Exhibit A

**TABLE OF CONTENTS**

**PAGE**


Request for Bids ..... 3

Bidding Checklist ..... 7

Instructions to Bidders ..... 9

Bid Proposal, Schedule of Prices, Bid Signature Page (Attachment A) ..... 15

Statements of Bidder's Qualifications (Attachment B) ..... 21

Bid Bond Form (Attachment C) ..... 23

Local Agency Subcontractor List (Attachment D) ..... 25

Combined Affidavit and Certification Form (Attachment E) ..... 27

Non-Discrimination in Benefits Affidavit (Attachment F) ..... 29

Non-Discrimination Certificate (Attachment G) ..... 31

Contractor Certification Wage Law Compliance (Attachment H) ..... 33

Public Works Contract (Attachment I) ..... 35

- Exhibit A Notice of Completion ..... 49
- Exhibit B Contract Change Order Agreement ..... 51
- Exhibit C Notice to Labor Unions or Other Employment Organizations of Nondiscrimination in Employment ..... 53
- Exhibit D Certificate(s) of Insurance Form ..... 55
- Exhibit E-1 Performance Bond ..... 59
- Exhibit E-2 Payment Bond ..... 63
- Exhibit F Retainage Bond to 3rd Party Depositary ..... 67
- Exhibit G Retainage Bond to City of Tumwater ..... 69

Special Provisions ..... 74


APPENDICES

A. State Prevailing Wages and Benefit Code Key
B. Nearby Water Well Reports
C. Water Well Location Maps (Figures 1 through 5)
D. Schematic of Anticipated Test Well Construction and Testing (Figure 6)

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**REQUEST FOR BIDS**
**BREWERY WELLFIELD INSTALLATION AND DEVELOPMENT PROJECT**

**SUBMITTAL OF SEALED BIDS:**
Notice is hereby given that sealed bids will be received by a Public Works representative at Tumwater City Hall, 555 Israel Road SW, Tumwater, Washington from 10:00 a.m. until 11:00:00 a.m. Friday, February 20, 2026**.** for the **Brewery Wellfield Installation and Development Project**. Bid proposals will be received only at the Public Works front desk located on the basement floor. Bid proposals received after the time fixed for opening will not be considered. Bid deliveries other than hand-delivered (i.e., faxed, mailed, or emailed) will not be considered. Late bids will be returned unopened.

**BID OPENING:**
All bids will be opened and publicly read aloud at **11:00 a.m. on Friday, February 20, 2026** at Tumwater City Hall, 555 Israel Road SW, Tumwater, Washington, for this request for bids.

**DESCRIPTION OF WORK:**
The Work to be performed will include the furnishing of all labor, materials, services, equipment and incidentals necessary to make the improvements as shown in the Plans and described in these Specifications as briefly outlined below.

Drill, install, and test two 400-foot deep, large-diameter test wells and potentially a third test well all within a flowing artesian aquifer underlying the Brewery Wellfield, located at the Tumwater Valley Golf Club at 4611 Tumwater Valley Drive SE, Tumwater, WA 98501. The wells must be constructed to Washington State Departments of Ecology and Health water well standards. The City's goal is to achieve a combined production capacity of at least 4,343 gpm, from at least 2 (Base Bid) and no more than 3 (Additive Bid) wells.

Cost estimate range: $2,800,000 - $3,300,000

**BID DOCUMENTS:**
Free-of-charge access to project bid documents (plans, specifications, addenda, and Bidders List) is provided to Prime Bidders, Subcontractors, and Vendors by going to www.bxwa.com and clicking on "Posted Projects", "Public Works", and "City of Tumwater." This online plan room provides Bidders with fully usable online documents with the ability to: download, view, print, order full/partial plan sets from numerous reprographic sources, and a free online digitizer/take-off tool. It is recommended that Bidders "Register" in order to receive automatic e-mail notification of future addenda and to place themselves on the "Self-Registered Bidders List". Bidders that do not register will not be automatically notified of addenda and will need to periodically check the on-line plan room for addenda issued on this project. Contact Builders Exchange of Washington at (425) 258-1303 should you require assistance with access or registration.

All bid proposals shall be in accordance with the contract documents which may be obtained through Builders Exchange of Washington. Any questions regarding work description or the explanation or interpretation of the bid documents must be directed to Patrick Soderberg, Program Manager, in writing at 555 Israel Road SW, Tumwater, Washington 98501 or via email at psoderberg@ci.tumwater.wa.us a minimum of 48 hours prior to bid opening.

**RESERVATION OF RIGHTS:**
The City of Tumwater reserves the right to reject any or all bids and/or any portion of any bid, and to waive any informalities or irregularities in the bid or in the bidding, and determine which bid or bidder meets the criteria set forth in the bid documents. The City shall reserve the right to reject single items or combinations of bid items.

No bidder may withdraw their proposal after the hour set for the opening thereof, or before award of contract, unless said award is delayed for a period exceeding thirty (30) days.

**NOTICE TO BIDDERS – TITLE VI**
**The City of Tumwater, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 U.S.C. 2000d to 2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively ensure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.**

The Contractor shall comply with the following nondiscrimination provisions, and the Contractor shall ensure the nondiscrimination provisions are included in all subcontracts:

a. Nondiscrimination Requirement. During the term of this Contract, the Contractor, including all subcontractors, shall not discriminate on the bases enumerated at RCW 49.60.530(3). In addition, the Contractor, including all subcontractors, shall give written notice of this nondiscrimination requirement to any labor organizations with which the Contractor, or subcontractor, has a collective bargaining or other agreement.

b. Obligation to Cooperate. The Contractor, including all subcontractors, shall cooperate and comply with any Washington state agency investigation regarding any allegation that the Contractor, including any subcontractor, has engaged in discrimination prohibited by this Contract pursuant to RCW 49.60.530(3).

c. Default. Notwithstanding any provision to the contrary, the Contracting Agency may suspend the Contract in accordance with Section 1-08.6, upon notice of a failure to participate and cooperate with any state agency investigation into alleged discrimination prohibited by this Contract, pursuant to RCW 49.60.530(3). Any such suspension will remain in place until the Contracting Agency receives notification that Contractor, including any subcontractor, is cooperating with the investigating state agency. In the event the Contractor, or subcontractor, is determined to have engaged in discrimination identified at RCW 49.60.530(3), the Contracting Agency may terminate this Contract in whole or in part in accordance with Section 1-08.10(1), and in addition to the sanctions listed in Section 1-07.11(5), the Contractor, subcontractor, or both, may be referred for debarment as provided in RCW 39.26.200. The Contractor or subcontractor may be given a reasonable time in which to cure this noncompliance, including implementing conditions consistent with any court-ordered injunctive relief or settlement agreement.

d. Remedies for Breach. Notwithstanding any provision to the contrary, in the event of Contract termination or suspension for engaging in discrimination, the

Contractor, subcontractor, or both, shall be liable for contract damages as authorized by law including, but not limited to, any cost difference between the original contract and the replacement or cover contract and all administrative costs directly related to the replacement contract, which damages are distinct from any penalties imposed under Chapter 49.60, RCW. The Contracting Agency shall have the right to deduct from any monies due to Contractor or subcontractor, or that thereafter become due, an amount for damages Contractor or subcontractor will owe Contracting Agency for default under this Provision.

**APPRENTICESHIP UTILITIZATION:**

This project includes an Apprenticeship Utilization Requirement requiring a minimum of 15% of the labor hours to be completed by an apprentice. Refer to section 1-07.9(3) of the Special Provisions for more information.

Dated this Friday, February 13, 2026

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Shneider Water Services

## BIDDING CHECKLIST

***The Following Forms Must Be Executed In Full Prior to Submittal of the Bid***

- [x] **Bid Proposal, Schedule of Prices, and Bid Signature Page (Attachment A)**
The lump sum or unit prices must be shown in the spaces provided. Bidders must bid on all bid items contained in the Bid Proposal, including the base bid and additive bid. The omission or deletion of any bid item will be considered non-responsive and shall be cause for rejection of the bid. The proposal must be signed and the execution date shall be indicated on the proposal.

- [x] **Statement of Bidder's Qualifications (Attachment B)**
This form must be filled in and signed. The City reserves the right to check all statements and to judge the adequacy of the bidder's qualifications.

- [x] **Bid Bond Form (Attachment C)**
The Bid Bond must be executed by the bidder and the surety company unless a certified check is submitted with the bid. The amount of the Bid Bond or certified check shall be no less than five percent (5%) of the total amount bid and may be shown in dollars or on a percent basis.

- [x] **Local Agency Subcontractor List (Attachment D)**
Subcontractor list shall meet the requirements of RCW 39.30.060.

- [x] **Combined Affidavit and Certification Form (Attachment E)**
Shall be completed and sworn before a notary public by the bidder.

- [x] **Non-Discrimination in Benefits Affidavit (Attachment F)**
Shall be completed and sworn before a notary public by the bidder

- [x] **Non-Discrimination Certificate (Attachment G)**
Shall be completed and sworn before a notary public by the bidder.

- [x] **Contractor Certification of Wage Law Compliance (Attachment H)**
Must be signed and dated.

- [x] **Employment Security Department Contractor Bid Letter**
Must provide a current Contractor Bid Letter from Washington State Employment Security Department. Potential bidders may request a letter be sent to them by emailing publicworks@esd.wa.gov. Make sure to include ES#, UBI#, and business name in the email.

- [x] All 7 Addenda acknowledged

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CITY OF TUMWATER BID PROPOSAL

BREWERY WELLFIELD INSTALLATION AND DEVELOPMENT PROJECT

Bidder: Schneider Equipment, INC. [dba. Schneider Water Services] Date: 3/5/2026

TO: City Clerk, City of Tumwater,
555 Israel Road SW, Tumwater, WA 98501

Pursuant to and in compliance with your advertisement for bids for construction of the BREWERY WELLFIELD INSTALLATION AND DEVELOPMENT PROJECT and other documents relating thereto, the undersigned has carefully examined all of the bid and contract documents as well as the premises and conditions affecting the delivery, supply and maintenance of the BREWERY WELLFIELD INSTALLATION AND DEVELOPMENT PROJECT, and hereby proposes to furnish all labor, materials and perform all work as required in strict accordance with the contract documents, for the above-referenced amount, of Washington State sales tax and all other government taxes, assessments and charges as required by law under Washington State Department of Revenue Rule 170 and related rules. The required bid security consisting of a certified check, bid bond, or cashier's check in an amount of not less than five percent (5%) of the total amount bid is attached hereto, which it is agreed shall be collected and retained by the City as liquidated damages in the event this bid is accepted by the City within forty-five (45) calendar days after the day of the bid opening and the undersigned fails to execute the BREWERY WELLFIELD INSTALLATION AND DEVELOPMENT PROJECT Public Works Contract and to provide the required certificate of insurance to the City, under the conditions thereof, within the required time frame after the Notice of Award; otherwise said Bid Security will be returned to the undersigned.

The undersigned bids for complete construction of the following described project: BREWERY WELLFIELD INSTALLATION AND DEVELOPMENT PROJECT; the following prices which shall include all materials, labor, tools, and necessary equipment. The Bidder shall complete this entire Bid Proposal, or this bid may be considered non-responsive. The City may correct obvious mathematical errors.

Provided to Builders Exchange of WA, Inc. For usage Conditions Agreement see www.bxwa. com - Always Verify Scal

SCHEDULE OF PRICES
Base Bid

| Item | Description | Unit | QT | Unit Price | Total |
|---|---|---|---|---|---|
| 1 | Mobilization/Demobilization | LS | 1 | $ 150,000.00 | $ 150,000.00 |
| 2 | Inter-Well Mobilization | LS | 1 | $ 25,000.00 | $ 25,000.00 |
| 3 | Construction Records, Artesian Flow Plan, and As-Builts | LS | 1 | $ 8,000.00 | $ 8,000.00 |
| 4 | Install Sanitary Seal | LF | 100 | $ 1,300.00 | $ 130,000.00 |
| 5 | Well Seal Drilling to 270 feet | LF | 440 | $ 700.00 | $ 308,000.00 |
| G | Well Seal Installation to 270 feet | LF | 540 | $ 600.00 | $ 324,000.00 |
| 7 | Plumbness and Alignment Testing | EA | 2 | $ 5,000.00 | $ 10,000.00 |
| 8 | 16-Inch Drilling to 400 feet | LF | 260 | $ 600.00 | $ 156,000.00 |
| 9 | Furnish Well Screen Assembly (Cost plus 15%) | EST | 2 | $50,000 | $100,000 |
| 10 | Assemble and Install Well Screen Assembly and Wellhead | HR | 60 | $ 600.00 | $ 36,000.00 |
| 11 | Well Development and Other Authorized Work | HR | 60 | $ 600.00 | $ 36,000.00 |
| 12 | Furnish, Install, and Remove Test Pump and Equipment | EA | 2 | $ 50,000.00 | $ 100,000.00 |
| 13 | Pump Test Operation | HR | 60 | $ 600.00 | $ 36,000.00 |
| 14 | Video Inspection | EA | 2 | $ 2,000.00 | $ 4,000.00 |
| 15 | Fabric for Temporary Site Access and Drilling Pads | SY | 5,000 | $ 10.00 | $ 50,000.00 |
| 16 | Gravel Backfill for Site Access and Drilling Pads | TN | 1,450 | $ 40.00 | $ 58,000.00 |
| 17 | Asphalt Restoration | SY | 1,700 | $ 50.00 | $ 85,000.00 |
| 18 | Landscape Restoration | SY | 3,700 | $ 20.00 | $ 74,000.00 |
| 19 | Minor Change | EST | 1 | $30,000 | $30,000 |
| 20 | Standby Time, Non-Working Day | EA | 10 | $ 2,800.00 | $ 28,000.00 |
| | Subtotal | | | XXXXX | $ 1,748,000.00 |
| | Sales Tax 9.7% | | | XXXXX | $ 169,556.00 |
| | Total Base Bid | | | XXXXX | $ 1,917,556.00 |

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Additive Bid

| Item | Description | Unit | QT | Unit Price | Total |
|---|---|---|---|---|---|
| A1 | Inter-Well Mobilization | LS | 1 | $ 25,000.00 | $ 25,000.00 |
| A2 | Construction Records, Artesian Flow Plan, and As-Builts | LS | 1 | $ 4,000.00 | $ 4,000.00 |
| A3 | Install Sanitary Seal | LF | 50 | $ 1,300.00 | $ 65,000.00 |
| A4 | Well Seal Drilling to 270 feet | LF | 220 | $ 700.00 | $ 154,000.00 |
| AS | Well Seal Installation to 270 feet | LF | 270 | $ 600.00 | $ 162,000.00 |
| AG | Plumbness and Alignment Testing | LS | 1 | $ 5,000.00 | $ 5,000.00 |
| AT | 16-Inch Drilling to 400 feet | LF | 130 | $ 600.00 | $ 78,000.00 |
| A8 | Furnish Well Screen Assembly (Cost plus 15%) | EST | 1 | $50,000 | $50,000 |
| A9 | Assemble and Install Well Screen Assembly and Wellhead | HR | 30 | $ 600.00 | $ 18,000.00 |
| A10 | Well Development and Other Authorized Work | HR | 30 | $ 600.00 | $ 18,000.00 |
| A11 | Furnish, Install, and Remove Test Pump and Equipment | LS | 1 | $ 50,000.00 | $ 50,000.00 |
| A12 | Pump Test Operation | HR | 30 | $ 600.00 | $ 18,000.00 |
| A13 | Video Inspection | LS | 1 | $ 2,000.00 | $ 2,000.00 |
| Al-I | Fabric For Temporary Drilling Pads | SY | 1,850 | $ 10.00 | $ 18,500.00 |
| A15 | Gravel Backfill for Drilling Pad | TN | 520 | $ 40.00 | $ 20,800.00 |
| A1G | Asphalt Restoration | SY | 3,350 | $ 50.00 | $ 167,500.00 |
| A17 | Landscape Restoration | SY | 1,850 | $ 20.00 | $ 37,000.00 |
| A18 | Minor Change | EST | 1 | $15,000 | $15,000 |
| | Subtotal | | | XXXXX | $ 907,800.00 |
| | Sales Tax 9.7% | | | XXXXX | $ 88,056.60 |
| | Total Additive Bid | | | XXXXX | $ 995,856.60 |

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**The total amount of either the total base bid or the total base bid plus the total additive bid shall be used in the determination of the award of the contract, at the discretion of the City.**

The City of Tumwater reserves the right to reject any and all bids, waive any informalities or minor irregularities in the bidding, and determine which bid or bidder meets the criteria set forth in the bid documents.

Receipt of the following Addendums is hereby acknowledged:

| | | |
|---|---|---|
| Corporation / ~~Partnership / Individual~~ *(Delete Two)* | Addendum No. 1 | Date Issued: 12/9/2026 |
| | Addendum No. 2 | Date Issued: 12/15/2026 |
| | Addendum No. 3 | Date Issued: 1/14/2026 |
| | Addendum No. 4 | Date Issued: 1/16/2026 |
| | Addendum No. 5 | Date Issued: 02/3/2026 |
| | Addendum No. 6 | Date Issued: 2/13/2026 |
| | Addendum No. 6 plans | Date Issued: 2/13/2026 |
| | Addendum No. 7 | Date Issued: 2/18/2026 |
| | Addendum No. | Date Issued: |

Schneider Equipment, INC. [dba. Schneider Water Services]
Firm Name

Vice-President
Title

SCHNEEI778BZ
Bidder's State License No.

Signature

600202757
Bidder's State Tax No.

Eric Schneider
Type/Print Name

***Attachment A***
(Page 5 of 5)

**BID SIGNATURE PAGE**

Date: 3/5/2026

The undersigned bidder hereby proposes and agrees to deliver the equipment and/or services pursuant to the BREWERY **WELLFIELD INSTALLATION AND DEVELOPMENT PROJECT** Bid Specifications and Contract Documents and all other terms and conditions of this bid proposal.

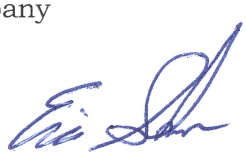
No bidder may withdraw his/her bid for a period of ninety (90) days after the day of bid opening.

The undersigned individual represents and warrants that he or she is duly authorized to execute the bid on behalf of any partnership, joint venture or corporation.

Schneider Equipment, INC. [dba. Schneider Water Services]

Corporation/~~Partnership~~/~~Individual~~
*(Circle one)*

Company

By: 
(Signature)

Eric Schneider
Type/Print Name

Vice-President
(Title)

21881 River Rd

St Paul, OR 97137
(Address)

503-633-2666
(Telephone Number)

Provided to Builders Exchange of WA, Inc. For usage Conditions Agreement see www.bxwa. com - Always Verify Scal

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***Attachment B***

**STATEMENT OF BIDDER'S QUALIFICATIONS**

NAME OF FIRM: Schneider Equipment, INC. [dba. Schneider Water Services]

ADDRESS: 21881 River Rd, St Paul, Oregon 97137

Number of years the Contractor has been engaged in the construction business under the present firm name, as indicated above: 50 years

Gross dollar amount of work under contract 10.1 Million

Gross dollar amount of contracts not completed: 5.8 Million

General character of work performed by firm: Groundwater Well Drilling Contractor

Provide a list of five (5) major projects of a similar nature, including both drilling and completing a 12-inch diameter or larger municipal supply wells and the installation of wells within artesian flowing aquifers, completed by the Contractor within the last five (5) years and the gross dollar amount of each project:

| Project Name | Amount ($) | Owner/Phone # | Engineer's Name/Phone # |
|---|---|---|---|
| Well #8 | $1,476,541.00 | Nob Hill/509-966-0272 | RH2 Engineering / 509-886-2900 |
| Cascade Well #6 | $1,905,397.00 | City of Gresham/503-661-3000 | GSI Water Solutions / 503-239-8799 |
| Cascade Well #10 | $1,841,011.75 | City of Gresham/503-661-3000 | GSI Water Solutions / 503-239-8799 |
| Water Supply Improvement | $ 946,855.86 | City of Chiloquin/541-783-2717 | GSI Water Solutions / 503-239-8799 |
| Well #9 Improvements | $1,523,654.24 | City of Redmond/541-923-7710 | GSI Water Solutions / 503-239-8799 |

List three major pieces of equipment which are anticipated to be used on this Project by the Contractor and note which items are owned by the Contractor and which are to be leased or rented from others: 28L, SEI Rotary, Gefco 90K - Owned

Bank Reference: Oregon Pacific Bank, Eric Deisler, Cell# 971-323-0843

How many general superintendents or other responsible employees in a supervisory position do you have at this time, and how long has each of them been with the firm?
Ryan Smith - 20+ years, Brad Wright - 4+ years, Mike Mingay - 5+ years, Eric Schneider 20+

Have you ever been sued by the client or have you ever sued the client on any public works contract for a special district, municipality, county or state government? NO
For what reason? N/A

Disposition of case: N/A

Schneider Equipment, INC. [dba. Schneider Water Services] _____
(Firm) By

Vice-President Eric Schneider
(Title) Type/Print Name

Provided to Builders Exchange of WA, Inc. For usage Conditions Agreement see www.bxwa. com - Always Verify Scal

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*Attachment C*

## BID BOND FORM

Herewith find deposit in the form of a certified check, cashier's check, cash, or bid bond in the amount of $ 5% Bid Bond, which amount is not less than five percent (5%) of the total bid.

## BID BOND

KNOW ALL PERSONS BY THESE PRESENTS that we, Schneider Equipment, Inc. dba Schneider Water Services, as Principal, and Travelers Casulaty and Surety Company of America, as Surety, are held and firmly bound unto the City of Tumwater, as Obligee, in the penal sum of Five Percent of Total Amount Bid and 00/100 dollars ($ 5% ), for the payment of which the Principal and the Surety bond themselves, their heirs and executors, administrators, successors and assigns, jointly and severally, by these presents.

The condition of this obligation is such that if the Obligee shall make any award to the Principal for:

BREWERY WELLFIELD INSTALLATION AND DEVELOPMENT PROJECT

according to the terms of the proposal or bid made by the Principal therefore, and the Principal shall duly make and enter into a contract with the Obligee in accordance with the terms of said proposal or bid and award and shall give bond for the faithful performance thereof, with Surety or Sureties approved by the Obligee; or if the Principal shall in case of failure so to do, pay and forfeit to the Obligee the penal amount of the deposit specified in the call for bids, then this obligation shall be null and void; otherwise, it shall be, and remain in full force and effect, and the Surety shall forthwith pay and forfeit to the Obligee as penalty and liquidated damages, the amount of this bond.

SIGNED, SEALED AND DATED THIS 16th DAY OF February , 2026

| | |
|---|---|
| Schneider Equipment, Inc. dba Schneider Water Services | Travelers Casulaty and Surety Company of America |
| Principal | Surety |
| Type/Print Name Eric Schneider VP | Type/Print Name Tracy Stewart, Attorney-in-Fact |

Date: , 2026

Received return of deposit in the sum of $ _____.

Provided to Builders Exchange of WA, Inc. For usage Conditions Agreement see www.bxwa.com - Always Verify Scal

TRAVELERS

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

## POWER OF ATTORNEY

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

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

State of Connecticut

City of Hartford ss.

By: _____
Robert L. Raney, Senior Vice President

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

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

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

_____
Anna P. Nowik, Notary Public

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

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

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

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

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

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

Dated this **16th** day of **February** , **2026** .

_____
Kevin E. Hughes, Assistant Secretary

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

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*Attachment D*

City of Tumwater

555 Israel 'load SW
Tumwater, WA 98501

# Local Agency Subcontractor List

*Prepared in compliance with RCW 39.30.060 as amended*

**To Be Submitted with the Bid Proposal**

Project Name City of Tumwater Brewery Wellfield Improvements and Development

**Failure to fist subcontractors with whom the bidder, if awarded the contract, will directly subcontract for performance of the work of structural steel installation, re bar installation, heating, ventilation and air conditioning, plumbing, as described in Chapter 18.106 RCVV, and electrical, as described in Chapter 19.28 RCW or naming more than one subcontractor to perform the same work will result In your bid being non-responsive and therefore void,**

**Subcontractor(s) with whom the bidder will directly subcontract that are proposed to perform the work of structural steel Installation, rebar installation, heating, ventilation and air conditioning, plumbing, as described in Chapter 18.106 RCW, and electrical as described in Chapter 19.28 RCW must be listed below. The work to be performed is to be fisted below the subcontractoils) name,**

**To the extent the Project includes one or more categories of work referenced In RCW 39.30.060, and no subcontractor is listed below to perform such work, the bidder certifies that the work will either (0 be performed by the bidder itself, or (ii) be performed by a lower tier subcontractor who will not contract directly with the bidder.**

| | |
|---|---|
| Subcontractor Name | N/A |
| Work to be performed | |
| Subcontractor Name | N/A |
| Work to be performed | |
| Subcontractor Name | N/A |
| Work to be performed | |
| Subcontractor Name | N/A |
| Work to be performed | |
| Subcontractor Name | N/A |
| Work to be performed | |

**" Bidder's are notified that it is the opinion of the enforcement agency that P',..rC or metal conduit, junction boxes, etc, are considered electrical equipment and therefore considered part of electrical work, even if the installation is for future use and no wiring or electrical current Is connected during the project.**

DOT Form 271-016A
Revised 06/2020

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# COMBINED AFFIDAVIT AND CERTIFICATION FORM

Non-Collusion, Anti-Trust, Prevailing Wage,
Debarment and Certification of Lawful Employment

## NON-COLLUSION AFFIDAVIT

Being first duly sworn, the undersigned deposes and says, that he/she is the identical person who submitted the foregoing proposal or bid, and that such bid is genuine and not sham or collusive or made in the interest or on behalf of any person not therein named, and further, that the deponent has not directly induced or solicited any other Bidder on the foregoing work equipment to put in a sham bid, or any other person or corporation to refrain from bidding, and that deponent has not in any manner sought by collusion to secure to himself/herself or to any other person any advantage over other Bidder or Bidders; and

## CERTIFICATION REGARDING ASSIGNMENT OF ANTI-TRUST CLAIMS TO PURCHASER

Vendor and purchaser recognize that in actual economic practice, overcharges resulting from anti-trust violations are, in fact, usually borne by the purchaser. Therefore, vendor hereby assigns to purchaser any and all claims for such overcharges as to goods and materials purchased in connection with this order or contract, except as to overcharges resulting from anti-trust violations commencing after the date of the bid, quotation, or other event establishing the price under this order or contract. In addition, vendor warrants and represents that each of his suppliers and subcontractors shall assign any and all such claims to purchaser, subject to the aforementioned exception; and

## PREVAILING WAGE AFFIDAVIT FORM

I, the undersigned, having been duly sworn, deposes, says and certifies that in connection with the performance of the work of this project, will pay each classification of laborer, workperson, or mechanic employed in the performance of such work, not less than the prevailing rate of wage or not less than the minimum rate of wage as specified in the principal contract; that I have read the above and forgoing statement and certificate, know the contents thereof and the substance as set forth therein, is true to my knowledge and belief; and

## DEBARMENT AFFIDAVIT

I certify that, except as noted below, the firm, association or corporation or any person in a controlling capacity associated therewith or any position involving the administration of federal funds; is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any federal agency; has not been suspended, debarred, voluntarily excluded or determined ineligible by any federal agency within the past three (3) years; does not have a proposed debarment pending; and has not been indicted, convicted, or had a civil judgment rendered against said person, firm, association or corporation by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past three (3) years.

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***Attachment E***



## CERTIFICATION OF LAWFUL EMPLOYMENT

The bidder hereby certifies that it has complied with all provisions of the Immigration and Nationality Act, now or as herein after amended, 8 USC Section 1101 et. seq., and that all employees, including subcontractor employees, are lawfully permitted to perform work in the United States as provided in this agreement with the City of Tumwater.

FOR: Non-Collusion Affidavit, Assignment of Anti-Trust Claims to Purchaser, Minimum Wage Affidavit, Debarment Affidavit and Certification of Lawful Employment.

BREWERY WELLFIELD INSTALLATION AND DEVELOPMENT PROJECT

Schneider Equipment, INC. [dba. Schneider Water Services]
Name of Bidder's Firm

VP
Signature of Authorized Representative of Bidder

Eric Schneider
Type/Print Name

Subscribed and sworn to before me this 5th day of March, 2026

OFFICIAL STAMP
SARAH ELIZABETH NELSON
NOTARY PUBLIC - OREGON
COMMISSION NO. 1065389
MY COMMISSION EXPIRES JANUARY 29, 2030

Sarah E Nelson
Sarah E Nelson
Type/Print Name

Notary Public in and for the State of ~~Washington~~ Oregon
My commission expires: January 29, 2030

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***Attachment F***

**NON-DISCRIMINATION IN BENEFITS AFFIDAVIT**

(Must Be Completed for **All** Bids in Excess of $50,000.00)

State of ~~Washington~~ Oregon )
) ss
County of Marion )

Chapter 3.46 of the Tumwater Municipal Code provides for non-discrimination in the provision of employee benefits between an employee with a domestic partner and an employee with a spouse by contractors providing supplies or services to the city estimated to cost fifty thousand dollars ($50,000) or more.

Eric Schneider, being first duly sworn, on their oath, states that they have reviewed Chapter 3.46 of the Tumwater Municipal Code and hereby certifies that Schneider Equipment, INC. [dba. Schneider Water Services] (Name of Firm) is in compliance with TMC 3.46.

Signed _____

Eric Schneider
Type/Print Name

Subscribed and sworn to before me this 5th day of March, 2026

Sarah E Nelson

Sarah E. Nelson
Type/Print Name

OFFICIAL STAMP
SARAH ELIZABETH NELSON
NOTARY PUBLIC - OREGON
COMMISSION NO. 1065389
MY COMMISSION EXPIRES JANUARY 29, 2030

Notary Public in and for the State of ~~Washington~~ Oregon
My commission expires January 29, 2030

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***Attachment G***

**NON-DISCRIMINATION CERTIFICATE**

State of ~~Washington~~ Oregon )
) ss
County of Marion )

The bidder hereby covenants, stipulates and agrees that no person shall be discriminated against in the bidding of the services and/or materials hereunder and that the bidder shall not refuse to hire any person therefore because of such person's race, religion, creed, color, national origin, sex, marital status, disability, sexual orientation, age or other basis prohibited by state or federal law, unless based on a bona fide occupational qualification. Also, the bidder will in no manner discriminate against any person because of such person's race, religion, creed, color, national origin, sex, marital status, disability, sexual orientation, age or other basis prohibited by state or federal law. Any such discrimination shall be deemed a violation of this bid and shall render this bid subject to forfeiture.

BREWERY **WELLFIELD INSTALLATION AND DEVELOPMENT PROJECT**

Schneider Equipment, INC. [dba. Schneider Water Services]
Name of Bidder's Firm

Signature of Authorized Representative of Bidder

Eric Schneider
Type/Print Name

Subscribed and sworn to before me this 5th day of March, 2026.

Sarah E Nelson

OFFICIAL STAMP
SARAH ELIZABETH NELSON
NOTARY PUBLIC - OREGON
COMMISSION NO. 1065389
MY COMMISSION EXPIRES JANUARY 29, 2030

Sarah E Nelson
Type/Print Name
Notary Public in and for the State of ~~Washington~~ Oregon.
My Commission expires: January 29, 2030

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*Attachment H*

## CONTRACTOR CERTIFICATION OF WAGE LAW COMPLIANCE

I hereby certify, under penalty of perjury under the laws of the State of Washington, on behalf of the firm identified below that, to the best of my knowledge and belief, this firm has NOT been determined by a final and binding citation and notice of assessment issued by the Washington State Department of Labor and Industries or through a civil judgment entered by a court of limited or general jurisdiction to have willfully violated, as defined in RCW 49.48.082, any provision of RCW chapters 49.46, 49.48, or 49.52 within three (3) years prior to the date of the Call for Bids.

Schneider Equipment, INC. [dba. Schneider Water Services]

Bidder

Signature of Authorized Official*

Eric Schneider

Printed Name

Vice-President

Title

3/05/2026 | St. Paul | Oregon

Date | City | State

*Check One:*
Individual ❑ Partnership ❑ Joint Venture ❑ Corporation ☒

State of Incorporation, or if not a corporation, State where business entity was formed:

Oregon

If a co-partnership, give firm name under which business is transacted:

** If a corporation, proposal must be executed in the corporate name by the president or vice-president (or any other corporate officer accompanied by evidence of authority to sign). If a co-partnership, proposal must be executed by a partner.*

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WELL DRILLING
PUMP · CONTROLS
SALES & SERVICE

ST. PAUL, OR
(503) 633-2666

SCHNEIDER
WATER SERVICES

21881 River Road NE, St. Paul, Oregon 97137
schneiderwater.com

SINCE 1945
OR CCB: 39265
WA UBI: 600202757

RICHLAND, WA
(509) 943-0331

In a special meeting of the Shareholders of Schneider Equpiment, Inc. dba Schneider Water Services held on April 15, 2025 at St. Paul, OR, the following resolution was adopted:

> RESOLVED that Kriss D. Schneider, Eric B. Schneider, Patrick J. Schneider are hereby authorized to individually negotiate and execute contracts on behalf of Schneider Equipment, Inc. dba Schneider Water Services. Prior authorization for other individuals to negotiate and execute contracts for the company are rescinded.

Kriss D. Schneider, President

Eric B. Schneider, Vice President

Patrick J. Schneider, Vice President & Secretary

**Employment Security Department**
WASHINGTON STATE

February 17, 2026

Schneider Equipment Inc DBA Schneider Water Services
21881 River Rd NE
St Paul, OR 97137

ES Ref # 000265248007
UBI # 600202757000

This letter confirms that, as of the date shown above, you have an account and it is in good standing with the Employment Security Department of the State of Washington.

If we may be of further assistance, please call us at (360) 890-3499 or email publicworks@esd.wa.gov

EMPLOYMENT SECURITY DEPARTMENT

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**Attachment I**
**PUBLIC WORKS CONTRACT**
**FOR**
**BREWERY WELLFIELD INSTALLATION AND DEVELOPMENT PROJECT**
**Tumwater Project No. W4000007**

THIS PUBLIC WORKS CONTRACT ("Contract") is dated effective this _____ day of _____, 2026 and is made by and between the City of Tumwater, a Washington municipal corporation ("City or Owner"), and Schneider Water Services, a _____ corporation ("Contractor").

A. The City desires to retain an independent contractor to furnish all labor and materials necessary to perform work necessary to complete the **BREWERY WELLFIELD INSTALLATION AND DEVELOPMENT PROJECT**; and

B. The Contractor has the requisite skill and experience to perform such work.

NOW, THEREFORE, the parties ("Parties") agree to the following terms and conditions:

## 1. SERVICES BY CONTRACTOR

1.1 Description of Work. Contractor shall perform all work and furnish all tools, materials, supplies, equipment, labor and other items incidental thereto necessary for the construction and completion of the work, more particularly described as the **BREWERY WELLFIELD INSTALLATION AND DEVELOPMENT PROJECT**. The Project includes, without limitation, drill, install, and test two 400-foot deep, large-diameter test wells and potentially a third well all into a flowing artesian aquifer underlying the Brewery Wellfield, located at the Tumwater Valley Golf Club at 4611 Tumwater Valley Drive SE, Tumwater, WA 98501. The wells must be constructed to Washington State Departments of Ecology and Health water well standards. The City's goal is to achieve a production capacity of at least 4,343 gallons per minute (gpm), with at least 2 wells and no more than 3 wells if necessary to achieve the gpm goal. If the wells successfully achieve the production goal, the wells will then be used for municipal water supply. The City will determine if the third test well would be drilled no sooner than the completion and testing of the first well and no later than the completion and testing of the second well; and other work; as shown on the Plans and as described in these Specifications, all in accordance with the Contract Documents ("Work"). Work shall be performed and completed as described in the Contract Documents, which include without limitation, this Contract, Bid Proposal, Schedule of Prices, Bid Signature Page as attached as Attachment A; Statement of Bidder's Qualifications as Attachment B; Bid Bond Form as Attachment C; Local Agency Subcontractor List as Attachment D; Combined Affidavit and Certification Certificate at Attachment E; Non-Discrimination in Benefits Affidavit as Attachment F; Contractor's Non-Discrimination Certificate as Attachment G; Contractor Certification Wage Law Compliance as Attachment H; Notice of Completion of Public Works Contract attached as Exhibit A; Contract Change Order Agreement attached as Exhibit B; Notice to Labor Unions or Other Employment Organizations of Nondiscrimination in Employment attached as Exhibit C; Certificate(s) of Insurance Form attached hereto as Exhibit D; Performance Bond attached as Exhibit E-1; Payment Bond attached as Exhibit E-2; Retainage Bond to 3rd Party Depositary attached as Exhibit F; Retainage Bond to City of Tumwater attached as Exhibit G; Special Provisions; *WSDOT Standard Plans and Details for Road, Bridge and*

*Municipal Construction, 2025 WSDOT Standard Specifications for Road, Bridge and Municipal Construction* ("Standard Specifications"), current State Prevailing Wage Rates, Supplemental to Wages, and Benefit Code Key attached as Appendix A; Nearby Water Well Reports attached as Appendix B; Water Well Location Maps (Figures 1 through 5) as Appendix C; Schematic of Anticipated Test Well (Figure 6) as Appendix D; Construction and Testing incorporated herein by this reference (collectively the "Contract Documents"). Work shall be completed to the City's satisfaction, within the time period prescribed by the City and pursuant to the direction of the City Administrator or his or her designee.

1.2 Completion Date. The Work associated with the base bid shall be physically completed within one-hundred eighty (180) working days. The Work associated with the additive bid shall be physically completed within ninety (90) additional working days. The Physical Work shall commence within ten (10) days of the issuance by the City of the **Sitework Notice to Proceed**, which shall be a mutually agreed upon date by the City and Contractor before August 28, 2026, or as described in Section 1-08.5 of the WSDOT Standard Specifications as amended by the project Special Provisions or other sections of the Contract. A **Procurement Notice to Proceed** will be given to allow the Contractor to proceed with document review and materials procurement prior to site work beginning. Working days shall begin to be counted against the Contractor when Physical Work on the site commences.

Every day will be counted as a "working day" unless it is a nonworking day or an Engineer determined unworkable day. A nonworking day is defined as a Saturday, a Sunday, a holiday observed by the Contracting Agency, or any whole or half day on which the Contract specifically prohibits Work. However, the Contractor may be allowed to perform Work during a Saturday or a Sunday with prior written approval by the Engineer in which case the day will be counted as a working day. The Contract includes a list of blackout dates when Work is not allowed to take place due to events to be held at the golf course. In the event that any of these blackout dates becomes available, the Contracting Agency will provide two weeks' notice to the Contractor, and upon mutual agreement this day will become a working day.

In the event the Work is not substantially completed within the time specified, Contractor agrees to pay to the City liquidated damages in the amount set forth in Section 1.3 of this Contract. The Work shall not be deemed physically completed until the City has accepted the Work and delivered a written Notice of Completion of Public Works Contract in the form attached hereto as Exhibit A.

1.3 Liquidated Damages. Time is of the essence of the Contract. Delays inconvenience the public and cost taxpayers undue sums of money, adding time needed for administration, inspection, and supervision. It is impractical for the City to calculate the actual cost of delays. Accordingly, the Contractor agrees to pay liquidated damages calculated based on WSDOT standard Specifications per section 1-08.9 as amended by the project Special Provisions herein.

(1) To pay liquidated damages for each working day beyond the number of working days established for completion, and

(2) To authorize the City to deduct these liquidated damages from any money due or coming due to the Contractor.

**LIQUIDATED DAMAGES FORMULA**

$$LD = \frac{0.15C}{T}$$

Where: LD = Liquidated damages per working day (rounded to the nearest dollar).
C = Original Contract amount.
T = Original time for completion.

When the Work is completed to the extent that the City has full and unrestricted use and benefit of the facilities, both from an operational and safety standpoint, the City may determine the Work is complete. Liquidated damages will not be assessed for any days for which an extension of time is granted. No deduction or payment of liquidated damages will, in any degree, release the Contractor from further obligations and liabilities to complete this entire Contract.

1.4 Performance Standard. Contractor shall perform the Work in a manner consistent with accepted practices for other properly licensed contractors.

1.5 Compliance with Laws. Contractor shall perform the Work in accordance with all applicable federal, state and City laws, including but not limited to all City ordinances, resolutions, standards or policies, as now existing or hereafter adopted or amended, and obtain all necessary permits and pay all permit, inspection or other fees, at its sole cost and expense.

1.6 Change Orders. The City may, at any time, without notice to sureties, order changes within the scope of the Work. Contractor agrees to fully perform any such alterations or additions to the Work. All such change orders shall be in the form of the Contract Change Order Agreement attached hereto as Exhibit B, which shall be signed by both the Contractor and the City, shall specifically state the change of the Work, the completion date for such changed Work, and any increase or decrease in the compensation to be paid to Contractor as a result of such change in the Work. Oral change orders shall not be binding upon the City unless confirmed in writing by the City. If any change hereunder causes an increase or decrease in the Contractor's cost of, or time required for, the performance or any part of the Work under this Contract, an equitable adjustment will be made and the Contract modified in writing accordingly.

If the Contractor intends to assert a claim for an equitable adjustment hereunder, it shall, within five (5) days after receipt of a written change order from the City or after giving the written notice required above, as the case may be, submit to the City a written statement setting forth the general nature and monetary extent of such claim; provided the City, in its sole discretion, may extend such five (5) day submittal period upon request by the Contractor. The Contractor shall supply such supporting documents and analysis for the claims as the City may require to determine if the claims and costs have merit. No claim will be allowed for any costs incurred more than five (5) days before the Contractor gives written notice as required. No claim by the Contractor for an equitable adjustment hereunder will be allowed if asserted after final payment under this Contract.

1.7 Work and Materials Omitted. The Contractor shall, when directed in writing by the City, omit work, services and materials to be furnished under the Contract and the value of the omitted work and materials will be deducted from the Total Compensation and the delivery schedule will be reviewed if appropriate. The value of the omitted work, services and materials will be a lump sum or unit price, as mutually agreed upon in writing by the Contractor and the City. If the parties cannot agree on an appropriate deduction, the

City reserves the right to issue a unilateral change order adjusting the price and the delivery schedule.

1.8 Utility Location. Contractor is responsible for locating any underground utilities affected by the Work and is deemed to be an excavator for purposes of Chapter 19.122 RCW, as amended. Contractor shall be responsible for compliance with Chapter 19.122 RCW, including utilization of the "one call" locator system before commencing any excavation activities.

1.9 Air Environment. Contractor shall fully cover any and all loads of loose construction materials including without limitation, sand, dirt, gravel, asphalt, excavated materials, construction debris, etc., to protect said materials from air exposure and to minimize emission of airborne particles to the ambient air environment within the City.

**2. TERM**

This Contract shall commence on the effective date of this Contract and continue until the completion of the Work as described in the Plans and Specifications, and final acceptance by the City, and the expiration of all warranties contained in the Contract Documents ("Term").

**3. WARRANTY**

3.1 Requisite Skill. The Contractor warrants that it has the requisite skill to complete the Work, and is appropriately accredited and licensed by all applicable agencies and governmental entities, including but not limited to being licensed to do business in the City of Tumwater by obtaining a City of Tumwater business license. Contractor represents that it has visited the site and is familiar with all of the plans and specifications in connection with the completion of the Work.

3.2 Defective Work. The Contractor shall, at its sole cost and expense, correct all Work which the City deems to have defects in workmanship and material discovered within one (1) year after the City's final acceptance of the Work as more fully set forth in the General Special Provisions. This warranty shall survive termination of this Contract. Conducting of tests and inspections, review of specifications or plans, payment for goods or services, or acceptance by the City does not constitute waiver, modification or exclusion of any express or implied warranty or any right under this Contract or law.

**4. COMPENSATION**

4.1 Total Compensation. In consideration of the Contractor performing the Work, the City agrees to pay the Contractor in accordance with Attachment A, Schedule of Prices, which amount shall constitute full and complete payment by the City ("Total Compensation").

4.2 Contractor Responsible for Taxes. The Contractor shall be solely responsible for the payment of any taxes imposed by any lawful jurisdiction as a result of the performance and payment of this Contract, including the City of Tumwater Business and Occupation taxes. All Washington State sales tax and all other government taxes, assessments and charges shall be as required under either Washington State Department of Revenue Rule 171 and WAC 458-20-171, and its related rules, or Washington State Department of Revenue Rule 170 and WAC 458-20-170, and its related rules. See bid proposal Attachment A, Schedule of Prices for applicable sales tax rule for each bid schedule.

4.3 Nonpayment. The City shall have the right to withhold payment to the Contractor for any of the Work not completed in a satisfactory manner, in the City's sole discretion,

which shall be withheld until such time as Contractor modifies or repairs the Work so that the Work is acceptable to the City.

4.4 Method of Payment. The basis of payment will be the actual quantities of work performed according to the contract and as specified for payment. Payments will be made for work and labor performed and materials furnished under the contract according to the price in the proposal unless otherwise provided. Partial payments will be made once each month, based on partial estimates prepared by the Engineer. Failure to perform any obligation under this Contract may be adequate reason for the City to withhold payments until the obligation is performed.

Upon completion of all work and after final inspection, the amount due the Contractor under the contract will be paid based upon the Final Voucher made by the Engineer and signed by the Contractor.

Payment to the Contractor for partial estimates, final estimates, and retained percentages shall be subject to controlling laws.

## 5. NONDISCRIMINATION

A. The City is an equal opportunity employer.

B. Nondiscrimination in Employment

The Contractor shall comply with the following nondiscrimination provisions, and the Contractor shall ensure the nondiscrimination provisions are included in all subcontracts:

(a) Nondiscrimination Requirement. During the term of this Contract, the Contractor, including all subcontractors, shall not discriminate on the bases enumerated at RCW 49.60.530(3). In addition, the Contractor, including all subcontractors, shall give written notice of this nondiscrimination requirement to any labor organizations with which the Contractor, or subcontractor, has a collective bargaining or other agreement.

(b) Obligation to Cooperate. The Contractor, including all subcontractors, shall cooperate and comply with any Washington state agency investigation regarding any allegation that the Contractor, including any subcontractor, has engaged in discrimination prohibited by this Contract pursuant to RCW 49.60.530(3).

(c) Default. Notwithstanding any provision to the contrary, the Contracting Agency may suspend the Contract in accordance with Section 1-08.6, upon notice of a failure to participate and cooperate with any state agency investigation into alleged discrimination prohibited by this Contract, pursuant to RCW 49.60.530(3). Any such suspension will remain in place until the Contracting Agency receives notification that Contractor, including any subcontractor, is cooperating with the investigating state agency. In the event the Contractor, or subcontractor, is determined to have engaged in discrimination identified at RCW 49.60.530(3), the Contracting Agency may terminate this Contract in whole or in part in accordance with Section 1-08.10(1), and in addition to the sanctions listed in Section 1-07.11(5), the Contractor, subcontractor, or both, may be referred for debarment as provided in RCW 39.26.200. The Contractor or subcontractor may be given a reasonable time in which to cure this noncompliance, including implementing conditions consistent with any court-ordered injunctive relief or settlement agreement.

(d) Remedies for Breach. Notwithstanding any provision to the contrary, in the event of Contract termination or suspension for engaging in discrimination, the Contractor,

subcontractor, or both, shall be liable for contract damages as authorized by law including, but not limited to, any cost difference between the original contract and the replacement or cover contract and all administrative costs directly related to the replacement contract, which damages are distinct from any penalties imposed under Chapter 49.60, RCW. The Contracting Agency shall have the right to deduct from any monies due to Contractor or subcontractor, or that thereafter become due, an amount for damages Contractor or subcontractor will owe Contracting Agency for default under this Provision.

C. Nondiscrimination in Services. The Contractor will not discriminate against any recipient of any services or benefits provided for in this Contract on the grounds of race, religion, creed, color, national origin, sex, marital status, disability, sexual orientation, age or other basis prohibited by state or federal law.

D. Nondiscrimination in Contractors / Subcontractors. The City of Tumwater, in accordance with RCW 49.60.530 requires all covered contractors or subcontractors to actively pursue a diverse and inclusive workforce. Discriminatory actions such as the ones listed here are prohibited:

(a) Refusing to hire any person because of age, sex, marital status, sexual orientation, gender identity, race, creed, color, national origin, citizenship or immigration status, honorably discharged veteran or military status, the presence of any sensory, mental, or physical disability, or the use of a trained dog guide or service animal by a person with a disability, unless based upon a bona fide occupational qualification: PROVIDED, That the prohibition against discrimination because of such disability shall not apply if the particular disability prevents the proper performance of the particular worker involved: PROVIDED, That this section shall not be construed to require an employer to establish employment goals or quotas based on sexual orientation;

(b) Discharging or barring any person from employment because of age, sex, marital status, sexual orientation, gender identity, race, creed, color, national origin, citizenship or immigration status, honorably discharged veteran or military status, the presence of any sensory, mental, or physical disability, or the use of a trained dog guide or service animal by a person with a disability;

(c) Discriminating against any person in compensation or in other terms or conditions of employment because of age, sex, marital status, sexual orientation, gender identity, race, creed, color, national origin, citizenship or immigration status, honorably discharged veteran or military status, the presence of any sensory, mental, or physical disability, the use of a trained dog guide or service animal by a person with a disability: PROVIDED, That it shall not be an unfair practice for an employer to segregate washrooms or locker facilities on the basis of sex, or to base other terms and conditions of employment on the sex of employees where the commission by regulation or ruling in a particular instance has found the employment practice to be appropriate for the practical realization of equality of opportunity between the sexes; or

(d) Printing or circulating, or causing to be printed or circulated, any statement, advertisement, or publication, or to use any form of application for employment, or to make any inquiry in connection with prospective employment, which expresses any limitation, specification, or discrimination as to age, sex, marital status, sexual orientation, gender identity, race, creed, color, national origin, citizenship or immigration status, honorably discharged veteran or military status, or the presence of any sensory, mental, or physical disability, the use of a trained dog guide or service animal by a person with a disability, or any intent to make any such limitation, specification, or discrimination, unless based upon

a bona fide occupational qualification: PROVIDED, That nothing contained herein shall prohibit advertising in a foreign language."

**6. INDEPENDENT CONTRACTOR/CONFLICT OF INTEREST**

It is the intention and understanding of the Parties that the Contractor shall be an independent contractor and that the City shall be neither liable nor obligated to pay Contractor sick leave, vacation pay or any other benefit of employment, nor to pay any social security or other tax which may arise as an incident of employment. The Contractor shall pay all income and other taxes due. Industrial or any other insurance which is purchased for the benefit of the City, regardless of whether such may provide a secondary or incidental benefit to the Contractor, shall not be deemed to convert this Contract to an employment contract. It is recognized that Contractor may or will be performing work during the Term for other parties; provided, however, that such performance of other work shall not conflict with or interfere with the Contractor's ability to perform the Work. Contractor agrees to resolve any such conflicts of interest in favor of the City.

**7. CITY'S RIGHT TO TERMINATE CONTRACT**

7.1 Termination Without Cause. Prior to the expiration of the Term, this Contract may be terminated without cause upon oral or written notice delivered to Contractor from the City. Upon termination, all supplies, materials, labor and/or equipment furnished prior to such date shall, at the City's option, become its property. In the event Contractor is not in breach of any of the provisions of this Contract, Contractor will be paid for any portion of the Work which has been completed to the City's satisfaction, calculated by the percentage amount that portion of the Work completed and accepted by the City bears to the Total Compensation.

7.2 Termination For Cause. The City may immediately terminate this Contract, take possession of the Property and all materials thereon and finish the Work by whatever methods it may deem expedient, upon the occurrence of any one or more of the following events:

(1) If the Contractor should be adjudged as bankrupt.

(2) If the Contractor should make a general assignment for the benefit of its creditors.

(3) If a receiver should be appointed on the account of insolvency of the Contractor.

(4) If the Contractor should persistently or repeatedly refuse or fail to supply a sufficient number of properly skilled workmen or proper materials for completion of the Work.

(5) If the Contractor should fail to complete the Work within the time specified in this Contract.

(6) If the Contractor should fail to complete the Work in compliance with the plans and specifications, to the City's satisfaction.

(7) If the Contractor should fail to make prompt payment to subcontractors or for material labor.

(8) If the Contractor should persistently disregard laws, ordinances or regulations of federal, state, or municipal agencies or subdivisions thereof.

(9) If the Contractor should persistently disregard instructions of the City Administrator or his or her representative.

(10) If the Contractor shall be in breach or violation of any term or provision of this Contract, or

(11) If the Work is not being performed pursuant to RCW 49.28.050 or 49.28.060.

7.3 Result of Termination. In the event that this Contract is terminated for cause by the City, the City may do any or all of the following:

(1) Stop payments. The City shall cease any further payments to Contractor and Contractor shall be obligated to repay any payments it received under this contract.

(2) Complete Work. The City may, but in no event is the City obligated to, complete the Work, which Work may be completed by the City's agents, employees or representatives or the City may retain independent persons or entities to complete the Work. Upon demand, Contractor agrees to pay to the City all of its costs and expenses in completing such Work.

(3) Take Possession. The City may take possession of the Property and any equipment and materials on the Property and may sell the same, the proceeds of which shall be paid to the City for its damages.

(4) Remedies Not Exclusive. No remedy or election under this Contract shall be deemed an election by the City but shall be cumulative and in addition to all other remedies available to the City at law, in equity or by statute.

## 8. INDEMNIFICATION

8.1 Contractor Indemnification. The Contractor agrees to indemnify, defend, and hold the City, its elected officials, officers, employees, agents, and volunteers harmless from any and all claims, demands, losses, actions and liabilities (including costs and all attorney fees) to or by any and all persons or entities, including, without limitation, their respective agents, licensees, or representatives, arising from, resulting from, or connected with this Contract to the extent caused by the negligent acts, errors or omissions of the Contractor, its partners, shareholders, agents, employees, or by the Contractor's breach of this Contract. Contractor waives any immunity that may be granted to it under the Washington State Industrial Insurance Act, Title 51 RCW. Contractor's indemnification shall not be limited in any way by any limitation on the amount of damages, compensation or benefits payable to or by any third party under workers' compensation acts, disability benefit acts or any other benefits acts or programs.

8.2 City Indemnification. The City agrees to indemnify, defend, and hold the Contractor, its officers, directors, shareholders, partners, employees, and agents harmless from any and all claims, demands, losses, actions and liabilities (including costs and attorney fees) to or by any and all persons or entities, including without limitation, their respective agents, licenses, or representatives, arising from, resulting from or connected with this Contract to the extent solely caused by the negligent acts, errors, or omissions of the City, its employees or agents.

8.3 Survival. The provisions of this Section shall survive the expiration or termination of this Contract with respect to any event occurring prior to such expiration or termination.

## 9. INSURANCE

9.1 Minimum Limits. The Contractor agrees to carry as a minimum, the following insurance, in such forms and with such carriers who have a rating which is satisfactory to the City:

(1) Workers' compensation and employer's liability insurance in amounts sufficient pursuant to the laws of the State of Washington;

(2) Commercial General Liability insurance shall be written with limits no less than $1,000,000 each occurrence, $2,000,000 general aggregate, and a $2,000,000 products-completed operations aggregate limit.

(3) Automobile Liability insurance with a minimum combined single limit for bodily injury and property damage of $1,000,000 per accident.

9.2 Endorsements. Each insurance policy shall contain, or be endorsed to contain, the following provisions:

(1) The City, its officers, officials, employees, volunteers and agents shall each be named as additional insured.

(2) Coverage may not be terminated or reduced in limits except after thirty (30) days prior written notice by certified mail, return receipt requested, to the City.

(3) Coverage shall be primary insurance as respects the City, its officials, employees and volunteers. Any insurance or self-insurance maintained by the City, its officials, employees or volunteers shall be in excess of Contractor's insurance.

(4) Coverage shall apply to each insured separately against whom claim is made or suit is brought.

(5) Coverage shall be written on an "occurrence" form as opposed to a "claims made" or "claims paid" form.

9.3 Verification. Contractor shall furnish the City with certificates of insurance on an ACORD™ Certificate of Liability Insurance form or an equivalent format attached hereto as Exhibit "H", which certificate must be executed by a person authorized by the insurer to bind coverage on its behalf. The City reserves the right to require complete certified copies of all required insurance policies, at any time.

9.4 Subcontractors. Contractors shall include all subcontractors as additional insured under its policies or shall furnish separate certificates for each subcontractor. All coverage for subcontractors shall be subject to all of the requirements stated herein.

9.5 Deductibles and Self-Insured Retentions. Any deductibles or self-insured retentions must be disclosed by Contractor and approved in writing by the City. At the option of the City, Contractor shall either reduce or eliminate such deductibles or self-insured retentions or procure a bond guaranteeing payment for any amounts not covered by the insurance by reason of such deductibles or self-insured retentions.

9.6 Asbestos Abatement or Hazardous Materials. If asbestos abatement or hazardous materials work is performed, Contractor shall review coverage with the City's Risk Manager and provide scope and limits of coverage that are appropriate for the scope of Work and are satisfactory to the City. Contractor shall not commence any Work until its coverage has been approved by the Risk Manager.

9.7 Termination. The Contractor's failure to provide the insurance coverage required by this Section shall be deemed to constitute non-acceptance of this Contract by the Contractor and the City may then award this Contract to the next lower bidder.

## 10. PERFORMANCE AND PAYMENT BONDS

Pursuant to RCW 39.08.010, Contractor shall post both a Performance Bond, attached to this Contract as Exhibit E-1, and a Payment Bond, attached to this Contract as Exhibit E-2, in favor of the City, and incorporated by this reference, in a dollar amount satisfactory to the City; to guarantee Contractor's performance of the Work to the City's satisfaction; to insure Contractor's performance of all of the provisions of this Contract; and to guarantee Contractor's payment of all laborers, mechanics, subcontractors and material persons. Contractor's obligations under this Contract shall not be limited to the dollar amount of the bonds.

## 11. SAFETY

Contractor shall take all necessary precautions for the safety of employees on the work site and shall comply with all applicable provisions of federal, state and municipal safety and health laws and codes, including without limitation, all OSHA/WISHA requirements, Safety and Health Standards for Construction Work (Chapter 296-155 WAC), General Safety and Health Standards (Chapter 296-24 WAC), and General Occupational Health Standards (Chapter 296-62 WAC). Contractor shall erect and properly maintain, at all times, all necessary guards, barricades, signals and other safeguards at all unsafe places at or near the Work for the protection of its employees and the public, safe passageways at all road crossings, crosswalks, street intersections, post danger signs warning against any known or unusual hazards and do all other things necessary to prevent accident or loss of any kind. Contractor shall protect from danger all water, sewer, gas, steam or other pipes or conduits, and all hydrants and all other property that is likely to become displaced or damaged by the execution of the Work. The Contractor shall, at its own expense, secure and maintain a safe storage place for its materials and equipment and is solely responsible for the same.

## 12. PREVAILING WAGES

12.1 Wages of Employees. This contract is subject to the minimum wage requirements of Chapter 39.12 RCW and Chapter 49.28 RCW (as amended or supplemented). On Federal-aid projects, Federal wage laws and rules also apply. The Hourly minimum rates for wages and fringe benefits are listed in Appendix A. When Federal wage and fringe benefit rates are listed, the rates match those identified by the U.S. Department of Labor's "Decision Number" shown in Appendix A.

The Contractor, any subcontractor, and all individuals or firms required by Chapter 39.12 RCW, Chapter 296-127 WAC, or the Federal Davis-Bacon and Related Acts (DBRA) to pay minimum prevailing wages, shall not pay any worker less than the minimum hourly wage rates and fringe benefits required by Chapter 39.12 RCW or the DBRA. Higher wages and benefits may be paid.

When the project is subject to both State and Federal hourly minimum rates for wages and fringe benefits and when the two rates differ for similar kinds of labor, the Contractor shall not pay less than the higher rate unless the State rates are specifically preempted by Federal law.

The Contractor shall ensure that any firm (Supplier, Manufacturer, or Fabricator) that falls under the provisions of Chapter 39.12 RCW because of the definition "Contractor" in Chapter 296-127-010 WAC, complies with all the requirements of Chapter 39.12 RCW.

12.2 Exemptions to Prevailing Wage. The prevailing wage requirements of Chapter 39.12 RCW, and as required in this Contract, do not apply to:

(1) Sole owners and their spouses;

(2) Any partner who owns at least 30% of a partnership;

(3) The President, Vice President and Treasurer of a corporation if each one owns at least 30% of the corporation.

12.3 Reporting Requirements. On forms provided by the Industrial Statistician of State L&I, the Contractor shall submit to the Engineer the following for itself and for each firm covered under Chapter 39.12 RCW that provided work and materials of the contract:

(1) A copy of an approved "Statement of Intent to Pay Prevailing Wages" State L&I form number F700-029-000. The City will make no payment under this contract for the work performed until this statement has been approved by State L&I and a copy of the approved form has been submitted to the City.

(2) A copy of an approved "Affidavit of Prevailing Wages Paid," State L&I form number F700-007-000. The City will not release to the Contractor any funds retained under Chapter 60.28.011 RCW until all of the "Affidavit of Prevailing Wages Paid" forms have been approved by State L&I and a copy of all the approved forms have been submitted to the City.

The Contractor shall be responsible for requesting these forms from the State L&I and for paying any approval fees required by State L&I.

Certified payrolls are required to be submitted weekly by the Contractor to the City, for the Contractor and all subcontractors or lower tier subcontractors.

12.4 Disputes. In the event any dispute arises as to what are the prevailing rates of wages for work of a similar nature and such dispute cannot be resolved by the City and the Contractor, the matter shall be referred for arbitration to the Director of the Department of Labor and Industries of the State of Washington and the decision therein shall be final and conclusive and binding on all parties involved in the dispute.

## 13. FAILURE TO PAY SUBCONTRACTORS

In addition to any other remedies provided herein, in the event the Contractor shall fail to pay any subcontractors or laborers, fail to pay for any materials, or fail to pay any insurance premiums, the City may terminate this Contract and/or the City may withhold from the money which may be due the Contractor an amount necessary for the payment of such subcontractors, laborers, materials or premiums.

## 14. OWNERSHIP OF DOCUMENTS

All originals and copies of work product, including plans, sketches, layouts, designs, design specifications, records, files, computer disks, magnetic media, all finished or unfinished documents or material which may be produced or modified by Contractor while performing the Work shall become the property of the City and shall be delivered to the City at its request.

## 15. CONFIDENTIALITY

Any records, reports, information, data or other documents or materials given to or prepared or assembled by the Contractor under this Contract will be kept as confidential and shall not be made available to any individual or organization by the Contractor without prior written approval of the City.

**16. BOOKS AND RECORDS**

The Contractor agrees to maintain books, records, and documents which sufficiently and properly reflect all direct and indirect costs related to the performance of this Contract and such accounting procedures and practices as may be deemed necessary by the City to assure proper accounting of all funds paid pursuant to this Contract. These records shall be subject at all reasonable times to inspection, review or audit by the City, its authorized representative, the State Auditor, or other governmental officials authorized by law to monitor this Contract.

**17. CLEAN UP**

At any time ordered by the City and immediately after completion of the Work, the Contractor shall, at its own expense, clean up and remove all refuse and unused materials of any kind resulting from the Work. In the event the Contractor fails to perform the necessary clean up, the City may, but in no event is it obligated to, perform the necessary clean up and the costs thereof shall be immediately paid by the Contractor to the City and/or the City may deduct its costs from any remaining payments due to the Contractor.

**18. GENERAL PROVISIONS**

18.1 Entire Contract. The Contract Documents contain all of the agreements of the Parties with respect to any matter covered or mentioned in this Contract and no prior agreements or understandings pertaining to any such matters shall be effective for any purpose.

18.2 Modification. No provisions of this Contract, including this provision, may be amended or added to except by agreement in writing signed by the Parties or their respective successors in interest.

18.3 Full Force and Effect. Any provision of this Contract, which is declared invalid, void or illegal, shall in no way affect, impair, or invalidate any other provision hereof and such other provisions shall remain in full force and effect.

18.4 Assignment. The Contractor shall not transfer or assign, in whole or in part, any or all of its obligations and rights hereunder without the prior written consent of the City. In the event the City consents to any such assignment or transfer, such consent shall in no way release the Contractor from any of its obligations or liabilities under this Contract.

18.5 Successors in Interest. Subject to the preceding Subsection, this Contract shall be binding upon and inure to the benefit of the Parties' successors in interest, heirs and assigns.

18.6 Attorney Fees. In the event the City or the Contractor defaults on the performance of any terms in this Contract, and the Contractor or City places the enforcement of the Contract or any part thereof, or the collection of any monies due, or to become due hereunder, or recovery of possession of any belongings, in the hands of an attorney, or file suit upon the same, each Party shall pay all its own attorneys' fees, costs and expenses. The venue for any dispute related to this Contract shall be Thurston County, Washington.

18.7 No Waiver. Failure of the City to declare any breach or default immediately upon occurrence thereof, or delay in taking any action in connection with, shall not waive such breach or default. Failure of the City to declare one breach or default does not act as a waiver of the City's right to declare another breach or default.

18.8 Governing Law. This Contract shall be made in and shall be governed by and interpreted in accordance with the laws of the State of Washington.

18.9 Authority. Each individual executing this Contract on behalf of the City and Contractor represents and warrants that such individuals are duly authorized to execute and deliver this Contract on behalf of the Contractor or City.

18.10 Notices. Any notices required to be given by the City to the Contractor or by the Contractor to the City shall be delivered to the Parties at the addresses set forth below. Any notices may be delivered personally to the addressee of the notice or may be deposited in the United States mail, postage prepaid, to the address set forth herein. Any notice so posted in the United States mail shall be deemed received three (3) days after the date of mailing.

18.11 Captions. The respective captions of the Sections of this Contract are inserted for convenience of reference only and shall not be deemed to modify or otherwise affect in any respect any of the provisions of this Contract.

18.12 Performance. Time is of the essence of this Contract and each and all of its provisions in which performance is a factor. Adherence to completion dates is essential to the Contractor's performance of this Contract.

18.13 Conflicting Provisions. In the event of a conflict between the terms and provisions of any of the Contract Documents, the City Administrator or his or her designee shall issue an interpretation of the controlling document, which interpretation shall be final and binding.

*** Signatures on Following Page ***

IN WITNESS WHEREOF, the parties have caused this contract to be executed the day and year first hereinabove written.

**CITY OF TUMWATER**
555 Israel Road SW
Tumwater, WA 98501-6515

_____
Leatta Dahlhoff, Mayor

Attest:

_____
Melody Valiant, City Clerk

Approved as to Form:

_____
Karen Kirkpatrick, City Attorney

**CONTRACTOR**
Schneider Water Services
21881 River Rd NE
Saint Paul, OR 97137-9508

Telephone: 503-633-2666
UBI#: 600-202-757

By: _____
Type/Print Name: _____
Title: _____

STATE OF WASHINGTON )
) ss
COUNTY OF _____)

On this day personally appeared before me_____, to me known to be the _____ of _____ that executed the foregoing instrument, and acknowledged the said instrument to be the free and voluntary act and deed of said corporation, for the uses and purposes therein mentioned, and on oath stated that he/she was authorized to execute said instrument and that the seal affixed, if any, is the corporate seal of said corporation.

GIVEN my hand and official seal this _____ day of _____2026.

_____

_____
Type/Print Name
Notary Public in and for the State of Washington
My commission expires: _____.

**Exhibit A**

CITY OF TUMWATER

NOTICE OF COMPLETION OF PUBLIC WORKS CONTRACT

Contractor:

Project:

The City of Tumwater has determined that the Brewery Wellfield Installation and Development Project has been Physically Completed per Section 1-08.5 of the Standard Specifications as of

_____, 20___, for all work that the contract requires.

This date shall constitute physical completion of the contract but shall not imply the City's acceptance of the work or contract.

Sincerely,

Manager

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**Exhibit B**

**CITY OF TUMWATER**
**Public Works**

| |
|---|
| **CONTRACT CHANGE ORDER NO.** |
| **PROJECT TITLE:** |
| **Contractor's Name:** |
| **Address:** |
| **City/State/Zip** |

**DESCRIPTION OF WORK**

| Pay Item | Description | Unit | Quantity | Unit Price | Total |
|---|---|---|---|---|---|

**DESCRIPTION:**

Will this change affect expiration of insurance coverage? Yes _____ No_____

If "YES", will the policies be extended? Yes _____ No_____

The amount of working/calendar days that will be added to
the total authorized contract days as a result of this Change Order will be: _____.

| | |
|---|---|
| **ESTIMATED PERCENT CHANGE** | |
| **PREVIOUS CONTRACT AMOUNT** | |
| **CURRENT CHANGE ORDER AMOUNT** | |
| **REVISED CONTRACT TOTAL** | |

_____ _____
Date Date

_____ _____
Approved - City of Tumwater Accepted - (Contractor Name)

_____ _____
Type/Print Name Type/Print Name

*This page intentionally left blank.*

**Exhibit C**

## NOTICE TO LABOR UNIONS OR OTHER EMPLOYMENT ORGANIZATIONS OF NONDISCRIMINATION IN EMPLOYMENT

TO: ALL EMPLOYEES

AND TO: _____
(Name of Union or Organization)

The undersigned currently holds contract(s) with _____ involving funds or credit of the City of Tumwater, Washington, or (a) subcontract(s) with a prime contractor holding such contract(s).

You are advised that, under the provisions of the above contract(s) or subcontract(s) and in accordance with applicable state or federal law, the undersigned is obliged not to discriminate against any employee or applicant of employment because of race, religion, creed, color, national origin, sex, marital status, disability, sexual orientation, age or other basis prohibited by state or federal law. This obligation not to discriminate in employment includes, but is not limited to, the following:

EMPLOYMENT, UPGRADING, TRANSFER OR DEMOTION

RECRUITMENT AND ADVERTISING

RATES OF PAY OR OTHER FORMS OF COMPENSATION

SELECTION FOR TRAINING INCLUDING APPRENTICESHIP, LAYOFF OR TERMINATION

This notice is furnished to you pursuant to the provisions of the above contract(s) or subcontractor(s) and state and federal law.

Copies of this Notice will be posted by the undersigned in conspicuous places available to employees or applicants for employment.

Complaints may be submitted to the City Engineer,
City of Tumwater, 555 Israel Road SW, Tumwater, WA 98501

_____ _____
Signed (Contractor or Subcontractor)

_____ _____
Type/Print Name Date

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**Exhibit D**

**CERTIFICATE OF INSURANCE**

This is to certify to the City of Tumwater, Washington that the following policies are in force for:

Name of Insured _____

Address _____

Contract Title and/or Description of Job _____

_____

**1. GENERAL LIABILITY**

A. Commercial, General Liability Insurance, and Business Automobile Liability Insurance with limits of not less than:

(1) Commercial General Liability insurance shall be written with limits no less than $3,000,000 each occurrence, $3,000,000 general aggregate, and a $2,000,000 products-completed operations aggregate limit (or as allowed in Public Works Contract Section 9 affording total liability limits of not less than stated).

(2) Business Automobile Liability Coverage (including any and all leased, owned, hired or non-owned vehicles used in any activities associated with this contract) with combined single limits of not less than One Million Dollars ($1,000,000.00) for bodily injury, including personal injury or death, and property damage.

B. The following coverages are included in both Primary and Excess Liability Contracts.

| | |
|---|---|
| (1) Broad Form Property Damage Coverage | YES ☐ NO ☐ |
| (2) Blanket Broad Form Contractual | YES ☐ NO ☐ |
| (3) Stop-Gap Employer's Contingent Liability | YES ☐ NO ☐ |
| (4) Underground Damage, Collapse and Blasting or Explosion | YES ☐ NO ☐ |
| (5) Contractor's Protective | YES ☐ NO ☐ |
| (6) Personal Injury Liability (Libel, Slander, Defamation, etc.) | YES ☐ NO ☐ |
| (7) Products and Completed Operations | YES ☐ NO ☐ |
| (8) Non-owned and Hired Auto Coverage | YES ☐ NO ☐ |
| (9) Mobile Equipment | YES ☐ NO ☐ |
| (10)_____ | YES ☐ NO ☐ |

C. General Requirements of Policy(ies) shall include, but not be limited to:

(1) City of Tumwater is an additional named insured by endorsement as respects this contract and such insurance as is carried by the contractor is primary.

(2) In the event of non-renewal, cancellation or material change in the coverage provided, thirty (30) days written notice shall be furnished the City of Tumwater prior to the date of non-renewal, cancellation or change, such notice to be sent to City of Tumwater Risk Manager, 555 Israel Road SW, Tumwater, WA 98501.

(3) City of Tumwater has no obligation to report occurrences unless a claim is filed with the City of Tumwater; and City of Tumwater has no obligation to pay premiums.

(4) The contractor's insurance policies contain a "cross liability" endorsement substantially as follows:

The inclusion of more than one Insured under this policy shall not affect the rights of any Insured as respects any claim, suit or judgment made or brought by or for any other Insured or by or for any employee of any other Insured. This policy shall protect each Insured in the same manner as though a separate policy had been issued to each, except that nothing herein shall operate to increase the company's liability beyond the amount or amounts for which the company would have been liable had only one Insured been named.

**Insurance Company(ies) Policy No. Effective Expires**

_____

_____

I,_____, hereby certify that I am an Authorized Representative of the above named insurance company(ies); that I have read the foregoing Certificate of Insurance and know the contents thereof; and that the policies of Insurance listed above provide the insurance coverage required by this Certificate of Insurance.

_____
Authorized Representative

_____
Type/Print Name

Subscribed and sworn to before me this _____day of _____, 20____.

_____

_____
Type/Print Name
Notary Public in and for the State of Washington
My commission expires: _____

The undersigned further certifies that the above signed is his authorized insurance representative.

_____
Contractor

_____
Type/Print Name

**2. COMPENSATION INSURANCE**

The following coverages are provided as indicated:

A. Workman's Compensation Act of the State of Washington
(Account No. _____)

B. United States Longshoremen's and Harborworker's Compensation Act:

YES ☐ NO ☐

**Insurance Company(ies) Policy No. Effective Expires**

_____

_____

I, _____, hereby certify that I am an Authorized Representative of the above named insurance company(ies); that I have read the foregoing Certificate of Insurance and know the contents thereof; and that the policies of insurance listed above provide the insurance coverage required by this Certificate of Insurance.

_____
Authorized Representative

_____
Type/Print Name

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

_____

_____
Type/Print Name
Notary Public in and for the State of Washington
My commission expires: _____

The undersigned further certifies that the above signed is his authorized insurance representative.

_____
Contractor

_____
Type/Print Name

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**Exhibit E-1**

**CITY OF TUMWATER**
**PERFORMANCE BOND**

KNOW ALL PEOPLE BY THESE PRESENTS:

We, the undersigned _____, ("Principal") and _____, the undersigned corporation organized and existing under the laws of the State of _____ and legally doing business in the State of Washington as a surety ("Surety"), are held and firmly bonded unto the City of Tumwater, a Washington municipal corporation ("City") in the penal sum of _____ _____ Dollars and no/100 ($_____) for the payment of which we firmly bind ourselves and our legal representatives, heirs, successors and assigns, jointly and severally.

This obligation is entered into pursuant to the statutes of the State of Washington and the ordinances, regulations, standards and policies of the City, as now existing or hereafter amended or adopted.

The Principal has entered into a Contract with the City dated _____, 2026 for the Brewery Wellfield Installation and Development Project**.**

NOW, THEREFORE, if and when the Principal, its heirs, executors, administrators, successors, or assigns shall well and faithfully perform all of the Principal's obligations under the Contract and fulfill all terms and conditions of all duly authorized modifications, additions, and changes to said Contract that may hereafter be made, at the time and in the manner therein specified; and shall indemnify and hold the City harmless from any damage or expense by reason of failure of performance as specified in the Agreement within a period of one (1) year after its final acceptance thereof by the City, then this obligation shall be void; but otherwise, if such performance obligations have not been fulfilled, this bond shall remain in full force and effect.

And the Surety, for value received, hereby further stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or to the work to be performed thereunder or the specifications accompanying the same shall in any way affect its obligation on this bond, and it does hereby waive notice of any change, extension of time, alterations or additions to the terms of the Contract or to the Work.

The Surety hereby agrees that modifications and changes may be made in terms and provisions of the Contract without notice to Surety, and any such modifications or changes increasing the total amount to be paid the Principal shall automatically increase the obligation of the Surety on this Performance Bond in a like amount, such increase, however, not to exceed twenty-five percent (25%) of the original amount of this bond without the consent of the Surety.

Within forty-five (45) days of receiving notice that the Principal has defaulted on all or part of the terms of the Contract, the Surety shall make a written commitment to the City that it will either: (a) cure the default itself within a reasonable time period, or (b) tender to the

City, the amount necessary for the City to remedy the default, including legal fees incurred by the City, or (c) in the event that Surety's evaluation of the dispute is not complete or in the event the Surety disputes the City's claim of default, the Surety shall notify the City of its finding and its intent, if any, to interplead. The Surety shall then fulfill its obligations under this bond, according to the option it has elected. Should Surety elect option (a) to cure the default, the penal sum of the Bond shall be reduced in an amount equal to the costs actually incurred by the Surety in curing the default. If the Surety elects option (b), then upon completion of the necessary work, the City shall notify the Surety of its actual costs. The City shall return, without interest, any overpayment made by the Surety and the Surety shall pay to the City any actual costs which exceed the City estimate, limited to the bond amount. Should the Surety elect option (c), the Parties shall first complete participation in mediation, described in the below paragraph, prior to any interplead action.

In the event a dispute should arise between the Parties to this Bond with respect to the City's declaration of default by the Principal, the Parties agree to participate in at least four hours of mediation in accordance with the mediation procedures of Washington Arbitration and Mediation Services - Tacoma ("WAMS"). The Parties shall proportionately share in the cost of the mediation. The mediation shall be administered by the Tacoma WAMS office, 3600 Port of Tacoma Road, Suite 304, Tacoma, WA 98424, www.usamwa.com. The Surety shall not interplead prior to completion of the mediation.

DATED this _____day of _____, 2026.

CORPORATE SEAL OF PRINCIPAL: [PRINCIPAL]

_____

By

_____

Type/Print Name

_____

Title

_____

Address

_____

CERTIFICATE AS TO CORPORATE SEAL

I hereby certify that I am the (Assistant) Secretary of the Corporation named as Principal in the within bond; that _____, who signed the said bond on behalf of the Principal, was _____ of the said Corporation; that I know his or her signature thereto is genuine, and that said bond was duly signed, sealed, and attested for and in behalf of said Corporation by authority of its governing body.

_____
Type/Print Name

_____
Secretary or Assistant Secretary

CORPORATE SEAL OF SURETY:

[SURETY]

By:_____
Attorney-in-Fact
(Attach Power of Attorney)

_____
Name of Person Executing Bond

_____

_____
Address

_____
Phone

APPROVED AS TO FORM:

_____
Karen Kirkpatrick, City Attorney

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**Exhibit E-2**

**CITY OF TUMWATER**
**PAYMENT BOND**

KNOW ALL PEOPLE BY THESE PRESENTS:

We, the undersigned _____, ("Principal") and _____, the undersigned corporation organized and existing under the laws of the State of _____ and legally doing business in the State of Washington as a surety ("Surety"), are held and firmly bonded unto the City of Tumwater, a Washington municipal corporation ("City") in the penal sum of _____ Dollars and no/100 ($_____) for the payment of which we firmly bind ourselves and our legal representatives, heirs, successors and assigns, jointly and severally.

This obligation is entered into pursuant to the statutes of the State of Washington and the ordinances, regulations, standards and policies of the City, as now existing or hereafter amended or adopted.

The Principal has entered into a Contract with the City dated _____, 2026 for the Brewery Wellfield Installation and Development Project**.**

NOW, THEREFORE if and when the Principal, its heirs, executors , administrators, successors, or assigns shall pay all persons in accordance with RCW 39.08, 39.12, and 60.28 including all workers, laborers, mechanics, subcontractors, and materialmen, and all persons who shall supply such contractor or subcontractor with provisions and supplies for the carrying on of such work, and all taxes incurred on said Contract under Titles 50 and 51 RCW and all taxes imposed on the Principal under Title 82 RCW in the manner and within the time period prescribed by the City, or within such extensions of time as may be granted under the Contract, this statutory Payment Bond shall become null and void, and if such payment obligations have not been fulfilled , this bond shall remain in full force and effect.

And the Surety, for value received, hereby further stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or to the work to be performed thereunder or the specifications accompanying the same shall in any way affect its obligation on this bond, and it does hereby waive notice of any change, extension of time, alterations or additions to the terms of the Contract or to the Work.

The Surety hereby agrees that modifications and changes may be made in terms and provisions of the Contract without notice to Surety, and any such modifications or changes increasing the total amount to be paid the Principal shall automatically increase the obligation of the Surety on this Performance Bond in a like amount, such increase, however, not to exceed twenty-five percent (25%) of the original amount of this bond without the consent of the Surety.

Within forty-five (45) days of receiving notice that the Principal has defaulted on all or part of the terms of the Contract, the Surety shall make a written commitment to the City that it will either: (a) cure the default itself within a reasonable time period, or (b) tender to the City, the amount necessary for the City to remedy the default, including legal fees incurred by the City, or (c) in the

event that Surety's evaluation of the dispute is not complete or in the event the Surety disputes the City's claim of default, the Surety shall notify the City of its finding and its intent, if any, to interplead. The Surety shall then fulfill its obligations under this bond, according to the option it has elected. Should Surety elect option (a) to cure the default, the penal sum of the Bond shall be reduced in an amount equal to the costs actually incurred by the Surety in curing the default. If the Surety elects option (b), then upon completion of the necessary work, the City shall notify the Surety of its actual costs. The City shall return, without interest, any overpayment made by the Surety and the Surety shall pay to the City any actual costs which exceed the City estimate, limited to the bond amount. Should the Surety elect option (c), the Parties shall first complete participation in mediation, described in the below paragraph, prior to any interplead action.

In the event a dispute should arise between the Parties to this Bond with respect to the City's declaration of default by the Principal, the Parties agree to participate in at least four hours of mediation in accordance with the mediation procedures of Washington Arbitration and Mediation Services - Tacoma ("WAMS"). The Parties shall proportionately share in the cost of the mediation. The mediation shall be administered by the Tacoma WAMS office, 3600 Port of Tacoma Road, Suite 304, Tacoma, WA 98424, www.usamwa.com. The Surety shall not interplead prior to completion of the mediation.

DATED this _____day of _____, 2026.

CORPORATE SEAL OF PRINCIPAL: [PRINCIPAL]

_____

By

_____

Type/Print Name

_____

Title

_____

Address

_____

CERTIFICATE AS TO CORPORATE SEAL

I hereby certify that I am the (Assistant) Secretary of the Corporation named as Principal in the within bond; that _____, who signed the said bond on behalf of the Principal, was _____ of the said Corporation; that I know his or her signature thereto is genuine, and that said bond was duly signed, sealed, and attested for and in behalf of said Corporation by authority of its governing body.

_____
Type/Print Name

_____
Secretary or Assistant Secretary

CORPORATE SEAL OF SURETY:

[SURETY]

By:_____
Attorney-in-Fact
(Attach Power of Attorney)

_____
Name of Person Executing Bond

_____

_____
Address

_____
Phone

APPROVED AS TO FORM:

_____
Karen Kirkpatrick, City Attorney

*This page intentionally left blank.*

*Contractor shall complete either Exhibit F – Retainage Bond to 3rd Party Depositary or Exhibit G – Retainage Bond to City of Tumwater*

## RETAINAGE BOND TO 3RD PARTY DEPOSITARY

I hereby elect to have the owner deposit the retained percentage for this contract, from time-to-time, as such retained percentage accrues and in accordance with RCW 60.28.011, 021, and 051.

I hereby designate _____ as the depositary for said funds, which shall be deposited in an interest earning account subject to joint control by owner and the contractor. All interest earned on said deposits shall belong to the contractor. If contractor fails to designate the depositary, then the owner designates _____, which is the owner's depositary under contract between said bank and the City of Tumwater.

I hereby further agree to be fully responsible for payment of all costs or fees incurred as a result of establishing said depository account and depositing the retained percentage as authorized by statute. The owner shall not be liable in any way for any costs or fees in connection therewith.

| | |
|---|---|
| _____ | _____ |
| Contractor | By |
| _____ | _____ |
| Type/Print Name | Date |

**Exhibit F**
(Page 2 of 2)

## CERTIFICATION FOR RELEASE OF CONTRACT RETAINAGE

Project Title:

I hereby certify that all work required by the above cited contract was completed on _____, and final acceptance by the City was granted on _____.

I also certify that no liens have been received within 60 days from the above date from any person, persons, mechanics, subcontractors or materialmen who has performed any work or provided any material of subject contract.

_____
Contract Manager

_____
Type/Print Name

_____
Department Director

_____
Type/Print Name

*Also, please find attached certifications by the applicable state agencies of the receipt of: 1) Washington State Business Taxes (Washington State Dept. of Revenue); 2) Industrial Insurance Premiums (State Dept. of Labor & Industries); and 3) Employment Security, Unemployment Insurance Premiums (State of Washington Employment Security Dept.).*

*Contractor shall complete either Exhibit F – Retainage Bond to 3rd Party Depositary or Exhibit G – Retainage Bond to City of Tumwater*

## RETAINAGE BOND TO CITY OF TUMWATER

KNOW ALL PERSONS BY THESE PRESENTS that we, the undersigned, _____, as principal ("Principal"), and _____, a Corporation organized and existing under the laws of the State of _____, as a surety Corporation, and qualified under the laws of the State of Washington to become surety upon bonds of Contractors with Municipal Corporations, as surety ("Surety"), are jointly and severally held and firmly bonded to the City of Tumwater ("City") in the penal sum of: _____ ($ _____) for the payment of which sum we bind ourselves and our successors, heirs, administrators or personal representatives, as the case may be.

A. This obligation is entered into in pursuant to the statutes of the State of Washington and the ordinances, regulations, standards and policies of the City, as now existing or hereafter amended or adopted; and

B. Pursuant to proper authorization, the Mayor is authorized to enter into a certain contract with the Principal, providing for the **Brewery Wellfield Installation and Development Project**, which contract is incorporated herein by this reference ("Contract"), and

C. Pursuant to State law, Chapter 60.28 RCW, the City is required to reserve from the monies earned by the Principal pursuant to the contract, a sum not to exceed five percent (5%), said sum to be retained by the City as a trust fund for the protection and payment of any person or persons, mechanic, subcontractor or materialmen who shall perform any labor upon such contract or the doing of such work, and all persons who shall supply such person or persons or subcontractors with provisions and supplies for the carrying on of such work, and the State with the respect to taxes imposed pursuant to Title 82 RCW which may be due from said Principal. Every person performing labor or furnishing supplies towards completion of said improvement or work shall have a lien on said monies so reserved, provided that such notice of the lien of such claimant shall be given in the manner and within the time provided in RCW 39.08.030 as now existing and in accordance with any amendments that may hereafter be provided thereto; and

D. State law further provides that with the consent of the City, the Principal may submit a bond for all or any portion of the amount of funds retained by the public body in a form acceptable to the public body conditioned upon such bond any proceeds therefrom being made subject to all claims and liens and in the same manner and priority as set forth retained percentages pursuant to Chapter 60.28 RCW; and

E. The Principal has accepted, or is about to accept, the Contract, and undertake to perform the work therein provided for in the manner and within the time set forth, for the amount of $_____; and

F. The City is prepared to release any required retainage money previously paid by the Principal prior to acceptance and successful operation and fulfillment of all other terms of said contract upon being indemnified by these presents,

NOW, THEREFORE, if the Principal shall perform all the provisions of the Contract in the manner and within the time period prescribed by the City, or within such extensions of time as may be granted under the Contract, and shall pay all laborers, mechanics, subcontractors and material, men or women, and all persons who shall supply the Principal or subcontractors with provisions and supplies for the carrying on of said work, and if the Principal shall pay to the State all taxes

imposed pursuant to Title 82 RCW which may be due from such Principal as a result of this contract then and in the event this obligation shall be void; but otherwise it shall be and remain in full force and effect.

And the Surety, for value received, hereby further stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or to the work to be performed thereunder or the specifications accompanying the same shall in any way affect its obligation on this bond, and it does hereby waive notice of any change, extension of time, alterations or additions to the terms of the Contract or to the Work.

The Surety hereby agrees that modifications and changes may be made in the terms and provisions of the Contract without notice to Surety, and any such modifications or changes increasing the total amount to be paid the Principal shall automatically increase the obligation of the Surety on this Retainage Bond in a like amount, such increase, however, not to exceed twenty-five percent (25%) of the original amount of this bond without consent of the Surety.

Within forty-five (45) days of receiving notice that the Principal has defaulted on all or part of the terms of the Contract, the Surety shall make written commitment to the City that it will either: (a) cure the default itself within a reasonable time period, or (b) tender to the City, the amount necessary for the City to remedy the default, including legal fees incurred by the City, or (c) in the event that Surety's evaluation of the dispute is not complete or in the event the Surety disputes the City's claim of default, the Surety shall notify the City of its finding and its intent, if any, to interplead. The Surety shall then fulfill its obligations under this bond, according to the option it has elected. Should Surety elect option (a) to cure the default, the penal sum of the Bond shall be reduced in an amount equal to the costs actually incurred by the Surety in curing the default. If the Surety elects option (b), then upon completion of the necessary work, the City shall notify the Surety of its actual costs. The City shall return, without interest, any overpayment made by the Surety and the Surety shall pay to the City any actual costs which exceed the City estimate, limited to the bond amount. Should the Surety elect option (c), the Parties shall first complete participation in mediation, described in the below paragraph, prior to any interplead action.

In the event a dispute should arise between the Parties to this Bond with respect to the City's declaration of default by the Principal, the Parties agree to participate in at least four hours of mediation in accordance with the mediation procedures of Washington Arbitration and Mediation Services - Tacoma ("WAMS"). The Parties shall proportionately share in the cost of the mediation. The mediation shall be administered by the Tacoma WAMS office, 3600 Port of Tacoma Road, Suite 304, Tacoma, WA 98424, www.usamwa.com. The Surety shall not interplead prior to completion of the mediation.

The parties have executed this instrument under their separate seals this _____ day of _____, 20____ the name and corporate seal of each corporate party hereto affixed, and these presents duly signed by its undersigned representatives pursuant to authority of its governing body.

CORPORATE SEAL OF PRINCIPAL: [PRINCIPAL]

By: _____

_____
Type/Print Name

Title: _____

Address: _____

_____

CORPORATE SEAL OF SURETY: [SURETY]

By: _____
Attorney-in-Fact
(Attach Power of Attorney)

_____
Type/Print Name

Title: _____

Address: _____

_____

**Exhibit G**
(Page 4 of 5)

CERTIFICATES AS TO CORPORATE SEAL

I hereby certify that I am the (Assistant) Secretary of the Corporation named as Principal in the within bond; that _____, who signed the said bond on behalf of the Principal, was _____ of said Corporation; that I know his or her signature thereto is genuine, and that said bond was duly signed, sealed, and attested for and in behalf of said Corporation by authority of its governing body.

_____
Secretary or Assistant Secretary

_____
Type/Print Name

I hereby certify that I am the (Assistant) Secretary of the Corporation named as Surety in the within bond; that _____, who signed the said bond on behalf of the Surety, was _____ of the said Corporation; that I know his or her signature thereto is genuine, and that said bond was duly signed, sealed, and attested for and in behalf of said Corporation by authority of its governing body.

_____
Secretary or Assistant Secretary

_____
Type/Print Name

APPROVED AS TO FORM:

_____
Karen Kirkpatrick, City Attorney

**Exhibit G**
(Page 5 of 5)

## CERTIFICATION FOR RELEASE OF CONTRACT RETAINAGE

Project Title:

I hereby certify that all work required by the above cited contract was completed on _____, and final acceptance by the City was granted on _____.

I also certify that no liens have been received within 60 days from the above date from any person, persons, mechanics, subcontractors or materialmen who has performed any work or provided any material of subject contract.

_____
Contract Manager

_____
Type/Print Name

_____
Department Director

_____
Type/Print Name

*Also, please find attached certifications by the applicable state agencies of the receipt of: 1) Washington State Business Taxes (Washington State Dept. of Revenue); 2) Industrial Insurance Premiums (State Dept. of Labor & Industries); and 3) Employment Security, Unemployment Insurance Premiums (State of Washington Employment Security Dept.).*

## Special Provisions

## DRAINAGE STRUCTURES, STORM SEWERS, SANITARY SEWERS, WATER MAINS, AND CONDUITS

### WELL CONSTRUCTION (New Section)

**Project Summary**

Drill, construct, and test at least two and potentially three production wells to a depth of approximately 400 feet by advancing 16-inch-diameter borehole to the final completion depth and completing the borings within a flowing artesian aquifer with 12-inch-diameter stainless steel wire-wrapped well screen and filter pack. The wells will be completed at the Tumwater Valley Golf Club at 4611 Tumwater Valley Drive SE, Tumwater, WA 98501 (**Figure 1**). All work and materials must conform to Chapter 173-160 Washington Administrative Code (WAC) Minimum Standards for the Construction of Wells Chapter 246-290 WAC Group A Public Water Supplies. The City's goal is to achieve a production capacity of at least 4,343 gpm, with at least 2 and no more than 3 wells.

The City will contract and manage the project and rely on RH2 Engineering, Inc. (Engineer) to provide technical support and observation of drilling, well installation, testing and recommendations for well design, installation, and testing.

There is no federal aid or federal funding included on this project.

Drilling of the 28-inch diameter surface seal may be performed using either cable tool or rotary methods . Drilling beneath the surface seal will be completed using fluid rotary methods to advance the borehole and facilitate casing, seal, and well completion requirements as follows. All wells will be completed using the same methods.

The Contractor will initially install a 28-inch diameter boring to a depth of 50 feet to create the well sanitary seal with a permanent 24-inch-diameter casing. The boring will then be continued with fluid rotary methods into the underlying sediments to install a permanent 18-inch casing to a depth of approximately 270 feet. The boring will then be drilled either with simultaneous advance of a 16-inch diameter casing to a maximum depth of approximately 400 feet or with reverse circulation mud drilling methods to advance a 16-inch diameter borehole. Either method must be able to control artesian pressure in the borehole and prevent uncontrolled discharge of groundwater or drilling fluids to shallower layers or at the surface at all times. An 80- to 100-foot-long stainless-steel wire-wrapped well screen will be installed in the aquifer between approximately 300 and 400 feet and completed with well screen with a sand filter pack.

The target aquifer at all well drilling locations exhibits artesian water pressure of approximately 12 Pounds per Square Inch (PSI) (as measured at the ground surface at nearby Well No. 39; see **Figure 2**) and will need to be controlled by the Contractor during drilling so as not to allow groundwater or drilling fluid discharge through the boring into shallower geologic units or to the surface outside of any casings.

After well screen installation, the well will be developed through use of a surge block, pumping, or other appropriate methods suitable for the aquifer materials and well design. Flowing artesian conditions are expected at all well locations.

Pumping tests will include an artesian flow test, 1-hour equipment test, 4-hour step-rate test, and a 24-hour constant-rate test at rates of up to 2,000 gpm. The Contractor will provide a test

pump, power source, piping, flow controls, and flow meters to route the water from the well to discharge areas as shown on **Figure 3**.

Water supply for the first two wells is available at Well No. 39 which yields an artesian flow rate of 180 gpm; Well No. 39 is shown on **Figure 2**. Potable water for the third optional well is available at the nearby maintenance building as shown on **Figure 2**.

Electrical power is not available at any of the well sites.

Work will take place at the Tumwater Valley Golf Club during regular business operations, including regularly scheduled golf tournaments and recreational activities. The Contractor will be responsible for protecting crew and equipment from errant golf balls. In the event that any damage arises from errant golf balls, the Contractor shall bear full responsibility for all resulting costs and shall indemnify, defend, and hold the Contracting Agency harmless from any and all expenses, claims, losses, or liabilities attributable thereto.

Several nearby wells are completed in the same aquifer and the water well reports for these wells are included with these documents to assist bidders with understanding the conditions to be expected during drilling of the well (**Appendix B**).

## Contractor Expectations

All work incidental and necessary for the completion of the well drilling and testing shall be performed by the Contractor.

The Contractor will be responsible for coordinating required inspections by the City, providing advance notice as required later in this section to minimize construction delays. The Contractor must comply with the requirements of Chapter 173-160 Washington Administrative Code (WAC) and obtain drilling permits for the Project.

The Contractor is solely responsible for all elements of site safety. Inspections performed by the City are only to monitor and record that the Project is complying with and construction is consistent with the design intent. The Contractor is solely responsible for damage to utilities or property stemming from improper use of the site, inadequate locates, or deviation from these specifications.

The Contractor shall be responsible for managing, coordinating, and overseeing its subcontractors, suppliers, manufacturers' representatives, or any other persons involved with the Project. The Contractor shall have a competent representative familiar with the Project during any activities performed onsite.

The Contractor recognizes that, the City's Department of Parks and Recreation is organized and exists for the purpose of maintaining the golf course facilities for the use and enjoyment of the general public. The Contractor and its employees will devote their best efforts toward rendering courteous interactions with the public as though the Contractor and its employees and subs were employees of the City, with a view of adding to the enjoyment of the patrons of this recreational facility.

The Contractor shall operate and conduct daily operations in a business-like manner, and will not permit any acts or conduct on the part of the Contractor's employees that would be detrimental to the City's image and operation of the golf course.

The Contractor shall provide and pay for all labor, materials, equipment, tools, construction equipment, machinery, fuel, and other facilities and services as necessary for the proper execution and completion of the Project.

The Contractor acknowledges that he/she knows the nature and location of the Project; the general and local conditions, particularly those bearing upon availability of transportation, disposal, handling and storage of materials, availability of labor, water, electric power, roads, and uncertainties of weather, road conditions, access, or similar physical conditions at the site; the conformation and conditions of the ground; the character of equipment and facilities needed preliminary to and during the progress of the Project; and all other matters that can in any way affect the Project or the cost thereof under the Contract. The Contractor further acknowledges that he/she knows the character, quality, and quantity of surface and subsurface materials to be encountered from inspecting the site, all exploratory work done by the City, and information presented in this Project summary.

It is not anticipated that dangerous or hazardous materials will be encountered during drilling operations. Certified health and safety training is thus not required. However, it is expected that the Contractor will follow all applicable OSHA and WISHA regulations and that all personnel at the project site will wear clothing and equipment appropriate to heavy drilling operations.

All miscellaneous trash such as lunch material, cement, or sand bags will be hauled from the site by the Contractor and disposed of in a responsible manner. A litter bag shall be maintained at the drilling site.

**Decontamination**
All drilling equipment, tools, casings, and other downhole components must be pressure-washed before use in the bore hole, prior to mobilization to the Project site. No chemical cleaning agents will be allowed.

The Contractor shall use the minimum amount of hydrocarbon products required during drilling and construction of the well. Only hydrocarbon-free thread compound such as "Green Stuff" and "Well-Guard" shall be used on threaded joints that enter the well.

The Contractor shall maintain on site a 5-gallon bucket of clean water with a 50 ppm chlorine concentration and a brush for disinfection of tools. If the drill bit or other tools are allowed to contact soils, grasses, or other materials where potential contaminants may be introduced to the well, then the tools will be properly disinfected prior to any further use in the well.

# Project/Site Conditions

**Information on Site Conditions**
Work will take place on the Tumwater Valley Golf Club during normal business hours. Under normal circumstances, the movement of drilling supplies from the staging area to the site 26-01 and 26-02 drilling pads shall be limited to the first 2 hours of daylight each day. Contractor shall be aware of golfing activities during work hours, including errant golf balls. All information obtained from the City regarding site conditions, subsurface information, groundwater

elevations, or other information contained in these Specifications is offered as supplementary information only. The City assumes no responsibility for the completeness or interpretation of such supplementary information.

If the contractor and its employees and subs feel that a golfer is intentionally impeding their ability to perform their work, they shall notify designated Tumwater Valley Golf Club staff, who will resolve the issue with the golfers, as opposed to trying to resolve the issue themselves.

**No Working Dates**
Due to previously scheduled and anticipated Golf Club events, no drilling or testing activities, operation of equipment, or use of the access route on the golf course by Contractor vehicles, shall be allowed on the following dates.

| Date | Day of the Week |
|---|---|
| April 19, 2026 | Sunday |
| April 20, 2026 | Monday |
| May 11, 2026 | Monday |
| May 12, 2026 | Tuesday |
| May 18, 2026 | Monday |
| May 19, 2026 | Tuesday |
| May 20, 2026 | Wednesday |
| May 28, 2026 | Thursday |
| June 5, 2026 | Friday |
| June 19, 2026 | Friday |
| June 22, 2026 | Monday |
| June 26, 2026 | Friday |
| June 27, 2026 | Saturday |
| July 15, 2026 | Wednesday |
| July 18, 2026 | Saturday |
| July 23, 2026 | Thursday |
| August 24, 2026 | Monday |
| August 25, 2026 | Tuesday |
| August 26, 2026 | Wednesday |
| August 27, 2026 | Thursday |
| September 30, 2026 | Wednesday |
| October 12, 2026 | Monday |
| October 14, 2026 | Wednesday |
| October 15, 2026 | Thursday |
| April 18, 2027 | Sunday |
| April 19, 2027 | Monday |
| May 10, 2027 | Monday |
| May 11, 2027 | Tuesday |
| May 17, 2027 | Monday |
| May 18, 2027 | Tuesday |
| May 19, 2027 | Wednesday |
| May 27, 2027 | Thursday |
| June 4, 2027 | Friday |
| June 18, 2027 | Friday |
| June 21, 2027 | Monday |

| | |
|---|---|
| June 25, 2027 | Friday |
| June 26, 2027 | Saturday |
| July 14, 2027 | Wednesday |
| July 17, 2027 | Saturday |
| July 22, 2027 | Thursday |
| August 23, 2027 | Monday |
| August 24, 2027 | Tuesday |
| August 25, 2027 | Wednesday |
| August 26, 2027 | Thursday |
| September 29, 2027 | Wednesday |
| October 11, 2027 | Monday |
| October 13, 2027 | Wednesday |
| October 14, 2027 | Thursday |

**Access Route**

One access route to the 26-01 and 26-02 well locations is described as follows: After passing by the gate, cross the E Street SE Bridge, turn right before crossing the railroad tracks and continue south to the locked gate at the northeast corner of the driving range. From there continue south on the gravel road, across the concrete panels through the stormwater ditch, and along the northeast side of the driving range. Before the gravel road turns west is the designated laydown area where the contractor will be allowed to lay down geomembrane and gravel to build a pad to store materials, vehicles, and supplies (**Figure 4**). The areas south and west of the laydown area will be considered being on the golf course, with respect to restoration bid items.

There is a corner identified on the **Figure 4** as, “Tight Turn” that likely will not be able to be navigated as a forward turn. Instead, longer vehicles will need to be backed from the laydown area, past the Tight Turn, and then driven forward using the golf cart path. No trees may be removed from the vicinity of the Tight Turn during this project.

**Working Area**

The working area for this project includes access routes, laydown area, drilling pads, source water pathways, and testing discharge pathways. Each one will be discussed here as well as improvements that will need to be made by the Contractor to limit rutting of grass.

<u>Access</u>

Golf Cart Path – The golf cart path along the 18$^{th}$ and 17$^{th}$ holes is constructed of asphalt and is identified as the access route to well sites 26-01 and 26-02. The asphalt path is approximately 8 feet wide and is likely too narrow to fully support large vehicles. For this project, the working area is designated as a 14-foot-wide corridor following the golf cart path. The Contractor will be responsible for placing and removing either geomembrane fabric overlain by gravel, or steel plates, to support one set of wheels while using the asphalt golf cart path to support the other set. Any material added shall be added to the side of the cart path that is opposite the fairway, except for any areas by trees adjacent to the cart path, in which case, the added material may be placed on the fairway side at that location. No trees shall be removed or material excavated as part of this access route enhancement. See attached **Figure 5** for details.

Maintenance Shop Path – The maintenance shop path is a 10-foot wide asphalt road that extends from the Pro Shop to the Golf Course Maintenance Shop near the potential additive 26-03 site. This access route is assumed to be sufficient as-is, and able to be driven without

temporary improvements to the side of the path. For site 26-03, the working area for access is designated as the existing asphalt path. No travel/work is permitted outside of the existing asphalt path.

Well Sites

Drilling Pads – Drilling pads shall consist of a permeable geomembrane fabric overlain by gravel (see **Figure 5**). Construction and removal of this shall be the responsibility of the Contractor. These pads shall be large enough to complete the job, but not larger than required (approximately 10,000 to 15,000 square feet per drilling pad).

The drilling pad for Site 26-01 may run to the edge of the golf cart path, provided the golf cart path usage by golfers is not impacted. The drilling pad for Site 26-02 may run to the edge of the golf cart path, provided the golf cart path usage by golfers is not impacted.

The drilling pad for Site 26-02 will be located within the long rough north of the 17th green and powerlines (**Figure 4**). The drilling pad for Site 26-03, if needed, may run to the edge of the maintenance shop path, so long as the maintenance shop path usage is not impacted.

The drilling pad for Site 26-03 will be located west of the maintenance shop within the long rough (**Figure 4**). The drilling pad for Site 26-03, if needed, may run to the edge of the maintenance shop path, so long as the maintenance shop path usage is not impacted.

Source Water Pathways

The pathways needed for the routing of water from either Well No. 39 (Sites 26-01 and 26-02) or the water source at the maintenance shop (Site 26-03) in pipe or hose shall be included in the working area (**Figure 2** and **Figure 3**).

Testing Discharge Pathways

The routing of discharge pipe or hose for water well testing shall be included in the working area (**Figure 2** and **Figure 3**).

**Protection of Asbestos Cement Water Line**

The City has an 8-inch diameter asbestos cement water line that crosses the golf course running west-southwest to east-northeast between the 26-01 and 26-02 sites. The rough location is shown on **Figures 2, 3, and 4**. This water line will be located and marked by the City and the Contractor shall install vehicle-grade steel plate over the water line anywhere its vehicles shall cross it. If damage to the water line occurs by driving over it off of the steel plates, the cost of repair (performed by the City) shall be borne by the Contractor.

**Drilling Location**

The specific drilling locations will be staked in the field by the City before drilling commences. Well locations are generally shown on **Figure 2** and **Figure 3**.

**Water Source**

Water used for drilling activity will be available from the 12-inch diameter side port of Well No. 39 that can be opened and shut via a butterfly valve. Artesian flow through the side port at the wellhead was 180 gpm in 2018. Well No. 39 is located on the east side of the 17th fairway approximately 300 feet southeast from the drilling location 26-01 and 600 feet southeast from the drilling location 26-02 (**Figure 2**). Static artesian pressure in the Well No. 39 wellhead is approximately 10 to 12 pounds per square inch. Water will be available from the golf course

maintenance facility for use during drilling of the optional third well (**Figure 2**). Water usage from these sources will not be charged to the Contractor.

**Solids and Fluids Management**
All solids and fluids generated from drilling activities shall be managed by the Contractor in the drilling working limit (**Figure 3**). Solids will be transported off site for disposal by the Contractor. Drilling fluids and turbid groundwater from development will be filtered before discharge to the ground at the turbid water discharge areas (**Figure 3**). From these areas, water will be permitted to allow sediment to settle. If the areas are not sufficient to remove sediment and turbidity before infiltrating or discharging to the stormwater catch basin, the Contractor shall employ additional filtration measures such as Dirtbags, silt fences, and straw wattles as part of the Well Development Bid Item. Water with turbidity exceeding the water quality standards (Chapter 173-201A – water with turbidity that is 5 NTU or greater over background when background is 50 NTU or less, or a 10 percent increase in turbidity when the background turbidity is more than 50 NTU) shall not be allowed to reach the catch basin and directly discharge to the Deschutes River.

All clean groundwater from well testing at locations 26-01 and 26-02 will be discharged to the catch basin located approximately 1,100 feet southeast from the 26-02 well location. The pipeline route is generally shown on **Figure 2**. All clean groundwater from well testing at location 26-03 will be discharged to the irrigation pond as shown on **Figure 2**, which is a distance of approximately 500 feet.

**Security Access**
The site is on the Tumwater Valley Golf Club, which is owned by the City. Access to the 26-01 and 26-02 site is only through the locked gate (combination lock) at the E Street Bridge (approximately 4601 Tumwater Valley Drive SE) and the locked gate (key) accessing the northeast corner of the driving range (**Figure 4**). The City will provide the contractor with combinations and/or keys so that they can access the site. Access the 26-03 site following path to the Golf Club maintenance building from the vicinity of the pro shop (**Figure 3**).

**Security Fencing**
The Contractor shall be responsible for providing temporary security fencing to surround the well drilling site. Fencing should also provide protection from golf balls. The Contractor shall be responsible for securing the access gates after each entry and exit and at the end of each workday.

**Storage of On-site Materials**
Materials shall be stored to ensure the preservation of their quality and fitness for work. When considered necessary, they shall be placed on wooden platforms or other hard, clean surfaces (not on the ground), and/or they shall be placed under cover. Stored materials shall be located to facilitate prompt inspection. The Contractor is responsible for damage or loss of stored equipment, tools, or materials. Hazardous materials and materials that constitute a potential threat to aquifer contamination shall <u>not</u> be stored at the Site. This includes fuel oils, hydraulic fluid, and solvents that, if required, must be moved onto the Site as they are consumed and must not be stored. The extent of the drilling working limit, as shown on **Figure 3**, includes the areas to be used for materials storage

**Well, Aquifer, and Site Protection**
The Contractor shall conduct all operations in such a way as to prevent any destruction, scarring, or defacing of the drilling site, or contamination of the drill site and the well. In addition,

the Contractor shall conduct all operations in such a way to prevent injury to individuals working on or in the vicinity of the well, such as golfers, golf course staff and other users of the golf course facilities. Every effort will be made to present an orderly appearance at the site while drilling operations are under way.

This item of work includes protection of existing improvements such as asphalt cart paths, maintenance road, gravel access road, and golf course fairways, greens, green fringes and landscapes and/or restoration of any disturbed or damaged surface to match its original condition or better. Greens and green fringes are to be protected from any and all damage.

The Contractor shall use special precautions to protect the well and the well site from all sources of hydrocarbons and other contaminants.

All spills and leaks shall be immediately contained, reported, and cleaned up as required by state and local regulations and Washington State Department of Ecology (Ecology) guidelines. Spills and leaks cannot be the cause for claims of delay by the Contractor. Upon detection of a chemical leak, the Contractor shall immediately stop work and correct the leak, contain the spill, and remove the contaminated material from the Site for proper disposal at the Contractor's expense. The Contractor shall over-excavate the contained site at least 2 feet in all directions to confirm that the spilled material has not penetrated further. Sampling and analysis of the soil in the excavated area may be required for confirmation at the Contractor's expense.

The Brewery Wellfield's existing nearby potable water well (Well No. 39) and subsurface utilities (such as the golf course irrigation mains) must be protected at all times. The Contractor is responsible for protecting aquifer water quality from drilling and testing activities during the entire construction phase and should take all means necessary to protect the water quality. This shall include, but is not limited to, immediate spill containment and cleanup if it occurs during construction, installation and maintenance of temporary erosion and sedimentation control devices, and all other work necessary to protect the water quality of the well.

The Contractor shall install a plastic barrier beneath all stationary equipment that contain hazardous chemicals. This includes, but is not limited to, drill rigs, backhoes, service vehicles, generators, portable engines, and hydraulic jacks. Plastic tarps shall be seamless and have a 6 to 10 mil (0.006 to 0.010 inch) minimum thickness. A 4-inch curb shall surround the plastic barrier for containment. Upon completion of the production well, the plastic barrier shall be disposed of in accordance with applicable federal and state regulations.

The Contractor shall have a spill control kit onsite at all times. At a minimum, the pads, pillows, and booms in the kit will have the ability to absorb at least 20 gallons of fuel or oil (e.g., diesel, gasoline, motor oil, etc.).

The Contractor's work will be performed on a site that is owned by the City, and the Contractor shall not unreasonably encumber the site during this construction. The following limitation shall be in effect during the duration of this contract:

1. Do not drive construction equipment over property not owned by the City and included on the access route.
2. Minimize the area of construction disturbance.
3. Construction shall be within the limits shown on the Plans and as marked in the field. The Contractor shall not work outside of these limits.

The Contractor shall ensure that the safety and quality of the drinking water is maintained. The Contractor shall defend, indemnify, and hold the City harmless from all damages, injury, costs, losses and expense, including consequential damages, suffered by the City resulting from the Contractor's acts or omissions or defects in the Work. This indemnity shall expressly include damage to Brewery Wellfield's existing Well No. 39 and its respective property and aquifer, collectively referred to as the "Well." In the event of material damage to the Well and in addition to all other remedies, the City shall have the option to require the Contractor, at the Contractor's sole expense to: 1) repair the damaged portion of the Well to a condition equal to or better than the pre-existing condition when the Contractor took possession; 2) replace or restore the damaged portion of the Well if, at the City's discretion, the damage cannot be repaired; or 3) pay the City the actual cost of replacing or restoring the damaged portion of the Well.

The Contractor must adhere to all requirements of federal, state, and local statutes and regulations dealing with pollution, and follow all applicable OSHA and WISHA regulations for Project-related work.

**Construction Vehicles**
Wherever construction vehicle access routes intersect paved roads, provisions must be made by the Contractor to minimize the transport of sediment onto the paved road. The Contractor shall remove all dirt, mud, rocks, vegetation, and other deleterious material from all construction equipment prior to leaving the site. This may include spray washing, sweeping, or other physical methods as necessary to remove materials.

If sediment or other debris is transported onto a paved road surface, the road shall be cleaned thoroughly by the end of the work day. Debris shall be removed from roads by shoveling or sweeping. Street washing shall be allowed only after debris has been removed in this manner.

**Restroom Facilities**
The Contractor shall provide and maintain their own portable restroom facilities.

**Noise Control**
The Contractor shall take precautions to reduce the noise level from work activities. All work required to be performed by the Contractor shall normally be done between the hours of 7:00 a.m. and 8:00 p.m. local time, Monday through Friday. The Contractor shall provide a minimum 3 working day notice to the City representative if, at any time, it becomes necessary or the Contractor desires to work at times other than those specified herein or as approved in advance by the City. Approval of any proposed alternative work schedule shall be at the sole discretion of the City. If approved for work on Saturday and Sunday, all work required to be performed by the Contractor shall normally be done between the hours of 9:00 a.m and 8:00 p.m. local time.

Continuing operation of the constant-rate pumping test outside of the identified work hours is permissible.

**Site Restoration**
The Contractor shall use the utmost care in executing the well drilling, development, and testing to disrupt as little of the job site as necessary. The Contractor shall use only that area designated by the City as the working area limits (**Figures 3** and **4**). Temporary improvements for site access and restoration are detailed in **Figure 5**. Upon completion of construction, temporary improvements for the site access and drilling pads are to be removed and stockpiled

by the Contractor. Drilling pads shall be restored to preconstruction condition by the Contractor. Disturbed landscaping adjacent to the cart path shall be restored by the City.

If the Contractor damages the golf course outside of the working area limits, the Contractor shall be responsible for paying the City of Tumwater Parks and Recreation restitution costs to completely repair any damage caused by the Contractor. The restitution costs will be provided to the Contractor and withheld from payment to the Contractor under Bid Item No. 1 prior to project closeout.

# Well Construction

**General**
The Contractor must complete the project with a State of Washington licensed well driller with a valid Washington State Water Well Construction and Operator's License under Chapter 18.104 Revised Code of Washington (RCW).

The Contractor shall meet or exceed all requirements of Chapter 18.104 RCW – Water Well Construction, Chapter 173-160 WAC – Minimum Standards for Construction and Maintenance of Wells, and Chapter 173-162 WAC – Regulation and Licensing of Well Contractors and Operators.

The Contractor shall submit and pay for the well notices of intent to Ecology prior to mobilization, as specified in WAC 173-160-151.

**Required Inspections and Notification**
The City and Engineer will be in the field part-time during drilling activities. The Engineer will observe the drilling activities for compliance with this contract summary, manage sampling activity, and design the water production well.

The Contractor must contact the City and Engineer at the stages of construction listed later in this section for the purpose of job inspection. No work shall be performed by the Contractor on the next stage of work until such inspection has been made for the items below. The Contractor shall notify the City at least 24 hours prior to each of the required inspections to ensure that the City and Engineer will be available to conduct the inspection. Inspection of each item by the Engineer is required before proceeding to a subsequent stage of the Contract. A list of required inspections is as follows:

1. Artesian Well Sealing Plan, as specified under WAC 173-160-251, must be provided to the City prior to initiation of construction. This plan shall include a mitigation plan for inadvertent uncontrolled release of groundwater or drilling fluids at the wellhead, which describes how the artesian head may be controlled and how the uncontrolled fluids would be contained.
2. Confirmation of drilling locations after staked by the City
3. Mobilization/Setup – The Engineer shall approve drill rig working area setup and drill cutting containment prior to beginning any drilling activities.
4. Well Seal Depths – The Engineer shall be onsite to confirm the sanitary seal and well seal depths.
5. Drilling progress – The Engineer will periodically inspect drilling activities and must be present at the maximum depth reached for each casing diameter.
6. Screen Installation and Development – The Engineer will be onsite to inspect the well screen assembly prior to installation. The well screen assembly shall be constructed by the Contractor based on the design that will be provided by the Engineer. The Engineer will observe the installation of the screen, removal of drilling fluid from the casing, and development of the screen.
7. Pumping Tests – The Engineer will be onsite to observe the entire artesian flow test, the entire equipment check pumping test, the entire step-rate pumping test, and the start and end of the constant-rate pumping test.
8. Plumbness and Alignment Test - The Engineer will be onsite to observe the testing.
9. Video Inspection – The Engineer will be onsite to observe the video inspection.

The City and Engineer will have the authority to direct adjustments to these Specifications as the Work proceeds as conditions may require. In general, it is assumed that this Work will be an extension of the scope defined in this Contract and will be paid under the Bid Item descriptions in the Measurement and Payment Section.

## Well Casing

Each section of the permanent drilling casing shall be new, black steel (ASTM A53 Grade B) seamless pipe when mobilized to the job site. The casing shall be sufficient to support the loads occurring during drilling and at the completion depth.

Each casing section shall be pressure washed prior to installation below the ground surface. This includes any pipe used as part of the well screen assembly for the riser, blank sections, and tailpipe.

### 24-inch Casing

All 24-inch casing shall have a minimum wall thickness of 0.375 inches, an outside diameter of 24.0 inches, and a weight not less than 94.62 pounds per foot.

### 18-inch Casing

All 18-inch permanent casing shall have a minimum wall thickness of 0.375 inches, an outside diameter of 18.0 inches, and a weight not less than 70.59 pounds per foot.

### 16-inch Casing

All 16-inch permanent casing shall have a minimum wall thickness of 0.375 inches, an outside diameter of 16.0 inches, and a weight not less than 62.58 pounds per foot.

### 12-inch Casing

All 12-inch casing shall have a minimum wall thickness of 0.375 inches, an outside diameter of 12.0 inches, and a weight not less than 49.56 pounds per foot.

## Centralizers

Centralizers shall be either welded in place or attached with a stainless-steel clamp and stainless-steel screw.

## Welding Electrodes

Either E312-16 (AWS-ASTM Classification) or E309-16 electrodes shall be used for joining the low carbon steel casing to the 304 Stainless Steel Well Screen. Type E308-15 or E308-16 electrodes shall be used to weld stainless steel to stainless steel.

## Well Screen Assembly

The well screen utilized shall be a wire-wrapped, continuous slot, Hi-Flow (Hi-Q), well screen manufactured from Type 304 Stainless Steel by Johnson, or equivalent. The wire-wrap shall be of a triangular cross-section, and the longitudinal rods shall have a circular cross-section. The well screen construction shall be sufficient to support the loads at the completion depth. The well screen tailpipe and riser shall be new, black steel (ASTM A53 Grade B) seamless pipe.

## Casing Shoes

The lower end of well casing installed concurrent with drilling shall be fitted with a new casing shoe of the materials and a configuration required to prevent damage or distortion to the casing

during well drilling. The shoe shall have a beveled and tempered cutting edge of forged, cast, or fabricated metal, as required by the drilling method and subsurface soil conditions.

**Grout Materials**
Neat Cement Grout. Portland Cement Types I, II, III, or high alumina cement mixed with not more than 6 gallons of clean water per bag of cement (1 cubic foot or 94 pounds). The grout shall contain 5-percent bentonite to prevent shrinkage.

**Pea Gravel**
Pea gravel shall consist of naturally occurring subrounded granular material. It shall be free from various types of wood waste or other extraneous or objectionable materials. It shall have such characteristics of size and shape that it will not compact readily and shall meet the following specifications for grading:

| | Percent Passing by Weight | |
|---|---|---|
| Sieve Size | Minimum | Maximum |
| 1/2" | 100 | 100 |
| 3/8" | 85 | 100 |
| U.S. No. 4 | 10 | 30 |
| U.S. No. 8 | 0 | 10 |
| U.S. No. 16 | 0 | 5 |
| U.S. No. 200 | 0 | 0 |

**Bentonite**
Granular bentonite, if used as a sealing material, shall be composed of dry, medium-size bentonite chips such as Enviroplug. Powdered bentonite, if used to make grout or drilling mud, shall be provided in new, unopened sacks. Compressed bentonite pellets will not be allowed.

**Rotary Drilling Fluid Additives**
Drilling fluids shall consist of potable water, bentonite, and any additives to improve performance in viscosity, dispersion, density, etc. Additives shall meet AWWA well drilling material specifications in accordance with WAC 173-160-214 and WAC 173-160-216.

## Drilling Activities

**Drilling**
The well shall be completed using rotary methods over the entire depth of 400 feet. Reverse circulation with water as the drilling fluid and simultaneous casing advance to control artesian pressure, or reverse circulation with drilling mud that is sufficiently densified to control artesian pressure are allowed. The sanitary seal may be installed with cable tool drilling to install the permanent 24-inch diameter casing cemented into a 28-inch diameter borehole.

All drilling must minimize the potential for comingling of sediment from different depths, prevent cross-connection of aquifer zones, prevent sand heave into the boring, and control artesian conditions per the Contractor’s Artesian Well Sealing Plan.

The contractor must provide representative sample collection over the depth of the well to enable accurate well screen design.

The Contractor must provide a drilling rig with sufficient capability to reach the desired depths. The drilling operations shall allow any casing strings installed in conjunction with drilling to be withdrawn at any time, and the performance of any and all other work required.

Sanitary Well Seal. The Contractor shall construct a minimum 28-inch diameter boring to install and cement in a permanent 24-inch-diameter casing to create a well sanitary seal to a depth of approximately 50 feet.

The Contractor shall advance the sanitary seal boring to a depth of at least 40 feet but no more than 60 feet; the Contractor shall identify the termination depth of the temporary casing with concurrence of the Engineer. The Contractor shall collect representative samples of aquifer materials during drilling. For bidding purposes, 50 feet is assumed.

The Contractor shall install and cement in place a 24-inch-diameter casing at a depth of approximately 50 feet.

Well Seal. The Contractor shall then continue drilling the boring to a depth of approximately 270 feet and install a permanent 18-inch diameter casing in the boring.

The Contractor shall drill nominally 22-inch diameter boring using drilling stabilizing fluids to a depth of approximately 270 feet and collect representative samples of aquifer materials.

The Contractor shall install permanent 18-inch casing in the borehole and cement in place, filling the annulus between the borehole and the 18-inch casing with neat cement grout. The combinations of casing and cement shall be sufficient to prevent artesian flow from passing upward outside the 18-inch and 24-inch-diameter casings.

Artesian Aquifer Drilling. After the sealing material has cured, the Contractor shall advance a continuously drilled boring from approximately 270 feet to a total depth of approximately 400 feet. The Contractor shall either advance a 16-inch diameter casing or a 16-inch diameter densified drilling fluid (mud) borehole while drilling to approximately 400 feet and collect representative samples of aquifer materials. The final completion depth will be determined by the Engineer with Contractor concurrence. The Engineer will prepare a well completion design based on review of representative samples and laboratory analysis of soil grain size distribution. The well completion design will be made with Contractor concurrence.

The Contractor will install a well assembly with stainless-steel wire-wrapped well screen within the 16-inch casing or borehole. The well will be completed as a stainless-steel wire-wrapped well screen assembly with a sand filter pack and riser. If used for drilling, the 16-inch casing will be pulled back to expose the well assembly and trimmed as it is pulled back. The entire 16-inch casing may be removed once the well screen assembly and filter pack are installed.

**Figure 6** shows a schematic of the anticipated well construction.

Static water level in the borehole shall be measured and recorded by the Contractor every morning before beginning the day’s work, or as directed by the City. When the well becomes flowing artesian in nature, only documentation of that fact will be required for those days, unless the borehole is stabilized with dense drilling fluid.

**Material Sampling**
The Contractor shall collect representative samples directly from the rotary discharge. The Contractor shall take care to collect samples that represent both the fine-grained fraction and the coarse-grained fraction of the formation penetrated.

Samples shall be collected every 10 feet from ground surface to a depth of 270 feet and every 5 feet from a depth of 270 to 400 feet. Samples shall also be taken every time the soils change character and/or composition. The Contractor shall retain samples either in 1-quart, wide-mouth clear jars with screw caps, or in heavy-duty sealable clear polyethylene bags. The Contractor shall label each sample with the project site name (TUM 26-0#), the depth, and the date. Samples shall remain onsite in a waterproof container and available for inspection by the City.

**Installation of Steel Casing**
The borehole shall be stabilized with drilling fluid to advance the borehole and allow installation of the well casing, if used, and the well assembly. The drilling fluid and methods must be designed to resist artesian pressure in the borehole. The drilling fluid must be designed to support complete removal during well development.

Each casing joint shall be butt-welded to the casing string. Casing shall be prepared for welding by beveling the pipe ends at approximately 35 degrees. All welds shall be fully penetrating so that the entire beveled end flat area is filled with weld bead. All joints shall be water tight.

Welds shall be full, continuous, running welds, the full thickness of the pipe wall, and shall be in accordance with applicable standards of the American Welding Society. When joining low carbon steel casing to stainless steel screen for the well assembly, a 1-foot section of extra heavy wall low carbon steel pipe shall be installed between the standard wall low carbon steel casing and the stainless steel.

**Sealing Unused Portion of Boring**
If it is determined that all or a portion of the boring will not be used as part of the final well, the Contractor shall seal the unused portions of the borehole using bentonite per WAC 173-160221. The Contractor shall place the bentonite from the bottom of the boring to the specified depth in one continuous operation starting at the bottom and moving upward, making sure that the bentonite does not bridge and the seal is free of voids. Pea gravel shall be used to form a firm surface for placement of the bottom of the well screen assembly.

**Drilling Solids and Fluids Containment and Disposal**
The Contractor shall control discharge of sediment, drilling fluids and groundwater produced or used during drilling activities. The Contractor will be responsible for capturing and managing any sediment produced, containing it, and transporting and disposing of it offsite at an approved facility. The Contractor must collect all excavated drilling solids and drilling fluids within a containment system and will not excavate a spoils pit at this site.

**Fluid Containment and Disposal**
Drilling fluid removed from the well during development shall be contained and removed from the drilling site. Groundwater removed from the well during development shall be filtered if necessary and dispersed within the turbid water disposal area (**Figure 3**).

The Contractor may provide above-ground storage, straw bales, or wattles to retain development water until such time as the sediment can settle onto the surface of the disposal area. If water does not infiltrate and natural filtration does not reduce the turbidity of the water

below water quality standards (Chapter 173-201A; water with turbidity above 5 NTU or greater over background when background is 50 NTU or less, or a 10 percent increase in turbidity when the background turbidity is more than 50 NTU). If water does not infiltrate and natural surface filtration does not reduce the turbidity of the water below water quality standards before flowing into the stormwater system at the disposal area, the Contractor must remove sediment from the discharge to meet water quality standards before releasing it to the disposal area.

**Well Screen Design**
The Engineer shall obtain representative soil samples from the Contractor and will submit the samples to a soil laboratory for grain-size analysis. The Engineer shall present the screen design to the Contractor within ten (10) working days after the Engineer has received the soil samples from the Contractor. This delay is to be expected and shall not be construed as Standby Time. The well screen assembly design shall consist of the riser pipe, well screens, blank sections, tailpipe with bottom, centralizers, filter pack material , and borehole backfill materials (bentonite and/or pea gravel if used). It is assumed that the Contractor will require ten (10) working days for the order, delivery, and fabrication of the well screen. The Contractor must provide a written request with documentation supporting the request for additional time, in excess of the allotted ten (10) working days, to the Engineer at least two (2) days prior to the end of the allotted time.

**Installation of Well Screen Assembly**
The Contractor shall fabricate the well screen assembly consistent with the well screen assembly design provided by the Engineer.

Well backfill materials may be placed in the deepest portion of the borehole with a minimum of one foot of pea gravel at the top of the backfill for placement of the bottom of the well screen assembly.

The Contractor shall install the well screen assembly directly in the advanced casing or open borehole. The casing string shall be advanced through the formation to be screened and the hole cleaned to a point one foot below where the bottom of the screen is to be placed. The well screen assembly shall then be lowered, in a controlled manner, to that level. The screen shall be temporarily held at the required level along with filter pack if included as part of the well design. The tolerance for the vertical position of the well screen assembly placement is within 0.5 feet of the well design, unless otherwise directed by the Engineer.

The Contractor shall maintain a clear hole, free of debris, cuttings, and sediment throughout the full depth of the hole, and before and during casing and screen installation.

If the well does not allow the well screen assembly to pass freely to the total drilled depth, the well will be considered to be out of alignment and the well shall be re-drilled and cased at the Contractor’s sole cost.

**Well Development**
The Contractor will develop the well at the completion of the screen installation to remove drilling fluids from the borehole, sand and fine material from the strata penetrated by the well screen and to stabilize the remaining sand and fine material in the strata so that the well will provide the highest possible yield within the aquifer. Development shall not unduly settle or disturb the strata above the screened interval. Development will be complete once the sand production rate falls below 1 inch per hour of development or until directed by the City.

At a minimum, the well shall be developed by surging with a surge block. The surging equipment shall consist of a vented surge block attached to a drill stem or string of pipe. This system shall operate the surge block at a rate of 24 to 36 strokes per minute and the stroke shall extend 1 foot above and 1 foot below the 1-foot well screen interval. The Contractor shall periodically probe the well tail pipe and remove sediment so that the lower portion of the well screen is not blocked with sediment. The water and sediment shall be managed the same as water and cuttings produced during drilling and produced sediment shall be contained and removed from the site. One sample per 2 hours of development shall be collected by the Contractor. Samples should be marked with date and hours into development.

During the well development, the well shall be sealed during extended periods when development is not actively occurring, such as overnight, to prevent artesian flow during those time periods.

Other development techniques proposed by the Contractor may be considered and must be approved by the City.

**Well Surface Seal and Well Seal**
The Contractor shall install the surface seal for the well to a depth of approximately 50 feet per Chapter 173-160 WAC and the well seal to a depth of approximately 270 feet per the Ecology-required Artesian Well Sealing Plan per WAC 173-160-251. The Contractor shall seal the well using neat cement grout per WAC 173-160-221. The Contractor shall place the neat cement grout, by pumping, from the bottom of the borehole in the annular space next to the permanent casing, to the ground surface using a tremie pipe in one continuous operation. Drilling shall not commence below the seals for a period of 72 hours following completion of the neat cement grout surface seal to allow it to set.

**Well Head**
The top of the 24-inch diameter sanitary seal casing shall be at least 3 foot above ground surface upon completion of drilling and testing.

The top of the 18-inch diameter well seal casing shall be at least 5 feet above ground surface upon completion of drilling and testing.

The well shall be able to be sealed to prevent artesian flow of water after construction is complete, consistent with WAC 173-160-301. The Contractor shall install an appropriately sized side port on the 18-inch casing, with a new butterfly valve that can pass all artesian flow so that the top of the well can be opened without flow exiting the top of the well casing. The top of the well shall be sealed with a gasketed removable lid or plate as opposed to being welded shut. There shall be a vertical 1-inch-inner-diameter pipe threaded into the well cap with a 1-inch diameter ball valve to prevent uncontrolled flow from the pipe. This ball valve must have threads to allow for connection of a riser pipe or fittings for a pressure gage.

A metal collar shall be welded between the 24-inch and 18-inch diameter casings to cap the annulus after it has been sufficiently sealed.

**Repair/Restoration**
Any well on which the Contractor stops work shall be considered abandoned. A new well shall be started in the immediate vicinity at a location designated by the City. Payment will be made for work associated with the abandoned well if the conditions for abandonment are based on

drilling refusal due to natural conditions that cannot be remedied with additional readily available equipment or technology.

Drilling refusal due to natural conditions shall be defined as one of the following:

1. The point when the force being exerted on the casing to drive it has reached the maximum safe limit that will not cause damage to the casing, after increasing with increasing depth drilled due to friction of the material penetrated acting on the outside of the casing. A caveat is that the drive shoe must be in as-new condition and drive shoe deformation is not considered natural conditions for casing refusal.
2. Encountering an obstruction that under normal drilling conditions results in deformation of the drive shoe and does not allow for the casing to be driven deeper. An example of this would be a large, competent boulder.

No payment will be made for work associated with the abandoned well if the Contractor stops work for equipment failure, equipment loss, or improper drilling methods or similar reasons. The Contractor may, at his own expense, remove any ungrouted casing from the abandoned well. An abandoned well shall be backfilled and sealed by grouting in accordance with WAC 173-160-381.

**Well Testing**

The Contractor shall notify the City not less than two (2) working days in advance of the date and hour when the Contractor will be prepared to start pumping test operations.

1. Artesian flow and short-term pumping equipment and monitoring equipment test
2. Step-rate test
3. Constant-rate test

The Contractor shall furnish, install, operate, and remove all pumping equipment, throttling devices, valves, piping, measuring instruments, wellhead seals, the water disposal conveyance system, and discharge structure required for pumping tests of the well, and shall provide personnel to continuously operate and maintain the equipment during the pumping tests.

**Required Inspections and Notification**

The Contractor must contact the City at the stages of construction listed later in this section for the purpose of job inspection. No work shall be performed by the Contractor until such inspection has been made for the listed items. The Contractor shall notify the City at least 48 hours prior to each of the required inspections to ensure that the City will be available to conduct the inspections. Inspection of each item by the City is required before proceeding to a subsequent stage of the Contract. A list of required inspections is as follows:

1. Performance Testing – The City to be onsite during the artesian test, equipment test, step-rate test, start of constant-rate test, and at the conclusion of the constant-rate test for collection of water quality samples. At no point during testing, except in such cases that health and safety are at risk, or if equipment is being damaged, will pump test(s) be terminated without the City’s approval.

2. Decommissioning of Performance Test – The City shall remove water level monitoring equipment as needed.

**Pumping Test Operation**
The Contractor shall furnish and operate the equipment and appurtenances necessary to obtain water samples, measure the well pump flow, and control the pump flow within 95-percent accuracy while discharging the water at the discharge points specified by the City. Use of a circular orifice plate flow meter with a box for capturing discharge and aerating the water prior to it entering the Deschutes River is required. The Contractor shall have sufficient communication capability to adjust the flow rate if the measurement point is distant from the wellhead.

**Test Pump**
The Contractor shall furnish, install (pump intake at a depth of approximately 250 feet below ground surface), operate, and remove all wellhead seals, pumping equipment, throttling devices, valves, piping, measuring instruments, and the water disposal conveyance system required for pumping tests of the well, and shall provide personnel to continuously operate and maintain the equipment during the pumping tests.

The pumping equipment shall be a pump capable of providing approximately 200 feet of lift while maintaining a flow of at least 2,000 gallons per minute (gpm) through the discharge piping and water flow meters. The pumping equipment shall include all required electrical and mechanical accessories, appurtenances, and controllers for proper and continuous operation of the pump during the testing period. The pumping equipment and power source shall be capable of continuous operation for up to 72 hours without stopping for maintenance, fueling, or other causes.

The power source must be provided by the Contractor. The Contractor shall perform all electrical work and provide and install all electrical wiring and devices for operation of the test pump.

A check valve must be used to prevent backflow of water from the riser pipe into the well after pumping has ceased, which could result in unreliable recovery data. A manual isolation valve will not be permitted as the sole backflow prevention device.

**Water Level Monitoring Drop Tubes**
The Contractor shall provide two temporary 1-inch-inner-diameter pipes to act as drop tubes for water level measurement during well testing. These two tubes shall extend through the temporary wellhead seal and be completed as follows:

1. A 1-inch diameter ball valve to allow for the port to be closed when under pressure and opened for manual water level monitoring after pumping has started. This ball valve shall include a bushing on any threads to protect the water level probe from damage.
2. The ability to install a vented pressure transducer data logger and seal the area around the cable with a plug or stopper that is capable of restraining 10 pounds per square inch (psi) both before pumping commences and after recovery has completed.

One of the drop tubes will be used for a vented water level pressure transducer datalogger (provided by the Engineer).

One of the drop tubes will be used for a manual operated electric tape water level probe (provided by the Contractor). The well level probe must be accurate to 0.01 feet for the anticipated maximum depth to water experienced during pumping (250 feet).

The drop tubes shall extend from the top of the well to 5 feet above the pump intake and must be vertical. The drop tubes shall be attached to the pump discharge piping. The drop tubes must contain sufficient slots or holes to allow for the free passage of water into and out of the pipe to allow for accurate water level measurement over the length of the pipe. The bottom of the drop tube shall be capped to prevent the probe or transducer from being able to reach the depth of the pump intake. The bottom cap shall have two holes drilled in it to prevent standing water from remaining in the drop tube even if the water level in the well drops below the bottom of the drop tube.

**Electrical Sounding Level (Water Level Probe)**
The Contractor must provide a calibrated, functional electric water level probe. The water level probe must be precise to 0.01 feet for the anticipated maximum depth to water experienced during pumping (250 feet).

**Discharge Piping**
The Contractor shall provide and install temporary, above-ground, piping or hose with sufficient pressure rating, bends, and thrust blocking to transmit the test water to the point of discharge (**Figure 2**). The piping must be sufficient to convey up to 2,000 gpm under pressure from the well head to the catch basin discharge point (distance of approximately 750 feet over flat ground). The piping generally must be leak free. Acceptable leakage will be at the sole discretion of the City. Any leaks the City deems to be excessive must be repaired during pump operation or the pump test shall be restarted at the sole expense of the Contractor.

The golf course will remain in operation during drilling and testing. Golfers use of the cart path must not be impeded at any time. For any piping installed across a paved path, the contractor shall install a ramp on either side of the pipe that can accommodate a fully-loaded vehicle and over which a typical golf cart can navigate.

Erosion will not be permitted between the well and point of discharge. The Contractor shall inspect the discharge line throughout testing to make sure no erosion is occurring and must mitigate erosion if it is occurring.

**In-Line Water Flow Meters**
The two (2) in-line water flow meters must be accurate and installed within 20 feet of the well according to manufacturer specifications, including necessary lengths of straight pipe before and after the meter, orientation of the meter, distance from control valves, and distance from bends. The Contractor must make sure that the meter is measuring full pipe flow based on the layout of the discharge system. The Contractor must provide calibration certification no more than 6 months old from the manufacturer certifying the meters are accurate and operating within the original specifications.

**Water Quality Sampling Spigot**
The Contractor shall furnish the equipment and appurtenances necessary to obtain water quality samples from the discharge line through a new, lead-free type, hose spigot located at the wellhead.

**Rossum Sand Tester**
A Rossum sand tester shall be used for measurement of sand production during the pumping test and installed at the wellhead. A flow control valve must maintain a constant flow of 0.5 gpm through the unit.

**Flow Control Valve**
The Contractor shall furnish and operate the equipment and appurtenances necessary to control the pump flow within 95-percent accuracy during the pumping tests.

**Discharge Location**
The water shall be discharged into a catch basin at the location identified in **Figure 2**. The Contractor shall provide a means to direct the water into the catch basin without causing erosion of the ground surface near the catch basin.

# Well Testing

**Artesian Flow and Short-term Pumping Equipment and Monitoring Equipment Test**
After the test pump, discharge piping, and other associated equipment have been installed and constructed, the wellhead shall be sealed to confirm that the artesian pressure can be maintained and measured.

After proof that the artesian pressure can be contained with the temporary pump and discharge setup, the side port shall be opened for 30 minutes to allow for the Engineer to take measurements and estimate the artesian flow from the well using the inline flowmeter.

After the artesian flow measurement, the side port shall be closed and the pump shall be operated for a period of 60 minutes to confirm the operation of all equipment, confirm that development was sufficient (lack of suspended sediment), and establish that the system is ready for testing. Prior to starting the pump, the flow control valve shall be nearly closed to prevent excessive drawdown upon startup. The flow control valve shall be opened farther only after it is confirmed that the well is capable of producing the rate being pumped.

During this period, the flow rate shall be adjusted to see if the desired steps will be achievable. Depth to water measurements shall be taken, and the discharge location shall be viewed to make sure water is not backing up and overflowing or causing erosion.

**Equipment Test Recovery**
The pump and measurement devices shall not be removed until the tests are completed, including the recovery phases. Recovery measurements should commence immediately upon pump shutdown and continue for the same duration as the pumping phase, or until the water levels have reached 95 percent of the initial, pre-pumping static water level. The recovery phase is assumed to last at least twice as long as the well was operated during the flowing artesian and pumping portion of the test.

The City will inform the Contractor when the recovery portion of the test is considered complete.

**Step-rate Testing**
A step-rate test will be performed to allow evaluation of well efficiency and specific capacity and determine the pumping rate for the constant-rate test.

The step-rate test shall not be started until the well has recovered to a stable water level as determined by the City following the confirmation of system operation testing.

Each of the four steps will last one (1) hour, one step at each of the following approximate pumping rates: 500 gpm, 700 gpm, 1,200 gpm, and 2,000 gpm.

The Contractor shall be responsible for the management of pumping, discharge, and measuring of the water level during the entire step-rate test. If the access port, pipe, or other appurtenances required by the Engineer for water level measurements do not allow the Engineer or the Contractor to obtain accurate water level measurements during the test, or if the pump and/or generator fail to consistently maintain the discharge rate within 5 percent of the target rates, then the test shall be restarted after a recovery period determined by the Engineer City. The costs for the aborted test will be borne by the Contractor.

Water level measurements shall be performed according to the following schedule:

| Time After Pumping Started, Rate Changed, or Stopped | Depth to Water Measurement Time Intervals |
|---|---|
| 0 to 10 minutes | 1 minute |
| 10 to 60 minutes | 5 minutes |

**Step-rate Testing Recovery**
The pump and measurement devices shall not be removed until the tests are completed, including the recovery phases. The first hour of recovery shall be documented by the Contractor, after which time the Engineer will rely on its pressure transducer data logger to monitor water levels during the remaining recovery phase. The recovery phase is assumed to last twice as long as the well was operated during the pumping portion of the test.

The Engineer will inform the Contractor when the recovery portion of the test is considered complete.

**Constant-rate Testing**
The Contractor shall furnish and operate the equipment and appurtenances necessary to obtain water samples, measure the well pump flow, and control the pump flow within 95-percent accuracy while discharging the water.

The constant-rate pumping test shall be run at a flow rate of up to 2,000 gpm for a continuous time period of 24 hours. During the constant-rate pumping test, the Contractor shall continuously check, record, and adjust, if necessary, the discharge from the well to ensure that it is not varying more than 5 percent from the fixed rate that is selected.

The Contractor shall be responsible for the management of pumping, discharging, and measuring of the water level during the test. If the access port, pipe, or other appurtenances required by the City for water level measurements do not allow the City or the Contractor to obtain accurate water level measurements during the test, or if the pump and/or generator fail to consistently maintain the discharge rate within 5 percent of the target rates, then the test shall be restarted after a recovery period determined by the Engineer. The costs for the aborted test will be borne by the Contractor.

Water level measurements shall be performed according to the following schedule:

| Time After Pumping Started, Rate Changed, or Stopped | Depth to Water Measurement Time Intervals |
|---|---|
| 0 to 10 minutes | 1 minute |
| 10 to 20 minutes | 2 minutes |
| 20 to 40 minutes | 5 minutes |
| 40 to 60 minutes | 10 minutes |
| 60 to 180 minutes | 30 minutes |
| 180 minutes to end of test | 60 minutes |

**Constant-Rate Testing Recovery**
The pump and measurement devices shall not be removed until the tests are completed, including the recovery phases. Water level measurements over the first hour of recovery shall be documented by the Contractor, after which time the City will rely on its pressure transducer data logger to monitor water levels during the remainder of the recovery phase. The recovery phase is assumed to last at least twice as long as the well was operated during the pumping portion of the test.

The Engineer will inform the Contractor when the recovery portion of the test is considered complete.

**Testing Conclusion**
The pump and measurement devices shall not be removed until the tests are completed, including the recovery phases. The recovery phase is assumed to last at least twice as long as the well was operated during the pumping portion of the test.

The Engineer will inform the Contractor when testing has been successfully completed and removal of equipment can proceed.

The Engineer will remove the pressure transducer data logger from the well.

The Contractor will be responsible for removal of all other Contractor-provided equipment from the well and adjacent site.

# Quality Control

**Plumbness and Alignment Test**

A plumbness and alignment test shall be performed by the Contractor as described in Appendix D of ANSI/AWWA A100-06. The test shall be performed in the presence of the City and a copy of all field notes shall be given to the City. The plumbness and alignment test shall be performed before well development.

The alignment tolerance is specified in the installation of well screen assembly section.

If the well does not meet the requirement to the top of the well screen, the well shall be re-drilled and cased at the Contractor’s sole cost.

**Video Inspection**
Following removal of the test pump, the Contractor shall provide a video inspection of the well. The video inspection shall be performed either by the Contractor or by a subconsultant, either of

which must have demonstrated experience and proper equipment for television well inspection. The camera shall have lights, produce video in color, produce high-definition video,and be able to change between side and downhole views. The Engineer shall observe the inspection and be provided an electronic recording of the inspection in DVD format or a thumb drive. The video recording shall show depth at all times in feet to the nearest 0.1 foot. The Contractor shall open the well side port for a long enough duration to purge the casing of stagnant, cloudy water. The cost of a second video inspection due to poor water clarity caused by not purging the well sufficiently shall be borne by the Contractor.

**Disinfection**
After the well has been completed and tested and prior to the Contractor leaving the site, it shall be disinfected in accordance with American National Standards Institute/American Water Works Association (ANSI/AWWA) C654. All chlorinated water shall be discharged to the ground near the well.

Following disinfection, the Contractor shall close the wellhead to prevent artesian flow and confirm the integrity of the wellhead valve.

## MEASUREMENT AND PAYMENT

It is the intention of these specifications that the performance of all work under the bid for each item shall result in the complete construction in an accepted operating condition of each item. All sections related to payment in the Standard Specifications are deleted and replaced with these Special Provisions.

Work and material not specifically listed in the proposal, but required per the contract plans, specifications, and general practice shall be included in the Contractor’s bid price. No separate payment of any kind will be made for these incidental items.

The Contractor must complete the project using fluid rotary drilling methods.

The quantities for the items listed below have been entered into the Proposal based on estimated quantities to provide a common proposal for bidders. Actual quantities will be determined in the field as the work progresses, and will be paid at the original bid price, regardless of the final quantity. These bid items shall not be subject to the provisions of 1-04.6 of the Standard Specifications.

- Bid Item No. 15 – Temporary Site Access and Drilling Pads
- Bid Item No. 16 – Gravel Backfill for Site Access
- Bid Item No. 17 – Asphalt Restoration
- Bid Item No. 18 – Landscape Restoration
- Bid Item No. 20 – Standby Time, Non-Working Day
- Bid Item No. A14 – Temporary Drilling Pads
- Bid Item No. A15 – Gravel Backfill for Drilling Pad
- Bid Item No. A16 – Asphalt Restoration
- Bid Item No. A17 – Landscape Restoration

## Base Bid

### Bid Item No. 1 – Mobilization/Demobilization

The lump sum price shown shall cover the complete cost of furnishing all work and materials necessary to move and organize equipment and personnel required to complete the first two wells for the project. The price will also include providing and maintaining all necessary support facilities, temporary security, and obtaining all necessary permits and licenses, including the well start card.

The price shall include demobilization of all equipment and materials necessary to complete the work for wells 1 and 2, including all materials and labor to move all personnel and equipment from the site after project completion. The Contractor shall clean up the site with readily available light equipment and hand tools prior to final acceptance. Payment shall be lump sum. No more than 50 percent of this bid item will be paid to the Contractor prior to final demobilization from the project site.

### Bid Item No. 2 – Inter-Well Mobilization

The lump sum price shown shall cover the complete cost of furnishing all work and materials necessary to set up and organize equipment and personnel at each well site. The price will also include providing and maintaining all support facilities including noise abatement, if necessary, and obtaining all necessary drilling permits and licenses, including the well start card.

### Bid Item No. 3 – Construction Records, Artesian Flow Plan, and As-Builts

Lump sum price shown shall cover the complete cost of providing copies of daily field logs annotated with field observations, and well construction records necessary for the Engineer to create accurate as-built records. The Contractor shall provide legible daily logs of the driller's activities on the site (drilling footage, well screen intervals developed, quantity of sediment removed, materials and lengths installed, etc.), an artesian flow control plan, and a completed water well report that the Contractor will submit to Ecology. No more than 75 percent of this item will be paid for this item prior to the final payment. Payment shall be lump sum.

### Bid Item No. 4 – Install Sanitary Seal

The linear foot price shown shall cover the complete cost of labor, equipment, and materials necessary to drilling a 28-inch diameter boring to install a permanent 24-inch diameter casing to a depth of 50 feet and representative sample collection.

The linear foot price shown shall cover the complete cost of all materials, labor, and equipment necessary for the installation of all required 24-inch diameter casing. This bid item includes cleaning, trimming, welding, centralizing, and stringing.

The linear foot price shown shall cover the complete cost of labor, equipment, and materials necessary to install a formation seal to fill the annular space between the 24-inch casing and 28-inch borehole. Measurement shall be per linear foot of sanitary seal per well.

The linear foot price shown shall cover the complete cost of directing drilling cuttings and sediment derived from drilling and development into a temporary location at the well site for the Contractor to arrange for offsite disposal of these materials.

**Bid Item No. 5 – Well Seal Drilling**

The linear foot price shown shall cover the complete cost of labor and equipment necessary for drilling a nominal 22-inch diameter borehole to support installing a permanent 18-inch diameter casing and well seal around the casing. This bid item includes drilling and representative sample collection. Measurement shall begin at the depth of the sanitary seal (approximately 50 feet below ground surface) and proceed to a depth of approximately 270 feet (220 feet of drilling) and shall be per linear foot of drilling per well.

The price shown shall cover the complete cost of directing drilling cuttings and sediment derived from drilling and development into a temporary location at the well site for the Contractor to arrange for offsite disposal of these materials.

**Bid Item No. 6 – Well Seal Installation**

The linear foot price shown shall cover the complete cost of all materials, labor, and equipment necessary for the installation of all required 18-inch diameter casing from the completion depth plus 3 feet of casing stick up. This bid item includes cleaning, trimming, welding, centralizing, and stringing, but does not include drilling.

The linear foot price shown shall cover the complete cost of all materials, labor, and equipment necessary for the installation of the cement grout well seal surrounding the installed 18-inch diameter casing from the completion depth to ground surface. Payment shall be per linear foot of 18-inch casing and well seal installed below ground surface which is estimated to be approximately 270 feet per well.

**Bid Item No. 7 – Plumbness and Alignment Testing of 18-Inch Casing**

The price shown shall cover the complete cost of a plumbness test and a 40-foot blank alignment test for each well. Alignment shall be tested by lowering a section of pipe or dummy 40 feet long into the casing, which shall move freely throughout the test interval. The outside diameter of the pipe or dummy shall not be more than 0.5 inches smaller than the inside diameter of the casing

The plumbness test shall be performed by the Contractor as described in Appendix D of ANSI/AWWA A100-06. If the well casing deviates more than allowed in the AWWA standard, the boring shall be decommissioned, re-drilled and cased at the Contractor’s sole cost.

**Bid Item No. 8 – 16-Inch Drilling**

The linear foot price shown shall cover the complete cost of labor and equipment necessary for drilling a boring below the permanent 18-inch casing while either simultaneously advancing 16-inch diameter casing or densified drilling fluid (mud) borehole. This bid item includes drilling and representative sample collection. Measurement shall begin at approximately 270 feet below ground surface and proceed to a depth of approximately 400 feet (130 feet of drilling) and shall be per linear foot of drilling per well.

The price shown shall cover the complete cost of directing drilling cuttings, drilling fluids, and sediment derived from drilling and development into a temporary location at the well site for the Contractor to arrange for offsite disposal of these materials.

**Bid Item No. 9 – Furnish Well Screen Assembly**

The cost for this item shall be the invoice cost paid by the Contractor for purchase and delivery of well assembly materials to the Contractor yard or the well site plus 15 percent markup. Well assembly materials will include blank casing for tailpipe and risers and blank screen sections, stainless steel wire-wrapped screen, weld rings, centralizers, bail bottom, and filter pack materials. The Contractor will not include a cost for this item; an Estimated value of $50,000 per well to be used for all bids is included for this item.

**Bid Item No. 10 – Assemble and Install Well Screen Assembly and Wellhead**

The per hour unit price shall cover the complete cost of the labor and use of equipment and materials to assemble and install the furnished well assembly materials. This assembly installation includes the cost to clear the borehole of drilling fluid and cuttings, assembling the screen and blank sections with tailpipe and riser, to lower the well assembly to the bottom of the borehole and to install any filter materials as the 16-inch casing is pulled back (if used) to expose the well assembly. This item includes the cost of adding up to 5 feet of pea gravel to the bottom of the borehole to provide a stable base. Payment shall be per hour of work. Assume 30 hours per well for this bid item.

**Bid Item No. 11 – Well Development and Other Authorized Work**

The per hour unit price shall cover the complete cost of all labor, material, and equipment necessary to develop the screen. Payment shall be per hour of well boring/well screen development. For each foot of well screen, the Contractor shall use air lifting, pumping, or surge block surging within the well screen or a combination of methods until discharge flows free and clear of sediment. The Contractor shall periodically probe the well and remove sediment so that the lower portion of the well boring and screen are not blocked with sediment.

For final payment, the Contractor shall provide the Engineer with daily logs of the driller's activities on-site, well boring/well screen intervals developed, quantity of sediment removed, hours spent, crew and equipment used. Other work authorized by the Engineer and not covered in another bid item shall be covered under this item. Payment shall be per hour of work. Assume 20 hours for this bid item per well.

**Bid Item No. 12 – Furnish, Install, and Remove Test Pump and Equipment**

The price shown shall cover the complete cost of furnishing, installing, and removing the test pump, portable power supply, two access tubes, water level probe, water quality sampling port, flow control valve, in-line flow meter, main discharge line to the discharge area and the discharge dissipation as required for pump testing the completed well. Also included is the cost for short-term operation (up to 2 hours) of the pump and monitoring equipment to confirm its performance prior to step-rate and subsequent constant-rate testing. The cost shall include well disinfection to be completed upon removal of the test pump. Payment shall be lump sum per well (two each).

**Bid Item No. 13 – Pump Test Operation**

The per hour price shall cover the complete cost of all materials, labor, and equipment necessary to continuously operate the test pump at the desired rates and record flow and water level data during 4 hours of step-rate testing and 24 hours of constant-rate testing per well. Payment shall be per hour upon completion of the successful step-rate and constant-rate pump tests.

**Bid Item No. 14 – Video Inspection**

The price shall cover the complete cost of all materials, labor, and equipment necessary to continuously record the well casing, well boring, and well screen assembly (if installed) per well (2 each). The Contractor shall use a high-resolution video camera capable of horizontal and vertical imaging. The Contractor shall sufficiently clear the water column in the well before video inspection. If the water is too turbid to resolve the condition of the casing, boring, or well screen assembly, the Contractor will re-clear the water column using potable water and redo the video inspection. The Contractor will provide two copies of the well video inspection in electronic and DVD format.

**Bid Item No. 15 – Temporary Site Access and Drilling Pads**

The unit price shall cover the complete cost of all materials, labor, and equipment necessary to furnish, deliver, and install all permeable geomembrane for site access and drilling pads. The price shall also cover costs for general coordination with the City of the final access route and drilling pads, and all vehicle/pedestrian site traffic/circulation controls. The price shall also cover costs for complete removal of the geomembrane fabric and gravel and stockpiling of the gravel at the staging location following site construction. Restoration activities are covered in their respective bid items. The cost for gravel backfill is included in **Bid Item No. 16**. Payment shall be per square yard as measured by finished gravel surface. The Contractor shall be paid for the actual quantities used and deemed necessary for construction. No compensation will be made under this bid item for work outside of the designated working area.

**Bid Item No. 16 – Gravel Backfill for Site Access**

The unit price shall cover the complete cost of all materials, labor, and equipment necessary to furnish, deliver, and install all gravels backfill for temporary site access and drilling pads. Restoration activities are covered in their respective bid items. Payment shall be per ton of gravel backfill in place as measured by truck weight tickets. The Contractor shall be paid for the actual quantities used and deemed necessary for construction. No compensation will be made under this bid item for work outside of the designated working area. The quantity shown is based on a maximum depth of 18”. The Contractor shall use only what is necessary for access and drilling pad stabilization. The Contractor should expect to place less than the full depth when construction begins in the summer of 2026, and add more gravel backfill as necessary as wet season work progresses.

**Bid Item No. 17 – Asphalt Restoration**

The unit price shall cover the complete cost of all materials, labor, and equipment necessary to remove asphalt damaged from construction activities and install new site asphalt overlay to restore site pavement areas to preconstruction condition or better. This price shall cover costs

from disposal of any waste generated from asphalt restoration activities. The price shall also cover any imported crushed surfacing to fill voids, compaction, sawcutting, sealing, and temporary vehicle/pedestrian site traffic/circulation controls necessary to restore site asphalt. The extent of asphalt restoration will be mutually agreed upon by the City and the Contractor. For bidding purposes, an assumed quantity is given the schedule of prices in square yards. Measurement and Payment shall be per square yard of actual asphalt restoration performed.

**Bid Item No. 18 – Landscape Restoration**

The unit price shall cover the complete cost of all materials, labor, and equipment necessary to restore site topsoil and grass where disturbed by the drilling pad areas. This shall not include areas disturbed by the temporary site access road installed along the cart path. Restoration of landscape adjacent to the cart path (as shown in the Plans) shall be completed by the City. This price shall include the application of approximately 2 inches of topsoil to all restored area and broadcasting of grass seed. Measurement and Payment shall be per square yard of actual landscape restoration performed.

**Bid Item No. 19 – Minor Change**

The unit price Bid for Minor Change shall be per Calculation (CALC) in accordance with Section 1-04.4(1) of the Standard Specifications and has been included for any additional work associated with minor changes. An estimated dollar amount for Minor Changes Item has been entered in the Bid Proposal by the Contracting Agency, to provide a common proposal for all Bidders
which have been figured into the Contract Sum.

Payments or credits for changes amounting to $30,000 or less may be made under the bid item "Minor Changes", at the discretion of the Contracting Agency, and in accordance with Section 1-04.4(1) of the Standard Specifications. The actual amount paid under this item may vary from no payment to the full amount of the bid item. At the time of authorization, the Engineer and Contractor will agree to the basis of compensation for that work, by one of the following methods:

1. By an accepted lump sum proposal from the Contractor;
2. By Bid prices already established in the Bid Proposal;
3. By Bid prices mutually agreed upon by the Contractor and the Contracting Agency; or
4. By force account, as set forth in Section 1-09.6.

The Contracting Agency will provide the Contractor a copy of the request for a minor change and will
require the Contractor to provide a cost estimate for the Engineer's review and approval prior to the work being performed. Approved minor change work performed under this bid item will be performed only after a work directive is issued by the Engineer. Any additional work performed prior to the work directive issued by the Engineer will not be compensated under this bid item.

**Bid Item No. 20 – Standby Time, Non-Working Day**

The daily price shown shall be for any working days qualifying as standby time. Payment shall be per day at the conclusion of the Project. The price shall cover the complete cost for working days that are included in the Contract in which the Contracting Agency prohibits Work due to unscheduled golf course activities beyond their control. The Contractor will be provided written

notification of a non-working day by the Engineer. For bidding purposes, 10 non-working days are assumed for this bid item, and the unit price shall cover the complete cost of the crew and the equipment present on-site at the time the non-working day notice is issued. It is assumed that one non-working day is a regular eight-hour workday. The daily rate for this Bid Item will be used for adjusting, adding or subtracting non-working days from the Contract.

## Additive Bid

The intent of the additive bid is to cover all costs associated with the drilling of a third well. The decision by the City, to authorize the drilling of the third well will be made during the project, and no sooner than the completion of at least one of the first two wells (base bid). If the contractor is authorized by the City to proceed with the drilling of a third well (additive bid), then the contractor must begin preparing the drilling pad at site 26-03 within 30 working days of the Notice to Proceed to mobilize and start drilling the third well, unless otherwise allowed by the City.

**Bid Item No. A1 – Inter-Well Mobilization**
The lump sum price shown shall cover the complete cost of furnishing all work and materials necessary to set up and organize equipment and personnel at each well site. The price will also include providing and maintaining all support facilities including noise abatement, if necessary, and obtaining all necessary drilling permits and licenses, including the well start card. The lump sum price shall cover the cost of all materials, labor and equipment to restore each well site to its original condition.

The price shall include materials and labor to restore golf course to equal or better conditions after mobilization and demobilization of all equipment and materials necessary to complete the work for well 3.

**Bid Item No. A2– Construction Records, Artesian Flow Plan, and As-Builts**

Lump sum price shown shall cover the complete cost of providing copies of daily field logs annotated with field observations, and well construction records necessary for the Engineer to create accurate as-built records for the third well. The Contractor shall provide legible daily logs of the driller's activities on the site (drilling footage, well screen intervals developed, quantity of sediment removed, materials and lengths installed, etc.), an artesian flow control plan, and a completed water well report that the Contractor will submit to Ecology. No more than 75 percent of this item will be paid for this item prior to the final payment. Payment shall be lump sum.

**Bid Item No. A3 – Install Sanitary Seal**

The linear foot price shown shall cover the complete cost of labor, equipment, and materials necessary to drilling a 28-inch diameter boring to install a permanent 24-inch diameter casing to a depth of 50 feet and representative sample collection.

The linear foot price shown shall cover the complete cost of all materials, labor, and equipment necessary for the installation of all required 24-inch diameter casing. This bid item includes cleaning, trimming, welding, centralizing, and stringing.

The linear foot price shown shall cover the complete cost of labor, equipment, and materials necessary to install a formation seal to fill the annular space between the 24-inch casing and 28-inch borehole. Measurement shall be per linear foot of sanitary seal.

The linear foot price shown shall cover the complete cost of directing drilling cuttings and sediment derived from drilling and development into a temporary location at the well site for the Contractor to arrange for offsite disposal of these materials.

**Bid Item No. A4 –Well Seal Drilling**

The linear foot price shown shall cover the complete cost of labor and equipment necessary for drilling a nominal 22-inch diameter borehole to support installing a permanent 18-inch diameter casing and well seal around the casing. This bid item includes drilling and representative sample collection. Measurement shall begin at the depth of the sanitary seal (approximately 50 feet below ground surface) and proceed to a depth of approximately 270 feet (220 feet of drilling) and shall be per linear foot of drilling.

The price shown shall cover the complete cost of directing drilling cuttings, drilling fluids, and sediment derived from drilling and development into a temporary location at the well site for the Contractor to arrange for offsite disposal of these materials.

**Bid Item No. A5 – Well Seal Installation**

The linear foot price shown shall cover the complete cost of all materials, labor, and equipment necessary for the installation of all required 18-inch diameter casing from the completion depth plus 3 feet of casing stick up. This bid item includes cleaning, trimming, welding, centralizing, and stringing, but does not include drilling.

The linear foot price shown shall cover the complete cost of all materials, labor, and equipment necessary for the installation of the cement grout well seal surrounding the installed 18-inch diameter casing from the completion depth to ground surface. Payment shall be per linear foot of 18-inch casing and well seal installed below ground surface which is estimated to be approximately 270 feet.

**Bid Item No. A6 – Plumbness and Alignment Testing of 18-Inch Casing**

The lump sum-price shown shall cover the complete cost of a plumbness test and a 40-foot blank alignment test. Alignment shall be tested by lowering a section of pipe or dummy 40 feet long into the casing, which shall move freely throughout the test interval. The outside diameter of the pipe or dummy shall not be more than 0.5 inches smaller than the inside diameter of the casing being tested. If the casing does not allow the section of pipe or dummy to pass freely to the top of the casing, the boring shall be decommissioned, re-drilled and cased at the Contractor’s sole cost.

The plumbness test shall be performed by the Contractor as described in Appendix D of ANSI/AWWA A100-06. If the well casing deviates more than allowed in the AWWA standard, the boring shall be decommissioned, re-drilled and cased at the Contractor’s sole cost.

**Bid Item No. A7 – 16-Inch Drilling**

The linear foot price shown shall cover the complete cost of labor and equipment necessary for drilling a boring below the permanent 18-inch casing while either simultaneously advancing 16-inch diameter casing or a densified fluid (mud) borehole. This bid item includes drilling and representative sample collection. Measurement shall begin at approximately 270 feet below ground surface and proceed to a depth of approximately 400 feet (130 feet of drilling) and shall be per linear foot of drilling.

The price shown shall cover the complete cost of directing drilling cuttings and sediment derived from drilling and development into a temporary location at the well site for the Contractor to arrange for offsite disposal of these materials.

**Bid Item No. A8 – Furnish Well Screen Assembly**

The cost for this item shall be the invoice cost paid by the Contractor for purchase and delivery of well assembly materials to the Contractor yard or the well site plus 15 percent markup. Well assembly materials will include blank casing for tailpipe and risers and blank screen sections, stainless steel wire-wrapped screen, weld rings, centralizers, bail bottom, and filter pack materials. The Contractor will not include a cost for this item; an Estimated value of $50,000 to be used for all bids is included for this item.

**Bid Item No. A9 – Assemble and Install Well Screen Assembly and Wellhead**

The per hour unit price shall cover the complete cost of the labor and use of equipment and materials to assemble and install the furnished well assembly materials. This assembly installation includes the cost to clear the borehole of drilling fluid and cuttings, assembling the screen and blank sections with tailpipe and riser, to lower the well assembly to the bottom of the borehole and to install any filter materials as the 16-inch casing (if used) is pulled back to expose the well assembly. This item includes the cost of adding up to 5 feet of pea gravel to the bottom of the borehole to provide a stable base. Payment shall be per hour of work. Assume 20 hours for this bid item.

**Bid Item No. A10 – Well Development and Other Authorized Work**

The per hour unit price shall cover the complete cost of all labor, material, and equipment necessary to develop the screen. Payment shall be per hour of well boring/well screen development. For each foot of well screen, the Contractor shall use air lifting, pumping, or surge block surging within the well screen or a combination of methods until discharge flows free and clear of sediment. The Contractor shall periodically probe the well and remove sediment so that the lower portion of the well boring and screen are not blocked with sediment.

For final payment, the Contractor shall provide the Engineer with daily logs of the driller's activities on-site, well boring/well screen intervals developed, quantity of sediment removed, hours spent, crew and equipment used. Other work authorized by the Engineer and not covered in another bid item shall be covered under this item. Payment shall be per hour of work. Assume 20 hours for this bid item.

**Bid Item No. A11 – Furnish, Install, and Remove Test Pump and Equipment**

The lump sum shown shall cover the complete cost of furnishing, installing, and removing the test pump, portable power supply, two access tubes, water level probe, water quality sampling port, flow control valve, in-line flow meter, main discharge line to the discharge area and the discharge dissipation as required for pump testing the completed well. Also included is the cost for short-term operation (up to 2 hours) of the pump and monitoring equipment to confirm its performance prior to step-rate and subsequent constant-rate testing. The cost shall include well disinfection to be completed upon removal of the test pump. Payment shall be lump sum.

**Bid Item No. A12 – Pump Test Operation**

The per hour price shall cover the complete cost of all materials, labor, and equipment necessary to continuously operate the test pump at the desired rates and record flow and water level data during 4 hours of step-rate testing and 24 hours of constant-rate testing. Payment shall be per hour upon completion of the successful step-rate and constant-rate pump tests.

**Bid Item No. A13 – Video Inspection**

The lump sum price shall cover the complete cost of all materials, labor, and equipment necessary to continuously record the well casing, well boring, and well screen assembly (if installed). The Contractor shall use a high-resolution video camera capable of horizontal and vertical imaging. The Contractor shall sufficiently clear the water column in the well before video inspection. If the water is too turbid to resolve the condition of the casing, boring, or well screen assembly, the Contractor will re-clear the water column using potable water and redo the video inspection. The Contractor will provide two copies of the well video inspection in electronic and DVD format.

**Bid Item No. A14 – Temporary Drilling Pads**

The unit price shall cover the complete cost of all materials, labor, and equipment necessary to furnish, deliver, and install all permeable geomembrane for the drilling pad. The price shall also cover costs for general coordination with the City of the drilling pad, and all vehicle/pedestrian site traffic/circulation controls. The price shall also cover costs for complete removal of the geomembrane fabric and gravel and stockpiling of the gravel at the staging location following well construction. Restoration activities are covered in their respective bid items. The cost for gravel backfill is included in **Bid Item No. A15**. Payment shall be per square yard as measured by finished gravel surface. The Contractor shall be paid for the actual quantities used and deemed necessary for construction. No compensation will be made under this bid item for work outside of the designated working area.

**Bid Item No. A15 – Gravel Backfill for Drilling Pad**

The unit price shall cover the complete cost of all materials, labor, and equipment necessary to furnish, deliver, and install all gravel backfill for the drilling pad. Restoration activities are covered in their respective bid items. Payment shall be per ton of gravel backfill in place as measured by truck weight tickets. The Contractor shall be paid for the actual quantities used and deemed necessary for construction. No compensation will be made under this bid item for work outside of the designated working area. The quantity shown is based on a maximum depth of 18”. The Contractor shall use only what is necessary for drilling pad stabilization. The

Contractor should expect to place less than the full depth when construction begins and add more gravel backfill as necessary as wet season work progresses.

**Bid Item No. A16 – Asphalt Restoration**

The unit price shall cover the complete cost of all materials, labor, and equipment necessary to remove asphalt damaged from construction activities and install new site asphalt overlay to restore site pavement areas to preconstruction condition or better. This price shall cover costs from disposal of any waste generated from asphalt restoration activities. The price shall also cover any imported crushed surfacing to fill voids, compaction, sawcutting, sealing, and temporary vehicle/pedestrian site traffic/circulation controls necessary to restore site asphalt. The extent of asphalt restoration will be mutually agreed upon by the City and the Contractor. For bidding purposes, an assumed quantity is given the schedule of prices in square yards. Measurement and Payment shall be per square yard of actual asphalt restoration performed.

**Bid Item No. A17 – Landscape Restoration**

The unit price shall cover the complete cost of all materials, labor, and equipment necessary to restore site topsoil and grass where disturbed by the drilling pad area. The price shall include the application of approximately 2 inches of topsoil to all restored area and broadcasting of grass seed. Measurement and Payment shall be per square yard of actual landscape restoration performed.

**Bid Item No. A18 – Minor Change**

The unit price Bid for Minor Change shall be per Calculation (CALC) in accordance with Section 1-04.4(1) of the Standard Specifications and has been included for any additional work associated with minor changes. An estimated dollar amount for Minor Changes Item has been entered in the Bid Proposal by the Contracting Agency, to provide a common proposal for all Bidders which have been figured into the Contract Sum.

Payments or credits for changes amounting to $15,000 or less may be made under the bid item “Minor Changes”, at the discretion of the Contracting Agency, and in accordance with Section 1-04.4(1) of the Standard Specifications. The actual amount paid under this item may vary from no payment to the full amount of the bid item. At the time of authorization, the Engineer and Contractor will agree to the basis of compensation for that work, by one of the following methods:

1. By an accepted lump sum proposal from the Contractor;
2. By Bid prices already established in the Bid Proposal;
3. By Bid prices mutually agreed upon by the Contractor and the Contracting Agency; or
4. By force account, as set forth in Section 1-09.6.

The Contracting Agency will provide the Contractor a copy of the request for a minor change and will require the Contractor to provide a cost estimate for the Engineer’s review and approval prior to the work being performed. Approved minor change work performed under this bid item will be performed only after a work directive is issued by the Engineer. Any additional work performed prior to the work directive issued by the Engineer will not be compensated under this bid item.

# *APPENDIX A*

## Wage Rates and Benefit Code Key

State of Washington
**DEPARTMENT OF LABOR AND INDUSTRIES**
Prevailing Wage Section - Telephone (360) 902-5335 PO Box 44540, Olympia, WA 98504-4540
Washington State Prevailing Wage Rates For Public Works Contracts
The PREVAILING WAGES listed here include both the hourly wage rate and the hourly rate of fringe benefits. On public works projects, workers' wage and benefit rates must add to not less than this total. A brief description of overtime calculation requirements is provided on the Benefit Code Key.

**THURSTON COUNTY**
Effective January 29, 2026

| Trade | Wage | Holiday | Overtime | Notes |
|---|---|---|---|---|
| **Asbestos Abatement Workers** | | | | |
| Journey Level | $67.39 | 5D | 1H | |
| **Boilermakers** | | | | |
| Journey Level | $78.89 | 5N | 1C | |
| **Brick Mason** | | | | |
| Journey Level | $76.07 | 7E | 1N | |
| Pointer-Caulker-Cleaner | $76.07 | 7E | 1N | |
| **Building Service Employees** | | | | |
| Janitor | $17.13 | | 1 | |
| Shampooer | $17.13 | | 1 | |
| Waxer | $17.13 | | 1 | |
| Window Cleaner | $17.13 | | 1 | |
| **Cabinet Makers (In Shop)** | | | | |
| Journey Level | $17.13 | | 1 | |
| **Carpenters** | | | | |
| Acoustical Worker | $83.21 | 15J | 11U | |
| Bridge Dock and Wharf Carpenter | $84.81 | 15J | 11U | |
| Floor Layer & Floor Finisher | $83.21 | 15J | 11U | |
| General Carpenter | $83.21 | 15J | 11U | |
| Scaffold Erector | $83.21 | 15J | 11U | |
| Acoustical Worker | $83.21 | 15J | 11U | |
| **Cement Masons** | | | | |
| Application of all Composition Mastic | $81.87 | 15J | 4U | |
| Application of all Epoxy Material | $81.36 | 15J | 4U | |
| Application of all Plastic Material | $81.87 | 15J | 4U | |
| Application of Sealing Compound | $81.36 | 15J | 4U | |
| Application of Underlayment | $81.87 | 15J | 4U | |
| Building General | $81.36 | 15J | 4U | |
| Composition or Kalman Floors | $81.87 | 15J | 4U | |
| Concrete Paving | $81.36 | 15J | 4U | |
| Curb & Gutter Machine | $81.87 | 15J | 4U | |
| Curb & Gutter, Sidewalks | $81.36 | 15J | 4U | |
| Curing Concrete | $81.36 | 15J | 4U | |
| Finish Colored Concrete | $81.87 | 15J | 4U | |
| Floor Grinding | $81.87 | 15J | 4U | |
| Floor Grinding/Polisher | $81.36 | 15J | 4U | |
| Green Concrete Saw, self-powered | $81.87 | 15J | 4U | |
| Grouting of all Plates | $81.36 | 15J | 4U | |
| Grouting of all Tilt-up Panels | $81.36 | 15J | 4U | |
| Gunite Nozzleman | $81.87 | 15J | 4U | |
| Hand Powered Grinder | $81.87 | 15J | 4U | |
| Journey Level | $81.36 | 15J | 4U | |
| Patching Concrete | $81.36 | 15J | 4U | |
| Pneumatic Power Tools | $81.87 | 15J | 4U | |

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|---|---|---|---|---|
| Power Chipping & Brushing | $81.87 | 15J | 4U | |
| Sand Blasting Architectural Finish | $81.87 | 15J | 4U | |
| Screed & Rodding Machine | $81.87 | 15J | 4U | |
| Spackling or Skim Coat Concrete | $81.36 | 15J | 4U | |
| Troweling Machine Operator | $81.87 | 15J | 4U | |
| Troweling Machine Operator on Colored Slabs | $81.87 | 15J | 4U | |
| Tunnel Workers | $81.87 | 15J | 4U | |
| **Divers & Tenders** | | | | |
| Bell/Vehicle/Submersible Operator (not under pressure) | $144.72 | 15J | 11T | 9I |
| Dive Supervisor | $146.22 | 15J | 11T | 9I |
| Diver | $144.72 | 15J | 11T | 9I |
| Diver Tender | $91.05 | 15J | 11T | 9I |
| Hyperbaric Worker - Compressed Air Worker 0-30.00 PSI | $114.73 | 15J | 11U | |
| Hyperbaric Worker - Compressed Air Worker 30.01-44.00 PSI | $124.28 | 15J | 11U | |
| Hyperbaric Worker - Compressed Air Worker 44.01 - 54.00 PSI | $133.82 | 15J | 11U | |
| Hyperbaric Worker - Compressed Air Worker 54.01 - 60.00 PSI | $143.37 | 15J | 11U | |
| Hyperbaric Worker - Compressed Air Worker 60.01 - 64.00 PSI | $152.91 | 15J | 11U | |
| Hyperbaric Worker - Compressed Air Worker 64.01 - 68.00 PSI | $162.46 | 15J | 11U | |
| Hyperbaric Worker - Compressed Air Worker 68.01 - 70.00 PSI | $172.00 | 15J | 11U | |
| Hyperbaric Worker - Compressed Air Worker 70.01 - 72.00 PSI | $181.55 | 15J | 11U | |
| Hyperbaric Worker - Compressed Air Worker 72.01 - 74.00 PSI | $191.09 | 15J | 11U | |
| Lead Diver (Dive Master) | $105.51 | 15J | 11T | 9I |
| Manifold Operator (Life Support Technician) | $96.05 | 15J | 11U | 9I |
| Remote Operated Vehicle Operator/Technician | $91.05 | 15J | 11T | 9I |
| Remote Operated Vehicle Operator/Technician | $91.05 | 15J | 11U | 9I |
| Remote Operated Vehicle Tender | $84.75 | 15J | 11T | 9I |
| Stand-by Diver | $100.51 | 15J | 11T | 9I |
| **Dredge Workers** | | | | |
| Assistant Engineer | $89.47 | 5D | 3F | |
| Assistant Mate (Deckhand) | $88.78 | 5D | 3F | |
| Boatmen | $89.47 | 5D | 3F | |
| Engineer Welder | $91.20 | 5D | 3F | |
| Leverman, Hydraulic | $93.03 | 5D | 3F | |
| Mates | $89.47 | 5D | 3F | |
| Oiler | $88.78 | 5D | 3F | |
| **Drywall Applicator** | | | | |
| Journey Level | $81.71 | 15O | 11S | |
| **Drywall Tapers** | | | | |
| Journey Level | $81.71 | 15O | 11S | |
| **Electrical Fixture Maintenance** | | | | |
| Journey Level | $29.54 | | 1 | |
| **Electricians - Inside** | | | | |
| Cable Splicer | $98.98 | 5C | 1G | |
| Journey Level | $92.27 | 5C | 1G | |
| Lead Covered Cable Splicer | $105.70 | 5C | 1G | |
| Welder | $98.98 | 5C | 1G | |
| **Electricians - Motor Shop** | | | | |
| Craftsman | $17.13 | | 1 | |
| Journey Level | $17.13 | | 1 | |
| **Electricians - Powerline Construction** | | | | |
| Cable Splicer | $102.42 | 5A | 4D | |
| Certified Line Welder | $93.99 | 5A | 4D | |
| Groundperson | $59.30 | 5A | 4D | |
| Heavy Line Equipment Operator | $93.99 | 5A | 4D | |
| Journey Level Lineperson | $93.99 | 5A | 4D | |

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|---|---|---|---|---|
| Line Equipment Operator | $80.96 | 5A | 4D | |
| Meter Installer | $59.30 | 5A | 4D | |
| Pole Sprayer | $93.99 | 5A | 4D | |
| Powderperson | $69.84 | 5A | 4D | |
| **Electronic Technicians** | | | | |
| Journey Level | $60.28 | 6Z | 1B | |
| **Elevator Constructors** | | | | |
| Mechanic | $115.14 | 7D | 4A | |
| Mechanic In Charge | $124.53 | 7D | 4A | |
| **Fabricated Precast Concrete Products** | | | | |
| Journey Level | $17.13 | | 1 | |
| Journey Level - In-Factory Work Only | $17.13 | | 1 | |
| **Fence Erectors** | | | | |
| Fence Erector | $57.66 | 15J | 11P | 8Y |
| Fence Laborer | $57.66 | 15J | 11P | 8Y |
| **Flaggers** | | | | |
| Journey Level | $57.66 | 15J | 11P | 8Y |
| **Glaziers** | | | | |
| Journey Level | $85.16 | 7L | 1Y | |
| **Heat & Frost Insulators & Asbestos** | | | | |
| Journey Level | $96.42 | 15H | 11C | |
| **Heating Equipment Mechanics** | | | | |
| Journey Level | $105.42 | 7F | 1E | |
| **Hod Carriers & Mason Tenders** | | | | |
| Journey Level | $71.09 | 15J | 11P | |
| **Industrial Power Vacuum Cleaner** | | | | |
| Journey Level | $17.13 | | 1 | |
| **Inland Boatmen** | | | | |
| Boat Operator | $71.28 | 5B | 1K | |
| Cook | $69.70 | 5B | 1K | |
| Deckhand | $70.00 | 5B | 1K | |
| Deckhand Engineer | $69.55 | 5B | 1K | |
| Launch Operator | $71.23 | 5B | 1K | |
| Mate | $89.12 | 5B | 1K | |
| **Inspection/Clng/Sealing Sewer & Water Sys By Remote Control** | | | | |
| Cleaner Operator, Foamer Operator | $17.13 | | 1 | |
| Grout Truck Operator | $17.13 | | 1 | |
| Head Operator | $17.13 | | 1 | |
| Technician | $25.00 | | 1 | |
| Tv Truck Operator | $17.13 | | 1 | |
| **Insulation Applicators** | | | | |
| Journey Level | $83.21 | 15J | 11U | |
| **Ironworkers** | | | | |
| Journeyman | $92.82 | 15K | 11N | |
| **Laborers** | | | | |
| Air, Gas Or Electric Vibrating Screed | $67.39 | 15J | 11P | 8Y |
| Airtrac Drill Operator | $69.37 | 15J | 11P | 8Y |
| Ballast Regular Machine | $67.39 | 15J | 11P | 8Y |
| Batch Weighman | $57.66 | 15J | 11P | 8Y |
| Brick Pavers | $67.39 | 15J | 11P | 8Y |
| Brush Cutter | $67.39 | 15J | 11P | 8Y |
| Brush Hog Feeder | $67.39 | 15J | 11P | 8Y |
| Burner | $67.39 | 15J | 11P | 8Y |
| Caisson Worker | $69.37 | 15J | 11P | 8Y |
| Carpenter Tender | $67.39 | 15J | 11P | 8Y |

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|---|---|---|---|---|
| Cement Dumper-paving | $69.37 | 15J | 11P | 8Y |
| Cement Finisher Tender | $67.39 | 15J | 11P | 8Y |
| Change House Or Dry Shack | $67.39 | 15J | 11P | 8Y |
| Chipping Gun (30 Lbs. And Over) | $68.56 | 15J | 11P | 8Y |
| Chipping Gun (Under 30 Lbs.) | $67.39 | 15J | 11P | 8Y |
| Choker Setter | $67.39 | 15J | 11P | 8Y |
| Chuck Tender | $67.39 | 15J | 11P | 8Y |
| Clary Power Spreader | $68.56 | 15J | 11P | 8Y |
| Clean-up Laborer | $67.39 | 15J | 11P | 8Y |
| Concrete Dumper/Chute Operator | $69.37 | 15J | 11P | 8Y |
| Concrete Form Stripper | $67.39 | 15J | 11P | 8Y |
| Concrete Placement Crew | $69.37 | 15J | 11P | 8Y |
| Concrete Saw Operator/Core Driller | $68.56 | 15J | 11P | 8Y |
| Crusher Feeder | $57.66 | 15J | 11P | 8Y |
| Curing Laborer | $67.39 | 15J | 11P | 8Y |
| Demolition: Wrecking & Moving (Incl. Charred Material) | $67.39 | 15J | 11P | 8Y |
| Ditch Digger | $67.39 | 15J | 11P | 8Y |
| Diver | $69.37 | 15J | 11P | 8Y |
| Drill Operator (Hydraulic, Diamond) | $68.56 | 15J | 11P | 8Y |
| Dry Stack Walls | $67.39 | 15J | 11P | 8Y |
| Dump Person | $67.39 | 15J | 11P | 8Y |
| Epoxy Technician | $67.39 | 15J | 11P | 8Y |
| Erosion Control Worker | $67.39 | 15J | 11P | 8Y |
| Faller & Bucker Chain Saw | $68.56 | 15J | 11P | 8Y |
| Fine Graders | $67.39 | 15J | 11P | 8Y |
| Firewatch | $57.66 | 15J | 11P | 8Y |
| Form Setter | $69.37 | 15J | 11P | 8Y |
| Gabian Basket Builders | $67.39 | 15J | 11P | 8Y |
| General Laborer | $67.39 | 15J | 11P | 8Y |
| Grade Checker & Transit Person | $71.09 | 15J | 11P | 8Y |
| Grinders | $67.39 | 15J | 11P | 8Y |
| Grout Machine Tender | $67.39 | 15J | 11P | 8Y |
| Groutmen (Pressure) Including Post Tension Beams | $68.56 | 15J | 11P | 8Y |
| Guardrail Erector | $67.39 | 15J | 11P | 8Y |
| Hazardous Waste Worker (Level A) | $69.37 | 15J | 11P | 8Y |
| Hazardous Waste Worker (Level B) | $68.56 | 15J | 11P | 8Y |
| Hazardous Waste Worker (Level C) | $67.39 | 15J | 11P | 8Y |
| High Scaler | $69.37 | 15J | 11P | 8Y |
| Jackhammer | $68.56 | 15J | 11P | 8Y |
| Laserbeam Operator | $68.56 | 15J | 11P | 8Y |
| Maintenance Person | $67.39 | 15J | 11P | 8Y |
| Manhole Builder-Mudman | $68.56 | 15J | 11P | 8Y |
| Material Yard Person | $67.39 | 15J | 11P | 8Y |
| Mold Abatement Worker | $67.39 | 15J | 11P | 8Y |
| Motorman-Dinky Locomotive | $71.19 | 15J | 11P | 8Y |
| nozzleman (concrete pump, green cutter when using combination of high pressure air & water on concrete & rock, sandblast, gunite, shotcrete, water blaster, vacuum blaster) | $71.09 | 15J | 11P | 8Y |
| Pavement Breaker | $68.56 | 15J | 11P | 8Y |
| Pilot Car | $57.66 | 15J | 11P | 8Y |
| Pipe Layer (Lead) | $71.09 | 15J | 11P | 8Y |
| Pipe Layer/Tailor | $68.56 | 15J | 11P | 8Y |
| Pipe Pot Tender | $68.56 | 15J | 11P | 8Y |
| Pipe Reliner | $68.56 | 15J | 11P | 8Y |
| Pipe Wrapper | $68.56 | 15J | 11P | 8Y |

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|---|---|---|---|---|
| Pot Tender | $67.39 | 15J | 11P | 8Y |
| Powderman | $69.37 | 15J | 11P | 8Y |
| Powderman's Helper | $67.39 | 15J | 11P | 8Y |
| Power Jacks | $68.56 | 15J | 11P | 8Y |
| Power Washer | $67.39 | 15J | 11P | 8Y |
| Railroad Spike Puller - Power | $68.56 | 15J | 11P | 8Y |
| Raker - Asphalt | $71.09 | 15J | 11P | 8Y |
| Re-timberman | $69.37 | 15J | 11P | 8Y |
| Remote Equipment Operator | $68.56 | 15J | 11P | 8Y |
| Rigger/Signal Person | $68.56 | 15J | 11P | 8Y |
| Rip Rap Person | $67.39 | 15J | 11P | 8Y |
| Rivet Buster | $68.56 | 15J | 11P | 8Y |
| Rodder | $69.37 | 15J | 11P | 8Y |
| Scaffold Erector | $67.39 | 15J | 11P | 8Y |
| Scale Person | $67.39 | 15J | 11P | 8Y |
| Sloper (Over 20)" | $68.56 | 15J | 11P | 8Y |
| Sloper Sprayer | $67.39 | 15J | 11P | 8Y |
| Spreader (Concrete) | $69.37 | 15J | 11P | 8Y |
| Stake Hopper | $67.39 | 15J | 11P | 8Y |
| Stock Piler | $67.39 | 15J | 11P | 8Y |
| Swinging Stage/Boatswain Chair | $57.66 | 15J | 11P | 8Y |
| Tamper & Similar Electric, Air & Gas Operated Tools | $68.56 | 15J | 11P | 8Y |
| Tamper (Multiple & Self-propelled) | $68.56 | 15J | 11P | 8Y |
| Timber Person - Sewer (Lagger, Shorer & Cribber) | $68.56 | 15J | 11P | 8Y |
| Toolroom Person (at Jobsite) | $67.39 | 15J | 11P | 8Y |
| Topper | $67.39 | 15J | 11P | 8Y |
| Track Laborer | $67.39 | 15J | 11P | 8Y |
| Track Liner (Power) | $68.56 | 15J | 11P | 8Y |
| Traffic Control Laborer | $61.41 | 15J | 11P | 9C |
| Traffic Control Supervisor | $64.86 | 15J | 11P | 9C |
| Truck Spotter | $67.39 | 15J | 11P | 8Y |
| Tugger Operator | $68.56 | 15J | 11P | 8Y |
| Tunnel Work-Compressed Air Worker 0-30 psi | $225.32 | 15J | 11P | 9B |
| Tunnel Work-Compressed Air Worker 30.01-44.00 psi | $230.35 | 15J | 11P | 9B |
| Tunnel Work-Compressed Air Worker 44.01-54.00 psi | $234.03 | 15J | 11P | 9B |
| Tunnel Work-Compressed Air Worker 54.01-60.00 psi | $239.73 | 15J | 11P | 9B |
| Tunnel Work-Compressed Air Worker 60.01-64.00 psi | $241.85 | 15J | 11P | 9B |
| Tunnel Work-Compressed Air Worker 64.01-68.00 psi | $246.95 | 15J | 11P | 9B |
| Tunnel Work-Compressed Air Worker 68.01-70.00 psi | $248.85 | 15J | 11P | 9B |
| Tunnel Work-Compressed Air Worker 70.01-72.00 psi | $250.85 | 15J | 11P | 9B |
| Tunnel Work-Compressed Air Worker 72.01-74.00 psi | $252.85 | 15J | 11P | 9B |
| Tunnel Work-Guage and Lock Tender | $71.19 | 15J | 11P | 8Y |
| Tunnel Work-Miner | $71.19 | 15J | 11P | 8Y |
| Vibrator | $69.37 | 15J | 11P | 8Y |
| Vinyl Seamer | $67.39 | 15J | 11P | 8Y |
| Watchman | $52.73 | 15J | 11P | 8Y |
| Welder | $68.56 | 15J | 11P | 8Y |
| **Laborers - Underground Sewer & Water** | | | | |
| General Laborer & Topman | $67.39 | 15J | 11P | 8Y |
| Pipe Layer | $68.56 | 15J | 11P | 8Y |
| **Landscape Construction** | | | | |
| Landscape Construction/Landscaping Or Planting Laborers | $52.73 | 15J | 11P | 8Y |
| Landscape Operator | $88.27 | 15J | 3K | 8X |
| **Landscape Maintenance** | $16.66 | | 1 | |
| Groundskeeper | $17.13 | | | |

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|---|---|---|---|---|
| **Lathers** | | | | |
| Journey Level | $81.71 | 15O | 11S | |
| **Marble Setters** | | | | |
| Journey Level | $76.07 | 7E | 1N | |
| **Metal Fabrication (In Shop)** | | | | |
| Fitter | $27.10 | 6T | 2U | |
| Laborer | $17.13 | 6T | 2U | |
| Layerout | $30.63 | 6T | 2U | |
| Machine Operator | $20.86 | 6T | 2U | |
| Welder | $24.74 | 6T | 2U | |
| **Millwright** | | | | |
| Journey Level | $80.28 | 15J | 4C | |
| **Modular Buildings** | | | | |
| Cabinet Assembly | $17.13 | | 1 | |
| Electrician | $17.13 | | 1 | |
| Equipment Maintenance | $17.13 | | 1 | |
| Plumber | $17.13 | | 1 | |
| Production Worker | $17.13 | | 1 | |
| Tool Maintenance | $17.13 | | 1 | |
| Utility Person | $17.13 | | 1 | |
| Welder | $17.13 | | 1 | |
| **Painters** | | | | |
| Journey Level | $56.09 | 6Z | 11J | |
| **Pile Driver** | | | | |
| Crew Tender | $80.50 | 15J | 11U | 9L |
| Journey Level | $84.81 | 15J | 11U | 9L |
| **Plasterers** | | | | |
| Journey Level | $78.60 | 7Q | 1R | |
| Nozzleman | $82.70 | 7Q | 1R | |
| **Playground & Park Equipment Installers** | | | | |
| Journey Level | $17.13 | | 1 | |
| **Plumbers & Pipefitters** | | | | |
| Journey Level | $95.37 | 5A | 1G | |
| **Power Equipment Operators** | | | | |
| Asphalt Plant Operator | $89.75 | 15J | 3K | 8X |
| Assistant Engineer | $82.95 | 7A | 11H | 8X |
| Barrier Machine (zipper) | $88.96 | 15J | 3K | 8X |
| Batch Plant Operator: Concrete | $88.96 | 15J | 3K | 8X |
| Bobcat | $84.39 | 15J | 3K | 8X |
| Brokk - Remote Demolition Equipment | $84.39 | 15J | 3K | 8X |
| Brooms | $84.39 | 15J | 3K | 8X |
| Bump Cutter | $88.96 | 15J | 3K | 8X |
| Cableways | $89.75 | 15J | 3K | 8X |
| Chipper | $88.96 | 15J | 3K | 8X |
| Compressor | $84.39 | 15J | 3K | 8X |
| Concrete Pump: Truck Mount With Boom Attachment Over 42m | $89.75 | 15J | 3K | 8X |
| Concrete Finish Machine -laser Screed | $84.39 | 15J | 3K | 8X |
| Concrete Pump - Mounted Or Trailer High Pressure Line Pump, Pump High Pressure | $88.27 | 15J | 3K | 8X |
| Concrete Pump: Truck Mount With Boom Attachment Up To 42m | $88.96 | 15J | 3K | 8X |
| Conveyors | $88.27 | 15J | 3K | 8X |
| Cranes Friction: 200 tons and over | $90.88 | 7A | 11H | 8X |
| Cranes, A-frame: 10 tons and under | $82.95 | 7A | 11H | 8X |
| Cranes: 100 tons through 199 tons, or 150' of boom (including jib with attachments) | $89.09 | 7A | 11H | 8X |

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|---|---|---|---|---|
| Cranes: 20 tons through 44 tons with attachments | $87.42 | 7A | 11H | 8X |
| Cranes: 200 tons- 299 tons, or 250' of boom including jib with attachments | $90.00 | 7A | 11H | 8X |
| Cranes: 300 tons and over or 300' of boom including jib with attachments | $90.88 | 7A | 11H | 8X |
| Cranes: 45 tons through 99 tons, under 150' of boom(including jib with attachments) | $88.20 | 7A | 11H | 8X |
| Cranes: Friction cranes through 199 tons | $90.00 | 7A | 11H | 8X |
| Cranes: through 19 tons with attachments, A-frame over 10 tons | $86.75 | 7A | 11H | 8X |
| Crusher | $88.96 | 15J | 3K | 8X |
| Deck Engineer/deck Winches (power) | $88.96 | 15J | 3K | 8X |
| Derricks: on building work | $88.20 | 7A | 11H | 8X |
| Dozers D-9 & Under | $88.27 | 15J | 3K | 8X |
| Drill Oilers: Auger Type, Truck Or Crane Mount | $88.27 | 15J | 3K | 8X |
| Drilling Machine | $90.68 | 15J | 3K | 8X |
| Elevator and man-lift: permanent and shaft type | $82.95 | 7A | 11H | 8X |
| Finishing Machine, Bidwell And Gamaco & Similar Equipment | $88.96 | 15J | 3K | 8X |
| Forklift: 3000 lbs and over with attachments | $86.75 | 7A | 11H | 8X |
| Forklifts: under 3000 lbs. with attachments | $82.95 | 7A | 11H | 8X |
| Grade Engineer: Using Blueprints, Cut Sheets,etc. | $88.96 | 15J | 3K | 8X |
| Gradechecker/stakeman | $84.39 | 15J | 3K | 8X |
| Guardrail punch/Auger | $88.96 | 15J | 3K | 8X |
| Hard Tail End Dump Articulating Off- Road Equipment 45 Yards. & Over | $89.75 | 15J | 3K | 8X |
| Hard Tail End Dump Articulating Off-road Equipment Under 45 Yards | $88.96 | 15J | 3K | 8X |
| Horizontal/directional Drill Locator | $88.27 | 15J | 3K | 8X |
| Horizontal/directional Drill Operator | $88.96 | 15J | 3K | 8X |
| Hydralifts/boom trucks: 10 tons and under | $82.95 | 7A | 11H | 8X |
| Hydralifts/boom trucks: over 10 tons | $86.75 | 7A | 11H | 8X |
| Loader, Overhead 8 Yards. & Over | $90.68 | 15J | 3K | 8X |
| Loader, Overhead, 6 Yards. But Not Including 8 Yards | $89.75 | 15J | 3K | 8X |
| Loaders, Overhead Under 6 Yards | $88.96 | 15J | 3K | 8X |
| Loaders, Plant Feed | $88.96 | 15J | 3K | 8X |
| Loaders: Elevating Type Belt | $88.27 | 15J | 3K | 8X |
| Locomotives, All | $88.96 | 15J | 3K | 8X |
| Material Transfer Device | $88.96 | 15J | 3K | 8X |
| Mechanics: all (Leadmen - $0.50 per hour over mechanic) | $89.09 | 7A | 11H | 8X |
| Motor patrol graders | $89.75 | 15J | 3K | 8X |
| Mucking Machine, Mole, Tunnel Drill, Boring, Road Header And/or Shield | $89.75 | 15J | 3K | 8X |
| Oil Distributors, Blower Distribution & Mulch Seeding Operator | $84.39 | 15J | 3K | 8X |
| Outside Hoists (elevators and manlifts), Air Tuggers, Strato | $86.75 | 7A | 11H | 8X |
| Overhead, bridge type Crane: 20 tons through 44 tons | $87.42 | 7A | 11H | 8X |
| Overhead, bridge type: 100 tons and over | $89.09 | 7A | 11H | 8X |
| Overhead, bridge type: 45 tons through 99 tons | $88.20 | 7A | 11H | 8X |
| Pavement Breaker | $84.39 | 15J | 3K | 8X |
| Pile Driver (other Than Crane Mount) | $88.96 | 15J | 3K | 8X |
| Plant Oiler - Asphalt, Crusher | $88.27 | 15J | 3K | 8X |
| Posthole Digger, Mechanical | $84.39 | 15J | 3K | 8X |
| Power Plant | $84.39 | 15J | 3K | 8X |
| Pumps - Water | $84.39 | 15J | 3K | 8X |
| Quad 9, HD 41, D10 And Over | $89.75 | 15J | 3K | 8X |
| Quick Tower: no cab, under 100 feet in height based to boom | $86.75 | 7A | 11H | 8X |
| Remote Control Operator On Rubber Tired Earth Moving Equipment | $89.75 | 15J | 3K | 8X |

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|---|---|---|---|---|
| Rigger and Bellman | $82.95 | 7A | 11H | 8X |
| Rigger/Signal Person, Bellman(Certified) | $86.75 | 7A | 11H | 8X |
| Rollagon | $89.75 | 15J | 3K | 8X |
| Roller, Other Than Plant Mix | $84.39 | 15J | 3K | 8X |
| Roller, Plant Mix Or Multi-lift Materials | $88.27 | 15J | 3K | 8X |
| Roto-mill, Roto-grinder | $88.96 | 15J | 3K | 8X |
| Saws - Concrete | $88.27 | 15J | 3K | 8X |
| Scraper, Self Propelled Under 45 Yards | $88.96 | 15J | 3K | 8X |
| Scrapers - Concrete & Carry All | $88.27 | 15J | 3K | 8X |
| Scrapers, Self-propelled: 45 Yards And Over | $89.75 | 15J | 3K | 8X |
| Service Engineers: equipment | $86.75 | 7A | 11H | 8X |
| Shotcrete/gunite Equipment | $84.39 | 15J | 3K | 8X |
| Shovel, Excavator, Backhoe, Tractors Under 15 Metric Tons | $88.27 | 15J | 3K | 8X |
| Shovel, Excavator, Backhoe: Over 30 Metric Tons To 50 Metric Tons | $89.75 | 15J | 3K | 8X |
| Shovel, Excavator, Backhoes, Tractors: 15 To 30 Metric Tons | $88.96 | 15J | 3K | 8X |
| Shovel, Excavator, Backhoes: Over 50 Metric Tons To 90 Metric Tons | $90.68 | 15J | 3K | 8X |
| Shovel, Excavator, Backhoes: Over 90 Metric Tons | $91.60 | 15J | 3K | 8X |
| Slipform Pavers | $89.75 | 15J | 3K | 8X |
| Spreader, Topsider & Screedman | $89.75 | 15J | 3K | 8X |
| Subgrader Trimmer | $88.96 | 15J | 3K | 8X |
| Tower Bucket Elevators | $88.27 | 15J | 3K | 8X |
| Tower Crane: over 175' through 250' in height, base to boom | $90.00 | 7A | 11H | 8X |
| Tower crane: up to 175' in height base to boom | $89.09 | 7A | 11H | 8X |
| Tower Cranes: over 250' in height from base to boom. | $90.88 | 7A | 11H | 8X |
| Transporters, All Track Or Truck Type | $89.75 | 15J | 3K | 8X |
| Trenching Machines | $88.27 | 15J | 3K | 8X |
| Truck Crane Oiler/Driver: 100 tons and over | $87.42 | 7A | 11H | 8X |
| Truck crane oiler/driver: under 100 tons | $86.75 | 7A | 11H | 8X |
| Truck Mount Portable Conveyor | $88.96 | 15J | 3K | 8X |
| Vac Truck (Vactor Guzzler, Hydro Excavator) | $88.96 | 15J | 3K | 8X |
| Welder | $88.20 | 7A | 11H | 8X |
| Wheel Tractors, Farmall Type | $84.39 | 15J | 3K | 8X |
| Yo Yo Pay Dozer | $88.96 | 15J | 3K | 8X |
| **Power Equipment Operators- Underground Sewer & Water** | | | | |
| Asphalt Plant Operator | $89.75 | 15J | 3K | 8X |
| Assistant Engineer | $82.95 | 7A | 11H | 8X |
| Barrier Machine (zipper) | $88.96 | 15J | 3K | 8X |
| Batch Plant Operator: Concrete | $88.96 | 15J | 3K | 8X |
| Bobcat | $84.39 | 15J | 3K | 8X |
| Brokk - Remote Demolition Equipment | $84.39 | 15J | 3K | 8X |
| Brooms | $84.39 | 15J | 3K | 8X |
| Bump Cutter | $88.96 | 15J | 3K | 8X |
| Cableways | $89.75 | 15J | 3K | 8X |
| Chipper | $88.96 | 15J | 3K | 8X |
| Compressor | $84.39 | 15J | 3K | 8X |
| Concrete Pump: Truck Mount With Boom Attachment Over 42m | $89.75 | 15J | 3K | 8X |
| Concrete Finish Machine -laser Screed | $84.39 | 15J | 3K | 8X |
| Concrete Pump - Mounted Or Trailer High Pressure Line Pump, Pump High Pressure | $88.27 | 15J | 3K | 8X |
| Concrete Pump: Truck Mount With Boom Attachment Up To 42m | $88.96 | 15J | 3K | 8X |
| Conveyors | $88.27 | 15J | 3K | 8X |
| Cranes Friction: 200 tons and over | $90.88 | 7A | 11H | 8X |
| Cranes, A-frame: 10 tons and under | $82.95 | 7A | 11H | 8X |

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|---|---|---|---|---|
| Cranes: 100 tons through 199 tons, or 150' of boom (including jib with attachments) | $89.09 | 7A | 11H | 8X |
| Cranes: 20 tons through 44 tons with attachments | $87.42 | 7A | 11H | 8X |
| Cranes: 200 tons- 299 tons, or 250' of boom including jib with attachments | $90.00 | 7A | 11H | 8X |
| Cranes: 300 tons and over or 300' of boom including jib with attachments | $90.88 | 7A | 11H | 8X |
| Cranes: 45 tons through 99 tons, under 150' of boom(including jib with attachments) | $88.20 | 7A | 11H | 8X |
| Cranes: Friction cranes through 199 tons | $90.00 | 7A | 11H | 8X |
| Cranes: through 19 tons with attachments, A-frame over 10 tons | $86.75 | 7A | 11H | 8X |
| Crusher | $88.96 | 15J | 3K | 8X |
| Deck Engineer/deck Winches (power) | $88.96 | 15J | 3K | 8X |
| Derricks: on building work | $88.20 | 7A | 11H | 8X |
| Dozers D-9 & Under | $88.27 | 15J | 3K | 8X |
| Drill Oilers: Auger Type, Truck Or Crane Mount | $88.27 | 15J | 3K | 8X |
| Drilling Machine | $90.68 | 15J | 3K | 8X |
| Elevator and man-lift: permanent and shaft type | $82.95 | 7A | 11H | 8X |
| Finishing Machine, Bidwell And Gamaco & Similar Equipment | $88.96 | 15J | 3K | 8X |
| Forklift: 3000 lbs and over with attachments | $86.75 | 7A | 11H | 8X |
| Forklifts: under 3000 lbs. with attachments | $82.95 | 7A | 11H | 8X |
| Grade Engineer: Using Blueprints, Cut Sheets,etc. | $88.96 | 15J | 3K | 8X |
| Gradechecker/stakeman | $84.39 | 15J | 3K | 8X |
| Guardrail punch/Auger | $88.96 | 15J | 3K | 8X |
| Hard Tail End Dump Articulating Off- Road Equipment 45 Yards. & Over | $89.75 | 15J | 3K | 8X |
| Hard Tail End Dump Articulating Off-road Equipment Under 45 Yards | $88.96 | 15J | 3K | 8X |
| Horizontal/directional Drill Locator | $88.27 | 15J | 3K | 8X |
| Horizontal/directional Drill Operator | $88.96 | 15J | 3K | 8X |
| Hydralifts/boom trucks: 10 tons and under | $82.95 | 7A | 11H | 8X |
| Hydralifts/boom trucks: over 10 tons | $86.75 | 7A | 11H | 8X |
| Loader, Overhead 8 Yards. & Over | $90.68 | 15J | 3K | 8X |
| Loader, Overhead, 6 Yards. But Not Including 8 Yards | $89.75 | 15J | 3K | 8X |
| Loaders, Overhead Under 6 Yards | $88.96 | 15J | 3K | 8X |
| Loaders, Plant Feed | $88.96 | 15J | 3K | 8X |
| Loaders: Elevating Type Belt | $88.27 | 15J | 3K | 8X |
| Locomotives, All | $88.96 | 15J | 3K | 8X |
| Material Transfer Device | $88.96 | 15J | 3K | 8X |
| Mechanics: all (Leadmen - $0.50 per hour over mechanic) | $89.09 | 7A | 11H | 8X |
| Motor patrol graders | $89.75 | 15J | 3K | 8X |
| Mucking Machine, Mole, Tunnel Drill, Boring, Road Header And/or Shield | $89.75 | 15J | 3K | 8X |
| Oil Distributors, Blower Distribution & Mulch Seeding Operator | $84.39 | 15J | 3K | 8X |
| Outside Hoists (elevators and manlifts), Air Tuggers, Strato | $86.75 | 7A | 11H | 8X |
| Overhead, bridge type Crane: 20 tons through 44 tons | $87.42 | 7A | 11H | 8X |
| Overhead, bridge type: 100 tons and over | $89.09 | 7A | 11H | 8X |
| Overhead, bridge type: 45 tons through 99 tons | $88.20 | 7A | 11H | 8X |
| Pavement Breaker | $84.39 | 15J | 3K | 8X |
| Pile Driver (other Than Crane Mount) | $88.96 | 15J | 3K | 8X |
| Plant Oiler - Asphalt, Crusher | $88.27 | 15J | 3K | 8X |
| Posthole Digger, Mechanical | $84.39 | 15J | 3K | 8X |
| Power Plant | $84.39 | 15J | 3K | 8X |
| Pumps - Water | $84.39 | 15J | 3K | 8X |
| Quad 9, HD 41, D10 And Over | $89.75 | 15J | 3K | 8X |

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|---|---|---|---|---|
| Quick Tower: no cab, under 100 feet in height based to boom | $86.75 | 7A | 11H | 8X |
| Remote Control Operator On Rubber Tired Earth Moving Equipment | $89.75 | 15J | 3K | 8X |
| Rigger and Bellman | $82.95 | 7A | 11H | 8X |
| Rigger/Signal Person, Bellman(Certified) | $86.75 | 7A | 11H | 8X |
| Rollagon | $89.75 | 15J | 3K | 8X |
| Roller, Other Than Plant Mix | $84.39 | 15J | 3K | 8X |
| Roller, Plant Mix Or Multi-lift Materials | $88.27 | 15J | 3K | 8X |
| Roto-mill, Roto-grinder | $88.96 | 15J | 3K | 8X |
| Saws - Concrete | $88.27 | 15J | 3K | 8X |
| Scraper, Self Propelled Under 45 Yards | $88.96 | 15J | 3K | 8X |
| Scrapers - Concrete & Carry All | $88.27 | 15J | 3K | 8X |
| Scrapers, Self-propelled: 45 Yards And Over | $89.75 | 15J | 3K | 8X |
| Service Engineers: equipment | $86.75 | 7A | 11H | 8X |
| Shotcrete/gunite Equipment | $84.39 | 15J | 3K | 8X |
| Shovel, Excavator, Backhoe, Tractors Under 15 Metric Tons | $88.27 | 15J | 3K | 8X |
| Shovel, Excavator, Backhoe: Over 30 Metric Tons To 50 Metric Tons | $89.75 | 15J | 3K | 8X |
| Shovel, Excavator, Backhoes, Tractors: 15 To 30 Metric Tons | $88.96 | 15J | 3K | 8X |
| Shovel, Excavator, Backhoes: Over 50 Metric Tons To 90 Metric Tons | $90.68 | 15J | 3K | 8X |
| Shovel, Excavator, Backhoes: Over 90 Metric Tons | $91.60 | 15J | 3K | 8X |
| Slipform Pavers | $89.75 | 15J | 3K | 8X |
| Spreader, Topsider & Screedman | $89.75 | 15J | 3K | 8X |
| Subgrader Trimmer | $88.96 | 15J | 3K | 8X |
| Tower Bucket Elevators | $88.27 | 15J | 3K | 8X |
| Tower Crane: over 175' through 250' in height, base to boom | $90.00 | 7A | 11H | 8X |
| Tower crane: up to 175' in height base to boom | $89.09 | 7A | 11H | 8X |
| Tower Cranes: over 250' in height from base to boom. | $90.88 | 7A | 11H | 8X |
| Transporters, All Track Or Truck Type | $89.75 | 15J | 3K | 8X |
| Trenching Machines | $88.27 | 15J | 3K | 8X |
| Truck Crane Oiler/Driver: 100 tons and over | $87.42 | 7A | 11H | 8X |
| Truck crane oiler/driver: under 100 tons | $86.75 | 7A | 11H | 8X |
| Truck Mount Portable Conveyor | $88.96 | 15J | 3K | 8X |
| Vac Truck (Vactor Guzzler, Hydro Excavator) | $88.96 | 15J | 3K | 8X |
| Welder | $88.20 | 7A | 11H | 8X |
| Wheel Tractors, Farmall Type | $84.39 | 15J | 3K | 8X |
| Yo Yo Pay Dozer | $88.96 | 15J | 3K | 8X |
| **Power Line Clearance Tree Trimmers** | | | | |
| Journey Level In Charge | $65.20 | 5A | 4A | |
| Spray Person | $61.74 | 5A | 4A | |
| Tree Equipment Operator | $65.00 | 5A | 4A | |
| Tree Trimmer | $58.29 | 5A | 4A | |
| Tree Trimmer Groundperson | $43.05 | 5A | 4A | |
| **Refrigeration & Air Conditioning Mechanics** | | | | |
| Journey Level | $100.71 | 5A | 1G | |
| **Residential Brick Mason** | | | | |
| Journey Level | $35.53 | | 1 | |
| **Residential Carpenters** | | | | |
| Journey Level | $32.32 | | 1 | |
| **Residential Cement Masons** | | | | |
| Journey Level | $18.09 | | | |
| **Residential Drywall Applicators** | | | | |
| Journey Level | $51.52 | 15J | 4C | |
| **Residential Drywall Tapers** | | | | |
| Journey Level | $29.06 | | 1 | |
| **Residential Electricians** | | | | |

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|---|---|---|---|
| Journey Level | $50.93 | 6Z | 1B |
| **Residential Glaziers** | | | |
| Journey Level | $56.50 | 7L | 1H |
| **Residential Insulation Applicators** | | | |
| Journey Level | $78.96 | | 1 |
| **Residential Laborers** | | | |
| Journey Level | $22.90 | | 1 |
| **Residential Marble Setters** | | | |
| Journey Level | $35.53 | | 1 |
| **Residential Painters** | | | |
| Journey Level | $22.13 | | 1 |
| **Residential Plumbers & Pipefitters** | | | |
| Journey Level | $71.41 | | 1 |
| **Residential Refrigeration & Air Conditioning Mechanics** | | | |
| Journey Level | $88.56 | | 1 |
| **Residential Sheet Metal Workers** | | | |
| Journey Level | $66.16 | 7F | 1R |
| **Residential Soft Floor Layers** | | | |
| Journey Level | $25.84 | | 1 |
| **Residential Sprinkler Fitters (Fire Protection)** | | | |
| Journey Level | $52.72 | | 1 |
| **Residential Stone Masons** | | | |
| Journey Level | $35.53 | | 1 |
| **Residential Terrazzo Workers** | | | |
| Journey Level | $17.19 | | 1 |
| **Residential Terrazzo/Tile Finishers** | | | |
| Journey Level | $21.96 | | 1 |
| **Residential Tile Setters** | | | |
| Journey Level | $17.13 | | 1 |
| **Roofers** | | | |
| Journey Level | $67.45 | 5A | 3H |
| Using Irritable Bituminous Materials | $70.45 | 5A | 3H |
| **Sheet Metal Workers** | | | |
| Journey Level (Field or Shop) | $105.42 | 7F | 1E |
| **Shipbuilding & Ship Repair** | | | |
| Boilermaker | $61.07 | 7X | 4J |
| **Sign Makers & Installers (Electrical)** | | | |
| Journey Level | $18.04 | | 1 |
| **Sign Makers & Installers (Non-Electrical)** | | | |
| Journey Level | $17.13 | | 1 |
| **Soft Floor Layers** | | | |
| Journey Level | $63.29 | 15J | 4C |
| **Solar Controls For Windows** | | | |
| Journey Level | $17.13 | | 1 |
| **Sprinkler Fitters (Fire Protection)** | | | |
| Journey Level | $103.19 | 5C | 1X |
| **Stage Rigging Mechanics (Non Structural)** | | | |
| Journey Level | $17.13 | | 1 |
| **Stone Masons** | | | |
| Journey Level | $76.17 | 7E | 1N |
| **Street & Parking Lot Sweeper Workers** | | | |
| Journey Level | $17.13 | | 1 |
| **Surveyors** | | | |

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|---|---|---|---|---|
| Assistant Construction Site Surveyor | $86.75 | 7A | 11H | |
| Chainman | $82.95 | 7A | 11H | |
| Construction Site Surveyor | $88.20 | 7A | 11H | |
| Drone Operator (when used in conjunction with surveying work only) | $82.95 | 7A | 11H | |
| Ground Penetrating Radar | $82.95 | 7A | 11H | |
| **Telecommunication Technicians** | | | | |
| Journey Level | $60.28 | 6Z | 1B | |
| **Telephone Line Construction - Outside** | | | | |
| Cable Splicer | $42.62 | 5A | 2B | |
| Hole Digger/Ground Person | $27.97 | 5A | 2B | |
| Telephone Equipment Operator (Light) | $35.60 | 5A | 2B | |
| Telephone Lineperson | $40.28 | 5A | 2B | |
| **Terrazzo Workers** | | | | |
| Journey Level | $70.61 | 7E | 1N | |
| **Tile Setters** | | | | |
| Journey Level | $68.61 | 7E | 1N | |
| **Tile, Marble & Terrazzo Finishers** | | | | |
| Finisher | $59.44 | 7E | 1N | |
| **Traffic Control Stripers** | | | | |
| All cleanup required in connection with traffic control stripers work (Group 1) | $95.41 | 15L | 1K | |
| Handling, painting and installing of all car stops, stop signs and any other type sign (Group 2) | $62.69 | 15L | 1K | |
| Installation of guard rail and posts and similar protective devices (Group 2) | $62.69 | 15L | 1K | |
| Installation of parking gates, ticket spitters and other mechanical and automatic control devices (Group 2) | $62.69 | 15L | 1K | |
| Installation of plastic metal or composition button, or lines used instead of paint (Group 1) | $95.41 | 15L | 1K | |
| Line removal; chemical sand and hydro-blast, paint and button (Group 1) | $95.41 | 15L | 1K | |
| Manufacturing and installation of all car stops and control devices and similar traffic regulators (Group 2) | $62.69 | 15L | 1K | |
| Manufacturing, painting, stenciling, servicing, repairing, placing and removal of traffic safety and control devices/barricades (Group 2) | $62.69 | 15L | 1K | |
| Painting and installing lines, arrows, bumpers, curbs, etc., on parking lots, air fields, highways, game courts (Group 1) | $95.41 | 15L | 1K | |
| Preparation and maintenance of all surfaces (Group 1) | $95.41 | 15L | 1K | |
| Seal coating, slurry coating and other surface protection (Group 2) | $62.69 | 15L | 1K | |
| **Truck Drivers** | | | | |
| Asphalt Mix Over 16 Yards | $82.20 | 15J | 11M | 8L |
| Asphalt Mix To 16 Yards | $81.36 | 15J | 11M | 8L |
| Dump Truck | $81.36 | 15J | 11M | 8L |
| Dump Truck & Trailer | $82.20 | 15J | 11M | 8L |
| Other Trucks | $82.20 | 15J | 11M | 8L |
| Transit Mix | $82.20 | 15J | 11M | 8L |
| **Well Drillers & Irrigation Pump Installers** | | | | |
| Irrigation Pump Installer | $17.53 | | 1 | |
| Oiler | $17.13 | | 1 | |
| Well Driller | $18.00 | | 1 | |

## Overtime Codes

**Overtime Calculations** are based on the hourly rate actually paid to the worker. On public works projects, the hourly rate must be not less than the prevailing rate of wage minus the hourly rate of the cost of fringe benefits actually provided for the worker.

**1. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.**

B. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

C. The first two (2) hours after eight (8) regular hours Monday through Friday and the first ten (10) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other overtime hours worked and all hours worked on Sundays and Holidays worked shall be paid at double the hourly rate of wage.

D. The first two (2) hours before or after a five-eight (8) hour workweek day or a four-ten (10) hour workweek day and the first eight (8) hours worked the next day after either workweek shall be paid at one and one-half times the hourly rate of wage. All additional hours worked and all worked on Sundays and holidays shall be paid at double the hourly rate of wage.

E. The first two (2) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one & one-half times the hourly rate of wage. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

F. The first two (2) hours after eight (8) regular hours Monday through Friday and the first ten (10) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other overtime hours worked, except Labor Day, shall be paid at double the hourly rate of wage. All hours worked on Labor Day shall be paid at three times the hourly rate of wage.

G. The first ten (10) hours worked on Saturdays and the first ten (10) hours worked on a fifth calendar weekday in a four-ten hour schedule, shall be paid at one & one-half times the hourly rate of wage. All hours worked in excess of ten (10) hours per day Monday through Saturday and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

H. All hours worked on Saturdays (except makeup days if work is lost due to inclement weather conditions or equipment breakdown) shall be paid at one & one-half times the hourly rate of wage. All hours worked Monday through Saturday over twelve (12) hours and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

I. All hours worked on Sundays and Holidays shall be paid at double the hourly rate of wage.

J. The first two (2) hours after eight (8) regular hours Monday through Friday and the first ten (10) hours on Saturday shall be paid at one & one-half times the hourly rate of wage. All hours worked over ten (10) hours Monday through Saturday, Sundays and holidays shall be paid at double the hourly rate of wage.

K. All hours worked on Saturdays and Sundays shall be paid at one & one-half times the hourly rate of wage. All hours worked on holidays shall be paid at double the hourly rate of wage.

M. All hours worked on Saturdays (except makeup days if work is lost due to inclement weather conditions) shall be paid at one &one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

N. All hours worked on Saturdays (except makeup days) shall be paid at one & one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

O. The first ten (10) worked on Saturday shall be paid at one & one-half times the hourly rate of wage. All hours worked on Sundays, holidays and after twelve (12) hours, Monday through Friday, and after ten (10) hours on Saturday shall be paid at double the hourly rate of wage.

P. All hours worked on Saturdays (except makeup days if circumstances warrant) &and Sundays shall be paid at one & one-half times the hourly rate of wage. All hours worked on holidays shall be paid at double the hourly rate of wage.

Q. The first two (2) hours after eight (8) regular hours Monday through Friday and up to ten (10) hours worked on Saturdays shall be paid at one & one-half times the hourly rate of wage. All hours worked in excess of ten (10) hours per day Monday through Saturday and all hours worked on Sundays and holidays (except Christmas Day) shall be paid at double the hourly rate of wage. All hours worked on Christmas Day shall be paid at two & one-half times the hourly rate of wage.

R. All hours worked on Sundays and holidays shall be paid at two times the hourly rate of wage.

S. The first two (2) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one & one-half times the hourly rate of wage. All hours worked on holidays and all other overtime hours worked, except Labor Day, shall be paid at double the hourly rate of wage. All hours worked on Labor Day shall be paid at three times the hourly rate of wage.

U. All hours worked on Saturdays shall be paid at one & one-half times the hourly rate of wage. All hours worked on Sundays and holidays (except Labor Day) shall be paid at two times the hourly rate of wage. All hours worked on Labor Day shall be paid at three times the hourly rate of wage.

V. All hours worked on Sundays and holidays (except Thanksgiving Day and Christmas Day) shall be paid at one & one-half times the hourly rate of wage. All hours worked on Thanksgiving Day and Christmas Day shall be paid at double the hourly rate of wage.
W. All hours worked on Saturdays, Sundays and holidays (except for make-up days) shall be paid at one & one-half times the hourly rate of wage. All hours worked on holidays shall be paid at double the hourly rate of wage.
X. The first four (4) hours after eight (8) regular hours Monday through Friday and the first twelve (12) hours on Saturday shall be paid at one & one-half times the hourly rate of wage. All hours worked over twelve (12) hours Monday through Saturday, Sundays and holidays shall be paid at double the hourly rate of wage. When holiday falls on Saturday or Sunday, the day before Saturday, Friday, and the day after Sunday, Monday, shall be considered the holiday and all work performed shall be paid at double the hourly rate of wage.
Y. All hours worked outside the hours of 5:00am and 5:00pm (or such other hours as may be agreed upon by any employer and the employee) and all hours worked in excess of eight (8) hours per day (10 hours per day for a 4x10 workweek) and on Saturdays and holidays (except Labor Day) shall be paid at one & one-half times the hourly rate of wage. (Except for employees who are absent from work without prior approval on a scheduled workday during the workweek shall be paid at the straight-time rate until they have worked 8 hours in a day (10 in a 4x10 workweek) or 40 hours during that workweek.) All hours worked Monday through Saturday over twelve (12) hours and all hours worked on Sundays and Labor Day shall be paid at double the hourly rate of wage.
Z. All hours worked on Saturdays and Sundays shall be paid at one & one-half times the hourly rate of wage. All hours worked on holidays shall be paid the straight time rate of wage in addition to holiday pay.

**2. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.**

B. All hours worked on holidays shall be paid at one & one-half times the hourly rate of wage.
C. All hours worked on Sundays shall be paid at one & one-half times the hourly rate of wage. All hours worked on holidays shall be paid at two times the hourly rate of wage.
F. The first eight (8) hours worked on holidays shall be paid at the straight hourly rate of wage in addition to the holiday pay. All hours worked in excess of eight (8) hours on holidays shall be paid at double the hourly rate of wage.
G. All hours worked on Sunday shall be paid at two times the hourly rate of wage. All hours worked on paid holidays shall be paid at two & one-half times the hourly rate of wage including holiday pay.
H. All hours worked on Sunday shall be paid at two times the hourly rate of wage. All hours worked on holidays shall be paid at one & one-half times the hourly rate of wage.
O. All hours worked on Sundays and holidays shall be paid at one & one-half times the hourly rate of wage.
R. All hours worked on Sundays and holidays and all hours worked over sixty (60) in one week shall be paid at double the hourly rate of wage.
U. All hours worked on Saturdays shall be paid at one & one-half times the hourly rate of wage. All hours worked over twelve (12) hours in a day, or on Sundays and Holidays, shall be paid at double the hourly rate of wage.
W. The first two (2) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one & one-half times the hourly rate of wage. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage. On a 4x10 weekly schedule, either Monday through Thursday or Tuesday through Friday schedule, all hours worked after ten shall be paid at double the hourly rate of wage. The first eight (8) hours worked on the fifth day shall be paid at one & one-half times the hourly rate of wage. All other hours worked on the fifth, sixth, and seventh days and on holidays shall be paid at double the hourly rate of wage.
Y. All hours worked on Saturdays (except for make-up days) shall be paid at one & one-half times the hourly rate of wage. All hours worked Monday through Saturday over twelve (12) hours and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

**3. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.**

A. Work performed in excess of eight (8) hours of straight time per day, or ten (10) hours of straight time per day when 4x10 hour shifts are established, or forty (40) hours of straight time per week, Monday through Friday, or outside the normal shift, and all work on Saturdays shall be paid at time & one-half the straight time rate. Hours worked over twelve hours (12) in a single shift and all work performed after 6:00pm Saturday to 6:00am Monday and Holidays shall be paid at double the straight time rate of pay. Any shift starting between the hours of 6:00pm and midnight shall receive an additional one dollar ($1.00) per hour for all hours worked that shift. The employer shall have the sole discretion to assign overtime work to employees. Primary consideration for overtime work shall be given to employees regularly assigned to the work to be performed on overtime situations. After an employee has worked eight (8) hours at an applicable overtime rate, all additional hours shall be at the applicable overtime rate until such time as the employee has had a break of eight (8) hours or more.
C. Work performed in excess of eight (8) hours of straight time per day, or ten (10) hours of straight time per day when 4x10 hour shifts are established, or forty (40) hours of straight time per week, Monday through Friday, or outside the normal shift, and all work on Saturdays shall be paid at one & one-half times the hourly rate of wage.

All work performed after 6:00pm Saturday to 5:00am Monday and Holidays shall be paid at double the hourly rate of wage. After an employee has worked eight (8) hours at an applicable overtime rate, all additional hours shall be at the applicable overtime rate until such time as the employee has had a break of eight (8) hours or more.

E. All hours worked Sundays and holidays shall be paid at double the hourly rate of wage. Each week, once 40 hours of straight time work is achieved, then any hours worked over 10 hours per day Monday through Saturday shall be paid at double the hourly wage rate.

F. All hours worked on Saturday shall be paid at one & one-half times the hourly rate of wage. All hours worked on Sunday shall be paid at two times the hourly rate of wage. All hours worked on paid holidays shall be paid at two & one-half times the hourly rate of wage including holiday pay.

H. All work performed on Sundays between March 16th and October 14th and all holidays shall be compensated for at two (2) times the regular rate of pay. Work performed on Sundays between October 15th and March 15th shall be compensated at one & one half times the regular rate of pay.

I. All hours worked on Saturdays shall be paid at one & one-half times the hourly rate of wage. In the event the job is down due to weather conditions during a five day work week (Monday through Friday,) or a four day-ten hour work week (Tuesday through Friday,) then Saturday may be worked as a voluntary make-up day at the straight time rate. However, Saturday shall not be utilized as a make-up day when a holiday falls on Friday. All hours worked Monday through Saturday over twelve (12) hours and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

J. All hours worked between the hours of 10:00 pm and 5:00 am, Monday through Friday, and all hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

**4. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.**

A. All hours worked in excess of eight (8) hours per day or forty (40) hours per week shall be paid at double the hourly rate of wage. All hours worked on Saturdays, Sundays, and holidays shall be paid at double the hourly rate of wage.

B. All hours worked over twelve (12) hours per day and all hours worked on holidays shall be paid at double the hourly rate of wage.

C. On Monday through Friday, the first four (4) hours of overtime after eight (8) hours of straight time work shall be paid at one & one half times the straight time rate of pay, unless a 4x10 workweek has been established. On a 4x10 hour workweek scheduled Monday through Thursday, or Tuesday through Friday, the first two (2) hours of overtime after ten (10) hours of straight time work shall be paid at one & one half times the straight time rate of pay. On Saturday, the first twelve (12) hours of work shall be paid at one & one half times the straight time rate of pay, except that if the job is down on Monday through Friday due to weather conditions or other conditions outside the control of the employer, the first ten (10) hours on Saturday may be worked at the straight time rate of pay. All hours worked over twelve (12) hours in a day and all hours worked on Sunday and Holidays shall be paid at two (2) times the straight time rate of pay.

D. All hours worked in excess of eight (8) hours per day or forty (40) hours per week shall be paid at double the hourly rate of wage. All hours worked on Saturday, Sundays and holidays shall be paid at double the hourly rate of pay. Rates include all members of the assigned crew.

*EXCEPTION:*

On all multipole structures and steel transmission lines, switching stations, regulating, capacitor stations, generating plants, industrial plants, associated installations and substations, except those substations whose primary function is to feed a distribution system, will be paid overtime under the following rates:

The first two (2) hours after eight (8) regular hours Monday through Friday of overtime on a regular workday, shall be paid at one & one-half times the hourly rate of wage. All hours in excess of ten (10) hours will be at two (2) times the hourly rate of wage. The first eight (8) hours worked on Saturday will be paid at one & one-half times the hourly rate of wage. All hours worked in excess of eight (8) hours on Saturday, and all hours worked on Sundays and holidays will be at the double the hourly rate of wage. All overtime eligible hours performed on the above described work that is energized, shall be paid at the double the hourly rate of wage.

E. The first two (2) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one & one-half times the hourly rate of wage. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage. On a four-day, ten-hour weekly schedule, either Monday thru Thursday or Tuesday thru Friday schedule, all hours worked after ten shall be paid at double the hourly rate of wage. The Monday or Friday not utilized in the normal four-day, ten hour work week, and Saturday shall be paid at one & one half times the regular shift rate for the first eight (8) hours. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

F. All hours worked between the hours of 6:00pm and 6:00am, Monday through Saturday, shall be paid at a premium rate of 20% over the hourly rate of wage. All hours worked on Sundays shall be paid at one & one-half times the hourly rate of wage. All hours worked on holidays shall be paid at double the hourly rate of wage.
G. All hours worked on Saturdays shall be paid at one & one-half times the hourly rate of wage. All hours worked Monday through Saturday over twelve (12) hours and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
H. The first two (2) hours after eight (8) hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one and on-half times the hourly rate of wage. All other overtime hours worked, except Labor Day and all hours on Sunday shall be paid at double the hourly rate of wage. All hours worked on Labor Day shall be paid at three times the hourly rate of wage.

**5. HOLIDAY CODES**

A. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, and Christmas Day (7).
B. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, the day before Christmas Day, and Christmas Day (8).
C. Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, and Christmas Day (8).
D. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, and Christmas Day (8).
H. Holidays: New Year's Day, Memorial Day, Independence Day, Thanksgiving Day, the day after Thanksgiving Day, and Christmas Day (6).
I. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day (6).
J. Holidays: New Year's Day, Memorial Day, Independence Day, Thanksgiving Day, Friday after Thanksgiving Day, Christmas Eve Day, and Christmas Day (7).
K. Holidays**:** New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, Christmas Eve Day and Christmas Day (9).
L. Holidays**:** New Year's Day, Martin Luther King Jr. Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, and Christmas Day (8).
N. Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, the Friday after Thanksgiving Day, and Christmas Day (9).
P. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday and Saturday after Thanksgiving Day, the day before Christmas Day, and Christmas Day (9).
Q. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day (6).
R. Paid Holidays: New Year's Day, Presidents' Day, Independence Day, Labor Day, Thanksgiving Day, the day after Thanksgiving Day, one-half day before Christmas Day, and Christmas Day (7 1/2).
S. Paid Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day (7).
T. Paid holiday: New Year's Day, Washington’s Birthday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day,& the day before or after Christmas (10).
Z. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, the Friday after Thanksgiving Day, and Christmas Day (8).

**6. HOLIDAY CODES**

A. Paid Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, and Christmas Day (8).
E. Paid Holidays: New Year's Day, Day Before or After New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, and Christmas Day and a Half-Day on Christmas Eve Day (9 1/2).
G. Paid Holidays: New Year's Day, Martin Luther King Jr. Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, and Christmas Eve Day (11).
H. Paid Holidays: New Year's Day, New Year's Eve Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, Christmas Eve Day, and A Floating Holiday (10).
I. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, and Christmas Day (7).
T. Paid Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, the last working day before Christmas Day, and Christmas Day (9).

Z. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, and Christmas Day (7). If a holiday falls on Saturday, the preceding Friday shall be considered as the holiday. If a holiday falls on Sunday, the following Monday shall be considered as the holiday.

**7. HOLIDAY CODES**

A. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, and Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. If any of the listed holidays falls on a Saturday, the preceding Friday shall be a regular work day.

B. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, and Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

C. Holidays: New Year's Day, Martin Luther King Jr. Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, and Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

D. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Veteran’s Day, Thanksgiving Day, the Friday after Thanksgiving Day, and Christmas Day (8). Unpaid Holidays: President’s Day. Any paid holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any paid holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

E. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, and Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

F. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the last working day before Christmas Day and Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

G. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day (6). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday.

H. Holidays: New Year's Day, Martin Luther King Jr. Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the last working day before Christmas Day and Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

I. Holidays: New Year's Day, President’s Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the day before Christmas Day and Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

J. Holidays: New Year's Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day and Christmas Day (6). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

K. Holidays: New Year's Day, Memorial Day, Independence Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, and Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

L. Holidays: New Year's Day, Memorial Day, Labor Day, Independence Day, Thanksgiving Day, the last work day before Christmas Day, and Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

M. Paid Holidays: New Year's Day, the day after or before New Year’s Day, President’s Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, and the day after or before Christmas Day (10). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

N. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, and Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. When Christmas falls on a Saturday, the preceding Friday shall be observed as a holiday.

P. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, and Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday.

Q. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the last working day before Christmas Day and Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. If any of the listed holidays falls on a Saturday, the preceding Friday shall be a regular work day.

R. Paid Holidays: Paid Holidays: New Year's Day, the day after or before New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, and the day after or before Christmas Day (10). If any of the listed holidays fall on Saturday, the preceding Friday shall be observed as the holiday. If any of the listed holidays falls on a Sunday, the day observed by the Nation shall be considered a holiday and compensated accordingly.

S. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, Christmas Day, the Day after Christmas, and A Floating Holiday (9). If any of the listed holidays falls on a Sunday, the day observed by the Nation shall be considered a holiday and compensated accordingly.

T. Paid Holidays: New Year's Day, the day after or before New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, and the day after or before Christmas Day. (10). If any of the listed holidays falls on a Sunday, the day observed by the Nation shall be considered a holiday and compensated accordingly. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

**8. NOTE CODES**

D. Workers working with supplied air on hazmat projects receive an additional $1.00 per hour.

L. Workers on hazmat projects receive additional hourly premiums as follows - Level A: $0.75, Level B: $0.50, and Level C: $0.25.

M. Workers on hazmat projects receive additional hourly premiums as follows - Levels A & B: $1.00, Levels C & D: $0.50.

N. Workers on hazmat projects receive additional hourly premiums as follows - Level A: $1.00, Level B: $0.75, Level C: $0.50, and Level D: $0.25.

P. Workers on hazmat projects receive additional hourly premiums as follows - Class A Suit: $2.00, Class B Suit: $1.50, Class C Suit: $1.00, and Class D Suit: $0.50.

Q. The highest pressure registered on the gauge for an accumulated time of more than fifteen (15) minutes during the shift shall be used in determining the scale paid.

R. Effective August 31, 2012 – A Traffic Control Supervisor shall be present on the project whenever flagging or spotting or other traffic control labor is being utilized. A Traffic Control Laborer performs the setup, maintenance and removal of all temporary traffic control devices and construction signs necessary to control vehicular, bicycle, and pedestrian traffic during construction operations. Flaggers and Spotters shall be posted where shown on approved Traffic Control Plans or where directed by the Engineer. All flaggers and spotters shall possess a current flagging card issued by the State of Washington, Oregon, Montana, or Idaho. These classifications are only effective on or after August 31, 2012.

S. Effective August 31, 2012 – A Traffic Control Supervisor shall be present on the project whenever flagging or spotting or other traffic control labor is being utilized. Flaggers and Spotters shall be posted where shown on approved Traffic Control Plans or where directed by the Engineer. All flaggers and spotters shall possess a current flagging card issued by the State of Washington, Oregon, Montana, or Idaho. This classification is only effective on or after August 31, 2012.

T. Effective August 31, 2012 – A Traffic Control Laborer performs the setup, maintenance and removal of all temporary traffic control devices and construction signs necessary to control vehicular, bicycle, and pedestrian traffic during construction operations. Flaggers and Spotters shall be posted where shown on approved Traffic Control Plans or where directed by the Engineer. All flaggers and spotters shall possess a current flagging card issued by the State of Washington, Oregon, Montana, or Idaho. This classification is only effective on or after August 31, 2012.

U. Workers on hazmat projects receive additional hourly premiums as follows – Class A Suit: $2.00, Class B Suit: $1.50, And Class C Suit: $1.00. Workers performing underground work receive an additional $0.40 per hour for any and all work performed underground, including operating, servicing and repairing of equipment. The premium for underground work shall be paid for the entire shift worked. Workers who work suspended by a rope or cable receive an additional $0.50 per hour. The premium for work suspended shall be paid for the entire shift worked. Workers who do "pioneer" work (break open a cut, build road, etc.) more than one hundred fifty (150) feet above grade elevation receive an additional $0.50 per hour.

V. In addition to the hourly wage and fringe benefits, the following depth and enclosure premiums shall be paid. The premiums are to be calculated for the maximum depth and distance into an enclosure that a diver reaches in a day. The premiums are to be paid one time for the day and are not used in calculating overtime pay.

Depth premiums apply to depths of fifty feet or more. Over 50' to 100' - $2.00 per foot for each foot over 50 feet. Over 101' to 150' - $3.00 per foot for each foot over 101 feet. Over 151' to 220' - $4.00 per foot for each foot over 220 feet. Over 221' - $5.00 per foot for each foot over 221 feet.

Enclosure premiums apply when divers enter enclosures (such as pipes or tunnels) where there is no vertical ascent and is measured by the distance travelled from the entrance. 25’ to 300’ - $1.00 per foot from entrance. 300’ to 600’ - $1.50 per foot beginning at 300’. Over 600’ - $2.00 per foot beginning at 600’.

W. Meter Installers work on single phase 120/240V self-contained residential meters. The Lineman/Groundmen rates would apply to meters not fitting this description.

# STATEMENT OF INTENT TO PAY PREVAILING WAGES

Public Works Contract

40.00 Filing Fee Required

This form must be typed or printed in ink

- Fill in all blanks or the form will be returned for correction (see instructions)
- Please allow a **minimum** of 10 working days for processing
- Once approved, your form will be posted online at https://fortress.wa.gov/lni/pwiapub/SearchFor.asp

**Intent ID# (Assigned by L&I)**_____

| **Your Company Information** | | | **Awarding Agency Information** | | |
|---|---|---|---|---|---|
| Company Name | | | Project Name | | |
| Address | | | Awarding Agency | | |
| City | State | Zip +4 | Awarding Agency Address | | |
| Contractor Registration Number | UBI Number | | City | State | Zip +4 |
| Industrial Insurance Account Number | | | Awarding Agency Contact Name | Phone Number | |
| Email Address (required for notification of approval) | Phone Number | | County Where Work Will Be Performed | City Where Work Will Be Performed | |
| **Additional Details** | | | **Contract Details** | | |
| **Your** Expected Job Start Date (mm/dd/yyyy) | | | Bid Due Date (**Prime Contractor's**) | Award Date **(Prime Contractor's**) | |
| Job Site Address/Directions | | | Indicate Total Dollar Amount of **Your** Contract (including sales tax) or time and materials, if application | $ | |
| **ARRA Funds** | | | **Weatherization or Energy Efficient Funds** | | |
| Does this project utilize American Recovery and Reinvestment Act (ARRA) funds? ☐ Yes ☐ No | | | Does this project utilize any weatherization or energy efficiency upgrade funds (ARRA or otherwise)? ☐ Yes ☐ No | | |
| **Prime Contractor Information** | | | **Hiring Contractor Information** | | |
| Prime Contractor | | | Hiring Contractor | | |
| Contractor Registration Number | UBI Number | | Contractor Registration Number | UBI Number | |

| **Employment Information** | | | | | |
|---|---|---|---|---|---|
| Do you intend to use subcontractors? | ☐ Yes | ☐ No | Will employees perform work on this project? | ☐ Yes | ☐ No |
| Will **ALL** work be subcontracted? | ☐ Yes | ☐ No | Contractor Registration Number | ☐ Yes | ☐ No |

Number of Owner/Operators who own at least 30% of the company who will perform work on the project ☐ None (0) ☐ One (1) ☐ Two (2) ☐ Three (3)

| **Crafts/Trades/Occupations -** (Do not list apprentices they are listed o the Affidavit of Wages Paid only"<br>If an employee works in more than one craft, ensure that all hours worked in each craft are reported below.<br>For additional craft/trades/occupations, please use Addendum A | **Number of Workers** | **Rate of Hourly Pay** | **Rate of Hourly Usual ("Fringe"), Benefits** |
|---|---|---|---|
| | | | |
| | | | |
| | | | |

**Signature Block**

I hereby certify that I have read and understand the instructions to this form. That the information, including any addendums, are correct, and that all workers I employ on this Public Works Project will be paid no less than the Prevailing Wage Rate(s) as determined by the industrial Statistician of The Department of Labor and Industries.

Name: Title: Signature: Date:

| For L&I Use Only | |
|---|---|
| **APPROVED:** Department of Labor and Industries<br><br>_____<br>By Industrial Statistician | **Check Number:** _____ ☐ **$40** or $_____<br>Received: |

F700-029-000 statement of intent to pay prevailing wages 06-2010

STATE OF WASHINGTON
DEPARTMENT OF LABOR AND INDUSTRIES
*Prevailing Wage*
PO Box 44540 Olympia, Washington 98504-4540
360/902-5335 Fax 360/902-5300

**NOTICE:**

**SUBCONTRACTOR LIST REQUIRED WITH AFFIDAVIT OF WAGES PAID:**
Effective July, 11 2008, the Affidavit of Wages Paid form has been revised. A full list of the next tier of subcontractors is required as part of your Affidavit of Wages Paid form for public work under Chapter 39.12 RCW. Each contractor must list the subcontractors they hired on the public works project.

Contractors who file electronically will complete this list as part of that on-line filing. Addendum B is attached to this email for contractor's filing paper forms to print out, fill in, and then mail with the affidavit for the same project.

**FILING FEE:**
Effective July 1, 2008, a $40.00 form filing fee is required for each Statement of Intent to Pay Prevailing Wages and each Affidavit of wages Paid. The fee change was enacted by the legislature in the 2008 session in section 2 of EHB 3381.

By law, only the forms approved by the Industrial Statistician of the Department of Labor and Industries may be used for filing the Statements of Intent to Pay Prevailing Wages and filing the Affidavits of Wages Paid.

Department of Labor and Industries
Prevailing Wage
(360) 902-5335
http://www.lni.wa.gov/TradesLicensing/PrevailingWage

# AFFIDAVIT OF WAGES PAID

- This form must be typed or printed in ink
- Fill in all blanks or the form will be returned for correction (see instructions)
- Please allow a **minimum** of 10 working days for processing
- Once approved, your form will be posted online at https://fortress.wa.gov/lni/pwiapub/SearchFor.asp

Affidavit ID # (Assigned by L&I):_____

| **Your Company Information** | | | **Awarding Agency Information** | | |
|---|---|---|---|---|---|
| Your Company Name | | | Project Name | | |
| Your Address | | | Awarding Agency | | |
| City | State | Zip +4 | Awarding Agency Address | | |
| Your Contractor Registration Number | Your UBI Number | | City | State | Zip +4 |
| Your Industrial Insurance Account Number | | | Awarding Agency Contact Name | Phone Number | |
| Your Email Address (required for notification of approval) | Your Phone Number | | County Where Work Will Be Performed | City Where Work Will Be Performed | |
| **Additional Details** | | | **Contract Details** | | |
| **Your** Job Start Date (mm/dd/yyyy) | **Your** Date Work Completed | | Bid Due Date (**Prime Contractor's**) | Award Date (**Prime Contractor's**) | |
| Job Site Address/Directions | Your Approved Intent ID # | | Indicate Total Dollar Amount of **Your** Contract (including sales tax) or time and materials, if application | $ | |
| **EHB 2805 (RCW 39.04.370) –** Is the Prime Contractor's Contract at a cost of over one million dollars ($1,000,000)? | ☐ Yes | ☐ No | If you answered "Yes" to the EHB 2805 question and the Award Date is **91/2010** or later you must complete and submit the **EHB 2805 (RCW 39.04.370) Addendum** | | |
| **ARRA Funds** | | | **Weatherization or Energy Efficient Funds** | | |
| Does this project utilize American Recovery and Reinvestment Act (ARRA) funds? ☐ Yes ☐ No | | | Does this project utilize any weatherization or energy efficiency upgrade funds (ARRA or otherwise)? ☐ Yes ☐ No | | |
| **Prime Contractor Information** | | | **Hiring Contractor Information** | | |
| Prime Contractor | | | Hiring Contractor' Company Name | | |
| Prime Contractor Registration Number | Prime Contractor's UBI Number | | Hiring Contractor Registration Number | Hiring Contractor's UBI Number | |

| **Employment Information** | | | | | |
|---|---|---|---|---|---|
| Did you use **ANY** subcontractors? | ☐ Yes (Addendum B Required) | ☐ No | Did employees perform work on this project? | ☐ Yes | No |
| Was **ALL** work subcontracted? | ☐ Yes(Addendum B Required) | ☐ No | Did you use apprentice employees? | ☐ Yes | ☐ No |

Number of Owner/Operators who own at least 30% of the company who will perform work on the project ☐ None (0) ☐ One (1) ☐ Two (2) ☐ Three (3)

| **Crafts/Trades/Occupations and Apprentices –** For Apprentices enter their name, registration number, trade, dates worked on project, the number of hours in the program when they started work and ended work on the project, wage and fringe for each apprentice. For additional craft/trades/occupations, please use Addendum A | **Number of Workers** | **Total # of Hours Worked** | **Rate of Hourly Pay** | **Rate of Hourly Usual ("Fringe"), Benefits** |
|---|---|---|---|---|
| | | | | |

| | | | | |
|---|---|---|---|---|
| | | | | |
| | | | | |

**Signature Block**

I hereby certify that I have read and understand the instructions to this form. That the information, including any addendums, are correct, and that all workers I employ on this Public Works Project will be paid no less than the Prevailing Wage Rate(s) as determined by the industrial Statistician of The Department of Labor and Industries.

**Print Name:** **Print Title:** **Signature:** **Date:**

**For L&I Use Only**

**APPROVED:** Department of Labor and Industries

_____

By Industrial Statistician

**Check Number:** _____ ☐ **$40** or $_____

Received:

# *APPENDIX B*

## Nearby Water Well Reports

File Original and First Copy with the Division of Water Resources
Second Copy — Owner's Copy
Third Copy — Driller's Copy

Please consider CONFIDENTIAL

# WATER WELL REPORT
STATE OF WASHINGTON

Application No. .....
Permit No. .....

**(1) OWNER:** Name Olympia Brewing Co Address Olympia Wash

**(2) LOCATION OF WELL:** County Thurston NW¼ SE¼ Sec. 35 T. 18 N., R. 2W W.M.
Bearing and distance from section or subdivision corner 1720N & 2700' W of SE cor 35

**(3) PROPOSED USE:** Domestic ☐ Industrial ☐ Municipal ☐
Irrigation ☒ Test Well ☐ Other ☐

**(4) TYPE OF WORK:** Owner's number of well (if more than one) .... 29
New well ☒ Method: Dug ☐ Bored ☐
Deepened ☐ Cable ☒ Driven ☐
Reconditioned ☐ Rotary ☐ Jetted ☐

**(5) DIMENSIONS:** Diameter of well 16-12-10 inches.
Drilled 323 ft. Depth of completed well 315 ft.

**(6) CONSTRUCTION DETAILS:**
Casing installed: 16" Diam. from 0 ft. to 160 ft.
Threaded ☐ 12" Diam. from 0 ft. to 287 ft.
Welded ☐ 10" Diam. from 276 ft. to 285 ft.

Perforations: Yes ☐ No ☒
Type of perforator used .....
SIZE of perforations ..... in. by ..... in.
..... perforations from ..... ft. to ..... ft.
..... perforations from ..... ft. to ..... ft.
..... perforations from ..... ft. to ..... ft.

Screens: Yes ☒ No ☐
Manufacturer's Name Johnson
Type wire wound 35 Model No. .....
Diam. 10 Slot size 35 from 285 ft. to 295 ft.
Diam. 10 Slot size 25 from 295 ft. to 315 ft.

Gravel packed: Yes ☐ No ☒ Size of gravel: .....
Gravel placed from ..... ft. to ..... ft.

Surface seal: Yes ☒ No ☐ To what depth? 160 ft.
Material used in seal Cemented in 20" hole
Did any strata contain unusable water? Yes ☐ No ☒
Type of water? ..... Depth of strata .....
Method of sealing strata off .....

**(7) PUMP:** Manufacturer's Name .....
Type: ..... H.P. .....

**(8) WATER LEVELS:** Land-surface elevation above mean sea level .... ft.
Static level +22 ft. below top of well Date Oct 11 1963
Artesian pressure 9.5 lbs. per square inch Date .....
Artesian water is controlled by Gate and Valve (Cap, valve, etc.)

**(9) WELL TESTS:** Drawdown is amount water level is lowered below static level
Was a pump test made? Yes ☐ No ☒ If yes, by whom? .....

| Yield: | gal./min. with | ft. drawdown after | hrs. |
|---|---|---|---|
| "Flow | 1700 " | 22 " — | " |
| " | " | " | " |

Recovery data (time taken as zero when pump turned off) (water level measured from well top to water level)

| Time | Water Level | Time | Water Level | Time | Water Level |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| | | | | | |

Date of test .....
Bailer test ..... gal./min. with ..... ft. drawdown after ..... hrs.
Artesian flow 1700 g.p.m. Date .....
Temperature of water ..... Was a chemical analysis made? Yes ☒ No ☐

**(10) WELL LOG:**
Formations: Describe by color, character, size of material and structure, and show thickness of aquifers and the kind and nature of the material in each stratum penetrated, with at least one entry for each change of formation.

| MATERIAL | FROM | TO |
|---|---|---|
| Silt, brn | 0 | 9 |
| Gvl and sand, coarse, loose | 9 | 19 |
| Sand, Fine, gray, w/organics | 19 | 40 |
| Sand, silty, occ pebble, gray | 40 | 57 |
| Sand, med to Fine, gray | 57 | 81 |
| Pebbly gritty clay - gray | 81 | 82 |
| Sand, Fine-med, w/silt gray | 82 | 92 |
| clay, sandy, pebbly w/ peat | 92 | 93 |
| Sand & gvl, w/fe | 93 | 99 |
| " " " w/clay beds, w/fe | 99 | 106 |
| Sand, coarse-med, green-gray, w/thin clay beds | 106 | 118 |
| Sand, med, brn-gray | 118 | 123 |
| Sand, clayey, compact, greenish | 123 | 125 |
| Sand, some gvl, clayey sand layers, greenish gray | 125 | 153 |
| Dark green Flinty clay | 153 | 154 |
| Brn-blk sticky clay | 154 | 163 |
| Sand and pea gvl | 163 | 165 |
| clay, sticky, dark gray | 165 | 178 |
| Sand, coarse, loose, some pebbles w/fe | 178 | 201 |
| Dark gray sticky clay | 201 | 204 |
| Sand, coarse, some clay beds, fine pebbles, w/fe | 204 | 236 |
| Sand, med, w/ peaty clay beds, heaving - w/fe | 236 | 264 |
| Sand, silt, clay - layered | 264 | 290 |
| Sand, coarse, some gvl, clay w/fe | 290 | 307 |
| Sand, Coarse and med, heaving, w/fe | 307 | 323 |
| Ends not bottomed | | |

Work started 8-7 19 68 Completed 9-20 19 68

**WELL DRILLER'S STATEMENT:**
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME Kinzy Hardware (Person, firm, or corporation) (Type or print)
Address Olympia
[Signed] John B Kelly (Well Driller)
License No. — Date Sep 10 19 70
Robinson, Robertson and Assoc

S. F. No. 7338—(Rev. 2-66)—2-66—3M. 4618. (USE ADDITIONAL SHEETS IF NECESSARY)

WB 3/9/77 DM

GOLF COURSE WELL

## WELL INFORMATION
OLYMPIA BREWING Co.

WELL 29

WATER RIGHT DOCUMENT
APPLICATION No. 11220
PERMIT
CERTIFICATE
CERTIFICATE OF CHANGE

TYPE OF USE
Irrigation 200 Acres
Golf Course

WELL DATA

| | | |
|---|---|---|
| DEPTH | | 318.5 ft |
| CASING SIZE | | 12 in. |
| STATIC WATER LEVEL | | +25 ft |
| PUMPING RATE | 1000 | 1000 gpm |
| DRAWDOWN | | 15 ft |
| HORSE POWER | | 25 HP |
| DRILLER | | KLECK |

REMARKS.

## WELL INFORMATION
OLYMPIA BREWING Co.

WELL 31

WATER RIGHT DOCUMENT
APPLICATION No. 11220
PERMIT
CERTIFICATE
CERTIFICATE OF CHANGE

TYPE OF USE
Irrigation Golf Course

WELL DATA

| | | |
|---|---|---|
| DEPTH | | 346 ft. |
| CASING SIZE | | 12 in. |
| STATIC WATER LEVEL | | +25 ft |
| PUMPING RATE | 1000 | 1000 gpm |
| DRAWDOWN | | 15 ft |
| HORSE POWER | | 25 HP |
| DRILLER | | KLECK |

REMARKS.

MONITOR WELL
DURING TESTING

File Original and First Copy with Department of Ecology
Second Copy — Owner's Copy
Third Copy — Driller's Copy

# WATER WELL REPORT
**STATE OF WASHINGTON**

Application No. .....
Permit No. .....

**(1) OWNER:** Name OLYMPIA BREWING COMPANY Address Custer Way and Schmidt Place, Tumwater WA

**(2) LOCATION OF WELL:** County Thurston NW ¼ NE ¼ Sec 35 T 18 N., R 2W W.M.

Bearing and distance from section or subdivision corner Well # 39

**(3) PROPOSED USE:** Domestic ☐ Industrial ☒ Municipal ☐
Irrigation ☐ Test Well ☐ Other ☐

**(4) TYPE OF WORK:** Owner's number of well (if more than one) .... #39
New well ☒ Method: Dug ☐ Bored ☐
Deepened ☐ Cable ☒ Driven ☐
Reconditioned ☐ Rotary ☐ Jetted ☐

**(5) DIMENSIONS:** Diameter of well ..... inches.
Drilled ..... ft. Depth of completed well ..... ft.

**(6) CONSTRUCTION DETAILS:**

**Casing installed:** ..... " Diam. from ..... ft. to ..... ft.
Threaded ☐ ..... " Diam. from ..... ft. to ..... ft.
Welded ☒ ..... " Diam. from ..... ft. to ..... ft.

**Perforations:** Yes ☐ No ☒
Type of perforator used .....
SIZE of perforations ..... in. by ..... in.
..... perforations from ..... ft. to ..... ft.
..... perforations from ..... ft. to ..... ft.
..... perforations from ..... ft. to ..... ft.

**Screens:** Yes ☒ No ☐
Manufacturer's Name Johnson U.O.P.
Type ..... Model No .....
Diam. 10"PS Slot size 15to30 from 296 ft. to 390 ft.
Diam. ..... Slot size ..... from ..... ft. to ..... ft.

**Gravel packed:** Yes ☐ No ☒ Size of gravel: .....
Gravel placed from ..... ft. to ..... ft.

**Surface seal:** Yes ☒ No ☐ To what depth? 120' ft.
Material used in seal .....
Did any strata contain unusable water? Yes ☐ No ☒
Type of water? ..... Depth of strata .....
Method of sealing strata off .....

**(7) PUMP:** Manufacturer's Name .....
Type: ..... H.P. .....

**(8) WATER LEVELS:** Land-surface elevation above mean sea level .... 102 ft.
Static level ..... ft. below top of well Date .....
Artesian pressure 10.5 lbs. per square inch Date 5-14-82
Artesian water is controlled by Valve (Cap, valve, etc.)

**(9) WELL TESTS:** Drawdown is amount water level is lowered below static level
Was a ~~pump~~ flow test made? Yes ☒ No ☐ If yes, by whom? Geologist
Yield: 1200 gal./min. with 24 ft. drawdown after 4 hrs.
" " " "
" " " "

Recovery data (time taken as zero when pump turned off) (water level measured from well top to water level)

| Time | Water Level | Time | Water Level | Time | Water Level |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| | | | | | |

Date of test .....
Bailer test ..... gal./min. with ..... ft. drawdown after ..... hrs.
Artesian flow ..... g.p.m. Date .....
Temperature of water ..... Was a chemical analysis made? Yes ☐ No ☐

**(10) WELL LOG:**

Formation: *Describe by color, character, size of material and structure, and show thickness of aquifers and the kind and nature of the material in each stratum penetrated, with at least one entry for each change of formation.*

| MATERIAL | FROM | TO |
|---|---|---|
| Brown sand and gravel with some silt and clay matrix | 0' | 18' |
| Gray and brown fine sand | 18' | 104' |
| Gray silty clay with some peat | 104' | 136' |
| Gray fine to coarse sand | 136' | 198' |
| Gray-green silty clay | 198' | 203' |
| Gray fine to coarse sand | 203' | 261' |
| Gray silty clay | 261' | 294' |
| Gray medium and coarse sand | 294' | 393' |

RECEIVED
AUG -9 1982
DEPARTMENT OF ECOLOGY
SOUTHWEST REGIONAL OFFICE

Prepared by:
ROBINSON & NOBLE, INC.
F. Michael Krautkramer, geologist

Work started March 4 19 82 Completed May 14 19 82

**WELL DRILLER'S STATEMENT:**

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME STORY AND DODGE DRILLING CO.
(Person, firm, or corporation) (Type or print)

Address 10416 244th E

[Signed] Elgon T. Story
(Well Driller)

License No. 0492 Date ..... 19.....

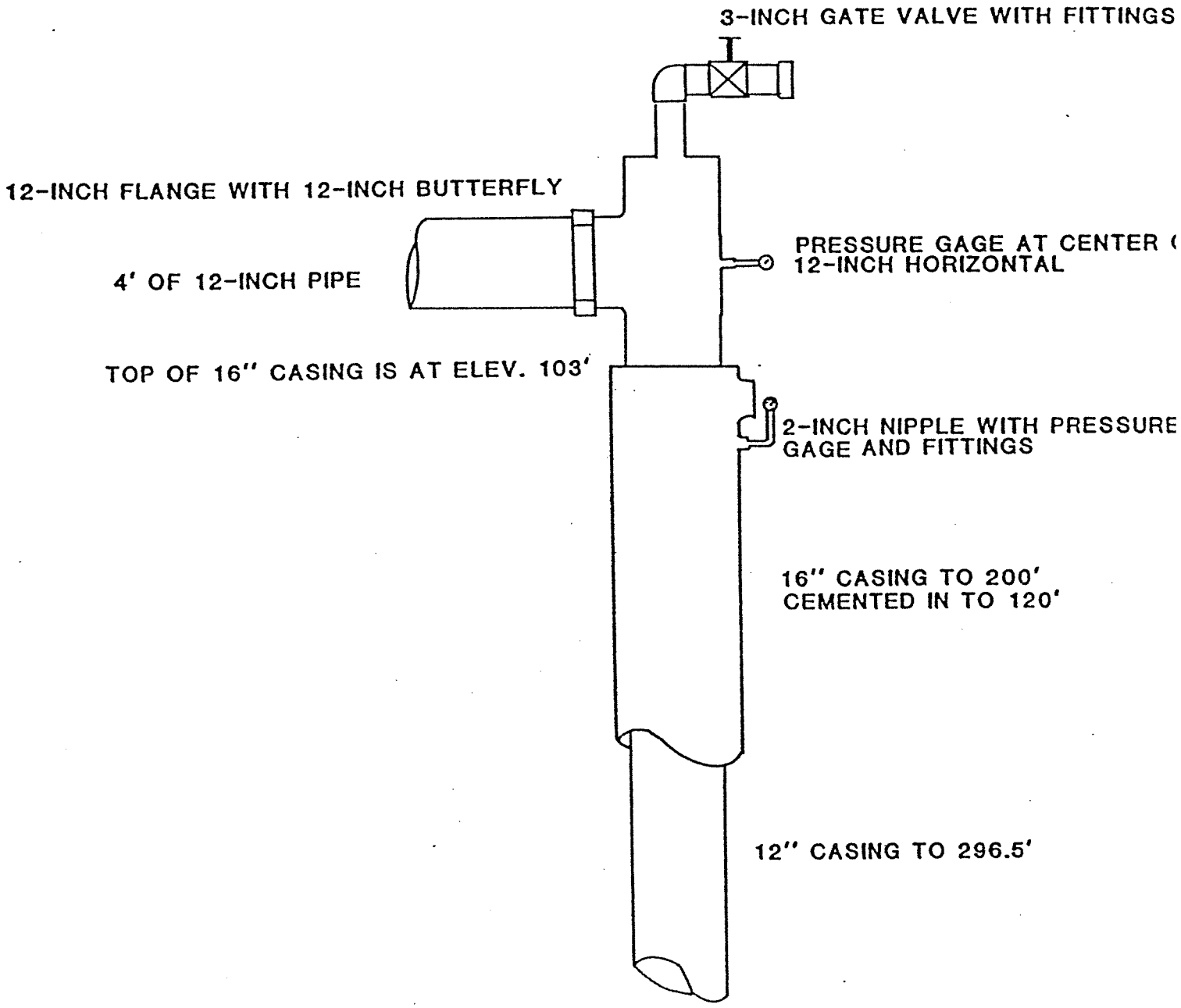
(USE ADDITIONAL SHEETS IF NECESSARY)

ECY 050-1-20

The Department of Ecology does NOT Warranty the Data and/or the Information on this Well Report.

FIGURE 3

WELL 39




ROBINSON & NOBLE, INC.

WELL No 39

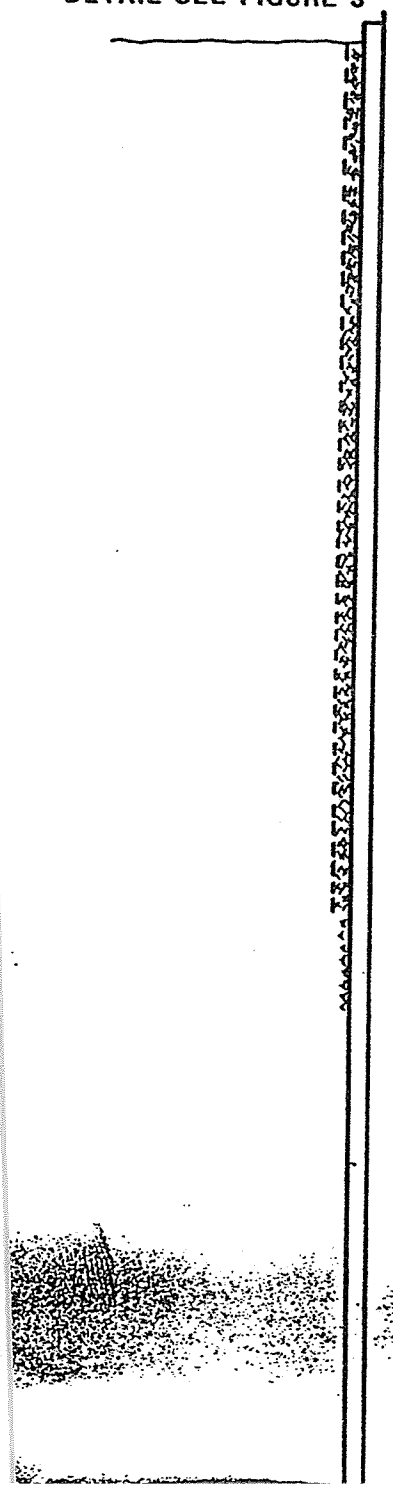
[illegible]YM[illegible]REWING COMPANY W

## CONSTRUCTION DETAILS

SHUT IN PRESSURE 1

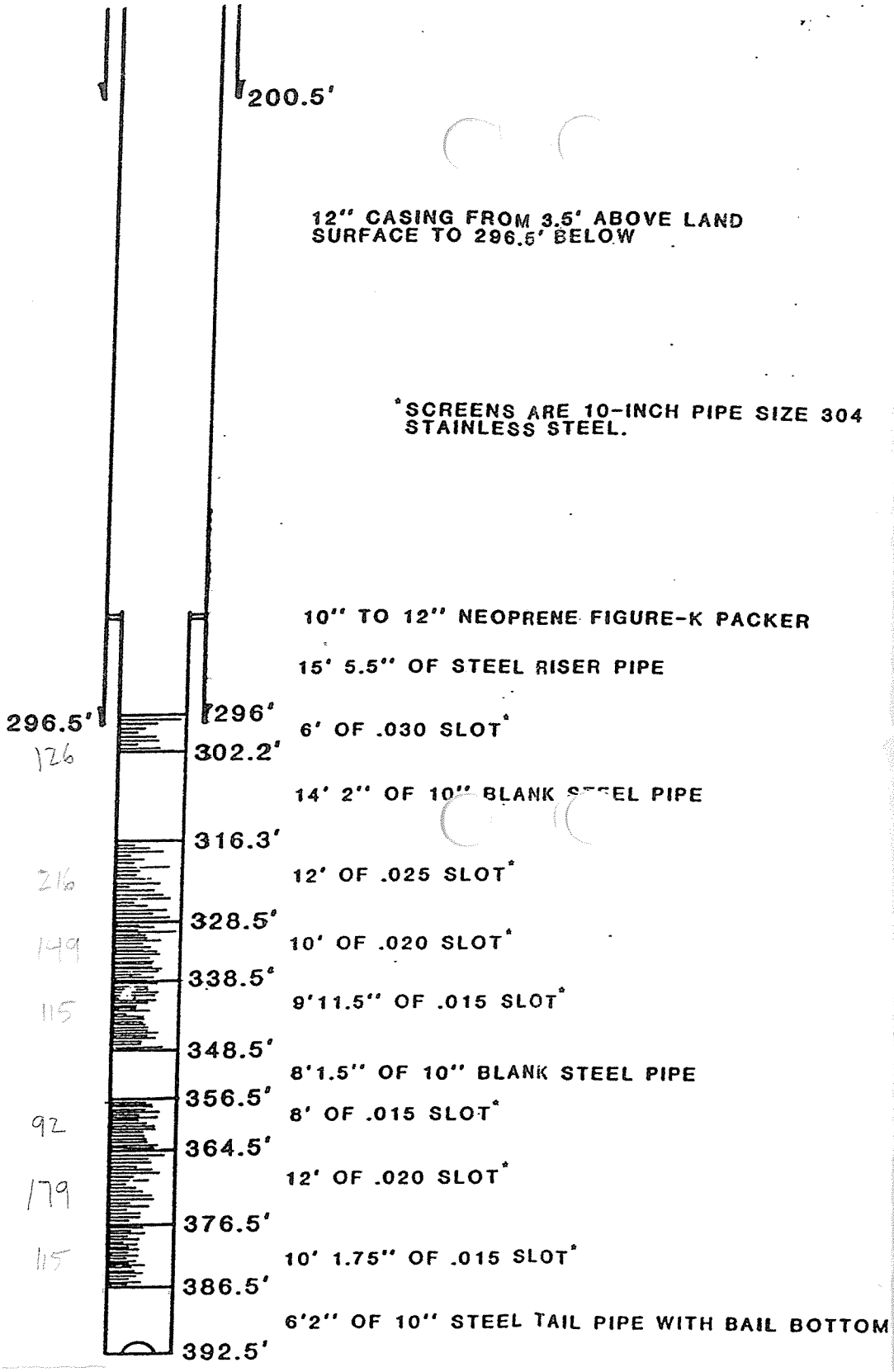
SHUT-IN PRESSURE 10.5

FOR WELL HEAD
DETAIL SEE FIGURE 3




32

25'

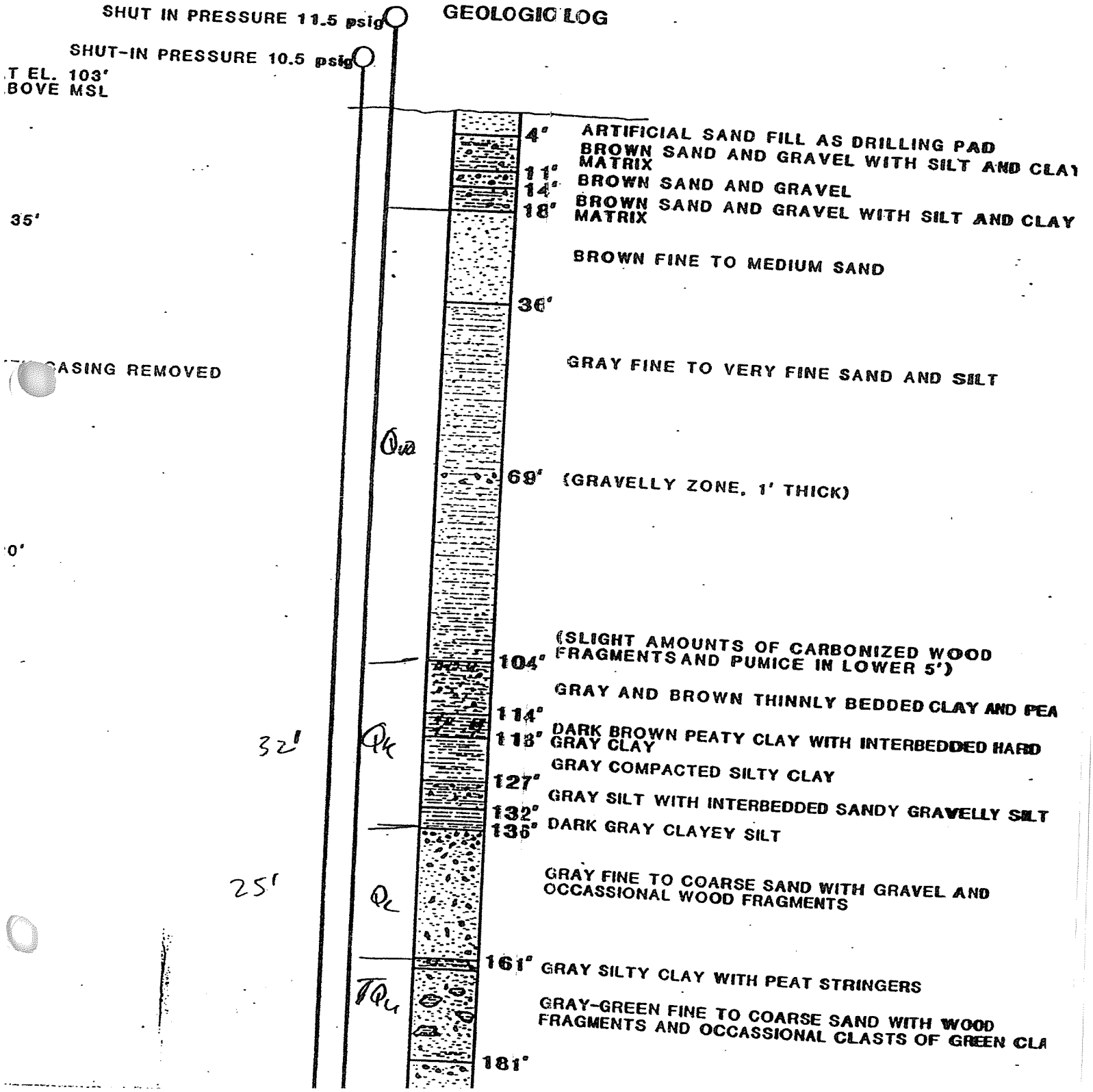

200.5'
12" CASING FROM 3.5' ABOVE LAND SURFACE TO 296.5' BELOW
*SCREENS ARE 10-INCH PIPE SIZE 304 STAINLESS STEEL.
10" TO 12" NEOPRENE FIGURE-K PACKER
15' 5.5" OF STEEL RISER PIPE
296.5'
296'
6' OF .030 SLOT*
126
302.2'
14' 2" OF 10" BLANK STEEL PIPE
316.3'
216
12' OF .025 SLOT*
328.5'
149
10' OF .020 SLOT*
338.5'
115
9'11.5" OF .015 SLOT*
348.5'
8'1.5" OF 10" BLANK STEEL PIPE
356.5'
92
8' OF .015 SLOT*
364.5'
179
12' OF .020 SLOT*
376.5'
115
10' 1.75" OF .015 SLOT*
386.5'
6'2" OF 10" STEEL TAIL PIPE WITH BAIL BOTTOM
392.5'

68 FT 992 6in

FIGURE 2

REWING COMPANY WELL #39

Well No. 39



3.5' ABOVE LAND
' BELOW

RE 10-INCH PIPE SIZE 304
STEEL.

:NE FIGURE-K PACKER

IISER PIPE

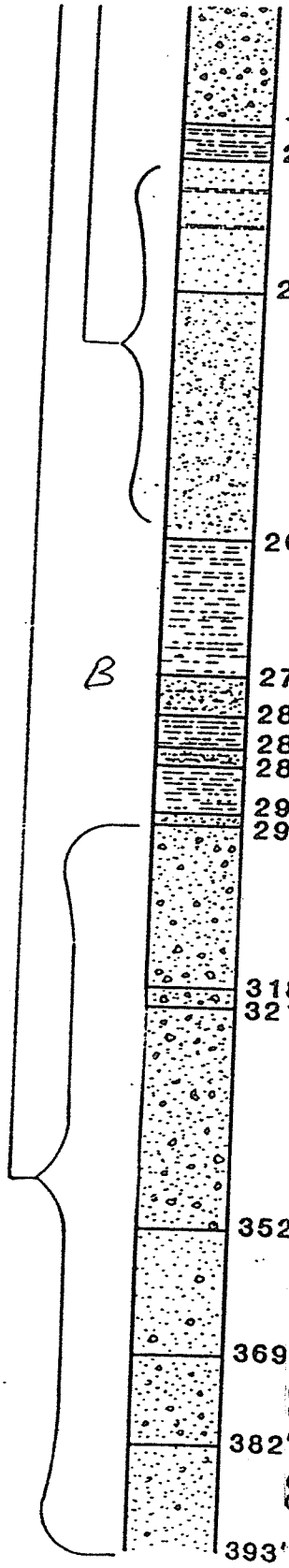
K STEEL PIPE

T°

STEEL PIPE

T°

IIL PIPE WITH BAIL BOTTOM




GRAY TO GRAY-GREEN FINE TO COARSE SAND AND GRAVEL

198.5'

203' GRAY-GREEN SILTY CLAY

GRAY FINE TO COARSE SAND WITH TWO DISTINCT 6" THICK CLAY LAYERS

222'

GRAY VERY FINE TO MEDIUM SAND WITH SOME COARS SAND AND OCCASSIONAL GRANULES

261'

GRAY SILT AND CLAY

275' GRAY TO GRAY-GREEN FINE TO MEDIUM SAND WITH
281' SOME SILT

285' GRAY SILTY CLAY

287' GRAY SILTY SANDY CLAY

GRAY CLAY AND SILT

294' GRAY AND GRAY-GREEN COARSE SAND AND GRANULES
296'

GRAY POORLY SORTED FINE TO COARSE SAND WITH GRAVEL

318' GRAY COMPACTED FINE TO COARSE SAND WITH SOME
321' GRAVEL

GRAY MEDIUM TO COARSE SAND WITH SOME FINE SAND AND GRANULES

352'

GRAY MEDIUM SAND WITH SOME FINE AND SOME COARSE SAND

369'

GRAY MEDIUM TO COARSE SAND WITH 10% ADMIX OF SMALL GRAVEL

382'

GRAY MEDIUM TO COARSE SAND WITH SOME FINE SAND ANC GRANULES

393' TOTAL DEPTH

ROBINSON & NOBLE, INC.

# *APPENDIX C*

## Water Well Location Maps

**Legend**

Test Well Locations

Test Well Locations (to be drilled)

Tumwater Valley Golf Club

5 & 10 Year Time-of-travel

J:\DATA\TUM\518-025\GIS\MAPS\TUM TEST WELLS\TUM TEST WELLS.APRX BY: KMILLER PLOT DATE: JAN 29, 2026 COORDINATE SYSTEM: NAD 1983 STATEPLANE WASHINGTON SOUTH FIPS 4602 FEET

RH2

NORTH

1 inch : 600 Feet

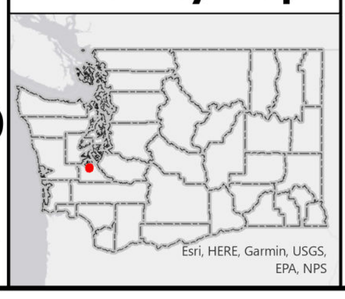
0 300 600 1,200 Feet

DRAWING IS FULL SCALE WHEN BAR MEASURES 2”

CITY OF TUMWATER

# Figure 1
# Test Well Installation and Development Project Location Map
## *City of Tumwater*
## *Test Well Installation and Development*

**Vicinity Map**

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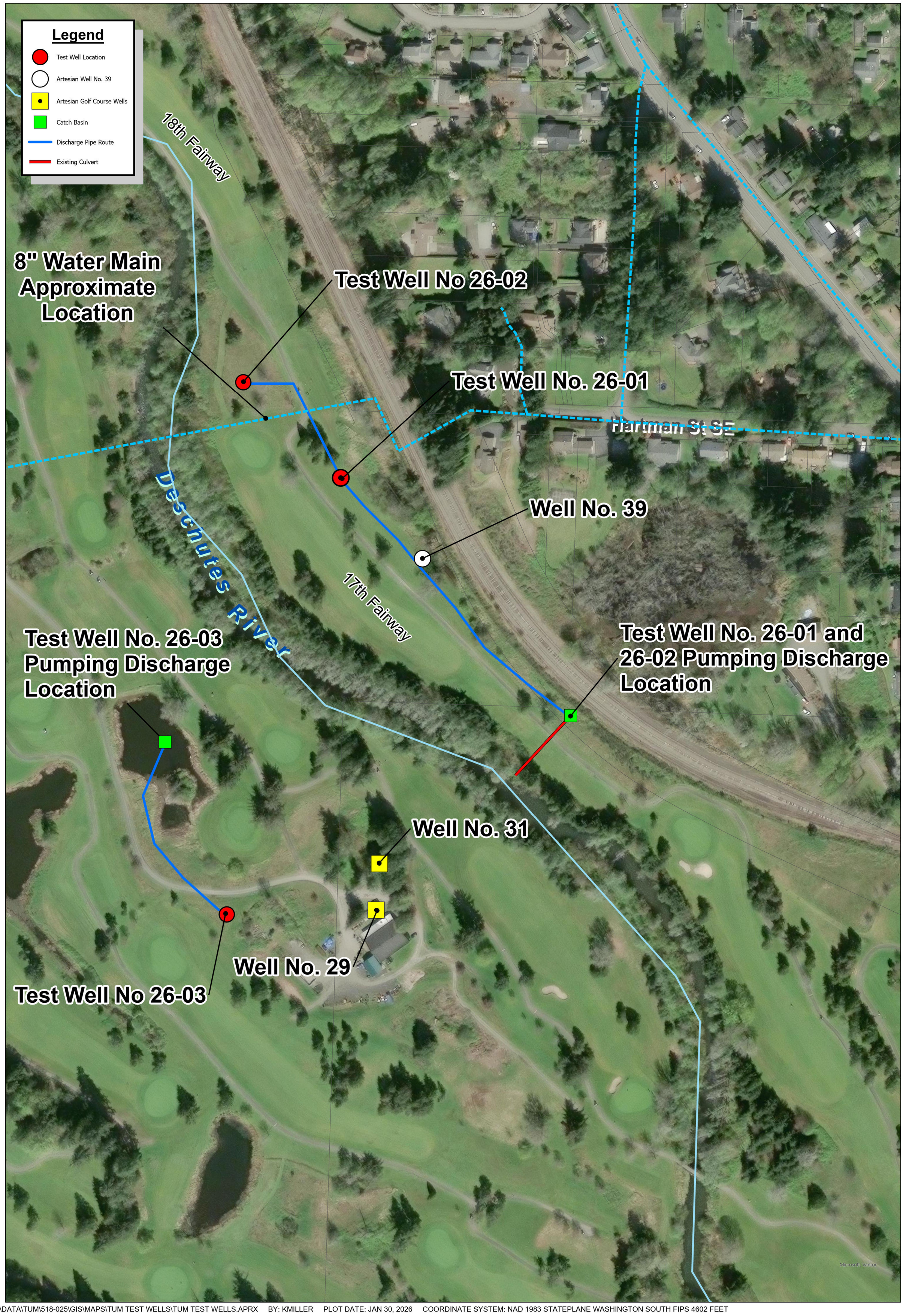



J:\DATA\TUM\518-025\GIS\MAPS\TUM TEST WELLS\TUM TEST WELLS.APRX BY: KMILLER PLOT DATE: JAN 30, 2026 COORDINATE SYSTEM: NAD 1983 STATEPLANE WASHINGTON SOUTH FIPS 4602 FEET

RH2

NORTH

1 inch : 100 Feet

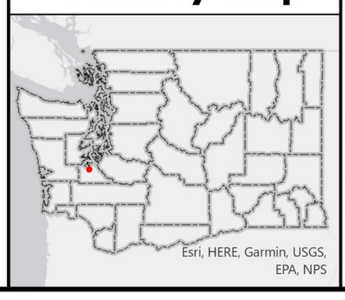
0 50 100 200 Feet

DRAWING IS FULL SCALE WHEN BAR MEASURES 2”

CITY OF TUMWATER

# Figure 2
# Test Well Location Site Map
## *City of Tumwater*
## *Test Well Installation and Development*

**Vicinity Map**

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J:\DATA\TUM\518-025\GIS\MAPS\TUM TEST WELLS\TUM TEST WELLS.APRX BY: KMILLER PLOT DATE: JAN 30, 2026 COORDINATE SYSTEM: NAD 1983 STATEPLANE WASHINGTON SOUTH FIPS 4602 FEET

RH2

NORTH

1 inch : 75 Feet

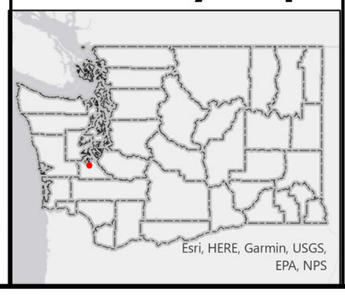
0 25 50 100 Feet

DRAWING IS FULL SCALE WHEN BAR MEASURES 2”

CITY OF TUMWATER

# Figure 3
# Test Well Drilling Areas
## *City of Tumwater*
## *Test Well Installation and Development*

**Vicinity Map**




This map is a graphic representation derived from the City of Tumwater Geographic Information System. It was designed and intended for the City of Tumwater staff use only; it is not guaranteed to survey accuracy. This map is based on the best information available on the date shown on this map.

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J:\DATA\TUM\518-025\GIS\MAPS\TUM TEST WELLS\TUM TEST WELLS.APRX BY: KMILLER PLOT DATE: FEB 13, 2026 COORDINATE SYSTEM: NAD 1983 STATEPLANE WASHINGTON SOUTH FIPS 4602 FEET

RH2

NORTH

1 inch : 150 Feet

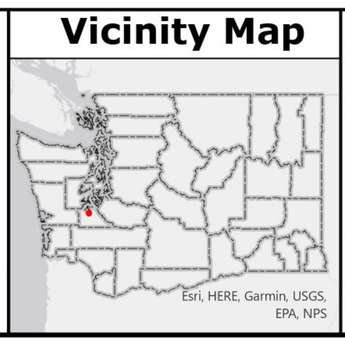
0 75 150 300 Feet

DRAWING IS FULL SCALE WHEN BAR MEASURES 2”

CITY OF TUMWATER

# Figure 4
# Test Well Access Route
## *City of Tumwater*
## *Test Well Installation and Development*

**Vicinity Map**

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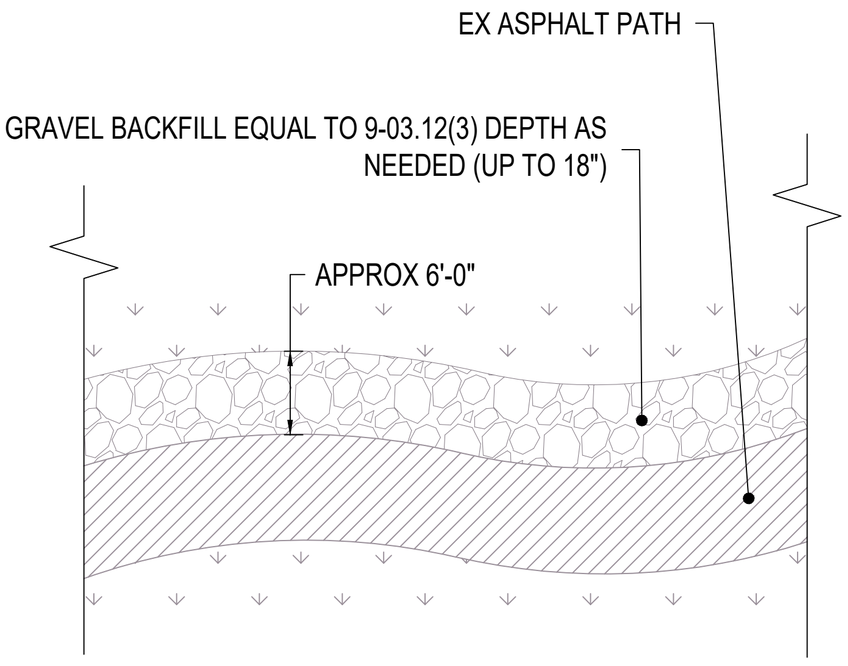
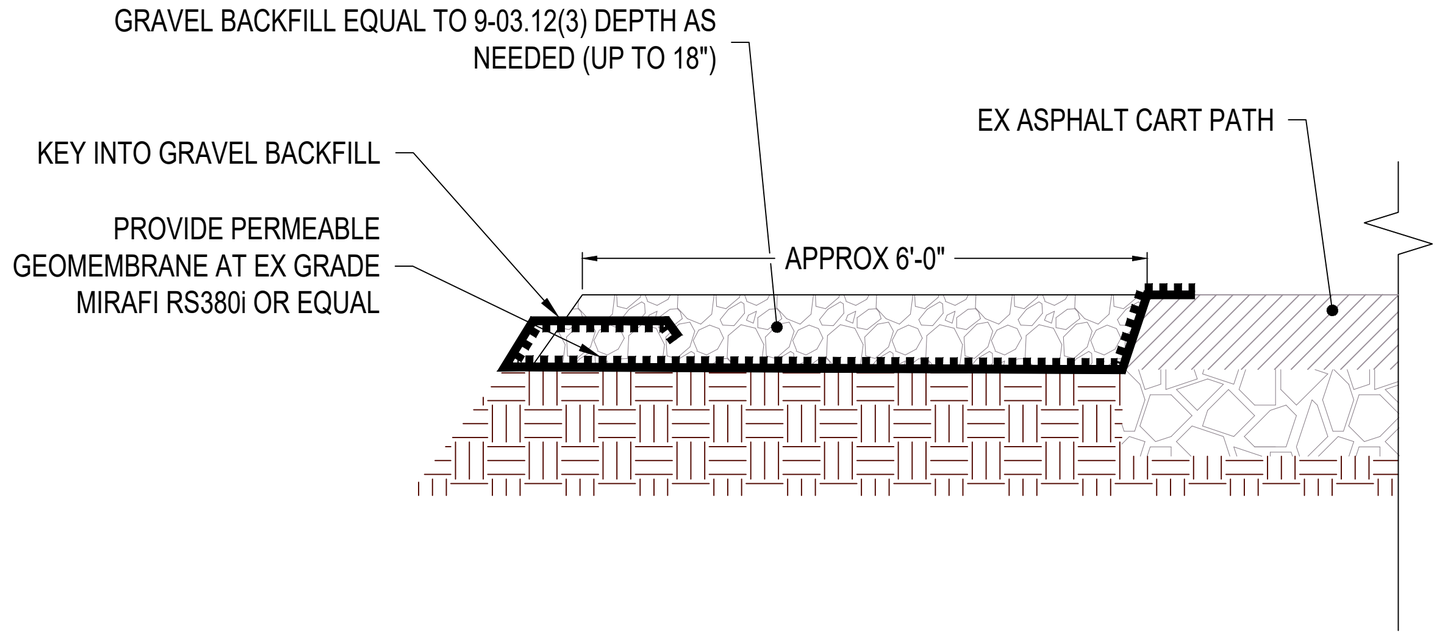



TYPICAL PLAN



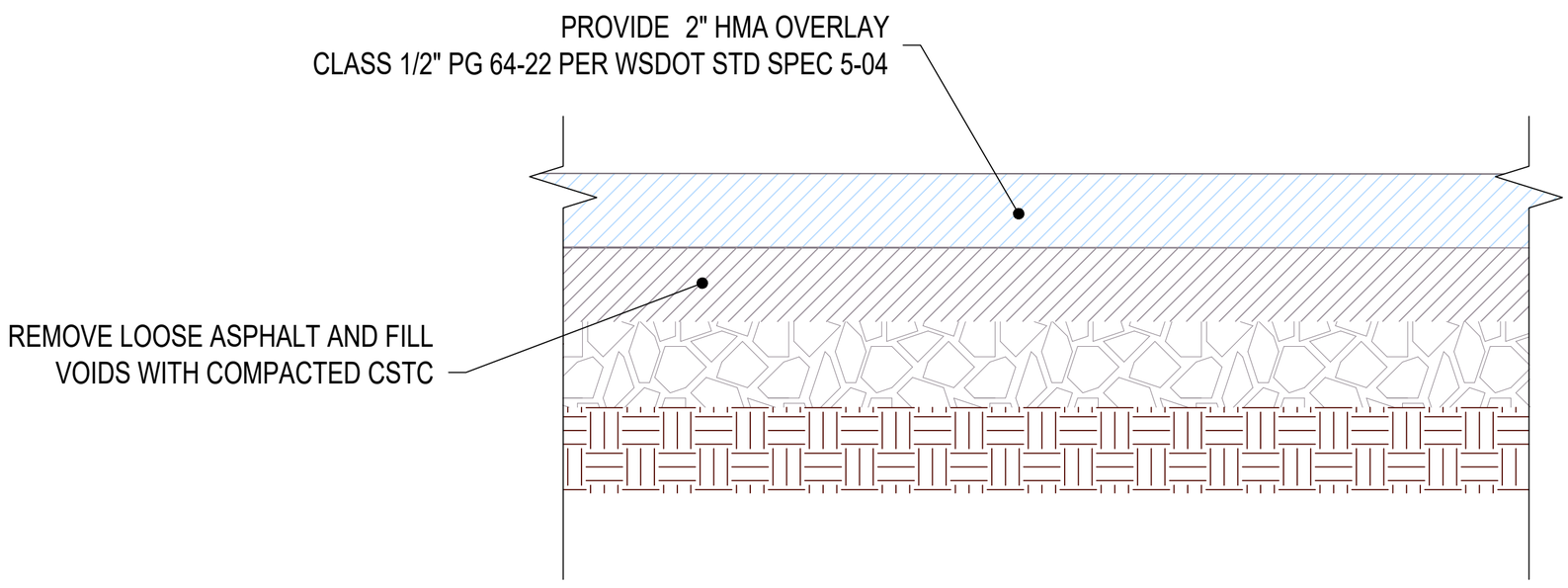

TYPICAL DETAIL

NOTES:
1. LOCATE TEMPORARY ACCESS ROAD GRAVEL BACKFILL ON SIDE OF CART PATH OPPOSITE THE NEAREST FAIRWAY UNLESS THERE ARE TREES THAT WOULD BE IMPACTED. SEE SPECIFICATIONS.
2. DRILLING PADS SHALL INCLUDE PERMEABLE GEOMEMBRANE OVERLAYED BY GRAVEL BACKFILL AS IDENTIFIED IN THIS DETAIL. SEE SPECIFICATIONS.

01

## TEMPORARY SITE ACCESS PATH DETAIL

NOT TO SCALE

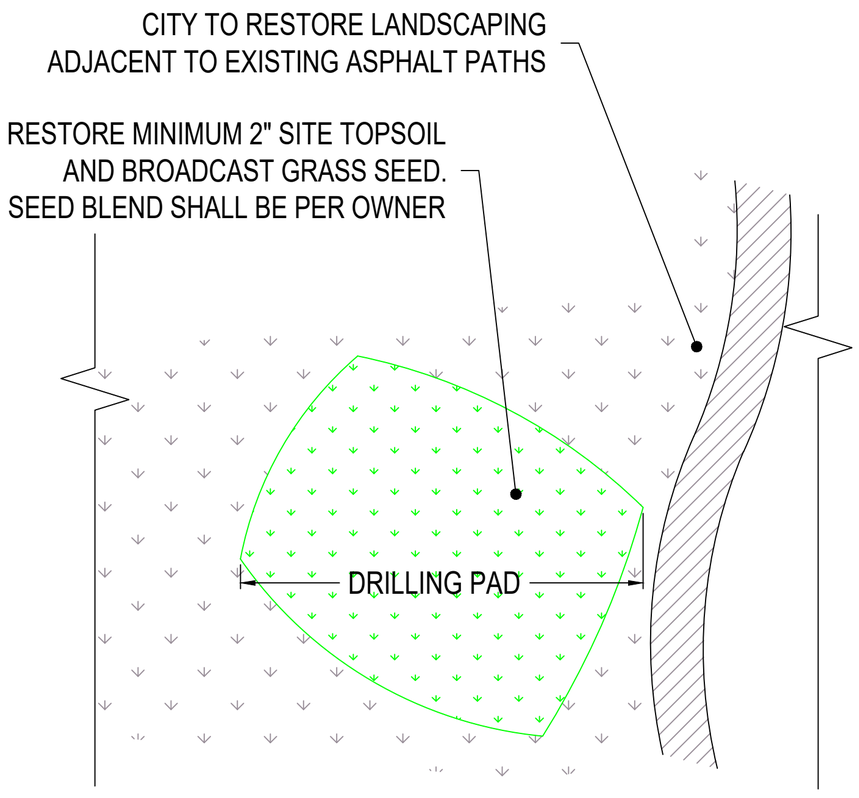



NOTES:
1. CONDITION OF THE CART PATH TO BE ASSESSED FOLLOWING CONSTRUCTION TO DETERMINE FINAL EXTENTS OF RESTORATION.
2. WHEN RETURNING TO EXISTING GRADE AT EDGE OF PATH, SLOPE ASPHALT EDGE AT 2:1.

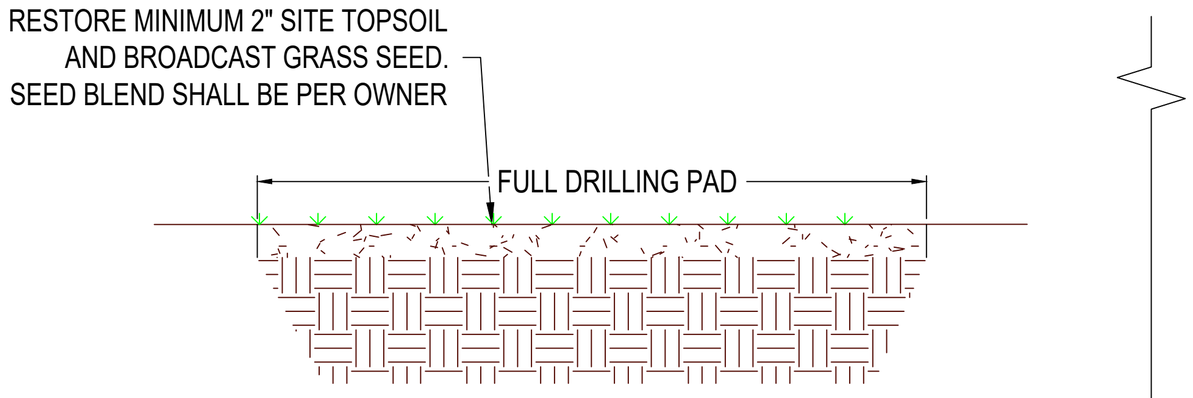
02

## CART PATH ASPHALT RESTORATION DETAIL

NOT TO SCALE




TYPICAL PLAN




TYPICAL DETAIL

NOTES:
1. GRAVEL BACKFILL AND PERMEABLE GEOMEMBRANE USED FOR TEMPORARY SITE ACCESS AND DRILLING PADS SHALL BE REMOVED AND STOCKPILED AT STAGING AREA FOLLOWING SITE CONSTRUCTION.

03

## DRILLING PAD RESTORATION DETAIL

NOT TO SCALE

RH2

SCALE: SHOWN

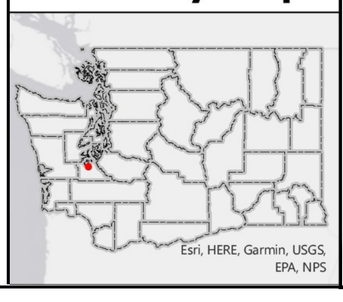
0" 1" 2"

DRAWING IS FULL SCALE WHEN BAR MEASURES 2"

CITY OF TUMWATER

# Figure 5
# Construction Details
## City of Tumwater
## Test Well Installation and Development

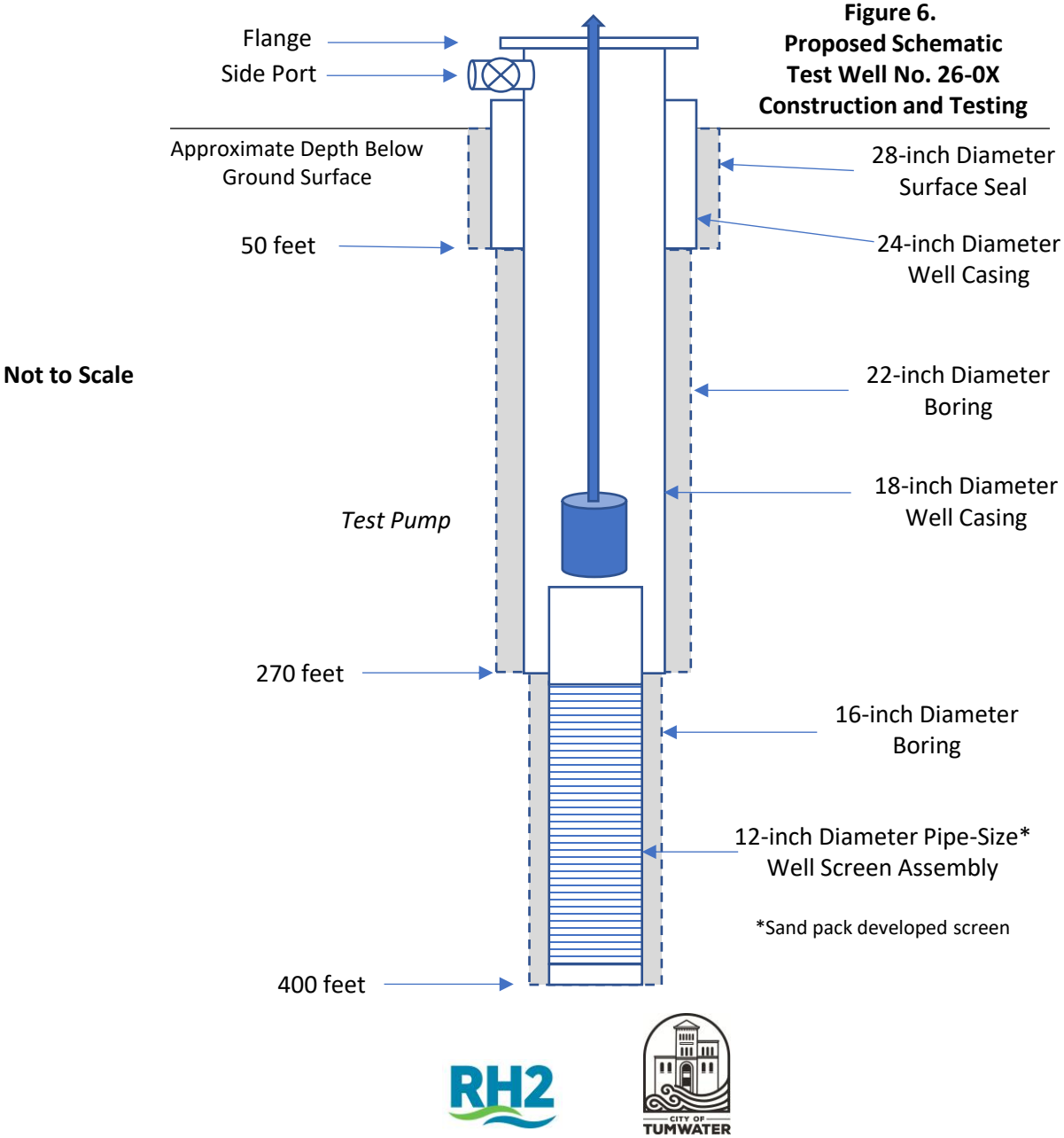
Vicinity Map



# *APPENDIX D*

## Schematic of Anticipated Test Well Construction and Testing

**Figure 6.**
**Proposed Schematic**
**Test Well No. 26-0X**
**Construction and Testing**




**Not to Scale**

RH2

CITY OF TUMWATER