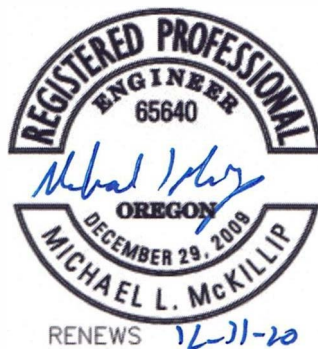


**CONTRACT DOCUMENTS**  
**FOR**  
**CONSTRUCTION OF**  
**PARR ROAD MUNICIPAL WATER SUPPLY WELL**  
**FOR**  
**CITY OF WOODBURN, OREGON**  
**AUGUST 2020**



**MURRAYSMITH, INC.**  
**888 SW 5th Avenue**  
**Suite #1170**  
**Portland, OR 97204**  
**(503) 225-9010**

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**PARR ROAD MUNICIPAL WATER SUPPLY WELL**  
**CONTRACT DOCUMENTS**

**PROJECT No. 2018-011-28**  
**BID No. 2020-01**

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# **SECTION 2 INVITATION TO BID**

*By the*  
**CITY OF WOODBURN**  
*for*  
**PARR ROAD MUNICIPAL WATER SUPPLY WELL**

**PROJECT No. 2018-11-28**  
**BID No. 2020-01**

Sealed bids for the construction of **“Parr Road Municipal Water Supply Well”** will be received by the City of Woodburn, OR at City Hall Annex, 190 Garfield St. until **2:00 PM, Thursday, October 29, 2020** and will thereafter be publicly opened and read.

Proposals shall be addressed to the Public Works Director, City of Woodburn, and 190 Garfield St., Woodburn, OR 97071. Bids shall be submitted in a plain sealed envelope bearing the Bidder's name, the name of the project and the date and time of the Bid opening, and shall be marked "**Bid No. 2020-01**" and bidders shall indicate on the Form of Proposal that ***“Bidder will comply with the provisions of Chapter 279C.800 through 279C.870, Oregon Revised Statutes”***.

The major items of work are estimated (approximate) quantities as follows:

1. 300 vertical linear feet of 20-inch diameter borehole drilling.
2. 263 vertical linear feet of 16-inch diameter production casing.
3. 750 linear feet of temporary security fencing.
4. 40 linear feet of 16-inch diameter stainless steel wire wrap screen.
5. 230 linear feet of surface seal between the production casing and the borehole wall.
6. 260 linear feet of 2-inch PVC drop pipe.
7. All other items of work listed in the Bid Form and shown and specified in the Contract Documents.

Plans and specifications may be examined at the City Engineer's Office, City Hall Woodburn, OR on or after **Friday, October 2, 2020**. Copies of the Bid Documents may be obtained from the City Engineer's Office upon deposit of a non-refundable fee of fifty dollars (\$50.00) for each set. Additionally, electronic plan sets are available for viewing and downloading on the Engineering Division's website at <https://www.woodburn-or.gov/publicworks/page/bids-and-rfps> and/or have been downloaded by the following plan centers.

*DJC Plan Center – Portland, OR*  
*Contractor's Plan Center – Clackamas, OR*  
*Salem Contractor's Exchange – Salem, OR*

Site visits by prospective bidders during the pre-bid period can be arranged by contacting Dago Garcia:

Dago Garcia, City Engineer  
190 Garfield St.  
Woodburn, OR 97071  
Phone: 503.982.5248  
Email: [dago.garcia@ci.woodburn.or.us](mailto:dago.garcia@ci.woodburn.or.us)

Bidders must be pre-qualified in accordance with the laws of the State of Oregon. Completed pre-qualification forms or proof of pre-qualification shall conform to the Special Provisions and the other requirements of these Contract Documents. Only bids from pre-qualified Bidders will be opened.

No bid for a construction contract shall be received or considered unless the bidder is registered with the Construction Contractors Board. The Contractor and every Subcontractor must have a Public Works Bond filed with the CCB before starting work on the project.

Bidders on this project need not be licensed for asbestos handling pursuant to ORS 468A.720. Each bidder must indicate on the bid form whether they are a resident or nonresident bidder as defined in ORS 279A.120 (b).

All proposals shall be made on the proposal forms. All proposals shall be accompanied by a Bid Bond, equal to ten percent (10%) of the total bid. Bid Bond shall be forfeited to the City if the Contractor fails to execute the contract within time allotted under the specifications.

Pursuant to ORS 279C.370, bidders on public works projects with a contract value of \$100,000 or more are required to disclose, 2-hours after bid opening, the bidders first-tier subcontractors. The bidder shall provide the information as required on City of Woodburn first-tier disclosure form, provided in the contract documents.

At the discretion of the Project Manager, Addenda (um) and Contract clarifications shall either be posted on the City, Engineering Division website or delivered to Plan Holders via facsimile. Potential Bidders should check the website on a daily basis until the Bid Opening date. The website can be found at <https://www.woodburn-or.gov/publicworks/page/bids-and-rfps>. Addenda must be signed and submitted with the Bid Proposal to be considered a responsive offer.

Although contract award is expected to be made by the City Council on **November 9, 2020** the City of Woodburn reserves the right to reject any and all bids not in compliance with prescribed bidding procedures and requirements, and may reject for good cause any and all bids upon a finding of the Agency if it is in the public interest to do so. The three (3) lowest bidders may not withdraw or modify his bid prior to the lapse of 35-days after the bid opening.

This project must be substantially completed within **one hundred and fifty (150) calendar days** after the date of “Notice to Proceed”.

---

Heather Pierson  
City Recorder  
City of Woodburn, OR 97071

**SECTION 3 INSTRUCTIONS TO BIDDERS**  
**BID #2020-01**

**1. GENERAL:**

- A. SPECIFICATIONS – The Specifications that is applicable to the Work on this Project is the 2018 edition of the “Oregon Standard Specifications for Construction” as modified by Special Provisions, and the “Technical Specifications” specific to this Project.
- B. This is a formal procure. Faxed bids will not be accepted.
- C. Bidding requirements and obligations shall comply and conform to Part 00100 of the General Conditions of the Standard Specifications or as modified by the Special Provisions or herein.

**2. SECURING CONTRACT DOCUMENTS:**

- A. Copies of the Contract Documents are on file with the Public Works Department - Engineering Division, located at:

City Hall Annex  
190 Garfield Street  
Woodburn, OR 97071.

- B. Questions regarding bidding, materials or technical requirements should be directed to the Project Manager at:

Dago Garcia, City Engineer  
190 Garfield St.  
Woodburn, OR 97071  
Phone: 503.982.5248  
Email: [dago.garcia@ci.woodburn.or.us](mailto:dago.garcia@ci.woodburn.or.us)

Or

Eric Liljequist, PE, Public Works Director  
190 Garfield St.  
Woodburn, OR 97071  
Phone: 503.982.5241  
Email: [Eric.Liljequist@ci.woodburn.or.us](mailto:Eric.Liljequist@ci.woodburn.or.us)

- C. Bidder is responsible for completing and returning all page(s), attachment(s) which require a response.
- D. Plan Holder’s List – An electronic copy of the “Plan Holders List” is provided on the Agency website and will be periodically updated. Contractors, suppliers and others wishing to be added to this list should contact the Project Manager as identified in 2.B.
- E. Project Notifications – Addenda, clarifications, etc. shall be posted on the Agency website and are the responsibility of the Contractor to download before submission

of bids. Contractor shall sign and submit with offer all Addenda associated (posted on website) with the project.

**3. PROJECT FINANCING:**

- A. This project is financed and paid for by the City of Woodburn.
- B. The Engineer's cost estimated range for the construction of this project is between: \$400,000 and \$600,000.
- C. This project is subject to the prevailing wages rates under the Oregon Prevailing Wages Law (BOLI).
- D. The applicable BOLI prevailing wage rates are included with the Special Provisions.

Applicable link is as follows :

<https://www.oregon.gov/boli/employers/Pages/prevailing-wage-rates.aspx>

and listed as "Prevailing Wage Rates for Public Works Contracts in Oregon effective July 1, 2020".

**4. CONSTRUCTION AGREEMENT**

- A. The construction contract between Owner and Contractor shall be provided by The City of Woodburn. A sample Agreement is included in these documents.

**5. PREBID CONFERENCE:**

- A. Site visits by prospective bidders may be arranged by contacting Dago Garcia during the pre-bid period (see Paragraph 2 for Mr. Garcia's contact info).

**6. AWARD OF THE CONTRACT:**

- A. Award of the Contract, by the Contract Review Board (City Council), will be by recommendation of the Public Works Department, based on the lowest cost offer of the responsive and responsible Bidder in accordance with Section 00130 of the Oregon Standard Construction Specifications and all modifications by Special Provisions.
- B. Notice to Proceed will be provided by the City to the Contractor within 90 days of Contract Award.

**7. TIME OF COMPLETION:**

- A. The project shall be substantially completed within one hundred and fifty (150) calendar days after the dated "Notice to Proceed". Substantial completion is defined as completion of well drilling, casing installation, sealing, and completion of aquifer/well testing as shown and specified in the Contract Documents. Final completion shall be one hundred and eighty (180) days after the dated "Notice to Proceed".

**SECTION 4**  
**CERTIFICATION PAGE**

Each Bidder (offeror) must read and comply with the following Sections. Failure to do so may result in bid/proposal (offer) rejection.

**RESIDENCY INFORMATION**

ORS 279A.120 (2) states "For the purposes of awarding a public contract, a contracting agency shall: (a) Give preference to goods or services that have been manufactured or produced in this state if price, fitness, availability and quality are otherwise equal; and (b) Add a percent increase to the bid of a nonresident bidder equal to the percent, if any, of the preference given to the bidder in the state in which the bidder resides."

"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" [ORS 279A.120(1)(b)].

"Non-resident bidder" means a bidder who is not a "resident bidder" as defined above [ORS 279A.120 (1)(b)].

Check one: Bidder is a         RESIDENT bidder     NON-RESIDENT bidder.

**CERTIFICATION OF COMPLIANCE WITH DISCRIMINATION LAWS**

By my signature in Form of Proposal, I hereby attest or affirm under penalty of perjury that I am authorized to act on behalf of Contractor in this matter, and to the best of my knowledge the Contractor has not discriminated against minority, women or emerging small business enterprises certified under ORS 200.055, in obtaining any required subcontract or against a business enterprise that is owned or controlled by or that employs a disable veteran as defined in ORS 408.225.

**CERTIFICATION OF COMPLIANCE WITH OREGON TAX LAWS**

By my signature in Form of Proposal, I hereby attest or affirm under penalty of perjury that I am authorized to act on behalf of Contractor in this matter that I have authority and knowledge regarding the payment of taxes, and that Contractor is, to the best of my knowledge, not in violation of any Oregon Tax Laws.

For purposes of this certificate, 'Oregon Tax Laws' means those programs listed in ORS 305.380(4) which is incorporated herein by this reference. Examples include the state inheritance tax, personal income tax, withholding tax, corporation income and excise taxes, amusement device tax, timber taxes, cigarette tax, other tobacco tax, 9-1-1 emergency communications tax, the homeowners and renters property tax relief program and local taxes administered by the Department of Revenue.

**VERIFICATION OF RESPONSIBILITY**

The City reserves the right, pursuant to ORS 279C.375 and OAR 137-049-0390, to investigate and evaluate, at any time prior to award and execution of the contract, the lowest bidder's (apparent successful offeror's) ability to perform the contract. Submission of a signed offer shall constitute approval for the City to obtain any information the City deems necessary to conduct the evaluation. The City shall notify the apparent successful offeror, in writing, of any other documentation required. Being a responsible bidder may include having the appropriate financial, material, equipment, facility and personnel resources and expertise, or ability to obtain the resources and expertise to perform the contract. Contractor shall have a satisfactory record of contract performance. The Contractor shall also have a satisfactory record of integrity. An unsatisfactory record of integrity may include previous violations of state environmental laws or false certifications made to any Public Agency. The Contractor is to be qualified legally to contract with the City of Woodburn. Failure to promptly provide any requested information may result in bid/proposal rejection.

The City may postpone the award of the contract after announcement of the apparent successful offeror in order to complete its investigation and evaluation. Failure of the apparent successful offeror to demonstrate responsibility, as required under ORS 279C.375 and OAR 137-049-0390, may render the offeror non-responsible and shall constitute grounds for offer rejection.

**DRUG TESTING POLICY CERTIFICATION**

**DRUG-TESTING POLICY CERTIFICATION:**

By my signature in Form of Proposal, I hereby attest or affirm under penalty of perjury that I am authorized to act on behalf of Contractor in the matter, and to the best of my knowledge the Contractor has a drug-testing program in place which applies to all employees. Contractor shall maintain a drug-testing program at all times during the performance of the Contract awarded. Failure to maintain such a program shall constitute a material breach of contract. [ORS 279C.505J]

**SECTION 5**  
**FORM OF PROPOSAL**  
For  
**PARR ROAD MUNICIPAL WATER SUPPLY WELL**

**PROJECT No. 2018-011-28**  
**Bid No. 2020-01**

Honorable Mayor and City Council  
City Hall  
Woodburn, Oregon 97071

The undersigned, hereinafter called the Bidder, declares that the only persons or parties interested in this Proposal are those named herein, that the Proposal is in all respects fair and without fraud, which it is made without any connection or collusion with any person making another Proposal on this Contract.

The Bidder further declares that he has carefully examined the Contract Documents for the construction of the proposed improvements; that he has personally inspected the site; that he has satisfied himself as to the quantities of materials, items of equipment, and conditions or work involved, including the fact that the description of work and materials as included herein, is brief and is intended only to indicate the general nature of such items and to identify the said quantities with the detailed requirements of the Contract Documents; and that this Proposal is made according to the provisions and the terms of the Contract Documents, which Documents are herein attached and are hereby made a part of this Proposal.

The Bidder further agrees to complete construction of all work in all respects in accordance with the Special Provisions incorporated herein.

In the event the Bidder is awarded the Contract and shall fail to complete the work within the time limit set under Specifications of this document or extended time limit agreed upon, as more particularly set forth in the Contract Documents, liquidated damages shall be paid to the City of Woodburn, Oregon, using the rate formula outlined in the Special Provisions, and not less than \$150.00 per day, until the work shall have been finished, as provided by the Contract Documents.

The Bidder further proposes to accept as full payment for the work proposed herein the amount computed under the provisions of the Contract Documents and based on the following unit price amounts, it being expressly understood that the unit prices are independent of the exact quantities involved, that they represent a true measure of the labor and material required to perform the work, including all allowance for overhead and profit for each type and unit of work called for in these Contract Documents.

The amounts shall be shown in both words and figures. In case of discrepancy, the amount shown in words shall govern.



It is declared that the Bidder will comply with the provisions of ORS 279C.800 through 279.870, Oregon Revise Statutes. The workmen on the project will be paid Oregon Prevailing Wage Rates (also called "PWR").

It is agreed that if the Bidder is awarded the Contract for the work herein proposed and shall fail or refuse to execute the Contract and furnish the specified Performance Bond within ten (10) calendar days after receipt of notification of acceptance of his Proposal, then, in that event, the bid security in the sum of:

(In Words): \_\_\_\_\_

(In Numbers): \$ \_\_\_\_\_

deposited herewith according to the conditions of the Advertisement for Bids and Information to Bidders, shall be retained by the City of Woodburn, Oregon, as liquidated damages; and it is agreed that the said sum is a fair measure of the amount of damage the City of Woodburn will sustain in case the Bidder shall fail or refuse to enter into the contract for the said work and to furnish the Performance Bond as specified in the Contract Documents. Bid security in the form of a certified check shall be subject to the same requirements as a bid bond.

If the Bidder is awarded a construction contract on this proposal, the surety who will provide the Performance Bond will be: \_\_\_\_\_ Whose address is:

\_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_  
Street City State Zip

Agents Name: \_\_\_\_\_ Phone \_\_\_\_\_

The address for all communications concerned with this Proposal and where the Contract shall be sent is:

Contractor: \_\_\_\_\_ doing business at:

\_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_  
Street City State Zip

# Bid Form

City of Woodburn, OR  
 Parr Road Municipal Water  
 Supply Well

Item No.	Items of Work and Materials	Units	Unit Price	Approx. Quantity	Extended Price
<b>MOBILIZATION / DEMOBILIZATION</b>					
1	Mobilization and Demobilization	Lump Sum		1	\$
2	Spill Prevention and Control	Lump Sum		1	\$
3	Site Preparation	Lump Sum		1	\$
4	Site Cleanup	Lump Sum		1	\$
5	Temporary Security Fencing	Linear Feet		750	\$
6	Erosion and Sediment Control	Lump Sum		1	\$
7	Water Management and Turbidity Reduction	Lump Sum		1	\$
<i>SUBTOTAL I - General (Items 1 through 7) =</i>					\$ -
<b>WELL DRILLING AND CONSTRUCTION PROGRAM</b>					
8	Drill the borehole at a minimum diameter of 20-inches from ground surface to an anticipated depth of 300 ft below ground surface (bgs)	Linear Feet		300	\$
9	Furnish and cut drive shoe	Lump Sum		1	\$
10	Furnish and install the 16-inch diameter well casing	Linear Feet		263	\$
11	Furnish and install the 16-inch diameter stainless steel wire-wrap screen	Linear Feet		40	\$
12	Complete plumbness testing	Lump Sum		1	\$
13	Complete alignment testing	Lump Sum		1	\$
14	Furnish and install the filter pack envelope	Linear Feet		70	\$
15	Complete well development				
15a	Impulse generation with dual-isolation surging/pumping, including incremental performance testing	Hours		16	\$
15b	Dual-isolation surging/pumping only	Hours		8	\$
15c	Pumping with test pump	Hours		8	\$
15d	AQUA-CLEAR® PFD	Gallons		7	\$

16	Install a surface seal between the 16-inch production casing and the 20-inch borehole wall (including the fine sand base)	Linear Feet		232	\$
17	Video survey	Lump Sum		1	\$
18	Disinfection				
18a	Complete well disinfection	Lump Sum		1	\$
18b	Sodium Hypochlorite (12%)	Gallons		8	\$
18c	Johnson Screens NW-410 Chlorine Enhancer	Gallons		5	\$
19	Temporary wellhead protection (bollards/ecology blocks)	Lump Sum		1	\$
20	Temporary well cap	Lump Sum		1	\$
21	2-inch PVC drop pipe	Linear Feet		250	
22	Standby Time	Hours		0	\$
23	Authorized Hourly Work	Hours		0	\$
<b><i>SUBTOTAL II - Well Drilling and Construction Program (Items 8 through 23) =</i></b>					<b>\$ -</b>
<b>AQUIFER TESTING</b>					
24	Furnish, install, and remove aquifer testing equipment	Lump Sum		1	\$
25	Aquifer testing: step-rate test	Hours		8	\$
26	Aquifer testing: constant-rate test (including recovery monitoring)	Hours		96	\$
<b><i>SUBTOTAL III - Aquifer Testing (Items 24 through 26) =</i></b>					<b>\$ -</b>
<b><i>TOTAL BASE BID - (Items 1 through 26) =</i></b>					<b>\$</b>

The names of the principal officers of the corporation submitting this Proposal, or of the partnership, or of all persons interested in this Proposal as principals are as follows:

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

(If Sole Proprietor or Partnership)

In witness hereto the undersigned has set his (its) hand this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
 Signature of Bidder

\_\_\_\_\_  
 Title (If Corporation)

In witness whereof the undersigned corporation has caused this instrument to be executed and its seal affixed by its duly authorized officer this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

Name of Corp: \_\_\_\_\_  
Oregon Corp. No: \_\_\_\_\_  
By: \_\_\_\_\_  
Title: \_\_\_\_\_  
CCB No: \_\_\_\_\_

Attest: \_\_\_\_\_  
*Secretary*

*"Bidder will comply with the provisions of Oregon Revised Statutes (ORS) 279C.800 through 279C.870, Oregon Revised Statutes".*

Initial \_\_\_\_\_

Attest: \_\_\_\_\_  
*Bidder*

**SECTION 6  
BID BOND  
FOR  
PARR ROAD MUNICIPAL WATER SUPPLY WELL  
FOR  
CITY OF WOODBURN, OREGON**

KNOW ALL PEOPLE BY THESE PRESENTS:

That we, \_\_\_\_\_, hereinafter called  
(Name of Contractor)

the PRINCIPAL, as Principal, and \_\_\_\_\_,  
(Name of Surety)

a corporation and existing under and by virtue of the laws of the State of \_\_\_\_\_  
and authorized to transact a surety business in the State of Oregon, hereinafter called the  
SURETY, as Surety, are held and firmly bound unto the City of Woodburn,  
a Municipal Corporation of the State of Oregon, hereinafter called the OBLIGEE, in the

penal sum of \_\_\_\_\_ Dollars

(\$ \_\_\_\_\_) for the payment of which sum well and truly to be made, the said  
PRINCIPAL and the said SURETY bind ourselves, our heirs, executors, administrators,  
successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THE ABOVE OBLIGATION IS SUCH THAT:

WHEREAS the PRINCIPAL has submitted a Bid Proposal for Parr Road Municipal Water  
Supply Well, City of Woodburn, Oregon.

NOW, THEREFORE, if the Bid Proposal submitted by the PRINCIPAL is accepted, and the  
Contract awarded to the PRINCIPAL, and if the PRINCIPAL shall execute the proposed  
Agreement and shall furnish such Performance and Payment Bonds as required by the Contract  
Documents within the time fixed by the Documents, then this obligation shall be void; if the  
PRINCIPAL shall fail to execute the proposed Agreement and furnish the bonds, the SURETY  
hereby agrees to pay to the OBLIGEE the penal sum as liquidated damages, within ten (10) days  
of such failure.

Signed and sealed this \_\_\_\_\_ day of \_\_\_\_\_, 2020.

CONTRACTOR AS PRINCIPAL:

SURETY:

(Corp. Seal)

(Corp. Seal)

Company: \_\_\_\_\_

Company: \_\_\_\_\_

Signature: \_\_\_\_\_

Signature: \_\_\_\_\_

Name: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

**(Attach Power of Attorney)**

## 7 - STATEMENT OF BIDDER'S QUALIFICATIONS

All questions must be answered and the data given must be clear and comprehensive. Questions may be answered on separate attached sheets. The Bidder may submit additional information beyond that requested below to document the Bidder's Qualifications. Any information the Bidder desires to keep confidential must be clearly marked.

**The statement of Bidder's qualifications must be submitted to the City of Woodburn at the SAME time the bids are due on October 1, 2020 at the City of Woodburn City Hall Annex at 190 Garfield Street, Woodburn, OR 97071.**

**Failure to meet the following criteria will result in the submitted bid being designated as non-responsive. All answers must be "Yes" on questions #5 through #7 and all information must be provided for all questions presented in this section.**

1. Company Name: \_\_\_\_\_

2. Company Address: \_\_\_\_\_

3. Company Email: \_\_\_\_\_ Company Phone: \_\_\_\_\_

4. Date Organized and Any Prior Company Names: \_\_\_\_\_

5. Is your company licensed and bonded in the State of Oregon and has your company complied with all Oregon Administrative Rules (OAR) for Well Construction and Maintenance and Well Construction Standards including OAR 690-200-005 through OAR 690-210-420 during construction of water supply wells in Oregon? (Circle One)

YES

NO

6. Does your team have a lead driller with at least 10 years of experience constructing deep, large-diameter municipal production wells? (Circle One and Complete)

YES

Name and Title/Position: \_\_\_\_\_

Years of Experience: \_\_\_\_\_

NO

7. Has your company performed work on at least five (5) production well installation projects in the last five (5) years, each totaling \$250,000 or more – and of those, two of the projects listed shall involve the installation of wells of a depth of 300 feet or deeper, with well casing diameters of 16-inches or greater in alluvial formations? (Circle One and Complete)

YES

Name of Project (>300 feet deep; >16-inch diameter; alluvial formations):

\_\_\_\_\_

Client Name and Phone: \_\_\_\_\_

Name of Project (>300 feet deep; >16-inch diameter; alluvial formations):

Client Name and Phone: \_\_\_\_\_

Name of Project (>\$250,000): \_\_\_\_\_

Client Name and Phone: \_\_\_\_\_

Name of Project (>\$250,000): \_\_\_\_\_

Client Name and Phone: \_\_\_\_\_

Name of Project (>\$250,000): \_\_\_\_\_

Client Name and Phone: \_\_\_\_\_

NO

**8. Bidder attests that:**

- a. The person submitting this offer has the authority to submit the offer and to represent Bidder in all phases of this procurement process;
- b. The information provided herein is true and accurate;
- c. Bidder is a “resident bidder”, as described in ORS 279A.120 in the State of Oregon, or is a “non-resident bidder” of \_\_\_\_\_ (insert state) and has not discriminated against any minority, women, or emerging small business enterprises in obtaining any required subcontracts in accordance with ORS 279A.110. Non-resident bidder also agrees to report their participation in this contract, if awarded, to the Oregon Department of Revenue as required by ORS 279A.120 (3).
- d. Any false statement may disqualify this offer from further consideration or be the cause of contract termination;
- e. Bidder has the appropriate financial, material, equipment, facility, personnel resources, and expertise or the ability to obtain the resources and expertise necessary to meet all contractual responsibilities;
- f. Bidder has an employee drug testing program in place as required by ORS 279C.505 (2);
- g. If awarded a contract, Bidder will notify the City of Woodburn within 30 days of any change in information provided on this form.

The undersigned hereby authorizes and requests any person, firm, or corporation to furnish any information requested by the City of Woodburn in verification if recitals comprising this statement of Bidder’s Qualification.

I hereby certify that the answers to the foregoing statements attached hereto including any supplemental data, are true and correct to the best of my knowledge.

BY: \_\_\_\_\_

Signature

\_\_\_\_\_

Company Name

\_\_\_\_\_

Title

\_\_\_\_\_

Date

**CITY OF WOODBURN, OR**  
**SECTION 8 FIRST-TIER SUBCONTRACTOR DISCLOSURE FORM**

PROJECT NAME:	<b>Parr Road Municipal Water Supply Well Project</b>		
PROJECT No:	<b>2018-011-28</b>	BID No:	<b>2020-01</b>
BID CLOSING DATE:	<b>October 29, 2020</b>	TIME:	<b>2:00 PM</b>
DISCLOSURE DEADLINE DATE:	<b>October 29, 2020</b>	TIME:	<b>4:00 PM</b>

This form must be submitted at the location specified in the Invitation to Bid on the advertised bid closing date with in two working hours after the advertised bid closing.

List below the name of each subcontractor that will be furnishing labor or materials and that is required to be disclosed, the category of work that the subcontractor will be performing and the dollar value of the subcontract. Enter "None" if there are no subcontractors that need to be disclosed. (IF NEEDED, ATTACH ADDITIONAL SHEETS.)

	<u>NAME</u>	<u>DOLLAR VALUE</u>	<u>CATEGORY OF WORK</u>
1		\$	
2		\$	
3		\$	
4		\$	
5		\$	

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

- a. 5% of the total contract price or \$15,000 (including all alternates), whichever is greater; or
- b. \$350,000.00 regardless of the percentage of the total Contract Price.

**FAILURE TO SUBMIT THIS FORM FILLED OUT BY THE DISCLOSURE DEADLINE WILL RESULT IN A NON-RESPONSIVE BID. A NON-RESPONSIVE BID WILL NOT BE CONSIDERED FOR AWARD.**

Form Submitted by (Bidder Name): \_\_\_\_\_  
Contact Name: \_\_\_\_\_ Phone No: \_\_\_\_\_  
Deliver Form to Agency: \_\_\_\_\_ CITY OF WOODBURN  
Person Designated to Receive Form: \_\_\_\_\_ CITY ENGINEER  
Agency's Address: \_\_\_\_\_ 190 Garfield Street, Woodburn, OR 97071

**UNLESS OTHERWISE STATED IN THE ORIGINAL SOLICITATION,  
THIS DOCUMENT SHALL NOT BE FAXED.**



## **SECTION 9**

### **BID SUBMITTAL CHECKLIST**

---

The following is a checklist of the items that shall be submitted with the Bidder's Bid Proposal

- Form of Proposal
- Bid Bond
- First Tier Subcontractor Disclosure Form (Submit within two hours after bid opening time)
- Certification Page
- Statement of Bidder's Qualifications

**SECTION 10**  
**CONSTRUCTION AGREEMENT**

THIS AGREEMENT, made this \_\_\_\_\_ day of \_\_\_\_\_, 2020, by and between \_\_\_\_\_, hereinafter called "CONTRACTOR" and the CITY OF WOODBURN, an Oregon Municipal Corporation, hereinafter called "City" or "Owner".

The Contractor, for the consideration hereinafter named, does hereby agree to furnish all materials, equipment, labor and necessary implements for the construction of the **Parr Road Municipal Water Supply Well** and doing such other work as is necessary to make an appropriate and complete improvement.

All of said work shall be done according to the terms, conditions, and requirements of the Contract Documents including the: Advertisement of Bids, Contractor's signed Proposal, information to bidders, special specifications, general conditions, standard specifications, general specifications, and plans and Addendum Nos. ( ) for said improvement, which Contract Documents by this reference are made a part of this agreement.

Said improvement shall be completed by the date specified in said Contract Documents and if not so completed, unless said time for completion is extended, as provided in the Contract Documents, or if extended, if the same is not completed within time extended, the City will suffer liquidated damages as specified in the Contract Documents, which liquidated damages shall be retained out of any monies due or to become due under this agreement.

Payments shall be made as provided in the Contract Documents. The contract amount, as approved by the Council on **November 9, 2020**, and agreed by the Contractor, is **\$ xxx,xxx.xx**.

The City will pay the required fee to the Bureau of Labor and Industries equal to one-tenth of one percent (0.1 percent) of the price of this contract, minimum fee in the amount of \$250.00 and maximum fee of \$7,500.00.

The Contractor will pay the prevailing wage rates in accordance with ORS279C.830.

NOW, THEREFORE, in consideration of the faithful performance of the covenants and agreements hereinbefore made by the Contractor, the City hereby covenants and agrees to pay the Contractor as in said Contract Documents provided.

IN WITNESS WHEREOF, the respective parties hereto have each caused these presents to be executed in duplicate the day and year first above written.

CITY OF WOODBURN, OREGON

ATTESTED: \_\_\_\_\_  
Heather Pierson, *CITY RECORDER*                      Eric Swenson, *MAYOR*

CONTRACTOR: \_\_\_\_\_  
*Organization*

By: \_\_\_\_\_ Title: \_\_\_\_\_

**SECTION 11  
PERFORMANCE BOND**

**KNOW ALL MEN BY THESE PRESENTS** that, \_\_\_\_\_, as the Principal, and \_\_\_\_\_, a corporation organized and existing under the laws of the State of Oregon, and duly authorized to transact a surety business in the State of Oregon, as Surety, are held and firmly bound unto the City of Woodburn, a municipal corporation of the State of Oregon, in the penal sum of \$\_\_\_\_\_ Dollars \$\_\_\_\_\_, lawful money of the United States of America, for the payment whereof well and truly to be made, we and each of us, jointly and severally, bind ourselves, our and each of our heirs, executors, administrators successors and assign, firmly by these presents.

**WHEREAS**, the Principal has entered into a contract with the City of Woodburn, 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, special provisions, schedule of performance, and schedule of contract prices, are made a part of this Performance Bond by reference, whether or not attached to the contract (all hereafter called the "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 Woodburn, the, 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 Woodburn, 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.

Contractor

BY: \_\_\_\_\_

TITLE: \_\_\_\_\_

Surety

By: \_\_\_\_\_  
Attorney-In-Fact

Bond No. \_\_\_\_\_  
Solicitation: \_\_\_\_\_  
Project Bid#: 2020-01

**SECTION 12  
PAYMENT BOND**

**KNOW ALL MEN BY THESE PRESENTS** that, \_\_\_\_\_, as the Principal, and \_\_\_\_\_, a corporation organized and existing under the laws of the State of Oregon, and duly authorized to transact a surety business in the State of Oregon, as Surety, are held and firmly bound unto the City of Woodburn, a municipal corporation of the State of Oregon, in the penal sum of \$\_\_\_\_\_ Dollars \$\_\_\_\_\_, lawful money of the United States of America, for the payment whereof well and truly to be made, we and each of us, jointly and severally, bind ourselves, our and each of our heirs, executors, administrators successors and assign, firmly by these presents.

**WHEREAS**, the Principal has entered into a contract with the City of Woodburn, 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, special provisions, schedule of performance, and schedule of contract prices, are made a part of this Payment Bond by reference, whether or not attached to the contract (all hereafter called the “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 shall faithfully and truly observe and comply with the terms, conditions and provisions of the Contract, in all respects, and shall well and truly and fully do and perform all matters and things by it undertaken to be performed under said Contract and any duly authorized modifications that are made, upon the terms set forth therein, and within the time prescribed therein, or as extended therein as provided in the Contract, with or without notice to the sureties, including the conditions listed in ORS 279.310 to 279.320, and shall indemnify and save harmless the City of Woodburn, its officers, employees and agents, against any claim for direct or indirect damages of every kind and description that shall be suffered or claimed to be suffered in connection with or arising out of the performance of the Contract by the Contractor or its Subcontractors, and shall promptly pay all persons supplying labor, materials or both to the Principal or its Subcontractors for prosecution of the work provided in the Contract; and shall promptly pay all contributions due the State Industrial Accident Fund and the State Unemployment Compensation Fund from the Principal or its Subcontractor in connection with the performance of the Contract; and shall pay over to the Oregon Department of Revenue all

sums required to be deducted and retained from the wages of employees of the Principal and its Subcontractors pursuant to ORS 316.167, and shall permit no lien nor claim to be filed or prosecuted against the City of Woodburn on account of any labor or materials furnished; and shall do all things required of the Principal by the laws of this State, then this obligation shall be void; otherwise, it shall remain in full force and effect.

Nonpayment of the bond premium will not invalidate this bond nor shall the City of Woodburn, 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.

Contractor

\_\_\_\_\_

BY:

TITLE: \_\_\_\_\_

Surety

By: \_\_\_\_\_

Attorney-In-Fact

Bond No. \_\_\_\_\_

Solicitation \_\_\_\_\_

Project Bid No. 2020-01

Project Name: **Parr Road Municipal Water Supply Well**

**SECTION 13  
MAINTENANCE/WARRANTY BOND**

**KNOW ALL MEN BY THESE PRESENTS** that, \_\_\_\_\_, as the Principal, and \_\_\_\_\_, a corporation organized and existing under the laws of the State of Oregon, and duly authorized to transact a surety business in the State of Oregon, as Surety, are held and firmly bound unto the City of Woodburn, a municipal corporation of the State of Oregon, in the penal sum of \$ \_\_\_\_\_ Dollars \$ \_\_\_\_\_, lawful money of the United States of America, for the payment whereof well and truly to be made, we and each of us, jointly and severally, bind ourselves, our and each of our heirs, executors, administrators successors and assign, firmly by these presents.

**WHEREAS**, the Principal has entered into a contract with the City of Woodburn, 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, special provisions, schedule of performance, and schedule of contract prices, are made a part of this Maintenance/Warranty Bond by reference, whether or not attached to the contract (all hereafter called the "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 the Principal agrees to warrant to the City of Woodburn that the construction is, and will remain for a period of one (1) year from the date of acceptance, free from defects in materials and workmanship.

That if the Principal herein shall faithfully and truly observe the terms, provisions, conditions, stipulations, directions, and requirements of the Contract and shall in all respects, whether the same be enumerated herein or not, faithfully comply with the same and shall assume the defense of indemnify and save harmless the City of Woodburn, its officers, agents, and employees from all claims, liabilities, loss, damage or injury which may have been suffered or claimed to have been suffered to persons or property directly or indirectly resulting from or arising out of the operations or conduct of the Principal or any subcontractor in the performance of the work under the



Contract and shall indemnify and make whole the City for any injury or damage to any street, highway, avenue, private driveway, paved pathway, or road or any part thereof, resulting from the operations or conduct of the Principal or any subcontractor in connection with performance or conduct of the work under the Contract, and shall in all respects faithfully keep and observe all of said terms, provision, conditions, stipulations, directions, and requirements, then this obligation is void, otherwise, it shall remain in full force and effect.

WITNESS our hand and seals this \_\_ day of \_\_\_\_\_, 2020.

Name:

\_\_\_\_\_

BY:

TITLE: \_\_\_\_\_

Surety

By: \_\_\_\_\_

Attorney-In-Fact

**SECTION 14**  
**NOTICE TO PROCEED**

PUBLIC WORKS DEPT.  
ENGINEERING DIV.



PROJECT NAME:	Parr Road Municipal Water Supply Well		
BID #:	2020-01	PROJECT No #:	2018-011-28
AMOUNT:	\$	BEGIN DATE:	
CONTRACTOR:		CCB #:	
ADDRESS:			

You are hereby notified to commence work on the referenced contract, and shall substantially complete all of the work of said contract within one hundred and fifty calendar days of the Notice to Proceed.

The substantial completion date is therefore: **one hundred and fifty calendar days from issuance of Notice to Proceed.**

The completion date is therefore: \_\_\_\_\_, **202X**.

The contract provides for the assessment of liquidated damages for each consecutive calendar day after the above-established contract completion date that the work remains incomplete in the amount established by the Special Provisions, which is equivalent to \$\_\_\_\_\_ per day.

PM for THE CITY OF WOODBURN: Dago Garcia

DATE: \_\_\_\_\_

**Contractor:** *Complete items below this line and return Document to Owner within seven (7) days:*

**CONTRACTOR'S ACCEPTANCE OF THIS NOTICE**

Receipt of the foregoing Notice to Proceed is hereby acknowledged:

SIGNED: \_\_\_\_\_

TITLE: \_\_\_\_\_

DATE: \_\_\_\_\_

**SECTION 15  
SPECIAL PROVISIONS**

**WORK TO BE DONE**

The Work to be done under this Contract consists of the following on the City of Woodburn, OR in Marion County:

1. 300 vertical linear feet of 20-inch diameter borehole drilling.
2. 263 vertical linear feet of 16-inch diameter production casing.
3. 750 linear feet of temporary security fencing.
4. 40 linear feet of 16-inch diameter stainless steel wire wrap screen.
5. 230 linear feet of surface seal between the production casing and the borehole wall.
6. 260 linear feet of 2-inch PVC drop pipe.
7. All other items of work listed in the Bid Form and shown and specified in the Contract Documents.

Perform additional and incidental Work as called for by the Specifications and Plans.

**CONTRACT TIME AND PROJECT SCHEDULE**

- A. The work to be completed under this contract and described by these specifications shall adhere to the following project schedule:

<b>Project Phase / Event</b>	<b>Date</b>
Bids Due	October 29, 2020
Notice of Intent to Award	October 30, 2020
Issuance of Notice to Proceed	Within 90 calendar days of Contract Award
Substantial Completion	150 days after Notice to Proceed
Final Completion	180 days after Notice to Proceed

**NOTICE TO PROCEED**

- A. The City intends to provide written Notice to Proceed within 90 calendar days after the City has issued a Notice of Intent to Award, provided the Selected Bidder submits all required bonds and insurance information within 60 days after the City has issued a Notice of Intent to Award.
- B. The City retains the right to delay the Notice to Proceed. The City shall provide the Contractor with notification that the Notice to Proceed will be delayed and an estimate of when Notice to Proceed will be issued as soon as a delay is anticipated. The Contractor shall not commence work under the contract until such written notice has been given.

## EXPERIENCE AND QUALIFICATIONS

1. The Contractor shall demonstrate the following minimum qualification criteria:
  - a. Licensed and bonded in the State of Oregon and must comply with all Oregon Administrative Rules (OAR) for Well Construction and Maintenance and Well Construction Standards including OAR 690-200-005 through OAR 690-210-420.
  - b. Assigned lead driller with at least ten years of experience constructing deep, large-diameter municipal supply wells.
  - c. At least five large-diameter well installation projects each totaling \$250,000 or more, for which the Contractor performed the work within the past five years. At least two of the projects listed shall involve the installation of wells that are 300-feet deep or more, with well casing diameters of 16-inches or greater in alluvial formations.
  - d. Documentation of experience and qualifications shall be provided as part of the Contractor's Bid for the project.

## PRE-BID CONFERENCE

Site visits by prospective bidders during the pre-bid period may be arranged by contacting Dago Garcia at the City. Mr. Garcia's contact info is in the Invitation to Bid.

## PRE-CONSTRUCTION CONFERENCE

1. A mandatory pre-construction conference shall be scheduled no less than two weeks prior to the start of work. At this conference, the Contractor shall provide the following pre-construction submittals in addition to those outlined elsewhere in these Contract Documents:
  - a. Construction Schedule: A detailed construction schedule, which shall be followed by the Contractor throughout the duration of the contract, and updated as needed.
  - b. Weekend/Emergency Contacts: The names, addresses, and telephone numbers of two or more persons employed by the Contractor who can be reached during evening and weekend hours to handle emergency matters.

## STANDBY/DELAY TIME, INCIDENTAL, AUTHORIZED HOURLY WORK

- A. Time lost to the project schedule can be expected during the course of project execution due to unavoidable and unforeseen events. Time lost to the project due to such circumstances may be originated by the City or the Contractor. Time lost from stoppage of work at the request of the City shall be defined as "standby time." Time lost due to the

inability of the Contractor to proceed shall be defined as “delay time.” These terms are further defined as follows:

1. **Standby Time:** Standby time is the duration of idle time greater than one (1) hour accrued at the request of the City. The Contractor’s workers and equipment shall remain onsite while standby time is in effect. In the event of standby time, the City shall pay the Contractor for equipment and crew per hour, not to exceed eight (8) hours per working day. No standby time will be paid during screen design, fabrication, and shipment to site, or for the recovery period following the step-rate or constant-rate aquifer tests.
2. **Delay Time:** Delay time is defined as avoidable delays greater than one (1) hour caused by neglect in planning, improper scheduling or sequencing of work by the Contractor. These items shall include, but are not limited to, the Contractor’s tardiness and inability to provide the trained staff and adequate equipment in a reasonable manner. Delay time shall not include time lost to the project as a result of conditions beyond the Contractor’s control. These unavoidable delays shall include, but are not limited to, inclement weather and unexpected or unusual conditions. The Contractor may give a 12-hour notice to City that there will be a delay without being assessed delay time in the event of equipment breakdown and parts not easily attainable and must be ordered. Shorter notice may suffice at the City’s discretion. Except in the case of emergency or unless otherwise approved by the City, a working day shall be defined for this purpose as any consecutive 12-hour period between 7:00 a.m. and 7:00 p.m. of a working day with a maximum 1-hour lunch break and a 5-day work week Monday through Friday, excluding holidays. Any additional hours (weekends) will be negotiated between the City and the Contractor.
3. **Authorized Hourly Work:** Authorized hourly work shall include furnishing all equipment, labor, tools, and miscellaneous materials necessary to conduct activities not covered under other bid items, and as approved by the City in writing. The City and the Contractor shall maintain records for this work. The City’s record will be binding. No hourly payment will be made to the Contractor for work being performed to condition or ream the borehole, or to repair, clean, or replace equipment that is not in working condition.

#### NOISE LIMITS

- A. The Contractor shall use all reasonable and available means to reduce noise to minimum levels during working hours. The Contractor shall review the site and understand the relationship of the site to surrounding facilities.

#### WORK LIMITS AND HOURS

- A. The Contractor shall limit work to the following daily schedule; Monday through Friday, 7:00 AM to 7:00 PM.
- B. The Contractor shall obtain approval from the City prior to conducting work on weekends.

## WORK COVERED / NOT COVERED BY THE CONTRACT

- A. The general work to be completed under this contract consists of drilling, constructing, developing, testing, and disinfecting one new municipal water supply well.
- B. The City reserves the right to limit (reduce) any aspect of the project for any reason.
- C. The work to be completed under this contract does not include the permanent pump station for the well.

## PREVAILING WAGE:

Comply with prevailing wage requirements listed in BOLI's published 2020 prevailing wage rates for Power Equipment Operator and any other Covered Occupations regulated by BOLI that are necessary to perform the Work. The specific 2020 rates for Marion County are available on the BOLI website.

## **APPLICABLE SPECIFICATIONS**

The Specifications that are applicable to the Work on this Project is the 2018 edition of the "Oregon Standard Specifications for Construction" and the "Technical Specifications" which are part of the Contract Bid Documents.

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

## **PART 00100 – GENERAL CONDITIONS**

### **SECTION 00110 - ORGANIZATION, CONVENTIONS, ABBREVIATIONS AND DEFINITIONS**

Comply with Section 00110 of the Standard Specifications modified as follows:

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

- City of Woodburn Public Works Department:  
[https://www.woodburn-or.gov/?q=public\\_works](https://www.woodburn-or.gov/?q=public_works)
- City of Woodburn Public Works Department Bids and RFPs:  
<http://www.ci.woodburn.or.us/?q=blog-categories/bids-and-rfps>
- American Traffic Safety Services Association (ATSSA)  
[www.atssa.com](http://www.atssa.com)
- ODOT Construction Section  
[www.oregon.gov/odot/construction/pages/index.aspx](http://www.oregon.gov/odot/construction/pages/index.aspx)
- ODOT Construction Section - Qualified Products List (QPL)  
[www.oregon.gov/ODOT/Construction/Pages/Qualified-Products.aspx](http://www.oregon.gov/ODOT/Construction/Pages/Qualified-Products.aspx)
- ODOT Estimating  
[www.oregon.gov/ODOT/Business/Pages/Steel.aspx](http://www.oregon.gov/ODOT/Business/Pages/Steel.aspx)
- Oregon Legislative Counsel  
[www.oregonlegislature.gov/lc](http://www.oregonlegislature.gov/lc)
- ODOT Procurement Office - Conflict of Interest Guidelines and Disclosure Forms  
[www.oregon.gov/ODOT/Business/Procurement/Pages/PSK.aspx](http://www.oregon.gov/ODOT/Business/Procurement/Pages/PSK.aspx)
- ODOT Procurement Office - Construction Contracts Unit Notice of Intent  
[www.oregon.gov/ODOT/Business/Procurement/Pages/NOI.aspx](http://www.oregon.gov/ODOT/Business/Procurement/Pages/NOI.aspx)
- ODOT Procurement Office - Construction Contracts Unit prequalification forms  
[www.oregon.gov/odot/business/procurement/pages/bid\\_award.aspx](http://www.oregon.gov/odot/business/procurement/pages/bid_award.aspx)
- Oregon Secretary of State: State Archives  
[sos.oregon.gov/archives/Pages/default.aspx](http://sos.oregon.gov/archives/Pages/default.aspx)
- ODOT Traffic Control Plans Unit  
[www.oregon.gov/ODOT/Engineering/Pages/Work-Zone.aspx](http://www.oregon.gov/ODOT/Engineering/Pages/Work-Zone.aspx)
- ODOT Traffic Standards  
[www.oregon.gov/ODOT/Engineering/Pages/Signals.aspx](http://www.oregon.gov/ODOT/Engineering/Pages/Signals.aspx)

Replace the “Agency” definition with the following definition:

**Agency** – The City of Woodburn Public Works Department – Engineering Division.

Add the following definition:

**Agency Website** – This is the website of the Public Works Department, Engineering Division as owned, controlled and administrated by the City of Woodburn, OR. The URL being referenced when this term is used shall be the following:

*<http://www.ci.woodburn.or.us/?q=blog-categories/bids-and-rfps>*

Replace the "Bid Booklet" definition with the following definition:

**Bid Booklet** - The version that can be accessed and printed from the Agency website.

## **SECTION 00120 - BIDDING REQUIREMENTS AND PROCEDURES**

Comply with Section 00120 of the Standard Specifications modified as follows:

**00120.00 Prequalification of Bidders** - Replace this subsection, except for the subsection number and title, with the following:

The Agency will prequalify Bidders according to ODOT’s Oregon Administrative Rules and prequalification procedures. A Bidder must file for prequalification and **NO** fee. Prequalification must be renewed annually. Bidders shall make application for prequalification and for required renewals on standard forms available from the ODOT Procurement Office - Construction Contracts Unit website. Bidders shall return the completed application to the Dago Garcia at 190 Garfield St. Woodburn, OR 97071 or e-mail to [dago.garcia@ci.woodburn.or.us](mailto:dago.garcia@ci.woodburn.or.us). No facsimile of Prequalification will be accepted.

Contracts will only be awarded to Bidders who, at the time of Bid Opening, are prequalified in the Class or Classes of Work specified in the Special Provisions, except that a Bidder whose prequalification has been revoked or revised as provided in ORS 279C.430(4) may also be eligible for Award under that statute if the Project was advertised prior to the revocation or revision. The Agency will consider a Bid from a Bidder whose complete application for prequalification has been received by the Public Works Department – Engineering Division Office at least 3 Calendar Days before the opening of Bids. Bidders shall submit Bids in the same company name used on the prequalification application; provided however, if Bidder’s legal name has changed since the submittal of its application for prequalification, it shall submit its Bid under its current legal name with the former name referenced by "formerly known as".

The Agency will regularly evaluate the performance of Contractors on its projects for purposes of responding to reference checks, future prequalification and determinations of responsibility.



**00120.01 General Bidding Requirements** - In the paragraph that begins "Bidders may submit ...", replace the paragraph with the following sentence:

Bidders may submit Bids by paper only. No electronic (e-mail or facsimile) Bids will be accepted.

**00120.05 Request for Plans, Special Provisions, and Bid Booklets** - Replace this subsection, with the following subsection:

**00120.05 Request for Plans, Special Provisions, and Bid Booklets:**

**(a) Informational Plans and Special Provisions** - Informational Project Plans and Special Provisions are available, free of charge, on the Agency's website.

**(b) Bidding Plans, Special Provisions, and Bid Booklets** - Bidders must submit paper Bids.

**(1) Paper Bids** - Bidders submitting bids shall access and print Plans, Special Provisions, and Bid Booklets from the Agency's website. Bidders obtaining Plans, Special Provisions, and Bid Booklets must register on Agency's list of "Holders of Bidding Plans". Bids will be considered responsive only if Bidders are registered as "Holders of Bidding Plans".

Delete the paragraph that begins with the following;

**"(2) Electronic Bids** - Bidders ..."

The Plans, which are applicable to the Work to be performed under the Contract, are included in these Special Provisions.

**00120.10 Bid Booklet** - In the paragraph that begins "The Bid Section includes all pages after...", add the following bullet to the bullet list:

- Certificate of nondiscrimination regarding ORS 279A.110 and certificate regarding policy and practice against sexual harassment, sexual assault and discrimination against employees who are members of a protected class as required by Chapter 212, Oregon Laws 2017 (House Bill 3060)

**00120.30 Changes to Plans, Specifications, or Quantities before Opening of Bids** - Replace all "ODOT eBids website" wording in this section with "Agency's website".

Delete "(see 00110.05(e))" wording in this section.

**00120.40(a-1) Paper Bids** - Replace this subsection, except for the subsection number and title, with the following:

Bidders shall not alter, in any manner, the (paper) documents within the Bid Section that are accessed and printed from the Agency's website. Bidders shall complete the certifications and statements included in the Bid Section of the Bid Booklet according to the instructions. Signature of the Bidder's authorized representative thereon constitutes the Bidder's confirmation

of an agreement to all certifications and statements contained in the Bid Booklet. Entries on paper documents in the Bid Section shall be in ink or typed.

The Bidder shall properly complete and bind all the paper documents in the Bid Section, as specified in 00120.10, together with all other required documents that are part of the Bid Booklet, between the front and back covers of the Bid Booklet, except that the Bid Bond is not required if another permissible type of Bid guaranty is provided. (see 00120.40(e))

**00120.40(a-2) Electronic Bids** – Delete this subsection in its entirety.

**00120.40(c-2) Electronic Bid Schedule Entries** – Delete this subsection in its entirety.

**00120.40(e-2) Bid Guaranty with Electronic Bids** - Delete this subsection in its entirety.

**00120.40(f) Disclosure of First-Tier Subcontractors** - Replace this subsection, except for the subsection number and title, with the following:

Without regard to the amount of a Bidder's Bid, if the Agency's cost range for a public improvement Project in the "Invitation to Bid", or in other advertisement or solicitation documents, exceeds \$100,000, the Bidder shall, within 2 working hours of the time Bids are due to be submitted, submit to the Agency, on a form provided by the Agency, a disclosure identifying any first-tier Subcontractors that will furnish labor or labor and Materials, and whose contract value is equal to or greater than:

- 5% of the total Project Bid, but at least \$15,000; or
- \$350,000, regardless of the percentage of the total Project Bid.

For each Subcontractor listed, Bidders shall state:

- The name of the Subcontractor;
- The dollar amount of the subcontract; and
- The category of Work that the Subcontractor would be performing.

If no subcontracts subject to the above disclosure requirements are anticipated, a Bidder shall so indicate by entering "NONE" or by filling in the appropriate check box. For each Subcontractor listed, Bidders shall provide all requested information. An incomplete form will be cause for rejection of the Bid.

The Subcontractor Disclosure Form may be submitted for a paper Bid (See 00120.05(b-1) either:

By filling out the Subcontractor Disclosure Form printed from the Bid Booklet on the Agency's Engineering Division's website.

Subcontractor Disclosure Forms will be considered late if not received by the Agency within 2 working hours of the time designated for receiving Bids.

The Agency is not responsible for partial, failed, illegible or partially legible facsimile (FAX) transmissions or submittals, and such forms may be rejected as incomplete.

In the event that multiple Subcontractor Disclosure Forms are submitted, the last version received prior to the deadline will be considered to be the intended version.

Bids not in compliance with the requirements of this Subsection will be considered non-responsive.

**00120.45 Submittal of Bids** – Replace subsections (a) with the following:

**00120.45 Submittal of Bids** – Bids may be submitted by mail, parcel delivery service, or hand delivery to the office and address and at the time given in the Bid Booklet. Submit Bids in a sealed envelope and marked on the outside of the envelope as required by the Invitation to Bid. Closing time for acceptance of Bids is 2:00:00 p.m. local time on the day of Bid Opening. Bids submitted after the time set for receiving Bids will not be opened or considered. The Agency assumes no responsibility for the receipt and return of late Bids.

**00120.45(b) Electronic Bids** - Delete this subsection in its entirety.

**00120.60(a) Paper Bids** - In the paragraph that begins "Information entered into...", replace the words " ODOT Procurement Office" with the words "Agency".

In the paragraph that begins "A Bidder may withdraw...", replace the words "ODOT Procurement Office " with the words "Agency".

**00120.60(b) Electronic Bids** – Delete this subsection in its entirety.

**00120.70 Rejection of Nonresponsive Bids** - Add the following bullet(s) to the end of the bullet list:

- The Bidder has liquidated and delinquent debt owed to the State or any department or agency of the State.

## **SECTION 00130 - AWARD AND EXECUTION OF CONTRACT**

Comply with Section 00130 of the Standard Specifications modified as follows:

**00130.10 Award of Contract** - Replace the paragraph that begins "The Agency will provide Notice of Intent to Award..." with the following bullet:

The Agency will provide Notice of Intent to Award on the Agency's website.

**00130.15 Right to Protest Award** - Replace this subsection number and title and replace the sentence that begins "Before the Agency will..." with the following number and title and sentence:

**00130.15 Right to Protest Award** - Adversely affected or aggrieved Bidders, limited to the here apparent lowest Bidders and any other Bidder directly in for Contract Award, may submit to the Agency a written protest of the Agency's intent to Award within 3 working days following

posting of the Notice of Intent to Award on the Agency’s website. The protest shall specify the grounds upon which it is based.

The Agency is not obligated to consider late protests.

**00130.50(a) By the Bidder** - In the paragraph that begins "The successful Bidder...", replace the words "ODOT Procurement Office – Construction Contract Unit" with the words "Agency’s Project Manager".

### **SECTION 00140 - SCOPE OF WORK**

Comply with Section 00140 of the Standard Specifications.

### **SECTION 00150 - CONTROL OF WORK**

**00150.30 Delivery of Notices** - Add the following to the end of this subsection:

For purposes of this subsection, the time zone is Pacific Standard Time (PST) to determine time of receipt of notices and other documents. For purposes of this subsection, non-business days are Saturdays, Sundays and legal holidays as defined by ORS 187.010 and 187.020.

Following Notice to Proceed, all notices and other documents submitted to the Contractor by the Engineer, or to the Engineer by the Contractor, electronically under 00170.08:

- If recorded in Doc Express® as received before 5:00 p.m. PST on a business day it shall be considered as received on the business day on which it was actually received in Doc Express®.
- If recorded in Doc Express® as received on a non-business day, or after 5:00 p.m. PST on a business day, it shall be considered as received at 8:00 a.m. PST on the next business day.

Claims must be submitted on paper documents according to Section 00199.

**00150.50(c) Contractor Responsibilities** - Add the following subsection:

**00150.50(f) Utility Information:**

Contact those Utilities having buried facilities and request that they locate and mark them for their protection prior to construction.

<b>UTILITY</b>	<b>CONTACT PERSON</b>	<b>PHONE NUMBER</b>
Century Link	Josh Fallin	503.399.4931
AT&T	Tom Normoyle	503.588.1899
NWN Gas	Daniel Kizer	503.226.4211ext8166
PGE	Darrin Perkins	503.463.4325

<b><u>UTILITY</u></b>	<b><u>CONTACT PERSON</u></b>	<b><u>PHONE NUMBER</u></b>
DataVision	Dennis Weddle	503-949-9701
Wave Cable/Internet	Derek Anderson	503.798-6651
City Water	Curtis Stultz	503.982.5268
City Sewer Collections and Streets	Curtis Stultz	503.982.5268

This Project is located within the Oregon Utility Notification Center area which is a Utilities notification system for notifying owners of Utilities about Work being performed in the vicinity of their facilities. The Utilities notification system telephone number is 811 (or use the old number which is 1-800-332-2344).

### **SECTION 00160 - SOURCE OF MATERIALS**

Comply with Section 00160 of the Standard Specifications.

### **SECTION 00165 - QUALITY OF MATERIALS**

Comply with Section 00165 of the Standard Specifications.

### **SECTION 00170 - LEGAL RELATIONS AND RESPONSIBILITIES**

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

**00170.05 Assignment of Antitrust Rights** - Replace the bullet that reads "ORS 646.725; and" with the following bullet:

- ORS 646.725

**00170.07 Record Requirements** - In the paragraph that begins "For purposes of this Subsection, the term...", replace the words "OAR 731-005-0780" with the words "OAR 734-010-0400".

**00170.07(a) Records Required** - In the paragraph that begins "These records shall include...", replace the bullet that begins "Contracts or documents of other...", with the following bullet:

- Contracts or documents of other arrangements with any Related Entity as defined in OAR 734-010-0400.

In the paragraph that begins "The Contractor shall include...", replace the words "OAR 731-005-0780" with the words "OAR 734-010-0400".

**00170.07(b) Access to Records** - In the paragraph that begins "The Contractor shall provide...", replace the words "OAR 731-005-0780(9)" with the words "OAR 734-010-0400(9)".

**00170.62 Labor Nondiscrimination** - Add the following sentence to the end of this subsection:

It is a material term of this Contract that the Contractor certifies by entering into this Contract that the Contractor has a written policy and practice that meets the requirements described in Chapter 212, Oregon Laws 2017 (House Bill 3060) for preventing sexual harassment, sexual assault and discrimination against employees who are members of a protected class and that the Contractor shall maintain the policy and practice in force during the entire term of this Contract.

**00170.60 Safety, Health and Sanitation Provisions** – Add the following paragraph to the end of this subsection:

The Contractor is responsible to require each subcontractor at every tier to comply with the requirements of OAR 437-002-0146, Oregon OSHA’s Confined Space Rule including a copy of all closed permit entry forms to the Agency Project Manager within 24 hours of closing the permit.

**00170.70(a) Insurance Coverages** - The following insurance coverages and dollar amounts are required pursuant to this subsection:

<b>Coverages</b>	<b>per Occurrence</b>	<b>Limit</b>
Commercial General Liability	\$1,000,000.00	\$2,000,000.00
Commercial Automobile Liability	\$1,000,000.00	(aggregate limit not required)

**00170.70(c) Additional Insured** - Add the following paragraph and bullet(s) to the end of this subsection:

Add the following as Additional Insureds under the Contract:

- The City of \_Woodburn, OR and its officers, agents, representatives, volunteers and employees
- Murraysmith, Inc., Portland, OR
- GSI Water Solutions, Portland, OR

**00170.72 Indemnity/Hold Harmless** - Add the following paragraph and bullet(s) to the end of this subsection:

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

- The City of \_Woodburn, OR and its officers, agents, representatives, volunteers and employees
- Murraysmith, Inc., Portland, OR
- GSI Water Solutions, Portland, OR

**SECTION 00180 - PROSECUTION AND PROGRESS**

Comply with Section 00180 of the Standard Specifications modified as follows:

**00180.40(a) In General** – Add the following bullets to this subsection:

- Street Closures are not allowed in this project.
- Provided and maintain access to all homes, School and Business at all times.
- All work shall be accomplished between 7:00 AM and 7:00 PM every day from Monday through Friday, excluding Legal Holidays.

Add the following subsection:

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

<b>Limitations</b>	<b>Subsection</b>
Cooperation with Utilities .....	00150.50
Cooperation with Other Contractors .....	00150.55
On-Site Work .....	00180.40(b)
Contract Time .....	00180.50(h)
Right-of-Way and Access Delays .....	00180.65
Special Events .....	00220.40(e)(2)(b)
Regulated Work Areas .....	00290.34(a)
Noise Control .....	00290.32

**00180.41 Project Work Schedules** - After the paragraph that begins "One of the following Type..." add the following paragraph:

In addition to the "look ahead" Project Work schedule, a Type A schedule as detailed in the Standard Specifications is required on this Contract.

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

A mandatory pre-construction conference shall be scheduled no less than two weeks prior to the start of work. At this conference, the Contractor shall provide the following pre-construction submittals in addition to submittals mentioned elsewhere in the Contract Documents:

Construction Schedule: A detailed construction schedule, which shall be followed by the Contractor throughout the duration of the contract, and updated as needed.

Weekend/Emergency Contacts: The names, addresses, and telephone numbers of two or more persons employed by the Contractor who can be reached during evening and weekend hours to handle emergency matters.

**00180.50(c) Beginning of Contract Time** - Replace this subsection, except for the subsection number and title, with the following:

When the Contract Time is stated in Calendar Days, counting of Contract Calendar Days will begin on the day the Contractor begins On-Site Work as defined in 00110.20.

Add the following subsection:

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

Complete all Work to be done under the Contract within 150 days of the Notice to Proceed, to a level of Substantial Completion, which is defined as completion of well drilling, casing, sealing, and aquifer/well testing.

**00180.85(b)(1) Single Contract Time** - Replace this subsection, except for the subsection number and title, with the following:

The Liquidated Damages per Calendar Day\* are 15.0 percent of C divided by T as defined in this Section.

C = The Contractor's Bid amount for the Contract.

T = The total Calendar Days between the latest completion date or time listed under 00180.50(h) in the Solicitation Documents and the Bid Opening that will result in the greatest value for T.

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

Liquidated damage amount per day shall be determined by the above formula, but shall be no less than \$150 per day.

**00180.90(a) Termination for Default** - In the paragraph that begins "Termination of the Contract for default...", add the following bullet to the end of the bullet list:

- Has liquidated and delinquent debt owed to the State or any department or agency of the State.

## **SECTION 00190 - MEASUREMENT OF PAY QUANTITIES**

Comply with Section 00190 of the Standard Specifications.

## **SECTION 00195 - PAYMENT**

Comply with Section 00195 of the Standard Specifications modified as follows:



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

**00195.10 Payment for Changes in Materials Costs** – There are no changes in payments for escalation/De-Escalation of materials in this Contract.

Additional work required by the Agency will be negotiated on a case by case basis for all changes in materials costs and shall be agreed upon, in writing, before the work is accomplished.

All materials are subject to change in costs and conditions, as specified in subsection 00195.20 Changes in Plans or Character of Work, including but not limited to:

- Steel Materials Price Adjustment
- Asphalt Cement Price Adjustment
- Fuel Price Adjustment

The Agency reserves all of its rights under the Contract, including, but not limited to, its rights for suspension of the Work under 00180.70 and its rights for termination of the Contract under 00180.90, and this escalation/de-escalation provision shall not limit those rights.

**00195.12 Steel Material Price Escalation/De-Escalation** – Remove this subsection in its entirety.

**00195.50 (1) Progress Payments** - Replace the paragraph that begins with “At the same time each month...” of this subsection with the following:

At the same time each month, the Contractor will make an estimate of the amount and value of the Pay Item Work completed. The Contractor will submit this estimation of quantities to the Engineer for agreement on the number of estimated units completed for unit price Pay Items plus the estimated percentage completed of lump sum Pay Items.

**00195.50 (2) Value of Materials on Hand** – Replace the paragraph that begins with “The Engineer will...” of this subsection with the following:

The Contractor will also make an estimate of the amount and value of acceptable Materials on hand, i.e., already delivered and stored according to 00195.60(a), to be incorporated into the Work and submit this estimation to the Engineer for agreement for Pay Items for this progress payment.

**00195.50(b) Retainage** - Replace the paragraph that begins "The amount to be retained..." with the following paragraph:

The amount to be retained from progress payments will be 5% of the value of Work accomplished, and will be retained by the Agency until completion of the Work as specified in (c) below.

**00195.50(c) Forms of Retainage** - Replace this entire subsection through and including 00195.50(3) Bonds, Securities, and Other Instruments with the following:

The Agency will withhold payment of 5% of all progress payments until completion of the project as is described in (c) below.

Insert the following:

**00195.50 (c) Release of Retainage** – The Agency will make payment to the Contractor after the Contractor has made application for payment to the Engineer upon issuance of the Third Notification.

**00195.50 (e) Withholding Payments** – Change (e) to (d) in the title of this subsection.

**00195.50 (f) Prompt Payment Policy** – Change the (f) to (e) in the title of this subsection.

**00195.90(c) No Waiver of Right to Make Adjustment** - Replace this subsection, except for the subsection number and title, 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(c) 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.

#### **SECTION 00196 - PAYMENT FOR EXTRA WORK**

Comply with Section 00196 of the Standard Specifications.

#### **SECTION 00197 - PAYMENT FOR FORCE ACCOUNT WORK**

Comply with Section 00197 of the Standard Specifications.

## **PART 00200 – TEMPORARY FEATURES and APPURTENANCES**

### **SECTION 00210 – MOBILIZATION**

Comply with Section 00210 of the Standard Specifications.

### **SECTION 00220 – ACCOMODATIONS FOR PUBLIC TRAFFIC**

Comply with Section 00220 of the Standard Specifications. Comply with City traffic and access requirements for Special Events that may occur on City property near the Project Site.

### **SECTION 00225 – WORK ZONE TRAFFIC CONTROL**

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

**00225.02(a) Temporary Signs** - Add the following to the end of this subsection:

Ten Calendar Days before closing any pedestrian pathway, place a “PATHWAY CLOSED, Daily” (CW11-5) sign in advance of each future closure point. Locate the sign so it is legible from the nearest alternate pedestrian pathway facing incoming pedestrian traffic. The sign may be mounted between the panels of a Type II barricade, or on a single-post TSS. Do not place the sign or sign support such that it narrows the pedestrian pathway to a width of less than 4 feet.

Before opening the TPAR, place TPAR signing and other TCM as shown, or as directed. Maintain the “SIDEWALK CLOSED, Daily” (CW11-5) signs while the TPAR is open to pedestrian traffic.

### **SECTION 00280 – EROSION and SEDIMENT CONTROL**

Comply with Section 00280 of the Standard Specifications.

### **SECTION 00290 – ENVIRONMENTAL PROTECTION**

Comply with Section 00290 of the Standard Specifications.

### **SECTION 00310 – REMOVAL OF STRUCTURES AND OBSTRUCTIONS**

Comply with Section 00310 of the Standard Specifications.

### **SECTION 00320 – CLEARING and GRUBBING**

Select clearing and grubbing is included in the Contractor’s Work under this Contract. Comply with Section 00320 of the Standard Specifications modified as follows:

**00320.40(b)(3) Trees To Be Saved** - Replace this subsection with the following subsection:

**00320.40(b)(3) Vegetation and Materials to be Saved** - The Engineer will designate no work zones and identify and mark trees, existing landscaping, vegetation, or other natural materials to be saved. Do not begin construction activity or move equipment into existing landscaped or vegetated areas until the work zone fencing is in place to designate and protect no work and critical root zones.

Do not work within the no work zones or critical root zone of marked trees unless written approval is obtained from the Engineer. Be responsible for all damage to and removal of trees, landscaping, vegetation or other natural materials designated to be saved. Damage will be determined by a specialist selected by the Engineer.

### **SECTION 00330 – EARTHWORK**

Comply with Section 00330 of the Standard Specifications.

### **SECTION 00331 – SUBGRADE STABILIZATION**

Comply with Section 00331 of the Standard Specifications.

### **SECTION 00340 – WATERING**

Comply with Section 00340 of the Standard Specifications.

**PART 02000 – MATERIALS**

**Concrete Materials and Additives**

**SECTION 02001 – CONCRETE**

Comply with Section 002001 of the Standard Specifications.

**SECTION 02010 – PORTLAND CEMENT**

Comply with Section 002001 of the Standard Specifications.

**SECTION 02015 – PORTLAND CEMENT CONCRETE REPAIR MATERIAL**

Comply with Section 002001 of the Standard Specifications.

**SECTION 02020 – WATER**

Comply with Section 002020 of the Standard Specifications.

**SECTION 02030 – MODIFIERS**

Comply with Section 002030 of the Standard Specifications.

**SECTION 02040 – CHEMICAL ADMIXTURES**

Comply with Section 002040 of the Standard Specifications.

**SECTION 02050 – CURING MATERIALS**

Comply with Section 002050 of the Standard Specifications.

**SECTION 02070 – BONDING AGENT**

Comply with Section 002070 of the Standard Specifications.

**SECTION 02080 – GROUT**

Comply with Section 002080 of the Standard Specifications.

**SECTION 02090 – LIME**

Comply with Section 002090 of the Standard Specifications.

**Geosynthetics and Slope Protection**

**SECTION 02320 – GEOSYNTHETICS**

Comply with Section 002320 of the Standard Specifications.

**PART 03000 – MATERIALS**

**SECTION 03020 – EROSION MATERIALS**

Comply with Section 003020 of the Standard Specifications.

**SECTION 16  
OREGON PREVAILING WAGE RATES  
FOR  
PARR ROAD MUNICIPAL WATER SUPPLY PROJECT  
FOR  
CITY OF WOODBURN, OREGON**

**The applicable Oregon prevailing wage rates are contained in the publication *Prevailing Wage Rates for Public Works Contracts in Oregon, Effective July 1, 2020* and are incorporated herein as though fully set forth as of the date the Bidding Documents are first advertised.**

**See Oregon Bureau of Labor and Industries website links at:**

<https://www.oregon.gov/boli/employers/Pages/prevailing-wage-rates.aspx>

**NOTE: THIS FORM TO BE COMPLETED BY OWNER. IT IS INCLUDED IN THE CONTRACT DOCUMENTS FOR BIDDERS' INFORMATION ONLY.**

**SECTION 17  
RESPONSIBILITY DETERMINATION FORM  
FOR  
PARR ROAD MUNICIPAL WATER SUPPLY WELL  
FOR  
CITY OF WOODBURN, OREGON**

Project Name: Parr Road Municipal Water Supply Well

Bid Number: 2020-01

Bidder's Business Entity Name: \_\_\_\_\_

Bidder's CCB License Number: \_\_\_\_\_

Form Submitted By (Contracting Agency): City of Woodburn

Form Submitted By (Representative Name): Dago Garcia

Title: City Engineer

Date: ---

OWNER has:

- [ ] Checked the list created by the Construction Contractors Board under ORS 701.227 for bidders who are not qualified to hold a public improvement contract.
- [ ] Determined whether the Bidder has met the standards of responsibility. In doing so, OWNER has considered whether the Bidder:
  - [ ] Has available the appropriate financial, material, equipment, facility and personnel resources and expertise, or the ability to obtain the resources and expertise, necessary to meet all contractual responsibilities.
  - [ ] Holds current licenses that businesses or service professionals operating in this state must hold in order to undertake or perform the work specified in the contract.
  - [ ] Is covered by liability insurance and other insurance in amounts required in the solicitation documents.
  - [ ] Qualifies as a carrier-insured employer or a self-insured employer under ORS 656.407 or has elected coverage under ORS 656.128.
  - [ ] Has disclosed the bidder's first-tier subcontractors in accordance with ORS 279C.370.
  - [ ] Has a satisfactory record of performance.
  - [ ] Has a satisfactory record of integrity.
  - [ ] Is qualified legally to contract with OWNER.
  - [ ] Has supplied all necessary information in connection with the inquiry concerning responsibility.



**NOTE: THIS FORM TO BE COMPLETED BY OWNER. IT IS INCLUDED IN THE CONTRACT DOCUMENTS FOR BIDDERS' INFORMATION ONLY.**

- Determined the Bidder to be (check only one of the following):
- Responsible under ORS 279C.375 (3)(a) and (b).
  - Not responsible under ORS 279C.375 (3)(a) and (b).  
(Attach documentation if OWNER finds the bidder not to be responsible)
- 

**This form and any attachments must be submitted within 30 days after the date of Contract Award to the Oregon Construction Contractors Board, PO Box 14140, Salem, OR 97309-5052, Phone (503) 378-4621, Fax (503) 373-2007.**

# TECHNICAL SPECIFICATIONS

## Parr Road Municipal Water Supply Well

City of Woodburn,  
Oregon

August 2020



Prepared By:

GSI Water Solutions, Inc.  
55 SW Yamhill St., Suite 300  
Portland, Oregon 97204  
(503) 239-8799

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# SECTION 01 00 00: GENERAL REQUIREMENTS

## PART 1 - GENERAL

### 1.1 PROJECT DESCRIPTION

- A. The work described in these specifications includes drilling, construction, development, testing, and disinfection of one municipal water supply well for the City of Woodburn (City). The Contractor shall supply all materials, labor, appurtenances, equipment, incidentals and testing necessary, and shall perform all operations and testing required to finish the work under this contract.

### 1.2 PLANS

- A. Included herein as part of the contract documents are the following plans and exhibits:
  - 1. **Exhibit A:** Site Map
  - 2. **Exhibit B:** Conceptual Well Design Schematic

### 1.3 WORK SITE LOCATION

- A. The project work site and drilling location is located in the southeast corner of Centennial Park at 900 Parr Road NE, in Woodburn, OR. The drilling location is presented on **Exhibit A**.
- B. The City's Representative shall stake the precise location of the new water supply well at or before the Pre-Construction Conference.

### 1.4 ORGANIZATION AND INTERPRETATION OF CONTRACT DOCUMENTS

- A. Specifications and drawings included in these contract documents establish the performance, quality requirements, location and general arrangement of materials and equipment, and establish the minimum standards for quality of workmanship and appearance.
- B. Any work that is necessary or required to make the new water supply well satisfactory and operable for its intended purpose that is not specifically called out in the specifications or on the exhibits shall be performed as incidental work as if it were described in the specifications and shown on the exhibits.

### 1.5 REFERENCES

- A. The following is a list of standards that may be referenced in these specifications:
  - 1. American Petroleum Institute (API):
    - a. Spec 5L-90, Specification for Line Pipe, 38th edition.
    - b. API 10-A, Specification for Materials and Testing for Well Cements.
  - 2. American Society for Testing and Materials (ASTM)
    - a. A53-90b, Standard Specification for Pipe, Steel, Black and Hot-dipped, Zinc-coated, Welded, and Stainless.
    - b. A409 Stainless steel casing.
    - c. A139-90, Standard Specification for Electric-Fusion (ARC) Welded Steel Pipe (NPS 4 and Over)
    - d. C33-90, Fine Aggregate

- e. C150-89, Standard Specification for Portland Cement
- 3. American Water Works Association (AWWA)
  - a. A100-06, Standard for Water Wells
  - b. C200-91, Standard for Steel Water Pipe, 6 Inches or Larger
  - c. C206-91, Standard for Field Welding of Steel Water Pipe
  - d. C654-13, Standard for Disinfection of Wells
- 4. State of Oregon
  - a. OAR 690-200 through 690-230
  - b. OAR 690-240
  - c. OAR 333-061-0005 through 333-061-0098

1.6 HEALTH AND SAFETY

- A. The Contractor shall develop and maintain a project-specific health and safety plan that documents procedures that will be followed to protect worker safety while working onsite. A copy of the Contractor's project-specific health and safety plan shall be submitted to the City's Representative prior to mobilizing to the work site. The Contractor shall be solely responsible for the health and safety of its employees and subcontractors

1.7 POWER

- A. The Contractor shall make all arrangements necessary to obtain sufficient power for the activities to be performed as stated in these specifications. The Contractor shall determine whether there is sufficient power available to operate and maintain the test pump during the duration of aquifer testing.
- B. If the Contractor determines that power at the site is not sufficient, the Contractor shall provide power using a generator. The Contractor shall be responsible for operating and maintaining a generator used for power for completion of the work.

1.8 POTABLE WATER SUPPLY

- A. The Contractor shall be responsible for supplying potable water as needed for the work. Water may be obtained from a hydrant located on site at no charge to the Contractor (see **Exhibit A**). The City shall prepare the hydrant with a backflow prevention device prior to use by the Contractor.

1.9 CONTRACTOR RESPONSIBILITIES AND QUALIFICATIONS

- A. General
  - 1. The Contractor shall comply with all of the standards and requirements outlined in these specifications.
  - 2. The Contractor shall be responsible for any damages to the new water supply well or existing property features by negligent or faulty operations or construction, or Contractor materials or practices, including (but not limited to): losses of drilling equipment; broken, collapsed, or punctured casing/screen or welds; damages to existing property features; and, damages or disruptions to underground utility lines. If the City determines that damages to the new water supply well or existing property features have occurred, the Contractor shall repair or replace the damages to the satisfaction of the City, at no additional cost to the City.

3. The Contractor shall provide the following submittals in addition to those outlined in Part 1.11 Paragraph C of this section:
  - a. Construction Schedule: A detailed construction schedule, which shall be followed by the Contractor throughout the duration of the contract, and updated as needed.
  - b. Weekend/Emergency Contacts: The names, addresses, and telephone numbers of two or more persons employed by the Contractor who can be reached during evening and weekend hours to handle emergency matters.

B. Personnel and Equipment

1. The Contractor shall provide all equipment, tools, supplies, materials, and personnel required to complete the work as described in these specifications.
2. The lead driller employed by the Contractor shall hold a current water well construction operator's license for the State of Oregon.
3. The lead driller shall be present on site for the complete project unless a written request to change drilling staff is approved by the City. Any new drillers shall have similar qualifications and experience as the original lead.

1.10 SUBMITTALS

A. Submittal Procedures

1. The Contractor shall submit the items listed in Part 1.11 Paragraph C. The City's Representative reserves the right to request additional submittals that are not included in Part 1.11 Paragraph C.
2. Unless otherwise specified, the Contractor shall provide all submittals to the City's Representative.
3. The Contractor is responsible for coordinating the timing of all submittals to avoid work delays associated with the City's Representative's review of submittals.
4. Throughout the duration of the project, the Contractor shall submit any proposed changes to equipment layouts, materials, or well design to the City's Representative for approval.

B. Submittal Reviews

1. The City's Representative shall review and mark each submittal.
2. The City's Representative's review of the submittals is applied to the general characteristics and to a general design only. Review by the City's Representative does not in any way release the Contractor from the responsibility to comply with the requirements of the contract documents and for the proper fit, construction sequences, dimensions, and quantities. The City's Representative's review does not constitute acceptance of departures from the contract documents, from supplementary drawings or instructions, and from applicable codes, laws, or ordinances, or from boards, commissions, and departments having jurisdiction. The Contractor shall make special note by separate letter and clearly mark on the submittal any deviations from the contract documents. It is the responsibility of the Contractor to confirm that all specifications, dimensions, and materials will result in the successful completion of the project as described herein and as may result from changed conditions encountered during drilling.
3. The Contractor shall resubmit all submittals as required by the City's Representative.

C. List of Submittals

1. The following page outlines a list of submittals that the Contractor shall provide prior to, during, and at the conclusion of the project:



Submittal	Specifications Location			Timing of Submittal (business days)
	Section	Part	Paragraph	
Health and Safety Plan	01 00 00	1.6	A	Prior to mobilization
Licensing and Bonding of Drillers	01 00 00	1.9	A	At Pre-Construction Conference
Construction Schedule	01 00 00	1.9	A	At Pre-Construction Conference
Weekend / Emergency Contacts	01 00 00	1.9	A	At Pre-Construction Conference
List of Furnished Materials	32 30 00	1.3	A	Prior to mobilization
Material Safety Data Sheets	32 30 00	1.3	A	Prior to mobilization
Proposed Changes in Well Design, Materials, or Methods	32 30 00	1.3	A	As necessary throughout project
Erosion and Sediment Control Plan	32 30 00	1.6	A	Prior to mobilization
Water Management and Turbidity Reduction Plan	32 30 00	1.7	A	Prior to mobilization
Spill Prevention, Control, and Countermeasures Plan	32 30 00	1.8	A	Prior to mobilization
Well Drilling, Construction, and Testing Plan	33 11 13	3.2	A	Prior to mobilization
Daily Drilling Logs and Static Water Levels	33 11 13	1.5	A	Weekly
Well Casing Specifications	33 11 13	3.4	A	Prior to purchasing or installing
Well Screen Specifications	33 11 13	3.4	A	Prior to purchasing or installing
Filter Pack Specifications	33 11 13	3.6	A	Prior to purchasing or installing
Plumbness and Alignment Documentation	33 11 13	3.5	E	Within three days of plumbness and alignment testing completion
Well Development Materials and Methods	33 11 13	3.7	B	Prior to start of well development
Well Development Documentation	33 11 13	3.7	G	Within three days of well development completion
Well Seal Materials and Methods	33 11 13	3.7	A	Prior to installing
Well Seal Documentation	33 11 13	3.8	G	Within three days of well seal installation
Aquifer Testing Plan	33 01 12	3.1	A	Prior to start of aquifer testing
Aquifer Testing Documentation	33 01 12	3.3	G	Within three days of aquifer testing completion
Well Video Log	33 11 13	3.9	D	Within five days of well video completion
Well Disinfection Materials and Methods	33 11 13	3.10	A	Prior to start of well disinfection
As-Built Diagram of Well	32 30 00	1.3	B	Prior to demobilizing
OWRD Well Report	32 30 00	1.3	B	Prior to demobilizing

PART 2 - PRODUCTS  
NOT USED

PART 3 - EXECUTION  
NOT USED

PART 4 - MEASUREMENT AND PAYMENT  
NOT USED

\*END OF SECTION\*

# SECTION 32 30 00: MOBILIZATION/DEMOBILIZATION

## PART 1 - GENERAL

### 1.1 DESCRIPTION

- A. This section describes work activities and requirements related to mobilization/demobilization and site preparation prior to the drilling, construction, development, and testing of one municipal water supply well.

### 1.2 SITE ACCESS AND SECURITY

- A. It is anticipated that the work site will be accessible from Parr Road by a farm road located at the southern edge of the property boundary (see **Exhibit A**). The farm road can be accessed from Parr Road, approximately 0.5-miles west of the site. Alternatively, the work site may be accessed from Centennial Park, with prior approval and coordination with the City. The Contractor shall verify an access route with the City prior to mobilization.
- B. The extents of the available work site area is presented on **Exhibit A**. The Contractor shall provide temporary fencing to secure the work area used for material storage and drilling operations including areas occupied by construction equipment, piping, and other equipment. Whenever the Contractor is off-site, the temporary fencing shall be locked/secured and the borehole/wellhead shall be equipped with a temporary cover.
- C. The Contractor shall provide and maintain a portable sanitation restroom.

### 1.3 MOBILIZATION / DEMOBILIZATION

#### A. Site Preparation and Mobilization

- 1. Prior to mobilizing to the work site, the Contractor shall submit the following to the City's Representative for approval:
  - a. List of Proposed Materials: A list of all materials proposed to be furnished for the project showing the supplier's name and address, the manufacturer's name and product identification number, and catalog cut sheets to clearly identify materials.
- 2. Materials Safety Data Sheets (MSDs): MSDs for any and all hazardous chemical products to be stored or used by the Contractor for the project. The area within the work site (see **Exhibit A**) is relatively flat and includes a section of a paved walking path and multiple trees, therefore, it is not anticipated that a minimal level of site preparation will be required. The Contractor shall determine the amount of effort (ex. additional grading, gravel pads, vegetation removal) required to prepare the work site for completing the project as described by these specifications.
- 3. The remainder of the Centennial Park property is completed with an athletic complex consisting of four baseball fields, a dog park, paved parking spaces, paved walking paths, and landscaped vegetation. The Contractor shall employ all measures necessary to prevent damage to the property features located outside of the work site and described above.
- 4. The Contractor shall be responsible for implementation of all site preparation activities, including the installation and maintenance of site security, erosion control, and water management facilities.

B. Site Cleanup and Demobilization

1. At the completion of the project, the Contractor shall be responsible for removing all equipment tools, unused materials, trash, and any other items brought to the work site, leaving the work site in a neat and presentable condition satisfactory to the City.
2. The Contractor shall replace or repair any damages to the paved walking path to the north of the work site area (see **Exhibit A**).
3. Gravel brought to the work site by the Contractor shall not be removed from the site upon completion of site work. The Contractor shall replant grass around the gravel pad to the satisfaction of the City.
4. Prior to demobilizing from the work site, the Contractor shall submit the following to the City's Representative for approval:
  - a. As-Built Diagram: An as-built diagram of the water supply well that shows calculations, dimensions, and assumptions.
  - b. OWRD Well Log: And OWRD well log / well report for the water supply well.

1.4 PROTECTION OF UTILITIES

- A. The Contractor shall make all necessary arrangements for the identification and protection of existing power, communication, gas, and/or other underground and above ground utilities in the vicinity of the work site location for this contract that interfere with construction.
- B. The Contractor shall be responsible for locating and marking underground utilities within a 20-foot radius of the well drilling location, including pre-excavating the borehole location by vacuum or air-knife excavation to a depth of six feet.

1.5 DRILL CUTTINGS

- A. The Contractor shall stockpile drill cuttings onsite in a stockpile adjacent to the farm road. At the conclusion or periodically throughout the duration of the project, the City shall remove and dispose of all drill cuttings from the site. The Contractor shall provide a means to convey the drill cuttings to the stockpile location.

1.6 EROSION AND SEDIMENT CONTROL

- A. The Contractor shall submit an Erosion and Sediment Control Plan for review by the City's Representative prior to mobilization to the work site. The Erosion and Sediment Control Plan shall comply with the provisions of Section 00280 of the Oregon Department of Transportation's (ODOT's) 2018 Oregon Standard Specifications for Construction. The Contractor shall design the plan to meet the standards using measures that will best fit the Contractor's construction sequencing and approved schedule.
- B. Erosion and sediment control measures shall be installed in accordance with the Contractor's Erosion and Sediment Control Plan and inspected by the City's Representative prior to beginning any well drilling activities. The Contractor shall notify the City's Representative of any deletions, additions, substitutions or any other modifications to the measures shown on the originally submitted prior to installation.
- C. Erosion and sediment control shall consist of installation, maintenance and removal of temporary erosion and sedimentation control measures, as stated in the Contractor's Erosion and Sediment Control Plan.
- D. The Contractor shall immediately remove eroded sediment carried or tracked onto areas outside of the work site (**Exhibit A**), or into storm drainage systems such as storm drain inlets, ditches, or culverts.

- E. Installation of erosion and sediment control measures in accordance with the Contractor's Erosion and Control Plan shall not relieve the Contractor of any responsibility for enforcement actions resulting from regulatory violations.

#### 1.7 WATER MANAGEMENT AND TURBIDITY REDUCTION

- A. The Contractor shall submit a Water Management and Turbidity Reduction Plan describing the Contractor's plan for control and management of water generated during the project to the City's Representative for approval prior to mobilization to the work site.
- B. The Contractor shall contain all fluids or debris generated during the project and shall prevent run off from the work site to roads, sidewalks, storm drains, surface water bodies, and/or neighboring properties.
- C. Fluids containing grout or seal material shall be properly disposed of offsite.
- D. Any water generated during drilling and well development shall be discharged through temporary water storage/treatment facilities (e.g., settling tank; baker tank or roll-off bin) designed to minimize turbidity prior to discharging to the designated discharge point (see **Exhibit A**). No waste shall be introduced into the discharge water.
- E. The location of the City's designated discharge point is presented on **Exhibit A** and consists of a storm drain located in the parking area of Centennial Park. The Contractor shall maintain access for vehicle traffic around the discharge location and provide traffic cones as needed.
- F. The Contractor's temporary water storage/treatment facilities shall be sufficient to reduce the turbidity of the effluent to 50 nephelometric turbidity units (NTUs). The Contractor shall periodically monitor the treated effluent to ensure that the temporary water storage/treatment facilities are working properly.
- G. The Contractor shall provide temporary discharge piping to convey water generated during aquifer testing to the designated discharge point (see **Exhibit A**). The temporary discharge piping shall be equipped with two hose bibs for water quality monitoring and sample collection during aquifer testing. The hose bibs shall be located no further than ten feet from the wellhead, unless otherwise approved by the City's Representative.
- H. Installation of water management and turbidity reduction measures in accordance with the Contractor's Water Management and Turbidity Reduction Plan shall not relieve the Contractor of any responsibility for enforcement actions resulting from regulatory violations.

#### 1.8 SPILL PREVENTION AND CONTROL

- A. The Contractor shall develop and maintain a spill prevention, control and countermeasures (SPCC) plan that addresses the provisions of Section 00290 of ODOT's 2018 Oregon Standard Specifications for Construction. A copy of the SPCC plan shall be submitted to the City's Representative prior to mobilizing to the work site.
- B. Use of hydrocarbon products other than fuel, motor oil, hydraulic oil and grease normally used during well drilling and installation shall be minimized. All lubricants or oils used on drill pipe threads, down-hole hammers, or other drilling equipment that could be discharged or otherwise come into contact with aquifer materials and groundwater shall be NSF-approved for use in potable water applications, and adequate measures shall be taken to prevent all oil, fuel and other fluid spills onsite.
- C. The Contractor shall have a spill response kit onsite that includes sufficient materials and equipment to control and prevent discharge of spills offsite or into site catch basins. Contractor personnel shall be familiar with the SPCC plan and trained in the use of spill prevention and response equipment.

- D. The Contractor shall place a protective barrier under the drilling rig and equipment to prevent oils, fuels and other fluids from contaminating the site. Drip pans or other protective devices shall be required for all oil, fuel or chemical transfer operations.

## PART 2 - PRODUCTS

NOT USED

## PART 3 - EXECUTION

NOT USED

## PART 4 - MEASUREMENT AND PAYMENT

### 4.1 MOBILIZATION / DEMOBILIZATION

- A. Measurement and payment for mobilization and demobilization shall be on a lump sum price for the production well drilling work as specified in the bid schedule submitted by the Contractor for this project.
- B. The lump sum price shall be full compensation for all labor and materials required to transport personnel, equipment, and operating supplies to and from the work site; furnish and establish power service, and portable sanitary facilities; preparation of a spill prevention and control plan and implementation of spill countermeasures; obtain an adequate source of fresh water from the City; and obtain the necessary start cards.
- C. Progress estimates and payments for mobilization/demobilization will be made in accordance with the following schedule:
  - 1. Mobilization to the site and set up for well drilling: 25 percent.
  - 2. Completion of well drilling: 25 percent
  - 3. Setup for aquifer testing: 25 percent.
  - 4. Site cleanup and demobilization: 25 percent.

### 4.2 SPILL PREVENTION AND CONTROL

- A. Measurement and payment for spill prevention and control shall be on a lump sum basis.
- B. The lump sum price shall be full compensation for all labor and materials required for preparation of the spill prevention and control plan, and implementation of spill countermeasures.
- C. Progress payments for spill prevention and control will be made in accordance with the following schedule:
  - 1. Submittal of the spill prevention, control and countermeasures (SPCC) plan: 50 percent.
  - 2. Site cleanup and demobilization: 50 percent.

### 4.3 SITE PREPARATION

- A. Measurement and payment for site preparation is lump sum.
- B. The lump sum price shall include the cost of all labor, equipment, and materials required to prepare the well site for drilling, well installation, and testing as described in these specifications.

- C. Progress payments for site preparation will be made in accordance with the following schedule:
  - 1. Initiation of drilling: 50 percent.
  - 2. Completion of drilling: 50 percent.

#### 4.4 SITE CLEANUP

- A. Measurement and payment for site cleanup is lump sum.
- B. The lump sum price shall include the cost of all labor, equipment, and materials required to prepare the well site for drilling, well installation, and testing as described in these specifications.
- C. Payment of 100 percent of the lump sum price for site cleanup as specified in the bid schedule submitted by the Contractor for this project will be paid upon completion of all work on the project, final inspection and approval from the City's Representative.

#### 4.5 TEMPORARY SECURITY FENCING

- A. The measurement unit for temporary security fencing is linear feet of temporary security fence installed.
- B. Payment shall be the unit price specified in the bid schedule submitted by the Contractor for this project multiplied by the length of temporary security fence furnished and installed.
- C. If additional temporary security fencing is required beyond what is indicated in these specifications, then the Contractor shall be reimbursed for the additional fencing at the unit price specified in the bid schedule submitted by the Contractor for this project.

#### 4.6 EROSION AND SEDIMENT CONTROL

- A. The measurement unit for this work is lump sum.
- B. The lump sum price shall include the cost of all labor, materials and equipment used to provide, install, and remove erosion and sedimentation control devices and measures at the work site. The lump sum bid price shall include all costs associated with the preparation of the plans and modifications to the plans required to achieve compliance with all applicable requirements. The lump sum bid price shall also include removal or replacement of degraded measures with new materials when directed by the City or City's Representative.
- C. Progress estimates and payments for erosion and sediment control will be made in accordance with the following schedule:
  - 1. When the Erosion and Sediment Control plan has been submitted and all erosion and sedimentation control materials and measures are in place and have been inspected by the City: 50 percent.
  - 2. When drilling and construction of the well is complete: 25 percent.
  - 3. Upon completion of all work on the project, final inspection and approval from the City's Representative: 25 percent.
- D. The Contractor shall not be paid standby time in the event the project is shut down due to nonconformance of the Erosion and Sediment Control plan or Federal, State, or local requirements.

#### 4.7 WATER MANAGEMENT AND TURBIDITY REDUCTION

- A. The measurement unit for this work is lump sum.
- B. The lump sum bid price shall include the cost of all labor, materials and equipment used to provide, install, and remove the approved water management and turbidity reduction facilities

at the work site. The lump sum bid price shall include all costs associated with the preparation of the plans, modifications to the plans required to achieve compliance with the contract, the turbidity standard set by the City and maintenance of the measures in accordance with the regulatory standards for turbidity reduction. The lump sum bid price shall also include removal or replacement of degraded measures with new materials when directed by the City or City's Representative.

- C. Progress estimates and payments for water management and turbidity reduction will be made in accordance with the following schedule:
  - 1. When the approved facilities and materials are in place for drilling and have been inspected and approved by the City's Representative: 50 percent.
  - 2. When drilling and construction of the well is complete: 25 percent.
  - 3. Upon completion of all work on the project, final inspection and approval from the City's Representative: 25 percent.
  
- D. The CONTRACTOR shall not be paid standby time in the event the project is shut down due to nonconformance of the Water Management and Turbidity Reduction Plan or Federal, State, or local requirements.

\*END OF SECTION\*



# SECTION 33 11 13: NEW WATER SUPPLY WELL

## PART 1 - GENERAL

### 1.1 WELL CONSTRUCTION SUMMARY

- A. The new water supply well is planned to be completed with a single string of 16-inch diameter well casing and wire-wrap screen with a silica sand filter pack envelope. A conceptual well design schematic is provided in **Exhibit B**. Approximate construction depths and diameters, design parameters, and the target design well yield are listed below:

Construction Feature	Description
Anticipated Well Depth	300 feet
Target Well Yield	1,000 gpm
Borehole Diameter	20-inch
Permanent Well Casing Diameter	16-inches
Permanent Well Casing Length	263 feet
Anticipated Surface Seal Depth	230 feet
Wire-Wrap Screen Diameter	16-inches
Anticipated Wire-Wrap Screen Length	40 feet

- B. Final design of the water supply well will depend on subsurface conditions encountered during drilling and shall be determined by the City's Representative after review of the formation samples and the sieve analyses results.

### 1.2 DRILLING EQUIPMENT CAPABILITIES

- A. The Contractor's equipment shall be sufficient to produce a completed well as shown in **Exhibit B** and as described in Part 1.1 above. Increases in borehole and well casing diameters to accommodate the Contractor's existing equipment may be approved by the City's Representative at the Contractor's expense when requested by the Contractor.

### 1.3 HYDROGEOLOGIC INFORMATION

- A. The project's target aquifer is the Troutdale Equivalent, which exists under confined conditions and is generally composed of gravels and coarse-grained sands. The seasonal low static water level is estimated to be 80 feet bgs. In the vicinity of the work site the target aquifer is estimated to be present at a depth of 185 to 300 feet, underlying the following geologic units; the Missoula Flood Deposits or Willamette Silt (stratified silt, clay, and sand) and the Willamette Basin Weathered Terrace Deposits (sand and gravel).
- B. Well logs that are representative of local hydrogeologic conditions are available through the Oregon Water Resources Department (OWRD) and include MARI-57301 (City Well 12) and MARI-57300 (City Well 13). This information is provided for the Contractor's information only and the City shall not be responsible for the Contractor's application or interpretation of the information.

### 1.4 DRILLING PERMITS AND STANDARDS

- A. The Contractor shall obtain at its expense the start cards and furnish the well logs and well reports for the new water supply well to the licensing state agency. The Contractor shall be

responsible for completing and obtaining any other required permits or special standards required to complete the well as described in these specifications, except for City of Woodburn land use approval and water right permitting, which will be all handled separately by the City.

#### 1.5 CONTRACTOR'S DAILY LOGS

- A. Daily logs shall be prepared by the Contractor's field staff and shall be submitted to the City's Representative every week. Daily logs shall include the following information, at a minimum:
1. General project identification (well name or start card number)
  2. The depth to water prior to commencing activities each day, including a record of the depth of the borehole and temporary casing at the time of the water level measurement.
  3. The type and quantity of any materials used each day, including but not limited to casing, fittings, filter pack, or sealing materials.
  4. The duration of activities throughout the day.
  5. The depth, thickness, type, and general characteristics of each formation material encountered including evidence of water bearing zones, note chattering, increased turbidity in drill returns or other drilling actions that are evidence of the type of materials being penetrated.

## PART 2 - PRODUCTS

#### 2.1 FORMATION SAMPLE CONTAINERS

- A. The Contractor shall furnish appropriately-sized containers for collecting and storing formation samples during drilling of the new well. The containers shall have a minimum nominal capacity of one gallon.

#### 2.2 TEMPORARY CASING

- A. The Contractor shall furnish temporary well casing of such strength to reach the maximum designated depth undamaged, and shall be of such strength so that the temporary casing can be completely removed from the well.
- B. All pipe used as temporary casing to maintain the borehole walls or to obtain samples required during drilling shall remain the property of the Contractor and be removed from the work site at the completion of the project.

#### 2.3 WELL CASING

- A. The well casing shall be new, seamless or electric resistance welded 16-inch pipe size diameter low-carbon steel pipe with a wall thickness of 0.375 inches.
- B. All steel pipe shall conform to the latest edition of the specification: ASTM A-53 A or B.
- C. The well casing shall have the brand name, wall thickness, and ASTM designation clearly stamped on each segment of pipe. Manufacturer-rejected pipe shall not be used. The well casing shall be clean and free of drilling mud or other foreign material prior to installation into the borehole.

#### 2.4 PIPE FITTINGS, CENTERING GUIDES, AND CASING JOINTS

- A. The Contractor shall provide all fittings, drive shoes, welding rings, and centering guides as necessary to complete each well as described by these specifications.

- B. All welding shall be completed by a certified welder, as certified by an independent testing laboratory as per AWS D1.1. Casing joints when welded shall be a complete penetration, vee-groove weld with a 60-degree angle bevel, 1/16-inch root opening, and the feather edge shall be ground to provide a land. The weld shall not use a backing ring and shall provide a 1/32-inch surface build/finish. Prior to welding, the Contractor shall inspect the bevel edge and if it is serrated or otherwise not smooth it shall be ground smooth.
- C. The Contractor shall provide centering guides for the well casing at intervals of 40 feet or intervals of 20 feet for the screen.

## 2.5 WELL SCREEN

- A. The well screen shall be 16-inch pipe size diameter of continuous slot, wire-wrap design, manufactured by Johnson Well Screens, or approved equal. The well screen material shall be Type 304 stainless steel conforming to ASTM requirements.
- B. The outer winding that forms the wire-wrap screen surface and the internal longitudinal bars shall be joined at each intersection by welding. Both members shall be Type 304 stainless steel conforming to ASTM requirements. All welding material used to couple screen components shall be stainless. Top and bottom fittings required for the screen assembly shall be manufactured out of the same material as the screens. Joints between screen sections shall be welded and shall have tensile and collapse strength equal to or greater than that of the entire well screen assembly. Stainless steel 309 welding rod or equivalent shall be used to weld stainless steel screen sections to the sections of low carbon steel blank pipe. The Contractor may recommend alternative welding materials. Approval of alternates shall be at the discretion of the City's Representative.
- C. Below the bottom-most section of screen, a five (5) foot section of blank steel pipe with a welded end cap shall be installed as a sump.

## 2.6 TEMPORARY WELL CAP

- A. The Contractor shall provide a temporary well cap that can be secured to the top of the permanent well casing after completion of the well. The temporary well cap shall have one 1-inch diameter and one 2-inch diameter threaded access port with cap.

## 2.7 PVC DROP PIPE

- A. The Contractor shall furnish and install a 2-inch diameter, schedule 40 PVC drop pipe in the completed well to a depth of 250 feet bgs. The drop pipe shall extend and be accessible from the 2-inch threaded access port on the temporary well cap.

## 2.8 PLUMBNESS AND ALIGNMENT TOOLS

- A. The plumbness and alignment survey shall be performed with tools specified in Appendix D of AWWA A100-06, or approved equal.

## 2.9 FILTER PACK

- A. Filter pack material shall consist of clean silica sand, conforming to AWWA A100-06 with respect to specific gravity, uniformity, absence of deleterious substances, and non-rounded fragments. The clean silica sand shall be manufactured by Colorado Silica Sand Inc. (CSSI) or approved equal.
- B. The Contractor shall provide a measuring device to sound the filter pack level in the borehole during placement and development to detect bridging and/or settlement.

## 2.10 WELL DEVELOPMENT TOOLS AND MATERIALS

- A. The Contractor shall provide Liquid AQUA-CLEAR® Phosphate-Free Dispersant (PFD) as a well development aid. The anticipated minimum treatment volume is one gallon of AQUA-CLEAR® PFD for every 500 gallons of static volume of water in the new well, plus 50 percent excess to account for water in the filter pack envelope and formation interface.
- B. The Contractor shall provide a dual-isolation surge block tool consisting of two (2) appropriately spaced rubber disks to facilitate aggressive development of the filter pack and near-borehole. The outside diameter of the rubber disks shall be not more than 1/2-inch smaller than the inside diameter of the well screen being developed. The dual-isolation tooling shall allow simultaneous pumping (either with a shrouded submersible pump or by airlift pumping) during swabbing at a pumping rate of at least 200 gpm.
- C. The Contractor shall provide impulse generation tooling for use during well development.
- D. The Contractor shall provide Imhoff Cones for measurement of settleable solids (measured in mL/L) and a turbidity meter for measurement of turbidity (measured in NTU) during well development.
- E. Alternative or comparable tools and materials proposed by the Contractor shall be subject to approval by the City's Representative.

## 2.11 SURFACE SEAL

- A. The requirements for grout materials shall conform to OAR 690-210-0310.
- B. Use of any additives not expressly allowed in OAR 690-210-0310 shall be subject to the approval of the City's Representative.
- C. The Contractor shall provide a measuring device to sound the level of cement grout in the borehole during placement to ensure that excessive grout leakage to the native formation is not occurring.

## 2.12 WELL VIDEO SURVEYING TOOLS

- A. The Contractor shall provide the necessary equipment to complete a color video survey of the entire length of the completed well.
- B. The camera shall be equipped with side-viewing capability without the use of mirrors, and shall have depth below ground surface encoded on the video.
- C. The camera shall not have been used to video boreholes containing contaminated groundwater.
- D. The camera and cable shall be disinfected using a chlorine solution prior to installation into the well.

## 2.13 WELL DISINFECTION TOOLS AND MATERIALS

- A. The Contractor shall provide the necessary equipment to disinfect the well as specified in AWWA C654-13 and Part 3, Item 3.10 of this Section.

## 2.14 TEMPORARY WELLHEAD PROTECTION

- A. The Contractor shall furnish temporary protection devices (e.g., Jersey barriers or ecology blocks) around the completed well to protect the well casing stickup from damage.

## PART 3 - EXECUTION

### 3.1 WORK SEQUENCE

- A. The general work sequence for this project shall include, but may not be limited to the following steps:
1. Mobilize to the work site (see **Exhibit A**).
  2. Set up and maintain a power supply, water supply, and portable sanitary restroom (Section 01 00 00 Parts 1.7 and 1.8 and Section 32 30 00 Part 1.2).
  3. Set up and maintain erosion and sediment control, water management and turbidity reduction, and spill prevention facilities in accordance with the Contractor's plans (Section 32 30 00 Parts 1.6, 1.7, and 1.8).
  4. Perform a utility locate at the well drilling location, including pre-excavation by vacuum or air-knife to a depth of six feet below grade (Section 32 30 00 Part 1.4).
  5. Drill the well borehole at a minimum nominal diameter of 20-inches to an anticipated depth of 300 feet while advancing temporary casing and collecting formation samples (Parts 3.2 and 3.3 of this section).
  6. Fabricate and install the 16-inch diameter well casing and well screen (Parts 3.4 of this section).
  7. Conduct plumbness and alignment testing of the well (Part 3.5 of this section).
  8. Install the silica sand filter pack envelope and pull back the temporary casing to expose the well screen (Part 3.6 of this section).
  9. Conduct initial well development using a combination of impulse generation and dual-isolation surging and pumping, replenishing the filter pack envelope as necessary (Part 3.7 of this section).
  10. Conduct final well development using the test pump until the well development criteria have been met (Part 3.7 of this section).
  11. Install the surface seal (Part 3.8 of this section).
  12. Conduct aquifer testing (step-rate and constant-rate discharge tests) (Section 33 01 12 Parts 3.1, 3.2, and 3.3).
  13. Conduct a color video survey of the completed well (Part 3.9 of this section).
  14. Disinfect the completed well (Part 3.10 of this section).
  15. Complete and secure the wellhead (Parts 2.7, 2.14, and 3.11 of this section).
  16. Complete final site cleanup and restoration to the satisfaction of the City and demobilize from the work site (Section 32 30 00 Part 1.3).

### 3.2 DRILLING METHODS

- A. The Contractor shall develop a well drilling, construction, and testing plan that describes how the Contractor shall sequence and coordinate the drilling, construction, and testing programs, including drawings of the work site showing the proposed layout of equipment, equipment specifications. The well drilling, construction, and testing plan shall be submitted to the City's Representative for approval in accordance with the submittal schedule outlined in Part 1.10 of Section 01 000 000.
- B. The Contractor may use any drilling method for the borehole other than mud rotary.
- C. The Contractor shall drill the borehole at a minimum nominal diameter of 20-inches and advance temporary casing with drive shoes to an anticipated depth of 300 feet.

- D. Additives used during drilling, if necessary, shall be NSF 60 compliant for potable water wells. Only clean and potable water shall be introduced into the well.
- E. The Contractor shall notify the City's Representative at least two days in advance of initiating drilling.

### 3.3 FORMATION SAMPLING

- A. The Contractor shall collect samples from the formation being drilled at every change in formation and at no greater than ten foot intervals at depths shallower than the target aquifer and no greater than five foot intervals within the target aquifer.
- B. All formation samples shall be representative of the material penetrated. The Contractor shall account for return time of the cuttings when collecting a sample from each depth interval to ensure that the sample is representative of the depth interval.
- C. The Contractor shall mark each sample container with the well name, depth interval the sample was collected from, and the date the sample was taken using waterproof ink.

### 3.4 WELL CASING AND WELL SCREEN INSTALLATION

- A. Prior to purchase or installation, the Contractor shall submit to the City's Representative for approval manufacturer's specifications for both the well casing and well screen, including the following, at a minimum:
  - 1. Well Casing: Mill certificates.
  - 2. Well Screen(s): The collapse and tensile strength, estimated screen weight, screen outside and clear inside diameter, slot size and the square inches of open area per lineal foot of screen.
- B. The well casing and well screen shall be fabricated and installed in accordance with the manufacturer's recommendations and according to the anticipated design depths presented on **Exhibit B**, or as directed by the City's Representative.
- C. After installation, the well screen shall be exposed to the filter pack envelope using the pullback method.
- D. If for any reason the well screen cannot be placed at the final design position or at a depth acceptable to the City, the Contractor shall remove and repair any damage to the well screen, overdrill the borehole, and reinstall the well screen at no additional cost to the City. In no event shall the Contractor attempt to drive or spud the well screen.
- E. The Contractor shall notify the City's Representative at least two days in advance of installing the well casing and well screen string at the new well.

### 3.5 PLUMBNESS AND ALIGNMENT TESTING

- A. The Contractor shall conduct a plumbness and alignment test after the borehole of the new well reaches final completion depth, and after the well casing and well screen string has been installed.
- B. The Contractor shall conduct the plumbness test following the methods specified in Appendix D of AWWA A100-06. **Deviation from perfect plumbness shall not exceed six inches per 100 feet, as specified in the Handbook of Ground Water Development (Roscoe Moss Company, 1990).**
- C. The Contractor shall prove the alignment of the well by lowering into the well a straight section of pipe or dummy measuring 40 feet long with an outside diameter not more than 0.5 inches

smaller than internal diameter of casing being tested). The well will be deemed adequately straight if the pipe or dummy can be lowered freely the entire depth of the well.

- D. If the well cannot meet the specified criteria for plumbness and alignment, the Contractor shall correct the well at the Contractor's expense or abandoned due to the fault of the Contractor and a new well shall be constructed at no additional cost to the City.
- E. The Contractor shall submit results of plumbness and alignment testing of the well to the City's Representative for approval within three days of completing plumbness and alignment testing.
- F. The Contractor shall notify the City's Representative at least two days in advance of conducting plumbness and alignment testing of the new well.

### 3.6 FILTER PACK INSTALLATION

- A. Prior to purchase or installation, the Contractor shall submit to the City's Representative for approval manufacturer's specifications for the filter pack material.
- B. The Contractor shall install the filter pack envelope using the casing pullback method, and shall measure and monitor the well screen position during pullback to ensure it remains at the final design location.
- C. The method of installing the filter pack envelope shall be proposed by the Contractor and approved by the City's Representative, but shall conform to the following requirements, at a minimum:
  - 1. The Contractor shall maintain the filter pack envelope at all times to prevent heaving and to ensure the well screen is not exposed directly to the formation.
  - 2. The Contractor shall not install the filter pack envelope at a rate of more than 1/2 cubic foot per minute.
  - 3. The Contractor shall not install more than a 20 foot section of filter pack without pulling up the temporary casing.
  - 4. As the filter pack is installed, the Contractor shall disinfect the filter pack material with a concentration of at least 50 mg/L of available chlorine.
  - 5. As the filter pack is installed, the Contractor shall swab the well screen until there is no further measurable settlement of the filter pack envelope.
  - 6. The Contractor shall provide the City's Representative with records of all tagged depths of the filter pack during installation, measurements of settlement, and the volume of filter pack material installed.
- D. The Contractor shall notify the City's Representative at least two days in advance of installing the filter pack at the new well.

### 3.7 WELL DEVELOPMENT

- A. After the well screen and filter pack envelope have been installed, the Contractor shall develop the well. Well development shall be completed prior to aquifer testing to remove the silt/finer sand fraction to establish a hydraulic connection between the well and the aquifer and so that representative aquifer testing results can be achieved.
- B. Prior to the start of well development, the Contractor shall develop and submit a well development plan to the City's Representative for approval that describes how the Contractor shall sequence well development activities, including specifications for any equipment or materials to be used for well development and also the proposed methods and frequency of collecting measurements of water levels, pumping rates, turbidity, and fines content.

- C. Prior to beginning well development, the static water volume in the well shall be treated with liquid AQUA-CLEAR® PFD. Treatment volume of the dispersant shall follow manufacturer specifications. The dispersant shall be placed into the screened interval via a tremmie line, thoroughly blended, and then agitated repeatedly by swabbing.
- D. Well development shall be executed using a combination of impulse generation technology and mechanical surging with a dual-isolation tool that allows simultaneous pumping (either with a shrouded submersible pump or by airlift pumping). Well development activities shall be carried out in a manner that does not cause undue settlement and disturbance of the strata above the water bearing formation.
- E. Initial well development includes the following activities and criteria for completion:
  - 1. Initial well development is anticipated to occur for a minimum of 16 hours for impulse generation development and dual-isolation surging and pumping.
  - 2. After each sequence of developing the full length of the well screen with impulse generation and dual-isolation surging/pumping, the Contractor shall complete a performance test that consists of pumping the well at a rate specified by the City's Representative for a duration of at least 45 minutes while measuring pumping water levels at intervals of ten minutes.
  - 3. Well development via impulse generation and dual-isolation surging/pumping shall continue until performance testing indicates that, in the opinion of the City's Representative, the well's performance and water quality are no longer meaningfully improving.
- F. Final well development includes the following activities and criteria for completion:
  - 1. An additional eight hours for final development via pumping shall be conducted after the test pump is set prior to aquifer testing. Final development via pumping shall be conducted at a rate determined by the City's Representative.
  - 2. Well development shall continue until water pumped from the well at the test pumping rate specified by the City's Representative is clear (less than five NTU) and free of fines (less than five mg/L), and/or the water quality and performance of the well is no longer meaningfully improving in the opinion of the City's Representative.
- G. The Contractor shall submit documentation of well development (measurements of fines and turbidity, and the durations of development activities) to the City's Representative for approval within three days of completing well development.
- H. The Contractor shall notify the City's Representative at least two days in advance of initiating well development activities at the new well.

### 3.8 SURFACE SEAL INSTALLATION

- A. Prior to installing the well's surface seal, the Contractor shall develop and submit a well sealing plan to the City's Representative for approval that describes how the Contractor shall sequence seal installation activities, including specifications for any equipment or materials to be used for seal installation and also the proposed methods and frequency of collecting measurements of either of the following:
  - 1. Weight measurements of cement grout seal material at 25, 50, 75, and 100 percent of seal placement; or
  - 2. The proportions of cement and water used in mixing each batch of cement grout (i.e., gallons of water per sack of dry cement), including a record of the cement type/manufacturer and bag weight.
- B. The cement grout surface seal shall be installed in compliance with acceptable methods of placement specified in OAR 690-210-0320 and Appendix 210-3.



- C. The Contractor shall place approximately 2 feet of fine sand (20-40 or equivalent) and a grout plug at the base of the annular space prior to placement of the remainder of the surface seal to prevent grout intrusion into the filter pack and aquifer. The Contractor shall employ all other available measures to prevent grout intrusion into the filter pack and aquifer. No work will be done on the well for a minimum of 72 hours following placing of the grout seal.
- D. The cement grout seal shall be placed from the bottom and upward to promote even distribution. The completed seal shall fully surround the well casing, be evenly distributed, be free of voids or bridges, and extend to undisturbed or recompacted soil.
- E. The Contractor shall use an accurate measuring device to continuously monitor the depth of the seal during placement. A record of all tagged depths shall be kept and made available upon the request of the City's Representative.
- F. In the event the borehole or part of the borehole collapses prior to completion of the surface seal, the Contractor shall take whatever steps are necessary to reopen the borehole, reset the casing and place the seal material as required. Any such remedial action shall be completed at no additional cost to the City.
- G. The Contractor shall submit documentation of seal installation to the City's Representative for approval within three days of completing seal installation.
- H. The Contractor shall notify the City's Representative at least two days in advance of installing the surface seal at the new well.

### 3.9 VIDEO SURVEY

- A. The Contractor shall complete a video survey of the full length of the completed well, from the top of the casing stickup to the total depth of the well.
- B. The video survey shall be conducted after all sediment accumulating in the well from well development and aquifer testing has been removed and after fresh water has been introduced from the surface to clarify water standing in the well as needed.
- C. If the water column in the well is too cloudy, the Contractor shall flush the well with potable water and allow sufficient time for the well to become clear so that, in the opinion of City's Representative, the video survey will show sufficient detail. If the quality of the video does not meet the approval of the City's Representative, the Contractor shall re-video the well at no additional cost to the City.
- D. The Contractor shall submit two DVD (or other digital media) copies of the well video survey to the City's Representative within five days of completing video surveying.
- E. The Contractor shall notify the City's Representative at least two days in advance of performing the video survey of the new well.

### 3.10 WELL DISINFECTION

- A. Prior to the start of well disinfection, the Contractor shall develop and submit a well disinfection plan to the City's Representative for approval that describes how the Contractor shall sequence well disinfection activities, including specifications for equipment, materials, and quantities of chemicals to be used for well disinfection and also the proposed method for measuring the chlorine concentration of the disinfection solution.
- B. The Contractor shall disinfect the well after completing completion of the video survey of the well, or as directed by the City's Representative. The well shall be disinfected in accordance with OAR 690-210-0380 and ANSI/AWWA C654, except as modified herein.

- C. The Contractor shall use sodium hypochlorite and Johnson Screen NW-410 chlorine enhancer or approved equivalent to produce a well-mixed solution with a chlorine concentration of at least 200 mg/L throughout the entire water column in the well. All disinfection chemicals used shall be NSF/ANSI 60 certified for use in potable water applications. The quantity of chemicals used for the disinfection solution shall be recommended by the Contractor and approved by the City's Representative prior to introduction into the well.
- D. The chlorine solution shall be left in the well (i.e., no purging of the well is to be completed following disinfection).
- E. The Contractor shall notify the City's Representative at least two days in advance of disinfecting the new well.

### 3.11 WELL SURFACE COMPLETION

- A. Upon completion of all work associated with well drilling, construction, development, testing, and disinfection of the new well, the Contractor shall cut off the well casing squarely and neatly at a minimum of three feet above grade and install the temporary well cap.
- B. Well surface completion shall include a gravel fill to the existing surface around the wellhead and installation of the temporary wellhead protection devices in a triangular or square array surrounding the wellhead to ensure construction equipment or other vehicles do not impact the wellhead. The temporary protection devices to be installed should be recommended by the Contractor for approval by the City's Representative.

## PART 4 - MEASUREMENT AND PAYMENT

### 4.1 BOREHOLE DRILLING

- A. The measurement unit for this work is linear foot (vertical) of borehole drilled and shall include all labor, equipment, and materials for advancing the borehole, including furnishing, installing and removing temporary casing, and formation sampling. The value for payment shall be measured to the nearest foot. Measurement shall be taken from the ground surface to the total drilled depth.
- B. Payment shall be the unit price specified in the bid schedule submitted by the Contractor for this project multiplied by the borehole footage.
- C. If additional borehole drilling footage is required and approved by the City's Representative beyond what is indicated in these specifications, then the Contractor shall be reimbursed for the additional footage of borehole drilling at the unit price specified in the bid schedule submitted by the Contractor for this project.

### 4.2 DRIVE SHOE CUT

- A. The measurement unit for this work is lump sum, and shall include all equipment, tools, labor, and incidental supplies needed to cut the drive shoe at the bottom of the 20-inch temporary casing string.
- B. Payment shall be the unit price specified in the bid schedule submitted by the Contractor for this project multiplied by the number of shoe cuts made.
- C. There will be no additional payment for rig time, idle time or standby time for work associated with tooling set-up or removal or while the shoe is being cut.

#### 4.3 WELL CASING

- A. The measurement unit for this work is linear feet (vertical) of well casing installed, and shall include weld rings, all labor, equipment and materials. The value for payment shall be as measured to the nearest foot. Measurement shall be the total length of well casing installed.
- B. Payment shall be the unit price specified in the bid schedule submitted by the Contractor for this project multiplied by the length of well casing furnished and installed.
- C. If additional well casing is required and approved by the City's Representative beyond what is indicated in these specifications, then the Contractor shall be reimbursed for the additional casing on a per foot basis at the unit price specified in the bid schedule submitted by the Contractor for this project.

#### 4.4 WELL SCREEN

- A. The measurement unit for this work is linear foot (vertical) of well screen furnished and installed, and shall include all labor, equipment, tools and materials. The value for payment shall be as measured to the nearest foot. Measurement shall be the total length of well screen installed.
- B. Payment shall be the unit price specified in the bid schedule submitted by the Contractor for this project multiplied by the length of well screen furnished and installed.
- C. If additional well screen is required and approved by the City's Representative beyond what is indicated in these specifications, then the Contractor shall be reimbursed for the additional well screen on a per foot basis at the unit price specified in the bid schedule submitted by the Contractor for this project.

#### 4.5 PLUMBNESS TESTING

- A. The measurement unit for this work/service is lump sum, and shall include all labor, equipment, and materials. Measurement includes completion and acceptance of the plumbness test.
- B. The lump sum price for payment shall be as specified in the bid schedule submitted by the Contractor for this project for the full length of the well.
- C. There will be no payment for rig time, idle time, or standby time while the test is being conducted or evaluated.

#### 4.6 ALIGNMENT TESTING

- A. The measurement unit for this work/service is lump sum, and shall include all labor, equipment, and materials. Measurement includes completion and acceptance of the alignment test.
- B. The lump sum price for payment shall be as specified in the bid schedule submitted by the Contractor for this project for the full length of the well.
- C. There will be no payment for rig time, idle time, or standby time while the test is being conducted or evaluated.

#### 4.7 FILTER PACK

- A. The measurement unit for this work is linear foot (vertical) of filter pack envelope furnished and installed, and shall include all labor, equipment, tools and materials required to install the filter pack, and shall include settling and maintaining the filter pack envelope through casing pullback and development of the well. Measurement for payment shall be rounded to the nearest foot.
- B. Payment shall be the unit price specified in the bid schedule submitted by the Contractor for this project multiplied by the linear footage of filter pack envelope furnished and installed.

- C. No separate payment will be made for time while filter pack material is added to maintain the filter pack envelope.
- D. If additional filter pack envelope is required and approved by the City's Representative beyond what is indicated in these specifications, then the Contractor shall be reimbursed on a per foot basis at the unit price specified in the bid schedule submitted by the Contractor for this project.

#### 4.8 WELL DEVELOPMENT

- A. The measurement unit for this work is hours of development time for all labor and equipment associated with well disinfection, and on a per unit basis for AQUA-CLEAR® PFD. Measurement for payment for development time shall be rounded to the nearest ½-hour. Measurement begins when the development equipment installed in the well is placed in operation and shall end when the operation is stopped at the direction of the City's Representative.
- B. Payment for development time shall be the unit price specified in the bid schedule submitted by the Contractor for this project multiplied by the number of development hours completed:
  - 1. Initial well development (impulse generation, dual-isolation surging/pumping, and performance testing).
  - 2. Final well development (test pump)
- C. Payment for AQUA-CLEAR® PFD shall be at the unit price specified in the bid schedule submitted by the Contractor for this project multiplied by the quantity of disinfection chemicals used.
- D. No payment shall be made for time unrelated to development, including for example, standby time, repairs, equipment breakdown, tool fishing, and weather delays.
- E. If additional time is required for well development and approved by the City's Representative beyond what is indicated in these specifications, then the Contractor shall be reimbursed for the additional development time on a per hour basis at the unit price specified in the bid schedule submitted by the Contractor for this project.
- F. If an additional quantity of AQUA-CLEAR® PFD is required and approved by the City's Representative beyond what is indicated in these specifications, then the Contractor shall be reimbursed for the additional AQUA-CLEAR® PFD on a per unit basis at the unit price specified in the bid schedule submitted by the Contractor for this project

#### 4.9 SURFACE SEAL

- A. The measurement unit for this work is linear feet (vertical) of borehole drilled and completed as a surface seal. The measurement shall include all labor, equipment and materials required to drill the borehole and place the seal material. The value for payment shall be measured to the nearest foot. Measurement shall be taken from the ground surface to the bottom of the surface seal.
- B. Payment shall be the unit price specified in the bid schedule submitted by the Contractor for this project multiplied by the footage of borehole drilled and sealed.
- C. If additional surface seal drilling footage is required and approved by the City's Representative beyond what is indicated in these specifications, then the Contractor shall be reimbursed for the additional footage of borehole drilling at the unit price specified in the bid schedule submitted by the Contractor for this project.

#### 4.10 VIDEO SURVEYING

- A. The measurement unit for this work is lump sum for all work associated with the well video survey. Measurement shall be completion of the survey and delivery of the well video to the City's Representative.
- B. The lump sum price for each well video survey shall be as specified in the bid schedule submitted by the Contractor for this project.
- C. There shall be no additional payment for rig time or idle time while the surveys are being conducted. Payment shall not be made if the video is poor quality or the video does not cover the specified depth interval. The Contractor shall not be paid for standby time while the well is being flushed and/or while the Contractor is waiting for the well to clear.

#### 4.11 WELL DISINFECTION

- A. The measurement unit for this work is lump sum for all labor and equipment associated with well disinfection and on a per unit basis for the disinfection chemicals.
- B. The lump sum price for well disinfection shall be as specified in the bid schedule submitted by the Contractor for this project.
- C. Payment for the disinfection chemicals shall be the unit price specified in the bid schedule submitted by the Contractor for this project multiplied by the quantity of disinfection chemicals used.
- D. If additional quantities of disinfection chemicals are required and approved by the City's Representative beyond what is indicated in these specifications, then the Contractor shall be reimbursed for the additional disinfection chemicals on a per unit basis at the unit price specified in the bid schedule submitted by the Contractor for this project.
- E. There shall be no additional payment for rig time or idle time while the disinfection is being conducted.

#### 4.12 TEMPORARY WELLHEAD PROTECTION

- A. The measurement unit for this work is lump sum for all work associated with surface completion at the wellhead, and shall include all labor, equipment, tools and materials. Measurement shall be completion of the well surface completion as specified in Part 3.11 of this section.
- B. The lump sum price for the surface completion shall be as specified in the bid schedule submitted by the Contractor for this project.

#### 4.13 TEMPORARY WELL CAP

- A. The measurement unit for this work is lump sum for all work associated with furnishing and installing a temporary well cap meeting the requirements of Part 2.6 of this section.

#### 4.14 PVC DROP PIPE

- A. The measurement unit for this work is linear feet (vertical) of 1-inch PVC drop pipe installed. The measurement shall include all labor and materials associated with installation of the drop pipe meeting the requirements of Part 2.7 of this section.
- B. If additional PVC drop pipe is required and approved by the City's Representative beyond what is indicated in these specifications, then the Contractor shall be reimbursed on a per foot basis at the unit price specified in the bid schedule submitted by the Contractor for this project.

4.15 STANDBY TIME AND AUTHORIZED HOURLY WORK

- A. The measurement unit for standby time and authorized hourly is hours as recorded by the City's Representative and as approved by the City. Measurement for payment shall be rounded to the nearest ½-hour.
- B. Payment shall be at the hourly unit price as specified in the bid schedule submitted by the Contractor for this project.
- C. Measurement and payment for hourly work includes work authorized by the City's Representative and shall be at the bid hourly price. Definitions of standby and authorized hourly work are included in Section 01 00 00. No separate measurement and payment under this bid item will be made for drill rig work that is covered by other bid items for drilling operations, grouting, casing and screen installation, plumbness and alignment testing, well development, or test pump installation or removal.

\*END OF SECTION\*

# SECTION 33 01 12: AQUIFER TESTING

## PART 1 - GENERAL

### 1.1 SCOPE OF WORK

- A. Aquifer testing shall consist of one step-rate discharge test and one constant-rate discharge test (with associated recovery monitoring).

### 1.2 DISCHARGE OF AQUIFER TESTING WATER

- A. Water produced during aquifer testing shall be managed according to the provisions of Section 32 30 00 Part 1.7 and also the Contractor's approved Water Management and Turbidity Reduction Plan.

## PART 2 - PRODUCTS

### 2.1 AQUIFER TESTING EQUIPMENT

- A. The Contractor shall supply the test pump, all materials, labor, appurtenances, equipment, incidentals and testing necessary, and shall perform all operations and testing required to complete aquifer testing as described in these specifications.
- B. Minimum requirements for the test pump include the following:
  - 1. Operating and throttling capabilities to control the pumping rate within an anticipated range of between 250 and 1,200 gpm.
  - 2. An estimated intake depth setting of 250 feet.
  - 3. An estimated pumping lift (exclusive of discharge pressure) of 220 feet.
- C. Minimum requirements for temporary conveyance piping (including water sampling hose bibs), temporary treatment facilities, and procedures for the discharge of water produced during aquifer testing are provided in Section 32 30 00 Part 1.7, and also include the following:
  - 1. The Contractor shall provide, install, and operate per manufacturer's recommendations, a Rossum centrifugal sand sampler, or approved equal, for measuring the sand content of water produced during aquifer testing.
  - 2. The Contractor shall provide a flow control valve and two calibrated, dual-reading (totalizing and instantaneous in the unit of gallons) flow meter to accurately control, maintain, and measure the rates of the well discharge to within 5 percent of the anticipated discharge rates.
  - 3. The Contractor shall submit calibration records for the flow meter being used to the City's Representative two days prior to use of the flow meter.
- D. The Contractor shall provide two temporary 1.25-inch inside diameter threaded polyvinyl chloride (PVC) drop pipes to accommodate a water level sounder and a pressure transducer. The drop pipes shall be approximately 250 feet in length, and the bottoms perforated and capped.
- E. All aquifer testing equipment furnished by the Contractor shall remain the property of the Contractor and shall be removed from the work site upon completion of aquifer testing.

## PART 3 - EXECUTION

### 3.1 AQUIFER TESTING

- A. Prior to the start of aquifer testing, the Contractor shall develop and submit an aquifer testing plan to the City's Representative for approval that describes how the Contractor shall sequence aquifer testing activities, including specifications for any equipment or materials to be used for aquifer testing and also the proposed methods and frequency of collecting measurements of water levels, pumping rates, pumped volumes, turbidity, and fines content.
- B. Upon satisfactory completion of well development, the well shall be allowed to rest for a minimum of 12-hours before aquifer testing can begin.

### 3.2 STEP-RATE TESTING

- A. The step-rate test shall consist of pumping at up to four different rates, as directed by the City's Representative, with up to 60 minutes of pumping at each step-rate. Each pumping step shall be performed sequentially with no shutdowns between steps; the rate shall be increased for each consecutive step.
- B. For planning purposes, the anticipated rates for the step-rate test are 250, 500, 750, and 1,000 gpm.
- C. During the step-rate test, the Contractor shall monitor and record the flow rate (gpm), total gallons pumped, and pumping water level using an electronic water level meter. The time and date when each measurement is made shall also be recorded. The monitoring intervals for these measurements during the step-rate test are as follows:

<b>Time After Pumping Started or After Step-Rate Increases (minutes)</b>	<b>Monitoring Interval (minutes)</b>
0 – 10	1
10 – 60	5
> 60	10

- D. Failure of the Contractor's equipment during the step-rate test and/or fluctuation in the pumping rate greater than five percent shall void the step-rate test and the Contractor shall receive no payment for the failed test. After a failed test, the Contractor shall restart the step-rate test and repeat the test in accordance with Paragraphs A through C above.
- E. The Contractor shall notify the City's Representative at least two days in advance of performing the step-rate test.

### 3.3 CONSTANT-RATE TESTING AND RECOVERY MONITORING

- A. Upon satisfactory completion of the step-rate test and recovery of the static water level in the well to within ½-foot of the previously recorded static water level, or within 95 percent of its pre-static water level, whichever is least, the constant-rate test shall begin.
- B. The constant-rate test shall be conducted at a pumping rate specified by the City's Representative for a period of up to 72-hours. A total of up to 24-hours is also required for the recovery portion of the test.
- C. During the constant-rate test, the Contractor shall monitor and record the flow rate (gpm), total gallons pumped, and pumping water level using an electronic water level meter. The time and date when each measurement is made shall also be recorded. The monitoring intervals for these measurements during the constant-rate test are as follows:



Time After Pumping Started or Stopped (minutes)	Monitoring Interval (minutes)
0 – 10	1
10 – 60	5
60 – 240	15
> 240	60

- D. Following the cessation of the pumping phase of the constant-rate test, the Contractor shall measure and record the water level within the well according to the monitoring schedule provided in Paragraph C above until the static water level in the well has recovered to within ½-foot of the previously recorded static water level, or within 95 percent of its pre-static water level, whichever is least.
- E. At least one pump-tender shall be on hand at all times during active pumping to operate and maintain the pumping equipment and to ensure the pump and power source are operating properly, collect pumping rate and manual water level measurements throughout the test, and monitor the discharge piping to ensure water generated during pumping is disposed of properly and safely.
- F. Failure of the Contractor’s equipment during the constant-rate test and/or fluctuation in the pumping rate greater than five percent shall void the constant-rate test and the Contractor shall receive no payment for the failed test. After a failed test, the Contractor shall restart the constant-rate test and repeat the test in accordance with Paragraphs A through E above.
- G. The Contractor shall submit documentation of aquifer testing to the City’s Representative for approval within three days of completing aquifer testing.
- H. The Contractor shall not remove any aquifer testing equipment from the well until directed by the City’s Representative.

## PART 4 - MEASUREMENT AND PAYMENT

### 4.1 AQUIFER TESTING EQUIPMENT

- A. The measurement unit for this work is lump sum, and shall include all materials, equipment, and labor to furnish, install, operate, and remove the test pump, power source, and appurtenances for aquifer testing. Measurement for payment shall be completion of the aquifer tests.
- B. Payment shall be at the daily unit price as specified in the bid schedule submitted by the Contractor for this project multiplied.

### 4.2 STEP-RATE TESTING

- A. The measurement unit for this work is hours of testing time for all labor associated with step-rate testing. Measurement for payment shall be rounded to the nearest ½-hour. The time recorded for payment shall commence when the pumping and discharge equipment is installed and are placed in operation, and shall end when the operation is stopped at the direction of the City’s Representative.
- B. Payment shall be at the hourly unit price specified in the bid schedule submitted by the Contractor for this project multiplied by the number of step-rate testing hours completed.
- C. In the event that the step-rate test runs longer than the times specified, and as approved by the City’s Representative, then the Contractor shall be paid for the additional time at the hourly unit price specified in the bid schedule submitted by the Contractor for this project.

4.3 CONSTANT-RATE TESTING AND RECOVERY MONITORING

- A. The measurement unit for this work is hours of testing time for all labor associated with constant rate testing. Measurement for payment shall be rounded to the nearest ½-hour. The time recorded for payment shall commence when the pumping and discharge equipment is installed and are placed in operation, and shall end when the operation is stopped at the direction of the City's Representative.
- B. Payment shall be at the hourly unit price specified in the bid schedule submitted by the Contractor for this project multiplied by the number of constant-rate testing or recovery monitoring hours completed.
- C. In the event that the constant-rate test or recovery monitoring period runs longer than the times specified, and as approved by the City's Representative, then the Contractor shall be paid for the additional time at the hourly unit price specified in the bid schedule submitted by the Contractor for this project.

\*END OF SECTION\*

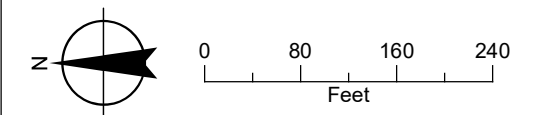
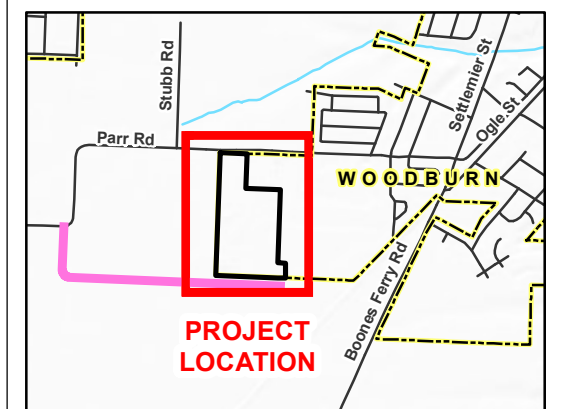
**EXHIBIT A**  
**Site Map**  
 City of Woodburn



**LEGEND**

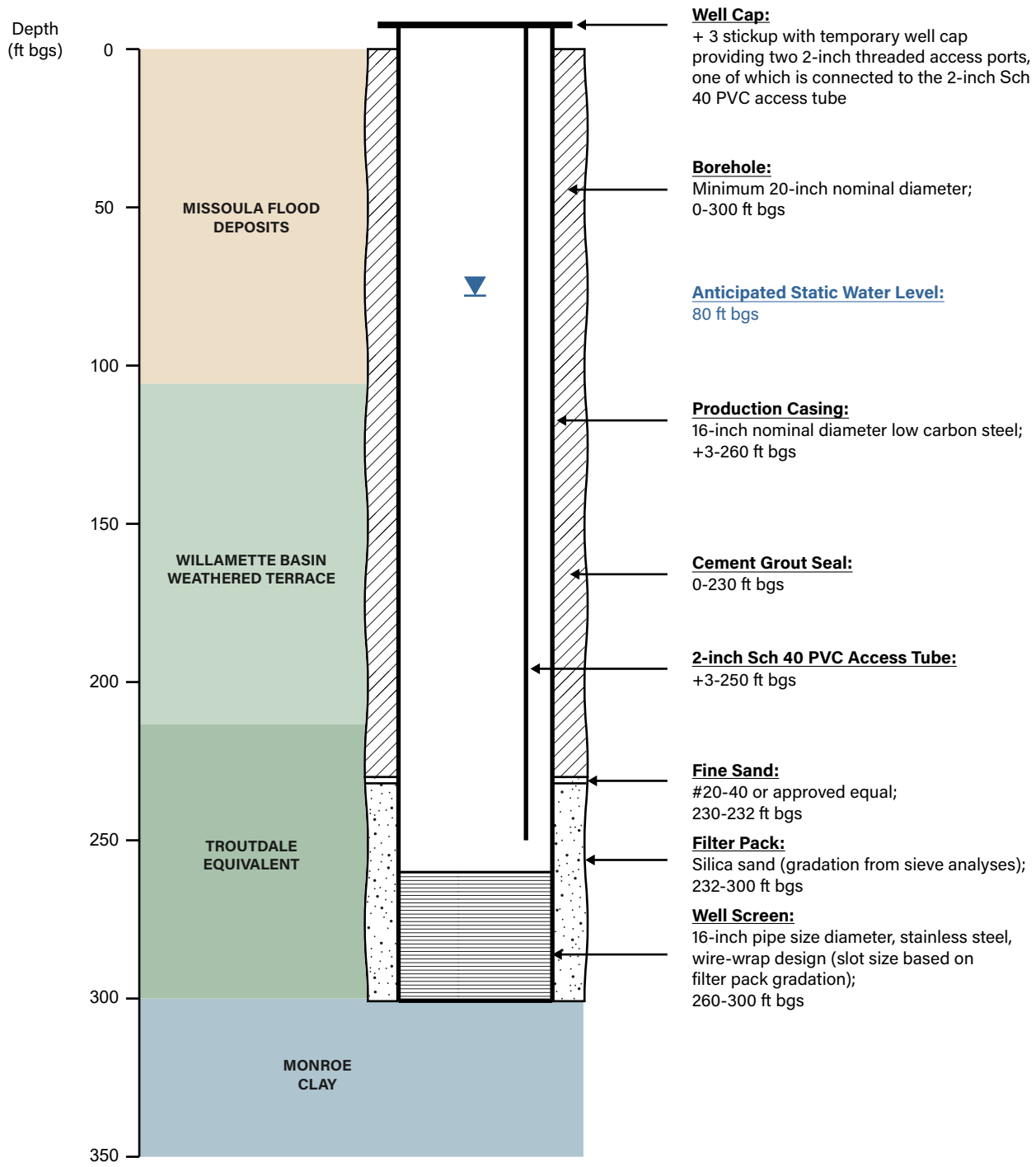
- Proposed Well
- Well
- Designated Discharge Point
- Hydrant
- Work Area
- Property of Interest
- Utilities**
- Water
- Sewer
- Storm
- All Other Features**
- City Boundary
- Tax Lot
- Major Road
- Access Road
- Watercourse
- Waterbody

**LOCATION MAP:**



Date: May 13, 2020  
 Data Sources: City of Woodburn, USGS,  
 OSIP, Imagery 2018





**EXHIBIT B**

**Conceptual Well Design Schematic**  
City of Woodburn

**NOTE**  
bgs: below ground surface



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