City of Sherwood Oregon

Home of the Tualatin River National Wildlife Refuge

8069 – Columbia Street Regional Stormwater Facility

June, 2014

Project Number: 8069
Bidding and General Requirements, Contract Forms,
Project Special Provisions and Plans

Owner
City of Sherwood
Engineering Department
22560 SW Pine Street
Sherwood, OR 97140
(503) 925-2309

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Division One
Bidding Requirements

INVITATION TO BID
City of Sherwood
8069 – Columbia Street Regional Water Quality Facility

Sealed bids for furnishing all materials, equipment, labor, and services for the construction of the **8069 – Columbia Street Regional Water Quality Facility** for the City of Sherwood will be received at City of Sherwood, Engineering Department, 22560 SW Pine Street, Sherwood, Oregon 97140 (Attn: Craig Christensen, P.E., Project Manager) until the **Bid Closing** at **2:00 PM (PDT)** on **Thursday, July 10, 2014**. Please title the envelope "Columbia Street Regional Water Quality Facility". Bids will then be publicly opened and read aloud after 2:00 PM at the Sherwood City Hall Community Room, 22560 SW Pine Street, Sherwood, Oregon. This project is subject to a pre-qualification process and only General Contractors pre-qualified bids will be accepted. No bids will be accepted after the **BID CLOSING** time.

First-Tier Subcontractor Disclosure forms must be received at the above mentioned location and date no later than **4:00 PM (PDT).** Proposals without a completed First-Tier Subcontractor Disclosure form submitted will be considered non-responsive.

Bidders must be **pre-qualified** in accordance with the laws of the State of Oregon (ORS 279C.430) to do Drainage Improvements. Letters of pre-qualification (approval letter only) from the Oregon Department of Transportation (ODOT), Washington County Department of Land Use &Transportation, or any local municipality with a population equal to or greater than 18,000 persons is acceptable to the City. Proof of valid pre-qualification must be submitted to the City **by Monday, July 7, 2014 at 5:00 PM (PDT)** for the Bidder to retain appeal rights. Only bids from pre-qualified Bidders will be opened.

A **MANDATORY PRE-BID MEETING** will be held at the project site (Intersection of SW Main Street and SW Division Street) on **Tuesday, July 1, 2014 at 3:00 PM (PDT)**. A bidder's failure to attend the pre-bid meeting shall cause any bid submitted by that bidder to be deemed non-responsive and will be returned unopened.

Project Description

The Work to be done under this Contract consists of the construction of the following items:

1. Water quality swale construction.
2. Storm sewer and manholes.
3. Pipe bore of 36-inch diameter casing with 24-inch diameter carrier.
4. Asphalt access roads.
5. Retaining wall.
6. Installation of plantings, weeding and temporary irrigation.
7. Engineer's Estimate Total ($700,000 - $750,000).

The bid will be broken into 3 portions: Base Bid, Bid Alternate A and Bid Alternate B. The apparent low bidder will be based upon the total bid amount for all 3 portions of the project together.

The Bidding Documents will be available on **Monday, June 30 at 5:00 PM (PDT)** for examination and/or purchased at Sherwood City Hall for a $30.00 non-refundable fee, if documents are picked up or a $35.00 non-refundable fee if documents are mailed. Bidding Documents are also available for free download on the City's website, www.sherwoodoregon.gov, under "Business" and "Bids and RFPs" and are acceptable for Bid Submittal. Additional Information and Project Plans will be available on the City website at the same location.

Other locations Bidding Documents may be examined:

- DJC Plan Center (Electronic only), 503-224-0624, Email: plancenter@djcoregon.com
- Oregon Contractors Plan Center, 14625 SW 82nd Drive, Clackamas, OR 97015

- Builder's Exchange of Washington, Inc., 2607 Wetmore Avenue, Everett, WA 98201

Parties purchasing Bidding Documents will be included on a Planholders list maintained by the City. Parties downloading Bidding Documents from the City's website can request to be included on the official Planholders list by sending an email to christensenc@sherwoodoregon.gov. Bidders are not required to be on Planholders list to submit a Bid for this project.

Addenda, clarifications and Notices will be posted online on the City's website. Potential Bidders are responsible for checking the website on a daily basis. Each addendum must be signed and submitted with the Bid to be considered a responsive bid offer. The City is not responsible for failure of bidders to receive notifications of changes or corrections made by the City and posted as stated above.

All questions or requests for clarification must be submitted **by 5:00 PM (PDT) on Thursday, July 3, 2014**, seven (7) days prior to bid opening to receive responses. All final responses will be posted on the City's website no later than three (3) days prior to Bid Opening.

This is a local public works project subject to BOLI prevailing wages (ORS 279C.800 to ORS 279C.870).

Bids shall be accompanied by a certified check, cashier's check or bid bond payable to the City of Sherwood in an amount equal to ten percent (10%) of the amount bid.

The City of Sherwood may reject a bid that does not comply with prescribed public contracting procedures and requirements, including the requirement to demonstrate the bidder's responsibility under ORS 279C.375(3)(b), and that the City may reject for good cause, all bids after finding that doing so is in the public interest. City reserves the right to waive minor informalities in any bid.

For more information regarding this project, contact Craig Christensen, P.E., at 503-925-2301 or by e-mail at christensenc@sherwoodoregon.gov.

PUBLISH: Portland Daily Journal of Commerce, June 27 and June 30, 2014.

BIDDER'S CHECKLIST

8069 – COLUMBIA STREET REGIONAL STORMWATER FACILITY

- ☐ Bid Statement Including signed signature page
- ☐ Bid Schedule
- ☐ First Tier Subcontractor Disclosure Form
- ☐ Bid Bond
- ☐ Certification of Non-Collusion
- ☐ Certification of Compliance with ORS 279C.840
- ☐ Certification of Asbestos Abatement
- ☐ Certification of Non-Discrimination
- ☐ Customer Service Acknowledgment
- ☐ Prequalification Acknowledgement
- ☐ Bidder Responsibility Form
- ☐ All Applicable Addenda

BID STATEMENT

The undersigned Bidder declares:

That Bidder has carefully examined and incorporates in this Bid, by this reference all documents included in the Bid Booklet of Contract Documents and Specifications for this job, which includes but is not limited to the Plans, Standard Specifications and Standard Drawings, Supplemental Specifications and Special Provisions, Addenda, Bid Schedule, Prevailing Wage Rates, Contract form, Bond forms, and Conditions of the Contract for:

8069 – Columbia Street Regional Stormwater Facility

That Bidder has made an examination of the site of the proposed work and has made such investigations as are necessary to determine the character of the material and the conditions to be encountered, independently of the indication on the plans; and that if the Proposal is accepted, Bidder will contract with the City of Sherwood as provided in the Contract form, will to the extent of this bid, provide the necessary machinery, tools, apparatus, and other means of construction, and will furnish all material and labor as specified, or called for by the Plans or as necessary to complete the work in the manner specified and in accordance with the requirements of the Engineer.

The undersigned has checked carefully all the bid schedule figures, and understands that the City will not be responsible for any errors or omissions on the part of the undersigned in making this bid.

That Bidder has carefully studied all reports of explorations and tests of subsurface conditions at or contiguous to the site and all drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the site which have been identified in the Solicitation Documents. Bidder acknowledges that such reports and drawings are not Contract Documents and may not be complete for Bidder's purposes. Bidder acknowledges that City and Architect/Engineer do not assume responsibility for the accuracy or completeness of information and data shown or indicated in the Bidding Documents with respect to Underground Facilities at or contiguous to the site.

That Bidder has obtained and carefully studied (or assumes responsibility for having done so) all additional or supplementary examinations, investigations, explorations, tests, studies and data concerning conditions (surface, subsurface and underground facilities) at or contiguous to the site which may affect cost, progress, or performance of the work and which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction expressly required by the Bidding Documents to be employed by Bidder, and safety precautions and programs incident thereto.

That Bidder does not consider that any additional examinations, investigations, explorations, tests, studies or data are necessary for the determination of this Bid for performance furnishing of the work in accordance with the times, price and other terms and conditions of the Contract Documents.

Bidder has given Architect/Engineer written notice of all conflicts, errors, ambiguities or discrepancies that Bidder has discovered in the Contract Documents and the written resolution thereof by Architect/Engineer is acceptable to Bidder, and the Contract Documents are generally sufficient to and convey understanding of all terms and conditions for performing and furnishing the work for which this Bid is submitted.

The undersigned also agrees that Bidder will order all material and equipment included under this contract and will commence work within ten (10) days after receipt of Notice to Proceed and that Bidder will complete the work in all respects after commencement and will have the project completed by the date specified in the special provisions and that Bidder will pay as liquidated damages to the City for any delay, the sum of **Eight Hundred and No/100 Dollars ($800.00)** per day for each Calendar Day required beyond that period.

Accompanying this proposal is a Certified Check, Cashier's Check, or Bidder's Bond

from _____ of _____
(Name of Surety) (City/State)

in the amount of _____ dollars

($_____), being 10% of the amount bid according to the conditions of the Call for Bids and Specifications.

If this proposal should be accepted by the City and the undersigned should fail to executed a satisfactory contract and bond within ten (10) days from the date of notification, then the City may, as stated in the specifications, determine that the undersigned has abandoned the contract and thereupon this proposal shall be null and void, and the certified check, cashier's check or Bidder's bond accompanying this proposal shall be forfeited to and become the property of the City. Otherwise, the certified check, cashier's check or Bidder's bond accompanying this proposal shall be returned to the undersigned.

The full name and residence of all parties and persons interested in this bid as principals are as follows:

NAME	RESIDENCE

The name and business address of the surety company which will furnish the required performance and payments bonds is

_____
(Name of Surety Company) (Number and Street Address) (City / State / Zip)

All General and Specialty Construction Contractors must have a valid Certificate of Registration with the Construction Contractors Board/State Landscape Contractors Board in order to submit a Bid or offer to undertake any Construction Work in the State of Oregon (ORS 701.026/ORS 671.530).

REGISTRATION NO. _____ **EXPIRATION DATE** _____

The undersigned Bidder has heretofore completed the following work of a similar nature to that contemplated.

JOB	LOCATION	DATE

The undersigned Bidder acknowledges that the amount of damages City might suffer by reason of a failure to complete the project by the Completion Date noted above would be difficult or impossible to compute, and therefore agrees that the stipulated amount of liquidated damages set forth above for such delay is a fair and reasonable measure of damages, and therefore Bidder agrees that it will not contest such sum as being other than a true measure of damages in the event of a failure to complete the project by the stipulated Completion Date. Bidder hereby declares and agrees:

(1) that this is a local public works project subject to the state prevailing rates of wage under ORS 279C.800 to 279C.870, no bid will be considered without statement by the bidder that the bidder will comply with ORS 279C.838 or 279C.840;

(2) that Bidder is _____ is not _____ a Resident of Oregon Bidder, as defined by ORS 279A.120. "Resident Bidder" means a Bidder that has paid unemployment taxes or income taxes in this state during the 12-calendar months immediately preceding submission of the bid, has a business address in this state, and has stated in the bid whether the Bidder is a "Resident Bidder;"

(3) that City of Sherwood may reject a bid that does not comply with prescribed public contracting procedures and requirements, including the requirement to demonstrate the bidder's responsibility under ORS 279C.375(3)(b), and the City of Sherwood may reject for good cause all bids after finding that doing so is in the public interest;

(4) that no Bid will be considered unless the Bidder is registered with the Construction Contractors Board as required by OAR 137-049-230.

(5) that where asbestos abatement is required the abatement shall be done by Department of Environmental Quality licensed contractor (ORS 468A.720) and the abatement shall be performed in conformity with DEQ and OSHA regulations and other standards related to work place safety;

(6) that Bidder shall comply with and cause its subcontractors to comply with all applicable provisions of federal, state and local statutes, ordinances, rules and regulations;

(7) that Bidder shall comply with pre-qualification conditions in accordance with the laws of the State of Oregon (ORS 279C.430) as follows:

a. Pre-qualification is required and forms must be filed two (2) days prior to the Bid Opening date for the Bidder to retain bidding rights.

b. Required forms: Proof of pre-qualification acceptance by either the State of Oregon Department of Transportation (ODOT), Washington County Department of Transportation, or any local major municipality is acceptable to the City. Bidders

may mail (address on cover sheet), fax (503-625-0629) or e-mail (engineering@sherwoodoregon.gov) proof of pre-qualification to the City, to the attention of the City Engineer.

(8) that each Bidder must provide certification of non-discrimination in obtaining required subcontractors in accordance with ORS 279A.110(4).

(9) that Bidder must also possess either a Metro license or a City of Sherwood business license at the time of construction.

(10) that all principal individuals in your organization assigned to the project (superintendent, project manager, and/or lead on-site contact) shall be listed on the Bidder Responsibility Form submitted to the City. Any personnel changes during the Project must be preceded by the submittal of the new individual's experience, and written acceptance by the City, as required on the Bidder Responsibility Form.

This bid is incomplete and shall not be considered unless there is attached hereto a signed and dated complete original of each of the following: Bid Statement, Bid Schedule, First-Tier Subcontractor Disclosure Form, a Certified Check, Cashier's Check or Bid Bond, Certification of Non-collusion, Certification of Compliance with ORS 279C.840, Certification of Asbestos Abatement, Certification of Non-Discrimination, Customer Service Acknowledgement, Prequalification Acknowledgment, Bidder Responsibility Form and all applicable Addenda.

Submitted By:
Name of Bidder: _____

Signature of Authorized Agent: _____

Title: _____

Business Address of Bidder: _____

Phone Number: _____

Date: _____

BID SCHEDULE
8069 – COLUMBIA STREET REGIONAL STORMWATER FACILITY

BASE BID

BASE BID includes work associated with the construction of the following: Water quality swale, storm sewer "A" from swale through manhole A3, storm sewer "B", storm sewer "C" and storm sewer "D", inlet A3.1, construction of access roads, removal of existing water quality facilities at northwest corner of new water quality swale, all plantings and invasive removal east of the railroad and 2-year plant establishment and weed control for entire site.

Item No.	Spec Section	Description	Unit	Quantity	Unit Price	Unit Total Cost
PART 00200 -- TEMPORARY FEATURES AND APPURTENANCES						
1	00210	Mobilization	LS	1		
2	00225	Work Zone Traffic Control	LS	1		
3	00240	Temporary Drainage Facilities, Existing Storm Drain	LS	1		
4	00280	Erosion Control	LS	1		
5	00280	Sediment Fence	FOOT	1000		
6	00280	Inlet Protection	EA	5		
7	00280	Seeding and Mulching	ACRE	0.5		
8	00280	Check Dams	EA	7		
9	00280	Gravel Construction Entrance	EA	2		
10	00280	Concrete Washout	LS	1		
11	00280	Protection Matting, Econojute	SY	1400		
12	00280	Water Quality Faciliy Matting, Geojute Plus	SY	600		
13	00280	Concrete Flow Spreader (WQ Facility), 12" depth	EA	7		
14	00280	Concrete Flow Spreader (WQ Facility), 36" depth	EA	1		
15	00280	Concrete Flow Spreader (WQ Facility), 42" depth	EA	1		
PART 00300 -- ROADWORK						
16	00310	Removal of Pipes, 42" Storm Main	FOOT	147		
17	00310	Removal of Manholes	EA	1		
18	00310	Removal of Sidewalk	SF	60		
19	00310	Removal of Curb	LF	30		
20	00310	Removal of Water Quality Pond Walls, Inlet and Outfall	LS	1		
21	00310	Removal of Pipes, 12" Storm	LF	140		

BID SCHEDULE
8069 – COLUMBIA STREET REGIONAL STORMWATER FACILITY

BASE BID

BASE BID includes work associated with the construction of the following: Water quality swale, storm sewer "A" from swale through manhole A3, storm sewer "B", storm sewer "C" and storm sewer "D", inlet A3.1, construction of access roads, removal of existing water quality facilities at northwest corner of new water quality swale, all plantings and invasive removal east of the railroad and 2-year plant establishment and weed control for entire site.

Item No.	Spec Section	Description	Unit	Quantity	Unit Price	Unit Total Cost
22	00310	Removal of Curb Inlets	EA	1		
23	00310	Removal of Fences	LF	550		
24	00310	Removal of AC Path	SF	825		
25	00310	Removal of Storm Leads	FOOT	20		
26	00320	Striping, Stockpiling, Redistribution and Off-Haul	LS	1		
27	00320	Tree Protection Fence	FOOT	120		
28	00330	Excavation, Embankment and Off-Haul	LS	1		
29	00390	Riprap Protection, Class 50	CY	5		
30	00390	Riprap Protection, Class 200	CY	180		
PART 00400 -- DRAINAGE & SEWERS						
31	00445	12" Storm Main, Class B Backfill	FOOT	38		
32	00445	12" Storm Main, Class A Backfill	FOOT	215		
33	00445	18" Class V RCP, Class A Backfill	FOOT	18		
34	00445	36" Class V RCP, Class B Backfill	FOOT	7		
35	00445	36" Class V RCP, Class A Backfill	FOOT	50		
36	00445	42" Storm Main, Class B Backfill	FOOT	123		
37	00445	10" Storm Catch Basin Lead, Class B Backfill	FOOT	22		
38	00470	48" Concrete Storm Sewer Manhole, Flat Top	EA	1		
39	00470	72" Concrete Storm Sewer Manhole, Flat Top	EA	1		
40	00470	84" Concrete Storm Sewer Pollution Control Manhole	EA	1		
41	00470	84" Concrete Storm Sewer Manhole	EA	1		
42	00470	Concrete Storm Sewer Curb Inlet	EA	1		
43	00470	Concrete Storm Sewer Manhole Inlet	EA	1		

BID SCHEDULE
8069 – COLUMBIA STREET REGIONAL STORMWATER FACILITY

BASE BID

BASE BID includes work associated with the construction of the following: Water quality swale, storm sewer "A" from swale through manhole A3, storm sewer "B", storm sewer "C" and storm sewer "D", inlet A3.1, construction of access roads, removal of existing water quality facilities at northwest corner of new water quality swale, all plantings and invasive removal east of the railroad and 2-year plant establishment and weed control for entire site.

Item No.	Spec Section	Description	Unit	Quantity	Unit Price	Unit Total Cost
44	00490	Connect to Existing Storm Sewer Manhole	EA	1		
45	00495	5" Thick Trench Patch (Level 2, 1/2-Inch Dense HMAC)	SY	68		
PART 00500 - BRIDGES						
46	00596	Modular Block Retaining Wall (Wall Face)	SF	400		
PART 00600 - BASES						
47	00641	Aggregate Base Rock – 2" Thick (3/4"-0")	SY	625		
48	00641	Aggregate Subbase Rock – 6" Thick (1'1/2"-0")	SY	625		
PART 00700 – WEARING SURFACES						
49	00745	Access Road Surface – 3" Thick, Level 2, 1/2-Inch Dense, HMAC	SY	532		
50	00759	Concrete Curb	FOOT	31		
51	00759	Commercial Driveway	SF	130		
52	00759	Concrete Sidewalk	SF	16		
PART 00800 – PERMANENT TRAFFIC SAFETY AND GUIDANCE DEVICES						
53	00815	Bollards	EA	2		
54	00815	Removable Bollards	EA	5		
PART 00900 – PERMANENT TRAFFIC CONTROL AND ILLUMINATION SYSTEMS						
55	00940	Vegetated Corridor Sign	EA	9		
56	00970	Street Light and Base Relocation	EA	1		
PART 01000 -- RIGHT OF WAY DEVELOPMENT AND CONTROL						
57	01030	Water Quality Facility Seeding, Free Board Seed Mix	SY	1675		
58	01030	Native Enhancement Grass Seed Mix	SY	6335		
59	01040	Water Quality Facility, Wet Area Plug	EA	27900		
60	01040	Water Quality Facility, 12" Thick Topsoil	SF	4600		
61	01040	Water Quality Facility Planting, Red Osier Dogwood	EA	67		
62	01040	Water Quality Facility Planting, Douglas Spirea	EA	52		

BID SCHEDULE
8069 – COLUMBIA STREET REGIONAL STORMWATER FACILITY

BASE BID

BASE BID includes work associated with the construction of the following: Water quality swale, storm sewer "A" from swale through manhole A3, storm sewer "B", storm sewer "C" and storm sewer "D", inlet A3.1, construction of access roads, removal of existing water quality facilities at northwest corner of new water quality swale, all plantings and invasive removal east of the railroad and 2-year plant establishment and weed control for entire site.

Item No.	Spec Section	Description	Unit	Quantity	Unit Price	Unit Total Cost
63	01040	Water Quality Facility Planting, Flowering Currant	EA	37		
64	01040	Water Quality Facility Planting, Serviceberry	EA	34		
65	01040	Water Quality Facility Planting, Snowberry	EA	69		
66	01040	Invasive Species Removal	LS	1		
67	01040	Vegetated Corridor Enhancement Tree, Douglas Fir	EA	211		
68	01040	Vegetated Corridor Enhancement Tree, Big Leaf Maple	EA	211		
69	01040	Vegetated Corridor Enhancement Tree, Western Red Cedar	EA	211		
70	01040	Vegetated Corridor Enhancement Shrub, Vine Maple	EA	633		
71	01040	Vegetated Corridor Enhancement Shrub, Snowberry	EA	634		
72	01040	Vegetated Corridor Enhancement Shrub, Sword Fern	EA	633		
73	01040	Vegetated Corridor Enhancement Shrub, Thimbleberry	EA	634		
74	01040	Vegetated Corridor Enhancement Shrub, Ocean Spray	EA	634		
75	01040	Plant Establishment, 2-Year Period ($4,000 Minimum)	LS	1		
76	01040	Weed Control, 2-Year Period ($4,000 Minimum)	LS	1		
77	01050	4-Foot, Vinyl Coated Chain Link Fence	FOOT	305		
78	01050	5-Foot, Vinyl Coated Chain Link Fence	FOOT	107		
79	01050	6-Foot Wood Fence	FOOT	142		
80	01050	12'x4'Vinyl Coated Chain Link Double Gate	EA	1		

BID SCHEDULE
8069 – COLUMBIA STREET REGIONAL STORMWATER FACILITY

BASE BID

BASE BID includes work associated with the construction of the following: Water quality swale, storm sewer "A" from swale through manhole A3, storm sewer "B", storm sewer "C" and storm sewer "D", inlet A3.1, construction of access roads, removal of existing water quality facilities at northwest corner of new water quality swale, all plantings and invasive removal east of the railroad and 2-year plant establishment and weed control for entire site.

Item No.	Spec Section	Description	Unit	Quantity	Unit Price	Unit Total Cost
81	01050	4'x6' Wood Single Gate	EA	1		
82	01090	Water Quality Facility, 3" Thick River Rock (3/4" to 2")	CY	47		
PART 01100 – WATER SUPPLY SYSTEMS						
83	01120	Temporary Irrigation System	LS	1		
PART 03020 – BID ALTERNATES						
84	00330	Additional Excavation	BCY	200		
85	00330	Additional Embankment	BCY	100		
86	00330	Additional Off-Haul	BCY	200		
87	00331	12" Subgrade Stabilization (Backfill with Aggregate)	SY	100		
88	00331	12" Subgrade Stabilization (Backfill with On-Site Soil)	SY	100		
89	00405	Rock Excavation	CY	50		
90	00405	Boulder Excavation	CY	50		
91	00405	Trench Excavation	CY	50		
92	01040	Imported Topsoil	CY	250		
TOTAL BASE BID						

The lowest responsive bidder will be determined by the lowest sum of all 3 Bid Schedules (Base Bid, Bid Alternate "A" and Bid Alternate "B").

BASE BID WRITTEN IN WORDS:

_____ **DOLLARS AND** _____ **CENTS**

In the event of discrepancy, the amount in words shall dictate.

In accordance with the provisions of the Oregon Standard Specifications for Construction, 2008 Edition as modified by these bid documents, the undersigned Bidder submits the following Bid Schedule with the understanding that City reserves the right to increase, decrease, or completely eliminate quantities as set forth in 00120.20. Also, the Bidder offers to do the work, whether quantities area changed (increased or decreased) in accordance with 00195.20, or not changed, at the unit rate price stated in the Bid Schedule:

Signature of Authorized Agent	Company Name
Printed Name	Date

BID SCHEDULE
8069 – COLUMBIA STREET REGIONAL STORMWATER FACILITY

BID ALTERNATE "A"

BID ALTERNATE A includes work associated with the construction of the following: Horizontal bore for new storm sewer and all plantings and invasive removal west of the railroad.

Item No.	Spec Section	Description	Unit	Quantity	Unit Price	Unit Total Cost
PART 00200 -- TEMPORARY FEATURES AND APPURTENANCES						
1	00210	Mobilization	LS	1		
2	00225	Work Zone Traffic Control	LS	1		
3	00240	Temporary Drainage Facilities, Horizontal Bore	LS	1		
4	00280	Erosion Control	LS	1		
5	00280	Sediment Fence	FOOT	200		
6	00280	Protection Matting, Econojute	SY	350		
PART 00300 -- ROADWORK						
7	00320	Striping, Stockpiling, Redistribution and Off-Haul	LS	1		
8	00320	Tree Protection Fence	FOOT	60		
9	00330	Excavation, Embankment and Off-Haul	LS	1		
10	00390	Riprap Protection, Class 50	CY	0		
11	00390	Riprap Protection, Class 200	CY	20		
PART 00400 -- DRAINAGE & SEWERS						
12	00406	Boring and Jacking, 36-Inch Casing with 24-Inch Carrier Pipe	FOOT	142		
13	00445	24" Storm Main, Class A Backfill	FOOT	18		
14	00470	Concrete Storm Sewer Manhole Inlet	EA	1		
PART 01000 -- RIGHT OF WAY DEVELOPMENT AND CONTROL						
15	01030	Native Enhancement Grass Seed Mix	SY	390		
16	01040	Vegetated Corridor Enhancement Tree, Douglas Fir	EA	12		
17	01040	Vegetated Corridor Enhancement Tree, Big Leaf Maple	EA	12		
18	01040	Vegetated Corridor Enhancement Tree, Western Red Cedar	EA	11		
19	01040	Vegetated Corridor Enhancement Shrub, Vine Maple	EA	25		
20	01040	Vegetated Corridor Enhancement Shrub,	EA	25		

BID SCHEDULE
8069 – COLUMBIA STREET REGIONAL STORMWATER FACILITY

BID ALTERNATE "A"

BID ALTERNATE A includes work associated with the construction of the following: Horizontal bore for new storm sewer and all plantings and invasive removal west of the railroad.

Item No.	Spec Section	Description	Unit	Quantity	Unit Price	Unit Total Cost
		Red Osier Dogwood				
21	01040	Vegetated Corridor Enhancement Shrub, Snowberry	EA	25		
22	01040	Vegetated Corridor Enhancement Shrub, Pacific Ninebark	EA	25		
23	01040	Vegetated Corridor Enhancement Shrub, Swamp Rose	EA	25		
24	01040	Vegetated Corridor Enhancement Shrub, Salmonberry	EA	25		
25	01040	Vegetated Corridor Enhancement Shrub, Serviceberry	EA	25		
PART 03020 – BID ALTERNATES						
26	00330	Additional Excavation	BCY	50		
27	00330	Additional Embankment	BCY	50		
28	00330	Additional Off-Haul	BCY	50		
TOTAL BID ALTERNATE "A"						

The lowest responsive bidder will be determined by the lowest sum of all 3 Bid Schedules (Base Bid, Bid Alternate "A" and Bid Alternate "B").

BID ALTERNATE "A" WRITTEN IN WORDS:

_____ **DOLLARS AND** _____ **CENTS**

In the event of discrepancy, the amount in words shall dictate.

In accordance with the provisions of the Oregon Standard Specifications for Construction, 2008 Edition as modified by these bid documents, the undersigned Bidder submits the following Bid Schedule with the understanding that City reserves the right to increase, decrease, or completely eliminate quantities as set forth in 00120.20. Also, the Bidder offers to do the work, whether quantities area changed (increased or decreased) in accordance with 00195.20, or not changed, at the unit rate price stated in the Bid Schedule:

_____ _____
Signature of Authorized Agent Company Name

_____ _____
Printed Name Date

BID SCHEDULE
8069 – COLUMBIA STREET REGIONAL STORMWATER FACILITY

BID ALTERNATE "B"

BID ALTERNATE "B" includes work associated with the construction of the following: storm sewer "A" from south of manhole A.3 through manhole A8, storm sewer "E" and associated catch basins and lead lines.

Item No.	Spec Section	Description	Unit	Quantity	Unit Price	Unit Total Cost
PART 00200 -- TEMPORARY FEATURES AND APPURTENANCES						
1	00210	Mobilization	LS	1		
2	00225	Work Zone Traffic Control	LS	1		
3	00240	Temporary Drainage Facilities, Existing Storm Drain	LS	1		
4	00280	Erosion Control	LS	1		
5	00280	Sediment Fence	FOOT	800		
6	00280	Inlet Protection	EA	4		
7	00280	Seeding and Mulching	ACRE	0.5		
PART 00300 -- ROADWORK						
8	00310	Removal of Manholes	EA	2		
9	00310	Removal of Sidewalk	SF	80		
10	00310	Removal of Curb	LF	20		
11	00310	Removal of Pipes, 12" Storm	LF	290		
12	00310	Removal of Pipes, 15" Storm	LF	36		
13	00310	Removal of Storm Leads	FOOT	113		
14	00320	Striping, Stockpiling, Redistribution and Off-Haul	LS	1		
15	00320	Tree Protection Fence	FOOT	220		
16	00330	Excavation, Embankment and Off-Haul	LS	1		
PART 00400 -- DRAINAGE & SEWERS						
17	00445	15" Storm Main, Class B Backfill	FOOT	70		
18	00445	15" Storm Main, Class A Backfill	FOOT	282		
19	00445	24" Storm Main, Class B Backfill	FOOT	315		
20	00445	24" Storm Main, Class A Backfill	FOOT	172		
21	00445	30" Storm Main, Class B Backfill	FOOT	190		
22	00445	10" Storm Catch Basin Lead, Class B Backfill	FOOT	32		

BID SCHEDULE
8069 – COLUMBIA STREET REGIONAL STORMWATER FACILITY

BID ALTERNATE "B"

BID ALTERNATE "B" includes work associated with the construction of the following: storm sewer "A" from south of manhole A.3 through manhole A8, storm sewer "E" and associated catch basins and lead lines.

Item No.	Spec Section	Description	Unit	Quantity	Unit Price	Unit Total Cost
23	00445	12" Storm Catch Basin Lead, Class A Backfill	FOOT	37		
24	00470	48" Concrete Storm Sewer Manhole, Flat Top	EA	3		
25	00470	60" Concrete Storm Sewer Manhole	EA	2		
26	00490	Connect to Existing Storm Sewer Catch Basin/Inlet	EA	4		
27	00490	Connect to Existing Storm Sewer Manhole	EA	1		
28	00490	Filling Abandoned Storm Sewer Pipes, 18" Diameter	FOOT	73		
29	00490	Filling Abandoned Storm Sewer Pipes, 24" Diameter	FOOT	193		
30	00495	5" Thick Trench Patch (Level 2, 1/2-Inch Dense HMAC)	SY	133		
31	00495	4" Thick Trench Patch (Level 2, 1/2-Inch Dense HMAC)	SY	21		
PART 00700 – WEARING SURFACES						
32	00759	Concrete Curb	FOOT	5		
33	00759	Commercial Driveway	SF	60		
PART 03020 – BID ALTERNATES						
34	00330	Additional Excavation	BCY	50		
35	00330	Additional Embankment	BCY	50		
36	00330	Additional Off-Haul	BCY	50		
37	00405	Rock Excavation	CY	50		
38	00405	Boulder Excavation	CY	50		
39	00405	Trench Excavation	CY	50		
40	01040	Imported Topsoil	CY	50		
TOTAL BID ALTERNATE "B"						

The lowest responsive bidder will be determined by the lowest sum of all 3 Bid Schedules (Base Bid, Bid Alternate "A" and Bid Alternate "B").

BID ALTERNATE "B" WRITTEN IN WORDS:

_____ **DOLLARS AND** _____ **CENTS**

In the event of discrepancy, the amount in words shall dictate.

In accordance with the provisions of the Oregon Standard Specifications for Construction, 2008 Edition as modified by these bid documents, the undersigned Bidder submits the following Bid Schedule with the understanding that City reserves the right to increase, decrease, or completely eliminate quantities as set forth in 00120.20. Also, the Bidder offers to do the work, whether quantities area changed (increased or decreased) in accordance with 00195.20, or not changed, at the unit rate price stated in the Bid Schedule:

_____	_____
Signature of Authorized Agent	Company Name
_____	_____
Printed Name	Date

FIRST-TIER SUBCONTRACTOR DISCLOSURE FORM

(OAR 137-049-0360)

Bids which are submitted by Bid Closing, but for which a required disclosure submittal has not been made by the specified Disclosure Deadline, are not responsive and shall not be considered for Contract award.

PROJECT NAME: **8069 – Columbia Street Regional Stormwater Facility**

BID CLOSING: Date: **July 10, 2014** Time: **2:00 PM (PDT)**
FIRST-TIER DISCLOSURE Date: **July 10, 2014** Time: **4:00 PM (PDT)**

Deliver Form To (Agency): City of Sherwood

Designated Recipient (Person): Craig Christensen, P.E. Phone #: 503-925-2301

Agency's Address: City of Sherwood, City Hall
22560 SW Pine Street
Sherwood, OR 97140

INSTRUCTIONS:

The contracting agency will insert "N/A" above if the contract value is not anticipated to exceed $100,000. Otherwise this form must be submitted either with the bid or within two (2) working hours after the advertised bid closing date and time; but no later than the DISCLOSURE DEADLINE stated above.

Unless otherwise stated in the solicitation, this document shall not be submitted by facsimile. It is the responsibility of bidders to submit this disclosure form and any additional sheets, with the bid number and project name clearly marked, at the location indicated by the specified disclosure deadline. See "Instructions to Bidders".

List below the Name, Category of Work and Dollar Value for each first-tier subcontractor that would be furnishing labor, or labor and material, for which disclosure is required. Enter the word "NONE" if there are no first-tier subcontractors subject to disclosure. ATTACH ADDITIONAL SHEETS IF NECESSARY.

BIDDER DISCLOSURE:

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

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.

Form Submitted By (Bidder Name): _____

Contact Name: _____ Phone #: _____

BID BOND

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 the City of Sherwood ("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 Obligee's procurement document for the project identified as:

8069 – Columbia Street Regional Stormwater Facility

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 and ORS 279C.365(4) for competitive bidding or 279C.400(5) for competitive proposals.

NOW, THEREFORE, if the proposal or bid submitted by Principal is accepted, and if a contract pursuant to the proposal or bid is awarded to Principal, and if Principal enters into and executes such contract within the time specified in the procurement document and executes and delivers to Obligee its good and sufficient performance and payment bonds required by Obligee, as well as any required proof of insurance, within the time fixed by Obligee, then this obligation shall be void; otherwise, it shall 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

_____ _____
Official Capacity Name

Attest: _____ _____
Corporation Secretary Signature

_____
Address

_____
City State Zip

_____ _____
Phone Fax

CERTIFICATION OF NON-COLLUSION

PROJECT NAME: 8069 – COLUMBIA STREET REGIONAL STORMWATER FACILITY

TO: CITY OF SHERWOOD, A MUNICIPAL CORPORATION OF THE STATE OF OREGON

STATE OF OREGON)
) SS
COUNTY OF WASHINGTON)

_____
(Bidder's Firm Name)

I, the undersigned, as [circle one]:

- sole owner
- a partner
- officer of the foregoing corporation
- agent of the above bidder

being first duly sworn on oath, depose and say:

That the attached bid has been arrived at by the bidder, independently, and has been submitted without collusion with, and without any agreement, understanding or planned course of action with, any other contractor, bidder, or vendor on materials, supplies, equipment or services, described in the invitation to bid, designed to limit independent bidding or competition.

The contents of the bid herein presented and made have not been communicated by the bidder or (his) (their) or (its) employees or agents to any person not an employee or agent of the bidder or its surety on any bond furnished with the bid, and will not be communicated to any such person prior to the official opening of the bid.

I have fully informed myself regarding the accuracy of the foregoing statements, and the same are made by me based on my personal information.

I have read and understood the Bid Booklet and the Specifications for the attached Bid.

Signature _____

Title _____

Subscribed and sworn before me this _____ day of _____, 20__

My commission expires: _____

_____
Notary Public for Oregon

CERTIFICATION OF COMPLIANCE WITH ORS 279C.840 (PREVAILING WAGES)

FOR

Project Name: 8069 – Columbia Street Regional Stormwater Facility

The undersigned confirms that the provisions of ORS 279C.840 shall be complied with for personnel working on this project.

A copy of the Prevailing Wage Rates is available on-line at the Bureau of Labor and Industries website at:

http://www.oregon.gov/boli/WHD/PWR/Pages/pwr_oregon_2014.aspx

When a contractor or subcontractor is a party to a statewide collective bargaining agreement in effect with any labor organization, the rate of wages provided for in such agreement shall be considered to be the prevailing rate of wage to be paid to the workers on this project.

Date _____

Signature of Bidder _____

Title _____

Business Name _____

CERTIFICATION OF ASBESTOS ABATEMENT

FOR

Project Name: 8069 – Columbia Street Regional Stormwater Facility

The undersigned confirms that if asbestos abatement is required the abatement shall be done by Department of Environmental Quality licensed contractor (ORS 468A.720) and the abatement shall be performed in conformity with DEQ and OSHA regulations and other standards related to work place safety.

Date: _____

Signature of Bidder: _____

Title: _____

Business Name: _____

CERTIFICATION OF NON-DISCRIMINATION
[ORS 279A.110(4) & OAR 137-049-0440(3)]

FOR

Project Name: 8069 – Columbia Street Regional Stormwater Facility

The undersigned certifies that it has not discriminated against minority, women or emerging small business enterprises in the obtaining of subcontracts for this project and shall not discriminate against minority, women or emerging small business enterprises in awarding of subcontracts for this project.

Date _____

Signature of Bidder _____

Title _____

Business Name _____

CUSTOMER SERVICE ACKNOWLEDGMENT

FOR

Project Name: **8069 – Columbia Street Regional Stormwater Facility**

Bid Closing: Date: _____ Time: _____ AM__ PM__

Note: This form is part of the inquiry concerning bidder responsibility and must be submitted with the other proposal forms as specified in Section 00120.40(h) of Division Four – Special Provisions."

Bidder, by his/her signature below, hereby signifies that s/he has read and understands the construction specifications, including but not limited to the following sections of Division Four – Special Provisions, relating to customer service. These sections include, but are not limited to, the sections listed below:

- Section 00160, Source of Materials
- Section 00180.40, Limitation of Operations
- Section 00225, Work Zone Traffic Control

Bidder further acknowledges that s/he understands their terms, fully acknowledges their importance to successful completion of the project, and agrees to be bound thereby if awarded this contract. Bidder further assures the City that, if awarded this contract, s/he will promptly, efficiently and courteously carry out his/her responsibilities under the aforementioned specifications.

_____ _____
Signature of Bidder Title

_____ _____
Name of Firm Date

PREQUALIFICATION ACKNOWLEDGMENT

FOR

Project Name: **8069 – Columbia Street Regional Stormwater Facility**

The undersigned confirms that the Bidder has complied with pre-qualification conditions in accordance with the laws of the State of Oregon (ORS 279C.430) by submitting proof of pre-qualification acceptance three (3) days prior to the Bid Opening date by submitting pre-qualification acceptance by either the State of Oregon Department of Transportation (ODOT), Washington County Department of Transportation, or any local municipality with a population equal to or greater than 18,000 persons.

Date: _____

Signature of Bidder: _____

Title: _____

Business Name: _____

BIDDER RESPONSIBILITY FORM

FOR

Project Name: 8069 – Columbia Street Water Regional Stormwater Facility

All information shall be typed or printed legibly

Note: Information provided in this form is part of the inquiry concerning bidder responsibility, and this form must be submitted with the other proposal forms as specified in Section 00120.40(g) of DIVISION FOUR - SPECIAL PROVISIONS."

Part A

Submitted by: _____ _____

Signature Date

Name (print): _____

Name of Firm: _____

Address: _____

_____

Phone: _____

Fax: _____

1. How many years has your organization done business as a General Contractor under the present business name? _____

   How many years under (a) different name(s)? _____

   List different names, if any, and dates of operation:

   _____

   _____

2. How many years has your organization been in business under its present business name?

   _____

   How many years under (a) different name(s)? _____

   List different names, if any, and dates of operation:

   _____

   _____

Part B – Complete the appropriate Portion Below

1. Bidder is an **INDIVIDUAL**:

   Name of individual _____

   Doing Business as _____

2. Bidder is a **CORPORATION**:

   Name of Corporation as registered with the state of Oregon:

   _____

   Date of Incorporation: _____ State of Incorporation: _____

   Name of President _____

   Name of Secretary _____

   Name of Treasurer _____

   Name of Manager _____

3. Bidder is a **LIMITED PARTNERSHIP**:

   Name of Limited Partnership as registered with the state of Oregon:

   _____

   Name of persons or parties composing the Limited Partnership (indicate whether an individual or corporation):

   _____

   _____

   _____

   _____

4. Bidder is a **GENERAL PARTNERSHIP**:

   Name of General Partnership as registered with the state of Oregon:

   _____

   Name of persons or parties composing the General Partnership (indicate whether an individual or corporation):

   _____

   _____

   _____

   _____

5. Bidder is a **JOINT VENTURE**:

   Name of Joint Venture as registered with the state of Oregon:

   _____

   Name of persons or parties composing the Joint Venture (indicate whether an individual or corporation):

   _____
   _____
   _____
   _____

Part C

1. What percent of the work do you normally perform with you own forces? _____

   List Trades directly employed by you:

   _____ _____ _____
   _____ _____ _____

2. List the Construction Equipment you own or lease long-term:

   _____ _____ _____
   _____ _____ _____
   _____ _____ _____

3. Have you ever failed to complete any work awarded to you? _____
   (Answer yes or no)

   If so, indicate when, where, and why.

   _____
   _____
   _____

4. A. Have you ever defaulted on a contract? _____ If so, indicate when, where and why.
   (Answer yes or no)

   _____
   _____
   _____

   B. What result: Lawsuit? Judgment? Arbitration? Settled? Other?
   Circle the one that most applies

   If other, explain: _____

   _____

C. Are there currently any unpaid judgments against the business or any of its principals?

_____
(Answer yes or no)

If so, describe: _____

_____

5. Has any Officer or Partner of your organization ever been an Officer or Partner of another Organization that failed to complete a construction contract? _____
(Answer yes or no)

If so, describe circumstances below:

_____

_____

_____

6. List major construction projects your organization currently has under contract as the general contractor:

Project name _____

City / Contact Name & phone #: _____

Architect/Engineer: _____

Contract Amount / Contract Date: _____

% Complete / Schedule Complete: _____

Project name _____

City / Contact Name & phone #: _____

Architect/Engineer: _____

Contract Amount / Contract Date: _____

% Complete / Schedule Complete: _____

Project name _____

City / Contact Name & phone #: _____

Architect/Engineer: _____

Contract Amount / Contract Date: _____

% Complete / Schedule Complete: _____

Add additional sheets listing projects as required

7. List major construction projects, similar to the one being bid, that your organization completed in the past 5 years as the general contractor if not shown on the State of Oregon Department of Administrative Services' Contractor's Prequalification Application:

Project name _____
City / Contact Name & phone #: _____
Architect/Engineer: _____
Contract Amount / Date Awarded: _____
Percent Completed with own forces: _____

Project name _____
City / Contact Name & phone #: _____
Architect/Engineer: _____
Contract Amount / Date Awarded: _____
Percent Completed with own forces: _____

Project name _____
City / Contact Name & phone #: _____
Architect/Engineer: _____
Contract Amount / Date Awarded: _____
Percent Completed with own forces: _____

Add additional sheets listing projects as required

8. List the construction experience of the principal individuals in your Organization; which ones will be assigned to this project (including the percentage of their time to be assigned to this project):

Individual's Name _____
Construction experience - years: _____
Present position & years with organization: _____
Percentage of individual's time to be assigned to project: _____

Individual's Name _____

Construction experience - years: _____

Present position & years with organization: _____

Percentage of individual's time to be assigned to project: _____

Individual's Name _____

Construction experience - years: _____

Present position & years with organization: _____

Percentage of individual's time to be assigned to project: _____

A. Have any of the principal individuals in your Organization been convicted under state or federal statutes of embezzlement, theft, forgery, bribery, falsification or destruction of records, or receiving stolen property? _____ If so, describe circumstances below:

_____

_____

_____

B. Have any of the principal individuals in your Organization been the subject to a civil judgment for fraud? _____ If so, describe circumstances below:

(Answer yes or no)

_____

_____

_____

9. Bank References:

_____ _____

_____ _____

_____ _____

10. Trade References:

_____ _____

_____ _____

_____ _____

11. List names of Bonding and Insurance Companies, name and address of agents, and maximum bonding capacity.

    _____

    _____

    _____

    What portion remains on this Bonding Capacity at the time of submittal of the Bid?

    _____

12. The bidder agrees to furnish, upon request by the City, within 5-days after the Bid Opening, a current Statement of Financial Conditions, including Contractor's latest regular dated financial statement or balance sheet which must contain the following items:
    - Current assets: (cash, joint venture accounts, accounts receivable, notes receivable, accrued interest on notes, deposits, and materials and prepaid expenses), net fixed assets and other assets.
    - Current liabilities: (Accounts payable, notes payable, accrued interest on notes, provisions for income taxes, advances received from owners, accrued salaries accrued payroll taxes), other liabilities, and capital (capital stock, authorized and outstanding shares per values, earned surplus).

Date of statement or balance sheet: _____

Name of firm preparing statement: _____

By: _____

Bidder's Initials: _____

Bid Closing: Date: _____ **Time:** _____ **AM** ____ **PM** ___

City of Sherwood Oregon
Home of the Tualatin River National Wildlife Refuge

8069 – Columbia Street Regional Stormwater Facility

DATE **ADDENDUM NO. 1**

Addition/Change to the Contract Documents
The work provided for in this addendum shall become a part of the drawings and specifications for this project.

1.

2.

This ADDENDUM shall be signed and attached to the Bidder's Proposal and shall subsequently become part of the Contract Documents.

Company Name	
Contractor Name	
Contractor Signature	
Date	

SAMPLE

Division Two
Contract Forms

PUBLIC IMPROVEMENT CONTRACT FOR USE WITH OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION

BETWEEN: The City of Sherwood,
an Oregon Municipal Corporation

AND: (Contractor):

JOB NO.: 8069

PROJECT: Columbia Street Regional Stormwater Facility

RECITALS

Contractor was the successful Bidder for the contract construction of the improvement ("Project") described in this Public Improvement Contract for use with Oregon Standard Specifications for Construction as supplemented by the City. (this "Document")

AGREEMENT TERMS AND CONDITIONS

1. **The Contract.** The Contract between the City and Contractor (the "Contract") includes this Document and its exhibits, the 2008 Oregon Standard Specifications for Construction issued by the Oregon Department of Transportation (ODOT) together with all of the documents and materials included in the definition of the "Contract" under the 2008 ODOT Standard Specifications for Construction, as modified by the City's Supplemental Specifications and project Special Provisions. In addition, the Contract between the City and Contractor shall be deemed to incorporate all reports, records, laws, rules and orders referenced in the Contract Documents.

   This Document also includes and incorporates the following exhibits:

   Exhibit A – CITY OF SHERWOOD – STANDARD CONTRACT PROVISIONS
   Exhibit B – Certification of Bidder/Contractor Employee Drug Testing Program
   Exhibit C – Certification of Compliance with Oregon Tax Law
   Exhibit D – Certification of Registration with Contractors Board
   Exhibit E – Certification of Workers' Compensation Coverage

2. **Definitions.** Unless otherwise specifically defined in this Document, all capitalized terms which are not proper nouns shall have the meanings assigned thereto in the specifications.

3. **Work to be Performed.** Contractor agrees to furnish, as the "Work" all services, labor, materials and equipment which are described as the Contractor's responsibility in the plans and specifications, or as reasonably inferred therefrom, as the same may be modified in accordance with the Contract, and to construct the improvement described therein (the Project), all according to the provisions of the Contract. All parts of the Work are the sole responsibility of Contractor.

4. **Time of Commencement and Completion.** Time is of the Essence of the Contract. The time in which Contractor shall commence, prosecute and complete the Work is described in the specifications, as modified by any Addenda or subsequent Contract Change Order.

5. **Contract Sum.** The Contract sum is $_____ and consists of unit prices bid by Contractor multiplied by estimated quantities, together with lump sum amounts for portions of the Work, as described on the Contractor's Bid attached hereto. Unless the Contract states otherwise, the actual sum payable to Contractor for the Work shall be based on lump sum amounts and actual quantities, as modified by Change Orders and adjustments made in accordance with the specifications. Payment will be made as provided in the specifications.

6. **Indemnification**. Contractor's duty to indemnify is described in Section 00170.72 of the General Conditions in ODOT's 2008 Standard Specifications, as modified by the Special Provisions. Contractor's indemnity obligations survive acceptance of the Work and completion of the Contract.

7. **Insurance**. Contractor shall maintain in force for the duration of this contract the insurance coverages specified below and in specification Section 00170.70(a). Each policy required by these provisions shall be written as a primary policy, not contributing with or in excess of any coverage which City may carry. In accordance with the Special Provisions, a copy of each policy or a Certificate of Insurance satisfactory to City shall be delivered to City prior to commencement of the Work. Unless otherwise specified, each policy shall be written on an "occurrence" form with an admitted insurance carrier licensed to do business in the state of Oregon and shall contain an endorsement entitling City to not less than 30 days prior written notice of any material change, nonrenewal or cancellation. In the event the statutory limit of liability of a public body for claims arising out of a single accident or occurrence is increased above the combined single limit coverage requirements specified below, City shall have the right to require Contractor to increase the Contractor's coverages by the amount of the statutory limit increase for such claims and to increase the aggregate coverage by an amount that is twice as large as the statutory increase. The adequacy of all insurance required by these provisions shall be subject to approval by City's Risk Manager. Unless otherwise allowed by City, Contractor shall require all subcontractors to carry insurance at least equal to that required under this section. Failure to maintain any insurance coverage required by this contract shall be cause for immediate termination of this Contract by City.

   7.1 **Commercial General Liability**. Contractor shall maintain a broad form Commercial General Liability Insurance policy with coverage of not less than $1,000,000 combined single limit per occurrence, with an annual aggregate of not less than $2,000,000.00, for bodily injury, personal injury or property damage. Such policy shall contain a contractual liability endorsement to cover Contractor's indemnification obligations under the Contract and products/completed operations liability. The policy shall also contain an endorsement naming City as an additional insured, in a form satisfactory to City, and expressly providing that the interest of City shall not be affected by Contractor's breach of policy provisions. The policy shall be endorsed to state that the general aggregate limit of liability shall apply separately to the Contract.

   7.2 **Commercial Automobile Liability**. Contractor shall maintain a Commercial Automobile Liability Insurance policy with coverage of not less than $1,000,000.00 combined single limit per occurrence, with an annual aggregate limit of not less than $1,000,000.00, for bodily injury, personal injury or property damage. The coverage shall include both hired and non-owned auto liability. The policy shall also contain an endorsement naming City as an additional insured, in a form satisfactory to City, and expressly providing that the interest of City shall not be affected by Contractor's breach of policy provisions.

   7.3 **Workers' Compensation Insurance**. All employers, including the Contractor and its Subcontractors, if any, that employ subject workers who are performing Work or providing labor or materials 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. The Contractor shall ensure that each of its Subcontractors complies with these requirements. Contractor shall provide City with such further assurances as City may require from time to time that Contractor is in compliance with these Workers' Compensation coverage requirements and the Workers' Compensation law. The Contractor shall ensure that its insurance carrier files a Guaranty Contract with the Oregon Workers' Compensation Division before performing any Work.

8. **Performance, Payment and Maintenance Bonds**. Prior to the commencement of the Work, Contractor shall provide good and sufficient Performance Bond and Payment Bond approved by the City, each in an amount equal to the 100% of the Contract sum, for the faithful performance of the Work in all respects and indemnifying City for any claims or liens for labor, work, equipment or material provided by others in the performance of the Work. The amount of the Performance Bond and Payment Bond shall be increased whenever the Contract Sum is increased for any reason.

   At the conclusion of the Construction and prior to Final Acceptance of the Work by the City, the Contractor shall provide a 10% Maintenance Bond for a period of **two (2) years** from the date of Final Acceptance by the City. A surety licensed to do business as a surety in the state of Oregon shall provide the Maintenance Bond.

   The acceptance by the Contractor of Final Payment shall be and shall operate as a release to the City of all claims and all liability to the Contract other than claims in stated amounts as may be specifically excepted by the Contractor in writing prior to the request for final payment for all things done or furnished in connection with this work and for every act and neglect of the City and its agents and others relating to or arising out of this work. However, any payment, final or otherwise, or any acceptance, shall not release the Contractor or its sureties from any obligations under the Contract Documents or the Performance and Payment Bonds or diminish the Agency's rights under the Guaranty Provisions.

   In addition to and not in lieu of any other warranties required under the Contract make all necessary repairs and replacements to remedy, in a manner satisfactory to the Engineer and at no cost to the Agency, any and all defects, breaks, or failures of the Work occurring during the specified warranty period due to faulty or inadequate materials or workmanship. Repair damage or disturbance to other improvements under within, or adjacent to the Work, whether or not caused by settling, washing, or slipping, when such damage or disturbance is caused, in whole or in part, from activities of the Contractor in performing his duties and obligations under this Contract when such defects or damage occur within the warranty period. The two-year maintenance period required shall, with relation to such required repair, be extended one year from the date of completion of such repair or to the end of the original two-year maintenance period, whichever comes later.

   If Contractor, after written notice, fails within ten days to proceed to comply with the terms of this section, Agency may have the defects corrected, and Contractor and Contractor's Surety shall be liable for all expense incurred. In case of an emergency where, in the opinion of the Engineer, delay would cause serious loss or damage, repairs may be made without notice being given to the Contractor with the Contractor or surety paying the cost of repairs. Failure of the Engineer to act in case of an emergency shall not relieve Contractor or Surety from liability and payment of all such costs.

9. **Termination and Compensation**. City may terminate this contract or suspend the Work at any time as provided in the specifications.

10. **Performance for Goods and Services.** In performance of the Work, Contractor shall prefer materials that have been manufactured or produced in the state of Oregon, if price, fitness, availability and quality are otherwise equal.

11. **Non-Resident Contractor.** If Contractor is not a resident bidder as defined in ORS 279A.120, and the contract price exceeds $10,000, the Contractor must report to the Department of Revenue, on the department's form, the total contract price, terms of payment, length of contract and such other information as the department may require before the Contractor may receive final payment under the Contract. The Contractor must provide copies of all forms filed with the Department to the City to receive final payment.

12. **Laws and Ordinances**. In addition to those laws, rules and ordinances specifically identified in this Contract, Contractor shall comply with and require its Subcontractors to comply with all applicable provisions of Federal, State and local statutes, ordinances, orders, rules and regulations.

13. **Default and Willful Violation**. If the Contractor willfully violates any of the provisions of the Sherwood Code, or any of the provisions of law governing public contracts, or if Contractor knowingly files false affidavits of compliance required under the Contract, Contractor shall waive for a period of one year any right to bid upon any public improvement project let by City. If Contractor or any of Contractor's Subcontractors violates any such provisions or files any such false affidavits of compliance, or in the event Contractor otherwise fails to perform any of its obligations under this Contract, time and quality of performance being of the essence, City may, at its option, terminate this Contract upon written notice to Contractor. In the event of a termination of this Contract or a subcontract under these provisions, Contractor or the Subcontractor, if applicable, shall forfeit all rights under this Contract or the subcontract, as the case may be. The City's claim for damages under paragraph 15 and any other relief available to City resulting from the Contractor's breach shall survive a termination of the Contract.

14. **Liquidated Damages**. In the event the Work is not completed within the Contract Time as specified in Bid Statement, or as may be extended in accordance with the Contract's terms, Contractor will pay to City, or City may withhold from any payment due Contractor, Liquidated Damages as specified in the specifications. The parties believe that due to the costs of bringing an action and the difficulty of establishing the exact amount of damages City will incur, it would be inconvenient and infeasible for City to bring an action for the actual damages it will incur because of Contractor's failure to complete the Work within the Contract Time. In order to compensate City for the damages City will suffer because of a delay, the amount City would be damaged for every Calendar Day completion is delayed is $800.00 per Calendar Day. The parties agree that the sum set as Liquidated Damages is reasonably related to City's anticipated damages per Calendar Day after the Completion Date that the Work is not completed. Contractor agrees that any liquidated damages imposed under the Contract is the best estimate of the City's damages and is not a penalty. Contractor will not contest such sum as being other than the best measure of damages in the event liquidated damages become payable under these provisions.

15. **Notices**. Any written notices permitted or required by this Contract shall be deemed given when personally delivered, or five days after deposit in the United States mail, postage fully prepaid, certified, return receipt requested, addressed to the representatives of the parties as set forth below or when delivered by electronically confirmed facsimile transmission to the FAX address and attention of the representatives of the parties set for below:

Contractor: _____, Project Superintendent

_____

_____

_____

City: City Engineer, City of Sherwood

or such other address as either party may provide to the other by notice given in accordance with this provision.

16. **Contract Documents/Interpretation.** Where possible, all parts of the Contract shall be interpreted in a manner that avoids conflict between the various documents and their provisions. In the event that any provision of this Document conflicts with any provision of the specifications, the provision that is most detailed shall prevail. In the event that any other component part of the Contract conflicts with any provision of any other component part, the precedence of documents shall be as set forth in the Special Provisions.

17. **Governing Law, Jurisdiction and Venue.** This Contract shall be governed by and interpreted in accordance with the laws of the State of Oregon, without respect to conflict of laws principles. Notwithstanding any contrary provisions in the Contract Documents, any litigation arising out of or relating to this Contract shall be tried to a court without a jury. Any claim or action must be brought in the Circuit Court of Washington County, Oregon. If a claim or action 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 paragraph be construed as a waiver by the City of any form of defense or immunity, whether sovereign immunity, governmental immunity or otherwise, from any claim or from the jurisdiction of any court. Contractor by execution of the Contract hereby consents to the personal jurisdiction of the courts referenced in this paragraph.

18. **Dispute Resolution.** Disputes will be resolved in accordance with Section 00199 of the General Conditions in ODOT's 2008 Standard Specifications as modified in the Supplemental Specifications and project Special Provisions.

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

    The Contract shall not be construed against either party regardless of which party drafted it. Other than as modified by the Contract, the applicable rules of contract construction and evidence shall apply.

19. **Payment of Costs, Expenses and Attorney's Fees.** Notwithstanding any language to the contrary in the Contract Documents, each party is responsible for all of its own costs and fees, including expert fees and attorney fees. This includes any costs and fees incurred in any trial and in any appeal.

20. **No Third Party Beneficiaries.** The parties to this Contract do not intend to confer on any third party any rights under this Contract. All Subcontractors are third parties.

21. **Survival.** Any obligation arising under the Contract which is not, or cannot be performed or paid prior to the expiration or termination of the Contract, including, but not limited to, all provisions concerning the quality of the Work, warranties and obligations for payment, indemnification, and reimbursement, shall survive termination or expiration of the Contract.

22. **Integration; Amendment.** The Contract includes the entire agreement between the parties as of its date of execution and shall not be modified or amended, except as expressly provided in the Contract.

23. **Effective Date**. The effective date of the Contract shall be the latest date of signature by the parties.

24. **Prompt Payment.** The Contractor shall:

    (a) Make payment promptly, as due, to all persons supplying to the contractor labor or material for the performance of the work provided for in the Contract.

    (b) Pay all contributions or amounts due the Industrial Accident Fund from the contractor or subcontractor incurred in the performance of the Contract.

    (c) Not permit any lien or claim to be filed or prosecuted against the state or a county, school district, municipality, municipal corporation or subdivision thereof, on account of any labor or material furnished.

    (d) Pay to the Department of Revenue all sums withheld from employees under ORS 316.167.

25. **Drug Testing.**

    (a) The Contractor shall demonstrate that an employee drug testing program is in place at the time of submitting its bid, and that such program will be maintained throughout the Contract period, including any extensions. The failure of Contractor to have, or to maintain such a drug testing program is grounds for rejection of a bid or immediate termination of this Contract.

    (b) The City of Sherwood shall not be liable, either directly or indirectly, in any dispute arising out of the substance or procedure of Contractor's drug testing program. Nothing in this drug testing provision shall be construed as requiring Contractor to violate any legal, including constitutional, rights of any employee, including but not limited, to selection of which employees to test and the manner of such testing. The City shall not be liable for Contractor's negligence in establishing or implementing, failure to establish or implement a drug testing program, or for any damage or injury caused by Contractor's employees acting under the influence of drugs while performing work covered by this Contract. These are Contractor's sole responsibilities and nothing in this provision is intended to create any third party beneficiary rights against the City.

26. **Demolition Contracts to Require Material Salvage.** On demolition projects, the Contractor is required to salvage or recycle construction and demolition debris, if feasible and cost-effective.

27. **Landscape Maintenance Projects to Require Composting or Mulching.** On Landscape Maintenance Projects, the Contractor is required to compost or mulch yard waste material at an approved site; if feasible and cost-effective.

28. **Conditions Concerning Payment of Claims by Public Officers to Person Furnishing Labor of Services when Contractor Neglects or Refuses to Make Prompt Payment.** If the Contractor fails, neglects or refuses to make prompt payment of any claim for labor or services furnished to the Contractor or a subcontractor by any person in connection with this Contract as the claim becomes due, the City may pay such claim to the person furnishing the labor or services and charge the amount of the payment against funds due or to become due to the Contractor by reason of the Contract.

29. **Conditions Concerning Neglect or Refusal to Make Prompt Payment of Claim by Contractor or First-Tier Subcontractor to Persons Furnishing Labor or Materials.** If the Contractor or a first-tier subcontractor fails, neglects or refuses to make payment to a person furnishing labor or materials in connection with this contact within 30 days after receipt of payment from the City or the Contractor, the Contractor or first-tier subcontractor shall owe the person the amount due plus interest charges commencing at the end of the 10-day period that payment is due under ORS 279C.580(4) and ending upon final payment, unless payment is subject to a good faith dispute as defined in ORS 279C.580. See additional text in ORS 279C.515(2).

30. **Complaints Concerning Contractor or Subcontractor Neglect or Refusal to Make Payment to Persons Furnishing Labor or Material.** If the Contractor or a subcontractor fails, neglects or refuses to make payment to a person furnishing labor or materials in connection with the public improvement contract, the person may file a complaint with the Construction Contractors Board, unless payment is subject to a good faith dispute as defined in ORS 279C.580.

31. **Condition Concerning Hours of Labor.** A person may not be employed for more than 10 hours in any one day, or 40 hours in any one week, except in cases of necessity, emergency or when the public policy absolutely requires it, and in such cases, except in cases of contracts for personal services as defined in ORS 279C.100, the employee shall be paid at least time and a half pay:

    (a) For all overtime in excess of eight hours in any one day or 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 10 hours in any one day or 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.

32. **Condition Concerning Payment for Medical Care.** The Contractor and all subcontractors, as applicable, shall promptly, as due, make payment to any person, co-partnership, association or corporation furnishing medical, surgical and hospital care services or other needed care and attention, incident to sickness or injury, to the employees of the Contractor or subcontractor, as applicable, of all sums that the Contractor or subcontractor, as applicable, agrees to pay for the services and all moneys and sums that the Contractor or subcontractor, as applicable, collected or deducted from the wages of employees under any law, contract or agreement for the purpose of providing or paying for the services.

33. **Condition Concerning Payment for Providing Workers' Compensation.** All subject employers working under the Contract are either employers that will comply with ORS 656.017 or employers that are exempt under ORS 656.126.

34. **Retainage.** The amount to be retained from progress payments will be 2.5% of the value of the Work accomplished as noted in Section 00195.50(b) of the specifications, and will retained in one of the forms specified in Section 00195.50(c) of the specifications.

33. **Contractor Claims. Notice of Claim.** Claims on public works bonds and payment bonds shall be submitted in writing and follow the procedures established by ORS 279C.600 and ORS 279C.605.

34. **Certified Statements Regarding Payment of Prevailing Rates of Wage; Retainage**. (1) The contractor or the contractor's surety and every subcontractor or the subcontractor's surety shall file certified statements with the public agency in writing, on a form prescribed by the Commissioner of the Bureau of Labor and Industries, certifying:

    (a) The hourly rate of wage paid each worker whom the contractor or the subcontractor has employed upon the public works; and

    (b) That no worker employed upon the public works has been paid less than the prevailing rate of wage or less than the minimum hourly rate of wage specified in the contract.

The certified statement shall be in accordance with ORS 279C.845.

CITY OF SHERWOOD	**CONTRACTOR**
By: _____ (signature)	By: _____ (signature)
Date: _____	Date: _____

Exhibit A

CITY OF SHERWOOD – STANDARD CONTRACT PROVISIONS

1. **Notice in Writing to Employees who Work on a Public Contract.** An employer must give notice in writing to employees who work on a public contract, either at the time of hire or before commencement of work on the contract, or by posting a notice in a location frequented by employees, of the number of hours per day and days per week that the employees may be required to work.

2. **Provisions concerning environmental and natural resources laws; remedies.** The contractor shall adhere to all federal, state and local agencies (Oregon State of Environmental Quality, Clean Water Services, Washington County and City of Sherwood) that have enacted ordinances, rules or regulations dealing with the prevention of environmental pollution and the preservation of natural resources that affect the performance of the contract. See additional text in ORS 279C.525.

3. **Known Environmental Conditions.** See project plans and specifications for description of any known environmental conditions, if any. The contractor shall apply best management practices as pertaining to sediment and erosion control to insure that sediments do not leave the project site. See additional text in ORS 279C.525.

4. **Contractor's Relations with Subcontractors.** The 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) A payment clause that obligates the contractor to pay the first-tier subcontractor for satisfactory performance under its subcontract within 10 days out of such amounts as are paid to the contractor by the contracting agency under the contract.

   (b) An interest penalty clause that obligates the contractor, if payment is not made within 30 days after receipt of payment from the contracting agency, to pay to the first-tier subcontractor an interest penalty on amounts due in the case of each payment not made in accordance with the payment clause included in the subcontract under paragraph (a) of this section. See additional text in ORS 279C.580.

   The contractor shall include in each of the contractor's subcontracts, for the purpose of performance of such contract condition, a provision requiring the first-tier subcontractor to include a payment clause and an interest penalty clause conforming to the standards of subsections 4(a) & 4(b) above in each of the first-tier subcontractor's subcontracts and to require each of the first-tier subcontractor's subcontractors to include such clauses in their subcontracts with each lower-tier subcontractor or supplier.

5. **State Minimum Wage in Contracts.** All workers must be paid not less than the specified minimum hourly rate of wage in accordance with ORS 279C.838 and 279C.840.

6. **Prevailing Minimum Wage when Both State and Federal Minimum Wages are Applicable.** If a public works project is subject both to ORS 279C.800 to 279C.870 and to the Davis-Bacon Act, every contract and subcontract must provide that workers on the public works must be paid not less than the higher of the applicable state or federal prevailing rate of wage.

7. **Contract Bond Filed with Construction Contractor's Board.** Contractor shall have a public works bond filed with the Construction Contractors Board before starting work on the project, unless exempt under ORS 279C.836 (4), (7), (8) or (9).

8. **Subcontract Bond Filed with Construction Contractor's Board.** Every subcontract shall have a public works bond filed with the Construction Contractors Board before starting work on the project, unless exempt under ORS 279C.836 (4), (7), (8) or (9).

9. **Provide the Liability of the Public Agency for Unpaid Minimum Wages.** The contractor and any subcontractor must comply with ORS 279C.840.

10. **Failure to Provide Prevailing Minimum Wage.** Prevailing rates of wage are referenced in the specifications for the contract for public works as required under ORS 279C.830 (1)(a), and workers on the public works must be paid not less than the higher of the applicable state or federal prevailing rate of wage as required under ORS 279C.830 (1)(d).

11. **Statement of Compliance.** Before any payment is made to Contractor, Contractor shall file with City a statement, under oath, that it has complied with all provisions of State law governing contractors on a public contract and that it has complied with the provisions of the Sherwood Code governing fair employment practices. In addition, Contractor shall file with City a sworn statement by each of its subcontractors to the same effect.

Exhibit B

CERTIFICATION OF BIDDER/CONTRACTOR EMPLOYEE DRUG TESTING PROGRAM ORS 279C.505(2)

BIDDER'S NAME: _____

ORS 279C.505(2) provides that every public improvement contract contain a condition that the contractor shall demonstrate that an employee drug testing program is in place. The City's award of the contract (the "Contract") for which this certificate is required is conditioned, in part, upon the bidder's demonstration of compliance with the provisions of ORS 279C.505. If the bidder named above (the "Bidder") is awarded the Contract, this certificate shall become a part of, and shall constitute a continuing representation and warranty under, the Contract.

To induce the City of Sherwood to award the Contract to the Bidder, the undersigned, as the duly authorized representative of the Bidder, hereby represents and warrants, on behalf of the Bidder:

1) That Bidder has and enforces, and at all times during the term of the Contract will have and enforce, a written employee drug testing policy that, at a minimum:

   a) Requires pre-employment drug testing;

   b) Requires drug testing of an employee when the Bidder has reasonable cause to believe the employee is under the influence of drugs;

   c) Requires compliance with the Oregon Department of Transportation Commercial Drivers License drug testing regulations.

2) A copy of the Bidder's current written employee drug testing policy will be available for inspection by the City at any time upon the City's request.

3) The Bidder/Contractor understands and agrees that its representations and warranties herein will become a continuing part of the Contract and that breach of any of the foregoing will be sufficient grounds for disbarment under ORS 279B.130.

The City of Sherwood shall not be liable, either directly or indirectly, in any dispute arising out of the substance or procedure of Contractor's drug testing program. Nothing in this drug testing provision shall be construed as requiring Contractor to violate any legal, including constitutional, rights of any employee, including but not limited to, selection of which employees to test and the manner of such testing. The City shall not be liable for Contractor's negligence in establishing or implementing, failure to establish or implement a drug testing policy, or for any damage or injury caused by Contractor's employees acting under the influence of drugs while performing work covered by this Contract. These are Bidder/Contractor's sole responsibilities.

In Witness Whereof, the Bidder has caused this document to be executed by its duly authorized representative on the date shown below.

Signature: _____

Printed Name: _____

Title: _____

Date: _____

Exhibit C

CERTIFICATION OF COMPLIANCE WITH OREGON TAX LAWS

The Contractor, for the purposes of this contract, hereby certifies that to the best of his/her knowledge that he/she is in compliance with all tax laws stated in ORS 305.385.

Dated _____ 20___

_____
Contractor's Signature

Exhibit D

CERTIFICATION OF REGISTRATION WITH THE CONSTRUCTION CONTRACTORS BOARD

The Contractor, for the purposes of this contract, hereby certifies that he/she and all subcontractors performing work described in ORS 701-005(2) (i.e., construction work) are registered with the Construction Contractors Board in accordance with ORS 701.035 to ORS 701.095.

Dated _____ 20___

_____
Contractor's Signature

CCB # _____

Exhibit E

CERTIFICATION OF WORKERS' COMPENSATION COVERAGE

The Contractor, for the purposes of this contract, hereby certifies that it is currently providing Oregon Workers' Compensation coverage for all its employees and will maintain coverage throughout the course of the project through one of the following methods:

1. ☐ "Carrier-insured Employer" (State Accident insurance Fund Corp. or other authorized insurer)

   Insurance Company Name_____

   ID/Policy Number_____

2. ☐ "Self Insured Employer" (Certified by the Workers' Compensation Division)

   ID number as assigned by
   the Work' Compensation Division_____

3. ☐ I am an independent contractor and will perform all work under this contract without the assistance of others.

In the event of cancellation or change in the information above, Contractor certifies that it will immediately notify the Department of said cancellation or change and will obtain alternate coverage.

Dated_____ 20___

_____
Contractor's Signature

REMINDER ADDITIONAL INFORMATION NEEDED

Has your insurance carrier filed with Oregon Workers' Compensation Division a guaranty contract as proof of coverage for your employees working in Oregon?

For filing information, contact the Workers' Compensation Division at Labor and Industries Building: Salem, OR 97301; Phone (503) 947-7810.

PERFORMANCE BOND

Bond No._____

Project Name: **8069 – Columbia Street Regional Stormwater Facility**

_____(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 the City of Sherwood 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 City of Sherwood, the Plans, Specifications, terms and conditions of which are contained in the above-referenced Solicitation;

WHEREAS, the terms and conditions of the contract, together with applicable Plans, Standard specifications and Standard Drawings, Supplemental Specifications and Special Provisions, Addenda, Bid Schedule, Prevailing Wage Rates are made a part of this Performance Bond by reference, whether or not attached to the contract (all hereafter called "Contract"); and

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

NOW, THEREFORE, THE CONDITION OF THIS BOND IS SUCH that if the Principal herein shall faithfully and truly observe and comply with the terms, conditions and provisions of the Contract, in all respects, and shall well and truly and fully do and perform all matters and things undertaken by Contractor to be performed under the Contract, upon the terms set forth therein, and within the time prescribed therein, or as extended as provided in the Contract, with or without notice to the Sureties, and shall indemnify and save harmless the City of Sherwood, and the _____ _____ (name of institution and any other Owner agency), and members thereof, its 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.

Nonpayment of the bond premium will not invalidate this bond nor shall the City of Sherwood, or the above-referenced agency(ies), be obligated for the payment of any premiums.

This bond is given and received under authority of ORS Chapter 279C, 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 surety if using multiple bonds]

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

_____
Name

_____
Signature

_____
Address

_____
City State Zip

_____ _____
Phone Fax

PAYMENT BOND

Bond No. _____
Solicitation _____
Project Name **8069 – Columbia Street Regional Stormwater Facilities**

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

KNOW ALL MEN BY THESE PRESENTS: That, WHEREAS, the City of Sherwood, on _____, _____, has awarded to _____, hereinafter designated as "Principal", a Contract for construction of the _____, the terms and provisions of which contract are incorporated herein by reference, and;

WHEREAS, said Principal is required to furnish a bond in connection with this said Contract, providing that if said Principal, or any of his or its subcontractors, shall fail to pay for any materials, provisions, provender or other supplies or teams used in, upon, for, or about the performance of the work contracted to be done, or any other work or labor done thereon of any kind, the Surety of this body will pay the same to extend hereinafter set forth;

NOW, THEREFORE, we the Principal and _____, as Surety, are held and firmly bound unto the City of Sherwood, in the penal sum of _____ Dollars ($_____), lawful money of the United States, being one hundred percent (100%) of the Contract amount for the payment of which sum well and truly to be made, we bond ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

NOW, THEREFORE, if the above bounden Principal or any of his subcontractor shall promptly make payment to all persons supplying labor and material or amounts due in the prosecution of the work provided for in said Contract, and any and all duly authorized modifications of said Contract that may hereafter be made, then this obligation shall be void; otherwise, this obligation shall remain in full force and virtue; and if the bounden Principal or any of his subcontractors fails to promptly pay any of the persons or amounts due with respect to work or labor performed by any such claimant, the Surety will pay for the same, in an amount not exceeding the sum specified in this bond, and also in case suit brought upon this bond, a reasonable attorney's fee, be fixed by the court; and this bond shall insure to the benefit of any persons so as to give a right of action to such persons or their assigns in any suit brought upon this bond.

The bond shall insure to the benefit of any all persons, companies and corporations entitle to file claims, so as to give a right of action to them or their assigns in any suit brought upon this bond.

And the said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract, or to the work to be performed thereunder, or the Specifications accompanying the same shall in any wise affect its obligations on this bond; and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract, or to the work or to the Specifications.

IN WITNESS WHEREOF, the above bounden parties have executed this instrument under their seals this _____ day of _____, _____, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

Nonpayment of the bond premium will not invalidate this bond nor shall the City of Sherwood, or the above-referenced agency(ies), be obligated for the payment of any premiums.

This bond is given and received under authority of ORS Chapter 279C, 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

STATE OF OREGON

STATUTORY PUBLIC WORKS BOND

Surety bond #: _____ CCB # (if applicable): _____

We, _____, as principal, and _____, a corporation qualified and authorized to do business in the State of Oregon, as surety, are held and firmly bound unto the State of Oregon for the use and benefit of the Oregon Bureau of Labor and Industries (BOLI) in the sum of thirty thousand dollars ($30,000) lawful money of the United States of America to be paid as provided in ORS chapter 279C, as amended by Oregon Laws 2005, chapter 360, for which payment well and truly to be made, we bind ourselves, our heirs, personal representatives, successors and assigns, jointly and severally, firmly by this agreement.

WHEREAS, the above-named principal wishes to be eligible to work on public works project(s) subject to the provisions of ORS chapter 279C, as amended by Oregon Laws 2005, chapter 360, and is, therefore, required to obtain and file a statutory public works bond in the penal sum of $30,000 with good and sufficient surety as required pursuant to the provisions of section 2, chapter 360, Oregon Laws 2005, conditioned as herein set forth.

NOW, THEREFORE, the conditions of the foregoing obligations are that if said principal with regard to all work done by the principal as a contractor or subcontractor on public works project(s), shall pay all claims ordered by BOLI against the principal to workers performing labor upon public works projects for unpaid wages determined to be due, in accordance with ORS chapter 279C, as amended by Oregon Laws 2005, chapter 360, and OAR Chapter 839, then this obligation shall be void; otherwise to remain in full force and effect.

This bond is for the exclusive purpose of payment of wage claims ordered by BOLI to workers performing labor upon public works projects in accordance with ORS chapter 279C, as amended by Oregon Laws 2005, chapter 360.

This bond shall be one continuing obligation, and the liability of the surety for the aggregate of any and all claims which may arise hereunder shall in no event exceed the amount of the penalty of this bond.

This bond shall become effective on the date it is executed by both the principal and surety and shall continuously remain in effect until depleted by claims paid under ORS chapter 279C, as amended by Oregon Laws 2005, chapter 360, unless the surety sooner cancels the bond. This bond may be cancelled by the surety and the surety be relieved of further liability for work performed on contracts entered after cancellation by giving 30 days' written notice to the principal, the Construction Contractors Board, and BOLI. Cancellation shall not limit the responsibility of the surety for the payment of claims ordered by BOLI relating to work performed during the work period of a contract entered into before cancellation of this bond.

IN WITNESS WHEREOF, the principal and surety execute this agreement. The surety fully authorizes its representatives in the State of Oregon to enter into this obligation.

SIGNED, SEALED AND DATED this _____ day of _____, 20 _____

Surety by:		Principal by:
_____	(Seal)	_____
Company Name		*Name*
_____		_____
Signature		*Signature*
_____		_____
Title (e.g. Attorney-in-Fact)		*Title*
		_____
		Address
		_____
		City *State* *Zip*

SEND BOND TO: **Construction Contractors Board**
PO Box 14140
Salem, OR 97309-5052
Telephone: (503) 378-4621

City of Sherwood
Oregon
Home of the Tualatin River National Wildlife Refuge

City of Sherwood
22560 SW Pine St.
Sherwood, OR 97140
Tel 503-625-5522
Fax 503-625-5524
www.sherwoodoregon.gov

Mayor
Bill Middleton

Council President
Linda Henderson

Councilors
Dave Grant
Robyn Folsom
Bill Butterfield
Matt Langer
Krisanna Clark

City Manager
Joseph Gall, ICMA-CM

Assistant City Manager
Tom Pessemier, P.E.

FamilyCircle BEST TOWN FOR FAMILIES

2009 Top Ten Selection

MONEY MAGAZINE 2007 BEST PLACES TO LIVE GREAT AMERICAN TOWNS

2007 18th Best Place to Live

Sherwood
2006
All-America City Finalist

_____, 2014

Re: **Notice of Intent to Award**

8069 – Columbia Street Regional Stormwater Facilities Construction Services

Dear Proposer:

This is the Notice of Intent to Award required to be posted on the City's website pursuant to OAR 137-049-0395(1).

The City of Sherwood received ____ bids for work associated with the **Columbia Street Regional Stormwater Facility**. The bids were opened at the Sherwood City Hall on _____ at 2:00 PM. The lowest responsive bidder was **XXXXXX** with a quote of **$XX.XX**.

City staff will recommend award of the contract for the **Columbia Street Regional Stormwater Facility** to **XXXXXX**.

If you wish to protest the City's Intent to Award, you must do so within seven (7) days after the date of the issuance of this notice. The protest must follow the process set forth in OAR 137-049-450(4). Any protest not so complying, will not be considered by the City. Protests must be directed to:

Craig Christensen, P.E.
City of Sherwood – Engineering Department
22560 SW Pine St
Sherwood, OR 97140

If you have any questions, please contact Craig Christensen, P.E. at (503) 925-2301 or christensenc@sherwoodoregon.gov

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2007 18th Best Place to Live

Sherwood
2006
All-America City Finalist

_____, 2014

XXX
XXX
XXX

NOTICE OF AWARD

8069 – Columbia Street Regional Stormwater Facility
Construction Services

You are notified that your bid dated _____, 2014 for the above stated project has been considered. You are the apparent low responsive bidder for the project and have been awarded the subject contract.

Attached are 3 copies of the Contract Agreement. Please sign each and resubmit. Also include the Performance Bond, Payment Bond, Proof of Liability Insurance, Oregon Workers Compensation Certificate of Insurance and a copy of your Statutory Public Works Bond sent to the State of Oregon.

Once the Contract Agreements have been signed by the City Manager, one fully signed Contract Agreement will be given to you at the preconstruction meeting set for _____, 2014 at ____ at the staging area on the Sherwood Road Industrial, LLC property .

We look forward to working with you on this project.

Sincerely,

CITY OF SHERWOOD

By:_____
Craig Christensen, P.E.
Engineering Associate II

BUREAU OF LABOR AND INDUSTRIES
NOTICE OF AWARD OF PUBLIC WORKS CONTRACT
(For use by Public Agencies in Complying with ORS 279.363)

NOTE: Effective January 1, 2002, ORS 279.363 was amended to require that public contracting agencies include with this form a copy of the disclosure of first-tier subcontractors submitted pursuant to ORS 279.027.

1. CONTRACTING AGENCY INFORMATION

Agency Name _____ Agency Number _____

Address _____

City, State, Zip _____

Agency Representative _____ Phone _____

2. CONTRACT INFORMATION

Project Name _____ Project Number _____

Project Manager Name _____ FAX Number _____

Phone Number _____

Project Location (Street(s), City, State) _____

Project County _____ Contract Amount _____

Source of Funds (i.e., 100% Federal Funds, 50/50 Federal/State, 100% Local, etc.) _____

If this project is federally funded and subject to the Davis-Bacon Act, do not submit this form to the Oregon Bureau of Labor and Industries. If federal funds are involved, but the project is subject to the Oregon Prevailing Wage Rate Law, please specify.

Date Contract Specification First Advertised for Bid _____

Date Contract Awarded _____ Date Work Expected to Begin _____

Date First Progress Payment Due _____ Expected Date of Completion _____

3. PRIME CONTRACTOR INFORMATION

Name _____

Address _____

City, State, Zip _____ Phone _____

Construction Contractors Board Registration Number _____

Name of Bonding Company _____

Address _____

Agent Name/Phone _____

Bond Number _____

○ Copy of first-tier subcontractors attached (see NOTE above).

Signature of person completing form _____

Printed name _____ Date _____

THIS FORM WILL BE RETURNED TO THE CONTRACTING AGENCY FOR CORRECTION AND RESUBMITTAL IF INCOMPLETE.

RETURN THIS COMPLETED FORM TO:

Prevailing Wage Rate Unit
Wage and Hour Division, Room 1160
Bureau of Labor and Industries
800 N.E. Oregon Street, #32
Portland, OR 97232
Telephone: (503) 731-4723
FAX: (503) 731-4606

City of Sherwood Oregon
Home of the Tualatin River National Wildlife Refuge

Community Development Division
Engineering Department
22560 SW Pine St.
Sherwood, OR 97140
503-925-2309

NOTICE TO PROCEED

PROJECT NAME:	**Columbia Street Regional Stormwater Facility**
DATE:	XXX, 2014
PROJECT NO.:	8069
COUNCIL RESOLUTION:	2014-XXX
C.O.S. PROJECT MANAGER:	Craig Christensen, P.E.

TO: XXXXX
Attn: XXX

ADDRESS: XXX
XXX

PHONE/EMAIL: (503) – email address

CONTRACT: City of Sherwood and XXX

Columbia Street Regional Stormwater Facility

You are hereby notified that the Contract for the aforementioned project has been properly executed; performance and payment bonds and proof of insurance has been received.

In accordance with the Contract Agreement, all Contract Work shall be completed by the completion date described in the Bid Booklet on or before XXXX, 2013 which is 120 calendar days from the issuance of this Notice to Proceed.

CITY OF SHERWOOD

_____
Craig Christensen, P.E.
Project Manager

SAMPLE

Division Three
General Requirements

PREVAILING WAGE RATES

FOR

PUBLIC WORKS CONTRACTS IN OREGON

OREGON BUREAU OF LABOR AND INDUSTRIES

BOLI PREVAILING WAGE RATES (PWR)

This Project is subject to Oregon Bureau of Labor and Industry – Prevailing Wage Rates for Public Works Projects in Oregon, effective January 1, 2014 and Amended on April 1, 2014.

This publication is available on the web at:
http://www.oregon.gov/boli/WHD/PWR/Pages/pwr_oregon_2014.aspx

This is a local project. No Federal Funds are being used on this project. Therefore the project is not subject to the Davis-Bacon Act (40 U.S.C. 3141 et seq.).

GENERAL REQUIREMENTS

STANDARD SPECIFICATION

The Oregon Standard Specifications for Construction 2008 edition, as issued by the Oregon Department of Transportation, as amended herein, these Special Provisions, the Advertisement of Bids, the Accepted Proposal, the Agreement, the Special Specifications, the Plans, the Standard Details appended hereto, and all addenda issued prior to the execution of the agreement and all modifications thereto comprise the Contract documents or the contract.

CONSTRUCTION CONTRACTORS BOARD

The contractor must:

(a) Have a public works bond filed with the Construction Contractors Board before starting work on the project, unless exempt under ORS 279C.836 (4), (7), (8) or (9).

(b) Require, in every subcontract, that the subcontractor have a public works bond filed with the Construction Contractors Board before starting work on the project, unless exempt under ORS 279C.836 (4), (7), (8) or (9).

Division Four
Special Provisions

SPECIAL PROVISIONS AND REVISIONS TO STANDARD SPECIFICATIONS

CITY OF SHERWOOD
COLUMBIA STREET REGIONAL STORMWATER FACILITY
SHERWOOD, OREGON

CITY OF SHERWOOD PROJECT NO.: 8069

JUNE 30, 2014

PREPARED BY

AKS
ENGINEERING & FORESTRY

6/30/14

REGISTERED PROFESSIONAL ENGINEER
56528PE
OREGON
JANUARY 15, 2002
ALEXANDER H. HURLEY

RENEWAL DATE: 6-30-15

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SPECIAL PROVISIONS

WORK TO BE DONE

The plan set for this project is entitled: City of Sherwood Regional Stormwater Facility and is located in the City of Sherwood, Oregon in Washington County. The Scope of Work to be done under this contract consists of the following:

1. Install approximately 1,490 lineal feet of storm sewer pipe (pipe diameters ranging from 12 to 42 inches) by open trench methods;
2. Construct six (6) new storm sewer manholes;
3. Install one (1) flow splitter manhole and one (1) water quality manhole;
4. Reconnect existing storm sewer pipes;
5. Install approximately 142 lineal feet of 36-inch diameter steel casing and 24-inch diameter storm sewer carrier pipe by horizontal auger bore and jacking;
6. Decommission existing onsite stormwater facility (extended dry basin) and remove associated outfall pipe and structure;
7. Construct a new regional stormwater facility with the associated inlet and outfall channels;
8. Construct approximately 60 lineal feet of drainage channel for stormwater bypass flows;
9. Perform plantings, seeding, Vegetated Corridor enhancement and other environmental work;
10. And other incidental work as required to complete the project as called for by the plans and specifications.

EASEMENT REQUIREMENTS

Contractor shall confine the construction operations to City of Sherwood Property, City of Sherwood Easement Areas and right-of-way. Any occupation or use of additional area by Contractor shall be by written agreement between Contractor and said property owner with a copy of said agreement to be submitted to the City Project Manager. Contractor shall restore all areas impacted by construction to a condition equal to or better than the preconstruction condition with signed approval by the property owner being submitted to the City Project Manager. Easement locations are shown on the Construction Plans (under separate cover).

APPLICABLE SPECIFICATIONS

The Specification that is applicable to this project is the 2008 edition of the "Oregon Standard Specifications for Construction" produced by the Oregon Department of Transportation and the Oregon Chapter of the APWA. All number references in these Special Provisions shall be understood to refer to the Sections and subsections of the Standard Specifications and Supplemental Specifications bearing like numbers and to Sections and subsections contained in these Special Provisions in their entirety. Unless

specifically noted in these Special Provisions, all specifications included in the 2008 edition of the "Oregon Standard Specifications for Construction" shall be strictly adhered to.

CLASS OF PROJECT

This is a City of Sherwood Public Works project. The construction of this project is NOT federally funded.

REVISIONS TO STANDARD SPECIFICATIONS

SECTION 00110 - ORGANIZATION, CONVENTIONS, ABBREVIATIONS AND DEFINITIONS

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

00110.10 Abbreviations

Add the following:

COS -	City of Sherwood
PCC -	Portland Cement Concrete

00110.20 Definitions - Add or modify definitions as follows:

Agreement – Same as Contract.

Amendment - A contract modification for Additional Work, Changed Work, Extra Work, Field Directives, or other changes. An Amendment changes the contract value, scope, and/or time. Amendments require formal approval by the City prior to approval of such work.

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

Award - Same as "Notice to Award".

Bid - A written offer by a bidder on forms furnished by the City to do work stated in the bid documents at the prices quoted. "Bid" is synonymous with "proposal" in these bid documents.

Bid Booklet - The bidding documents bound with the Solicitation Documents that contain the information identified in 00120.10.

Bid Section – The portion of the Solicitation Documents labeled, Division One – Bidding Requirements.

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

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

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

City - The term "City" shall mean the City of Sherwood, including City Councilors, employees, and agents of the City authorized to administer the conditions of these contract documents.

Department - Synonymous with Agency.

Engineer – The consultant's Project Manager or the City's Project Manager either acting directly or through an authorized representative(s).

Invitation to Bid - The public announcement (Notice to Contractors) inviting bids for work to be performed or materials to be furnished.

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

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

Notice of Award - A written notice from the City notifying bidders that the City intends to award to the responsible bidder submitting the lowest responsive bid.

ODOT Procurement Office – City of Sherwood.

Owner - Synonymous with Agency.

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

Shop Drawings - Synonymous with Working Drawings.

Solicitation Document - Synonymous with Bid Documents.

Standard Drawings - The Agency-prepared detailed drawings for Work or methods of construction that normally do not change from project to project. The Standard Drawings include the ODOT Standard Drawings.

State - Where the term "State" or "State of Oregon" or "ODOT" appears in the contract documents it shall mean "City of Sherwood ", "State of Oregon", or "ODOT" as applicable because of context.

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

END OF SECTION

SECTION 00120 - BIDDING REQUIREMENTS AND PROCEDURES

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

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

a. Prequalification is required, and required forms or documentation must be filed 3 days prior to the bid opening for the Bidder to retain appeal rights.

b. Proof of pre-qualification acceptance by either the State of Oregon Department of Transportation (ODOT), Washington County Department of Transportation Development (DTD) or any local municipality with a population equal or greater than 18,000 persons is acceptable to the City. Bidders may mail or fax proof of pre-qualification to the attention of the Project Manager.

c. Bidders must attend and be registered at a mandatory pre-bid site meeting. Failure to attend and be registered at the pre-bid meeting shall invalidate any bids submitted by non-registered bidders.

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

Paper Bids shall be submitted in accordance with the requirements in the Invitation to Bid.

00120.05 Requests for Solicitation Documents - Delete and replace with the following:

Bidders must obtain the Solicitation Documents from the City of Sherwood.

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

00120.10 Bid Booklet - Delete and replace with the following:

The Bidding Documents are bound with the Solicitation Documents, and labeled as Division One – Bidding Requirements. The Bidding Documents may include but are not limited to:

- Invitation to Bid
- Bidder's Checklist
- Bid Statement
- Bid Schedule
- First Tier Subcontractor Disclosure Form
- Bid Bond
- Certificate of Non-Collusion

- Compliance with ORS 279C.840
- Certification of Asbestos Abatement
- Certificate of Non-Discrimination
- Customer Service Acknowledgment
- Prequalification Acknowledgement
- Bidder Responsibility Form
- Addendum Acknowledgment (Example)
- Special Provisions and Revisions to Standard Specifications
- The "Oregon Standard Specifications for Construction" by ODOT and APWA, 2008 edition
- Plans and drawings
- Other bid documents included or referenced in the bid documents
- Addenda, if any
- The Contract Form

00120.14 Pre-Bid Meeting – If stated in the Advertisement for Bids, a pre-bid meeting will be held at the time and location as described. In addition, it will be stated if prospective bidder's attendance is mandatory or voluntary.

00120.15 Examination of Work Site and Solicitation Documents; Consideration of Conditions to be Encountered – Replace the last sentence of the third paragraph with the following:

Such notification shall also be made at least seven (7) calendar days prior to bid opening to provide Agency sufficient time to make necessary modifications and issue addenda to Bidders.

00120.17 Use of Agency-Owned Land for Staging or Storage Areas– Delete and replace with the following:

As designated on the plans, the contractor shall use designated areas on the project property for staging and storage. Except for areas alongside the pedestrian pathway along SW Division Street, the Contractor shall <u>not</u> use public right-of-way for staging and storage. Contractor to coordinate with City regarding the closure of the pedestrian pathway along SW Division Street.

00120.25 Subsurface Investigations – Delete and replace with the following:

A copy Geotechnical Engineering Report by GeoPacific Engineering, Inc. (dated February 26, 2014) is included in the bid documents for the convenience of the bidder and shall not relieve the Bidder or the Contractor of any risk, duty to make examinations and investigations as required by 00120.15, or other responsibility under the Contract Documents.

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

The City reserves the right to make necessary changes or corrections to the bid documents at any time prior to the opening of bids. Addenda and Contract Clarifications will be posted on the City's website. Potential bidders are responsible for checking the website (www.sherwoodoregon.gov) on a daily basis the last week before the Bid Opening date.

The City is not responsible for failure of bidders to receive notifications of changes or corrections made by the City, and sent as stated above. Bids shall incorporate all Addenda, and a copy of all issued Addenda shall be included with Bids. Bids opened and found not to be based on the changes or corrections, or found not to include a copy of all Addenda issued, will not be considered and will be deemed non-responsive.

00120.32 Changes to Quantities and Bid Items after Opening of Bids – Add the following section:

The City reserves the right to make changes to bid quantities and/or delete entire bid items at any time following the opening of bids.

00120.40 Preparation of Bid – Delete the following paragraphs: (a)(2), (c)(2), (e)(2). Delete and replace paragraph (f) with the following:

(f) Disclosure of First-Tier Subcontractors - Within two working hours after the date and time of the deadline when the bids are due to the public contracting agency for a public improvement, a bidder shall submit to the public contracting agency a disclosure of the first-tier subcontractors that:

(A) Will be furnishing labor or will be furnishing labor and materials in connection with the public improvement; and

(B) Will have a contract value that is equal to or greater than five percent of the total project bid or $15,000, whichever is greater, or $350,000 regardless of the percentage of the total project bid.

The disclosure of first-tier subcontractors shall include:

(a) The name of each subcontractor; and

(b) The dollar value of work; and

(c) The category of work that each subcontractor will be performing.

If no subcontracts subject to the above disclosure requirements are anticipated, a bidder shall so indicate by entering "NONE" or filling in the appropriate check box.

The public contracting agency shall consider the bid of any contractor that does not submit a subcontractor disclosure to the public contracting agency to be a non-responsive bid and may not award the contract to the contractor.

Subcontractor lists may be submitted with the bid in the same envelope at the bid closing date and time. Those subcontractor lists submitted after the bid closing shall be delivered in a separate sealed envelope that clearly identifies the contents. However, the subcontractor lists must be submitted within two (2) hours of the bid closing date and time.

00120.40(h) Customer Service Agreement – Add the following subsection:

00120.40(h) Customer Service Agreement - To demonstrate a commitment to providing an exceptionally high level of customer service to the City and the community on this project, each bidder shall complete the provided Customer Service Agreement. The Acknowledgement certifies that s/he has read and understands the sections of the specifications emphasizing customer service, including public safety and convenience, protection and preservation of private property and existing vegetation, and related aspects of construction.

00120.45 Submittal of Bids - Delete all of section (b) and 1st paragraph of section (a) and replace with:

Paper Bids shall be submitted in accordance with the requirements in the Invitation to Bid.

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

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

A revision to a bid after it has been submitted, but prior to the deadline for submission, will be allowed provided it is submitted in a sealed envelope and signed by an authorized individual. Revisions must include bid schedule, bid guarantee, signature page, and be submitted prior to the time set for receiving proposals.

A bidder may withdraw a proposal after it has been submitted provided the withdrawal request is in writing from an individual authorized to sign the proposal and received prior to the time set for opening proposals.

00120.68 Mistakes in Bids - Add the following section:

(a) General - Clarifications to or withdrawal of a bid after bid opening because of an inadvertent, non-judgmental mistake in the bid requires careful consideration by the City to protect the integrity of the competitive bidding system and to assure fairness to all bidders. Bid corrections or withdrawal by reason of a non-judgmental mistake is

permissible, but only to the extent it is not contrary to the interest of the City or the fair treatment of other bidders.

(b) Mistakes Discovered After Bid Closing But Before Award - This subsection prescribes standards to be applied in situations where mistakes in bids are discovered after the time and date set for bid closing, but before award.

(1) Minor Informalities - are insignificant mistakes of form that are evident from the bid documents and do not affect price, quality, quantity, delivery, or contractual obligations except in the case of informalities involving unit price. Minor informalities can be waived or corrected promptly without prejudice to other bidders or to the City. Examples include, but are not limited to:

- Return of the number of signed bids or the number of other documents required by the bid documents;
- Failure to sign the bid form in the designated block so long as a signature appears in the bid documents evidencing an intent to be bound;
- Failure to acknowledge receipt of an addenda to the bid documents, but only if:
  - it is clear from the bid that the bidder received the addenda and
  - intended to be bound by its terms, or;
  - the addenda involved had a negligible effect on price, quality, quantity, or delivery.

(2) Mistakes Where Intended Correct Bid is Evident - If the mistake and the intended correct bid are clearly evident on the face of the bid form, or can be substantiated from accompanying documents, the City may accept the bid (i.e., typographical errors, errors in extending unit prices, transposition errors, and arithmetical errors). For discrepancies between unit prices and extended prices, unit prices will prevail.

(3) Mistakes Where Intended Correct Bid is not Evident - The City will not accept a bid in which a mistake is clearly evident on the face of the bid form, but the intended correct bid is not similarly evident or cannot be substantiated from accompanying documents.

00120.70 Rejection of Bids - Delete and replace with the following:

A bid will be considered irregular and may be rejected if:

- The bid section provided is not used or is altered.

- The bid is incomplete or incorrectly completed.
- The bid has unauthorized additions, deletions, alternate bids, or conditions.
- A member of a joint venture and the joint venture submit bids for the same project. Both bids may be rejected.
- The bid has entries not typed or in ink, or has signatures or initials not in ink.
- Each erasure, change, or correction is not initialed.
- The price per unit cannot be determined.
- The City finds that it is in the public interest to do so (ORS 279.035).
- The bid guaranty is insufficient or improper.
- The standard bid bond form is not used or is altered.
- The Oregon Construction Contractors Board registration number and expiration date are not shown on the bid if required by the bid document. This requirement applies to State-funded projects, with the exception of aggregate production and landscape projects.
- A disclosure of first-tier subcontractors/material suppliers, if required under *00120AO(f),* is not received within two working hours of the time bids are due to be submitted, or the disclosure form is not complete.
- The Agency determines that any Pay Item is significantly unbalanced to the potential detriment of the Agency.

00120.95 Opportunity for Cooperative Arrangement - Delete this section.

END OF SECTION

SECTION 00130 - AWARD AND EXECUTION OF CONTRACT

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

00130.00 Consideration of Bids - Delete third paragraph.

00130.10 Award of Contract -Add the following text below the 1st paragraph of the subsection:

- A satisfactory record of performance. In evaluating a Bidder's record of performance, the Agency may consider, among other things, whether the Bidder completed previous contracts of a similar nature with a satisfactory record of performance. For purposes of evaluating a Bidder's performance on previous contracts of a similar nature, a satisfactory record of performance means that to the extent that the costs associated with and time available to perform a previous contract remained within the Bidder's control, the Bidder stayed within the time and budget allotted for the procurement and otherwise performed the contract in a satisfactory manner.

- A satisfactory record of integrity. In evaluating a Bidder's record of integrity, the Agency may consider, among other things, whether the Bidder has previous criminal convictions for offenses related to obtaining or attempting to obtain a contract or subcontract or in connection with the Bidder's performance of a contract or subcontract.

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

Adversely affected or aggrieved Bidders, limited to the three apparent lowest Bidders, may submit to the City of Sherwood a written protest of the City's Intent to Award within seven (7) calendar days following the date of the Notice of Intent to Award. The protest shall specify the grounds upon which it is based.

An aggrieved Bidder may protest an award only if the Bidder alleges, in its written protest, that it should have received the award because:

- All lower Bids are non-responsive;
- The Agency failed to conduct the Bid process as described in the Bid document;
- The Agency has abused its discretion in rejecting the protestor's Bid as non-responsive or non-responsible; or
- The Agency's evaluation of Bids or subsequent determination of award is otherwise in violation of ORS Chapter 279C or the Agency's public contracting rules.

The written protest must describe the facts that support the protest. The Agency may not consider late protests or protests that do not describe facts that would support a finding that the Bidder is aggrieved for one of the reasons cited above.

00130.30 Contract Booklet - Add the following:

Other documents are part of the contract documents by reference. These include, but are not limited to:

- The "Oregon Standard Specifications for Construction", 2008 Edition, as published by the Oregon Department of Transportation (ODOT).
- "Oregon Standard Drawings" latest edition, as published by ODOT.

00130.40 Contract Bonds, Certificates, and Registrations - Delete the 2nd paragraph of section (b) and replace with the following:

For this Contract, the Agency may request at any time a certified copy of any insurance policy that this Contract requires and Contractor will provide same at its sole cost within ten (10) days of Agency's request.

Add the following subsection (e):

(e) State of Oregon Statutory Public Works Bond

As particularly described in 00170.20, when awarded the contract, the successful Bidder shall furnish a State of Oregon Statutory Public Works Bond.

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

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

00130.80 Project Site Restrictions - Replace the paragraph that begins "Until the Agency sends ... ", with the following paragraph:

Until the Agency sends the Contractor written Notice to Proceed with the Work, and the Contractor has filed the public works bonds required in 00170.20, the Contractor shall not go onto the property on which the Work is to be done, nor move Materials, Equipment or workers onto that property.

END OF SECTION

SECTION 00140 - SCOPE OF WORK

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

00140.30 Agency-Required Changes in the Work - Delete and replace the last paragraph with the following:

Upon receipt of an Engineer's written order modifying the Work, the Contractor shall perform the Work as modified.

If an Amendment incorporating changes to the Work increases the Contract amount, the Contractor shall notify its Surety of the increase and shall provide the Agency with a copy of any resulting modification to bond documents. The Contractor's performance of Work pursuant to Amendments shall neither invalidate the Contract nor release the Surety. Payment for changes in the Work shall be made in accordance with 00195.20. Contract Time adjustments shall be made in accordance with 00180.80.

00140.31 "As-Built" Records - Add the following section:

Maintain a current and accurate record of the work completed during the course of this contract. This shall be in the form of redline "as-built" drawings kept by accurately marking a designated set of the contract plans with the specified information as the Work proceeds. Accurate, complete and current redline "as-built" drawings are a specified requirement for full payment of the work completed. At project Substantial Completion and as a condition of final payment, the Contractor shall deliver to the Engineer a complete and legible set of redline "as-built" drawings.

The Contractor provided redline "as-built" drawings must show the information listed below. Where the term "locate" or "location" is used, it shall mean record of position with respect to both the construction vertical datum and either construction horizontal datum or a nearby permanent improvement.

1) Record location of underground services and utilities as installed.
2) Record location of existing underground utilities and services that are to remain and that are encountered during the course of the work.
3) Record changes in dimension, location, grade or detail to that shown on the plans.
4) Record changes made by change order.
5) Record details not in the original plans.
6) Provide fully completed shop drawings reflecting all revisions.

00140.40 Differing Site Conditions - Add the following section:

The Contractor is responsible for site conditions relating to pipe trench and manhole trench stability. Issues affecting pipe and manhole trench stability shall not be considered Differing Site Conditions.

00140.70 Cost Reduction Proposals – Add the following paragraph:

Unless otherwise agreed to in writing by the Agency, a proposal that is solely or primarily a proposal to reduce estimated quantities or delete Work, as determined by the Engineer, is not eligible for consideration as a cost reduction proposal and will instead be addressed under 00140.30, whether proposed or suggested by the Agency or the Contractor.

00140.90 Final Trimming and Cleanup - Add the following bulleted item to the end of the list:

- Removal and clean-up of erosion and sediment controls facilities, once vegetation is established on disturbed areas of Project Site and the Project Site has been stabilized.

END OF SECTION

SECTION 00150 - CONTROL OF WORK

Comply with Section 00150 of the Standard Specifications supplemented and/or modified as follows:

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

Except as indicated elsewhere in the Contract (e.g. Amendment approval by the City), the Engineer has full authority over the Work and its suspension.

00150.05 Cooperative Arrangements - Delete this section.

00150.10(a) Coordination of Specifications and Plans: Order of Precedence – Replace the bulleted items with the following:

- Contract Change Orders, supplemental agreements and approved revisions to Plans and Specifications;
- The signed Agreement between the Agency and the Contractor;
- Public Works Construction Permit;
- Permits from outside Agencies required by law;
- Project-Specific Special Provisions;
- City of Sherwood Special Provisions;
- ODOT Special Provisions;
- Project Drawings;
- City of Sherwood Engineering Design and Standard Details Manual;
- 2008 Oregon Standard Drawings;
- 2008 Oregon Standard Specifications for Construction; and
- All other Contract documents not listed above.

00150.15 Construction Stakes, Lines and Grades - Replace this subsection with the following:

The Contractor shall establish all field controls for the project and furnish all principal lines, grades, and measurements necessary for the completion of the Work.

The Contractor shall inform the Engineer of any property corners, monuments and/or survey markers found during construction activities that are in conflict with the proposed improvements. The Contractor shall not bury or disturb any property corners, monuments and/or survey markers.

00150.15 (b) Agency Responsibilities – The Engineer will provide one (1) set of:

- Construction limits and tree fencing stakes (25-foot intervals);
- Grading and erosion control stakes for the following (grade breaks and 25-foot intervals):

    - Clearing limits
    - Water Quality Facility
    - Realigned channel alignment and finish grade
- Layout and set construction stakes to establish the lines and grades for access road construction;
- Construction stakes for storm drain structures (offset from center of structure);
- Construction stakes for line and grade of retaining wall at top of wall;
- Layout and set benchmarks and construction stakes to establish the line and grade for horizontal auger bore, and to establish the location of the pipe using a guidance system;
- Deduct from payments due the Contractor all costs incurred to replace stakes and marks negligently or intentionally damaged, removed or destroyed by contractor.

00150.15(c) Contractor Responsibilities – Add the following bulleted items to the end of this section:

- Contractor shall provide Engineer at least 48-hours of notice for all staking requests;
- Responsible for notifying the Engineer for cancellations prior to the survey crew leaving the office; and
- Responsible for additional expenses due to additional construction stakes or re-staking.

00150.35 (d)(1) Stamped Work Drawings – Replace this subsection with the following:

Stamped Working Drawings will be designated as "reviewed and accepted" or "reviewed with comments" by the Engineer.

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

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

00150.50(c) Contractors Responsibilities: Add the following to the end of Paragraph(c):

- The Contractor will make arrangements for the removal, relocation, or adjustment of utilities and show utility work on the project schedule. The Contractor shall be responsible for coordinating, communicating, and scheduling work with the utility companies through the entire project. The Contractor shall obtain the available plans for utility relocations within in the area from the utility servers.

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

- The Contractor shall accomplish potholing excavations and borings ahead of the work where necessary to determine the exact location of underground pipes or other features which might interfere with construction. Potholing shall be accomplished prior to ordering materials for the project and

- The Contractor shall support and protect pipes or other services where they cross the trench and shall be responsible for all damages incidental in interruptions of service that may be caused by Contractor operations. Where a new utility line crosses an existing pipeline or other conduit, the trench backfill shall be well compacted in a manner that provides for the required backfill and compaction standards while protecting the utility in question.

- City has shown the known utilities within the project area on the construction plans. Contractor shall secure utility locates prior to the start of any construction. Prior to ordering materials for the project, Contractor shall pothole all known utility locations to determine the exact location and depth of all utilities that may conflict with the proposed design or construction of this project. If Contractor fails to locate any known utility that interferes with the new storm sewer pipe, the cost of correcting the conflict shall be borne by Contractor. If Contractor performs the location duties and it is determined that an existing utility(s) is in direct conflict with the sanitary line, City shall pay the cost of relocating utility.

- Contractor shall be responsible for prompt notification to City, Engineer and the appropriate utility agencies of any known utility conflicts. Contractor shall be responsible for the scheduling, and coordination of the construction activities necessary to support the resolution of any utility conflicts with the appropriate utility agency. City shall not incur any financial responsibility for any construction delays related to the relocation of any utilities not appropriately located by Contractor.

00150.50(f) Cooperation With Utilities: Utility Information – Add the following Subsection:

00150.50(f) Utility Information:

The following organizations may be adjusting Utilities within the limits of the Project during the period of the Contract:

Type of Utility - Responsible Authority
- Gas – Northwest Natural

- Electric – Portland General Electric
- Water, Storm & Sanitary Sewer – City of Sherwood
- Communications – Qwest Communications, Frontier (Verizon), and Comcast

The Contractor shall be responsible, although Agency will cooperate as necessary, for scheduling and coordinating public utility work.

The Agency assumes no responsibility as to the exact location of utilities and/or omission from the plans. Existing utilities damaged by the Contractor shall be repaired or replaced at Contractor's expense.

The Contractor shall not be entitled to any additional compensation due to the presence of or interference, delays, or expense caused by said existing utilities. Utility potholing

The Contractor's project schedule shall allow time to coordinate with the utility companies to relocate their facilities (assume 3 to 4 weeks).

00150.95 Final Acceptance - Add the following:

Once the construction work is complete, all systems are operable, and final inspection discloses no deficiencies, the following documentation shall be delivered to the City:

- Special guarantees and bonds;
- Separate waivers of liens for subcontractor, supplies and others with lien rights against property of City;
- Final pay estimate;
- Evidence that the Maintenance Bond will remain in effect for two years following the date of Final Acceptance;
- Red-lined as-built drawings showing locations of all improvements constructed as part of the project.

00150.96 Maintenance Warranties and Guarantees – Add the following paragraphs:

The contractor shall provide a 10% Maintenance Bond for a period of two years from the date of final acceptance by the Agency. A surety licensed to do business as a surety in the State of Oregon shall provide the Maintenance Bond.

The acceptance by the Contractor of final payment shall be and shall operate as a release to the Agency of all claims and all liability to the Contract other than claims in stated amounts as may be specifically excepted by the Contractor in writing prior to the request for final payment for all things done or furnished in connection with this work. However, any payment, final or otherwise, or any acceptance, shall not release the Contractor or its sureties from any obligations under the Contract Documents or the Performance and Payment Bonds or diminish the Agency's rights under the guaranty provision.

In addition to and not in lieu of any other warranties required under the Contract to make all necessary repairs and replacements to remedy, in a manner satisfactory to the Engineer and at no cost to the Agency, any and all defects, breaks or failures of the Work occurring during the specified warranty period due to fault or inadequate materials or workmanship. Repair damage or disturbance to other improvements under, within, or adjacent to the Work, whether or not caused by settling, washing, or slipping, when such damage or disturbance is caused, in whole or in part, from activates of the Contractor in performing his duties and obligations under this Contract when such defects or damage occur within the warranty period. The two-year maintenance period required shall, with relation to such required repair, be extended one year from the date of completion of such repair.

If Contractor, after written notice, fails within ten days to proceed to comply with the terms of this section, Agency may have the defects corrected, and Contractor and Contractor's Surety shall be liable for all expenses incurred. In case of an emergency where, in the opinion of the Engineer, delay would cause serious loss or damage, repairs may be made without notice being given to Contractor and Contractor or Surety shall pay the cost of repairs. Failure of the Engineer to act in case of an emergency shall not relieve Contractor or Surety from liability and payment of all such costs.

END OF SECTION

SECTION 00160 - SOURCE OF MATERIALS

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

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

END OF SECTION

SECTION 00165 - QUALITY OF MATERIALS

Comply with Section 00165 of the Standard Specifications.

END OF SECTION

SECTION 00170 - LEGAL RELATIONS AND RESPONSIBILITIES

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

00170.10 (c) Interest on Unpaid Amount – Replace subsection text with the following:

If the Contractor or a first-tier Subcontractor fails, neglects, or refuses to make payment to an Entity furnishing labor or Materials in connection with the Contract within 30 days after the Contractor's receipt of payment, the Contractor or first-tier Subcontractor shall owe the Entity the amount due plus interest charges that begin at the end of the 10 day period within which payment is due under ORS 279C.580(3) and that end upon final payment, unless payment is subject to a good-faith dispute as defined in ORS 279C.580(5)(b). As required by ORS 279C.515(2), the rate of interest on the amount due shall be nine percent per annum. The amount of interest shall not be waived.

00170.65 Minimum Wage and Overtime Rates for Public Works Projects – Replace subsection text with the following:

(a) General - The Contractor is responsible for investigating local labor conditions. The Agency does not imply that labor can be obtained at the minimum hourly wage rates specified in State or federal wage rate publications, and no increase in the Contract Amount will be made if wage rates paid are more than those listed.

(**b) State Prevailing Wage Requirements** - The Contractor shall comply with the prevailing wage provisions of ORS 279C.800 through ORS 279C.870.

(1) Minimum Wage Rates - The Bureau of Labor and Industries (BOLI) determines and publishes the existing State prevailing wage rates in the publication "Prevailing Wage Rates for Public Works Contracts in Oregon". The Contractor shall pay workers not less than the specified minimum hourly wage rate according to ORS 279C.838 and ORS 279C.840 and shall include this requirement in all subcontracts.

See the Project Wage Rates page included with the Special Provisions for additional information about which wage rates apply to the project and how to access the applicable wage rates.

The applicable BOLI wage rates will be included in the Contract.

(2) Payroll and Certified Statements - As required in ORS 279C.845, the Contractor and every subcontractor shall submit written certified statements to the Engineer on the form prescribed by the Commissioner of BOLI in OAR 839-025-0010 certifying compliance with wage payment requirements and accurately setting out the Contractor's or subcontractor's weekly payroll records for each worker employed upon the project.

The Contractor and subcontractors shall preserve the certified statements for a period of six years from the date of completion of the Contract.

(3) Additional Retainage:

(a) **Agency** - As required in ORS 279C.845(7) the Agency will retain 25% of any amount earned by the Contractor on the project until the Contractor has filed the certified statements required in ORS 279C.845 and in FHWA Form 1273, if applicable. The Agency will pay to the Contractor the amount retained within 14 days after the Contractor files the required certified statements, regardless of whether a subcontractor has failed to file certified statements.

(b) **Contractor** - As required in ORS 279C.845(8) the Contractor shall retain 25% of any amount earned by a first tier subcontractor on the project until the first tier subcontractor has filed with the Agency the certified statements required in ORS 279C.845 and in FHWA Form 1273, if applicable. Before paying any amount retained, the Contractor shall verify that the first tier subcontractor has filed the certified statement. Within 14 days after the first tier subcontractor files the required certified statement the Contractor shall pay the first tier subcontractor any amount retained.

(4) Owner/Operator Data - The Contractor shall furnish data to the Engineer for each owner/operator providing trucking services. Furnish the data before the time the services are performed and include without limitation for each owner/operator:

- Drivers name;
- Copy of driver's license;
- Vehicle identification number;
- Copy of vehicle registration;
- Motor vehicle license plate number;
- Motor Carrier Plate Number;
- Copy of ODOT Motor Carrier 1A Permit; and
- Name of owner/operator from the side of the truck.

(c) State Overtime Requirements - As a condition of the Contract, the Contractor shall comply with the pertinent provisions of ORS 279C.540.

(1) Maximum Hours of Labor and Overtime Pay - According to ORS 279C.540, no person shall be employed to perform Work under this Contract for more than 10 hours in any one Day, or 40 hours in any one week, except in cases of necessity, emergency, or where public policy absolutely requires it. In such instances, the Contractor shall pay the employee at least time and a half pay:

- For all overtime in excess of eight hours a day or 40 hours in any one week when the work week is five consecutive days, Monday through Friday; or

- For all overtime in excess of 10 hours a day or 40 hours in any one week when the work week is four consecutive days, Monday through Friday; and
- For all Work performed on Saturday and on any legal holiday specified in ORS 279C.540.

For additional information on requirements for overtime and establishing a work schedule see OAR 839-025-0050 and OAR 839-025-0034.

(2) Notice of Hours of Labor - The Contractor shall give written notice to employees of the number of hours per day and days per week the employees may be required to work. Provide the notice either at the time of hire or before commencement of work on this Contract, or by posting a notice in a location frequented by employees.

(3) Exception - The maximum hours of labor and overtime requirements under ORS 279C.540 will not apply to the Contractor's Work under this Contract if the Contractor is a party to a collective bargaining agreement in effect with any labor organization. For a collective bargaining agreement to be in effect it shall be enforceable within the geographic area of the project, and its terms shall extend to workers who are working on the project (see OAR 839-025-0054).

(d) State Time Limitation on Claim for Overtime - According to ORS 279C.545, any worker employed by the Contractor is foreclosed from the right to collect any overtime provided in ORS 279C.540 unless a claim for payment is filed with the Contractor within 90 days from the completion of the contract, provided the Contractor posted and maintained a circular as specified in this provision. Accordingly, the Contractor shall:

- Cause a circular, clearly printed in boldfaced 12-point type containing a copy of ORS 279C.545, to be posted in a prominent place alongside the door of the timekeeper's office or in a similar place which is readily available and freely visible to any or all workers employed to perform Work; and

- Maintain such circular continuously posted from the inception to the completion of the Contract on which workers are or have been employed.

Add the following subsection:

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

00170.70(a) Insurance Coverages – Add the following text:

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

Insurance Coverage	Combined Single Limit per Occurrence	Annual Aggregate Limit
Commercial General Liability	$1,000,000.00	$2,000,000.00
Commercial Automobile Liability	$1,000,000.00	$1,000,000.00

Add the following text to the following subsection as noted:

00170.70(c) Additional Insured – Add the following text:

Add the following as Additional Insured's under the Contract:

- City of Sherwood and its Councilors, officers, agents, and employees.
- AKS Engineering & Forestry, LLC, and their officers, agents, and employees, and subconsultants.

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

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

- City of Sherwood and its Councilors, officers, agents, and employees.
- AKS Engineering & Forestry, LLC, and their officers, agents, and employees, and subconsultants.

00170.80 Responsibility for Damage to Work – Replace subsection with the following:

(a) Responsibility for Damage in General - The Contractor shall perform Work, and furnish Materials and Equipment for incorporation into the Work, at the Contractor's own risk, until the entire Project has been completed and accepted by the Agency. The Contractor shall repair all damages to Work performed, Materials supplied, and Equipment incorporated into the Work, except as otherwise provided in this Section.

(b) Repair of Damage to Work - Until Final Acceptance, the Contractor shall promptly rebuild, repair, restore, and make good damages to all portions of the permanent or temporary Work, except to the extent the Agency has assumed responsibility according to the provisions of (c) below. Perform all repairs of damage to Work at no additional cost to the Agency, except for repairs necessitated by damage caused by:

- Acts of God or Nature, as defined in Section 00110; or
- Actions of governmental authorities.

(c) Responsibility for Damage to Work Caused by Public Traffic - The Contractor may apply for relief of responsibility for damage to Work caused by public traffic by

submitting a signed Contractor's Request for Relief of Responsibility, form 734-2768, to the Engineer by mail, personal delivery or courier, by FAX, or other agreed-upon method.

The Engineer will process a maximum of two forms per month and return the forms within seven Calendar Days indicating each item as "approved" or "denied".

The approval of the Engineer is limited, and is made only for the purposes of determining relief of responsibility for damage to completed portions of the Work caused by public traffic. The non-damaged portions of the Work are not considered complete, and are neither finally accepted under the Contract nor will they be deemed accepted.

If the Contractor disagrees with the Engineer's findings, the Contractor may request a Region level review according to 00199.40(b).

(1) Request for Relief - The Agency will only accept a request for relief from and will only assume responsibility for damages caused by public traffic, to the following completed portions of the Work:

- A segment of Roadway, drainage facilities, slopes, lighting, traffic control devices and access facilities;
- A Bridge or other Structure within a segment of Roadway;
- Traffic signals and appurtenances at an intersection;
- Permanent, passive traffic control devices;
- Complete circuits of a highway lighting system; and
- Portions of a building open to public use.

The Agency will approve a request for the Agency to assume responsibility for damages to the completed portions of the Work caused by public traffic only under the following conditions:

- The completed portions of the Work are completed according to Contract Change Orders, the Contract Plans or approved stage construction Plans;
- The traffic control complies with approved traffic control Plans; and
- All required Materials conformance and quality compliance documents pertaining to the completed portions of the Work are on file with the Engineer (see Section 00165).

(2) Scope of Relief - When the Agency assumes responsibility for damage to completed portions of the Work caused by public traffic any damages will be repaired by the Contractor on an Extra or Changed Work basis, or by Agency forces, or by other means as determined by the Engineer. If completed portions of the Work are damaged by public traffic before Final Inspection, and the Agency requires the Contractor to repair the damages, the Engineer will reimburse the Contractor for the Extra or Changed Work at 75% of the total amount calculated according to Section 00197.

If completed portions of the Work are damaged by public traffic after Final Inspection, and the Agency requires the Contractor to repair the damages, the Engineer will reimburse the Contractor for the Extra or Changed Work at 100% of the total amount calculated according to Section 00197.

If any additional Work is performed by the Contractor on completed portions of the Work for which the Agency has assumed responsibility for damages caused by public traffic, and the Work is performed outside of the approved stage construction Plans or approved traffic control Plans, the Contractor shall become fully responsible and liable, and shall make good all damages caused by public traffic at no additional cost to the Agency.

(d) Vandalism and Theft - Vandalism includes damage to or destruction of Work or portions of Work that remain on the Project Site resulting from vandalism, criminal mischief, arson, or other criminal or illegal behavior.

The Contractor shall provide reasonable protection of the Work from vandalism until Third Notification. If reasonable protection has been provided, the Contractor's responsibility for damage resulting from vandalism will be limited to $5,000.00 per occurrence. Requests for reimbursement of amounts in excess of $5,000.00 shall be in writing and directed to the Engineer. Upon receipt, the Engineer will investigate, evaluate the amount of damages and their cause, determine the number of occurrences, and determine whether, and how much, the Contractor will be compensated.

Theft includes the loss of Work or portions of Work that are lost or stolen or otherwise unaccounted for from the Project Site or from Materials or fabrication locations. The Contractor shall remain solely responsible for all losses caused by theft, including without limitation theft that occurs in conjunction with vandalism.

00170.85(b)(2) Warranties for Local Agency Projects – Replace the 2nd paragraph as follows:

The Contractor shall warrant all Work and workmanship, including Changed Work, Additional Work, Incidental Work, On-Site Work, and Extra Work, and Materials and Equipment incorporated in the Work, for two years from the date of Final Acceptance, except that manufacturers' warranties and extended warranties according to 00170.85(c) shall not be abridged.

END OF SECTION

SECTION 00180 - PROSECUTION AND PROGRESS

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

00180.21(a) General – Delete the last sentence of the second paragraph and bulleted paragraphs and add the following text:

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

00180.21(d) Terms of Subcontracts - Replace the text of this subsection with the following:

Subcontracts shall provide that work performed under the subcontract shall be conducted and performed according to the terms of the Contract. All subcontracts, including Contractor's with the first-tier Subcontractors and those of the first-tier Subcontractors with their subcontractors, and any other lower tier subcontracts shall contain a clause or condition that if the Contractor or a Subcontractor fails, neglects, or refuses to make payment to an Entity furnishing labor or Materials in connection with the Contract, the Entity may file a complaint with the Construction Contractors Board, unless payment is subject to a good-faith dispute as defined in ORS 279C.580. Additionally, according to the provisions of ORS 279C.580, subcontracts shall include:

(1) A payment clause that obligates the Contractor to pay the first-tier Subcontractor for satisfactory performance under the subcontract within 10 Calendar Days out of amounts the Agency pays to the Contractor under the Contract.

(2) A clause that requires the Contractor to provide the first-tier Subcontractor with a standard form that the first-tier Subcontractor may use as an application for payment or as another method by which the Subcontractor may claim a payment due from the Contractor.

(3) A clause that requires the Contractor, except as otherwise provided in this subsection, to use the same form and regular administrative procedures for processing payments during the entire term of the subcontract. The Contractor may change the form or the regular administrative procedures the Contractor uses for processing payments if the Contractor:

- Notifies the Subcontractor in writing at least 45 Calendar days before the date on which the Contractor makes the change; and
- Includes with the written notice a copy of the new or changed form or a description of the new or changed procedure.

(4) An interest penalty clause that obligates the Contractor, if the Contractor does not pay the first-tier Subcontractor within 30 Calendar Days after receiving payment from the Agency, to pay the first-tier Subcontractor an interest penalty on amounts due in each payment the Contractor does not make in accordance with the payment clause included in the subcontract under 00180.21(d-1). The Contractor or first-tier Subcontractor is not obligated to pay an interest penalty if the only reason that the Contractor or first-tier Subcontractor did not make payment when payment was due is that the Contractor or first-tier Subcontractor did not receive payment from the Agency or the Contractor when payment was due. The interest penalty applies to the period that begins on the day after the required payment date and ends on the date on which the amount due is paid; and shall be computed at the rate specified in 00170.10(c).

(5) A clause that requires the Contractor's first-tier Subcontractor to include a payment clause and an interest penalty clause that conform to the standards of ORS 279C.580 (see 00180.21(d-1) and 00180.21(d-4)) in each of the first-tier Subcontractor's subcontracts and to require each of the first-tier Subcontractor's subcontractors to include such clauses in their subcontracts with each lower-tier subcontractor or Material supplier.

These payment clauses shall require the Contractor to return all retainage withheld from the Subcontractor, whether held by the Contractor or the Agency, as specified in 00195.50(d).

As required by ORS 279C.800 through ORS 279C.870, subcontracts shall include:

- A provision requiring the subcontractor to have a public works bond filed with the Construction Contractors Board before starting Work on the Project, unless exempt.
- A provision requiring that the workers shall be paid not less than the specified minimum hourly rate of wage.

00180.40(a) In General - Add the following to bulleted items:

- Hours of construction are limited to between 7:00 a.m. to 6:00 p.m., Monday through Friday.
- Construction is prohibited on Saturdays, Sundays or Legal Holiday without prior written approval from the City.
- Work on a Saturday, Sunday, or Legal Holiday will be approved only when it is in the interest of City and must be of such a nature as to provide for, but not limited to, the following:
    - Least inconvenience to the public and
    - Least inconvenience to the Agency's infrastructure.

- The Contractor shall submit a written request to the City for approval of Work on a Saturday, Sunday, or Legal Holiday, no less than 48 hours in advance of the Work. The City shall approve or reject the request in writing. No additional Contract Time will be given if request is rejected.
- Contractor shall notify in writing and coordinate with adjacent property owners and City prior to commencing work on adjacent owner's property, including work within easements. No work is authorized on adjacent private property not covered with a permanent or temporary easement.
- Construction activities include all field maintenance of equipment, refueling, and pick-up and delivery of equipment and materials, as well as actual construction activities.
- Contractor is solely and completely responsible for conditions of the job site, including safety of all persons and property during performance of the work, in accordance with generally accepted construction practices. This requirement will apply continuously and not be limited to normal working hours.
- Provide the Agency Project Manager with a 24-hour emergency contact person's name and telephone number.

Add the following subsection:

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

Limitations	**Subsection**
Contract Completion Time	00180.50(h)
Noise Control	00290.32

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

00180.41 Project Work Schedules - Add the following after the third paragraph:

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

00180.42 Preconstruction Conference - Add the following:

Submit the following during the preconstruction conference unless otherwise directed:

- The name, address, and telephone number of a person employed by the Contractor who can be reached day or night to handle emergency matters.
- Subcontractor's list including contact list for each subcontractor with phone numbers and addresses and work to be performed.
- List of personnel authorized to sign change orders and receive progress payment warrants.
- Traffic Control Plan
- Storm Pipe, Materials & Details
- Horizontal Bore Casing & Carrier Pipe, Materials & Details
- Shoring/Excavation/Staging Plan for Horizontal Bore
- Temporary Stormwater Bypass Plan(s)
- Dry Utility Relocation Schedule
- Project Work Schedule

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

After meeting with the Engineer for the preconstruction conference and after potholing of potential utility conflicts, hold a group utilities scheduling meeting with representatives from the utility companies involved with this project. Incorporate the utilities time needs into the Contractor's schedule submitted prior to the preconstruction conference.

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

- Conduct the work at all times in a manner and sequence that will insure minimal interference with traffic. If it is in the City's best interest to do so, the City may require the Contractor to finish a portion or unit of the project on which work is in progress or to finish a construction operation before work is started on an additional portion or unit of the project.

00180.50(h) Contract Time –

All Work under the contract must be completed within 90 Calendar Days of the Notice To Proceed or by October 31, 2014, whichever is sooner.

Work on storm sewer systems shall not begin until Clean Water Services Sewer Connection Authorization has been received (under review).

Work within wetlands and tributary shall not begin until joint permit has been received (under review).

No work may be performed within railroad right-of-way until a permit from the railroad company has been received (under review).

In water work is limited to July 15 through September 30 in accordance with Oregon Department of Fish and Wildlife Guidelines.

Recording of the elapse of Calendar Days will begin on the day the Contractor begins On-Site Work as defined in 00110.20

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

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

00180.85(b) Liquidated Damages - Add the following:

The liquidated damages for failure to complete the Work on time required by 180.50(h) will be **$800.00** per Calendar Day*

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

END OF SECTION

SECTION 00190 - MEASUREMENT OF PAY QUANTITIES

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

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

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

END OF SECTION

SECTION 00195 - PAYMENT

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

00195.10 Payment for Changes in Material Costs - Delete and replace with the following:

No asphalt cement price escalation/de-escalations shall be used on this project.

00195.12 Steel Material Price Escalation/De-Escalation Clause - Modify as follows:

No steel material price escalation/de-escalations shall be used on this project. There is no option for Contractor participation.

00195.20(a) Insignificant Changed Work – Add the following to the end of the first paragraph:

Total value of changes made under 00140.30 amounting to less than 30% of the original contract amount shall be considered as Insignificant Changed Work and shall not change unit costs of the Work.

00195.50 Progress Payments and Retained Amounts - Modify as follows:

00195.50(a) Progress Payments - Modify as follows:

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

At a regular period each month to be determined at the Preconstruction Conference, the Contractor will make an estimate of the amount and value of pay item work completed and in-place. This estimate will be submitted to the Project Manager for approval.

The Agency's payment of progress payments, or determination of satisfactory completion of Pay Items or Work or release of retainage under 00195.50(d), shall not be construed as Final Acceptance or approval of any part of the Work, and shall not relieve the Contractor of responsibility for defective Materials or workmanship or for latent defects and warranty obligations.

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

(2) Value of Material on Hand - The Contractor will also make an estimate of the amount and value of acceptable material to be incorporated in the completed work which has been delivered and stored as given in 00195.60(a).

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

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

The amount to be retained from progress payments will be 2.5% of the value of Work accomplished, and will be retained in one of the forms specified in Subsection (c) below. The City will withhold Retainage from all force account and change order work.

00195.50(c) Forms of Retainage – Replace the text of this subsection with the following:

(1) Cash, Alternate A - Retainage will be deducted from progress payments and held by the Agency until final payment is made according to 00195.90, unless otherwise specified in the Contract.

The Agency will deposit the cash retainage withheld in an interest-bearing account in a bank, savings bank, trust company, or savings association for the benefit of the Agency, as provided by ORS 279C.560(5).

Any retainage withheld on Work performed by a Subcontractor will be released to the Contractor according to 00195.50(d).

(2) Cash, Alternate B (Retainage Surety Bond) – Replace the 3rd paragraph with the following:

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

00195.50(c-3) Bonds, Securities, and Other Instruments

(4) Bonds, Securities, and Other Instruments – Replace the text of this subsection with the following:

In accordance with ORS 279C.560, unless the Agency finds in writing that accepting a bond, security or other instrument poses an extraordinary risk that is not typically associated with the bond, security or other instrument, the Agency will approve the Contractor's written request to deposit bonds, securities or other instruments with the Agency or in a custodial account or other account satisfactory to the Agency with an approved bank or trust company, to be held instead of cash retainage for the benefit of the Agency. In such event, the Agency will reduce the cash retainage by an amount equal to the value of the bonds, securities and other instruments. Interest or earnings on the bonds, securities and other instruments shall accrue to the Contractor.

Bonds, securities and other instruments deposited instead of cash retainage shall be assigned to or made payable to the Agency and shall be of a kind approved by the Director of the Oregon Department of Administrative Services, including but not limited to:

- Bills, certificates, notes or bonds of the United States;
- Other obligations of the United States or agencies of the United States;
- Obligations of a corporation wholly owned by the federal government;
- Indebtedness of the Federal National Mortgage Association;
- General obligation bonds of the State of Oregon or a political subdivision of the State of Oregon;
- Irrevocable letters of credit issued by an insured institution, as defined in ORS 706.008.

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

00195.50(e) Withholding Payments – Replace the text of this subsection with the following:

Notwithstanding ORS 279C.555, ORS 279C.570 or 00195.50(d), if a Contractor is required to file statements on the prevailing rate of wages, but fails to do so, the Agency will retain 25% of any amount earned as required in 00175.65.

Delete the text of the following subsection and replace with the following:

00195.90 Final Payment

(c) No Waiver of Right to Make Adjustment – Replace the text of this subsection with the following:

The fact that the Agency has made any measurement, estimate, determination or certification either before or after completion of the Project, Final Acceptance, Agency assumption of possession of the Project Site, determination of satisfactory completion of Pay Items or Work or release of retainage under 00195.50(d) or payment for any part of the Work, shall not prevent either party from:

- Showing the true amount and character of the Work;
- Showing that any measurement, estimate, determination or certification is incorrect;
- Recovering from the other party damages that may have been suffered because the other party failed to comply with the Contract.

00195.90 Final Payment – Add the following subsections:

(d) The Contractor shall maintain a current and accurate record of the work completed during the course of this contract. These "as-built" drawings shall be kept by accurately marking a designated set of the contract Plans with the specified information as work proceeds. Accurate, complete and current "as-built" drawings are a specified requirement for full or partial payment of the work completed. At project completion and as a condition of final payment, the Contractor shall deliver an acceptably complete and legible full-size set of "as-built" drawings to Agency.

The "as-built" drawings must show the information listed below. Where the term "locate" or "location" is used, it means a record of position with respect to both the construction vertical datum and either horizontal datum or a nearby permanent improvement.

- Record location of underground services and utilities as installed.
- Record location of existing underground utilities and services that are to remain and that are encountered during the course of the work.
- Record changes in dimensions, location, grade or detail to that shown on the Plans.
- Record changes made by change order.
- Record details not in the original Plans.
- Provide fully completed shop drawings reflecting all revisions.

(e) Notwithstanding any contrary language in the Contract Documents, Contractor's acceptance of the final payment will release Agency and the Engineer from all claims and all liability to the Contractor for all things done or furnished in connection with the Work, and every act of the Agency and others relating to or arising out of the Work. The Contractor's acceptance of final payment is conclusive proof of Agency's full performance under the Contract. If Agency requests, Contractor will sign a release stating Contractor has been paid in full prior to the final payment. No payment, final or otherwise, will operate to release the Contractor or the Contractor's sureties from obligations under the Contract and will not affect the continuing validity and enforceability of the performance, payment and other bonds and warranties provided pursuant to the Contract.

END OF SECTION

SECTION 00196 - PAYMENT FOR EXTRA WORK

Comply with Section 00196 of the Standard Specifications.

END OF SECTION

SECTION 00197 - PAYMENT FOR FORCE ACCOUNT WORK

Comply with Section 00197 of the Standard Specifications.

END OF SECTION

SECTION 00199 - DISAGREEMENTS, PROTESTS AND CLAIMS

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

00199.20 Protest Procedure – Add the following text to the following subsection:

Written Notice – The Engineer has no responsibility to evaluate the protest unless the Contractor has timely filed a proper notice submitting all of the above information. Failure to comply with this notice requirement renders the notice improper and shall constitute a waiver of any claim for additional compensation for any part of the protested work.

00199.20(g) Protest Evaluation by Third Party Neutral – Delete this subsection.

Claims Procedure(f) Payment of Costs, Expenses and Attorney's Fees – Add this subsection.

Each party is responsible for its own costs, expenses and attorney's fees in the event of litigation.

00199.40(b) Step 1: Region Level Review – Add the following text to this subsection:

The Contractor shall request that the Engineer arrange a meeting with the Region-level reviewer in order to present the denied or partially denied claim for formal review and discussion. For the purposes of this Contract, the "Region-level reviewer" is Agency's public works director. The meeting will take place within 21 Calendar Days of the Agency's receipt of the request, or as otherwise agreed by the parties.

00199.40(c) Step 2: Agency Level Review – Replace paragraphs 1 and 4 with the following:

The Contractor shall request a meeting with the Contract Administration Engineer, to present the claim for final Agency review. For the purposes of this Contract, the "Contract Administration Engineer" is the Agency's City Manager. The presentation will take place within 21 Calendar Days of the Agency's receipt of the Contractor's written request, or as otherwise agreed by the parties.

If the Contractor does not accept the Step 2 decision, the Contractor may, within 10 Calendar Days of receipt of the written decision, request in writing through the Engineer that the claim be advanced to Step 3.

00199.40(d) Step 3: Arbitration; Claims Review Board – Delete this subsection and replace with the following:

00199.40(d) Step 3: Litigation –

This step applies to any claim that is not resolved under Steps 1 or 2.

The Contractor must follow Steps 1 and 2 in order, and exhaust all available administrative remedies, before resorting to litigation. The Contractor must properly file a lawsuit in a court of competent jurisdiction within six months from the date of the final decision that exhausted the Contractor's administrative remedies under this Contract.

In any litigation, the entire text of any order or permit issued by a governmental or regulatory body, as well as any documents referenced or incorporated by reference therein, will be admissible for the purpose of Contract interpretation.

The Contract or any of its provisions will not be construed against either party regardless of who drafted it. Other than as may be modified by the Contract, the applicable rules of contract construction and evidence will apply. The Contract will be governed by and construed in accordance with Oregon law without regard to conflict of laws principles.

Any dispute between the Agency and the Contractor that arises from or relates to the Contract and that is not resolved under Section 00199 may only be brought and must be conducted solely and exclusively in the Circuit Court for the State of Oregon, Washington County. If a dispute must be brought in a federal forum, then it may only be brought and conducted solely and exclusively in the United States District Court for the State of Oregon. To the maximum extent permitted by law, the dispute will be tried to a court without a jury and will not be subject to mandatory arbitration. In no event will this Subsection be construed as a waiver by the Agency of any form of defense or immunity, whether sovereign immunity, governmental immunity, immunity based on the Eleventh Amendment to the United States Constitution, from any claim or from the jurisdiction of any court. Contractor consents to the personal jurisdiction of the courts referenced herein.

In any dispute between the Agency and the Contractor that arises from or relates to the Contract, each party is solely responsible for its own costs and fees, including attorney fees.

00199.40(e) Step 4: Litigation – Delete this subsection in its entirety.

00199.60 Expenses, Costs and Attorney Fees – Add this subsection.

Notwithstanding any contrary language in the Contract Documents, each party will solely bear its own expenses, costs and fees, including attorney fees, throughout prosecution of the Work and including any disagreements, protests or claims, including all trials and appeals.

END OF SECTION

SECTION 00210 – MOBILIZATION

Comply with Section 00210 of the Standard Specifications supplemented and/or modified as follows:

00210.40 Mobilization - Add the following bullet to the end of the bulleted list:

- General utility locating and potholing

END OF SECTION

SECTION 00220 - ACCOMMODATIONS FOR PUBLIC TRAFFIC

Comply with Section 00220 of the Standard Specifications supplemented and/or modified as follows:

00220.02 Public Safety and Mobility - Add the following bullets to the end of the bullet list:

- Do not stop or hold vehicles on the traveled way, at intersections, or other connecting roadways within the project limits for more than five (5) minutes.
- Obtain permission from the City before closing any City roadway or sidewalk. No street or sidewalk closures will be permitted until the Engineer approves it and the area is signed according to Section 00225.
- Notify, in writing, all affected emergency services, school districts, and the US Postal Service at least 14 days in advance of the street closure and provide documentation to the Engineer, in writing, that such notice was provided.
- When construction requires the closure of a sidewalk or pedestrian path, notify, in writing, the City of Sherwood at least 14 days in advance of closure. Do not close sidewalk or pedestrian path until the City provides written approval. After approval, provide 48-hour public notification prior to closing the pedestrian access.
- Place work zone signs and supports in a manner that they will not block existing walkways.
- All traffic control shall be removed out of SW Main Street and SW Division Street at the end of each workday.
- Notify the City of Sherwood Police and Tualatin Valley Fire & Rescue Department of all changes to the traffic control prior to completing the change. Notify the Police and Fire of all lane and road closures. The Sherwood Police Department may be contacted at (503) 625-5523, and Tualatin Valley Fire & Rescue at (503) 649-8577.

00220.03 Work Zone Notifications(b) Closures – Delete the bulleted items from this subsection and replace with the following:

- **Lanes and Roads** – One (1) calendar day prior to the pre-construction meeting and at least three (3) business days before closing any portion of the road. Also, at least five (5) calendar days before any lane closure, confirm with the City of Sherwood that written notification of has been given to all affected emergency & essential services, school districts, school bus dispatchers, and US Postal Service, and that general notification mailers and door hangers have been provided to each affected property within the work zone. Local access shall be maintained to private properties per section 00220.02 of the Standard Specifications and Project Special Provisions.

00220.03(c) Access to Private Property – Add this subsection.

If the Contractor must block access to private property per section 00220.02 of the Standard Specifications and Project Special Provisions in order to complete the work, the Contractor shall make verbal contact with the inhabitants of the property at least twice, once 48-hours prior to and again 1-hour prior to blocking access. If the Contractor is unable to make verbal contact with the inhabitants of the property in either instance, the Contractor shall leave written notification in a conspicuous location containing the field Superintendent's cell phone number and other contact information necessary to make immediate verbal contact and in person if requested. No access shall be blocked for any period of time until verbal notification has been made and the City Inspector notified.

00220.40(e) Lane Restrictions – Add the following text:

- SW Main Street may be closed to through traffic on approval by the City.
- SW Main Street shall have 1 sidewalk open at all times.
- SW Division Street shall remain open to 1 lane of traffic at all times.
- The trail within SW Division Street shall remain open to pedestrians. Contractor is responsible for any signing and temporary gravel (6-foot wide) pedestrian path necessary (incidental).
- All street traffic lanes shall be open at the end of each work day.

00220.40(e) Lane Restrictions(1) Weekdays – Replace the text with the following:

- SW Main Street may only be closed between 9:00AM and 3:00PM Monday through Friday.
- SW Division Street may only be closed from 9:00AM and 5:00 PM Monday through Friday.

END OF SECTION

SECTION 00225 - WORK ZONE TRAFFIC CONTROL

Comply with Section 00225 of the Standard Specifications supplemented and/or modified as follows:

00225.05 Contractor Traffic Control Plan - Modify this section as follows:

The Agency or Engineer has not prepared a Traffic Control Plan (TCP). The Contractor shall be required to prepare a TCP and submit it to the City for review and approval.

- If at any time during the work the Engineer determines the Traffic Control Plan to be inadequate, the Contractor shall provide a revised Traffic Control Plan and install the additional signs and devices at no additional cost to the Owner.

00225.11 Temporary Signing - Replace the sentence that begins "Furnish new or acceptable temporary signs..." with the following sentence:

Furnish temporary signs meeting the requirements of the "Acceptable" category shown in the American Traffic Safety Services Association (ATSSA) "Quality Standards For Work Zone Traffic Control Devices" handbook.

Add the following subsection:

00225.11(a-5) Light-Weight Sign Substrate - Use light-weight sign substrates from the QPL.

00225.12(h) Pedestrian Channelizing Device – Add the following subsection:

Use pedestrian channelizing devices (PCD) from the QPL or Conditional Use List and as shown on the standard drawings or as modified by the supplemental drawings.

00225.40 General – Add the following to the end of this subsection:

The Contractor shall post notice of construction for each resident a minimum of 48 hours prior to the disruption or shutdown of any driveway. Notices shall provide information regarding the dates of construction affecting their access.

The Contractor shall post No Parking signs on Type II barricades a minimum of 48 hours prior to the shutdown of on-street parking for the Contractors trenching operations. On-street parking shall be maintained at all times except in the near vicinity of the Contractors active construction zone. Once backfilled, the Contractor shall remove No Parking signs. Notices shall provide information regarding the dates of construction affecting the on-street parking.

00225.90 Payment - Replace this section with the following:

Payment for Work Zone Traffic Control shall be Method "B" Lump Sum Basis.

The Contractor shall be responsible for all traffic control costs including all flagging to complete the work and punch-list items.

Payment shall also include payment for the Contractor supplying approved traffic control plans as specified in the Provisions.

Any additional signs and devices deemed necessary by the Engineer or Inspector shall be installed at no additional cost to the Owner.

END OF SECTION

SECTION 00240 – TEMPORARY DRAINAGE FACILITIES

Comply with Section 00240 of the Standard Specifications supplemented and/or modified as follows:

00240.40 General - Add the following paragraphs as follows:

A Temporary Stormwater Bypass System is required to convey stormwater flows from the point of origin to the existing unnamed tributary for the purpose of bypassing the site work area. The following work areas within the project will require temporary drainage facilities:

1. Horizontal Auger Bore beneath Southern Pacific Railroad ROW
2. Existing Storm Drain System

Horizontal Auger Bore
The temporary stormwater bypass facility for the horizontal auger bore should be designed to hard pipe the existing channel and connect to the existing 21" Corrugated Metal Pipe (CMP) and convey stormwater flows past the launch "pit" area for the horizontal bore.

- The existing CMP culvert currently conveys approximately 10 cubic feet per second (cfs) before backwater flooding occurs at the existing inlet.
- Contractor (and its subcontractors) should be aware that stormwater flows which exceed the capacity of the existing CMP culvert or the bypass system will result in temporary flooding of the launch pit area.
- The Temporary Drainage Facility for the horizontal bore shall wholly be located within the disturbance limits identified on the project plans.

Existing Storm Drain System
This project replaces, upgrades and connects portions of an active storm drain system and several associated outfalls into the unnamed tributary drainage. The Contractor shall construct, and coordinate the installation of temporary drainage facilities (if required) for the existing storm drain system to convey any storm drain flows at the time of construction.

Contractor is required to submit proposed temporary drainage system design/plan to the City and Project Engineer for approval. Written approval from the City shall be obtained prior to demolition or earthwork activities. Temporary Stormwater Bypass Systems are required to be in-place and operational prior to any rain event (at a minimum) and within 8 hours of Contractor notification by City or Project Engineer.

00240.90 Payment – Delete and replace with the following:

All temporary drainage facilities shall be completed on a Lump Sum Basis under the following pay items:

Pay Item	Unit of Measurement
(a) Horizontal Auger Bore Drainage Facility	Lump Sum
(b) Existing Storm Drain, Temporary Drainage Facilities	Lump Sum

Payment will be payment in full for furnishing, placing, maintaining, and removing temporary drainage facilities, and for furnishing all equipment, labor, and incidentals necessary to complete the work as specified.

END OF SECTION

SECTION 00280 - EROSION AND SEDIMENT CONTROL

Comply with Section 00280 of the Standard Specifications supplemented and/or modified as follows:

00280.01 National Pollutant Discharge Elimination System – Delete the entire section and replace with the following:

Comply with Federal, State, and local laws, rules and regulations, and the National Pollutant Discharge Elimination System (NPDES) 1200 Permit or Permits applicable to the project. A copy of the Agency's General 1200-CN Permit, is available from the Agency.

00280.02 Erosion and Sediment Control Plan on Agency Controlled Lands – Delete the entire section and replace with the following:

The contractor shall adhere to the conditions of 1200-CN permit and follow the erosion control plan as shown in the project plans.

00280.03 Non-Agency Controlled Lands Erosion and Sediment Control Plan - Delete this section:

00280.14 Erosion Prevention Materials – Add the following item:

(f) Jute Matting – supply the following jute matting materials meeting Clean Water Services (CWS) standards in locations designated on the plans.

a) Geojute Plus or approved equivalent
b) Econojute or approved equivalent

00280.15 (e) Flow Spreader – Delete and replace with the following:

Furnish Commercial Grade Concrete for concrete spreaders as shown on the plans and meets the requirements of Section 00440.12.

00280.40 Installation – Replace the first paragraph with the following:

Install erosion and sediment control BMP as shown and according to the most current edition of the City of Sherwood Engineering Design and Standard Details Manual. Install these BMP before performing clearing, grading, or other land alteration activities. Ensure that no visible and measurable sediment or pollutants leave the Project boundaries, enter drainage systems or waterways, or violate applicable water standards.

For the purposes of this requirement, "visible and measurable" is defined as:

- Deposits or tracking of mud, dirt, sediment or similar material exceeding ½ cubic foot in volume on any private or public street or adjacent property, or into any storm or surface water drainage system, either by direct deposit, dropping or discharged, or as a result of erosion; or
- Evidence of concentrated flows or water over bare soils; turbid or sediment-laden flows; or evidence of on-site erosion, such as rivulets on bare slopes where the flow of water is not filtered or captured on the site; or
- Earth slides, mudflows, earth sloughing, or other earth movement off the Project site.

00280.45 (e) Flow Spreader – Replace the 2nd sentence with the following:

The flow spreaders within the water quality swale shall be constructed with commercial grade concrete. The concrete spreaders shall be formed and constructed as shown on the project plans.

00280.70 Removal – Replace the first sentence of the paragraph with the following:

Within 30 days of the notification of acceptance of permanent stabilization, remove temporary erosion and sediment control devices, materials, and erosion control signing from the area. Any disturbance from this removal shall be permanently stabilized with seed and mulch.

00280.90 Payment – Replace with the following:

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

Pay Item	Unit of Measurement
a) Erosion Control	Lump Sum
b) Sediment Fence	Foot
c) Inlet Protection	Each
d) Seeding and Mulching	Acre
e) Check Dams	Each
f) Gravel Construction Entrance	Each
g) Concrete Washout	Lump Sum
h) Slope Protection Matting – EconoJute	Square Yard
i) Water Quality Facility Matting – Geojute Plus.	Square Yard
j) Concrete Flow Spreader (WQ Facility), 12" Depth	Each
k) Concrete Flow Spreader (WQ Facility), 36" Depth	Each
l) Concrete Flow Spreader (WQ Facility), 42" Depth	Each

Item (a) includes

All items not listed in (b) through (l) required to provide erosion and sediment control throughout the project duration, including changes to the erosion and sediment control facilities that may be necessary, but not indicated in the ESCP.

- Providing the Erosion and Sediment Control Manager
- Revising, and documenting the ESCP
- Mobilization
- Monitoring activities
- Furnishing, stockpiling, protecting, restocking, and removing emergency materials
- Preparing Project for winter shut-down
- Inspecting, maintaining, and removing erosion control devices.
- Restoring, mulching, tacking, and seeding all disturbed ground, work, and storage areas not otherwise covered.

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

No separate or additional payment will be made for:

- Removing and disposing of sediment build-up behind sediment fences and sediment barriers
- Removing and reinstalling required appurtenances to modify temporary slope drains as the embankment slopes are changed
- Constructing and removing temporary slope berms
- Applying dust control
- Erosion control for work outside the construction limits including but not limited to borrow pits, haul roads, disposal sites, and equipment storage sites

END OF SECTION

SECTION 00290 - ENVIRONMENTAL PROTECTION

Comply with Section 00290 of the Standard Specifications supplemented and/or modified as follows:

00290.20(c)(3)d. Concrete and Masonry - Replace the paragraph that begins "Concrete and masonry..." with the following paragraph:

Concrete, Masonry, and Asphalt is to be removed from the site and properly disposed of.

00290.20(d) Hazardous Waste Management - In the paragraph that begins "In addition to current Laws ... ", replace the two bullets that begin "If the quantity of hazardous waste projected to be ... " with the following three bullets:

- If the quantity of hazardous waste projected to be generated meets the requirements for a LQG, prepare a full Hazardous Waste Contingency Plan according to 40 CFR 265 Subpart O. Maintain a copy of the Contingency Plan on-site at all times during construction activities, readily available to employees and inspectors.

- If the quantity of hazardous waste projected to be generated meets the requirements for a SQG, prepare a modified Hazardous Waste Contingency Plan according to 40 CFR 262.34(d)(5) and 40 CFR 265 Subpart C. Maintain a copy of the modified Contingency Plan on-site at all times during construction activities, readily available to employees and inspectors.

- If the quantity of hazardous waste projected to be generated meets the requirements for a CEG, follow the contingency planning and storage requirements of the SQG unless the only potentially hazardous waste is aerosol cans smaller than 20 ounces. Limit storage to 180 days and 2,200 pounds. Prepare a modified Hazardous Waste Contingency Plan and keep a copy on-site with emergency response procedures and contact information.

00290.20(g) Spills and Releases - Replace the lead-in paragraph that begins "In the event... ", with the following lead-in paragraph:

In the event of a spill or release of a hazardous substance or hazardous waste or the release of any other material that has the potential to harm human health or the environment, do the following:

00290.30(a) Pollution Control Measures - Add the following subsection and bullets:

(7) Water Quality:

- Do not discharge contaminated or sediment-laden water, including drilling fluids and waste, dewatered trench, or water contained within a work area isolation, directly into any waters of the state or U.S. or municipal collection and conveyance systems until it has been satisfactorily treated (for example: bioswale, filter, settlement pond, pumping to vegetated upland location, bio-bags, dirt-bags). Treatment shall meet the turbidity requirements below.
- Do not cause turbidity in waters of the State or U.S. greater than 10% above background reading (up to 100 feet upstream of the Project), as measured 100 feet downstream of the Project.
- During construction, monitor and inspect all erosion controls daily during the rainy season and weekly during the dry season, or more often as necessary, to ensure the erosion controls are working adequately and meeting treatment requirements.
- If construction discharge water is released using an outfall or diffuser port, do not exceed velocities more than 4 feet per second, and do not exceed an aperture size of 1 inch.
- If monitoring or inspection shows that the erosion and sediment controls are ineffective, mobilize work crews immediately to make repairs, install replacements, or install additional controls as necessary.
- Implement containment measures adequate to prevent pollutants or construction and demolition materials, such as waste spoils, fuel or petroleum products, concrete cured less than 24 hours, concrete cure water, silt, welding slag and grindings, concrete saw cutting by-products and sandblasting abrasives, from entering waters of the state or U.S. or municipal collection and conveyance systems.
- End-dumping of riprap with the waters of the State or U.S. is not allowed. Place riprap from above the bank line.
- Cease project operations under high flow conditions that may result in inundation of the project area, except for efforts to avoid or minimize resource damage.
- The Project Manager retains the authority to temporarily halt or modify the Project in case of excessive turbidity or damage to natural resources.

00290.34(b) Prohibited Operations – Add the following bulleted item to the end of this subsection.

- Allow equipment to enter or work in the waters of the State or U.S.

00290.41 Protection of Wetlands – Add the following:

Comply with the conditions of the Clean Water Service's (CWS) Service Provider Letter (SPL) and USACE/ODSL Removal/Fill Permits obtained for this Project.

00290.90 Payment – Delete and replace with the following:

No payment will be made for work performed under this section, as it is considered incidental to other bid items.

END OF SECTION

SECTION 00310 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS

Comply with Section 00310 of the Standard Specifications supplemented and/or modified as follows:

00310.91 Lump Sum Basis – Add the following pay item:

Pay Item	Unit of Measurement
c) Removal of Water Quality Pond Walls, Inlets & Outfall	Lump Sum

00310.92 Separate Item Basis – Add the following pay item:

Pay Item	Unit of Measurement
g) Removal of Fences	Foot
h) Removal of Curb Inlets	Each
i) Removal of AC Path	Sq. Ft.
j) Removal of Storm Leads	Foot

No separate or additional payment will be made for:

- Saw cutting
- Pipe disposal
- Concrete & AC disposal

END OF SECTION

SECTION 00320 - CLEARING AND GRUBBING

Comply with Section 00320 of the Standard Specifications supplemented and/or modified as follows:

00320.40(b) Preserving and Trimming Vegetation – Add the following subsection:

> **(4) Trees To Be Saved** – Provide and place Tree Protection Fence (48" high density, orange, polyethylene safety fence and/or orange sediment fence) along boundaries of protection area as established in the field as directed by the Project Arborist. Do not begin construction activity or move equipment into existing tree areas until the Tree Protection Fence is in-place.
>
> Do not work within the critical root zone of marked trees unless written approval is obtained from the Project Arborist. The Contractor is responsible for any damage to or removal of marked trees. Tree damage will be determined by the Project Arborist.

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

00320.42 Disposal of Matter - Dispose of all matter and debris according to 00290.20, except for Selected Topsoil material which may be temporarily stockpiled on site and used as topsoil where specified. Excess topsoil materials shall be off-hauled and disposed off-site.

00320.80 Measurement – Delete and replace with the following:

00320.80 Measurement – No measurement will be made for Clearing and Grubbing. No measurement will be made for stripping, stockpiling, redistribution of topsoil materials and off-haul of excess materials.

The contractor shall complete their own earthwork calculations to confirm the required quantities.

00320.90 Payment – Delete and replace with the following:

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

Pay Item	Unit of Measurement
a) Stripping (6"+/- Depth), Stockpiling, Redistribution & Off-Haul	Lump Sum
b) Tree Protection Fence	Foot

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

Item (a) includes the following:

- Vegetation & tree removal
- Clearing
- Grubbing
- Root picking (if required)
- Strippings (topsoil) excavation, stockpiling, redistribution & off-haul

Item (b) includes removal of the fence by contractor. Cost for tree protection fence at the conclusion of construction is incidental.

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

END OF SECTION

SECTION 00330 – EARTHWORK

Comply with Section 00330 of the Standard Specifications supplemented and/or modified as follows:

00330.20 Tamping Foot Rollers - In the paragraph, replace "115 tons" with "15 tons".

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

Unless otherwise specifically allowed and subject to the requirements of 00280.03, dispose of materials, classed as waste materials in 00330.41 (a-3) and 00330.41 (a-4), outside and beyond the limits of the Project and Agency controlled property according to 00290.20. Do not dispose of materials on wetlands, either public or private, or within 300 feet of rivers or streams.

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

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

00330.42(c-8) Engineered Fills – Delete the section and replace with the following:

Engineered Fill – General – Structural fill placed to construct the embankments for the regional water quality facility shall utilize Selected General Backfill materials per Section 00330.13. The Selected General Backfill should be free of topsoil, wet and/or organic soil, roots, debris of wood/organic pieces, and other deleterious materials. Select General Backfill materials for use in Engineered Fills shall be inspected and approved by the Project Geotechnical Engineer.

Sloped grades steeper than 6H:1V to receive fill should be stepped prior to fill placement. All Engineering Fill should be placed in a maximum of 8 inch loose lifts and compacted. Compaction of Engineered Fills should be to at least 95 percent of the maximum dry density, as measured by the standard Proctor AASHTO T-99 or equivalent.

Contractor shall adhere to recommendations with respect to Engineered Fill which are outlined in the Geotechnical Engineering Report for the project (GeoPacific Engineering, Inc. report dated February 26, 2014).

00330.43(b) Moisture-Density Testable Materials: Modify sections (1) and (2) as follows:

(1) Test in-place materials for compaction according to AASHTO T-99.

(2) In-place materials shall meet the following moisture content, density, and deflection requirements, each of which has equal weight and each of which shall be satisfied:

(a) Moisture Content – Moisture content at the time of compacting the materials shall be prepared to within minus 4% to plus 2% of optimum moisture content. Material which does not contain sufficient moisture to obtain proper compaction shall be wetted and thoroughly mixed as directed. Material containing an excess of moisture shall be dried by manipulation, aeration, drainage or other means before being compacted.

(b) Density -- After compaction of each layer the density shall be at least:

- 95% of maximum density per AASHTO T-99 (Standard Proctor).

00330.71 Daily Progress Reports – Delete this section.

00330.80 Measurement - Replace with the following:

There will be no measurement of quantities for earthwork. The Contractor shall complete their own earthwork calculations to confirm the required quantities.

If changes to the project plans are required, the changes to earthwork will be measured in-place in volume units (cubic yards) and are identified as separate bid alternates for Excavation, Embankment & Off-Haul . In-place volumes (bank cubic yards) for changes or additions to the earthwork volumes will be determined by the Engineer.

00330.81 Excavation Basis Measurement – Delete this section.

00330.82 Embankment Basis Measurement – Delete this section.

00330.90 Payment– Replace with the following:

All earthwork, including all excavation and embankment as defined under Sections 00330 and 00405.41 shall be completed on a Lump Sum Basis under the following pay item:

Pay Item	**Unit of Measurement**
a) Earthwork – Excavation, Embankment & Off-Haul	Lump Sum
b) Additional Excavation	Bank Cubic Yards
c) Additional Embankment	Bank Cubic Yards
d) Additional Off Haul	Bank Cubic Yards

Item (a) will be payment in full for excavation, selecting, handling, hauling, placing, compacting, stockpiling and off-haul of excess materials as specified on the project

plans and all other costs in furnishing required embankment materials. No separate or additional payment will be made for water used to moisture condition for proper compaction and in the care of the work.

Items (b, c & d) will be payment for additional excavation, embankment and off-haul which are added to project at the direction of the City or Engineer.

00330.91 Kinds of Pay Excavation – Delete this section.

00330.92 Kinds of Incidental Earthwork – Delete the bullet that reads "If shown on the plans."

00330.93 Excavation Basis Payment – Delete this section.

00330.94 Embankment Basis Payment – Delete this section.

END OF SECTION

SECTION 00331 – SUBGRADE STABILIZATION

Comply with Section 00331 of the Standard Specifications.

END OF SECTION

SECTION 00340 - WATERING

Comply with Section 00340 of the Standard Specifications supplemented and/or modified as follows:

00340.40(a) General – Add the following after the first paragraph of the subsection:

The Contractor shall not request the use of or obtain water from any residential, commercial, or industrial property owners or tenants. Contractor to contact and coordinate with the City of Sherwood for hydrant meter.

If in the opinion of the Engineer or the City, dust control watering is necessary, the Contractor shall respond to such request within one (1) hour or pay Agency a fine of $250.00 per occurrence. The Contractor shall furnish the Engineer the name(s) and telephone number(s) of the qualified person(s) available to perform dust control watering.

00340.80 Measurement - Replace with the following:

There will be no measurement of quantities for watering under this contract.

00340.90 Payment - Replace with the following:

There will be no payment for watering under this contract. Watering is considered incidental to other pay items. No separate payment will be made for fees associated with hydrant meter.

END OF SECTION

SECTION 00350 - GEOSYNTHETIC INSTALLATION

Comply with Section 00350 of the Standard Specifications supplemented and/or modified as follows:

00350.10 Materials – Add the following to the end of this subsection:

Provide manufacturer's certifications complying with 02320.10(c) for the following geosynthetic(s):

	Certification	
Geotextile	**Type 1**	**Type 2**
Subgrade		X
Riprap		X

00350.80 Measurement – Delete and replace with the following:

There will be no measurement of quantities for subgrade or riprap geotextiles under this contract.

00350.90 Payment – Delete and replace with the following:

There will be no payment for geosynthetics under this contract. Subgrade and riprap geotextile fabrics are considered incidental to other pay items.

END OF SECTION

SECTION 00370 - FINISHING ROADBEDS

Comply with Section 00370 of the Standard Specifications supplemented and/or modified as follows:

00370.80 Measurement– Replace with the following:

No measurement will be made for work performed under this section.

00370.90 Payment – Replace with the following:

No additional payment will be made for Finishing Roadbeds. This item is considered incidental to Section 00330.

END OF SECTION

SECTION 00390 – RIPRAP PROTECTION

Comply with Section 00390 of the Standard Specifications modified as follows:

00390.01 Definitions – Add the following:

Energy Dissipating Boulder – Energy dissipater boulder consisting of large riprap boulder with specified minimum stone weight placed in pipe outlet flow path as specified in the plans.

00390.13 Riprap Blanket – Delete section and replace with the following:

Riprap Class	Filter Blanket
Class 200	No filter blanket required, except at locations specified on plans downstream of outlet structures. Downstream of outlet structures locations shall have 6 inch layer (minimum) of Class 50 Riprap conforming to 00390.11 over riprap geotextile conforming to 00390.41.
Class 50	No filter blanket required, place riprap geotextile over subgrade conforming to 00390.41

00390.41 Riprap Geotextile – Replace with the following:

Install a Type 2 riprap geotextile according to the requirements of Section 00350 and Section 02320 and as shown or directed.

00390.80 Measurement – Replace with the following:

Measurement of quantities of Riprap Protection will be made on an area basis.

00390.90 Payment – Replace with the following:

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

	Pay Item	Unit of Measurement
(a)	Riprap Protection , Class 50	Cubic Yard
(b)	Riprap Protection, Class 200	Cubic Yard

Riprap Geotextile (Type 2) and Energy Dissipating Boulders are incidental to Riprap Protection and will not be paid for separately.

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

END OF SECTION

SECTION 00405 – TRENCH EXCAVATION, BEDDING, AND BACKFILL

Comply with Section 00405 of the Standard Specifications supplemented and/or modified as follows:

00405.2 Definitions – Modify as follows:

Boulder Excavation – The removal, without drilling, blasting or splitting, of masses of rock having a volume of one cubic yard or greater. Volume will be measured per 00405.81.

Pipe Zone - The area from the top of the bedding to a point 6 inches, minimum, above the top outside of the pipe barrel for the full width of the trench.

00405.12 Bedding – Replace the subsection with the following:

Unless otherwise specified in the construction plans or project special provisions, all bedding material shall be dense graded 3/4" – 0 aggregate conforming to Subsection 02630.10.

00405.14(a) Trench Backfill: Class A Backfill – Replace the subsection with the following:

Use Class "A" Backfill outside of paved or graveled areas in accordance with City of Sherwood Trench Backfill Details standard drawing. Use native or common material that, in the opinion of the Engineer, meets the characteristics required for the specific surface loading or other criteria of the backfill zone.

00405.14(b) Trench Backfill: Class B Backfill – Replace the subsection with the following:

Use dense graded 3/4" – 0 aggregate conforming to Subsection 02630.10 for trench backfill in existing rights-of-way unless otherwise directed. In landscaping areas and median islands, the top 12" shall consist of Topsoil conforming to Section 01040.14.

00405.15 Quality Control – Replace the subsection with the following:

Provide quality control according to Section 00165. Compaction of trench backfill shall be in accordance with City of Sherwood Trench Backfill Details drawing.

00405.40(e) General: Existing Underground Utilities – Add the following to the end of the Subsection:

(e) Existing Underground Utilities – The Contractor shall be responsible for notifying the Engineer and City when existing utilities (not shown on plans or located prior to construction) are discovered when digging or discrepancies are found with the Project

Plans. Contractor shall notify the Engineer immediately and provide a minimum of 48 hour notice prior to construction operations so that modifications can be made to the design in a timely manner. Failure to notify the Engineer of discrepancies found before beginning construction will render the Contractor liable for all corrective measures required. When abandoned facilities are encountered, see Section 00405.41(g).

00405.41(c) Trench Width – Add the following paragraph:

The Contractor shall review and be familiar with the anticipated subsurface conditions described in the Geotechnical Engineering Report for the project. The Contractor is responsible for maintaining trench width with temporary shoring, dewatering, benching, backsloping or other measures. No separate or additional payments will be made due to Contractor's negligence to maintain trench width due to trench sidewall caving or instability.

00405.41(g) Existing Abandoned Utilities – Delete and replace with the following:

The contractor shall notify the City for inspection of the abandoned facilities while uncovered and note the horizontal and vertical location, size, and type of existing utilities and structures on the construction drawings and incorporate the information into the as-built drawings.

00405.43 Dewatering – Delete the last paragraph and add the following paragraphs:

The Contractor is solely responsible for the design of any dewatering systems required for trench excavations. The Contractor is also solely responsible for installation, operation, maintenance, equipment performance, equipment failure, or damage resulting from installation or operation of any component of the dewatering and groundwater control systems for this Contract.

The Contractor shall consider possible groundwater inflow from existing adjacent or intersecting utility trenches when planning and designing the dewatering and sump pump system.

The discharge points for clean water removed by dewatering system shall be directed into the storm drainage system or sanitary sewer system as determined and approved by the City during construction. For these discharge points, the Contractor shall assume treatment shall consist of settling tank(s) to obtain clean water prior to discharge, as specified in this section. The Contractor shall clean storm water system after use by methods acceptable to the Engineer if acceptable removal of sediment is not accomplished. The definition of clean water shall be by visual methods determined by the Engineer.

No separate or additional payment will be made for Trench Dewatering of utility trenches during construction. The Contractor is responsible for the means and methods of all trench dewatering. Trench dewatering is considered incidental to the project.

00405.46(d) Ponding or Jetting of Backfill Materials – Delete and replace with the following:

Ponding or jetting of backfill materials will not be allowed for this project.

00405.90 Payment – Replace last section with the following:

No separate or additional payment will be made for:

- Trench excavation
- Trench backfill
- Saw cutting
- Trench protection
- Shoring
- Pipe bedding
- Pipe zone material
- Trench widening due to trench instability
- Trench dewatering

These items are considered incidental to Section 00445.

END OF SECTION

SECTION 00406 – TUNNELING, BORING AND JACKING

Comply with Section 00406 of the Standard Specifications supplemented and/or modified as follows:

00406.12 Casing – Add the following to the end of the subsection.

Casing shall be steel pipe with a minimum wall thickness of 0.625" per ASTM A 53 Grade B or ASTM 252 Grade 2.

00406.30 General – Add the following to the end of the subsection.

Boring and jacking supervisors shall have a minimum of five (5) years of experience in tunneling, boring and jacking operations.

All welding shall be done by skilled welders, welding operators, and tackers who have had adequate experience in the type of materials, welds, and positions to be used.

00406.41(b) Boring and Jacking – Add the following bulleted item.

- Carrier pipe type and specifications

00406.80 Measurement – Delete and replace with the following.

The measurement of quantities will be made by linear foot of casing constructed.

00406.90 Payment – Replace with the following:

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

	Pay Item	Unit of Measurement
(a)	Boring and Jacking, 36-inch casing with 24-inch Carrier Pipe.....	Foot

The following items are considered incidental and no separate or additional payment will be made for:

- Excavation of bore pits
- Shoring
- Backfill
- Surface Restoration
- Casing
- Welding
- Boring Completion

- Carrier Pipe
- Casing spacers/runners
- Casing Filling (grout or sand)
- Grouting of Casing Voids
- Cement grout
- Cleaning and testing of carrier pipe

Temporary Drainage Facilities, culvert inlet structures, storm main extensions for the horizontal auger bore shall be paid under separate bid items.

END OF SECTION

SECTION 00420 – SALVAGING PIPE

Comply with Section 00420 of the Standard Specifications supplemented and/or modified as follows:

00420.00 Scope – Salvaging pipe will not be allowed.

END OF SECTION

SECTION 00440 – COMMERCIAL GRADE CONCRETE

Comply with Section 00440 of the Standard Specifications.

END OF SECTION

SECTION 00442 – CONTROLLED LOW STRENGTH MATERIALS

Comply with Section 00442 of the Standard Specifications.

END OF SECTION

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

Comply with Section 00445 of the Standard Specifications supplemented and/or modified as follows:

00445.11 Materials – Add the following :

Corrugated Polypropylene Pipe 02410.75

00445.40(d) General: Laying Pipe on Curves – Delete and replace the subsection with the following:

Vertical and horizontal curving of pipes is not allowed.

00445.40(f) Installation of Sanitary Sewer Service Tees and Wyes – Delete and replace the subsection with the following:

Provide a compacted base of pipe bedding material under all tees extending to the springline of the fittings.

The maximum line or grade change accomplished with any one fitting shall not exceed 45 degrees and shall be accomplished with long radius curves or bends.

00445.70(b) Siphon, Irrigation and Sanitary Sewer Installations – Add the following:

For irrigation installations, perform only a hydrostatic test.

00445.80 Measurement – Modify as follows:

(a) Pipes - The quantities of pipe of the various kinds, types, and sizes will be measured on the length basis as follows:

Length - The length will be measured, with no deduction for structures or fittings, along the pipe flow line from center to center of manholes, inlets, special sections, or the ends of pipe, whichever is applicable.

Depth – The depth of laterals, pipe, and catch basin leads will not be measured.

(b) Tee and Wye Fittings - The quantities of tee, wye, and other fittings will not be measured.

(d) Sloped and Skewed Ends - The quantities of sloped and skewed ends will not be measured.

(j) Video Inspection – The quantities of video inspection will not be measured.

(l) Cleanouts - No measurement will be made for cleanouts.

00445.91 Payment – Delete and replace with the following:

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

	Pay Item	Unit of Measurement
(a)	__ inch Class V RCP Pipe, Class A Backfill	Foot
(b)	__ inch Class V RCP Pipe, Class B Backfill	Foot
(c)	__ inch Storm Main, Class A Backfill	Foot
(d)	__ inch Storm Main, Class B Backfill	Foot
(e)	__ inch Storm Catch Basin Lead, Class A Backfill	Foot
(f)	__ inch Storm Catch Basin Lead, Class B Backfill	Foot

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

No separate or additional payment will be made for:

- Saw Cutting
- Trench excavation, bedding, pipe zone material, backfill
- Aggregate base backfill
- Topsoil and travel trench resurfacing
- Temporary Trench resurfacing
- Pipe tees, wyes, plugs, stoppers, and other required fittings
- Tracer wire or magnetic tape
- Hydrostatic, air, joint, video inspection, and deflection testing
- Additional excavation or backfill required due to trench width or unstable trench walls

When the Contract Bid Schedule of Prices does not indicate payment for pipes or other work under this Section, no separate or additional payment will be made. Payment will be included in payment made for the appropriate items under which this work is required.

END OF SECTION

SECTION 00470 – MANHOLES, CATCH BASINS, AND INLETS

Comply with Section 00470 of the Standard Specifications supplemented and/or modified as follows:

00470.01 Cast-in-Place and Precast Construction – Delete and replace the subsection with the following:

Concrete manholes, except for new bases at existing sewers, shall be precast as shown or specified. Concrete inlets and siphon boxes shall be either cast-in-place or precast. Trim existing AC to achieve square corners and vertical edges for cast-in-place structures to pour against. Tool edges of concrete.

00470.10 Materials – Add the following:

Corrugated Polypropylene Pipe 02410.75

00470.11 Precast Concrete Manholes and Bases – Add the following:

Precast manholes and bases shall be constructed per the City of Sherwood Standard Details.

00470.12 Cap Screws – Delete and replace the subsection with the following:

Cap screws and washers for watertight manhole covers shall be constructed per the City of Sherwood Standard Details.

00470.13 Inside Drop Manhole Connectors – Delete and replace the subsection with the following:

Inside drop manhole connectors shall be constructed per the City of Sherwood Standard Details.

00470.40(a) General: Excavation, Backfill, and Foundation Stabilization – Add the following to the end of the Subsection:

When removing and replacing an existing catch basin, protect the inlet and outlet pipes from damage. Excavate to a depth sufficient to install compacted crushed aggregate base per City of Sherwood Details.

If inlet or outlet pipe is damaged during removal of the existing catch basin, saw cut and remove existing pipe. Replacement pipe type shall be per direction of the Engineer. Connect the existing and new pipe sections using a Fernco® adaptor (or approved equal) with stainless steel bands.

Repair to damaged pipes or surrounding structures shall be considered incidental. No separate or additional payment will be made.

00470.90 Payment – Delete and replace with the following:

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

Pay Item	Unit of Measurement
(a) ___ inch Concrete Storm Sewer Manhole, Flat Top	Each
(b) ___ inch Concrete Storm Sewer Manhole	Each
(c) ___ inch Concrete Storm Sewer Pollution Control Manhole	Each
(d) Concrete Storm Sewer Curb Inlet	Each
(e) Concrete Storm Sewer Manhole Inlet	Each

Payment will be payment in full for furnishing and placing all materials, and for furnishing all equipment, labor and incidentals necessary to complete the work as specified, including manhole frames, catch basin frames, manhole covers, and catch basin grates.

No separate or additional payment will be made for:

- Saw cutting
- Trench excavation
- Topsoil and gravel trench resurfacing
- Temporary trench resurfacing
- Pipe connections
- Manhole frames and covers
- Catch basin frames
- Catch basin grates
- Rock backfill
- Aggregate base backfill
- Acceptance testing
- Channeling
- Additional excavation or backfill required due to excessive excavation width or unstable excavation walls
- Storm sewer manhole inlet grates
- 4x4 Markers (Offsite Storm Sewer Manholes)

END OF SECTION

SECTION 00490 – WORK ON EXISTING SEWERS AND STRUCTURES

Comply with Section 00490 of the Standard Specifications supplemented and/or modified as follows:

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

Fill all abandoned pipes with controlled low-strength material meeting the requirements of 00442, or other City approved material.

00490.80 Measurement – Add the following:

The quantity for connecting to existing storm sewer manholes or structures will be measured at the unit basis and include all incidental work and materials necessary to complete the work.

00490.90 Payment – Modify as follows:

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

Pay Item	Unit of Measurement
(a) Connection to Existing Storm Sewer Manhole	Each
(b) Connection to Existing Storm Sewer Catch Basins/Inlets	Each
(c) Filling Abandoned Storm Sewer Pipes, __ inch Diameter	Foot

Payment will be payment in full for furnishing and placing all materials, and for furnishing all equipment, labor and incidentals necessary to complete the work as specified, including manhole frames, catch basin frames, manhole covers, and catch basin grates.

No separate or additional payment will be made for:

- Saw cutting
- Coring new manhole connection for pipe
- Rechanneling manhole
- Topsoil and gravel trench resurfacing
- Trench excavation
- Backfill
- Aggregate base backfill
- Protective coatings
- Replacement of manhole or similar structure backfill
- Base drains
- Aggregate bases
- Topsoil and gravel trench resurfacing

- Temporary trench resurfacing
- Connections
- Structure abandonment
- Removing and disposing of existing structures and pipe
- Bypass pumping
- Acceptance testing

END OF SECTION

SECTION 00495 – TRENCH RESURFACING

Comply with Section 00495 of the Standard Specifications supplemented and/or modified as follows:

00495.80 Measurement – Replace this subsection with the following:

The accepted quantities of HMAC Trench Resurfacing will be based on a neat line calculation and will not be measured, unless changes are ordered by the Engineer. The trench patch width will be based on the outside diameter of the pipe plus 24 inches.

No deductions and no separate measurements will be made of asphalt cement, mineral filler, lime, anti-strip, or any other additive used in the mixture.

No separate measurement will be made for asphalt tack coat or crack seal.

00495.90 Payment – Modify as follows:

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

Pay Item	Unit of Measurement
(a) 4" Thick Trench Path (Level 2, ½" Dense HMAC)	Square Yard
(b) 5" Thick Trench Patch (Level 2, ½" Dense HMAC)	Square Yard

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

No separate or additional payment will be made for:

- asphalt tack coat
- Asphalt crack seal
- Temporary resurfacing
- additional trench resurfacing width due to trench width widening due to trench caving or instability.

END OF SECTION

SECTION 00596 – PREFABRICATED MODULAR RETAINING WALLS

Replace Section 00596 of the Standard Specifications with the following:

00596.00 Scope - This work consists of furnishing and constructing prefabricated modular gravity retaining walls as shown and specified.

00596.01 Proprietary Prefabricated Modular Walls – The following Prefabricated Modular proprietary retaining wall system has been designed for this project:

- UltraBlock, Inc. Retaining Wall System

00596.02 Alternative Retaining Wall Proposals - Prior to the pre-construction meeting, the Contractor may submit an alternative proposals utilizing proprietary retaining wall systems that are submitted and approved by the City prior to the pre-construction meeting. Alternative retaining wall proposal shall adhere to the requirements as outlined in Section 0596.04.

00596.03 Definitions:

Appurtenances - Traffic barriers, guardrail, fences, non-standard coping, drainage structures, sign supports, lighting supports, sound barriers, foundations, and utilities that are not part of the retaining wall system, but are connected to, resting on, or passing through the retaining wall system.

Batter - The slope of the wall facing from vertical that is expressed as degrees or as a ratio of the horizontal change in inches for each 12 inches of vertical change. A vertical face has a zero batter.

Dry Cast Concrete Block Gravity Wall - A prefabricated modular gravity retaining wall system type composed of dry cast concrete blocks without soil reinforcements.

Manufacturer - The fabricator having exclusive production rights for a proprietary retaining wall system.

Nonproprietary Retaining Wall System - A retaining wall system that is not patented or trademarked and is shown on the plans.

Piecemark - An alpha-numeric marking that identifies a specific type of retaining wall component. All components with the same piecemark are considered identical. Piecemarks shown on the working drawings identify placement of the component.

Prefabricated Modular Retaining Wall System - A basic gravity retaining wall system type composed of solid or hollow prefabricated concrete or steel modules. Hollow modules are typically backfilled with granular structure backfill material. Prefabricated

modular retaining walls include metal and precast concrete bin, precast concrete crib, gabion, dry cast concrete block, and wet cast concrete block gravity retaining walls.

Proprietary Retaining Wall System - A retaining wall system that is protected by trademark, patent, or copyright and is produced or distributed by a manufacturer having exclusive rights.

Retained Backfill - Unreinforced backfill within a distance of H/2 behind the back of the wall, where H is the total height of the wall excluding the leveling pad or footing.

Retaining Wall System - An engineered system of structural and geotechnical components that restrains a mass of earth. The terms "retaining wall system", "retaining structure", and "retaining wall" are used interchangeably.

00596.04 Proprietary Retaining Walls – If the Contractor is submitting an alternative retaining wall proposal utilizing an alternative proprietary wall system for construction, the contractor shall submit the following at least 7 calendar days prior to the pre-construction meeting:

- Complete stamped working drawings and design calculations prepared by the Manufacturer according to 00150.35.
- Manufacturer's field construction manual.
- Manufacturer's field representative name and qualifications.
- Materials and Quantity Summary List

Field verify existing ground elevations and bottom of wall elevations before preparing and submitting working drawings. Failure of the Contractor to submit the above-mentioned documents to the City for approval at least 7 days prior to the pre-construction meeting requires the Contractor to construct the retaining wall system shown on the project plans.

(a) Design Calculations - Design calculations are calculations that meet the requirements of the project documents, AASHTO LRFD Bridge Design Specifications, as modified by the ODOT GDM, and are consistent with the retaining wall design shown on the project plans, and according to 00150.35.

Include the following items in the design calculations, as applicable:

- Design Limits:
- Methodology:
- External Stability Calculations
- Internal Stability Calculations
- Compound Stability

(b) Manufacturer's Field Construction Manual - A field construction manual according to 00150.37, is prepared by the manufacturer and includes detailed instructions for constructing the retaining wall.

Materials

00596.10 General:

(a) Proprietary Retaining Wall Systems - Provide all proprietary retaining wall system components from the same wall manufacturer. If there are conflicts between the Manufacturer's requirements and the Agency's requirements, the Agency's requirements prevail.

(b) Nonproprietary Retaining Wall Systems - Provide materials according to the applicable material Specifications.

(c) Quality Control - Provide quality control according to Section 00165.

00596.11 Backfill:

(a) Gravel Leveling Pads Backfill - Furnish dense graded 1" - 0 or the 3/4" – 0 aggregate base material for leveling pads meeting the requirements of 02630.10.

(b) Modular Block Core and Drainage Backfill - Furnish 3/4" - No. 4 PCC aggregate material meeting the requirements of 02690.20 (a) through (f).

(c) Granular Structure Backfill - Furnish dense graded 1" - 0 or 3/4" - 0 aggregate base material meeting the requirements of 02630.10 and the following:

> **(1) Material Passing No. 200 Sieve** - The amount of material passing the No. 200 sieve shall not exceed 15 percent by weight. Test according to AASHTO T 27 and AASHTO T 11.
> **(2) Plasticity Index** - The plasticity index of the material passing the No. 40 sieve shall not exceed 6. Test according to AASHTO T 90.

(d) Pipe Drain Backfill - Furnish granular drain backfill material for drainage pipes meeting the requirements of 00430.11.

00596.12 Dry Cast Concrete Blocks - Furnish dry cast concrete blocks with the following properties:

(1) Aggregate, Strength, Freeze-Thaw Durability, Unit Weight, and Water Absorption:

- Aggregate meeting the requirements of ASTM C 33.
- Blocks meeting the requirements of ASTM C 1372.
- The average of three coupons or cores have minimum compressive strength of 4,000 psi as tested according to ASTM C 140.

- Individual coupons or cores have a minimum compressive strength of 3,500 psi as tested according to ASTM C 140.
- A minimum oven-dry unit weight of 125 pcf as tested according to ASTM C 140.
- Test, no longer than 18 months before delivery, freeze-thaw durability of five test specimens made with the same materials, concrete mix design, manufacturing process, and curing method that will be used on the project. At least four of the five test specimens shall have a weight loss of not more than 1 percent of the block's initial weight after 150 freeze-thaw cycles as tested according to ASTM C 1262.
- A maximum water absorption of 1 percent above the water absorption of the sublot of blocks that were produced and passed the freeze thaw test. For the water absorption testing, do not use the same blocks used for the freeze-thaw test.

(2) Portland Cement - Portland cement meeting the requirements of 02010.10.

(3) Blended Hydraulic Cement - Blended hydraulic cement meeting the requirements of 02010.20.

(4) Tolerances - Manufacture within the following geometric tolerances:

- Molded length and width dimensions within ± 1/8 inch of the block manufacturer's nominal length and width dimensions.
- Molded height dimension within ± 1/16 inch of the block manufacturer's nominal height dimension.
- Rear height does not exceed the front height.
- Top and bottom face groove dimensions within the tolerances specified by the manufacturer.

(5) Color - Consistent natural color of dry cast concrete.

(6) Finish - Split-face units that when viewed from a distance of 10 feet under diffused light, chips, cracks, and other imperfections are not detectable.

(7) Acceptance of Blocks - Acceptance will be determined on tolerances, visual inspection, compressive strength, water absorption, freeze-thaw durability, and unit weight. Acceptance of compressive strength, water absorption, and unit weight will be based on production sublots. The maximum number of blocks per production sublot is 2,000 blocks. Test blocks at the frequency of one set for each production sublot. Acceptance of freeze-thaw durability will be based on the freeze-thaw testing requirements of 0B596.12(c-1).

(8) Marking - Indicate the date of manufacture and the production sublot number on each sublot of dry cast concrete blocks.

9) Handling, Storage, and Shipping - Do not allow chipping, discoloration, cracks, or fractures during handling, storing and shipping.

(10) Rejection - Blocks not meeting the requirements of this subsection will be rejected.

00596.30 Quality Control Personnel - Provide technicians with CAgT and CDT certifications.

00596.31 Manufacturer's Field Representative Qualifications and Duties - Provide a Manufacturer's field representative with the following minimum qualifications:

- Is a licensed Professional Engineer (P.E.) in the State of Oregon.
- Has been trained and certified by the Manufacture in the construction, installation, and inspection of the selected proprietary retaining wall system.

The times that the Manufacturer's field representative are required to be present or available and the duties of the Manufacturer's field representative are:

• **Preconstruction Conference** - Meet with the Engineer and all contractor supervisory personnel and subcontractors involved in construction of the proprietary retaining wall at the preconstruction conference to discuss methods of accomplishing all phases of work required to construct the proprietary retaining wall.

• **Initial Wall Construction** - Be present at the retaining wall construction site and provide technical assistance to the Contractor and Engineer during all wall construction activities from the beginning of wall construction until at least 10 percent of the total wall length is successfully installed and backfilled to a height of at least 10 feet, or the actual wall height, whichever is less.

Submit daily field observation reports no later than noon of the next working day. Include the following information in the daily field observation reports:

- Date of observation.
- Description all work observed and whether or not the work was acceptable.
- Documentation of all communications with the Contractor and Engineer.
- Name and signature.

• **Remaining Wall Construction** - Be available by phone or in person as needed throughout the remaining construction of the proprietary retaining wall to provide technical assistance to the Contractor and Engineer.

• **Final Field Observations** - Conduct a final field observation of the completed retaining wall construction with the Engineer and Contractor. Submit a final field observation report that includes the following information one Calendar Day after the final field observation:

- Date of observation.
- Documentation of all retaining wall deficiencies.
- Recommendation to accept or reject the retaining wall construction.

- Provide a stamped final report to the Engineer no later than 10 Calendar Days after the final field observation of the retaining wall. Include the following information in the final report:
- Preconstruction meeting minutes.
- All daily field observation reports.
- Transcripts of all communications with the Contractor and the Engineer during the remaining wall construction phase.
- Final field observation report.

Construction

00596.40 General:

(a) Proprietary Retaining Walls - Construct proprietary retaining walls according to Agency requirements, Manufacturer's working drawings, and the Manufacturer's Field Construction Manual. If the Manufacturer's working drawings or the Manufacturer's Field Construction Manual conflict with Agency requirements, Agency requirements shall take precedence.

Follow instructions and recommendations of the representative if approved by the Engineer.

00596.41 Excavation and Foundation Preparation - Perform excavation and prepare and backfill wall foundations according to Section 00510 and the following:

- Grade the foundation level for a width equal to the width of the wall base plus 1.0 feet on each side. Do not reinforce backfill for over-excavated foundations without prior approval.
- Place backfill material in nearly horizontal layers not more than 8 inches thick. Compact the entire surface of each layer with at least three coverages, using equipment made specifically for compaction. Routing hauling and grading equipment over the surface is not acceptable as adequate compaction.
- Do not construct backfill when the backfill, the foundation, or the embankment on which it would be placed is frozen, or unstable.

00596.42 Gravel Leveling Pad:

Construct gravel leveling pads with:

- A width of at least the width of the wall facing plus 12 inches (6 inches on each side of the facing units).
- A thickness of at least 6 inches.
- A location tolerance of ± 1 inch of the design location.
- A top pad tolerance of ± 1/8 inch of the design elevation.

Compact gravel leveling pads in 3 to 4 inch lifts using a minimum of three passes of a walk behind vibratory plate compactor with a gross static weight of not less than 125 pounds and a total compaction static plus dynamic force of not less than 2,000 pounds.

00596.43 Subsurface Drainage - Install subsurface drainage before constructing walls.

00596.44 Erecting Walls:

Dry Cast Concrete Block Walls:

(1) Placement - Begin placing the first course of blocks on top of and in full contact with the lowest foundation level of the leveling pad. Level and align all blocks. Lay blocks as close together as possible and parallel to the straight or curved line of the wall face. Place blocks in vertical or battered positions as shown. Level each course block-to-block and front-to-back. Set each block on the blocks below without rocking.

Correct high areas by grinding or shimming with approved shims. Do not use shims within 1 inch of the front face. Do not exceed a shim stack thickness of 1/16 inch. Stack all blocks in a running bond pattern with each block spanning the joint below. Place granular structure backfill with each course of blocks. When shown, place modular block core backfill and drainage fill backfill, and install drainage fill geotextile and shear pins with each course of blocks. Remove all backfill that is on top of the blocks before installing the next course of blocks or soil reinforcements. Attach the top row of dry cast concrete blocks or cap blocks to the underlying blocks with an adhesive from the QPL. Clean the finished exposed wall face of all foreign material deposits.

(2) Tolerances:

- First course of wall blocks located within ± 1/4 inch of the design horizontal alignment.
- Final out of plane concavity or convexity of the front face within ± 3/4 inch in 10 feet.
- Final deviation from the design batter within ± 1 1/4 inch for each 10 feet of wall height.
- Outward leaning batter is zero.
- Each course of blocks within ± 1/16 inch of level when checked with a 4 foot straight edge level.
- Out of plane offset between consecutive rows within 3/4 inch of the planned offset.
- Finished top of wall elevation within ± 1 inch of the design elevation.

00596.45 Geotextile Placement - Install geotextiles according to Section 00350 and as shown.

00596.47 Backfill Placement:

(a) General - Do not misalign wall units or damage wall components when placing backfill material. Remove and replace all misaligned or damaged wall materials at no additional cost to the Agency.

(b) Compaction - Meet the following requirements:

(1) Equipment - Provide the following compaction equipment:

a. **Backfill In and Within 3 Feet Behind Wall Units** - Walk behind vibratory roller compactor with a single smooth drum, vibratory plate compactor, or rammer/tamper plate compactor; each with a gross static weight of not more than 1,000 pounds and a total compaction static plus dynamic force of not more than 5,000 pounds.
b. **Backfill More Than 3 Feet Behind Wall Units** - Vibratory roller compactor with a single smooth drum, vibratory plate compactor, or rammer/tamper plate compactor.

(2) Maximum Density and Optimum Moisture Content - Determine maximum density and optimum moisture content of the MSE granular backfill material according to AASHTO T 99 Standard Proctor Method A, with coarse particle correction according to AASHTO T 224.

(3) Moisture Content - Prepare backfill material to within minus 4% to plus 2% of optimum moisture content at the time of compacting. Add water to material that does not contain sufficient moisture and thoroughly mix. Remove excess moisture by manipulation, aeration, drainage, or other means before compacting.

(4) Density:

a. **Backfill In and Within 3 Feet Behind Wall Units** - Compact to 95% of maximum density using the required number of passes determined according to 0B596.47(b-5-a).
b. **Backfill More Than 3 Feet Behind Wall Units** - Compact to 95% of maximum density determined according to 0B596.47(b-5-b).

(5) Testing Methods and Frequency:

a. **Test Pad Method** - Before placing the wall backfill, determine the number of passes necessary to achieve the specified density by constructing a test pad that is at least 5 feet wide, 15 feet long, and 3 feet in final depth. Construct test pad fill in layers no more than 8 inches thick using the same equipment and methods that will be used to compact the wall backfill. Perform at least one density test according to AASHTO T 310 on each test pad layer. Construct and test a new test pad when changes in material occur or different equipment is used during the construction of the wall backfill, except a new test pad is not required for modular block drainage backfill.

b. **Nuclear Gauge Method** - Test in-place field density according to AASHTO T 310. Test at the frequency required in the ODOT Manual of Field Procedures.

(6) Deflection Requirement - Conduct at least one deflection text, witnessed by the Engineer on each compacted layer of backfill according to ODOT TM 158. If the tested layer exhibits yielding, deflection, reaction, or pumping, rework the area to provide acceptable test results before placing the next layer.

00596.60 Protecting Work - Protect and repair work as follows:

- Do not allow runoff from adjacent areas to enter the wall construction site during construction operations.
- At the end of each day's operation, direct potential runoff away from the wall by sloping the last lift of backfill away from the wall.
- Rework and repair all damaged subgrade areas to the depth where undamaged work is encountered.

00596.80 Measurement - No measurement of quantities will be made for retaining walls.

00596.90 Payment - The accepted quantities of work performed under this Section will be paid for at the Contract unit price, per unit of measurement, for the following items:

Pay Item	**Unit of Measurement**
a) Modular Block Retaining Wall (Wall Face)	Sq.Ft.

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

No separate or additional payment will be made for:

- Manufacturer's representative
- Excavation, shoring, leveling pads, and specified backfill
- Wall drainage and filter systems
- Excavation below elevations shown

END OF SECTION

SECTION 00641 - AGGREGATE SUBBASE, BASE AND SHOULDERS

Comply with Section 00641 of the Standard Specifications supplemented and/or modified as follows:

00641.10(a) Materials: Base and Shoulder Aggregate – Replace the subsection with the following:

All aggregate for bases and shoulder rock shall consist of dense graded, 3/4"-0 for the aggregate base rock which meets the requirements for dense-graded base aggregate per section 02630.10.

00641.10(b) Materials: Subbase Aggregate – Replace the subsection with the following:

All aggregate for subbases shall consist of crushed, dense graded, 1 1/2"-0 rock unless otherwise specified the Design Plans.

Maximum size aggregate shall not exceed 75% of the compacted thickness of the layer in which it is incorporated. Aggregates passing the 1/4 inch sieve shall not be less than 10% nor more than 50% of the whole, by weight. No more than 10% of the aggregate shall pass the No. 100 sieve. Within these limits, the subbase aggregate gradation shall be adequate to produce a dense, firm base when placed and compacted.

00641.16 Acceptance of Aggregates – Delete and replace with the following:

Acceptance will be based on approved mix design submittal, satisfactory test results, and by visual inspection by the Engineer.

00641.80 Measurement - Replace with the following:

The accepted quantities of aggregate base and aggregate subbase will be based on a neat line calculation and will not be measured, unless changes are ordered by the Engineer. The quantities of aggregate base will be based on the number of square yards of aggregate base constructed to the full thickness for the culvert maintenance and stormwater facility maintenance access roads.

No separate measurement will be made for aggregate base or aggregate subbase for concrete sidewalk, concrete sidewalk ramps, or concrete driveways.

00640.91 Payment – Replace with the following:

The accepted quantities of aggregate base will paid for at the Contract unit price, per unit of measurement, for the following items:

Pay Item **Unit of Measurement**

b) Aggregate Base – 2" Thick (3/4"-0) ..... Sq. Yd.
c) Aggregate Subbase – 6" Thick (1-1/2"-0) ..... Sq. Yd.

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

No separate or additional payment will be made for :

- Water used to obtain proper compaction and in the care of the work.
- Aggregate base for concrete sidewalk, concrete sidewalk ramps, or concrete driveways.
- Subgrade geotextile separation fabrics.

END OF SECTION

SECTION 00730 – EMULSIFIED ASPHALT TACK COAT

Comply with Section 00730 of the Standard Specifications supplemented and/or modified as follows:

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

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

END OF SECTION

SECTION 00745 - HOT MIXED ASPHALT CONCRETE (HMAC)

Comply with Section 00745 of the Standard Specifications supplemented and/or modified as follows:

00745.11(a) Asphalt Cement – Replace the 2nd paragraph of this subsection with the following:

Use PG 70-22 asphalt cement for all HMAC provided for this project unless otherwise directed by the City.

00745.49(b)(3) Moving Average Maximum Density (MAMD) Method – Delete and replace the subsection with the following:

The MAMD is the average of the current MDT and, if available, the four previous MDT's for the JMF used. Determine each MDT using the Gmm determined according to AASHTO T 209 and calculate the MAMD according to ODOT TM 305. Compact all HMAC placed to at least the 92% percent of the MAMD.

00745.80 Measurement – Replace this subsection with the following:

The accepted quantities of HMAC will be based on a neat line calculation and will not be measured, unless changes are ordered by the Engineer.

No deductions and no separate measurements will be made of asphalt cement, mineral filler, lime, anti-strip, or any other additive used in the mixture.

No separate measurement will be made for asphalt tack coat.

00744.90 Payment – Modify this section as follows:

The accepted quantities of HMAC will paid for at the Contract unit price, per unit of measurement, for the following items:

Pay Item	Unit of Measurement
a) Access Road Surface - 3" Thick Level 2, ½ inch Dense, HMAC	Sq.Yd.

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

No separate or additional payment will be made for the asphalt tack coat or crack seal.

END OF SECTION

SECTION 00759 – MISCELLANEOUS PORTLAND CEMENT CONCRETE STRUCTURES

Comply with Section 00759 of the Standard Specifications supplemented and/or modified as follows:

00759.11 Aggregate Base: – Replace the last sentence of the subsection with the following:

If a designated size is not shown, or given, furnish 3/4"-0 aggregate meeting the requirements of Section 02630.

00759.90 Payment – Add and/or modify as follows:

The accepted quantities of concrete structures will paid for at the Contract unit price, per unit of measurement, for the following items:

Pay Item	Unit of Measurement
a) Concrete Curb	Foot
b) Commercial Driveway	Square Foot
c) Concrete Sidewalk	Square Foot

Item (b) includes monolithic curbs at driveway locations.

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

No separate or additional payment will be made for the following:

- Earthwork
- Aggregate base
- Rebar reinforcement

END OF SECTION

SECTION 00815 - BOLLARDS

Comply with Section 00815 of the Standard Specifications supplemented and/or modified as follows.

00815.00 Scope – Add the following text

Contractor to coordinate with City regarding chain connection details and desired locking mechanisms for bollards and chains.

00815.12 Plates, Shapes, Fasteners, and Hardware – Add the following text

Removable and permanent Bollards for culvert maintenance access road shall include a loop near top of bollards to provide for galvanized chain connection (minimum chain link length of 1 inch).

00815.90 Payment – Remove last sentence and replace with the following text

No separate payment shall be made for the following:

- Excavation
- Bollard/chain connection loop fabrication
- Chains
- Chain/bollard lock mechanisms
- Galvanization of bollards or hardware

END OF SECTION

SECTION 00940 - SIGNS

Comply with Section 00940 of the Standard Specifications supplemented and/or modified as follows:

00940.00 Scope– Replace with the following:

This work consists of furnishing, fabricating, and erecting informational and pedestrian signs of the types shown on the project plans. The Contractor shall install Sensitive Area and Vegetated Corridor signs at locations shown on the project plans.

00940.03 Drawings– Replace with the following:

Signs called for in the project plans shall be constructed using the drawings available in the City of Sherwood Engineering Design and Standard Details Manual or as depicted on the project plans.

00940.80 Measurement– Delete and replace with the following:

The quantities of signs will be measured on the unit basis.

00940.90 Payment – Delete and replace with the following:

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

Pay Item	Unit of Measurement
a) Vegetated Corridor Sign	Each

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

No separate or additional payment will be made for the following:

- Support posts
- Sign fasteners to posts or fences

END OF SECTION

SECTION 00960 – COMMON PROVISION FOR ELECTRICAL SYSTEMS

Comply with Section 00960 of the Standard Specifications supplemented and/or modified as follows:

00960.02 – Equipment List and Drawings – delete and replace with the following:

Contractor to coordinate with PGE for site electrical plan for relocation of the existing street light.

00960.10 – Materials – delete and replace with the following:

Furnish electrical materials meeting the requirements of PGE.

00960.41 – Excavation

(c) Excavation for Conduit – delete and replace with the following:

Install all conduit to the minimum cover requirements as specified on the PGE electrical plan.

(g) Backfill – delete and replace with the following:

All backfill shall meet the requirements of PGE.

00960.42 – Conduit - delete and replace with the following:

Install all conduit in accordance with the requirements of PGE.

Add the following sections:

Measurement

00960.80 – Measurement – Add the following Section:

00960.80 – Measurement

There will be no measurement of quantities for conduit, excavation, backfill and street light base installations under this contract.

Payment

00960.90 – Payment – Add the following Section:

00960.90 – Payment

No separate payment will be made for conduit, fittings, light base installation or coordination with PGE and the City regarding street light relocation. Payment is incidental to the bid item Street Light and Base Relocation.

END OF SECTION

SECTION 00970 – HIGHWAY ILLUMINATION

Comply with Section 00970 of the Standard Specifications supplemented and/or modified as follows:

00970.00 Scope - In addition to requirements of Section 00960, remove and reinstall street light illumination according to the following Specifications.

00970.80 Measurement – Replace with the following:

The quantity of street lights will be measured on the unit basis and include all materials and labor to complete the work.

00970.90 Payment – Replace with the following:

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

Pay Item	Unit of Measurement
a) Street Light and Base Relocation	Each

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

Item (a) includes the following items, for which no separate payment will be made:

- Existing street light removal and reinstallation
- Street light base removal and placement
- Excavation and backfill
- Conduit, wiring, cabinets, pedestal, and other items required to relocate the existing street light
- Street light base foundation
- Conduit and fittings
- Trench backfill

END OF SECTION

SECTION 01030 - SEEDING

Comply with Section 01030 of the Standard Specifications, supplemented and/or modified as follows:

01030.11 Topsoil – Delete and add the following:

Topsoil shall be used from stockpiled Selected Topsoil selected from excavations on the site. Selected Topsoil shall adhere to the requirements outlined in Section 1040.14(a).

If additional topsoil is needed, import and furnish topsoil meeting the requirements of 01040.14.

01030.13(d) Inspection – Delete this subsection.

01030.13(f) Types of Seed Mixes – Add the following:

See plans for seed mix.

01030.13(g) Availability – Delete this section.

01030.15 Mulch – delete subsections (b) and (c).

01030.17 Pesticides – Delete this section.

01030.30 General – Delete this section.

01030.40 General – Delete the first two sentences.

01030.62 Establishment Work – Delete subsections (3) Weed Control and (4) Mowing.

(5) Repair and Restore - Repair and restore soil grades and re-seed damaged, settled, or unproductive areas to the specified conditions of this Section at no additional cost to the Agency for a period of two years after acceptance.

01030.80 Measurement – Delete and replace with the following:

The quantities of seeding and associated work performed under this Section will be measured according to area.

01030.90 Payment – Replace with the following:

The accepted quantities of seeding and associated work performed under this

Section will be paid for at the Contract unit price, per unit of measurement, for the following items:

Pay Item	Unit of Measurement
a) Water Quality Facility Seeding, ___ type	Square Yard
b) Native Enhancement Grass Seed Mix	Square Yard

No separate payment will be made for any work included in section 00280.

Payment includes preparing the seed bed, soils preparation, seeding, fertilizing, mulching, applying tacking agent, temporary irrigation, and all establishment work as required by the specifications.

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

No additional or separate payments will be made for the following:

- Preparing the seed bed
- Soils preparation
- Mulch
- Fertilizing
- Applying tackifier agents
- Temporary irrigation
- Herbicide or pesticide applications

END OF SECTION

SECTION 01040 - PLANTING

Comply with Section 01040 of the Standard Specifications, supplemented and/or modified as follows:

01040.02 Definitions– Add the following:

Invasive Species – Non-native plants and invasive vegetation which have been identified as plants which threaten the ecological processes that preserve the water quality functions of wetland and riparian areas. Invasive species are identified in Chapter 3 of the Clean Water Services (CWS) Design and Construction Standards (R&O 07-20) and the Clean Water Services Integrated Vegetation and Animal (IVAM) Guidance manual (March 2003).

Invasive Species Control – Control of invasive species as identified Clean Water Services Integrated Vegetation and Animal (IVAM) Guidance manual (March 2003).

Weed Control - Synonymous with Invasive Species Control.

01040.03 General– Add the following:

> **(e) Specified Plantings** – Furnish plants meeting the requirements and specifications set forth on sheets L001 through L004 of the approved plans and per Appendix A of the Clean Water Services (CWS) Design and Construction Standards (R&O 07-20).

01040.03(b) Pesticide Applicators License and Chemical Registration – Delete this subsection.

01040.04 Coordination – Delete subsections (a) Planting Work Plan (PWP).

01040.04(b) Notice for Inspections – Delete subsections and replace with the following:

Notify the Agency and Clean Water Services a minimum of 72 hours prior to each required inspection.

01040.13 Soil Testing – Delete this subsection.

01040.14 Topsoil – Delete this subsection and replace with the following:

Furnish topsoil containing no substance detrimental to the growth of plants and that is free of plants designated by the Oregon Department of Agriculture as Type "A" or Type "B" weeds. Unsuitable topsoil, or topsoil placed by the Contractor without approval in

areas to be planted, may be required to be replaced at no additional cost to the Agency. 20 days before furnishing any type of topsoil, do the following:

- Give the Agency notice of intent to use the source.
- Provide access to the source for Agency inspection.
- Provide one 20 pound representative soil sample of each topsoil type for testing of particle size range and organic matter by the Agency, unless otherwise specified.
- Obtain approval of the source before excavation of topsoil begins.

(a) Selected Topsoil - Furnish and stockpile native topsoil from the required excavations. The Agency will make the final determination of the areas where the most suitable materials exist. Furnish topsoil that is the fertile part of a soil profile commonly referred to as the "A" horizon, typically ranging in depth from 3 inches to 12 inches. Do not take material for topsoil from a depth greater than 12 inches below existing ground, unless approved. Select only sources that are well-drained and, before stripping, have a healthy crop of vegetative growth. Remove and dispose of all undesirable plants, roots and seeds before stockpiling Selected Topsoil from excavations.

Selected Topsoil shall have the following characteristics to ensure a good growing medium:

a. Texture – material passes through one-inch screen
b. Fertility – 35% organic matter

(b) Imported Topsoil - Furnish composted-amended topsoil from non-Agency controlled lands that, has the following characteristics to ensure a good growing medium:

a. Texture – material passes through one-inch screen
b. Fertility – 35% organic matter

If directed by the City, Imported Topsoil may be required for the project due to the lack of suitable Selected Topsoil materials onsite (as determined by City). Additional payment will be made to import topsoil approved by the City.

01040.15 Soil Conditioners – Delete this subsection and heading and replace with the following.

01040.15 Soil Conditioners, Amendments and Fertilizers - Where appropriate and necessary to enhance organic matter, leaf compost may be placed uniformly on topsoil. Other amendments, conditioners, and bio-amendments may be added as needed to support the specified plants or adjust the soil pH. Traditional fertilization techniques (applying N-P-K) are not necessary for native plants.

01040.16 Soil Amendments – Delete this subsection.

01040.17 Soil Bio-Amendments – Delete this subsection.

01040.18 Fertilizer – Delete this subsection and heading and replace with the following:

01040.18 Invasive Species Removal – Contractor is responsible for removal of non-native, invasive weeds and plants prior to enhancement and mitigation planting within the Vegetated Corridor and through the plant establishment period.

(a) Prior to Enhancement/Mitigation Planting - Prior to installation of plant materials within the Vegetated Corridor, invasive species control per methods described in the Clean Water Services Integrated Pest Management Guide (2009) and Clean Water Services Integrated Vegetation and Animal Management Guidance (2003) is required.

During Removal of invasive vegetation, care shall be taken to minimize impacts to existing native tree and shrub species. Removal of any invasive, non-native species with the Vegetated Corridor shall be accomplished by hand, sprayed or mechanically.

(b) Weed Control Period – During the 2-year maintenance period, the Contractor is responsible for removal of non-native, invasive vegetation. All non-native, invasive plant species shall be removed as directed by the City or Engineer at the bi-annual inspection.

01040.19(g) Contract Grown Plant Materials – Delete this subsection.

01040.20 Mulch – Add the following paragraph.

Trees, shrubs, and groundcovers planted in upland areas shall be mulched a minimum of three inches in depth and 18 inches in diameter, to retain moisture and discourage weed growth around newly installed plant material. Appropriate mulches are made from composted bark or leaves that have not been chemically treated. The use of mulch in frequently inundated areas shall be limited, to avoid any possible water quality impacts including the leaching of tannins and nutrients, and the migration of mulch into waterways.

01040.20(b) Cinder Mulch – Delete this section and add the following:

Cinder mulches are not allowed for this project.

01040.20(c) Straw Mulch – Delete this section and add the following:

Straw mulch is not allowed for use within this project.

01040.20(d) Rock Mulch – Delete this section and add the following:

Rock mulch is not allowed for use within this project.

01040.22 Water – Delete this subsection.

01040.41 Planting Season (West of the Cascades) – Delete this subsection and replace with the following:

Plantings should preferably be installed between February 1 and May 1 or between October 1 and November 15. Plants may be installed at other times of the year; however, additional measures may be necessary to ensure plant survival.

01040.48 Planting Area Preparation – Add the following paragraph:

For this project, planting area preparations shall be prepared utilizing Method "D" or "E" unless otherwise directed by the City or project Landscape Architect.

01040.50 Special Planting Requirements - Add the following subsection:

(h) Wet Area Plugs – Wet Area Plugs for water quality swale bottom shall be planted per species types and spacing outlined on the project plans. Plant 6 plugs per square foot, approximately 3" on-center in masses of same type for natural appearing groupings. All plugs shall be planted after river rock bed is placed over jute matting and topsoil. Avoid damaging plugs when planting. Wet Area Plugs may be live root plugs.

01040.70 Plant Establishment: General – Replace the first sentence with the following:

The Contractor is responsible for the survival of plant material until the end of the plant establishment period of two (2) calendar years.

01040.71 Plant Care and Success Criteria – Delete and replace with the following:

During the plant establishment period, maintain plants in a vigorous growing condition by regularly doing the following:

- Watering and fertilizing sufficiently to promote growth.
- Weeding, cultivating, pruning, and repairing.
- Adjusting tree stakes and guys.
- Controlling weeds before they seed according to 01040.48.
- Controlling pests and noxious weeds before the reproductive cycle.
- Removing and replacing dead or non-vigorous plants.
- Replacing missing plants.
- Re-mulching of plant bed areas.

The determination of a successful plant establishment will be made during bi-annual plant establishment inspections by the Contractor. A successful planting establishment for each inspection is defined as follows:

No dead plants or trees are found and seeding and plugs are providing surface coverage.

If any mortality is noted on the site, the factor likely to have caused mortality of plantings is to be determined and corrected if possible.

01040.72 Periodic Inspections – Delete and replace with the following:

During the 2-year plant establishment and weed control period, the Contractor will make bi-annual inspections jointly with the Agency at the following times:

- Spring, early May
- Fall, late September

During each plant establishment and/or weed control inspection, the Agency may determine, based upon the specified success criteria and invasive species coverage, that corrective work is required. If so, the Agency will provide the Contractor with a written notice of required corrective work sent by hand-delivery, email or mail.

Upon completion of the original planting, full payment will be made of the bid item for all plantings shown on plans. Payment for the amount of the Bid Price in the Bid Schedule or minimum price per pay item name, whichever is greater, will be withheld for the 2-year plant establishment and weed control period. If the bidder bids a unit price less than the price stated in the Pay Item Name, the minimum price as stated in the Pay Item Name will replace the bidder's unit price with the Bid Total being changed accordingly. Bids submitted with amounts lower than the minimum bid price will not disqualify the bid.

01040.80 Measurement – Delete and replace with the following:

The quantities of plant materials will be measured on a unit basis.

No measurement will be made for Invasive Species Removal or Plant Establishment & Weed Control.

01040.90 Payment – Replace with the following:

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

Pay Item	Unit of Measurement
a) Invasive Species Removal	Lump Sum
b) Water Quality Facility, 12" Thick Topsoil	Sq. Ft.
c) Water Quality Facility, Wet Area Plugs	Each
d) Water Quality Facility Planting, ___ type	Each
e) Vegetated Corridor Enhancement Tree, ___ type	Each
f) Vegetated Corridor Enhancement Shrub, ___ type	Each
g) Imported Topsoil	Cubic Yard
h) Weed Control, 2-Years	Lump Sum
i) Plant Establishment, 2-Years.	Lump Sum

No separate payment will be made for any work included in section 00280.

Payment includes preparing the seed bed, soils preparation, seeding, fertilizing, mulching, applying tacking agent, temporary irrigation, and all establishment work as required by the specifications.

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

No additional or separate payments will be made for the following:

- Soils preparation
- Soil amendments and bio-amendments
- Fertilizing
- Mulching, including materials required for replacement planting
- Temporary irrigation
- Herbicide or pesticide applications
- Tree stakes and ties
- Browsing protectors
- Trunk wraps
- Game repellant

Payment for (j) and (k) will be made upon acceptance of the inspection/corrective actions by the Agency at which point one quarter of the Lump Sum amount will be paid.

END OF SECTION

SECTION 01050 - FENCES

Comply with Section 01050 of the Standard Specifications supplemented and/or modified as follows:

01050.10 Materials – Add the following:

Wood Fence 03010.45

01050.42 Optional Posts – Delete this section.

01050.44 Barbed and Woven Wire Fence – Delete this section and replace with the following.

01050.44 Wood Fence – Construct wood fences per detail on plans or match existing fence type as directed on the plans.

Concrete: All corner, gate, end, or line wood posts shall be set in concrete. Construct concrete footings according to 01050.43(a-3).

Construction Methods: The wood fence posts shall be set true to line and grade in concrete bases at least two (2) feet in depth. All posts shall be sound and free from all decay, splits, multiple cracks, or any other defect which would weaken the posts or otherwise cause them to be structurally unsuitable for the purpose intended.

The maximum distance between posts in any section shall not exceed eight (8) feet. The top and bottom railings shall be securely fastened to the posts with galvanized nails or other acceptable means. Changes in line of 30 degrees or more shall be considered as corners. A minimum of six (6) inches of concrete shall be provided below the bottom of each post. End post, corner posts, and gate posts shall have a concrete base at least twelve (12) inches in diameter. Bases for line posts shall also be twelve (12) inches in diameter.

Wood fence slats shall be placed on the roadway side of posts unless otherwise specified. The slats shall be placed approximately one inch above the ground, and on a straight grade between posts by excavating high points of the ground. Filling depressions will be permitted only upon approval of the City. The slats/fence boards shall be sound and free from all major decay or defects which would weaken or otherwise cause them to be unsuitable for fence slats. Fastening to top and bottom railings shall be done with two galvanized nails at both the top and bottom rail.

01050.46 Protective Fence for Bridges – Delete this section.

01050.80 Measurement– Delete and replace with the following:

The measurement of quantities of fence will be made by linear foot of fencing reinstalled and/or constructed.

The quantities of gates will be measured on a unit basis.

01050.90 Payment – Delete and replace with the following:

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

Pay Item	Unit of Measurement
a) ___-Foot Vinyl Coated Chain Link Fence	Foot
b) ___-Foot Wood Fence	Foot
c) ___-Foot x __-Foot Vinyl Coated Chain Link Double Gate	Each
d) ___-Foot x __-Foot Wood Single Gate	Each

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

END OF SECTION

SECTION 01090 - GRAVEL BEDS AND BLANKETS

Replace Section 01090 of the Standard Specifications as follows:

Description

01090.00 Scope - This work consists of furnishing river rock aggregate beds within the Water Quality Facility at locations shown or directed on the project plans.

Materials

01090.12 Aggregates - Furnish clean, uncrushed, nearly round rock (river rock) for gravel bed within Water Quality Facility meeting the following gradation requirements:

Sieve Size	Percent Passing (by Weight)
2"	100
1 1/2"	80-100
1"	0-15
3/4"	0-5
1/2"	0

The Engineer may accept aggregates by visual inspection.

01090.40 General - Prepare gravel bed areas, and furnish and place topsoil and jute matting per project plans.

(a) Excavation - Excavate and shape the water quality treatment area for gravel beds as shown on water quality swale details
(b) GeoJute Matting - After the area has been covered with 12" of topsoil, place the jute matting over the prepared ground surface. Overlap all seams at least 12 inches.
(c) River Rock – Cover the jute matting to the depth specified or directed.

01090.80 Measurement - The quantities of gravel beds will be measured on the volume basis. The quantities of gravel blankets will be measured on the area basis by surface measurement of the material in place, limited to the established neat lines and grades. Payment

01090.90 Payment - The accepted quantities of gravel beds and gravel blankets will be paid for at the Contract unit price, per unit of measurement, for the following items:

Pay Item **Unit of Measurement**

a) Water Quality Facility, 3" Thick River Rock (3/4" to 2")..... Cubic Yard

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

No separate or additional payment will be made for fine grading. Payment for matting within the water quality facility treatment area is covered in Section 00280.

END OF SECTION

SECTION 01120 – IRRIGATION SYSTEMS

Comply with Section 01120 of the Standard Specifications supplemented and/or modified as follows:

01120.00 Scope – Delete and replace with the following:

This work consists of installing temporary irrigation systems and associated equipment at locations shown on the plans (final meter location to be coordinated with City). Temporary irrigation systems will be required for the Stormwater Quality Swale plantings and the Vegetated Corridor enhancement/mitigation plantings.

Watering shall be provided at a rate of at least one inch per week between June 15 and October 15.

The Contractor shall coordinate with the City regarding the location and installation of a city provided water meter (1" meter with maximum capacity of 50 gpm). The Contractor is responsible for the design and installation of the temporary irrigation system and all future fees/maintenance associated with the irrigation system during the 2-year maintenance period.

01120.90 Payment – Delete and replace with the following:

The accepted quantities of work performed under this section will paid for at the Contract lump sum price for the following item:

Pay Item	Unit of Measurement
a) Temporary Irrigation System	Lump Sum

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

No separate or additional payment with be made for the following:

- Excavating
- Backfill
- Laying and jointing the pipe
- Fittings and appurtenances
- Testing
- Electrical service
- System orientation
- Potable water service connection
- Irrigation double check valve

- Water meter (City provided)
- Water service fees before or during 2-year maintenance period

END OF SECTION

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

Comply with Section 01170 of the Standard Specifications supplemented and/or modified as follows:

001170.90 Payment – Replace this subsection with the following:

No separate or additional payment will be made for water service connections or water meters. This is considered incidental to payment for Section 01120, Temporary Irrigation System.

The contractor shall coordinate with the City regarding temporary water meter location and prior to irrigation design.

END OF SECTION

SECTION 02410 – CONCRETE AND PLASTIC PIPE

Comply with Section 02410 of the Standard Specifications supplemented and/or modified as follows:

02410.65 Solid Wall High Density Polyethylene (HDPE) Pipe – Add the following:

HDPE pipe shall be rated by the manufacturer to comply with maximum depth of cover affecting the pipe. A Contractor submittal of pipe proposed to be used will be required.

02410.75 Corrugated Polypropylene Pipe – Furnish corrugated polypropylene pipe meeting the following requirements:

Corrugated polypropylene storm sewer pipe, 12"-30"..... ASTM F2736
Corrugated polypropylene storm sewer pipe, 30"-60"..... ASTM F2764

All corrugated polypropylene pipe shall have a minimum pipe stiffness of 46 psi when tested in accordance with ASTM D2412.

The allowable nominal inside diameter of polyethylene pipe is as follows:

Corrugated polypropylene storm sewer pipe..... 12" - 60"

Watertight joints for corrugated polypropylene pipe shall meet the requirements of ASTM D3212. Corrugated polypropylene pipe shall be rated by the manufacturer to comply with maximum depth of cover affecting the pipe. A Contractor submittal of pipe proposed to be used within the project will be required.

END OF SECTION

SECTION 03010 – FENCING MATERIALS

Comply with Section 003010 of the Standard Specifications supplemented and/or modified as follows:

03010.40 Vinyl Clad Fabric – Replace section with:

Fence material shall be no. 9 gauge galvanized steel fabric with bonded vinyl coating (green or black). Fabric color shall match posts and hardware.

03010.45 Wood Fences – Add the following subsection:

03010.45 Wood Fences – All wood fence materials shall consist of the following:

a) Corner, Gate, End or Line Posts: Minimum 4"x4" or 4"x6" Pressure Treated (PT) Fir or No. 1 Grade cedar posts.
b) Bottom & Top Rails: Minimum 2" x 4" x 8-foot No. 1 Grade cedar.
c) Slats or Fence Boards: No. 1 Grade cedar or redwood with fence board configuration matching existing fences.
d) All fasteners to be hot dipped galvanized.
e) All wood to be coated with one coat of solid stain.

END OF SECTION

SECTION 03020 – BID ALTERNATES

03020.00 Scope – Bid Alternates are bid items that may be necessary for the construction of the project. Contractor shall contact Engineer prior to implementing any bid alternates for approval. Construction of Bid Alternates without prior Engineer approval are at the contractor's expense.

03020.80 Measurement – Measurement shall be in accordance with the specific Bid Alternate constructed.

03020.90 Payment - Payment shall be in accordance with the specific Bid Alternate constructed.

END OF SECTION

SECTION 03030 – PERMIT REQUIREMENTS

03030.00 Scope – All construction for this project shall adhere to all required permits for this project. Permits include but are not limited to NPDES 1200-C permit, railroad permit, CWS Service Provider Letter, CWS Storm Water Connection Permit Authorization, US Corps of Engineers.

03030.80 Measurement – There will be no measurement for work under this Section.

03030.90 Payment - There will be no payment for work under this Section.

END OF SECTION

Division Five
Supplemental Information

Real-World Geotechnical Solutions
Investigation • Design • Construction Support

Revised February 26, 2014
Project No. 14-3289

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SUBJECT: GEOTECHNICAL ENGINEERING REPORT
COLUMBIA STREET WATER QUALITY FACILITY
22939 SW MAIN STREET
SHERWOOD, OREGON

This report presents the results of a geotechnical explorations conducted by GeoPacific Engineering, Inc. (GeoPacific) for the above-referenced project. The purpose of our work was to evaluate subsurface conditions at the site and provide recommendations for site development. This geotechnical study was performed in accordance your authorization of GeoPacific's 'Agreement for Geotechnical Services,' and with the scope outlined in Exhibit 'A' of the Subconsultant Agreement.

SITE DESCRIPTION AND PROPOSED DEVELOPMENT

The subject site is approximately 2 acres in size and is bordered generally by Southern Pacific Railroad property and SW Wildlife Haven Court to the west, single-family residences and SW Columbia Street to the north, single-family residences and SW Main Street to the east, and one single family residence and SW Division Street to the south.

An existing drainage channel, which flows towards Cedar Creek to the east, bisects the site from east to west. Several stormwater outfalls enter the drainage channel from the north, west, and south. A culvert at the western end of the drainage channel conveys stormwater away from the site to the northwest, under the railroad embankment. Topography slopes down to the bottom of the drainage channel at grades of approximately 3H:1V (Horizontal to Vertical) on the north and west sides, 2H:1V on the west side, and 2H:1V to 3H:1V on the south side. Vegetation generally consists primarily of dense brush and small to large trees, except for the northeast portion of the site, where vegetation consists of long grasses, dense brush, and blackberry vines.

It is our understanding that the proposed development will include the construction of a water quality facility in the northeast portion of the project site. Plans for project development may also include adding another pipe culvert underneath the railroad embankment, adjacent to the existing pipe, and constructing access roads from SW Main Street in the northeast corner of the

site, and from SW Barbara Way to the location of the proposed pipe culvert at the west end of the existing drainage channel. We understand that proposed water quality facility in the northeast portion of the site will likely consist of a swale approximately 25 feet wide at the bottom, and that it will mostly be constructed by excavating material, creating 2.5H:1V slopes on each side of the swale. Depending on design and site constraints, the excavated material resulting from the construction of the proposed water quality facility may be placed at the top of the slopes or removed from the site.

SUBSURFACE CONDITIONS

Our site-specific exploration for this report was conducted on January 28, 2014. A total of 5 exploratory test pits were excavated with a trackhoe to depths ranging from 6 to 10.5 feet at the approximate locations indicated on Figure 2. It should be noted that test pit locations were located in the field by pacing distances from apparent property corners and other site features shown on the plans provided. As such, the locations of the explorations should be considered approximate.

A GeoPacific geotechnical engineer continuously monitored the field exploration program and logged the test pits. Soils observed in the explorations were classified in general accordance with the Unified Soil Classification System. During exploration, our engineer also noted geotechnical conditions such as soil consistency, moisture and groundwater conditions. Logs of test pits are attached to this report. The following report sections are based on the exploration program and summarize subsurface conditions encountered at the site.

Undocumented Fill: Underlying the ground surface in test pit TP-1, we observed undocumented fill material to a depth of 5 feet. The undocumented fill material generally consisted of dark brown SILT (ML), which graded to with occasional subrounded gravel and cobbles and charred organic material below a depth of 2 feet. The fill material generally had a soft to medium stiff consistency.

Topsoil Horizon: We observed a topsoil horizon consisting of dark brown, moderatley organic SILT (ML) directly underlying the ground surface test pits TP-2 through TP-5. The topsoil horizon was generally soft and extended to depths of 8 to 18 inches. We generally observed some fine roots and organic debris throughout topsoil horizon.

Willamette Formation: Underlying the undocumented fill material in test pit TP-1 and the topsoil horizon in test pits TP-2 though TP-5 was material belonging to the Willamette Formation. These soils generally consisted of stiff SILT (ML) extending beyond the maximum depth of exploration (10.5 feet).

Soil Moisture and Groundwater

On January 28, 2014, groundwater seepage was encountered in all test pits except TP-2, which was only excavated to a depth of 6 feet. Groundwater seepage was generally encountered at the point where the color of the Willamette Formation soils changed from brown to blue gray, at depths of 7 to 10 feet beneath the ground surface. However, some slower groundwater seepage was observed at slightly shallower depths in test pits TP-1 and TP-4. In test pits TP-1 and TP-4, the groundwater seepage rates increased at the point where the color of the Willamette Formation soils changed from brown to blue gray.

The groundwater conditions reported are for the specific date and locations indicated, and therefore may not necessarily be indicative of other times and/or locations. It is anticipated that groundwater conditions will vary depending on the time of year, rainfall, local subsurface conditions, changes in site utilization, and other factors. During periods of heavy and prolonged precipitation, shallow perched groundwater conditions often occur over fine-grained native deposits such as those beneath the site, particularly during the wet season.

CONCLUSIONS AND RECOMMENDATIONS

Based on our review, we consider the proposed improvements to be geotechnically feasible, provided that the recommendations of this report are incorporated into the design and construction phases of the project. The following report sections provide recommendations for site development and construction in accordance with the current applicable codes and local standards of practice.

Site Preparation

Construction areas and areas to receive fill should be cleared of vegetation and any organic and inorganic debris. Existing structures should be demolished and any cavities structurally backfilled. Inorganic debris should be removed from the site. Organic materials from clearing should either be removed from the site or placed as landscape fill in areas not planned for structures.

Organic-rich topsoil, where encountered, should then be stripped from construction areas of the site or where engineered fill is to be placed. The estimated average necessary depth of removal in undisturbed areas for moderately to highly organic soils is about 6 inches. Deeper stripping to remove large tree roots or other organics may be necessary in localized areas. The final depth of soil removal will be determined on the basis of a site inspection after the stripping/ excavation has been performed. Stripped topsoil should be stockpiled only in designated areas and stripping operations should be observed and documented by the geotechnical engineer or his representative.

Any remaining and subsurface structures (tile drains, basements, driveway and landscaping fill, old utility lines, septic leach fields, etc.) should be removed and the excavations backfilled with engineered fill. Undocumented fill material should be removed from slopes or areas upon which fill is to be placed. Undocumented fill material was observed to a depth of 5 feet in test pits TP-1. This fill material generally consisted of medium stiff silt with occasional gravel and cobbles. We anticipate that the undocumented fill material in test pit TP-1 below a depth of 2 feet may remain in place under the proposed access road in the southwest portion of the site, but should be evaluated during construction. Soft/loose undocumented fill material, if encountered, should be removed and the excavations backfilled with engineered fill.

Once stripping of a particular area is approved, the area must be ripped or tilled to a depth of 12 inches, moisture conditioned, root-picked, and compacted in-place prior to the placement of engineered fill or crushed aggregate base for pavement. Exposed subgrade soils should be evaluated by the geotechnical engineer. For large areas, this evaluation is normally performed by proof-rolling the exposed subgrade with a fully loaded scraper or dump truck. For smaller areas where access is restricted, the subgrade should be evaluated by probing the soil with a steel probe. Soft/loose soils identified during subgrade preparation should be compacted to a firm and unyielding condition, over-excavated and replaced with engineered fill (as described below), or stabilized with rock prior to placement of engineered fill. The depth of

overexcavation, if required, should be evaluated by the geotechnical engineer at the time of construction.

Stability of Existing Slopes and CWS Slope Setbacks

Slope geomorphology on the site is generally smooth and uniform, consistent with relatively stable conditions. No evidence of past instability or historic slope movement (such as scarplets, ground cracks, benches, leaning trees, etc.) was observed at the site during our site visit on January 28, 2014. Based on the results of our test pit explorations, the existing slopes on the site generally consist of stiff native SILT (ML) belonging to the Willamette Formation, which are generally considered moderately resistant to deep-seated landsliding on gentle slopes unless adversely impacted by natural processes or human activities.

Our observations indicate that slope stability hazard at the subject site is low to moderate. Some erosion was observed at a stormwater outfall on the south side of the site. While this erosion does not currently pose a significant risk to slope stability, we recommend that measures be taken to prevent surficial instability and/or erosion of embankment material at the locations of the stormwater outfalls on the site in the future. We understand that the existing stormwater outfall causing erosion on the south side of the existing drainage channel is to be removed as part of project development.

Based on preliminary grading plans, understand that the side slopes of the proposed water quality facility will consist primarily of undisturbed, native SILT (ML) belonging to the Willamette Formation and will be inclined at grades no steeper than 2.5H:1V.

Clean Water Services (CWS) allows a 15 foot minimum slope setback from the break in slope, with a geotechnical engineer's review. Based on our geologic reconnaissance of the site and the results of our test pit explorations, it is our opinion that a 15 foot setback from the break in slope is adequate for the site.

Grading of Drainage Channel Slopes

We understand that in order to construct the water quality facility in the northeast portion of the site, cut slopes with grades of approximately 2.5H:1V will be created. We also understand that, depending on design and site constraints, the excavated material resulting from the construction of the proposed water quality facility may be placed at the top of the slopes or removed from the site. The side slopes of the existing drainage channel are currently 15 to 20 feet tall and slope down at grades of approximately 3H:1V (Horizontal to Vertical) on the north and west sides, 2H:1V on the west side, and 2H:1V to 3H:1V on the south side. Above the side slopes of the drainage channel, grades are approximately 10 degrees. Based on preliminary grading plans, the side slope of the proposed water quality facility will be approximately 10 to 20 feet tall on the north side and 2 to 10 feet tall on the south side, and will slope down at grades of approximately 2.5H:1V.

GeoPacific performed slope stability analyses for the proposed conditions. Shear strength parameters for use in analysis were selected based on the results of our ~~subsurface exploration,~~ and our general experience with similar soil and geologic conditions. A summary of the assumed shear strength parameters is presented below, in Table 1.

Table 1 - Summary of Assumed Shear Strength Parameters

Soil Type	Moist Unit Weight (pcf)	Friction Angle (Degrees)	Apparent Cohesion (psf)
SILT (Willamette Formation)	115	28	100

Based on information provided by AKS Engineering and Forestry, we understand that the maximum elevation of backwater resulting from the 25-year storm for the existing conditions is 170.75 feet. In order to analyze the critical condition for slope stability analysis, we considered the rapid draw-down condition post-construction, in which the groundwater levels are at an elevation of approximately 170 feet at the slope face.

Slope stability analyses were performed using the SLOPE/W computer program, which was developed by GeoSlope International, Ltd. of Calgary, British Columbia, Canada. SLOPE/W utilizes a two-dimensional limiting equilibrium method to calculate the factor of safety. For the case analyzed, a search routine was utilized to identify the most critical potential failure surface. Factors of safety were calculated by the Spencer Method of Slices. Computer-generated output files for each case analyzed are attached. Strength parameters, slope geometry, and ground water conditions modeled in each case are indicated on the output figures.
The stability analyses were formulated to determine factors of safety against sliding under post-construction conditions. In performing our slope stability analyses, we used factors of safety of 1.5 as the minimum acceptable for static conditions, and 1.1 as the minimum acceptable for seismic conditions. These threshold values are widely accepted in the geotechnical industry as being acceptable factors of safety for residential development.

In order to present the designer of the water quality facility with options for site development, we evaluated slope stability for a range of slope inclinations and fill depths. We recommend that all slopes for the project be planned no steeper than 2H:1V. For slopes with a grade of 2H:1V, no excavated material may be placed at the top of the slope. For slopes with grades of 2.5H:1V or 3H:1V, 4 and 10 feet of excavated material may be placed at the top of the slope, respectively. Table 2 summarizes the allowable depths of excavated soils that can be placed as fill at the top of the slope. Graphic plots of our slope stability analyses are attached to this report.

Table 2 - Allowable Depths of Fill at Top of Slope for Various Slope Inclinations

Slope Inclination (Undisturbed Native Soil)	Allowable Depth of Fill at Top of Slope (ft)
2H:1V (26.5 degrees)	0
2.5H:1V (21.8 degrees)	4
3H:1V (18.3 degrees)	10

Excavated materials placed at the top of the slopes should be placed and compacted as engineered fill, described in the following section of this report. Prior to placing compacted fill

against natural slopes, loose undocumented fill, topsoil, and soft soils should first be removed. Adequate keying and benching should be maintained where fill is placed on existing slopes steeper than about 6H:1V (Horizontal:Vertical). GeoPacific should be consulted to provide recommendations for key ways, benching, and subdrains if fill is to be placed on existing slopes steeper than about 6H:1V. The side slopes of fill material placed at the top of the slope should be inclined no steeper than 2H:1V. To achieve the specified relative compaction at the slope face, it may be necessary to overbuild the slopes several feet, and then trim back to design finish grade. In our experience, compaction of slope faces by "track-walking" is generally ineffective and is therefore not recommended.

For slopes consisting of undisturbed native soils and for appropriate depths of engineered fill placed and compacted at the top of the slopes, as recommended herein, we anticipate that adequate factors of safety against global failure will be maintained.

Compacted Landscape Fill

All grading for the proposed improvements may be performed as landscape grading. Proper test frequency and earthwork documentation usually requires daily observation and testing during stripping, rough grading, and placement of compacted fill. Imported fill material must be approved by the geotechnical engineer prior to being imported to the site. Oversize material greater than 6 inches in size should not be used within 3 feet of foundation footings, and material greater than 12 inches in diameter should not be used in engineered fill.

Landscape fill should be compacted in horizontal lifts not exceeding 8 inches using standard compaction equipment. We recommend that engineered fill be compacted to at least 90% of the maximum dry density determined by Standard Proctor AASHTO T-99 or equivalent. If any pavement or structural areas are included, they should be compacted to 95%. Field density testing should conform to ASTM D2922 and D3017, or D1556. All engineered fill should be observed and tested by the project geotechnical engineer or his representative. Typically, one density test is performed for at least every 2 vertical feet of fill placed or every 500 yd^3, whichever requires more testing. Because testing is performed on an on-call basis, we recommend that the earthwork contractor be held contractually responsible for test scheduling and frequency.

Site earthwork will be impacted by soil moisture and shallow groundwater conditions. Earthwork in wet weather would likely require extensive use of cement or lime treatment, or other special measures, at considerable additional cost compared to earthwork performed under dry-weather conditions.

Erosion Control Considerations

Measures should be taken to prevent surficial instability and/or erosion of the side slopes of the existing drainage channel and of the proposed water quality facility. Based on preliminary information provided by AKS Engineering and Forestry, we understand that regular water quality flows are on the order of 4.2 cfs (velocity of 0.35 fps) and that the peak storm flow resulting from the 25-year storm is on the order of 56 cfs (velocity of 12 to 14 fps).

Considering the flow rates and velocities provided by AKS Engineering and Forestry, we recommend that ODOT Class 50 riprap be utilized to prevent slope instability and/or erosion of the side slopes of the drainage channel. For planning purposes, the riprap should be placed on the side slopes to at least 1 foot higher than the maximum elevation of backwater resulting from

the 25-year storm. Based on the peak storm flow rates, we estimate that a thickness 12 inches of ODOT Class 50 riprap will be sufficient to protect the side slopes of the drainage channel. Increased thicknesses and heights of riprap may be required at stormwater outfalls and surrounding the pipe culvert outlets at the west end of the drainage channel where flow can be more turbulent than in other areas of the drainage channel.

In addition to protecting the side slopes of the main drainage channel, measures should also be taken to prevent surficial instability and/or erosion of the bottom and side slopes of the stormwater outfalls entering the drainage channel on the north, west, and south sides.

Regarding erosion potential during construction in areas that have been stripped of vegetation, erosion at the site during construction can be minimized by implementing the project erosion control plan, which should include judicious use of straw bales and silt fences. If used, these erosion control devices should be in place and remain in place throughout site preparation and construction.

Erosion and sedimentation of exposed soils can also be minimized by quickly re-vegetating exposed areas of soil, and by staging construction such that large areas of the project site are not denuded and exposed at the same time. Areas of exposed soil requiring immediate and/or temporary protection against exposure should be covered with either mulch or erosion control netting/blankets. Areas of exposed soil requiring permanent stabilization should be seeded with an approved grass seed mixture, or hydroseeded with an approved seed-mulch-fertilizer mixture.

Excavating Conditions

Subsurface test pit exploration indicates that, in general, on site soils be excavated using conventional heavy equipment such as dozers and trackhoes. Maintenance of safe working conditions, including temporary excavation stability, is the responsibility of the contractor. Actual slope inclinations at the time of construction should be determined based on safety requirements and actual soil and groundwater conditions. All temporary cuts in excess of 4 feet in height should be sloped in accordance with U.S. Occupational Safety and Heath Administration (OSHA) regulations (29 CFR Part 1926), or be shored. The existing native soils classify as Type B Soil and temporary excavation side slope inclinations as steep as 1H:1V may be assumed for planning purposes. This cut slope inclination is applicable to excavations above the water table only. Maintenance of safe working conditions, including temporary excavation stability, is the responsibility of the contractor. Actual slope inclinations at the time of construction should be determined based on safety requirements and actual soil and groundwater conditions. Saturated soils and groundwater may be encountered in excavations, particularly during the wet season. We anticipate that dewatering systems consisting of ditches, sumps and pumps would be adequate for control of perched groundwater, if necessary. Regardless of the dewatering system used, it should be installed and operated such that in-place soils are prevented from being removed along with the groundwater.

Vibrations created by traffic and construction equipment may cause some caving and raveling of excavation walls. In such an event, lateral support for the excavation walls should be provided by the contractor to prevent loss of ground support and possible distress to existing or previously constructed structural improvements.

Wet Weather Earthwork

Soils underlying the site are likely to be moisture sensitive and may be difficult to handle or traverse with construction equipment during periods of wet weather. Earthwork is typically most economical when performed under dry weather conditions. Earthwork performed during the wet-weather season will probably require expensive measures such as cement treatment or imported granular material to compact fill to the recommended engineering specifications. If earthwork is to be performed or fill is to be placed in wet weather or under wet conditions when soil moisture content is difficult to control, the following recommendations should be incorporated into the contract specifications.

- Earthwork should be performed in small areas to minimize exposure to wet weather. Excavation or the removal of unsuitable soils should be followed promptly by the placement and compaction of clean engineered fill. The size and type of construction equipment used may have to be limited to prevent soil disturbance. Under some circumstances, it may be necessary to excavate soils with a backhoe to minimize subgrade disturbance caused by equipment traffic;
- The ground surface within the construction area should be graded to promote run-off of surface water and to prevent the ponding of water;
- Material used as engineered fill should consist of clean, granular soil containing less than 5 percent fines. The fines should be non-plastic. Alternatively, cement treatment of on-site soils may be performed to facilitate wet weather placement;
- The ground surface within the construction area should be sealed by a smooth drum vibratory roller, or equivalent, and under no circumstances should be left uncompacted and exposed to moisture. Soils which become too wet for compaction should be removed and replaced with clean granular materials;
- Excavation and placement of fill should be observed by the geotechnical engineer to verify that all unsuitable materials are removed and suitable compaction and site drainage is achieved; and
- Bales of straw and/or geotextile silt fences should be strategically located to control erosion.

If cement or lime treatment is used to facilitate wet weather construction, GeoPacific should be contacted to provide additional recommendations and field monitoring.

UNCERTAINTIES AND LIMITATIONS

We have prepared this report for the owner and their consultants for use in design of this project only. This report should be provided in its entirety to prospective contractors for bidding and estimating purposes; however, the conclusions and interpretations presented in this report should not be construed as a warranty of the subsurface conditions. Experience has shown that soil and groundwater conditions can vary significantly over small distances. Inconsistent conditions can occur between explorations that may not be detected by a geotechnical study. If, during future site operations, subsurface conditions are encountered which vary appreciably from those described herein, GeoPacific should be notified for review of the recommendations of this report, and revision of such if necessary.

Sufficient geotechnical monitoring, testing and consultation should be provided during construction to confirm that the conditions encountered are consistent with those indicated by explorations. The checklist attached to this report outlines recommended geotechnical observations and testing for the project. Recommendations for design changes will be provided should conditions revealed during construction differ from those anticipated, and to verify that the geotechnical aspects of construction comply with the contract plans and specifications.

Within the limitations of scope, schedule and budget, GeoPacific attempted to execute these services in accordance with generally accepted professional principles and practices in the fields of geotechnical engineering and engineering geology at the time the report was prepared. No warranty, expressed or implied, is made. The scope of our work did not include environmental assessments or evaluations regarding the presence or absence of wetlands or hazardous or toxic substances in the soil, surface water, or groundwater at this site.

We appreciate this opportunity to be of service.

Sincerely,

GEOPACIFIC ENGINEERING, INC.

REGISTERED PROFESSIONAL ENGINEER
14743PE
OREGON
JAN. 23, 1990
JAMES D. IMBRIE

EXPIRES: 06/30/2015

Benjamin G. Anderson, E.I.T.
Geotechnical Staff

James D. Imbrie, G.E., C.E.G.
Principal Geotechnical Engineer

Attachments: References
Figure 1 - Vicinity Map
Figure 2 - Site Plan and Exploration Locations
Test Pit Logs (TP-1 through TP-5)
Slope/W Graphic Plots (4 pages)

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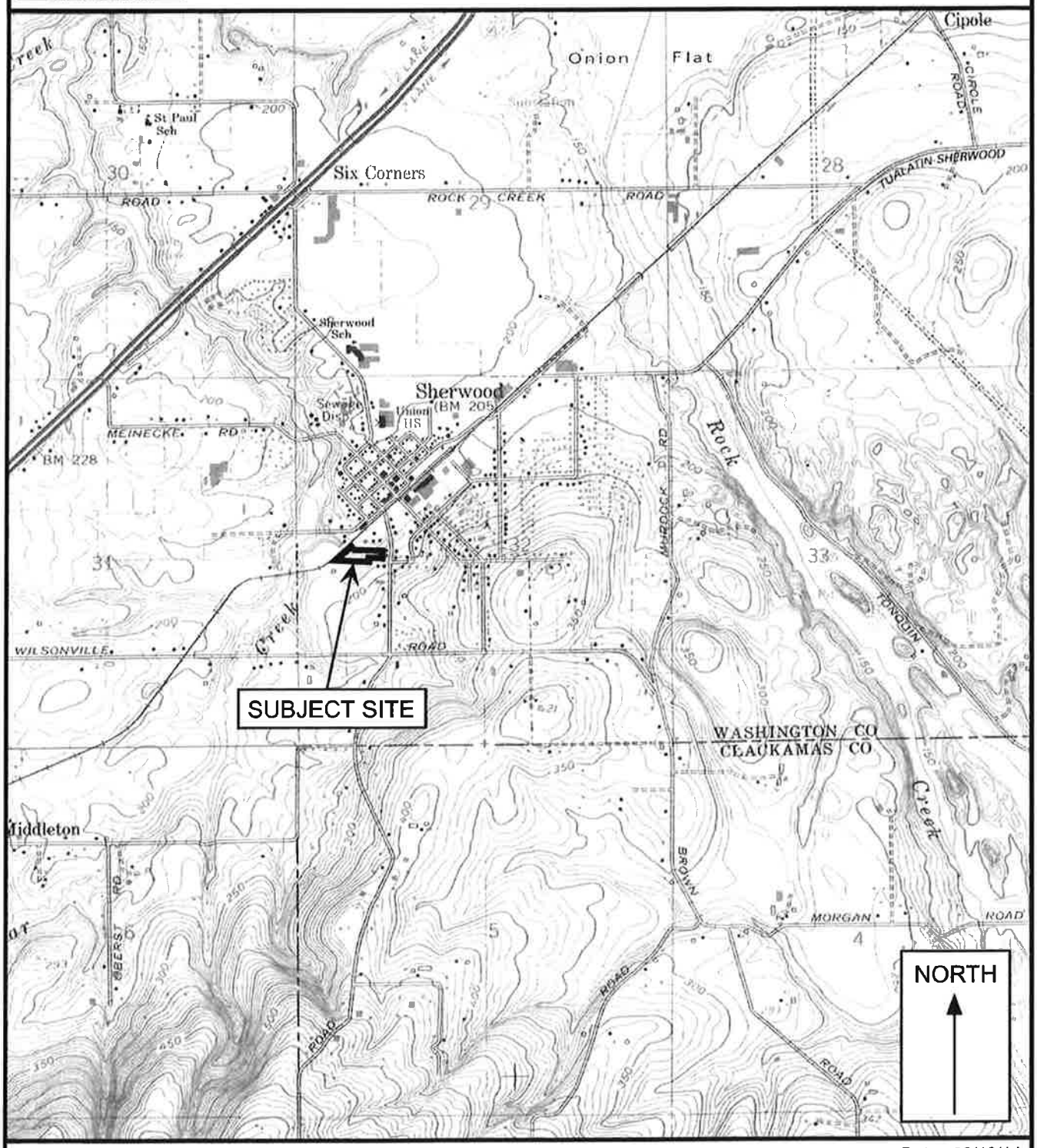
VICINITY MAP



Legend

Approximate Scale 1 in = 2,000 ft

Date: 02/10/14
Drawn by: BGA

Base map: U.S. Geological Survey 7.5 minute Topographic Map Series, Sherwood, Oregon Quadrangle, 1961 (Revised 1984).

Project: Columbia Street Water Quality Facility Sherwood, Oregon	Project No. 14-3289	FIGURE 1

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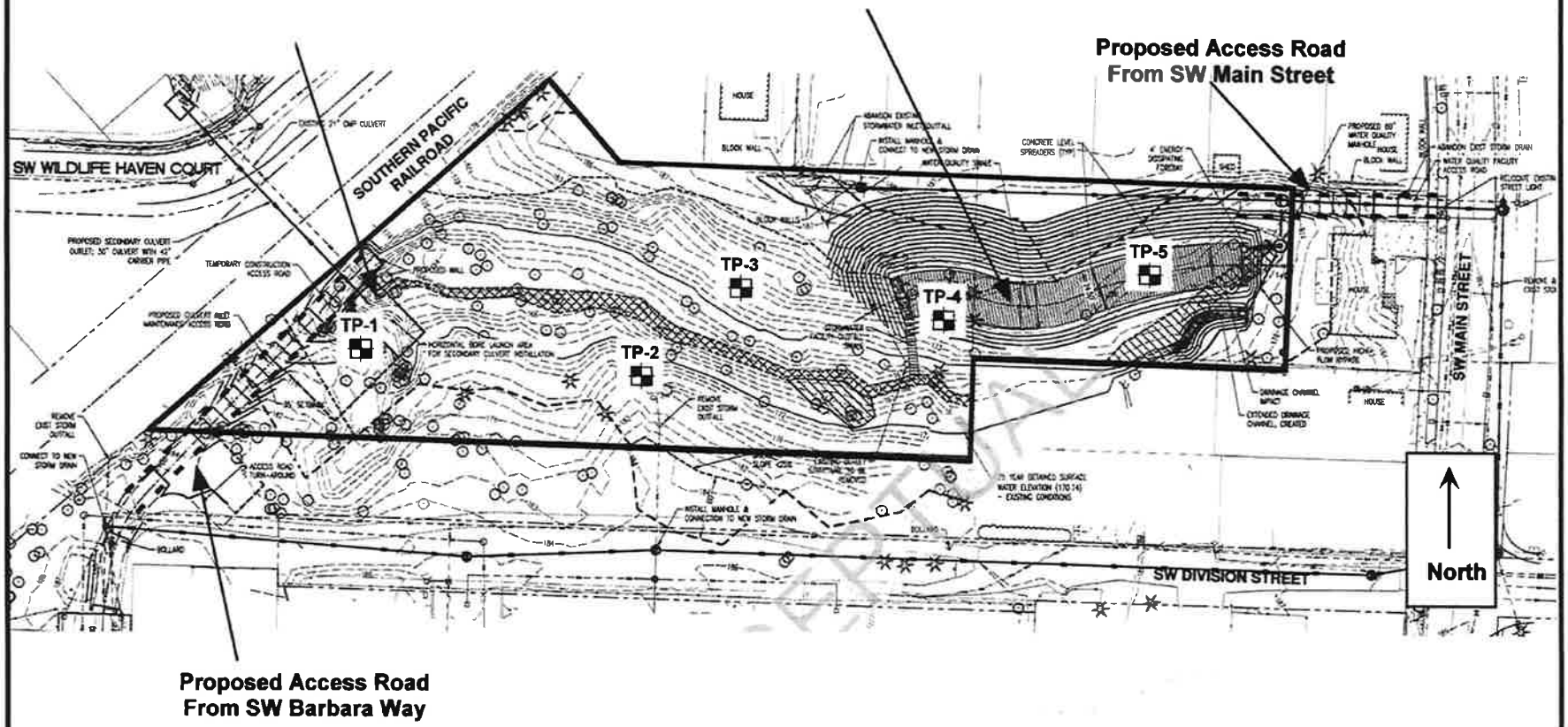
SITE PLAN AND EXPLORATION LOCATIONS



Legend

TP-1 Test Pit Designation and Approximate Location

Conceptual Site Plan Provided by AKS Engineering and Forestry

0 80'
APPROXIMATE SCALE 1"=80'

Date: 02/10/14
Drawn by: BGA

Project: Columbia Street Water Quality Facility Sherwood, Oregon	Project No. 14-3289	FIGURE 2

GeoPacific Engineering, Inc
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TEST PIT LOG

Project: Columbia Street Water Quality Facility
Sherwood, Oregon

Project No. 14-3289

Test Pit No. **TP- 1**

Depth (ft)	Pocket Penetrometer (tons/ft²)	Sample Type	In-Situ Dry Density (lb/ft³)	Moisture Content (%)	Water Bearing Zone	Material Description
1	2.0					Soft to medium stiff, gravelly SILT (ML), dark brown, fine to medium roots throughout upper 8 inches, moist (Undocumented Fill)
2						
	1.5					Medium stiff, SILT (ML), dark gray, with occasional subrounded gravel and cobbles, with some charred organic material, with some fine to medium roots, moist (Undocumented Fill)
3	1.5					
	2.0					
4	2.5					
5						Medium stiff to stiff, SILT (ML), brown, with orange mottling, moist (Willamette Formation)
6						Grades to hard, with black, orange, and dark gray mineral deposits, and wet
7						
8						Grades to gray brown and sandy
9						Grades to blue gray
10						Test pit terminated at 10 feet
11						
12						Notes: Very slow groundwater seepage encountered at 5.5 feet on west side of test pit; Discharge visually estimated at less than 1 gallon per minute
13						
14						Increased groundwater seepage encountered below 6.5 feet; Discharge visually estimated at less than 3 gallons per minute
15						No significant caving observed
16						
17						

LEGEND

Bag Sample (100 to 1,000 g) | Bucket Sample (5 Gal. Bucket) | Shelby Tube Sample | Seepage | Water Bearing Zone | Water Level at Abandonment

Date Excavated: 01/28/14
Logged By: BGA
Surface Elevation:

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Tel: (503) 598-8445 Fax: (503) 941-9281

TEST PIT LOG

Project: Columbia Street Water Quality Facility
Sherwood, Oregon

Project No. 14-3289

Test Pit No. **TP-2**

Depth (ft)	Pocket Penetrometer (tons/ft²)	Sample Type	In-Situ Dry Density (lb/ft³)	Moisture Content (%)	Water Bearing Zone	Material Description
						Soft, moderately organic SILT (ML), dark brown, fine roots throughout upper 8 inches, moist (Topsoil)
1						Medium stiff, SILT (ML), light brown, with orange and gray mottling, moist (Willamette Formation)
	1.5					
2	2.0					Grades to stiff
3	3.0					
4	3.0					
5						
6						Test pit terminated at 6 feet
7						
8						Notes: Groundwater seepage not encountered Logged the exposed soil of near vertical embankment at stormwater outfall entering drainage channel from the south
9						
10						No significant caving observed
11						
12						
13						
14						
15						
16						
17						

LEGEND

Bag Sample | Bucket Sample | Shelby Tube Sample | Seepage | Water Bearing Zone | Water Level at Abandonment

Date Excavated: 01/28/14
Logged By: BGA
Surface Elevation:

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TEST PIT LOG

Project: Columbia Street Water Quality Facility Sherwood, Oregon	Project No. 14-3289	Test Pit No. **TP-3**

Depth (ft)	Pocket Penetrometer (tons/ft²)	Sample Type	In-Situ Dry Density (lb/ft³)	Moisture Content (%)	Water Bearing Zone	Material Description
						Soft, moderately organic SILT (ML), dark brown, with fine to medium roots and organic debris throughout, moist (Topsoil)
1						
2	1.5					Medium stiff, SILT (ML), light brown, with somem charred organic material in upper 12 inches, moist (Willamette Formation)
	1.5					
3	1.5					
4	2.0					Grades to stiff
5						
6						Grades to with increased stiffness
7						
8						Grades to hard and with black, orange, and dark gray mineral deposits from 7.5 to 8.5 feet
9						Grades to blue gray
10						Test pit terminated at 10 feet
11						
12						Notes: Slow groundwater seepage encountered below 7 feet Discharge visually estimated at less than 1 gallon per minute
13						
14						No significant caving observed
15						
16						
17						

LEGEND

Bag Sample (100 to 1,000 g) | Bucket Sample (5 Gal. Bucket) | Shelby Tube Sample | Seepage | Water Bearing Zone | Water Level at Abandonment

Date Excavated: 01/28/14
Logged By: BGA
Surface Elevation:

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TEST PIT LOG

Project: Columbia Street Water Quality Facility Sherwood, Oregon	Project No. 14-3289	Test Pit No. **TP-4**

Depth (ft)	Pocket Penetrometer (tons/ft²)	Sample Type	In-Situ Dry Density (lb/ft³)	Moisture Content (%)	Water Bearing Zone	Material Description
						8" soft, moderately organic SILT (ML), dark brown, fine roots throughout, moist (Topsoil)
1	1.5					Medium stiff, SILT (ML), light brown, moist (Willamette Formation)
2	2.0					Grades to stiff
3	2.0					
4	>4.5					Grades to very stiff
5						
6						
7						
8						Grades to hard and with black, orange, and dark gray mineral deposits from 8 to 8.5 feet
9						Grades to blue gray
10						
11						Test pit terminated at 10 feet
12						Notes: Very slow groundwater seepage encountered at 6.5 feet; Discharge visually estimated at less than 1 gallon per minute
13						Increased groundwater seepage encountered below 9 feet; Discharge visually estimated at less than 5 gallons per minute
14						No significant caving observed
15						
16						
17						

LEGEND

Bag Sample (100 to 1,000 g) | Bucket Sample (5 Gal. Bucket) | Shelby Tube Sample | Seepage | Water Bearing Zone | Water Level at Abandonment

Date Excavated: 01/28/14
Logged By: BGA
Surface Elevation:

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TEST PIT LOG

Project: Columbia Street Water Quality Facility
Sherwood, Oregon

Project No. 14-3289

Test Pit No. **TP-5**

Depth (ft)	Pocket Penetrometer (tons/ft²)	Sample Type	In-Situ Dry Density (lb/ft³)	Moisture Content (%)	Water Bearing Zone	Material Description
1						Soft to medium stiff, highly organic SILT (ML-OL), dark brown, fine roots and organic debris throughout upper 8 inches, moist (Topsoil)
2	2.0					Medium stiff to stiff, SILT (ML), light brown, very moist (Willamette Formation)
3	2.0					
4	2.0					
5						
6						
7						
8						
9					✓	Grades to hard and with black, orange, and dark gray mineral deposits from 8.5 to 9.5 feet
10					✓	Grades to blue gray and with some sand
11						Test pit terminated at 10.5 feet
12						
13						Notes: Groundwater seepage encountered below 8.5 feet Discharge visually estimated at less than 1 gallon per minute
14						No significant caving observed
15						
16						
17						

LEGEND

Bag Sample (100 to 1,000 g) | Bucket Sample (5 Gal. Bucket) | Shelby Tube Sample | Seepage | Water Bearing Zone | Water Level at Abandonment

Date Excavated: 01/28/14
Logged By: BGA
Surface Elevation:

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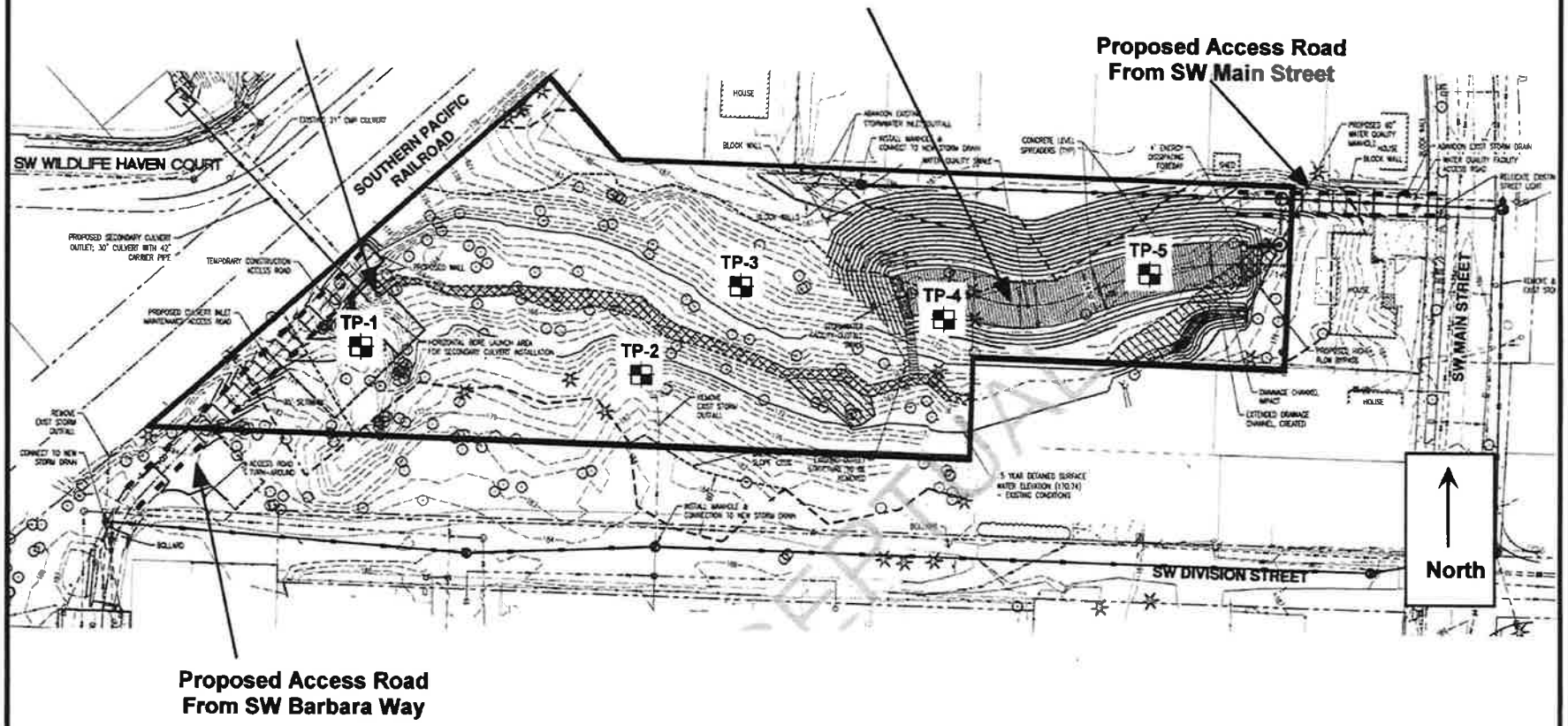
SITE PLAN AND EXPLORATION LOCATIONS



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TP-1 Test Pit Designation and Approximate Location

Conceptual Site Plan Provided by AKS Engineering and Forestry

0 80'
APPROXIMATE SCALE 1"=80'

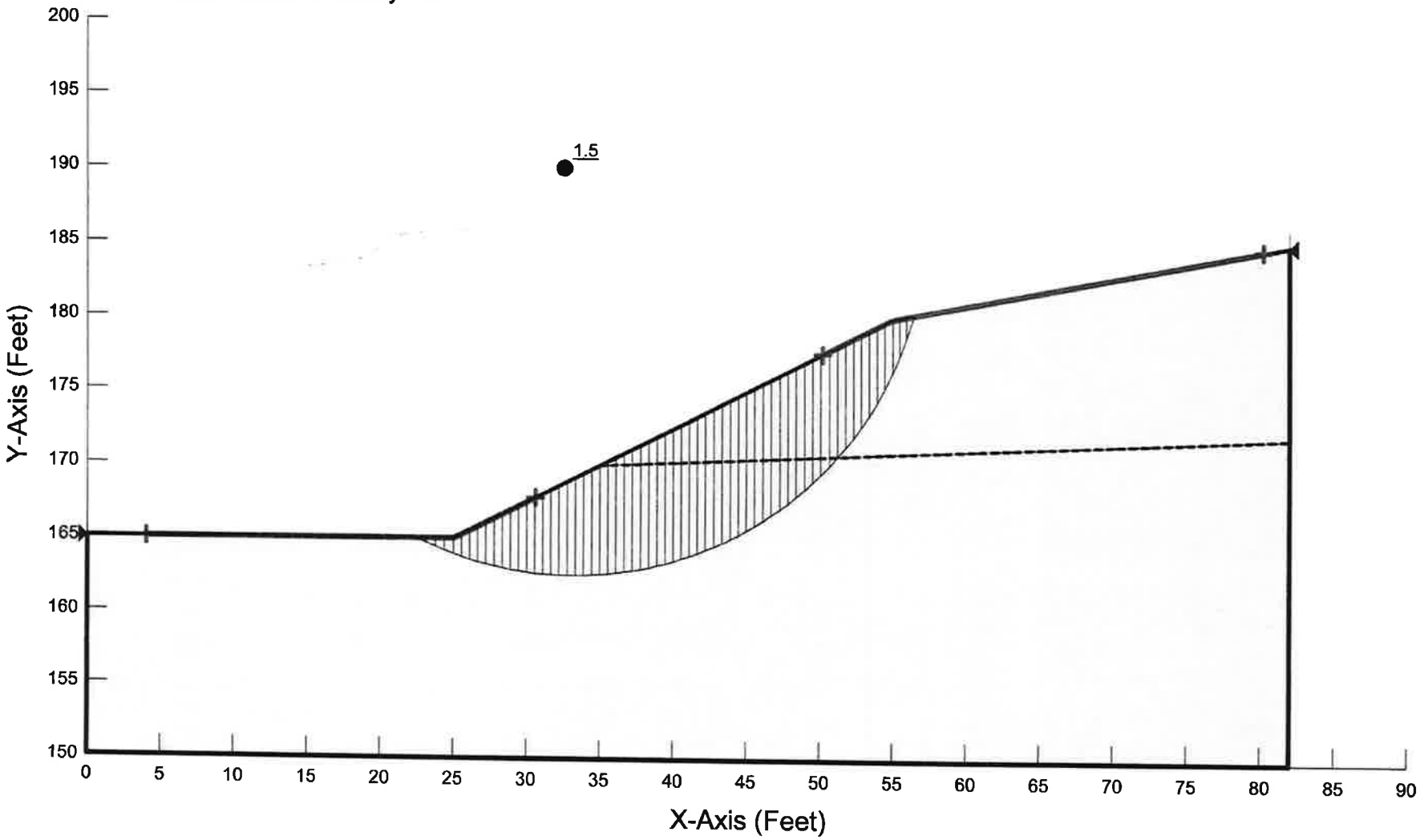
Date: 02/26/14
Drawn by: BGA

Project: Columbia Street Water Quality Facility Sherwood, Oregon	Project No. 14-3289	FIGURE 2

Name: Columbia Street Water Quality Facility - 2H1V - Static.gsz

Description: Native Silt Model: MohrCoulomb Wt: 115 Cohesion: 100 Phi: 28

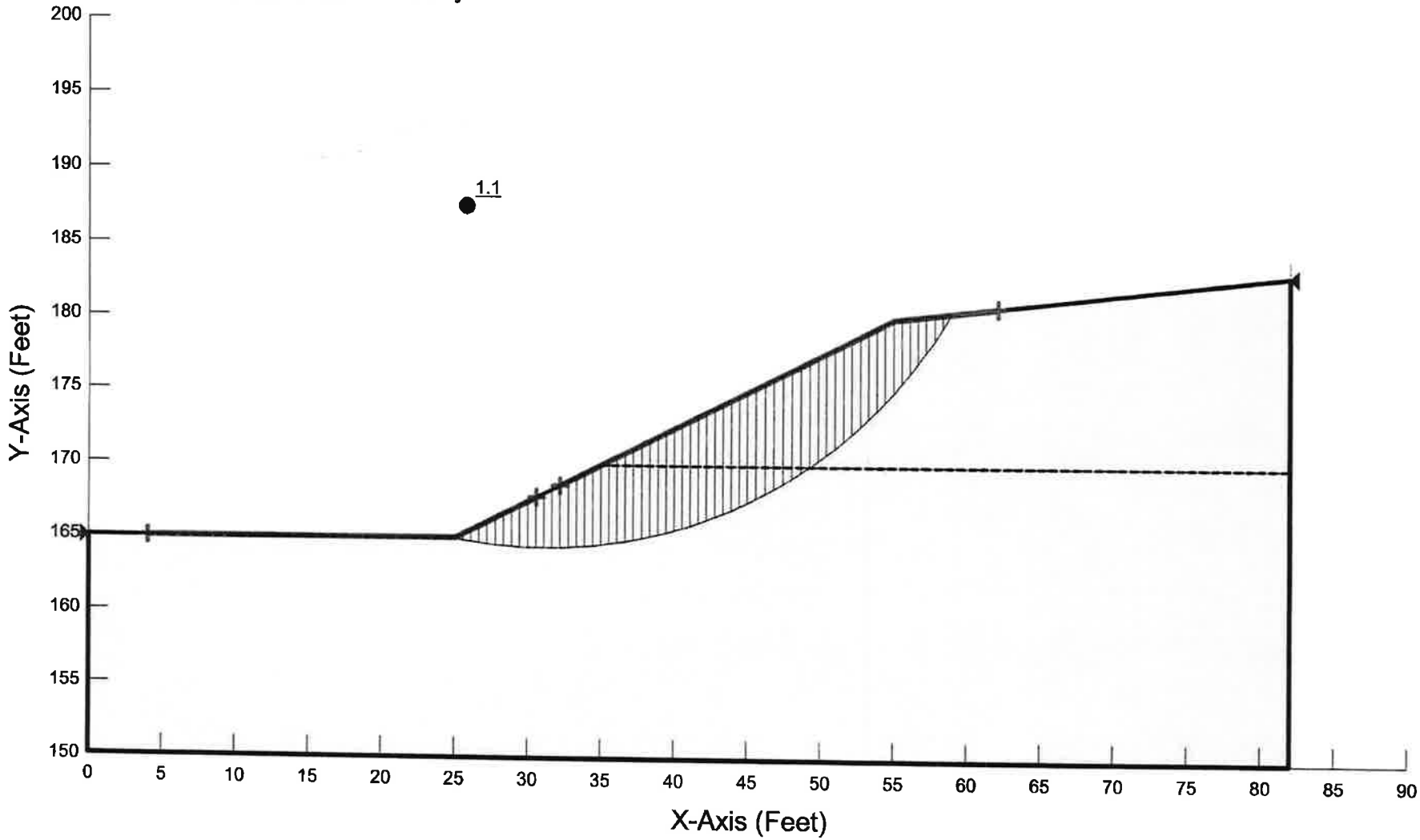
Static Factor of Safety: 1.5



Name: Columbia Street Water Quality Facility - 2H1V - Seismic.gsz

Description: Native Silt Model: MohrCoulomb Wt: 115 Cohesion: 100 Phi: 28

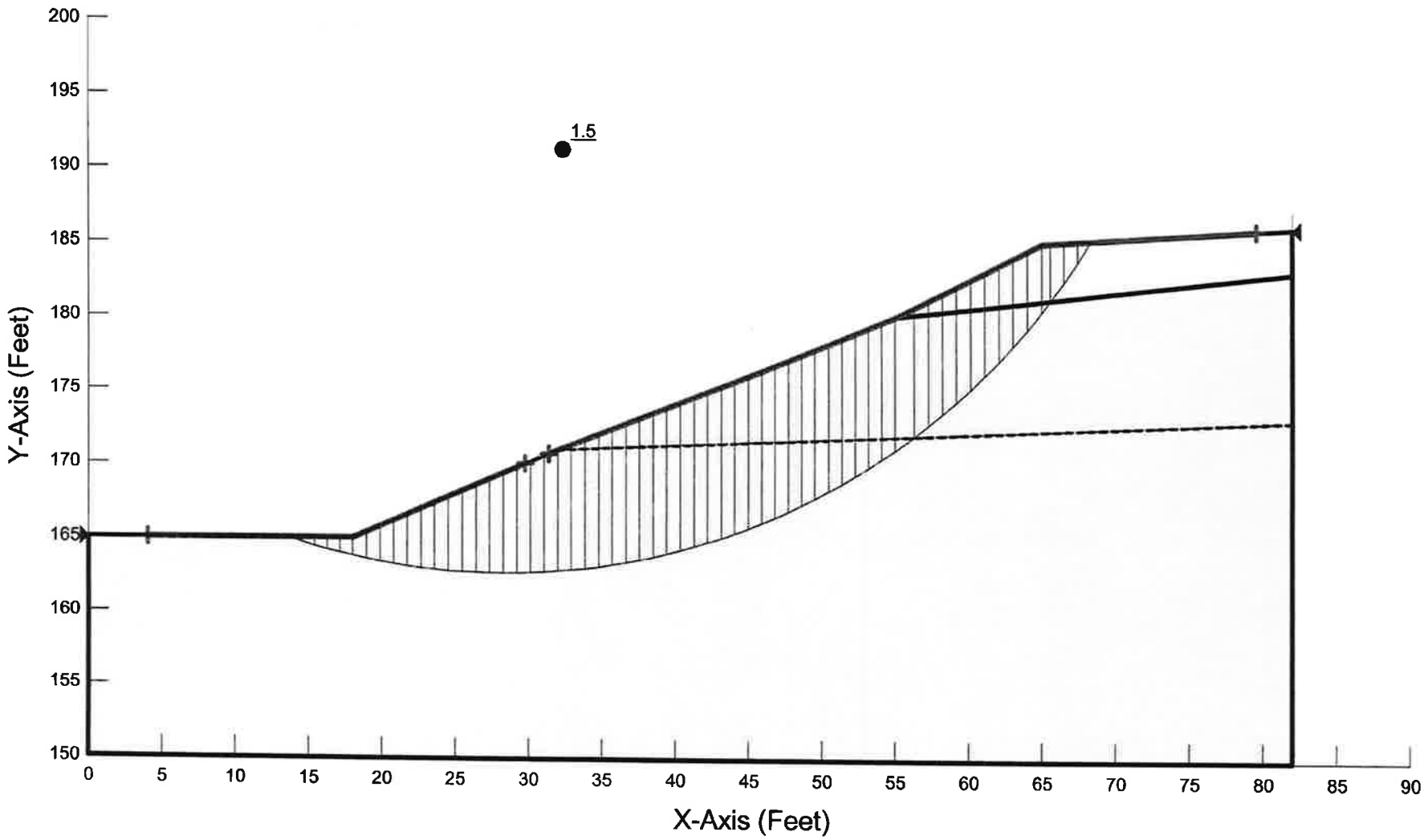
Pseudostatic Factor of Safety: 1.1



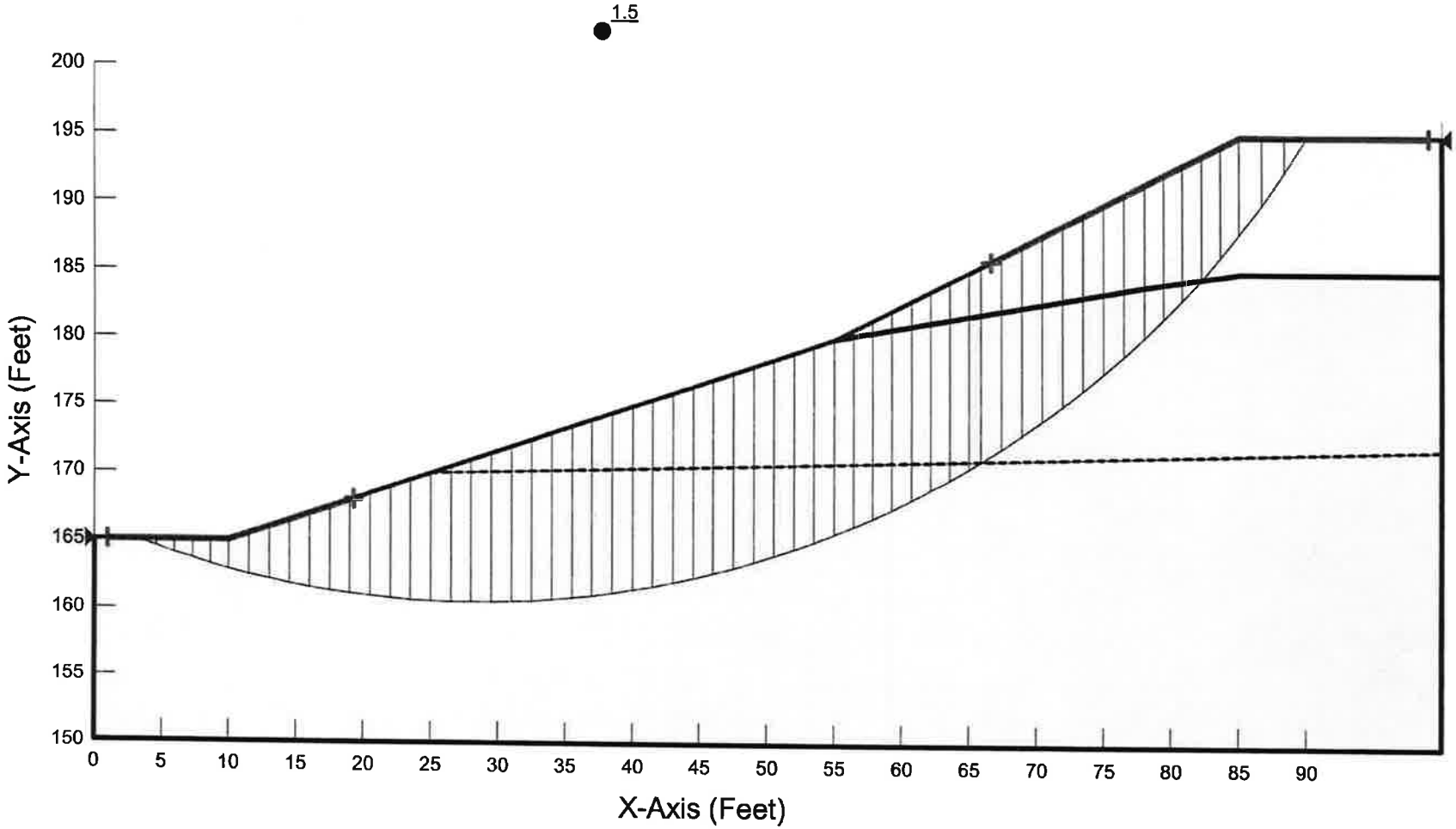
Name: Columbia Street Water Quality Facility - 2.5H1V with Fill - Static.gsz

Description: Native Silt Model: MohrCoulomb Wt: 115 Cohesion: 100 Phi: 28
Description: Fill Material Model: MohrCoulomb Wt: 115 Cohesion: 0 Phi: 24

Static Factor of Safety: 1.5



Name: Columbia Street Water Quality Facility - 3H1V with Fill - Static.gsz

Description: Native Silt Model: MohrCoulomb Wt: 115 Cohesion: 100 Phi: 28
Description: Fill Material Model: MohrCoulomb Wt: 115 Cohesion: 0 Phi: 24

Static Factor of Safety: 1.5