

DAN JOHNSON

DIRECTOR

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

DEVELOPMENT SERVICES BUILDING 150 BEAVERCREEK ROAD OREGON CITY, OR 97045

January 30, 2025

BCC Agenda Date/Item: _____

Board of County Commissioners Acting as the Development Agency Board Clackamas County

Approval of a Public Improvement Contract with Corpac Construction Company for the SE Monroe Street Improvements Project. Total Contract Value is \$7,418,501. Funding is through Clackamas River Water, Water Environment Services and \$6,183,057 of Development Agency funds. No County General Funds are involved.

Previous Board	08/21/24: Approval of a construction services contract with HHPR								
Action/Review	05/23/24: Approval of IC	/23/24: Approval of IGA with Clackamas River Water							
	02/08/24: Approval of IC	pproval of IGA with Water Environment Services							
	08/03/23: Approval of R	08/03/23: Approval of Resolution of Necessity							
	12/10/20: Approval of d	esign contract with HHPF	2						
	02/22/18: Approval of IGA with the City of Milwaukie								
	03/19/15: Approval of TGM grant agreement with ODOT for developing								
	the Monroe Design Plan								
Performance	This project will build an	nd provide strong infrastru	icture.						
Clackamas	This item aligns with "E	nsure safe, healthy and s	ecure communities" by						
	adding bicycle and pede	estrian facilities, repairing	the road base and						
	upgrading stormwater a	nd sanitary sewer system	าร.						
Counsel Review	AN – 12/30/24	Procurement	Yes						
		Review							
Contact Person	Ken Itel	Contact Phone	503-742-4324						

EXECUTIVE SUMMARY: The SE Monroe Street Improvements Project (the "Project") is located in the North Clackamas Revitalization Area (NCRA) urban renewal district. The Project will reconstruct the SE Monroe corridor from SE Linwood to SE Fuller Road. A priority of the NCRA urban renewal plan is to improve neighborhood streets to accommodate all modes of transportation, enhance safety and accessibility, and upgrade storm water management systems. The corridor currently has many sections lacking sidewalk, bicycle lanes and stormwater facilities, creating unsafe conditions for pedestrians, cyclists, and motorists.

In order to carry out the public improvement goals of the NCRA urban renewal plan, the Project will make improvements on Monroe Street between Linwood Avenue and Fuller Road, SE 72nd Avenue between Monroe Street and Thompson Road, and Thompson Road between SE 72nd Avenue and Lot Whitcomb Elementary School.

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Improvements will include filling in sidewalk gaps, adding a shared-use pathway separated from traffic, constructing a mini-roundabout at the intersection of Monroe and SE 72nd Avenue, upgrading curb ramps, adding landscaping strips and restoration and improvement of the road base and travel surface. The Project also includes upgrades and additions to existing stormwater facilities, an upgrade to a sanitary sewer main by Water Environment Services (WES) and water system upgrades by Clackamas River Water (CRW). The Development Agency will be reimbursed by WES and CRW for construction costs per approved Intergovernmental Agreements.

The Project provides safety and connectivity improvements to multiple modes of transportation, while also addressing infrastructure deficiencies such as sanitary sewer, storm water management and accessibility. It will link to future greenway improvements by the City of Milwaukie to Monroe west of Linwood, creating a continuous multi-modal linkage from Fuller Road/SE 82nd to central Milwaukie.

PROCUREMENT PROCESS:

The Project was advertised in accordance with ORS and LCRB Rules on October 31, 2024, through BID # 2024-103. Bids were publicly opened on December 3, 2024. The County received eight (8) Bids in response to the Bid: Corpac Construction Company at \$7,418,501; Goodfellow Bros., LLC at \$8,511,159; Kerr Contractors Oregon at \$8,540,095; K & E Excavating at \$8,141.175; Moore Excavation at \$8,586,401; Pacific Excavation at \$7,992,000; Tapani, Inc. at \$7,497,446; and Westech Construction at \$8,547,000. After review of the bids, Corpac Construction Company was determined to be the lowest responsive bidder.

RECOMMENDATION: Staff respectfully recommends the Board approve and sign this Public Improvement contract with Corpac Construction Company for the SE Monroe Street Improvements Project.

Respectfully submitted,

Dan Johnson

Dan Johnson, Director Department of Transportation & Development



Contract #1123

This Public Improvement Contract (the "Contract"), is made by and between the Clackamas County Development Agency, a political subdivision of the State of Oregon, hereinafter called "Owner," and **Corpac Construction Company**, 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: # 2024-103 SE Monroe Street Improvements

1. Contract Price, Contract Documents and Work.

The Contractor, in consideration of the sum of **Seven Million Four Hundred Eighteen Thousand Five Hundred One Dollars (\$7,418,501.00)** (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

The Plans, Specifications and Drawings expressly incorporated by reference into this Contract includes, but is not limited to, the Special Provisions for Highway Construction (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 <u>Trisha Cauthorn</u> 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 <u>Jordan Cools</u> 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: <u>Trisha Cauthorn</u> shall be the Contractor's project executive and will provide oversight and guidance throughout the project term.

Project Manager: <u>James Cauthorn</u> shall be the Contractor's project manager and will participate in all meetings throughout the project term.

Job Superintendent: <u>William Henrikson</u> shall be the Contractor's on-site job superintendent throughout the project term.

Project Engineer: <u>Sung Min Ahn</u> shall be the Contractor's project engineer, providing assistance to the project manager, and subcontractor and supplier coordination throughout the project term.

4. Contract Dates.

COMMENCEMENT DATE: Upon Issuance of Notice to Proceed ("NTP") SUBSTANTIAL COMPLETION DATE: April 30, 2026 FINAL COMPLETION DATE: April 30, 2029

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 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 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; 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. Liquidated damages are set forth in the Contract Documents and may include the following:

11.1 \$1,200.00 per Calendar day past the Substantial Completion date, as set forth in section 00180.85 (b).

11.2 \$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), 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.

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

Signature Page Follows

Contractor DATA: **Corpac Construction Company** P.O. Box 83477 Portland, Oregon 97283

Contractor CCB # 196842 Expiration Date: 5/8/2026 Oregon Business Registry # 854204-96 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.

Corpac Construction Company

Development Agency

Carly 200	01/02/2025
Authorized Signature	Date

Authorized Signature

Chair

Date

Trisha Cauthorn, President Name / Title Printed

Recording Secretary

APPROVED AS TO FORM

1/13/25

Hong Huynh County Counsel

Date

Clackamas County Contract Form B-6 (6/23)



CLACKAMAS COUNTY PUBLIC IMPROVEMENT CONTRACT OPPORTUNITY

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CLACKAMAS COUNTY NOTICE OF PUBLIC IMPROVEMENT CONTRACT OPPORTUNITY

INVITATION TO BID #2024-103 SE Monroe Street Improvements October 31, 2023

Clackamas County ("County") through its Board of County Commissioners is accepting sealed bids for the **SE Monroe Street Improvements** Project until **December 4, 2024, 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: <u>https://oregonbuys.gov/bso/view/login/login.xhtml</u>, Document No.S-C01010-00011990.

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, **<u>Bid Locker</u>**. *Email submissions to Clackamas County email addresses will no longer be accepted.*

- A. Completed proposal documents must arrive electronically via Bid Locker located at <u>https://bidlocker.us/a/clackamascounty/BidLocker</u>.
- 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 <u>https://www.clackamas.us/how-to-bid-on-county-projects.</u>

Engineers Estimate: \$8,727,000.00

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 Asphalt Concrete Paving (ACP), and Earthwork and Drainage (EART).

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, July 5, 2024 and amended on October 5, 2024, which can be downloaded at the following web address: <u>http://www.oregon.gov/boli/WHD/PWR/Pages/pwr_state.aspx</u> The Work will take place in Clackamas County, Oregon.

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



INSTRUCTIONS TO BIDDERS

Clackamas County Local Contract Review Board Rules ("LCRB Rules") govern this procurement process. LCRB Rules may be found at: <u>http://www.clackamas.us/code/documents/appendi</u> <u>xc.pdf</u>. 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.



SUPPLEMENTAL INSTRUCTIONS TO BIDDERS

Project Name: # 2024-103 SE Monroe Street Improvements

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 Asphalt Concrete Paving & Oiling (ACP), and Earthwork and Drainage (EART).
- 1. 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. <u>https://bidlocker.us/a/clackamascounty/BidLocker</u>.

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/87645338963

Meeting ID: 876 4533 8963

One tap mobile +12532050468,,87645338963# US +12532158782,,87645338963# US (Tacoma)

Dial by your location • +1 253 205 0468 US • +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
+1 386 347 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
+1 312 626 6799 US (Chicago)
+1 360 209 5623 US

Meeting ID: 876 4533 8963

Find your local number: https://clackamascounty.zoom.us/u/kbXsrqo04I

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

2. 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:

Total Contract Amount:

Project Name: # 2024-103 SE Monroe Street Improvements

DOW BIDDER WILL SELF-PERFORM (GFE not required) General Cundit; ons Partoaro Bri for tubils Part 00200 Temp Features Part 00200 Bar tubils Part 00200 Readwork Part 00700 Wenning Series No Part 00200 Readwork Part 00700 Wenning Series No Part 00700 Wenning Series Part 00700 Wenning Series No Part 00700 Wenning Series Part 00700 Wenning Series No Part 00700 Wenning Series Part 00700 Wenning Series No Prime contractor Shall Disclose AND LIST ALL SUBCONTRACTORS, including those Minority-owned, Woman-owned, and Er Small Businesses (MW/ESB") that you intend to use on the project. Delivery via bid locker https://bidlocker.us/a/clackamascounty/Bidlocker within 2 hou the BID/Quote Closing Date/Time. Division of Work (Painting, electrical, landscaping, etc.) DolLLAR AMOUNT OF SUBCONTRACTORS BELOW Division of Work SuBCONTRACT MBE/WBE/Er Subcontractor (No Assumed Business Names) LIST ALL DOW performed by Subcontractors MBE MBE WBE	r SB SC ESB
General Cunditions Part 00500 Part	r B B C ESB
fact 00 200 Temp Features fact 00 400 Baces No Part 00300 Readwork Part 00700 Wearing Surfaces (Part) Part 00400 Drawaget Sewers Part 0000 - Readwork Part 0000 - Readwork Part 0000 - Readwork Prime contractor shall Disclose AND LIST ALL SUBCONTRACTORS, including those Minority-owned, Woman-owned, and Er Small Businesses (MW/ESB") that you intend to use on the project. Delivery via bid locker https://bidlocker.us/a/clackamascounty/BidLocker within 2 hou the BID/Quote Closing Date/Time. LIST ALL SUBCONTRACTORS BELOW Division of Work If Certified of self-reportin Use correct legal name of Subcontractor (No Assumed Business Names) Division of Work Bit All DOW performed by Subcontractors MBE WBE	r SB r ESB
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Part Double Division of Work Part of 0 000 - R is the Way Development PRME CONTRACTOR SHALL DISCLOSE AND LIST ALL SUBCONTRACTORS, including those Minority-owned, Woman-owned, and Er Small Businesses (*MW/ESB") that you intend to use on the project. Delivery via bid locker https://bidlocker.us/a/clackamascounty/BidLocker within 2 hou the BID/Quote Closing Date/Time. LIST ALL SUBCONTRACTORS BELOW Use correct legal name of Subcontractor (No Assumed Business Names) Division of Work Double Closing Date/Time. Use to correct legal name of Subcontractor (No Assumed Business Names) Division of Work Division of Work Bub Contractor MBE WBE	rs of r SB SB r ESB
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(No Assumed Business Names) List ALL DOW performed by Subcontractors SUBCONTRACT Subcontractor MBE WBE	ESB
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Name Egami	
Address POBOX 21541 Permanent	
City/St/Zip Keiza OR 97307 510 wing \$125,000 the	
Phone# 503-669-1416	
OCCB# 133 991	
Name NorthStarElectric	
Address 11055 5WS lay St Electrical & a	
City/St/Zip Sherwood, OR97140 903,500	
Phone# 503-612-0840	
OCCB# 90454	
Name Engle Elsner INC.	
Address POBOX 23294 Paving of the	
City/St/Zip Tigord, OR 97281 597.400	
Phone# 503- 628-1137	L]
OCCB# 27112	
Name cher Co	
Address 17350 Boones Feary Rd	
City/St/Zip LakeOSwego, OR 97035 Landesco Ping 110,000 [
Phone# $971 - 361 - 050\%$	
OCCB# ZCB 9505	

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

Prime Contractor: Project: # 2024-103 SE Monroe Street Improvements

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	Divisions of Work	Date Sollicitation	PHQ	PHONE CONTACT		BID ACTIVITY Check Yes or No			JECTED BIDS eceived & not used)	•
SUBCONTRACTOR	(Painting, electrical, landscaping, etc.)	Letter / Fax Sent	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>>)	Notes
Kodink Porka	Pou.vg	12/1/24	126th		I Ves I No	I No	T Yes	かつ2763	to Too Hrgh	
FOXEGOSINN	Landscap,	12/3/24	•		Yes No	ĨX Yes I™No	1 Yes IX No	\$93053	1 700 Hich	
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DOH Flooging Inc	Flagging	12/1/24			K⊂Yes ⊂ No	Yes No	Γ Yes €No	\$82.57 How	too high	
AEC	(and scaping	12/11/24			IF Yes I⊤ No	f¥ Yes ∏ No	Г Yes I≯No	\$ 399, 280	Toohigh	

Clackamas County GFE (2/2023)

Page 3 of 4



BID BOND

Project Name: # 2024-103 SE Monroe Street Improvements

We, Corpac Construction Company, as "Principal,"

(Name of Principal)

and <u>Merchants National Bonding, Inc.</u>, an <u>Iowa</u> 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 (\$_______)

Ten Percent (10%) of the 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.

*S-C01010-00011990

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 <u>4th</u> day of <u>December</u>, 20 <u>24</u>.

Principal: Corpac Construction Company	Surety: Merchants National Bonding, Inc.						
By: And Alp	By: Attorney-In-Fact	Fachicken	CORPORTO Z				
Signature			5 2003 5				
PROSIDONT	Nichola	s Fredrickson	- Hu Hu				
Official Capacity	N	ame					
Attest 2000	2233 112	h Avenue NE					
Corporation Secretary	Ad	dress	김 사람이 있는 양식에서 말했다.				
- // · · · · · · · · · · · · · · · · · ·	Bellevue	VA 98004					
	City	State Zip					
	(425) 709-3600 Phone	(425) 709-746 Fax	0				



Know All Persons By These Presents, that MERCHANTS BONDING COMPANY (MUTUAL) and MERCHANTS NATIONAL BONDING, INC., both being corporations of the State of Iowa, d/b/a Merchants National Indemnity Company (in California only) (herein collectively called the "Companies") do hereby make, constitute and appoint, individually,

Abigail A Bonney; Alec Gumpfer; Alex Giannini; Andrew Kerslake; Brenda Nolin; Chris Larson; Deanna M French; Elizabeth R Hahn; Francis Wirt; Greg Lagreid; Gregory C Ryerson; Guy P Armfield; Jana M Roy; Janteane Blyton; John N Bustard; John R Claeys; Justin Gwinn; Katelyn Cooper;

Kyle Dozier; Lauren Zakarian; Mindee L Rankin; Nicholas Fredrickson; Rebecca Sarmiento; Roger Kaltenbach; Roland R Eugenio; Ronald J

Lange; Sandy L Boswell; Scott A Garcia; Scott Fisher; Scott McGilvray; Sean K Spencer; Sharon L Pope; Shirley J Pace; Susan B Larson; William M Smith

their true and lawful Attorney(s)-in-Fact, to sign its name as surety(ies) and to execute, seal and acknowledge any and all bonds, undertakings, contracts and other written instruments 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.

This Power-of-Attorney is granted and is signed and sealed by facsimile under and by authority of the following By-Laws adopted by the Board of Directors of Merchants Bonding Company (Mutual) on April 23, 2011 and amended August 14, 2015 and April 27, 2024 and adopted by the Board of Directors of Merchants National Bonding, Inc., on October 16, 2015 and amended on April 27, 2024.

"The President, Secretary, Treasurer, or any Assistant Treasurer or any Assistant Secretary or any Vice President shall have power and authority to appoint Attorneys-in-Fact, and to authorize them to execute on behalf of the Company, and attach the seal of the Company thereto, bonds and undertakings, recognizances, contracts of indemnity and other writings obligatory in the nature thereof."

"The signature of any authorized officer and the seal of the Company may be affixed by facsimile or electronic transmission to any Power of Attorney or Certification thereof authorizing the execution and delivery of any bond, undertaking, recognizance, or other suretyship obligations of the Company, and such signature and seal when so used shall have the same force and effect as though manually fixed."

In connection with obligations in favor of the Florida Department of Transportation only, it is agreed that the power and aut hority hereby given to the Attorney-in-Fact includes any and all consents for the release of retained percentages and/or final estimates on engineering and construction contracts required by the State of Florida Department of Transportation. It is fully understood that consenting to the State of Florida Department of Transportation and/or its assignee, shall not relieve this surety company of any of its obligations under its bond.

In connection with obligations in favor of the Kentucky Department of Highways only, it is agreed that the power and authority hereby given to the Attorney-in-Fact cannot be modified or revoked unless prior written personal notice of such intent has been given to the Commissioner-Department of Highways of the Commonwealth of Kentucky at least thirty (30) days prior to the modification or revocation. In Witness Whereof, the Companies have caused this instrument to be signed and sealed this 1st day of November 2024





President

STATE OF IOWA COUNTY OF DALLAS ss.

On this 1st day of November 2024, before me appeared Larry Taylor, to me personally known, who being by me duly sworn did say that he is President of MERCHANTS BONDING COMPANY (MUTUAL) and MERCHANTS NATIONAL BONDING, INC.; and that the seals affixed to the foregoing instrument are the Corporate Seals of the Companies; and that the said instrument was signed and sealed in behalf of the Companies by authority of their respective Boards of Directors.





(Expiration of notary's commission does not invalidate this instrument)

I, Elisabeth Sandersfeld, Secretary of MERCHANTS BONDING COMPANY (MUTUAL) and MERCHANTS NATIONAL BONDING, INC., do hereby certify that the above and foregoing is a true and correct copy of the POWER-OF-ATTORNEY executed by said Companies, which is still in full force and effect and has not been amended or revoked.

In Witness Whereof, I have hereunto set my hand and affixed the seal of the Companies on this 4 day of DECEMBER , 2024 .



POA 0018 (6/24)



BID FORM

PROJECT: # 2024-103 SE Monroe Street Improvements BID CLOSING: December 4, 2024, 2:00 PM, Pacific Time BID OPENING: December 4, 2024, 2:05 PM, Pacific Time

FROM:	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 O_{5290N} ; or
	d. A limited liability corporation organized under the laws of the State of;
Se Fi	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: we mill w Fauc hundred Eighteen we hundred one Dollars $(\frac{57418}{501}, \frac{20}{20})$
	and the Undersigned agrees to be bound by the following documents:

- Notice of Public Improvement Contract Opportunity • Supplemental Instructions to Bidders
- Instructions to Bidders

• Bid Bond

- Public Improvement Contract Form
- Prevailing Wage Rates
- Performance Bond and Payment Bond
- · Payroll and Certified Statement Form
- Plans, Specifications and Drawings

, inclusive (fill in blanks) • ADDENDA numbered / through

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

• Bid Form

The Undersigned proposes to add to or deduct from the Base Bid indicated above the items or work 3. 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.

The work shall be completed within the time stipulated and specified in 00180.50(h) of the Special 4. Provisions for Construction Clackamas County Development Agency, Monroe Street Improvements.

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:

(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 X HAS, HAS NOT (*check one*) paid unemployment or income taxes in Oregon within the past 12 months and X 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 196842. 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.

Policy No. 7705/02, and that Contractor shall submit Certificates of Insurance as required.

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

Project Executive: To zha Cauthorn, Cell Phone: 5-41-740-7929 Project Manager: James Capthoon, Cell Phone: 52/1-760-5729 Job Superintendent: William Heurikson Cell Phone: 5-41-740-58 Project Engineer: Surgmin Ahu Cell Phone: 503-962-9474.

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	1 <u>Corpac Construction Co.</u>
ADDRESS	POBOX 83477
	Portland, OR 97283
TELEPHONE N	0 5211-740-7929
EMAIL	BidspcorpacConstruction, Com
SIGNATURE	l)Sole Individual
or	2) Partner
or	3) Authorized Officer or Employee of Corporation

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

Monroe Street Improvements

Bid Schedule

October 8, 2024

ITEM	SPEC	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
SCHEDULE	E A					
General C	onditions			1		
1	00180	Work Place Harassment Prevention Plan	LS	1	\$ 500.00	\$ 500.00
2	00196	Extra Work as Authorized	FA	1	\$250,000.00	\$ 250,000.00
Part 0020	0 - Tempora	ary Features and Appurtenances				
3	00210	Mobilization	LS	1	\$ 634,925.00	\$ 634,925.00
4	00221	Temporary Work Zone Traffic Control, Complete	LS	1	\$ 350,000.00	\$ 350,000.00
5	00270	Temporary Fence, 6 Ft Chain Link Fence with Concrete Blocks	Ft	1,000	\$ 25.00	\$ 25,000.00
6	00280	Erosion Control	LS	1	\$ 75,000.00	\$ 75,000.00
7	00280	Matting, Type B	SY	90	\$ 8.00	\$ 720.00
8	00280	Construction Entrance	Ea	1	\$ 1,950.00	\$ 1,950.00
9	00280	Inlet Protection, Type 4 (Bio Bag Inlet Protection)	Ea	5	\$ 105.00	\$ 525.00
10	00280	Inlet Protection, Type 5 (Catch Basin Insert)	Ea	68	\$ 75.00	\$ 5,100.00
11	00280	Sediment Barrier, Type 3 (Straw Wattles Fiber Rolls)	Ft	5,000	\$ 4.90	\$ 24,500.00
12	00280	Concrete Washout Facility	LS	1	\$ 5,500.00	\$ 5,500.00
13	00290	Pollution Control Plan	LS	1	\$ 1,000.00	\$ 1,000.00
14	00294	Health and Safety Plan	LS	1	\$ 1,000.00	\$ 1,000.00
15	00294	Contaminated Soil Removal	Ton	800	\$ 95.00	\$ 76,000.00
Part 0030	0 - Roadwo	rk		-	-	
16	00310	Removal of Structures and Obstructions	LS	1	\$ 227,000.00	\$ 227,000.00
17	00320	Clearing and Grubbing	LS	1	\$ 110,700.00	\$ 110,700.00
18	00330	Earthwork - Excavation and Embankment	LS	1	\$ 285,000.00	\$ 285,000.00
19	00330	General Rock Excavation	СҮ	300	\$ 95.00	\$ 28,500.00
20	00331	12 Inch Subgrade Stabilization	SY	2,100	\$ 28.00	\$ 58,800.00
21	00350	Subgrade Geotextile	SY	11,000	\$ 1.15	\$ 12,650.00
22	00390	Loose Riprap, Class 50	СҮ	20	\$ 125.00	\$ 2,500.00
Part 0040	0 - Drainag	e and Sewers		· · · · ·		
23	00430	6 Inch Perforated Storm Pipe with Geotextile Sock, Class "B" Backfill	Ft	710	\$ 57.50	\$ 40,825.00

24	00445	6 Inch Storm Sewer Pipe, Class "B" Backfill	Ft	222	\$ 125.00	\$ 27,750.00
25	00445	12 Inch Storm Sewer Pipe, Class "B" Backfill	Ft	2,603	\$ 135.00	\$ 351,405.00
26	00445	12 Inch Ductile Iron Storm Sewer Pipe, Class "B" Backfill	Ft	546	\$ 182.00	\$ 99,372.00
27	00445	8 Inch Sanitary Sewer Pipe, Class "B" Backfill	Ft	8	\$ 95.00	\$ 760.00
28	00445	12 Inch Restrained Sanitary Force Main Ductile Iron Pipe, Class "B" Backfill	Ft	440	\$ 210.00	\$ 92,400.00
29	00445	4 Inch Sanitary Lateral Extension, Class "B" Backfill	Ea	1	\$ 3,000.00	\$ 3,000.00
30	00445	6 Inch Sanitary Sewer Force Main Gravity Overflow Pipe, Class B Backfill	Ft	90	\$ 186.00	\$ 16,740.00
31	00445	Gate Valve, 6" MJ Gate Valve with Valve Box for Force Main Drain	Ea	1	\$ 1,800.00	\$ 1,800.00
32	00445	Gate Valve, 12" MJ Gate Valve for Force Main	Ea	2	\$ 4,800.00	\$ 9,600.00
33	00470	Concrete Manhole, 48" Flat Top with Air Release/Air Vacuum Assembly	Ea	1	\$ 8,000.00	\$ 8,000.00
34	00470	Concrete Manholes, 48" Sanitary Sewer Standard Manhole	Ea	1	\$ 8,500.00	\$ 8,500.00
35	00470	Concrete Manholes, 48" Storm Sewer Standard Manhole	Ea	21	\$ 7,500.00	\$ 157,500.00
36	00470	Concrete Manholes, 60" Storm Sewer Standard Manhole	Ea	1	\$ 9,500.00	\$ 9,500.00
37	00470	Catch Basin, Type CG-3	Ea	5	\$ 3,850.00	\$ 19,250.00
38	00470	Catch Basin, Type GB-2	Ea	16	\$ 3,250.00	\$ 52,000.00
39	00470	Catch Basin, Type Area Drain	Ea	4	\$ 4,500.00	\$ 18,000.00
40	00470	Catch Basin, Type Ditch Inlet	Ea	1	\$ 3,500.00	\$ 3,500.00
41	00470	Beehive Inlet Stormwater Planter Overflow	Ea	23	\$ 3,500.00	\$ 80,500.00
42	00470	Storm Cleanout	Ea	32	\$ 550.00	\$ 17,600.00
43	00490	Minor Adjustments of Manholes	Ea	32	\$ 450.00	\$ 14,400.00
44	00490	Major Adjustments of Manholes	Ea	5	\$ 3,275.00	\$ 16,375.00
45	00490	Adjusting Inlets	Ea	5	\$ 200.00	\$ 1,000.00
46	00490	Controlled Low Strength Material	СҮ	50	\$ 125.00	\$ 6,250.00
47	00490	Filling Abandoned Structures	СҮ	50	\$ 125.00	\$ 6,250.00
Part 0050	0 - Bridge a	nd Walls				
48	00596B	Retaining Wall, Segmental Block (As-Directed)	SF	200	\$ 75.00	\$ 15,000.00
49	00596C	Retaining Wall, Concrete Gravity (114 SF) with Fence (36 ')	LS	1	\$ 21,500.00	\$ 21,500.00
Part 0060	0 - Bases					
50	00620	Cold Plane Pavement Removal, 0-2" Deep	SY	5,100	\$ 7.00	\$ 35,700.00

51	00641	Aggregate Base	СҮ	4,000	\$ 91.50	\$ 366,000.00			
52	00641	Open Graded Aggregate Base for Pervious Pavement	СҮ	900	\$ 90.00	\$ 81,000.00			
53	00641	Choker Aggregate Base for Pervious Pavement	СҮ	270	\$ 90.00	\$ 24,300.00			
Part 0070	0 - Wearing	g Surfaces							
54	00743	1/2" PAC Mixture	Ton	800	\$ 152.00	\$ 121,600.00			
55	00744	Level 3, 1/2" Dense ACP Mixture	Ton	4,000	\$ 119.00	\$ 476,000.00			
56	00759	Concrete Curbs, Standard Curb	Ft	2,589	\$ 28.00	\$ 72,492.00			
57	00759	Concrete Curbs, Sloped Curb	Ft	2,106	\$ 26.00	\$ 54,756.00			
58	00759	Concrete Curbs, Curb and Gutter with 12 Inch Gutter Pan	Ft	3,878	\$ 28.00	\$ 108,584.00			
59	00759	Concrete Curbs, Curb and Gutter with 18 Inch Gutter Pan	Ft	355	\$ 28.00	\$ 9,940.00			
60	00759	Concrete Curbs, Modified Thickened Curb and Gutter for Stormwater Planters	Ft	844	\$ 40.00	\$ 33,760.00			
61	00759	Concrete Curbs, Perimeter Curb Wall for Stormwater Planters	Ft	1,259	\$ 38.00	\$ 47,842.00			
62	00759	Concrete Curbs, Low Profile Mountable	Ft	698	\$ 22.00	\$ 15,356.00			
63	00759	Concrete Curbs, Mountable Curb and Gutter	Ft	294	\$ 22.00	\$ 6,468.00			
64	00759	Concrete Walks	SF	12,800	\$ 11.00	\$ 140,800.00			
65	00759	Concrete Driveways	SF	14,598	\$ 18.00	\$ 262,764.00			
66	00759	Concrete Driveways, Reinforced	SF	1,682	\$ 23.00	\$ 38,686.00			
67	00759	Concrete Driveway Connection	SF	13,136	\$ 15.00	\$ 197,040.00			
68	00759	Concrete Driveway Connection, Exposed Aggregate	SF	254	\$ 25.00	\$ 6,350.00			
69	00759	6 Inch Thick Reinforced Concrete Cut-Through Concrete Surfacing	SF	161	\$ 25.00	\$ 4,025.00			
70	00759	8 Inch Thick Reinforced Raised Crosswalk Concrete Surfacing	SF	816	\$ 25.00	\$ 20,400.00			
71	00759	6 Inch Thick Reinforced Truck Apron Concrete Surfacing	SF	1,660	\$ 28.00	\$ 46,480.00			
72	00759	6 Inch Thick Reinforced Stamped Colored Concrete Surfacing	SF	3,045	\$ 36.00	\$ 109,620.00			
73	00759	Truncated Domes on New Surfaces	SF	651	\$ 65.00	\$ 42,315.00			
74	00759	Extra For New Curb Ramps	Ea	42	\$ 700.00	\$ 29,400.00			
Part 0080	Part 00800 - Permanent Traffic Safety and Guidance Devices								
75	00815	Removable Bollards	Ea	3	\$ 1,450.00	\$ 4,350.00			
76	00865	Thermoplastic, Extruded, Surface, Non-Profiled	Ft	8,600	\$ 1.80	\$ 15,480.00			
77	00867	Pavement Legend, Type B-HS: Arrows	Ea	2	\$ 290.00	\$ 580.00			

78	00867	Pavement Bar, Type B-HS	SF	2,220	\$ 12.00	\$	26,640.00
79	00867	Pavement Legend, Type B-HS: Yield Line Triangle	Ea	9	\$ 69.00	\$	621.00
80	00867	Pavement Legend, Type B-HS: Shared Lane Marking	Ea	4	\$ 320.00	\$	1,280.00
81	00867	Pavement Legend, Type B-HS: Speed Hump Arrows	Ea	4	\$ 310.00	\$	1,240.00
Part 00900) - Perman	ent Traffic Control and Illumination Systems				-	
82	00902	Crosswalk Closure Supports	Ea	13	\$ 1,500.00	\$	19,500.00
83	00905	Remove Existing Signs	LS	1	\$ 2,100.00	\$	2,100.00
84	00905	Remove and Reinstall Existing Signs	LS	1	\$ 500.00	\$	500.00
85	00910	Wood Sign Posts	FBM	124	\$ 30.00	\$	3,720.00
86	00920	Sign Support Footings	LS	1	\$ 40,000.00	\$	40,000.00
87	00930	Perforated Steel Square Tube Anchor Sign Supports	LS	1	\$ 25,000.00	\$	25,000.00
88	00940	Signs, Standard Sheeting, Sheet Aluminum	SF	1,025	\$ 38.00	\$	38,950.00
89	00970	Switching, Conduit, and Wiring	LS	1	\$ 23,000.00	\$	23,000.00
90	00970	Pole Foundations	LS	1	\$ 4,000.00	\$	4,000.00
91	00990	Flashing Beacon Installation, SE Monroe Rd and SE Linwood Ave	LS	1	\$ 76,500.00	\$	76,500.00
Part 01000) - Right of	Way Development and Control	-	-			
92	01015	Open Graded Aggregate Base for Stormwater Planters	Ton	80	\$ 80.00	\$	6,400.00
93	01015	Washed Drain Rock for Stormwater Planters	Ton	300	\$ 80.00	\$	24,000.00
94	01015	Concrete Check Dams	Ea	4	\$ 1,250.00	\$	5,000.00
95	01030	Permanent Seeding	Acre	1	\$ 9,000.00	\$	9,000.00
96	01040	Topsoil	СҮ	1,100	\$ 50.00	\$	55,000.00
97	01040	Water Quality Mixture	СҮ	200	\$ 55.00	\$	11,000.00
98	01040	Bark Mulch, 3 Inch Depth	СҮ	500	\$ 47.00	\$	23,500.00
99	01040	Deciduous Trees, 2 Inch Caliper	Ea	101	\$ 300.00	\$	30,300.00
100	01040	Groundcover, #1 Container	Ea	1,719	\$ 10.00	\$	17,190.00
101	01040	Groundcover, #SP4 Container	Ea	3,431	\$ 6.00	\$	20,586.00
102	01040	Wetland Plants, #SP4 Container	Ea	2,826	\$ 5.00	\$	14,130.00
103	01040	Root Barrier	Ft	2,020	\$ 12.00	\$	24,240.00
104	01044	2nd and 3rd Year Plant Establishment	LS	1	\$ 48,000.00	\$	48,000.00

105	01065	Monument Boxes	Ea	20	\$ 1,250.00	\$ 25,000.00
106	01070	Single Mailbox Supports	Ea	43	\$ 550.00	\$ 23,650.00
107	01070	Multiple Mailbox Supports	Ea	2	\$ 675.00	\$ 1,350.00
108	01075	Private Property Improvements - Property 10	LS	1	\$ 2,040.00	\$ 2,040.00
109	01075	Private Property Improvements - Property 12	LS	1	\$ 2,790.00	\$ 2,790.00
110	01075	Private Property Improvements - Property 15	LS	1	\$ 3,645.00	\$ 3,645.00
111	01075	Private Property Improvements - Property 16	LS	1	\$ 2,880.00	\$ 2,880.00
112	01075	Private Property Improvements - Property 19	LS	1	\$ 8,580.00	\$ 8,580.00
113	01075	Private Property Improvements - Property 20	LS	1	\$ 14,520.00	\$ 14,520.00
114	01075	Private Property Improvements - Property 22	LS	1	\$ 960.00	\$ 960.00
115	01075	Private Property Improvements - Property 34	LS	1	\$ 1,900.00	\$ 1,900.00
116	01075	Private Property Improvements - Property 55	LS	1	\$ 2,835.00	\$ 2,835.00
117	01075	Private Property Improvements - Property 56	LS	1	\$ 5,400.00	\$ 5,400.00
118	01075	Private Property Improvements - Property 93	LS	1	\$ 25,145.00	\$ 25,145.00
119	01075	Private Property Improvements - Property 94	LS	1	\$ 24,860.00	\$ 24,860.00
120	01075	Private Property Improvements - Property 99	LS	1	\$ 2,070.00	\$ 2,070.00
Part 0110	0 - Water S	upply Systems	-	-		
121	01120	Repair Private Irrigation Systems	LS	1	\$ 2,500.00	\$ 2,500.00
				TO.	TAL SCHEDULE A	\$ 6,349,257.00

SCHEDULE B - Clackamas River Water						
122	00196	Extra Work as Authorized	LS	1	\$ 20,000.00	\$ 20,000.00
123	00210	Mobilization	LS	1	\$ 106,924.00	\$ 106,924.00
124	00221	Temporary Work Zone Traffic Control, Complete	LS	1	\$ 65,000.00	\$ 65,000.00
125	01140	Blowoff Assembly, Type I	Ea	10	\$ 2,875.00	\$ 28,750.00
126	01140	Blowoff Assembly, Type II	Ea	2	\$ 2,200.00	\$ 4,400.00
127	01140	6 Inch Wet Tap on 8 Inch Existing Main	Ea	1	\$ 4,300.00	\$ 4,300.00
128	01140	8 Inch Connection to 4 Inch Existing Main	Ea	2	\$ 800.00	\$ 1,600.00
129	01140	8 Inch Connection to 6 Inch Existing Main	Ea	7	\$ 1,200.00	\$ 8,400.00
130	01140	8 Inch Connection to 8 Inch Existing Main	Ea	5	\$ 2,000.00	\$ 10,000.00

131	01140	4 Inch Ductile Iron Pipe with Restrained Joints and Class B Backfill	Ft	30	\$	225.00	\$ 6,750.00
132	01140	6 Inch Ductile Iron Pipe with Restrained Joints and Class B Backfill	Ft	80	\$	225.00	\$ 18,000.00
133	01140	8 Inch Ductile Iron Pipe with Restrained Joints and Class B Backfill	Ft	3,380	\$	140.00	\$ 473,200.00
134	01140	Ductile Iron Pipe Fittings	Lb	4,240	\$	8.00	\$ 33,920.00
135	01140	Tracer Wire Terminal Station	Ea	4	\$	250.00	\$ 1,000.00
136	01150	8 Inch Gate Valve	Ea	20	\$	2,500.00	\$ 50,000.00
137	01150	1 Inch Combination Air Release/Air Vacuum Valve Assembly	Ea	1	\$	3,850.00	\$ 3 <i>,</i> 850.00
138	01160	Fire Hydrant Assembly	Ea	6	\$	9,500.00	\$ 57,000.00
139	01160	Fire Hydrant Assembly, no Gate Valve	Ea	2	\$	8,500.00	\$ 17,000.00
140	01170	1 Inch Long Side Water Service Assembly	Ea	21	\$	3,500.00	\$ 73,500.00
141	01170	1 Inch Short Side Water Service Assembly	Ea	34	\$	2,125.00	\$ 72,250.00
142	01170	2 Inch Water Service Assembly	Ea	1	\$	7,800.00	\$ 7,800.00
143	01170	Water Service Abandonment	Ea	7	\$	800.00	\$ 5 <i>,</i> 600.00
				то	TAL	SCHEDULE B	\$ 1 069 244 00

CORPAC CONSTRUCTION CO.	\$ 7,418,501.00				
Contractor Name	Total Bid - Schedule A + B (Number)				
even Million Four Hundred Eighteen Thousand Five Hundred One Dollars & 00/100					
Total Bid (In Words)					

FIRST-TIER SUBCONTRACTOR DISCLOSURE FORM PROJECT: #2024-103

BID OPENING: December 4, 2024, 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/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 <u>https://www.clackamas.us/how-to-bid-on-county-projects</u>.

Subcontractor lists may be submitted with the bid in the same envelope or email at the Bid Closing date and time. Subcontractor lists <u>MUST</u> 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 <u>"NONE"</u> if the value of the project bid is less than \$100,000 or there are no subcontractors that need to be disclosed. ATTACH ADDITIONAL SHEETS IF NECESSARY.

	SUBCONTRACTOR NAME	DOLLAR VALUE	CATEGORY OF WORK
1.	Egami	7125.000-	Signing (Permanent)
2.	NorthStar Electric	\$103,500 m	Electrical
3.	Eagle Elsner	\$ 599 400	Paving
4.	CHARGE		Astraction in the
5.	Glern Co	\$170.00000	Landscaping
6.			- 0 /

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.

orpac Construction, Co. Firm Name: Phone # 4741-740-79.29 Bidder Signature:



PERFORMANCE BOND

Bond No.: 101334133 Solicitation: #2024-103 Project Name: SE Monroe Street Improvements

Merchants National Bondir	ng, Inc. (Surety #1)	Bond Amount No. 1:	\$ 7,418,501.00
N/A	(Surety #2)*	Bond Amount No. 2:*	\$ <u>N/A</u>
* If using multiple	e sureties	Total Penal Sum of Bond:	\$_7,418,501.00

We, <u>Corpac Construction Company</u> 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) <u>Seven Million, Four Hundred Eighteen Thousand, Five Hundred One & 00/100ths</u> (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	le The	day of	VANUARY	, 20 25 .

PRINCIPAL: Cor	pac Construction Co	mpany diado	
By	07	Det	
	Signature		101
PROSID	BNT	V VLA	
	Official Capacity	20.2	1
Attest:	\sim \sim \sim (2 Any	L.
	Corporation Secr	etary	

SURETY: <u>Merchants National Bonding, Inc.</u> [*Add signatures for each if using multiple bonds*]

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

Nichol					
M. 11	Name	11	-		
Witholus	Stell	Mikel	2000	GATICNA !!!!	
	Signature				
2233 112	2233 112th Avenue NE				
	Address		12.01	2003	5
Bellevue	WA	98004		34 S 34	
City	State	Zip	1-110-	" A A A A A A A A A A A A A A A A A A A	1
(425) 709-3600	(425) 7	09-7460		N.	2
Phone	Fax		1.50	12.000000000	-




Know All Persons By These Presents, that MERCHANTS BONDING COMPANY (MUTUAL) and MERCHANTS NATIONAL BONDING, INC., both being corporations of the State of Iowa, d/b/a Merchants National Indemnity Company (in California only) (herein collectively called the "Companies") do hereby make, constitute and appoint, individually,

Abigail A Bonney; Alec Gumpfer; Alex Giannini; Andrew Kerslake; Brenda Nolin; Chris Larson; Deanna M French; Elizabeth R Hahn; Francis Wirt; Greg Lagreid; Gregory C Ryerson; Guy P Armfield; Jana M Roy; Janteane Blyton; John N Bustard; John R Claeys; Justin Gwinn; Katelyn Cooper;

Kyle Dozier; Lauren Zakarian; Mindee L Rankin; Nicholas Fredrickson; Rebecca Sarmiento; Roger Kaltenbach; Roland R Eugenio; Ronald J

Lange; Sandy L Boswell; Scott A Garcia; Scott Fisher; Scott McGilvray; Sean K Spencer; Sharon L Pope; Shirley J Pace; Susan B Larson; William M Smith

their true and lawful Attorney(s)-in-Fact, to sign its name as surety(ies) and to execute, seal and acknowledge any and all bonds, undertakings, contracts and other written instruments 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.

This Power-of-Attorney is granted and is signed and sealed by facsimile under and by authority of the following By-Laws adopted by the Board of Directors of Merchants Bonding Company (Mutual) on April 23, 2011 and amended August 14, 2015 and April 27, 2024 and adopted by the Board of Directors of Merchants National Bonding, Inc., on October 16, 2015 and amended on April 27, 2024.

"The President, Secretary, Treasurer, or any Assistant Treasurer or any Assistant Secretary or any Vice President shall have power and authority to appoint Attorneys-in-Fact, and to authorize them to execute on behalf of the Company, and attach the seal of the Company thereto, bonds and undertakings, recognizances, contracts of indemnity and other writings obligatory in the nature thereof."

"The signature of any authorized officer and the seal of the Company may be affixed by facsimile or electronic transmission to any Power of Attorney or Certification thereof authorizing the execution and delivery of any bond, undertaking, recognizance, or other suretyship obligations of the Company, and such signature and seal when so used shall have the same force and effect as though manually fixed."

In connection with obligations in favor of the Florida Department of Transportation only, it is agreed that the power and aut hority hereby given to the Attorney-in-Fact includes any and all consents for the release of retained percentages and/or final estimates on engineering and construction contracts required by the State of Florida Department of Transportation. It is fully understood that consenting to the State of Florida Department of Transportation and/or its assignee, shall not relieve this surety company of any of its obligations under its bond.

In connection with obligations in favor of the Kentucky Department of Highways only, it is agreed that the power and authority hereby given to the Attorney-in-Fact cannot be modified or revoked unless prior written personal notice of such intent has been given to the Commissioner-Department of Highways of the Commonwealth of Kentucky at least thirty (30) days prior to the modification or revocation. In Witness Whereof, the Companies have caused this instrument to be signed and sealed this 1st day of November 2024



STATE OF IOWA COUNTY OF DALLAS ss.

On this 1st day of November 2024, before me appeared Larry Taylor, to me personally known, who being by me duly sworn did say that he is President of MERCHANTS BONDING COMPANY (MUTUAL) and MERCHANTS NATIONAL BONDING, INC.; and that the seals affixed to the foregoing instrument are the Corporate Seals of the Companies; and that the said instrument was signed and sealed in behalf of the Companies by authority of their respective Boards of Directors.





(Expiration of notary's commission does not invalidate this instrument)

I, Elisabeth Sandersfeld, Secretary of MERCHANTS BONDING COMPANY (MUTUAL) and MERCHANTS NATIONAL BONDING, INC., do hereby certify that the above and foregoing is a true and correct copy of the POWER-OF-ATTORNEY executed by said Companies, which is still in full force and effect and has not been amended or revoked.

In Witness Whereof, I have hereunto set my hand and affixed the seal of the Companies on this 6th day of VANUARY, 2025 .



Indin

Secretary





CLACKAMAS COUNTY PUBLIC IMPROVEMENT CONTRACT

PAYMENT BOND

Bond No.: <u>101334133</u> Solicitation: #2024-103 Project Name: SE Monroe Street Improvements

Merchants National Bondin	g, Inc.(Surety #1)	Bond Amount No. 1:	\$ <u>7,418,501.00</u>
N/A	(Surety #2)*	Bond Amount No. 2:*	\$N/A
* If using multi	ple sureties	Total Penal Sum of Bond:	\$ <u>7,418,501.00</u>

We, <u>Corpac Construction Company</u>, 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) <u>Seven Million, Four Hundred Eighteen</u> Thousand, Five Hundred One & 00/100ths (Provided, that we the Sureties bind ourselves in such sum "jointly and severally" as well as "severally" only for the purpose of allowing a joint action or actions against any or all of us, and for all other purposes each Surety binds itself, jointly and severally with the Principal, for the payment of such sum only as is set forth opposite the name of such Surety); and

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

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

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

NOW, THEREFORE, THE CONDITION OF THIS BOND IS SUCH that if the Principal shall faithfully and truly observe and comply with the terms, conditions and provisions of the Contract, in all respects, and shall well and truly and fully do and perform all matters and things by it undertaken to be performed under said Contract and any duly authorized modifications that are made, upon the terms set forth therein, and within the time prescribed therein, or as extended therein as provided in the Contract, with or without notice to the Sureties, and shall defend, indemnify, and save harmless Clackamas County and its elected officials, officers, employees and agents, against any claim for direct or indirect damages of every kind and description that shall be suffered or claimed to be suffered in connection with or arising out of the performance of the Contract by the Contractor or its subcontractors, and shall promptly pay all persons supplying labor, materials or both to the Principal or its subcontractors for prosecution of the work provided in the Contract; and shall promptly pay all contributions due the State Industrial Accident Fund and the State Unemployment Compensation Fund from the Principal or its subcontractors in connection with the performance of the Contract; and shall pay over to the Oregon Department of Revenue all sums required to be deducted and retained from the wages of employees of the Principal and its subcontractors pursuant to ORS 316.167, and shall permit no lien nor claim to be filed or prosecuted against Clackamas County on account of any labor or materials furnished; and shall do all things required of the Principal by the laws of this State, then this obligation shall be void; otherwise, it shall remain in full force and effect for so long as any term of the Contract remains in effect.

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

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

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

Dated this <u>GPM</u> day of <u>VANUARY</u>, 20<u>25</u>.

PRINCI	PAL: Corpac Construction Company	antio Critica
By:	Jo J. gr	20
	Signature	
	PROSIDENT	CAL ES
C	Official Capacity	
Attest:	A. D	Adapt
	Corporation Secretary	

SURETY: Merchants National Bonding, Inc. [Add signatures for each if using multiple bonds]

BY ATTORNEY-IN-FACT:

[Power-of-Attorney must accompany each bond]

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2233 112	th Avenu	e NE	100	N -0- 60
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Bellevue	WA	98004		5 211
City	State	Zip		÷4 ☆ `)`,
(425) 709-3600	(425) 7	09-7460		
Phone	Fax			



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Know All Persons By These Presents, that MERCHANTS BONDING COMPANY (MUTUAL) and MERCHANTS NATIONAL BONDING, INC., both being corporations of the State of Iowa, d/b/a Merchants National Indemnity Company (in California only) (herein collectively called the "Companies") do hereby make, constitute and appoint, individually,

Abigail A Bonney; Alec Gumpfer; Alex Giannini; Andrew Kerslake; Brenda Nolin; Chris Larson; Deanna M French; Elizabeth R Hahn; Francis Wirt; Greg Lagreid; Gregory C Ryerson; Guy P Armfield; Jana M Roy; Janteane Blyton; John N Bustard; John R Claeys; Justin Gwinn; Katelyn Cooper;

Kyle Dozier; Lauren Zakarian; Mindee L Rankin; Nicholas Fredrickson; Rebecca Sarmiento; Roger Kaltenbach; Roland R Eugenio; Ronald J

Lange; Sandy L Boswell; Scott A Garcia; Scott Fisher; Scott McGilvray; Sean K Spencer; Sharon L Pope; Shirley J Pace; Susan B Larson; William M Smith

their true and lawful Attorney(s)-in-Fact, to sign its name as surety(ies) and to execute, seal and acknowledge any and all bonds, undertakings, contracts and other written instruments 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.

This Power-of-Attorney is granted and is signed and sealed by facsimile under and by authority of the following By-Laws adopted by the Board of Directors of Merchants Bonding Company (Mutual) on April 23, 2011 and amended August 14, 2015 and April 27, 2024 and adopted by the Board of Directors of Merchants National Bonding, Inc., on October 16, 2015 and amended on April 27, 2024.

"The President, Secretary, Treasurer, or any Assistant Treasurer or any Assistant Secretary or any Vice President shall have power and authority to appoint Attorneys-in-Fact, and to authorize them to execute on behalf of the Company, and attach the seal of the Company thereto, bonds and undertakings, recognizances, contracts of indemnity and other writings obligatory in the nature thereof."

"The signature of any authorized officer and the seal of the Company may be affixed by facsimile or electronic transmission to any Power of Attorney or Certification thereof authorizing the execution and delivery of any bond, undertaking, recognizance, or other suretyship obligations of the Company, and such signature and seal when so used shall have the same force and effect as though manually fixed."

In connection with obligations in favor of the Florida Department of Transportation only, it is agreed that the power and aut hority hereby given to the Attorney-in-Fact includes any and all consents for the release of retained percentages and/or final estimates on engineering and construction contracts required by the State of Florida Department of Transportation. It is fully understood that consenting to the State of Florida Department of Transportation and/or its assignee, shall not relieve this surety company of any of its obligations under its bond.

In connection with obligations in favor of the Kentucky Department of Highways only, it is agreed that the power and authority hereby given to the Attorney-in-Fact cannot be modified or revoked unless prior written personal notice of such intent has been given to the Commissioner-Department of Highways of the Commonwealth of Kentucky at least thirty (30) days prior to the modification or revocation. In Witness Whereof, the Companies have caused this instrument to be signed and sealed this 1st day of November , 2024



STATE OF IOWA COUNTY OF DALLAS ss.

On this 1st day of November 2024 , before me appeared Larry Taylor, to me personally known, who being by me duly sworn did say that he is President of MERCHANTS BONDING COMPANY (MUTUAL) and MERCHANTS NATIONAL BONDING, INC.; and that the seals affixed to the foregoing instrument are the Corporate Seals of the Companies; and that the said instrument was signed and sealed in behalf of the Companies by authority of their respective Boards of Directors.





(Expiration of notary's commission does not invalidate this instrument)

I, Elisabeth Sandersfeld, Secretary of MERCHANTS BONDING COMPANY (MUTUAL) and MERCHANTS NATIONAL BONDING, INC., do hereby certify that the above and foregoing is a true and correct copy of the POWER-OF-ATTORNEY executed by said Companies, which is still in full force and effect and has not been amended or revoked.

In Witness Whereof, I have hereunto set my hand and affixed the seal of the Companies on this & day of Runary, 2025



Secretary







PROJECT: #2024-103

Project Background:

The Development Agency is requesting to finalize bid documents and advertise for construction of the SE Monroe Street Improvement Project. The contract will include construction of new sidewalks, a shared-use pathway and ADA ramps, landscaping and installation of storm water swales, as well as storm water pipes, manholes and drains, water and sanitary sewer system upgrades, signing and striping and street reconstruction and paving between SE Linwood and SE Fuller Road.

Road improvements will also include mobilization, temporary traffic control, construction survey, drainage work, permanent traffic control, base work, shoulder construction, grading, permanent seeding, AC paving and pavement striping, asphalt and concrete wearing surfaces and construction of curbs, sidewalks, driveways, and other related flat-work facilities.

Engineers Estimate: \$8,727,000.00

Key Dates:

All Basic Bid Work may begin as soon as the Notice to Proceed ("NTP") is issued Substantial Completion: April 30, 2026 Final Completion: April 30, 2029

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 FOR CONSTRUCTION- CLACKAMAS COUNTY DEVELOPMENT AGENCY CLACKAMAS COUNTY, OREGON- Monroe Street Improvements, dated AUGUST 2024 (95 pages)

MONROE STREET IMPROVEMENT PROJECT- Drawing Set- (142 pages)



CLACKAMAS COUNTY DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

SPECIAL PROVISIONS

FOR

Grading, Drainage, Structures, Paving, Signing, Signals & Roadside Development Monroe Street Improvement Project Clackamas County

PROFESSIONAL OF RECORD CERTIFICATION:



FINAL ELECTRONIC DOCUMENT AVAILABLE UPON REQUEST

Harper Houf Peterson Righellis Inc. – General Civil Engineering Plans including road improvements, structures, utilities, erosion control, storm planters, sanitary, temporary and permanent traffic control, and landscape plans. HHPR compiled the specification booklet and provided input or information related to special provisions for the above-mentioned sections of work.

DKS Associates – Temporary and permanent traffic control, traffic signals, signing, pavement markings, and street lighting. DKS Associates provided input or information related to the special provisions for the above-mentioned sections of work.

Clackamas County Water Environment Services (WES) – Installation and replacement of sanitary force main.

Clackamas River Water (CRW) – Replacement of water main and water service relocations.

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INFORMATION PROVIDED UNDER SEPARATE COVER

- MONROE STREET IMPROVEMENTS BID SET DRAWINGS
- BID SCHEDULE

OTHER DOCUMENTS AVAILABLE FOR DOWNLOAD FROM FTP SITE:

FTP site: www.tinyurl.com/Monroe-SupportDocs

- Geotechnical and Pavement Design Reports
- Shoulder Material Investigation Report
- Supplemental Design Information and Project CAD files (incl. surfaces for earthwork)
- Private Utility Designs or Records PGE, Lumen, etc.
- Clackamas River Water Technical Specifications and Details

SPECIAL PROVISIONS

WORK TO BE DONE

The Plan Set for this project is entitled:

MONROE STREET IMPROVEMENT PROJECT, CLACKAMAS COUNTY

The Monroe Street Improvement Project includes the construction of roadway improvements to Monroe Street from SE Linwood Avenue and SE Fuller Rd. The project also includes improvements to SE 72nd Avenue and SE Thompson Road.

Improvements include new curbs, concrete driveways and ADA ramps, roundabout, widening of the roadway section to add multi-use pathway on one side of the roadway, storm drainage facilities, sanitary force main, potable water, landscaping, street lighting, utility adjustments, and also to perform additional and incidental Work, as called for by the Specifications and Plan.

APPLICABLE SPECIFICATIONS

The Specifications that are applicable to the Work on this Project are the 2021 edition of the "Oregon Standard Specifications for Construction", as modified by these Special Provisions. All Sections in Part 00100 apply, whether or not modified or referenced in the Special Provisions.

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

The construction drawings may include standard drawings or details within the plan set or they may be included by reference. If standard drawings or details are included, it is intended to indicate that this specific drawing be used. If standard drawings or details are referenced, it is intended to indicate that the latest available drawing should be used.

CLASS OF PROJECT

This is a Clackamas County Development Agency Funded Project.

SECTION 00110 - ORGANIZATION, CONVENTIONS, ABBREVIATIONS, AND DEFINITIONS

Comply with Section 00110 of the General Conditions for Construction for Clackamas County modified as follows:

00110.05(a) Grammar - Add the following bullet to the bullet list:

• For the purposes of this Contract, the terms "sidewalk ramp" and "sidewalk ramps" shall respectively refer to and shall be read to mean "curb ramp" and "curb ramps".

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:

https://dochub.clackamas.us/documents/drupal/ef976bc9-14f4-495b-9bd8-c69ee7334685

00110.05(e) Reference to Websites - Add the following bullet list to the end of this subsection:

• American Traffic Safety Services Association (ATSSA)

www.atssa.com

Clackamas County's Local Contract Review Board (LCRB) Rules https://dochub.clackamas.us/documents/drupal/ef976bc9-14f4-495b-9bd8c69ee7334685

ODOT Construction Section

www.oregon.gov/odot/construction/pages/index.aspx

- ODOT Construction Section Qualified Products List (QPL)
 www.oregon.gov/ODOT/Construction/Pages/Qualified-Products.aspx
 - ODOT Traffic Control Plans Unit

www.oregon.gov/ODOT/Engineering/Pages/Work-Zone.aspx

• ODOT Traffic Standards

www.oregon.gov/ODOT/Engineering/Pages/Signals.aspx

00110.10 Abbreviations

Add the following:

CCDA - Clackamas County Development Agency 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:

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

Agreement – The written agreement between the Owner and Contractor covering the work to be performed under the contract.

Amendment – A contract modification for Additional Work, Changed Work, Extra Work, Field Directives, or other changes. An Amendment changes the contract value, scope, and/or time. Amendments require formal approval by the Board of County Commissioners, pursuant to LCRB Rule Division 160, prior to approval of such work.

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

Award – Same as "Notice 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.

Bid Booklet – The bound paper version included in the Solicitation Documents.

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 documents included or referenced in the bid documents
- Addenda, if any
- The Agreement Form and Special Provisions
- Minimum Contractor Qualifications Submittal Form

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 must be agreed upon, in writing, by the County Project Manager and/or the Contractor's designated representative, prior to beginning work.

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.

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.

Department – Synonymous with 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 00170.65 "Minimum Wage and Overtime Rates for Public Works Projects".

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 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 Procurement Division.

Owner – Synonymous with Agency.

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.

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.

Substantial Completion – The work or specified parts of the work which are sufficiently complete, in accordance with the contract documents, such that they can be utilized by the County for the purposes intended as determined by the Engineer.

Temporary – Work or Bid Items identified as "temporary" require removal once they are no longer needed. All removal costs are to be considered incidental to the temporary item.

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 General Conditions for Construction for Clackamas County 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 Requests for Solicitation Documents – Delete and replace with the following:

See Notice of Public Improvement Contract and Instructions to Bidders.

Copies of the Oregon Standard Specifications for Construction and Supplements may be purchased from the Oregon Department of Transportation from the Plan Distribution Center in Salem, Oregon.

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:

The Clackamas County WES property at 9620 SE Linwood Avenue may be available for Contractor staging. See Section 00290.10.

00120.25 Subsurface Investigations - Replace the first two sentences of the first paragraph with the following:

The Agency or its consultant has conducted subsurface or geologic investigations of the Project Site, and the results of these investigations are available at the Clackamas County's PM office and on the project FTP site. Refer to the "Other Documents Available for Download" section following the Table of Contents for link to FTP site.

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 Bid – Delete and replace with the following:

See Instructions to Bidders.

00120.45 Submittal of Bids - Delete and replace with:

See Instructions to Bidders.

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.

00120.68 Mistakes in Bids - Delete and replace with the following:

See Instructions to Bidders.

00120.70 Rejection of 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.
- * Clackamas County Standard Drawings located at www.clackamas.us/engineering/roadway.html
- * Clackamas River Water Specifications and Standard Details located at https://crwater.com/engineering-specifications/

00130.40 Contract Bonds, Certificates, and Registrations - Delete and replace with the following:

See Instructions to Bidders.

00130.50(a) By the Bidder – Delete and replace with the following:

See Instructions to Bidders.

00130.50(b) By the Agency – Delete and replace with the following:

Within 10 Working Days after the Agency has received and verified the properly executed documents specified in the Instructions to Bidders, and received legal sufficiency approval from the Agency's attorney, the Agency will request Clackamas County Board of Commissioners or County Administrator's Approval of the Contract. Approval will occur within 21 Calendar Days after the Agency has received and verified the properly executed documents. The Agency will then send a fully executed Public Improvement Contract (Contract Form) to the successful Bidder, who then officially becomes the Contractor.

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

Security deposited by unsuccessful bidders will be returned as soon as practicable after the bid opening.

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 – Delete and 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.

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. The Contractor's "as-built"

drawings shall be made available for inspection or review at any time throughout construction. Maintenance of accurate, complete and current "as-built" drawings will be a 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.

00140.70(c) Consideration of Proposal - Add the following to the end of this paragraph:

Cost Reduction Proposals will not be considered during the bidding process.

SECTION 00150 - CONTROL OF WORK

Comply with Section 00150 of the Standard Specifications supplemented and/or 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.

00150.15 Construction Stakes, Lines and Grades – Add the following to the end of Paragraph (b):

The Agency will provide construction staking for all design elements that are specifically identified (by STA/Offset) on the plans, or that can be directly calculated from provided design information. The contractor is responsible for providing their own construction layout for items that are shown schematically on construction drawings or that cannot be precisely staked due to field adjustments. These items will need to be laid out in the field (by the contractor) and may need to be field adjusted to fit within project constraints.

The Agency will stake the following:

- Right-of-way or easement lines
- Limits of clearing and limits for demolition of structures (sawcut lines are not staked)
- Utility installation (manholes, catch basins, waterlines, hydrants, etc.)
- Major utility vaults (PGE)
- Rough grading, road subgrade, top of aggregate base
- Road Improvements (curbs, sidewalks, planters, median, etc.)
- Driveways Stake centerline and width. Contractor to field layout remaining points as required for construction.
- ADA Ramps (based on Contractor's working drawings). Agency will stake enough to facilitate construction (i.e. front center, back of walk, other critical match points such as signal pole and ped pole elevations). Agency will not stake every sidewalk node/deflection points as contractor is required to field fit & verify ADA requirements are met prior to placing concrete. See 00759.46.
- Signal pole and pedestrian pole installations. Note Pedestrian pole locations need to be field verified with regard to Contractor's working drawings, and actual curb locations and sidewalk joints to ensure ADA requirements are met. Final location may require adjustment to meet field requirements.
- Private property improvements such as parking lots, driveway connections, etc.
- Wall alignments and wall foundations (if shown in plans)
- Station Marks (100-ft stations) to aid contractor-provided striping/marker layout. Agency is not responsible for layout of actual stripes or markers.
- Other items not listed but applicable to similar conditions (location precisely identified in plans)
- All stakes will be one-time only. Any staking requested beyond the "one-time", will be charged at the Agency consultant's rates and deducted from progress payments.

The Agency <u>will not</u> stake the following:

- Temporary Signs (or other Temporary Items) Temporary signs are shown schematically on plans as minimum distances along an alignment. Temporary signs need to be field located (by contractor) completing the work. Sign locations may need to be field-modified (while meeting minimum requirements) to resolve field conflicts.
- Tree Removal Typically included within project improvement limits or as shown on plans. Inspector can assist with identification of trees for removal.
- Tree Protection Fencing (if required)
- Erosion Control Shown schematically on plans and often varies from field conditions. Contractor to submit erosion control plans following field observation and locate material as required to meet erosion needs. Field adjustments may be required to improve function.
- Signal Loops Per traffic plans, signal loops are to be located as specific distances from the crosswalk at center of lane. This requires field layout (by contractor).
- Joint trench alignment Plans show schematic alignments and width/depth varies according to need. Agency will stake other controlling features such as back of walk and obstructions to be avoided to assist in field layout
- Junction Boxes and/or smaller utility vaults. Often shown schematically and installed at sidewalk grade. Agency will stake other controlling design features or obstructions to facilitate placement and structure orientation. Final locations may require adjustment to avoid utility conflicts or to fit within final curb/sidewalk configurations

- Sawcut lines Utility sawcut lines are a contractor-generated item (dependent on contractor equipment/shoring). Agency will provide staking of actual utility, but contractor is responsible to generate their own sawcut layout based on the staked alignments. Agency may provide sawcut lines at project limits if field layout not required.
- Temporary and Final striping/ pavement marker layout. Stripe layout to be completed (by contractor) in the field, utilizing actual roadway conditions and plan dimensions. Agency will provide station marks along the alignment (at 100-ft stations) to aid in contractor-layout
- Landscaping and Irrigation
 - Other items not listed but meeting any of the following criteria:
 - Shown schematically on plans
 - Requires field adjustment to fit project requirements
 - Dependent on contractor means/methods
 - Other staking requests for contractor convenience

If the contractor requires (or desires) additional layout or convenience staking that is not provided by the Agency, they should include costs for that work in their respective bid items.

00150.40 Cooperation and Superintendence by Contractor:

00150.40(a) General – Add the following:

• Attend weekly construction meeting with the Engineer either on-site or at a location to be determined by the Engineer.

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 bullet to the end of the bulleted list:

- Hold a Utility scheduling meeting and monthly Utility coordination meetings (see also 00180.42)
- The Contractor will make arrangements for the removal, relocation, or adjustment of utilities and show utility work on the project schedule. The Contractor shall be responsible for coordinating, communicating, and scheduling work with the utility companies through the entire project. The Contractor shall obtain the available plans for utility relocations in the project area from the utility servers.
- The existing underground utilities shown on the Plans have been determined by as-built records and field surveys, but they 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 existing pipeline or other conduit (identified on the project plans or
 not), 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. Where a new utility line crosses an existing abandoned utility (identified on the project drawings or not), the Contractor is responsible for removing the abandoned utility per 00330.41(a)(7) as required to complete new construction as directed.

- The Contractor shall anticipate that some infrastructure adjustments/modifications (i.e. planters, storm infrastructure, curbs, sidewalks, landscaping, etc.) may be required due to existing utility conflicts. The Contractor shall coordinate with engineer and utility representatives and allow sufficient time to resolve conflicts with design revisions as appropriate.
- The Contractor shall coordinate with property owners and utility representatives and make every effort to minimize disruption when transitioning between existing and new utility services.

Add the following subsection:

(f) Utility Contact Information: The following organizations have been identified to possess utilities within the project area:

Utility and Representative

PGE – Power

Brent Baldwin 1705 NE Burnside Gresham, OR 97030 (503) 736-5470 Office (503) 351-7345 Cell Brent.Baldwin@pgn.com

Description of Work/Duration:

PGE power improvements include installation/relocation of poles and adjustment of power lines. Close coordination with PGE by the contractor is critical to the completion of the project within the project timeline. PGE crews may install temporary barriers in front of relocated poles to protect from traffic during construction. PGE crews can be expected to be on-site at any time during the entire duration of the project. Energized power lines overhang portions of the Work with a minimum vertical clearance of 18 feet. Contractor shall maintain at least 10 feet of safety clearance.

PGE – Lighting Services

Chung Lam (503) 736-5785 209 Warner Milne Road Oregon City, OR 97045 Chung.Lam@pgn.com

Description of Work/Duration:

PGE will be installing new street lighting on the relocated power poles. PGE will also be supplementing the lighting along with corridor by installing new wooden poles. Close coordination with PGE by the contractor is critical to the completion of the project within the project timeline. PGE crews can be expected to be on-site at any time during the entire duration of the project.

N.W. Natural Gas Jerry Vaughn (503) 703-6842 220 NW Second Avenue Portland, OR 97209 Jerry.VaughnJr@nwnatural.com

Brock Inman (503) 226-4211 220 NW Second Avenue Portland, OR 97209 Brock.Inman@nwnatural.com

Description of Work/Duration:

N.W. Natural Gas (NWN) has utilities within the project area, including a 12" high-pressure main. Close coordination with NWN by the contractor is critical to the completion of the project within the project timeline. Contractor to identify existing NWN conflicts and coordinate relocation with NWN. It is expected that individual gas services will need to be relocated to accommodate the new design. NWN crews can be expected to be on-site at any time during the entire duration of the project.

Notify, in writing, at least 14 Calendar Days (2 weeks) before beginning any work within 10 feet of the 12 inch diameter high pressure gas pipeline.

Northwest Natural Gas operates a 12 inch diameter high pressure gas pipeline within the Project limits. The high pressure gas line runs within Monroe Street and 72nd Avenue between 70th and Thompson and may require an On-Site safety watcher, at no cost to the Contractor.

When operating equipment directly above the high pressure gas pipeline, keep equipment on the paved surfaces only.

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 Northwest Natural Gas 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 Northwest Natural Gas 1-800-882-3377 in addition to calls required by the Utilities notification system.

Northwest Natural Gas has an existing high pressure gas line that may be within 15 feet of roadway work. There are no anticipated conflicts with this facility. However, due to the close proximity of the work, Northwest Natural Gas will monitor, inspect, and protect.

Comcast

Todd Royer 7900 NE Killingsworth St Portland, OR 97218 Todd Royer@comcast.com

Description of Work/Duration

Comcast will be transferring existing aerial facilities to relocated power poles as well as making adjustments for service drops and any existing vaults/pedestals. Comcast has two underground road crossings feeding SE 64th Ave and SE Cozy Dr. Comcast may be relocating their facilities throughout the duration of the project. Close coordination with Comcast by the contractor is critical to the completion of the project within the project timeline. Comcast crews can be expected to be on-site at any time during the entire duration of the project.

Lumen

Jonathan Myrick 8021 SW Capitol Hill Rd. Rm Portland, OR 97219 (303) 382-0697 jonathan.myrick@lumen.com

Heath Lins 8021 SW Capitol Hill Rd. Rm Portland, OR 97219 (971) 284-2736 heath.lins@lumen.com

Description of Work/Duration

Lumen will be transferring existing aerial facilities to relocated power poles as well as making adjustments for service drops at any existing vaults/pedestals. Lumen also has underground communication lines and structures located throughout the project. These lines and structures may require relocation by Lumen or field adjustments of contractor work as directed by the engineer to avoid conflicts with the new water line and storm line. Close coordination with Lumen by the contractor is critical to the completion of the project within the project timeline. Lumen crews can be expected to be on-site at any time during the entire duration of the project.

Clackamas River Water District

Anthony Steele (503) 722 9239 Office (503) 793 1094 Cell 16770 SE 82nd Drive Clackamas, OR 97015 asteele@crwater.com

Description of Work/Duration:

Clackamas River Water District (CRW) work is included in Schedule B of the contract work Bid Schedule. This includes but is not limited to a new water line replacement along portions of SE Monroe St, new water services and meter relocations, hydrant relocations, and valve adjustments. In addition, CRW will be observing contracted water improvements throughout the duration of the project. Close coordination with CRW by the contractor is critical to the completion of the project within the project timeline. CRW District personnel can be expected to be on-site at any time during the duration of the project.

Clackamas County - Water Environment Services (WES)

Don Kemp 150 Beavercreek Road Oregon City, OR 97045

503-742-4577 DonKem@co.clackamas.or.us

Description of Work/Duration:

Water Environment Services (WES) improvements are included with the contract work. WES, or a designated authority, will be inspecting and observing relocations and/or adjustments of the sanitary systems. Contractor to coordinate directly with project surveyor during installation of the sanitary force main and allow them to collect GPS survey asbuilt records, as requested, prior to backfill. WES personnel can be expected to be on-site at any time during the duration of the project.

00150.70 Detrimental Operations – Add the following:

Portions of this project will 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. To aid in the defense of private property claims against the Contractor and the County, the Contractor shall, prior to start of construction, provide to the Engineer a digital video recording showing all private property which may be disturbed during construction. The Contractor shall include in the video any areas, public or private, that are to be used as staging to document the pre-construction condition of the surface and limits.

SECTION 00160 - SOURCE OF MATERIALS

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

00160.20 Preferences for Materials – Add "Federal highway funds are NOT involved on this Project."

SECTION 00165 - QUALITY OF MATERIALS

Comply with Section 00165 of the Standard Specifications.

SECTION 00170 - LEGAL RELATIONS AND RESPONSIBILITIES

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

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

The portion of this project that will be constructed in Clackamas County road right of way and streets will not require any further street opening permits from Clackamas County to perform the work required under this contract.

The contractor must take out all necessary electrical permits and pay all fees for the project including but not limited to the following:

- Signal Installation
- Private lighting modifications
- Private sign connections
- Irrigation power connections
- Plumbing permits for reconnecting private water services
- All other private or public connections

00170.03 Furnishing Right-of-Way and Permits – Add the following:

Add the following bullet items:

- The Contactor must comply with all special requirements of the written agreements between the County and the Property Owners for work on Private property within the limits of the Temporary Construction Easements or as established by the right-of-entries signed by the property owners to connect driveways to the new roadway. Copies of these agreements are available at Clackamas County upon request.
- The Contractor may not store materials or equipment within project TCE's unless specifically approved by the Project Manager.

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

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	\$1,000,000	\$2,000,000	
Commercial Automobile Liability	y \$1,000,000	(aggregate limit not required)	

Add the following:

The Contractor shall require that all subcontractors of any tier provide insurance coverage (including additional insured provisions) and limits identical to the insurance required of the Contractor under this contract, unless this requirement is expressly modified or waived by the Agency in writing.

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

Add the following as Additional Insureds under the Contract:

- Clackamas County and its officers, agents, and employees
- Clackamas County Board of Commissioners
- Clackamas River Water
- Harper Houf Peterson Righellis Inc, officers, agents, and employees

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

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

- Clackamas County and its officers, agents, and employees
- Clackamas County Board of Commissioners
- Clackamas River Water
- Harper Houf Peterson Righellis Inc. and its officers, agents, and employees

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.

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.

Some local businesses and private property owners will be affected by construction activities on this project and the Contractor is expected to coordinate and work with them to minimize impacts to homes, businesses and to their customers. Access to homes and businesses impacted by this project must be maintained at all times. The Contractor shall coordinate with owners regarding all work on their property or impacting their parking and/or access to ensure minimal impact or specific needs during construction are met.

Some properties within the project area have negotiated contract work to be included or restrictions that limit construction activities on their properties. The Contractor must comply with all special requirements of the written agreements between the County and the Property Owners for work on Private property within the limits of the Temporary Construction Easements or as established by the right-of-entries signed by the property owners to connect driveways to the new roadway. Copies of these agreements are available from Clackamas County.

Add the following subsection:

00180.40(c) Specific Limitations - Limitations of operations specified in these Special Provisions include, but are not limited to, the following:

Limitations

Subsection

Cooperation with Utilities	00150.50
Cooperation with Other Contractors	00150.55
On-Site Work	00180.40(b)
Contract Time	00180.50(h)
Right-of-Way and Access Delays	
Closed Lanes	00220.40(e)(1)
Limited Duration Road Closure	00220.40(f)
Regulated Work Areas	00290.34(a)
Noise Control	
Maintenance Under Traffic	00620.43
Opening Sections to Traffic	00744.51

The Contractor shall be aware of and subject to schedule limitations in the Standard Specifications that are not listed in this subsection.

00180.41 Project Work Schedules – Add the following:

A Type B schedule as detailed in the Standard 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 current week and the following three-week period. The three-week look-ahead schedule shall be in a format agreed upon by the Contractor and the Engineer.

00180.42 Preconstruction Conference - Add the following to the end of this subsection:

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

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

Identify each specific Utility;

Identify Utility contact names and numbers;

Identify dates for Utility scheduling for the entire Project;

Contain documents showing that the Contractor has accomplished Utility locates; and

Contain documents showing that Utility locates, along with applicable construction activities, have been reviewed and discussed on-site with Utility representatives.

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

Detailed discussions of existing and abandoned Utilities,

Detailed discussions of de-energizing and re-energizing service lines,

Detailed discussions of critical locations for potholing of Utilities,

Detailed discussions of Project activities, and

Detailed discussions of on-going Utility relocations in upcoming Project activity areas.

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

The Contractor shall plan and schedule all Utility adjustment operations well in advance of On-Site Work. When the Contractor becomes aware of Utility conflicts not previously identified, the Contractor shall notify the applicable Utilities in writing the same Calendar Day. The Contractor shall allow Utilities at least 30 Calendar Days to relocate (adjust) the Utility conflicts not previously identified.

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.
- List of all contractor and subcontractor equipment proposed for use on the project, and Blue Book Rental Rate sheets for that equipment.
- Digital video showing pre-construction record of private property potentially impacted by construction. See 00150.70.

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

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 ensure minimal interference with traffic. The Contractor shall not begin work that will interfere with work already started. If it is in the County's best interest to do so, the County may require the Contractor to finish a portion or unit of the project on which work is in progress or to finish a construction operation before work is started on an additional portion or unit of the project.

Add the following subsection:

00180.44 Critical Time Periods - Note the following critical time periods, where only certain types of work can be performed throughout the project, and specific completion times for those work items:

• All trees and shrubs which require removal, must be removed by February 28, 2025, to avoid additional costs related to the Migratory Bird Treaty Act (MBTA).

00180.50(h) Contract Time - There is one Contract Time on this Project as follows:

(1) The Contractor shall complete all Work to be done under the Contract, except for plant establishment, not later than April 30, 2026.

The Contractor shall complete all Work to be done under the contract, including the 1st year plant establishment (incidental), and the 2nd and 3rd Year Plant Establishment period, which follows, not later than three years following the date original planted materials are accepted by the County.

00180.65 Right-of-Way and Access Delays - Add the following paragraph:

There are possible Right-of-Way delays on this project. Properties 19, 20, 56, 93, and 94 are not currently available. Contractor should assume these properties will not be available until April 1, 2025.

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 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 – Remove subsections (1) and (2) and replace with the following:

The liquidated damages for failure to complete the Work on time as required by 00180.50(h) will be \$1,200 per Calendar Day.

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.

(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).

Add the following subsection:

00180.88 Workplace Harassment Prevention Plan – Submit a workplace harassment prevention plan for review 10 days before the preconstruction conference:

- A Contractor-developed workplace harassment prevention plan to ensure all workers, regardless of their identity or status, are guaranteed a safe and respectful work environment. The plan applies, but is not limited to, a worker's race, ethnicity, color, national origin, gender identity, gender expression, sex, sexual orientation, religion, marital or familial status, age, mental or physical disability (as defined by the Americans with Disabilities Act and state law), former incarceration, immigrant status, or veteran status.
- A description of how the plan will be implemented and monitored during the project duration.
- A list of the in-person training that will be conducted for workers of all ranks working on the project.
- 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.

Post on the jobsite and make available signage that shows the rights of workers on the site and for:

- a) participation in positive jobsite trainings and
- b) copies of policies about hate, intimidation, or harassment including how to report and how to receive support. Materials will be provided in languages 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.

SECTION 00190 - MEASUREMENT OF PAY QUANTITIES

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

00190.20 Contractor to Provide Vehicle Weigh Scales: Delete and replace subsection (g) with the following:

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

SECTION 00195 - PAYMENT

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

00195.10 Payment for Changes in Material Costs – Add the following:

There are no clauses for material price escalation/de-escalation in this project, including for Asphalt, Steel, or Fuel. There is no option for Contractor participation.

00195.50 Progress Payments and Retained Amounts - Modify as follows:

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 Work accomplished 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" 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 (Interest Bearing Account). 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 (Interest Bearing Account) – 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 the first two paragraphs and add the following bullet items:

- When the Work is 50% completed and upon written application of the Contractor and written approval of the Surety, the Engineer may reduce or eliminate retainage on remaining progress payments if the Work is progressing satisfactorily.
- When the work is 100% complete and all contract requirements have been satisfied, all retainage will be released.

SECTION 00196 - PAYMENT FOR EXTRA WORK

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

Add the following subsection:

00196.90 Extra Work Allowance - The bid schedule of prices contains the bid item "Extra Work as Authorized". This bid item serves as a contingency 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.

The contractor must receive written approval from the Engineer or County Project Manager prior to start of any work to be paid as Extra Work. Any work completed prior to receipt of written approval may not be eligible for compensation.

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.
If the Engineer or Project Manager determines that the Contractor must furnish additional information, records, or documentation to allow proper evaluation of the claim, the Engineer will schedule a second meeting, to be held within 14 calendar days, or as otherwise agreed by the parties, at which the Contractor shall present the requested information, records and documentation.

The Engineer or Project Manager will advise the Contractor of the decision to accept or reject the claim. If the Engineer or Project Manager finds the claim has merit, an equitable adjustment will be offered. If the Engineer or Project Manager finds the claim has no merit, no offer of adjustment will be made and the claim will be denied. The County intends to resolve claims at the lowest possible level.

If, at any step in the claim decision or review process, the Contractor fails to promptly submit requested information or documentation that the Agency deems necessary to analyze the claim, the Contractor is deemed to have waived its right to further review, and the claim will not be considered properly filed and preserved.

If the Engineer or Project Manager has denied a claim, in full or in part, for Contract Time only according to 00180.80, or has denied a claim, in full or in part, for correction of final compensation according to 00195.95, those disputed claims may then be resolved, in full or in part, at either of the two progressive steps of claim review procedure as specified in this Subsection. For all claims, all of the actions and review under each step of the review process shall occur before the review can be advanced to the next higher step.

(b) **Director Claim Review** - Upon request by the Contractor, the Department Director will review the Engineer or Project Manager's decision on the claim and advise the Contractor of the decision in writing. If the Director finds the claim has merit, and equitable adjustment will be offered. If the Director finds the claim has no merit, no offer of adjustment will be made and the claim will be denied.

Once the Engineer determines the Agency is in receipt of a properly submitted claim, the Engineer will arrange a meeting, within 21 Calendar Days or as otherwise agreed by the parties, with the Contractor in order to present the claim for formal review and discussion.

If the Engineer determines that the Contractor must furnish additional information, records or documentation to allow proper evaluation of the claim, the Engineer will schedule a second meeting, to be held within 14 Calendar Days or as otherwise agreed by the parties, at which the Contractor shall present the requested information, records and documentation.

The Director shall evaluate the claim based on the information provided by the Contractor to the Engineer or Project Manager. However, if the Department Director (or designee) determines that the Contractor must furnish additional information, records or documentation to allow proper evaluation of the claim, the Department Director (or designee) will schedule a meeting, to be held within 14 Calendar Days, or as otherwise agreed by the parties, at which the Contractor shall present the requested information, records and documentation.

The claim is subject to records review, if not all of the records requested by the Department Director (or designee) were furnished. If applicable, advancement of the claim is subject to the provisions regarding waiver and dismissal of the claim or portions of the claim.

The decision of the Department Director shall be the final decision of the Agency.

(c) Commencement of Litigation - If the Contractor does not accept the Director's decision, then the Contractor shall commence any suit or action to collect or enforce any claim filed in accordance with 00199.30 within a period of one (1) year following the mailing of the decision or within one (1) year following the date of "Second Notification", whichever is later. If said suit or action is not commenced in said one (1) year period, the Contractor expressly waives any **and** all claims for additional compensation and any and all causes of suit or action for the enforcement thereof that he might have had.

The Contractor must follow each step in order, and exhaust all available administrative remedies before resorting to litigation. Litigation of a claim that cannot be resolved through the process described above shall be initiated by filing a complaint in the Clackamas County Circuit Court for the State of Oregon.

In any litigation, the entire text of any order or permit issued by the County or any other governmental or regulatory authority, as well as any documents referenced or incorporated therein by reference, shall be admissible for purposes of Contract interpretation.

The Contract shall not be construed against either party regardless of which party drafted it. Other than as modified by the Contract, the applicable rules of contract construction and evidence shall apply. This Contract shall be governed by and construed according to the laws of the State of Oregon without regard to principles of conflict of laws.

The Contractor shall comply with 00170.00.

SECTION 00210 – MOBILIZATION

Comply with Section 00210 of the Standard Specifications.

SECTION 00220 - ACCOMMODATIONS FOR PUBLIC TRAFFIC

Comply with Section 00220 of the Standard Specifications modified as follows:

00220.02(a) General Requirements - Add the following bullets to the end of the bullet list:

- When an abrupt edge is created by excavation, protect traffic according to the "Excavation Abrupt Edge" and the "Typical Abrupt Edge Delineation" configurations shown on the Standard Drawings.
- When paving operations create an abrupt edge, protect traffic by installing a "DO NOT PASS" (R4-1) sign before the Work Area at sign spacing "A" from the TCD Spacing Table" shown on the Standard Drawings. Alternate "ABRUPT EDGE" (CW21-7) signs with appropriate (CW21-8) rider and "DO NOT PASS" (R4-1) signs at 1/2 mile spacings. Install a "BUMP" (W8-1) sign 100 feet prior to the transverse paving edge.

00220.03(a) Over-Dimensional Vehicle Restrictions - Replace this subsection, except subsection number and title, with the following:

When the Project restricts the width, length, height, or weight of vehicles through a work zone or detours trucks around a work zone, fill out and submit a completed copy of the "Highway Restriction Notice - Size and/or Weight" form (Form No. 734-2357), available from the ODOT Oregon Trucking Online website (see 00110.05(e)), at least 35 Calendar Days before the restriction or detour takes effect.

Section 00220.40(e) Lane Restrictions – Replace this section with the following:

Traffic lanes may be closed on Monroe Street when allowed, shown, or directed during the following periods:

(1) Weekdays:

- Between 8:00 a.m. and 8:00 p.m. Monday through Friday.
- Between 9:00 a.m. and 3:00 p.m. Monday through Friday, within 250' of Linwood Ave.

(2) Weekends –

- Between 8:00 a.m. and 8:00 p.m. on Saturday.
- Sunday closures are not allowed

Lane restrictions may be adjusted at the discretion of the Owner.

Sunrise and sunset hours for "Clackamas County", for the applicable month(s), to be determined from the following website:

hhtp://www.sunrisesunset.com/USA/Oregon.asp.

(3) **Holidays** – Between noon on the day preceding a legal holiday or holiday weekend and midnight on a legal holiday or the last day of the holiday weekend, except Thanksgiving, when no lanes may be closed between noon on Wednesday and midnight on the following Sunday.

For the purposes of this Section, legal holidays are as follows:

- New Year's Day on January 1
- Memorial Day on the last Monday in May
- Independence Day on July 4
- Labor Day on the first Monday in September
- Thanksgiving Day on the fourth Thursday in November
- Christmas Day on December 25

When a holiday falls on Sunday, the following Monday shall be recognized as a legal holiday. When a holiday falls on Saturday, the preceding Friday shall be recognized as a legal holiday.

(4) **Special Events –** Between noon on the day preceding and midnight on the final day of the special event.

For the purposes of this Section, special events are as follows:

None Specified

All pedestrian ways will be open, traffic lanes will be unobstructed, and parking will be available to the maximum extent possible. Temporary Protection and Direction of Traffic measures will be placed as necessary for the safe movement of pedestrians, bicycles, and motor vehicles through the construction site.

- (5) **Staging Considerations** Contractor to consider the following when developing their staging/work sequencing plan:
 - Some properties are not currently available for construction. Refer to 00180.65 for right-of-way and access delay considerations.
 - Utilities relocations Poles and overhead lines are being relocated on this project. All relocations between SE Linwood Ave. and SE 70th Ave. are anticipated to be relocated in advance of construction. Remaining pole relocations are also affected by right-of-way accessibility and will likely coincide with construction work in those areas.
 - Monroe West (from Linwood to the west side of SE 70th Avenue) may be closed to all traffic except local traffic and emergency vehicles. Contractor must submit for road closure.
 - The remainder of the project (Monroe and 72nd/Thompson east of 70th Ave.) must maintain two-way traffic (min. width 22 feet) throughout construction. Contractor may remove street parking by placing temporary "No Parking" signs.
 - A maximum 60-day road closure will be permitted for the construction of the roundabout at Monroe and 72nd. Limits of road closure are between the east side of 70th Ave. (at Monroe) and the west side of 74th Ave. (both at Monroe and at Thompson). Road closure only allowed during 2025 summer period (June 15, through August 22, 2025), to prevent impacts to school bus traffic. Pedestrian access, local access to properties within the closure area, and emergency vehicle access must be maintained. A road closure permit and detour route are required. The closure will not be allowed until the area and the detour route are signed according to the TCP and the requirements of Section 00255.
 - While road closures and detours are generally permitted in these special provisions, the Contractor must officially apply for said closure/detours with Clackamas County and submit traffic control plans and other associated paperwork as required to approve closures. Contractor is responsible for providing all traffic control devices as required for these closures/detours.

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).

00221.06 (c) Tourist-Oriented Directional and Business Logo Signs - Replace this subsection, except for the subsection number and title, with the following:

Submit one of the following for approval, at least 5 Calendar Days before the preconstruction conference:

(1) No Signs - If there are no tourist-oriented directional (TOD) or business logo signs on the Project, a written notification that no TOD or business logo signs exist within the Project limits or

(2) Signs - Submit one copy of a sketch map of the Project showing all existing TOD and business logo signs and a written narrative describing how these signs will be kept in service and protected throughout all the construction stages. If modifications are necessary, submit updated information to the Engineer for approval at least 21 Calendar Days before the change is needed.

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

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.

00221.90(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.

SECTION 00222 – TEMPORARY TRAFFIC CONTROL SIGNS

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

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

 At least ten Calendar Days prior to the start of work, place a "SIDEWALK OPEN" (CW11-3) sign in advance of each end of the Work Area. Locate the sign so it is legible from the nearest alternate pedestrian pathway facing incoming pedestrian traffic. The sign may be mounted between the panels of a Type II barricade, or on a single-post TSS. Do not place the sign or support such that it narrows the pedestrian pathway to a width less than 4 feet.

- Before starting work, place pedestrian-specific TCM as shown in the TCP, or as directed. Maintain "SIDEWALK OPEN" (CW11-3) signs while work is affecting the pedestrian pathway.
- Place a "PEDESTRIANS ON ROADWAY" (CW11-2) sign at the beginning of each end of the Work Area, facing incoming traffic as shown, or as directed.
- Install "ROAD WORK AHEAD" (W20-1-48) signs with a 36 by 24-inch "FINES DOUBLE" (R2-6aP) rider on Monroe St, Thompson Rd, and intersection streets, according to the "TCD Spacing Table" shown on the Standard Drawings or as modified by the Plans except do not install the "FINES DOUBLE" rider on concrete barrier mounted signs.
- Install beyond each end of the Project, facing outgoing traffic, an "END ROAD WORK" (CG20-2A-24) sign a distance of (A ÷ 2) according to the "TCD Spacing Table" shown on the Standard Drawings or as modified by the Plans.
- Install a "NEW TRAFFIC PATTERN AHEAD" (W23-2) sign approximately 100 feet in advance of 72nd Avenue on Monroe St, facing northbound, eastbound, and westbound incoming traffic.
- Keep the "NEW TRAFFIC PATTERN AHEAD" signs in place 30 Calendar Days after installing the roundabout.
- Install an 18 by 24-inch "NO PARKING" (R8-3a) sign in every block where on-street parking is prohibited, facing incoming traffic.
- For paving operations on non-freeways, place "ABRUPT EDGE" (CW21-9) and "ROAD WORK XX MPH" (CW20-1a) signs as shown. Use an "XX" value equal to 10 mph below the current posted regulatory speed. If a speed is posted for a temporary regulatory speed reduction, that speed is the current posted regulatory speed.
- For all other moving operations that do not create an abrupt edge adjacent to traffic, omit the "ABRUPT EDGE" signs.
- When construction requires bicycles to use the Traffic Lanes, install a "Bicycle ON ROADWAY" (CW11-1) symbol sign on 1/2 mile spacing through the affected area. Keep the signs in place until completion of the Shoulder or bikeway final surface.

SECTION 00223 - WORK ZONE TRAFFIC CONTROL LABOR AND VEHICLES

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

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

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

00223.91 Payment, Lump Sum or Incidental Basis - Replace this subsection, except for the subsection number and title, with the following:

When the Contract indicates payment for Work under 00221.98 Payment, Method "B" - Lump Sum Basis or 00221.99 Payment, Method "C" - Incidental Basis, no separate or additional payment will be made for Work performed under this Section. Payment will be included in payment according to 00221.98 or 00221.99.

SECTION 00224 - TEMPORARY TRAFFIC CHANNELIZING DEVICES

Comply with Section 00224 of the Standard Specifications modified as follows:

00224.46 Pavement Edge Delineation - Replace the paragraph that begins "Place tubular or conical markers..." with the following paragraph:

Place tubular or conical markers to delineate the edge of Pavement immediately after construction Work or paving operations create an abrupt or sloped edge drop-off greater than 1 inch in height along the right hand or left hand Shoulder.

00224.91 Payment, Lump Sum or Incidental Basis - Replace this subsection, except for the subsection number and title, with the following:

When the Contract indicates payment for Work under 00221.98 Payment, Method "B" - Lump Sum Basis or 00221.99 Payment, Method "C" - Incidental Basis, no separate or additional payment will be made for Work performed under this Section. Payment will be included in payment according to 00221.98 or 00221.99.

SECTION 00225 - TEMPORARY PAVEMENT MARKINGS

Comply with Section 00225 of the Standard Specifications modified as follows:

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.

00225.91 Payment, Lump Sum or Incidental Basis - Replace this subsection, except for the subsection number and title, with the following:

When the Contract indicates payment for Work under 00221.98 Payment, Method "B" - Lump Sum Basis or 00221.99 Payment, Method "C" - Incidental Basis, no separate or additional payment will be made for Work performed under this Section. Payment will be included in payment according to 00221.98 or 00221.99.

SECTION 00228 - TEMPORARY PEDESTRIAN AND BICYCLIST ROUTING

Comply with Section 00228 of the Standard Specifications modified as follows:

00228.00 Scope - Replace this subsection, except subsection number and title, with the following:

In addition to the requirements of Section 00221, this Work consists of furnishing, installing, operating, maintaining, inspecting, and removing temporary devices for accommodating pedestrians and bicyclists through a work zone.

00228.13 Temporary Curb Ramps - Add the following sentence to the end of this subsection:

Furnish truncated dome detectable warning surface for temporary curb ramps from the QPL according to 00759.12.

00228.43 Temporary Curb Ramps - Add the following paragraph to the end of this subsection:

Install a minimum 2 foot wide truncated dome detectable warning surface on temporary curb ramps at pedestrian street crossings. Omit truncated dome detectable warning surfaces on temporary curb ramps that are not at a pedestrian street crossing.

00228.80(a) Length Basis - Replace this subsection, except subsection number and title, with the following:

Pedestrian channelizing devices and bicycle channelizing devices will be measured on the length basis upon delivery to the Project. The quantities will be limited to those in the approved TCP.

00228.80(b) Unit Basis - Replace this subsection, except for the subsection number and title, with the following:

Temporary curb ramps will be measured on the unit basis, at each location where a temporary curb ramp is constructed or placed.

00228.90 Payment - Add the following paragraph after the paragraph that begins "In item (c), the type...":

Item (c) includes furnishing and installing truncated dome detectable warning surfaces.

00228.91 Payment, Lump Sum or Incidental Basis - Replace this subsection, except for the subsection number and title, with the following:

When the Contract indicates payment for Work under 00221.98 Payment, Method "B" - Lump Sum Basis or 00221.99 Payment, Method "C" - Incidental Basis, no separate or additional

payment will be made for Work performed under this Section. Payment will be included in payment according to 00221.98 or 00221.99.

SECTION 00270 - TEMPORARY FENCES

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

00270.90 Payment - Add the following pay item:

Pay Item

Unit of Measurement

(d) Temporary Fence, 6 Ft Chain Link Fence with Concrete Blocks.......Foot

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 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.

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, or
- 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.

00280.16(i) Concrete Washout – Replace this subsection, except subsection number and title, with the following:

Furnish impermeable, spill resistant, leak proof concrete washout basin of sufficient size and quantity to retain all concrete wash water and concrete waste developed during construction, meeting the following requirements:

- (1) Field fabricated washout basin as shown and consisting of the following:
 - Straw Bales Standard rectangular straw bales, with straw Material according to 01030.15, except no certification is required.
 - **Plastic Sheeting** Minimum 10-mil thick polyethylene plastic sheeting.
 - **Staples** 1/8-inch diameter steel wire staples. 2-inch "U" width with a length of 6 inches minimum

(2) Manufactured basins sufficiently durable to be removed intact, or cleaned of content without releasing concrete material or concrete washout water.

00280.30 Erosion and Sediment Control Manager - Replace this subsection, except for the subsection number and title, with the following:

If the Agency's NPDES 1200-CA Permit is applicable to the Project, designate and provide an ESCM who possesses a valid ODOT ESCM certificate or who has successfully completed an erosion control training that is acceptable to the Engineer.

The ESCM duties include:

- Manage and ensure proper implementation of the ESCP.
- Accompany the Engineer during field review of the ESCP prior to construction activities.
- Monitor rainfall, snow melt and runoff on and in the vicinity of the Project Site.
- Monitor water quality in receiving streams in the vicinity of the Project Site.
- Monitor water in sediment traps receiving runoff from soils amended with cementitious material for acidity or alkalinity.
- Monitor locations identified in Section 00294 for compliance.
- Inspect ESC and monitor receiving waters on active construction site on initial date and every 14 Days for effective functioning.
- Inspect ESC on inactive sites every 14 Days for effective functioning.
- Inspect ESC for effective functioning and monitor receiving waters, on all active and inactive sites at least within 24 hours of rainfall events sufficient to result in runoff from the Project Site.
- Ensure that ESC are regularly cleaned and maintained.
- Mobilize crews to make immediate repairs to ESC or install additional ESC during working and non-working hours when ESC is not effectively functioning.
- Record actions taken to clean up discharged sediment.
- Report potential permit violations to the Agency immediately upon discovery.
- Repair conditions that caused permit violations and prepare submittals for corrective actions that document repairs for Agency review and submittal to regulatory agencies.
- Update the ESCP monthly and within 7 Days after changes or major ESC modifications are implemented in the field.
- Submit ESCP revisions in electronic format, to Engineer within 30 Days after making revisions.
- Prepare a contingency plan in preparation for emergencies and for the periods between October 1 and May 31.
- Accompany the Engineer on inspections and, if required, on inspections by representatives
 of regulating agencies. If any of the following occur, revise the ESCP to reflect the change(s)
 within 7 Days.
- Changes to the construction plans that impact erosion and sediment control measures;
- Changes to the stormwater control BMPs, their location, maintenance required, and any other revisions necessary to prevent erosion and control sediment runoff;

- An increase in the area impacted by construction activities;
- Other activities at the site that are no longer accurately reflected in the ESCP. This includes changes made in response to corrective actions triggered;
- To reflect areas on the site map where operational control has been transferred (and the date of transfer) since initiating permit coverage;
- If inspections by DEQ determine that ESCP revisions are necessary for compliance with the 1200-CA permit;
- Where DEQ determines it is necessary to install or implement additional controls at the site in order to meet the requirements of the 1200-CA permit. Include the following in the ESCP:
- A copy of any correspondence describing such measures and requirements; and
- A description of the controls to be used to meet such requirements.
- Change of Subcontractors that engage in construction activities on site, and the areas of the site where the Subcontractor(s) engage in construction activities;
- Change of any personnel (by name and position) that are responsible for the design, installation and maintenance of stormwater control measures;
- Change of the certified erosion and sediment control inspector, or of their contact information and any applicable certification and training experience;
- To reflect any revisions to applicable federal, state, tribal, or local requirements that affect the stormwater controls implemented at the site; and
- If a change in chemical treatment systems or chemically enhanced stormwater control is made, including use of a different treatment chemical, different dosage rate, or different area of application as applicable. Furnish temporary sediment trap as shown on drawings, stamped and signed by licensed engineer.

Submit revised ESCP to Engineer for signature by licensed professional (see 00280.04) and submission to DEQ when changes are made for the following reasons:

- Part of a corrective action requirement;
- An increase or decrease in project size;
- An increase or decrease in size or location of disturbed areas;
- Changes to BMPs, such as type, design or location;
- Change of the ESCM.

Add the following subsection

00280.41(e) Buffers - 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.

00280.46(i) Concrete Washout - Add the following paragraph to the end of this subsection:

Locate concrete wash basins and concrete waste disposal to prevent stormwater that has been in contact with concrete wash or waste concrete from contaminating Waters of the State or stormwater inlets or conveyances. Handle wash water as waste. Do not dispose of concrete wash water or wash out concrete trucks or tools onto the ground, or into storm drains, open ditches, streets, or streams.

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

Provide and stockpile the following emergency materials on the Project site:

ltem

Quantity

Straw Wattles	300 LF
Biofilter Bags	50 EA

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.

00280.91 Payment – Modify as follows:

Modify item (h) Concrete Washout Facility to be paid LS. Add the following:

Item (h) includes payment for all concrete washout facilities used on the project.

For item (j) "Inlet Protection, _____", the "Type" of inlet protection is as shown in the construction drawings. See sheet 4.6 for reference.

SECTION 00290 - ENVIRONMENTAL PROTECTION

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

00290.10 Staging and Disposal Sites - Add the following to the end of this subsection:

The contractor may be able to utilize the Clackamas County WES property at 9620 SE Linwood Avenue for staging with the following conditions:

- Coordinate with the County Project Manager prior to use
- Protect existing trees as required in 00320
- Protect existing fence. Fence should be securely closed each night.
- Ensure any equipment using or being stored in the staging area is leak free
- Contractor will keep property clean and orderly at all times. Garbage storage is not allowed.
- Fuel storage is not allowed
- Availability Lot is previously committed to Mill Park overflow parking for annual Johnson Creek Cleanup. Coordinate with WES for specific dates.
- Property access will be revoked for violation of these conditions, or any other property abuse.
- Contractor assumes all risk associated with use of the property
- Upon completion, restore the site by:
 - Removing all materials, equipment and other construction debris
 - Clean up any apparent spills or damages
 - Regrade/reseed as required to re-establish vegetation to pre-construction condition.

00290.20(c)(1) General - Add the following:

Railroad ties and painted curbs are to be considered hazardous waste and shall be handled/disposed of as such.

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.

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.

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:

The Contractor shall comply with the applicable noise control requirements of the ordinance for project work in Clackamas County.

Copies of the ordinance and noise control code (Title 6.05) are available at the office of the Project Manager or online at www.clackamas.us/code.

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.

Upon receiving Notice to Proceed, and confirmation that affected right-of-way and/or easements have been received, the Contractor shall clear affected vegetation and remove all nesting habitat as required for project construction. To minimize risk of potential erosion, only remove vegetation above ground surface until construction work is ready to begin in each area of vegetation removal. All nesting habitat removals must be complete by February 28, 2025.

Add the following subsection:

00290.36(c) Avoid Nesting - Comply with Migratory Bird Treaty Act (16 U.S.C. 703-712).

Submit a migratory bird protection plan for review and approval at least 10 Calendar Days before the pre-construction conference. Include the following:

- Describe measures to avoid disturbance to migratory bird nesting habitat (vegetation, structures) from March 1 to September 1 of each year.
- Do not begin work until the migratory bird protection plan is approved.
- Meet with the Agency Biologist, the Engineer, and inspector on-site if nests containing eggs or young are found.
- In the event the nesting birds or bats are encountered during construction, the Engineer may suspend the work according to 00180.70.

SECTION 00294 – CONTAMINATED MEDIA

Section 00294, which is not a Standard Specification, is included in this Project by Special Provision.

Description

00294.00 Scope - In addition to the requirements of Section 00290 and these specifications, this work consists of the following:

• Excavate, transport, and dispose of contaminated soils from the following locations:

Location/Station	Depth below grade (feet)	Approximate Concentration (mg/kg)	Known Contaminants
Green	0-1.5' BGS	0.45749 mg/kg	Benz(a)anthracene
		0.4905 mg/kg	Benzo(a)pyrene
Orange	0-1.0' BGS	(0-1.0 BGS) 0.01283 mg/kg (1-1.5 BGS) 0.01223 mg/kg	4,4'-DDE 4,4'-DDT



 Prepare a Health and Safety Plan (HASP) for work within the contaminated areas of the Project.

A report titled "Shoulder Material Investigation" dated June 11, 2024 was completed by NV5. This report is available on the project FTP site. Refer to the "Other Documents Available for Download" section following the Table of Contents for link to FTP site.

00294.03 Submittals - Submit the following documents:

• A site specific HASP at least 10 Calendar Days before the pre-construction conference.

• Modifications to the HASP that are requested by the Engineer within seven Calendar Days of the request.

00294.05 Health and Safety Plan - Prepare a site-specific HASP that meets or exceeds the requirements of 29 CFR 1910.120 and include a personnel and equipment decontamination plan that details how decontamination media will be contained and disposed.

Maintain a copy of the HASP on site at all times and readily available to employees and inspectors during construction activities. If additional information becomes available regarding the site specific conditions, revise the HASP and submit the revised version to the Engineer. Review of the HASP by the Engineer does not indicate that the HASP is fully compliant with State or federal requirements. Compliance is the responsibility of the Contractor. Review by the Engineer will not impose liability upon the Agency or relieve the Contractor of responsibilities under the Contract.

Do not begin work in contaminated areas until the Engineer provides written acknowledgement of the HASP.

All personnel entering contaminated areas shall follow the requirements of the HASP.

Labor

00294.30 Personnel Qualifications - Provide employees meeting the following requirements:

• Any required certifications by DEQ that are required for the specific contaminates.

Construction

00294.40 Contaminated Soil Excavation - Excavate and handle contaminated soil according to the following:

- Schedule Contaminated Soil Excavation during the summer months, when the water table is low, or at a time when all excavation and backfill work can be completed in dry conditions, as approved by the Engineer.
- Notify the Engineer 3 Calendar Days before beginning excavation activities within contaminated areas.
- Allow the Agency to collect soil samples during excavation activities.
- Allow Agency access to field screen soils for contaminants during excavation.
- Segregate non-contaminated soil from contaminated soil during excavation activities, as directed.
- Load contaminated soil directly into trucks and transport directly to the recycling or disposal facility.
- Contractor is responsible to provide opportunity for County Inspector to document each truck and approximate load size, before it leaves the site. Only properly documented and verifiable contaminated loads will be paid for.
- Remove contaminated media from the exterior of all vehicles before they leave the Project Site.

• Where over excavation is required and approved by the County, backfill the excavation according to 00330.42.

00294.41 Contaminated Soil Management - Reuse, recycle, or dispose of contaminated soil according to any of the following:

- Landfill Disposal:
 - Obtain the Engineer's approval of the disposal facility before disposing of the contaminated soil.
 - Transport the contaminated soil to a DEQ permitted municipal solid waste landfill or a permitted construction and demolition landfill for disposal.
 - Complete and sign all manifests and bill-of-lading forms for handling, loading, transporting, and disposing of the contaminated soil.
 - Pay all filing and permit fees.
- Recycling:
 - Obtain the Engineer's approval of the recycling facility before disposing of the contaminated soil.
 - Transport contaminated soil to a DEQ permitted recycling facility.
 - Complete and sign all manifests and bill-of-Lading forms for handling, loading, transporting, and recycling the contaminated soil.

Measurement

00294.80 Measurement -

No measurement of quantities will be made for health and safety plan.

The quantities of contaminated soil removed will be measured on the weight basis, based on the receiving recycling or disposal facility weigh tickets.

Payment

00294.90 Payment - The accepted quantities of work performed under this Section will be paid for at the Contract unit price, per unit of measurement, for the following items:

Pay Item

Unit of Measurement

(a) Health and Safety Plan(b) Contaminated Soil RemovalLump SumTon

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 00305 - CONSTRUCTION SURVEY WORK

Comply with Section 00305 of the Standard Specifications modified as follows:

00305.00 Scope – Replace this subsection with the following:

The Agency is providing Construction Survey on this project. Refer to 00150.15 for list of items included in this work. Typically, the Agency will stake all design elements that are specifically identified (by STA/Offset) in the plans or that can be directly calculated from provided design information.

If the Contractor desires construction staking of items not included in Agency provided staking, or for their convenience, they will need to provide their own construction survey to complete these tasks.

00305.90 Payment – There will be no payment for Construction Survey Work. Any contractorprovided construction survey will be considered incidental to the item for which it is used.

SECTION 00310 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS

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

00310.00 Scope - Add the following:

The work shall include the removal and/or relocation of existing landscape features that must be removed for the project. The work shall also include the removal of walls, existing fences and foundations, existing inlets, culverts, and disconnecting, protecting, and/or capping the existing utility lines as shown on the plans. This work also includes the removal of portions of abandoned utilities (whether identified on the plans or not) that conflict with contract work. Complete abandoned pipe removals per 00330.41(a)(7).

The work includes removal of existing WES force main, as required to complete new installation work.

This work includes removal of portions of greenhouse/shed buildings at property 19/20, as required to construct road improvements. Salvage existing materials and coordinate with property owner to re-construct structure ends within temporary construction easement.

00310.91 Lump Sum Basis – Add the following:

The estimated quantity for items to be removed and paid on the lump sum basis is as follows:

Among other removal work, item (a) includes the removal of AC Pavement, Concrete, Curb and Concrete Surface that is estimated at 15,200 Square Yards. This estimated quantity is provided for the benefit of the Contractor, however the Contractor is responsible for calculation of their own quantity of surfaces and other materials to be removed in preparation of their bid. No payment adjustment will be made based on actual quantities removed.

Sawcutting existing surfaces or structures shall be considered incidental to item (a).

SECTION 00320 - CLEARING AND GRUBBING

Comply with Section 00320 of the Standard Specifications modified as follows:

00320.40(a) Clearing Trees and Other Vegetation - Add the following to the end of this subsection:

Trees and vegetation identified for removal within available right of way must be removed by February 28, 2025 to comply with MBTA requirements (See 00290.36(a)).

00320.42 Disposal of Matter - Replace this subsection with the following subsection:

00320.42 Ownership and Disposal of Matter - Vegetation and natural material designated for preservation and salvage are the property of the Agency. All other matter and debris accumulated from clearing and grubbing operations become the Contractor's property at the place of origin. Dispose of all matter and debris according to 00290.20.

00320.90 Payment – Add the following:

No separate or additional payment will be made for trimming existing trees or shrubs that are adjacent to sidewalks, roadways, pathways, etc. as required or as directed by the Engineer.

SECTION 00330 - EARTHWORK

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

00330.02 Definitions - Add the following:

General Rock Excavation – General Rock Excavation is defined as removal of solid bedrock, or ledge rock, which in the opinion of the engineer cannot be excavated or removed by dozers with rippers, or hydraulic excavator, but which requires the use of pneumatic rock splitters, hammers, and wedges.

00330.03 Basis of Performance - Delete this subsection and replace with the following:

00330.03 Basis of Performance – Earthwork to be performed under this specification including excavation, haul, disposal, and embankment construction, unless otherwise specified, will not be measured and will be paid for on the Lump Sum Basis.

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

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

00330.41(a)(5) Waste Materials - Replace this subsection, except for the subsection number and title, with the following:

Unless otherwise specifically allowed and subject to the requirements of Section 00280, dispose of materials, classed as waste materials in 00330.41(a)(3), outside and beyond the limits of the Project and Agency controlled property according to 00290.20. Do not dispose of materials on Wetlands, either public or private, or within 300 feet of rivers or streams.

Contractor shall provide written certification to Clackamas County DTD that the waste material is placed in a state approved and local agency approved location. Certification must be delivered to County prior to material leaving the site.

00330.41(e) Blasting – Replace this subsection, except for the subsection number and title, with the following:

Blasting will not be permitted on this project.

00330.42(c-3) Embankment Slope Protection - Add the following paragraph:

Construct the outer 12 inches of embankments with suitable materials to establish slope stabilization through permanent seeding. If suitable material is not available, provide suitable materials from a Contractor-provided source which conforms to the requirements of 00330.11 or 00330.13 and provides favorable conditions for germination of seed and growth of grass.

00330.80 Measurement – Replace the first paragraph and two bulleted items with the following:

• There will be no measurement of quantities for general earthwork. The Contractor shall complete their own earthwork calculations to confirm the required quantities for their bid. The Engineer has estimated the following quantities utilizing AutoCAD Civil 3D 2020.

*Embankment:	2,000 cubic yards
*Excavation:	5,800 cubic yards

The Contractor should consider the following when preparing their lump sum bid:

* The Engineer's earthwork volume estimates are calculated as the volume between subgrade of the roadway as indicated on the typical sections and the existing ground surface as indicated in the topographic survey. These estimated volumes <u>do not</u> reflect volumetric adjustments relating to stripping depths or removal of structures and obstructions such as existing asphalt concrete pavement and concrete sidewalks, curbs, and driveways that are identified to be removed. Earthwork quantities also include excavation required at storm planters and for placement of topsoil within the project limits including landscape areas, and other grading outside the limits of the roadway as shown on the plans.

A 5% contingency has been added to the earthwork quantity estimate to make grading adjustments as requested by property owners or directed by the Engineer. This additional 5% work contingency shall be reflected in the Contractor's lump sum bid and will not be measured.

*The quantities estimated above exclude excavation and embankment for the following items, which are paid under the separate specific bid items:

Trench Excavation (Incidental to Pipe Installation) All Concrete Curbs, Sidewalks (Incidental to those items) Wall Excavation All other items where the specifications specifically state that excavation is a part of the bid item

Some rock excavation may be required on this project. The estimated earthwork quantities already include volumes where rock could be encountered. Thus, the bid item for "General Rock Excavation" should be considered an "additional cost for excavating through rock instead of soil" and applies to all locations where excavation may be needed, including mass earthwork, wall excavations and trench excavations.

For some locations on this project, particularly at storm planters and near protected trees, excavation may require gentle excavation techniques such as vacuum excavation or hand excavation to ensure no damage to existing utilities or critical tree roots occurs.

Supplemental design information and AutoCAD Files are available on the project FTP site. For link to the FTP site, refer to the "Other Documents Available for Download" section following the Table of Contents.

00330.91(d) General Excavation - Delete the bullet that begins "Includes unsuitable material...".

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

Earthwork required for driveways and road approaches. Earthwork for driveways and road approaches will be that which is outside the neat line limits shown on the typical sections.

Add the following subsection:

00330.93 Excavation Basis Payment – Add the following pay item:

Pay Item	Unit of Measurement	
	-	

(f) General Rock Excavation

Cubic Yard

Item (f) will be payment in full for all labor, equipment, tools, removal, disposal, and incidentals necessary to complete the work as required and as specified in these special provisions.

Add the following subsection:

00330.95 Lump Sum Basis - All earthwork, including all excavation and embankment as defined under Section 00330, shall be completed on a Lump Sum Basis under the following pay item:

Pay Item

Unit of Measurement

(a) Earthwork – Excavation and Embankment

Lump Sum

Payment includes payment in full for excavating, selecting, handling, hauling, placement and compaction of the materials as specified, and all other costs associated with furnishing required embankment materials.

No additional payment will be made for gentle excavation techniques such as vacuum- or handexcavation, where required.

SECTION 00331 - SUBGRADE STABILIZATION

Comply with Section 00331 of the Standard Specifications.

SECTION 00340 - WATERING

Comply with Section 00340 of the Standard Specifications.

SECTION 00350 - GEOSYNTHETIC INSTALLATION

Comply with Section 00350 of the Standard Specifications.

SECTION 00390 - RIPRAP PROTECTION

Comply with Section 00390 of the Standard Specifications.

SECTION 00405 - TRENCH EXCAVATION, BEDDING, AND BACKFILL

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

00405.12 Bedding - Replace this subsection, except for the subsection number and title, with the following:

Bedding material shall be 3/4"-0 aggregate bedding.

00405.13 Pipe Zone Material – Replace the sentence beginning "For rigid pipes..." with the following:

For rigid pipes, furnish 3/4"-0 base aggregate, conforming to 2630.10

00405.14(b) Class B Backfill – Replace the sentence beginning "Designated size shall be..." with the following:

Designated size shall be 3/4"-0.

00405.46(c)(1) General – Replace the sentence beginning "Use Class B backfill..." with the following:

00405.46(c)(1) General – Use 3/4"-0 backfill.

00405.46(c)(2) Class A, B, C, or D Backfill - Replace the paragraph that begins "Compact the top 3 feet..." with the following paragraph:

Compact each layer of trench backfill material within the Roadway and Shoulders, and within a 2V:1H Slope line projected from each Subgrade Shoulder, to not less than 95 percent of maximum density. Compact all other trench backfill material to not less than 90 percent of maximum density.

00405.90 – Add the following:

If required, General Rock Excavation (as defined in 00330.02), will be paid under Section 00330.

SECTION 00430 - SUBSURFACE DRAINS

Comply with Section 00430 of the Standard Specifications.

SECTION 00440 - COMMERCIAL GRADE CONCRETE

Comply with Section 00440 of the Standard Specifications modified as follows

00440.12 Properties of Commercial Grade Concrete - Replace the bullet that begins "**Slump** - 5 inches..." with the following bullets:

• **Slump** - 5 inches or less

• For concrete sidewalks, ramps, driveways, or other hand finished surface applications, and when using a high range water reducing admixture, provide a slump of 8 inches or less as approved by the Engineer.

00440.13 Field-Mixed Concrete - Replace the subsection, except for subsection number and title, with the following:

CGC Work items listed in 00440.14(a) may be field-mixed conventionally, or by volumetric/mobile mixers conforming to ASTM C685. When approved, concrete sidewalks, concrete curb ramps, concrete driveways, and other flat concrete surfaces may be field-mixed using volumetric/mobile mixers conforming to ASTM C685, request approval prior to placement. For all other CGC applications, submit written request to the Engineer for approval to use volumetric/mobile mixers conforming to ASTM C685 at least 21 Days prior to placement.

Pre-packaged dry blended concrete from the QPL may be used for Work items listed in 00440.14(a).

00440.14(d) Hardened CGC - Add the following to the end of this subsection:

The ASTV at 28 Days is the average compressive strength of the three cylinders tested. Discard all specimens that show definite evidence, other than low strength, of improper sampling, molding, handling, curing, or testing. The average strength of the remaining cylinders shall then be considered the test result.

00440.40(b) Placing - Add the following bullet to the end of the bullet list:

• When haul time or placement conditions warrant exceeding the time of discharge, submit a detailed breakdown of the estimated time needed from batching to discharge of a load along with the measures that will be taken to ensure slump, temperature and uniformity will be maintained. Submit in advance to establish a new time limit at the Engineer's discretion.

SECTION 00442 - CONTROLLED LOW STRENGTH MATERIALS

Comply with Section 00442 of the Standard Specifications.

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

Comply with Section 00445 of the Standard Specifications modified as follows.

00445.11 Materials - Modify as follows:

Storm Pipe: Unless otherwise noted, all storm pipe, 12" diameter and larger, shall be ADS SaniTite HP pipe or reinforced concrete pipe. Storm pipe, if required for shallow installations, shall be Class 52 Ductile Iron Pipe.

Sanitary sewer pipe and storm pipe smaller than 12" diameter shall be PVC, ASTM D3034 SDR 35 and shall comply with Clackamas County Service District No. 1 specifications.

Sanitary Force Main pipe shall be 12" Ductile Iron Pipe, meeting the requirements of Section 01140 and 02470. Provide continuous joint restraint per 02475. Sanitary Force Main valves shall meet the requirements of 01150 and 02480.

00445.40 General – Add the following to the end of the section:

(h) Potholing – The Contractor must pothole <u>all utility crossings</u> to confirm that there are no grade conflicts. If a grade conflict is found, the Contractor shall report immediately to the Engineer. Additionally, the Contractor shall begin coordinating the relocation work with the specific utility company. Some storm or sanitary laterals may require grade adjustment to avoid existing utility conflicts.

00445.70 General – Add the following to the end of the section:

(c) Sanitary Force Main – After completing installation of the pipe, install caps, temporary blowoff assembly, and thrust restraint as required to facilitate pressure testing. Complete hydrostatic testing meeting the requirements of 01140.51.

00445.80(a) Depth – Delete this subsection. There will be no measurement for pipe depth. There will be no adjustment of quantity or payment to account for horizontal or vertical adjustments in the storm or sanitary lateral construction as required to avoid utilities.

00445.91 Payment – Delete the subsection and replace with the following:

The accepted quantities of pipe and related work items performed under this Section will be paid for at the Contract unit price, per the unit of measurement, for the following items:

Pay Item

Unit of Measurement

(a)	inch	Pipe	, Class "B" Backfill	Foot
(b) 4	inch Sanitary L	ateral Extensi	on, Class "B" Backfill	Each
(c) G	ate Valve,	for Force	Main	Each

In item (a), the nominal pipe diameter will be inserted in the first blank. The type of pipe will be inserted in the second blank. If necessary, additional descriptive information will be inserted in the third blank.

Item (b) includes all work required to install a 4-inch sanitary lateral extension, as shown on the plans and in Standard Drawing SAN-017 on Sheet 3.7, including lateral extension, wye, cleanout riser and cap, and extension behind cleanout, as required.

In Item (c), the size and type of valve will be inserted in the blank, along with other descriptive information, as necessary.

Payment for "12 Inch Restrained Sanitary Force Main Ductile Iron Pipe, Class "B" Backfill" includes all materials and work required for construction of the force main as shown in the project drawings, including all fittings, bends, thrust blocks and mechanical restraint, and all caps, temporary blowoff assembly and temporary restraint as required to facilitate pressure testing. Valves will be paid separately, unless indicated otherwise.

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.

Excavation and backfill for pipes greater than 72 inches in diameter will be paid for according to Section 510.

There will be no separate payment for pipe tees (including inserta tees), pipe wyes, flapper valves, slip joints, sloped end section, safety end section, concrete pipe anchors, concrete closure collars, concrete in blocks, reinforcement used in blocks, metal pipe anchor, furnishing and installing the outer sleeve of the slip joint, furnishing and installing safety end sections, and including safety bars when required. There will be no separate payment for connection to other structures. Installation of these items will be considered incidental and included in payment for the appropriate pipe pay item.

No separate or additional payment will be made for:

- Trench excavation, bedding, pipe zone material, and trench backfill for pipes 72 inches and less in diameter
- Trench Resurfacing
- Adjusting the grade as required to avoid utilities
- pipe plugs, stoppers, and other required fittings
- metal pipe anchors
- tracer wire
- hydrostatic, air, joint, and deflection testing
- video inspection
- temporary pumping/storage of sanitary effluent during transfers (if necessary)
- detention pipe fittings, access structures, or other elements required for construction.
- Sawcutting

When the Contract Schedule of Items does not indicate payment for pipes or other work 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 00470 - MANHOLES, CATCH BASINS, AND INLETS

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

00470.42 Precast Concrete Catch Basins and Inlets – Modify as follows:

Precast Concrete Catch Basins and Inlets will not be allowed on this project.

00470.41 (c) – Grates, Frames, Covers and Fittings – Replace the sentence beginning "Set frames, covers and grates true..." with the following:

"Set frames, covers and grates true to the locations and grades established. Use tapered grade rings to ensure rims are set to match grades for both road slope and side slope and provide a smooth finished surface."

Manholes located in the shared use path or sidewalks shall have slip resistant lids.

00470.90 Payment – Modify as follows:

Add the following pay items:

	Pay Item	Unit of Measurement
(I)	Beehive Inlet Stormwater Planter Overflow	Each
(m)	Storm Cleanout	Each

Item (m) includes installation of concrete pad as shown in the construction drawings.

Delete the paragraph beginning "Payment will be..." and replace with the following:

Payment will be payment in full for furnishing and placing all materials, and for furnishing all equipment, labor, appurtenances and incidentals necessary to complete the work as specified and as shown on individual details for complete installation of the specific items.

SECTION 00490 - WORK ON EXISTING SEWERS AND STRUCTURES

Comply with Section 00490 of the Standard Specifications modified as follows:

00490.10 Materials - Replace the "Precast Concrete Sections" line with the following line:

Precast Concrete Sections......02450

00490.43 Abandoning Pipe in Place – Delete the second paragraph and replace with the following:

When directed by the Engineer, fill abandoned pipes or other areas with controlled low-strength material meeting the requirements of Section 00442.

00490.90 Payment – Modify as follows:

Delete Pay Item (g). Connection of an existing pipe or structure to a new pipe, manhole, catch basin or inlet is considered incidental to pipe or structure installation.

Modify Pay Item (h) to pay by the cubic yard (for structures filled with aggregate).

Add Pay Item (j) "Controlled Low Strength Material", paid by the CY. This pay item will be used to pay for CLSM backfill as required and directed by the Engineer.

Valve (water/gas) or Cleanout (storm/sanitary) adjustments to finished grade are incidental and 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 00495 - TRENCH RESURFACING

Comply with Section 00495 of the Standard Specifications.

SECTION 00596B – PREFABRICATED MODULAR RETAINING WALLS

Comply with Section 00596B of the Standard Specifications modified as follows:

00596B.00 Scope – Add the following:

There are no specific locations where segmental block retaining walls are identified in the design. This item is a placeholder to be used for minor gravity walls if needed and as directed to resolve slope or support issues on the project. Contractors should provide a unit price sufficient to

complete this work as deemed necessary but understand that there is no guarantee that the bid quantity will be utilized.

00596B.01 Proprietary Prefabricated Modular Walls – The following proprietary retaining wall systems have been preapproved for Prefabricated Modular Block Walls:

- Allan Block Retaining Wall System, telephone: (541-233-7856 Tanner Weston).
- Approved equal

00596B.03 Definitions - Replace the "Bin Wall" definition with the following definition:

Bin Wall - A prefabricated modular gravity retaining wall system type composed of metal or precast concrete modules backfilled with granular material.

Replace the "Crib Wall" definition with the following definition:

Crib Wall - A prefabricated modular gravity retaining wall system type composed of interlocking longitudinal and transverse beams made of precast reinforced concrete and backfilled with granular material.

Replace the "**Prefabricated Modular Retaining Wall System**" definition with the following definition:

Prefabricated Modular Retaining Wall System - A basic gravity retaining wall system type composed of solid or hollow prefabricated concrete or steel modules. Hollow modules are typically backfilled with granular material. Prefabricated modular retaining walls include metal and precast concrete bin, precast concrete crib, gabion, dry cast concrete block, and wet cast concrete block gravity retaining walls.

00596B.11(b) Modular Block Core and Drainage Backfill - Replace this subsection, except for the subsection number and title, with the following:

Furnish 3/4" - No. 4 PCC Aggregate Material meeting the requirements of 02690.20(a) through (d) and 02690.20(f).

00596B.44(a)(1) Placement - In the paragraph that begins " Place granular structure backfill with...", replace the first sentence with the following sentence:

Place retaining wall granular backfill with each course of blocks.

00596B.47(b)(2) Maximum Density and Optimum Moisture Content - Replace this subsection, except for the subsection number and title, with the following:

Determine maximum density and optimum moisture content of the retaining wall granular backfill material according to AASHTO T 99 Standard Proctor Method A, with coarse particle correction according to ODOT TM 223.

00596B.80 Measurement – The quantities of Work performed under this Section will be measured on the area basis. The measured quantity will be the square foot area determined by multiplying the length along face of wall by the exposed height of wall.

00596B.90 Payment – Add the following:

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

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

(d) Retaining Wall, Segmental Block (As-Directed) Square Foot

SECTION 00596C - CAST-IN-PLACE CONCRETE RETAINING WALLS

Comply with Section 00596C of the Standard Specifications modified as follows:

00596C.00 Scope – Add the following:

This work includes construction of the cast-in-place concrete retaining wall and integrated fence along the top of the wall as shown.

00596C.06 Experience and Qualifications – Products and work shall be supplied by a Contractor having a minimum 5 consecutive years of experience in concrete cast-in-place wall construction. Contractor shall furnish evidence to the satisfaction of the Engineer of the Contractor's successful experience with products and workmanship used in similar applications.

00596C.16 Fence – Provide fence material as indicated on the plans, meeting the requirements of 01050.

00596C.17 Class I Finish – Provide Class 1 Finish and Concrete Coating according to Section 00540.53.

00596C.43 Wall Construction – Delete subsection (b) and replace with the following:

(b) Cast-in-Place Concrete Gravity Retaining Walls - Construct cast-in-place concrete gravity wall with Class 1 finish and concrete paint coating (concrete gray) per 00540.53.

00596C.80 Measurement – Add the following to the end of this subsection:

The estimated quantities for the Concrete Gravity Wall are as follows:

Wall No.	Station Limits	Area	Fence
Wall 1	Sta. 0+00 to Sta. 0+38	114 sf	38 feet

The estimated wall surface area above is approximate and was calculated by multiplying the wall length by average height (2' exposed + 1' bury). The Contractor is responsible for completing their own quantity takeoff for bidding purposes.

00596C.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) Retaining Wall – Concrete Gravity with Fence

Lump Sum

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

No separate or additional payment will be made for:

- excavation, shoring, and specified backfill
- wall drainage and filter systems
- concrete and reinforcement for concrete
- Class 1 Finish and concrete paint
- fencing, pedestrian rail or work required to prepare wall for installation of fencing or pedestrian rails (i.e. insertion of sleeves in wall or in backfill zone).

SECTION 00610 - RECONDITIONING EXISTING ROADWAY

Comply with Section 00610 of the Standard Specifications.

SECTION 00620 - COLD PLANE PAVEMENT REMOVAL

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

00620.40(a) General - Replace this subsection, except for the subsection number and title, with the following:

Remove the existing pavement to the depth, width, grade and cross section shown or as directed. The use of a heating device to soften the pavement is not allowed.

Match Points: At all locations where the area to be cold planed abuts up to existing asphalt roadway, the contractor shall sawcut the asphalt equal to the depth of the cold plane at the match line prior to removal of existing pavement to provide a vertical surfaced, clean joint.

The contractor may need to chip out by hand areas adjacent to existing curbs and structures (i.e. manholes, catch basins, valve boxes, etc.) that are missed by grinding equipment or at transverse joints, as necessary to provide clean edges at the required depth.

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 for up to 5 Calendar Days after starting asphalt grinding work. Sweep and clean the cold planed surface before opening to traffic.

Contractor is to schedule the grind and pavement inlay work to prioritize paving half of the road at a time to minimize number of transverse joints.

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.

00620.90 Payment – Add the following to this section.

Sawcutting required at match points defined in Section 00620.40(a) shall be considered incidental to payment. No additional payment will be made for removal or disposal of pavement fabric or for the "increased cost" of hauling grindings that include pavement fabric.

SECTION 00641 - AGGREGATE SUBBASE, BASE, AND SHOULDERS

Comply with Section 00641 of the Standard Specifications modified as follows:

00641.10(a) Base and Shoulder Aggregate - In the paragraph that begins "Aggregate for bases...", add the following sentence after the first sentence:

Base aggregate shall be 1"- 0 size. Base aggregate shall be "visually" clean. Any visually dirty aggregate base delivered to the project will be rejected.

Add the following subsections:

00641.10(c) Open Graded Aggregate Base for Pervious Pavement – Open Graded Aggregate Base for Pervious Pavement shall be $1\frac{1}{2}$ " $-\frac{3}{4}$ " crushed rock meeting the requirements of 02690.20.

00641.10(d) Choker Aggregate Base for Pervious Pavement – Open Graded Aggregate Base for Pervious Pavement shall be $\frac{3}{4}$ " – $\frac{1}{4}$ " crushed rock meeting the gradation provided in 02630.11.

00641.20 Mixing Plant - Replace the sentence that begins "Mix aggregate and water..." with the following two sentences:

Mix aggregate and water according to paragraph (a) of this subsection. Road mix is not allowed on this Project.

00641.80 Volume Basis - Replace this subsection, except for the subsection number and title, with the following:

When measurement is by volume, quantities will be the theoretical neat line quantity constructed and accepted.

00641.90 Payment - Add the following Pay Items:

Pav Item

Unit of Measurement

Cubic Yard

(c) Open Graded Aggregate Base for Pervious Pavement

(d) Choker Aggregate Base for Pervious Pavement

Cubic Yard

Add the following to the end of this subsection:

Aggregate base within the road section under both the asphalt pavement section and concrete pavement, and under curb and gutters shall be 1"-0 and will be paid as "Aggregate Base" under 00641.90. See plans for depth requirements.

Crushed rock required under items outside of the road section (i.e. under sidewalks, driveways, etc.) shall be 3/4" – 0 and will be considered incidental to the appropriate bid item. See plans for depth requirements.

SECTION 00730 – EMULSIFIED ASPHALT TACK COAT

Comply with Section 00730 of the Standard Specifications.

00730.90 Payment - Replace this subsection, except for the subsection number and title, with the following:

No separate or additional payment will be made for emulsified asphalt tack coat.

SECTION 00743 - POROUS ASPHALT CONCRETE (PAC)

Comply with Section 00743 of the Standard Specifications modified as follows:

00743.45(b) Drop-Offs - Replace the bullet that begins "Provide warning signs and markings..." with the following bullet:

Provide warning signs and markings according to Sections 00221, 00222, 00224 and 00225 where abrupt or sloped edge drop-offs greater than 1 inch in height occur.

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.

00744.90 Payment – Add the following:

Payment for asphalt prelevel, if required, will be included under payment of Level 3, 1/2:" Dense ACP Mixture.

SECTION 00759 - MISCELLANEOUS PORTLAND CEMENT CONCRETE STRUCTURES

Comply with Section 00759 of the Standard Specifications modified as follows:

00759.00 Scope - Add the following:

All work must meet the requirements of the American with Disabilities Act (ADA).

Add the following subsection:

00759.01 Terminology - According to 00110.05(a), for the purposes of this Contract, the terms "sidewalk ramp" and "sidewalk ramps" shall respectively refer to and shall be read to mean "curb ramp" and "curb ramps".

00759.03(b) Curb Ramp Plan - Replace the bullet that begins "Compliance with Working Drawings and details..." with the following bullet:

Comply with Working Drawings and details submitted under 00759.03(a)

00759.10 Materials - Add the following:

For Exposed Aggregate Concrete Driveway Connections, furnish concrete sealer from the QPL. Install/apply sealer per manufacturer recommendations.

For Colored Stamped Concrete, use integral coloring agents (Greystone or similar) and provide ashlar stone finish, or other approved pattern. Color shall be terracotta, closely matching Federal Standard 595B Color #22203 and #32169, and shall meet requirements of ASTM C979. Submit samples of color and pattern as photos for County review and approval. The County reserves the right to change color and pattern without impact to cost.

Contractor shall furnish one 4' x 4' colored and stamped sample at the project location for approval by the County and Engineer. Once accepted, the furnished approved sample shall remain through the completion of the work and will be a quality standard for determining acceptance of placed work. Do not commence work on the colored stamped concrete until the sample has been completed and approved. The contractor may be required to construct additional samples if the initial tests are not acceptable. Upon acceptance of samples, provide asbuilt record of concrete mix design to the Agency, including quantities of the specific integral color agents used, so the mix can be duplicated in future repairs The stamped concrete shall be sealed with an approved sealer after it has cured.

00759.11 Aggregate Base - Add the following to the end of this subsection:

Aggregate base within the road section (i.e. under "Concrete Curb" or "Concrete Curb and Gutter") shall be 1"-0 and will be paid as "Aggregate Base" under 00641.90. See plans for depth requirements.

Crushed rock required under items outside of the road section (i.e. under sidewalks, driveways, etc.) shall be 3/4" – 0 and will be considered incidental to the appropriate bid item. See plans for depth requirements.

00759.43 Foundation Preparation - Add the following to the end of this subsection:

For medians, curbs for medians, or traffic separators constructed on existing asphalt surfaces, notify Engineer when forms are set to confirm lines and grades of structures. Do not begin placement of concrete until Engineer has reviewed and approved the layout and form grades.

00759.50 Surface Finishing – Add the following to subsection (b):

For the interior face of planter walls and concrete check dams, provide a Class 1 finish per 00540.53. A concrete coating, per 00540.53 (d), is not required.

00759.90 Payment – Add the following Pay Items:

Pay Item

Unit of Measurement

(o) Concrete Driveway Connection, _____ Square Foot

Replace the paragraph that begins " Item (k) includes the additional Work required ... " with the following paragraph:

Item (k) includes the additional Work required to construct a curb ramp or replace an existing curb ramp. Where required, item (k) also includes installation of directional bar tile. Payment for the area of the curb ramp will be made under the concrete walks Pay item.

Add the following:

Items "Concrete Curbs, Modified Thickened Curb and Gutter for Stormwater Planters" and "Concrete Curbs, Perimeter Curb Wall for Storm Planters", include installation of Black Plastic Liner adjacent to planter curbs as shown in the project details. "Thickened Curb and Gutter" also includes construction of inlet/outlet breaks in the curb line and installation of transition concrete between back of curb opening and concrete pad in planter.

Item (o) includes concrete driveway connections between back of walk and connection to existing driveway. If necessary, the type of concrete will be inserted in the blank.

Item "Concrete Driveway Connection, Exposed Aggregate" includes procurement and application of concrete sealer.

Item "6 Inch Thick Reinforced Stamped Colored Concrete Surfacing" includes additional work to provide colored stamped samples, and to provide color pigmentation and stamp materials. It also includes any additional materials required to protect existing surfaces near/adjacent to color concrete to protect them from the stained concrete, or to clean/repair/replace items damaged or stained by the colored concrete.

Aggregate base within the road section (i.e. under "Concrete Curb" or "Concrete Curb and Gutter") shall be 1"-0 and will be paid as "Aggregate Base" under 00641.90. See plans for depth requirements.

Crushed rock required under items outside of the road section (i.e. under sidewalks, driveways, etc.) shall be 3/4" – 0, and will be considered incidental to the appropriate bid item. See plans for depth requirements.

No separate or additional payment will be made for Sidewalk Ramp Working Drawings, Sidewalk Ramp Plan, Preplacement Conference, concrete form verification, and any necessary repair, removal or replacement of Sidewalk Ramps.

No separate or additional payment will be made for providing supervisory personnel who have an active ODOT ADA Certification for Contractors to directly supervise the curb ramp Work.

SECTION 00815 - BOLLARDS

Comply with Section 00815 of the Standard Specifications.

SECTION 00850 - COMMON PROVISIONS FOR PAVEMENT MARKINGS

Comply with Section 00850 of the Standard Specifications modified as follows:

00850.47(c) Retro-reflectivity - Replace the sentence that begins "Except for paint applications..." with the following sentence:

Except for paint and colored lane marking applications, evaluate longitudinal and transverse marking retro-reflectivity according to ODOT TM 777.

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.

SECTION 00868 - COLORED LANE MARKINGS

Section 00868, which is not a Standard Specification, is included in this Project by Special Provision.

Description
00868.00 Scope - In addition to the requirements of Section 00850, install colored lane markings according to the following Specifications.

Labor

00868.30 Manufacturer's Representative - Provide a manufacturer's representative according to 00850.30.

00868.31 Manufacturer-Certified Installers - Provide certified installers according to 00850.31.

Construction

00868.45 Installation - Place markings only when the manufacturer's representative determines that the pavement is ready for the pavement marking material.

Apply the material to the pavement according to the manufacturer's installation instructions to the full width shown in the Plans. Joints will be allowed with no overlap or gap allowed at the joint.

Do not install reflective elements.

Install the pavement marking material surface according to the manufacturer's installation instructions to achieve a uniform initial skid resistance greater than or equal to 50 British Pendulum Number (BPN) when tested according to ASTM E303.

Apply one or more of the following marking material types:

- **Preformed, Fused Thermoplastic Film High Skid** Install preformed, fused thermoplastic film high skid that has factory installed crushed glass or Aggregate on the surface.
- **Methyl Methacrylate** Apply methyl methacrylate to the pavement to the full width shown in a single application. Colored lane markings shall be 90 mils to 120 mils in thickness, exclusive of projecting surface-applied friction elements, with a continuous and uniform cross sectional configuration.

00868.75 Manufacturer's Warranty - Furnish a manufacturer warranty that unconditionally warrants to the Agency the product(s) and installation under this Section against failure , according to this subsection and 00170.85(c)(1). Use Agency-supplied warranty forms, available from the Engineer.

"Unconditionally warrant" means that the warranty covers all failures, regardless of the source or cause of the failure, including, without limitation, whether the source or cause is or may be related to workmanship, inspection, or choice of materials.

The Agency inspection of any portion of the Work during the Contract and during the product installation, the Agency acceptance of the Work, corrections under the warranty, or expiration of the warranty shall not relieve the obligations under this warranty.

- (a) Warranty Period The warranty period shall be for 18 months.
- (b) Failure For purposes of this warranty, failure is defined as one or more of the following:

- Insufficient Color Stability:
 - Green markings fail to meet the requirements of the Federal Highway Administration Interim Approval for Optional Use of Green Colored Pavement for Bike Lanes (IA-14) tested according to ASTM D6628.
- Loss of Adhesion Markings show 5 percent or greater loss of marking material due to non-adhesion.
- Skid Resistance Markings fail to maintain an average skid resistance greater than or equal to 50 British Pendulum Number (BPN) when tested in an equal number of test locations in both wheel path and non-wheel path locations according to ASTM E303.

(c) Remedy - Upon notification by the Engineer of a failure, provide the following remedy at no additional cost to the Agency:

- Repair or replace, at the discretion of the Engineer, all failed pavement markings within 6 months of the Agency's request to do so.
- Use materials and procedures meeting the Specifications.
- Match repairs to adjoining Work.
- Coordinate timing of repair Work with the Engineer.

(d) Agency's Right to Make Repairs - If, in the opinion of the Engineer, a failure causes or may cause a hazard, the failure may be temporarily corrected by Agency or other forces at no additional cost to the Agency. Replace temporary repairs with permanent repairs at no additional cost to the Agency and according to the Specifications and within the time specified in 00868.75(c).

Measurement

00868.80 Measurement - The quantities of colored lane markings will be measured on the area basis.

Payment

00868.90 Payment - The accepted quantities of Work performed under this Section will be paid for at the Contract unit price, per unit of measurement, for the following items:

Pay Item

Unit of Measurement

(a) Green Bicycle Lane, Preformed Thermoplastic Film Square Foot

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

Payment for Work under this Section will be limited to 75 percent of the amount due until the Agency has received the signed warranty.

SECTION 00902 - CROSSWALK CLOSURE SUPPORTS

Section 00902, which is not a Standard Specification, is included in this Project by Special Provision.

Description

00902.00 Scope - This Work consists of constructing crosswalk closure supports and associated signs as shown.

Materials

00902.10 Materials - Furnish Materials meeting the following requirements:

Commercial Grade Concrete .	
Steel	01070.10 and 01070.12
Signs	00940

Construction

00902.40 General - Install crosswalk closure supports and associated signs as shown or directed.

Measurement

00902.80 Measurement - The quantities of crosswalk closure supports will be measured on the unit basis. No separate measurement will be made for signs attached to crosswalk closure supports.

Payment

00902.90 Payment - The accepted quantities of Work done under this Section will be paid for at the Contract unit price, per each, for the item "Crosswalk Closure Supports".

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

SECTION 00905 - REMOVAL AND REINSTALLATION OF EXISTING SIGNS

Comply with Section 00905 of the Standard Specifications modified as follows:

00905.40 General - Add the following:

Protect existing signs and posts that are designated for "removal only". Deliver removed signs and posts to Clackamas County at 902 Abernethy Road, Oregon City. Contact the Clackamas County Inspector, 48 hours prior to removal.

SECTION 00910 - WOOD SIGN POSTS

Comply with Section 00910 of the Standard Specifications.

SECTION 00920 - SIGN SUPPORT FOOTINGS

Comply with Section 00920 of the Standard Specifications modified as follows:

00920.80 Measurement - Add the following to the end of this subsection:

The estimated quantities of concrete for minor sign supports are:

Support Type	Quantity

Perforated Steel Square Tube Anchor Sign Supports 6 cu. yd.

SECTION 00930 - METAL SIGN SUPPORTS

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

00930.80 Measurement - Add the following to the end of this subsection:

The estimated quantities of structural steel are as follows:

Item	Estimated Quantity (Pound)
Minor Sign Supports	
Perforated Steel Square Tube Anchor Sign Supports	3800

SECTION 00940 - SIGNS

Comply with Section 00940 of the Standard Specifications.

SECTION 00960 - COMMON PROVISIONS FOR ELECTRICAL SYSTEMS

Comply with Section 00960 of the Standard Specifications modified as follows:

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00960.01 Regulations, Standards, and Codes – Add the following to the end of this subsection:

Provide and install an illumination system satisfying the requirements and standards of Portland General Electric (PGE) Option A. Comply with the requirements of the PGE Statement of Streetlight Installation Responsibilities, latest revision.

00960.02 Equipment List and Drawing Submittals – Replace this subsection with the following subsection:

00960.02 Equipment List and Drawing Submittals – Within 30 Calendar Days after execution of the Contract, submit electronic PDF copies of the Blue Sheets (see 00160.00 and 001607.07) and the Green Sheets (see 00160.00 and 00160.07) according to 00150.37 for all materials the Contractor proposes to install. Refer to 00990 for exemptions to the Blue Sheets and Green Sheets on Clackamas County operated traffic signals.

Within 14 Calendar Days after receipt of submittals, the Engineer will review the submittals and designate them in writing as "review" or "reviewed with comments". Then within the follow 7 Calendar Days after the Engineer review, Clackamas County Traffic Staff will review the submittals and designate them in writing "approved", "approved as noted", or "revise and resubmit". Do not proceed with the Work before receiving written approval of the submittals from the Engineer or Clackamas County.

00960.10 Materials – Add the following to the end of this subsection:

Use only Schedule 80 PVC conduits and fittings for all underground conduits.

Furnish illumination system electrical materials that are listed on the PGE Approved Street Lighting Equipment list dated August 11, 2023 or latest revision. The list is available at the following website:

https://assets.ctfassets.net/416ywc1laqmd/1gNsn1kSSuWeqEyct0m7QW/0f2a5bc658a0aa65b1 3e723d15fed8f0/approved materials list 1.pdf

00960.30 Licensed Electricians - Replace the paragraph that begins "According to the Oregon Administrative Rule ..." with the following paragraph:

According to the Oregon Administrative Rule 918-282-0120(1), no person or entity shall allow any individual to perform electrical work for which the individual is not properly registered or licensed. Every person who installs electrical systems on the Project shall submit a copy of their electrical license or apprentice registration to the Engineer prior to performing any Work. They must be licensed as an S or a J under Oregon Administrative Rule 918-282.

Add the following subsection:

00960.42(c) Connecting Non-Metallic Conduit to Metallic Conduit - Use a nonmetallic female threaded connector to connect nonmetallic conduit to metallic conduit.

00960.43 Foundations – Add the following to the end of this subsection.

Separate the aluminum from the concrete with one layer of 30 pound nonperforated, asphaltsaturated felt. Neatly trim the felt pad to the size and shape of the base contact surface.

00960.46 Service Cabinet and Electrical Energy - Replace this subsection, except for the subsection number and title, with the following:

Table 00960-1 contains Utility contact information to arrange for the Utility to make electrical hookups:

	PGE Contact Person's Name,	
Location	Email and Phone Number	PGE Job Number
SE Monroe	Chung Lam	M3325942
Street Lighting	Chung.Lam@pgn.com,	
	503-736-5785	
SE Linwood	Jeremy Rasmussen	M3377100
Ave/SE Monroe	jeremy.rasmussen@pgn.com	
Street Service	971-419-1742	
Connection		

Table 00960-1

Furnish and install a meter base approved by the serving Utility (with cover by the Utility), where shown.

SECTION 00970 - HIGHWAY ILLUMINATION

Replace Section 00970 of the Standard Specifications with the following:

00970.00 Scope – In addition to requirements of Section 00960 install highway illumination according to the following Specifications:

00970.01 Regulations, Standards, and Codes - Provide and install PGE street lighting system satisfying the requirements and standards of Portland General Electric (PGE) Option A. Comply with the requirements of the PGE Statement of Streetlight Installation Responsibilities, latest revision available at the time of advertisement.

00970.02 Materials - The street lighting system will be installed under PGE Option A. Foundations will be provided by the Agency for the Contractor to install, see section 00160.30. Provide the materials to install the street light conduits, conduit bends, junction boxes, ground rods, and any other incidental work required for the installation of the street lights required for PGE Option A. Provide all trench excavation, bedding, and backfill for the installation of the street light conduits. Refer to the following website for PGE installation requirements:

https://portlandgeneral.com/builders-new-construction/electric-service-requirements

Furnish illumination system electrical materials that are listed on the PGE Approved Street Lighting Equipment list of the latest version available at the time of advertisement. The list is available at the following website:

https://assets.ctfassets.net/416ywc1laqmd/1gNsn1kSSuWeqEyct0m7QW/0f2a5bc658a0aa65b1 3e723d15fed8f0/approved_materials_list_1.pdf

00970.40 Construction - Install the conduit according to PGE requirements from the street light junction boxes or poles to the power source. The power source is considered the PGE electrical service point of connection.

The street lighting conduits may be placed in the same trench as other underground utilities provided the appropriate clearances between conduits are provided. Perform trench excavation and backfill with granular material compacted according to PGE requirements.

Notify the Engineer at least 14 Calendar Days before underground work is constructed. The Contractor must receive the Engineer's approval prior to covering underground work. After the Engineer has accepted the street underground system installed by the Contractor, PGE will install the street light poles, luminaire arms, and luminaires, and pull the cable and wires.

Field cutting of conduit bends is not allowed.

00970.80 Measurement - No measurement of quantities will be made for Work performed under this Section.

00970.90 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) Pole Foundations	Lump Sum
(b) Switching, Conduit, and Wiring	Lump Sum

Item (a) includes installation of pre-cast foundations for lighting poles furnished by the Agency.

Item (b) includes all switches, conduit, cabinets, delineators, junction boxes, and other items required to construct the lighting system as specified.

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

SECTION 00990 - TRAFFIC SIGNALS

Comply with Section 00990 of the Standard Specifications modified as follows:

Add the following subsection:

00990.10 Materials - Furnish Materials meeting the following requirements:

Add the following subsections:

00990.13 Power Service Cabinet - Service cabinets shall be the following or an approved equal:

Fouch Drwg #0600-0074-00 (NEMA 3-R Metered Base Mount Service Cabinet Clackamas County).

00990.15 Pedestrian Push Buttons and Mount - Pedestrian pushbuttons for installation at traffic signals shall be as follows:

Pedestrian push button system shall be a Polara iNavigator 2-Wire (iNS2) Push Button Station (P/N: iNS2-3-T-N-0-B) or approved equal. See the Contract Plans for additional details. The following components make up the push button system:

(a) Push Button Station (P/N: iNS2 PBS) - The main body with pushbutton for installation on the signal or pedestrian pole using 2-Wire push button wired as a 3-Wire system.

(b) Ped Head Control Unit (P/N: iPHCU3W) - Interface device for installation in pedestrian signal head. One per Push Button Station.

(c) Pedestrian Push Button Decal - The pedestrian push button sign shall be a Polara option T (Hi-Intensity Retroreflective MUTCD R10-3e) 9"x15" sign.

(d) Interconnect Cables (iN3-CABLE-X) - Pre-cut lengths (12', 25', or 50') of interconnect cable from Push Button Station to Ped Head Control Unit.

(e) iNav Bluetooth Dongle (iN-DGL) - Bluetooth dongle to communicate from personal computer with Polar iN3 Push Button Station.

00990.16 Rectangular Rapid Flashing Beacons – The installation of rectangular rapid flashing beacons (RRFB) shall be as follows:

- (a) **RRFB Assembly Unit** The RRFB shall be a Carmanah (P/N: SC315-G) with AC Power Kit and uni- or bi-directional light bar configurations as shown on the Contract Plans or approved equal.
- (b) Push Button System RRFB push button system shall be a Polara Crosswalk Button Station (P/N: iNX9WN0-Y) or approved equal.

00990.18 Cable - Industrial Ethernet Cable - Waterblock/direct burial rated, shielded enhanced, Category-6A cable with 24 AWG solid bare copper conductors, PE inner jacket, overall shield, and sunlight and oil resistant PE jacket. Terminate cable with factory-installed RJ-45 connectors.

00990.90 Payment - Delete Pay Item (c) from the pay item list.

Delete the paragraph that begins "Item (c) includes furnishing and installing..."

Replace the paragraph that begins "In Items (a), (b), (c), (d), (f) ..." with the following paragraph:

In Items (a), (b), (d), (f) and (g), the intersection location will be inserted in the blank.

Replace the paragraph that begins "Item (b) includes furnishing and replacing..." with the following paragraph:

Item (b) includes furnishing and replacing or installing items for an existing traffic signal installation and the detection system.

Replace the paragraph that begins "Item (f) includes furnishing and installing..." with the following paragraph:

Item (f) includes furnishing and installing all items of the flashing beacon system.and the detection system.

Crosswalk closure supports will be paid for according to 00902.90.

SECTION 01015 - STORMWATER CONTROL, WATER QUALITY PLANTER

Section 01015, which is not a Standard Specification, is included for this Project by Special Provision.

Description

01015.00 Scope - This work consists of furnishing and installing water quality planters as shown. The work includes the installation and maintenance of the entire facility, as necessary, for a complete installation.

Materials

01015.10 Materials - Furnish material meeting the following requirements:

Storm Sewer Pipe	00445.11
Subsurface Drain Pipe	00430.10
Structural Steel	02530
Anchor Bolts	02560

01015.11 Water Quality Mixture – Furnish water quality mixture meeting the requirements of Section 01040.

01015.12 Concrete Check Dams – Construct concrete check dams with commercial grade concrete meeting the requirements of 00440.

01015.13 Washed Drain Rock – Furnish crushed granular drain backfill material $(1 \frac{1}{2} - \frac{3}{4})$ meeting the requirements of 00430.11. Material shall be clean and free of fines.

01015.14 Open Graded Aggregate Base – Furnish open graded aggregate base material meeting the requirements of 02630.11.

Construction

01015.40 General - Construct water quality facility as shown. Perform planter excavation and fine grading work only when the biofiltration planter area is dry and only from the top of the planter area. Do not stockpile excavated material in the biofiltration planter area.

01015.40 General - Construct water quality facility as shown. Perform planter excavation and fine grading work only when the biofiltration planter area is dry and only from the top of the planter area. Do not stockpile excavated material in the biofiltration planter area.

(a) Excavate and Scarify – Excavate to bottom of planter and scarify the subsoil area a minimum 12 inches deep.

(b) Laying and Join Pipe - Lay the pipe according to Sections 00430 and 00445. Place pipe with perforations down. Fasten pipes together with coupling fittings or bands as specified for the type of pipe used. Cap the upstream end of the pipe.

(c) **Concrete Check Dams** - If check dams are required in the planter, install as shown per the plans after the planter curbs and pipe have been installed and prior to backfilling the planter with drain rock and water quality mixture. You may need to support the perforated pipe penetrating the check dam to ensure it is located at the right elevation

(d) Black Plastic Liner – Place the Black Plastic liner as shown in the plans after curb & check dam installations are complete and prior to backfilling the planter with drain rock and water quality mixture.

(e) Inspection and Repair – Inspect pipe (and repair if necessary) to ensure pipe is complete and in acceptable condition prior to backfilling with open graded aggregates and water quality mix. Remove and reinstall or replace all pipe that is out of alignment, has settled, or is damaged at no additional cost to the Agency.

(f) Placement of Drain Rock and Choker Rock - Place washed drain rock and open-graded aggregate base material (choker rock) per the planter section depths required. Lift the pipe if necessary to seat it at the correct depth in the drain rock layer.

(g) Placement of Water Quality Mixture - Place the water quality mixture in maximum 12 inch Lifts. Compact each Lift with a water filled landscape roller.

Maintenance

01015.70 Cleaning - If a stormwater control facility is used for erosion and sediment control, remove all accumulated sediment and debris before completing the facility.

Measurement

01015.80 Measurement – The quantities of Work performed under this section will be measured according to the following:

- (a) Washed Drain Rock- Washed Drain Rock will be measured on the weight basis, measured in the hauling vehicle, after mixing.
- (b) Open Graded Aggregate Base Open graded aggregate base will be measured on the weight basis, measured in the hauling vehicle, after mixing.

(c) Concrete Check Dams – Concrete Check Dams will be measured on the "Each" basis as shown or directed.

Water Quality Mixture for planters is measured under Section 01040.

6" perforated storm pipe with Geotextile sock is measured under Section 00430.

6" storm sewer pipe (solid) is measured under 00445.

Black Plastic Liner will not be measured.

Payment

01015.90 Payment - The accepted quantities of Work performed under this Section will be paid for at the Contract unit price, per the unit of measurement, for the following items:

Pay Item

Unit of Measurement

- (a) Washed Drain Rock for Stormwater PlantersTon
- (b) Open Graded Aggregate Base for Stormwater Planters Ton
- (c) Concrete Check Dams Each

Item (c) includes reinforcement and dowels into planter curbs, as shown in the project drawings.

Excavation will be paid according to 00330.90.

Solid and perforated pipe for planters is paid under 00445.

Water Quality Mixture for planters is paid under Section 01040.

Black Plastic Liner is not paid under this section. It is incidental to "Concrete Curbs, Modified Thickened Curb and Gutter for Stormwater Planters" or "Concrete Curbs, Perimeter Curb Wall for Stormwater Planters", as appropriate (Section 00759).

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

Use the PLS specified rate listed in 01030.13(f) for determining PLS application rates. Ensure the PLS application rate meets the PLS specified rate. Apply pre blended seed mixes, with multiple

species, at a PLS application rate ensuring all species meet or exceed the PLS specified rate for each species in the seed mix.

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

• PLS specified rate is listed in 01030.13(f)

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

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

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

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

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

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

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

Provide the following seed mix formulas:

Permanent Seeding:

Botanical Name (Common Name)	PLS Specified Rate (Ib/acre)			
Festuca rubra spp. Fallax var 'Windwar (Windward Chewings Fescue)	d' 60.0			
Festuca rubra var. 'Garnet' (Garnet Creeping Red Fescue)	60.0			
Lolium perenee var 'Blazer 4' (Blazer 4 Perennial Rye)	90.0			
Lolium perenee var 'Express II' (Express II Perennial Rye)	90.0			

* Oregon Certified Seed

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.

01030.40 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 01040 - PLANTING

Comply with Section 01040 of the Standard Specifications modified as follows:

001040.02 Definitions - Add the following definition:

Weed Free - See 01030.02 for weed free definition

01040.14 Topsoil – Replace subsections (a), (b), and (c) with the following:

(a) **Topsoil** – 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 T 2. Determine sieve analysis according to AASHTO T 27 and AASHTO T 11.

Blend the medium compost and soil so that the mixture:

Is composed of between 20 percent and 25 percent medium compost material and between 75 percent and 80 percent soil material.

Has a pH between 5.5 and 8.0.

Does not have clumps greater than 3 inches in any direction.

(b) 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	75-100
No 10	40 - 100
No. 40	15 - 50
No. 100	5 - 25
No. 200	5 - 15

Sample soil according to AASHTO T 2. Determine sieve analysis according to AASHTO T 27 and AASHTO T 11.

Blend the medium compost and soil so that the mixture:

Is composed of between 20 percent and 25 percent medium compost material and between 75 percent and 80 percent soil material.

Has a pH between 5.5 and 8.0.

Does not have clumps greater than 3 inches in any direction.

Refer to Section Appendix A, Section A.3 of the Clackamas County Sewer District #1 Stormwater Standards for further mixture requirements.

01040.15 Soil Conditioners - Remove subsection (b) and replace with the following:

(b) Commercially Manufactured Compost - Commercially manufactured fine compost material meeting the requirements of Section 03020.

01040.19(f) Plant Substitution – Add the following to the end of this paragraph:

The Engineer reserves the right to modify tree or plant materials. The cost of changing materials will be limited to the price difference (credit or deduction) of the plant.

01040.22 Water – Add the following:

(c) **Tree Bags** – Trees planted in non-irrigated areas, require placement of a tree watering bag, "TreeGator" or approved equal. Tree watering bags to be filled at least once a week, or as directed by product specifications.

Contractor will hand-water all plantings which are not served by underground irrigation systems. Trees in non-irrigated areas require placement of a "TreeGator" or approved equal tree watering bag. Tree watering bags to be re-filled at least once a week, or as directed by product specifications. All other vegetation to be hand-watered as required in 01040.49.

01040.48(a) Method "A" (Cultivated Planting Areas, Non-lawn) – Modify as follows:

Delete the sentence beginning "Thoroughly mix 2 inches..." and replace with "Deliver Topsoil and Water Quality Mixture to the project, pre-blended to meet the specifications in 01040.14.

01040.49 General Planting - Add the following to the end of this subsection:

The following watering frequencies are required:

Plantings and seeded areas to be watered at a rate of one (1) inch per week.

01040.54(b) Moisture Retention Chemicals – Add the following:

This project requires installation of moisture retention chemicals in all planter soils that do not have permanent irrigation installed.

01040.80 Measurement – Modify as follows:

Delete subsection (a). Soil Testing will be incidental to the bid items "Topsoil" and "Water Quality Mixture".

Replace subsection (b) with the following:

(b) Topsoil and Water Quality Mixture – Topsoil and Water Quality Mixture will be measured on the volume basis, using neat line field measurements after material has settled. Place sufficient material as required to account for settlement.

Replace subsection (c) with the following:

(c) Soil Conditioners – There will be no measurement for soil conditioners.

Replace subsection (f) with the following:

(f) Mulch – Bark Mulch, 3 Inch Depth will be measured on the area basis at time of placement, using neat line field measurements.

1040.90 Payment – Modify as follows:

Delete subsection (a). Soil Testing will be incidental to the items "Topsoil" and "Water Quality Mixture".

(b) Topsoil and Water Quality Mixture – "Topsoil" and "Water Quality Mixture" will be paid at the Contract unit price per cubic yard.

(c) Soil Conditioners - Soil conditioner will be incidental to the payment for items paid under 1040.90 (b) Topsoil and Water Quality Mixture.

(d) Plant Materials – Modify as follows:

Delete the partial payment schedule. Payment for plants will be made in full after the time of original planting and after the County has accepted the plant material as healthy and properly planted.

(f) Mulch – Modify the following pay items:

Pay Item

Unit of Measurement

Bark Mulch, 3 Inch Depth

Square Yard

For the paragraph beginning "No separate or additional payment...", add the following bullet:

- tree watering bags
- moisture retention chemicals

SECTION 01044 – SECOND AND THIRD YEAR PLANT ESTABLISHMENT

Section 01044, which is not a Standard Specification, is included in the Project by Special Provision.

Description

01044.00 Scope - This work consists of furnishing labor, materials and equipment necessary to maintain all new plants and irrigation system elements <u>within the public rights-of-way</u>, beginning at the conclusion (final acceptance) of the original plant establishment period and continuing for two additional years. In case of conflict, the provisions of this Section shall govern over those of Section 01040.

Materials

01044.00 General - The minimum bid for 2nd and 3rd year plant establishment period may not be less than **\$40,000**.

Engineer may reject part or all the landscape construction and establishment bids as nonconforming if the bid for landscape establishment does not meet or exceed this minimum requirement.

01044.11 Corrective Work - The Engineer may act to correct inadequate establishment work by any appropriate means. If corrective work is performed by Clackamas County, a proportional amount of monies otherwise due to the contractor for establishment services shall be deducted from the contract. The amount shall be determined as stated in Section 00150.80 of the Standard Specifications.

Maintenance

01044.20 General - The 2nd and 3rd year plant establishment periods will begin once all planting areas have been planted as specified in Section 01040, the first one-year maintenance period is completed, and written acceptance from the Engineer is received. The length of the additional establishment period will be two calendar years. The "anticipated" schedule is as follows:

- Project Completion by April 30, 2026
- First, one-year establishment period (included as part of landscaping bid items) from May 1, 2026 through April 30, 2027.
- Second- and Third-Year plant establishment periods from May 1, 2027 through April 30, 2029

01044.21 Watering - Water all newly installed plant materials at required intervals using either the project-installed automatic irrigation system or continuing with the hand-watering method established under the initial first-year plant establishment period, unless otherwise directed by the Engineer. Water costs during the establishment period will be at the Contractor's expense. Repair

or replace any damaged irrigation system components within 24-hours of observing problem with the system. Irrigation replacement and/or repair costs will be per 01044.22(e).

Contractor will hand-water all plantings which are not served by underground irrigation systems. Trees in non-irrigated areas require placement of a "TreeGator", or approved equal, tree watering bag. Tree watering bags to be re-filled at least once a week, or as directed by product specifications. All other vegetation to be hand-watered at a rate of one (1) inch per week, or on an as-needed basis to ensure healthy plant conditions.

01044.22 Plant Establishment -

(a) General - Maintain all original plantings and seeding as specified in Sections 01040.70 and 01040.71.

(b) <u>Periodic Inspections</u> - During the two-year establishment period, make inspections jointly with the Engineer at the following times:

Spring:Early-May, each year,Summer:Mid-July, each year,Fall:Late-September, each year.

(c) <u>Corrective work</u> - Perform corrective work per Sections 01040.74, 01040.75, 01040.77, and 01040.78.

(d) <u>Success Criteria</u> - Determination of success of establishment shall be made at each of the inspections listed in Section 01044.22(b). Successful establishment shall be defined as follows:

• 90% survival and vigorous growth of all trees, shrubs, vines and groundcovers.

(e) <u>Irrigation Maintenance</u> - Irrigation maintenance will include proper system start-up sufficiently ahead of the growing season to accommodate repairs without causing plant stress. Activate all lines with cleaning and adjustments as necessary. Program all clocks with the consultation and assistance of the Clackamas County supervisors. Regularly review clock operation to account for damage fluctuations and seasonal/environmental fluctuations.

Repair and replace system parts due to normal usage and product defect at contractor's expense. Other repair and replacement due to vandalism, acts of natural disaster or other causes such as traffic accidents shall be at Clackamas County's expense. Contractor must submit for repairs to Engineer for pre-approval prior to repair work. Rates for labor and equipment use required to repair shall be pre-negotiated with Engineer after award for contract but prior to repair work. Contractor will be responsible for system winterization, typically no later than October 31st.

(f) <u>Plant Care</u> - Plant care maintenance will include regular feeding of trees, shrubs and groundcover to promote vigorous and healthy growth. Use low phosphorus fertilizer within 50 feet of bio-swales and detention ponds. Do not use fertilizer within 50 feet of streams and natural drainage ways. Plant pruning shall be done to enhance the natural growth of plants. Pruning shall be done to eliminate dead growth and crossing branches, maintain growth within available space and not overgrow walks and walls, and to reduce tree canopy damage from winds. Tree pruning shall generally occur in the dormant winter season, a minimum of once per year for the street trees. To maintain overall appearance of the landscape, Contractor shall remove and dispose of all dead and/or critically damaged plant material. The cost of plant replacement will be borne by

Contractor for plants damaged by poor establishment practices. The cost of plant replacement will be borne by Clackamas County for plants damaged by vehicle traffic, vandalism, theft and unusual insect infestation.

(g) <u>Weed Control</u> - Weed maintenance control will include non-selective contact spraying of identifiable weeds during the growing season with hand weeding as required. Do not use herbicides within 50 feet of streams and natural drainage ways. Weeding of persistent weed growth will be performed on an on-going basis to minimize unsightly weed build-up. Dead growth shall be removed and beds raked to a uniform finish grade.

(h) <u>Litter Control</u> - Litter control work will include regular pickup removal and disposal of litter and debris from all landscape areas. Litter work must be performed consistently throughout the year.

(i) <u>Bark Mulch</u> - Bark mulch maintenance will include application of bark to areas where existing bark has degraded or eroded. Generally, maintenance of the bark mulch at a depth of 2" will be sufficient. Rake smooth to an even finish grade.

(j) <u>Safety Practices</u> - All workmen must wear bright orange (or red) safety vests and must be instructed in safe working practices around the roadway system prior to any work. No work may proceed in any area of the roadway without proper notification by person, telephone or radio, a minimum of 24 hours before beginning work.

Measurement

01044.80 Measurement – The two-year establishment work will be measured by the Engineer during the periodic inspections described in Section 01044.22 (b). The contractor must submit establishment services reports to the Engineer no later than two weeks after each inspection date. The establishment services reports must include invoices for all establishment labor and materials expended toward the specific project, within the billed time period.

Payment

01044.90 Payment – 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) 2nd and 3rd Year Plant Establishment

LS

Item (a) includes all plant establishment along the project corridor. This item has a minimum bid price of \$40,000.

Payment for the additional two-year establishment work will be paid on a quarterly basis after plant establishment work is verified by the engineer.

No separate or additional payment will be made for:

- Corrective work required during the plant establishment period
- Replacement of mulch as required to maintain minimum 2" depth
- Water (irrigation and hand-watered areas)

• Replacement of watering bags

SECTION 01050 - FENCES

Comply with Section 01050 of the Standard Specifications modified as follows:

01050.00 Scope – Add the following bullet:

• Where required, installation of new fence includes providing a connection to existing fences.

Add the following at the end of this subsection:

Fences on this project will not be paid under this section. Any fences required as part of private property improvements will be paid as part of the "Private Property Improvements" bid items (Section 01075) or incorporated as part of a wall bid item (00596C). Regardless of what sections the fences are paid under, all fences are required to meet the requirements of 01050, unless specified otherwise.

01050.10 Materials – Add the following at the end of the section:

Where specified in the bid schedule to provide Vinyl Coated Chain Link Fence or Gates, all items must be matching color Vinyl Coated including the fencing, posts, bars, cross braces, hardware and other elements of the fence.

All chain link style fences shall have a top bar.

SECTION 01065 – MONUMENT BOXES

Section 01065, which is not in the Standard Specifications, is included for this project by Special Provision.

01065.00 Scope – This work shall consist of installing new monument frames and covers at the locations designated by the Engineer.

Adjustment of existing monument boxes to finish grade shall be considered incidental work.

01065.10 Materials - The monument frames and covers shall be in compliance with the Clackamas County Surveyor's Office requirements as follows:

8" inch frames and covers - are typically acceptable for most local streets (subdivisions) with speeds of 35 miles per hour or less.

East Jordan Iron Works, Inc. 13127 State Avenue Marysville, WA 98271

(360) 651-6144 Fax (360) 651-6150

Anders Jorgenson Oregon Sales Representative (503) 774-4144 Fax (503) 775-3263 Cell (503) 367-7925 ajorgenson@ejiw.com

- Product number 00368004 (fka 1036) for 8" Monument Frame and Cover
- Paving riser rings available

Additional vendor for 8" frames and covers:

Olympic Foundry Inc.

6530 NE 42nd Avenue Portland, OR 97218 503-281-3381 503-284-5880 Fax

- Pattern No. M1010 for 8" Monument Frame and Cover
- Paving riser rings available

12 " inch frames and covers - are required for streets or County Roads of a higher speed classification (speeds over 35 miles per hour).

East Jordan Iron Works, Inc.

13127 State Avenue Marysville, WA 98271 (360) 651-6144 Fax (360) 651-6150

Anders Jorgenson Oregon Sales Representative (503) 774-4144 Fax (503) 775-3263 Cell (503) 367-7925 ajorgenson@ejiw.com

- Product No. 00367311 12" x 7-7/8" Monument Frame
- Product No. 00367323 Monument Cover with drop handle
- Paving riser rings available

01065.40 Construction - Set monument case just below the pavement finished surface $(0.00 \text{ inch to } \frac{1}{4} \text{ inch})$ at the slope of the street surface.

For asphalt streets, contractor shall complete top lift paving before installing monument boxes. Upon completion of paving, contractor shall diamond cut and install monument box as shown on the project drawings, backfilling with compacted ³/₄"-0 crushed rock and finishing with 6" of Class 4000 concrete. Contractor shall repair sawcut extensions with asphalt joint sealer. For concrete streets, monument boxes must be set and secured in place prior to concrete pour.

The location of the required monument boxes have not been indicated on the plans. The location of the required monument boxes will be determined during construction. A minimum of 30 days prior to placing the final lift of pavement, the contractor shall notify the engineer that they are ready for the monument boxes to be placed. The County or designated representative will mark the locations of the required monument boxes. At a minimum, the P.C.'s, P.T.'s, P.R.C.'s, P.C.C.'s, and tangents at a minimum of 1000 foot increments along the centerline will be marked.

01065.80 Measurement –While an estimated quantity is provide in the bid schedule, the quantities to be paid for will be the actual number of monument boxes installed.

01065.90 Payment - Payment will be made at the contract unit price per each for the item "Monument Boxes". Payment will constitute full compensation to provide the monument boxes and furnish all materials, equipment, and labor required to set the monument boxes as specified.

SECTION 01070 - MAILBOX SUPPORTS

Comply with Section 01070 of the Standard Specifications.

SECTION 01075 - MISCELLANEOUS PRIVATE PROPERTY ADJUSTMENTS

Section 01075, which is not a Standard Specification, is included for this project by Special Provision. This section is intended to provide direction for specific private property improvements that are not covered under other Sections of the Standard Specifications or Special Provisions.

01075.00 Scope - The following work items shall be completed under this section and defined as follows:

Private Property Improvements – Property 10

• Install new fence at property line in replacement of existing fence being removed within the right-of-way. Match existing fence material type and height. New fence material to be chain link fence, 4' in height. Estimated length is 62'.

Private Property Improvements – Property 12

• Install new fence at property line in replacement of existing fence being removed within the right-of-way. Match existing fence material type and height. New fence material to be split rail wood fence, 3' in height. Estimated length is 51'.

Private Property Improvements – Property 15

• Install new fence at property line in replacement of existing fence being removed within the right-of-way. Match existing fence material type and height. New fence material to be wood fence, 3' in height. Estimated length is 72'.

Private Property Improvements – Property 16

• Install new fence at property line in replacement of existing fence being removed within the right-of-way. Match existing fence material type and height. New fence material to be chain link fence, 4' in height. Estimated length is 81'.

Private Property Improvements – Property 19

• Install new fence at property line in replacement of existing fence being removed within the right-of-way. Match existing fence material type and height. New fence material to be chain link fence, 6' in height. Estimated length is 156'.

Private Property Improvements – Property 20

• Install new fence at property line in replacement of existing fence being removed within the right-of-way. Match existing fence material type and height. New fence material to be chain link fence, 6' in height. Estimated length is 264'.

Private Property Improvements – Property 22

• Remove, salvage, and reconstruct approximately 24 square feet of existing pavers, as shown on the plans.

Private Property Improvements – Property 34

• Install new gates with similar configuration to existing gates. See plan for location of new gates.

Private Property Improvements – Property 55

• Install new fence at property line in replacement of existing fence being removed within the right-of-way. Match existing fence material type and height. New fence material to be chain link fence, 4' in height. Estimated length is 63'.

Private Property Improvements – Property 56

• Install new fence at property line in replacement of existing fence being removed within the right-of-way. Match existing fence material type and height. New fence material to be chain link fence, 4' in height. Estimated length is 120'.

Private Property Improvements – Property 93

- Install new fence at property line in replacement of existing fence being removed within the right-of-way. Match existing fence material type and height. New fence material to be galvanized welded wire mesh fence, 5' in height, and chain link fence, 6' in height. Estimated length of galvanized welded wire mesh fence is 310'. Estimated length of chain link fence is 29'.
- Install new gates with similar configuration to existing gates. See plan for location of new gates.
- Relocate existing hose bib to easement line.

Private Property Improvements – Property 94

• Install new fence at easement line in replacement of existing fence being removed within the right-of-way. Match existing fence material type and height. New fence material to be chain link fence, 6' in height. Estimated length is 452'.

Private Property Improvements – Property 99

• Install new fence at property line in replacement of existing fence being removed within the right-of-way. Match existing fence material type and height. New fence material to be chain link fence, 4' in height. Estimated length is 46'.

All fence installations must meet the requirements of 01050. Where specified to provide Vinyl Coated Chain Link Fence or Gates, all items must be matching color Vinyl Coated including the fencing, posts, bars, cross braces, hardware and other elements of the fence. All fences shall have a top bar.

01075.80 Measurement – No measurement of quantities will be made for work performed under this Section. Fence material, height, and lengths are provided here for contractor convenience. Regardless, where shown, fence types and heights are to match existing, including finish treatments (paint, stain, etc.). Fence materials, heights and lengths shown are approximate. No changes to measurement/payment will be made based on minor discrepancies of information presented here vs. actual. The contractor should inspect each property to determine their bid price for private property improvements work.

01075.90 Payment - Payment for each item listed in the bid schedule under this Section will be made on the Lump Sum basis for "Private Property Improvements - _____", where the property number is listed in the blank.

Payment will be payment in full for furnishing and placing all materials (including new materials), and for furnishing all equipment, labor, and incidentals necessary to complete the work, including permits, if necessary.

SECTION 01120 - IRRIGATION SYSTEMS

Comply with Section 01120 of the Standard Specifications modified as follows.

01120.10 Scope – Replace with:

This work consists of repair to existing private irrigation systems damaged by construction improvements along the project corridor.

01120.90 Payment – Replace with the following:

01120.90 Payment – The accepted quantities of Work performed under this Section will be paid for at the Contract lump sum amount, for the following items:

Pay Item

Unit of Measurement

(a) Repair Private Irrigation Systems

Lump Sum

Add the following to the end of this section:

Payment of item (a) includes repair/replacement of all private irrigation systems impacted by construction. Contractor will be required to coordinate with property owners and ensure that irrigation systems damaged or impacted by construction are restored to working condition, and that all zones function as intended. This work may include incidental repairs of damaged irrigation systems such as capping lines, moving/adjusting sprinkler heads or other similar modifications. Contractor will be responsible for replacing plants and landscaped areas damaged as a result of not restoring damaged irrigation systems in a timely manner.

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

No separate or additional payment will be made for excavation, backfill, electrical service, and system orientation.

SECTION 01140 – POTABLE WATER PIPE AND FITTINGS

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

Contractor is to comply with the materials, installation, and testing requirements as provided in the latest version of the Clackamas River Water Technical Specifications.

01140.80 Measurement, (a) Pipe, Fittings, and Couplings – Replace the sentence "Ductile iron pipe fittings will be measured on a unit basis" with the following:

"Ductile iron pipe fittings will be measured on the per pound (LB) basis, per manufacturer recorded weights."

01140.80 Measurement – Add the following:

(d) Tracer Wire Terminal Station – The quantities of tracer wire terminal stations will be measured on the unit basis.

01140.90 Payment – Delete the following pay items: (h), (i), (j), (k), (l), (m), and (n).

Add pay items as follows:

Pay ItemUnit of Measurement(h) Blowoff Assembly, Type IEach(i) Blowoff Assembly, Type IIEach(j) 6-Inch Wet Tap on 8-Inch Existing MainEach(k) Ductile Iron Pipe FittingsLB(l) Tracer Wire Terminal StationEach

Add the following:

Item (e) includes couplers, temporary and permanent pipe restraints, temporary and permanent thrust blocks, piping connection, bolts, nuts and other hardware, pipe clamps, insulation kits and rubberized coatings, specialized equipment, labor, and all other items not included in another bid items and that are required for a complete installation. Ductile iron pipe and ductile iron fittings required for complete installation will be paid for according to their respective pay items according to 01140.90. This item does not include wet taps, which are paid for under a separate item according to 01140.90.

Item (h) includes all work and materials as shown in the Blowoff Assembly – Type I Detail (CRW 106A), including fittings, valves, and valve boxes, as required for temporary and permanent blowoffs.

Item (i) includes all work and materials as shown in the Blowoff Assembly – Type II Detail (CRW 106B), including fittings, mainline gate valves, and valve boxes, as required for temporary and permanent blowoffs.

Item (j) includes all work and materials as shown in the Wet Tap Assembly Detail (CRW 105), including the excavation, backfill, surface restoration, wet tap work, tapping valve, tapping sleeve, and valve box.

Item (k) includes all ductile iron fittings (tees, wyes, crosses, bends, couplings, and reducers) of any size.

Item (I) includes all work and materials as shown in the Typical Tracer Wire Detail (CRW 115).

Delete the following sentence: "Trench resurfacing will be paid for according to 00495.90".

Add "trench resurfacing" as a bulleted item to the list beginning with "No separate or additional payment will be made."

SECTION 01150 – POTABLE WATER VALVES

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

Contractor is to comply with the materials, installation, and testing requirements as provided in the latest version of the Clackamas River Water Technical Specifications.

01150.80 Measurement – Add the following at the end of the subsection:

Measurement of valves excludes valves installed as part of blowoffs and wet taps according to 01140.80, and as part of fire hydrant assemblies according to 01160.90.

01150.90 Payment – Add the following at the end of the subsection:

Item (a) includes all work and materials as shown in the Typical Valve and Accessories Detail (CRW 104A).

Item (f) includes all work and materials as shown in the 1" Air/Vacuum Valve Assembly Detail (CRW 107A).

Adjusting existing and new valve boxes to grade is incidental to the item for which the box is being adjusted.

No separate or additional payment will be made for the removal of valve boxes.

SECTION 01160 – HYDRANT AND APPURTENANCES

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

Contractor is to comply with the materials, installation, and testing requirements as provided in the latest version of the Clackamas River Water Technical Specifications.

01160.80 Measurement - Replace the words "New pipe" with "Wet taps".

Delete the sentence "Gate valves will be measured according to 01150.80."

01160.90 Payment – Add the pay item as follows:

Pay Item

Unit of Measurement

Each

(f) Fire Hydrant Assembly, no Gate Valve

Add the following at the end of the subsection:

Item (a) includes all work as shown in the Fire Hydrant Assembly Detail (CRW 110A), including new fire hydrant, gate valve, and ductile iron pipe. Fire hydrant tees shall be paid for according to 01140.90. Other ductile iron fittings required for a complete installation are incidental to item (a).

Item (f) includes all work as shown in the Fire Hydrant Assembly Detail (CRW 110A), including fire hydrant and ductile iron pipe and excluding the tapping valve, which is incidental to the wet tap, paid for according to 01140.90.

No separate or additional payment will be made for the removal of fire hydrants.

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

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

Contractor is to comply with the materials, installation, and testing requirements as provided in the latest version of the Clackamas River Water Technical Specifications.

01170.90 Payment – Add the pay item as follows:

Pay Item

Unit of Measurement

Each

(g) 1-Inch Long Side Water Service Assembly

(h) 1-Inch Short Side Water Service Assembly(i) 2-Inch Water Service Assembly(j) Water Service Abandonment

Each Each Each

Add the following:

Item(s) (g) and (h) includes all work and materials as shown in the ³/₄" or 1" Service Assembly Details (CRW 108A, 108B, and 108D), including excavation, backfill, surface restoration, boring, tapping the main, setting meter boxes, removing existing meter boxes, and connecting tailpieces to existing plumbing.

Item (i) includes all work and materials as shown in the 2" Service Assembly Detail (CRW 109) including excavation, backfill, surface restoration, boring tapping the main, setting meter boxes, removing existing meter boxes, and connecting tailpieces to existing plumbing. Depending on the side of the street compared to the water main, "Long Side" or "Short Side" will be inserted in the blank.

Item (j) includes excavation, backfill, surface restoration, brass plugs, and other fittings to abandon the existing water service at the main.

SECTION 02001 - CONCRETE

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

02001.02 Abbreviations and Definitions: 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.

02001.20(a) Strength - Replace Table 2001-1 with the following Table 2001-1:

Concrete Strength and Water/Cementitious Material (w/cm) Ratio Strength Maximum Type of Concrete *f*'c (**psi**) w/cm Ratio 3300 0.50 3300 0.45 (Seal) Structural 4000 0.48 4000 (Drilled Shaft)

Table 02001-1

	HPC4500	0.40		
	HPC(IC)4500	0.40		
	5000 +			
Paving	4000	0.44		
PPCM's	5000	0.48		
(with cast-in-place decks and no entrained air)	5500	0.44		
	6000 +	0.42		

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 02050 - CURING MATERIALS

Comply with Section 02050 of the Standard Specifications modified as follows:

02050.10 Liquid Compounds - Replace the paragraph that begins "Furnish liquid membrane-forming curing..." with the following paragraph:

Furnish liquid membrane-forming curing compounds from the QPL and meeting the requirements of ASTM C309. Before use, submit a one quart sample from each lot for testing. Samples will be

tested according to ODOT TM 721. Samples are not required for curing compounds used on Commercial Grade Concrete.

SECTION 02470 - POTABLE WATER PIPE MATERIALS

For water-related work, contractor is to comply with the materials, installation, and testing requirements as provided in the latest version of the Clackamas River Water Technical Specifications.

SECTION 02475 – POTABLE WATER FITTING MATERIALS

For water-related work, contractor is to comply with the materials, installation, and testing requirements as provided in the latest version of the Clackamas River Water Technical Specifications.

SECTION 02480 – POTABLE WATER VALVE MATERIALS

For water-related work, contractor is to comply with the materials, installation, and testing requirements as provided in the latest version of the Clackamas River Water Technical Specifications.

SECTION 02485 – HYDRANT AND APPURTENANCE MATERIALS

For water-related work, contractor is to comply with the materials, installation, and testing requirements as provided in the latest version of the Clackamas River Water Technical Specifications.

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

For water-related work, contractor is to comply with the materials, installation, and testing requirements as provided in the latest version of the Clackamas River Water Technical Specifications.

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 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.

			Sieve Size										
Size Number	Nominal Size Square Openings	(2½ in.)	(2 in.)	(1½ in.)	<mark>(1 in.)</mark>	(¾ in.)	(½ in.)	(¾ 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 ¾ 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 ¾ 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	(1/2 to No. 4)	_	—	_	_	100	90 to 100	40 to 70	0 to 15	0 to 5	—	_	**
78	(1/2 to No. 8)	_	_	_	_	100	90 to 100	40 to 75	5 to 25	0 to 10	0 to 5	_	**
8	(¾ to No. 8)	_	_	_	_	_	100	85 to 100	10 to 30	0 to 10	0 to 5	_	**
89	(¾ to No. 16)	_	_	_	_	_	100	90 to 100	20 to 55	5 to 30	0 to 10	0 to 5	**

Table 02690-1Gradation of Coarse AggregatesPercent passing (by Weight)

* Use two or more seperated 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).

SECTION 03010 – FENCE MATERIALS

Comply with Section 03010 of the Standard Specifications modified as follows.

03010.30 Chain Link Fabric, Ties, and Tension Wires – Add the following bullet:

• Vinyl coated fabric shall be coated with a minimum of 7 mils of poly-vinyl chloride.

03010.50 Metal Fence Posts, Braces and Appurtenances for Chain Link Fence – Modify this subsection as follows:

03010.50(c)(1) Tubular Steel Posts – Add the following bullet after the last paragraph:

• All vinyl coated posts shall be coated with 10 to 15 mils of poly-vinyl chloride.

03010.50(c)(3) Fence Stays, Brace Guys and Wire Loops – Add the following bullet after the last paragraph:

• All vinyl coated fence stays, brace guys, and wire loops, and other miscellaneous wire shall be coated with 7 mils of poly-vinyl chloride.

SECTION 03020 - EROSION MATERIALS

Comply with Section 03020 of the Standard Specifications.

MONROE STREET IMPROVEMENT PROJECT CLACKAMAS COUNTY, OREGON





LEGEND

	EXISTING						
	RIGHT OF WAY						
	PROPERTY LINE			"CRW" C			
x x x	· FENCE			"ROW" R			
ОНЖ ОНЖ ОНЖ	OVERHEAD WIRE			"TCE" T			
COMCOMCOM	COMMUNICATIONS LINE PER UTILIT	' LOCATE PAINT/VISUAL FIELD OB ד האדמ	SERVATION	"PR" P			
(COM) (COM) (COM)	GAS LINE PER UTILITY LOCATE PAINT	VISUAL FIELD OBSERVATION		"EX" E			
(G)(G)(G)(G)(G)	GAS LINE PER ASBUILT DATA			"ТҮР" Т			
PPPP	POWER/SIGNAL LINE PER UTILITY LO	CATE PAINT/VISUAL FIELD OBSER	VATION	"OF" (
(P)(P)(P)(P)(P)	POWER/SIGNAL LINE PER ASBUILT D STORM DRAINAGE LINE PER LITILITY	POWER/SIGNAL LINE PER ASBUILT DATA					
(SD) (SD) (SD) (SD)	- — STORM DRAINAGE LINE PER ASBUIL	DATA					
SS SS SS SS	SANITARY SEWER LINE PER UTILITY I	OCATE PAINT/VISUAL FIELD OBSE	ERVATION				
(SS)	SANITARY SEWER LINE PER ASBUILT WATER LINE PER LITHITY LOCATE PA	DATA NT/VISUAL FIELD OBSERVATION					
	WATER LINE PER ASBUILT DATA						
FOUND SURVEY MO	NUMENT	GRAVEL SURFACE					
ASPHALT SURFACE	RUTATION CONTRACTOR	1					
		EXISTING BUILDING					
		I					
		TRAFFIC/SIGNAL JUNCTION BO	X				
D STORM MANHOLE	9	TRAFFIC SIGNAL CROSSING POI	LE				
		COMMUNICATIONS RISER AS N	NOTED				
			AS NOTED				
		UTILITY CABINET AS NOTED					
$\overset{GV}{\rightarrowtail}$ GAS VALVE	0	BOLLARD					
	VAULT						
	• TH	GATE POST					
$\!$	0	BUSH/SHRUB					
		CONIFEROUS TREE					
	<u>()</u>						
	PROPOSED						
	ROW / PROPERTY LINE	PROPOSED CONC	CRETE				
	STORM PIPE						
//////////////////////////////////////	WHHHH REMOVE/ABANDON EXISTING PIPE	PROPOSED AC					
~~~~~~	REMOVE EXISTING FENCE	PROPOSED GRINE	D AND INLAY				
	WALL						
	······ DAYLIGHT CATCH LINE	PROPOSED PERVI	IOUS ASPHALT PATHWAY				
	SANITARY PIPE						
FM	SANITARY FOREMAIN PIPE	$\begin{vmatrix} + & + & + \\ + & + & + \\ + & + & + \end{vmatrix}$ PROPOSED LANDS	SCAPE				
	WATER LINE		M PLANTER				
SD	STORM MANHOLE						
		PROPOSED GRAV	'EL				
	G-2 CATCH BASIN						
	AREA DRAIN	ုံစပိုစပိုင်္ရ <b>PROPOSED TACTI</b> စစိုစစိုရင်	ICAL WARNING				
<b>D</b>	BEEHIVE OVERFLOW INLET						
	CURB CUT UTILITY POI F						
<b>(</b> •	UTILITY POLE GUY WIRE						
٢	FIRE HYDRANT						
-	WATER METER						
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ACKAMAS AD				UAIE:			

### **ABBREVIATIONS**

CLACKAMAS RIVER WATER

RIGHT OF WAY

TEMPORARY CONSTRUCTION EASEMENT

PROPOSED

EXISTING

TYPICAL

OVERFLOW

STORMWATER PLANTER

### **GENERAL NOTES:**

- PROTECT ALL EXISTING TREES AND LANDSCAPING THAT IS TO REMAIN.
- 4. THE CONTRACTOR SHALL MAKE EVERY REASONABLE EFFORT TO PROTECT THE REMAINING EXISTING CONCRETE CURBS AND SIDEWALKS.
- PROJECT AREA FREE OF DEBRIS AND UNUSED MATERIAL.
- CONTROL PLANS.
- 7. THE CONSTRUCTION NOTE NUMBERS SHOWN ON EACH PLAN SHEET ARE EXCLUSIVE TO THAT INDIVIDUAL PLAN SHEET.
- 8. REMOVE ALL ABANDONED AC SURFACES BEHIND SIDEWALKS AND FILLS.

### **UTILITY NOTES:**

- EXCAVATION THEY SHALL NOTIFY THE ENGINEER AND UTILITY IMMEDIATELY.
- UTILITIES PRIOR TO CONSTRUCTION TO AVOID POTENTIAL CONFLICTS.
- 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
- 4. COORDINATE UTILITY RELOCATIONS WITH APPROPRIATE UTILITY PRIOR TO CONSTRUCTION.
- CLACKAMAS RIVER WATER AND/OR PLUMBING CODES.
- SERVICES (WES).
- INATTENTION.
- INSTALLATION.
- CONTRACTOR SHALL COORDINATE BY CALLING THE AFFECTED UTILITY AT LEAST 24 HOURS PRIOR TO EXCAVATION.

## **UTILITY CONTACTS:**

DON KEMP CLACKAMAS COUNTY WES PHONE: (503) 742-4577 DONKEM@CLACKAMAS.US

JESSICA RINNER CLACKAMAS COUNTY WES JRINNER@CLACKAMAS.US

JOE ESKEW CLACKAMAS RIVER WATER PHONE: (503) 723-2565 CELL: (503) 747-8520 JESKEW@CRWATER.COM

ANTHONY STEELE CLACKAMAS RIVER WATER PHONE: (503) 722 9239 CELL: (503) 793 1094 ASTEELE@CRWATER.COM

**BROCK INMAN** NW NATURAL BROCK.INMAN@NWNATURAL.COM

JERRY VAUGHN NW NATURAL JERRY.VAUGHNJR@NWNATURAL.COM

BRENT BALDWIN PGE PHONE: (503) 736-5470 CELL: (503)-351-7345 BRENT.BALDWIN@PGN.COM

JAMES LOWRY PGE

PHONE: (503) 672-5438 JAMES.LOWRY@PGN.COM

CHUNG LAM PGE LIGHTING CHUNG.LAM@PGN.COM

JONATHAN MYRICK LUMEN PHONE: (303) 382-0697 JONATHAN.MYRICK@LUMEN.COM

HEATH LINS LUMEN PHONE: (971) 284-2736 HEATH.LINS@LUMEN.COM

TODD ROYER COMCAST TODD ROYER@COMCAST.COM

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DSH/JSH
8-23-24





LANDSCAPE ARCHITECTS + SURVEYORS 205 SE Spokane Street, Suite 200, Portland, OR 97202 phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

GENERAL NOTES & LEGEND MONROE STREET IMPROVEMENT PROJECT CLACKAMAS

1. ALL WORK SHALL CONFORM TO CLACKAMAS COUNTY STANDARDS AND THE OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION, 2021, AS AMENDED BY THE SPECIAL PROVISIONS.

2. THIS PROJECT HAS BEEN DESIGNED BASED ON ORIGINAL TOPOGRAPHIC SURVEY PERFORMED BY PBS ENGINEERING AND ENVIRONMENTAL INC WITH SUPPLEMENTAL TOPOGRAPHIC SURVEY PERFORMED BY HARPER HOUF PETERSON RIGHELLIS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IF SURVEYED CONDITIONS DIFFER FROM ACTUAL FIELD CONDITIONS.

3. THE CONTRACTOR SHALL PRUNE ALL VEGETATION, AS NECESSARY, AWAY AND UP FROM THE STREET AS WELL AS ANY ROOT PRUNING AS DETERMINED BY THE ENGINEER. THE CONTRACTOR SHALL

5. AT THE END OF EACH WORK DAY THE CONTRACTOR SHALL CLEAN UP THE PROJECT AREA AND LEAVE IT IN A NEAT AND SECURED MANNER. UPON COMPLETION, THE CONTRACTOR SHALL LEAVE THE

6. RIGHT-OF-WAY DOCUMENTS ARE ON FILE WITH THE ENGINEER. 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. FOR INFORMATIONAL PURPOSES ONLY, REFER TO RIGHT-OF-WAY DEVELOPMENT AND

1. EXISTING ABANDONED UTILITIES (I.E. STORM AND WATER LINE, ETC.) MAY EXIST THAT ARE NOT SHOWN ON THE PLANS. IF THE CONTRACTOR ENCOUNTERS ABANDONED FACILITIES DURING

2. EXISTING UTILITIES SHOWN ON THE PLANS ARE PER SURFACE LOCATIONS AND AS-BUILT DRAWINGS. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS AND ELEVATIONS OF ALL EXIST.

3. 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

5. CONTRACTOR SHALL PROTECT EXISTING WATER SERVICE LINES. ALL DISTURBED WATER SERVICE LINES SHALL BE REPAIRED BY A LICENSED PLUMBER AS DIRECTED BY WATER AUTHORITY,

6. CONTRACTOR SHALL PROTECT EXISTING SANITARY SERVICE LATERALS. ALL DISTURBED SANITARY SERVICE LATERALS SHALL BE REPAIRED AS DIRECTED AND INSPECTED BY CLACKAMAS COUNTY. CONTRACTOR SHALL PAY INSPECTION FEES. CONTRACTOR TO OBTAIN ALL REQUIRED PLUMBING PERMITS PRIOR TO BEGINNING SANITARY WORK. COORDINATE WITH WATER ENVIRONMENT

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OF EXISTING SANITARY SERVICE LATERALS AND EXISTING WATER SERVICE LINES DESTROYED THROUGH NEGLIGENCE AND/OR

8. CONTRACTOR SHALL POTHOLE ALL UTILITY CROSSINGS BEFORE INSTALLING STORM, SANITARY, AND/OR WATER LINES. CONTRACTOR TO REPORT ANY CONFLICTS TO ENGINEER PRIOR TO

9. WHILE PERFORMING ANY CONSTRUCTION WORK WITHIN 10 FEET OF A HIGH PRESSURE GAS LINE, A REPRESENTATIVE/INSPECTOR FOR THE HIGH PRESSURE GAS LINE MUST BE PRESENT. THE

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SHEET NO.

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CLA-98







SHEET	NO.

# 1.2

JOB	NO.	

CLA-98





3.0' PERMANENT SLOPE, DRAINAGE AND UTILITY EASE

STORMWATER PLANTER PER DETAIL ON SHEET 3.9. SEE PLAN FOR LOCATIONS

STORMWATER PLANTER PER DETAIL ON SHEET 3.9. SEE PLAN FOR LOCATIONS

DRAWN:

CHECKED:

DATE:

CLACKAMAS C O U N T Y	CLACKAMAS COUNTY DEVELOPMENT AGENCY DEVELOPMENT SERVICES BLDG. 150 BEAVERCREEK ROAD OREGON CITY, OR 97045	DATE	NO.	R E	V		S	DE	ESCRI O	IPTIO N	N S	



# MONROE STREET IMPROVEMENT PROJECT

CLACKAMAS COUNTY, OREGON

SHEET NO.

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CLACKAMAS C O U N T Y	CLACKAMAS COUNTY DEVELOPMENT AGENCY DEVELOPMENT SERVICES BLDG. 150 BEAVERCREEK ROAD OREGON CITY, OR 97045	DATE	NO.	DESCRIPTION R E V I S I O N S	DRAWN: CHECKED: DATE:



NOTE: TYPICAL DAYLIGHT TO BE 2:1 MAX SLOPE UNLESS OTHERWISE SPECIFIED ON PLAN WITH OTHER DAYLIGHT CONDITIONS SUCH AS DRIVEWAY CONNECTIONS, CURBS, WALLS, STAIRS, ETC. FOR LOCATIONS AND DETAILS SEE ROADWAY PLAN SHEET SERIES 5.0 AND CROSS SECTIONS ON SHEET SERIES 11.0.

NOTE: REMOVE BENCH IF REQUIRED TO GRADE WITHIN THE EXISTING ROW.





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CLACKAMAS COUNTY DEVELOPMENT AGENCY DEVELOPMENT SERVICES BLDG. 150 BEAVERCREEK ROAD OREGON CITY, OR 97045	DATE	NO.	DESCRIPTION	DRAWN	
	OREGON CITY, OR 97045		F	REVISIONS	DATE:

## **TYPICAL SECTIONS SHOWN** (SEE SHEET SERIES 6.0 FOR LOCATIONS OF VARIATION)

NOTE: TYPICAL DAYLIGHT TO BE 2:1 MAX SLOPE UNLESS OTHERWISE SPECIFIED ON PLAN WITH OTHER DAYLIGHT CONDITIONS SUCH AS DRIVEWAY CONNECTIONS, CURBS, WALLS, STAIRS, ETC. FOR LOCATIONS AND DETAILS SEE ROADWAY PLAN SHEET SERIES 5.0 AND CROSS SECTIONS ON SHEET SERIES 11.0.

NOTE: REMOVE BENCH IF REQUIRED TO GRADE WITHIN THE EXISTING ROW.





# MONROE STREET IMPROVEMENT PROJECT

CLACKAMAS COUNTY, OREGON

SHEET NO.

JOB NO.

2.2

SEE PLANS FOR SECTIONS BEHIND CURB

## SEE PLANS FOR SECTIONS BEHIND CURB



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	DEVELOPMENT AGENCY DEVELOPMENT SERVICES BLDG. 150 BEAVERCREEK ROAD OREGON CITY, OR 97045					CHECKED:
		DATE	NO.	REVIS	DESCRIPTION	 DATE:

## TYPICAL SECTIONS SHOWN (SEE SHEET SERIES 6.0 FOR LOCATIONS OF VARIATION)

NOTE: TYPICAL DAYLIGHT TO BE 2:1 MAX SLOPE UNLESS OTHERWISE SPECIFIED ON PLAN WITH OTHER DAYLIGHT CONDITIONS SUCH AS DRIVEWAY CONNECTIONS, CURBS, WALLS, STAIRS, ETC. FOR LOCATIONS AND DETAILS SEE ROADWAY PLAN SHEET SERIES 5.0 AND CROSS SECTIONS ON SHEET SERIES 11.0.

NOTE: REMOVE BENCH IF REQUIRED TO GRADE WITHIN THE EXISTING ROW/TCE.







# MINI ROUNDABOUT TYPICAL SECTION

SCALE: 1"=5'

EXPIRES: 6/30/25





LANDSCAPE ARCHITECTS + SURVEYORS 205 SE Spokane Street, Suite 200, Portland, OR 97202 phone: 503.221.1131 www.hhpr.com fax: 503.221.1171 **TYPICAL SECTIONS** 

# CLACKAMAS COUNTY, OREGON

# **MONROE STREET IMPROVEMENT PROJECT**

SHEET NO.

JOB NO.

2.3

CLA-98

SEE PLANS FOR SECTIONS BEHIND CURB





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<u>NOTES</u> 1. SPECIFICATIONS FOR CONCRETE AND MISCELLANEOUS MATERIALS USED IN CONSTRUCTION SHALL CONFORM TO CURRENT OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION. 2. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3300 PSI IN 28 DAYS, 2" TO 4" SLUMP. 3. 4" PLASTIC PIPE SHALL HAVE A BELL OR A 3" EXTENSION, FOR FUTURE HOOK-UP. 4. EXPANSION JOINTS, MAX. 45' SPACING AND AT BEGINNING AND END OF CURVES OR AS DIRECTED. 5. CONTRACTION JOINTS, MAX. 15' SPACING AND AT LOCATIONS AS DIRECTED. 6. USE FROM PC TO PT AT PUBLIC INTERSECTIONS INSIDE THE UGB AND UNINCORPORATED COMMUNITIES. ALSO USE WHEN THE GUTTER SLOPE OR CURB LINE IS LESS THAN 1% ON ALL PUBLIC ROADS. 7. SEE NOTES ON DETAIL S100.

BATTER 2" IN 12"

*18"

*SEE PLANS WHERE DIMESNION IS 24"

- ASPHALT CONCRETE

"_"

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BATTER 2" IN 12

BATTER 1/2" IN 12"

R=1*

Þ

1...

- R=1/4"

12"

REVISION	DATE	BY			APPROVAL DATE: 6/1/2020	SCALE: N.T.S.	STANDARD
EDIT NOTE 1	12/12	RN	DEPARTMENT OF TRANSPORTATION				DRAWING
REVISED	11/19	AAR	AND DEVELOPMENT				
					STANDARD CURB AND	GUTTER	Q150
			ORECON CITY OR 97045	<b>CLACKAMAS</b>			3150
				COUNTY			



**SLOPED CURB** 

**MONROE STREET IMPROVEMENT PROJECT** 

CLACKAMAS COUNTY, OREGON

DETAILS

SHEET	NC



12/12 RN DEPARTMENT OF TRANSPORTATION 12/12 RN AND DEVELOPMENT

150 BEAVERCREEK ROAD OREGON CITY, OR 97045

DIT NOTE 1 DIT NOTE 6

	0.9"	VAR. CURB
	TRUNCATED DOME DETAIL	RAMP_TEXTURE_PATTERN (TRUNCATED_DOMES) DETAIL
PC CE CC	DRTLAND MENT DNCRETE	4" FOR STANDARD SIDEWALK 6" IN DRIVEWAY SECTION, AND AT OTHER LOCATIONS AS DIRECTED 4" MIN. GRANULAR LEVELING COURSE
	SIDEWALK SURFACING	DETAIL
NO	<u>TES</u>	
1.	CONCRETE AND MISC. MATERIALS USED IN CONSTRUCTION STANDARD SPECIFICATIONS FOR CONSTRUCTION. DETECTA PER ADA REQUIREMENTS.	I SHALL CONFORM TO CURRENT OREGON BLE WARNINGS ON WALKING SURFACES AS
2.	DETECTABLE WARNINGS SHALL CONSIST OF RAISED TRUN NOMINAL 0.9 in (23 mm) A HEIGHT OF NOMINAL 0.2 in SPACING OF NOMINAL 2.35in (60mm) AND YELLOW IN CO CONTRAST SHALL BE AN INTEGRAL PART OF THE WALKIN ON INTERIOR SURFACES SHALL DIFFER FROM ADJOINING V SOUND-ON-CANE CONTACT.	CATED DOMES WITH A DIAMETER OF (5 mm) AND A CENTER-TO-CENTER ILOR. THE MATERIAL USED TO PROVIDE G SURFACE. DETECTABLE WARNINGS USED WALKING SURFACES IN RESILIENCY OR
3.	EXPANSION JOINT SPACING EVERY 45' MIN. OR AT EQUAL JOINTS SHALL BE PROVIDED PER ODOT STD. DWG. RD722	INTERVALS CORRESPONDING TO CURB LINE.
4.	THE SURFACE FINISH SHALL BE CROSS BROOMED.	
5.	CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENG	GTH OF 3300 PSI IN 28 DAYS.

CLACKAMAS COUNTY

**>**0000

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RAMP WIDTH

APPROVAL DATE: 6/1/2020 SCALE: N.T.S. STANDARD DRAWING

S960

STANDARD SIDEWALK & CURB

RAMP NOTES & DETAILS

3.0

JOB NO.





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	CLACKAMAS COUNTY			
	DEVELOPMENT AGENCY			
	150 BEAVERCREEK ROAD	DATE	NO	
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HHPR TEAM HHPR TEAM DSH/JSH 8-23-24





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# DETAILS **MONROE STREET IMPROVEMENT PROJECT**

CLACKAMAS COUNTY, OREGON

SHEET NO.

3.'

JOB NO.





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	CLACKAMAS COUNTY				DRAWN:
	DEVELOPMENT AGENCT DEVELOPMENT SERVICES BLDG. 150 BEAVERCREEK ROAD	DATE	NO	DESCRIPTION	CHECKED:
COUNTY	OREGON CITY, OR 97045	DATE	NO.	REVISIONS	DATE:

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# DETAILS MONROE STREET IMPROVEMENT PROJECT

CLACKAMAS COUNTY, OREGON

SHEET NO.

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CLACKAMAS COUNTY DEVELOPMENT AGENCY DEVELOPMENT SERVICES 150 BEAVERCREEK ROAD OREGON CITY, OR 97045	CLACKAMAS COUNTY				DRAWN:
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		DATE	NO. 	DESCRIPTION R E V I S I O N S	DATE:

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DSH/JSH	
8-23-24	





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CLACKAMAS COUNTY, OREGON

# DETAILS **MONROE STREET IMPROVEMENT PROJECT**

SHEET NO.

3.3

JOB NO.





GATE COMPONENTS									
GATE OPENING (ft)		SCHEDULE STEEL PIP	40 GALV. E FRAME	SCHEDULE 40 GALV. STEEL PIPE BRACE			[		
SINGLE GATE	DOUBLE GATE	NOM. DIA. (in)	MIN. WT. (lb/ft)	NUMBER	NOM. DIA. (in)	MIN. WT. (lb/ft)			
UP thru 6	UP thru 12	1	1.68	-	-	-	Γ		
7 thru 11	13 thru 22	11/4	2.27	1	1	1.68	Γ		
12 thru 16	23 thru 32	11/2	2.72	2	1 1/4	2.27			
17 thru 20	33 thru 40	2	3.65	2	11/4	2.27			

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

- 1. Gates shown are for use with Fence Types 1, 1-5W and 2.



DETAILS **MONROE STREET IMPROVEMENT PROJECT** 

CLACKAMAS COUNTY, OREGON

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T NO.	3.5
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3. GB CATCH BASIN FOR USE WITH CURB INLET CATCH BASIN WITH GRATE ONLY.

		APPROVAL	DATE:	2013	SCALE:	N.T.S.	STANDARD
WATER ENVIRONMENT SERVICES	CLACKAMAS COUNTY 150 BEAVERCREEK ROAD OREGON CITY, OR 97045	CAT	TCH AN	BASIN-F ID GRAT	FRAME TE	_	SWM CB-4.0

SEE NOTE (3)-**PIPE TO PIPE PIPE TAP** – SEE NOTE 2 1 BREAK OUT WALL 2" MIN., 4" MAX. CLEAR OF PIPE WALL. GROUT SPACE WITH NON-SHRINK GROUT. FOR SANITARY CONNECTION INSTALL SAND COLLAR AS DIRECTED BY WATER ENVIRONMENT SERVICES (WES). (2) USE "FERNCO" FLEXIBLE COUPLING WITH STAINLESS STEEL CLAMPS OR APPROVED EQUAL AS REQUIRED.

(3) FOR STORM: CUT HOLE INTO PIPE AND INSTALL "FOWLER" SEWER BOOT TAP OR APPROVED EQUAL. FOR SANITARY: PROVIDE 48 HOUR NOTICE TO WATER ENVIRONMENT SERVICES (WES, PHONE: 503-742-4567). WES TO PROVIDE AND INSTALL TAP. CONTRACTOR TO EXCAVATE, SHORE, AND BACKFILL.

## **PIPE CONNECTION** FOR STORM PIPE AND/OR SANITARY PIPE



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	CLACKAMAS COUNTY DEVELOPMENT AGENCY				- DRAWN:
	DEVELOPMENT SERVICES BLDG. 150 BEAVERCREEK ROAD				
CLACKAMAS county	OREGON CITY, OR 97045	DATE	NO.	REVISION S	DATE:





CLACKAMAS COUNTY, OREGON



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8-23-24



Righellis Inc.

JOB NO.



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phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

DATE:

8-23-24

EXPIRES: 6/30/25

R E V I S I O N S

COUNTY

CLACKAMAS COUNTY, OREGON

JOB NO.



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COUNTY

R E V I S I O N S

8-23-24

EXPIRES: 6/30/25

CLACKAMAS COUNTY, OREGON

JOB NO.



R E V I S I O N S

COUNTY

# **MONROE ST NEIGHBORHOOD IMPROVEMENT - ESC PLAN**

# **CLACKAMAS COUNTY, OREGON**

SOUTH WITH ADJACENT RESIDENTIAL AND COMMERCIAL PROPERTIES ALONG THE CORRIDOR. THE CORRIDOR IS UNDERDEVELOPED, AND DOES NOT INCLUDE

WEST WITH ADJACENT RESIDENTIAL AND COMMERCIAL PROPERTIES ALONG CURB, SIDEWALK, AND BIKE LANES, BUT THE MAJORITY OF THE CORRIDOR IS

):	HHPR TEAM
	HHPR TEAM
	DSH/JSH
	8-23-24



# **PROJECT LOCATION**

SE MONROE ST, SE 72ND AVE, SE THOMPSON RD MILWAUKIE, OR 97222 WEST PROJECT LIMITS: SE LINWOOD AVE EAST PROJECT LIMITS (MONROE ST): SE FULLER RD EAST PROJECT LIMITS (THOMPSON RD): LOT WHITCOMB ELEMENTARY SCHOOL LATITUDE = 45.4355555 - 45° 26' 08" LONGITUDE = 122.5991667 - 122° 35' 57"

# **ATTENTION EXCAVATORS:**

OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH OAR 952-001-0090. YOU MAY OBTAIN COPIES OF THESE RULES FROM THE CENTER BY CALLING 503-232-1987. JE YOU HAVE ANY OUESTIONS ABOUT THE RULES. YOU MAY CONTACT THE CENTER. YOU MUST NOTIFY THE CENTER AT LEAST TWO BUSINESS DAYS, BEFORE COMMENCING AN EXCAVATION. CALL 503-246-6699.

# SHEET INDEX

## **EROSION AND SEDIMENT CONTROL PLANS**

ESCP COVER SHEET
ESCP GENERAL NOTES
ESCP CLEARING AND DEMO PLA
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ESCP PLAN
<b>ΕSCP PLAN</b>

- ESCP PLAN ESCP DETAILS
- HOLD A PRE-CONSTRUCTION MEETING OF PROJECT CONSTRUCTION PERSONNEL THAT INCLUDES THE INSPECTOR TO DISCUSS EROSION AND SEDIMENT CONTROL MEASURES AND CONSTRUCTION LIMITS.
- ALL INSPECTIONS MUST BE MADE IN ACCORDANCE WITH DEQ 1200-CN PERMI REQUIREMENTS.
- INSPECTION LOGS MUST BE KEPT IN ACCORDANCE WITH DEQ'S 1200-CN PERMIT REQUIREMENTS.
- RETAIN A COPY OF THE ESCP AND ALL REVISIONS ON SITE AND MAKE IT AVAILABLE ON REQUEST TO DEQ, AGENT, OR THE LOCAL MUNICIPALITY. DURING INACTIVE PERIODS OF GREATER THAN SEVEN (7) CONSECUTIVE CALENDAR DAYS, RETAIN THE ESCP AT THE CONSTRUCTION SITE OR AT ANOTHER LOCATION

SUPERCEDE REQUIREMENTS OF THIS PLAN.

AVAILABLE BMP'S.

	CLEARING	MASS GRADING	UTILITY INSTALLATION	SITE CONSTRUCTION	FINAL STABILIZATION	WET WEATHER (OCT. 1 - MAY 31ST)
EROSION PREVENTION						
PRESERVE NATURAL VEGETATION	**X	Х	Х	Х	Х	Х
GROUND COVER					Х	Х
HYDRAULIC APPLICATIONS						
PLASTIC SHEETING						
MATTING						
DUST CONTROL	Х	Х	X	Х	Х	Х
TEMPORARY/ PERMANENT SEEDING		Х	Х	Х	Х	Х
BUFFER ZONE						
THER:						
SEDIMENT CONTROL						
SEDIMENT FENCE (PERIMETER)	**X	Х	X	Х	Х	Х
SEDIMENT FENCE (INTERIOR)						
STRAW WATTLES	**X	Х	X	Х	Х	Х
FILTER BERM						
INLET PROTECTION	**X	Х	X	Х	Х	Х
DEWATERING						
SEDIMENT TRAP	Х	Х	Х	Х		Х
NATURAL BUFFER ENCROACHMENT	*Х	*Х	*Х	*Х	*Х	*Х
THER:						
RUN OFF CONTROL						
CONSTRUCTION ENTRANCE	**X	Х	X	Х		Х
PIPE SLOPE DRAIN						
OUTLET PROTECTION						
SURFACE ROUGHENING					Х	Х
CHECK DAMS						
THER:						
POLLUTION PREVENTION						
PROPER SIGNAGE	Х	Х	X	Х	Х	Х
HAZ WASTE MGMT	Х	Х	X	Х	Х	Х
SPILL KIT ON-SITE	Х	Х	Х	Х	Х	Х
CONCRETE WASHOUT AREA	Х	Х	X	Х	Х	Х
THER:						
SIGNIEIES ADDITIONAL	BMP'S REC	UIRED FO		HIN 50' OF W	ATER OF THE S	TATE

IFIES ADDITIONAL DIVIP 3 REQUIRED FOR WORK WI ** SIGNIFIES BMP THAT WILL BE INSTALLED PRIOR TO ANY GROUND DISTURBING ACTIVITY

# **RATIONALE STATEMENT**

A COMPREHENSIVE LIST OF AVAILABLE BEST MANAGEMENT PRACTICES (BMP) OPTIONS BASED ON DEQ'S GUIDANCE MANUAL HAS BEEN REVIEWED TO COMPLETE THIS EROSION AND SEDIMENT CONTROL PLAN. SOME OF THE ABOVE LISTED BMP'S WERE NOT CHOSEN BECAUSE THEY WERE DETERMINED TO NOT EFFECTIVELY MANAGE EROSION PREVENTION AND SEDIMENT CONTROL FOR THIS PROJECT BASED ON SPECIFIC SITE CONDITIONS, INCLUDING SOIL CONDITIONS TOPOGRAPHIC CONSTRAINTS, ACCESSIBILITY TO THE SITE, AND OTHER RELATED CONDITIONS, AS THE PROJECT PROGRESSES AND THERE IS A NEED TO REVISE THE ESC PLAN, AN ACTION PLAN WILL BE SUBMITTED.

## **INSPECTION FREQUENCY:** SITE CON 1. ACTIVE PERIOD 2. PRIOR TO THE SITE BECOMII ANTICIPATION OF SITE INAC 3. INACTIVE PERIODS GREATE CONSECUTIVE CALENDAR D 4. PERIODS DURING WHICH T DUE TO INCLEMENT WEATH 5. PERIODS DURING WHICH D DUE TO FROZEN CONDITION

ENGINEERS+PLANNERS LANDSCAPE ARCHITECTS + SURVEYORS 205 SE Spokane Street, Suite 200, Portland, OR 97202 phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

Harper

**HHPR** Houf Peterson Righellis Inc.

4.0 4.1 4.2 4.3 44

4.5

4.6

THE PERMITTEE IS REQUIRED TO MEET ALL THE CONDITIONS OF THE 1200-CA PERMIT. THIS ESCP AND GENERAL CONDITIONS HAVE BEEN DEVELOPED TO FACILITATE COMPLIANCE WITH THE 1200-CA PERMIT REQUIREMENTS. IN CASES OF DISCREPANCIES OR OMISSIONS, THE 1200-CA PERMIT REQUIREMENTS

## **BMP MATRIX FOR CONSTRUCTION PHASES**

**REFER TO DEQ GUIDANCE MANUAL FOR A COMPREHENSIVE LIST OF** 

INITIAL

JSH

NDITION	MINIMUM FREQUENCY
	WEEKLY WHEN STORMWATER RUNOFF, INCLUDING RUNOFF FROM SNOW MELT, IS OCCURRING.
	AT LEAST ONCE EVERY MONTH, REGARDLESS OF WHETHER STORMWATER RUNOFF IS OCCURRING.
NG INACTIVE OR IN CCESSIBILITY.	ONCE TO ENSURE THAT EROSION AND SEDIMENT CONTROL MEASURES ARE IN WORKING ORDER. ANY NECESSARY MAINTENANCE AND REPAIR MUST BE MADE PRIOR TO LEAVING THE SITE.
R THAN FOURTEEN (14) AYS.	ONCE EVERY MONTH.
HE SITE IS INACCESSIBLE HER.	IF PRACTICAL, INSPECTIONS MUST OCCUR DAILY AT A RELEVANT AND ACCESSIBLE DISCHARGE POINT OR DOWNSTREAM LOCATION.
ISCHARGE IS UNLIKELY NS.	MONTHLY, RESUME MONITORING IMMEDIATELY UPON MELT, OR WHEN WEATHER CONDITIONS MAKE DISCHARGES LIKELY.

**ESCP COVER SHEET** MONROE STREET IMPROVEMENT PROJECT SHEET NO.

4.0

CLACKAMAS COUNTY, OREGON

JOB NO.

## STANDARD EROSION AND SEDIMENT CONTROL PLAN **DRAWING NOTES:**

- 1. HOLD A PRE-CONSTRUCTION MEETING OF PROJECT CONSTRUCTION PERSONNEL THAT INCLUDES THE INSPECTOR TO DISCUSS EROSION AND SEDIMENT CONTROL MEASURES AND CONSTRUCTION LIMITS. (SCHEDULE A.8.C.I.(3))
- 2. ALL INSPECTIONS MUST BE MADE IN ACCORDANCE WITH DEQ 1200-C PERMIT REQUIREMENTS. (SCHEDULE A.12.B AND SCHEDULE B.1)
- 3. INSPECTION LOGS MUST BE KEPT IN ACCORDANCE WITH DEQ'S 1200-C PERMIT REQUIREMENTS. (SCHEDULE B.1.C AND B.2)
- 4. RETAIN A COPY OF THE ESCP AND ALL REVISIONS ON SITE AND MAKE IT AVAILABLE ON REQUEST TO DEQ, AGENT, OR THE LOCAL MUNICIPALITY. DURING INACTIVE PERIODS OF GREATER THAN SEVEN (7) CONSECUTIVE CALENDAR DAYS, THE ABOVE RECORDS MUST BE RETAINED BY THE PERMIT REGISTRANT BUT DO NOT NEED TO BE AT THE CONSTRUCTION SITE. (SCHEDULE B.2.C)
- 5. ALL PERMIT REGISTRANTS MUST IMPLEMENT THE ESCP. FAILURE TO IMPLEMENT ANY OF THE CONTROL MEASURES OR PRACTICES DESCRIBED IN THE ESCP IS A VIOLATION OF THE PERMIT. (SCHEDULE A 8.A)
- 6 THE ESCE MUST BE ACCURATE AND REFLECT SITE CONDITIONS (SCHEDULE A 12 C I)

υ.	THE ESCHMOST BE ACCORATE AND REFLECT STE CONDITIONS. (SCHEDULE A.12.C.I)
7.	SUBMISSION OF ALL ESCP REVISIONS IS NOT REQUIRED. SUBMITTAL OF THE ESCP REVISIONS IS ONLY UNDER SPECIFIC
	CONDITIONS. SUBMIT ALL NECESSARY REVISION TO DEQ OR AGENT WITHIN 10 DAYS. (SCHEDULE A.12.C.IV. AND V)
8.	PHASE CLEARING AND GRADING TO THE MAXIMUM EXTENT PRACTICAL TO PREVENT EXPOSED INACTIVE AREAS FROM
	BECOMING A SOURCE OF EROSION. (SCHEDULE A.7.A.III)
9	IDENTIEY MARK AND PROTECT (BY CONSTRUCTION FENCING OR OTHER MEANS) CRITICAL RIPARIAN AREAS AND

- IDENTIFY, MARK, AND PROTECT (BY CONSTRUCTION FENCING OR OTHER MEANS) CRITICAL RIPARIAN AREAS AT VEGETATION INCLUDING IMPORTANT TREES AND ASSOCIATED ROOTING ZONES, AND VEGETATION AREAS TO BE PRESERVED. IDENTIFY VEGETATIVE BUFFER ZONES BETWEEN THE SITE AND SENSITIVE AREAS (E.G., WETLANDS), AND OTHER AREAS TO BE PRESERVED, ESPECIALLY IN PERIMETER AREAS. (SCHEDULE A.8.C.I.(1) AND (2))
- 10. PRESERVE EXISTING VEGETATION WHEN PRACTICAL AND RE-VEGETATE OPEN AREAS. RE-VEGETATE OPEN AREAS WHEN PRACTICABLE BEFORE AND AFTER GRADING OR CONSTRUCTION. IDENTIFY THE TYPE OF VEGETATIVE SEED MIX USED. (SCHEDULE A.7.A.V)
- 11. MAINTAIN AND DELINEATE ANY EXISTING NATURAL BUFFER WITHIN THE 50-FEET OF WATERS OF THE STATE. (SCHEDULE A.7.B.I. AND (2(A)(B))
- 12. INSTALL PERIMETER SEDIMENT CONTROL, INCLUDING STORM DRAIN INLET PROTECTION AS WELL AS ALL SEDIMENT BASINS, TRAPS, AND BARRIERS PRIOR TO LAND DISTURBANCE. (SCHEDULE A.8.C.I.(5))
- 13. CONTROL BOTH PEAK FLOW RATES AND TOTAL STORMWATER VOLUME, TO MINIMIZE EROSION AT OUTLETS AND DOWNSTREAM CHANNELS AND STREAMBANKS. (SCHEDULE A.7.C)
- 14. CONTROL SEDIMENT AS NEEDED ALONG THE SITE PERIMETER AND AT ALL OPERATIONAL INTERNAL STORM DRAIN INLETS AT ALL TIMES DURING CONSTRUCTION, BOTH INTERNALLY AND AT THE SITE BOUNDARY. (SCHEDULE A.7.D.I)
- 15. ESTABLISH CONCRETE TRUCK AND OTHER CONCRETE EQUIPMENT WASHOUT AREAS BEFORE BEGINNING CONCRETE WORK. (SCHEDULE A.8.C.I.(6))
- 16. APPLY TEMPORARY AND/OR PERMANENT SOIL STABILIZATION MEASURES IMMEDIATELY ON ALL DISTURBED AREAS AS GRADING PROGRESSES. TEMPORARY OR PERMANENT STABILIZATIONS MEASURES ARE NOT REQUIRED FOR AREAS THAT ARE INTENDED TO BE LEFT UNVEGETATED, SUCH AS DIRT ACCESS ROADS OR UTILITY POLE PADS.(SCHEDULE A.8.C.II.(3))
- 17. ESTABLISH MATERIAL AND WASTE STORAGE AREAS, AND OTHER NON-STORMWATER CONTROLS. (SCHEDULE A.8.C.I.(7)) 18. PREVENT TRACKING OF SEDIMENT ONTO PUBLIC OR PRIVATE ROADS USING BMPS SUCH AS: CONSTRUCTION ENTRANCE, GRAVELED (OR PAVED) EXITS AND PARKING AREAS, GRAVEL ALL UNPAVED ROADS LOCATED ONSITE, OR USE AN EXIT TIRE WASH. THESE BMPS MUST BE IN PLACE PRIOR TO LAND-DISTURBING ACTIVITIES. (SCHEDULE A 7.D.II AND A.8.C.I(4))
- 19. WHEN TRUCKING SATURATED SOILS FROM THE SITE, EITHER USE WATER-TIGHT TRUCKS OR DRAIN LOADS ON SITE. (SCHEDULE A.7.D.II.(5))
- 20. CONTROL PROHIBITED DISCHARGES FROM LEAVING THE CONSTRUCTION SITE, I.E., CONCRETE WASH-OUT, WASTEWATER FROM CLEANOUT OF STUCCO, PAINT AND CURING COMPOUNDS. (SCHEDULE A.6)
- 21. USE BMPS TO PREVENT OR MINIMIZE STORMWATER EXPOSURE TO POLLUTANTS FROM SPILLS; VEHICLE AND EQUIPMENT FUELING, MAINTENANCE, AND STORAGE; OTHER CLEANING AND MAINTENANCE ACTIVITIES; AND WASTE HANDLING ACTIVITIES. THESE POLLUTANTS INCLUDE FUEL, HYDRAULIC FLUID, AND OTHER OILS FROM VEHICLES AND MACHINERY, AS WELL AS DEBRIS, FERTILIZER, PESTICIDES AND HERBICIDES, PAINTS, SOLVENTS, CURING COMPOUNDS AND ADHESIVES FROM CONSTRUCTION OPERATIONS. (SCHEDULE A.7.E.I.(2))
- 22. IMPLEMENT THE FOLLOWING BMPS WHEN APPLICABLE: WRITTEN SPILL PREVENTION AND RESPONSE PROCEDURES, EMPLOYEE TRAINING ON SPILL PREVENTION AND PROPER DISPOSAL PROCEDURES. SPILL KITS IN ALL VEHICLES. REGULAR MAINTENANCE SCHEDULE FOR VEHICLES AND MACHINERY, MATERIAL DELIVERY AND STORAGE CONTROLS, TRAINING AND SIGNAGE, AND COVERED STORAGE AREAS FOR WASTE AND SUPPLIES. (SCHEDULE A. 7.E.III.) 23. USE WATER, SOIL-BINDING AGENT OR OTHER DUST CONTROL TECHNIQUE AS NEEDED TO AVOID WIND-BLOWN SOIL.
- (SCHEDULE A 7.A.IV) 24. THE APPLICATION RATE OF FERTILIZERS USED TO REESTABLISH VEGETATION MUST FOLLOW MANUFACTURER'S RECOMMENDATIONS TO MINIMIZE NUTRIENT RELEASES TO SURFACE WATERS. EXERCISE CAUTION WHEN USING
- TIME-RELEASE FERTILIZERS WITHIN ANY WATERWAY RIPARIAN ZONE. (SCHEDULE A.9.B.III) 25. IF AN ACTIVE TREATMENT SYSTEM (FOR EXAMPLE, ELECTRO-COAGULATION, FLOCCULATION, FILTRATION, ETC.) FOR SEDIMENT OR OTHER POLLUTANT REMOVAL IS EMPLOYED, SUBMIT AN OPERATION AND MAINTENANCE PLAN (INCLUDING SYSTEM SCHEMATIC, LOCATION OF SYSTEM, LOCATION OF INLET, LOCATION OF DISCHARGE, DISCHARGE DISPERSION DEVICE DESIGN, AND A SAMPLING PLAN AND FREQUENCY) BEFORE OPERATING THE TREATMENT SYSTEM. OBTAIN PLAN APPROVAL BEFORE OPERATING THE TREATMENT SYSTEM. OPERATE AND MAINTAIN THE TREATMENT SYSTEM ACCORDING TO MANUFACTURER'S SPECIFICATIONS. (SCHEDULE A.9.D)
- 26. TEMPORARILY STABILIZE SOILS AT THE END OF THE SHIFT BEFORE HOLIDAYS AND WEEKENDS, IF NEEDED. THE REGISTRANT IS RESPONSIBLE FOR ENSURING THAT SOILS ARE STABLE DURING RAIN EVENTS AT ALL TIMES OF THE YEAR. (SCHEDULE A 7.B)
- 27. AS NEEDED BASED ON WEATHER CONDITIONS, AT THE END OF EACH WORKDAY SOIL STOCKPILES MUST BE STABILIZED OR COVERED, OR OTHER BMPS MUST BE IMPLEMENTED TO PREVENT DISCHARGES TO SURFACE WATERS OR CONVEYANCE SYSTEMS LEADING TO SURFACE WATERS. (SCHEDULE A 7.E.II.(2))
- 28. CONSTRUCTION ACTIVITIES MUST AVOID OR MINIMIZE EXCAVATION AND BARE GROUND ACTIVITIES DURING WET WEATHER. (SCHEDULE A.7.A.I)
- 29. SEDIMENT FENCE: REMOVE TRAPPED SEDIMENT BEFORE IT REACHES ONE THIRD OF THE ABOVE GROUND FENCE HEIGHT AND BEFORE FENCE REMOVAL. (SCHEDULE A.9.C.I) 30. OTHER SEDIMENT BARRIERS (SUCH AS BIOBAGS): REMOVE SEDIMENT BEFORE IT REACHES TWO INCHES DEPTH ABOVE
- GROUND HEIGHT AND BEFORE BMP REMOVAL. (SCHEDULE A.9.C.I) 31. CATCH BASINS: CLEAN BEFORE RETENTION CAPACITY HAS BEEN REDUCED BY FIFTY PERCENT. SEDIMENT BASINS AND
- SEDIMENT TRAPS: REMOVE TRAPPED SEDIMENTS BEFORE DESIGN CAPACITY HAS BEEN REDUCED BY FIFTY PERCENT AND AT COMPLETION OF PROJECT. (SCHEDULE A.9.C.III& IV) 32. WITHIN 24 HOURS, SIGNIFICANT SEDIMENT THAT HAS LEFT THE CONSTRUCTION SITE, MUST BE REMEDIATED.
- INVESTIGATE THE CAUSE OF THE SEDIMENT RELEASE AND IMPLEMENT STEPS TO PREVENT A RECURRENCE OF THE DISCHARGE WITHIN THE SAME 24 HOURS. ANY IN-STREAM CLEAN-UP OF SEDIMENT SHALL BE PERFORMED ACCORDING TO THE OREGON DIVISION OF STATE LANDS REQUIRED TIMEFRAME. (SCHEDULE A.9.B.I)
- 33. THE INTENTIONAL WASHING OF SEDIMENT INTO STORM SEWERS OR DRAINAGE WAYS MUST NOT OCCUR. VACUUMING OR DRY SWEEPING AND MATERIAL PICKUP MUST BE USED TO CLEANUP RELEASED SEDIMENTS. (SCHEDULE A.9.B.II) 34. THE ENTIRE SITE MUST BE TEMPORARILY STABILIZED USING VEGETATION OR A HEAVY MULCH LAYER, TEMPORARY
- SEEDING, OR OTHER METHOD SHOULD ALL CONSTRUCTION ACTIVITIES CEASE FOR 30 DAYS OR MORE. (SCHEDULE A.7.F.I) 35. PROVIDE TEMPORARY STABILIZATION FOR THAT PORTION OF THE SITE WHERE CONSTRUCTION ACTIVITIES CEASE FOR
- 14 DAYS OR MORE WITH A COVERING OF BLOWN STRAW AND A TACKIFIER, LOOSE STRAW, OR AN ADEQUATE COVERING OF COMPOST MULCH UNTIL WORK RESUMES ON THAT PORTION OF THE SITE. (SCHEDULE A.7.F.II)
- 36. DO NOT REMOVE TEMPORARY SEDIMENT CONTROL PRACTICES UNTIL PERMANENT VEGETATION OR OTHER COVER OF EXPOSED AREAS IS ESTABLISHED. ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED, ALL TEMPORARY EROSION CONTROLS AND RETAINED SOILS MUST BE REMOVED AND DISPOSED OF PROPERLY, UNLESS DOING SO CONFLICTS WITH LOCAL REQUIREMENTS. (SCHEDULE A.8.C.III(1) AND D.3.C.II AND III)

PREPAI	RED FOR				DESIGNED:	HHPR TEAM
CLACKAMAS C O U N T Y	CLACKAMAS COUNTY DEVELOPMENT AGENCY DEVELOPMENT SERVICES BLDG. 150 BEAVERCREEK ROAD OREGON CITY, OR 97045	DATE	NO.	DESCRIPTION R E V I S I O N S	DRAWN: CHECKED: DATE:	HHPR TEAM DSH/JSH 8-23-24

## GRADING, STREET AND UTILITY EROSION AND SEDIMENT **CONSTRUCTION NOTES:**

1. SEED USED FOR TEMPORARY OR PERMANENT SEEDING SHALL BE COMPOSED OF ONE OF THE FOLLOWING MIXTURES. UNLESS OTHERWISE AUTHORIZED:

- A. VEGETATED CORRIDOR AREAS REQUIRE NATIVE SEED MIXES. SEE RESTORATION PLAN FOR APPROPRIATE SEED MIX.
- B. DWARF GRASS MIX (MIN. 100 LB./AC.)
- 1. DWARF PERENNIAL RYEGRASS (80% BY WEIGHT)
- 2. CREEPING RED FESCUE (20% BY WEIGHT) C. STANDARD HEIGHT GRASS MIX (MIN. 100LB./AC.)
- 1. ANNUAL RYEGRASS (40% BY WEIGHT)
- 2. TURF-TYPE FESCUE (60% BY WEIGHT)

2. SLOPE TO RECEIVE TEMPORARY OR PERMANENT SEEDING SHALL HAVE THE SURFACE ROUGHENED BY MEANS OF TRACK-WALKING OR THE USE OF OTHER APPROVED IMPLEMENTS. SURFACE ROUGHENING IMPROVES SEED BEDDING AND REDUCES RUN-OFF VELOCITY.

3. LONG TERM SLOPE STABILIZATION MEASURES SHALL INCLUDE THE ESTABLISHMENT OF PERMANENT VEGETATIVE COVER VIA SEEDING WITH APPROVED MIX AND APPLICATION RATE.

4. TEMPORARY SLOPE STABILIZATION MEASURES SHALL INCLUDE: COVERING EXPOSED SOIL WITH PLASTIC SHEETING, STRAW MULCHING, WOOD CHIPS, OR OTHER APPROVED MEASURES.

5. STOCKPILED SOIL OR STRIPPINGS SHALL BE PLACED IN A STABLE LOCATION AND CONFIGURATION. DURING "WET WEATHER" PERIODS. STOCKPILES SHALL BE COVERED WITH PLASTIC SHEETING OR STRAW MULCH. SEDIMENT FENCE IS REQUIRED AROUND THE PERIMETER OF THE STOCKPILE.

6. EXPOSED CUT OR FILL AREAS SHALL BE STABILIZED THROUGH THE USE OF TEMPORARY SEEDING AND MULCHING. EROSION CONTROL BLANKETS OR MATS. MID-SLOPE SEDIMENT FENCES OR WATTLES. OR OTHER APPROPRIATE MEASURES. SLOPES EXCEEDING 25% MAY REQUIRE ADDITIONAL EROSION CONTROL MEASURES.

7. AREAS SUBJECT TO WIND EROSION SHALL USE APPROPRIATE DUST CONTROL MEASURES INCLUDING THE APPLICATION OF A FINE SPRAY OF WATER, PLASTIC SHEETING, STRAW MULCHING, OR OTHER APPROVED MEASURES.

8. CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES INCLUDING, BUT NOT LIMITED TO, TIRE WASHES, STREET SWEEPING, AND VACUUMING MAY BE BE REQUIRED TO INSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.

9. ACTIVE INLETS TO STORM WATER SYSTEMS SHALL BE PROTECTED THROUGH THE USE OF APPROVED INLET PROTECTION MEASURES. ALL INLET PROTECTION MEASURES ARE TO BE REGULARLY INSPECTED AND MAINTAINED AS NEEDED.

10. SATURATED MATERIALS THAT ARE HAULED OFF-SITE MUST BE TRANSPORTED IN WATER-TIGHT TRUCKS TO ELIMINATE SPILLAGE OF SEDIMENT AND SEDIMENT-LADEN WATER.

11. AN AREA SHALL BE PROVIDED FOR THE WASHING OUT OF CONCRETE TRUCKS IN A LOCATION THAT DOES NOT PROVIDE RUN-OFF THAT CAN ENTER THE STORM WATER SYSTEM. IF THE CONCRETE WASH-OUT AREA CAN NOT BE CONSTRUCTED GREATER THAN 50' FROM ANY DISCHARGE POINT, SECONDARY MEASURES SUCH AS BERMS OR TEMPORARY SETTLING PITS MAY BE REQUIRED. THE WASH-OUT SHALL BE LOCATED WITHIN SIX FEET OF TRUCK ACCESS AND BE CLEANED WHEN IT REACHES 50% OF THE CAPACITY.

12. SWEEPINGS FROM EXPOSED AGGREGATE CONCRETE SHALL NOT BE TRANSFERRED TO THE STORM WATER SYSTEM. SWEEPINGS SHALL BE PICKED UP AND DISPOSED IN THE TRASH.

13. AVOID PAVING IN WET WEATHER WHEN PAVING CHEMICALS CAN RUN-OFF INTO THE STORM WATER SYSTEM.

14. USE BMPS SUCH AS CHECK-DAMS, BERMS, AND INLET PROTECTION TO PREVENT RUN-OFF FROM REACHING DISCHARGE POINTS.

15. COVER CATCH BASINS, MANHOLES, AND OTHER DISCHARGE POINTS WHEN APPLYING SEAL COAT, TACK COAT, ETC. TO PREVENT INTRODUCING THESE MATERIALS TO THE STORM WATER SYSTEM.

# **PRE-CONSTRUCTION, CLEARING, AND DEMOLITION NOTES:**

- CONSTRUCTION ACTIVITIES.
- BARRIER.
- PROJECT.
- PROTECTION), CHECK DAMS, SURFACE ROUGHENING, AND BANK STABILIZATION.

# **EROSION AND SEDIMENT CONTROL BMP IMPLEMENTATION:**

- CONSTRUCTION ACTIVITIES.
- "CUT" ACTIVITIES.
- ESTABLISHMENT OF FINISHED GRADE AS SHOWN ON THESE PLANS.
- 5. LONG TERM SLOPE STABILIZATION MEASURES "INCLUDING MATTING" SHALL BE IN PLACE OVER ALL EXPOSED SOILS BY OCTOBER 1.
- FUNCTIONING AND SITE PAVING.
- 7. INLET PROTECTION SHALL BE IN-PLACE IMMEDIATELY FOLLOWING PAVING ACTIVITIES.





LANDSCAPE ARCHITECTS + SURVEYORS 205 SE Spokane Street, Suite 200, Portland, OR 97202 phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

# ESCP STANDARD NOTES MONROE STREET IMPROVEMENT PROJECT

CLACKAMAS COUNTY, OREGON

1. ALL BASE ESC MEASURES (INLET PROTECTION, PERIMETER SEDIMENT CONTROL, GRAVEL CONSTRUCTION ENTRANCES, ETC.) MUST BE IN PLACE, FUNCTIONAL, AND APPROVED IN AN INITIAL INSPECTION, PRIOR TO COMMENCEMENT OF

2. SEDIMENT BARRIERS APPROVED FOR USE INCLUDE SEDIMENT FENCE, BERMS CONSTRUCTED OUT OF MULCH, CHIPPINGS, OR OTHER SUITABLE MATERIAL, STRAW WATTLES, OR OTHER APPROVED MATERIALS.

3. SENSITIVE RESOURCES INCLUDING, BUT NOT LIMITED TO, TREES, WETLANDS, AND RIPARIAN PROTECTION AREAS SHALL BE CLEARLY DELINEATED WITH ORANGE CONSTRUCTION FENCING OR CHAIN LINK FENCING IN A MANNER THAT IS CLEARLY VISIBLE TO ANYONE IN THE AREA. NO ACTIVITIES ARE PERMITTED TO OCCUR BEYOND THE CONSTRUCTION

4. CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES INCLUDING, BUT NOT LIMITED TO, STREET SWEEPING, AND VACUUMING, MAY BE REQUIRED TO INSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE

5. RUN-ON AND RUN-OFF CONTROLS SHALL BE IN PLACE AND FUNCTIONING PRIOR TO BEGINNING SUBSTANTIAL CONSTRUCTION ACTIVITIES. RUN-ON AND RUN-OFF CONTROL MEASURES INCLUDE: SLOPE DRAINS (WITH OUTLET

1. ALL BASE ESC MEASURES (INLET PROTECTION, PERIMETER SEDIMENT CONTROL, GRAVEL CONSTRUCTION ENTRANCES, ETC.) MUST BE IN PLACE, FUNCTIONAL, AND APPROVED IN AN INITIAL INSPECTION, PRIOR TO COMMENCEMENT OF

2. "STOCK PILE AREA 1" SHALL BE MOVED TO "STOCK PILE AREA 2" FOLLOWING THE EXCAVATION CUT ACTIVITIES.

3. THE "STAGING, EQUIPMENT MAINTENANCE, FUELING, PORTA-POTTY, AND SOLID WASTE AREA 1" SHALL BE MOVED TO "STAGING, EQUIPMENT MAINTENANCE, FUELING, PORTA-POTTY, AND SOLID WASTE AREA 2" FOLLOWING EXCAVATION

4. ALL "SEDIMENT BARRIERS (TO BE INSTALLED AFTER GRADING)" SHALL BE INSTALLED IMMEDIATELY FOLLOWING

6. THE STORM WATER FACILITY SHALL BE CONSTRUCTED AND LANDSCAPED PRIOR TO THE STORM WATER SYSTEM

SHEET NO.

JOB NO.



EXPIRES: 6/30/25

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0	20	40
	SCALE	: 1" = 40'

1	сиггт	
	SHEET	NO.



# **CONSTRUCTION NOTES:**

- (1) INSTALL WATTLES AT PROJECT LIMIT LINE. CONTRACTOR TO DETERMINE NECESSARY LOCATIONS. SEE DETAIL ON SHEET 4.6
- (2) INSTALL INLET PROTECTION (TYPE 5) PER DETAIL ON SHEET 4.6
- (4) REMOVE EXISTING TREE OR VEGETATION IDENTIFIED AS REMOVAL WITHIN
- PROJECT LIMITS.

(7) TREE REMOVAL PER PROPERTY OWNER REQUEST. COORDINATE WITH ENGINEER PRIOR TO REMOVAL

TREE REMOVAL  $(\mathbf{X})$ , shrub removal  $(\mathbf{x})$ , and trimming  $(\mathbf{T})$  shown on plans REMOVAL IS TYPICAL WITHIN THE PROPOSED LIMITS OF GRADING (DAYLIGHT/CATCH POINTS). TRIMMING IS TYPICAL FOR ALL EXISTING TREES OR SHRUBS THAT REMAIN ALONG THE BACK OF SHARED-USE-PATH. COORDINATE WITH ENGINEER PRIOR TO REMOVAL OR TRIMMING. STUMPS TO BE GRINDED.



NOTE: THE PROJECT WILL PROVIDE EROSION CONTROL TO MEET DEQ AND WES STANDARD AND MEETING NPDES REQUIREMENTS. THE **EROSION CONTROL PLANS AND SPECIFICATIONS WILL BE INCLUDED IN** THE BID DOCUMENTS PER DTD STANDARDS. THE PROJECT WILL NOT INCLUDE ANY RIP-RAP PROTECTION AS THERE IS NO NEW STORM OUTFALL OR BANK STABILIZATION PROPOSED ON THE WATERWAY.

NOTE: CONTRACTOR TO PROVIDE TREE PROTECTION MEASURES FOR ALL TREES TO REMAIN WITHIN THE PROJECT LIMITS.

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0	20	40	80
	SCAL	E: 1" = 40'	

Λ	2
	J

CLA-98

80

SHEET NO.

JOB NO.



# **CONSTRUCTION NOTES:**

- (1) INSTALL WATTLES AT PROJECT LIMIT LINE. CONTRACTOR TO DETERMINE NECESSARY LOCATIONS. SEE DETAIL ON SHEET 4.6
- (2) INSTALL INLET PROTECTION (TYPE 5) PER DETAIL ON SHEET 4.6
- (3) INSTALL INLET PROTECTION (TYPE 4) PER DETAIL ON SHEET 4.6
- (6) INSTALL WATTLES PER DETAIL ON SHEET 4.6

TREE REMOVAL (X), SHRUB REMOVAL (X), AND TRIMMING (T) SHOWN ON PLANS REMOVAL IS TYPICAL WITHIN THE PROPOSED LIMITS OF GRADIN POINTS). TRIMMING IS TYPICAL FOR ALL EXISTING TREES OR SHRUBS THAT REMAIN ALONG THE BACK OF SHARED-USE-PATH. COORDINATE WITH ENGINEER PRIOR TO REMOVAL OR TRIMMING. STUMPS TO BE GRINDED.

NOTE: CONTRACTOR TO PROVIDE TREE





SHEET NO.



JOB NO.









# **EROSION AND SEDIMENT CONTROL WATTLE DETAIL**

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ack													
CI		CLACKAMAS COUNTY		_									
CLA		DEVELOPMENT AGENCY											
and		DEVELOPMENT SERVICES BLDG.											
Port	CIACKAMAS		DATE	NO.						D	ESCRI	PTIO	N
<u>\01-F</u>	COUNTY	OREGON CITT, OR 97045			R	Е	V	Ι	S	Ι	0	Ν	S

## NOTES:

- 1. IF THE ENTRANCE SITS ON A SLOPE, PLACE A FILTER FABRIC FENCE DOWN GRADIENT TO PREVENT SEDIMENT LADEN WATER FROM LEAVING THE SITE. WHEN THE CONSTRUCTION ENTRANCE BECOMES CLOGGED WITH SEDIMENTS, TOP DRESS THE PAD WITH CLEAN 3" MINUS ROCK.
- ANY SEDIMENT CARRIED FROM THE SITE ONTO THE STREET SHALL BE CLEANED UP 2. IMMEDIATELY.
- 3. IF EQUIPMENT TRAVELS EXTENSIVELY ON UNSTABILIZED ROADS ON THE SITE, A TIRE AND VEHICLE WHEEL WASH NEAR THE ENTRANCE WILL BE NEEDED. PERFORM WASHING ON CRUSHED ROCK. WASH WATER WILL REQUIRE TREATMENT IN A SEDIMENT POND OR TRAP.

## **GRAVEL CONSTRUCTION ENTRANCE** NTS



1. COLLECT AND RETAIN ALL THE CONCRETE WASHOUT WATER AND SOLIDS IN A LEAK PROOF BASIN.

A. WASHWATER RECYCLING: WASHWATER SHOULD BE PASSED THROUGH A FILTER AND TREATMENT SYSTEM TO REMOVE SOLIDS REDUCE PH. WASHWATER MAY BE REUSED FOR CONCRETE WASHOUT WATER. DISPOSAL OF WASHWATER SHALL BE AT AN APPROVED DISPOSAL FACILITY. DO NOT DRAIN TO STORM OR SANITARY SYSTEM.

WASHWATER MAY BE RETURN TO READY MIX PLANT. COORDINATE WITH READY MIX

THE HARDEN CONCRETE MAY BE DELIVERED TO RECYCLING PLANTS.

# **CONCRETE TRUCK WASHOUT BASIN**

DESIGNED:	HHPR TEAM
DRAWN:	HHPR TEAM
CHECKED:	DSH/JSH
DATE:	8-23-24





LANDSCAPE ARCHITECTS + SURVEYORS 205 SE Spokane Street, Suite 200, Portland, OR 97202 phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

ESCP DETAILS **MONROE STREET IMPROVEMENT PROJECT** 

## PLASTIC NETTING. 2. WATTLES BURIED $\frac{1}{2}$ WATTLE DIAMETER.

NOTES

- 3. USE 1"x 2" STAKES EVERY 4' O.C. 4. WHEN SPACED ON CONTOUR, STAGGER JOINTS ON EACH UPHILL INSTALLATION.
- 5. WATTLE INSTALLATION SPACING PER TABLE
- BELOW. 6. ADDITIONAL STAKES MAY BE REQUIRED ON DOWNHILL SIDE OF WATTLES ON STEEP SLOPES OR
- HIGHLY EROSIVE SOILS.

## WATTLE INSTALLATION SPACING TABLE

SPACING								
% SLOPE	SLOPE	(MAX)						
<10%	<10:1	300'						
10%>X<15%	10:1>X<7.5:1	150'						
15%>X<20%	7.5:1>X<5:1	100'						
20%>X<30%	5:1>X<3.5:1	50'						
30%>X<50%	3.5:1>X<2:1	25'						



NOTES:

2. INSPECT FREQUENTLY. DO NOT OVERFILL BASIN. 3. RECYCLE MATERIALS.

B. SOLIDS RECYCLING: COURSE AGGREGATE MATERIALS THAT ARE SEPARATED FROM

C. HARDENED CONCRETE RECYCLING: ALLOW CONCRETE WASHOUT TO HARDEN IN BASIN

PLANT PRIOR TO CONSTRUCTION.

– TIGHTLY ABOUT ADJACENT WATTLES 1. WATTLES TO BE MADE FROM RICE STRAW, WOOD, COCONUT FIBER, OR EXCELSIOR PLACED WITHIN A



## NOTE:

1. NOT ALLOWED FOR USE IN TRAFFIC AREAS.

# **BIO-BAG PROTECTION (TYPE 4)** ALTERNATE MEASURE

CLACKAMAS COUNTY, OREGON

SHEET NO.

4.6

JOB NO.







SCALE: 1" = 20'

PREPARED FOR



CLACKAMAS COUNTY DEVELOPMENT AGENCY DEVELOPMENT SERVICES BLDG. 150 BEAVERCREEK ROAD



## **ROADWAY CONSTRUCTION NOTES:**

- 1 CONSTRUCT CURB AND GUTTER PER DETAIL S150 ON SHEET 3.0.
- 2 ) CONSTRUCT STANDARD CURB PER DETAIL S100 ON SHEET 3.0.
- 3) CONSTRUCT PERVIOUS SHARED-USE PATH. SEE SECTION DETAIL ON SHEET 6.0.
- (4) CONSTRUCT CONCRETE SIDEWALK PER DETAIL S960 ON SHEET 3.0. SEE SECTION DETAIL ON SHEET 6.0.
- (5) CONSTRUCT SIDEWALK RAMP WITH TACTILE WARNING PER ODOT STANDARD DRAWINGS RD902, RD904, RD905, RD910 ON SHEETS 3.2 AND 3.3. SEE SPOT **ELEVATIONS ON SHEET SERIES 7.0.**
- (6) CONSTRUCT SLOPED CURB PER DETAIL ON SHEET 3.0.
- 7) CONSTRUCT CONCRETE DRIVEWAY APPROACH PER ODOT STANDARD DWG RD740 AND RD750 ON SHEET 3.1. MATCH EXISTING WIDTH AND MATERIAL BEHIND APPROACH UNLESS NOTED OTHERWISE (SEE PLAN). SAWCUT AND REMOVE EXISTING SURFACE AS REQUIRED. MINIMUM STRUCTURAL SECTION BEHIND APPROACH: 3" AC PAVEMENT OVER 8" AGGREGATE BASE OR 6" P.C.C. OVER 8" AGGREGATE BASE. SEE SHEET SERIES 8.0 FOR DRIVEWAY CONSTRUCTION TABLE, DIMENSIONS, AND MATERIAL TYPE.
- 8) CONSTRUCT FULL DEPTH ROADWAY SECTION. SAWCUT TO LIMITS SHOWN AND AS REQUIRED. SEE SECTION DETAIL ON SHEET 6.0.
- (9) CONSTRUCT VARIABLE GRIND OF EXISTING AC AND REPLACE WITH 2" INLAY. PRE-LEVEL AS REQUIRED. SEE CENTERLINE PROFILES, TYPICAL SECTIONS, AND CROSS SECTIONS.
- (10) MATCH NEW CURB TO EXISTING CURB AND/OR MATCH NEW SIDEWALK TO EXISTING SIDEWALK. SAWCUT AS REQUIRED AND DIRECTED.
- $( extsf{11})\,$  REMOVE (R) OR PROTECT (P) EXISTING CONCRETE CURB AND/OR SIDEWALK. SAWCUT NEAT LINE AT LIMIT OF REMOVAL.
- (12) REMOVE (R) OR PROTECT (P) EXISTING FENCE & GATES. FOR REMOVALS, REMOVE EXISTING FENCE WITHIN ROW LIMITS. INSTALL NEW FENCE AND/OR GATE ON PROPERTY LINE AT LOCATIONS IDENTIFIED IN THE SPECIFICATIONS.
- (13) RELOCATE (REL), PROTECT (P), OR DEMOLISH (D) EXISTING MAILBOX(ES). FOR ANY RELOCATION OR ADJUSTMENT, SEE ODOT STANDARD DRAWING RD100 AND RD101 ON SHEET 3.10. COORDINATE LOCATION WITH ENGINEER.
- (21) PROTECT AND WORK AROUND EXISTING VEHICLE WITHIN TCE LIMITS.
- (22) CONSTRUCT PLANTER WALL PER DETAIL ON SHEET 3.9.
- (84) INSTALL REMOVABLE BOLLARD PER DETAIL ON SHEET 3.10.
- (98) INSTALL 6" DIRECTIONAL BAR TILE SURFACE MOUNT TACTILE WARNING STRIP.

## **UTILITY CONSTRUCTION NOTES:**

- 13 RELOCATE (REL), PROTECT (P), OR DEMOLISH (D) EXISTING MAILBOX(ES). FOR ANY RELOCATION OR ADJUSTMENT, SEE ODOT STANDARD DRAWING RD100 AND RD101 ON SHEET 3.10. COORDINATE LOCATION WITH ENGINEER.
- 31 PROTECT (P), REMOVE (R), OR PLUG AND ABANDON IN-PLACE (AB) EXISTING STORM PIPE AS DIRECTED BY ENGINEER. UPON ABANDON IN-PLACE, FILL PIPE WITH CONTROLLED DENSITY FILL (CDF). REMOVE ANY PIPES IN CONFLICT WITH PROPOSED IMPROVEMENTS.
- 32 PROTECT (P), REMOVE (R), ADJUST (A), OR PLUG AND ABANDON (AB) EXISTING STORM STRUCTURE. UPON REMOVAL, FILL ANY VOID WITH GRANULAR BACKFILL.
- 33 CONNECT TO EXISTING PIPE OR STRUCTURE PER DETAIL ON SHEET 3.6.
- 35 CONSTRUCT CATCH BASIN TYPE CG-3 AND LATERALS PER ODOT STANDARD DWG RD371 AND RD372 ON SHEET 3.7. SEE PROFILE AND DRAINAGE DATA FOR INVERTS AND LOCATION.
- 36 CONSTRUCT CATCH BASIN TYPE GB-2 AND LATERALS PER STANDARD DWG SWM CB-5.0, SWM CB-4.0, AND SWM CB-1.0 ON SHEET 3.6. SEE PROFILE AND DRAINAGE DATA FOR INVERTS AND LOCATION.
- 37 CONSTRUCT STORMWATER TREATMENT PLANTER PER DETAIL ON SHEET 3.9. PLANTER TO INCLUDE BEEHIVE INLET, PERFORATED PIPE, AND CLEANOUT, PER PLAN. SEE DETAILED PLANTER PLANS ON SHEET SERIES 9.0 FOR CURB CUT STATIONING AND PLANTER DIMENSIONING.
- 39 CONSTRUCT AREA DRAIN PER DETAIL ON SHEET 3.6. SEE PROFILE AND DRAINAGE DATA FOR INVERTS AND LOCATION.
- 40 CONSTRUCT STORM SEWER CLEANOUT PER STANDARD DETAIL SWM ST-4.0 ON SHEET 3.8.
- 42 CONSTRUCT OVERFLOW BEEHIVE INLET PER STANDARD DETAIL ON SHEET 3.8. SEE PROFILE AND DRAINAGE DATA FOR INVERTS AND LOCATION.
- 43 CONSTRUCT 48" STANDARD STORM SEWER MANHOLE PER STANDARD DWG SWM MH-9.0 ON SHEET 3.7. SEE PROFILE AND DRAINAGE DATA FOR INVERTS AND LOCATION.
- 46 CONSTRUCT INSERTA TEE PER STANDARD DWG SWM-44 ON SHEET 3.6. RELOCATE (REL), REMOVE (R), OR PROTECT (P) EXISTING UTILITY POLE.
- REMOVAL OR RELOCATION BY UTILITY. CONTRACTOR TO COORDINATE POLE AND WIRE RELOCATIONS WITH APPROPRIATE UTILITIES.
- 62 RELOCATE (REL), REMOVE (R), OR PROTECT (P) EXISTING COMMUNICATIONS PEDESTAL. COORDINATE WITH APPROPRIATE UTILITIES.
- 66 RELOCATE (REL), ADJUST (A), OR PROTECT (P) EXISTING GAS VALVE. RELOCATION OR ADJUSTMENT BY UTILITY. CONTRACTOR TO COORDINATE.

SHEET NO.

5.0

JOB NO.





MONROE STREET PLAN AND PROFILE **MONROE STREET IMPROVEMENT PROJECT** CLACKAMAS COUNTY, OREGON

## **ROADWAY CONSTRUCTION NOTES:**

- (1) CONSTRUCT CURB AND GUTTER PER DETAIL S150 ON SHEET 3.0.
- (2) CONSTRUCT STANDARD CURB PER DETAIL S100 ON SHEET 3.0.
- (3) CONSTRUCT PERVIOUS SHARED-USE PATH. SEE SECTION DETAIL ON SHEET 6.0.
- (5) CONSTRUCT SIDEWALK RAMP WITH TACTILE WARNING PER ODOT STANDARD DRAWINGS RD902, RD904, RD905, RD910 ON SHEETS 3.2 AND 3.3. SEE SPOT ELEVATIONS ON SHEET SERIES 7.0.
- 6) CONSTRUCT SLOPED CURB PER DETAIL ON SHEET 3.0.
- CONSTRUCT CONCRETE DRIVEWAY APPROACH PER ODOT STANDARD DWG RD740 AND RD750 ON SHEET 3.1. MATCH EXISTING WIDTH AND MATERIAL BEHIND APPROACH UNLESS NOTED OTHERWISE (SEE PLAN). SAWCUT AND REMOVE EXISTING SURFACE AS REQUIRED. MINIMUM STRUCTURAL SECTION BEHIND APPROACH: 3" AC PAVEMENT OVER 8" AGGREGATE BASE OR 6" P.C.C. OVER 8" AGGREGATE BASE. SEE SHEET SERIES 8.0 FOR DRIVEWAY CONSTRUCTION TABLE, DIMENSIONS, AND MATERIAL TYPE.
- 8 CONSTRUCT FULL DEPTH ROADWAY SECTION. SAWCUT TO LIMITS SHOWN AND AS REQUIRED. SEE SECTION DETAIL ON SHEET 6.0.
- (9) CONSTRUCT VARIABLE GRIND OF EXISTING AC AND REPLACE WITH 2" INLAY. PRE-LEVEL AS REQUIRED. SEE CENTERLINE PROFILES, TYPICAL SECTIONS, AND CROSS SECTIONS.
- (10) match new curb to existing curb and/or match new sidewalk to EXISTING SIDEWALK. SAWCUT AS REQUIRED AND DIRECTED.
- (11) REMOVE (R) OR PROTECT (P) EXISTING CONCRETE CURB AND/OR SIDEWALK. SAWCUT NEAT LINE AT LIMIT OF REMOVAL.
- (12) REMOVE (R) OR PROTECT (P) EXISTING FENCE & GATES. FOR REMOVALS, REMOVE EXISTING FENCE WITHIN ROW LIMITS. INSTALL NEW FENCE AND/OR GATE ON PROPERTY LINE AT LOCATIONS IDENTIFIED IN THE SPECIFICATIONS.
- (13) RELOCATE (REL), PROTECT (P), OR DEMOLISH (D) EXISTING MAILBOX(ES). FOR ANY RELOCATION OR ADJUSTMENT, SEE ODOT STANDARD DRAWING RD100 AND RD101 ON SHEET 3.10. COORDINATE LOCATION WITH ENGINEER.
- (24) REMOVE (R) OR PROTECT (P) EXISTING WALL. FIELD COORDINATE REMOVAL LIMITS WITH ENGINEER.
- (68) REMOVE (R) OR PROTECT (P) EXISTING PRIVATE LIGHT POLE.
- (87) ADJUST EXISTING ROCKERY WALL AS NECESSARY.

## **UTILITY CONSTRUCTION NOTES:**

- 31 PROTECT (P), REMOVE (R), OR PLUG AND ABANDON IN-PLACE (AB) EXISTING STORM PIPE AS DIRECTED BY ENGINEER. UPON ABANDON IN-PLACE, FILL PIPE WITH CONTROLLED DENSITY FILL (CDF). REMOVE ANY PIPES IN CONFLICT WITH PROPOSED IMPROVEMENTS.
- 32 PROTECT (P), REMOVE (R), ADJUST (A), OR PLUG AND ABANDON (AB) EXISTING STORM STRUCTURE. UPON REMOVAL, FILL ANY VOID WITH GRANULAR BACKFILL.
- **33** CONNECT TO EXISTING PIPE OR STRUCTURE PER DETAIL ON SHEET 3.6.
- 34 ADJUST STRUCTURE RIM, COVER, OR FRAME TO FINISH GRADE PER ODOT STANDARD DWG RD360 AND STANDARD DWG SWM MH-2.0 ON SHEET 3.8. MAJ = MAJOR ADJUSTMENT, MIN = MINOR ADJUSTMENT.
- [37] CONSTRUCT STORMWATER TREATMENT PLANTER PER DETAIL ON SHEET 3.9. PLANTER TO INCLUDE BEEHIVE INLET, PERFORATED PIPE, AND CLEANOUT, PER PLAN. SEE DETAILED PLANTER PLANS ON SHEET SERIES 9.0 FOR CURB CUT STATIONING AND PLANTER DIMENSIONING.
- 38 CONTRACTOR TO FIELD CONFIRM EXISTING STRUCTURE PRIOR TO
- CONSTRUCTION. COORDINATE WITH PROPERTY OWNER AND ENGINEER. 39 CONSTRUCT AREA DRAIN PER DETAIL ON SHEET 3.6. SEE PROFILE AND
- DRAINAGE DATA FOR INVERTS AND LOCATION.
- 42 CONSTRUCT OVERFLOW BEEHIVE INLET PER STANDARD DETAIL ON SHEET 3.8. SEE PROFILE AND DRAINAGE DATA FOR INVERTS AND LOCATION.
- 43 CONSTRUCT 48" STANDARD STORM SEWER MANHOLE PER STANDARD DWG SWM MH-9.0 ON SHEET 3.7. SEE PROFILE AND DRAINAGE DATA FOR INVERTS AND LOCATION.
- 61 RELOCATE (REL), REMOVE (R), OR PROTECT (P) EXISTING UTILITY POLE. REMOVAL OR RELOCATION BY UTILITY. CONTRACTOR TO COORDINATE POLE AND WIRE RELOCATIONS WITH APPROPRIATE UTILITIES.



JOB NO.

SHEET NO.

CLA-98

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FREFA	RED FOR			
	CLACKAMAS COUNTY			
	DEVELOPMENT SERVICES BLDG.			
CLACKAMAS	150 BEAVERCREEK ROAD	DATE	NO.	
CLACKAMAS	OREGON CITY, OR 97045			
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MONROE STREET PLAN AND PROFILE MONROE STREET IMPROVEMENT PROJECT CLACKAMAS COUNTY, OREGON



205 SE Spokane Street, Suite 200, Portland, OR 97202 phone: 503.221.1131 www.hhpr.com fax: 503.221.1171





JOB NO.

SHEET NO.

**5.1A** 





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208

206

204

202

200

198

196

192

190

2+00









# MONROE STREET PLAN AND PROFILE CLACKAMAS COUNTY, OREGON

SHEET NO.

JOB NO.

5.2

CLA-98

# OR ADJUSTMENT BY UTILITY. CONTRACTOR TO COORDINATE.

# **MONROE STREET IMPROVEMENT PROJECT**

REMOVAL OR RELOCATION BY UTILITY. CONTRACTOR TO COORDINATE POLE

- 42 CONSTRUCT OVERFLOW BEEHIVE INLET PER STANDARD DETAIL ON SHEET 3.8. SEE PROFILE AND DRAINAGE DATA FOR INVERTS AND LOCATION.
- SWM MH-9.0 ON SHEET 3.7. SEE PROFILE AND DRAINAGE DATA FOR INVERTS
- AND LOCATION.
- AND WIRE RELOCATIONS WITH APPROPRIATE UTILITIES.
- 62 RELOCATE (REL), REMOVE (R), OR PROTECT (P) EXISTING COMMUNICATIONS PEDESTAL. COORDINATE WITH APPROPRIATE UTILITIES. 63 ADJUST UTILITY VAULT RIM, COVER, OR FRAME TO FINISH GRADE PER ODOT
- STANDARD DWG RD360 AND STANDARD DWG SWM MH-2.0 ON SHEET 3.8. MAJ = MAJOR ADJUSTMENT, MIN = MINOR ADJUSTMENT. COORDINATE WITH
- APPROPRIATE UTILITIES. 66 RELOCATE (REL), ADJUST (A), OR PROTECT (P) EXISTING GAS VALVE. RELOCATION

- 43 CONSTRUCT 48" STANDARD STORM SEWER MANHOLE PER STANDARD DWG
- 46 CONSTRUCT INSERTA TEE PER STANDARD DWG SWM-44 ON SHEET 3.6.
- 61 RELOCATE (REL), REMOVE (R), OR PROTECT (P) EXISTING UTILITY POLE.
- 40 CONSTRUCT STORM SEWER CLEANOUT PER STANDARD DETAIL SWM ST-4.0 ON SHEET 3.8.
- 39 CONSTRUCT AREA DRAIN PER DETAIL ON SHEET 3.6. SEE PROFILE AND DRAINAGE DATA FOR INVERTS AND LOCATION.

- STATIONING AND PLANTER DIMENSIONING.

- PLAN. SEE DETAILED PLANTER PLANS ON SHEET SERIES 9.0 FOR CURB CUT

- [37] CONSTRUCT STORMWATER TREATMENT PLANTER PER DETAIL ON SHEET 3.9. PLANTER TO INCLUDE BEEHIVE INLET, PERFORATED PIPE, AND CLEANOUT, PER
- CB-5.0, SWM CB-4.0, AND SWM CB-1.0 ON SHEET 3.6. SEE PROFILE AND DRAINAGE DATA FOR INVERTS AND LOCATION.
- 36 CONSTRUCT CATCH BASIN TYPE GB-2 AND LATERALS PER STANDARD DWG SWM

35 CONSTRUCT CATCH BASIN TYPE CG-3 AND LATERALS PER ODOT STANDARD DWG

RD371 AND RD372 ON SHEET 3.7. SEE PROFILE AND DRAINAGE DATA FOR



**UTILITY CONSTRUCTION NOTES:** 

- SERIES 7.0.

(14) REMOVE (R) OR PROTECT (P) EXISTING BOLLARD.

- (24) REMOVE (R) OR PROTECT (P) EXISTING WALL. FIELD COORDINATE REMOVAL LIMITS WITH ENGINEER.

- (28) CONSTRUCT ASPHALT RAMP TRANSITION. SEE SPOT ELEVATIONS ON SHEET

(85) REMOVE EXISTING BRICK SURFACING. COORDINATE WITH ENGINEER ON LIMITS

31 PROTECT (P), REMOVE (R), OR PLUG AND ABANDON IN-PLACE (AB) EXISTING

STORM PIPE AS DIRECTED BY ENGINEER. UPON ABANDON IN-PLACE, FILL PIPE WITH CONTROLLED DENSITY FILL (CDF). REMOVE ANY PIPES IN CONFLICT WITH

- (83) CONSTRUCT PRIVATE WALK CONNECTION.

PROPOSED IMPROVEMENTS.

INVERTS AND LOCATION.

OF REMOVAL.



**ROADWAY CONSTRUCTION NOTES:** 

(1) CONSTRUCT CURB AND GUTTER PER DETAIL S150 ON SHEET 3.0.

(2) CONSTRUCT STANDARD CURB PER DETAIL S100 ON SHEET 3.0.

- (4) CONSTRUCT CONCRETE SIDEWALK PER DETAIL S960 ON SHEET 3.0. SEE SECTION DETAIL ON SHEET 6.0.
- (5) CONSTRUCT SIDEWALK RAMP WITH TACTILE WARNING PER ODOT STANDARD DRAWINGS RD902, RD904, RD905, RD910 ON SHEETS 3.2 AND 3.3. SEE SPOT **ELEVATIONS ON SHEET SERIES 7.0.**

CONSTRUCT CONCRETE DRIVEWAY APPROACH PER ODOT STANDARD DWG RD740 AND RD750 ON SHEET 3.1. MATCH EXISTING WIDTH AND MATERIAL

BEHIND APPROACH UNLESS NOTED OTHERWISE (SEE PLAN). SAWCUT AND REMOVE EXISTING SURFACE AS REQUIRED. MINIMUM STRUCTURAL SECTION

(8) CONSTRUCT FULL DEPTH ROADWAY SECTION. SAWCUT TO LIMITS SHOWN AND

(9) CONSTRUCT VARIABLE GRIND OF EXISTING AC AND REPLACE WITH 2" INLAY. PRE-LEVEL AS REQUIRED. SEE CENTERLINE PROFILES. TYPICAL SECTIONS. AND

(10) MATCH NEW CURB TO EXISTING CURB AND/OR MATCH NEW SIDEWALK TO

 $(11)\,$  REMOVE (R) OR PROTECT (P) EXISTING CONCRETE CURB AND/OR SIDEWALK.

REMOVE EXISTING FENCE WITHIN ROW LIMITS. INSTALL NEW FENCE AND/OR

ANY RELOCATION OR ADJUSTMENT, SEE ODOT STANDARD DRAWING RD100 AND

GATE ON PROPERTY LINE AT LOCATIONS IDENTIFIED IN THE SPECIFICATIONS.

(13) RELOCATE (REL), PROTECT (P), OR DEMOLISH (D) EXISTING MAILBOX(ES). FOR

(12) REMOVE (R) OR PROTECT (P) EXISTING FENCE & GATES. FOR REMOVALS,

RD101 ON SHEET 3.10. COORDINATE LOCATION WITH ENGINEER.

EXISTING SIDEWALK. SAWCUT AS REQUIRED AND DIRECTED.

OVER 8" AGGREGATE BASE. SEE SHEET SERIES 8.0 FOR DRIVEWAY CONSTRUCTION TABLE, DIMENSIONS, AND MATERIAL TYPE.

BEHIND APPROACH: 3" AC PAVEMENT OVER 8" AGGREGATE BASE OR 6" P.C.C.

(6) CONSTRUCT SLOPED CURB PER DETAIL ON SHEET 3.0.

AS REQUIRED. SEE SECTION DETAIL ON SHEET 6.0.

SAWCUT NEAT LINE AT LIMIT OF REMOVAL.

CROSS SECTIONS.

5.0' X 5.0' -

REL

32 R 31 R

63

62

30.0'

**EASEMEN** 

200

190

180

170

165

23+00

-1.40%

EX. DUCT BANK

EX. SEWER

36 CB-8

10.0' X 10.0' —

EX. TELECOM

EASEMENT

\EX. ROW -

I KEI A				
	CLACKAMAS COUNTY			
	DEVELOPMENT AGENCY			
	DEVELOPMENT SERVICES BLDG.			
CLACKANAAS	150 BEAVERCREEK ROAD	DATE	NO.	
CLACKAMAS	OREGON CITY, OR 97045			
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REVISIONS



20.6 LF 12" D.I. STM S=0.0100



- (95) CONTRACTOR TO POTHOLE EXISTING FORCE MAIN PRIOR TO CONSTRUCTION. CONNECTION POINT WITH ENGINEER PRIOR TO INSTALLATION OF FORCE MAIN

PROPOSED UNDERGROUND UTILITY CROSSING. CONTRACTOR TO POTHOLE VERTICAL/HORIZONTAL BENDS ON SANITARY FORCE MAIN AS NECESSARY TO

- PROVIDE JOINT DEFLECTION TO MAINTAIN ADEQUATE CLEARANCE FROM
- COORDINATE ALL EXISTING ³/₄" TO 2" GAS LINES SHALL BE RELOCATIONS
- COORDINATE WITH WES FOR AS-BUILT SURVEY DATA FOR ALL BENDS,

- (73) CONSTRUCT 12" MJ GATE VALVE. INSTALL TRACER WIRE UP VALVE CAN PER WES



# **CONSTRUCTION NOTES:**

- 1) CONSTRUCT CURB AND GUTTER PER DETAIL S150 ON SHEET 3.0.
- 3) CONSTRUCT PERVIOUS SHARED-USE PATH. SEE SECTION DETAIL ON SHEET 6.0.
- (4) CONSTRUCT CONCRETE SIDEWALK PER DETAIL S960 ON SHEET 3.0. SEE SECTION DETAIL ON SHEET 6.0.
- (6) CONSTRUCT SLOPED CURB PER DETAIL ON SHEET 3.0.
- (7) CONSTRUCT CONCRETE DRIVEWAY APPROACH PER ODOT STANDARD DWG RD740 AND RD750 ON SHEET 3.1. MATCH EXISTING WIDTH AND MATERIAL BEHIND APPROACH UNLESS NOTED OTHERWISE (SEE PLAN). SAWCUT AND REMOVE EXISTING SURFACE AS REQUIRED. MINIMUM STRUCTURAL SECTION BEHIND APPROACH: 3" AC PAVEMENT OVER 8" AGGREGATE BASE OR 6" P.C.C. OVER 8" AGGREGATE BASE. SEE SHEET SERIES 8.0 FOR DRIVEWAY CONSTRUCTION TABLE, DIMENSIONS, AND MATERIAL TYPE.
- 8) CONSTRUCT FULL DEPTH ROADWAY SECTION. SAWCUT TO LIMITS SHOWN AND AS REQUIRED. SEE SECTION DETAIL ON SHEET 6.0.
- (9) CONSTRUCT VARIABLE GRIND OF EXISTING AC AND REPLACE WITH 2" INLAY. PRE-LEVEL AS REQUIRED. SEE CENTERLINE PROFILES, TYPICAL SECTIONS, AND CROSS SECTIONS.
- (10) MATCH NEW CURB TO EXISTING CURB AND/OR MATCH NEW SIDEWALK TO EXISTING SIDEWALK. SAWCUT AS REQUIRED AND DIRECTED.
- (11) REMOVE (R) OR PROTECT (P) EXISTING CONCRETE CURB AND/OR SIDEWALK. SAWCUT NEAT LINE AT LIMIT OF REMOVAL
- (12) REMOVE (R) OR PROTECT (P) EXISTING FENCE & GATES. FOR REMOVALS, REMOVE EXISTING FENCE WITHIN ROW LIMITS. INSTALL NEW FENCE AND/OR GATE ON PROPERTY LINE AT LOCATIONS IDENTIFIED IN THE SPECIFICATIONS.
- (13) RELOCATE (REL), PROTECT (P), OR DEMOLISH (D) EXISTING MAILBOX(ES). FOR ANY RELOCATION OR ADJUSTMENT, SEE ODOT STANDARD DRAWING RD100 AND RD101 ON SHEET 3.10. COORDINATE LOCATION WITH ENGINEER.
- (15) REMOVE (R) OR PROTECT (P) EXISTING HEADWALL.
- (24) REMOVE (R) OR PROTECT (P) EXISTING WALL. FIELD COORDINATE REMOVAL LIMITS WITH ENGINEER.

# **UTILITY CONSTRUCTION NOTES:**

- 31 PROTECT (P), REMOVE (R), OR PLUG AND ABANDON IN-PLACE (AB) EXISTING STORM PIPE AS DIRECTED BY ENGINEER. UPON ABANDON IN-PLACE, FILL PIPE WITH CONTROLLED DENSITY FILL (CDF). REMOVE ANY PIPES IN CONFLICT WITH PROPOSED IMPROVEMENTS.
- 32 PROTECT (P), REMOVE (R), ADJUST (A), OR PLUG AND ABANDON (AB) EXISTING STORM STRUCTURE. UPON REMOVAL, FILL ANY VOID WITH GRANULAR BACKFILL.
- 34 ADJUST STRUCTURE RIM, COVER, OR FRAME TO FINISH GRADE PER ODOT STANDARD DWG RD360 AND STANDARD DWG SWM MH-2.0 ON SHEET 3.8. MAJ = MAJOR ADJUSTMENT, MIN = MINOR ADJUSTMENT.
- **36** CONSTRUCT CATCH BASIN TYPE GB-2 AND LATERALS PER STANDARD DWG SWM CB-5.0, SWM CB-4.0, AND SWM CB-1.0 ON SHEET 3.6. SEE PROFILE AND DRAINAGE DATA FOR INVERTS AND LOCATION.
- **37** CONSTRUCT STORMWATER TREATMENT PLANTER PER DETAIL ON SHEET 3.9. PLANTER TO INCLUDE BEEHIVE INLET, PERFORATED PIPE, AND CLEANOUT, PER PLAN. SEE DETAILED PLANTER PLANS ON SHEET SERIES 9.0 FOR CURB CUT STATIONING AND PLANTER DIMENSIONING.
- 42 CONSTRUCT OVERFLOW BEEHIVE INLET PER STANDARD DETAIL ON SHEET 3.8. SEE PROFILE AND DRAINAGE DATA FOR INVERTS AND LOCATION.
- 43 CONSTRUCT 48" STANDARD STORM SEWER MANHOLE PER STANDARD DWG SWM MH-9.0 ON SHEET 3.7. SEE PROFILE AND DRAINAGE DATA FOR INVERTS AND LOCATION.
- 44 CONSTRUCT 60" STANDARD STORM SEWER MANHOLE PER STANDARD DWG SWM MH-9.0 ON SHEET 3.7. SEE PROFILE AND DRAINAGE DATA FOR INVERTS AND LOCATION.
- 46 CONSTRUCT INSERTA TEE PER STANDARD DWG SWM-44 ON SHEET 3.6.
- 47 CONSTRUCT STORM ROOF DRAIN LATERAL AND INSTALL CLEANOUT PER DETAIL ON SHEET 3.8. CONNECTION LOCATION SHOWN ON PLANS IS APPROXIMATE.
- 61 RELOCATE (REL), REMOVE (R), OR PROTECT (P) EXISTING UTILITY POLE. REMOVAL OR RELOCATION BY UTILITY. CONTRACTOR TO COORDINATE POLE AND WIRE RELOCATIONS WITH APPROPRIATE UTILITIES.
- 77 EXTEND EXISTING SANITARY LATERAL AND INSTALL CLEANOUT PER DETAIL ON SHEET 3.7. FIELD VERIFY LOCATION OF EXISTING LATERAL STUB PRIOR TO BEGINNING WORK. CONNECTION LOCATION SHOWN ON PLANS IS APPROXIMATE.



SHEET NO.

JOB NO.

5.3

FREFA	RED FOR			
	CLACKAMAS COUNTY			
	DEVELOPMENT SERVICES BLDG.			
CLACKANAS	150 BEAVERCREEK ROAD	DATE	NO.	
CLACKAMAS	OREGON CITY, OR 97045			
СОИМТҮ			F	R E

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DATE:
REVISIONS

HHPR TEAM HHPR TEAM DSH/JSH 8-23-24





LANDSCAPE ARCHITECTS + SURVEYORS 205 SE Spokane Street, Suite 200, Portland, OR 97202 phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

MONROE STREET PLAN AND PROFILE MONROE STREET IMPROVEMENT PROJECT CLACKAMAS COUNTY, OREGON

SHEET NO.

JOB NO.



⊢MH-8

178

176

172

170

168

164

STA: 25+18.11, -16.3' L

12" IE OUT (SW) = 169.57

RIM = 173.58

SUMP = 168.07 12" IE IN (N) = 169.67

> 180 __MH-9

178

174

172

170

166

168

0+21

_−CB-10

RIM = 174.65

SUMP = 169.18

178

176

174

172

168

166

0+21

12" IE IN (N) = 170.78

180 -MH-10

12" IE OUT (SW) = 170.68

176

**BH-7 PROFILE** SCALE: 1" = 20' (HORIZ.) 1" = 5' (VERT.)

BH-8 GB-2 BH INLET WITH 1.3" ORIFICE STA: 27+92.50, -16.3' L

|M|| 166

0+20

νI 

**BH-6 PROFILE** SCALE: 1" = 20' (HORIZ.) 1" = 5' (VERT.)

GB-2

174

RIM = 173.70

178

176

172

170

168

166

164

0+00

10.2 LF 12" STM S=0.0200-

BH INLET WITH 1.1" ORIFICE

STA: 25+18.11, -20.5' L

12" IE OUT (S) = 169.71

RIM = 173.46 SUMP = 168.21

180

178

176

174

172

170

0+00

168 4.2 LF 12" STM S=0.0100 6.6 LF 12" STM S=0.0100 166

STA: 27+92.50*,* -20.5' L

12" IE OUT (S) = 170.86

RIM = 174.53

180

178

176

174

172

170

0+00

BH-8 & CB-10 PROFILE SCALE: 1" = 20' (HORIZ.) 1" = 5' (VERT.)

4.2 LF 12" STM S=0.0200 6.6 LF 12" STM S=0.0226 166

 $\sim$ 

SUMP = 169.36

174

SUMP = 168.53

BH INLET WITH 0.8" ORIFICE STA: 24+70.81, -20.5' L

12" IE OUT (SE) = 170.03







# SHEET NO.

JOB NO.





# **ROADWAY CONSTRUCTION NOTES:**

- 1 CONSTRUCT CURB AND GUTTER PER DETAIL S150 ON SHEET 3.0.
- (3) CONSTRUCT PERVIOUS SHARED-USE PATH. SEE SECTION DETAIL ON SHEET 6.0.
- (4) CONSTRUCT CONCRETE SIDEWALK PER DETAIL S960 ON SHEET 3.0. SEE SECTION
- (5) CONSTRUCT SIDEWALK RAMP WITH TACTILE WARNING PER ODOT STANDARD DRAWINGS RD902, RD904, RD905, RD910 ON SHEETS 3.2 AND 3.3. SEE SPOT
- 6) CONSTRUCT SLOPED CURB PER DETAIL ON SHEET 3.0.
- CONSTRUCT CONCRETE DRIVEWAY APPROACH PER ODOT STANDARD DWG RD740 AND RD750 ON SHEET 3.1. MATCH EXISTING WIDTH AND MATERIAL BEHIND APPROACH UNLESS NOTED OTHERWISE (SEE PLAN). SAWCUT AND REMOVE EXISTING SURFACE AS REQUIRED. MINIMUM STRUCTURAL SECTION BEHIND APPROACH: 3" AC PAVEMENT OVER 8" AGGREGATE BASE OR 6" P.C.C. OVER 8" AGGREGATE BASE. SEE SHEET SERIES 8.0 FOR DRIVEWAY CONSTRUCTION TABLE, DIMENSIONS, AND MATERIAL TYPE.
- (8) CONSTRUCT FULL DEPTH ROADWAY SECTION. SAWCUT TO LIMITS SHOWN AND AS REQUIRED. SEE SECTION DETAIL ON SHEET 6.0.
- (9) CONSTRUCT VARIABLE GRIND OF EXISTING AC AND REPLACE WITH 2" INLAY. PRE-LEVEL AS REQUIRED. SEE CENTERLINE PROFILES, TYPICAL SECTIONS, AND
- (10) MATCH NEW CURB TO EXISTING CURB AND/OR MATCH NEW SIDEWALK TO EXISTING SIDEWALK. SAWCUT AS REQUIRED AND DIRECTED.
- (11) REMOVE (R) OR PROTECT (P) EXISTING CONCRETE CURB AND/OR SIDEWALK. SAWCUT NEAT LINE AT LIMIT OF REMOVAL.
- (12) REMOVE (R) OR PROTECT (P) EXISTING FENCE & GATES. FOR REMOVALS, REMOVE EXISTING FENCE WITHIN ROW LIMITS. INSTALL NEW FENCE AND/OR GATE ON PROPERTY LINE AT LOCATIONS IDENTIFIED IN THE SPECIFICATIONS.
- (13) RELOCATE (REL), PROTECT (P), OR DEMOLISH (D) EXISTING MAILBOX(ES). FOR ANY RELOCATION OR ADJUSTMENT, SEE ODOT STANDARD DRAWING RD100 AND RD101 ON SHEET 3.10. COORDINATE LOCATION WITH ENGINEER.
- (22) CONSTRUCT PLANTER WALL PER DETAIL ON SHEET 3.9.
- (24) REMOVE (R) OR PROTECT (P) EXISTING WALL. FIELD COORDINATE REMOVAL

# **UTILITY CONSTRUCTION NOTES:**

- 31 PROTECT (P), REMOVE (R), OR PLUG AND ABANDON IN-PLACE (AB) EXISTING STORM PIPE AS DIRECTED BY ENGINEER. UPON ABANDON IN-PLACE, FILL PIPE WITH CONTROLLED DENSITY FILL (CDF). REMOVE ANY PIPES IN CONFLICT WITH
- 32 PROTECT (P), REMOVE (R), ADJUST (A), OR PLUG AND ABANDON (AB) EXISTING STORM STRUCTURE. UPON REMOVAL, FILL ANY VOID WITH GRANULAR
- 33 CONNECT TO EXISTING PIPE OR STRUCTURE PER DETAIL ON SHEET 3.6.
- ADJUST STRUCTURE RIM, COVER, OR FRAME TO FINISH GRADE PER ODOT STANDARD DWG RD360 AND STANDARD DWG SWM MH-2.0 ON SHEET 3.8. MAJ
- 36 CONSTRUCT CATCH BASIN TYPE GB-2 AND LATERALS PER STANDARD DWG SWM CB-5.0, SWM CB-4.0, AND SWM CB-1.0 ON SHEET 3.6. SEE PROFILE AND
- 37 CONSTRUCT STORMWATER TREATMENT PLANTER PER DETAIL ON SHEET 3.9. PLANTER TO INCLUDE BEEHIVE INLET, PERFORATED PIPE, AND CLEANOUT, PER PLAN. SEE DETAILED PLANTER PLANS ON SHEET SERIES 9.0 FOR CURB CUT
- 43 CONSTRUCT 48" STANDARD STORM SEWER MANHOLE PER STANDARD DWG SWM MH-9.0 ON SHEET 3.7. SEE PROFILE AND DRAINAGE DATA FOR INVERTS

- CONSTRUCT STORM ROOF DRAIN LATERAL AND INSTALL CLEANOUT PER DETAIL ON SHEET 3.8. CONNECTION LOCATION SHOWN ON PLANS IS APPROXIMATE.
- 48 CONSTRUCT DITCH INLET PER DETAIL ON SHEET 3.5. [61] RELOCATE (REL), REMOVE (R), OR PROTECT (P) EXISTING UTILITY POLE.
- AND WIRE RELOCATIONS WITH APPROPRIATE UTILITIES.
- OR ADJUSTMENT BY UTILITY. CONTRACTOR TO COORDINATE.

- 66 RELOCATE (REL), ADJUST (A), OR PROTECT (P) EXISTING GAS VALVE. RELOCATION
- REMOVAL OR RELOCATION BY UTILITY. CONTRACTOR TO COORDINATE POLE

46 CONSTRUCT INSERTA TEE PER STANDARD DWG SWM-44 ON SHEET 3.6.



5.4







M	C



DI-1

DITCH INLET

EX. MH-176

CB-11-

GB-2

PVI STA: 1+18.00

PVI ELEV: 176.60







## **MONROE ST - SHIFTED CROWN CENTERLINE PROFILE**



## **ROADWAY CONSTRUCTION NOTES:**

- 1 CONSTRUCT CURB AND GUTTER PER DETAIL S150 ON SHEET 3.0.
- (3) CONSTRUCT PERVIOUS SHARED-USE PATH. SEE SECTION DETAIL ON SHEET 6.0.
- (4) CONSTRUCT CONCRETE SIDEWALK PER DETAIL S960 ON SHEET 3.0. SEE SECTION DETAIL ON SHEET 6.0.
- (5) CONSTRUCT SIDEWALK RAMP WITH TACTILE WARNING PER ODOT STANDARD DRAWINGS RD902, RD904, RD905, RD910 ON SHEETS 3.2 AND 3.3. SEE SPOT **ELEVATIONS ON SHEET SERIES 7.0.**
- (6) CONSTRUCT SLOPED CURB PER DETAIL ON SHEET 3.0.
- (7) CONSTRUCT CONCRETE DRIVEWAY APPROACH PER ODOT STANDARD DWG RD740 AND RD750 ON SHEET 3.1. MATCH EXISTING WIDTH AND MATERIAL BEHIND APPROACH UNLESS NOTED OTHERWISE (SEE PLAN). SAWCUT AND REMOVE EXISTING SURFACE AS REQUIRED. MINIMUM STRUCTURAL SECTION BEHIND APPROACH: 3" AC PAVEMENT OVER 8" AGGREGATE BASE OR 6" P.C.C. OVER 8" AGGREGATE BASE. SEE SHEET SERIES 8.0 FOR DRIVEWAY CONSTRUCTION TABLE, DIMENSIONS, AND MATERIAL TYPE.
- (8) CONSTRUCT FULL DEPTH ROADWAY SECTION. SAWCUT TO LIMITS SHOWN AND AS REQUIRED. SEE SECTION DETAIL ON SHEET 6.0.
- (9) CONSTRUCT VARIABLE GRIND OF EXISTING AC AND REPLACE WITH 2" INLAY. PRE-LEVEL AS REQUIRED. SEE CENTERLINE PROFILES, TYPICAL SECTIONS, AND CROSS SECTIONS.
- (11) REMOVE (R) OR PROTECT (P) EXISTING CONCRETE CURB AND/OR SIDEWALK. SAWCUT NEAT LINE AT LIMIT OF REMOVAL.
- (12) REMOVE (R) OR PROTECT (P) EXISTING FENCE & GATES. FOR REMOVALS, REMOVE EXISTING FENCE WITHIN ROW LIMITS. INSTALL NEW FENCE AND/OR GATE ON PROPERTY LINE AT LOCATIONS IDENTIFIED IN THE SPECIFICATIONS.
- (13) RELOCATE (REL), PROTECT (P), OR DEMOLISH (D) EXISTING MAILBOX(ES). FOR ANY RELOCATION OR ADJUSTMENT, SEE ODOT STANDARD DRAWING RD100 AND RD101 ON SHEET 3.10. COORDINATE LOCATION WITH ENGINEER.
- (16) CONSTRUCT MOUNTABLE CURB AND GUTTER PER ODOT STANDARD DWG RD700 ON SHEET 3.0.
- (17) CONSTRUCT LOW PROFILE MOUNTABLE CURB PER ODOT STANDARD DWG RD700 ON SHEET 3.0.
- (18) CONSTRUCT REINFORCED CONCRETE TRUCK APRON. SEE SECTION DETAIL ON SHEET 6.0.
- (19) CONSTRUCT CONCRETE MEDIAN ISLAND WITH ADA CUT-THROUGH. NO TACTILE WARNING REQUIRED. SEE SHEET SERIES 7.0 FOR GRADING.
- (20) CONSTRUCT REINFORCED STAMPED COLORED CONCRETE SURFACING. SEE SECTION DETAIL ON SHEET 6.0. SEE SPECIFICATIONS FOR DETAILS AND MATERIAL TYPE.
- (25) CONSTRUCT CONCRETE GRAVITY WALL PER DETAILS ON SHEET 3.4. HEIGHT (H) NOTED ON PLANS. WALL TYPE CUT (C) OR FILL (F) NOTED ON PLANS. SEE SHEET SERIES 7.0 FOR WALL GRADING.
- (86) PROTECT (P) OR REMOVE (R) EXISTING BUILDING STRUCTURE. COORDINATE WITH PROPERTY OWNER AND ENGINEER PRIOR TO REMOVAL.

## **UTILITY CONSTRUCTION NOTES:**

- 31 PROTECT (P), REMOVE (R), OR PLUG AND ABANDON IN-PLACE (AB) EXISTING STORM PIPE AS DIRECTED BY ENGINEER. UPON ABANDON IN-PLACE, FILL PIPE WITH CONTROLLED DENSITY FILL (CDF). REMOVE ANY PIPES IN CONFLICT WITH PROPOSED IMPROVEMENTS.
- 32 PROTECT (P), REMOVE (R), ADJUST (A), OR PLUG AND ABANDON (AB) EXISTING STORM STRUCTURE. UPON REMOVAL, FILL ANY VOID WITH GRANULAR BACKFILL.
- 34 ADJUST STRUCTURE RIM, COVER, OR FRAME TO FINISH GRADE PER ODOT STANDARD DWG RD360 AND STANDARD DWG SWM MH-2.0 ON SHEET 3.8. MAJ = MAJOR ADJUSTMENT, MIN = MINOR ADJUSTMENT.
- 36 CONSTRUCT CATCH BASIN TYPE GB-2 AND LATERALS PER STANDARD DWG SWM CB-5.0, SWM CB-4.0, AND SWM CB-1.0 ON SHEET 3.6. SEE PROFILE AND DRAINAGE DATA FOR INVERTS AND LOCATION.
- 37 CONSTRUCT STORMWATER TREATMENT PLANTER PER DETAIL ON SHEET 3.9. PLANTER TO INCLUDE BEEHIVE INLET, PERFORATED PIPE, AND CLEANOUT, PER PLAN. SEE DETAILED PLANTER PLANS ON SHEET SERIES 9.0 FOR CURB CUT STATIONING AND PLANTER DIMENSIONING.
- 42 CONSTRUCT OVERFLOW BEEHIVE INLET PER STANDARD DETAIL ON SHEET 3.8. SEE PROFILE AND DRAINAGE DATA FOR INVERTS AND LOCATION.
- 43 CONSTRUCT 48" STANDARD STORM SEWER MANHOLE PER STANDARD DWG SWM MH-9.0 ON SHEET 3.7. SEE PROFILE AND DRAINAGE DATA FOR INVERTS AND LOCATION.
- 61 RELOCATE (REL), REMOVE (R), OR PROTECT (P) EXISTING UTILITY POLE. REMOVAL OR RELOCATION BY UTILITY. CONTRACTOR TO COORDINATE POLE AND WIRE RELOCATIONS WITH APPROPRIATE UTILITIES.
- 62 RELOCATE (REL), REMOVE (R), OR PROTECT (P) EXISTING COMMUNICATIONS PEDESTAL. COORDINATE WITH APPROPRIATE UTILITIES.



MONROE STREET PLAN AND PROFILE **MONROE STREET IMPROVEMENT PROJECT** CLACKAMAS COUNTY, OREGON

SHEET NO.

5.5

JOB NO.







# **ROADWAY CONSTRUCTION NOTES:**

- (1) CONSTRUCT CURB AND GUTTER PER DETAIL S150 ON SHEET 3.0.
- (2) CONSTRUCT STANDARD CURB PER DETAIL S100 ON SHEET 3.0.
- (3) CONSTRUCT PERVIOUS SHARED-USE PATH. SEE SECTION DETAIL ON SHEET 6.0.
- (5) CONSTRUCT SIDEWALK RAMP WITH TACTILE WARNING PER ODOT STANDARD DRAWINGS RD902, RD904, RD905, RD910 ON SHEETS 3.2 AND 3.3. SEE SPOT ELEVATIONS ON SHEET SERIES 7.0.
- 7) CONSTRUCT CONCRETE DRIVEWAY APPROACH PER ODOT STANDARD DWG RD740 AND RD750 ON SHEET 3.1. MATCH EXISTING WIDTH AND MATERIAL BEHIND APPROACH UNLESS NOTED OTHERWISE (SEE PLAN). SAWCUT AND REMOVE EXISTING SURFACE AS REQUIRED. MINIMUM STRUCTURAL SECTION BEHIND APPROACH: 3" AC PAVEMENT OVER 8" AGGREGATE BASE OR 6" P.C.C. OVER 8" AGGREGATE BASE. SEE SHEET SERIES 8.0 FOR DRIVEWAY CONSTRUCTION TABLE, DIMENSIONS, AND MATERIAL TYPE.
- (8) CONSTRUCT FULL DEPTH ROADWAY SECTION. SAWCUT TO LIMITS SHOWN AND AS REQUIRED. SEE SECTION DETAIL ON SHEET 6.0.
- (9) CONSTRUCT VARIABLE GRIND OF EXISTING AC AND REPLACE WITH 2" INLAY. PRE-LEVEL AS REQUIRED. SEE CENTERLINE PROFILES, TYPICAL SECTIONS, AND CROSS SECTIONS.
- (10) MATCH NEW CURB TO EXISTING CURB AND/OR MATCH NEW SIDEWALK TO EXISTING SIDEWALK. SAWCUT AS REQUIRED AND DIRECTED.
- (11) REMOVE (R) OR PROTECT (P) EXISTING CONCRETE CURB AND/OR SIDEWALK. SAWCUT NEAT LINE AT LIMIT OF REMOVAL.
- (12) REMOVE (R) OR PROTECT (P) EXISTING FENCE & GATES. FOR REMOVALS, REMOVE EXISTING FENCE WITHIN ROW LIMITS. INSTALL NEW FENCE AND/OR GATE ON PROPERTY LINE AT LOCATIONS IDENTIFIED IN THE SPECIFICATIONS.
- (13) RELOCATE (REL), PROTECT (P), OR DEMOLISH (D) EXISTING MAILBOX(ES). FOR ANY RELOCATION OR ADJUSTMENT, SEE ODOT STANDARD DRAWING RD100 AND RD101 ON SHEET 3.10. COORDINATE LOCATION WITH ENGINEER.
- (24) REMOVE (R) OR PROTECT (P) EXISTING WALL. FIELD COORDINATE REMOVAL LIMITS WITH ENGINEER.
- (29) REMOVE EXISTING PAVERS TO LIMITS SHOWN. CONTRACTOR TO SALVAGE AND RECONSTRUCT PAVERS AT FINISHED GRADE. COORDINATE WITH ENGINEER AND PROPERTY OWNER.
- (86) PROTECT (P) OR REMOVE (R) EXISTING BUILDING STRUCTURE. COORDINATE WITH PROPERTY OWNER AND ENGINEER PRIOR TO REMOVAL.

# **UTILITY CONSTRUCTION NOTES:**

- ADJUST STRUCTURE RIM, COVER, OR FRAME TO FINISH GRADE PER ODOT STANDARD DWG RD360 AND STANDARD DWG SWM MH-2.0 ON SHEET 3.8. MAJ = MAJOR ADJUSTMENT, MIN = MINOR ADJUSTMENT.
- [37] CONSTRUCT STORMWATER TREATMENT PLANTER PER DETAIL ON SHEET 3.9. PLANTER TO INCLUDE BEEHIVE INLET, PERFORATED PIPE, AND CLEANOUT, PER PLAN. SEE DETAILED PLANTER PLANS ON SHEET SERIES 9.0 FOR CURB CUT STATIONING AND PLANTER DIMENSIONING.
- 42 CONSTRUCT OVERFLOW BEEHIVE INLET PER STANDARD DETAIL ON SHEET 3.8. SEE PROFILE AND DRAINAGE DATA FOR INVERTS AND LOCATION.
- 43 CONSTRUCT 48" STANDARD STORM SEWER MANHOLE PER STANDARD DWG SWM MH-9.0 ON SHEET 3.7. SEE PROFILE AND DRAINAGE DATA FOR INVERTS AND LOCATION.
- 61 RELOCATE (REL), REMOVE (R), OR PROTECT (P) EXISTING UTILITY POLE. REMOVAL OR RELOCATION BY UTILITY. CONTRACTOR TO COORDINATE POLE AND WIRE RELOCATIONS WITH APPROPRIATE UTILITIES.
- 71 RELOCATE (REL), ADJUST (A). OR PROTECT (P) EXISTING CLEANOUT.

10 SCALE: 1" = 20'

SHEET NO.

5.6

JOB NO.




# **ROADWAY CONSTRUCTION NOTES:**

- 1) CONSTRUCT CURB AND GUTTER PER DETAIL S150 ON SHEET 3.0.
- (2) CONSTRUCT STANDARD CURB PER DETAIL S100 ON SHEET 3.0.
- (3) CONSTRUCT PERVIOUS SHARED-USE PATH. SEE SECTION DETAIL ON SHEET 6.0.
- (4) CONSTRUCT CONCRETE SIDEWALK PER DETAIL S960 ON SHEET 3.0. SEE SECTION DETAIL ON SHEET 6.0.
- (7) CONSTRUCT CONCRETE DRIVEWAY APPROACH PER ODOT STANDARD DWG RD740 AND RD750 ON SHEET 3.1. MATCH EXISTING WIDTH AND MATERIAL BEHIND APPROACH UNLESS NOTED OTHERWISE (SEE PLAN). SAWCUT AND REMOVE EXISTING SURFACE AS REQUIRED. MINIMUM STRUCTURAL SECTION BEHIND APPROACH: 3" AC PAVEMENT OVER 8" AGGREGATE BASE OR 6" P.C.C. OVER 8" AGGREGATE BASE. SEE SHEET SERIES 8.0 FOR DRIVEWAY CONSTRUCTION TABLE, DIMENSIONS, AND MATERIAL TYPE.
- (8) CONSTRUCT FULL DEPTH ROADWAY SECTION. SAWCUT TO LIMITS SHOWN AND AS REQUIRED. SEE SECTION DETAIL ON SHEET 6.0.
- (9) CONSTRUCT VARIABLE GRIND OF EXISTING AC AND REPLACE WITH 2" INLAY. PRE-LEVEL AS REQUIRED. SEE CENTERLINE PROFILES, TYPICAL SECTIONS, AND CROSS SECTIONS.
- (11) REMOVE (R) OR PROTECT (P) EXISTING CONCRETE CURB AND/OR SIDEWALK. SAWCUT NEAT LINE AT LIMIT OF REMOVAL.
- $(\mathbf{12})\,$  REMOVE (R) OR PROTECT (P) EXISTING FENCE & GATES. FOR REMOVALS, REMOVE EXISTING FENCE WITHIN ROW LIMITS. INSTALL NEW FENCE AND/OR GATE ON PROPERTY LINE AT LOCATIONS IDENTIFIED IN THE SPECIFICATIONS.
- (13) RELOCATE (REL), PROTECT (P), OR DEMOLISH (D) EXISTING MAILBOX(ES). FOR ANY RELOCATION OR ADJUSTMENT, SEE ODOT STANDARD DRAWING RD100 AND RD101 ON SHEET 3.10. COORDINATE LOCATION WITH ENGINEER.
- (24) REMOVE (R) OR PROTECT (P) EXISTING WALL. FIELD COORDINATE REMOVAL LIMITS WITH ENGINEER.
- (27) PROTECT (P) OR REMOVE (R) EXISTING STAIRS.
- (80) PROTECT EXISTING GRASSCRETE DRIVEWAY.
- (89) MATCH NEW DRIVEWAY APPROACH TO EXISTING TRENCH DRAIN. PROTECT EXISTING TRENCH DRAIN.
- (91) WALL AND TREE REMOVAL PER PROPERTY OWNER REQUEST. COORDINATE WITH ENGINEER PRIOR TO REMOVAL.

# **UTILITY CONSTRUCTION NOTES:**

- 31 PROTECT (P), REMOVE (R), OR PLUG AND ABANDON IN-PLACE (AB) EXISTING STORM PIPE AS DIRECTED BY ENGINEER. UPON ABANDON IN-PLACE, FILL PIPE WITH CONTROLLED DENSITY FILL (CDF). REMOVE ANY PIPES IN CONFLICT WITH PROPOSED IMPROVEMENTS.
- 32 PROTECT (P), REMOVE (R), ADJUST (A), OR PLUG AND ABANDON (AB) EXISTING STORM STRUCTURE. UPON REMOVAL, FILL ANY VOID WITH GRANULAR BACKFILL.
- **33** CONNECT TO EXISTING PIPE OR STRUCTURE PER DETAIL ON SHEET 3.6.
- 34 ADJUST STRUCTURE RIM, COVER, OR FRAME TO FINISH GRADE PER ODOT STANDARD DWG RD360 AND STANDARD DWG SWM MH-2.0 ON SHEET 3.8. MAJ = MAJOR ADJUSTMENT, MIN = MINOR ADJUSTMENT.
- 35 CONSTRUCT CATCH BASIN TYPE CG-3 AND LATERALS PER ODOT STANDARD DWG RD371 AND RD372 ON SHEET 3.7. SEE PROFILE AND DRAINAGE DATA FOR INVERTS AND LOCATION.
- 36 CONSTRUCT CATCH BASIN TYPE GB-2 AND LATERALS PER STANDARD DWG SWM CB-5.0, SWM CB-4.0, AND SWM CB-1.0 ON SHEET 3.6. SEE PROFILE AND DRAINAGE DATA FOR INVERTS AND LOCATION.
- [37] CONSTRUCT STORMWATER TREATMENT PLANTER PER DETAIL ON SHEET 3.9. PLANTER TO INCLUDE BEEHIVE INLET, PERFORATED PIPE, AND CLEANOUT, PER PLAN. SEE DETAILED PLANTER PLANS ON SHEET SERIES 9.0 FOR CURB CUT STATIONING AND PLANTER DIMENSIONING.
- 42 CONSTRUCT OVERFLOW BEEHIVE INLET PER STANDARD DETAIL ON SHEET 3.8. SEE PROFILE AND DRAINAGE DATA FOR INVERTS AND LOCATION.
- 61 RELOCATE (REL), REMOVE (R), OR PROTECT (P) EXISTING UTILITY POLE REMOVAL OR RELOCATION BY UTILITY. CONTRACTOR TO COORDINATE POLE AND WIRE RELOCATIONS WITH APPROPRIATE UTILITIES.
- 62 RELOCATE (REL), REMOVE (R), OR PROTECT (P) EXISTING COMMUNICATIONS PEDESTAL. COORDINATE WITH APPROPRIATE UTILITIES.
- 66 RELOCATE (REL), ADJUST (A), OR PROTECT (P) EXISTING GAS VALVE. RELOCATION OR ADJUSTMENT BY UTILITY. CONTRACTOR TO COORDINATE.



JOB NO.

SHEET NO.

CLA-98

5.



MONROE STREET PLAN AND PROFILE MONROE STREET IMPROVEMENT PROJECT CLACKAMAS COUNTY, OREGON

	5.	<b>7</b> A	
OB NO.		CLA-98	



SHEET NO.





CB-22 GB-2

STA: 19+21.78, 12.1' R

12" IE IN (SW) = 170.73

180

178

176

174

172

170

168

— EX. 15" STM MAIN

EX 12" IE OUT (N) = 170.63

RIM = 172.83 SUMP = 169.49

BH-15-

BH INLET WITH 0.5" ORIFICE

STA: 19+19.79, 16.5' R

12" IE OUT (NE) = 170.83

RIM = 172.91

180

178

176

174

172

170

168

4.8 LF 12" D.I. STM S=0.0200-

SUMP = 169.33





PREPARED FOR				DESIGNED:
CLACKAMAS COUNTY DEVELOPMENT AGENCY				DRAWN:
DEVELOPMENT SERVICES BLDG. 150 BEAVERCREEK ROAD			DESCRIPTION	CHECKED:
CLACKAMAS COUNTY COUNTY	DATE	NO.	R E V I S I O N S	DATE:





SCALE: 1" = 20' (HORIZ.) 1" = 5' (VERT.)





phone: 503.221.1131 www.hhpr.com fax: 503.221.1171



EXPIRES: 6/30/25

**MONROE ST - LEFT GUTTER PROFILE** 





1" = 5' (VERT.)



BH-16-

RIM = 185.15

188

186

184

182

180

178

176

42.5 LF 12" STM S=0.0300

SUMP = 179.98

BH INLET WITH 0.5" ORIFICE STA: 23+04.66, 19.8' R

12" IE OUT (NW) = 181.48

# **MONROE STREET IMPROVEMENT PROJECT**

JOB NO.

SHEET NO.

**5.8A** 









### **ROADWAY CONSTRUCTION NOTES:**

- (1) CONSTRUCT CURB AND GUTTER PER DETAIL S150 ON SHEET 3.0.
- (4) CONSTRUCT CONCRETE SIDEWALK PER DETAIL S960 ON SHEET 3.0. SEE SECTION DETAIL ON SHEET 6.0.
- (5) CONSTRUCT SIDEWALK RAMP WITH TACTILE WARNING PER ODOT STANDARD DRAWINGS RD902, RD904, RD905, RD910 ON SHEETS 3.2 AND 3.3. SEE SPOT ELEVATIONS ON SHEET SERIES 7.0
- (7) CONSTRUCT CONCRETE DRIVEWAY APPROACH PER ODOT STANDARD DWG RD740 AND RD750 ON SHEET 3.1. MATCH EXISTING WIDTH AND MATERIAL BEHIND APPROACH UNLESS NOTED OTHERWISE (SEE PLAN). SAWCUT AND REMOVE EXISTING SURFACE AS REQUIRED. MINIMUM STRUCTURAL SECTION BEHIND APPROACH: 3" AC PAVEMENT OVER 8" AGGREGATE BASE OR 6" P.C.C. OVER 8" AGGREGATE BASE. SEE SHEET SERIES 8.0 FOR DRIVEWAY CONSTRUCTION TABLE, DIMENSIONS, AND MATERIAL TYPE.
- (8) CONSTRUCT FULL DEPTH ROADWAY SECTION. SAWCUT TO LIMITS SHOWN AND AS REQUIRED. SEE SECTION DETAIL ON SHEET 6.0.
- (9) CONSTRUCT VARIABLE GRIND OF EXISTING AC AND REPLACE WITH 2" INLAY. PRE-LEVEL AS REQUIRED. SEE CENTERLINE PROFILES, TYPICAL SECTIONS, AND CROSS SECTIONS.
- (10) MATCH NEW CURB TO EXISTING CURB AND/OR MATCH NEW SIDEWALK TO EXISTING SIDEWALK. SAWCUT AS REQUIRED AND DIRECTED.
- (11) REMOVE (R) OR PROTECT (P) EXISTING CONCRETE CURB AND/OR SIDEWALK. SAWCUT NEAT LINE AT LIMIT OF REMOVAL.
- (12) REMOVE (R) OR PROTECT (P) EXISTING FENCE & GATES. FOR REMOVALS, REMOVE EXISTING FENCE WITHIN ROW LIMITS. INSTALL NEW FENCE AND/OR GATE ON PROPERTY LINE AT LOCATIONS IDENTIFIED IN THE SPECIFICATIONS.
- (13) RELOCATE (REL), PROTECT (P), OR DEMOLISH (D) EXISTING MAILBOX(ES). FOR ANY RELOCATION OR ADJUSTMENT, SEE ODOT STANDARD DRAWING RD100 AND RD101 ON SHEET 3.10. COORDINATE LOCATION WITH ENGINEER.
- (81) CONSTRUCT TACTILE WARNING PER ODOT STANDARD DRAWINGS RD902, RD904, RD905, RD910 ON SHEETS 3.2 AND 3.3.
- (84) INSTALL REMOVABLE BOLLARD PER DETAIL ON SHEET 3.10.
- (86) PROTECT (P) OR REMOVE (R) EXISTING BUILDING STRUCTURE. COORDINATE WITH PROPERTY OWNER AND ENGINEER PRIOR TO REMOVAL

### **UTILITY CONSTRUCTION NOTES:**

- 31 PROTECT (P), REMOVE (R), OR PLUG AND ABANDON IN-PLACE (AB) EXISTING STORM PIPE AS DIRECTED BY ENGINEER. UPON ABANDON IN-PLACE, FILL PIPE WITH CONTROLLED DENSITY FILL (CDF). REMOVE ANY PIPES IN CONFLICT WITH PROPOSED IMPROVEMENTS.
- 32 PROTECT (P), REMOVE (R), ADJUST (A), OR PLUG AND ABANDON (AB) EXISTING STORM STRUCTURE. UPON REMOVAL, FILL ANY VOID WITH GRANULAR BACKFILL.
- 33 CONNECT TO EXISTING PIPE OR STRUCTURE PER DETAIL ON SHEET 3.6.
- 34 ADJUST STRUCTURE RIM, COVER, OR FRAME TO FINISH GRADE PER ODOT STANDARD DWG RD360 AND STANDARD DWG SWM MH-2.0 ON SHEET 3.8. MAJ = MAJOR ADJUSTMENT, MIN = MINOR ADJUSTMENT.
- **36** CONSTRUCT CATCH BASIN TYPE GB-2 AND LATERALS PER STANDARD DWG SWM CB-5.0, SWM CB-4.0, AND SWM CB-1.0 ON SHEET 3.6. SEE PROFILE AND DRAINAGE DATA FOR INVERTS AND LOCATION.
- 42 CONSTRUCT OVERFLOW BEEHIVE INLET PER STANDARD DETAIL ON SHEET 3.8. SEE PROFILE AND DRAINAGE DATA FOR INVERTS AND LOCATION.
- 43 CONSTRUCT 48" STANDARD STORM SEWER MANHOLE PER STANDARD DWG SWM MH-9.0 ON SHEET 3.7. SEE PROFILE AND DRAINAGE DATA FOR INVERTS AND LOCATION.
- 45 CONSTRUCT VEGETATED SWALE PER DETAIL ON SHEET 3.7.
- 61 RELOCATE (REL), REMOVE (R), OR PROTECT (P) EXISTING UTILITY POLE. REMOVAL OR RELOCATION BY UTILITY. CONTRACTOR TO COORDINATE POLE AND WIRE RELOCATIONS WITH APPROPRIATE UTILITIES.
- 97 CONSTRUCT 48" STANDARD SANITARY MANHOLE PER STANDARD DWG SAN-004 ON SHEET 3.5. REMOVE EXISTING SANITARY PIPE BEND AND CONNECT NEW 8" SANITARY PIPE TO EXISTING SYSTEM. SEE PLAN FOR SANTIARY DATA. LOCATION ON PLANS ARE APPROXIMATE. FIELD COORDINATE WITH WES PRIOR TO CONSTRUCTION.

SHEET NO.

5.9

JOB NO.

PREPA	RED FOR			
	CLACKAMAS COUNTY			
	DEVELOPMENT AGENCY			
	DEVELOPMENT SERVICES BLDG.			
CLACKAMAS	150 BEAVERCREEK ROAD	DATE	NO.	
COUNTY	OREGON CITY, OR 97045		F	R E

										DESIGNED:
										DRAWN:
										CHECKED:
DATE	NO					D	FSCR		N	
DATE	110.						LUCIN			
	F	R E	V	Ι	S	Ι	0	Ν	S	5/112.

HHPR TEAM HHPR TEAM DSH/JSH 8-23-24





ENGINEERS*PLANNERS LANDSCAPE ARCHITECTS*SURVEYORS 205 SE Spokane Street, Suite 200, Portland, OR 97202 phone: 503.221.1131 www.hhpr.com fax: 503.221.1171 MONROE STREET PLAN AND PROFILE MONROE STREET IMPROVEMENT PROJECT CLACKAMAS COUNTY, OREGON





PROPOSED UNDERGROUND UTILITY CROSSING. CONTRACTOR TO POTHOLE PRIOR TO BEGINNING WORK.

SHEET NO.

5.9A

CLA-98

JOB NO.



### **ROADWAY CONSTRUCTION NOTES:**

- (1) CONSTRUCT CURB AND GUTTER PER DETAIL S150 ON SHEET 3.0.
- (3) CONSTRUCT PERVIOUS SHARED-USE PATH. SEE SECTION DETAIL ON SHEET 6.0.
- (4) CONSTRUCT CONCRETE SIDEWALK PER DETAIL S960 ON SHEET 3.0. SEE SECTION DETAIL ON SHEET 6.0.
- (7) CONSTRUCT CONCRETE DRIVEWAY APPROACH PER ODOT STANDARD DWG RD740 AND RD750 ON SHEET 3.1. MATCH EXISTING WIDTH AND MATERIAL BEHIND APPROACH UNLESS NOTED OTHERWISE (SEE PLAN). SAWCUT AND REMOVE EXISTING SURFACE AS REQUIRED. MINIMUM STRUCTURAL SECTION BEHIND APPROACH: 3" AC PAVEMENT OVER 8" AGGREGATE BASE OR 6" P.C.C. OVER 8" AGGREGATE BASE. SEE SHEET SERIES 8.0 FOR DRIVEWAY CONSTRUCTION TABLE, DIMENSIONS, AND MATERIAL TYPE.
- (8) CONSTRUCT FULL DEPTH ROADWAY SECTION. SAWCUT TO LIMITS SHOWN AND AS REQUIRED. SEE SECTION DETAIL ON SHEET 6.0.
- (9) CONSTRUCT VARIABLE GRIND OF EXISTING AC AND REPLACE WITH 2" INLAY. PRE-LEVEL AS REQUIRED. SEE CENTERLINE PROFILES, TYPICAL SECTIONS, AND CROSS SECTIONS.
- (12) REMOVE (R) OR PROTECT (P) EXISTING FENCE & GATES. FOR REMOVALS, REMOVE EXISTING FENCE WITHIN ROW LIMITS. INSTALL NEW FENCE AND/OR GATE ON PROPERTY LINE AT LOCATIONS IDENTIFIED IN THE SPECIFICATIONS.
- (13) RELOCATE (REL), PROTECT (P), OR DEMOLISH (D) EXISTING MAILBOX(ES). FOR ANY RELOCATION OR ADJUSTMENT, SEE ODOT STANDARD DRAWING RD100 AND RD101 ON SHEET 3.10. COORDINATE LOCATION WITH ENGINEER.
- (24) REMOVE (R) OR PROTECT (P) EXISTING WALL. FIELD COORDINATE REMOVAL LIMITS WITH ENGINEER.

## **UTILITY CONSTRUCTION NOTES:**

- 31 PROTECT (P), REMOVE (R), OR PLUG AND ABANDON IN-PLACE (AB) EXISTING STORM PIPE AS DIRECTED BY ENGINEER. UPON ABANDON IN-PLACE, FILL PIPE WITH CONTROLLED DENSITY FILL (CDF). REMOVE ANY PIPES IN CONFLICT WITH PROPOSED IMPROVEMENTS.
- 32 PROTECT (P), REMOVE (R), ADJUST (A), OR PLUG AND ABANDON (AB) EXISTING STORM STRUCTURE. UPON REMOVAL, FILL ANY VOID WITH GRANULAR BACKFILL.
- 33 CONNECT TO EXISTING PIPE OR STRUCTURE PER DETAIL ON SHEET 3.6.
- 34 ADJUST STRUCTURE RIM, COVER, OR FRAME TO FINISH GRADE PER ODOT STANDARD DWG RD360 AND STANDARD DWG SWM MH-2.0 ON SHEET 3.8. MAJ = MAJOR ADJUSTMENT, MIN = MINOR ADJUSTMENT.
- 35 CONSTRUCT CATCH BASIN TYPE CG-3 AND LATERALS PER ODOT STANDARD DWG RD371 AND RD372 ON SHEET 3.7. SEE PROFILE AND DRAINAGE DATA FOR INVERTS AND LOCATION.
- **37** CONSTRUCT STORMWATER TREATMENT PLANTER PER DETAIL ON SHEET 3.9. PLANTER TO INCLUDE BEEHIVE INLET, PERFORATED PIPE, AND CLEANOUT, PER PLAN. SEE DETAILED PLANTER PLANS ON SHEET SERIES 9.0 FOR CURB CUT STATIONING AND PLANTER DIMENSIONING.
- 39 CONSTRUCT AREA DRAIN PER DETAIL ON SHEET 3.6. SEE PROFILE AND DRAINAGE DATA FOR INVERTS AND LOCATION.
- 40 CONSTRUCT STORM SEWER CLEANOUT PER STANDARD DETAIL SWM ST-4.0 ON SHEET 3.8.
- 42 CONSTRUCT OVERFLOW BEEHIVE INLET PER STANDARD DETAIL ON SHEET 3.8. SEE PROFILE AND DRAINAGE DATA FOR INVERTS AND LOCATION.
- [43] CONSTRUCT 48" STANDARD STORM SEWER MANHOLE PER STANDARD DWG SWM MH-9.0 ON SHEET 3.7. SEE PROFILE AND DRAINAGE DATA FOR INVERTS AND LOCATION.
- 61 RELOCATE (REL), REMOVE (R), OR PROTECT (P) EXISTING UTILITY POLE. REMOVAL OR RELOCATION BY UTILITY. CONTRACTOR TO COORDINATE POLE AND WIRE RELOCATIONS WITH APPROPRIATE UTILITIES.
- 62 RELOCATE (REL), REMOVE (R), OR PROTECT (P) EXISTING COMMUNICATIONS PEDESTAL. COORDINATE WITH APPROPRIATE UTILITIES.



SCALE: 1" = 20'

# 72ND AVENUE PLAN AND PROFILE **MONROE STREET IMPROVEMENT PROJECT**

CLACKAMAS COUNTY, OREGON

SHEET NO.

JOB NO.















THOMPSON ROAD PLAN AND PROFILE **MONROE STREET IMPROVEMENT PROJECT** CLACKAMAS COUNTY, OREGON

## **ROADWAY CONSTRUCTION NOTES:**

- 1) CONSTRUCT CURB AND GUTTER PER DETAIL S150 ON SHEET 3.0.
- (3) CONSTRUCT PERVIOUS SHARED-USE PATH. SEE SECTION DETAIL ON SHEET 6.0.
- (4) CONSTRUCT CONCRETE SIDEWALK PER DETAIL S960 ON SHEET 3.0. SEE SECTION DETAIL ON SHEET 6.0.
- (5) CONSTRUCT SIDEWALK RAMP WITH TACTILE WARNING PER ODOT STANDARD DRAWINGS RD902, RD904, RD905, RD910 ON SHEETS 3.2 AND 3.3. SEE SPOT ELEVATIONS ON SHEET SERIES 7.0.
- (7) CONSTRUCT CONCRETE DRIVEWAY APPROACH PER ODOT STANDARD DWG RD740 AND RD750 ON SHEET 3.1. MATCH EXISTING WIDTH AND MATERIAL BEHIND APPROACH UNLESS NOTED OTHERWISE (SEE PLAN). SAWCUT AND REMOVE EXISTING SURFACE AS REQUIRED. MINIMUM STRUCTURAL SECTION BEHIND APPROACH: 3" AC PAVEMENT OVER 8" AGGREGATE BASE OR 6" P.C.C. OVER 8" AGGREGATE BASE. SEE SHEET SERIES 8.0 FOR DRIVEWAY CONSTRUCTION TABLE, DIMENSIONS, AND MATERIAL TYPE.
- (8) CONSTRUCT FULL DEPTH ROADWAY SECTION. SAWCUT TO LIMITS SHOWN AND AS REQUIRED. SEE SECTION DETAIL ON SHEET 6.0.
- (9) CONSTRUCT VARIABLE GRIND OF EXISTING AC AND REPLACE WITH 2" INLAY. PRE-LEVEL AS REQUIRED. SEE CENTERLINE PROFILES, TYPICAL SECTIONS, AND CROSS SECTIONS.
- (10) MATCH NEW CURB TO EXISTING CURB AND/OR MATCH NEW SIDEWALK TO EXISTING SIDEWALK. SAWCUT AS REQUIRED AND DIRECTED.
- (12) REMOVE (R) OR PROTECT (P) EXISTING FENCE & GATES. FOR REMOVALS, REMOVE EXISTING FENCE WITHIN ROW LIMITS. INSTALL NEW FENCE AND/OR GATE ON PROPERTY LINE AT LOCATIONS IDENTIFIED IN THE SPECIFICATIONS.
- (13) RELOCATE (REL), PROTECT (P), OR DEMOLISH (D) EXISTING MAILBOX(ES). FOR ANY RELOCATION OR ADJUSTMENT, SEE ODOT STANDARD DRAWING RD100 AND RD101 ON SHEET 3.10. COORDINATE LOCATION WITH ENGINEER.
- (22) CONSTRUCT PLANTER WALL PER DETAIL ON SHEET 3.9.
- (24) REMOVE (R) OR PROTECT (P) EXISTING WALL. FIELD COORDINATE REMOVAL LIMITS WITH ENGINEER.
- 82 CONSTRUCT RAISED CROSSING PER SECTION DETAIL ON SHEET 6.0. SEE SPOT ELEVATIONS ON SHEET SERIES 7.0.

## **UTILITY CONSTRUCTION NOTES:**

- 31 PROTECT (P), REMOVE (R), OR PLUG AND ABANDON IN-PLACE (AB) EXISTING STORM PIPE AS DIRECTED BY ENGINEER. UPON ABANDON IN-PLACE, FILL PIPE WITH CONTROLLED DENSITY FILL (CDF). REMOVE ANY PIPES IN CONFLICT WITH PROPOSED IMPROVEMENTS.
- 32 PROTECT (P), REMOVE (R), ADJUST (A), OR PLUG AND ABANDON (AB) EXISTING STORM STRUCTURE. UPON REMOVAL, FILL ANY VOID WITH GRANULAR BACKFILL.
- 33 CONNECT TO EXISTING PIPE OR STRUCTURE PER DETAIL ON SHEET 3.6.
- 34 ADJUST STRUCTURE RIM, COVER, OR FRAME TO FINISH GRADE PER ODOT STANDARD DWG RD360 AND STANDARD DWG SWM MH-2.0 ON SHEET 3.8. MAJ = MAJOR ADJUSTMENT, MIN = MINOR ADJUSTMENT.
- 36 CONSTRUCT CATCH BASIN TYPE GB-2 AND LATERALS PER STANDARD DWG SWM CB-5.0, SWM CB-4.0, AND SWM CB-1.0 ON SHEET 3.6. SEE PROFILE AND DRAINAGE DATA FOR INVERTS AND LOCATION
- [37] CONSTRUCT STORMWATER TREATMENT PLANTER PER DETAIL ON SHEET 3.9. PLANTER TO INCLUDE BEEHIVE INLET, PERFORATED PIPE, AND CLEANOUT, PER PLAN. SEE DETAILED PLANTER PLANS ON SHEET SERIES 9.0 FOR CURB CUT STATIONING AND PLANTER DIMENSIONING.
- 42 CONSTRUCT OVERFLOW BEEHIVE INLET PER STANDARD DETAIL ON SHEET 3.8. SEE PROFILE AND DRAINAGE DATA FOR INVERTS AND LOCATION.
- 43 CONSTRUCT 48" STANDARD STORM SEWER MANHOLE PER STANDARD DWG SWM MH-9.0 ON SHEET 3.7. SEE PROFILE AND DRAINAGE DATA FOR INVERTS AND LOCATION.
- 61 RELOCATE (REL), REMOVE (R), OR PROTECT (P) EXISTING UTILITY POLE. REMOVAL OR RELOCATION BY UTILITY. CONTRACTOR TO COORDINATE POLE AND WIRE RELOCATIONS WITH APPROPRIATE UTILITIES.



JOB NO.

SHEET NO.

CLA-98

5.11



	8" LEVEL 3, ¹ / ₂ " DENSE ACP (3 LIFTS)			
AN.dwg	10" CRUSHED AGGREGATE, 1"-0 SUBGRADE GEOTEXTILE COMPACTED SUBGRADE (EXISTING) (95% COMPACTION-ASTM D1557)			PL
NG PL/	<b>ΒΟΠΝΟΔΒΟΠΤ ΕΠΙ Ι</b>		NT SECTION	
D PAVI	RUUNDADUUT FULL	N.T.S.		
<pre>//CLA-98 (Monroe Street)/CLA98-DWGS\Sheets\ CLA98-6.0 GEOME</pre>	2" GRIND, VARIABLE INLAY 2" LEVEL 3, ¹ / ₂ " DENSE ACP (2 LIFTS, TACK COAT) PRE-LEVEL AS REQUIRED PRIOR TO FINAL PAVING <b>2" GRIND ANI</b>	D INLAY SECTION N.T.S.		
s County				DESIGNED
skama	PREPARED FOR			
Clac	CLACKAMAS COUNTY DEVELOPMENT AGENCY			DRAWN:
ind/CLA (	DEVELOPMENT SERVICES BLDG.			CHECKED:
Portland/CLA (	CLACKAMAS DEVELOPMENT SERVICES BLDG. 150 BEAVERCREEK ROAD OREGON CITY, OR 97045	DATE NO.	DESCRIPTION	



6" THICK REINFORCED TRUCK APRON CONCRETE SURFACING 6" THICK REINFORCED STAMPED COLORED CONCRETE SURFACING



4" P.C. CONCRETE 4" CRUSHED AGGREGATE, 3/4"-0

### **REINFORCED CONCRETE TRUCK APRON &** STAMPED COLORED CONCRETE SURFACING N.T.S.

3" OF ¹/₂" POROUS ASPHALT CONCRETE MIXTURE

COMPACTED SUBGRADE (EXISTING) (95% COMPACTION-ASTM D1557)



6" P.C. CONCRETE 8" AGGREGATE BASE, 3/4"-0 —

 $\frac{1}{2}$ " DENSE MIXTURE

OR

3" ACP WEARING COURSE LEVEL 3,

OR

SEE SPECS FOR STYLE AND COLOR

*6" AGGREGATE BASE, 3/4"-0 FOR GRAVEL DRIVEWAY CONNECTIONS

# **DRIVEWAY CONNECTION SECTION**

N.T.S.



# **REINFORCED CONCRETE DRIVEWAY SECTION**

N.T.S.

6" OF EXPOSED AGGREGATE CONCRETE — SEE SPECIFICATIONS

000000000000000000000000000000000000000	

6" AGGREGATE BASE ——

# **EXPOSED AGGREGATE CONCRETE**

N.T.S.

HHPR TEAM HHPR TEAM DSH/JSH 8-23-24





205 SE Spokane Street, Suite 200, Portland, OR 97202 phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

PAVING MONROE STREET

8" P.C. CONCRETE · · . . Δ  $\checkmark$ #4 BAR AT 24" O.C. EACH WAY. — PLACE 4" CLEAR OF AGGREGATE. TIE ALL BARS. 6" AGGREGATE BASE 95% COMPACTION-AASHTO T-180

PAVING SECTION DETAILS	
E STREET IMPROVEMENT PROJECT	
CLACKAMAS COUNTY, OREGON	

SHEET NO.

JOB NO.

6.0

CLA-98

2" CHOKER AGGREGATE 7" OPEN GRADED AGGREGATE BASE SUBGRADE GEOTEXTILE

**PERVIOUS PAVEMENT SECTION** N.T.S.

**RAISED CROSSWALK SECTION** 

N.T.S.



**CONCRETE SIDEWALK SECTION** 

N.T.S.







$\langle \# \rangle$	SEE SHEET SERIES 7.0 FOR CURB RETURN AND RAMP	GEOMETRY
	SEE SHEET SERIES 7.0 FOR CURB RETURN AND RAMP	GEOMETR



SHEET	NO.	

# 6.1

JOB NO.







	_

# 7.0

CLA-98

SHEET NO.

JOB NO.

SCALE: 1" = 40'

20



SHEET	N

JOB NO.

7.1



POINT TABLE				
#	STATION	OFFSE		
1	10+29.69	43.14 L		
2	10+30.09	39.10 L		
3	10+31.56	34.67 L		
4	10+34.05	30.72 L		
5	10+36.12	28.53 L		
6	10+39.25	26.22 L		
7	10+40.98	25.31 L		
8	10+45.42	23.87 L		
9	10+55.19	23.50 L		
10	10+23.76	41.89 R		
11	10+24.64	35.95 R		
12	10+21.49	30.43 R		
13	10+23.06	30.66 R		
14	10+21.72	28.87 R		
15	10+24.60	29.29 R		
16	10+27.92	33.03 R		
17	10+34.23	20.75 R		
18	10+33.56	19.00 R		
19	10+38.35	19.00 R		
20	10+43.73	19.00 R		
21	10+44.35	19.00 R		
22	10+50.35	19.00 R		
23	10+50.35	9.00 R		
24	10+44.35	9.00 R		
25	10+38.35	9.00 R		
26	10+33.56	9.00 R		

# CURB RETURNS **MONROE STREET IMPROVEMENT PROJECT**

### - CURB LINE CURB — SIDEWALK (TYPE VARIES) NO LIP -SC RAMP____ COUNTERSLOPE 0 2.5 5 10 CURB DETAIL SCALE: NTS SCALE: 1" = 5' SIDEWALK TURNING SPACE MIN. LEVEL AREA 4'X4' 4'X5' WHEN CONSTRAINED (WITH LONGER DIMENSION IN DIRECTION OF PEDESTRIAN STREET CROSSING). FOR THE PURPOSES OF THIS APPLICATION, A MAX. 2.0% FINISHED SURFACE SLOPE (FOR DRAINAGE) IS CONSIDERED LEVEL. TRUNCATED DOME DETECTABLE WARNING SURFACE 2' X 4' MIN (WITH SHORTER DIMENSION IN DIRECTION OF PEDESTRIAN STREET CROSSING) UNLESS OTHERWISE NOTED. (SEE DRG. NO. RD759) SLOPE INFORMATIONAL ARROW (FINISHED SURFACE SLOPE) COUNTER SLOPE $\Rightarrow$ **CONSTRUCTION NOTES:** 1. SLOPES HOLD OVER ELEVATIONS 2. MAX. CROSS SLOPE CHANGE ON RAMP 0.5% PER FOOT. 3. SEE STD. DRGS. RD700, RD720, RD755, RD757 & RD759 FOR DETAILS NOT SHOWN.

	CURVE		IABLE	
	DELTA	RADIUS	TANGENT	LENGTH
$\langle 1 \rangle$	90°24'56"	25.0'	25.18'	39.45'
2	81°39'20"	25.0'	21.60'	35.63'

14 L	
10 L	
67 L	
72 L	
53 L	
22 L	
31 L	
87 L	
50 L	
89 R	
95 R	
43 R	
66 R	
87 R	
29 R	
03 R	
75 R	
00 R	
0 R	
0 R	
0 R	
0 R	

I	SHEET NO.
I	

7	7

CLACKAMAS COUNTY, OREGON

JOB	NO.



	POINT TA	BL
#	STATION	0
1	14+43.64	9.0
2	14+48.64	9.0
3	14+43.64	19.
4	14+48.64	19.
5	14+96.24	9.0
6	15+03.24	9.0
7	15+08.24	9.0
8	14+96.24	19.
9	15+03.24	19.
10	15+08.24	19.

CURVE DATA TABLE				
	DELTA	RADIUS	TANGENT	LENGTH
	90°26'00"	15.0'	15.11'	23.68'
2	89°34'00"	15.0'	14.89'	23.45'



POINT TABLE		
#	STATION	OFFSE
1	19+35.00	23.50 L
2	19+39.45	24.60 L
3	19+43.41	28.58 L
4	19+44.35	31.32 L
5	19+79.66	31.29 L
6	19+80.61	28.55 L
7	19+84.59	24.59 L
8	19+89.00	23.50 L
9	19+37.14	9.00 R
10	19+37.14	19.00 R
11	19+43.14	9.00 R
12	19+43.14	19.00 R
13	19+48.14	9.00 R
14	19+48.14	19.00 R
15	19+54.14	9.00 R
16	19+54.14	19.00 R
17	19+69.92	9.00 R
18	19+69.92	19.00 R
19	19+75.92	9.00 R
20	19+75.92	19.00 R
21	19+80.92	9.00 R
22	19+80.92	19.00 R
23	19+86.92	9.00 R
24	19+86.92	19.00 R
50	19+44.48	39.04 L
51	19+44.47	41.12 L
52	19+79.48	38.96 L
53	19+79.47	41.03 L
54	19+44.49	35.31 L
55	19+79.49	35.28 L

CURB RETURNS MONROE STREET IMPROVEMENT PROJECT CLACKAMAS COUNTY, OREGON



6

80°18'13" 15.0'

SHEET NO.

12.65'

21.02'

7.4

JOB NO.



CURVE DATA TABLE				
DELTA RADIUS TANGENT LENGTH				LENGTH
7	63°14'37"	25.0'	15.39'	27.60'
8	95°15'45"	25.0'	27.41'	41.57'

#	STATION	OFFSET
1	21+97.74	9.00 R
2	22+02.74	9.00 R
3	21+97.74	19.00 R
4	22+02.74	19.00 R
5	22+68.77	9.00 R
6	22+73.77	9.00 R
7	22+68.77	19.00 R
8	22+73.77	18.50 R
9	22+78.77	18.00 R
10	22+88.77	18.00 R
11	22+98.77	19.00 R
12	22+98.77	9.00 R



# MONROE (WEST) & 70TH - CURB RETURN 1

SCALE: 1" = 5'

DESCRIPTION

R E V I S I O N S



DATE NO.

150 BEAVERCREEK ROAD

CLACKAMAS OREGON CITY, OR 97045

соимту

I/CLA (Clackamas County)/CLA-98 (Monroe Street)/CLA98-DWGS\Sheets\ CLA98-7.3 CURB RETURNS.dwg

1	POINT TA	BL
#	STATION	0
1	29+57.07	28.
2	29+60.61	25.
3	29+60.60	32.
4	29+64.14	28.
5	29+65.59	33.
6	29+60.53	45.
7	29+65.53	45.
8	29+58.28	9.0
9	29+64.28	9.0
10	29+69.28	9.0
11	29+75.28	9.0
12	29+58.28	19.
13	29+64.28	19.
14	29+69.28	19.
15	29+75.28	19.

HHPR TEAM
HHPR TEAM
DSH/JSH
8-23-24

DATE:





LANDSCAPE ARCHITECTS + SURVEYORS 205 SE Spokane Street, Suite 200, Portland, OR 97202 phone: 503.221.1131 www.hhpr.com fax: 503.221.1171 CURB RETURNS MONROE STREET IMPROVEMENT PROJECT CLACKAMAS COUNTY, OREGON



CURVE DATA TABLE									
	DELTA	RADIUS	TANGENT	LENGTH					
9	90°16'00"	15.0'	15.07'	23.63'					
	89°44'00"	15.0'	14.93'	23.49'					

7.6

JOB NO.



PREPA	RED FOR				DESIGNED:
	CLACKAMAS COUNTY				DRAWN:
	DEVELOPMENT AGENCY DEVELOPMENT SERVICES BLDG. 150 BEAVERCREEK ROAD	DATE		DECONDION	CHECKED:
CLACKAMAS COUNTY	OREGON CITY, OR 97045	DATE	NO. 	REVISION S	DATE:

POINT TABL							
#	STATION	OF					
1	33+76.35	37.1					
2	33+82.35	37.3					
3	33+87.35	37.4					
4	33+93.34	37.6					
5	33+76.63	27.2					
6	33+82.63	27.3					
7	33+87.63	27.4					
8	33+93.63	27.6					
9	33+78.60	17.1					
10	33+84.59	16.7					
11	33+89.58	16.4					
12	33+95.56	16.0					
13	33+79.27	27.1					
14	33+85.25	26.7					
15	33+90.24	26.3					
16	33+96.23	25.9					







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CURB RETURNS MONROE STREET IMPROVEMENT PROJECT CLACKAMAS COUNTY, OREGON



7.7

JOB NO.



POINT TABL							
#	STATION	0					
1	6+51.26	32.					
2	6+58.86	31.					
3	6+65.95	31.					
4	6+72.46	31.					
5	6+49.29	22.					
6	6+59.28	21.					
7	6+65.54	21.					
8	6+72.46	21.					
9	6+55.04	21.					
10	6+60.24	21.					
11	6+64.57	21.					
12	6+69.77	21.					
13	6+55.04	31.					
14	6+60.24	31.					
15	6+64.57	31.					
16	6+69.77	26.					









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													DESIGNED.
													DRAWN:
													CHECKED:
DATE	NO.						D	ESCR	IPTIO	N			
	•	R	Е	V	I	S	I	0	Ν	S			DATE:

	/							
	POINT TABL							
#	STATION	0						
1	9+83.18	29.						
2	9+88.49	29.						
3	9+92.91	29.						
4	9+99.98	29.						
5	9+83.18	19.						
6	9+88.49	19.						
7	9+92.91	19.						
8	9+99.98	19.						
9	9+80.62	24.						
10	9+87.37	24.						
11	9+94.59	24.						
12	10+01.83	24.						
13	9+83.27	34.						
14	9+88.73	34.						
15	9+94.59	34.						
16	10+01.83	34.						

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РКЕРА				DESIGNED:	
	CLACKAMAS COUNTY				DRAWN:
	DEVELOPMENT SERVICES BLDG.				CHECKED:
CLACKAMAS	150 BEAVERCREEK ROAD	DATE	NO.	DESCRIPTION	
COUNTY	OREGON CITY, OR 97045			REVISIONS	DATE:

POINT TABL							
#	STATION	0					
18	12+28.22	19.					
19	12+32.14	20.					
20	12+35.71	24.					
21	12+36.77	26.					
22	12+76.06	28.					
23	12+77.23	24.					
24	12+80.73	20.					
25	12+85.53	19.					

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CURB RETURNS MONROE STREET IMPROVEMENT PROJECT CLACKAMAS COUNTY, OREGON



CURVE DATA TABLE									
	DELTA	RADIUS	TANGENT	LENGTH					
(19)	80°18'13"	15.0'	12.65'	21.02'					
20	80°18'13"	15.0'	12.65'	21.02'					

SHEET NO.

7.10

JOB NO.



	I	POINT TA	BL
	#	STATION	O
	1	14+76.02	29.
	2	14+76.02	19.0
	3	15+45.97	28.
	4	15+45.19	18.9
	5	14+87.44	19.
	6	14+91.78	20.
/	7	14+95.79	24.4
	8	14+96.93	28.
	9	15+35.95	29.
	10	15+37.00	24.
	11	15+40.93	20.
,	12	15+45.45	19.
	60	14+84.86	19.0
	61	14+84.86	29.0
	63	15+49.51	17.9
	64	15+53.16	27.
	65	15+59.84	24.
/	66	15+60.53	24.
	67	15+60.53	14.
		/	

CURB RETURNS **MONROE STREET IMPROVEMENT PROJECT** CLACKAMAS COUNTY, OREGON



CURVE DATA TABLE											
	DELTA	RADIUS	TANGENT	LENGTH							
21	91°19'06"	15.0'	15.35'	23.91'							
22	88°40'54"	15.0'	14.66'	23.22'							
23	80°18'13"	15.0'	12.65'	21.02'							
24	80°18'13"	15.0'	12.65'	21.02'							

SHEET NO.

7.11

JOB NO.



PREPAF					DESIGNE	
	CLACKAMAS COUNTY					DRAWN:
						CHECKED
	150 BEAVERCREEK ROAD	DATE	NO			
CLACKAMAS county	OREGON CITY, OR 97045	DAIL		REVISI	O N S	DATE:

HHPR TEAM HHPR TEAM DSH/JSH 8-23-24





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### **CONSTRUCTION NOTES:**

- 1. SLOPES HOLD OVER ELEVATIONS
- 2. MAX. CROSS SLOPE CHANGE ON RAMP 0.5% PER FOOT.
- 3. SEE STD. DRGS. RD700, RD720, RD755, RD757 & RD759 FOR DETAILS NOT SHOWN.

CURVE DATA TABLE											
DELTA RADIUS TANGENT LENGTH											
25	91°14'54"	15.0'	15.33'	23.89'							
(26)	88°45'06"	15.0'	14.68'	23.24'							

I	POINT TABLE									
#	STATION	OFFSET								
1	21+22.33	20.00 L								
2	21+37.95	22.50 L								
3	21+42.95	22.50 L								
4	21+46.94	22.50 L								
5	21+37.95	12.50 L								
6	21+42.95	12.50 L								
7	21+46.94	12.50 L								
8	22+07.88	22.50 L								
9	22+16.96	22.50 L								
10	22+21.96	22.50 L								
11	22+07.88	12.50 L								
12	22+16.96	12.50 L								
13	22+21.96	12.50 L								
14	22+37.57	20.00 L								
15	21+51.94	22.50 L								
16	21+51.94	12.50 L								

# CURB RETURNS MONROE STREET IMPROVEMENT PROJECT CLACKAMAS COUNTY, OREGON

SHEET NO.

7.12

JOB NO.



	POINT TABLE										
#	STATION	OFFSET									
1	22+42.29	20.00 L									
2	22+48.29	20.00 L									
3	22+53.29	20.00 L									
4	22+62.29	20.00 L									
5	22+83.37	20.00 L									
6	22+89.37	19.94 L									
7	22+94.37	19.80 L									
8	23+02.37	19.45 L									
9	22+40.31	22.50 R									
10	22+44.64	23.55 R									
11	22+48.66	27.47 R									
12	22+49.81	31.77 R									
13	22+92.83	32.23 R									
14	22+93.88	27.67 R									
15	22+97.80	23.65 R									
16	23+01.42	22.54 R									

CURB RETURNS MONROE STREET IMPROVEMENT PROJECT



CURVE DATA TABLE										
	DELTA	RADIUS	TANGENT	LENGTH						
27	88°38'05"	15.0'	14.65'	23.20'						
28	91°23'03"	15.0'	15.37'	23.92'						

CLACKAMAS COUNTY, OREGON

SHEET NO.

7.13

JOB NO.





	POINT TABLE									
#	STATION	OFFSET								
1	12+82.70	21.36 L								
2	12+88.70	21.36 L								
3	12+93.70	21.36 L								
4	12+99.70	21.36 L								
5	12+82.70	16.36 L								
6	12+88.70	16.36 L								
7	12+93.70	16.36 L								
8	12+99.70	16.36 L								
9	12+82.70	17.64 R								
10	12+88.70	17.64 R								
11	12+93.70	17.64 R								
12	12+99.70	17.64 R								
13	12+82.70	27.64 R								
14	12+88.70	27.64 R								
15	12+93.70	27.64 R								
16	12+99.70	27.64 R								
17	13+29.39	17.64 R								
18	13+29.40	27.64 R								

MONROE STREET IMPROVEMENT PROJECT CLACKAMAS COUNTY, OREGON



# CURB RETURNS

SHEET NO.

7.15

JOB NO.

					DRIVEWA	Y CONSTRU	ICTION TAB	LE					
	LOCATION			CONCRETE DRIVEWAY APPROACH						DRIVEWAY (	CONNECTION		
STATION "L"	ADDRESS	PROPERTY NUMBER	"A" APPROACH WIDTH	APPROACH AREA (SF)	"B" WING WIDTH	"C" WING WIDTH	"D" APPROACH LENGTH	"E" PATHWAY LENGTH	"F" APPROX. SLOPE	FINISH SURFACE	"G" ESTIMATED LENGTH	ESTIMATED AREA (SF)	"H" APPROX. SLOPE
11+15.82, 18.5' LT	6201 SE MONROE ST	1	16.0	125	6.0	3.0	5.0	N/A	1.5%	CONCRETE	17.0	306	-3.4%
11+59.22, 18.5' LT	6231 SE MONROE ST	2	27.0	149	3.0	3.0	4.5	N/A	1.5%	CONCRETE	14.5	438	-4.0%
12+55.04, 18.5' LT	6303 SE MONROE ST	3	17.0	104	3.0	3.0	4.5	N/A	1.5%	CONCRETE	9.5	162	SEE SHEET 8.1
13+45.84, 18.5' LT	6311 SE MONROE ST	4	13.5	88	3.0	3.0	4.5	N/A	1.5%	GRAVEL	32.0	433	SEE SHEET 8.1
13+73.17, 18.5' LT	6311 SE MONROE ST	4	12.0	81	3.0	3.0	4.5	N/A	1.0%	CONCRETE	3.0	36	1.0%
15+20.32, 18.5' LT	6409 SE MONROE ST	5	28.0	153	3.0	3.0	4.5	N/A	0.5%	CONCRETE	22.0	616	SEE SHEET 8.3
15+57.58,18.5' LT	6411 SE MONROE ST	6	34.0	180	3.0	3.0	4.5	N/A	1.5%	CONCRETE AC PAVEMENT	16.0	313 (C) 235 (A)	SEE SHEET 8.1
16+26.44, 18.5' LT	6411 SE MONROE ST	6	12.0	81	3.0	3.0	4.5	N/A	1.5%	GRAVEL	12.0	144	-11.7 %
16+52.76, 18.5' LT	6505 SE MONROE ST	7	16.5	101	3.0	3.0	4.5	N/A	0.5%	CONCRETE	20.0	334	SEE SHEET 8.3
17+19.18, 18.5' LT	6505 SE MONROE ST	7	15.7	98	3.0	3.0	4.5	N/A	0.5%	AC PAVEMENT	15.2	910	SEE SHEET 8.3
17+56.40,18.5' LT	6507 SE MONROE ST	8	35.0	185	3.0	3.0	4.5	N/A	1.5%	AC PAVEMENT	19.8	721	SEE SHEET 8.1
21+58.16, 18.5' LT	6619 SE MONROE ST	11	16.8	103	3.0	3.0	4.5	N/A	1.5%	CONCRETE GRAVEL	14.9	250 (C) 61 (G)	-7.1%
22+10.43, 18.5' LT	6709 SE MONROE ST	12	19.0	113	3.0	3.0	4.5	N/A	1.5%	CONCRETE	13.5	257	-6.2%
22+77.59, 18.5'LT	6709 SE MONROE ST	12	12.0	81	3.0	3.0	4.5	N/A	1.5%	CONCRETE	4.5	49	-4.5%
23+26.06, 18.5' LT	6759 SE MONROE ST	13	21.5	124	3.0	3.0	4.5	N/A	1.5%	CONCRETE	15.9	295	-6.1%
24+02.87, 18.5' LT	6789 SE MONROE ST	14	23.0	131	3.0	3.0	4.5	N/A	1.5%	AC PAVEMENT	6.5	138	3.3%
24+99.62 18.5' LT	6815 SE MONROE ST	15	14.0	90	3.0	3.0	4.5	N/A	1.5%	AC PAVEMENT	35.0	498	SEE SHEET 8.1
25+71.67, 18.5' LT	6815 SE MONROE ST	15	15.0	95	3.0	3.0	4.5	N/A	1.5%	AC PAVEMENT	35.0	509	SEE SHEET 8.1
25+97.14, 18.5' LT	6823 SE MONROE ST	16	14.5	92	3.0	3.0	4.5	N/A	1.5%	GRAVEL	27.0	329	SEE SHEET 8.2
27+72.22, 18.5' LT	6905 SE MONROE ST	17	15.0	95	3.0	3.0	4.5	N/A	1.5%	GRAVEL	15.0	225	-9.5%
28+64.65, 18.5' LT	6989 SE MONROE ST	18	35.0	185	3.0	3.0	4.5	N/A	1.5%	CONCRETE	4.0	140	4.1%
*32+74.55, 19.8' LT	10750 SE MONROE ST	19	20.0	117	3.0	3.0	4.5	N/A	1.5%	AC PAVEMENT	8.0	145	-12.2%
12+56.12, 14.5' LT	7307 SE MONROE ST	21	18.8	330	10.0	10.0	8.0	N/A	2.0%	CONCRETE	29.0	555	SEE SHEET 8.2
13+42.48 14.5'LT	7319 SE MONROE ST	22	16.0	259	3.0	3.0	4.5	10.0	10.7%	CONCRETE	15.0	243	SEE SHEET 8.2
15+68.78, 14.5' LT	7411 SE MONROE ST	24	16.5	344	11.0	8.0	N/A	10.0	1.5%	CONCRETE	5.5	90	9.3%
17+19.66, 14.5' LT	NO SITE ADDRESS	25	24.0	240	8.0	8.0	N/A	10.0	VARIES	N/A	N/A	N/A	SEE SHEET 8.4
18+54.55, 14.5' LT	7565 SE MONROE ST	26	28.5	445	8.0	8.0	N/A	10.0	0.5%	CONCRETE	9.5	272	1.5%
20+14.46, 10.0' LT	7577 SE MONROE ST	27	20.0	360	8.0	8.0	N/A	10.0	1.5%	CONCRETE	8.0	200	6.6%
25+14.02, 13.0' LT	7811 SE MONROE ST	31	19.0	70	6.0	6.0	N/A	4.0	1.5%	CONCRETE	12.0	228	9.3%
25+73.56, 13.0' LT	7811 SE MONROE ST	31	19.0	70	6.0	6.0	N/A	4.0	1.5%	CONCRETE	12.0	228	4.3%
*27+40.22, 17.5' LT	8057 SE MONROE ST	32	27.0	195	6.0	6.0	5.0	N/A	1.5%	AC PAVEMENT	7.5	200	15.7%
*30+69.44, 18.0' LT	8057 SE MONROE ST	32	25.0	185	6.0	6.0	5.0	N/A	1.5%	AC PAVEMENT	7.0	177	15.3%
28+61.14, 15.5' RT	7922 SE MONROE ST	34	12.0	144	6.0	6.0	6.0	N/A	1.5%	N/A	N/A	N/A	N/A
*27+36.76, 15.5' RT	10807 SE GREEN VISTA DR	35	47.5	357	8.0	8.0	6.0	N/A	1.5%	AC PAVEMENT	31.5	1583	-1.2%
20+27.32, 17.0' RT	7582 SE MONROE ST	42	28.7	N/A	3.0	0.0	N/A	N/A	N/A	GRAVEL	8.0	231	-1.7%
19+58.96, 16.6' RT	7582 SE MONROE ST	42	18.9	N/A	3.0	3.0	N/A	N/A	N/A	GRAVEL	8.0	159	-1.7%

# DENOTES REINFORCED CONCRETE DRIVEWAY SECTION. SEE SHEET 6.0 FOR SECTION DETAIL.

PREPARED FOR							DESIGNED:
	CLACKAMAS COUNTY						DRAWN:
	DEVELOPMENT AGENCY DEVELOPMENT SERVICES BLDG. 150 BEAVERCREEK ROAD	DATE	NO		DESCRIPTIO	N	CHECKED:
CLACKAMAS county	OREGON CITY, OR 97045	DATE	R	E V I S	I O N	S	DATE:

DRIVEWAY CONSTRUCTION TABLE													
	LOCATION			CONCRETE DRIVEWAY APPROACH							DRIVEWAY C	CONNECTION	
STATION "L"	ADDRESS	PROPERTY NUMBER	"A" APPROACH WIDTH	APPROACH AREA (SF)	"B" WING WIDTH	"C" WING WIDTH	"D" APPROACH LENGTH	"E" PATHWAY LENGTH	"F" APPROX. SLOPE	FINISH SURFACE	"G" ESTIMATED LENGTH	ESTIMATED AREA (SF)	"H" APPROX. SLOPE
11+23.21, 16.6' RT	10852 SE 72ND AVE	52	26.0	N/A	3.0	3.0	N/A	N/A	N/A	GRAVEL	13.9	350	-11.9%
06+88.66, 17.0' LT	10856 SE 72ND AVE	53	16.0	186	3.0	3.0	4.5	5.0	1.5%	AC PAVEMENT	17.9	336	-5.8%
07+65.98, 15.2' LT	10890 SE 72ND AVE	54	22.5	241	3.0	3.0	4.5	5.0	1.5%	CONCRETE	28.0	656	-5.2%
8+46.72, 12.5' LT	10920 SE 72ND AVE	55	23.0	332	6.0	6.0	4.5	5.0	1.5%	AC PAVEMENT	12.4	289	-11.5%
09+72.10, 14.8' LT	10966 SE 72ND AVE	56	21.3	207	3.0	3.0	4.5	5.0	1.5%	AC PAVEMENT	19.1	305	-4.9%
12+32.49, 12.5' LT	7277 SE THOMPSON RD	57	16.0	179	3.0	3.0	4.5	5.0	10.7%	CONCRETE	5.8	94	-9.2%
12+60.05, 12.5' LT	7299 SE THOMPSON RD	58	16.0	179	3.0	3.0	4.5	5.0	10.7%	CONCRETE	5.8	94	-5.4%
13+17.74, 12.5' RT	7300 SE THOMPSON RD	93	17.0	274	3.0	3.0	4.5	10.0	1.5%	CONCRETE GRAVEL	3.0 (C) 10.9 (G)	51 (C) 203 (G)	-8.6%
*33+00.67, 9.2' RT	NO SITE ADDRESS	94	20.0	317	3.0	3.0	4.5	10.0	1.5%	AC PAVEMENT GRAVEL	7.0 (AC) 15 (G)	127 (AC) 488 (G)	SEE SHEET 8.4
*30+02.48, 4.5' RT	NO SITE ADDRESS	94	20.5	324	3.0	3.0	4.5	10.0	1.5%	AC PAVEMENT	11.0	221	-14.3%
28+65.94, 4.5' RT	6990 SE MONROE ST	95	21.5	339	3.0	3.0	4.5	10.0	1.5%	CONCRETE	22.0	473	0.5%
28+16.56, 4.5' RT	6990 SE MONROE ST	95	17.0	274	3.0	3.0	4.5	10.0	1.5%	CONCRETE	21.0	321	0.5%
27+54.14, 4.5' RT	6900 SE MONROE ST	96	25.0	390	3.0	3.0	4.5	10.0	1.5%	CONCRETE GRAVEL	22.5	417 (C) 149 (G)	0.5%
26+97.41, 4.5' RT	6868 SE MONROE ST	97	12.0	201	3.0	3.0	4.5	10.0	1.5%	CONCRETE GRAVEL	3.0 (C) 18.8 (G)	36 (C) 213 (G)	-6.5%
26+58.28, 4.5' RT	6868 SE MONROE ST	97	20.0	317	3.0	3.0	4.5	10.0	1.5%	CONCRETE	30.5	610	0.5%
25+15.72, 4.5' RT	6790 SE MONROE ST	98	20.0	317	3.0	3.0	4.5	10.0	1.5%	AC PAVEMENT	21.2	392	-6.5%
24+65.10, 4.5' RT	6790 SE MONROE ST	98	34.5	527	3.0	3.0	4.5	10.0	1.5%	CONCRETE	17.2	594	-6.5%
23+42.29, 4.5' RT	6707 SE MAPLEHURST RD	99	12.0	201	3.0	3.0	4.5	10.0	1.5%	AC PAVEMENT	13.8	143	-6.5%
21+82.52, 4.5' RT	6676 SE MONROE ST	100	18.5	295	3.0	3.0	4.5	10.0	1.5%	CONCRETE	24.0	534	0.5%
20+86.03, 4.5' RT	6632 SE MONROE ST	101	35.0	535	3.0	3.0	4.5	10.0	1.5%	CONCRETE	17.0	602	3.5%
19+20.52, 4.5' RT	6600 SE MONROE ST	102	23.5	368	3.0	3.0	4.5	10.0	1.5%	CONCRETE	28.2	664	-3.8%
17+77.39, 4.5' RT	6570 SE MONROE ST	103	20.0	317	3.0	3.0	4.5	10.0	1.5%	CONCRETE	32.5	661	0.5%
16+99.48, 4.5' RT	6560 SE MONROE ST	104	39.0	593	3.0	3.0	4.5	10.0	1.5%	CONCRETE	16.0	634	0.5%
16+55.36, 4.5' RT	6424 SE MONROE ST	105	20.0	317	3.0	3.0	4.5	10.0	1.5%	CONCRETE	13.5	269	0.6%
15+32.46, 4.5' RT	6454 SE MONROE ST	106	20.0	317	3.0	3.0	4.5	10.0	1.5%	EXPOSED AGGREGATE CONCRETE	12.5	254	7.4%
13+37.85, 4.5' RT	6330 SE MONROE ST	108	18.0	288	3.0	3.0	4.5	10.0	1.5%	CONCRETE	25.0	451	5.5%
12+11.25, 4.5' RT	6260 SE MONROE ST	109	20.0	317	3.0	3.0	4.5	10.0	1.5%	CONCRETE	24.5	243	SEE SHEET 8.2
11+40.26, 4.5' RT	6236 SE MONROE ST	110	22.0	346	3.0	3.0	4.5	10.0	1.5%	CONCRETE	33.5	713	0.4%
10+87.46, 4.5' RT	10810 SE LINWOOD AVE	111	18.0	288	3.0	3.0	4.5	10.0	1.5%	GRAVEL	6.7	125	-6.5%



ENGINEERS+PLANNERS LANDSCAPE ARCHITECTS + SURVEYORS 205 SE Spokane Street, Suite 200, Portland, OR 97202 phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

HHPR TEAM HHPR TEAM DSH/JSH 8-23-24



DETAILED DRIVEWAY PLANS **MONROE STREET IMPROVEMENT PROJECT** CLACKAMAS COUNTY, OREGON

DRIVEWAY APPROACH

SHEET NO.		
	8.	(

CLA-98

JOB NO.



VERTICAL CURVE

(SEE NOTE 1)





# **PROPERTY 4 - DRIVEWAY PROFILE**

SCALE: 1" = 5' (HORIZ.) 1" = 2.5' (VERT)





SCALE: 1" = 5' (HORIZ.) 1" = 2.5' (VERT)



SCALE: 1" = 5' (HORIZ.) 1" = 2.5' (VERT)

# MONROE STREET IMPROVEMENT PROJECT

CLACKAMAS COUNTY, OREGON

Harper **HHPR** Houf Peterson Righellis Inc. ENGINEERS+PLANNERS LANDSCAPE ARCHITECTS + SURVEYORS

205 SE Spokane Street, Suite 200, Portland, OR 97202 phone: 503.221.1131 www.hhpr.com fax: 503.221.1171



DETAILED DRIVEWAY PLANS

SHEET NO. 8.1

CLA-98

JOB NO.



<b>FIMPROVEMENT PROJECT</b>

8.	2





			DESIGNED:
DATE	NO.	DESCRIPTION R E V I S I O N S	DRAWN: CHECKED: DATE:
	DATE	DATE NO.	DATE NO. DESCRIPTION R E V I S I O N S

PROPERTY 5 - DRIVEWAY GRADING SCALE: 1" = 5'

PROPERTY 7 - DRIVEWAY GRADING SCALE: 1" = 5'







ENGINEERS*PLANNERS LANDSCAPE ARCHITECTS*SURVEYORS 205 SE Spokane Street, Suite 200, Portland, OR 97202 phone: 503.221.1131 www.hhpr.com fax: 503.221.1171 DETAILED DRIVEWAY PLANS MONROE STREET IMPROVEMENT PROJECT CLACKAMAS COUNTY, OREGON SHEET NO.

JOB NO.

8.3

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182.27 TC 181.77 G		5.3%
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ACKAMAS COUNTY VELOPMENT AGENCY VELOPMENT SERVICES BLDG. 0 BEAVERCREEK ROAD REGON CITY, OR 97045

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# Harper **HHPR** Houf Peterson Righellis Inc.

ENGINEERS*PLANNERS LANDSCAPE ARCHITECTS*SURVEYORS 205 SE Spokane Street, Suite 200, Portland, OR 97202 phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

CLACKAMAS COUNTY, OREGON

# MONROE STREET IMPROVEMENT PROJECT

DETAILED DRIVEWAY PLANS

SHEET NO.

JOB NO.

8.4












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HHPR TEAM
HHPR TEAM
DSH/JSH
8-23-24



phone: 503.221.1131 www.hhpr.com fax: 503.221.1171







:	HHPR TEAM
	HHPR TEAM
	DSH/JSH
	8-23-24

DETAILED PLANTER PLANS MONROE STREET IMPROVEMENT PROJECT CLACKAMAS COUNTY, OREGON

CLA-98

JOB NO.



EXPIRES: 05/31/25

<u>P</u>	LANTING LEGEND		
	I) INSTALL ACER TATARICUM GINNALA     'FLAME' AS SHOWN - 2" CAL	17	EA
(	2 INSTALL MAACKIA AMURENSIS AS SHOWN -	23	EA
	+ 3 INSTALL PISTACHIA CHINENSIS AS SHOWN -	16	EA
$\left( \right)$	(4) INSTALL ACER HALESIA CAROLINA 'WEDDING     BELLS' - 2" CAL	14	EA
	5 INSTALL CARPINUS BETULUS 'FASTIGIATA' - 2" CAL	2	EA
	6 INSTALL COTONEASTER DAMMERI 'CORAL BEAUTY' 36" OC - #1 CONTAINER	255	EA
	7 INSTALL EUONYMUS FORTUNEI COLORATUS' 36" OC - #1 CONTAINER	332	EA
	8 INSTALL JUNIPERUS HORIZONTALIS WILTONII' 36" OC - #1 CONTAINER	254	EA
	9 INSTALL MAHONIA AQUIFOLIUM COMPACTA 36" OC - #1 CONTAINER	347	EA
	10 INSTALL FESTUCA GLAUCA 'ELIJA BLUE' 12" OC - SP#4 CONTAINER	2455	EA
	11 INSTALL INSTALL PERMANENT SEEDING AS	0.35	AC
	(12) INSTALL 12" DEEP TOPSOIL IN PLANTERS	421	CY
	(13) INSTALL 4" TOPSOIL IN SEEDED AREAS	190	CY
	(14) INSTALL 2' DEEP X 10' LONG ROOT BARRIER PER DETAIL SHEET 9.4	1440	LF
	(15) INSTALL 3" DEEP BARK MULCH IN PLANTERS	316	SY
	(16) INSTALL 18" DEEP WATER QUALITY MIXTURE IN PLANTERS	104	CY
	INSTALL JUNCUS PATENS 18" OC - SP#4 CONTAINER	880	EA
	INSTALL CAREX OBNUPTA 18" OC - SP#4	750	EA
	19 INSTALL 3" DEEP BARK MULCH OVER 12" DEEP TOPSOIL - NO PLANTINGS	2	SY

SCALE: 1" = 40'

LANDSCAPE PLAN MONROE STREET IMPROVEMENT PROJECT

CLACKAMAS COUNTY, OREGON

SHEET	NO.

10.0

CLA-98

JOB NO.



## **GENERAL PLANTING NOTES**

- 1. ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH CURRENT CLACKAMAS COUNTY STANDARDS AND OREGON BUILDING AND SPECIALITY CODES.
- 2. INSTALL EROSION CONTROL SYSTEMS IN ACCORDANCE WITH CLACKAMAS COUNTY STANDARDS PRIOR TO SITE WORK AND LANDSCAPE INSTALLAT
- 3. CONTRACTOR SHALL MARK AND PROTECT ALL UTILITIES, SITE FEATURES, AND VEGETATION TO REMAIN IN PLACE.
- 4. CONTRACTOR SHALL REMOVE ALL WEEDS AND INVASIVE SPECIES PRIOR TO PLANTING OR SEEDING.
- 5. ALL DISTURBED AREAS SHALL BE SEEDED.
- 6. PRIOR TO PLANTING, CONTRACTOR SHALL TEST SOILS FOR SOIL FERTILITY BY CERTIFIED TESTING LAB. IF NECESSARY, BACKFILL SOILS FOR TREE PITS AND GROUNDCOVER AREAS SHALL BE AMENDED AS RECOMMENDED BY SOIL ANALYSIS REPORT.
- 7. ALL SEEDED AREAS SHALL BE STRIPPED OF VEGETATION, SCARIFIED AND RECEIVE 4" OF TOPSOIL PRIOR TO APPLICATION OF SEED.
- 8. ALL PLANTER BEDS SHALL BE SCARIFIED 12" BELOW FINISHED GRADE AND HAVE 12" OF TOPSOIL ADDED TO BRING BACK TO FINISHED GRADE PRICE PLANTING.
- 9. CONTRACTOR TO INSTALL 3" LAYER OF BARK MULCH AT ALL TREE, SHRUB AND GROUNDCOVER AREAS.
- 10. PLANT MATERIAL INSTALLED SHALL CONFORM IN SIZE AND GRADE TO THE "AMERICAN STANDARD FOR NURSERY STOCK" CURRENT EDITION.
- 11. QUANTITIES OF PLANT MATERIALS SHALL BE AS DETERMINED BY CONTRACTOR IN ACCORDANCE WITH SPECIFIED SPACING OR LOCATION ON PLAN MATERIAL QUANTITIES SHOWN ON PLAN ARE FOR CONTRACTOR CONVENIENCE ONLY AND SHALL BE VERIFIED BY CONTRACTOR PRIOR TO INSTAL SURPLUS OR SHORTAGES OF PLANT QUANTITIES SHALL BE RESPONSIBILITY OF CONTRACTOR.
- 12. LANDSCAPE CONTRACTOR SHALL WATER PLANTINGS FOR DURATION OF 2-YEAR WARRANTY PERIOD AFTER INSTALLATION AND GUARANTEE ALL F TO BE IN SATISFACTORY HEALTH. LANDSCAPE CONTRACTOR SHALL REPLACE ALL DAMAGED, DEAD, OR DYING PLANTS COVERED BY WARRANTY W DAYS OF INITIAL IDENTIFICATION OF CONDITION.

PREPAR	RED FOR
	CLACKAMAS COUNTY
	DEVELOPMENT AGENCY
	DEVELOPMENT SERVICES BLDG.
	150 BEAVERCREEK ROAD
CLACKAMAS	OREGON CITY, OR 97045
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## **BID ITEM LOG - ROADSIDE DEVELOPMENT**

								BIC	) ITEM L	OG								
TION. TS, SHRUB	BID ITEM	DECIDUOUS TREES - 2" CAL.					GROUNDCOVER - NO. 1 CONT.				GROUNDCOVER - SP#4 WETLAND PLANTS - SP#4 CONTAINER		PERMANENT SEEDING	TOP SOIL	ROOT BARRIER	BARK MULCH	WATER QUALITY MIXTURE	
OR TO N. LLATION.	DESCRIPTION	Acer tataricum Ginnala 'Flame' - Flame Maple	Maackia amurensis - Amur Maackia	Pistachia chinensis - Chinese Pistache	Halesia carolina 'Wedding Bells' - Wedding Bells Silverbell	Carpinus betulus 'Fastigiata' - Pyramidal European Hornbeam	Cotoneaster dammeri 'Coral Beauty' - Bearberry	Euonymus fortunei 'Coloratus' - Purpleleaf Wintercreeper	Juniperus horizontalis 'Wiltonii' - Blue Rug Juniper	Mahonia aquifolium 'Compacta' - Compact Oregon Grape	Festuca glauca 'Elija Blue' - Blue Fescue	Juncus patens - Spreading Rush	Carex obnupta - Slough Sedge					
	UNITS	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	AC.	CY.	LF.	SY.	CY.
VITHIN 30	PAGE																	
	10.0	17	23	16	14	2	255	332	254	347	2455	880	750	0.35	612	1440	318	104
	10.1	9	8	4	8	0	165	91	158	117	976	629	566	0.27	333	580	138	76
	SUBTOTAL	26	31	20	22	2	420	423	412	464	3431	1509	1317					
	TOTAL			101	·				1719		3431	28	26	0.62	944	2020	457	181

HHPR TEAM HHPR TEAM DSH/JSH 8-23-24





205 SE Spokane Street, Suite 200, Portland, OR 97202 phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

LANDSCAPE LEGEND & NOTES MONROE STREET IMPROVEMENT PROJECT CLACKAMAS COUNTY, OREGON

SHEET NO.

10.2

JOB NO.



HHPR TEAM
HHPR TEAM
DSH/JSH
8-23-24



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# CROSS SECTIONS - MONROE ST (EAST) MONROE STREET IMPROVEMENT PROJECT CLACKAMAS COUNTY, OREGON

1	1	.5

CLA-98

SHEET NO.

JOB NO.

![](_page_230_Figure_6.jpeg)

![](_page_230_Figure_7.jpeg)

![](_page_230_Figure_8.jpeg)

![](_page_230_Figure_9.jpeg)

![](_page_231_Figure_0.jpeg)

SHEET NO. 11.6 JOB NO. CLA-98

![](_page_231_Figure_4.jpeg)

### SIGNING LEGEND

![](_page_232_Figure_1.jpeg)

![](_page_232_Figure_2.jpeg)

![](_page_232_Figure_3.jpeg)

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FREFA	REB FOR	
	CLACKAMAS COUNTY	
	DEVELOPMENT AGENCY	
	DEVELOPMENT SERVICES BLDG.	
	150 BEAVERCREEK ROAD	
<b>CLACKAMAS</b>	OREGON CITY. OR 97045	
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DATE	NO.	DESCRIPTION		
	F	REVISIONS	DATE:	8-23-24

- INSTALL 8" WHITE LINE.
- INSTALL 8" WHITE DOTTED LINE.
- INSTALL SHARED LANE MARKING.
- INSTALL NARROW DOUBLE YELLOW NO-PASS.
- INSTALL 4" YELLOW LINE.
- INSTALL YIELD LINE (WHITE).
- INSTALL STAGGERED CONTINENTAL CROSSWALK
- INSTALL RIGHT TURN ARROW (WHITE).
- RETAIN AND PROTECT EXISTING 8" WHITE LINE.
- RETAIN AND PROTECT EXISTING DOUBLE YELLOW NO-PASS.
- RETAIN AND PROTECT EXISTING BICYCLE STENCIL.
- RETAIN AND PROTECT EXISTING 8" WHITE DOTTTED LINE.
- RETAIN AND PROTECT EXISTING SUPPLEMENTAL BICYCLE LANE SOLID LINE. (GREEN)

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TM	$\Big)$
TS	$\sum$

INSTALL 4" WHITE LINE.

INSTALL YELLOW TRANSVERSE MEDIAN BARS AT 20' SPACING.

INSTALL WHITE TRANSVERSE SHOULDER BARS AT 20' SPACING.

![](_page_232_Picture_26.jpeg)

INSTALL WHITE PAVEMENT MARKINGS FOR CROSSWALK SPEED TABLE.

![](_page_232_Picture_28.jpeg)

![](_page_232_Picture_29.jpeg)

1050 SW 6th Ave, Suite #600 Portland, Oregon 97204 www.dksassociates.com

### **GENERAL NOTES**

- 1. LOCATE STOP LINE 4 FT (MIN.) TO 30 FT (MAX.) IN ADVANCE OF THE NEAREST MARKED CROSSWALK LINE. IN THE ABSENCE OF A MARKED CROSSWALK, LOCATE STOPLINE 4 FT (MIN.) TO 30 FT (MAX.) FROM THE NEAREST EDGE OF THE INTERSECTING TRAVELED WAY. VERIFY SIGHT DISTANCE AND TRUCK TURNING MOVEMENTS.
- 2. ALIGN CROSSWALKS WITH SIDEWALK RAMP LOCATIONS OR 5 FT. BACK OF EXTENDED EDGE LINE, EDGE OF PAVEMENT, OR CURB FACE.
- 3. REMOVAL OF EXISTING PAVEMENT MARKINGS IS TO BE DETERMINED IN THE FIELD. PAVEMENT MARKINGS AND STRIPING SHALL BE REMOVED PER THE OREGON STANDARD SPECIFICATIONS AND PROJECT SPECIAL PROVISIONS.
- 4. ALL PAVEMENT MARKING MATERIALS SHALL BE INSTALLED AS PER OREGON STANDARD SPECIFICATIONS.
- 5. ALL PAINT AND PAVEMENT MARKINGS SHALL BE FROM THE ODOT QUALIFIED PRODUCTS LISTING.
- 6. FOR DETAILS NOT SHOWN ON SHEET 11.6 SEE REMAINING TM500 SERIES OF THE OREGON STANDARD DRAWINGS.
- 7. ALL PERMANENT LONGITUDINAL STRIPING IS METHOD "A" THERMOPLASTIC, EXTRUDED SURFACE, NON-PROFILED EXCEPT AS NOTED ON THE PLANS. SEE SECTION 00865 IN THE SPECIAL PROVISIONS.
- 8. ALL LEGENDS AND BARS ARE METHOD "B-HS", PREFORMED, FUSED THERMOPLASTIC HIGH SKID FILM. SEE SECTION 00867 IN THE SPECIAL PROVISIONS.
- 9. MATCH POINTS TO EXISTING PAVEMENT MARKINGS AND STATION CALL-OUTS ARE APPROXIMATE AND SHALL BE FIELD VERIFIED.
- 10. REMOVE ALL PAVEMENT MARKINGS THAT CONFLICT WITH THESE PLANS. REMOVAL OF EXISTING PAVEMENT MARKINGS IS TO BE DETERMINED IN THE FIELD. STRIPING SHALL BE REMOVED AS DIRECTED BY THE ENGINEER.

STANDARD DRAWINGS

■ TM457	PEDESTAL FOUNDATION AND TRAFFIC SIGNAL
■ TM467	PEDESTRIAN SIGNAL MOUNT AND PEDESTRIAN
	SERVICE CABINET WIRING DETAILS
■ TM493	RECTANGULAR RAPID FLASHING BEACON (RRER)
	ASSEMBLIES
TM500	PAVEMENT MARKING STANDARD DETAIL BLOCKS
TM501	PAVEMENT MARKING STANDARD DETAIL BLOCKS
■ TM502	PAVEMENT MARKING STANDARD DETAIL BLOCKS
■ TM503	PAVEMENT MARKING STANDARD DETAIL BLOCK
■ TM521	DURABLE & HIGH-PERFORMANCE PAVEMENT MARKINGS SURFACE & GROOVE INSTALLED NON-PROFILED
TM530	INTERSECTION PAVEMENT MARKINGS (CROSSWALK,
	STOP BAR, BIKE LANE STENCIL)
■ TM531	TURN ARROW MARKING DETAILS
■ TM539	MEDIAN AND LEFT TURN CHANNELIZATION DETAILS
■ TM560	ALIGNMENT LAYOUT: GENERAL
TM561	MEDIANS
ТМ670	WOOD POST SIGN SUPPORTS
■ TM671	3-SECOND GUST WIND SPEED MAP
■ TM676	SIGN ATTACHMENTS
■ TM677	SIGN MOUNTS
■ TM681	PERFORATED STEEL SQUARE (PSST) SIGN SUPPORT INSTALLATION
■ TM687	PERFORATED STEEL SQUARE TUBE (PSST) ANCHOR FOUNDATION
■ TM688	PERFORATED STEEL SQUARE TUBE (PSST) SLIP BASE FOUNDATION
TM689	TEMPORARY PSST VANE ANCHOR INSTALLATION
TM821	TEMPORARY SIGN SUPPORTS
■ TM822	TEMPORARY SIGN SUPPORTS
■ T100	STREET NAME SIGNS AND DETAILS CLACKAMAS COUNTY STANDARD
■ T130	STREET NAME SIGNS AND DETAILS (CONTINUED) CLACKAMAS COUNTY STANDARD
T150	STREET MOUNTING AND ATTACHMENTS
T250	SIGN INSTALLATIONS
	SHEET NO.

# SIGNING/STRIPING LEGEND **MONROE NEIGHBORHOOD IMPROVEMENT PROJECT** CLACKAMAS COUNTY, OREGON

12.0

JOB NO.

![](_page_233_Figure_0.jpeg)

![](_page_234_Figure_0.jpeg)

![](_page_235_Figure_0.jpeg)

![](_page_236_Figure_0.jpeg)

![](_page_237_Figure_0.jpeg)

![](_page_237_Figure_2.jpeg)

![](_page_238_Figure_0.jpeg)

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![](_page_239_Figure_0.jpeg)

![](_page_240_Figure_0.jpeg)

# SIGNING/STRIPING PLAN **MONROE NEIGHBORHOOD IMPROVEMENT PROJECT** CLACKAMAS COUNTY, OREGON

SEE SHEET 12.0 FOR LEGEND.

SHEET NO.

JOB NO.

CLA-98

12.8

SE 72nd Av  $\overline{4^{"C}} = \frac{4^{"C}}{5}$ 0ٌ⊥_ NO PARKING ANY TIME R7-1 12"X18" **—** 

SIGN NO. 43

CALL 911

SIGN NO. 37

6"C 4"C

![](_page_240_Picture_15.jpeg)

SIGN	STREET NAME	SIGN	SIGN		SU	JB-	COLOR		SIGN					TYPE C	OF SUPP	PORT		POST		FOO	DTING	REMARKS
NO.		LOCATION	DIMENSIO	NS	STR	CATE	BACK- ROUND	_EGEND TYPE	NO.	ODOT	589) AY		C)		ICADE		SECONDARY SIGN (TM676 & TM678)	SIZE	LENGTH	LOCATION	MIN. DEPTH	
		.,	WIDTH HEI	SHT	PLYWOOD SHEET ALUMINUM	EXTRUDED ALUMINUM (ODOT TM675) DOUBLE-SIDED (CLACKAMAS COUNTY T150)	ASTM TYPE III OR TYPE IV ASTM TYPE IX ASTM TYPE III OR TYPE IV	ASTM TYPE IX NON-REFLECTIVE PERMANENT DEMOUNTABLE		WOOD POST (ODOT TM670-671, TM676) PERF. STEEL SQUARE TUBE ((	TM671, TM676, TM681, TM687-6 TRIANGULAR BASE BREAKAW	(ODOT TM602) MULTI-POST BREAKAWAY (ODOT TM220, TM600-601)	STAINLESS STEEL CLAMP (SS (TM677) SIGNAL POLE MOUNT (ODOT TM680)	BRIDGE RAIL MOUNT STRUCTURE MOUNT CANTILEVER		VERTICAL SIGN MOUNT ON VERTICAL SIGN MOUNT ON EXISTING STRUCTURE ADJUSTABLE SIGN MOUNT MAST ARM SNS MOUNT MAST ARM SNS MOUNT TEMPORARY SIGN SUPPORT (TM821.TM822) C 4 X 5.4	C 4 X 7.25 C 4 X 7.25 ROUTE MARKER FRAME (ODOT TM676 & TM678) (ODOT TM676 & TM678) (ODOT TM676 & TM678) H	(BASED ON ESTIMATED LENGTH)	(MUST BE FIELD VERIFIED)	3/		
1	Monroe St	10+49L	36 3	6	~		R W	v -	1	~								6" x 8"	23'-9"	2'-6"	7'	3/ FACE OF CURB
	Monroe St	14+90 R	36 3	6	<ul> <li>✓</li> </ul>		R W	✓	1									2" x 2" - 12 ga	14'-3"	22'	3'	3/ FACE OF CURB
	Monroe St	19+43.5 L	36 3	6	$\checkmark$		R //	✓	1		~							2" x 2" - 12 ga	14'-3"	19'	3'	3/ FACE OF CURB
	Monroe St	22+55 R	36 3	6	~		R //	✓	1		~							2" x 2" - 12 ga	14'-3"	23'	3'	3/ FACE OF CURB
	Monroe St	29+68 L	36 3	6	×		R 🛛 🛛 🕅	✓	1	;	~							2" x 2" - 12 ga	14'-3"	24'	3'	3/ FACE OF CURB
	Monroe St	12+74 R	36 3	6	×		R W	✓	1									2" x 2" - 12 ga	14'-3"	34'	3'	3/ STATIONING CENTERLINE
	Monroe St	14+98 L	36 3	6	<ul> <li>✓</li> </ul>		R W	✓	1	,								2" x 2" - 12 ga	15'-6"	32'	3'	3/ STATIONING CENTERLINE
	Monroe St	15+34 R	36 3	6	<ul> <li>✓</li> </ul>		R W	v 🗸	1									2" x 2" - 12 ga	15'-6"	31'	3'	3/ STATIONING CENTERLINE
	Monroe St	21+61 L	36 3	6	<ul> <li>✓</li> </ul>		R 🛛 🛛 🛛	✓	1		/							2" x 2" - 12 ga	14'-3"	32'	3'	3/ STATIONING CENTERLINE
	Monroe St	22+90 R	36 3	6	×		R 🛛 🛛	✓	1									2" x 2" - 12 ga	14'-3"	38'	3'	3/ STATIONING CENTERLINE
	Monroe St	24+38 L	36 3	6	<ul> <li>✓</li> </ul>		R W	× –	1									2" x 2" - 12 ga	14'-3"	30'	3'	3/ STATIONING CENTERLINE
2	Monroe St	10+49/	Ex F	x	Fx		x Fx		2													3/ MOUNT ABOVE SIGN NO .3
-	Monroe St	14+89 R	36 1	2			3 W/		2													3/ MOUNT ABOVE SIGN NO 1
	Monroe St	14+89 R	36 1	2			3 W		2													3/ MOUNT ABOVE SIGN NO 1
	Monroe St	19+43.51	36 1	2			3 W		2													3/ MOUNT ABOVE SIGN NO 1
	Monroe St	19+43.5 L	36 1	2					2													3/ MOUNT ABOVE SIGN NO. 1
	Monroe St	22±55 P	36 1	2	V				2													3/ MOUNT ABOVE SIGNING. 1
	Monroe St	22+33 N	36 1	2	V	V			2													3/ MOUNT ABOVE SIGN NO. 1
	Monroe St	22+33 1	30 1	2	V	V			2													3/ MOUNT ABOVE SIGN NO. 1
	Monroe St	20+60 L		2	• •				2													
	Manraa St	29+00 L		2	V (				2									0" 20" 40	111.0"		21	
		34+10 L		2	<b>v</b>				2									$z \times z - iz ga$	11-0"	4	J 21	
		9+/UL	00 1	2	<b>v</b>			V	2									2 x 2 - 12 ga	11-0	4	3	
		12+/4 K	30 0		· ·				2													3/ MOUNT ABOVE SIGN NO. 1
	Marrie St	12+74 K	30		· ✓				2					_	_							3/ MOUNT ABOVE SIGN NO. 1
	Monroe St	14+98 L	30 8		✓				2													3/ MOUNT ABOVE SIGN NO. 1
	Monroe St	14+98 L	36 8	5	<b>·</b>				2													3/ MOUNT ABOVE SIGN NO. 1
	Monroe St	21+61L	36	5 -	· ·				2													3/ MOUNT ABOVE SIGN NO. 1
	Monroe St	21+61 L	36 8	5	✓		ש W		2													3/ MOUNT ABOVE SIGN NO. 1
	Monroe St	22+90 R	36 8	3	✓		j W		2													3/ MOUNT ABOVE SIGN NO. 1
	Monroe St	22+90 R	36 8	3	<ul> <li>✓</li> </ul>		G W		2													3/ MOUNT ABOVE SIGN NO. 1
	Monroe St	24+48 L	36	3	~		G W	✓	2													3/ MOUNT ABOVE SIGN NO. 1
	Monroe St	24+38 L	36 8	3	~		G   W		2													3/ MOUNT ABOVE SIGN NO. 1

BK=BLACK

BL=BLUE BR=BROWN FY=FLUORESCENT YELLOW G=GREEN O=ORANGE P=PURPLE R=RED RB=RED-BLUE SW=SILVER-WHITE W=WHITE Y=YELLOW YG=FLOURESCENT YELLOW-GREEN

NOTE: L,C,R ARE LOCATIONS OF POSTS FACING THE SIGN. L = LEFT POSTC = CENTER POST R = RIGHT POST

### 3 /

DISTANCE FROM EDGE OF TRAVEL LANE, FACE OF CURB, CENTER LINE, GUARDRAIL, OR BARRIER TO THE CENTERLINE OF FOOTING. FOR ADDITIONAL INFORMATION SEE STANDARD DRAWINGS TM600, TM602, AND TM635.

4/ NOTE: THE LOCATIONS SHOWN ARE APPROXIMATE EXCEPT FOR SPEED ZONES, SCHOOL ZONES, OBJECT MARKERS NAD MILEPOST MARKERS. EXACT LOCATIONS ARE TO BE DETERMINED BY THE ENGINEER.

![](_page_241_Picture_7.jpeg)

![](_page_241_Picture_9.jpeg)

![](_page_241_Picture_10.jpeg)

**DKS** 1050 SW 6th Ave, Suite #600 Portland, Oregon 97204 www.dksassociates.com

STRIPING DETAILS MONROE NEIGHBORHOOD IMPROVEMENT PROJECT

CLACKAMAS COUNTY, OREGON

SHEET NO.

12.9

JOB NO.

SIGN STREET NAME	SIGN		N	SI	JB-		COLOR	1/	LEGEND	SIGN					TYF	PE OF SUF	PPORT			1			POST	1	F	OOTING	F	EMARKS
NO.	4/	DiviENS				BAC GROU	UND	EGEND	TYPE	- 2/	ODOT	-689) VAY		QC)		RICADE				S	ECONDA (TM676 &	RY SIGN TM678)	SIZE	LENGTH	LOCATIC	N MIN. DE	тн	
		WIDTH H	HEIGHT	PLYWOOD SHEET ALUMINUM	EXTRUDED ALUMINUM (ODOT TM675)	CLACKAMAS COUNTY T150) ASTM TYPE III OR TYPE IV	ASTM TYPE IX ASTM TYPE III OR TYPE IV	ASTM TYPE IX NON-REFLECTIVE	PERMANENT DEMOUNTABLE		WOOD POST (ODOT TM670-671, TM676) PERF. STEEL SQUARE TUBE	TM671, TM676, TM681, TM687 TRIANGULAR BASE BREAKAV	(ODOT TM602) MULTI-POST BREAKAWAY (ODOT TM220, TM600-601)	STAINLESS STEEL CLAMP (S (TM677) SIGNAL POLF MOUNT	(ODOT TM680) BRIDGE RAIL MOUNT STRUCTURE MOUNT	CANTILEVER CROSSWALK CLOSURE BARF	(ODOT TM240) VERTICAL SIGN MOUNT ON EXISTING STRUCTURE	ADJUSTABLE SIGN MOUNT	MAST ARM SNS MOUNT TEMPORARY SIGN SUPPORT (TM821.TM822)	C 4 X 5.4	C 4 X 7.25 ROUTE MARKER FRAME	LENGTH (FT.)	(BASED ON ESTIMATED LENGTH)	(MUST BE FIELD VERIFIED)	3/			
Monroe St	10+58 L	EX	EX	EX	EX	EX	EX		EX	3																	3/ MOUNT ABO	OVE SIGN NO. 1
Monroe St	10+58 L	EX	EX	EX		EX		EX	EX	4																	3/ MOUNT BEL	.OW SIGN NO. 5
Monroo St	10+581	EY	EY	EY		EV	EV	EV		5																		
	10+38 L									5																		.011 31611 110. 1
Monroe St	11+08 R	30	36	<ul> <li>✓</li> </ul>		W		BK	~	6		~											2" x 2" - 12 ga	<mark>13'-0</mark> "	3'-0"	3'	3/ FACE OF C	JRB
Monroe St	18+40 L	30	36	~		W		BK	✓	6		~											2" x 2" - 12 ga	13'-0"	3'-0"	3'	3/ FACE OF C	JRB
Monroe St	20+20 R	30	36	~		W		BK	~	6		~											2" x 2" - 12 ga	13'-0"	3'-0"	3'	3/ FACE OF C	JRB
Monroe St	22+83 R	30	36	~		W		BK		6		✓											2" x 2" - 12 ga	13'-0"	3'-0"	3'	3/ FACE OF C	JRB
Monroe St	29+20 L	30	36	✓		W		BK	✓	6		v											2" x 2" - 12 ga	13'-0"	3'-0"	3'	3/ FACE OF C	JRB
Monroe St	14+89 R	36	12	<ul> <li>✓</li> </ul>		G	W			8																	3/ MOUNT ABO	OVE SIGN NO. 2
Monroe St	19+43.5 L	36	12			G	W			9																	3/ MOUNT ABO	OVE SIGN NO. 2
Monroe St	22+55 R	36	12	✓		G	W		✓	10																	3/ MOUNT ABO	OVE SIGN NO. 2
Monroe St	29+68 L	36	12			G	W		✓ ·	11																	3/ MOUNT ABO	DVE SIGN NO. 2
Monroe St	14+48 R	24	18					BK		14						+	<u> </u>								1'	2'	3/ FACE OF CI	IRB
Monroe St	14+48 R	24	18			W		BK		14							·								,		3/ MOUNT BE	HND SIGN 14
Monroe St	14+96 R	24	18			W		BK		14															1'	2'	3/ FACE OF C	JRB
Monroe St	14+96 R	24	18	· ·		W		BK		14						-	<u> </u>										3/ MOUNT BEI	HIND SIGN 14
Monroe St	18+40 R	24	18	· ·		W		BK		14						,									1'	2'	3/ FACE OF C	JRB
Monroe St	18+40 R	24	18	· ·		W		BK	V	14							-										3/ MOUNT BEI	HIND SIGN 14
Monroe St	18+86 R	24	18	· ·		W		BK	×	14						,									1'	2'	3/ FACE OF C	JRB
Monroe St	18+86 R	24	18	V		W		BK	~	14																	3/ MOUNT BEI	HIND SIGN 14
Monroe St	21+91 R	24	18	1		W		BK	~	14						,									1'	2'	3/ FACE OF C	JRB
Monroe St	21+91 R	24	18	<ul> <li>✓</li> </ul>		W		BK	$\checkmark$	14																	3/ MOUNT BEI	HIND SIGN 14
Monroe St	22+56 R	24	18	~		W		BK	<b>~</b>	14						,	~								1'	2'	3/ FACE OF C	JRB
Monroe St	22+56 R	24	18	~		W		BK	<ul> <li>✓</li> </ul>	14																	3/ MOUNT BEI	HIND SIGN 14
Monroe St	30+21 R	24	18	×		W		BK	×	14						,	<b>v</b>								1'	2'	3/ FACE OF C	JRB
.ACK .UE	2 / NOTE: L,C FACING T	C,R ARE LOCATI THE SIGN.	IONS OF P	POSTS	4/ NO SHO EXC	TE: THE LO OWN ARE A CEPT FOR SE	CATIONS PPROXIMA PEED ZONE	TE ES,																				
OWN JORESCENT YELLOW EN	L = LEFT F C = CENT R = RIGHT	POST TER POST T POST			SCF MA MA ARE	HOOL ZONE RKERS NAD RKERS. EXA E TO BE DET	S, OBJECT MILEPOST CT LOCAT	- Ions By																				
\NGE PLE	3/				TH	E ENGINEER																						
	DISTANCE	E FROM EDGE O	OF TRAVEL	LANE,																								
		UKB, CENTER L	LINE, GUA	AKUKAIL,																								
LOW	SEE STAN		GS TM600	TM602																								
_OURESCENT YELLOW-GREEN	AND TM6	35.		, TWOUZ,																								
PREPARED FOR							DE	SIGNED:	CJH		45	RED PROFE	CC															SHEET NO.
							DR.	AWN:	VCI		RECIS	ENGINEER 87,324											SIGNING I	DETAILS	<b>)</b>			17
DEVELOPMENT	AGENCY						СН		INCJ		Digitally	Signed ^{2024.08.2} 18:59:27 <b>OREGON</b>	21 07'00'		Portland	W 6th Ave, S d. Oregon 97	Suite #600 7204		MC	DNI	ROE	<b>NEIGH</b>	<b>IBORHOOD</b>	<b>IMPRO</b>	VEME	NT PR	OJECT	

DEVELOPMENT AGENCY DEVELOPMENT SERVICES BLDG. 150 BEAVERCREEK ROAD OREGON CITY, OR 97045

DATE

										I CHECK
NO.						D	ESCR	IPTIO	N	
	R	Е	V	I	S	I	0	Ν	S	DATE:

SXV/SJB 8-23-24

![](_page_242_Picture_6.jpeg)

![](_page_242_Picture_7.jpeg)

CLACKAMAS COUNTY, OREGON

JOB NO.

No.         LODY ON A         LODY ON A <thlody a<="" on="" th=""> <thlody o<="" th=""><th>SIGN</th><th>STREET NAME</th><th>SIGN</th><th>;</th><th>SIGN</th><th></th><th>SU</th><th>JB-</th><th></th><th></th><th>COLOR ¹/</th><th></th><th>LEGEND</th><th>SIGN</th><th></th><th></th><th></th><th></th><th></th><th></th><th>TYP</th><th>E OF SU</th><th>PPORT</th><th>Т</th><th></th><th></th><th></th><th></th><th></th><th></th><th>POST</th><th></th><th>FOO</th><th>ING</th><th>REMARKS</th></thlody></thlody>	SIGN	STREET NAME	SIGN	;	SIGN		SU	JB-			COLOR ¹ /		LEGEND	SIGN							TYP	E OF SU	PPORT	Т							POST		FOO	ING	REMARKS
M         More 9         More 11         More 9	NO.		LOCATION	DIM	ENSIONS		STR		1	BACK- GROUN	D LEG	END	TYPE	NO.		(ODOT (689)	IAY		SC)			RCADE					SE (1	ECOND TM676 &	ARY SIGN & TM678)		SIZE	LENGTH	LOCATION	MIN. DEPTI	4
14       Marrie 8       300-78       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74       74 <th74< th=""> <th74< th="">       74</th74<></th74<>				WIDTH	H HEIGH	PLYWOOD 1	SHEET ALUMINUM	EXTRUDED ALUMINUM (ODOT TM675)	DOUBLE-SIDED (CLACKAMAS COUNTY T150)	ASTM TYPE III OR TYPE IV ASTM TYPE IX	ASTM TYPE III OR TYPE IV	AS IM LYPE IX NON-REFLECTIVE	PERMANENT DEMOUNTABLE		WOOD POST (ODOT TM670-671, TM676)	PERF. STEEL SQUARE TUBE ( TM671, TM676, TM681, TM687-	TRIANGULAR BASE BREAKAV (ODOT TM602)	MULTI-POST BREAKAWAY (ODOT TM220, TM600-601)	STAINLESS STEEL CLAMP (SS (TM677)	SIGNAL POLE MOUNT (ODOT TM680)	BRIDGE RAIL MOUNT STRUCTURE MOUNT	CANTILEVER CROSSWALK CLOSURE BARF	(ODOT TM240)	VERTICAL SIGN MOUNT ON EXISTING STRUCTURE	ADJUSTABLE SIGN MOUNT	MAST ARM SNS MOUNT TEMPORARY SIGN SUPPORT (TM821.TM822)	C 4 X 5.4	C 4 X 7.25 ROUTE MARKER FRAME		GTH .)	(BASED ON ESTIMATED LENGTH)	(MUST BE FIELD VERIFIED)	3/		
Mouras S         174-31         24         16         V         Mo         BK         V         14         V         V         T         V         Statute Constraints           Morrae S         123-31         24         16         V         Mo         BK         V         14         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V         V	14	Monroe St	30+21 R	24	18		~			W		BK	~	14																					3/ MOUNT BEHIND SIGN 14
Mourine S       12x14       24       18       V       W       K       V       14       V       K       V       IA		Monroe St	12+33 L	24	18		~			W		BK	~	14									~										1'	2'	3/ FACE OF CURB
Monore St       127-74       24       16       V       W       BK       14       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I <thi< th="">       I       I</thi<>		Monroe St	12+33 L	24	18		~			W		BK	~	14																					3/ MOUNT BEHIND SIGN 14
Image:		Monroe St	12+74 L	24	18		~			W		BK	~	14									~										1'	2'	3/ FACE OF CURB
Monree St       214 60 R       24       18       V       W       BK V       14       V       V       I       V       V       I       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V <td></td> <td>Monroe St</td> <td>12+74 L</td> <td>24</td> <td>18</td> <td></td> <td>~</td> <td></td> <td></td> <td>W</td> <td></td> <td>BK</td> <td>~</td> <td>14</td> <td></td> <td>3/ MOUNT BEHIND SIGN 14</td>		Monroe St	12+74 L	24	18		~			W		BK	~	14																					3/ MOUNT BEHIND SIGN 14
Morroe St.       24:05 R       24       16       V       W       BK       V       14       V       V       24:06 C C UB       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V		Monroe St	21+50 R	24	18		~			W		BK	~	14									~										1'	2'	3/ FACE OF CURB
Morroe St       224/01/k       24       19       V       W       BK       V       14       V       V       I       V       I       V       V       I       V       V       I       V       V       I       V       V       I       V       V       I       V       V       I       V       V       I       V       V       I       V       V       I       V       V       I       V       V       I       V       V       I       V       V       I       V       V       I       V       V       I       V       V       I       V       V       I       V       V       I       V       V       I       V       V       I       V       V       I       V       V       I       V       V       I       V       V       I       V       V       I       V       V       I       V       V       I       V       V       I       V       V       I       V       V       I       V       I       V       V       I       V       V       I       V       V       I       V       V       V		Monroe St	21+50 R	24	18		~			W		BK	~	14																					3/ MOUNT BEHIND SIGN 14
Marce S         24:06 R         24:37 Mount Relwood         Mount Relwood<		Monroe St	22+00 R	24	18		~			W		BK	~	14									~										1'	2'	3/ FACE OF CURB
Marrie S.       24+33 R       24       18       V       W       BK V       14       Image: Constraint of the constraint of th		Monroe St	22+00 R	24	18		V			W		BK	V	14																					3/ MOUNT BEHIND SIGN 14
Intervels       24-38 /term       24       18       2       18       2       14       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1 <th1< th="">       1       <th1< th=""> <th1< th=""></th1<></th1<></th1<>		Monroe St	24+38 R	24	18		<b>v</b>			W		BK	~	14									~									-	1'	2'	3/ FACE OF CURB
15       Monroe St.       34+17R       36       36       -       R       W       -       15       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -		Monroe St	24+38 R	24	18		~			W	_	BK	~	14																					3/ MOUNT BEHIND SIGN 14
13       Mondee 3       34117 R       36       36       V       R       V       13	15	Manraa St	24, 17 D	26	26					D	147			15																	0" x 0" 10 ac	121.0"	21	21	
Montrol St.     340 L     36     36     7     R     W     7     13     7     13     7     13     7     13     7     13     7     13     7     13     7     13     7     13     7     13     7     13     7     13     7     13     7     13     7     13     7     13     7     13     7     13     7     13     7     13     7     13     7     13     7     13     7     13     7     13     7     13     7     13     7     13     7     13     7     13     7     13     7     13     7     13     7     13     7     13     7     13     7     13     7     13     7     13     13     14     14     14     14     14     14     14     14     14     14     14     14     14     14     14     14     14     14     14     14     14     14     14     14     14     14     14     14     14     14     14     14     14     14     14     14     14     14     14     14     14     14 <th14< th="">    &lt;</th14<>	15	Monroe St	34+17 R	30	30		V			R			V	10		V															2 x 2 - 12 ga	13-0	3	3	3/ FACE OF CURB
Serial New       0+00L       30       30       30       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7		SE 72nd Avo	9+50 L	30	30		V						v	15		V															2 x 2 - 12 ya	13-0		2'	
16       Monroe St       12+74 R       36       8       ·       V       V       V       16       V       16       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V </td <td></td> <td>SE 72110 AVE</td> <td>0+30 L</td> <td></td> <td></td> <td></td> <td>V</td> <td></td> <td></td> <td>ĸ</td> <td></td> <td></td> <td>V</td> <td>15</td> <td></td> <td>V</td> <td></td> <td>2 X Z - 12 Ya</td> <td>13-0</td> <td>3</td> <td>5</td> <td></td>		SE 72110 AVE	0+30 L				V			ĸ			V	15		V															2 X Z - 12 Ya	13-0	3	5	
17       Monroe St       15+00L       36       8       -       6       W       V       17       V       V       17       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V       V	16	Monroe St	12+74 R	36	8		~			Y		BK	<b>~</b>	16																					3/ MOUNT BELOW SIGN NO. 2
Image: Normon St       12+74 R       36       8       Image: Normon St       12+74 R       36       8       Image: Normon St       Image: Norm	17	Monroe St	15+00 L	36	8		$\checkmark$			G	W		~	17																					3/ MOUNT ABOVE SIGN NO. 2
18       Monroe St       12+74 R       36       8       V       G       W       I       V       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I																																			
19       SE 72nd Ave       5+47L       48       12       v       v       0       42       v       1       v       1       0       0       0       0       1       1       0       0       0       1       1       0       0       1       0       0       0       0       1       1       1       0       0       0       1       1       1       0       0       0       1       1       1       0       0       0       1       1       1       0       0       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1	18	Monroe St	12+74 R	36	8		~			G	W		×	18																					3/ MOUNT ABOVE SIGN NO. 2
20       Monroe St       21+61 L       36       8       ✓       6       W       V       20       20       V       20       20       V       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       <	19	SE 72nd Ave	5+47 L	48	12		~			G	W			42		~															2" x 2" - 12 ga	11'-0"	4'	3'	3/ FACE OF CURB
Monroe St       22+90 R       36       8       Image: Constraint of the	20	Monroe St	21+61 L	36	8		~			G	W		~	20																					3/ MOUNT ABOVE SIGN NO. 2
Image: Normal Sector		Monroe St	22+90 R	36	8		<ul> <li>✓</li> </ul>			G	W		~	20																					3/ MOUNT ABOVE SIGN NO. 2
21       Monroe St       12+74 R       36       8       Image: Constraint of the state of the stat																																			
22       Monroe St       24+38 L       36       8       ✓       G       W       ✓       22       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I	21	Monroe St	12+74 R	36	8		~			Y		BK	~	21																					3/ MOUNT BEHIND SIGN NO. 16
	22	Monroe St	24+381	.36	8					G	W		<hr/>	22																					3/ MOUNT ABOVE SIGN NO 2
			2,000							-																									
23 SE Thompson Rd 11+48 R 24 36 🗸 V V BK 🗸 23 V V V V V V V V V V V V V V V V V V	23	SE Thompson Rd	11+48 R	24	36		V				W	Bk	<b>v</b>	23		<ul> <li>✓</li> </ul>															2" x 2" - 12 aa	15'-0"	3'	3'	3/ FACE OF CURB
23a       SE Thompson Rd       11+48 R       24       18       V	23a	SE Thompson Rd	11+48 R	24	18		~				W	Bk	~	23a		~															- 3-				3/ MOUNT BELOW SIGN NO. 23

1/ BK=BLACK **BL=BLUE** BR=BROWN FY=FLUORESCENT YELLOW G=GREEN O=ORANGE P=PURPLE R=RED RB=RED-BLUE SW=SILVER-WHITE W=WHITE Y=YELLOW YG=FLOURESCENT YELLOW-GREEN

2/

NOTE: L,C,R ARE LOCATIONS OF POSTS FACING THE SIGN. L = LEFT POSTC = CENTER POSTR = RIGHT POST

4/ NOTE: THE LOCATIONS SHOWN ARE APPROXIMATE EXCEPT FOR SPEED ZONES, SCHOOL ZONES, OBJECT MARKERS NAD MILEPOST MARKERS. EXACT LOCATIONS ARE TO BE DETERMINED BY THE ENGINEER.

3/

DISTANCE FROM EDGE OF TRAVEL LANE, FACE OF CURB, CENTER LINE, GUARDRAIL, OR BARRIER TO THE CENTERLINE OF FOOTING. FOR ADDITIONAL INFORMATION SEE STANDARD DRAWINGS TM600, TM602, AND TM635.

![](_page_243_Picture_8.jpeg)

DESIGNED: CJH KCJ CHECKED: SXV/SJB 8-23-24

DRAWN:

DATE:

![](_page_243_Picture_11.jpeg)

![](_page_243_Picture_12.jpeg)

**DKS** 1050 SW 6th Ave, Suite #600 Portland, Oregon 97204 www.dksassociates.com

SIGNING DETAILS MONROE NEIGHBORHOOD IMPROVEMENT PROJECT

CLACKAMAS COUNTY, OREGON

SHEET NO.

12.11

JOB NO.

SIGN	STREET NAME	SIGN		SIGN	SUB-	COLO	DR ¹ /	EGEND	SIGN					TYPE	OF SUPPO	DRT						POST		FOOT	ING	RI	EMARKS
NO.		LOCATION	DIME	ENSIONS	STRATE	BACK- GROUND		TYPE	NO.	3DOT 89) 1/	:	6			CADE				SECC (TM6	ONDARY 676 & TM	SIGN 1678)	SIZE	LENGTH	LOCATION	MIN.		
		4/	WIDTH	H HEIGHT	PLYWOOD SHEET ALUMINUM EXTRUDED ALUMINUM (ODOT TM675)	DOUBLE-SIDED (CLACKAMAS COUNTY T150) ASTM TYPE III OR TYPE IV ASTM TYPE III OR TYPE IV	ASTM TYPE III OK TYPE IV ASTM TYPE IX NON-REFLECTIVE	PERMANENT DEMOUNTABLE	2/	WOOD POST (ODOT TM670-671, TM676) PERF. STEEL SQUARE TUBE (C TM671, TM676, TM681, TM687-6 TRIANGULAR BASE BREAKAW/	(ODOT TM602) MULTI-POST BREAKAWAY	(UDUT TM2ZU, TMBUU-BUT) STAINLESS STEEL CLAMP (SSC (TM677) SIGNAL POLE MOUNT	(ODOT TM680) BRIDGE RAIL MOUNT	STRUCTURE MOUNT	CANTILEVER CROSSWALK CLOSURE BARRI (ODOT TM240)	VERTICAL SIGN MOUNT ON EXISTING STRUCTURE	ADJUSTABLE SIGN MOUNT	MAST ARM SNS MOUNT TEMPORARY SIGN SUPPORT (TM821.TM822)	C 4 X 5.4 C 4 X 7.25	ROUTE MARKER FRAME (ODOT TM676 & TM678)	LENGTH (FT.)	(BASED ON ESTIMATED LENGTH)	(MUST BE FIELD VERIFIED)	3/	DEPTH		
24	SE Thompson Rd	10+75 R	36	36	· · ·	Y	Bk		24	×												2" x 2" - 12 ga	14'-3"	3'	3'	3/ FACE OF CU	RB
24a	SE Thompson Rd	10+75 R	24	12		Y Y	Bk	~	24a	· · ·						-										3/ MOUNT BEL	OW SIGN NO. 24
25	SE Thompson Rd	12+72 R	36	36	×	Y	BK	~	25	✓ ✓												2" x 2" - 12 ga	14'-3"	3'	3'	3/ FACE OF CU	'RB
25a	SE Thompson Rd	12+72 R	24	12	✓	Y	BK	~	25a	×																3/ MOUNT BEL	OW SIGN NO. 25
00		40×05 D							00							-						0"	451.01	01	01		
26 26a	Monroe St Monroe St	19+35 R 19+35 R	24	36		Y Y	BK	v v	26 26a							-						2" x 2" - 12 ga	15'-6"	3'	3'	3/ FACE OF CU	OW SIGN 26
26	Monroe St	20+00 L	36	36		Y Y	BK	· •	26													2" x 2" - 12 <u>g</u> a	15'-6"	3'	3'	3/ FACE OF CU	RB
26a	Monroe St	20+00 L	24	12	✓ ✓	Y	BK	~	26a																	3/ MOUNT BEL	OW SIGN 26
26	Monroe St	29+55 R	36	36	<ul> <li>✓</li> </ul>	Y	BK	~	26													2" x 2" - 12 ga	15'-6"	3'	3'	3/ FACE OF CU	RB
26a	Monroe St	29+55 R	24	12	· · ·	Y Y	BK	×	26a			_										0	151.07	~		3/ MOUNT BEL	OW SIGN 26
26	Monroe St	29+55 L	36	36		Ŷ	BK	v	26													2" x 2" - 12 ga	15'-6"	3'	3'	3/ FACE OF CU	OW SIGN 26
26	Monroe St	33+75 R	36	36		Y	BK	V	26													2" x 2" - 12 ga	15'-6"	3'	3'	3/ FACE OF CU	IRB
26a	Monroe St	33+75 R	24	12	×	Y	BK	~	26a													5				3/ MOUNT BEH	IND SIGN 26
26	Monroe St	34+00 L	36	36	×	Y	BK	~	26													2" x 2" - 12 ga	15'-6"	3'	3'	3/ FACE OF CU	IRB
26a	Monroe St	34+00 L	24	12	✓	Y	BK	✓	26a																	3/ MOUNT BEH	IND SIGN 26
26	Monroe St	9+73 R	36	36		Y Y	BK		26													2" x 2" - 12 ga	15'-6"	3'	3'	3/ FACE OF CU	RB
20a 26	Monroe St	9+73 R 10+00 I	36	36		Y Y	BK	v 	20a 26													2" x 2" - 12 ga	15'-6"	.3'	3'	3/ FACE OF CU	IND SIGN 20 IRB
26a	Monroe St	10+00 L	24	12	· ·	Y	BK	· ·	26a													2 12 90	10 0	0		3/ MOUNT BEH	IND SIGN 26
26	Monroe St	14+84 R	36	36	✓	Y	BK	~	26													2" x 2" - 12 ga	15'-6"	3'	3'	3/ FACE OF CU	'RB
26a	Monroe St	14+84 R	24	12	✓	Y	BK	~	26a																	3/ MOUNT BEH	IND SIGN 26
26	Monroe St	15+50 L	36	36	· ·	Y	BK	<u> </u>	26													2" x 2" - 12 ga	15'-6"	3'	3'	3/ FACE OF CU	IRB
26a	Monroe St	15+50 L 60+50 P	24	12		Y Y	BK	v ./	26a													2" x 2" - 12 aa	15'-6"	3'	3'	3/ MOUNT BEH	IND SIGN 26
20 26a	SE 72nd Ave	60+50 R	24	12		Y Y	BK	v v	20 26a													2 x 2 - 12 ga	10-0	5	5	3/ MOUNT BEH	IND SIGN 26
26	SE 72nd Ave	60+50 L	36	36	· ·	Y	BK	~	26													2" x 2" - 12 ga	15'-6"	3'	3'	3/ FACE OF CU	IRB
26a	SE 72nd Ave	60+50 L	24	12	✓	Y	BK	×	26a																	3/ MOUNT BEH	IND SIGN 26
27	Monroe St	19+35 R	36	36	✓ ✓	Y	BK	✓	27																	3/ MOUNT BEH	IND SIGN 26
27a	Monroe St	19+35 R	24	12	<ul> <li>✓</li> </ul>	Y	BK	~	27a																	3/ MOUNT BEL	OW SIGN 27
/ K=BLACH L=BLUE R=BROW Y=FLUOF G=GREEN D=ORANC PURPLE RED RB=RED-E SW=SILVE W=WHITE Y=YELLOV YG=FLOUI	K N RESCENT YELLOW SE SLUE R-WHITE V RESCENT YELLOW-GREEN	2/ NOTE: L,C,R FACING THE L = LEFT PO C = CENTER R = RIGHT P 3/ DISTANCE F FACE OF CU OR BARRIER FOOTING. FO SEE STANDA AND TM635	ARE LOCA SIGN. ST POST POST ROM EDGE RB, CENTER TO THE CE OR ADDITIC	TIONS OF OF TRAVE R LINE, GU ENTERLINE ONAL INFO NGS TM60	POSTS NO SHO EXC SCH MA MA ARI THI EL LANE, ARDRAIL, E OF DRMATION 00, TM602,	TE: THE LOCATIONS OWN ARE APPROXIMAT CEPT FOR SPEED ZONES HOOL ZONES, OBJECT RKERS NAD MILEPOST RKERS. EXACT LOCATI E TO BE DETERMINED B E ENGINEER.	E S, ONS SY																				
		T						1	F								<b></b>										
	PREPARED FOR					Dł	ESIGNED:	СЈН		STERED PROFESS											വ						SHEET NO.
						DF	RAWN:			5 4 87,324 A	邕										510	JINING DEL	AILJ				19 19
	DEVELOPMEN DEVELOPMEN					Cł	HECKED:			Digitally Signed ^{2024.08.21} 19:00:06-07 <b>OREGON</b>	'00'	<b>DKS</b>	1050 S Portlan	W 6th Av d, Orego	ve, Suite #600 on 97204 ates com			MONF	ROE	NEI	GHBO	RHOOD IMP	PROVE	MENT	PRO	JECT	14.14
			DATE N	0.	DESCRIPTIO	N	SXV	(SIR		STARCH 10, 202			www.dl	naaasoCl	ai <del>c</del> 3.00111					(						F	
CO	UNTY	, UN 97040		RE	V I S I O N	S S	8-2	3-24		EXPIRES: JUN. 30, 2026	3									,							CLA-98

![](_page_244_Picture_5.jpeg)

![](_page_244_Picture_6.jpeg)

SIGN	STREET NAME	SIGN		SIGN		SUB-			COLOF	₹ ¹ /		SIGI	1						TYPE C	OF SUP	PORT							POST		FOC	TING	REMARKS
NO.		LOCATION	DIME	NSIONS		STRATE	-1	BAC GROL	K- JND	LEGEND	TYPE	/ NO			(coo		()			ICADE					SE (1	CONDA	RY SIGN TM678)	SIZE	LENGTH	LOCATIO	N MIN. DEPT	н
			WIDTH	HEIGHT	PLYWOOD	SHEET ALUMINUM EXTRUDED ALUMINUM (ODOT TM675)	CLACKAMAS COUNTY T150)	ASTM TYPE III OR TYPE IV	ASTM TYPE IX ASTM TYPE III OR TYPE IV	ASTM TYPE IX NON-REFLECTIVE	PERMANENT DEMOUNTABLE		WOOD POST	PERF. STEEL SQUARE TUBE (	TRIANGULAR BASE BREAKAW	(ODOT TM602) MULTI-POST BREAKAWAY (ODOT TM220, TM600-601)	STAINLESS STEEL CLAMP (SS (TM677)	SIGNAL POLE MOUNT		CANTILEVER CROSSWALK CLOSURE BARR	(ODOT TM240) VERTICAL SIGN MOUNT ON	EXISTING STRUCTURE	ADJUSTABLE SIGN MOUNT MAST ARM SNS MOUNT	TEMPORARY SIGN SUPPORT (TM821.TM822)	C 4 X 5.4	C 4 X /Z3 ROUTE MARKER FRAME (ODOT TM676 & TM678)	LENGTH (FT.)	(BASED ON ESTIMATED LENGTH)	(MUST BE FIELD VERIFIED)	3/		
27	Monroe St	20+00 L	36	36		~		Y		Bk	~	27																				3/ MOUNT BEHIND SIGN 26
27a	Monroe St	20+00 L	24	12		~		Y		Bk	~	27a																				3/ MOUNT BELOW SIGN 27
27	Monroe St	29+55 R	36	36		<b>v</b>		Y		Bk	~	27																				3/ MOUNT BEHIND SIGN 26
27a	Monroe St	29+55 R	24	12		×		Y		Bh	~	278																				3/ MOUNT BELOW SIGN 27
27	Monroe St	29+55 L	36	36		<b>v</b>		Y		Bk	~	27																				3/ MOUNT BEHIND SIGN 26
27a	Monroe St	29+55 L	24	12		~		Y		Bh	<ul> <li>✓</li> </ul>	278																				3/ MOUNT BELOW SIGN 27
27	Monroe St	14+84 R	36	36		~		Y		Bk	~	27																				3/ MOUNT BEHIND SIGN 26
27a	Monroe St	14+84 R	24	12	_	<ul> <li>✓</li> </ul>		Y		Bk		278						_														3/ MOUNT BELOW SIGN 27
27	Monroe St	15+50 L	36	36	_	~		Y		Bk	~	27						_														3/ MOUNT BEHIND SIGN 26
27a	Monroe St	15+50 L	24	12	_	✓		Y		Bk	~	278						_														3/ MOUNT BELOW SIGN 27
																		_														
29	Monroe St	24+84 R	36	36		V		R		Bk	~	29		~														2" x 2" - 12 ga	14'-3"	7'	3'	3/ STATIONING CENTERLINE
	Monroe St	26+93 L	36	36	_	~		R		Bk	~	29		~				_										2" x 2" - 12 ga	14'-3"	1'	3'	3/ BACK OF SIDEWALK
					_							-			,																	
31	SE Thompson Rd	11+70.5 L	36	36	_	V		Y		Bk		31		<ul> <li>✓</li> </ul>	2													2" x 2" - 12 ga	16'-0"	3'	3'	3/ FACE OF CURB
31a	SE Thompson Rd	11+70.5 L	24	24	-	✓		Y		Bk		31a		~				_														3/ MOUNT BELOW SIGN 31
		(0.70 D	10																									011 011 10	101.07			
32	SE Thompson Rd	10+72 R	18	24		V		Ŷ		BK	~	32		· ·													_	2" x 2" - 12 ga	12'-0"	3	3	3/ FACE OF CURB
	SE Thompson Ra	11+00 R	18	24	-	V		Ŷ		BK	~	32						_										2" x 2" - 12 ga	12'-0"	3	3	3/ FACE OF CURB
	SE THOMPSON RO	11+20 K	18	24		<b>V</b>		Ŷ		Bk	V	32	_	V														z x z - 12 ga	12-0"	5	3	J/ FAUE UF UUKB
33	SE Thomason Dd	10±72 D	10	21				V				22			,			-														3/ MOLINIT REHIND SIGN 21
55	SE Thompson Rd	11+00 R	10	24				v				33	_	V																		3/ MOLINT REHIND SIGN 31
	SE Thompson Rd	11+20 R	18	27		· ·		V			· ·	33		v										_								3/ MOUNT REHIND SIGN 31
			10	24				1						<b>v</b>																		
38	SE Thompson Rd	8+55.5 R	.36	.36				Y		R		.38			,			_										2" x 2" - 12 aa	16'-0"	.3'	3'	3/ FACE OF CURB
38a	SE Thompson Rd	8+55 5 R	24	24		· · ·		Y		Bk		38						-														3/ MOUNT BELOW SIGN 38
		0.00.011		2,														_														
39	Monroe St	14+98 L	24	12				Y		Bk		39																				3/ MOUNT ABOVE SIGN 2
	Monroe St	15+34 R	24	12		v -		Y		Bk		39																				3/ MOUNT ABOVE SIGN 2
40	Monroe St	13+89 R	36	36		V		Y		Bk	<b>v</b>	40												<ul> <li>✓</li> </ul>				2" x 2" - 12 aa	14'-3"	3'	3'	3/ FACE OF CURB
	Monroe St	16+45 L	36	36		~		Y		Bk	~	40												1				2" x 2" - 12 ga	14'-3"	3'	3'	3/ FACE OF CURB
ـــــــــــــــــــــــــــــــــــــ		2/				1 1	1/																		1			<b>C</b>				1

BK=BLACK **BL=BLUE** BR=BROWN FY=FLUORESCENT YELLOW G=GREEN O=ORANGE P=PURPLE R=RED RB=RED-BLUE SW=SILVER-WHITE W=WHITE Y=YELLOW YG=FLOURESCENT YELLOW-GREEN

2/ NOTE: L,C,R ARE LOCATIONS OF POSTS FACING THE SIGN. L = LEFT POST

C = CENTER POST

R = RIGHT POST

3/

DISTANCE FROM EDGE OF TRAVEL LANE, FACE OF CURB, CENTER LINE, GUARDRAIL, OR BARRIER TO THE CENTERLINE OF FOOTING. FOR ADDITIONAL INFORMATION SEE STANDARD DRAWINGS TM600, TM602, AND TM635.

4/ NOTE: THE LOCATIONS SHOWN ARE APPROXIMATE EXCEPT FOR SPEED ZONES, SCHOOL ZONES, OBJECT MARKERS NAD MILEPOST MARKERS. EXACT LOCATIONS ARE TO BE DETERMINED BY THE ENGINEER.

PREPARED FOR CLACKAMAS COUNTY DEVELOPMENT AGENCY DEVELOPMENT SERVICES BLDG. 150 BEAVERCREEK ROAD DATE NO. DESCRIPTION CLACKAMAS COUNTY COUNTY R E V I S I O N S

DESIGNED: CJH KCJ CHECKED: SXV/SJB 8-23-24

DRAWN:

DATE:

![](_page_245_Picture_12.jpeg)

![](_page_245_Picture_13.jpeg)

**DKS** 1050 SW 6th Ave, Suite #600 Portland, Oregon 97204 www.dksassociates.com

SIGNING DETAILS MONROE NEIGHBORHOOD IMPROVEMENT PROJECT

CLACKAMAS COUNTY, OREGON

SHEET NO.

12.13

JOB NO.

SIGN	STREET NAME	SIGN	S	IGN		SUB	3-		CC	OLOR 1/		LEGEN	ID SIGN	1			TYPE	OF SUPPO	ORT					POST		FOC	TING	REMARKS
NO.		LOCATION	DIME	NSIONS		STRA	TE	B/ GR	ACK-	LEGE	ND	TYPE	NO.		0DOT 889)	C) AY		CADE			SEC (TM	CONDAR M676 & T	Y SIGN M678)	SIZE	LENGTH	LOCATION	MIN. DEPTH	
		+/	WIDTH	HEIGHT	PLYWOOD	SHEET ALUMINUM	EXTRUDED ALUMINUM (ODOT TM675)	DOUBLE-SIDED (CLACKAMAS COUNTY T150) ASTM TYPE III OR TYPE IV	ASTM TYPE IX	ASTM TYPE III OR TYPE IV ASTM TYPE IX	NON-REFLECTIVE	PERMANENT		WOOD POST (ODOT TM670-671, TM676)	PERF. STEEL SQUARE TUBE (0 TM671, TM676, TM681, TM687-6	TRIANGULAR BASE BREAKAW (ODOT TM602) MULTI-POST BREAKAWAY (ODOT TM220, TM600-601) STAINLESS STEEL CLAMP (SS (TM677)	SIGNAL POLE MOUNT (ODOT TM680) BRIDGE RAIL MOUNT STRUCTURE MOUNT	CANTILEVER CROSSWALK CLOSURE BARRI (ODOT TM240)	VERTICAL SIGN MOUNT ON	EXISTING STRUCTURE ADJUSTABLE SIGN MOUNT MAST ARM SNS MOUNT TEMPORARY SIGN SUPPORT (TM821.TM822)	C 4 X 5.4 C 4 X 7.25	ROUTE MARKER FRAME (ODOT TM676 & TM678)	LENGTH (FT.)	(BASED ON ESTIMATED LENGTH)	(MUST BE FIELD VERIFIED)	3/		
40	74th Ave	SEE PLANS	36	36		~		Y			Bk	~	40							~				SEE TM821, TM822	TM821,	3'	SEE TM821, TM822	3/ FACE OF CURB
	74th Ave	SEE PLANS	36	36		~		Y			Bk	~	40							×				SEE TM821, TM822	SEE TM821,	3'	SEE TM821, TM822	3/ FACE OF CURB
41	Monroe St	34+29 L	60	12		~		G		W		~	41		~									2" x 2" - 12 ga	11'-0"	3'	3'	3/ FACE OF CURB
	Monroe St	34+50 R	60	12		~		G		W		~	41		~									2" x 2" - 12 ga	11'-0"	3'	3'	3/ FACE OF CURB
42	Monroe St	9+59 R	48	12		~		G		W		~	42	_	~									2" x 2" - 12 ga	11'-0"	3'	3'	3/ FACE OF CURB
43	Monroe St	24+85 R	12	18		~		W		R		~	43		~									2" x 2" - 12 ga	11'-6"	3'	3'	3/ FACE OF CURB
		10.001							·															0, 0, 10				
43a	Monroe St	19+69 L	12	18		~		W	2 ·	R		~	43a		~				_					2" x 2" - 12 ga	11'-6"	1'	3'	3/ BACK OF SIDEWALK
	Monroe St	24+90 R	12	18		~				R		~	43a		~									2" x 2" - 12 ga	77'-6"	3	3	3/ FACE OF CURB
44	Monroe St	10+47 L	24	18		~		W	ç ·		BK	~	44					~								1'	2'	3/ FACE OF CURB
45	Monroe St	10+02 L	36	12		~		W			BK	~	45		~									2" x 2" - 12 ga	8'-0"	15'	N/A	3/ CENTERED IN MEDIAN
46	SE Thompson Rd	11+88 R	36	36		<b>v</b>		Y			BK	<b>v</b>	46		~									2" x 2" - 12 ga	16'-6"	3'	3'	3/ FACE OF CURB
40a	SE Thompson Rd	11+88 K	24	24		V		Y			BK	V	468											0" x 0" 40 ~~	16' 6"	10'	21	
40	SE Thompson Pd	13+00 L 12+88 I	21	24		v					DK RV	V	40		V									2 x 2 - 12 ga	10-0	19	3	J STATIONING CENTERLINE
400	SE MOMPSON RU	13700 L	24	24		V		Ŷ			DK	~	408															

1/

BK=BLACK BL=BLUE **BR=BROWN** FY=FLUORESCENT YELLOW G=GREEN O=ORANGE P=PURPLE R=RED RB=RED-BLUE SW=SILVER-WHITE W=WHITE Y=YELLOW YG=FLOURESCENT YELLOW-GREEN 2/

NOTE: L,C,R ARE LOCATIONS OF POSTS FACING THE SIGN.

L = LEFT POSTC = CENTER POST

R = RIGHT POST

3/ DISTANCE FROM EDGE OF TRAVEL LANE, FACE OF CURB, CENTER LINE, GUARDRAIL, OR BARRIER TO THE CENTERLINE OF FOOTING. FOR ADDITIONAL INFORMATION SEE STANDARD DRAWINGS TM600, TM602, AND TM635.

4/ NOTE: THE LOCATIONS SHOWN ARE APPROXIMATE EXCEPT FOR SPEED ZONES, SCHOOL ZONES, OBJECT MARKERS NAD MILEPOST MARKERS. EXACT LOCATIONS ARE TO BE DETERMINED BY THE ENGINEER.

PREPARED FOR					DESIGNED:
	CLACKAMAS COUNTY				DRAWN:
	DEVELOPMENT AGENCY DEVELOPMENT SERVICES BLDG. 150 BEAVERCREEK ROAD				CHECKED:
CLACKAMAS county	OREGON CITY, OR 97045	DATE	NO. F	DESCRIPTION REVISIONS	DATE:

![](_page_246_Figure_13.jpeg)

![](_page_246_Picture_14.jpeg)

![](_page_246_Picture_15.jpeg)

**DKS** 1050 SW 6th Ave, Suite #600 Portland, Oregon 97204 www.dksassociates.com

SIGNING DETAILS MONROE NEIGHBORHOOD IMPROVEMENT PROJECT

CLACKAMAS COUNTY, OREGON

SHEET NO.

12.14

JOB NO.

![](_page_247_Figure_0.jpeg)

SWALK SBED SED TETAIL		
Drill 3/8" Dia. Bolt Hole At Each Corner Where Needed.		
<i>— #14 x 3/4" Self Tapping Screw</i> <u>FING SOCKET</u> <i>be Standard Drg. No. RD100</i>		
All materials shall be in accordance with the current Oregon Standard Specifications. OREGON STANDARD DRAWINGS CROSSWALK CLOSURE DETAIL		
REVISION DESCRIPTION         REVISION DESCRIPTION         Barre       02-JUL-2018         TM240         November 30, 2024		
NING DETAILS Hood Improvement prov	JECT	12.15

JOB NO.

### LEGEND

EX	DETAIN AND DOOTEOT EVICE		
UP	RETAIN AND PROTECT EXIST	ING WOOD POLE.	
(EX) LP	RETAIN AND PROTECT EXIST	ING LUMINAIRE POLE.	
EX	RETAIN AND PROTECT EXIST	ING LUMINAIRE ARM AND LED.	
(RX) UP	PGE TO REMOVE EXISTING L	ITILITY POLE.	SE
(RX) LA	PGE TO REMOVE EXISTING L	UMINAIRE ARM AND EXISTING LUMINAIRE.	SE
RR	PGE TO REMOVE AND RELO	CATE EXISTING LUMINAIRE ARM AND	SE
	) PGE TO REMOVE AND RELO	CATE EXISTING WOOD UTILITY POLE.	SE
	) PGE TO REINSTALL EXISTING	WOOD UTILITY POLE.	SE
RI	PGE TO REINSTALL EXISTING	LUMINAIRE ARM AND EXISTING	SE
	′ LUMINAIRE.   LUMINAIRE NO. (N) FOR RO.	ADWAY ILLUMINATION (SEE ILLUMINATION	SE
	POLE SCHEDULE ON SHEET	13.6 AND 13.7). All wood utility pole (see illumination pole	RO
	SCHEDULE ON SHEET 13.6	AND 13.7).	SE
	SCHEDULE ON SHEET 13.6	AND 13.7).	SE (
LAN	, PGE TO FURNISH AND INST (SEE ILLUMINATION POLE SC	ALL NEW LUMINAIRE ARM, (N) = LENGTH Chedule on sheet 13.6 and 13.7).	SE
LED	) PGE TO FURNISH AND INST (SEE ILLUMINATION POLE SC	ALL NEW LIGHT EMITTING DIODE LUMINAIRE Chedule on sheet 13.6 and 13.7).	SE 1
FND	INSTALL FOUNDATION FOR S	STREET LIGHT POLE, FOUNDATION TO BE	SE ·
S	FURNISH AND INSTALL (S=S 40 FLECTRICAL GRADE PVC	SIZE) INCH SCHEDULE CONDUIT.	SE .
JB	) INSTALL 17"×30"X18" PGE-4	APPROVED JUNCTION BOX.	SE 1
PWR	) PGE POWER SOURCE.		SE
PL	INSTALL POLY PULL TAPE		SE 1
	-		ML
LIG	HTING NOTES		SE
1.	ANCHOR BASE CONCRETE FO	OTING FOR DECORATIVE POST-TOP POLES SHALL BE:	SE I
	MANUFACTURER:	CATALOG NUMBER:	RO
C	ANCHOR BASE CONCRETE FOR	ZUK-LB-4-FGE	SE
۷.	MANUEACTURED.	CATALOC NUMBER	
	OLDCASTLE	5CL-LB	

PREPARED FOR					DESIGNED:
					_
	CLACKAMAS COUNTY				DRAWN:
	DEVELOPMENT AGENCY DEVELOPMENT SERVICES BLDG.				CHECKED:
	150 BEAVERCREEK ROAD OREGON CITY, OR 97045	DATE	NO.	DESCRIPTION	
		REVISIONS			

	LIGHTING	VALUES TABLE			
LOCATION	CLASSIFICATION TARGETED AVERAGE ILLUMINANCE (fc)		ACHIEVED AVERAGE ILLUMINANCE (fc)	TARGETED UNIFORMITY (Avg/Min)	ACHIEVED UNIFORMITY (Avg/Min)
TERSECTIONS					
MONROE ST/SE LINWOOD AVE	COLLECTOR/MAJOR	≥2.2	2.7	≤3:1	3.0
MONROE ST/SE 64TH AVE	COLLECTOR/LOCAL	≥1.4	1.6	≤4:1	4.0
MONROE ST/SE 66TH AVE	COLLECTOR/LOCAL	≥1.4	1.4	≤4:1	2.8
MONROE ST/SE MAPLEHURST RD	COLLECTOR/LOCAL	≥1.4	1.4	≤4:1	2.8
MONROE ST/SE 70TH AVE	COLLECTOR/LOCAL	≥1.4	1.4	≤4:1	3.6
MONROE ST/SE 73RD CT	LOCAL/LOCAL	≥1.1	1.3	≤4:1	2.2
MONROE ST/SE 74TH AVE	LOCAL/LOCAL	≥1.1	1.2	≤4:1	3.1
MONROE ST/SE 77TH AVE	LOCAL/LOCAL	≥1.1	1.1	≤4:1	3.7
MONROE ST/SE 78TH AVE	LOCAL/LOCAL	≥1.1	1.1	≤4:1	2.2
ADWAY SEGMENTS - SE MONROE ST					
LINWOOD AVE TO SE 64TH AVE	COLLECTOR	≥0.9	1.0	≤4:1	2.0
64TH AVE TO SE 66TH AVE	COLLECTOR	≥0.9	1.1	≤4:1	1.8
66TH AVE TO SE MAPLEHURST RD	COLLECTOR	≥0.9	0.9	≤4:1	3.0
MAPLEHURST RD TO SE 70TH AVE	COLLECTOR	≥0.9	1.0	≤4:1	2.5
70TH AVE TO SE 72ND AVE	COLLECTOR	≥0.9	1.0	≤4:1	3.4
72ND AVE TO SE 73RD AVE	LOCAL	≥0.7	1.2	≤6:1	3.1
73RD AVE TO SE 74TH AVE	LOCAL	≥0.7	0.9	≤6:1	2.3
74TH AVE TO SE 77TH AVE	LOCAL	≥0.7	0.8	≤6:1	2.0
77TH AVE TO SE 78TH AVE	LOCAL	≥0.7	1.0	≤6:1	2.0
78TH AVE TO SE FULLER RD	LOCAL	≥0.7	0.9	≤6:1	1.8
ADWAY SEGMENTS - SE THOMPSON RD					
72ND AVE/SE THOMPSON RD	COLLECTOR	≥0.9	1.0	≤4:1	3.4
JLTI-USE PATH- SE MONROE ST					
MONROE ST GAP	MEDIUM	≥0.5	0.9	≤5:1	2.9
MONROE ST WEST OF 72ND (SOUTH SIDE)	MEDIUM	≥0.5	0.7	≤5:1	3.5
MONROE ST EAST OF 72ND (NORTH SIDE)	MEDIUM	≥0.5	0.7	≤5:1	4.8
UNDABOUT					
MONROE ST/SE 72ND AVE	COLLECTOR/COLLECTOR	≥1.7	1.7	≤4:1	3.4

## GENERAL NOTES

- COMPANIES TO ELIMINATE CONFLICTS.
- EXISTING UTILITIES.

## ILLUMINATION LEGEND MONROE NEIGHBORHOOD IMPROVEMENT PROJECT CLACKAMAS COUNTY, OREGON

CJH KCJ SXV/SJB 8-23-24

![](_page_248_Picture_14.jpeg)

![](_page_248_Picture_15.jpeg)

**DKS** 1050 SW 6th Ave, Suite #600 Portland, Oregon 97204 www.dksassociates.com

1. STREET LIGHTING AND INSTALLATIONS ALONG MONROE ST SHALL CONFORM TO PORTLAND GENERAL ELECTRIC (P.G.E.) SCHEDULE 95 OPTION "A" SPECIFICATIONS. MATERIALS AND INSTALLATION SHALL BE APPROVED BY P.G.E., UNLESS NOTED OTHERWISE.

2. PLANS ARE SHOWN FOR BIDDING AND REFERENCE ONLY. CONTACT CHUNG LAM (503-736-5785) FOR PGE APPROVED LIGHTING MATERIALS. REFER TO PGE WORK ORDER NUMBER M3325942.

3. ALL STREET LIGHT POLES, LUMINAIRE ARMS LUMINAIRES, UTILITY POLES, LAMPS, HOUSE SIDE SHIELDS, AND WIRING SHALL BE FURNISHED AND INSTALLED BY PGE. FOUNDATIONS AND JUNCTION BOXES SHALL BE FURNISHED BY PGE AND INSTALLED BY THE CONTRACTOR. ALL CONDUITS AND PULL ROPES SHALL BE INSTALLED AND FURNISHED BY THE CONTRACTOR.

4. UTILITY LOCATIONS ARE APPROXIMATE AND NOT ALL UTILITIES ARE SHOWN. LOCATIONS OF EXISTING UTILITIES SHALL BE VERIFIED. MAINTAIN AND PROTECT ALL EXISTING UTILITIES UNLESS OTHERWISE NOTED. COORDINATE ALL WORK WITH UTILITY

5. MAINTAIN A MINIMUM OF 12 INCH CLEARANCE BETWEEN ALL

6. LUMINAIRE ARMS TO BE MOUNTED TO MEET NESC CLEARANCES.

SHEET NO.

13.0

JOB NO.

![](_page_249_Figure_0.jpeg)

![](_page_250_Figure_0.jpeg)

![](_page_251_Figure_0.jpeg)

cts\2021\P21068-000 (Clackamas Co Monroe






							ILLUMINATION POL	LE SCHEDULE								
							LUMINAIRE									
POLE NO.	STREET	STATIONING	OFFSET * (ft)	POLE TYPE	HEIGHT (ft)	ARM LENGTH (ft)	MANUFACTURER	PGE PART NUMBER	HOUSE SHIELD (YES/NO)	LIGHT SOURCE	WATTAGE	TYPE	LIGHT LOSS FACTOR			
1	MONROE STREET	EX	EX	EX	30	6	LEOTEK	GCJ2-20H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	NO	LED	45	Π	0.88			
2	MONROE STREET	EX	EX	EX	30	6	LEOTEK	GCJ2-20H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	NO	LED	45	П	0.88			
3	MONROE STREET	12+37	7.0 RT	UP	30	6	LEOTEK	GCJ2-20H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	YES	LED	45	П	0.88			
4	MONROE STREET	EX	EX	EX	30	6	LEOTEK	GCJ2-20H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	NO	LED	45	П	0.88			
5	MONROE STREET	14+46	6.7 RT	UP	30	6	LEOTEK	GCM2-40H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	NO	LED	88	П	0.88			
6	MONROE STREET	15+00.5	6.7 RT	UP	30	6	LEOTEK	GCJ2-20H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	NO	LED	45	П	0.88			
7	MONROE STREET	EX	EX	EX	30	6	LEOTEK	GCJ2-20H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	YES	LED	45	П	0.88			
8	MONROE STREET	16+72.5	6.7 RT	UP	30	6	LEOTEK	GCJ2-20H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	NO	LED	45	П	0.88			
9	MONROE STREET	EX	EX	EX	30	6	LEOTEK	GCJ2-20H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	NO	LED	45	П	0.88			
10	MONROE STREET	18+35.5	20.5 LT	UP	30	6	LEOTEK	GCM2-40H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	NO	LED	88	П	0.88			
11	MONROE STREET	19+37	24.0 LT	EX	30	6	LEOTEK	GCM2-40H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	NO	LED	88	П	0.88			
12	MONROE STREET	EX	EX	EX	30	6	LEOTEK	GCJ2-20H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	NO	LED	45	II	0.88			
13	MONROE STREET	21+97	6.7 RT	UP	30	6	LEOTEK	GCM2-40H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	NO	LED	88	П	0.88			
14	MONROE STREET	EX	EX	EX	30	6	LEOTEK	GCM2-40H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	NO	LED	88	П	0.88			
15	MONROE STREET	23+94	6.7 RT	UP	30	6	LEOTEK	GCJ2-20H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	NO	LED	45	П	0.88			
16	MONROE STREET	EX	EX	EX	30	6	LEOTEK	GCJ2-20H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	NO	LED	45	П	0.88			
17	MONROE STREET	25+93	18.4 RT	UP	30	6	LEOTEK	GCJ2-20H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	NO	LED	45	П	0.88			
18	MONROE STREET	EX	EX	EX	30	6	LEOTEK	GCJ2-20H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	NO	LED	45	П	0.88			
19	MONROE STREET	EX	EX	EX	30	6	LEOTEK	GCJ2-20H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	NO	LED	45	П	0.88			
20	MONROE STREET	28+82.5	6.7 RT	UP	30	6	LEOTEK	GCJ2-20H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	NO	LED	45	П	0.88			
21	MONROE STREET	EX	EX	EX	30	6	LEOTEK	GCM2-40H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	NO	LED	88	П	0.88			
22	MONROE STREET	EX	EX	EX	30	6	LEOTEK	GCJ2-20H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	NO	LED	45	П	0.88			
24	MONROE STREET	31+65	6.7 RT	UP	30	6	LEOTEK	GCJ2-20H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	NO	LED	45	П	0.88			
25	MONROE STREET	EX	EX	EX	30	6	LEOTEK	GCJ2-20H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	NO	LED	45	Π	0.88			
26	MONROE STREET	33+72	15.1 RT	UP	30	6	LEOTEK	GCM2-40H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	NO	LED	88	П	0.88			
27	MONROE STREET	34+39.5	45.5 LT	UP	30	6	LEOTEK	GCM2-40H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	NO	LED	88	П	0.88			
28	MONROE STREET	6+45	21.0 RT	UP	30	6	LEOTEK	GCM2-40H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	NO	LED	88	П	0.88			
29	MONROE STREET	EX	EX	EX	30	6	LEOTEK	GCM2-40H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	NO	LED	88	П	0.88			
30	MONROE STREET	10+45	21.6 LT	UP	30	6	LEOTEK	GCJ2-20H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	NO	LED	45	П	0.88			
31	MONROE STREET	11+45	17.4 RT	UP	30	6	LEOTEK	GCJ2-20H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	NO	LED	45	П	0.88			
32	MONROE STREET	EX	EX	EX	30	6	LEOTEK	GCM2-40H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	NO	LED	88	П	0.88			
33	MONROE STREET	EX	EX	EX	30	6	LEOTEK	GCM2-40H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	YES	LED	88	П	0.88			

EX= EXISTING

UP = NEW UTILITY STREET LIGHT ONLY POLE

LP = LIGHT POLE

*OFFSET MEASURED FROM CENTERLINE TO CENTER OF POLE (PROVIDE 2.0 FT MIN. FROM FACE OF CURB TO FACE OF POLE)





DATE:





**DKS** 1050 SW 6th Ave, Suite #600 Portland, Oregon 97204 www.dksassociates.com

CLACKAMAS COUNTY, OREGON

## ILLUMINATION PLAN MONROE NEIGHBORHOOD IMPROVEMENT PROJECT

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CLA-98

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SCALE:

SHEET NO.

								E SCHEDULE					
								LUMINAIRE					
POLE NO.	STREET	STATIONING	OFFSET * (ft)	POLE TYPE	HEIGHT (ft)	ARM LENGTH (ft)	MANUFACTURER	PGE PART NUMBER	HOUSE SHIELD (YES/NO)	LIGHT SOURCE	WATTAGE	TYPE	LIGHT LOSS FACTOR
34	MONROE STREET	EX	EX	EX	30	6	LEOTEK	GCM2-40H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	NO	LED	88	П	0.88
35	MONROE STREET	EX	EX	EX	30	6	LEOTEK	GCJ2-20H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	NO	LED	45	П	0.88
36	MONROE STREET	EX	EX	EX	30	6	LEOTEK	GCJ2-20H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	NO	LED	45	П	0.88
37	MONROE STREET	18+34	23.5 LT	UP	30	6	LEOTEK	GCJ2-20H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	NO	LED	45	П	0.88
38	MONROE STREET	19+33	23.7 LT	UP	30	6	LEOTEK	GCJ2-20H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	YES	LED	45	П	0.88
39	MONROE STREET	20+40	18.3 LT	UP	30	6	LEOTEK	GCJ2-20H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	NO	LED	45	П	0.88
40	MONROE STREET	21+31	23.7 LT	UP	30	6	LEOTEK	GCJ2-20H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	NO	LED	45	П	0.88
41	MONROE STREET	22+20	25.7 LT	UP	30	6	LEOTEK	GCM2-40H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	NO	LED	88	П	0.88
42	MONROE STREET	23+20	22.2 LT	UP	30	6	LEOTEK	GCJ2-20H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	NO	LED	45	П	0.88
43	MONROE STREET	24+31	9.0 LT	UP	30	6	LEOTEK	GCM2-40H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	NO	LED	88	П	0.88
44	MONROE STREET	25+99.5	4.5 RT	LP	16	N/A	HOLOPHANE	AWDE3 P30 30K MVOLT MS AL3 BK ST TBK PR7 FPD75 NL1X1	NO	LED	60	Ш	0.88
45	MONROE STREET	EX	EX	EX	EX	EX	EX	EX	NO	E	EX	EX	EX
46	MONROE STREET	27+94	22.6 RT	LP	30	6	LEOTEK	GCJ2-20H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	YES	LED	45	П	0.88
47	MONROE STREET	28+85	22.6 RT	LP	30	6	LEOTEK	GCJ2-20H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	YES	LED	45	П	0.88
48	MONROE STREET	29+65	22.6 RT	LP	30	6	LEOTEK	GCJ2-20H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	YES	LED	45	П	0.88
53	72ND	6+97.5	18.4 RT	UP	30	6	LEOTEK	GCJ2-20H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	NO	LED	45	П	0.88
54	72ND	EX	EX	EX	30	6	LEOTEK	GCJ2-20H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	NO	LED	45	П	0.88
55	72ND	8+36	14.6 RT	UP	30	6	LEOTEK	GCJ2-20H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	NO	LED	45	П	0.88
56	72ND	EX	EX	EX	30	6	LEOTEK	GCJ2-20H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	NO	LED	45	П	0.88
57	THOMPSON STREET	EX	EX	EX	30	6	LEOTEK	GCJ2-20H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	NO	LED	45	П	0.88
58	THOMPSON STREET	EX	EX	EX	30	6	LEOTEK	GCJ2-20H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	NO	LED	45	II	0.88
59	THOMPSON STREET	12+45	14.5 LT	UP	30	6	LEOTEK	GCJ2-20H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	NO	LED	45		0.88
60	THOMPSON STREET	EX	EX	EX	30	6	LEOTEK	GCJ2-20H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	NO	LED	45	П	0.88

PREPARED FOR

CLACKAMAS COUNTY COUNTY

CLACKAMAS COUNTY DEVELOPMENT AGENCY DEVELOPMENT SERVICES BLDG.

												DESIGNED:
												CHECKED:
DATE	NO.						D	ESCR	IPTIO	N		
	F	२	Е	V	I	S	I	0	Ν	S		DATE:

CJH KCJ SXV/SJB 8-23-24





**DISS** 1050 SW 6th Ave, Suite #600 Portland, Oregon 97204 www.dksassociates.com



## ILLUMINATION PLAN MONROE NEIGHBORHOOD IMPROVEMENT PROJECT

CLACKAMAS COUNTY, OREGON

SHEET NO.

13.7

JOB NO.

#### LEGEND

#### POLES

	INS
(PP)	( N
$\Lambda N /$	

ISTALL PEDESTAL WITH FRANGIBLE BASE ON I=NUMBER) FOUNDATION. SEE ODOT STANDARD DRAWING TM457 FOR DETAILS.

#### CABINETS

- (BMC)
- INSTALL BASE MOUNTED SERVICE CABINET, 120/240 VOLT METERED, FOR RRFB SYSTEM. SEE ODOT STANDARD DRAWING TM485 AND SHEET 14.2 FOR DETAILS.
- INSTALL RECTANGULAR RAPID FLASHING BEACON SYSTEM ( CC ) CONTROLLER CABINET. SEE SPECIAL PROVISIONS AND SHEET 14.3.
- POWER SOURCE (PS)

#### SIGNALS

·	
PP	$\mathbf{H}$

INSTALL AUDIBLE PEDESTRIAN PUSH BUTTON WITH MOUNT ("PUSH BUTTON TO TURN ON WARNING LIGHTS" R10-25). SEE SPECIAL PROVISIONS

#### SIGNS



INSTALL (N=NUMBER) ALUMINUM (36"X36") PEDESTRIAN CROSSING SIGN (W11-2) ASTM TYPE IX SHEETING.

- AL INSTALL (N=NUMBER) ALUMINUM (18"X30") DIAGONAL DOWNWARD POINTING ARROW PLAQUE (W16-7P) ASTM TYPE IX SHEETING.
- RRFB
- INSTALL (N=NUMBER) RRFB RAPID FLASHING BAR.

#### CONDUITS

- INSTALL (S=SIZE) INCH ELECTRICAL CONDUIT.
- INSTALL NEW 3 INCH PVC SCHEDULE 40 CONDUIT ( W )) AS REQUIRED BY POWER COMPANY.
- INSTALL NEW 3 INCH PVC SCHEDULE 40 RISER CONDUIT ON ( RIS ) EXISTING UTILITY POLE WITH NEW 12" STANDOFF BRACKETS.
- (S)ABANDON EXISTING ELECTRICAL CONDUIT EC (S=SIZE).
  - MAINTAIN AND PROTECT EXISTING ELECTRICAL CONDUIT (S=SIZE).

#### **WIRES**

 $\begin{pmatrix} EX \\ W \end{pmatrix}$ 

MAINTAIN AND PROTECT EXISTING WIRING.

- $\begin{pmatrix} \mathsf{RX} \\ \mathsf{W} \end{pmatrix}$ REMOVE EXISTING WIRING.

- $\left( \begin{array}{c} X N \\ G \end{array} \right)$
- INSTALL (X=NUMBER OF CABLES) CONTROL CABLES WITH (NUMBER) (G= AWG WIRE SIZE) AWG CONDUCTORS.
- NG INSTALL (N=NUMBER) NO. (G=AWG WIRE SIZE) XHHW WIRES

#### DETECTION

- INSTALL FLIR CAMERA FOR BICYCLISTS. SEE GREEN (FL-1)
- SHEETS AND SHEET NO. 14.4.
- INSTALL FLIR CAMERA FOR BICYCLISTS. SEE GREEN SHEETS (FL-2)AND SHEET NO. 14.4.

#### JUNCTION BOXES

- $\begin{pmatrix} JB \\ 1A \end{pmatrix}$
- INSTALL 17"x10"x12" PRECAST CONCRETE JUNCTION BOX WITH
- CONCRETE APRON.

MAINTAIN AND PROTECT EXISTING JUNCTION BOX.

- EX JB
  - REMOVE EXISTING JUNCTION BOX.
- (RX) JB
- INSTALL 8' GROUND ROD(S). (GR)

PREPARED FOR

	CLACKAMAS COUNTY				DRAWN:
	DEVELOPMENT AGENCT				CHECKED:
	150 BEAVERCREEK ROAD				
CLACKAMAS	OREGON CITY OR 97045	DATE	NO.	DESCRIPTION	
COUNTY			F	REVISIONS	DATE.

#### **GENERAL NOTES**

- STANDARD DRAWINGS LISTED BELOW
- OPERATIONS SHOWN ON THIS PLAN.
- THE UTILITY COMPANIES/AGENCIES TO ELIMINATE ANY CONFLICTS.

- 12. ALL CONDUIT RUNS SHALL BE WITHIN RIGHT-OF WAY.

CJH KCJ SXV/SJB 8-23-24

DESIGNED:





1050 SW 6th Ave, Suite #600 Portland, Oregon 97204 www.dksassociates.com

**RECTANGULAR RAPID FLASHING BEACON LEGEND** MONROE NEIGHBORHOOD IMPROVEMENT PROJECT

CLACKAMAS COUNTY, OREGON

1. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO CLACKAMAS COUNTY ORDINANCES AND SPECIAL PROVISIONS, THE 2021 OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION, AND THE OREGON

2. THE CONTRACTOR SHALL SUPPLY ALL EQUIPMENT, MATERIALS, AND LABOR REQUIRED FOR THE SIGNAL

3. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF EXISTING UTILITIES AND COORDINATE THIS WORK WITH

4. THE CONTRACTOR SHALL COORDINATE WORK WITH PGE FOR POWER SERVICE CONNECTION. CONTRACTOR SHALL COORDINATE WITH JEREMY RASMUSSEN (971-419-1742, JEREMY.RASMUSSEN@PGN.COM) A MINIMUM OF 4 WEEKS BEFORE STARTING PGE RELATED INFRASTRUCTURE TO SCHEDULE A COORDINATION MEETING FOR ALL POWER REQUIREMENTS. REFERENCE PGE WORK ORDER NUMBER M3377100.

5. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF ALL SIGNAL EQUIPMENT BEFORE INSTALLATION.

6. EQUIPMENT SUBMITTALS AND POLE DRAWINGS SHALL BE PROVIDED TO CLACKAMAS COUNTY BY THE CONTRACTOR AFTER AN INITIAL REVIEW HAS BEEN COMPLETED BY THE PROJECT ENGINEER. CLACKAMAS COUNTY APPROVAL OF THESE SUBMITTALS MUST BE OBTAINED PRIOR TO CONSTRUCTION. 7. TO BE ACCOMPANIED BY OREGON STD. DWGS TM457, TM467, TM485, TM493, AND TM677.

8. FLIR DETECTION UNIT ORIENTATION TO BE CALIBRATED IN THE FIELD BY MANUFACTURER.

9. INSTALL #12 STRANDED COPPER (ORANGE) TRACER WIRE IN ALL CONDUITS. GROUND ALL TRACER WIRES. 10. CONDUIT SHALL BE PLACED IN THE SAME TRENCH WITH OTHER CONDUITS WHEN POSSIBLE.

11. TOP OF SIGNAL AND PEDESTRIAN FOUNDATIONS SHALL MATCH TOP OF FINISHED GRADE OF SIDEWALK.

13. INSTALL POLY PULL TAPE (1800 LBF MIN. STRENGTH, NON CONDUCTIVE) IN ALL CONDUITS.

14. ALL UNDERGROUND CONDUITS AND FITTINGS SHALL BE SCHEDULE 80 PVC.

SHEET NO.

14.0

JOB NO.



PREPA	RED FOR								DESIGNED
	CLACKAMAS COUNTY								DRAWN:
	DEVELOPMENT AGENCY DEVELOPMENT SERVICES BLDG. 150 BEAVERCREEK ROAD	DATE	NO						CHECKED
CLACKAMAS county	OREGON CITY, OR 97045	DATE	<u>  NO.  </u> F	R E	V I	S	I O	N S	DATE:

NOTE: SEE SI

CJH KCJ SXV/SJB 8-23-24





1050 SW 6th Ave, Suite #600 Portland, Oregon 97204 www.dksassociates.com RECTANGULAR RAT

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RECTANGULAR RAPID FLASHING BEACON PLAN

LINWOOD AVE AT MONROE ST

	$P \bigcirc$				R A		CL		$C \vdash$	A	R							
See TM457	EQUIPMENT ON POLE		EQUIPMENT ON MAST ARM (Length in Feet and Equipment Type) FOUNDATION (See Std. Drg. TM457)								LUMINAIRES MISC. NEQUIF				MISC. EQUIP.			
POLE SHEET NO. NO. TYPE	PED. PED. TERM. RRFB/ FL SIGNAL PUSHBUTTON CABINET SIGN DE DEG. DEG. DEG. DEG. DE	LIR RRFB ET. CONTROL EG. CABINET	ARM LENGTH	D1 D2	2 D3	D4	D5	D6	D7	D8	FOUNDATION NUMBER	REQUIRED FOUNDATION DEPTH	ARM A Length [	RM MC PEG. H	)UNTING HEIGHT	FIXTURE TYPE	WATTAGE	on arm
1 14.1 PP-3	180 0	180	-								3	8'						
2 14.1 PP-3	180 180 0/-	/45 180									3	8'						
3 14.1 PP-3	0 180 0	0 180									3	8'						
4 14.1 PP-3	90*/180** 0	180									3	8'						

<u>MISC. ITEMS</u>

RRFB = Rectangular Rapid Flashing Beacon Assembly

PP = Pedestal (See Std. Dwg. TM457) * ORIENTATION OF EXTENSION BRACKET

** ORIENTATION OF PUSHBUTTON



PREPA	RED FOR				DESIGNE
	CLACKAMAS COUNTY				DRAWN:
	DEVELOPMENT AGENCY DEVELOPMENT SERVICES BLDG.				
CLACKAMAS COUNTY	OREGON CITY, OR 97045	DATE	NO.   F	DESCRIPTION REVISIONS	DATE:

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RECTANGULAR RAPID FLASHING BEACON DETAILS **MONROE NEIGHBORHOOD IMPROVEMENT PROJECT** 

CLACKAMAS COUNTY, OREGON

### RECTANGULAR RAPID FLASHING BEACON DETAILS



SERVICE CABINET WIRING FOR 120/240 VOLT SIGNAL SERVICE BMC

SHEET	NC

14.2

JOB NO.





PREPARED FOR					DESIGNE
CLACKAMAS C O U N T Y	CLACKAMAS COUNTY DEVELOPMENT AGENCY DEVELOPMENT SERVICES BLDG. 150 BEAVERCREEK ROAD OREGON CITY, OR 97045	DATE	NO.	DESCRIPTION REVISIONS	DRAWN: CHECKED







### RECTANGULAR RAPID FLASHING BEACON DETAILS



PREPARED FOR					DESIGNE
	CLACKAMAS COUNTY DEVELOPMENT AGENCY DEVELOPMENT SERVICES BLDG. 150 BEAVERCREEK ROAD OREGON CITY, OR 97045				DRAWN:
					CHECKED
		DATE	NO.	DESCRIPTION REVISIONS	DATE:

REVISION	DATE	BY			APPRO
			DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT 150 BEAVERCREEK ROAD OREGON CITY, OR 97045		R
	_			CLACKAMAS COUNTY	BE

SXV/SJB 8-23-24





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# **MONROE NEIGHBORHOOD IMPROVEMENT PROJECT**

### RECTANGULAR RAPID FLASHING BEACON DETAILS

CLACKAMAS COUNTY, OREGON

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JOB NO.



PREPARED FOR -					DESIGNED:
	CLACKAMAS COUNTY				DRAWN:
CLACKAMAS COUNTY	DEVELOPMENT SERVICES BLDG. 150 BEAVERCREEK ROAD OREGON CITY, OR 97045				CHECKED:
		DATE	NO. 	REVISION S	DATE:









ΡΠΕΡΑ	RED FOR				DESIGNED:	CJH
	CLACKAMAS COUNTY				DRAWN:	KCJ
	DEVELOPMENT SERVICES BLDG. 150 BEAVERCREEK ROAD	DATE		DECONDION	CHECKED:	SXV/SJB
CLACKAMAS county	OREGON CITY, OR 97045	DATE	j no. F	R E V I S I O N S	DATE:	8-23-24





1050 SW 6th Ave, Suite #600 Portland, Oregon 97204 www.dksassociates.com





8

## TRAFFIC CONTROL SIGNS MONROE NEIGHBORHOOD IMPROVEMENT PROJECT

CLACKAMAS COUNTY, OREGON

SHEET NO.

15.1

JOB NO.

## CLACKAMAS RIVER WATER MONROE ST WATERLINE IMPROVEMENTS PROJECT No. CIP 21-5278

#### GENERAL CONSTRUCTION NOTES

- NOTICE OF WORK: THE CONTRACTOR SHALL FOLLOW THE CLACKAMAS RIVER WATER (CRW) AND OTHER AFFECTED JURISDICTIONS' ADVANCE NOTIFICATION REQUIREMENTS PRIOR TO CONSTRUCTION START.
- 2. 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. 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.
- 3. 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.
- 4. INSURANCE: A COPY OF THE CONTRACTOR'S CERTIFICATE OF INSURANCE SHALL BE AVAILABLE ON THE JOB SITE AT ALL TIMES. 5. CONSTRUCTION STAKING: THE CONTRACTOR SHALL PROVIDE ALL CONSTRUCTION STAKING,
- INCLUDING WATERLINE ALIGNMENT STAKING AND OFFSETS, EASEMENTS AND PROPERTY LINES, UTILIZING DESIGN SURVEY INFORMATION AS PROVIDED BY CRW.
- 6. 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.
- 8. 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 THE PERMITTING JURISDICTION PRIOR TO COMMENCEMENT OF
- 9. 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.
- 10. 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.
- 11. 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.
- 12. UTILITY DISTURBANCE AND REPAIR: IF THE CONTRACTOR DAMAGES, DESTROYS, OR OTHERWISE DISTURBS AN EXISTING UTILITY, THE UTILITY OWNER SHALL BE IMMEDIATELY CONTACTED, AND THE UTILITY SHALL BE REPAIRED WITHOUT DELAY OR COST TO THE DISTRICT.
- 13. 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.
- 14. 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.
- 15. CONSTRUCTION SEQUENCING: THE CONTRACTOR SHALL PLAN AND SEQUENCE THE WORK AS REQUIRED TO MINIMIZE DISRUPTION OF SERVICE, INCLUDING TEMPORARY CONNECTIONS AND BYPASSES AS NECESSARY.

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#### **GENERAL CONSTRUCTION NOTES (cont.)**

- SPECIFICATIONS.
- 17. CHANGES OR DEVIATIONS TO WORK: ANY CHANGE OR DEVIATION FROM THE APPROVED CONSTRUCTION PLANS MUST BE SUBMITTED IN WRITING AND APPROVED BY CRW A MINIMUM OF FOUR (4) WORKING DAYS PRIOR TO STARTING THE MODIFIED WORK.
- 18. 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 THE DISTRICT.
- 19. 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.
- 20. 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.
- 21. 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 LOCAL JURISDICTION. 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. 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.
- 22. 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.
- 23. 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. II ANY PROPERTY DISTURBANCE OCCURS, THE CONTRACTOR SHALL RESTORE TO AS NEAR ORIGINAL CONDITION AS POSSIBLE OR REPLACE IN KIND. 24. SURVEY MONUMENTS: ALL SURVEY MONUMENTS SHALL BE LOCATED AND PROTECTED, EXCEPT
- AS SPECIFICALLY DIRECTED BY THE COUNTY SURVEYOR OR LOCAL JURISDICTION'S ENGINEER. 25. SITE RESTORATION AT PROJECT COMPLETION: UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL LEAVE THE PROJECT AREA FREE OF DEBRIS AND UNUSED MATERIALS.

### WATERLINE CONSTRUCTION NOTES

- 1. CRW SPECIFICATIONS: ALL WORK SHALL BE DONE IN ACCORDANCE WITH CLACKAMAS RIVER WATER STANDARD SPECIFICATIONS AND DETAILS. CURRENT REVISION.
- 2. NOTICE OF SERVICE DISRUPTION: UNLESS OTHERWISE DIRECTED, THE CONTRACTOR SHALL PROVIDE CRW AND ANY AFFECTED UTILITIES A MINIMUM OF FOUR (4) DAYS ADVANCE NOTICE OF CONSTRUCTION AND/OR PLANNED DISRUPTION OF SERVICE. THE CONTRACTOR SHALL
- SCHEDULE AND COORDINATE SHUTDOWNS WITH ALL AFFECTED UTILITIES.
- 3. NOTICE OF SERVICE DISRUPTION FOR CRW CUSTOMERS: CRW WILL PROVIDE NOTIFICATION TO AFFECTED WATER USERS FOR PLANNED SERVICE DISRUPTIONS.
- 4. OPERATION OF SYSTEM: OPERATION OF VALVES AND ANY OTHER COMPONENTS OF THE PUBLIC WATER SYSTEM SHALL ONLY BE PERFORMED BY CRW.
- 5. EXISTING WATER SERVICE: EXISTING WATER MAINS AND SERVICES SHALL BE KEPT IN
- OPERATION UNTIL NEW MAINS ARE CONNECTED AND IN SERVICE. 6. WATERLINE BURY DEPTH: ALL PIPING SHALL HAVE A MINIMUM OF 3 FEET OF COVER FROM TOP OF PIPE TO EXISTING GRADE OR OTHER FINISHED GRADE, UNLESS OTHERWISE SHOWN ON THE
- DRAWINGS. 7. SANITARY SEWER CROSSINGS: THE CONTRACTOR SHALL COMPLY WITH OAR CHAPTER 333 FOR REQUIRED WATERLINE-SANITARY SEWER LINE SEPARATION AND CROSSING REQUIREMENTS. **8. UTILITY CROSSINGS:** AS MAY BE REQUIRED BY THE DISTRICT, THE CONTRACTOR SHALL
- PROVIDE PVC SHIELDING AND/OR POLYETHYLENE ENCASEMENT IN ACCORDANCE WITH AWWA
- C105. 9. 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.
- 10. WATERLINE FITTINGS: WATERLINE FITTINGS SHALL BE CEMENT-LINED DUCTILE OR CAST IRON WITH MECHANICAL JOINTS PER AWWA C110 OR C153.
- 11. JOINT RESTRAINTS: ALL JOINTS AT VALVES, FITTINGS AND PIPE BELLS SHALL BE MECHANICALLY RESTRAINED. SEE SPECIFICATIONS FOR ALLOWABLE TYPES OF RESTRAINT SYSTEMS.
- 12. FLANGED CONNECTIONS: ALL FLANGED CONNECTIONS, WHERE REQUIRED, SHALL BE PROVIDED WITH CUT-RING GASKETS, AS SPECIFIED.

## CLACKAMAS COUNTY, OREGON

### AUGUST 2024

16. 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



#### WATERLINE CONSTRUCTION NOTES (cont.)

- 13. 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. 14. CONCRETE STRENGTH: ALL CONCRETE FOR THRUST BLOCKS SHALL HAVE A COMPRESSIVE
- STRENGTH OF 3000 PSI UNLESS OTHERWISE SPECIFIED. 15. 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. 16. BACKFILL: ALL BACKFILL IN THE RIGHT OF WAY OR OTHER TRAFFIC AREAS SHALL BE 3/4"-0" CRUSHED ROCK, COMPACTED TO 95 PERCENT OF MAXIMUM DENSITY PER AASHTO T-99
- UNLESS OTHERWISE SPECIFIED. 17. 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. 18. 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 WITH CRW SPECIFICATION WITH NO VISIBLE LEAKAGE ALLOWED.
- **19. 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.
- 20. 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.
- 22. 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.
- 23. TRACER WIRE: INSTALL NO. 12 AWG SOLID COPPER TRACER WIRE WITH BLUE COLORED HMWPE INSULATION ALONG THE TOP CENTERLINE OF NEW PIPE, TRACER WRE INTERSECTIONS SHALL BE SOLDERED OR MECHANICALLY CONNECTED WITH APPROVED WATERPROOF CONNECTOR DEVICES.

#### SHEET INDEX

<b>W</b> 1.0	TITLE SHEET
W1.1	SHEET LAYOUT AND PROJECT NOTES
W5.0	PLAN AND PROFILE STA. 10+75 TO STA. 13+00
W5.1	PLAN AND PROFILE STA. 13+00 TO STA. 18+00
W5.2	PLAN AND PROFILE STA. 18+00 TO STA. 23+00
<b>W5.3</b>	PLAN AND PROFILE STA. 23+00 TO STA. 28+00
W5.4	PLAN AND PROFILE STA. 28+00 TO STA. 33+00
<b>W5</b> .5	PLAN AND PROFILE STA. 33+00 TO STA. 11+00 TO STA. 7+50
<b>W5.6</b>	PLAN AND PROFILE STA. 11+00 TO STA. 16+00
W5.7	PLAN AND PROFILE STA. 16+00 TO STA. 21+00
W5.8	PLAN AND PROFILE STA. 21+00 TO STA. 26+00
W5.9	PLAN AND PROFILE STA. 26+00 TO STA. 30+05
<b>W5.10</b>	PLAN AND PROFILE STA. 7+50 TO STA. 10+50
<b>W5.11</b>	CONNECTION DETAILS
<b>W5.12</b>	CONNECTION DETAILS
W5.13	STANDARD DETAILS
<b>W5.14</b>	STANDARD DETAILS
<b>W</b> 5.15	STANDARD DETAILS

SHEET TITLE:

ROJECT No





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No.	DATE	REVISION	BY	JUALE	

1 ADJUST VALVE CAN TO FINISHED GRADE.

2 UPON ACCEPTANCE, REMOVE VALVE CAN AND LID.

3 FURNISH AND INSTALL NEW SERVICE ASSEMBLY PER CRW 108A. UPON WATERLINE ACCEPTANCE, COORDINATE WITH CRW TO REMOVE EXISTING METER. REMOVE EXISTING METER BOX. CONNECT TAILPIECE OF NEW SERVICE ASSEMBLY TO PRIVATE PLUMBING. METER BOXES TO BE SET 1 FT BEHIND CURB WITH MINIMUM 1 FT CLEARANCE FROM HARDSCAPING, OR AS DIRECTED BY CRW.

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- 5 FURNISH AND INSTALL SERVICE ASSEMBLY RETROFIT PER CRW 108B. - UPON WATERLINE ACCEPTANCE, CONNECT TO EXISTING METER.
- 6 FURNISH AND INSTALL NEW 2" SERVICE ASSEMBLY PER CRW 109. UPON WATERLINE ACCEPTANCE. COORDINATE WITH CRW TO REMOVE EXISTING METER. CONNECT TAILPIECE OF NEW SERVICE ASSEMBLY TO PRIVATE PLUMBING WITH COPPER PIPE AND BRASS FITTINGS. METER BOXES TO BE SET 1 FT BEHIND CURB WITH MINIMUM 1 FT CLEARANCE FROM HARDSCAPING, OR AS DIRECTED BY CRW.
- 7 FURNISH AND INSTALL NEW SERVICE ASSEMBLY PER CRW 108A WITH NEW TAP ON EXISTING 8" D.I. MAIN. COORDINATE WITH CRW TO REMOVE EXISTING METER. CONNECT TAILPIECE OF NEW SERVICE ASSEMBLY TO PRIVATE PLUMBING. METER BOXES TO BE SET 1 FT BEHIND CURB WITH MINIMUM 1 FT CLEARANCE FROM HARDSCAPING, OR AS DIRECTED BY CRW. REMOVE EXISTING METER BOX. ABANDON EXISTING SERVICE AT MAIN. CORP STOP SHALL BE UNCOVERED AND TURNED OFF. EXISTING SERVICE LINE SHALL BE CUT AND CORP STOP CAPPED WITH BRASS CORP CAP.

NOTE: EXISTING CONDITIONS SHOWN IN WATERLINE IMPROVEMENT PLAN, SEE SHEET W1.1 FOR LEGEND. PROPOSED LOT LINES, EASEMENTS, STREET, STORM AND UTILITY IMPROVEMENTS ARE INCLUDED IN BACKGROUND FOR REFERENCE. SEE ROADWAY PLAN AND PROFILE FOR DETAILS. STATIONING ON WATERLINE IMPROVEMENT PLAN IS COINCIDENT WITH ROADWAY PLAN.

## MONROE ST WATERLINE IMPROVEMENTS

PLAN AND PROFILE STA. 10+75 TO STA. 13+00

FILE NAME: 21-5278_MONROE_DES1.dwg





MONROE ST WATERLINE IMPROVEMENTS **W5** PLAN AND PROFILE STA. 13+00 TO STA. 18+00 SHEET of **18** FILE NAME: 4 21-5278_MONROE_DES1.dwg

3 FURNISH AND INSTALL NEW SERVICE ASSEMBLY PER CRW 108A. UPON

WATERLINE ACCEPTANCE, COORDINATE WITH CRW TO REMOVE EXISTING METER. REMOVE EXISTING METER BOX. CONNECT TAILPIECE OF NEW SERVICE ASSEMBLY TO PRIVATE PLUMBING. METER BOXES TO BE SET 1 FT BEHIND CURB WITH MINIMUM 1 FT CLEARANCE FROM HARDSCAPING OR AS DIRECTED BY CRW.

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	21+00 <b>PROFILE</b> 1"= 10' VERT. 1"= 20' HORIZ. POT CON POT ONL	Holing Note: Itractor Must Po Holed and Utility Y Utilities Being (	22+00 THOLE ALL EXISTING UTILI DEPTHS MEASURED OR ( CROSSED BY PROPOSED W	TIES TO VERIFY DEP CALCULATED AS SHO VATERLINE ARE SHOV	TH PRIOR TO CO WN. OTHER UTIL WN IN THE PROF
	Clackamas Rive 16770 SE 82nd Drive Clackamas, Oregon 97015 Clack	P.O. Box 2439 amas, Oregon 97015	SSERED PROFESSO ENGINEED OF 99346PE	DESIGNED BY: AMS DRAFTED BY: MJG CHECKED BY: IDE	PROJECT NAME: SHEET TITLE:
Clackamas River Wa	<b>™</b> (503) 722-9220 <i>ter</i> crw@crwater.com	FAX (503) 656-7086 n	TUREGON THAT 13, 2017 44 HOAN 13, 2017 44	DATE: AUG 2024	r falser

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SHEET

of **18** 



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#### MONROE ST WATERLINE IMPROVEMENTS

#### PLAN AND PROFILE STA. 23+00 TO STA. 28+00

FILE NAME: 21-5278_MONROE_DES1.dwg W5.3 SHEET of **18** 6



1 ADJUST VALVE CAN TO FINISHED GRADE.

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#### MONROE ST WATERLINE IMPROVEMENTS

#### PLAN AND PROFILE STA. 28+00 TO STA. 33+00

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#### MONROE ST WATERLINE IMPROVEMENTS

#### PLAN AND PROFILE STA. 16+00 TO STA. 21+00

W5. SHEET of **18** 10

21-5278_MONROE_DES1.dwg

FILE NAME:



- WATERLINE ACCEPTANCE, COORDINATE WITH CRW TO REMOVE EXISTING SERVICE ASSEMBLY TO PRIVATE PLUMBING. METER BOXES TO BE SET 1 FT BEHIND CURB WITH MINIMUM 1 FT CLEARANCE FROM HARDSCAPING,
- EXISTING METER BOX. CONNECT TAILPIECE OF NEW SERVICE ASSEMBLY TO PRIVATE PLUMBING. METER BOXES TO BE SET 1 FT BEHIND CURB WITH MINIMUM 1 FT CLEARANCE FROM HARDSCAPING, OR AS DIRECTED
- EXISTING METER. CONNECT TAILPIECE OF NEW SERVICE ASSEMBLY TO BOXES TO BE SET 1 FT BEHIND CURB WITH MINIMUM 1 FT CLEARANCE
- TURNED OFF. EXISTING SERVICE LINE SHALL BE CUT AND CORP STOP

**NOTE:** EXISTING CONDITIONS SHOWN IN WATERLINE IMPROVEMENT PLAN, SEE SHEET W1.1 FOR LEGEND. PROPOSED LOT LINES, EASEMENTS, STREET,



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EXISTING CENTERLI	GRADE AT NE			8 MJxMJ F	
	- 3' COVER, TYP.				
NEW 8" D.I.	W/L (RESTRAINED)		U SERVICE		= = = = = = = = = = = = = = = = = = =
			(N) 2" CI	E) WATE	
DLING NOTE: ACTOR MUST POTHOLE DLED AND UTILITY DEP UTILITIES BEING CROSS	29 E ALL EXISTING UTILITIES TO VERIF THS MEASURED OR CALCULATED / SED BY PROPOSED WATERLINE AR	FY DEPTH PRIOR TO CONSTRUCTION AS SHOWN. OTHER UTILITY DEPTHS E SHOWN IN THE PROFILE.	304 N. SPECIFIC LOCATIONS MAY HAVE GARE UNKNOWN OR ASSUMED. FO	FUU E BEEN R CLARITY,	
				DECIONED DY	DEGISCI



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UPON ACCEPTANCE, ABANDON EXISTING 2" SERVICE AT MAIN. CORP STOP SHALL BE EXPOSED AND TURNED OFF. EXISTING SERVICE LINE SHALL BE CUT AND CORP STOP CAPPED WITH BRASS END CAP OR CORP CAP. METER BOX SHALL BE REMOVED.

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PLAN STA. 26+	SHEET	
21-5278	FILE NAME: 21-5278_MONROE_DES1.dwg	<b>12</b> of <b>18</b>

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#### MONROE ST WATERLINE IMPROVEMENTS

#### PLAN AND PROFILE STA. 7+50 TO STA. 10+50

21-5278

FILE NAME: 21-5278_MONROE_DES1.dwg











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KEYNOTES. A SERVICE CONNECTION: 1. EXISTING MAINS: WET TAP WITH APPROVED SADDLE. 2. NEW MAINS: USE APPROVED CAST TEE.
(A1) 2" I.P.T BRASS NIPPLE (2"-4" LENGTH) (A2) 2" I.P.T.XI.P.T. GATE VALVE WITH VALVE BOX AND LID
<ul> <li>(A3) 2" M.I.P.T.XC.U. RESTRAINED COUPLER</li> <li>(B) 2" TYPE K RIGID COPPER TUBING, TYPICAL</li> <li>(C) 2" 90" CUXCU FORD TYPE G COMPRESSION COUPLING OR APPROVED EQUAL</li> </ul>
D CONCRETE PIER BLOCKS FOR SETTER SUPPORT E 2" STRAIGHT JOINT COMPRESSION COUPLING (FIPXCU). PLUG WITH PVC IP PLUG, LEAK TEST ASSEMBLY AT SYSTEM PRESSURE.
F 2"x2" TEMPORARY MARKER STAKE, PAINTED BLUE NOTES: 1. REFERENCE CRW TECHNICAL SPECIFICATION SECT 2. ALL SERVICE MATERIALS SHALL COMPLY WITH "L 3. PROVIDE PROPER SHORING FOR EXCAVATIONS AS

Clackam

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. REFERENCE CRW TECHNICAL SPECIFICATION SECTION 15150. . 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. 5. UPSTREAM ANGLE BALL METER VALVE TO REMAIN LOCKED UNTIL CRW REMOVES SPACER PIPE AND ACTIVATES SERVICE. (LOCK INSTALLED BY CRW).

AL LOCATION OF	SERV	CE ASSEMBLY REQUIRES CRI	N APPROVAL.					
$\sim$	NO	REVISION	3/4" OR 1" SERVICE ASSEMBLY					
			NEW					
			SCALE: N.T.S.	DATE: JANUARY 2023	1004			
as River Water			DRAWING: CRW.S	TD.DTL108A.dwg	IUOA			



- H OLDCASTLE 2436-30 METER BOX WITH DFW B40C-4EPA-LID OR OLDCASTLE STEEL COVER
- AS APPROVED  $\langle 1 \rangle$  2" meter setter (ford 70 series coppersetter MODEL #VBH77-95035-003-NL) OR EQUAL
- (J) VALVE BOX ASSEMBLY PER CRW STANDARD DETAIL 104
- CRW-FURNISHED METER ASSEMBLY INCLUDES:
- $\langle K \rangle$  1-1/2" or 2" meter as specified L RADIO READ METER REGISTER

EFERENCE CRW TECHNICAL SPECIFICATION SECTION 15150. SERVICE MATERIALS SHALL COMPLY WITH "LEAD-FREE" REQUIREMENTS OF THE SPECIFICATIONS. OVIDE PROPER SHORING FOR EXCAVATIONS AS REQUIRED. COMPLY WITH OREGON OSHA **REGULATIONS.** 





	NO	REVISION	3/4" OR 1" SERVICE ASSE		
				RETROFIT	
			SCALE: N.T.S.	DATE: MAY 2021	
Clackamas River Water			DRAWING: CRW.STD.DTL108B.dwg		



Clackamas River Water						
			TYPE 1 A			
			SCALE: N.T.S.	DATE: MAY 2021		
lackamas River Water			DRAWING: CRW.S	TD.DTL.110A.dwg		

	Clackamas	<i>River Water</i> P.O. Box 2439	SSERED PROFESSION SSEENGINEED 99346PE	DESIGNED BY: AMS DRAFTED BY: MJG	PROJECT NAME:
Clackamas River Water	Clackamas, Oregon 97015 (503) 722-9220 crw@cr	Clackamas, Oregon 97015 FAX (503) 656-7086 water.com	OREGON THING 13, 2012 4	CHECKED BY: JDE DATE: AUG 2024	SHEET TITLE:
APPROVED BY:	APPROVAL DATE:		EXPIRES: 6 -30 -26	SCALE: AS SHOWN	PROJECT No.

FILE NAME: 21-5278_MONROE_DES1.dwg 21-5278

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				<u>†                                    </u>	ATTENTION	
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				╂────┨		
					IF THIS BAR DOES NOT	
	8/15/04	RID SET		CRW	MEASURE 1" THEN DRAWING IS NOT TO	
No			0 N		SCALE	
		R F V I		1 0 '		





#### MONROE ST WATERLINE IMPROVEMENTS

#### STANDARD DETAILS

21-5278

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