



CLACKAMAS COUNTY
NOTICE OF PUBLIC IMPROVEMENT CONTRACT OPPORTUNITY

INVITATION TO BID #2018-81
Collection System Rehab- Sanitary Sewer Mainline
September 27, 2018

Clackamas County ("County") on behalf of Water Environment Services through their Board of County Commissioners is accepting sealed bids for the **Collection System Rehab – Sanitary Sewer Mainline** Project until **October 18, 2018, 2:00 PM**, Pacific Time, ("Bid Closing") at the following location:

DELIVER BIDS TO: Clackamas County Procurement Division, Attention George Marlton, Director, Clackamas County Public Services Building, 2051 Kaen Road, Oregon City, OR 97045 or via email to procurement@clackamas.us.

Bidding Documents can be downloaded from ORPIN at the following address:
<http://orpin.oregon.gov/open.dll/welcome>, Document No. C01010-2018-81-18.

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.

Contact Information

Procurement Process and Technical Questions: Ryan Rice, rice@clackamas.us, 503-742-5446.

Bids will be opened and publicly read aloud at the above Delivery address after the Bid Closing. Bid results will also be posted to ORPIN and the Clackamas County Procurement Website shortly after the opening.

Engineers Estimate: \$485,000.00

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 1, 2018, which can be downloaded at the following web address: http://www.oregon.gov/boli/WHD/PWR/Pages/pwr_state.aspx The Work will take place in Clackamas County, Oregon.

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



CLACKAMAS COUNTY PUBLIC IMPROVEMENT CONTRACT OPPORTUNITY

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CLACKAMAS COUNTY PUBLIC IMPROVEMENT CONTRACT

INSTRUCTIONS TO BIDDERS

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

Article 1. Scope of Work

The work contemplated under this contract with the Owner, includes all labor, materials, transportation, equipment and services necessary for, and reasonably incidental to, the completion of all construction work in connection with the project described in the Project Manual which includes, but is not necessarily limited to, the Notice of Public Improvement Contract Opportunity, Instructions to Bidders, Supplemental Instructions to Bidders, Bid Form, Bid Bond, Public Improvement Contract Form, Performance Bond, Payment Bond, Clackamas County General Conditions for Public Improvement Contracts (1/1/2017), Supplemental General Conditions, 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 Clackamas County Procurement Website (www.clackamas.us/bid) will become a part of the Project Manual. The Owner will not be responsible for any other explanation or interpretation of the Project Manual nor for any other approval of a particular manufacturer's process or item for any Bidder.

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

Article 4. Security to Be Furnished by Each Bidder

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

by the Project Manual shall mean the date of acceptance specified in the Notice of Intent to Award.

Article 5. Execution of Bid Bond

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

- A. Bid bonds must be executed on the County forms, which will be provided to all prospective Bidders by the Owner.
- B. The Bid bond shall be executed on behalf of a bonding company licensed to do business in the State of Oregon.
- C. In the case of a sole individual, the bond need only be executed as principal by the sole individual. In the case of a partnership, the bond must be executed by at least one of the partners. In the case of a corporation, the bond must be executed by stating the official name of the corporation under which is placed the signature of an officer authorized to sign on behalf of the corporation followed by such person's official capacity, such as president, etc. The corporation seal should then be affixed to the bond.
- D. The name of the surety must be stated in the execution over the signature of its duly authorized attorney-in-fact and accompanied by the seal of the surety corporation.

Article 6. Execution of the Bid Form

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

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

Article 7. Prohibition of Alterations to Bid

Bids that are incomplete, or contain ambiguities or have differing conditions required by the Bidder, including requested changes or exceptions to the Public Improvement Contract form or other portions of the Project Manual, may be rejected in Owner's sole and absolute discretion.

Article 8. Submission of Bid

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

Article 9. Bid Closing and Opening of Bids

All Bids must be received by the Owner at the place and time set for the Bid Closing. Any Bids received after the scheduled Bid Closing time for receipt of Bids will be rejected.

At the time of opening and reading of Bids, each Bid received will be publicly opened and read aloud, irrespective of any irregularities or informalities in such Bids.

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

Article 10. Acceptance or Rejection of Bids by Owner

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

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

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

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

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

Article 11. Withdrawal of Bid

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

After the time set for the Bid Closing, no Bidder will

be permitted to withdraw its Bid within the time frames specified in Article 10 for award and execution, except as provided for in that Article.

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

The Owner will provide the successful Bidder with contract forms within seven (7) calendar days after the completion of the award protest period. The Bidder is required to execute the contract forms as provided, including a performance bond and a payment bond from a surety company licensed to do surety business in the State of Oregon, within seven (7) calendar days after receipt of the contract forms. The contract forms shall be delivered to the Owner in the number called for and to the location as instructed by the Owner.

Article 13. Recyclable Products

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

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

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

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

Requests for clarification may be submitted no less than five (5) business days prior to the Bid Closing Date.

Article 15. Protest of Intent to Award

Owner will name the apparent successful Bidder in a "Notice of Intent to Award" letter. Identification of the apparent successful Bidder is procedural only and creates no right in the named Bidder to the award of the contract. Competing Bidders will be notified by publication of the Notice of Intent to

Award on the Clackamas County Procurement Website of the selection of the apparent successful Bidder(s) and Bidders shall be given seven (7) calendar days from the date on the "Notice of Intent to Award" letter to review the file at the Procurement Division office and file a written protest of award, pursuant to C-049-0450. Any award protest must be in writing and must be delivered by hand delivery or mail to the Procurement Division Director at: Procurement Division, 2051 Kaen Road, Oregon City, OR 97045.

Article 16. Disclosure of First-Tier Subcontractors

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

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



**CLACKAMAS COUNTY
PUBLIC IMPROVEMENT CONTRACT**

SUPPLEMENTAL INSTRUCTIONS TO BIDDERS

Project: #2018-81 Collection System Rehab- Sanitary Sewer Mainline

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. Submission of Bids by email:** Complete Bids (including all attachments) may be emailed and must be electronically received by the closing time and date **2:00p.m. Pacific Time, October 18, 2018.** **If emailed, the Bid must be emailed to the following address: Procurement@clackamas.us. The email subject line must be “Bid for #2018-81 Collection System Rehab.”** Bidders are **strongly encouraged** to telephone and confirm electronic receipt of the complete emailed document(s) before the above time and date deadline. Bids delayed or lost by email system filtering or failures may be considered at Clackamas County’s sole and absolute discretion.
- 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 by hand delivery to the location the Bid was due or may email the completed Forms to Procurement@clackamas.us. “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: 2018-81 Collection System Rehab- Sanitary Sewer Mainline

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

<u>DOW BIDDER WILL SELF-PERFORM (GFE not required)</u>	

PRIME CONTRACTOR SHALL DISCLOSE AND LIST ALL SUBCONTRACTORS, including those Minority-owned, Woman-owned, and Emerging Small Businesses ("M/W/ESB") that you intend to use on the project. Hand delivery to Procurement, 2051 Kaen Road, Oregon City, OR 97045 or email to procurement@clackamas.us within 2 hours of the BID/Quote Closing Date/Time


LIST ALL SUBCONTRACTORS BELOW Use <u>correct legal name</u> of Subcontractor (No Assumed Business Names)	Division of Work (Painting, electrical, landscaping, etc.) List ALL DOW performed by Subcontractors	DOLLAR AMOUNT OF SUBCONTRACT	If Certified or self-reporting MBE/WBE/ESB Subcontractor Check box 		
			MBE	WBE	ESB
Name Address City/St/Zip Phone# OCCB#			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Name Address City/St/Zip Phone# OCCB#			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Name Address City/St/Zip Phone# OCCB#			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Name Address City/St/Zip Phone# OCCB#			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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

Prime Contractor Name:

Total Contract Amount:

Project Name: 2018-81 Collection System Rehab- Sanitary Sewer
Mainline

LIST ALL SUBCONTRACTORS BELOW Use <u>correct legal name</u> of Subcontractor (No Assumed Business Names)	Division of Work (Painting, electrical, landscaping, etc.) List ALL DOW performed by Subcontractors	DOLLAR AMOUNT OF SUBCONTRACT	If Certified or self-reporting MBE/WBE/ESB Subcontractor Check box 		
			MBE	WBE	ESB
Name Address City/St/Zip Phone# OCCB#			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Name Address City/St/Zip Phone# OCCB#			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Name Address City/St/Zip Phone# OCCB#			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Name Address City/St/Zip Phone# OCCB#			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Name Address City/St/Zip Phone# OCCB#			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Name Address City/St/Zip Phone# OCCB#			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Name Address City/St/Zip Phone# OCCB#			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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

Prime Contractor:
Project: 2018-81 Collection System Rehab- Sanitary Sewer Mainline

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

NAME OF M/W/ESB SUBCONTRACTOR	Divisions of Work (Painting, electrical, landscaping, etc.)	Date Solicitation Letter / Fax Sent	PHONE CONTACT		BID ACTIVITY Check Yes or No			REJECTED BIDS (if bid received & not used)		Notes
					Will Bid	Bid Received	Bid Used	Bid Amount	Reason Not Used (Price, Scope or Other. If Other, explain in Notes>>)	
			Date of Call	Person Receiving Call						
					<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes			
					<input type="checkbox"/> No	<input type="checkbox"/> No	<input type="checkbox"/> No			
					<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes			
					<input type="checkbox"/> No	<input type="checkbox"/> No	<input type="checkbox"/> No			
					<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes			
					<input type="checkbox"/> No	<input type="checkbox"/> No	<input type="checkbox"/> No			
					<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes			
					<input type="checkbox"/> No	<input type="checkbox"/> No	<input type="checkbox"/> No			
					<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes			
					<input type="checkbox"/> No	<input type="checkbox"/> No	<input type="checkbox"/> No			
					<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes			
					<input type="checkbox"/> No	<input type="checkbox"/> No	<input type="checkbox"/> No			
					<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes			
					<input type="checkbox"/> No	<input type="checkbox"/> No	<input type="checkbox"/> No			
					<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes			
					<input type="checkbox"/> No	<input type="checkbox"/> No	<input type="checkbox"/> No			


**CLACKAMAS COUNTY
GOOD FAITH EFFORT
PROJECT COMPLETION REPORT
(FORM 3)**

Prime Contractor Name:

Total Contract Amount:

Project Name: 2018-81 Collection System Rehab- Sanitary Sewer Mainline

Complete this form and submit with your request for final payment upon the project completion. Please list all subcontractors used for the project. Use additional sheets as necessary.

LIST ALL SUBCONTRACTORS BELOW Use <u>correct legal name</u> of Subcontractor (No Assumed Business Names)	Division of Work (Painting, electrical, landscaping, etc.) List ALL DOW performed by Subcontractors	FINAL DOLLAR AMOUNT OF SUBCONTRACT	If Certified or self-reported MBE/WBE/ESB Subcontractor Check box 		
			MBE	WBE	ESB
Name Address City/St/Zip Phone# OCCB#			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Name Address City/St/Zip Phone# OCCB#			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Name Address City/St/Zip Phone# OCCB#			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Name Address City/St/Zip Phone# OCCB#			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Name Address City/St/Zip Phone# OCCB#			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Name Address City/St/Zip Phone# OCCB#			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

BY SIGNING BELOW, I HEREBY CERTIFY THAT THE ABOVE LISTED FIRMS HAVE BEEN UTILIZED BY OUR COMPANY IN THE AMOUNTS REPRESENTED ABOVE AND THAT THE INFORMATION CONTAINED HEREIN IS COMPLETE AND ACCURATE. .

Authorized Signature of Contractor Representative

Date



**CLACKAMAS COUNTY
PUBLIC IMPROVEMENT CONTRACT**

BID BOND

Project Name: 2018-81 Collection System Rehab- Sanitary Sewer Mainline

We, _____, as "Principal,"
(Name of Principal)

and _____, an _____ 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 and Water Environment Services ("Obligee") the sum of (\$_____)

_____ 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 Obligees procurement document (No. _____) for the project identified above which proposal or bid is made a part of this bond by reference, and Principal is required to furnish bid security in an amount equal to ten (10%) percent of the total amount of the bid pursuant to the procurement document.

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

IN WITNESS WHEREOF, we have caused this instrument to be executed and sealed by our duly authorized legal representatives this _____ day of _____, 20____.

Principal: _____ Surety: _____

By: _____ By: Attorney-In-Fact
Signature

_____ Name
Official Capacity

Attest: _____ Address
Corporation Secretary

_____ City State Zip

_____ Phone Fax



**CLACKAMAS COUNTY
PUBLIC IMPROVEMENT CONTRACT**

BID FORM

PROJECT: #2018-81 Collection System Rehab- Sanitary Sewer Mainline
BID CLOSING: October 18, 2018, 2:00 PM, Pacific Time
BID OPENING: October 18, 2018, 2:05 PM, Pacific Time

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

TO: Clackamas County
Procurement Division – Attention George Marlton, Director
2051 Kaen Road
Oregon City, OR 97045

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

____ c. A corporation organized under the laws of the State of _____; or

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

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

_____ Dollars (\$_____)

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

- Notice of Public Improvement Contract Opportunity
 - Instructions to Bidders
 - Bid Bond
 - Performance Bond and Payment Bond
 - Supplemental General Conditions
 - Payroll and Certified Statement Form
 - Supplemental Instructions to Bidders
 - Public Improvement Contract Form
 - Clackamas County General Conditions
 - Prevailing Wage Rates
 - Plans, Specifications and Drawings
- ADDENDA numbered _____ through _____, inclusive (*fill in blanks*)

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

3. The Undersigned proposes to add to or deduct from the Base Bid indicated above the items or work relating to the following Unit Price(s) as designated in the Specifications, for which any adjustments in the Contract amount will be made in accordance with Section D of the Clackamas County General Conditions: **Provide the attached bid schedule titled COLLECTION SYSTEM REHAB PROJECT.**

4. The work shall be completed within the time stipulated and specified in Division 1, Section 01010 of the Specifications.

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

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

10. The Undersigned agrees, if awarded a contract, to comply with the provisions of ORS

279C.800 through 279C.870 pertaining to the payment of the prevailing rates of wage.

11. Contractor's CCB registration number is _____. As a condition to submitting a bid, a Contractor must be registered with the Oregon Construction Contractors Board in accordance with ORS 701.035 to 701.055, and disclose the registration number. Failure to register and disclose the number will make the bid unresponsive and it will be rejected, unless contrary to federal law.

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

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

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

Project Executive: _____, Cell Phone: _____,
Project Manager: _____, Cell Phone: _____,
Job Superintendent: _____, Cell Phone: _____,
Project Engineer: _____, Cell Phone: _____.

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

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 _____

ADDRESS _____

TELEPHONE NO _____

EMAIL _____

SIGNATURE 1) _____

Sole Individual

or 2) _____

Partner

or 3) _____

Authorized Officer or Employee of Corporation

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

BID SCHEDULE
#2018-81
2017/18 COLLECTION SYSTEM REHAB PROJECT

BIDDER will complete the Work in accordance with the Bidding/Contract Documents for the prices listed in the following proposal:

ITEM NO.	ESTIMATED QUANTITY	DESCRIPTION OF ITEM	UNIT PRICE	AMOUNT
1	Lump Sum	Mobilization	_____ L.S.	\$ _____
2	5,011 LF	CIPP Liner, 8-inch	\$ _____ L.F.	\$ _____
3	29 EA	Lateral Reinstatement	\$ _____ EA.	\$ _____
4	29 EA	Lateral Connection Sealing	\$ _____ EA.	\$ _____
5	5,011 LF	Post-installation Video	\$ _____ L.F.	\$ _____
6	Lump Sum	Traffic Control	\$ _____ L.S.	\$ _____
7	Lump Sum	Sanitary Sewer Bypass Pumping – Hoodland Service Area	\$ _____ L.S.	\$ _____
8	Lump Sum	Sanitary Sewer Bypass Pumping – Clackamas Industrial Area	\$ _____ L.S.	\$ _____
9	Lump Sum	Sanitary Sewer Bypass Pumping – Sunnyside/ Sunnybrook Area	\$ _____ L.S.	\$ _____

TOTAL BID

_____ \$ _____
(Total Bid Words)

Signed and submitted this _____ day of _____, 2018.

CONTRACTOR/Principal: _____
Printed Name of Company/Corporation

By: _____ By: _____
Printed Name Authorized Signature

Title: _____

FIRST-TIER SUBCONTRACTOR DISCLOSURE FORM
PROJECT: 2018-81 Collection System Rehab- Sanitary Sewer Mainline

BID OPENING: October 18, 2018, 2:00 PM, Pacific Time

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

INSTRUCTIONS:

This First-Tier Subcontractor Disclosure Form ("Form") must be submitted and received at the location specified in the Notice of Public Improvement Contract Opportunity on the advertised Bid Closing, and within two working hours after the advertised Bid Closing Time.

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

Subcontractor lists may be submitted with the bid in the same envelope or email at the Bid Closing date and time. Subcontractor lists **MUST** be submitted within **two (2) hours** of the Bid Closing date and time.

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

	SUBCONTRACTOR NAME	DOLLAR VALUE	CATEGORY OF WORK
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____
4.	_____	_____	_____
5.	_____	_____	_____
6.	_____	_____	_____

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

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

Firm Name: _____

Bidder Signature: _____ Phone # _____



WATER ENVIRONMENT SERVICES PUBLIC IMPROVEMENT CONTRACT

This Public Improvement Contract (the "Contract"), is made by and between Water Environment Services, a political subdivisions of the State of Oregon, hereinafter called "Owner," and Contractor Name (No DBA/ABN), 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: **2018-81 Collection System Rehab- Sanitary Sewer Mainline**

1. Contract Price, Contract Documents and Work.

The Contractor, in consideration of the sum of _____ Dollars (\$) (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 Clackamas County General Conditions for Public Improvement Contracts (11/1/2017) ("General Conditions") 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.

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

- Notice of Contract Opportunity
- Supplemental Instructions to Bidders
- Public Improvement Contract Form
- Clackamas County General Conditions
- Prevailing Wage Rates
- Plans, Specifications and Drawings
- Instructions to Bidders
- Bid Bond
- Performance Bond and Payment Bond
- Supplemental General Conditions
- Payroll and Certified Statement Form
- [Addenda]

2. Representatives.

Contractor has named _____ 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 Jessica Rinner 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: _____ shall be the Contractor's project executive, and will provide oversight and guidance throughout the project term.

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

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

Project Engineer: 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: 90 days from NTP

FINAL COMPLETION DATE: 120 days from NTP

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.

In accordance with Section G.3.5 of the General Condition, Contractor shall furnish proof of the required insurance naming Clackamas County and Water Environment Services as additional insureds. Insurance certificates may be returned with the signed Contract or may emailed to Procurement@clackamas.us.

6. Tax Compliance.

Contractor must, throughout the duration of this Contract and any extensions, comply with all tax laws of this state and all applicable tax laws of any political subdivision of this state. Any violation of this section shall constitute a material breach of this Contract. Further, any violation of Contractor's warranty in this Contract that Contractor has complied with the tax laws of this state and the applicable tax laws of any political subdivision of this state also shall constitute a material breach of this Contract. Any violation shall entitle County to terminate this Contract, to pursue and recover any and all damages that arise from the breach and the termination of this Contract, and to pursue any or all of the remedies available under this Contract, at law, or in equity, including but not limited to: (A) Termination of this Contract, in whole or in part; (B) Exercise of the right of setoff, and withholding of amounts otherwise due and owing to Contractor, in an amount equal to Owner's setoff right, without penalty; and (C) Initiation of an action or proceeding for damages, specific performance, declaratory or injunctive relief. Owner 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 Owner may pursue any remedy or remedies singly, collectively, successively, or in any order whatsoever.

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

7. Confidential Information.

Contractor acknowledges that it and its employees or agents may, in the course of performing their responsibilities under this Contract, be exposed to or acquire information that is confidential to 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.

8. Counterparts.

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

9. Integration.

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.

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

Contractor DATA:

(Insert Contractor Name & Address)

Contractor CCB # Expiration Date:
Oregon Business Registry # Entity Type: State of Formation:

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.

Contractor Name (No DBA/ABN)

Water Environment Services

Signature Date

Chair Date

Name / Title Printed

Recording Secretary

APPROVED AS TO FORM

County Counsel Date



CLACKAMAS COUNTY GENERAL CONDITIONS FOR PUBLIC IMPROVEMENT CONTRACTS November 1, 2017

INSTRUCTIONS: The attached **Clackamas County General Conditions for Public Improvement Contracts** ("County General Conditions") apply to all designated Public Improvement contracts. Changes to the County General Conditions (including any additions, deletions or substitutions) should only be made by attaching Public Improvement Supplemental General Conditions. The text of these County General Conditions should not otherwise be altered.

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**CLACKAMAS COUNTY GENERAL CONDITIONS
FOR PUBLIC IMPROVEMENT CONTRACTS
("County General Conditions")**

**SECTION A
GENERAL PROVISIONS**

A.1 DEFINITION OF TERMS

In the Contract Documents the following terms shall be as defined below:

APPLICABLE LAWS, means all federal, state and local laws, codes, rules, regulations and ordinances, as amended applicable to the Work, to the Contract, or to the parties individually.

ARCHITECT/ENGINEER, means the Person appointed by the Owner to make drawings and specifications and, to provide contract administration of the Work contemplated by the Contract to the extent provided herein or by supplemental instruction of Owner (under which Owner may delegate responsibilities to the Architect/Engineer), in accordance with ORS Chapter 671 (Architects) or ORS Chapter 672 (Engineers) and administrative rules adopted thereunder.

AVOIDABLE DELAYS, mean any delays other than Unavoidable Delays, and include delays that otherwise would be considered Unavoidable Delays but that: (a) Could have been avoided by the exercise of care, prudence, foresight, and diligence on the part of the Contractor or its Subcontractors; (b) Affect only a portion of the Work and do not necessarily prevent or delay the prosecution of other parts of the Work nor the completion of the whole Work within the Contract Time; (c) Do not impact activities on the accepted critical path schedule; and (d) Are associated with the reasonable interference of other contractors employed by the Owner that do not necessarily prevent the completion of the whole Work within the Contract Time.

BIDDER, means a bidder in connection with Instructions to Bidders or a proposer in connection with a Request for Proposals, or Solicitation Document. May also be referenced as "Offeror," "Quoter" or "Proposer" based on the type of Solicitation Document.

CHANGE ORDER, means a written order which, when fully executed by the Parties to the Contract, constitutes a change to the Contract Documents. Change Orders shall be issued in accordance with the changes provisions in Section D and, if applicable, establish a Contract Price or Contract Time adjustment. A Change Order shall not be effective until executed by both parties.

CLAIM, means a demand by Contractor pursuant to Section D.3 for review of the denial of Contractor's initial request for an adjustment of Contract terms, payment of money, extension of Contract Time or other relief, submitted in accordance with the requirements and within the time limits established for review of Claims in these County General Conditions.

CONTRACT, means the written agreement between the Owner and the Contractor comprised of the Contract Documents which describe the Work to be done and the obligations between the parties.

CONTRACT DOCUMENTS, means the Contract, County General Conditions, Supplemental General Conditions if any, Plans, Specifications, the accepted Offer, Solicitation Document and addenda thereto, Instructions to Offerors, and Supplemental Instructions to Offerors.

CONTRACT PERIOD, as set forth in the Contract Documents, means the total period of time beginning with the full execution of a Contract and, if applicable, the issuance of a Notice to Proceed and concluding upon Final Completion.

CONTRACT PRICE, means the total price reflected in the Contract.

CONTRACT TIME, means any incremental period of time allowed under the Contract to complete any portion of the Work as reflected in the Project schedule.

CONTRACTOR, means the Person awarded the Contract for the Work contemplated.

DAYS, are calendar days, including weekdays, weekends and holidays, unless otherwise specified.

DEFECTIVE WORK, means Work that is not completed in accordance with the Specifications or the requirements of the Contract.

DIRECT COSTS, means, unless otherwise provided in the Contract Documents: the cost of materials, including sales tax and the cost of delivery; cost of labor which shall only include the applicable prevailing wage and fringe benefit (if applicable, and if paid to or on behalf of the employee) rate plus a maximum of a twelve percent (12%) markup on the prevailing wage (but not the fringe benefit) to cover Contractor's labor burden including but not limited to social security, Medicare, unemployment insurance, workers' compensation insurance, sick leave pay; substantiated Project cost increases for specific insurance (including, without limitation, Builder's Risk Insurance and Builder's Risk Installation Floater) or bond premiums; rental cost of equipment, and machinery required for execution of the Work; and the additional costs of field personnel directly attributable to the Work; travel expense reimbursement only if specifically authorized and only to the extent allowable under the County Contractor Travel Reimbursement Policy, hereby incorporated by reference.

FINAL COMPLETION, means the final completion of all requirements under the Contract, including Contract Closeout as described in Section K but excluding Warranty Work as described in Section I.2, and the final payment and release of all retainage, if any.

FORCE MAJEURE, means an act, event or occurrence caused by fire, riot, war, acts of God, terrorism, nature, sovereign, or public enemy, strikes, freight embargoes or any other act, event or occurrence that is beyond the control of the party to the Contract who is asserting Force Majeure.

NOTICE TO PROCEED, means the official written notice from the Owner stating that the Contractor is to proceed with the Work defined in the Contract Documents.

OFFER, means a bid in connection with Instructions to Bidders or a proposal in connection with a Request for Proposals, or Solicitation Document to do the work stated in the Solicitation Document at the price quoted. May also be referenced as "Bid," "Quote," or "Proposal" based on the type of Solicitation Document.

OVERHEAD, means those items which may be included in the Contractor's markup (general and administrative expense and profit) and that shall not be charged as Direct Cost of the Work, including without limitation such Overhead expenses as wages or salary of personnel above the level of foreman (i.e., superintendents and project managers), labor rates and fringe benefits above the applicable prevailing wage and fringe benefit (if applicable, and if paid to or on behalf of the employee), Contractor's labor burden for fringe benefit if paid to the employee, expenses of Contractor's offices and supplies at the Project Site (e.g. job trailer) and at Contractor's principal place of business and including expenses of personnel staffing the Project Site office and Contractor's principal place of business, and Commercial General Liability Insurance and Automobile Liability Insurance.

OWNER, means, Clackamas County or any component unit thereof including Clackamas County Development Agency, Clackamas County Service District No. 1, Surface Water Management Agency of Clackamas County, Tri-City Service District, Water Environment Services, North

Clackamas Parks and Recreation District, Clackamas County Extension & 4-H Service District, Library Service District of Clackamas County, Enhanced Law Enforcement District, and Clackamas County Service District No. 5. Owner may elect, by written notice to Contractor, to delegate certain duties to more than one agent, including without limitation, to an Architect/Engineer. However, nothing in these County General Conditions is intended to abrogate the separate design professional responsibilities of Architects under ORS Chapter 671 or of Engineers under ORS Chapter 672.

PERSON, means a natural person or entity doing business as a sole proprietorship, a partnership, a joint venture, a corporation, a limited liability company or partnership, a nonprofit, a trust, or any other entity possessing the legal capacity to contract.

PLANS, means the drawings which show the location, type, dimensions, and details of the Work to be done under the Contract.

PRODUCT DATA, means illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the Contractor to illustrate materials or equipment for some portion of the Work.

PROJECT, means the total undertaking to be accomplished for Owner by architects/engineers, contractors, and other others, including planning, study, design, construction, testing, commissioning, start-up, of which the Work to be performed under the Contract Documents is a part.

PROJECT SITE, means the specific real property on which the Work is to be performed, including designated contiguous staging areas, that is identified in the Plans, Specifications and Drawings.

PUNCH LIST, means the list of Work yet to be completed or deficiencies which need to be corrected in order to achieve Final Completion of the Contract.

RECORD DOCUMENT, means the as-built Plans, Specifications, testing and inspection records, product data, samples, manufacturer and distributor/supplier warranties evidencing transfer of ownership to Owner, operational and maintenance manuals, shop drawings, correspondence, certificate(s) of occupancy, and other documents listed in Subsection B.9.1 of these County General Conditions, recording all Services performed.

SAMPLES, means physical examples which illustrate materials, equipment or workmanship and establish standards by which the Work will be judged.

SHOP DRAWINGS, means drawings, diagrams, schedules and other data specially prepared for the Work by the Contractor or a Subcontractor (including any subsubcontractor), manufacturer, supplier, or distributor to illustrate some portion of the Work.

SOLICITATION DOCUMENT, means an Invitation to Bid, Request for Proposals, Request for Quotes, or other written document issued by Owner that outlines the required Specifications necessary to submit an Offer.

SPECIFICATION, means any description of the physical or functional characteristics of the Work, or of the nature of a supply, service or construction item included in the Solicitation Document. Specifications may include a description of any requirement for inspecting, testing or preparing a supply, service or construction item for delivery and the quantities or qualities of materials to be furnished under the Contract. Specifications generally will state the results or products to be obtained and may, on occasion, describe the method and manner of doing the Work to be performed. Specifications may be incorporated by reference and/or may be attached to the Contract.

SUBCONTRACTOR, means a Person having a direct contract with the Contractor, or another Subcontractor of any tier, to perform one or more items of the Work.

SUBSTANTIAL COMPLETION, means the date when the Owner accepts in writing the construction, alteration or repair constituting the Work or any designated portion thereof as having reached that state of completion when it may be used or occupied for its intended purpose. Substantial Completion of facilities with operating systems occurs only after thirty (30) continuous Days of successful, trouble-free operation of the operating systems as provided in Section K.3.2.

SUBSTITUTIONS, means items that in function, performance, reliability, quality, and general configuration are the same or better than the product(s) specified. Substitutions also means the performance of the Work by a labor force other than what is submitted in the Offer.

SUPPLEMENTAL GENERAL CONDITIONS, means those conditions that remove from, add to, or modify these County General Conditions. Public Improvement Supplemental General Conditions may be included in the Solicitation Document or may be a separate attachment to the Contract.

UNAVOIDABLE DELAYS, mean delays other than Avoidable Delays that are: (a) to the extent caused by any actions of the Owner, or any other employee or agent of the Owner, or by a separate contractor employed by the Owner; (b) to the extent caused by any Project Site conditions which differ materially from the conditions that would normally be expected to exist and inherent to the construction activities defined in the Contract Documents; or (c) to the extent caused by Force Majeure acts, or events or occurrences.

WORK, means the furnishing of all materials, equipment, labor, transportation, services, incidentals, those permits and regulatory approvals not provided by the owner necessary to successfully complete any individual item or the entire Contract and the carrying out of duties and obligations imposed by the Contract Documents for the Project.

A.2 SCOPE OF WORK

The Work contemplated under the Contract includes all labor, materials, transportation, equipment and services for, and incidental to, the completion of all work in connection with the Project described in the Contract Documents. The Contractor shall perform all Work necessary so that the Project can be legally occupied and fully used for the intended use as set forth in the Contract Documents.

A.3 INTERPRETATION OF CONTRACT DOCUMENTS

A.3.1 Unless otherwise specifically defined in the Contract Documents, words which have well-known technical meanings or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings. Contract Documents are intended to be complementary. Whatever is called for in one, is interpreted to be called for in all. However, in the event of conflicts or discrepancies among the Contract Documents, interpretations will be based on the following descending order of precedence:

- (a) The Contract and any amendments thereto, including Change Orders, with those of later date having precedence over those of an earlier date;
- (b) The Supplemental General Conditions;
- (c) County General Conditions;
- (d) Plans and Specifications;
- (e) The Solicitation Document, and any addenda thereto.

A.3.2 In the case of an inconsistency between Plans and Specifications or within either document not clarified by addendum, the better quality or greater quantity of Work shall be provided in accordance

with the Owner's interpretation in writing as determined in Owners sole discretion.

A.3.3 If the Contractor finds discrepancies in, or omissions from the Contract Documents, or if the Contractor is in doubt as to their meaning, the Contractor shall at once notify the Owner. Matters concerning and interpretation of requirements of the Contract Documents will be decided by the Owner in the Owner's sole discretion, who may delegate that duty in some instances to the Architect/Engineer. Responses to Contractor's requests for interpretation of Contract Documents will be made in writing by Owner (or the Architect/Engineer) within any time limits agreed upon or otherwise with reasonable promptness. Contractor shall not proceed without direction in writing from the Owner (or Architect/Engineer).

A.3.4 References to standard specifications, manuals, codes of any technical society, organization or association, to the laws or regulations of any governmental authority, whether such reference be specific or by implication, shall mean the latest standard specification, manual, code, laws or regulations in effect in the jurisdiction where the Project Site is located on the first published date of the Solicitation Document, except as may be otherwise specifically stated.

A.4 EXAMINATION OF PLANS, SPECIFICATIONS, AND PROJECT SITE

A.4.1 It is understood that the Contractor, before submitting an Offer, has made a careful examination of the Contract Documents; has become fully informed as to the quality and quantity of materials and the character of the Work required; and has made a careful examination of the location and conditions of the Work and the sources of supply for materials. The Owner will in no case be responsible for any loss or for any unanticipated costs that may be suffered by the Contractor as a result of the Contractor's failure to acquire full information in advance in regard to all conditions pertaining to the Work. No oral agreement or conversation with any officer, agent, or personnel of the Owner, or with the Architect/Engineer either before or after the execution of the Contract, shall affect or modify any of the terms or obligations herein contained. Contractor shall at all times be responsible for all utility locates regardless of the ownership of such utility infrastructure or service.

A.4.2 Should the Plans or Specifications fail to particularly describe the materials, kind of goods, or details of construction of any aspect of the Work, Contractor shall have the duty to make inquiry of the Owner and Architect/Engineer as to what is required prior to performance of the Work. Absent Specifications to the contrary, the materials or processes that would normally be used to produce first quality finished Work shall be considered a part of the Contract requirements.

A.4.3 Any design errors or omissions noted by the Contractor shall be reported promptly to the Owner, including without limitation, any nonconformity with Applicable Laws.

A.4.4 If the Contractor believes that adjustments to cost or Contract Time are involved because of clarifications or instructions issued by the Owner (or Architect/Engineer) in response to the Contractor's notices or requests for information, the Contractor must submit a written request to the Owner, setting forth the nature and specific extent of the request, including all time and cost impacts against the Contract as soon as possible, but no later than thirty (30) Days after receipt by Contractor of the clarifications or instructions issued. If the Owner denies Contractor's request for additional compensation, additional Contract Time, or other relief that Contractor believes results from the clarifications or instructions, the Contractor may proceed to file a Claim under Section D.3, Claims Review Process. If the Contractor fails to

perform the obligations of Sections A.4.1 to A.4.3, the Contractor shall pay such costs and damages to the Owner as would have been avoided if the Contractor had performed such obligations.

A.4.5 If the Contractor believes that adjustments to cost or Contract Time are involved because of an Unavoidable Delay caused by differing Project Site conditions, the Contractor shall notify the Owner immediately of differing Project Site conditions before the area has been disturbed. The Owner will investigate the area and make a determination as to whether or not the conditions differ materially from either the conditions stated in the Contract Documents or those which could reasonably be expected in execution of this particular Contract. If Contractor and the Owner agrees that a differing Project Site condition exists, any adjustment to compensation or Contract Time will be determined based on the process set forth in Section D.2.2 for adjustments to or deletions from Work. If the Owner disagrees that a differing Project Site condition exists and denies Contractor's request for additional compensation or Contract Time, Contractor may proceed to file a Claim under Section D.3, Claims Review Process.

A.5 INDEPENDENT CONTRACTOR STATUS

The service or services to be performed under the Contract are those of an independent contractor as defined in ORS 670.600. Contractor represents and warrants that it is not an officer, employee or agent of the Owner as those terms are used in ORS 30.265.

A.6 RETIREMENT SYSTEM STATUS AND TAXES

Contractor represents and warrants that it is not a contributing member of the Public Employees' Retirement System and will be responsible for any federal or state taxes applicable to payment received under the Contract. Contractor will not be eligible for any benefits from these Contract payments of federal Social Security, employment insurance, workers' compensation or the Public Employees' Retirement System, except as a self-employed individual. Unless the Contractor is subject to backup withholding, Owner will not withhold from such payments any amount(s) to cover Contractor's federal or state tax obligations.

A.7 GOVERNMENT EMPLOYMENT STATUS

A.7.1 If this payment is to be charged against federal funds, Contractor represents and warrants that it is not currently employed by the Federal Government. This does not preclude the Contractor from holding another contract with the Federal Government.

SECTION B **ADMINISTRATION OF THE CONTRACT**

B.1 OWNER'S ADMINISTRATION OF THE CONTRACT

B.1.1 The Owner shall administer the Contract as described in the Contract Documents throughout the term of the Contract, including the one-year period for correction of Work. The Owner will act as provided in the Contract Documents, unless modified in writing in accordance with other provisions of the Contract. In performing these tasks, the Owner may rely on the Architect/Engineer or other agents to perform some or all of these tasks.

B.1.2 The Owner may visit the Project Site at intervals appropriate to the stage of the Contractor's operations (1) to become generally familiar with and to keep the Owner informed about the progress and quality of the portion of the Work completed, (2) to endeavor to guard the Owner against defects and deficiencies in the Work, and (3) to determine in general if Work is being performed in a manner indicating that the Work, when fully completed, will be in accordance with the Contract Documents. The Owner will not make exhaustive or continuous on-Project Site inspections to check the quality or quantity of the Work. Unless otherwise required in a Change Order, the Owner will neither have control over or charge

of, nor be responsible for the construction means, methods, techniques, sequences or procedures, or for the safety precautions and programs in connection with the Work.

- B.1.3 Except as otherwise provided in the Contract Documents or when direct communications have been specifically authorized, the Owner and Contractor shall communicate with each other within a reasonable time frame about matters arising out of or relating to the Contract. Communications by and with the Architect/Engineer's consultants shall be through the Architect/Engineer. Communications by and with Subcontractors and material suppliers shall be through the Contractor. Communications by and with separate contractors shall be through the Owner.
- B.1.4 Based upon the Architect/Engineer's evaluations of the Contractor's Application for Payment, or unless otherwise stipulated by the Owner, the Architect/Engineer will review and certify the amounts due the Contractor and will issue Certificates for Payment in such amounts.

B.2 CONTRACTOR'S MEANS AND METHODS; MITIGATION OF IMPACTS

- B.2.1 The Contractor shall supervise and direct the Work, using the Contractor's best skill and attention. The Contractor shall be solely responsible for and have control over construction means, methods, techniques, sequences and procedures and for coordinating all portions of the Work under the Contract, unless the Contract Documents give other specific instructions concerning these matters. If the Contract Documents give specific instructions concerning construction means, methods, techniques, sequences or procedures, the Contractor shall evaluate the Project Site safety thereof and, except as stated below, shall be fully and solely responsible for the Project Site safety of such means, methods, techniques, sequences or procedures.
- B.2.2 The Contractor is responsible to protect and maintain the Work during the course of construction and to mitigate any adverse impacts to the Project, including those caused by authorized changes, which may affect cost, schedule, or quality.
- B.2.3 The Contractor is responsible for the actions of all its personnel, laborers, suppliers, agents, and Subcontractors on the Project. The Contractor shall enforce strict discipline and good order among Contractor's employees and other persons carrying out the Work. The Contractor shall not permit employment of persons who are unfit or unskilled for the tasks assigned to them.

B.3 MATERIALS AND WORKMANSHIP

- B.3.1 The intent of the Contract Documents is to provide for the construction and completion of every detail of the Work described. All Work shall be performed in a professional manner and, unless the means or methods of performing a task are specified elsewhere in the Contract Documents, Contractor shall employ methods that are generally accepted and used by the industry, in accordance with industry standards.
- B.3.2 The Contractor is responsible to perform the Work as required by the Contract Documents. Defective Work shall be corrected at the Contractor's sole expense and within a reasonable time frame.
- B.3.3 Work done and materials furnished may be subject to inspection and/or observation and testing by the Owner to determine if they conform to the Contract Documents. Inspection of the Work by the Owner does not relieve the Contractor of responsibility for the Work in accordance with the Contract Documents.
- B.3.4 Contractor shall furnish adequate facilities, as required, for the Owner to have safe access to the Work including without limitation walkways, railings, ladders, tunnels, and platforms.

Producers, suppliers, and fabricators shall also provide proper facilities and access to their facilities.

- B.3.5 The Contractor shall furnish Samples of materials for testing by the Owner and include the cost of the Samples in the Contract Price.

B.4 PERMITS

Contractor shall obtain and pay for all necessary permits, licenses and fees, except for those specifically excluded in the Supplemental General Conditions, as required for the project. Contractor shall be responsible for all violations of the law. Contractor shall give all requisite notices to public authorities.

B.5 COMPLIANCE WITH GOVERNMENT REGULATIONS

- B.5.1 Contractor shall comply with Applicable Laws, as amended pertaining to the Work and the Contract. Failure to comply with such requirements shall constitute a breach of Contract and shall be grounds for Contract termination. Without limiting the generality of the foregoing, Contractor expressly agrees to comply with the following, as applicable and as may be amended from time to time: (i) Title VI and VII of Civil Rights Act of 1964, as amended; (ii) Section 503 and 504 of the Rehabilitation Act of 1973, as amended; (iii) the Health Insurance Portability and Accountability Act of 1996; (iv) the Americans with Disabilities Act of 1990, as amended; (v) ORS Chapter 659A; as amended; (vi) all regulations and administrative rules established pursuant to any applicable laws; and (vii) all other applicable requirements of federal, state, county or other local government entity statutes, rules and regulations.
- B.5.2 Contractor shall comply with all applicable requirements of federal and state civil rights and rehabilitation statutes, rules and regulations, and
- (a) Contractor shall not discriminate against Disadvantaged, Minority, Women or Emerging Small Business enterprises, as those terms are defined in ORS 200.005, or a business enterprise that is owned or controlled by or that employs a disabled veteran, as that term is defined in ORS 408.225, in the awarding of subcontracts.
 - (b) Contractor shall maintain, in current and valid form, all licenses and certificates required by Applicable Laws or the Contract when performing the Work.
- B.5.3 Contractor shall certify that it shall not accept a bid from Subcontractors to perform Work unless such Subcontractors are registered with the Construction Contractors Board in accordance with ORS 701.021 at the time they submit their bids to the Contractor.
- B.5.4 Contractor shall certify that each landscape contracting business, as defined in ORS 671.520(2), performing Work under the Contract holds a valid landscape construction professional license issued pursuant to ORS 671.560.
- B.5.5 The following notice is applicable to Contractors who perform excavation Work. ATTENTION: Oregon law requires you to follow rules adopted by the Oregon Utility Notification Center. Those rules are set forth in OAR 952-001-0010 through OAR 952-001-0090. You may obtain copies of the rules by calling the center at (877) 668-4001.
- B.5.6 Failure to comply with any or all of the requirements of B.5.1 through B.5.5 shall be a material breach of Contract and constitute grounds for Contract termination. Damages or costs resulting from such noncompliance shall be the responsibility of Contractor.

B.6 SUPERINTENDENCE

Contractor shall keep on the Project Site, during the progress of the Work, a competent superintendent and any necessary assistants who shall be satisfactory to the Owner and who shall represent the Contractor on the Project Site. Directions given to the superintendent by the Owner shall be confirmed in writing to the Contractor.

B.7 INSPECTION

B.7.1 Owner shall have access to the Work at all times.

B.7.2 Inspection of the Work will be made by the Owner at its discretion. The Owner will have authority to reject Work that does not conform to the Contract Documents in the Owner's sole discretion. Any Work found to be not in conformance with the Contract Documents, in the discretion of the Owner, shall be removed and replaced at the Contractor's expense.

B.7.3 Contractor shall make or obtain at the appropriate time all tests, inspections and approvals of portions of the Work required by the Contract Documents or by Applicable Laws or orders of public authorities having jurisdiction. Unless otherwise provided, the Contractor shall make arrangements for such tests, inspections and approvals with an independent testing laboratory or entity acceptable to the Owner, or with the appropriate public authority, and shall bear all related costs of tests, inspections and approvals. Tests or inspections conducted pursuant to the Contract Documents shall be made promptly to avoid unreasonable delay in the Work. The Contractor shall give the Owner timely notice of when and where tests and inspections are to be made so that the Owner may be present for such procedures. Required certificates of testing, inspection or approval shall, unless otherwise required by the Contract Documents, be secured by the Contractor and promptly delivered to the Owner.

B.7.4 As required by the Contract Documents, Work done or material used without required inspection or testing and/or without providing timely notice to the Owner may be ordered removed at the Contractor's expense.

B.7.5 If directed to do so by Owner or other permitting authority any time before the Work is accepted, the Contractor shall uncover portions of the completed Work for inspection. After inspection, the Contractor shall restore such portions of Work to the standard required by the Contract. If the Work uncovered is unacceptable or was done without required testing or inspection or sufficient notice to the Owner, the uncovering and restoration shall be done at the Contractor's expense. If the Work uncovered is acceptable and was done with sufficient notice to the Owner, the uncovering and restoration will be paid for pursuant to a Change Order.

B.7.6 If any testing or inspection reveals failure of the portions of the Work to comply with requirements established by the Contract Documents, all costs made necessary by such failure, including those of repeated procedures and compensation for the Owner's and Architect/Engineer's services and expenses, shall be at the Contractor's expense.

B.7.7 In Owner's sole discretion, it may authorize other interested parties to inspect the Work affecting their interests or property. Their right to inspect shall not make them a party to the Contract and shall not interfere with the rights of the parties of the Contract. Instructions or orders of such parties shall be transmitted to the Contractor, through the Owner.

B.11 SUBCONTRACTS AND ASSIGNMENT

B.11.1 Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound by the terms and conditions of these General Conditions and

Supplemental General Conditions, and to assume toward the Contractor all of the obligations and responsibilities which the Contractor assumes toward the Owner thereunder, unless (1) the same are clearly inapplicable to the subcontract at issue because of legal requirements or industry practices, or (2) specific exceptions are requested by Contractor and approved in writing by Owner. Where appropriate, Contractor shall require each Subcontractor to enter into similar agreements with sub-subcontractors at any level.

B.11.2 At Owner's request, Contractor shall submit to Owner prior to their execution either Contractor's form of subcontract, or the subcontract to be executed with any particular Subcontractor. If Owner disapproves such form, Contractor shall not execute the form until the matters disapproved are resolved to Owner's satisfaction. Owner's review, comment upon or approval of any such form shall not relieve Contractor of its obligations under this Agreement or be deemed a waiver of such obligations of Contractor.

B.11.3 Contractor shall not assign, sell, or transfer its rights, or delegate its responsibilities under the Contract, in whole or in part, without the prior written approval of the Owner. No such written approval shall relieve Contractor of any obligations of the Contract, and any transferee shall be considered the agent of the Contractor and bound to perform in accordance with the Contract Documents. Contractor shall remain liable as between the original parties to the Contract as if no assignment had occurred.

B.13 OWNER'S RIGHT TO DO WORK

Owner reserves the right to perform other or additional work at or near the Project Site with other agents than those of the Contractor. If such work takes place within or next to the Project Site, Contractor shall coordinate work with the other contractors or agents, cooperate with all other contractors or forces, carry out the Work in a way that will minimize interference and delay for all agents involved, place and dispose of materials being used so as not to interfere with the operations of another, and join the Work with the work of the others in an acceptable manner and perform it in proper sequence to that of the others. The Owner will resolve any disagreements that may arise between or among Contractor and the other contractors over the method or order of doing all work (including the Work). In case of unavoidable interference, the Owner will establish work priority (including the Work) in the Owner's sole discretion.

B.14 OTHER CONTRACTS

In all cases and at any time, the Owner has the right to execute other contracts related to or unrelated to the Work of the Contract. The Contractor of the Contract shall fully cooperate with any and all other contractors without additional cost to the Owner in the manner described in Section B.13.

B.17 ALLOWANCES

B.17.1 The Contractor shall include in the Contract Price all allowances stated in the Contract Documents. Items covered by allowances shall be supplied for such amounts and by such persons or entities as the Owner may direct.

B.17.2 Unless otherwise provided in the Contract Documents:

- (a) when finally reconciled, allowances shall cover the cost of the Contractor's materials and equipment delivered at the Project Site and all required taxes, less applicable trade discounts;
- (b) Contractor's costs for unloading and handling at the Project Site, labor, installation costs, Overhead, profit and other

expenses contemplated for stated allowance amounts shall be included in the Contract Price but not in the allowances;

- (c) whenever costs are more than or less than allowances, the Contract Price shall be adjusted accordingly by Change Order. The amount of the Change Order shall reflect (i) the difference between actual costs and the allowances under Section B.17.2(a) and (ii) changes in Contractor's costs under Section B.17.2(b);
- (d) Unless Owner requests otherwise, Contractor shall provide to Owner a proposed fixed price for any allowance work prior to its performance.

B.18 SUBMITTALS, SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

- B.18.1 The Contractor shall prepare and keep current, for the Architect's/Engineer's approval (or for the approval of Owner if approval authority has not been delegated to the Architect/Engineer), a schedule and list of submittals which is coordinated with the Contractor's construction schedule and allows the Architect/Engineer reasonable time to review submittals. Owner reserves the right to finally approve the schedule and list of submittals. Submittals include, without limitation, Shop Drawings, Product Data, and Samples.
- B.18.2 Shop Drawings, Product Data, Samples and similar submittals are not Contract Documents. The purpose of their submittal is to demonstrate for those portions of the Work for which submittals are required by the Contract Documents the way by which the Contractor proposes to conform to the information given and the design concept expressed in the Contract Documents. Review of submittals by the Architect/Engineer is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, or for approval of safety precautions or, unless otherwise specifically stated by the Architect/Engineer, of any construction means, methods, techniques, sequences or procedures, all of which remain the responsibility of the Contractor as required by the Contract Documents. The Architect/Engineer's review of the Contractor's submittals shall not relieve the Contractor of its obligations under the Contract Documents. The Architect/Engineer's approval of a specific item shall not indicate approval of an assembly of which the item is a component. Informational submittals upon which the Architect/Engineer is not expected to take responsive action may be so identified in the Contract Documents. Submittals which are not required by the Contract Documents may be returned by the Architect/Engineer without action.
- B.18.3 The Contractor shall review for compliance with the Contract Documents, approve and submit to the Architect/Engineer Shop Drawings, Product Data, Samples and similar submittals required by the Contract Documents with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of the Owner or of separate contractors. Submittals which are not marked as reviewed for compliance with the Contract Documents and approved by the Contractor may be returned by the Architect/Engineer without action.
- B.18.4 By approving and submitting Shop Drawings, Product Data, Samples and similar submittals, the Contractor represents that the Contractor has determined and verified materials, field measurements and field construction criteria related thereto, or will do so, and has checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents.

B.18.5 The Contractor shall perform no portion of the Work for which the Contract Documents require submittal and review of Shop Drawings, Product Data, Samples or similar submittals until the respective submittal has been approved by the Architect/Engineer.

B.18.6 The Work shall be in accordance with approved submittals except that the Contractor shall not be relieved of responsibility for deviations from requirements of the Contract Documents by the Architect/Engineer's review or approval of Shop Drawings, Product Data, Samples or similar submittals unless the Contractor has specifically informed the Architect/Engineer in writing of such deviation at the time of submittal and (i) the Architect/Engineer has given written approval to the specific deviation as a minor change in the Work, or (ii) a Change Order has been executed by Owner authorizing the deviation. The Contractor shall not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, Samples or similar submittals by the Architect/Engineer's review or approval thereof.

B.18.7 In the event that Owner elects not to have the obligations and duties described under this Section B.18 performed by the Architect/Engineer, or in the event no Architect/Engineer is employed by Owner on the Project, all obligations and duties assigned to the Architect/Engineer hereunder shall be performed by the Owner.

B.19 SUBSTITUTIONS

The Contractor may make Substitutions only with the written consent of the Owner, after evaluation by the Owner and only in accordance with a Change Order. Substitutions shall be subject to the requirements of the Solicitation Document. By making requests for Substitutions, the Contractor represents that the Contractor has personally investigated the proposed substitute product; represents that the Contractor will provide the same warranty for the Substitution that the Contractor would for the product originally specified unless approved otherwise; certifies that the cost data presented is complete and includes all related costs under the Contract including redesign costs, and waives all claims for additional costs related to the Substitution which subsequently become apparent; and will coordinate the installation of the accepted Substitution, making such changes as may be required for the Work to be completed in all respects.

B.20 USE OF PLANS AND SPECIFICATIONS

Plans, Specifications and related Contract Documents furnished to Contractor by Owner or Owner's Architect/Engineer shall be used solely for the performance of the Work under the Contract. Contractor and its Subcontractors and suppliers are authorized to use and reproduce applicable portions of such documents appropriate to the execution of the Work, but shall not claim any ownership or other interest in them beyond the scope of the Contract, and no such interest shall attach. Unless otherwise indicated, all common law, statutory and other reserved rights, in addition to copyrights, are retained by Owner.

SECTION C **WAGES AND LABOR**

C.1 PREVAILING WAGE RATES ON PUBLIC WORKS

Contractor shall comply fully with the provisions of ORS 279C.800 through 279C.870. Pursuant to ORS 279C.830(1)(d), Contractor shall pay workers at not less than the specified minimum hourly rate of wage, and shall include that requirement in all subcontracts. If the Work is subject to both the state prevailing wage rate law and the federal Davis-Bacon Act, Contractor shall pay the higher of the applicable state or federal prevailing rate of wage. Contractor shall provide written notice to all workers of the number of hours per day and days per week such workers may be required to work.

C.2 PAYROLL CERTIFICATION AND FEE REQUIREMENTS

- C.2.1 In accordance with ORS 279C.845, the Contractor and every Subcontractor shall submit written certified statements to the Owner on the form prescribed by the Commissioner of the Bureau of Labor and Industries ("BOLI"), certifying the hourly rate of wage paid each worker which the Contractor or the Subcontractor has employed on the Project and further certifying that no worker employed on the Project has been paid less than the prevailing rate of wage or less than the minimum hourly rate of wage specified in the Contract, which certificate and statement shall be verified by the oath of the Contractor or the Subcontractor that the Contractor or Subcontractor has read the certified statement, that the Contractor or Subcontractor knows the contents of the certified statement, and, that to the Contractor's or Subcontractor's best knowledge and belief, the certified statement is true. The certified statements shall set out accurately and completely the payroll records for the prior week, including the name and address of each worker, the worker's correct classification, rate of pay, daily and weekly number of hours worked, deductions made, and actual wages paid. Certified statements for each week during which the Contractor or Subcontractor has employed a worker on the Project shall be submitted once a month, by the fifth (5th) business day of the following month. The Contractor and Subcontractors shall preserve the certified statements for a period of ten (10) years from the date of completion of the Contract.
- C.2.2 Pursuant to ORS 279C.845(7), the Owner shall retain 25 percent of any amount earned by the Contractor on the Project until the Contractor has filed the certified statements required by section C.2.1. The Owner shall pay to the Contractor the amount retained under this subsection within 14 days after the Contractor files the required certified statements, regardless of whether a Subcontractor has failed to file certified statements.
- C.2.3 Pursuant to ORS 279C.845(8), the Contractor shall retain 25 percent of any amount earned by a first-tier Subcontractor on this Project until the first-tier Subcontractor has filed with the Owner the certified statements required by C.2.1. Before paying any amount retained under this subsection, the Contractor shall verify that the first-tier Subcontractor has filed the certified statement. Within 14 days after the first-tier Subcontractor files the required certified statement the Contractor shall pay the first-tier Subcontractor any amount retained under this subsection.
- C.2.4 In accordance with statutory requirements and administrative rules promulgated by the Commissioner of the Bureau of Labor and Industries, the fee required by ORS 279C.825(1) will be paid by Owner to the Commissioner.

C.3 PROMPT PAYMENT AND CONTRACT CONDITIONS

- C.3.1 As a condition to Owner's performance hereunder, the Contractor shall:
- C.3.1.1 Make payment promptly, as due, to all persons supplying to Contractor labor or materials for the prosecution of the Work provided for in the Contract.
- C.3.1.2 Pay all contributions or amounts due the State Industrial Accident Fund or successor program from such Contractor or Subcontractor incurred in the performance of the Contract.
- C.3.1.3 Not permit any lien or claim to be filed or prosecuted against the Owner on account of any labor or material furnished. Contractor will not assign any claims that Contractor has against Owner, or

assign any sums due by Owner, to Subcontractors, suppliers, or manufacturers, and will not make any agreement or act in any way to give Subcontractors a claim or standing to make a claim against the Owner.

- C.3.1.4 Pay to the Department of Revenue all sums withheld from employees pursuant to ORS 316.167.
- C.3.2 As a condition to Owner's performance hereunder, if Contractor fails, neglects or refuses to make prompt payment of any claim for labor or services furnished to the Contractor of a Subcontractor by any person in connection with the Project as such claim becomes due, the proper officer(s) representing the Owner may pay the claim and charge the amount of the payment against funds due or to become due Contractor under the Contract. Payment of claims in this manner shall not relieve the Contractor or the Contractor's surety from obligation with respect to any unpaid claims.
- C.3.3 Contractor shall include in each subcontract for property or services entered into by the Contractor and a first-tier subcontractor, including a material supplier, for the purpose of performing a construction contract, a payment clause that obligates the Contractor to pay the first-tier Subcontractor for satisfactory performance under its subcontract within ten (10) Days out of such amounts as are paid to the Contractor by the Owner under such contract.
- C.3.4 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. Contractor shall ensure that each of its Subcontractors complies with these requirements.

C.4 PAYMENT FOR MEDICAL CARE

As a condition to Owner's performance hereunder, Contractor shall promptly, as due, make payment to any person, co-partnership, association or corporation furnishing medical, surgical, and hospital care or other needed care and attention, incident to sickness or injury, to the employees of the Contractor, of all sums of which the Contractor agrees to pay for the services and all moneys and sums that the Contractor collected or deducted from the wages of employees under any law, contract or agreement for the purpose of providing or paying for the services.

C.5 HOURS OF LABOR

As a condition to Owner's performance hereunder, no person shall be employed to perform Work under the Contract for more than ten (10) hours in any one day or forty (40) hours in any one week, except in cases of necessity, emergency or where public policy absolutely requires it. In such instances, Contractor shall pay the employee at least time and a half pay:

- (a) For all overtime in excess of eight (8) hours a day or forty (40) hours in any one week when the work week is five consecutive Days, Monday through Friday; or
- (b) For all overtime in excess of ten (10) hours a day or forty (40) hours in any one week when the work week is four consecutive Days, Monday through Friday; and
- (c) For all Work performed on Saturday and on any legal holiday specified in ORS 279C.540.

This Section C.5 will not apply to Contractor's Work under the Contract to the extent Contractor is currently a party to a collective bargaining agreement with any labor organization.

This Section C.5 shall not excuse Contractor from completion of the Work within the time required under the Contract.

SECTION D

CHANGES IN THE WORK

D.1 CHANGES IN WORK

D.1.1 The terms of the Contract shall not be waived, altered, modified, supplemented or amended in any manner whatsoever, without prior written agreement and then only after any necessary approvals have been obtained. A Change Order is required to modify the Contract, which shall not be effective until its execution by the parties to the Contract and all approvals required by public contracting laws have been obtained.

D.1.2 It is mutually agreed that changes in Plans, quantities, or details of construction may be necessary or desirable during the course of construction. Within the general scope of the Contract, the Owner may at any time, without notice to the sureties and without impairing the Contract, require changes it deems necessary or desirable within the scope of this Project and consistent with this Section D.1. All changes to the Work shall be documented and Change Orders shall be executed under the conditions of the Contract Documents. Such changes may include, but are not limited to:

- (a) Modification of specifications and design.
- (b) Increases or decreases in quantities.
- (c) Increases or decreases to the amount of Work.
- (d) Addition or elimination of any Work item.
- (e) Change in the duration of the Project.
- (f) Acceleration or delay in performance of Work.
- (g) Deductive changes.

Deductive changes are those that reduce the scope of the Work, and shall be made by mutual agreement whenever feasible. In cases of suspension or partial termination under Section J, Owner reserves the right to unilaterally impose a deductive change and to self-perform such Work, for which the provisions of Section B.13 (Owner's Right to Do Work) shall then apply. Adjustments in compensation shall be made under Section D.1.3, in which costs for deductive changes shall be based upon a Direct Costs adjustment together with the related percentage markup specified for profit, Overhead and other indirect costs, unless otherwise agreed to by Owner.

D.1.3 The Owner and Contractor agree that adjustments to or deletions from the Work shall be administered and compensated according to the following:

- (a) **Unit Pricing:** Unit pricing may be utilized at the Owner's option when unit prices or solicitation alternates were provided that established the cost for adjustments to Work, and a binding obligation exists under the Contract on the parties covering the terms and conditions of the adjustment to Work.
- (b) **Fixed Fee:** If the Owner elects not to utilize unit pricing, or in the event that unit pricing is not available or appropriate, fixed pricing may be used for adjustments to or deletions from the Work. In fixed pricing, the basis of payments or total price shall be agreed upon in writing between the parties to the Contract, and shall be established before the Work is done whenever feasible. Notwithstanding the foregoing, the mark-ups set forth in Section D.1.3(c) shall be utilized in establishing fixed pricing, and such mark-ups shall not be exceeded. Cost and price data relating to adjustments to or deletions from the Work shall be supplied by Contractor to Owner upon request, but Owner shall be under no obligation to make such requests.

- (c) **Time and Material:** In the event that unit pricing and fixed pricing are not utilized, then adjustments to or deletions from the Work shall be performed on a cost reimbursement basis for Direct Costs. Such Work shall be compensated on the basis of the actual, reasonable and allowable cost of labor, equipment, and material furnished on the Work performed. The Contractor or Subcontractor who performs the Work shall be allowed to add up to ten percent (10%) markup to the Direct Costs as full compensation for profit, Overhead and other indirect costs for Work performed with the Contractor's or Subcontractor's own agents

Each ascending tier Subcontractor or the Contractor that did not perform the Work, will be allowed to add up to five percent (5%) supplemental markup on the Direct Costs of the Work (but not the above allowable markups) covered by a Change Order. No additional markup shall be permitted for any third tier or greater descending Subcontractor.

Example: \$20,000 of Direct Costs Work performed by a 2nd Tier Subcontractor

	Markup	Allowed Total Fee Plus Markup
General Contractor	5%	\$1,000.00
1 st Tier Sub Contractor	5%	\$1,000.00
2 nd Tier Sub Contractor	10%	\$22,000.00

- (d) Payments made to the Contractor shall be complete compensation for Overhead, profit, and all costs that were incurred by the Contractor or by other agents furnished by the Contractor, including Subcontractors, for adjustments to or deletions from the Work pursuant to a Change Order. Owner may establish a maximum cost for additional Work under this Section D.1.3, which shall not be exceeded for reimbursement without additional written authorization from Owner in the form of a Change Order. Contractor shall not be required to complete such additional Work without additional authorization.

D.1.4 Any necessary adjustment of Contract Time that may be required as a result of adjustments to or deletions from the Work must be agreed upon by the parties before the start of the revised Work unless Owner authorizes Contractor to start the revised Work before agreement on Contract Time adjustment.

Contractor shall submit any request for additional compensation (and additional Contract Time if Contractor was authorized to start Work before an adjustment of Contract Time was approved) as soon as possible but no later than thirty (30) Days after receipt of Owner's request for additional Work. If Contractor's request for additional compensation or adjustment of Contract Time is not made within the thirty (30) Day time limit, Contractor's requests pertaining to that additional Work shall be barred. The thirty (30) Day time limit for making requests shall not be extended for any reason, including without limitation Contractor's claimed inability to determine the amount of additional compensation or adjustment of Contract Time, unless an extension is granted in writing by Owner. If the Owner denies Contractor's request for additional compensation or adjustment of Contract Time, Contractor may proceed to file a Claim under Section D.3, Claims Review Process. No other reimbursement, compensation, or payment will be made, except as provided in Section D.1.5 for impact claims.

D.1.5 If any adjustment to Work under Section D.1.3 causes an increase or decrease in the Contractor's cost of, or the Contract Time required for the performance of any other part of the Work under the Contract, Contractor shall submit a written request to the Owner, setting forth the nature and specific extent of the request, including all time and cost impacts against the Contract as soon as possible, but no later than thirty (30) Days after receipt of Owner's request for adjustments to or deletions from the Work by Contractor.

The thirty (30) Day time limit applies to claims of Subcontractors, suppliers, or manufacturers who may be affected by Owner's request for adjustments to or deletions from the Work and who request additional compensation or an extension of Contract Time to perform; Contractor has responsibility for contacting its Subcontractors, suppliers, or manufacturers within the thirty (30) Day time limit, and including their requests with Contractor's requests. If the request involves Work to be completed by Subcontractors, or materials to be furnished by suppliers or manufacturers, such requests shall be submitted to the Contractor in writing with full analysis and justification for the adjustments to compensation and Contract Time requested. The Contractor shall analyze and evaluate the merits of the requests submitted by Subcontractors, suppliers, and manufacturers to Contractor prior to including those requests and Contractor's analysis and evaluation of those requests with Contractor's requests for adjustments to compensation or Contract Time that Contractor submits to the Owner. Failure of Subcontractors, suppliers, manufacturers or others to submit their requests to Contractor for inclusion with Contractor's requests submitted to Owner within the time period and by the means described in this section shall constitute a waiver of these Subcontractor claims. The Owner will not consider direct requests or claims from Subcontractors, suppliers, manufacturers or others not a party to the Contract. The consideration of such requests and claims under this section does not give any Person, not a party to the Contract the right to bring a claim against Owner, whether in this claims process, in litigation, or in any dispute resolution process.

If the Owner denies the Contractor's request for adjustment to compensation or Contract Time, the Contractor may proceed to file a Claim under Section D.3, Claims Review Process.

- D.1.6 No request or Claim by the Contractor for additional costs or an adjustment of Contract Time shall be allowed if made after receipt of final payment application under the Contract. Final payment application must be made by Contractor within the time required under Section E.6.4.
- D.1.7 It is understood that changes in the Work are inherent in construction of this type. The number of changes, the scope of those changes, and the effect they have on the progress of the original Work cannot be defined at this time. The Contractor agrees that it will work in good faith with Owner to undertake changes, when agreed upon by execution of a Change Order. Each change will be evaluated for extension of Contract Time and increase or decrease in compensation based on its own merit.

D.2 DELAYS

- D.2.1 Contractor shall not be entitled to additional compensation or additional Contract Time for Avoidable Delays.
- D.2.2 In the event of Unavoidable Delays, Contractor may be entitled to the following:
 - (a) Contractor may be entitled to additional compensation or additional Contract Time, or both, for Unavoidable Delays described in Section D.2.1.2 (a) and (b).
 - (b) Contractor may be entitled to additional Contract Time for Unavoidable Delays described in Section D.2.1.2(c) and (d).

In the event of any requests for additional compensation or additional Contract Time, or both, as applicable, arising under this Section D.2.2 for Unavoidable Delays, other than requests for additional compensation or additional Contract Time for differing Project Site conditions for which a review process is established under Section A.4.5, Contractor shall submit a written notification of the delay to the Owner within two (2) Days of the occurrence of the cause of the delay. This written notification shall state the

cause of the potential delay, the Project components impacted by the delay, and the anticipated additional Contract Time extension or the additional compensation, or both, as applicable, resulting from the delay. Within seven (7) Days after the cause of the delay has been mitigated, or in no case more than thirty (30) Days after the initial written notification, the Contractor shall submit to the Owner, a complete and detailed request for additional compensation or additional Contract Time, or both, as applicable, resulting from the delay. If the Owner denies Contractor's request for additional compensation or adjustment of Contract Time, the Contractor may proceed to file a Claim under Section D.3, Claims Review Process.

If Contractor does not timely submit the notices required under this Section D.2, Contractor's Claim shall be barred.

D.3 CLAIMS REVIEW PROCESS

- D.3.1 All Contractor Claims shall be referred to the Owner for review. Contractor's Claims, including Claims for adjustments to compensation or Contract Time, shall be submitted in writing by Contractor to the Owner within five (5) Days after a denial of Contractor's initial request for an adjustment of Contract terms, payment of money, extension of Contract Time or other relief, provided that such initial request has been submitted in accordance with the requirements and within the time limits established in these County General Conditions. Within thirty (30) Days after the initial Claim, Owner shall receive from Contractor a complete and detailed description of the Claim (the "Detailed Notice") that includes all information required by Section D.3.2. Unless the Claim is made in accordance with these time requirements, it shall be barred.
- D.3.2 The Detailed Notice of the Claim shall be submitted in writing by Contractor and shall include all information, records and documentation necessary for the Owner to properly and completely evaluate the claim, including, but not limited to a detailed, factual statement of the basis of the Claim, pertinent dates, Contract provisions which support or allow the Claim, reference to or copies of any documents which support the Claim, the dollar value of the Claim, and the Contract Time adjustment requested for the Claim. If the Claim involves Work to be completed by Subcontractors, the Contractor will analyze and evaluate the merits of the Subcontractor claim prior to forwarding it and that analysis and evaluation to the Owner. The Owner will not consider direct claims from Subcontractors, suppliers, manufacturers, or others not a party to the Contract. Contractor agrees that it will make no agreement, covenant, or assignment, nor will it commit any other act that will permit or assist any Subcontractor, supplier, manufacturer, or other to directly or indirectly make a claim against Owner.
- D.3.3 The Owner, through the Architect/Engineer (or other employee or agent assigned by the Owner) will review all Claims and take one or more of the following preliminary actions within ten (10) Days of receipt of the Detailed Notice of a Claim: (1) request additional supporting information from the Contractor; (2) inform the Contractor and Owner in writing of the time required for adequate review and response; (3) reject the Claim in whole or in part and identify the reasons for rejection; (4) recommend approval of all or part of the Claim; (5) arrange a meeting with the Contractor for formal review of the Claim; or (6) propose an alternate resolution.
- D.3.4 Once the Engineer or Project Manager determines the Owner is in receipt of a properly submitted claim, the Engineer or Project Manager may arrange a meeting, as 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.

D.3.5 The Owner's decision, through the Architect/Engineer (or other employee or agent assigned by the Owner), shall be final and binding on the Contractor unless appealed by written notice to the Owner within fifteen (15) Days of receipt of the decision. The Contractor must present written documentation supporting the Claim within fifteen (15) Days of the notice of appeal. After receiving the appeal documentation, the Owner, through the appropriate department director, shall review the materials and render a decision within thirty (30) Days after receiving the appeal documents.

D.3.6 If, at any step in the claim decision or review process, the Contractor fails to promptly submit requested information or documentation that the Owner 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.

D.3.7 Both parties agree to exercise their best efforts in good faith to resolve all disputes within sixty (60) Days of the issuance of the appeal in Section D. 3.4 above. If the parties are unable to resolve their issues through mediation or otherwise, either party may seek redress through all available remedies in equity or in law.

D.3.8 Unless otherwise directed by Owner, Contractor shall proceed with the Work while any Claim, or mediation or litigation arising from a Claim, is pending. Regardless of the review period or the final decision of the Owner, the Contractor shall continue to diligently pursue the Work as identified in the Contract Documents. In no case is the Contractor justified or allowed to cease or delay Work, in whole or in part, without a written stop work order from the Owner.

SECTION E PAYMENTS

E.1 SCHEDULE OF VALUES

The Contractor shall submit, by or before the pre-construction conference (as described in Section H.1.3), a schedule of values ("Schedule of Values") for the Contract Work. This schedule shall provide a breakdown of values for the Contract Work and will be the basis for progress payments. The breakdown shall demonstrate reasonable, identifiable, and measurable components of the Work. Unless objected to by the Owner, this schedule shall be used as the basis for reviewing Contractor's applications for payment. If objected to by Owner, Contractor shall revise the schedule of values and resubmit the same for approval of Owner.

E.2 APPLICATIONS FOR PAYMENT

E.2.1 Owner shall make progress payments on the Contract monthly as Work progresses, in accordance with the requirements of this Section E.2 and ORS 279C.570. Applications for payment shall be based upon estimates of Work completed and the Schedule of Values. As a condition precedent to Owner's obligation to pay, all applications for payment shall be approved by the Owner. A progress payment shall not be considered acceptance or approval of any Work or waiver of any defects therein. Owner shall pay to Contractor interest in accordance with ORS 279C.570 for overdue invoices, not including retainage, due the Contractor. Overdue invoices will be those that have not been paid within the earlier of:

- (a) Thirty (30) days after receipt of the invoice; or
- (b) Fifteen (15) days after the payment is approved by the County.

Notwithstanding the foregoing, in instances when an application for payment is filled out incorrectly, or when there is any defect or impropriety in any submitted application or when there is a good faith dispute, Owner shall so notify the Contractor within fifteen

(15) Days stating the reason or reasons the application for payment is defective or improper or the reasons for the dispute. A defective or improper application for payment, if corrected by the Contractor within seven (7) Days of being notified by the Owner, shall not cause a payment to be made later than specified in this section unless interest is also paid. Payment of interest will be postponed when payment on the principal is delayed because of disagreement between the Owner and the Contractor.

Owner reserves the right, instead of requiring the Contractor to correct or resubmit a defective or improper application for payment, to reject the defective or improper portion of the application for payment and pay the remainder of the application for such amounts which are correct and proper.

Owner, upon written notice to the Contractor, may elect to make payments to the Contractor only by means of Electronic Funds Transfers ("EFT") through Automated Clearing House ("ACH") payments. If Owner makes this election, the Contractor shall arrange for receipt of the EFT/ACH payments.

E.2.2 Contractor shall submit to the Owner an application for each payment and, if required, receipts or other vouchers showing payments for materials and labor including payments to Subcontractors. Contractor shall include in its application for payment a schedule of the percentages of the various parts of the Work completed, based on the Schedule of Values which shall aggregate to the payment application total, and shall include, on the face of each copy thereof, a certificate in substantially the following form:

"I, the undersigned, hereby certify that the above bill is true and correct, and the payment therefore, has not been received.

Signed: _____
Dated: _____"

E.2.3 Generally, applications for payment will be accepted only for materials that have been installed. Under special conditions, applications for payment for stored materials will be accepted at Owner's sole discretion. Such a payment, if made, will be subject to the following conditions:

- (a) The request for stored material shall be submitted at least thirty (30) Days in advance of the application for payment on which it appears. Applications for payment shall be entertained for major equipment, components or expenditures only.
- (b) The Contractor shall submit applications for payment showing the quantity and cost of the material stored.
- (c) The material shall be stored in a bonded warehouse and Owner shall be granted the right to access the material for the purpose of removal or inspection at any time during the Contract Period.
- (d) The Contractor shall name the Owner as co-insured on the insurance policy covering the full value of the property while in the care and custody of the Contractor until it is installed. A certificate noting this coverage shall be issued to the Owner.
- (e) Payments shall be made for materials and equipment only. The submitted amount in the application for payment shall be reduced by the cost of transportation from the storage site to the Project Site and for the cost of an inspector to verify delivery and condition of the goods at the storage site. The cost of storage and inspection shall be borne solely by the Contractor.
- (f) Within sixty (60) Days of the application for payment, the Contractor shall submit evidence of payment covering the

material and/or equipment stored and of payment for the storage site.

- (g) Payment for stored materials and/or equipment shall in no way indicate acceptance of the materials and/or equipment or waive any rights under the Contract for the rejection of the Work or materials and/or equipment not in conformance with the Contract Documents.
- (h) All required documentation shall be submitted with the respective application for payment.

E.2.4 The Owner reserves the right to withhold all or part of a payment, or may nullify in whole or part any payment previously made, to such extent as may be necessary in the Owner's opinion to protect the Owner from loss because of:

- (a) Work that is defective and not remedied, or that has been demonstrated or identified as failing to conform with Applicable Laws or the Contract Documents;
- (b) third party claims filed or evidence reasonably indicating that such claims will likely be filed unless security acceptable to the Owner is provided by the Contractor;
- (c) failure of the Contractor to make payments properly to Subcontractors or for labor, materials or equipment (in which case Owner may issue checks made payable jointly to Contractor and such unpaid persons under this provision, or directly to Subcontractors and suppliers at any level under Section C.3.2);
- (d) reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Price;
- (e) damage to the Work, Owner or Owner's agent;
- (f) reasonable evidence that the Work will not be completed within the Contract Time required by the Contract, and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay;
- (g) failure to carry out the Work in accordance with the Contract Documents; or
- (h) assessment of liquidated damages, when withholding is made for offset purposes.

E.2.5 Subject to the provisions of the Contract Documents, the amount of each progress payment shall be computed as follows:

- (a) Take that portion of the Contract Price properly allocable to completed Work as determined by multiplying the percentage completion of each portion of the Work by the share of the total Contract Price allocated to that portion of the Work in the Schedule of Values, less retainage as provided in Section E.5. Pending final determination of cost to the Owner of changes in the Work, no amounts for changes in the Work can be included in applications for payment until the Contract Price has been adjusted by a Change Order;
- (b) Add that portion of the Contract Price properly allocable to materials and equipment delivered and suitably stored at the Project Site for subsequent incorporation in the completed construction (or, if approved in advance by the Owner pursuant to Section E.2.3, suitably stored off the Project Site at a location agreed upon in writing), less retainage as provided in Section E.5;

(c) Subtract the aggregate of previous payments made by the Owner; and

(d) Subtract any amounts for which the Owner has withheld or nullified payment as provided in the Contract Documents.

E.2.6 Contractor's applications for payment shall not include requests for payment for portions of the Work for which the Contractor does not intend to pay to a Subcontractor or material supplier.

E.2.7 The Contractor warrants to Owner that title to all Work covered by an application for payment will pass to the Owner no later than the time of payment. The Contractor further warrants that upon submittal of an application for payment all Work for which payments are received from the Owner shall be free and clear of liens, claims, security interests or encumbrances in favor of the Contractor, Subcontractors, material suppliers, or other persons or entities making a claim by reason of having provided financing, labor, materials and equipment relating to the Work.

E.2.8 If Contractor disputes any determination by Owner with regard to any application for payment, Contractor nevertheless shall continue to expeditiously perform the Work. No payment made hereunder shall be or be construed to be final acceptance or approval of that portion of the Work to which such partial payment relates or shall relieve Contractor of any of its obligations hereunder.

E.3 PAYROLL CERTIFICATION REQUIREMENT

Owner's receipt of payroll certification pursuant to Section C.2 of the Contract shall be a condition precedent to Owner's obligation to pay any progress payments or final payment otherwise due.

E.4 DUAL PAYMENT SOURCES

Contractor shall not be compensated for Work performed under the Contract from any state agency other than the agency that is a party to the Contract.

E.5 RETAINAGE

E.5.1 Retainage shall be withheld and released in accordance with the requirements set forth in Local Contract Review Board Rules or the applicable County standard.

E.5.1.1 Owner may reserve as retainage from any progress payment in an amount not to exceed five percent of the payment. As Work progresses, Owner may reduce the amount of retainage on or may eliminate retainage on any remaining monthly Contract payments after fifty (50) percent of the Work under the Contract is completed if, in the Owner's discretion, such Work is progressing satisfactorily. Elimination or reduction of retainage shall be allowed only upon written application by the Contractor, which application shall include written approval of Contractor's surety; except that when the Work is ninety-seven and a half percent (97.5%) completed in Owner's estimation, the Owner may, at its discretion and without application by the Contractor, reduce the retained amount to hundred (100) percent of the value of the Work remaining to be done. Upon receipt of written application by the Contractor, Owner shall respond in writing within a reasonable time.

E.5.1.2 Contractor may request in writing:

- (a) to be paid amounts which would otherwise have been retained from progress payments where Contractor has deposited acceptable bonds and securities of equal value with Owner or in a custodial account or other mutually agreed account satisfactory to Owner, with an approved bank or trust company to be held in lieu of the cash retainage for the benefit of Owner;

- (b) for construction projects over \$1,000,000, that retainage be deposited in an interest bearing account, established through the County Treasurer for county agencies, in a bank, savings bank, trust company or savings association for the benefit of Owner, with earnings from such account accruing to the Contractor; or
- (c) that the Owner allow Contractor to deposit a surety bond for the benefit of Owner, in a form acceptable to Owner, in lieu of all or a portion of funds retained, or to be retained. Such bond and any proceeds therefrom shall be made subject to all claims in the manner and priority as set forth for retainage.

When the Owner has accepted the Contractor's election of option (a) or (b), Owner may recover from Contractor any additional costs incurred through such election by reducing Contractor's final payment. Where the Owner has agreed to Contractor's request for option (c), Contractor shall accept like bonds from Subcontractors and suppliers on the Project from which Contractor has required retainages.

- E. 5.1.3 The retainage held by Owner shall be included in and paid to the Contractor as part of the final payment of the Contract Price. The Owner shall pay to Contractor interest at the rate of two thirds of one percent per month on the final payment due Contractor, interest to commence forty-five (45) Days after the date which Owner receives Contractor's final approved application for payment and Work under the Contract has been completed and accepted and to run until the date when final payment is tendered to Contractor. The Contractor shall notify Owner in writing when the Contractor considers the Work complete and deliver to Owner its final application for payment and Owner shall, within fifteen (15) Days after receiving the written notice and the application for payment, either accept the Work or notify the Contractor of Work yet to be performed on the Contract. If Owner does not within the time allowed notify the Contractor of Work yet to be performed to fulfill contractual obligations, the interest provided by this subsection shall commence to run forty-five (45) Days after the end of the fifteen (15) Day period.
- E.5.1.4 Owner will reduce the amount of the retainage if the Contractor notifies the Owner that the Contractor has deposited in an escrow account with a bank or trust company, in a manner authorized by the Owner, bonds and securities of equal value of a kind approved by the Owner and such bonds and securities have in fact been deposited.
- E.5.1.5 Contractor agrees that if Contractor elects to reserve a retainage from any progress payment due to any Subcontractor or supplier, such retainage shall not exceed five percent of the payment, and such retainage withheld from Subcontractors and suppliers shall be subject to the same terms and conditions stated in Subsection E.5 as apply to Owner's retainage from any progress payment due to Contractor.

E.6 FINAL PAYMENT

- E.6.1 Upon completion of all the Work under the Contract, the Contractor shall notify the Owner, in writing, that Contractor has completed Contractor's obligations under the Contract and shall prepare its application requesting final payment. The amount of final payment will be the difference between the total amount due the Contractor pursuant to the Contract Documents and the sum of all payments previously made. Upon receipt of such notice and application for payment, the Owner will inspect the Work, and, if acceptable, submit to Contractor a recommendation as to acceptance of the completed Work and the final estimate of the amount due the Contractor. If the Work is not acceptable, Owner will notify Contractor within fifteen (15) Days of Contractor's request for final payment. Upon approval of this final application

for payment by the Owner and compliance by the Contractor with provisions in Section K, and Contractor's satisfaction of other provisions of the Contract Documents as may be applicable, the Owner shall pay to the Contractor all monies due under the provisions of these Contract Documents.

- E.6.2 Neither final payment nor any remaining retained percentage shall become due until the Contractor submits to the Owner (1) a certificate evidencing that insurance required by the Contract Documents to remain in force after final payment is currently in effect and will not be canceled or allowed to expire until at least thirty (30) Days' prior written notice has been given to the Owner, (2) a written statement that the Contractor knows of no substantial reason that the insurance will not be renewable to cover the period required by the Contract Documents, (3) consent of surety, if any, to final payment and (4), if required by the Owner, other data establishing payment or satisfaction of obligations, such as receipts, releases and waivers of liens, claims, security interests or encumbrances arising out of the Contract, to the extent and in such form as may be designated by the Owner. If a Subcontractor refuses to furnish a release or waiver required by the Owner, the Contractor may furnish a bond satisfactory to the Owner to indemnify the Owner against such lien. If such lien remains unsatisfied after payments are made, the Contractor shall refund to the Owner all money that the Owner may be compelled to pay in discharging such lien.
- E.6.3 Acceptance of final payment by the Contractor, a Subcontractor or material supplier shall constitute a waiver of claims by that payee except those previously made in writing and identified by that payee as unsettled at the time of final application for payment.
- E.6.4 Contractor agrees to submit its final payment application within ninety (90) Days after Substantial Completion, unless written extension is granted by Owner. Contractor shall not delay final payment application for any reason, including without limitation nonpayment of Subcontractors, suppliers, manufacturers or others not a party to the Contract, or lack of resolution of a dispute with Owner or any other person of matters arising out of or relating to the Contract. If Contractor fails to submit its final payment application within ninety (90) Days after Substantial Completion, and Contractor has not obtained written extension by Owner, all requests or Claims for additional costs or an extension of Contract Time shall be barred.

SECTION F PROJECT SITE CONDITIONS

F.1 USE OF PREMISES

Contractor shall confine equipment, storage of materials and operation of Work to the limits indicated by Contract Documents, Applicable Laws, permits or directions of the Owner. Contractor shall follow the Owner's instructions regarding use of premises, if any.

F.2 PROTECTION OF WORKERS, PROPERTY AND THE PUBLIC

- F.2.1 Contractor shall maintain continuous and adequate protection of all of the Work from damage and shall protect the Owner, workers and property from injury or loss arising in connection with the Contract. Contractor shall remedy acceptably to the Owner any damage, injury, or loss, except such as may be directly due to errors in the Contract Documents or caused by authorized representatives or personnel of the Owner. Contractor shall adequately protect adjacent property as provided by law and the Contract Documents.
- F.2.2 Contractor shall take all necessary precautions for the safety of all personnel on the Project Site or otherwise engaged in the undertaking of the Work and shall comply with the Contract Documents, best practices and all applicable provisions of federal,

state and municipal safety laws and building codes to prevent accidents or injury to persons on, about or adjacent to the premises where the Work is being performed. Contractor shall erect and properly maintain at all times, as required by the conditions and progress of the Work, all necessary safeguards for protection of workers and the public against any hazards created by construction. Contractor shall designate a responsible employee or associate on the Project Site, whose duty shall be the prevention of accidents. The name and position of the person designated shall be reported to the Owner. The Owner has no responsibility for Project Site safety. Project Site safety shall be the responsibility of the Contractor.

- F.2.3 Contractor shall not enter upon private property without first obtaining permission from the property owner or its duly authorized representative. Contractor shall be responsible for the preservation of all public and private property along and adjacent to the Work contemplated under the Contract and shall use every precaution necessary to prevent damage thereto. In the event the Contractor damages any property, the Contractor shall at once notify the property owner and make, or arrange to make, full restitution. Contractor shall, immediately and in writing, report to the Owner, all pertinent facts relating to such property damage and the ultimate disposition of the claim for damage.
- F.2.4 Contractor shall be responsible for protection of adjacent work areas including impacts brought about by activities, equipment, labor, utilities, vehicles and materials on the Project Site.
- F.2.5 Contractor shall at all times direct its activities in such a manner as to minimize adverse effects on the environment. Handling of all materials shall be conducted so no release will occur that may pollute or become hazardous.
- F.2.6 In an emergency affecting the safety of life or limb or of the Work or of adjoining property, the Contractor, without special instruction or authorization from the Owner, shall act reasonably to prevent threatened loss or injury, and shall so act, without appeal, if instructed by the Owner. Any compensation claimed by the Contractor on account of emergency work shall be determined in accordance with section D.
- F.2.7 Contractor shall comply with all Owner safety rules and regulations, if applicable. Prior to commencement of any Work, Contractor and Subcontractors shall be required to complete an Owner Contractor Safety Orientation and submit all Owner required safety plans.
- F.2.8 Contractor shall demonstrate that an employee drug testing program is in place.

F.3 CUTTING AND PATCHING

- F.3.1 If applicable, Contractor shall be responsible for coordinating all cutting, fitting, or patching of the Work to make its several parts come together properly and fit to receive or be received by work of other contractors or Subcontractors shown upon, or reasonably implied by, the Contract Documents.
- F.3.2 If applicable, Contractor shall be responsible for restoring all cut, fitted, or patched surfaces to an original condition; provided, however, that if a different condition is specified in the Contract Documents, then Contractor shall be responsible for restoring such surfaces to the condition specified in the Contract Documents.

F.4 CLEANING UP

From time to time as may be prudent or ordered by the Owner and, in any event, immediately after completion of the Work, the Contractor shall, at its own expense, clean up and remove all refuse and unused materials of any kind resulting from the Work. If Contractor fails to do so within

twenty-four (24) hours after notification by the Owner the work may be done by others and the cost charged to the Contractor and deducted from payment due the Contractor.

F.5 ENVIRONMENTAL CONTAMINATION

F.5.1 Contractor shall be held responsible for and shall indemnify, defend (with counsel of Owner's choice), and hold harmless Owner from and against any costs, expenses, damages, claims, and causes of action, or any of them, resulting from all spills, releases, discharges, leaks and disposal of environmental pollution, including storage, transportation, and handling during the performance of the Work or Contractor's obligations under the Contract which occur as a result of, or are contributed by, the negligence or actions of Contractor or its personnel, agents, or Subcontractors or any failure to perform in accordance with the Contract Documents (except to the extent otherwise void under ORS 30.140). Nothing in this section F.5.1 shall limit Contractor's responsibility for obtaining insurance coverages required under Section G.3 of the Contract, and Contractor shall take no action that would void or impair such coverages.

- F.5.1.1 Contractor agrees to promptly dispose of such spills, releases, discharge or leaks to the satisfaction of Owner and regulatory agencies having jurisdiction in a manner that complies with Applicable Laws. Cleanup shall be at no cost to the Owner and shall be performed by properly qualified and, if applicable, licensed personnel.
- F.5.1.2 Unless otherwise approved in the Solicitation Document, Contractor shall obtain the Owner's written consent prior to bringing onto the Project Site any (i) environmental pollutants or (ii) hazardous substances or materials, as the same or reasonably similar terms are used in any Applicable Laws. In any event, Contractor shall provide prior written notice to Owner when hazardous materials are brought on to the Project Site. The Contractor, at all times, shall:
- (a) properly handle, use and dispose of all environmental pollutants and hazardous substances or materials on the Project Site, in accordance with all Applicable Laws;
 - (b) be responsible for any and all spills, releases, discharges, or leaks of (or from) environmental pollutants or hazardous substances or materials which Contractor has brought onto the Project Site; and
 - (c) promptly clean up and remediate, without cost to the Owner, such spills, releases, discharges, or leaks to the Owner's satisfaction and in compliance with all Applicable Laws.

F.5.2 Contractor shall report all reportable quantity releases, as such releases are defined in Applicable Laws. Upon discovery, regardless of quantity, Contractor must verbally report all releases to the Owner in a prompt manner. A written follow-up report shall be submitted to Owner within 48 hours of the telephonic report. Such written report shall contain, as a minimum:

- (a) Description of items released (identity, quantity, manifest numbers, and any and all other documentation required by law).
- (b) Whether amount of items released is EPA/DEQ reportable, and, if so, when reported.
- (c) Exact time and location of release, including a description of the area involved.
- (d) Containment procedures initiated.

- (e) Summary of communications about the release between Contractor and State, local or federal officials other than Owner. Any communication to the press will be done by Owner and Contractor will defer to Owner.
- (f) Description of cleanup procedures employed or to be employed at the Project Site, including disposal location of spill residue.
- (g) Personal injuries, if any, resulting from, or aggravated by, the release.

F.6 ENVIRONMENTAL CLEAN-UP

- F.6.1 Unless disposition of environmental pollution is specifically a part of the Contract, or was caused by the Contractor (reference F.5 Environmental Contamination), Contractor shall immediately notify Owner of any hazardous substance(s) which Contractor discovers or encounters during performance of the Work required by the Contract. "Hazardous substance(s)" means any hazardous, toxic and radioactive materials and those substances defined as "hazardous substances," "hazardous materials," "hazardous wastes," "toxic substances," or other similar designations in any federal, state, or local law, regulation, or ordinance, including without limitation asbestos, polychlorinated biphenyl ("PCB"), or petroleum, and any substances, materials or wastes regulated by 40 CFR, Part 261 and defined as hazardous in 40 CFR S 261.3. In addition to notifying Owner of any hazardous substance(s) discovered or encountered, Contractor shall immediately cease working in any particular area of the Project where a hazardous substance(s) has been discovered or encountered if continued work in such area would present a risk or danger to the health or wellbeing of Contractor's or any Subcontractor's work force, property or the environment.
- F.6.2 Upon being notified by Contractor of the presence of hazardous substance(s) on the Project Site, not brought on to the Project Site by Contractor, Owner shall arrange for the proper disposition of such hazardous substance(s).

SECTION G INDEMNITY, BONDING, AND INSURANCE

G.1 RESPONSIBILITY FOR DAMAGES / INDEMNITY

- G.1.1 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.
- G.1.2 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 G.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 G.1.2.

G.1.3 In claims against any person or entity indemnified under Section G.1.2 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 G.1.2 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.

G.2 PERFORMANCE AND PAYMENT SECURITY; PUBLIC WORKS BOND

- G.2.1 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.
- G.2.2 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.
- G.2.3 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.

G.3 INSURANCE

- G.3.1 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.
- G.3.2 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.
- G.3.3 Builder's Risk Insurance:
- G.3.3.1 Builder's Risk: During the term of the Contract, for new construction the Contractor shall obtain and keep in effect

Builder's Risk insurance on an all risk forms, including earthquake and flood, for an amount equal to the full amount of the Contract, plus any changes in values due to modifications, Change Orders and loss of materials added. Such Builder's Risk shall include, in addition to earthquake and flood, theft, vandalism, mischief, collapse, transit, debris removal, and architect's fees "soft costs" associated with delay of Project due to insured peril. Any deductible shall not exceed \$50,000 for each loss, except the earthquake and flood deductible which shall not exceed 2 percent of each loss or \$50,000, whichever is greater. The deductible shall be paid by Contractor. The policy will include as loss payees Owner, the Contractor and its Subcontractors as their interests may appear.

G.3.3.2 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.

G.3.3.3 Such insurance shall be maintained until Owner has occupied the facility.

G.3.3.4 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.

G.3.4 General Liability Insurance:

G.3.4.1 Commercial General Liability: Upon execution of a Contract, Contractor shall obtain, and keep in effect at Contractor's expense for the term of the Contract, Commercial General Liability Insurance ("CGL") covering bodily injury and property damage in the amount of not less than \$1,000,000 per claim and \$2,000,000 per occurrence in a form satisfactory to Owner. This insurance shall include personal injury liability, products and completed operations, and contractual liability coverage for the indemnities provided under the Contract (to the extent contractual liability coverage for the indemnity is available in the marketplace), and shall be issued on an occurrence basis written on ISO Form GC 00 01 (12 04 or later) or an equivalent form approved in advance by Owner. The CGL shall provide separation of insured language. The policy or policies obtained by Contractor for purposes of fulfilling the requirements of this section shall be primary insurance with respect to the Owner. Any insurance or self-insurance maintained by the County shall be excess and shall not contribute to it.

G.3.4.2 Automobile Liability: Contractor shall obtain, at Contractor's expense, and keep in effect during the term of the Contract, Automobile Liability Insurance covering owned, and/or hired vehicles, as applicable. The coverage may be written in combination with the Commercial General Liability Insurance. Contractor shall provide proof of insurance of not less than \$1,000,000 per claim and \$2,000,000 per occurrence. Contractor and its Subcontractors shall be responsible for ensuring that all non-owned vehicles maintain adequate Automobile Liability insurance while on Project Site.

G.3.4.3 Owner may adjust the insurance amounts required in Section G.3.4.1 and G.3.4.2 based upon institution specific risk

assessments through the issuance of Supplemental General Conditions and a Contract.

G.3.4.4 To the extent that the Contract Documents require the Contractor to provide professional design services, design-build, or certifications related to systems, materials, or equipment, the Contractor shall (1) purchase and maintain professional liability/errors-and-omissions insurance with limits of not less than \$1,000,000 for each claim and \$2,000,000 general annual aggregate and (2) cause those Subcontractors (of any tier) who are providing professional design services including any design-build services to procure and maintain professional liability/errors-and-omissions insurance with limits of not less than \$1,000,000 for each claim and \$2,000,000 general annual aggregate. This policy shall be for the protection of the Owner, its elected officials, officers, agents and employees against liability for damages because of personal injury, bodily injury, death, or damage to property, including loss of use thereof, and damages because of negligent acts, errors and omissions in any way related to the Contract. The Owner, at its option, may require a complete copy of the above policy.

G.3.4.5 "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).

G.3.4.6 Umbrella Liability (if required by Owner through issuance of Supplemental General Conditions): Contractor shall obtain, at Contractor's expense, and keep in effect during the term of the Contract, Umbrella liability Insurance over and above the general liability, automobile liability and workers' compensation coverage if required by Owner in specified limits at time of requirement.

G.3.4.7 Pollution Liability may be required by Owner through issuance of Supplemental General Conditions.

G.3.5 Additional Insured: The general liability insurance coverage, automobile liability, umbrella, and pollution liability if required, shall include the Owner as additional insureds but only with respect to the Contractor's activities to be performed under the Contract. The additional-insured endorsement for CGL insurance must be written on ISO Form CG 20 10 (10 01) and CG 20 37 (10 01), or their equivalent, but shall not use either of the following forms: CG 20 10 (10 93) or CG 20 10 (03 94). Proof of insurance must include a copy of the endorsement showing "Clackamas County, its elected officials, agents, officers, and employees" as scheduled insureds.

If Contractor cannot obtain an insurer to name the Owner as additional insureds, Contractor shall obtain at Contractor's expense, and keep in effect during the term of the Contract, Owners and Contractors Protective Liability Insurance, naming the Owner as additional insureds with not less than a \$2,000,000 limit per occurrence. This policy must be kept in effect for 36 months following Final Completion. As evidence of coverage, Contractor shall furnish the actual policy to Owner prior to execution of the Contract.

G.3.6 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.

G.3.7 Certificate(s) of Insurance/Insurance Carrier Qualification: As evidence of the insurance coverage required by the Contract, the Contractor shall furnish certificate(s) of insurance to the Owner prior to execution of the Contract. The certificate(s) will specify all of the parties who are additional insureds or loss payees for the Contract. A renewal certificate shall be sent to Owner at least 10 days prior to coverage expiration. Insurance coverage required under the Contract shall be obtained from insurance companies or entities acceptable to the Owner and that are eligible to provide such insurance under Oregon law. Eligible insurers include admitted insurers that have been issued a certificate of authority from the Oregon Department of Consumer and Business Services authorizing them to conduct an insurance business and issue policies of insurance in the state of Oregon, and certain non-admitted surplus lines insurers that satisfy the requirements of applicable Oregon law and which are subject to approval by the Owner. The Contractor shall be financially responsible for all deductibles, self-insured retentions and/or self-insurance included hereunder. Any deductible, self-insured retention and/or self-insurance in excess of \$50,000 shall be subject to approval by the Owner in writing and shall be a condition precedent to the effectiveness of any Contract.

SECTION H

SCHEDULE OF WORK

H.1 CONTRACT PERIOD

H.1.1 Time is of the essence. The Contractor shall at all times carry on the Work diligently, without delay and punctually fulfill all requirements herein.

H.1.2 Notice to Proceed. Unless otherwise directed in the Contract Documents, Contractor shall commence Work on the Project Site within fifteen (15) Days of the Notice to Proceed. Notwithstanding the Notice to Proceed, Contractor shall not be authorized to proceed with the Work until all initial Contract requirements, including the Contract, performance bond and payment bond, and certificates of insurance, have been fully executed and submitted in a form acceptable to Owner.

H.1.3 Unless otherwise not required in the Construction Documents, Contractor shall participate in a pre-construction conference with the Owner's representative and designated design team. The purpose of this pre-construction conference is to review the Contractor's proposed Schedule of Values and to review any other Project logistics to be coordinated between the parties.

H.1.4 Unless specifically extended by a Change Order, all Work shall be complete by the date contained in the Contract Documents. The Owner shall have the right to accelerate the completion date of the Work, which may require the use of overtime. Such accelerated Work schedule shall be an acceleration in performance of Work under Section D.1.2(f) and shall be subject to the provisions of Section D.1.

H.1.5 The Owner shall not waive any rights under the Contract by permitting the Contractor to continue or complete in whole or in part the Work after the date described in Section H.1.2 above.

H.2 SCHEDULE

H.2.1 Contractor shall provide, by or before the pre-construction conference, the initial as-planned schedule for review and acceptance by the Owner. The submitted schedule must illustrate Work by Project components, labor trades, and long lead items broken down by building and/or floor where applicable. If Owner shall so elect, Contractor shall provide the schedule in CPM format showing the graphical network of planned activities, including i) a reasonably detailed list of all activities required to complete the Work; ii) the time and duration that each activity will take to completion; and iii) the dependencies between the activities. Schedules lacking adequate detail, or unreasonably detailed, will be rejected. The schedule shall include the following: Notice to Proceed or the date the Work commences, if no Notice to Proceed is issued by Owner, Substantial Completion, and Final Completion. Schedules shall be updated monthly, unless otherwise required by the Contract Documents, and submitted with the monthly application for payment. Acceptance of the Schedule by the Owner does not constitute agreement by the Owner as to the Contractor's sequencing, means, methods, or durations. Any positive difference between the Contractor's scheduled completion and the Contract completion date is float owned by the Owner. Owner reserves the right to negotiate the float if it is deemed to be in Owner's best interest to do so. In no case shall the Contractor make a claim for delays if the Work is completed within the Contract Time but after Contractor's scheduled completion.

H.2.2 All Work shall be completed during normal weekdays (Monday through Friday) between the hours of 7:00 a.m. and 5:00 p.m. unless otherwise specified in the Contract Documents. Unless otherwise specified in the Contract Documents, no Work shall be performed during the following holidays:

- New Year's Day
- Martin Luther King Day
- Memorial Day
- Independence Day
- Labor Day
- Veterans Day
- Thanksgiving Day
- Christmas Day
- President's Day

When a holiday falls on a 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.

H.3 PARTIAL OCCUPANCY OR USE

The Owner may occupy or use any completed or partially completed portion of the Work at any stage, provided such occupancy or use is consented to by public authorities having jurisdiction over the Work. Such partial occupancy or use may commence whether or not the portion is substantially complete, provided the Owner and Contractor have reasonably accepted in writing the responsibilities assigned to each of them. Approval by

the Contractor to partial occupancy or use shall not be unreasonably withheld. Immediately prior to such partial occupancy or use, the Owner and Contractor shall jointly inspect the area to be occupied or portion of the Work to be used in order to determine and record the condition of the Work. Partial occupancy or use of a portion or portions of the Work shall not constitute acceptance of Work not complying with the requirements of the Contract Documents.

SECTION I CORRECTION OF WORK

I.1 CORRECTION OF WORK BEFORE FINAL PAYMENT

The Contractor warrants to the Owner that materials and equipment furnished under the Contract will be of good quality and new unless otherwise required or permitted by the Contract Documents, that the Work will be free from defects, and that the Work will conform to the requirements of the Contract Documents. Work failing to conform to these requirements shall be deemed defective. Contractor shall promptly remove from the premises and replace all defective materials and equipment as determined by the Owner, whether incorporated in the Work or not. Removal and replacement shall be without loss or expense to the Owner, and Contractor shall bear the cost of repairing all Work destroyed or damaged by such removal or replacement. Contractor shall be allowed a period of no longer than thirty (30) Days after Substantial Completion for completion of defective (Punch List) work. At the end of the thirty-day period, or earlier if requested by the Contractor, Owner shall arrange for inspection of the Work by the Architect/Engineer. Should the work not be complete, and all corrections made, the costs for all subsequent reinspections shall be borne by the Contractor. If Contractor fails to complete the Punch List work within the thirty (30) Day period, Owner may perform such work and Contractor shall reimburse Owner all costs of the same within ten (10) Days after demand without affecting Contractor's obligations.

I.2 WARRANTY WORK

I.2.1 Neither the final certificate of payment nor any provision of the Contract Documents shall relieve the Contractor from responsibility for Defective Work and, unless a longer period is specified, Contractor shall correct all defects that appear in the Work within a period of one year from the date of issuance of the written notice of Substantial Completion by the Owner except for latent defects which will be remedied by the Contractor at any time they become apparent. The Owner shall give Contractor notice of defects with reasonable promptness. Contractor shall perform such warranty work within a reasonable time after Owner's demand and at Contractor's sole expense. If Contractor fails to complete the warranty work within such period as Owner determines reasonable, or at any time in the event of warranty work consisting of emergency repairs, Owner may perform such work and Contractor shall reimburse Owner all costs of the same within ten (10) Days after demand, without affecting Contractor's obligations. The Contractor shall perform the warranty Work by correcting defects within twenty-four (24) hours of notification by Owner, unless otherwise specified in the Contract Documents. Should the Contractor fail to respond within the specified response time, the Owner may, at its option, complete the necessary repairs using another contractor or its agents. If Owner completes the repairs using Owner's agent, Contractor shall pay Owner at the rate of one and one-half (1½) times the standard hourly rate of Owner's agent, plus related overhead and any direct non-salary costs. If Owner completes the repairs using another contractor, Contractor shall pay Owner the amount of Owner's direct costs billed by the other contractor for the work, plus the direct salary costs and related overhead and direct non-salary expenses of Owner's agents who are required to monitor that contractor's work. Work performed by Owner using Owner's own agents or those of another contractor shall not affect the Contractor's contractual duties under these provisions, including warranty provisions.

I.2.2 Nothing in this Section I.2 provision shall negate guarantees or warranties for periods longer than one year including without limitation, such guarantees or warranties required by other sections of the Contract Documents for specific installations, materials, processes, equipment or fixtures.

I.2.3 In addition to Contractor's warranty, manufacturer's warranties shall pass to the Owner and shall not take effect until such portion of the Work covered by the applicable warranty has been accepted in writing by the Owner.

I.2.4 The one-year period for correction of Work shall be extended with respect to portions of Work performed after Substantial Completion by the period of time between Substantial Completion and the actual performance of the Work, and shall be extended by corrective Work performed by the Contractor pursuant to this Section, as to the Work corrected. The Contractor shall remove from the Project Site portions of the Work which are not in accordance with the requirements of the Contract Documents and are neither corrected by the Contractor nor accepted by the Owner.

I.2.5 Nothing contained in this Section I.2 shall be construed to establish a period of limitation with respect to other obligations which the Contractor might have under the Contract Documents. Establishment of the period for correction of Work as described in this Section I.2 relates only to the specific obligation of the Contractor to correct the Work, and has no relationship to the time within which the obligation to comply with the Contract Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to the Contractor's obligations other than specifically to correct the Work.

I.2.6 If the Owner prefers to accept Work which is not in accordance with the requirements of the Contract Documents, the Owner may do so instead of requiring its removal and correction, in which case the Contract Price will be reduced as appropriate and equitable as determined by Owner. Such adjustment shall be effected whether or not final payment has been made.

SECTION J SUSPENSION AND/OR TERMINATION OF THE WORK

J.1 OWNER'S RIGHT TO SUSPEND THE WORK

J.1.1 The Owner has the authority to suspend portions or all of the Work due to the following causes:

- (a) Failure of the Contractor to correct unsafe conditions;
- (b) Failure of the Contractor to carry out any provision of the Contract;
- (c) Failure of the Contractor to carry out orders;
- (d) Conditions, in the opinion of the Owner, which are unsuitable for performing the Work;
- (e) Time required to investigate differing Project Site conditions; or
- (f) Any reason considered to be in the public interest.

J.1.2 The Owner shall notify Contractor and the Contractor's Surety in writing of the effective date and time of the suspension, and Owner shall notify Contractor and Contractor's surety in writing to resume Work.

J.2 CONTRACTOR'S RESPONSIBILITIES

- J.2.1 During the period of the suspension, Contractor is responsible to continue maintenance at the Project just as if the Work were in progress. This includes, but is not limited to, protection of completed Work, maintenance of access, protection of stored materials, temporary facilities, and clean-up.
- J.2.2 When the Work is recommenced after the suspension, the Contractor shall replace or renew any Work damaged during the suspension, remove any materials or facilities used as part of temporary maintenance, and complete the Work in every respect as though its prosecution had been continuous and without suspension.

J.3 COMPENSATION FOR SUSPENSION

Depending on the reason for suspension of the Work, the Contractor or the Owner may be due compensation by the other party. If the suspension was required due to acts or omissions of Contractor, the Owner may assess the Contractor actual costs of the suspension in terms of administration, remedial work by the Owner's agents or another contractor to correct the problem associated with the suspension, rent of temporary facilities, and other actual costs related to the suspension, and any liquidated damages arising from the delay. If the suspension was caused by acts or omissions of the Owner, the Contractor may be due compensation which shall be defined using Section D, Changes in Work. If the suspension was required through no fault of the Contractor or the Owner, neither party shall owe the other for the impact.

J.4 OWNER'S RIGHT TO TERMINATE CONTRACT

- J.4.1 The Owner may, without prejudice to any other right or remedy, and after giving Contractor seven (7) Days' written notice and an opportunity to cure, terminate the Contract in whole or in part under the following conditions:
- (a) If Contractor should, voluntarily or involuntarily, seek protection under the United States Bankruptcy Code and Contractor as debtor-in-possession or the Trustee for the estate fails to assume the Contract within a reasonable time;
 - (b) If Contractor should make a general assignment for the benefit of Contractor's creditors;
 - (c) If a receiver should be appointed on account of Contractor's insolvency;
 - (d) If Contractor should repeatedly refuse or fail to supply an adequate number of skilled workers or proper materials to carry on the Work as required by the Contract Documents, or otherwise fail to perform the Work in a timely manner;
 - (e) If Contractor should repeatedly fail to make prompt payment to Subcontractors or for material or labor, or should disregard laws, ordinances or the instructions of the Owner;
 - (f) If Contractor is otherwise in breach of any part of the Contract; or
 - (g) If Contractor is in violation of Applicable Laws, either in the conduct of its business or in its performance of the Work.
- J.4.2 At any time that any of the above occurs, Owner may exercise all rights and remedies available to Owner at law or in equity, and, in addition, Owner may take possession of the premises and of all materials and appliances and finish the Work by whatever method it may deem expedient. In such case, the Contractor shall not be entitled to receive further payment until the Work is completed. If the Owner's cost of finishing the Work exceeds the unpaid balance

of the Contract Price, Contractor shall pay the difference to the Owner.

J.5 TERMINATION FOR CONVENIENCE, NONAPPROPRIATION OF FUNDS, OR FORCE MAJEURE

- J.5.1 Owner may terminate the Contract in whole or in part whenever Owner determines: (a) that termination of the Contract is in the best interest of Owner or the public; (b) that the Owner failed to receive funding, appropriations, allocations or other expenditure authority as contemplated by Owner's budget and Owner determines, in its sole determination, and its assessment and ranking of the policy objectives explicit or implicit in Owner's budget, Owner may determine it is necessary to and may terminate the Contract; or (c) in the event of Force Majeure.
- J.5.2 The Owner shall provide the Contractor with seven (7) Days prior written notice of a termination for Owner's or for public convenience. After such notice, the Contractor shall provide the Owner with immediate and peaceful possession of the premises and materials located on and off the premises for which the Contractor received progress payment under Section E. Compensation for Work terminated by the Owner under this provision will be according to Section E. In no circumstance shall Contractor be entitled to lost profits for Work not performed due to termination. If the Contract is terminated for public convenience, neither the Contractor nor its Surety shall be relieved of liability for damages or losses suffered by the Owner as a result of defective, unacceptable or unauthorized Work completed or performed.

J.6 ACTION UPON TERMINATION

- J.6.1 Upon receiving a notice of termination, and except as directed otherwise by the Owner, Contractor shall immediately cease placing further subcontracts or orders for materials, services, or facilities. In addition, Contractor shall terminate all subcontracts or orders to the extent they relate to the Work terminated and, with the prior written approval of the Owner, settle all outstanding liabilities and termination settlement proposals arising from the termination of subcontracts and orders.
- J.6.2 As directed by the Owner, Contractor shall, upon termination, transfer title and deliver to the Owner all Record Documents, information, and other property that, if the Contract had been completed, would have been required to be furnished to the Owner.
- J.6.3 Upon Owner's notice of termination pursuant to either Section J.4 or J.5, if Owner shall so elect, Contractor shall assign to the Owner such subcontracts and orders as Owner shall specify. In the event Owner elects to take assignment of any such subcontract or order, Contractor shall take such action and shall execute such documents as Owner shall reasonably require for the effectiveness of such assignment and Contractor shall ensure that no contractual arrangement between it and its subcontractors or suppliers of any tier or sub-tier shall prevent such assignment.

SECTION K CONTRACT CLOSE OUT

K.1 RECORD DOCUMENTS

As a condition of final payment (refer also to section E.6), Contractor shall comply with the following: Contractor shall provide Record Documents for the entire Project to Owner. Record Documents shall depict the Project as constructed and shall reflect each and every change, modification, and deletion made during the construction. Record Documents are part of the Work and shall be provided prior to the Owner's issuance of final payment. Record Documents include all modifications to the Contract Documents unless otherwise directed.

K.2 OPERATION AND MAINTENANCE MANUALS

As part of the Work, Contractor shall submit two completed operation and maintenance manuals ("O & M Manuals") for review by the Owner prior to submission of any pay request for more than 75% of the Work. Owner's receipt of the O & M Manuals shall be a condition precedent to any payment thereafter due. The O & M Manuals shall contain a complete set of all submittals, all product data as required by the specifications, training information, telephone list and contact information for all consultants, manufacturers, installer and suppliers, manufacturer's printed data, record and shop drawings, schematic diagrams of systems, appropriate equipment indices, warranties and bonds. The Owner shall review and return one O & M Manual for any modifications or adjustments required. Prior to submission of its final pay request, Contractor shall deliver two (2) complete and approved sets of O & M Manuals in paper form and one (1) complete and approved set in electronic form to the Owner and Owner's receipt of the O & M Manuals shall be a condition precedent to Owner's obligation to make final payment.

K.3 COMPLETION NOTICES

K.3.1 Contractor shall provide Owner written notice of both Substantial and Final Completion. The certificate of Substantial Completion shall state the date of Substantial Completion, the responsibilities of the Owner and Contractor for security, maintenance, heat, utilities, damage to the Work and insurance, and the time within which the Contractor shall finish all items on the Punch List accompanying the Certificate. Both completion notices must be signed and notarized by the Contractor and signed by the Architect/Engineer (if applicable) and Owner to be valid. The Owner shall provide the final signature on the notices. The notices shall take effect on the date they are signed by the Owner.

K.3.2 Substantial Completion of a facility with operating systems (e.g., mechanical, electrical, HVAC) shall be that degree of completion that has provided a minimum of thirty (30) continuous Days of successful, trouble-free operation, which period shall begin after all performance and acceptance testing has been successfully demonstrated to the Owner. All equipment contained in the Work, plus all other components necessary to enable the Owner to operate the facility in the manner that was intended, shall be complete on the Substantial Completion date. The Contractor may request that a Punch List be prepared by the Owner with submission of the request for the Substantial Completion notice.

K.4 TRAINING

As part of the Work, and prior to submission of the final application for payment, the Contractor shall schedule with the Owner training sessions for all equipment and systems as required by the Contract Documents. Contractor shall schedule training sessions at least two weeks in advance of the date of training to allow Owner to provide its personnel with adequate notice. If assignments arise because of termination under Section J.4, then such assignments shall not relieve Contractor of liability hereunder. The O & M Manual shall be used as a basis for training. In addition to any off-Project Site training required by the Contract Documents, training shall include a formal session conducted at the Project Site after the equipment and/or system is completely installed and operational in its normal operating environment.

K.5 EXTRA MATERIALS

As part of the Work, Contractor shall provide spare parts, extra maintenance materials, and other materials or products in the quantities specified in the Contract Documents prior to final payment. Delivery point for extra materials shall be designated by the Owner.

K.6 ENVIRONMENTAL CLEAN-UP

As part of the Final Completion notice, or as a separate written notice submitted with or before the notice of Final Completion, the Contractor shall notify the Owner that all environmental and pollution clean-up, remediation and closure have been completed in accordance with all Applicable Laws and pursuant to the authority of all agencies having jurisdiction, and Contractor shall provide Owner with any and all documentation related to the same, including but not limited to directives, orders, letters, certificates and permits related to or arising from such environmental pollution. The notice shall reaffirm the indemnification given under Section F.5.1 above. Contractor's completion of its obligations under this Section K.6 and Owner's receipt of documents evidencing such completion shall be a condition precedent to Owner's obligation to make final payment.

K.7 CERTIFICATE OF OCCUPANCY

Owner's receipt of an unconditioned certificate of occupancy from the appropriate state and/or local building officials shall be a condition precedent to Owner's obligation to make final payment, except to the extent failure to obtain an unconditional certificate of occupancy is due to the fault or neglect of Owner.

K.8 OTHER CONTRACTOR RESPONSIBILITIES

The Contractor shall be responsible for returning to the Owner all property of Owner issued to Contractor during construction such as keys, security passes, Project Site admittance badges, and all other pertinent items. Upon notice from Owner, Contractor shall be responsible for notifying the appropriate utility companies to transfer utility charges from the Contractor to the Owner. The utility transfer date shall not be before Substantial Completion and may not be until Final Completion, if the Owner does not take beneficial use of the facility and the Contractor's agents continue with the Work.

The Owner's property is drug free and weapons free areas and the use of tobacco products is only allowed in designated areas. Contractor shall be required to ensure that its employees, Subcontractors and agents shall comply with these requirements.

K.9 SURVIVAL

All warranty and indemnification provisions of the Contract, and all of Contractor's other obligations under the Contract that are not fully performed by the time of Final Completion or termination, shall survive Final Completion or any termination of the Contract.

SECTION L GENERAL PROVISIONS

L.1 NO THIRD PARTY BENEFICIARIES

Owner and Contractor are the only parties to the Contract and are the only parties entitled to enforce its terms. Nothing in the Contract gives, is intended to give, or shall be construed to give or provide any benefit or right, whether directly, indirectly, or otherwise, to third persons unless such third persons are individually identified by name herein and expressly described as intended beneficiaries of the terms of the Contract.

L.2 SEVERABILITY

If any provision of the Contract is declared by a court to be unenforceable, illegal, or in conflict with any law, the validity of the remaining terms and provisions shall not be affected and the rights and obligations of the parties shall be construed and enforced as if the Contract did not contain the particular provision held to be invalid.

L.3 ACCESS TO RECORDS

L.3.1 Contractor shall keep, at all times on the Project Site, one record copy of the complete Contract Documents, including the Plans, Specifications, addenda, and Change Orders (if any) in good order

and marked currently to record field changes and selections made during construction, and one record copy of Shop Drawings, Product Data, Samples and similar submittals, and shall at all times give the Owner access thereto.

- L.3.2 Contractor shall retain and the Owner and its duly authorized representatives shall have access, for a period not less than ten (10) years, to all Record Documents, financial and accounting records, and other books, documents, papers and records of Contractor which are pertinent to the Contract, including records pertaining to Overhead and indirect costs, for the purpose of making audit, examination, excerpts and transcripts. If for any reason, any part of the Work or the Contract shall be subject to litigation, Contractor shall retain all such records until all litigation is resolved and Contractor shall continue to provide Owner and/or its agents with full access to such records until such time as all litigation is complete and all periods for appeal have expired and full and final satisfaction of any judgment, order or decree is recorded and Owner receives a record copy of documentation from Contractor.

L.4 WAIVER

Failure of the Owner to enforce any provision of the Contract shall not constitute a waiver or relinquishment by the Owner of the right to such performance in the future nor of the right to enforce any other provision of the Contract.

L.5 SUCCESSORS IN INTEREST

The provisions of the Contract shall be binding upon and shall accrue to the benefit of the parties to the Contract and their respective permitted successors and assigns.

L.6 GOVERNING LAW

The Contract shall be governed by and construed in accordance with the laws of the State of Oregon without giving effect to the conflict of law provisions thereof.

L.7 APPLICABLE LAW

Contractor hereto agrees to comply in all ways with applicable local, state and federal ordinances, statutes, laws and regulations.

L.8 NON-EXCLUSIVE RIGHTS AND REMEDIES

Except as otherwise expressly provided herein, the rights and remedies expressly afforded under the provisions of the Contract shall not be deemed exclusive, and shall be in addition to and cumulative with any and all rights and remedies otherwise available at law or in equity. The exercise by either Party of any one or more of such remedies shall not preclude the exercise by it, at the same or different times, of any other remedies for the same default or breach, or for any other default or breach, by the other Party.

L.9 INTERPRETATION

The titles of the sections of the Contract are inserted for convenience of reference only and shall be disregarded in construing or interpreting any of its provisions.

L.10 DEBT LIMITATION

The Contract is expressly subject to the debt limitation of Oregon counties set forth in Article XI, Section 10, of the Oregon Constitution, and is contingent upon funds being appropriated therefore. Any provisions herein which would conflict with law are deemed inoperative to that extent.

L.11 LITIGATION

Any Claim between Owner and Contractor that arises from or relates to the Contract and that is not resolved through the Claims Review Process

in Section D.3 shall be brought and conducted solely and exclusively within the Circuit Court of Clackamas County for the State of Oregon; provided, however, if a Claim must be brought in a federal forum, then it shall be brought and conducted solely and exclusively within the United States District Court for the District of Oregon. In no event shall this section be construed as a waiver by the County of any form of defense or immunity, whether sovereign immunity, governmental immunity, immunity based on the Eleventh Amendment to the Constitution of the United States or otherwise, from any claim or from the jurisdiction of any court. CONTRACTOR, BY EXECUTION OF THE CONTRACT, HEREBY CONSENTS TO THE IN PERSONAM JURISDICTION OF THE COURTS REFERENCED IN THIS SECTION.



**CLACKAMAS COUNTY
PUBLIC IMPROVEMENT CONTRACT
SUPPLEMENTAL GENERAL CONDITIONS**

PROJECT: 2018-81 Collection System Rehab- Sanitary Sewer Mainline

The following modifies the November 1, 2017 Clackamas County General Conditions for Public Improvement Contracts (“County General Conditions”) for this Contract. Except as modified below, all other terms and conditions of the County General Conditions shall remain in effect.

The terms used in these Supplemental Conditions have the meanings stated in the Clackamas County General Conditions. Additional terms used in these Supplemental Conditions have the meanings stated below, which are applicable to both the singular and plural thereof. The address system used in these Supplemental Conditions is the same as the address system used in the Clackamas County General Conditions, with the prefix “SC” added thereto.

SC A.3.1(a). Replace A.3.1 (a) through A.3.1 (e) with the following:

- a) Permits from outside agencies;
- b) The Contract including: exhibits (and addenda and any amendments thereto), Change Orders, engineer’s written interpretation and clarification, and the Notice to Proceed, with those of later date having precedence over those of an earlier date;
- c) Supplemental General Conditions;
- d) Clackamas County General Conditions (11/01/2017);
- e) Specifications – Division 01;
- f) Specifications Division 02
- g) Construction Drawings (Construction Plans);
- h) Bonds

Design Details: Figure dimensions, and dimensions that can be computed, on plans shall take precedence over scale dimensions. The Drawings with the higher level of detail take precedence over less detailed Drawings.

SC B.4 Replace the Paragraph under B.4 Permits with the following:

Contractor will be responsible for obtaining all required permits and maintaining compliance with those permits throughout the course of the Work. Owner will pay the cost of obtaining all permits. The Contractor shall be responsible for any penalties or fines that result from Contractor’s noncompliance with the terms of the permits. The Contractor will be responsible for compliance with the terms of all permits throughout the performance of the Work.

SC D.1 Add the following to Section D.1

D.1.7 Change Order Authorization.

Throughout the performance of the Work under this Agreement, the Owner’s Project Manager is hereby granted the authority to verbally authorize change orders

in the field for an amount up to \$10,000. As soon as possible following the authorization, the Owner's Project Manager shall complete the change order form provided by Clackamas County Procurement ("Procurement"), obtain the signature of Owner's Director or other authorized signatory, and submit the form to Procurement for processing. As soon as the Director signs off on the change order form, the Project Manager may then authorize another change order in the future for up to \$10,000 following the same procedure above. Each change order should include the cumulative cost of the entire change and may not be artificially broken up into multiple change orders to fall under the dollar threshold listed above. The authority granted to the Project Manager is limited by the Director's authorization to amend the Agreement under Clackamas County's Local Contract Review Board Rules and is subject to the discretion of the Director, who may suspend or restrict the Project Manager's ability to authorize change orders at any time for any reason.

SC D.2 Delete first sentence of D.2.2 and entries D.2.2(a) and D.2.2(b)

SC E.5.1.1 Delete everything after the first sentence.

SC F.2. Add the following after Paragraph F.2.8

F.2.9 The following notice is applicable to Contractors who perform excavation Work: ATTENTION: Oregon law requires you to follow rules adopted by the Oregon Utility Notification Center. Those rules are set forth in OAR 952-001-0090. You may obtain copies of the rules by calling the center at (877) 668-4001.

F.2.10 Contractor shall be aware that permit-required confined spaces exist in or near the Project Site. Entry to these spaces must be accomplished in compliance with the requirements of OAR 166-150-0190 (29 CFR 1910.146). Examples of permit-required confined spaces include but are not limited to the following:

1. Open tanks beyond the handrails including clarifiers, aeration basins, channels, etc.
2. Manholes.
3. Flow control structures which have the potential to contain sewage.
4. Enclosed tanks including digesters, clarifiers, grit basins, chemical tanks, etc.
5. Wet well and dry wells of pump stations.
6. Headworks channels.
7. Electrical vaults.

The hazards associated with these confined spaces may include but are not limited to:

1. Oxygen deficiency.
2. Combustible vapors including methane.
3. Slip hazards.
4. Fall/retrieval hazard.
5. Engulfment hazard.
6. Lockout required of mechanical and electrical devices.
7. Toxic or hazardous chemicals including hydrogen sulfide and process chemicals.
8. Traffic hazards.

9. Hot work and ignition sources.
10. Potential for rapid changes in working conditions.
11. Painting or coating application activities often pose temporary hazards.

Prior to beginning Work in permit-required confined spaces, Contractor shall provide Owner with a copy of Contractor's permit-required confined space entry plan/program including a copy of the permit forms that will be used by Contractor. Upon request by Contractor, Owner will review with Contractor, Owner's permit-required confined space program and specific procedures Owner would incorporate in spaces entered. Owner will coordinate any of its entries into the same spaces with Contractor. When the permit-required confined space Work is completed, Contractor shall inform Owner, in writing, of any hazards encountered or changes made resulting in different hazards within the space.

SC H.1 Add the following after Paragraph H.1.5

H.1.6 As indicated in H.1.1, time is of the essence in the performance of this Contract. If Contractor fails to complete the Work within the Contract time, the actual damage to Owner for the delay will be substantial, but will be difficult or impractical to determine. It is therefore agreed, that Contractor will pay to Owner, not as a penalty, but as liquidated damages, the amount of \$1,255 each and every day that the date of final completion extends beyond the Contract Time.

Payment of liquidated damages shall not release Contractor from its obligation in respect to the complete performance of the Work, nor shall the payment of liquidated damages constitute a waiver of Owner's right to collect any additional damages that it may sustain by failure of Contractor to fully perform the Work, as it is the intent of the parties that the liquidated damages are a full and complete payment only for failure of Contractor to complete the Work on time. Owner expressly reserves the right to make claims for any and all other damages that Owner may incur due to contractor's failure to perform in strict accordance with this Contract.

SC I.2.1 Replace all references to a "one-year" warranty period with "two-year".

Good Faith Effort

As a condition of Contractor being awarded a Contract for this Project, Contractor must complete Good Faith Effort outreach and documentation as described in the Supplemental Instructions to Bidders of the Solicitation Document.

The Contractor may not change who is performing each Division of Work identified in Form 1 of the Good Faith Effort without the express written advance approval of Owner. This includes substituting identified subcontractors, self-performance of a Division of Work that was identified to be performed by a subcontractor, or the Contractor subcontracting a Division of Work that was identified to be self-performed by the Contractor.

Contractor shall be required to submit the completed Form 3 with its final pay application as a condition of final payment.



WATER ENVIRONMENT SERVICES PUBLIC IMPROVEMENT CONTRACT

PERFORMANCE BOND

Bond No.: _____

Solicitation: #2018-81

Project Name: Collection System Rehab- Sanitary Sewer Mainline

_____ (Surety #1)	Bond Amount No. 1:	\$ _____
_____ (Surety #2)*	Bond Amount No. 2:*	\$ _____
<i>* If using multiple sureties</i>	Total Penal Sum of Bond:	\$ _____

We, _____ 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 Water Environment Services ("District"), the sum of (Total Penal Sum of Bond) \$ _____ (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 the District, along with the plans, specifications, terms and conditions of which are contained in the above-referenced Project Contract Documents; 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 the District and Clackamas County and their elected officials, officers, employees and agents, against any direct or indirect damages or claim of every kind and description that shall be suffered or claimed to be suffered in connection with or arising out of the performance of the Contract by the Principal or its subcontractors, and shall in all respects perform said contract according to law, then this obligation is to be void; otherwise, it shall remain in full force and effect for so long as any term of the Contract remains in effect.

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

Nonpayment of the bond premium will not invalidate this bond nor shall the District, 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 _____ day of _____, 20____.

PRINCIPAL: _____

By: _____

Signature

Official Capacity

Attest: _____

Corporation Secretary

SURETY: _____

[Add signatures for each if using multiple bonds]

BY ATTORNEY-IN-FACT:

[Power-of-Attorney must accompany each bond]

Name

Signature

Address

City

State

Zip

Phone

Fax



WATER ENVIRONMENT SERVICES
PUBLIC IMPROVEMENT CONTRACT

PAYMENT BOND

Bond No.: _____

Solicitation: #2018-81

Project Name: Collection System Rehab- Sanitary Sewer Mainline

_____ (Surety #1)	Bond Amount No. 1:	\$ _____
_____ (Surety #2)*	Bond Amount No. 2:*	\$ _____
* If using multiple sureties	Total Penal Sum of Bond:	\$ _____

We, _____, 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 Water Environment Services ("District"), the sum of (Total Penal Sum of Bond) _____ (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 the District, along with the plans, specifications, terms and conditions of which are contained in above-referenced Project Contract Documents; 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 the District and Clackamas County and their 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 the District on account of any labor or materials furnished; and shall do all things required of the Principal by the laws of this State, then this obligation shall be void; otherwise, it shall remain in full force and effect for so long as any term of the Contract remains in effect.

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

Nonpayment of the bond premium will not invalidate this bond nor shall the District 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 _____ day of _____, 20____.

PRINCIPAL: _____

By: _____
Signature

Official Capacity

Attest: _____
Corporation Secretary

SURETY: _____
[Add signatures for each if using multiple bonds]

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

Name

Signature

Address

City State Zip

Phone Fax



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

PROJECT: #2018-81 Collection System Rehab- Sanitary Sewer Mainline

Background:

This project consists of replacement of approximately 5,011 lineal feet of sanitary sewer mainline 8-inches in diameter. Construction methods utilized for the improvements will include installation of Cured-in-place pipe ("CIPP"). The schedule of work also includes reconnection of private services laterals to the newly installed CIPP.

The work generally consists of furnishing and installing the following:

- Installation of CIPP.
- Sanitary Sewer bypassing.
- Restoring sanitary sewer services.
- All other ancillary work necessary to complete the improvements.

Contractor shall obtain and pay for all construction permits and licenses. District will assist Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary; for the prosecution of the Work which are applicable at the time of opening of Bids.

Key Dates:

All work will start upon issuance of Notice to Proceed ("NTP")

Substantially Completion: 90 days of Notice to Proceed

Final Completion: 120 days from Notice to Proceed

Engineers Estimate: \$485,000.00.

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

- 2017/18 COLLECTION SYSTEM REHAB PLANS:
 - ☐ DIVISION 01- GENERAL REQUIREMENTS
 - ☐ DIVISION 02 – SITE WORK
- 2017/18 COLLECTION SYSTEM REHAB PROJECT NO. P112230 Drawing Set: A-1 through A-4; B-1; B-2; C-1; C-2; G-1; G-2; and G-3.

2017/18 COLLECTION SYSTEM REHAB

CERTIFICATE OF ENGINEER

Century West Engineering
Ron C. Weigel



EXPIRES: 6-30-20

I certify the Specifications Sections listed below are applicable to the design for the subject project and were prepared by me or under my supervision.

01010, 01025, 01040, 01090, 01195, 01200, 01300,
01310, 01500, 01560, 01570, 01700, 02730, 02775

SECTION 00010 - TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

01010	Summary of Work
01025	Measurement and Payment
01040	Coordination and Project Requirements
01090	Reference Standards
01195	Protection and Maintenance of Work and Property
01200	Project Meetings
01300	Submittals Procedure
01310	Construction Schedule
01500	Temporary Construction Facilities
01560	Environmental Controls
01570	Traffic Control
01700	Contract Closeout

DIVISION 02 - SITEWORK

02730	Temporary Bypass Pumping
02775	Cured-in-Place Pipe (CIPP)

PLANS (CONTRACT DRAWINGS)

SECTION 01010

SUMMARY OF WORK

PART 1 GENERAL

1.01 SUMMARY

- A. This contract consists of replacement of approximately 5,011 lineal feet of sanitary sewer mainline 8-inches in diameter. Construction methods utilized for the improvements will include installation of Cured-in-place pipe (CIPP). The schedule of work also includes reconnection of private services laterals to the newly installed CIPP.
- B. The accomplishment of all of the above work, if awarded, shall meet the scheduled sequence, milestones, limitations and the final completion dates specified.
- C. All Work is to be substantially completed within 90 days of Notice to Proceed and ready for final payment 30 days thereafter.
- D. The estimated construction cost for Work scope is \$485,000.

- E. PROCUREMENT AND TECHNICAL QUESTIONS:

Ryan Rice
Procurement Division Staff
2051 Kaen Rd, Oregon City, OR 97045
Phone: 503-742-5446
rrice@clackamas.us

- F. PERMITS

Contractor shall obtain and pay for all construction permits and licenses. District will assist Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary; for the prosecution of the Work which are applicable at the time of opening of Bids.

- G. SITE VISITS

There will be no mandatory pre-bid site visit, but Bidders and sub-bidders are required to become familiar with and satisfy themselves as to the general, local and site conditions that may affect the cost, performance and furnishing of the Work.

1.02 WORK OF THIS CONTRACT

- A. The work generally consists of furnishing and installing the following:
 - 1. Installation of CIPP.
 - 2. Sanitary Sewer bypassing.
 - 3. Restoring sanitary sewer services.
 - 4. All other ancillary work necessary to complete the improvements.

B. Contractor Duties

1. Provide and pay for labor, materials, tools, equipment, superintendence, temporary facilities and services necessary for proper execution and completion of Work.
2. All required permits, governmental fees and licenses.
3. Comply with ordinances and regulation of public authorities having jurisdiction, including, but not limited to following:
 - a. Clackamas County
 - b. City of Happy Valley
 - c. State of Oregon Department of Environmental Quality
4. Contractor's Normal work hours shall be limited to between 7:00 a.m. to 7:00 p.m., Monday through Friday excepting Owner legal holidays. Night hours will be necessary for work in the Sunnybrook/Sunnyside Area during off-peak usage. Saturday hours will be necessary for work on SE 130th Avenue when Pacific Seafoods is not operating the facility.

1.03 EXISTING UTILITIES

- A. In general, the locations of existing major utilities, whether aboveground or underground, are indicated on the Drawings. This information has been obtained from utility maps and field surveys. Owner does not guarantee the accuracy or completeness of this information, and it is to be understood that other aboveground or underground facilities not shown on the Drawings may be encountered during the course of the work. In any case, most minor lines such as individual services for water, gas and sprinkler irrigation lines are not indicated.
- B. Existing utilities, whether shown on the Drawings or not, shall be maintained, relocated, rerouted, removed and restored as may be necessary by the Contractor in a manner satisfactory to owners and operators of the utilities and to Owner in accordance with the provisions and to the satisfaction of the affected utility or local agency.

1.04 SPECIFICATION LANGUAGE

Portions of the Specifications are written in imperative and streamlined form. This imperative language is directed to the Contractor, unless specifically noted otherwise. The words "shall be" shall be included by inference where a colon (:) is used within sentences or phrases. Example: Aggregate: ASTM C33.

Where the Bidding Documents define methods, materials, or equipment by specifying a trade name, manufacturer and model or catalog number, the intent is not to limit competition but to establish a standard of quality, features, workmanship, reliability, serviceability, compatibility, performance, etc. Unless the specification description expressly states that no substitutions or "equals" will be allowed, the words "or equal" shall be deemed inserted in each such instance.

END OF SECTION

SECTION 01025

MEASUREMENT AND PAYMENT

PART 1 GENERAL

1.01 DESCRIPTION

- A. Measurement is described under each proposal item in Paragraph 01025-1.02.
- B. Payment for the various items on the Proposal, as further specified herein, shall be based on measurements of completed work in accordance with United States Standard Measures and shall include all compensation to be received by the Contractor for furnishing all tools, equipment, supplies, and manufactured articles, and for all labor, operations, and incidentals appurtenant to the items of work being described, as necessary to complete the various items of the work all in accordance with the requirements of the Contract Documents, including all appurtenances thereto and including all costs of compliance with the regulations of public agencies having jurisdiction, including safety and health requirements of the Occupational Safety and Health Act of the U.S. Department of Labor (OSHA) and Oregon State Department of Labor and Industries, also for loss or damage arising from the nature of the work, or from the action of the elements, or from any unforeseen difficulties which may be encountered during the prosecution of the Work until the final acceptance by the Owner. No separate payment will be made for any item that is not specifically set forth in the Proposal Schedule, and all costs therefor shall be included in the prices named in the Proposal Schedule for the various appurtenant items of work. *Note that all work shall be completed within the project limits during varying times including either 7 am to 7 pm or 10 pm to 7 am depending upon specific locations. Refer to Section 01570, Paragraph 1.06.B for more detailed information.*
- C. Quantities listed in the Proposal do not govern final payment. Payments to the Contractor will be made only for actual quantities of Contract items performed in accordance with terms of the Contract and for items of work actually performed under Change Orders.
- D. Indirect costs, such as supervision and overheads, profit, the general conditions specified in the Contract, all shall be allocated to each proposal item as applicable for work defined in the proposal item. No separate payment will be made to the Contractor for these items.
- E. Owner has completed recent CCTV inspection on most of the proposed new CIPP installation. Efforts to identify major pipe deficiencies have been identified on Plans and described in the specifications. Contractor shall assume as part of the bid there may be additional pipeline deficiencies that could require pressure grouting prior to installation of the CIPP.

1.02 PROPOSAL ITEM MEASUREMENT AND PAYMENT

- A. Mobilization: Payment for Mobilization will be made on a lump sum basis. The amount to be allowed for Mobilization in the partial payment to be made under the Contract will be as follows:
 - 1. When 5% of the total original contract amount is earned from other proposal items, not including advances on materials, 50% of the amount bid for

Mobilization, or 2.5% of the original contract amount, whichever is the least, less normal retainage, will be paid.

2. When 10% of the total original contract amount is earned from other proposal items, not including advances on materials, 100% of the amount bid for mobilization, or 5% of the original contract amount, whichever is the least, less normal retainage, will be paid.
3. Upon completion of all work on the project, payment of any amount bid for Mobilization in excess of 5% of the total original contract amount will be paid.
4. The above schedule of progress payments for Mobilization shall not limit or preclude progress payments otherwise provided by the Contract.

B. CIPP Liner, 8-inch

1. Measurement shall be per linear foot of 8-inch diameter main line rehabilitation as measured from center of manhole to center of manhole (or end cap).
2. Payment shall include complete compensation for all work, labor, materials, equipment and incidentals necessary to provide Cured-in-Place Pipe (CIPP) in place and approved for use. This will include, but is not limited to pre-installation video inspection, cleaning and injection grouting of all pipeline deficiencies described as Runners (IR) or Gushers (IG) in Section 02775, Paragraph 3.01.H) or cutting of protruding taps necessary to install liner discovered from viewing the video. No separate or additional payment will be made for additional testing, cleaning and video inspection required as a result of correction of unsatisfactory work. Internal CIPP reinstatement and lateral sealing of existing service laterals agreed to be connected are paid under a separate bid item. Point repairs to clear the line of obstructions or collapsed pipe that prevent liner installation which require open cut excavation and replacement of the existing short section are not considered part of this bid item and shall be paid under a negotiated Work Change Directive.

C. Lateral Reinstatement

1. Measurement shall be on a per each basis for each lateral that is reconnected to the new CIPP sewer.
2. Payment shall include full compensation for providing all labor, materials, equipment, tools and incidentals for all aspects of cutting the hole to the specified diameter.

D. Lateral Connection Sealing

1. Measurement shall be on a per each basis for each lateral connection directly connected to the mainline sewer injected with a chemical grout to seal the interface between the installed CIPP and the host pipe at the location of the service connection. This will also include grouting any visible defects to the satisfaction of Engineer from the mainline connection extending approximately two feet up the lateral.

2. Payment shall include full compensation for providing all labor materials, equipment, tools and incidentals for all aspects of packer injection grouting to form a watertight seal between the CIPP liner and the host pipe along with approximately two feet of the lateral to seal defects with a non-shrink, watertight chemical grout compatible with the liner system. Additional efforts include pressure testing of each connection and removal of all residual grout from the sewer main and lateral as approved by the Engineer to prevent blockage of sewage flow.
- F. Dewatering: All dewatering/ground control measures including materials, equipment and labor unless identified as part of other individual bid items shall be incidental to the cost of related items of work and no separate payment will be made.
- G. Post-installation Video Inspection
1. Measurement for post-installation video inspection will be measured on the length basis to the nearest foot. The length will be measured, with no deduction for structures or fittings, along the pipe flow line from center of manholes or the ends of pipe.
 2. Payment shall include compensation for all labor, materials, equipment and incidentals necessary to complete the work as specified. Provide Owner with a copy of the video inspection.
- H. Traffic Control: Measurement and payment for traffic control shall be made on a lump sum basis. The lump sum price shall include all costs for materials, equipment and labor for: furnishing, erecting and maintaining temporary barricades, signs and other traffic control devices; detours, and other safeguards necessary for orderly flow of traffic; preparing and updating the Traffic Control Plan for approval by the Owner; notification schedules and notifying property owners and businesses at least 7 days in advance of beginning work; and providing all flagging identified in the approved Traffic Control Plan.
- I. Sanitary Sewer Bypass Pumping – Hoodland Service Area: Measurement and payment for sanitary sewer bypass pumping shall be made on a lump sum basis. The lump sum price shall include all costs for materials, equipment and labor to provide the appropriately sized flow diversion and piping during all elements of construction for CIPP and manhole improvements identified in Section 02730, Paragraph A.1.
- J. Sanitary Sewer Bypass Pumping –Clackamas Industrial Area: Measurement and payment for sanitary sewer bypass pumping shall be made on a lump sum basis. The lump sum price shall include all costs for materials, equipment and labor to provide the appropriately sized flow diversion and piping during all elements of construction for CIPP improvements identified in Section 02730, Paragraph A.2.
- K. Sanitary Sewer Bypass Pumping – Sunnybrook/Sunnyside Area: Measurement and payment for sanitary sewer bypass pumping shall be made on a lump sum basis. The lump sum price shall include all costs for materials, equipment and labor to provide the appropriately sized flow diversion and piping during all elements of construction for CIPP improvements identified in Section 02730, Paragraph A.3.

END OF SECTION

SECTION 01040

COORDINATION AND PROJECT REQUIREMENTS

PART 1 GENERAL

1.01 PROJECT COORDINATION

- A. Coordinate scheduling, submittals and work of various Sections of the Specifications and subcontractors to assure efficient and orderly sequence of interdependent construction.

1.02 CONNECTIONS TO UNDERGROUND UTILITIES, CONDUITS, OR PROCESS PIPING

- A. Obtain best available current information on location, identification and marking of existing utilities, piping and conduits and other underground facilities before beginning any excavation. Contact Oregon Utility Notification center at 503-246-6699 for information at least 48 hours in advance of beginning work. Give Engineer 24 hours notice before beginning work.
- B. The location of existing utilities and underground facilities known to the Engineer are shown in their approximate location based on information available at the time of preparing the Drawings. The actual location, size type and number of utilities and underground facilities may differ from that shown and utilities or underground facilities may be present that are not shown. See General Conditions, Section A.4. and Instructions to Bidders, Article 2. for the Contractor's responsibilities working around these facilities.
- C. Where connections to existing utilities or other underground facilities is required or where new piping or conduits may cross or interfere with existing utilities or underground facilities carefully excavate and uncover existing installations to a point 1 foot below the pipe or conduit to determine the actual elevation and alignment. Call the Engineer's attention to differing existing conditions that may require a clarification or change.

1.03 FIELD ENGINEERING AND LAYOUT

- A. See General Conditions, Section A.4. regarding reference points provided on the plans and responsibilities of the Contractor to accurately layout the Work.

1.04 PRECONSTRUCTION MEETING

- A. Prior to beginning the Work, the Contractor and its key personnel and Subcontractors including the Contractor's Superintendent, Project Manager, and Field Engineer shall attend a meeting with the Owner and the Engineer to discuss the following:
 - 1. Name, Authority, and Responsibilities of Parties Involved
 - 2. Project Procedures:
 - a. Progress meetings
 - b. Correspondence
 - c. Notification
 - d. Submittal of Shop Drawing Samples, and Proposed Equivalents

- e. Requests for Information
- f. Response to Requests for Information
- g. Work Directive Change
- h. Contractor Reporting requirements
- i. Change Orders
- 3. Temporary Schedule and Contractor's Construction Schedule
- 4. Maintenance of Record Drawings
- 5. Punch Lists and Project Closeout Procedures
- 6. Final Deliverables including Record Drawings

1.05 PROGRESS MEETINGS

- A. The Engineer will conduct progress meetings with Contractor and Owner at job site as necessary to insure project is on schedule. Contractor shall be prepared to attend up to five (5) interim meetings in addition to the Preconstruction conference and final walk through for acceptance of the project. Attendance required by Contractor's project manager, superintendent and affected Subcontractors and suppliers. The Engineer will prepare, maintain and distribute agenda and dated record of: (1) actions required and taken and (2) decisions needed and made.

1.06 MATERIALS

- A. General:
 - 1. Verify that products delivered meet requirements of Contract Documents and the requirements for approved submittals.
- B. Transportation and Handling:
 - 1. Transport and handle products in accordance with manufacturer's instructions.
 - 2. Promptly inspect shipments to assure that products comply with requirements, quantities are correct, and products are undamaged.
 - 3. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage.
- C. Storage and Protection:
 - 1. Store and protect products in accordance with manufacturer's instructions. Seals and labels shall be intact and legible.
 - 2. Provide offsite storage and protection including insurance coverage when site does not permit onsite storage or protection.

1.07 SAFETY

- A. In accordance with generally accepted construction practice, applicable law and the General Conditions, Section F, the Contractor shall be solely and exclusively responsible for:
 - 1. Construction means and methods.
 - 2. Safety of employees engaged in the work while on and off the site.
 - 3. Safety of the Owner, the Engineer, and others who may visit or be affected by the work.
 - 4. Safety of the work itself including material and equipment to be incorporated therein.

5. Safety of other property at the site or adjacent thereto.
 6. Safety programs, equipment and protective devices required to assure the safety of persons and property for whom/which the Contractor is responsible.
- B. The duties of the Engineer in conducting review of the Contractor's performance is not intended to include review of the adequacy of the Contractor's work methods, equipment, bracing, scaffolding or safety measures in, on, or near the construction site. See General Conditions, Section F.
 - C. The Contractor is hereby informed that work on this project could be hazardous. The Contractor shall carefully instruct all personnel working in potentially hazardous work areas as to potential dangers and shall provide such necessary safety equipment and instructions as required to prevent injury to personnel and damage to property, and to comply with all applicable laws and regulations including State OSHA, Federal OSHA, and other regulations referenced in these Contract Documents.
 - D. The Contractor shall, at all times, maintain the job in a condition that is safe for the Owner, the Engineer and their Consultants to make site visits and to conduct construction reviews. If the Owner or the Engineer cannot allow personnel to visit the job because it is not safe, the Contractor is not providing required safe access to the Work as required by General Conditions, Section F.
 - E. The Contractor shall prepare a Safety Plan meeting the requirements of the Clackamas County Safety Officer and applicable regulations. As a minimum, the Contractor's Safety Plan shall set forth definite procedures for informing workers about safety, for instructing workers in safe practices, for assuring that workers are using appropriate safety equipment and safe work practices and for reporting accidents.
 - F. Owner Safety Requirements: Before any Work at the site is started, Contractor and Owner safety representatives shall meet and review Owner's Contractor Notification Process document. The parties shall fill out, sign and submit two copies of the document for the Owner's project records. Contractor is responsible to convey the information in the Contractor Notification Process document to Contractor employees and subcontractors. All Contractor employees, subcontractors and manufacturer representatives shall view the Owner's "contractor orientation video" before starting work at the site.
 - G. The Contractor shall acquire a "Hot-Work Permit" in accordance with the Hot Work Permit Policy of the Water Environment Services, a department of Clackamas County when engaged in an activity that may produce sparks, flame, heat or other ignition source.

1.08 CONTRACTOR'S QUALITY CONTROL

- A. The Contractor shall be fully responsible for inspecting the work of its suppliers and Subcontractors to assure that the work when completed will comply with the standards for materials and workmanship required by the Contract Documents. See General Conditions Section, B.3.
- B. Inspections, periodic observations and testing performed by the Owner or the Engineer are

for the Owner's benefit and information only and shall not be construed as partial or incremental acceptance of the work and shall not be deemed to establish any duty on the part of the Owner or the Engineer to the Contractor, its subcontractors or suppliers. See General Conditions, Section B.3.

- C. The Contractor shall:
 - 1. Monitor quality control over suppliers, manufacturer, products, services, site conditions, and workmanship, to produce work of specified quality.
 - 2. Comply fully with manufacturer's installation instructions, including performing each step in sequence as recommended by the manufacturer.
 - 3. Submit a Request for Information to Engineer before proceeding with work when manufacturers' instructions or reference standards conflict with Contract Documents.
 - 4. Comply with specified standards as a minimum quality for the work except when more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
 - 5. Perform work by persons specializing in the specific trade and class of work required and qualified to produce workmanship of specified quality.
- D. If reference standards or manufacturers' instructions contain provisions that would alter or are at variance with relationships between the parties to the Contract set forth in the Contract Documents, the provisions in the Contract Documents shall take precedence.
- E. The Contractor shall provide assistance required by the Engineer to adequately inspect the Work including ladders, scaffolding, lighting, ventilation and other aids to facilitate access and provide a safe working environment.

END OF SECTION

SECTION 01090

REFERENCE STANDARDS

PART 1 GENERAL

1.01 QUALITY ASSURANCE

- A. For products or workmanship specified by association, trade, or Federal standards, comply with requirements of the standard, except when more rigid requirements are required by applicable codes or specified herein.
- B. Comply with issue of reference standard which is current at date of receipt of bids.
- C. The contractual relationship of the parties to the Contract shall not be altered from the Contract Documents by mention or inference otherwise in a reference document.

1.02 SCHEDULE OF REFERENCES

AAN	American Association of Nurserymen 230 Southern Building Washington, DC 20001
AASHTO	American Association of State Highway and Transportation Officials 444 North Capitol Street, NW, Suite 249 Washington, DC 20001
ACI	American Concrete Institute P.O. Box 19150 Detroit, MI 48219
ANSI	American National Standards Institute, Inc. 11 W. 42 nd Street, 13th Floor New York, NY 10036
ASTM	American Society for Testing and Materials 1916 Race Street Philadelphia, PA 19103-1187
AWWA	American Water Works Association 6666 West Quincy Avenue Denver, CO 80235
CWHSSA	Contract Work Hours & Safety Standards Act Department of Labor/WH Office of Contracting 200 Constitution Avenue NW Washington, DC 20210
EPA	United States Environmental Protection Agency 1200 Sixth Avenue Seattle, WA 98101

NESHAP	National Emission Standards for Hazardous Air Pollutants c/o Armina Nolan 1200 Sixth Avenue Seattle, WA 98101
NIOSH	National Institute of Occupational Safety and Health 4676 Columbia Parkway Cincinnati, OH 45226
OR-OSHA	Oregon Occupational Safety and Health Division of the Department of Insurance and Finance

1.03 ACRONYMS

Wherever used in the Contract Documents, the following acronyms will have the meaning listed:

UFC	Uniform Fire Code
BMPs	Best Management Practices
TESC	Temporary Erosion and Sedimentation Control

END OF SECTION

SECTION 01195

PROTECTION AND MAINTENANCE OF WORK AND PROPERTY

PART 1 GENERAL

1.01 DESCRIPTION

This section specifies the protection and maintenance of work and property as they are affected by the work.

1.02 RELATED SECTIONS

A list of sections of the project specifications that are most closely related to this section is provided for the convenience of the Contractor.

- A. Section 01560, *Environmental Controls*
- B. Section 02730, *Temporary Bypass Pumping*
- C. Section 02775, *Cured-in-Place Pipe (CIPP)*

1.03 PUBLIC AND PRIVATE PROPERTY

- A. Protect all public and private property, insofar as it may be endangered by Contractors' operations and take every reasonable precaution to avoid damage to such property.
- B. Restore and bear the cost of any public or private improvement facility, structure or land and landscaping within the Right-of-Way or Easement which is damaged or injured directly or indirectly by or on account of an act, omission, or neglect in the execution of the Work. Restore to a condition substantially equivalent to that existing before such damage or injury occurred, by repairing, rebuilding, or otherwise affecting restoration thereof, or if this is not feasible, make a suitable settlement with the owner of the damaged property.
- C. Contractor is responsible to contact each business impacted by the work fronting their location and to complete any temporary bypassing and/or other measures necessary to address their facility during the time of work to install the CIPP. Submit all temporary measures agreed upon to the Owner prior to commencing work within each affected section of main line pipe.

1.04 LOCATION OF EXISTING FACILITIES

- A. Pothole locations ahead of pipeline construction to verify locations so as not to affect main pipeline installation.
- B. In general, the locations of existing major utilities are indicated on the Drawings. This information has been obtained from utility maps and field surveys. Owner does not guarantee the accuracy or completeness of this information, and it is to be understood that other aboveground or underground utilities not shown on the Drawings may be encountered during the course of the work.

- C. Use a pipe locator or hand excavation to determine the exact location of underground facilities in the interest of avoiding unnecessary damage, maintenance costs, and to ensure continuity of customer service.
- D. Contact all utility companies and departments having underground facilities within the construction area and request they locate and mark their utilities. In addition, verify the location of all buried utilities in the construction area 48 hours before contractor digs by calling the one-call locator service at 1-800-332-2344. The contractor shall comply with Oregon “locate law” ORS 757.541 to ORS 757.571.

END OF SECTION

SECTION 01200

PROJECT MEETINGS

PART 1 GENERAL

1.01 DESCRIPTION

This section specifies project meetings prior to and during construction.

1.02 PRECONSTRUCTION CONFERENCE

Prior to beginning construction, a meeting of representatives of the Contractor, Subcontractors, Owner, Engineer, Consultant and other affected agencies will be held. The purpose of the meetings will be to establish lines of authority and communication and identify duties and responsibilities of the parties. Discussion will cover specific Drawings, Specifications, unusual conditions, schedules of completion, coordination with other projects, and other pertinent features of the Contract. Written notification of such a pending preconstruction conference will be made.

1.03 MEETINGS

- A. Attend weekly Contract meetings arranged by the Engineer to discuss plans for the following week and to evaluate progress. Arrange for attendance of Contractor's subcontractors as necessary to discuss job progress. See Section 01300 for requirements to provide a 2 week look-ahead schedule on a weekly basis.
- B. Attend meetings for other contractors working in the area to coordinate work as required by Engineer.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

END OF SECTION

SECTION 01300

SUBMITTALS PROCEDURE

PART 1 GENERAL

1.01 DESCRIPTION

This Section specifies procedures for Contractor submittals. Where required by the Specifications, submit descriptive information that will enable the Engineer to assess whether the Contractor's proposed materials, equipment or methods of work are in general conformance to the design concept and in compliance with the Drawings and Specifications. The information to be submitted shall consist of drawings, specifications, descriptive data, certificates, samples, test results and such other information, all as specifically required in the Specifications.

PART 2 PRODUCTS

2.01 CONTRACTOR RESPONSIBILITIES

- A. Contractor shall be responsible for the accuracy and completeness of the information contained in each submittal and shall ensure that the material, equipment or method of work shall be as described in the submittal. Verify that the material and equipment described in each submittal conforms to the requirements of the Specifications and Drawings prior to transmittal to the Engineer. Ensure that there is no conflict with other submittals and notify the Engineer in each case where such submittal may affect the work of another contractor or Owner.
- B. If the Contractor's review determines that the information shows deviations from the Specifications or Drawings, submit a request for substitution.

PART 3 EXECUTION

3.01 TRANSMITTAL PROCEDURE

- A. General:
 - 1. Submittals regarding material and equipment shall be accompanied by Submittal/Transmittal Form. A separate form shall be used for each specific item, class of material, equipment, and items specified in separate, discrete sections for which the submittal is required. Submittals for various items shall be made with a single form when the items taken together constitute a manufacturer's package or are so functionally related that expediency indicates checking or review of the group or package as a whole.
 - 2. A unique number, sequentially assigned, shall be noted on the transmittal form accompanying each item submitted. Original submittal numbers shall have the following format: "XXX"; where "XXX" is the sequential number assigned by the Contractor. Resubmittals shall have the following format: "XXX-Y"; where "XXX" is the originally assigned submittal number and "Y" is a sequential letter assigned for resubmittals, i.e., A, B or C being the 1st, 2nd and 3rd resubmittals, respectively. Submittal 25B, for example, is the second resubmittal of Submittal 25.

- B. Deviation from Contract: Submit a request for substitution for deviations from the Specifications or Drawings. Include the reason for the deviation and cost differential for the deviation. Deviations from the Contract shall be authorized by change order only.
- C. Submittal Completeness: Submittals which do not have all the information required to be submitted are not acceptable and will be returned without review.
- D. Submit to the Engineer the following items for review:
 - 1. Construction Schedule
 - 2. List of employees to be contacted in an emergency with their home phone numbers and cell numbers (available 24 hrs/day)
 - 3. List of subcontractors that will work on the project
 - 4. Erosion control plan
 - 5. Safety Plan
 - 6. Drug Testing Plan
 - 7. Sanitary Sewer Bypass Plan
 - 8. CIPP Materials
 - 9. Copy of confined space entry plan.
 - 10. Traffic Control Plan (SE Evelyn, SE 130th and SE 84th Avenue)

The Engineer reserves the right to ask for additional SUBMITTALS that are not included on the above list. Review by the Engineer shall not relieve the Contractor from responsibility for error of omission. Obtain the Engineer's approval prior to beginning any fabrication or other work. No deviation from the reviewed drawings shall be allowed without approval from the Owner or Engineer.

3.02 REVIEW PROCEDURE

- A. For each required submittal, submit four (4) copies of all the submitted information. Two (2) will be returned to the contractor. Individual sheets shall not exceed 22 inches x 34 inches. *Electronic copies may be substituted for hard copies pending final approval of format at Preconstruction Conference.*
- B. Unless otherwise specified, within 3 days after receipt of the submittal/resubmittal, the Engineer will review and return it to the Contractor. The returned material will consist of two (2) marked-up copies of the submittal. The returned submittal will indicate one of the following actions:
 - 1. If the review indicates that the material, equipment or work method is in general conformance with the Contract Drawings/Specifications, the submittal copies shall be marked "Approved." In this event, the Contractor may begin to incorporate the material/equipment/work method covered in the submittal.
 - 2. If the review indicates that the submittal is insufficient or that limited corrections are required, the submittal copies may be marked "Approved as Noted." The Contractor may begin to implement the work method or incorporate materials/comments covered in the submittal in accordance with the corrections/comments noted.
 - 3. If the review reveals the submittal is insufficient or contains incorrect data and the comments require revision and resubmittal, the submittal copies shall be

marked “Not Approved, Resubmit.” In this case, the Contractor shall not then undertake work covered by this submittal until the submittal has been revised, resubmitted and returned to the Contractor with a marking of “Approved” or “Approved as Noted.”

4. If the review indicates that the submittal is incomplete or that additional information is required, the submittal copies may be marked “Submit Specified Item”. In this case the Contractor shall not undertake work covered by this item until the submittal has been revised resubmitted and returned to the Contractor with a marking of “Approved” or “Approved as Noted.”
5. If the review reveals the material, equipment, or work does not require submittal, then the submitted copies shall be marked “Review Not Required Per Contract Documents.” In this event, the Contractors may begin to incorporate the material/equipment/work covered by the submittal and no further action is required.

3.03 EFFECT OF REVIEW OF CONTRACTOR’S SUBMITTALS

Review of drawings, methods of work or information regarding materials or equipment the Contractor proposes to provide shall not relieve the Contractor of his responsibility for errors therein, nor shall it be regarded as an assumption of risks or liability by the Engineer on behalf of Owner, or by any officer or employee of Owner. The Contractor shall have no claim under the Contract on account of the failure, or partial failure, of the method of work, material or equipment so reviewed. A mark of “Approved” or “Approved as Noted” shall mean the Owner has no objection to the Contractor, upon the Contractor’s own responsibility, using the plan or method of work proposed, or providing the materials or equipment proposed.

END OF SECTION

SECTION 01310

CONSTRUCTION SCHEDULE

PART 1 GENERAL

1.01 DESCRIPTION

- A. This Section specifies requirements and procedures for the Contractor in preparing a cost loaded construction schedule. The purpose of the schedule shall be to ensure adequate planning of the work by the Contractor, to establish the standard against which satisfactory completion of the project shall be judged, to assist the Engineer in monitoring progress, and to assess a change proposal's impact on the construction schedule.

1.02 SUBMITTALS

- A. Before starting work, the Contractor shall submit to the Engineer an overall contract construction schedule showing the proposed order of work and indicate the time required for completion of the major items and sub-items of work. The schedule shall also show the critical path to accomplish all of the work. The format for the schedule shall be as a minimum a Gantt Chart format showing start and completion dates for the various work activities.

PART 2 PRODUCTS

2.01 CONSTRUCTION SCHEDULES

- A. Gantt Chart, Bar Chart, or equivalent as approved by the Engineer. Chart shall include but not be limited to specific sequencing for each area of rehabilitation. This could specifically include the Hoodland Service Area, Clackamas Industrial Area and the Sunnybrook/Sunnyside Area.

PART 3 EXECUTION

3.01 SUBMISSION AND APPROVAL

- A. The schedule shall be realistic and definitive as to the amount of work which is to be accomplished within the time indicated and shall be updated monthly to reflect actual work progress. The schedule shall breakdown the project into activities corresponding to the plan sheets and will include major tasks to complete all phases of work. It will be used as an indication of the sequence of the major construction operations and as a check on the progress of the work and may, at the sole discretion of the Engineer, be employed by the Engineer in determining delays and time extensions.
- B. If the Contractor wishes to make changes in the construction schedule, then to the maximum extent possible provide two (2) weeks notice to the Engineer, or secure the approval of the Engineer prior to performing such changes. Such schedule changes shall be strictly in accordance with the other requirements of this specification, and shall show

the interrelationship between the original schedule and the proposed changes to the schedule.

- C. The Engineer's review of the original schedule shall not constitute a warranty or representation by the Owner that the Contractor can perform the work according to such schedule.
- D. Submission of a full updated schedule may not be required with each monthly progress payment invoice, if the two week look ahead schedule has been kept up to date to the satisfaction of the Engineer.

END OF SECTION

SECTION 01500

TEMPORARY CONSTRUCTION FACILITIES

PART 1 GENERAL

1.01 SUMMARY

- A. Section includes:
 - 1. Furnishing, maintaining, and removing construction facilities and temporary controls, including temporary utilities, construction aids, barriers and enclosures, security and removal after construction.
- B. Related sections:
 - 1. The Contract Documents are complementary; what is called for by one is as binding as if called for by all.
 - 2. It is the CONTRACTOR's responsibility for scheduling and coordinating the Work of subcontractors, suppliers, and other individuals or entities performing or furnishing any of CONTRACTOR's Work.
 - 3. The following Sections are related to the Work described in this Section. This list of Related Sections is provided for convenience only and is not intended to excuse or otherwise diminish the duty of the CONTRACTOR to see that the completed Work complies accurately with the Contract Documents.
 - a. Section 01300 - Submittal Procedures.

1.02 REFERENCE

- A. Occupational Safety and Health Administration (OSHA).

1.03 SUBMITTALS

- A. General: For products specified to be furnished under this Section, submit product data as specified in Section 01300.

1.04 TEMPORARY UTILITIES

- A. Temporary sanitary facilities:
 - 1. Provide suitable and adequate sanitary facilities that are in compliance with applicable Laws and Regulations.
 - 2. At completion of the Work, remove sanitary facilities and leave site in neat and sanitary condition.

1.05 CONSTRUCTION AIDS

- A. Provide railings, kick plates, enclosures, safety devices, and controls required by Laws and Regulations and as required for adequate protection of life and property.
- B. Accident prevention:
 - 1. Exercise precautions throughout construction for protection of persons and property.
 - 2. Observe safety provisions of applicable Laws and Regulations.
 - 3. Guard machinery and equipment, and eliminate other hazards.

4. Make reports required by authorities having jurisdiction, and permit safety inspections of the Work.
 5. Before commencing construction work, take necessary action to comply with provisions for safety and accident prevention.
- C. Warning devices and barricades: Adequately identify and guard hazardous areas and conditions by visual warning devices and, where necessary, physical barriers:
1. Devices shall conform to minimum requirements of OSHA and State agency which administers OSHA regulations where Project is located.

1.06 TEMPORARY CONTROLS

- A. Noise control:
1. In inhabited areas, particularly residential, perform operations in manner to minimize noise.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

END OF SECTION

SECTION 01560

ENVIRONMENTAL CONTROLS

PART 1 GENERAL

1.01 DESCRIPTION

- A. This section specifies environmental mitigation and temporary environmental controls required to be maintained during construction. Nothing in this section shall relieve any person from the obligation to comply with the regulations or permits of any federal, state, or local authority.
- B. Related Sections: A list of sections most closely related to this section is provided for the convenience of the Contractor.
 - 1. Section 01500, *Temporary Construction Facilities*

1.02 SUBMITTALS

- A. Procedures: see Section 01300.
- B. Erosion Control Plan: Develop and maintain for the duration of the contract an Erosion Control Plan that will effectively incorporate and implement environmental protection precautions. The Contractor's Erosion Control Plan shall include methods and interim facilities to be constructed and/or used concurrently during construction to control erosion in such a manner as to ensure that sediment and sediment laden water does not enter any drainage system, roadways, or violate applicable water quality standards. Visible or measurable erosion which enters, or is likely to enter, a public storm and surface water system, wetland or stream is prohibited. The plan shall include the name of the Contractor's employee authorized to supervise and enforce compliance with the Erosion Control Plan and telephone number(s) to contact that person at any time.
- C. The Erosion Control Plan shall be submitted and approved in accordance with Section 01300 prior to initiating work within the public right-of-way.
- D. In the event a regulatory agency or jurisdiction determines the Erosion Control Plan to be inadequate to protect environment:
 - 1. The Contractor shall stop immediately the affected work in progress until adequate environmental protection measures are implemented.
 - 2. The Contractor shall modify the Erosion Control Plan to meet the requirements of said regulatory agencies, jurisdictions and provide the Engineer with the revisions to the Plan within five (5) calendar days of the notice of deficiency. Plan resubmittal will be in accordance with Section 01300.

PART 2 PRODUCTS

2.01 EROSION CONTROL

- A. Provide inlet protection consisting of bio-filter bags or other approved measures.

PART 3 EXECUTION

3.01 NOISE CONTROL

- A. Comply with all local controls and noise level rules, regulations and ordinances.
- B. Each internal combustion engine, used on the job or related to the job, shall be equipped with a muffler of a type recommended by the manufacturer. No internal combustion engine shall be operated on the project without said muffler.
- C. Noise levels for all equipment shall not exceed 85 dBA. Equipment that cannot meet these levels shall be quieted by use of improved exhaust mufflers, noise attenuation barriers or other means.
- D. If special circumstances or emergency conditions require work beyond the hours as specified, the Contractor shall:
 - 1. Notify the Engineer and Owner 72 hours in advance of any proposed extended work hours for preauthorization. The Contractor's written request shall specify the work to be performed and the circumstances that warrant the request. The request shall include any additional measures to mitigate noise generated by this construction activity if deemed necessary by the Engineer.
 - 2. If an emergency situation occurs that warrants immediate extended hours, the Contractor shall notify the Engineer immediately upon determining the need for this work.

3.02 WATER QUALITY PROTECTION AND STORMWATER CONTROL

- A. All construction activities shall comply with all conditions contained in applicable Federal, State, and Local permits.
- B. Provide approved inlet protection for all structures within or immediately downstream of all CIPP efforts within the project limits.

3.03 FISH AND WILDLIFE HABITAT

- A. The requirements of local, state, and federal agencies charged with wildlife and fish protection shall be adhered to by the entire construction work force.

3.04 EROSION CONTROL

- A. Execute the approved Erosion Control Plan.
- B. The Contractor shall not drag, drop, track, or otherwise place or deposit, or permit to be deposited, mud, dirt, rock or other such debris into any part of the public storm or surface water system, or any part of a private storm or surface water system. Any such deposit of material shall be immediately removed by the Contractor at the Contractor's expense. No material shall be washed or flushed into any part of the storm or surface water system without erosion control measures installed to the satisfaction of the Engineer.
- C. The Contractor shall maintain the facilities and techniques contained in the approved Erosion Control Plan so as to continue to be effective during the construction or other permitted activity. If the facilities and techniques approved in an Erosion Control Plan are not effective or sufficient as determined by the Engineer, the Contractor shall revise the plan immediately upon notification by the Engineer. Upon approval of the revised plan by the Owner, the Contractor shall immediately implement the additional facilities and techniques. In cases where erosion is occurring, the Engineer may require the Contractor to install interim control measures prior to submittal of the revised Erosion Control Plan.
- D. The Contractor shall ensure that all necessary pollution control equipment, supplies, or materials are available to implement the Plan.

3.05 FINES

- A. Contractor shall be responsible for all fines incurred from non-compliance with regulations of governing authorities.

END OF SECTION

SECTION 01570

TRAFFIC CONTROL

PART 1 GENERAL

1.01 DESCRIPTION

- A. This work consists of furnishing, erecting, and maintaining temporary barricades, signs, and other traffic control devices, and provision of temporary roadways, detours, flagging and other safeguards necessary for orderly flow of traffic during performance of the work.
- B. The Contractor shall submit a Traffic Control Plan (TCP) which addresses public service building access, private business access, emergency services, mail delivery, property owner access, school bus service, and Tri-Met bus service, to the Engineer for approval. Affected permitting agencies including Clackamas County Department of Transportation (DTD) and possibly City of Happy Valley will review the plan and have input that must be complied with. The input may include placement of additional signs or flagging needs for specific working conditions proposed by the Contractor. The Contractor shall update the TCP as required during the progress of the work.
- C. The Contractor is not required to provide a Traffic Control Supervisor (TCS).

1.02 RELATED SECTIONS

A list of sections of the project specifications that are most closely related to this section is provided for the convenience of the Contractor.

- A. Section 01300, *Submittals Procedure*.
- B. Section 01310, *Construction Schedule*.
- C. Section 01560, *Environmental Controls*.

1.03 QUALITY ASSURANCE

- A. Traffic Control Devices shall be in conformance with the current edition of the *Manual on Uniform Traffic Control Devices* (MUTCD), as published by the U.S. Department of Transportation – Federal Highway Administration; the Oregon Supplements to the MUTCD as published by the State of Oregon Department of Transportation; and as approved by the Engineer through the Traffic Control Plan. Copies of the MUTCD are available at the United States Government Book Store, 1304 SW 1st Avenue, Portland, Oregon.
- B. Minimum Requirements for Labor and Equipment:
 - 1. Ensure flaggers are certified in the state of Oregon.

2. Labor under these provisions applies particularly to flaggers, all of whom shall be physically and mentally qualified, trained in their duties, efficient, and courteous. Each flagger on duty, except uniformed law enforcement officers, shall wear an orange or yellow colored hard hat and an orange colored or fluorescent red-orange or fluorescent yellow-orange vest, and shall be equipped with a highly visible, reflectorized "Stop-Slow" hand sign conforming to current standards for daylight use; and with illuminated stand area, of high visibility for night use.
3. When work on the project requires closure of a travel lane resulting in one-way traffic, the Contractor shall have flaggers equipped with two-way radios, whenever, in the opinion of the Engineer, radios are required.

1.04 SUBMITTALS

- A. The Contractor shall provide the following to the Owner and the Engineer in accordance with Section 01300 at least seven (7) calendar days in advance of the time the traffic control will be required:
- B. The TCP shall as a minimum address the following:
 1. Annotate proposed location of barricades, lighting, signing, temporary striping and other traffic control devices.
 2. Maintain full access on SE Sunnybrook, SE Evelyn, SE 130th and SE 84th Avenue at all times. This includes a minimum of one lane of traffic each way. Local streets including Sandy River Lane, E Wild Fern Lane, E Mountain Vista Ct, and Hackett Creek Ct may be closed during the day with local access provided around the equipment.
 3. Refer to Table 1 in Paragraph 1.06.B for specific hours of operation attributed to each area of rehabilitation shown on the plans.
 4. Maintain emergency access; access to public and private schools and public service buildings shall be provided at all times. If driveway or mail access is to be restricted, notice shall be given seven (7) calendar days prior to the date of the restriction to the owner/occupant of any building.
 5. Channel traffic flow through the work zone per approved Traffic Control Plan.
 6. Ensure the plan addresses all modes of transportation, including vehicles, bicycles, pedestrians, transit, and adjacent property access.
 7. Ensure the plan shows pertinent roadway features that will be obstructed by construction activity, such as fire hydrants.
 8. Indicate size, shape, color, location, and type of mounting for all proposed temporary pavement markings. Indicate any existing pavement markings that conflict with the TCP; describe method to be used for removing conflicting pavement markings per ODOT/APWA Section 0225.43(4).

1.05 REQUIREMENTS

- A. The TCP must be approved in writing by the Owner following review by Clackamas County Department of Transportation before any work commences within the applicable areas covered by each permit.
- B. Vehicular and pedestrian routing on streets where the work is not being performed shall not be revised without approval of a supplemental Traffic Control Plan by the Owner.
- C. Work hours within the project shall be as identified in Paragraph 1.06. B unless otherwise approved by the Owner.
- D. Sunday work will only be considered on the project if necessary to meet the final completion time frame. Contractor shall request this at least seven (7) days in advance for review and possible approval. Approval is not guaranteed and therefore Contractor should make every effort to complete the work within the allowable time frame identified.
- E. Public Streets:
 - 1. Property owner, emergency vehicle, mail delivery, pedestrian, and bicycle access shall be maintained at all times.
 - 2. Maintain 2-way traffic flow on all streets during non-working hours for all streets.
 - 3. The Contractor is responsible for identifying bus routes in the project area.
 - 4. Traffic diversion plans must be approved prior to this work starting.
- F. Signs:
 - 1. Standard construction zone warning signs shall be in accordance with documents referenced in Section 01570 - 1.03.
- G. Advance Information Signs and Warning Arrow Panels:
 - 1. Information Signs:
 - a. Black lettering on orange background
 - b. List beginning of work, work zone limits, nature of the work, and nature of traffic restrictions.
 - c. Post one week before beginning the work on the affected work zone.
 - 2. Warning Arrow Panels: Required to be positioned at each end of the work zones as required by permitting agency.

1.06 COORDINATION

- A. The Contractor shall coordinate all construction to offer the least possible obstruction and inconvenience to the public.
- B. The Contractor shall coordinate with all private businesses and residents within the project limits. Due to the timing of flows from multiple users this will likely require random installation of runs to accommodate the various peak usage times and to provide the best opportunity for efficiently bypassing flows. The following Table 1 summarizes available windows of time to complete work within the various areas:

TABLE 1

<i>Plan Sheet</i>	<i>Location</i>	<i>Zoning/ Rehab Method</i>	<i>Work Hours</i>
A-1	E Wild Fern Lane	Residential/ CIPP	M-F, 7 am – 7 pm
A-2	E Mountain Vista Ct	Residential/CIPP	M-F, 7 am – 7 pm
A-3	Sandy River Lane	Residential/CIPP	M-F, 7 am – 7 pm
A-4	Hackett Creek Ct	Residential/CIPP	M-F, 7 am – 7 pm
B-1	SE Evelyn Ave	Industrial and Commercial/ CIPP	M-F, 10 pm – 7 am
B-2	SE 130 th Ave.	Industrial/CIPP	Saturdays, 7 am – 7 pm Maintain two travel lanes at all time.
C-1	Clackamas Promenade	Restaurant/CIPP	M-F, 10 pm – 7 am
C-2	Sunnybrook Ave	Commercial/CIPP	M-F, 10 pm – 7 am

- C. During preparation of plans and specifications, the property managers for business within Clackamas Promenade were contacted in order to get their input for both work hours and notification that Construction vehicles would be impacting their parking lots. Clackamas Promenade contact is Brad Freeman (Kimco Realty) at 503-336-9202. Olive Garden restaurant is the major contributor to flows in LP 1.6. Pacific Seafoods located at 16797 SE 130th operates 24 hours/day excluding Saturdays. Contact Doug Watson, Maintenance Manager (Pacific Seafoods) at 503-444-1574 to coordinate Saturday efforts. The above described businesses shall be not construed as being the entire list of affected parcels to be contacted.
- D. The Contractor shall coordinate all revisions to the existing traffic control with the Owner. Traffic controls are to remain in operation unless determined to be unnecessary and confusing under the approved Traffic Control Plan. All damaged or lost traffic control devices shall be immediately replaced by the Contractor.

1.07 NOTIFICATIONS

- A. Written approval of the Traffic Control Plan and/or supplemental Traffic Control Plan shall be obtained from the Owner at least ten (10) days prior to initiating work.
- B. To accommodate emergency vehicle rerouting, notification shall be given to Owner in writing, not less than 72 hours prior to construction operations that modify existing traffic flow conditions.

- C. Individual property owners or businesses shall be notified at least 48 hours in advance of beginning work that restricts the use of the property.

PART 2 PRODUCTS

2.01 TRAFFIC CONTROL PLAN

Traffic Control Plan for shall be completed in accordance with Sections 01570-1.04 through 1.06.

2.02 SPECIAL SIGNS

Signs with special or non-standard messages may be necessary to properly convey information to the motorist or pedestrian. The Contractor shall be responsible for installing and maintaining these signs. Signs shall be in accordance with the documents referenced in Section 01570 - 1.03.

PART 3 EXECUTION

3.01 TRAFFIC MAINTENANCE

- A. The Contractor shall maintain a normal flow of vehicular and pedestrian traffic, to prevent accidents and to protect the work throughout the construction stages until completion of the work. The Contractor shall make all necessary arrangements to reroute traffic, provide and maintain barriers, cones, guards, barricades, and construction warning and regulatory signs. Regulatory devices provided by the Contractor shall be suitable for nighttime operation. The Contractor shall protect other portions of the work during construction and until completion. This includes providing and maintaining barricade lights, construction signs, guards, temporary crossovers, and flaggers in accordance with documents referenced in Section 01570-1.03.
- B. Rerouting of traffic by the Contractor shall be limited to the shortest time necessary to provide effective construction operations. Required travel lanes shall not be blocked by the Contractor's activities, including trucks delivering materials unless pre-approved by the Owner. Material deliveries and other related trucking activities shall occur in the Contractor's protected work or staging areas. Upon completion of a segment of work in streets, the Contractor shall restore traffic operations to normal flow as soon as possible.
- C. The Contractor shall provide Emergency vehicle access at all times throughout the project.
- D. The Contractor shall prohibit pedestrian movements to the best of their ability through construction areas. Facilities for pedestrians include provisions for the safe movement of mobility and sight-impaired individuals to match existing provision adjacent to construction activities.

3.02 ACCESS

- A. The Contractor shall maintain access to private properties and businesses at all times.

- B. If during some urgent stages of construction the Engineer and Owner concur that temporary closure of an access to a property is unavoidable, the closure shall be coordinated with the property owners and approved by the Engineer at least 48 hours in advance of closure. If required, alternative access and mail delivery shall be provided. Property access shall not be closed until the alternative access is available.

3.03 SAFETY

- A. The Contractor shall provide adequate safeguards, safety devices and protective equipment and take all necessary actions to protect life, health and safety of the public and construction crew and to protect property in connection with the performance of work covered by the Contract. This action shall include the provision of adequate safeguards, safety devices and protective equipment.
- B. The Contractor shall provide and erect all necessary standard construction signs, warning signs, portable message signs and detour signs to warn and protect the public at all times from injury or damage as a result of the Contractor's operations.
- C. Where flaggers are employed by the Contractor to safeguard traffic, the flagger's equipment shall be in accordance with documents referenced in Section 01570 - 1.03. Flaggers while flagging traffic must use this equipment.
- D. The Contractor shall furnish standard signs as well as other appropriate signs prescribed by the Owner or review agency as applicable and necessary for the work. Signs on posts and supports shall be erected and maintained by the Contractor in a neat and presentable condition until they are no longer necessary. When a sign is no longer necessary, the Contractor, upon approval by the Owner, shall take down such sign. Signs necessary for nighttime traffic control, or that remain in place during hours of darkness shall be fully reflectorized.
- E. The Contractor shall safeguard and direct traffic after the existing signs have been removed. Preservation and maintenance of traffic control and street name signs shall be the sole responsibility of the Contractor. Signs and other traffic control devices damaged or lost by the Contractor, shall be replaced by the Contractor at the Contractor's expense.
- F. Areas under work zone traffic control shall be monitored at least two (2) times daily. Disturbed signs and traffic control devices shall be reset immediately. Non applicable signs shall be removed or covered.
- G. Upon failure of the Contractor to provide necessary traffic control when ordered to do so by the Engineer, the Engineer can, without further notice to the Contractor, provide the necessary traffic control. The cost of the traffic control shall be deducted from any payment due the Contractor.
- H. The Contractor shall provide adequate traffic control for protection of the work and the public at all times. The Contractor shall be liable for injuries and damages to persons and property suffered by reason of the Contractor's operations or negligence.

END OF SECTION

SECTION 01700

CONTRACT CLOSEOUT

PART 1 GENERAL

1.01 SUMMARY

This Section includes a description of procedures to be followed and related work required to accomplish an orderly transfer of Project deliverables from the Contractor to the Owner.

1.02 DEFINITIONS

- A. Punch List: The stated qualification accompanying either the Engineer's Certificate of Substantial Completion or the Certificate of Final Payment, or any list of construction items found to be deficient or incomplete through review of the Work by Engineer and communicated in writing to Contractor at any time during the Contract Period.
- B. Substantial Completion: When the work is ready for its intended use.
- C. Record Drawings: Drawings showing changes made during actual construction.

1.03 SUBMITTALS

A. SUBSTANTIAL COMPLETION

- 1. Contractor to notify Engineer in writing that the Contractor considers the Work as a whole to be in Substantial Completion and request for a Substantial Completion inspection.
- 2. Record Drawings submitted to Engineer with accurate representation of all changes, as approved.

B. FINAL COMPLETION

- 1. Contractor to notify Engineer in writing that the Contractor considers the Work to have progressed to final completion.
- 2. Certification that all subcontractors and suppliers have been paid.
- 3. Submit to Engineer letter(s) from Contractor's bonding agent(s) authorizing Owner to make final payment to the Contractor indentifying the bonding agent's full approval for such actions.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.01 SUBSTANTIAL COMPLETION, ADJUSTMENT AND RELEASE OF RETAINAGE

- A. When the Work is found to be in a state of Substantial Completion with stated qualifications:

1. Engineer will determine the value of the punch list work using either Project approved schedule of values or other method at its discretion.
 2. The value of incomplete work will be multiplied by two (2) and retainage reduced to that amount.
- B. No partial payments of the Substantial Completion retainage will be allowed.
- C. The Substantial Completion retainage will be released with final payment.

3.02 INSPECTION FOR FINAL ACCEPTANCE AND PAYMENT

- A. When the Work on the Punch List(s) have been completed, and Contractor considers the Work of the entire Project is complete, he shall submit written certification that:
1. Contract Documents have been reviewed.
 2. Work has been inspected for compliance with Contract Documents.
 3. Work has been completed in accordance with Contract Documents.
 4. Work is completed and ready for final inspection.
 5. Certification that all subcontractor and suppliers have been paid.
- B. Engineer will make an inspection with the Contractor to verify the status of completion within 5 calendar days after receipt of such certification.
- C. Should Engineer consider that the Work is incomplete or defective the following actions will occur:
1. Engineer: Notify the Contractor in writing within 5 calendar days, listing the incomplete or defective work.
 2. Contractor: Remedy the stated deficiencies, and send a second written certification to Engineer that the Work is complete.
 3. Engineer will reinspect the Work.
- D. When Engineer finds the Work acceptable in accordance with the Contract Documents: Engineer requests Contractor to make closeout submittals.

3.03 FINAL APPLICATION FOR PAYMENT

- A. Complete demobilization prior to submitting final application for payment.
- B. Submit final application for payment in accordance with procedures and requirements stated in the Conditions of the Contract.
- C. Submit Certificate of Compliance Form 1700-A.
- D. Engineer will review application and if approved recommend final payment within 5 calendar days of receipt of application.

1700-A
CERTIFICATE OF COMPLIANCE FORM

2017/18 Collection System Rehab

TO: Clackamas County Service District No. 1

PROJECT NO: P 112230

CONTRACT FOR (Revised Total):

CONTRACT DATE:

I (We) hereby certify that all work has been performed and materials supplied in accordance with the Plans, Specifications, and Contract Documents for the above work, and that:

- A. No less than prevailing rates of wages as ascertained by the governing body of the contracting agency have been paid to laborers, workmen, and mechanics employed on this work.
- B. There have been neither unauthorized substitutions of subcontractors nor have any subcontracts been entered into without the name of the subcontractors having been submitted to the Engineer prior to the start of such subcontractor work.
- C. No subcontract was assigned or transferred or performed by any subcontractor other than the original subcontractor, without prior notice having been submitted to the Engineer together with the names of all subcontractors.
- D. All claims for material and labor and other services performed in connection with these Specifications have been paid. No further claims will be made and all liens have been satisfied and lifted.
- E. All monies due the State Industrial Accident Funds, the State Unemployment Compensation Trust Fund, the State Tax Commission, hospital associations, and/or others have been paid.

CERTIFIED BY:

CONTRACTOR

DATE

END OF SECTION

SECTION 02730

TEMPORARY BYPASS PUMPING

PART 1 GENERAL

1.01 DESCRIPTION

The work covered by this section consists of temporary bypass pumping of sanitary sewer around individual sections of sanitary sewer main within the Hoodland, Clackamas Industrial, and Sunnybrook/Sunnyside areas where shown on the plans.

1.02 RELATED SECTIONS

A list of sections of the project specifications that are most closely related to this section is provided for the convenience of the Contractor.

A. Section 02775, *Cured-In-Place Pipe (CIPP)*.

1.03 SUBMITTALS

A. Submittals: Section 01300

B. Bypass pumping procedures.

PART 2 PRODUCTS – (Not Used)

PART 3 EXECUTION

3.01 SANITARY SEWER BYPASS FLOWS

A. The Contractor shall submit a "Flow Diversion and By-Pass Pumping Plan" to the Owner prior to the start of construction for CIPP trenchless construction. Under no circumstances shall sewage be allowed to flow or leak onto the ground surface, into gutters or onto streets, over sidewalks, or into storm inlets. The Flow Diversion and By-Pass Pumping Plan shall outline the Contractor's proposed method of handling all flows during all elements of construction. The plan shall show all flow inputs (connections) in the work area and how the flow from each connection will be managed. Flow inputs shall be confirmed by the Contractor during initial surveys and television inspections. Estimated Peak Flows within the Project Areas include:

1. Hoodland Service Area

- a. Lateral TR1 +/- 200 GPM
- b. Lateral TR4 +/- 200 GPM
- c. Lateral TR4.1 +/- 50 GPM
- d. Lateral GT +/- 100 GPM

2. Clackamas Industrial Area

- a. Lateral CL8 +/- 300 GPM
- b. Lateral CL8.1 +/- 100 GPM
- c. Lateral CL22 +/- 100 GPM (Saturday flows only)

3. Sunnyside/Sunnybrook Service Area
 - a. Lateral LP1 +/- 500 GPM
 - b. Lateral LP1.6 +/- 50 GPM

The Contractor shall provide complete diversion regardless of flow rate. The diversion plan for each segment shall contain at a minimum, a plan view of the diversion on a site map and the individual components of the diversion including but not limited to:

- Pumps: type, size and placement
 - Diversion pipe: size, type, and placement
 - Power supply to pumps
 - Method of holding back the flow
 - Facilities for redundancy
- B. Diversion of flows shall be accomplished by the use of pumps to a manhole downstream of the construction. The Contractor shall have adequate pumps and piping or alternative methods to divert flow to the downstream conveyance lines. The pumping or transportation capacity shall be sufficient to maintain normal flows plus additional flows that may occur during a rainstorm. Contractor shall provide all measures necessary to temporarily collect/divert flows from private services if necessary to properly install the pipe. Each impacted business should be contacted by the Contractor to insure that the least disruption as possible to the public is adhered to for the individual services.
 - C. Flow diversion piping shall be arranged such that the piping is protected from traffic loads, traffic is maintained at driveways and roadways, and sidewalks are free of obstruction unless otherwise approved by the Owner. ***All sewage diversion piping shall be water-tight.***
 - D. The Contractor shall use critically silenced generators and pump units and shall meet or exceed the requirements of any local noise ordinances. Such approved generators and accompanying pumps shall be continuously monitored while in operation and shall be placed to minimize disturbances to residential areas. If necessary to meet noise ordinances, sound baffles and temporary sound walls shall be installed to deflect sound from generators and bypass-pumps away from residential areas or as directed by the Owner. No variance from any local noise ordinances will be allowed unless the Contractor secures a noise variance at no additional expense to the Owner.
 - E. Diversion of all flows shall be maintained at all times. This could also include individual sanitary sewer services if necessary to provide a suitable environment to install the CIPP according to manufacturer's recommendations. The Contractor shall provide a qualified operator who is capable of making emergency repairs or who is able to mobilize forces to handle power, pump or other problems. This operator shall be on call 24/7 while the diversion is in operation. The Contractor shall be responsible for continuity of sewer service to each facility connected to the section of the sewer being impacted during the execution of the work. No leaks in the diversion piping shall be permitted. Diversion pipes shall be cleaned and disinfected prior to disassembly and the liquid shall be discharged into an existing sanitary sewer. Service connections or laterals shall not be disconnected or plugged during the day. Service must be restored to service connections or laterals within the normal work day.

- F. Each flow diversion pump shall be powered by a dedicated power generator and shall operate as a single pumping unit. For system redundancy, the Contractor shall have on site an equivalent back-up flow pumping unit set up and fully operational for the pumping operation with capability to automatically switch over in case of failure to the primary system. In addition, an auto-dialer call out system shall be provided to notify the Contractor and the Owner's Field Operation Staff via a 24-hour number if/when the back-up flow pumping unit is utilized. Contractor is expected to visit site immediately to determine cause for primary system failure.
- G. Flow diversion piping and pumps shall be free of leaks. Leaking pipes and pumps shall be replaced immediately. Sewage spills shall be cleaned up immediately. If a sewage release occurs during any sewage diversion activity, the Contractor shall be responsible for taking immediate action to cease, contain, and clean up the release, and to notify the proper authorities. The Contractor shall have sufficient equipment and materials at the work site to cease, contain and cleanup any sewage release that occurs during diversion operations and will be responsible for all costs associated with sewage spill cleanup including associated fines. The Contractor shall be responsible for cleanup, repair, property damage costs and claims.
- H. No flow diversion operations may proceed unless the Contractor has, at the work site, the following items:
1. Dry granular lime, of sufficient quantities, to be spread on any release for purposes of disinfectant. A 10% bleach solution may also be used as a disinfectant. Disinfectants may not be directly applied to any surface waters, streams, creeks, etc.
 2. Equipment to secure the area of sewage release and isolate the public from accessing the release site. As a minimum this shall include barricades and caution tape.
 3. The equipment and materials on hand to stop the release and repair the failed item.
 4. Equipment and materials to clean the site, rake up solid debris and to dispose of material properly.
- I. In case of sanitary sewage release during diversion operations, the Contractor shall immediately contact the Owner notifying them of the release:
- The Owner will take appropriate measures within 24 hours to report the sewage spill to the Oregon Department of Environmental Quality and any other appropriate entities if it is determined the spill was of sufficient magnitude. Even if a sewage spill or release is contained within an excavation, the spill or release must be reported to the Owner.
- Failure by the Contractor to report a spill or release to the appropriate Owner's representative will result in liquidated damages in the amount of \$500.00 per incident plus an amount sufficient to reimburse the Owner for any civil and administrative penalties paid by the Owner as a result of the Contractor's failure to report as described above.
- J. The Contractor shall be responsible for providing the following information to the authorities in case of a spill or release:

1. Release location
2. Date and time release found or started and time stopped
3. Release flow rate and estimated total volume
4. Receiving stream, if any
5. Action taken to stop release
6. Cause of release
7. Clean-up actions taken
8. Any other information as requested by relevant authorities

3.02 TESTING OF GRAVITY SEWER PIPE AND APPURTENANCES

A. General:

1. Pipe installed by CIPP methods will not be air tested.

3.03 ACCEPTANCE

- #### A.
- Base acceptance of the pipeline on a final inspection of the entire line conducted jointly by the Contractor and the Engineer using CCTV methods.

END OF SECTION

SECTION 02775

CURED- IN- PLACE PIPE (CIPP)

PART 1 GENERAL

1.01 SUMMARY

- A. This section specifies rehabilitation of pipelines by the installation of a resin-impregnated fabric liner.
- B. Related sections: The work of the following Sections is related to the work of this Section. Other Sections, not referenced below, may also be related to the proper performance of this work. It is the Contractor's responsibility to perform all the work required by the Contract Documents.

1. Section 01300: Submittals.

1.02 REFERENCES

- A. This section incorporates by reference the latest revisions of the following documents. They are part of this section insofar as specified and modified herein. In case of conflict between the requirements of this Section and the listed documents, the requirements of this Section shall prevail.

<u>Reference</u>	<u>Title</u>
ASTM D543	Standard Practices for Evaluating the Resistance of Plastics to Chemical Reagents
ASTM D790	Standard Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials
ASTM D903	Standard Test Method for Peel or Stripping Strength of Adhesive Bonds
ASTM D1600	Standard Terminology for Abbreviated Terms Relating to Plastics
ASTM D5813	Standard Specification for Cured-in-Place Thermosetting Resin Sewer Pipe
ASTM F1216	Standard Practice for Rehabilitation of Existing Pipelines and Conduits by Inversion and Curing of a Resin-Impregnated Tube
ASTM F1743	Standard Practice for Rehabilitation of Existing Pipelines and Conduits by Pull-in-Place Installation of Cured-in-Place Thermosetting Resin Pipe

1.03 DEFINITIONS

- A. Definitions are in accordance with terminology of ASTM F412, unless otherwise specified. Abbreviations are in accordance with terminology of ASTM D1600, unless otherwise specified.
 - 1. Service connection is the point where the lateral pipe intersects with the mainline pipe, also known as the lateral interface. It can be the interface portion of a tee, wye, or cut-in connection where the lateral pipe flows into the main.
 - 2. Host Pipe: An existing pipeline or conduit to be internally rehabilitated by installation of a pipe liner.
 - 3. Manufacturer and/or Assembler: The entity responsible for obtaining individual components of a system and assembling into the final products which are shipped to the job site for installation.
 - 4. Installer: Licensed contractor or subcontractor responsible for the installation of the system in the field.

1.04 QUALIFICATIONS

- A. Product, Manufacturer/Assembler and Installer Qualification Requirements:
 - 1. The Manufacturer or Assembler shall have supplied the product bid for a minimum of 50,000 linear feet of installations. Contractor shall provide a list of installation projects. Also, provide the project names, owner contacts, phone numbers, and year installed.
 - 2. The Contractor shall have a minimum of 5 years recent experience in sewer main rehabilitation, including familiarity with CIPP processes. Contractor shall submit list of a minimum of 5 references including contact names, phone numbers, and year installed for sewer rehabilitation projects.
 - 3. Certification showing that the Installer is currently licensed by the appropriate licensor to perform CIPP installation.

1.05 SUBMITTALS

- A. Submit the following in accordance with Section 01300:
 - 1. Catalog data and manufacturer's technical data showing complete information on material composition, physical properties, depth of installation and dimensions of system components of the tube and resin system. Include manufacturer's recommendation for handling, storage, insertion, curing, trimming, finishing and repair of damaged liner.

2. Certification showing that the Installer is currently licensed by the appropriate licensor to perform CIPP installation. Certification shall be given to the Owner prior to delivery of material to the job site.
3. Certification from the manufacture that the materials meet the requirements of these specifications and intended use. Certification of test results confirming that the liner and resin meet the minimum chemical resistance requirement according to ASTM F1216 or ASTM 1753 depending upon which installation method is used.
4. Details on all lining materials and resins. Include calculations for the volume of resin to be used for each segment including the calculated amount of excess resin necessary to account for liner material properties, changes in the resin's physical and chemical characteristics due to the polymerization and the structural condition of the gravity pipe. Color of the resin shall also be identified.
5. Flow diversion plan for the mainline including services laterals (if applicable). This will include a specific plan for each individual manhole section which identifies location of bypass pipe, method of crossing individual driveway/street intersection, pumping capacity and location of equipment within the street. Generic bypassing plans will be rejected as incomplete.
6. Detailed method for samplings, including recommended location and size of each sample, method of removal and method of liner repair including a procedure to repair the cured liner when core/plate samples are taken.
7. Detailed description of the wet out process. Include tube and resin manufactures wet out recommendations including the roller gap, material feed speed and vacuum requirements for each liner size and thickness. If wet out occurs off-site, provide certification by the person in responsible charge that the entire wet out process including handling and delivery to the site followed the defined procedures.
8. Detailed narrative description for all work to be completed during the three identified windows including specified daylight hours (M-F), Saturday hours and night time work during the week.
9. A letter identifying the cleaning methods Contractor plans to employ to remove sediment, debris, grease, scale, encrustation, mineral deposits and roots throughout the gravity pipe to be lined and in the structures to be repaired. The letter shall include a detailed explanation of the cleaning process and a schedule of activities.
10. Name of resin supplier and liner fabric supplier. Resin manufacturer installation procedures including curing and cooling temperature and time requirements and sequences. Provide detailed calculations to confirm the liner thickness for the proposed resin system. List all assumptions, design criteria and material characteristics whether they are based on the information in the specifications, plans or not.
11. Technical data showing that the cured CIPP system meets the chemical resistance and corrosion resistance requirements of this specification section.

12. Manufacturer's or Assembler's certification that the liner materials and system are in compliance with the specifications, codes, and standards referenced herein.
13. Manufacturer's or Assembler's recommendations for factory and field (whichever applies) wet out procedures including: volume of resin per unit of liner, roller gap setting, mixing ratios and procedures for resin and catalyst/hardener, shelf life of resin, pot life of resin, required wet out procedure to ensure full saturation, and other criteria deemed necessary to ensure proper wet out of the liner.
14. Manufacturer's or Assembler's certification that all Manufacturer's or Assembler's wet out recommendations have been followed on all lengths of CIPP which have factory wet out.
15. Manufacturer's or Assembler's recommendations for storage procedures and temperature control, handling and inserting the liner, curing details and minimum equipment requirements to allow for an adequate installation.
16. Manufacturer's or Assembler's recommendations for minimum and maximum pressures, temperatures, and time durations to be used during liner inversion, cure, and cool down for each shot installed.
17. Data on Contractor's equipment to be used on site including: type and tolerance of temperature gages and thermocouples used to monitor cure temperature; type and tolerance of equipment used to generate liner inversion pressure; make model, and technical data of all equipment used to generate heat for the curing process; make, model and technical data of backup equipment used to maintain curing temperature; approximate size of vehicle(s) which carries the CIPP pipe and installation equipment.
18. Procedures for cool down and relieving static head after CIPP cure.
19. CIPP samples in accordance with Paragraph 3.04A of this section.
20. Data-logger output in printed and electronic (excel spreadsheet) formats.
21. Material Safety Data Sheets for resins, hardeners, solvents, and all other compounds or chemicals to be used on job site.
22. Hydrophillic end seal material to be used and each manhole and method of installation.
23. Liner design based upon criteria shown in Paragraph 2.04.
24. Name and location of the testing laboratory to perform CIPP tests. Provide certification that each test shall be performed by a laboratory with an American Association for Laboratory Accreditation (A2LA) for the specific test to be performed.

B. Closeout Documents:

1. Submit the pressure and temperature data for each segment. This includes at a minimum the temperature of the hot water, steam, and/or interior of the liner and the temperature of external thermocouples.
2. Provide CCTV inspection video
3. Material testing documentation in accordance with Paragraph 3.04

1.06 QUALITY ASSURANCE

- A. The Manufacturer or Assembler shall send a representative familiar with CIPP processes to the site to observe the initial five (5) installations of each product installed by the Contractor.
1. The Manufacturer or Assembler's representative shall provide certification to the Project Representative stating that the Contractor's installation methods meet the Manufacturer or Assembler's requirements.
 2. After the initial installations, the product Manufacturer or Assembler's representative shall meet with the Owner to discuss inspection items that the Owner should observe and record for subsequent installations. Inspection items include pre-installation activities, product identification, installation procedures, equipment operations, and post installation activities.
- B. The finished CIPP shall be continuous over the entire length of an insertion run between two manholes or access points and shall be free from visual defects such as foreign inclusions, dry spots, pinholes, and delamination.
- C. Wrinkles in the finished CIPP liner that cause a backwater of 1/2-inch or more or reduce the hydraulic capacity of the pipe are unacceptable and shall be removed and repaired by the Contractor at the Contractor's expense. Methods of repair shall be proposed by Contractor and submitted to the Project Representative for review. No wrinkles in the CIPP are allowed within 4 feet of liner terminations at manholes. Refer to Paragraph 3.04.B for additional conformance standards.

1.07 LICENSING AND CERTIFICATION

- A. The Contractor or subcontractor installing the CIPP shall have a current license agreement with the product Manufacturer or Assembler.
- B. Individuals installing the CIPP shall be certified by the product Manufacturer or Assembler.
- C. Lining installation shall be in accordance with the requirements of the product Manufacturer or Assembler and as directed by their Technical Representative. This includes the correction of defective work.

1.08 WARRANTY

- A. The Contractor shall warrant each mainline, lateral, and side sewer lined with the specified product against defects in materials, surface preparation, lining application, and workmanship for a period of 24 months from the date of final acceptance of the project. The Contractor shall, within one month of written notice thereof, repair defects in materials or workmanship that may develop during said 24-month period. Defects shall be defined as: evidence of visible leakage of groundwater through the CIPP system, delamination of any portion of the CIPP system as visible from CCTV inspection, or separation of any part of the CIPP system from the host pipe to the extent that the CIPP system inside diameter in the separated area is 95 percent or less of the completed CIPP system inside diameter. The Contractor shall also repair any damage to other work; damage to sewer system components, damage to buildings, houses or environmental damage caused by the backup of the sewer because of the failure of the lining system; or repairing of the same.
- B. Repairs shall include removal of the existing liner and re-lining if possible, or excavation and replacement of the section of pipe where the defect occurs.

PART 2 MATERIALS

2.01 CURED IN PLACE PIPE LINER

- A. The CIPP shall consist of one or more layers of flexible needled felt or an equivalent non-woven material, or a combination of non-woven and woven materials capable of carrying resin, withstanding installation pressures.
 - 1. The CIPP shall be continuous in length and the wall thickness shall be uniform. No overlapping sections shall be allowed in the length of the liner. No overlapping sections shall be allowed in the circumference of the liner when felt liner is used.
 - 2. The CIPP will be capable of conforming to offset joints, bells, and disfigured pipe sections. It shall be able to stretch to fit irregular pipe sections and negotiate bends.
 - 3. The CIPP resin shall be compatible with the liner fabric, other rehabilitation systems it may contact, and the host pipe materials.
 - 4. Seams in the CIPP shall be stronger than the non-seamed felt.
 - 5. The CIPP shall be marked at regular intervals along its entire length, not to exceed 5 feet. Markings shall include Manufacturer's or Assembler's name or identifying symbol.
 - 6. The CIPP liner shall be manufactured with materials from a consistent supplier. All materials of similar type shall be from a single source for the entire project.
- B. The CIPP shall be fabricated to a size that, when installed, will tightly fit the internal circumference and length of the original pipe.

1. Allowance shall be made for circumferential stretching during the installation process.
 2. The hydraulic capacity of the CIPP shall be greater than or equal to the hydraulic capacity of the original host pipe, based on hydraulic calculations with standard engineering roughness coefficients.
- C. The liner thickness shall be designed based on the engineering formulas listed in ASTM F1216 for **fully deteriorated** pipes, assuming groundwater at the surface, HS-20 live loading, 120 pounds per cubic foot dry soil density, and depth of cover as determined by the adjacent upstream or downstream manhole, whichever is deeper. The thickness shall be sufficient to prevent groundwater from entering the pipe, while maintaining the maximum cross-sectional pipe area possible.
- D. For liners inserted by the inversion method, the CIPP shall be coated on one side with translucent waterproof coating of:
1. Polyvinyl chloride (PVC)
 2. Polyurethane
 3. Polyethylene
- E. For liners inserted by the pull/winch method, the CIPP shall be coated on one side with a translucent waterproof coating of:
1. Polyvinyl chloride (PVC)
 2. Polyurethane
 3. Polyethylene
 4. Polypropylene
 5. Or approved equal
- F. Subject to these specifications, the following manufacturers or assemblers are acceptable:
1. Gelco Services Inc. (Salem, OR)
 2. C.I.P.P. Corporation (Hudson, IA)
 3. Perma-Liner Industries, Inc. (Clearwater, FL)
 4. LMK Enterprises Inc. (Ottawa, IL)
 5. Insituform Technologies, Inc. (Chesterfield, MO)
 6. Masterliner Inc. (Hammond, LA)
 7. Michels Corporation
 8. Or approved equal.
- G. UV-cured pipe will also be considered, if all performance requirements of this specification are met and approved by Engineer.

2.02 RESIN

- A. A general purpose, unsaturated thermosetting, polyester, vinyl ester, or epoxy resin compatible with the fabric liner material, host pipe material, and other rehabilitation products that the resin may contact. No part of the properly curer liner shall be less than 100 percent saturated by resin.

- B. Resin shall meet or exceed the physical properties listed in Section 2.03 and shall not be created from recycled materials.
- C. Resin shall form no excessive bubbling or wrinkling during lining.
- D. Resin shall be manufactured with materials from a consistent supplier. All materials of similar type shall be from a single source for the entire project.
- E. The resin shall have no fillers added for the sole purpose of increasing the resin volume.

2.03 PHYSICAL PROPERTIES

- A. The composite materials of the fabric liner tube and resin shall, upon installation inside the host pipe, exceed the minimum test standards specified by the American Society for Testing and Materials based upon restrained sample cured in host pipe and flat plate sample:

Physical Properties	
Flexural Strength (ASTM D790)	4,500 psi
Flexural Modulus (ASTM D790)	
Short Term	250,000 psi
Long Term	125,000 psi

- B. The CIPP after installation shall be corrosion resistant to withstand exposure to sewage gases containing quantities of hydrogen sulfide, carbon monoxide, diluted sulfuric acid, and other chemical reagents typical of sewage conveyance. Chemical resistance of the installed CIPP shall meet the chemical resistance requirements of ASTM F1216.
- C. The wall color of the interior pipe surface of the CIPP after installation shall be a light reflective color.
- D. The hydraulic profile of the installed CIPP shall be maintained as large as possible. The CIPP shall have at a minimum the full flow capacity of the original pipe before rehabilitation. Calculated capacities may be derived using commonly accepted roughness coefficients for the existing pipe material taking into consideration its age and condition.

2.04 DESIGN PROPERTIES

- A. Follow the design considerations of ASTM F 1216 and meet the following conditions and parameters:

Condition Parameter

Service Life	Greater than 50 year
Pipe Condition	Fully deteriorated

Load Conditions

Soil	120-pounds/cubic foot
Traffic	H20-Highway
Groundwater Elevation	At surface (Depth per plan or 12 feet min)
Design Thickness.....	Calculate and express this thickness as the absolute minimum thickness that will be acceptable. (Minimum

	thickness allowed for all pipe except Main CL8 shall be 4.5 mm. Main CL8 shall be 6.0 mm minimum)
Pipe Ovality.....	Per Contractor's review of CCTV Inspection (assumed 2%)
Modulus of Soil Reaction...	1000 psi
Enhancement Factor.....	7
Long-term Flexural Strength..	50% of initial (ASTM D 790)
Modulus of Elasticity	50% of initial (ASTM D 790)
Maximum Deflection	5%
Minimum Factor of Safety...	2.0
Resin Migration Allowance...	10% maximum
Allowable Deformity.....	3%

Design the CIPP wall thickness to withstand all imposed loads, including live loads and if applicable, hydrostatic pressure. Include considerations for ring bending, deflection, combined loading buckling and ovality in the design of the CIPP.

2.05 PRESSURE GROUT

- A. Chemical grout designed for injection to seal leaks in manhole walls. AV-100 chemical grout as manufactured by Avanti International, or approved equal.

2.06 PIPE PENETRATIONS AT MANHOLE

- A. Hydrophilic joint seal around pipe penetrations in manhole wall. Swellseal®8F by De Neef Construction Chemicals, Insignia™ Hydrophilic End Seal by LMK Technologies, Hydrotite Style DS-0520-351 or approved equal.

PART 3 EXECUTION

3.01 PREPARATION

- A. Make all necessary provisions to ensure service conditions and structural conditions of host pipe are suitable for installation and warranty of the liner. Provisions shall include, but are not limited to temporary sewer bypassing, temporary service interruption of side sewers tributary to the sewer main, correction of structural, and sealing of active infiltration through pressure grouting.
- B. Inspect and confirm the inside diameter, alignment, condition and length of each pipe segment to be lined. Use the data and information from this inspection to verify the size of the liner and refine the installation techniques. If unknown physical conditions in the work area are discovered during the investigation that materially differ from those ordinarily encountered by industry standards, notify the Engineer.
- C. Bypass Pumping
 - 1. The Contractor shall provide bypass pumping and/or diversion for acceptable completion of the liner installation. Bypass pumping shall consist of furnishing, installing, and maintain all power, primary and standby pumps, appurtenances and bypass piping required to maintain existing flows and services. Plans show

the names of most, but not all major businesses that contribute sewage flows to each line. Contractor shall investigate further the additional tenants if necessary to complete this work. Refer to Section 02730, Paragraph 3.01 for additional bypass pumping requirements. No flow that will negatively affect the liner shall be allowed in pipe during CIPP installation.

2. Bypass pumping shall be done in such a manner as to not damage private or public property, or create a nuisance or public menace. The pumped sewage shall be in an enclosed hose or pipe that is adequately protected from traffic, and shall be redirected into the sanitary sewer system. Dumping or free flow of sewage on private property, gutters, streets, or into storm sewers is prohibited. All bypass piping shall have traffic rated fully enclosed ramps specifically designed for this type installation. Use of wooden ramps for driveways will not be allowed without specific permission of the Owner. Specifically, all work within the parking lot of Clackamas Promenade shall also be protected from the public. Any accidental spillage of sewage onto the pavement surface in this area shall be thoroughly cleaned to the satisfaction of the Owner to fully protect the general public from this exposure.
3. The Contractor shall take all necessary precautions including constant monitoring of bypass pumping to insure that no private residences or properties are subjected to a sewage backup or spill. The Contractor shall be liable for all cleanup, damages, and resultant fines in the event of a spill. After the work is completed, flow shall be restored to normal.

D. Temporary Interruption of Service

1. When it is necessary to shut down a private service lateral to perform the rehabilitation work, notify all the affected parties one week prior to and again 24 hours prior to the shutdown. Gravity pipe service shall not be out of service for more than eight hours and not between 6:00 p.m. and 8:00 a.m. without approval of the District.

E. Cleaning and Inspection of Existing Sewer

1. The Contractor shall be responsible for cleaning, inspecting, confirming the inside diameter and determining the condition of each manhole-to-manhole segment to be lined. The cleaning process shall include the removal of all roots. A television inspection witnessed by Owners Representative shall be performed by the Contractor after the sewer cleaning operation, point repairs and grouting is completed. All services that will be reinstated will be identified at this time and approved by the Owner. This may require dye testing or other means necessary by the Contractor to verify whether or not the service is live. The television inspection shall be completed in the same direction each time and shall be done with a CCTV color camera recoded in DVD format. A pivot head camera shall be used for all pipelines 6-inches in diameter or greater to allow detailed lateral inspection. A copy of the television inspection video discs from all televising operations shall be provided to the District for review prior to the liner installation. Installation of the new liner shall commence within 48 hours of the final cleaning for each section of pipe from manhole to manhole. Installations delayed beyond the 48 hour period will require Contractor to clean the interior with a pressure washing operation again and thereby starting another 48 hour window

for installation. Television inspection will not be required during the subsequent cleanings unless excessive debris in the opinion of the Owner are found in the downstream manhole for each section.

F. Removal of Obstructions

1. It shall be the responsibility of the Contractor to clear the line of obstructions such as solids, offset joints, protruding service connections or collapsed pipe that will prevent linear insertion. If inspection reveals an obstruction that cannot be removed by conventional sewer cleaning equipment (including but not limited to equipment capable of cutting, filing, shaving, etc.) or by remotely performed point repair methods acceptable to the Engineer, then the Contractor shall make a point repair excavation to uncover and remove or repair the obstruction. Before any point repair excavation is pursued, the Contractor shall give the Engineer three (3) working days notice. Point repair excavation shall proceed only with the District's written authorization. The excavation process shall be completed by mechanical means with adequate trench shoring and dewatering of the trench as necessary. Backfill of all excavations shall be with Class C imported rock compacted to a minimum of 95% maximum density according to ASTM – T99. Pavement restoration shall match existing pavement.

G. Point Repairs

1. Clean and prepare pipe
2. Remove rolled gaskets, roots, mineral deposits, and other objects protruding into the pipe, internally with a remote controlled cutter.

H. Manholes

1. Protect all manholes to withstand forces generated by the equipment while installing the liner.

I. Pipeline Deficiencies

1. The District has attempted to determine within the project limits where there is excessive infiltration from groundwater present in the 8-inch main line pipe based upon recent CCTV investigative efforts. Miscellaneous deficiencies have been specifically identified on the plans within sections of CL8, LP 1 and LP 1.6. Their description is not inclusive of additional deficiencies that may be encountered following a thorough cleaning of the pipeline to install the CIPP described in Paragraph 3.01.D above. For pipe segments found to have any active infiltration that would be categorized as Runners (IR) or Gushers (IG) by NASSCO's Pipeline Assessment Certification Program (PACP) Defect Rating Code, chemical grout leaking joints(s)/holes until the pipe segment is free from the excessive infiltration, Contractor shall be responsible for insuring the CIPP can be properly installed according to manufacturer recommendation to insure there is no resin loss and contamination. Thermoplastic pre-liners may be installed at the Contractor's option at no additional cost to the Owner. Pre-liner is not a substitute for repair of active infiltration previously described.

3.02 INSTALLATION

A. Resin Impregnation

1. The uncured resin in the original containers and the unimpregnated fiberfelt tube shall be impregnated by vacuum or other means prior to installation. The materials and 'wet-out' procedure shall be subject to inspection by the Owner. A resin and catalyst system that re compatible with the requirements of the method shall be used.
2. The impregnated liner bag shall be transported to and stored at the site in such a manner that it will not be damaged, exposed to direct sunlight, or result in any public safety hazard. The impregnated liner bag shall be kept cool during shipment and storage. All materials shall be subject to inspection and review prior to installation
3. Use a volume of resin sufficient to fill all voids in the tube material at nominal thickness and diameter. Volume should be adjusted by adding excess resin for the change in resin volume due to polymerization and to allow for any migration of resin into the cracks and joints of the host pipe, per Manufacturer's or Assembler's recommendations.
4. The resin impregnated tube shall be stored in such a manner that it will not be damaged, exposed to direct sunlight, exposed to any curing environment, or result in a public safety hazard. All materials shall be subject to inspection and review prior to installation.

B. Liner Installation

1. Inversion Method
 - a. The impregnated tube shall be inserted through an existing manhole or other access point by means of the Manufacturer's or Assembler's recommended installation process and in accordance with ASTM F1216. The application of a hydrostatic head, compressed air, or other means shall fully extend the liner to the next designated manhole or termination point and inflate and firmly adhere the liner to the pipe wall.
 - b. The rate of the liner installation shall not exceed the maximum rate recommended by the manufacturer. This installed rate shall be identified in the submittal of materials as provide in Section 01300.
2. When inversion is by hydrostatic head, the Contractor shall use methods which control the installation rate, accounting for the increase in hydrostatic head in pipes which have significant elevation change.
3. A Preliner may be installed between manhole sections at the option of the Contractor.
4. Insert continuous or properly trimmed hydrophilic waterstops at each structure opening approximately three inches from structure wall. Trimmed waterstop

edges shall be butted up against each other at the crown of the pipe using a 45 degree miter cut or butted up horizontally against each other for a distance of 3 inches. Vertical overlap (e.g. stacking) of the hydrophilic waterstops will not be allowed. Waterstops with any gap between the ends will not be accepted.

4. Pull/Winch Method

- a. The impregnated tube shall be pulled into place in accordance with ASTM F1743 within the host pipe with the aid of a power winch power winch that for felt tubes is equipped with a device to monitor the force and prevent excessive tension and tube elongation.
- b. The maximum allowable longitudinal elongation, or stretch, of the material shall be one (1) percent. The longitudinal stretch of the tube shall be gauged by comparing marker on the fully inserted tube to the actual length of pipe being rehabilitated.
- c. The Contractor shall use a flexible and impermeable calibration hose to inflate the tube. The calibration hose may or may not remain in the complete installation. Any dry tube or inflation hose material that enters the existing pipe that has not been previously vacuum impregnated with resin cannot be included in the structural wall of the CIPP. Hose materials remaining in the installation shall be compatible with the resin system used, shall bond permanently with the tube, and shall be translucent to facilitate post-installation inspection. Hose materials that are to be removed after curing shall be of non-bondable material.

C. Curing

1. After placement of the liner is complete, follow submitted cure schedule in curing of line. Provide a suitable recirculation system capable of delivering air, steam, water or ultraviolet light, as required by the liner system manufacturer, uniformly throughout the section to achieve a consistent cure of the resin. Maintain the curing temperature or exposure times as recommended by the liner system manufacturer. Prevent excessive temperatures that could scald or bubble the liner. The rate of temperature rise during heating shall not exceed resin manufacturer's recommendations.
2. The heat source shall be fitted with continuous monitoring thermocouples to measure and record the temperature of the incoming and outgoing water or steam supply. The Contractor shall provide an additional continuous monitoring thermocouple placed between the impregnated felt tube and the pipe crown at the remote manhole to determine the temperature during the cure. The temperature during the cure shall follow resin manufacturer's recommendation.
3. Provide standby equipment to maintain the heat source supply. The temperature during the cure shall not be less than 130 degrees Fahrenheit at the boundary between the pipe wall and the liner unless otherwise directed by the Manufacturer or Assembler to meet resin system requirements.
4. The initial cure shall be deemed to be completed when inspection of the exposed

portions of the liner appear hard and sound and the remote temperature sensors indicate that an exotherm reaction has occurred. The cure period shall be of duration recommended by the resin manufacturer during which time the recirculation of the water and/or air and cycling of the heat exchanger continuously maintain the required temperature.

5. Provide for vapor tight connections in the downstream structure such that minimal vapors enter downstream pipes. Alternatively and at no additional cost to the Owner, provide styrene reducing agents, venting and downstream plugs sufficient to prevent steam, styrene, or other odors from entering downstream buildings.

D. Cool Down

1. The hardened liner shall be cooled to a temperature below 100 degrees F before relieving the static head or pressure in the lined pipe and returning normal flow back in the system.
2. Care shall be taken to ensure that a vacuum is not induced which could damage the new CIPP during the release of head on the new CIPP.

E. Sealing at the Sewer Main and Manholes.

1. After the cool down period is complete perform final trimming and sealing of the liner at access structures. Provide a watertight seal between the CIPP and the host pipe at each manhole. Trim the finished ends of the liner to within one inch of manhole wall. Provide a smooth transition between the existing structure channel invert and the liner using a cementitious coating, or other approved material to prevent settling of sediment or debris and ponding of standing water.
2. Care shall be taken to ensure that a vacuum is not induced which could damage the new CIPP during the release of head on the new CIPP.
3. Seal all holes and voids in manhole walls immediately surrounding the new liner with a hydrophilic rubber joint seal and the approved chemical grout identified in Paragraph 2.05A and 2.06A of this section. Contractor shall verify with the CIPP manufacturer the mixture applied is compatible with the liner/resin system utilized. No water shall be able to migrate between the CIPP and the host pipe, otherwise the CIPP shall be considered defective and shall be repaired or replaced at the Contractor's expense.
4. Where new CIPP can be installed through manholes, leave bottom half in place to provide continuous run through manhole channel. Seal watertight at each wall penetration as described in Paragraph 3 above.

- F. A data logger shall continuously record temperature, pressure and time during heating, cure and cool down at the liner insertion, termination and intermediate points from the installed thermocouple. Temperature and pressure versus time shall be plotted on a line graph and provided to the Engineer for each lining.

3.03 SERVICE CONNECTION RESTORATION

- A. Restore service connections (also known as reinstating service connections) to the lined pipe by the following method:
1. Internally reconnected by using a pivot-headed CCTV camera and a remote cutting tool to locate the service connections from inside the lined pipe, cutting a hole matching the service connection diameter which may vary from 4" to 6" nominal opening, and grouting the area where the service connection enters the lined pipe to produce a water tight seal. Grouting at mainline need not be performed if service connection rehabilitation liners are installed. Provide a nearly full-diameter hole, free from burrs or projections and with a smooth and crack-free edge. The hole shall be 95 percent minimum and 100 percent maximum of the original service connection inside diameter. The invert of the service connection shall match the bottom of the reinstated service opening. Each active service connection shall be cut completely open and shall have smooth edges with no protruding material capable of hindering flow or catching and holding solids contained in the flow stream. This specifically includes any portion of the cuttings that remain within the lateral invert or excess grout from packer operations. Excess grout shall be defined as a thickness of grout that given its location, size and geometry, could cause a blockage. The CCTV during cutting shall be recorded on DVD and shall include a pan and tilt view of entire lateral circumference following cutting. Any resultant leaks between host pipe liner at lateral shall be grouted watertight.
 2. Each lateral connection shall be sealed from the mainline by packer injection grouting. Pressure inject grout through the lateral packer into the mainline connection joint and any visible deficiencies extending approximately two feet up the existing service lateral pipe. Equipment shall be designed to monitor the injection of material and determine when any leaks are sealed to a minimum of 0.5 psi per vertical foot of depth plus 2 psi; however, test pressure shall not exceed 10psi without approval of the Engineer. Once the designated pressure is displayed on the meter of the control panel, application of air pressure will be stopped and a 15 second waiting period will commence. The void pressure will be observed during this period. If the void pressure drop is greater than 2.0 psi within 15 seconds, the lateral will be considered to have failed the air test and shall be grouted and retested. The grout shall be chemical grout AV-100 as manufactured by Avanti International or approved. Confirm lateral flow after sealing of each lateral connection. If a grout blockage exists, the Contractor shall immediately clear the lateral at no additional cost to the satisfaction of the Engineer.

3.04 TESTING

- A. Material Testing
1. All material testing shall be performed by a registered independent, third-party laboratory in accordance with the applicable ASMT test methods to confirm compliance with the requirements of these specifications.
 2. The Contractor shall provide certified test results of the short term properties of the cured CIPP lining material from the actual installed liner as a minimum on one location per each liner insertion setup.

3. The cured CIPP liner shall be sampled and tested for flexural strength and flexural modulus (short term). Flexural strength and modulus shall be tested in accordance with the requirements of ASTM D790. The liner shall be in compliance with the physical properties started under Paragraph 2.03A of this section. A certificate of compliance shall be provided for long term flexural modulus.
4. Minimum chemical resistance requirements shall be as stated in ASTM F1216, Section X2. Chemical solutions include Tap Water (pH 6-9), Nitric acid, Phosphoric acid, Sulfuric acid, Gasoline, Vegetable oil, Detergent and Soap at concentrations identified in Table X2.1. This test shall be required on a single installation for the project. The Engineer will determine which installation field sample shall be used for testing. If analytical results show that the finished CIPP does not meet the requirements of ASTM F1216, additional chemical resistance testing will be required at no additional cost to the Owner on another section of pipe.

B. Field Testing

1. Visual inspection of the CIPP shall be in accordance with ASTM F1743, Section 8.6.
2. After completion of all CIPP insertions, service reconnections, and finish work at the manholes the sewer shall be video recorded with Owner Representative witnessing and a copy of the tape provided to the Owner.
 - a. Repair CIPP per the Manufacturer's or Assembler's recommendations if defects, including infiltration of groundwater is observed.
 - b. All service connections shall be accounted for and be unobstructed. This will include any residual grout or coupons from the CIPP liner section removed.
3. Conformance Standards and Remedies must meet or exceed the following:
 - a. No radially positioned (perpendicular to flow) wrinkles, fins or other discontinuities in the lower third of the pipe which exceed ½ inches in height, or more than 3 percent of the host pipe inside diameter; whichever is the least.
 - b. No radial wrinkles, fins or other discontinuities in the upper two-thirds of the pipe having a height of 5 percent or more of the host pipe inside diameter, unless approved. The requirement may be waved at the option of the Owner under specific circumstances.
 - c. No leakage through the liner.
 - d. No separation of the liner from the existing pipe
 - e. No delamination of CIPP layers.
 - f. If an installed liner has unacceptable wrinkles, fins, discontinuities, leakage, delamination, pinholes, soft spots, blisters, failed tests, or other de-

fects, remedy the defect by installing a second liner, removing and re-installing a full-thickness liner, constructing a full pipe replacement, or installing a liner repair as approved.

- g. Any necessary replacement repair also included all surface restoration to equal or better condition before repair was begun, as approved.

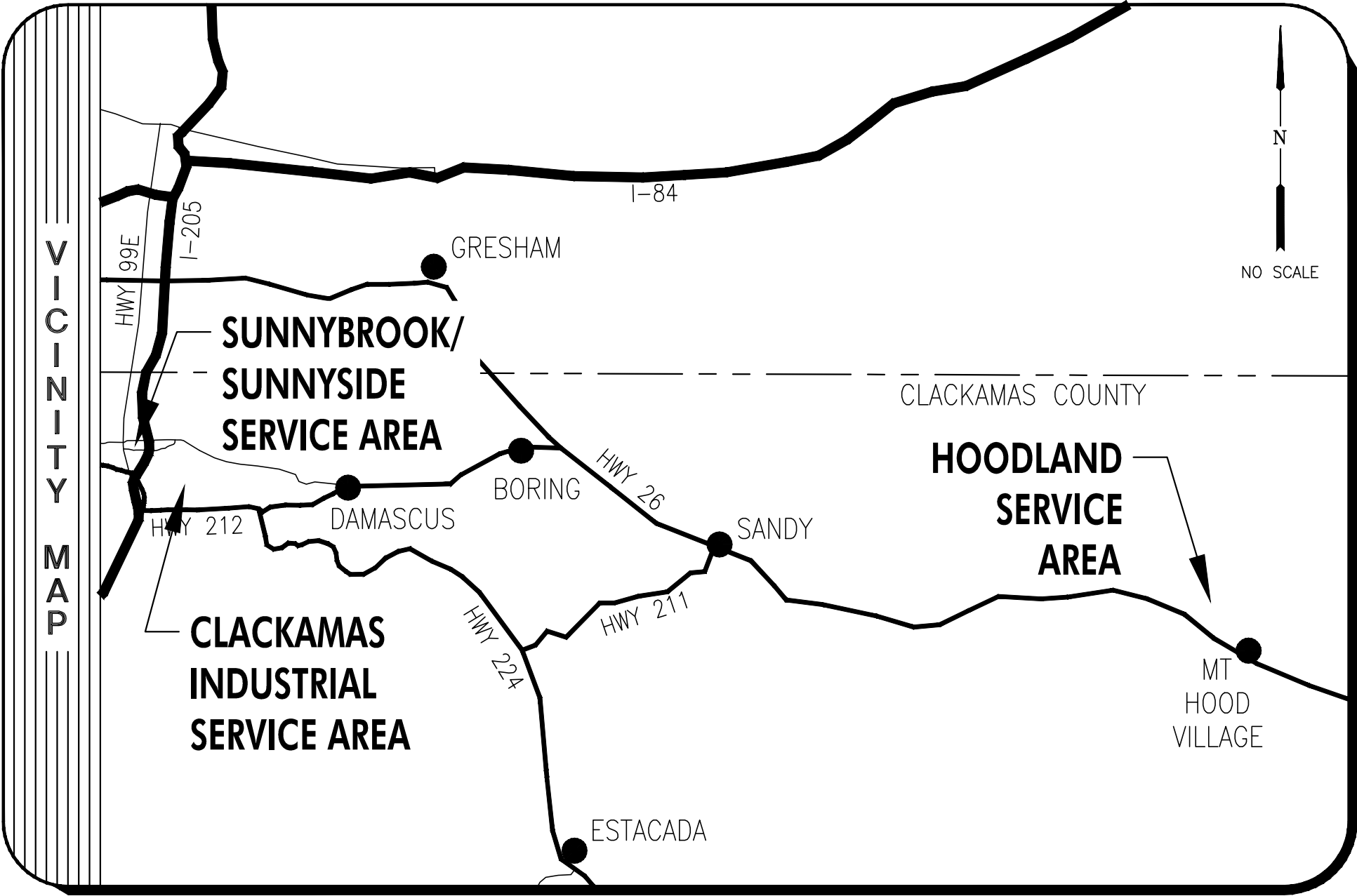
END OF SECTION

2017/18 COLLECTION SYSTEM REHAB

CLACKAMAS COUNTY SERVICE DISTRICT NO. 1

PROJECT NO. P112230

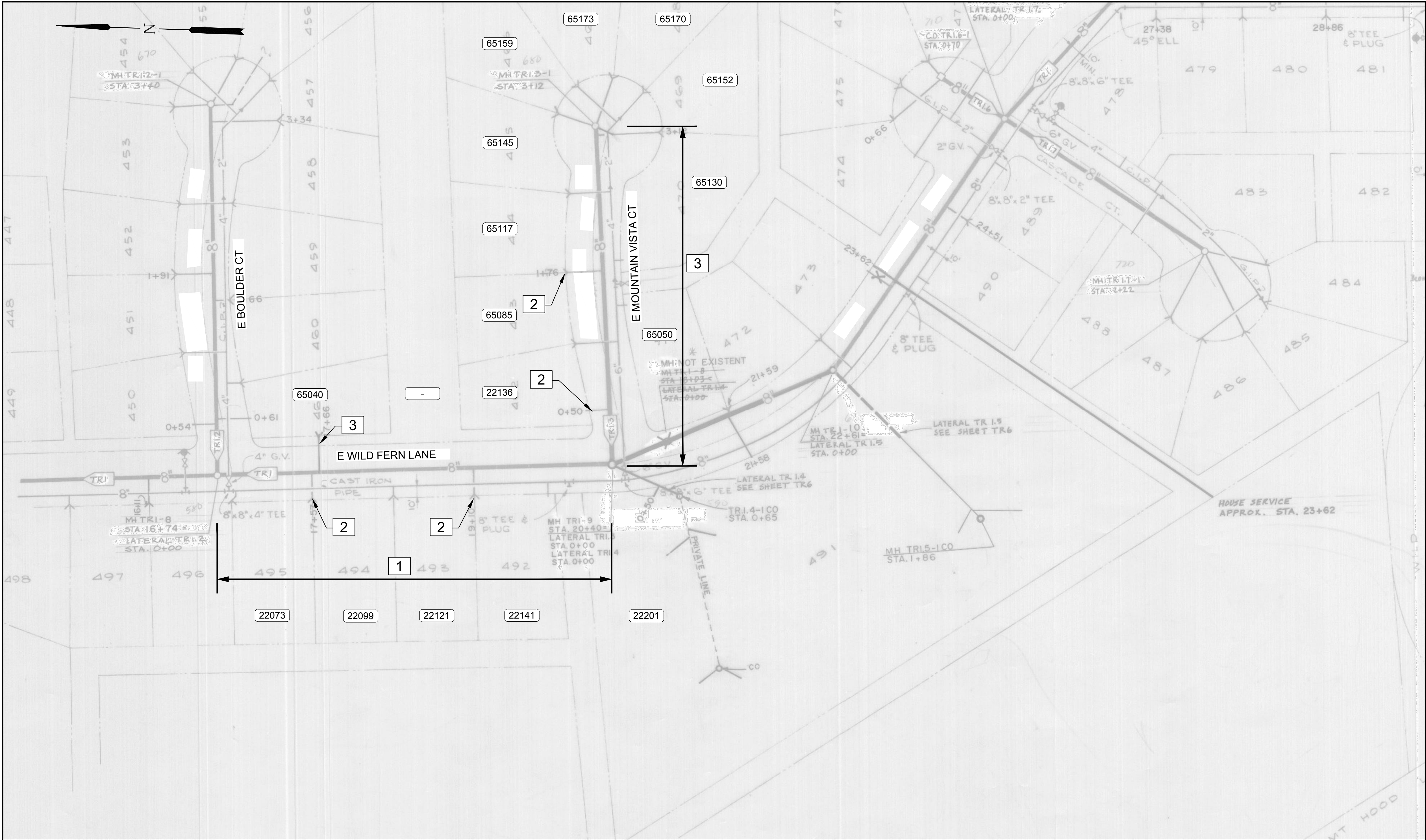
AUGUST 2018



SHEET NO.	DRAWING NO.	INDEX
1	-	COVER SHEET
2	G-1	SHEET/BASIN LAYOUT (HOODLAND SERVICE AREA)
3	G-2	SHEET/BASIN LAYOUT (CLACKAMAS INDUSTRIAL AREA)
4	G-3	SHEET/BASIN LAYOUT (SUNNYBROOK/SUNNYSIDE AREA)
5	A-1	TR1-8 TO TR1.3-1
6	A-2	TR4-7 TO TR4-8
7	A-3	TR4.1.1.1.3.1-1 TO TR4.1.1.1.31.1-CO & TR4.1.1.1.3.1-1 TO TR4.1.1.1.3.1-2
8	A-4	GT-6 TO GT-7
9	B-1	CL505 TO CL8.1-1
10	B-2	CL22-11 TO CL22-14
11	C-1	LP1-7 TO LP1.6-2
12	C-2	LP273 TO LP1-4

SHEET INDEX


CWE PROJECT NO. 40748037.01



NOTE:
THIS DRAWING IS
DERIVED FROM
AS-BUILT DRAWINGS.
FIELD VERIFY ACTUAL
PIPE ELEVATIONS
AND DISTANCES.

- KEY NOTES:
- 1 REHABILITATE EXISTING PIPE WITH 8" DIAMETER PIPE UTILIZING CURED-IN-PLACE PIPE. PREPARE HOST PIPE IN ACCORDANCE WITH SPECIFICATIONS.
 - 2 EXISTING SERVICE LATERAL TO REMAIN. RECONNECT EXISTING SERVICE TO NEW CIPP MAIN.
 - 3 EVALUATE SERVICE FOLLOWING CLEANING OF MAINLINE PIPE TO DETERMINE FINAL STATUS FOR REINSTATEMENT. OWNER CCTV RECORDS ARE NOT CLEAR.



DRAWING NO.		2017/18 COLLECTION SYSTEM REHAB HOODLAND SERVICE AREA		CENTURY WEST		PORTLAND OFFICE 5331 SW MACADAM AVE., #287 PORTLAND, OR 97239 503.419.2130 OFFICE 503.639.2710 FAX		NO.		DATE		BY		REVISIONS	
A-1															
SHEET NO.		CIPP IMPROVEMENTS TR1-8 TO TR1.3-1		ENGINEERING				DESIGNED BY:		DRAWN BY:		CHECKED BY:		SCALE: N.T.S.	
5 OF 12								DATE:		AUGUST 2018		PROJECT NO:		40748037.01	



NOTE:
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FIELD VERIFY ACTUAL
PIPE ELEVATIONS
AND DISTANCES.

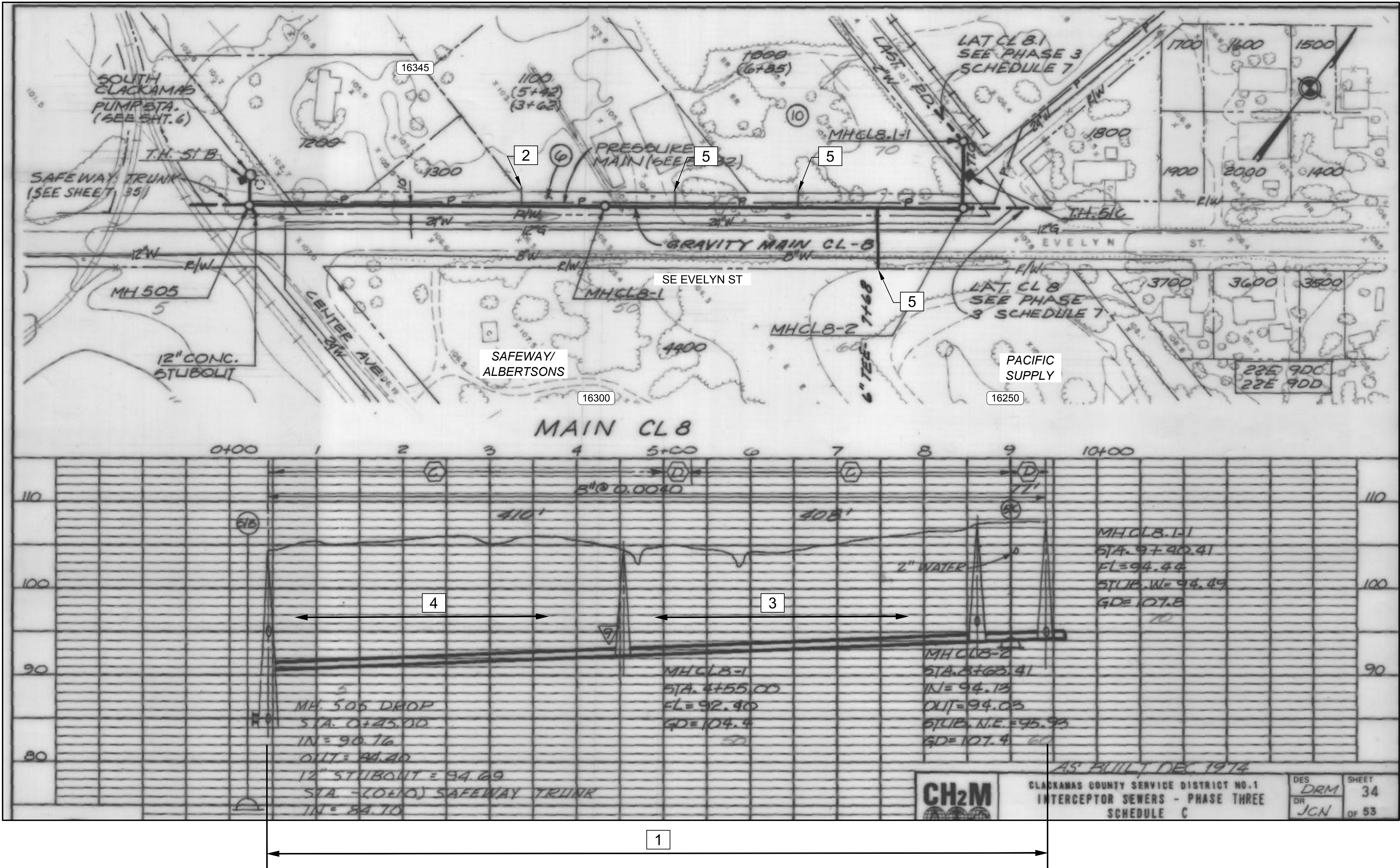
KEY NOTES:

- REHABILITATE EXISTING PIPE WITH 8" DIAMETER PIPE UTILIZING CURED-IN-PLACE PIPE. PREPARE HOST PIPE IN ACCORDANCE WITH SPECIFICATIONS.
- EXISTING SERVICE LATERAL TO REMAIN. RECONNECT EXISTING SERVICE TO NEW CIPP MAIN.
- END OF EXISTING 8" PIPE CONSISTS OF NEW CLEANOUT CONFIGURATION INSTALLED BY THE DISTRICT. THIS COULD REQUIRE NEW INSERTION NECESSARY FROM THIS LOCATION. FINAL MEAN AND METHODS SHALL BE AT CONTRACTOR DISCRETION.
- VERIFY TOTAL LENGTH OF RUN PRIOR TO ORDERING CIPP. OWNER HAS INSTALLED AN 8" CLEANOUT TO SURFACE FOR ACCESS.
- PIPE NOT SHOWN IN PROFILE. DEPTH OF COVER TO TOP OF PIPE VARIES FROM 5' TO APPROXIMATELY 7'.



EXPIRES: 6-30-20

DRAWING NO.		SHEET NO.		7 OF 12	
A-3					
2017/18 COLLECTION SYSTEM REHAB HOODLAND SERVICE AREA		CIPP IMPROVEMENTS TR4.1.1.3.1-1 TO TR4.1.1.3.1-1-CO & TR4.1.1.3.1-1 TO TR4.1.1.3.1-2			
CENTURY WEST ENGINEERING		DESIGNED BY: DRAWN BY: CHECKED BY: SCALE: N.T.S.		PORTLAND OFFICE 5331 SW MACADAM AVE., #287 PORTLAND, OR 97239 503.419.2130 OFFICE 503.699.2710 FAX	
		DATE: AUGUST 2018		PROJECT NO: 40748037.01	
				NO. DATE BY	
				REVISIONS	



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KEY NOTES:

- 1

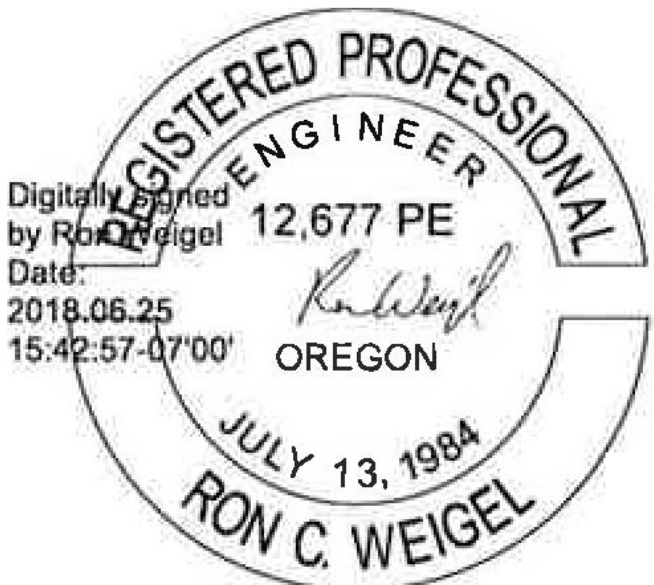
REHABILITATE EXISTING PIPE WITH 8" DIAMETER PIPE UTILIZING CURED-IN-PLACE PIPE. PREPARE HOST PIPE IN ACCORDANCE WITH SPECIFICATIONS.
- 2

EXISTING SERVICE LATERAL TO REMAIN. RECONNECT EXISTING SERVICE TO NEW CIPP MAIN.
- 3

OWNER UNABLE TO CONTINUE CCTV CAMERA AFTER APPROXIMATELY 20 FOOT INSPECTION DOWNSTREAM OF MH CL8-2 DUE TO EXTENSIVE GREASE BUILDUP.
- 4

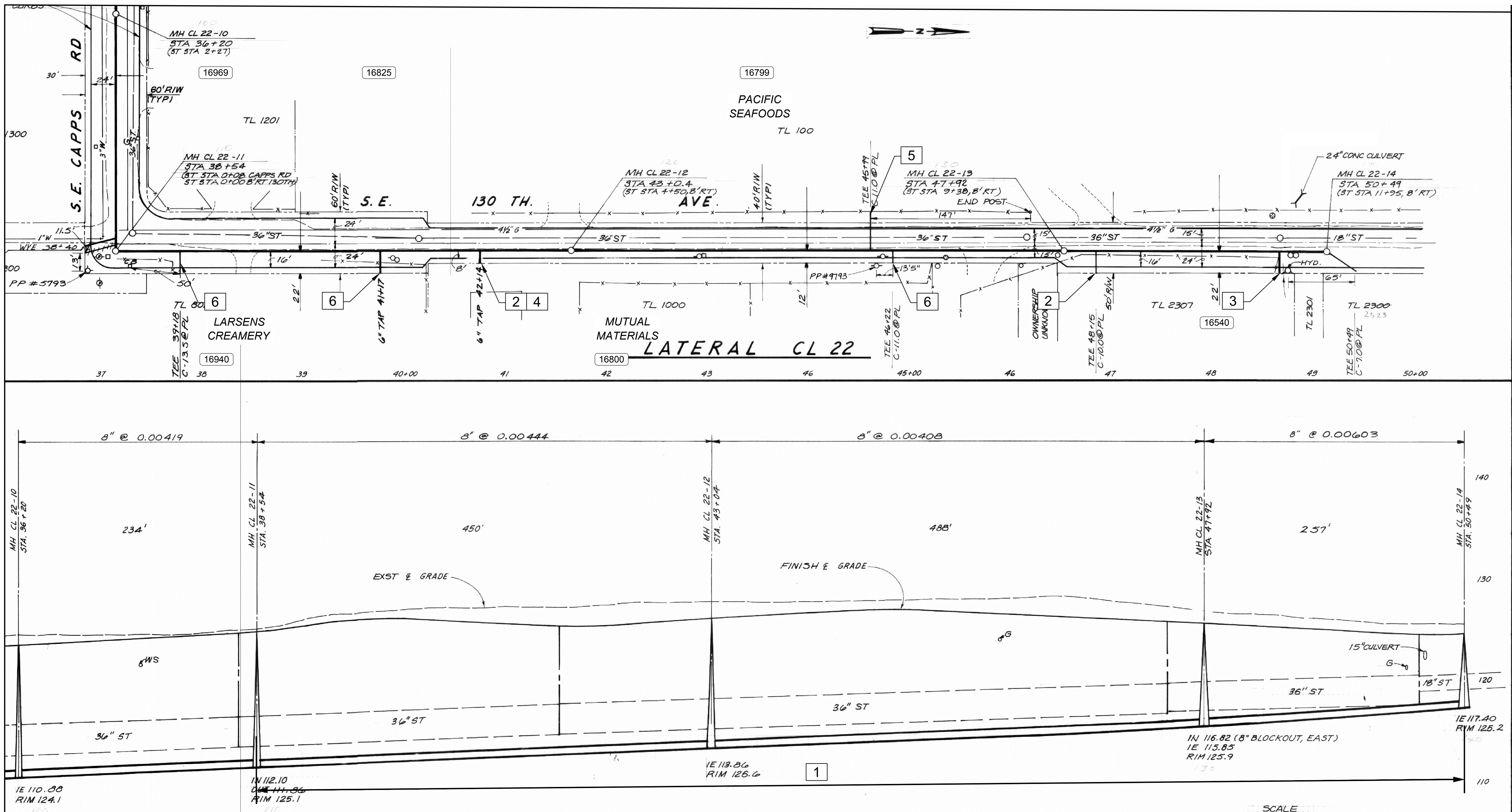
OWNER CCTV INSPECTION FOUND THREE INFILTRATION POINTS IN THE SECTION THAT WILL REQUIRE GROUTING PRIOR TO CIPP INSTALLATION.
- 5

STATUS UNKNOWN. VERIFY IN FIELD.



EXPIRES: 6-30-20

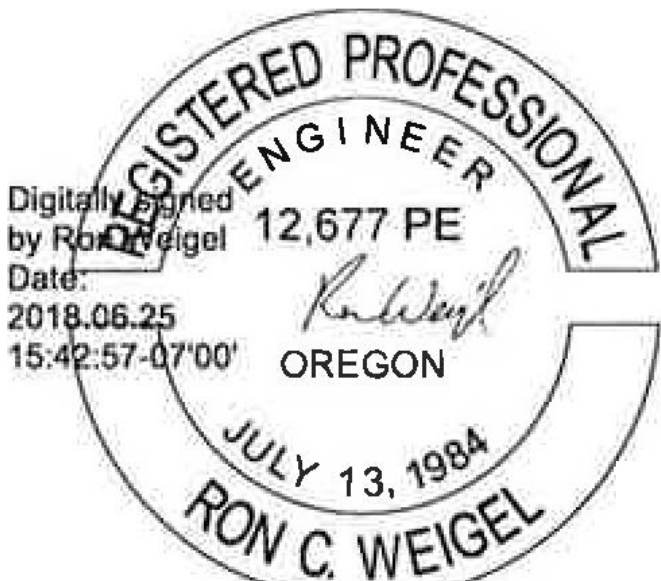
DRAWING NO. B-1	SHEET NO. 9 OF 12	2017/18 COLLECTION SYSTEM REHAB CLACKAMAS INDUSTRIAL AREA CIPP IMPROVEMENTS CL505 TO CL8.1-1	 CENTURY WEST ENGINEERING	PORTLAND OFFICE 5331 SW MACADAM AVE., #287 PORTLAND, OR 97239 503.419.2130 OFFICE 503.699.2710 FAX	DESIGNED BY: DRAWN BY: CHECKED BY: SCALE: N.T.S.	PROJECT NO: 40749037.01	
				NO.	DATE	BY	REVISIONS



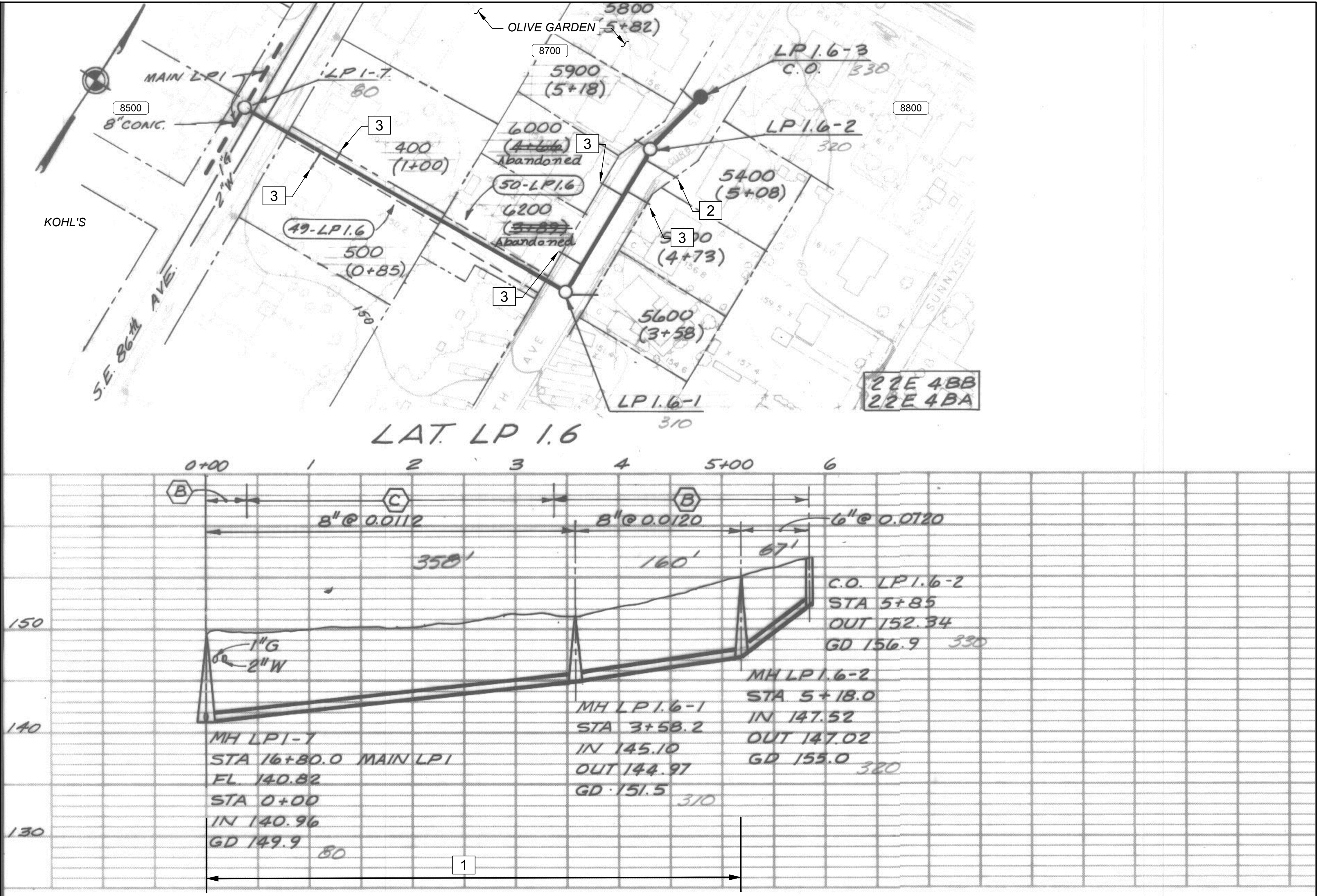
KEY NOTES:

- 1 REHABILITATE EXISTING PIPE WITH 8" DIAMETER PIPE UTILIZING CURED-IN-PLACE PIPE. PREPARE HOST PIPE IN ACCORDANCE WITH SPECIFICATIONS.
- 2 EXISTING SERVICE LATERAL TO REMAIN. RECONNECT EXISTING SERVICE LATERAL TO NEW CIPP MAIN.
- 3 ABANDON EXISTING SERVICE. REINSTATEMENT IS NOT REQUIRED.
- 4 EXISTING 6" PVC PROTRUDING TAP. OWNER WAS UNABLE TO CONTINUE CCTV CAMERA BEYOND THIS POINT TOWARDS MH CL22-11.
- 5 PACIFIC SEAFOODS OPERATES 24 HOURS/DAY GENERATING CONSTANT FLOWS. COORDINATE WITH MAINTENANCE STAFF TO COMPLETE WORK ON SATURDAYS. REFER TO SPECIFICATIONS.
- 6 STATUS UNKNOWN. VERIFY IN FIELD.

NOTE:
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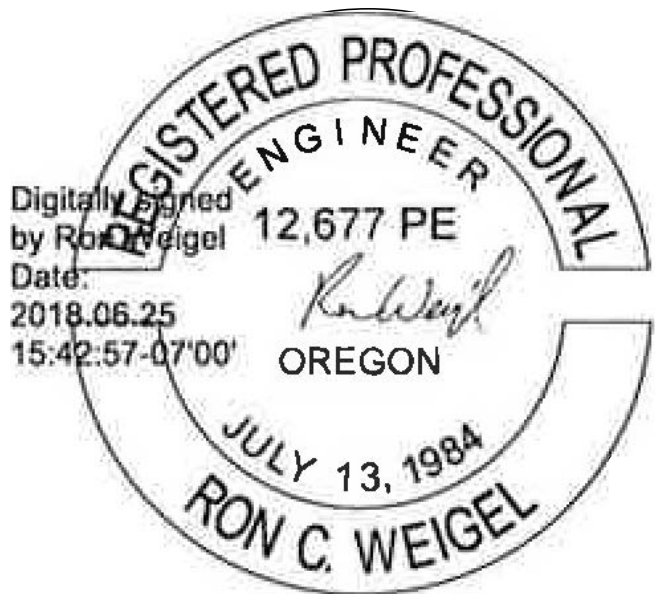
<p>2017/18 COLLECTION SYSTEM REHAB CLACKAMAS INDUSTRIAL AREA</p> <p>CIPP IMPROVEMENTS CL22-11 TO CL22-14</p>	<p>DRAWING NO. B-2</p> <p>SHEET NO. 10 OF 12</p>	<p>DESIGNED BY: ENGINEERING</p>		<p>CHECKED BY: SCALE: N.T.S.</p>		<p>PROJECT NO.: 40748037.01</p>
		<p>DATE: AUGUST 2018</p>		<p>PORTLAND OFFICE 5331 SW MACADAM AVE., #287 PORTLAND, OR 97239 503.499.2130 OFFICE 503.699.2710 FAX</p>		
<p>CENTURY WEST</p>		<p>NO. DATE BY</p>		<p>REVISIONS</p>		




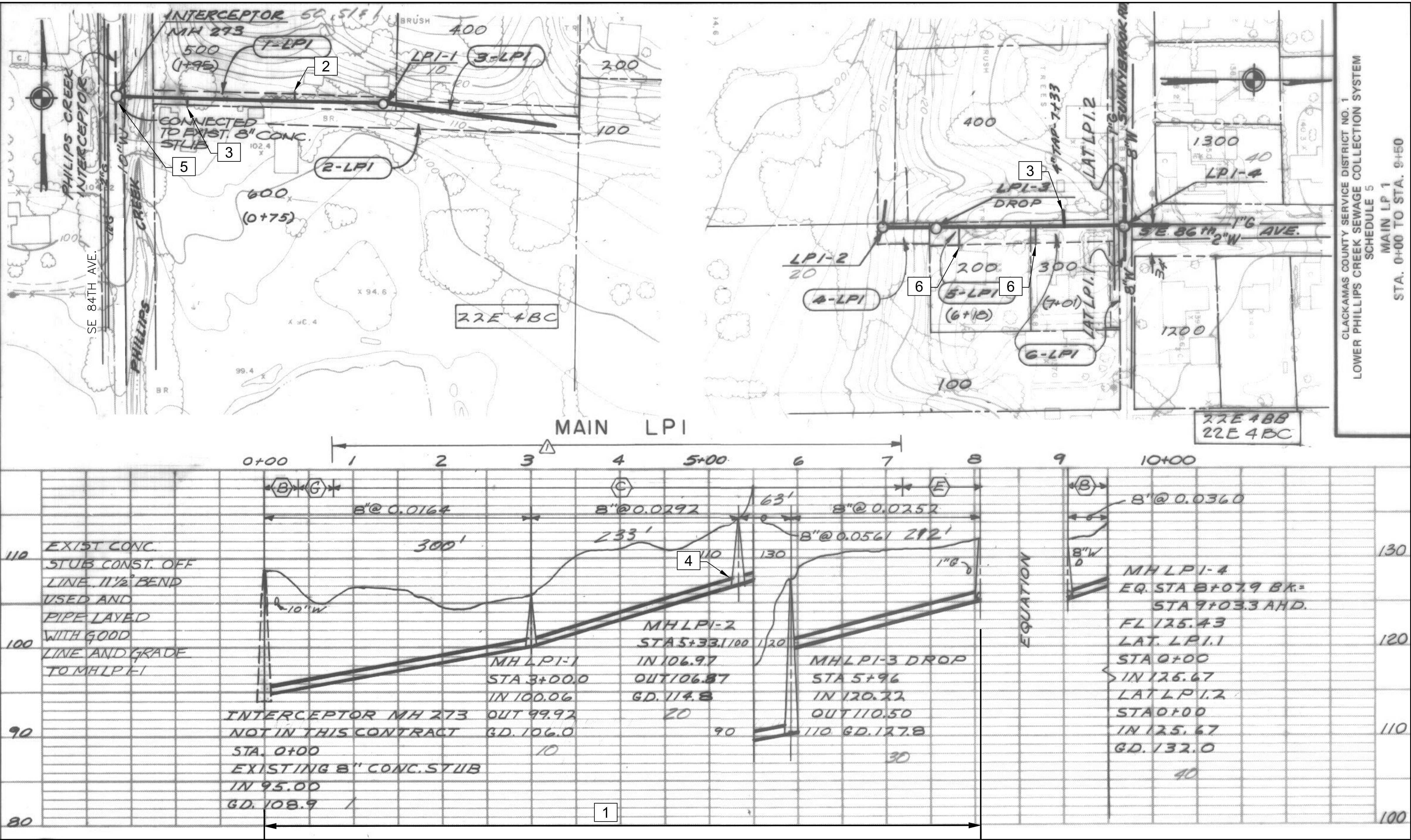
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KEY NOTES:

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- 2 EXISTING SERVICE LATERAL TO REMAIN. RECONNECT EXISTING SERVICE TO NEW CIPP MAIN.
- 3 ABANDON EXISTING SERVICE. REINSTATEMENT IS NOT REQUIRED.



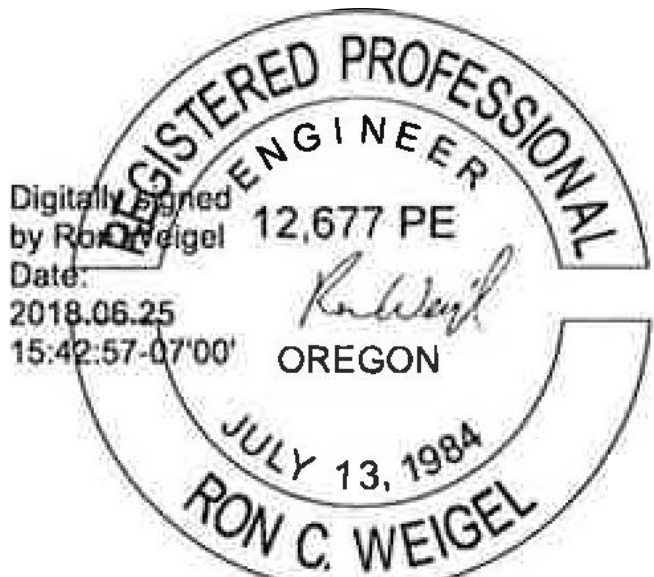
DRAWING NO. C-1	SHEET NO. 11 OF 12	2017/18 COLLECTION SYSTEM REHAB SUNNYBROOK / SUNNYSIDE AREA		CIPP IMPROVEMENTS LP1-7 TO LP1.6-2			
		 CENTURY WEST ENGINEERING		PORTLAND OFFICE 5331 SW MACADAM AVE., #287 PORTLAND, OR 97239 503.419.2130 OFFICE 503.699.2710 FAX			
				DESIGNED BY:		DRAWN BY:	
				CHECKED BY:		SCALE:	
				DATE:		PROJECT NO:	
				AUGUST 2018		40748037.01	
				N.T.S.			
		REVISIONS					
		NO.	DATE	BY			




NOTE:
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DERIVED FROM
AS-BUILT DRAWINGS.
FIELD VERIFY ACTUAL
PIPE ELEVATIONS
AND DISTANCES.

KEY NOTES:

- REHABILITATE EXISTING PIPE WITH 8" DIAMETER PIPE UTILIZING CURED-IN-PLACE PIPE. PREPARE HOST PIPE IN ACCORDANCE WITH SPECIFICATIONS.
- EXISTING SERVICE LATERAL TO REMAIN. RECONNECT EXISTING SERVICE TO NEW CIPP MAIN.
- ABANDON EXISTING SERVICE. REINSTATEMENT IS NOT REQUIRED.
- APPROXIMATELY 2' DOWNSTREAM OF MH LP1-2, 8" PIPE HAS TOP SECTION MISSING WITH UNKNOWN PROTRUDING OBJECT. OWNER UNABLE TO CONTINUE CCTV CAMERA DOWNSTREAM.
- CONTRACTOR SHALL BE PREPARED TO WORK WITHIN AN ACTIVE SEWER MANHOLE OVER THE 21" DIAMETER LOWER PHILLIPS CREEK INTERCEPTOR (MH 273). FLOWS TRAVEL FROM NORTH TO SOUTH.
IE IN (N) = 101.00±, 21"
IE IN (E) = 95.00±, 8"
IE OUT (S) = 95.00, 21"
- STATUS UNKNOWN. VERIFY IN FIELD.



EXPIRES: 6-30-20

DRAWING NO. C-2	SHEET NO. 12 OF 12	2017/18 COLLECTION SYSTEM REHAB SUNNYBROOK / SUNNYSIDE AREA CIPP IMPROVEMENTS LP 273 TO LP1-4	 CENTURY WEST ENGINEERING	PORTLAND OFFICE 5331 SW MACADAM AVE., #237 PORTLAND, OR 97239 503.499.2130 OFFICE 503.699.2710 FAX	DESIGNED BY: DRAWN BY: CHECKED BY: SCALE: N.T.S.	PROJECT NO: 40748037.01
				CLACKAMAS COUNTY SERVICE DISTRICT NO. 1 LOWER PHILLIPS CREEK SEWAGE COLLECTION SYSTEM SCHEDULE 5 MAIN LP 1 STA. 0+00 TO STA. 9+50		

