



*Washington  
Department of*  
**FISH and  
WILDLIFE**

## **WENAS WLA - MT VALE SEPTIC REPLACEMENT**

**DIRECTOR:**  
KELLY SUSEWIND

**PROGRAM DIRECTOR:**  
TIMOTHY W. BURNS, P.E.

**CHIEF ENGINEER:**  
GLENN F. GERTH, P.E.



**DATE:**  
NOVEMBER 2021

**PROJECT NO.**  
YA:R167:17-1

**PROJECT MANAGER:**  
BOB BEESLEY

### *WDFW Title VI Clause*

*It is the policy of Washington Department of Fish and Wildlife (WDFW) to provide equal access to its programs, services, activities, and facilities under Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, Title II of the Americans with Disabilities Act of 1990, the Age Discrimination Act of 1975, and the Architectural Barriers Act of 1968. WDFW is a recipient of state and federal financial assistance.*

*WDFW prohibits discrimination on the basis of race, color, religion, national origin, including language, sex, age, mental or physical disability, reprisal, sexual orientation, status as a parent, and genetic information.*

*If you believe you have been discriminated against, please contact the WDFW Title VI Manager, PO Box 43139, Olympia, WA 98504, or online at: <https://wdfw.wa.gov/accessibility/grievances> within 20 calendar days of the alleged incident to file a formal complaint, or you can file with the Washington State Human Rights Commission directly at: 1-800-233-3247, or you can write to: Chief, Public Civil Rights Division, Department of the Interior, 1849 C Street NW, Washington DC 20240.*

*Persons who need to receive this information in an alternative format, different language, or who need a reasonable accommodation to participate in WDFW sponsored public meetings, or other activities, may contact the Title VI Manager by phone at: (360) 902-2349, or TDD (711), or email [Title6@dfw.wa.gov](mailto:Title6@dfw.wa.gov).*

*If you need further assistance or information, please contact the Olympia office of the Washington Department of Fish and Wildlife: (360) 902-2464, or Telecommunications Device for the Deaf, TDD (711).*

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## DIVISION 0 – BID AND CONTRACT DOCUMENTS

### SECTION 00030 NOTICE TO CONTRACTORS

Sealed bids for the following Public Works Project will be received until 2:00 p.m. on March 2, 2022 at 600 Capitol Way North, MS: 43158, Olympia, Washington, 98501-1091, and will be publicly opened and read.

Due to the safety and health of the public and employees WDFW CAMP is temporarily closing Bid Openings to public attendance. Bid opening results will be made public within 24 hours of opening.  
**Please Note: The Public will not be able to attend this bid opening.**

**PROJECT:**

Wenas WLA - Mt Vale Septic Replacement

**NUMBER:**

YA:R167:17-1

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Provide all labor, material, permits, and equipment to remove and decommission the existing septic system and construct the attached permitted septic system, install electrical conduits with junction boxes and service for new septic pump and components as shown on attached diagram at the Department's Wenas Wildlife Area, Mt. Vale work center, located at 312 Mountain Vale Road Selah, 98942, Washington, in Yakima County.

**Engineer's Estimate:** \$35,500.00

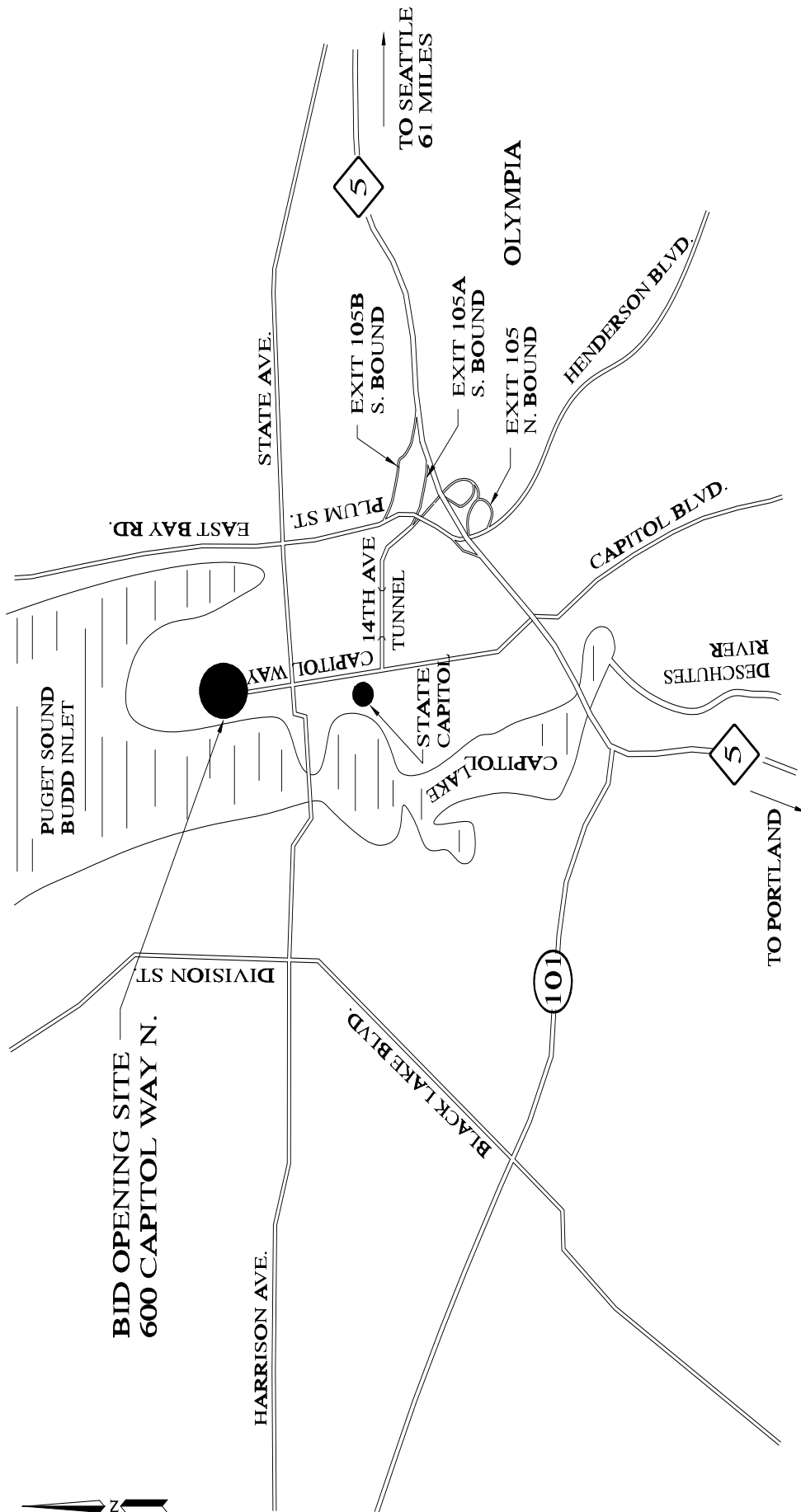
A **RECOMMENDED** pre-bid walkthrough is scheduled between 10:00 a.m. and 2:00 p.m. on February 24, 2022 at the Department's Wenas Wildlife Area, located at 312 Mountain Vale Road Selah, 98942, Washington, in Yakima County. **No questions will be answered, questions should be directed to [camp.bids@dfw.wa.gov](mailto:camp.bids@dfw.wa.gov). This is in response to the Covid-19 pandemic.**

For access to Drawings, Specifications, Addenda, plan holders list, and additional information for this project, please visit Builders Exchange of Washington, Inc. at <http://www.bxwa.com> – the official projects bidding affiliate for WA Department of Fish and Wildlife Public Works bidding projects. Click on “Posted Projects”; “Public Works”, “Washington State Department of Fish and Wildlife”, “Projects Bidding.”

For information or technical questions regarding this project, email [CAMP.Bids@dfw.wa.gov](mailto:CAMP.Bids@dfw.wa.gov) with the project title and project number in subject line. This email may also be used to request copies of the project's posted documents (Drawings, Specifications, Addenda).

**Minority and Women's Business Enterprises (MWBE) are encouraged to participate in the bidding as prime contractors, subcontractors, or suppliers.**

WASHINGTON DEPARTMENT OF FISH AND WILDLIFE  
Timothy Burns, Capital and Asset Management Program Director  
By  
Glenn F. Gerth, P.E., Chief Engineer  
Capital and Asset Management Program



**BID OPENING SITE**  
**600 CAPITOL WAY N.**  
**OLYMPIA, WA 98501-1091**

**STATE OF WASHINGTON**  
**DEPARTMENT OF FISH AND WILDLIFE**  
**DATE DRAWN: 04-10-95**      **SCALE: N.T.S.**

## DIVISION 0 – BID AND CONTRACT DOCUMENTS

### SECTION 00100 INSTRUCTIONS TO BIDDER

#### 00110 PREBID REQUIREMENTS

- A. Carefully examine all project documents.
- B. Be fully informed of all existing conditions and limitations, including any activities by City, County, State, Federal or private entities affecting access to the project.
- C. Include in the bid sufficient amount to cover all costs required by Bid Documents to complete the work, but not limited to applicable federal, state, and local taxes (except State Retail Sales Tax), insurance, bonding license(s), payment of prevailing wage rates, L&I filing fees, and all costs that may be necessary to complete the work.
- D. No Apprenticeship Participation requirements for projects estimated less than \$1,000,000.
- E. The project is not federally funded.

#### 00120 REQUIRED BID DOCUMENTS

**Failure to submit ALL PAGES of the following forms is sufficient cause to reject the bid.**

- A. **Bid Form**: The ENTIRE current Bid Form Section 00300 must be signed. Check for addenda at Builders Exchange of Washington, Inc. (<http://www.bxwa.com>) before submitting bid.
- B. **Standard Questionnaire for Qualification of Contractors Form**: Submit the completed form immediately following bid opening or submit with bid form.
- C. **Bid Bond**: For bids of \$35,000 or less, no bid guarantee is required. Bids greater than \$35,000 shall be accompanied by a certified check, cashier's check, or bid bond payable to the Treasurer of the State of Washington in an amount equal to at least five-percent of the bid as evidence of good faith and as a guarantee that, if awarded the Contract, the bidder will execute the Contract and give separate bond as required, see Section 00702.06.

#### 00130 BID FORMAT

- A. Each bid must be submitted on the current Bid Form, Section 00300 contained in these Bid Documents. Place your required bid documents into an envelope clearly marked on the outside with "BID ENCLOSED", the project name, and project number. Envelope shall clearly identify your Company's name and address as shown below.

Company Name Address City, State Zip	<b>BID ENCLOSED</b> PROJECT NAME PROJECT NUMBER BID OPENING
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- B. No oral, email, telephonic, faxed bids or modifications will be accepted or considered.

**00135 BID OPENING**

Bidders must submit their bid to the Washington Department of Fish and Wildlife, Capital and Asset Management Program, located at 600 Capitol Way North, MS: 43158, Olympia, Washington 98501-1091 before the bid submittal deadline for this solicitation. Sending your bid through the United States Postal Services (USPS) or United States Express Mail will not guarantee your bid will be received at the above location on time.

**PLEASE NOTE: As a state agency, USPS mail is routed through the State's Consolidated Mail Service with unpredictable delivery times. We encourage the following:**

- Hand delivery;
- Courier service;
- Allow sufficient amount of time;
- Third party (i.e. Federal Express, United Parcel Service) for overnight delivery;
- Clearly label the outside of your envelope using the format in Section 00130.

**00140 BID SUBMITTAL DEADLINE**

- A. Sealed bids for this project will be received by an authorized representative within the Washington Department of Fish and Wildlife, Capital and Asset Management Program located at 600 Capitol Way North, MS: 43158, Olympia, Washington, 98501-1091 until the time and date indicated on the current Bid Form, Section 00300. **Due to the safety and health of the public and employees, WDFW CAMP has temporarily closed Bid Openings to public attendance. Bid opening results will be made public within 24-hours of opening.**
- B. Bids submitted after deadline will not be accepted.

**00145 REASONABLE ACCOMMODATIONS**

- A. Persons with disabilities who need reasonable accommodations to participate in the bid openings are invited to contact Capital and Asset Management Program at (360) 902-8300 or [CAMP.Bids@dfw.wa.gov](mailto:CAMP.Bids@dfw.wa.gov). Reasonable accommodation requests should be received at least three business days prior to the bid opening to ensure availability.
- B. **Bid Results:** After bid opening, bidders may obtain bid results from Builders Exchange of Washington, Inc. at <http://bxwa.com> the next business day.

**00150 MANDATORY RESPONSIBILITY CRITERIA**

Before award of a public works contract, a bidder must meet the following mandatory responsibility criteria under RCW 39.04.350 (1) to be considered a responsible bidder and qualified to be awarded a public works project. The bidder must:

- A. At time of bid submittal, have a certificate of registration in compliance with Chapter 18.27 RCW;
- B. Have a current state Unified Business Identifier (UBI) number;
- C. If applicable, have industrial insurance coverage for the bidder's employees working in Washington as required in Title 51 RCW; an employment security department number as



## **DIVISION 0 – BID AND CONTRACT DOCUMENTS**

required in Title 50 RCW; and a state excise tax registration number as required in Title 82 RCW;

- D. Not be disqualified from bidding on any public works contract under RCW 39.06.010 or 39.12.065(3);
- E. If bidding on a public works project subject to the apprenticeship utilization requirements in RCW 39.04.320, not have been found out of compliance by the Washington State apprenticeship and training council for working apprentices out of ratio, without appropriate supervision, or outside their approved work processes as outlined in their standards of apprenticeship under Chapter 49.04 RCW for the one-year period immediately preceding the date of the bid solicitation;
- F. Have received training on the requirements related to public works and prevailing wage under this chapter and Chapter 39.12 RCW. The bidder must designate a person or persons to be trained on these requirements. The training must be provided by the Department of Labor and Industries or by a training provider whose curriculum is approved by the department. The department, in consultation with the prevailing wage advisory committee, must determine the length of the training. Bidders that have completed three or more public works projects and have had a valid business license in Washington for three or more years are exempt from this subsection. The Department of Labor and Industries must keep records of entities that have satisfied the training requirement or are exempt and make the records available on its web site. Responsible parties may rely on the records made available by the department regarding satisfaction of the training requirement or exemption; and

Labor and Industries (LNI) Training Information Link:

<https://www.lni.wa.gov/TradesLicensing/PrevWage/Contractors/Training.asp>

- G. Within the three-year period immediately preceding the date of the bid solicitation, not have been determined by a final and binding citation and notice of assessment issued by the 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, and provision of Chapter 49.46, 49.48 or 49.52 RCW.
- H. Before award of a public works contract, a bidder shall submit to the contracting agency a signed statement in accordance with RCW 9A.72.085 verifying under penalty of perjury that the bidder is in compliance with the responsible bidder criteria requirement of subsection G above. A contracting agency may award a contract in reasonable reliance upon such a sworn statement.

### **00155 BASIS OF AWARD**

The lowest responsive bid and responsible bidder is based upon the Base Bid. The Owner reserves the right to award the contract amount based on any or all of the bid items listed, to restrict the contract amount to the funds available, and to reject any or all bids for any reason whatsoever and waive informalities.

### **00160 PERIOD OF ACCEPTANCE**

All bids may be held 45 calendar days from bid opening date. At the end of this period, the three lowest bids may be retained for 15 additional days, or as may be further extended by the Owner with the approval of the bidding companies.

## **DIVISION 0 – BID AND CONTRACT DOCUMENTS**

### **00170 PAYMENT AND PERFORMANCE BONDS**

- A. Base bids greater than \$150,000; Contractor shall provide separate Payment and Performance Bonds, each executed by Contractor and Contractor's Surety.
- B. Base bids \$150,000 or less, Contractor shall provide separate Payment and Performance Bonds, each executed by Contractor and Contractor's Surety, unless the Contractor agrees Owner may, in lieu of the bond(s), retain 10 percent of the Contract Sum for the period allowed by RCW 39.08.010.
- C. For additional information see Section 00702.04.

### **00175 BUILDERS RISK INSURANCE**

Builders Risk Insurance is not required, see Section 00802.07.

### **00180 INTERPRETATIONS**

For information or technical questions regarding this project email [CAMP.Bids@dfw.wa.gov](mailto:CAMP.Bids@dfw.wa.gov) with the project title and project number in subject line and address questions to the Project Manager. Questions resulting in changes to the scope or nature of the drawings, specifications, or bid documents will be answered by addendum/addenda reflective of the Owner's process.

The Owner will **NOT** answer questions received after 2:00 p.m. on insert February 25, 2022. All addenda issued are part of the bid documents. The Owner will not be responsible for any oral interpretations.

### **00190 MINORITY AND WOMEN'S BUSINESS ENTERPRISE (MWBE) PARTICIPATION**

Minority and Women's Business Enterprises (MWBE) are encouraged to participate in the bidding as prime contractors, subcontractors, or suppliers.

### **00195 CONTRACT RESPONSIVENESS**

Contractor shall return all required contract documents and signed contract no later than 21 calendar days from date of Award Letter.

END OF SECTION 00100

## **DIVISION 0 – BID AND CONTRACT DOCUMENTS**

### **SECTION 00200 CONTRACTOR CHECKLIST**

#### **00230 PRIOR TO CONTRACT EXECUTION**

Submit the following to WDFW's Contract Administrator within 21 calendar days from the date of the Award Letter:

- A. Signed Public Works Contract Agreement.
- B. Performance and Payment Bonds Forms: Separate performance and payment bonds executed by Contractor and Contractor's Surety.
- C. Retainage in Lieu of Performance Bond Option on Contracts of \$150,000 or Less: If Contractor elects, Owner may retain ten percent of the Contract Sum in lieu of the Performance and Payment Bonds, see Section 00620.
- D. Retainage Options Form, see Section 00630.
- E. Certificate of Liability Insurance Form, see Section 00640.
- F. Statewide Payee Form, Form W-9, Request for Taxpayer ID Number and Certification: for General Contractors and Subcontractors.

#### **00235 PRIOR TO NOTICE TO PROCEED**

- A. Provide to the Project Manager:
  - 1. List of subcontractors and major suppliers of work and materials greater than \$2,500.
  - 2. Construction Schedule for approval, see Section 00703.2.
  - 3. Schedule of Values for approval, see Section 00650.
- B. Attend preconstruction conference.

#### **00240 SUBMIT WITH PAY REQUEST**

- A. First invoice: include Statement of Intent to Pay Prevailing Wage Rates for Contractor and all Subcontractors, filed and approved by the Department of Labor and Industries (L&I). Information regarding Prevailing Wages is found at the L&I website: <http://www.lni.wa.gov/TradesLicensing/PrevWage/IntentAffidavits/File/default.asp>.
- B. All invoices: include Verification of Monthly Payments to MWBEs, see Section 00660.
- C. For contract sums of \$1,000,000 or more include Statement of Apprentice/Journeyman Participation, see Section 00670.

**00250 DURING PROGRESS OF CONTRACT**

- A. Provide Submittals and Shop Drawings as required, see Section 01300.
- B. If work exceeds 30 calendar days, Contractor may request partial payment once per month. If work is 30 calendar days or less, Contractor requests payment when project is complete.

**00260 FOR SUBSTANTIAL COMPLETION**

- A. Owner/operator training completed.
- B. Submit Operation and Maintenance Manual draft to Owner, see Section 01730.
- C. Written Certificate of Occupancy received by Owner.
- D. Owner provides Contractor final punch list.
- E. Owner provides written Substantial Completion.

**00270 FOR FINAL COMPLETION**

- A. Contractor completes final punch list.
- B. Owner completes walkthrough and validates final punch list.
- C. Contractor submits final Operation and Maintenance Manuals to Owner, see Section 01730.
- D. Contractor submits Project Record to Owner if required in the contract.
- E. Contractor provides all signed permits to the Owner.
- F. Contractor provides all expressed warranties greater than one year to Owner.
- G. Owner issues Final Completion Letter to Contractor.
- H. Contractor submits final invoice after receipt of the Final Completion Certificate.
- I. Contractor submits Affidavit of Wages Paid to L&I.
- J. L&I approves the Affidavit of Wages Paid for Contractor and all Subcontractors working on the project.
- K. Owner submits a Notice of Completion Form to L&I, the Department of Revenue, and the Employment Security Department.
- L. Owner's Contract Administrator receives the notarized Contractor's Release of Claims Form.

**00280 FOR RETAINAGE TO BE RELEASED**

- A. Contract must not be in dispute.
- B. Owner processes final progress payment.
- C. Owner administers 60-day legal lien period.
- D. Owner's Contract Administrator receives releases from Department of Revenue, Employment Security Department, and Labor & Industries.

END OF SECTION 00200

**FAILURE TO SUBMIT ALL PAGES OF BID FORM SHALL BE  
SUFFICIENT CAUSE TO REJECT THE BID.**

**To:** Washington Department of Fish & Wildlife  
Chief Engineer  
600 Capitol Way North, MS: 43158  
Olympia, WA 98501-1091

**Project Title:** Wenas WLA - Mt Vale Septic Replacement  
**Project No.:** YA:R167:17-1  
**Bid Opening:** 2:00 p.m. March 2, 2022

**00310 BID**

Pursuant to and in compliance with the Bid Documents, the undersigned Bidder agrees to submit all bid form pages and perform the Work for the following Base Bid amount for the above referenced project:

<b>Lump Sum Items</b>	
<b>Bid Item 1:</b> Provide all labor, material, permits, temporary erosion and sediment control (TESC), grass seed, mulch, CSTC, and equipment to remove existing septic system and construct the attached permitted septic system.	\$
<b>Bid Item 2:</b> Provide all labor, material, permits, and equipment to install electrical service and owner-provided conduits for new septic pump system as shown in attached electrical diagram	\$
<b>Base Bid (Sum of bid items 1 thru 2, excluding Washington State sales tax)</b>	\$

**TRENCH EXCAVATION SAFETY PROVISIONS**

If the bid amounts contain any work in which trench excavation will exceed a depth of four feet, all costs for adequate trench safety systems amount shall be included in base bid in compliance with RCW 39.04.180. The Bidder agrees to comply with all the relevant trench safety requirements of Chapter 49.17 RCW and WAC 296-155-66411.

If trench excavation safety provisions do not pertain to this project, enter "N/A" for the dollar amount. Failure to complete this requirement shall be sufficient cause to reject the bid.

<b>Trench Excavation Safety Provisions</b>	\$
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**00320 CONTRACT COMPLETION TIME**

The bidder agrees to achieve Substantial Completion in 25 calendar days after date of Notice to Proceed and achieve Final Completion within 5 calendar days of Substantial Completion.

**00330 LIQUIDATED DAMAGES**

The undersigned agrees to pay the Owner as liquidated damages the sum of \$213 for each consecutive calendar day that is in default after the Contract Time. Liquidated damages shall be deducted from the Contract by Change Order.

**00340 MINORITY AND WOMEN'S BUSINESS ENTERPRISES (MWBE) UTILIZATION CERTIFICATION**

The bidder certifies they have, in good faith, afforded maximum opportunities to MWBEs, and if they are the successful bidder on this project, the following MWBE firms or approved substitutes shall be utilized on the project and compensated in the amounts shown. **If the bidder does not expect to utilize MWBE firms, enter "N.A." on line one below.**

Firm Name, Address and Federal I.D. #	Telephone Number	Type of Work	Certificate Number	MBE%	WBE%
1					
2					
<b>TOTALS</b>					

**00350 IDENTIFICATION OF SUBCONTRACTORS FOR PROJECTS GREATER THAN \$1,000,000**

Not Used.

**00360 CONTRACT EXECUTION**

- A. Contract Execution: If the Owner awards a contract based on this bid within 60 calendar days (unless otherwise negotiated) of the bid submission deadline, the Bidder agrees to execute a contract for the above work, for compensation computed from the above stated bid amounts, on the WDFW Public Works Contract Form.
- B. Bonds and Insurance: If Bidder fails to submit the documents listed in Section 00230, within 21 calendar days after date on the Award Letter, the Owner may revoke the award.
- C. Failure to Execute Contract: If the successful bidder, fails to submit the documents listed in Section 00230, the Owner may revoke the award. The bid guarantee may be retained by Owner as liquidated damages, not as penalty.

If a contract is not awarded within 60 calendar days (unless otherwise negotiated) after the bid submission deadline or Contractor fails to submit the documents listed in Section 00230, the certified or cashier's check submitted as the bid guarantee shall be returned to the bidder, or the Bid Bond shall become void.

**00370 DECLARATION**

- A. Familiarity with Bid Document and Site: The undersigned Bidder hereby certifies to have personally and carefully examined the Bid Documents issued for the above referenced project, the site where the Work is to be performed and the conditions affecting the Work.
- B. Proposal to Perform Work: The Bidder hereby proposes to furnish all labor, materials, equipment, and services and to perform all work which may be required to complete the Work within the time fixed and in strict accordance with the Contract Documents for the above-referenced project for the Base Bid indicated above. The bid prices cover all expenses of the Bidder, including but not limited to, overhead, profit, insurance, and bonding, to perform the Work in accordance with the Contract Documents.

- C. Non-Collusion: The Bidder affirms that the bid is a genuine and not a sham or collusive bid or made in the interest or on behalf of any person not therein named. The Bidder has not directly or indirectly induced or solicited any bidder on the work to put in a sham bid, or any other person or corporation to refrain from bidding, and that the Bidder has not in any manner sought by collusion to secure for itself an advantage over any other bidder or bidders. The Bidder has not entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free, competitive bidding in the preparation and submission of this bid to the Owner for the project described in the Bid Documents.
- D. Certification of Compliance with Wage Payment Statutes: The bidder hereby certifies that, within the 3 year period immediately preceding the bid solicitation date the bidder is not a “willful” violator, as defined in RCW 49.48.082, of any provision of Chapters 49.46, 49.48, or 49.52 RCW, as determined by a final and binding citation and notice of assessment issued by the Department of Labor and Industries or through a civil judgment entered by a court of limited or general jurisdiction.



**00380 ACKNOWLEDGEMENT**

I certify by signing the current Bid Form that all Addendum/Addenda, Contract Execution and Declarations have been acknowledged. Contractor shall review online bid documents at Builders Exchange of Washington, Inc. <http://www.bxwa.com> to ensure all information is considered in bid proposal.

Bidder's Business Name:		
Unified Business Number (UBI):	Contractor's License Number:	
Physical Business Street Address		
City:	State:	Zip Code:
Phone Number:		
Email Address:		
If the above address is not in Washington State, check ONE of the boxes below:		
<input type="checkbox"/> Physical office in WA: _____ <div style="display: flex; justify-content: space-around; width: 100%;"> <span>Street Address</span> <span>City</span> <span>Zip Code</span> </div> <div style="text-align: center; margin-top: 5px;">OR</div> <input type="checkbox"/> State of incorporation or where business entity was formed, if not corporation: _____		

**OFFICIAL AUTHORIZED TO SIGN FOR BIDDER:**

"I certify (or declare) under penalty of perjury under the laws of the State of Washington that the foregoing is true and correct":	
Signature of Authorized Official:	Date:
Print Name	Title

**FAILURE TO SUBMIT ALL PAGES OF BID FORM SHALL BE  
SUFFICIENT CAUSE TO REJECT THE BID.**

END OF SECTION 00300

**SECTION 00400  
SUPPLEMENTS TO BID FORM**

**00420 QUALIFICATION QUESTIONNAIRE**

**A. Information and Instructions - Standard Questionnaire for Qualification of Contractors:**

1. Any person, firm, or corporation bidding on this project shall execute and submit with their bid a Standard Questionnaire for Qualification of Contractors Form. Failure to submit the completed form immediately following the bid opening may be sufficient cause to reject the bid.
2. The Chief Engineer will make the sole determination as to the adequacy of the experience and responsibility of the bidder.
3. All information furnished will be treated as confidential to the extent that such policy is compatible with the provisions of the general statutes affecting the conduct of public offices.

**B. Preparation of Standard Questionnaire for Qualification of Contractors Form:**

1. Bidder shall submit the Standard Questionnaire for Qualification of Contractors Form only in the exact name under which the bid is submitted. Answers and entries shall be specific and complete in detail.
2. Bidder shall verify that Representative or Project Manager Contact information is current and valid prior to submission.

**C. Joint Ventures: The bids of Joint Ventures will be accepted if qualification has been satisfactorily established by each of the firms bidding in the name of the Joint Venture.**

# DIVISION 0 – BID AND CONTRACT DOCUMENTS

## STANDARD QUESTIONNAIRE FOR QUALIFICATION OF CONTRACTORS

PROJECT NO. \_\_\_\_\_

Submitted by: \_\_\_\_\_  
Name Title

\_\_\_\_\_  
Street Address City State Zip ( ) Phone Number

\_\_\_\_\_  
Signature

### QUESTIONNAIRE

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

\_\_\_\_\_

B. List three projects your organization has completed or has underway on this date reflecting the type of work for which you desire to qualify.

1.	Owner	Owner's Representative or PM	Representative or PM Phone Number
Project Name			Contract Amount
Class of Work Performed			
2.	Owner	Owner's Representative or PM	Representative or PM Phone Number
Project Name			Contract Amount
Class of Work Performed			
3.	Owner	Owner's Representative or PM	Representative or PM Phone Number
Project Name			Contract Amount
Class of Work Performed			

C. Has your organization ever failed to complete a construction contract?

☐ YES    ☐ NO

If Yes, state reason why:

---

---

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**00440 SUPPLEMENTAL BIDDER RESPONSIBILITY CRITERIA**

Not Used.

END OF SECTION 00400



## SECTION 00500

## PUBLIC WORKS CONTRACT

TITLE: [REDACTED]

CONTRACT NUMBER: [REDACTED]

CONTRACTOR: [REDACTED]

ENGINEERING #: [REDACTED]

CONTRACT AMOUNT: [REDACTED]

MASTER INDEX: [REDACTED]

TYPE: Payable / Engineering / Public Works

PROJECT MANAGER: [REDACTED]

CONTRACT PERIOD: [REDACTED]

**A. PARTIES TO THIS CONTRACT**

This Contract is entered into under the authority of Chapter 39.04 of the Revised Code of Washington (RCW) between the Washington State Department of Fish and Wildlife (WDFW), 600 Capitol Way North, Olympia, WA 98501-1091; and (Contractor), Company Address, Company City, Company State, Company Postal Code; and shall be binding upon the agents and all persons acting by or through the parties.

**B. PURPOSE OF CONTRACT**

The Contractor shall provide those goods and /or services in accordance with and as described in the plans and drawings designated as "State of Washington Department of Fish & Wildlife Engineer Number XX:XX:XXXX together with the Contractor's bid opened at 2:00 P.M. Pacific Time on XX/XX/XXXX; and in full compliance with terms, conditions and stipulations of the General Conditions of the Contract, Release of Claims, the Special Conditions of the contract and material, Rights-of-Way and Easements (other than those provided by the State), licenses, permits, for this contract, now referred to and by this reference incorporated herein and made a part hereof as fully, for all purposes as if here set forth at length.

**C. DESCRIPTION OF PROJECT**

The Contractor shall perform the project as described in Attachments, which are incorporated herein by this reference:

Attachment "A" Specifications and Drawings (WDFW Engineer Number: XX/XXXX/XXXX)

**D. PERIOD OF PERFORMANCE**

The Contractor shall begin work as stated in the Notice to Proceed letter from WDFW; and shall complete all work under this contract not later than **DATE**. No expenditures made before or after this period are eligible for reimbursement unless incorporated by written amendment into this Contract. The Contract may be terminated or the performance period extended pursuant to terms set forth in Attachment "A."

WDFW may suspend the work of the Contractor due to weather or other needs of WDFW. The Contractor shall suspend all work on the contract upon the receipt of a Notice to Suspend from WDFW; and shall not re-commence work until a Notice to Resume Work is received from WDFW.

**E. COMPENSATION / PAYMENT**

WDFW hereby promises and agrees with the Contractor to employ, and does employ the Contractor to provide the materials and to do and cause to be done the above-described work, and to complete and finish the same according to the plans designated, and the attached specifications and the terms and conditions herein contained, and hereby contracts to pay for the same in the manner set out in the specifications the sum of **\$00.00** plus applicable Washington State sales tax at the time and upon the conditions provided for in this contract and every part thereof.

## DIVISION 0 – BID AND CONTRACT DOCUMENTS

That WDFW further agrees to employ the Contractor to perform any alterations in or additions to the work covered by this contract and any force account work that may be ordered, if the construction or labor required by such changes or force work is to be executed during the period specified herein for the completion of the work under this contract, and to pay for the same under the terms of this contract. Except as otherwise provided in Section 00707 of Attachment "A" of the contract, no alteration or modification of any of the terms, conditions, price, quality, quantity or specifications of this contract will be effective if not in writing and signed by WDFW.

The Contractor is required to be registered in the Statewide Vendor Payment System prior to submitting a request for payment under this contract. The Washington State Office of Financial Management (OFM) maintains the Statewide Vendor Payment System; to obtain registration materials, forms are available on the OFM payee registration [website](#) or contact the Statewide Payee Help Desk at [HereToHelp@ofm.wa.gov](mailto:HereToHelp@ofm.wa.gov) (360) 407.9100.

### **F. RIGHTS AND OBLIGATIONS**

All rights and obligations of the parties of this Contract are subject to this Contract, including the Attachments, which are incorporated herein by this reference. By signing this Contract the Contractor acknowledges that they have read, fully understand, and agree to be bound by all terms and conditions set forth in this Contract.

### **G. ORDER OF PRECEDENCE**

In the event of an inconsistency in this contract, unless otherwise provided herein, the inconsistency shall be resolved by giving precedence in the following order:

Applicable Federal and State of Washington statutes and regulations;  
Special Terms and Conditions as contained in this basic contract instrument;  
Attachment "A" Specifications and Drawings (WDFW Engineer Number: XX/XXXX/XX); and  
Any other provision, term or material incorporated herein by reference or otherwise incorporated.

### **H. CONTRACT REPRESENTATIVES**

The below named representatives for each of the parties shall be the contact people for all communications and billings regarding the performance of this Contract. All written communications regarding this Contract shall be sent to the designated representatives at the addresses below unless notified in writing of any change.

#### **Contractor's Representative**

Name:   
Company Name:   
Address:   
Office Phone:   
Email:

#### **WDFW's Representative**

Project Manager:   
Capital and Asset Management Program  
PO Box 43158  
Olympia, WA 98504-3158  
(360) 902-8300  
Email:

### **I. ENTIRE CONTRACT**

This Contract, along with all attachments and exhibits, constitutes the entire agreement of the parties. No other understandings, verbal or otherwise, regarding this Contract shall exist or bind any of the parties.

### **J. APPROVAL**

This contract shall be subject to the written approval of WDFW'S authorized representative and shall not be binding until so approved. This Contract may be altered, amended, or waived only by a written amendment executed by both parties.

**DIVISION 0 – BID AND CONTRACT DOCUMENTS**

IN WITNESS WHERE, WDFW and the Contractor have signed this contract.

**CONTRACTOR NAME**

**WASHINGTON DEPARTMENT OF FISH AND WILDLIFE**

\_\_\_\_\_  
**Signature and Date**

\_\_\_\_\_  
**Signature and Date**

\_\_\_\_\_  
**Printed Name and Title**

**Timothy W. Burns, PE**  
**Program Director**  
**Capital and Asset Management Program**

APPROVED AS TO FORM BY THE OFFICE OF THE ATTORNEY GENERAL 12/19/2014

DIVISION 0 – BID AND CONTRACT DOCUMENTS

SECTION 00600

00620 RETAINAGE IN LIEU OF PERFORMANCE BOND OPTION ON CONTRACTS  
OF \$150,000 OR LESS



Contract No. \_\_\_\_\_

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

Agency: DEPARTMENT OF FISH AND WILDLIFE \_\_\_\_\_

Contractor: \_\_\_\_\_

Pursuant to *RCW 39.08.010* you are permitted to exercise your option, IN WRITING, on whether to provide a performance bond, or in lieu of bond to have retention increased to 10 percent. You are therefore requested to complete and return this form prior to receiving the *Notice to Proceed*.

**OPTION 1:**

Provide a performance bond in accordance with *SECTION 00702.04* of the *GENERAL CONDITIONS*.

I request Option #1 \_\_\_\_\_

**OPTION 2:**

Retain 10 percent of the contract payments in lieu of providing a performance bond in accordance with *SECTION 00702.04* of the *GENERAL CONDITIONS*.

I request Option #2 \_\_\_\_\_

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date







00640

**CERTIFICATE OF LIABILITY INSURANCE**

DATE (MM/DD/YYYY)

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

**IMPORTANT:** If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME:	
	PHONE (A/C, No. Ext):	FAX (A/C, No):
	E-MAIL ADDRESS:	
	INSURER(S) AFFORDING COVERAGE	
	NAIC #	
INSURED	INSURER A :	
	INSURER B :	
	INSURER C :	
	INSURER D :	
	INSURER E :	
	INSURER F :	

**COVERAGES****CERTIFICATE NUMBER:****REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
	<b>COMMERCIAL GENERAL LIABILITY</b>						EACH OCCURRENCE \$
	<input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence) \$
							MED EXP (Any one person) \$
							PERSONAL & ADV INJURY \$
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE \$
	<input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC						PRODUCTS - COMP/OP AGG \$
	OTHER:						\$
	<b>AUTOMOBILE LIABILITY</b>						COMBINED SINGLE LIMIT (Ea accident) \$
	<input type="checkbox"/> ANY AUTO						BODILY INJURY (Per person) \$
	<input type="checkbox"/> ALL OWNED AUTOS	<input type="checkbox"/> SCHEDULED AUTOS					BODILY INJURY (Per accident) \$
	<input type="checkbox"/> HIRED AUTOS	<input type="checkbox"/> NON-OWNED AUTOS					PROPERTY DAMAGE (Per accident) \$
							\$
	<b>UMBRELLA LIAB</b>						EACH OCCURRENCE \$
	<input type="checkbox"/> EXCESS LIAB	<input type="checkbox"/> OCCUR					AGGREGATE \$
	<input type="checkbox"/> DED <input type="checkbox"/> RETENTION \$	<input type="checkbox"/> CLAIMS-MADE					\$
	<b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b>						PER STATUTE <input type="checkbox"/> OTH-ER <input type="checkbox"/>
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH)	<input type="checkbox"/> Y <input type="checkbox"/> N	N/A				E.L. EACH ACCIDENT \$
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE \$
							E.L. DISEASE - POLICY LIMIT \$

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

**CERTIFICATE HOLDER****CANCELLATION**

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

STATE OF WASHINGTON  
00650 SCHEDULE OF VALUES

CERTIFICATE FOR PAYMENT. For period from: date to date  
Contract for: project title Date: 01/00/00  
Location: project location Certificate No.: \_\_\_\_\_  
Contractor: \_\_\_\_\_ Contract No.: \_\_\_\_\_

Original Contract Amount: \$0.00  
Net change in Contract Amount to Date: \$0.00

				Adjusted Contract amount		\$0.00
ITEM NO.	SCHEDULE OF VALUES DETAIL	ESTIMATED VALUE	AMOUNT EARNED	%	PREVIOUSLY CLAIMED	THIS INVOICE
1		\$0.00	\$0.00	####	\$0.00	\$0.00
2		\$0.00	\$0.00	####	\$0.00	\$0.00
3		\$0.00	\$0.00	####	\$0.00	\$0.00
4		\$0.00	\$0.00	####	\$0.00	\$0.00
5		\$0.00	\$0.00	####	\$0.00	\$0.00
6		\$0.00	\$0.00	####	\$0.00	\$0.00
7		\$0.00	\$0.00	####	\$0.00	\$0.00
8		\$0.00	\$0.00	####	\$0.00	\$0.00
9		\$0.00	\$0.00	####	\$0.00	\$0.00
10		\$0.00	\$0.00	####	\$0.00	\$0.00
11		\$0.00	\$0.00	####	\$0.00	\$0.00
12		\$0.00	\$0.00	####	\$0.00	\$0.00
13		\$0.00	\$0.00	####	\$0.00	\$0.00
14		\$0.00	\$0.00	####	\$0.00	\$0.00
15		\$0.00	\$0.00	####	\$0.00	\$0.00
16		\$0.00	\$0.00	####	\$0.00	\$0.00
17		\$0.00	\$0.00	####	\$0.00	\$0.00
18		\$0.00	\$0.00	####	\$0.00	\$0.00
19	Change Orders:					
20	1.	\$0.00	\$0.00	####	\$0.00	\$0.00
21	2.	\$0.00	\$0.00	####	\$0.00	\$0.00
22	3.	\$0.00	\$0.00	####	\$0.00	\$0.00
23	4.	\$0.00	\$0.00	####	\$0.00	\$0.00
24	5.	\$0.00	\$0.00	####	\$0.00	\$0.00
25	6.	\$0.00	\$0.00	####	\$0.00	\$0.00
26	7.	\$0.00	\$0.00	####	\$0.00	\$0.00
27	8.	\$0.00	\$0.00	####	\$0.00	\$0.00
28	6.	\$0.00	\$0.00	####	\$0.00	\$0.00
SUBTOTAL		\$0.00	\$0.00	####	\$0.00	\$0.00
TAX 0.00% SALES TAX		\$0.00	\$0.00		\$0.00	\$0.00
TOTAL		\$0.00	\$0.00		\$0.00	\$0.00
Less Retainage.. 5%			\$0.00		\$0.00	\$0.00
NET			\$0.00		\$0.00	\$0.00
Less Previous Payments....			\$0.00			
Additional Tax 0.00%		\$0.00			\$0.00	
AMOUNT DUE THIS ESTIMATE			\$0.00			\$0.00

check  
\$0.00  
\$0.00  
\$0.00  
\$0.00  
\$0.00

This is to certify that the contractor, having complied with the terms and conditions of the above mentioned contract, is due and payable from the State of Washington, the amount set after "AMOUNT DUE THIS ESTIMATE."

By 0 (Contracting Firm) By \_\_\_\_\_ (Architect or Engineer)  
SIGN IN INK SIGN AND DATE



00660 VERIFICATION OF MONTHLY PAYMENTS TO MWBES

State of Washington Department of Fish and Wildlife, 600 Capitol Way North, Olympia, Washington, 98501-1091, (360) 902-8300

Project No \_\_\_\_\_ Project Title \_\_\_\_\_ Sheet \_\_\_\_\_ of \_\_\_\_\_

Contractor \_\_\_\_\_ Payment # \_\_\_\_\_

Federal Tax Identification #	Contractor/Supplier	WBE or MBE	Nature of Work or Type of Supplies	Bid Total Utilization Dollars	Amount Paid This Month	Amount Paid to Date

CONTRACTOR: \_\_\_\_\_

Authorized Signature

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

## Washington Department of Fish and Wildlife

## STATEMENT OF APPRENTICE/JOURNEYMAN PARTICIPATION

Firm Name, Address, City, State & ZIP+4	Project Name (Title)		Contract No.
	Contract Award Amount: \$	Notice to Proceed Date	
Reporting Period from: to		Required Apprenticeship Percentage: 15%	

## APPRENTICE SUMMARY

Apprentice Name	Craft or Trade	Apprentice Registration Number	Name of Contractor or Sub-Contractor	Apprentice	
				Total Number	Hours Worked

## JOURNEYMEN SUMMARY

Journeyman Name	Craft or Trade	Journeyman Registration Number	Name of Contractor or Sub-Contractor	Journeyman	
				Total Number	Hours Worked

Apprentice total hours worked this period:	0									
Journeyman total hours worked this period:	0									
	<table border="1"> <tr> <td>Previous Total</td> <td>New Total</td> <td>Percentage</td> </tr> <tr> <td>Cumulative Apprentice hour Total brought forward from last reporting period: previous total</td> <td></td> <td></td> </tr> <tr> <td>Cumulative Journeyman hour Total brought forward from last reporting period: previous total</td> <td></td> <td></td> </tr> </table>	Previous Total	New Total	Percentage	Cumulative Apprentice hour Total brought forward from last reporting period: previous total			Cumulative Journeyman hour Total brought forward from last reporting period: previous total		
Previous Total	New Total	Percentage								
Cumulative Apprentice hour Total brought forward from last reporting period: previous total										
Cumulative Journeyman hour Total brought forward from last reporting period: previous total										

I, the undersigned, do hereby certify under penalty of perjury that the items listed herein represent the proper hourly totals for Apprenticeship/Journeyman participation during this reporting period.

Printed Name:	Signature:	Date:	Title:
---------------	------------	-------	--------

DES Labor Form 100412

END OF SECTION 00600

**DIVISION 0 – GENERAL CONDITIONS****SECTION 00700  
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for Projects Greater than  
\$1,000,000

**PART 1 - 00701.00 DEFINITIONS**

**00701.01 DEFINITIONS**

- A. Application for Payment: A written request submitted by Contractor to A/E for payment of Work completed, in accordance with the Contract Documents and approved Schedule of Values, supported by such substantiating data as Owner or A/E may require.
- B. Architect, Owner, or A/E: A person or entity lawfully entitled to practice architecture or engineering, representing Owner within the limits of its delegated authority.
- C. Change Order: A written instrument signed by Owner and Contractor stating their agreement upon all of the following: (1) a change in the Work; (2) the amount of the adjustment in the Contract Sum, if any; and (3) the extent of the adjustment in the Contract Time, if any.
- D. Claim: Contractor's exclusive remedy for resolving disputes with Owner regarding the terms of a Change Order or a request for equitable adjustment, as more fully set forth in *SECTION 00708 - CLAIMS AND DISPUTE RESOLUTION*.
- E. Contract Documents: The Advertisement for Bids, Instructions to Bidders, completed Form of Proposal, *GENERAL CONDITIONS*, Modifications to the *GENERAL CONDITIONS*, *SUPPLEMENTAL CONDITIONS*, Public Works Contract, other Special Forms, Drawings and Specifications, and all addenda and modifications thereof.
- F. Contract Sum: The total amount payable by Owner to Contractor for performance of the Work in accordance with the Contract Documents.
- G. Contract Time: The number of calendar days allotted in the Contract Documents for achieving Substantial Completion of the Work.
- H. Contractor: The person or entity who has agreed with Owner to perform the Work in accordance with the Contract Documents.
- I. Drawings: The graphic and pictorial portions of the Contract Documents showing the design, location, and dimensions of the Work, and may include plans, elevations, sections, details, schedules, and diagrams.
- J. Final Acceptance: The written acceptance issued to Contractor by Owner after Contractor has completed the requirements of the Contract Documents.
- K. Final Completion: The Work is fully and finally completed in accordance with the Contract Documents.

## DIVISION 0 – GENERAL CONDITIONS

- L. Force Majeure: Those acts entitling Contractor to request an equitable adjustment in the Contract Time, as more fully set forth in *SECTION 00703.05A*.
- M. Notice: A written notice that has been delivered in person to the individual or a member of the firm or entity, or to an officer of the corporation for which it was intended, or, if delivered or sent by registered or certified mail, to the last business address known to the party giving notice.
- N. Notice to Proceed: A notice from Owner to Contractor that defines the date on which the Contract Time begins to run.
- O. Owner: The state agency, institution, or its authorized representative with the authority to enter into, administer, and/or terminate the Work in accordance with the Contract Documents and make related determinations and findings.
- P. Person: A corporation, partnership, business association of any kind, trust, company, or individual.
- Q. Prior Occupancy: Owner's use of all or parts of the Project before Substantial Completion.
- R. Construction Schedule: A schedule of the Work, in a form satisfactory to Owner, as further set forth in *SECTION 00703.02*.
- S. Project: The total construction of which the Work performed in accordance with the Contract Documents may be the whole or a part and which may include construction by Owner or by separate contractors.
- T. Project Manual: The volume usually assembled for the Work, which may include documents such as the bidding requirements, sample forms, and other Contract Documents.
- U. Project Record: The separate set of Drawings and Specifications as further set forth in *SECTION 00704.02A*
- V. Schedule of Values: A written breakdown allocating the total Contract Sum to each principle category of Work, in such detail as requested by Owner.
- W. Specifications: That portion of the Contract Documents consisting of the written requirements for materials, equipment, construction systems, standards, and workmanship for the Work, and performance of related services.
- X. Subcontract: A contract entered between the Contractor and a Subcontractor for the purpose of obtaining supplies, materials, equipment, or services of any kind for, or in connection with, the Work.
- Y. Subcontractor: Any person other than the Contractor who agrees to furnish or furnishes any supplies, materials, equipment, or services of any kind in connection with the Work.
- Z. Substantial Completion: That stage in the progress of the Work where Owner has full and unrestricted use and benefit of the facilities for the purposes intended, as more fully set forth in *SECTION 00706.07*.



## DIVISION 0 – GENERAL CONDITIONS

- AA. Work: The construction and services required by the Contract Documents, and includes, but is not limited to, labor, materials, supplies, equipment, services, permits, and the manufacture and fabrication of components, performed, furnished, or provided in accordance with the Contract Documents.

### 00701.02 ORDER OF PRECEDENCE

Any conflict or inconsistency in the Contract Documents shall be resolved by giving the documents precedence in the following order:

- A. Signed Public Works Contract, including any Change Orders and any Special Forms
- B. *SUPPLEMENTAL CONDITIONS*
- C. *GENERAL CONDITIONS*
- D. Specifications: Provisions in *DIVISION 1* shall take precedence over provision of any other division.
- E. Drawings: In case of conflict within the Drawings, large-scale drawings (24" x 36" shall take precedence over reduced scale drawings.
- F. Signed and Completed *Bid Form*
- G. Instructions to Bidder
- H. Notice to Contractor

### 00701.03 EXECUTION AND INTENT

Contractor makes the following representations to Owner:

- A. The Contract Sum is reasonable compensation for the Work and the Contract Time is adequate for the performance of the Work, as represented by the Contract Documents.
- B. Contractor has carefully reviewed the Contract Documents, visited and examined the Project site, become familiar with the local conditions in which the Work is to be performed, and satisfied itself as to the nature, location, character, quality and quantity of the Work, labor, materials, equipment, goods, supplies, services, and other items to be furnished and all other requirements of the Contract Documents, as well as the surface and subsurface conditions and other matters that may be encountered at the Project site or affect performance of the Work or the cost or difficulty thereof.
- C. Contractor is financially solvent, able to pay its debts as they mature, and possesses sufficient working capital to complete the Work and perform Contractor's obligations required by the Contract Documents.
- D. Contractor is able to furnish the plants; tools, materials, supplies, equipment, and labor required to complete the Work and perform the obligations required by the Contract Documents and have sufficient experience and competence to do so.

## PART 2 - 00702.00 INSURANCE AND BONDS

### 00702.01 CONTRACTOR'S LIABILITY INSURANCE

Prior to commencement of the Work, Contractor shall obtain all the insurance required by the Contract Documents and provide evidence satisfactory to Owner that such insurance has been procured. Review of the Contractor's insurance by Owner shall not relieve or decrease the liability of Contractor. Companies writing the insurance to be obtained by this section shall be licensed to do business under *Chapter 48 RCW* or comply with the *Surplus Lines Law* of the State of Washington. Contractor shall include in its bid the cost of all insurance and bonds required to complete the base bid work and accepted alternates. Insurance carriers providing insurance in accordance with the Contract Documents shall be rated "B+" or better by A.M. Best and ratings shall be indicated on the insurance certificates.

- A. Contractor shall maintain the following insurance coverage during the Work and for 1 year after Final Acceptance. Contractor shall also maintain the following insurance coverage during the performance of any corrective Work required by *SECTION 00705.16*.
  - 1. General liability on the *ISO 1986 New Occurrence Form* or its equivalent, which will include:
    - a. Completed operations/products liability
    - b. Explosion, collapse, and underground
    - c. Employer's liability coverage
  - 2. Automobile liability
- B. Contractor shall comply with the *Washington State Industrial Insurance Act*, and, if applicable, the *Federal Longshoremen's and Harbor Workers' Act*, and the *Jones Act*.
- C. All insurance coverages shall protect against claims for damages for personal and bodily injury or death, as well as claims for property damage, which may arise from operations in connection with the Work whether such operations are by Contractor or any Subcontractor.
- D. All insurance coverages shall be endorsed to include Owner as an additional named insured for Work performed in accordance with the Contract Documents, and all insurance certificates shall evidence the Owner as an additional insured.

### 00702.02 COVERAGE LIMITS

- A. Required Insurance Coverages:
  - 1. For a contract less than \$100,000.00, the coverage required is:
    - a. Comprehensive General Liability Insurance – The Contractor shall at all times during the term of this contract, at its cost and expense, carry and maintain general public liability insurance, including contractual liability, against claims for bodily injury, personal injury, death or property damage occurring or arising out of services provided under this contract.

## DIVISION 0 – GENERAL CONDITIONS

This insurance shall cover claims caused by any act, omission, or negligence of the Contractor or its officers, agents, representatives, assigns or servants. The limits of liability insurance, which may be increased as deemed necessary by the contracting parties, shall be:

Each Occurrence	\$1,000,000.00
General Aggregate Limits (other than products – commercial operations)	\$1,000,000.00
Products – Commercial Operations Limited	\$1,000,000.00
Personal and Advertising Injury Limit	\$1,000,000.00
Fire Damage Limit (any one fire)	\$50,000.00
Medical Expenses Limit (any one person)	\$5,000.00

- b. If the contract is for underground utility work the Contractor shall provide proof of insurance for that above in the form of Explosion, Collapse and Underground (XCU) coverage.
  - c. Employers Liability on an occurrence basis in an amount not less than \$1,000,000.00 per occurrence.
2. For contracts over \$100,000.00 but less than \$5,000,000.00 the Contractor shall obtain the coverage limits as listed for contracts below \$100,000.00 and General Aggregate and Products – Commercial Operations Limit of not less than \$2,000,000.00.
3. Coverage for Comprehensive General Bodily Injury Liability Insurance for a contract over \$5,000,000.00 is:

Each Occurrence	\$2,000,000.00
General Aggregate Limits (other than products – commercial operations)	\$4,000,000.00
Products – Commercial Operations Limited	\$4,000,000.00
Personal and Advertising Injury Limit	\$2,000,000.00
Fire Damage Limit (any one fire)	\$50,000.00
Medical Expenses Limit (any one person)	\$5,000.00

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  4. For all Contracts – Automobile Liability; in the event that services delivered pursuant to this contract involve the use of vehicles or the transportation of clients, automobile liability insurance shall be required. If Contractor owned personal vehicles are used, a Business Automobile Policy covering at a minimum Code 2 “owned autos only” must be secured. If Contractor employee’s vehicles are used, the Contractor must also include under the Business Automobile Policy Code 9, coverage for non-owned autos. The minimum limits for automobile liability is: \$1,000,000.00 per occurrence, using a combined single limit for bodily injury and property damage.

## DIVISION 0 – GENERAL CONDITIONS

5. For contracts for Hazardous Substance Removal (Asbestos Abatement, PCB Abatement, etc.)

- a. In addition to providing insurance coverage for the project as outlined above, the Contractor shall provide Pollution Liability insurance for the hazardous substance removal as follows:

<u>EACH OCCURRENCE</u>	<u>AGGREGATE</u>
\$500,000.00	1,000,000.00

Or \$1,000,000.00 each occurrence/aggregate bodily injury and property damage combined single limit.

- 1) Insurance certificate must state that the insurer is covering hazardous substance removal.
- 2) Should this insurance be secured on a “claims made” basis, the coverage must be continuously maintained for 1 year following the project’s “final completion” through official completion of the project, plus 1 year following.

For contracts where hazardous substance removal is a subcomponent of contracted work, the general contractor shall provide to the Owner a certificate of insurance for coverage as defined in 5a above. The State of Washington must be listed as an additional insured. This certificate of insurance must be provided to the Owner prior to commencing work.

### 00702.03 INSURANCE COVERAGE CERTIFICATES

- A. Prior to the commencement of the Work, Contractor shall furnish acceptable proof of insurance on the State of Washington Certificate of Insurance Form SF500A, as well as copies of insurance policies.
- B. All insurance certificates shall name Owner's Project number and Project title.
- C. All insurance certificates shall specifically require 45 days prior notice to Owner of cancellation or any material change, except 30 days for surplus line insurance.

### 702.04.1 PAYMENT AND PERFORMANCE BONDS

- A. Contractor shall provide separate performance and payment bonds, each executed by the Contractor and the Contractor’s Surety.
- B. Option: Contract sums of \$150,000 or less, Owner will not require performance and payments bonds; if Contractor agrees Owner may, in lieu of the bond, retain 10 percent of the Contract Sum.

**00702.05 ADDITIONAL BOND SECURITY**

Contractor shall promptly furnish additional security required to protect Owner and persons supplying labor or materials required by the Contract Documents if:

- A. Owner has a reasonable objection to the surety; or
- B. Any surety fails to furnish reports on its financial condition if requested by Owner.

**00702.06 BID BOND OR PROPOSAL GUARANTEE**

- A. For bids of \$35,000 or less, no bid bond is required. Bids greater than \$35,000 shall be accompanied by a certified check, cashier's check, or bid bond payable to the Treasurer of the State of Washington in an amount equal to at least 5 percent of the bid as evidence of good faith and as a guarantee that, if awarded the Contract, the bidder will execute the Contract and give Performance Bond as required. All proposal guarantees may be held a maximum of 30 calendar days, and the 3 lowest bids may be held 45 calendar days from the date of the bid opening. At the end of the 30 calendar day period, all proposal guarantees, except those accompanying the 3 lowest bids, will be returned to the respective bidders. After the Contract and bonds have been executed, the remaining 3 proposal guarantees will be returned to their respective bidders.
- B. Only a cashier's check or certified check will be accepted in lieu of a bid bond. State statute requires deposit of negotiable receipts at the time of receipt. The bidder should be prepared to accept an additional 60 to 90 day delay in obtaining repayment from the State Treasurer.
- C. Fiscal procedures in preparing repayment are time consuming, and result in the requirement for additional time. Failure to comply with this section will cause bid to be considered nonresponsive.

**00702.07 BUILDER'S RISK**

- A. Contractor shall purchase and maintain property insurance in the amount of the Contract Sum including all Change Orders for the Work on a replacement cost basis until Final Completion. The insurance shall cover the interest of Owner, Contractor, and any Subcontractors, as their interests may appear.
- B. Contractor property insurance shall be placed on an "all risk" basis and insure against the perils of fire and extended coverage and physical loss or damage including theft, vandalism, malicious mischief, collapse, false work, temporary buildings, debris removal including demolition occasioned by enforcement of any applicable legal requirements, and shall cover reasonable compensation for A/Es' services and expenses required as a result of an insured loss.

- C. Owner and Contractor waive all subrogation rights against each other, any Subcontractors, A/E, A/Es' sub consultants, separate contractors described in *SECTION 00705.20*, if any, and any of their subcontractors, for damages caused by fire or other perils to the extent covered by property insurance obtained pursuant to this section or other property insurance applicable to the Work, except such rights as they have to proceeds of such insurance held by Owner as fiduciary. The policies shall provide such waivers of subrogation by endorsement or otherwise. A waiver of subrogation shall be effective to a person or entity even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise, did not pay the insurance premium directly or indirectly, and whether or not the person or entity had an insurable interest in the property damaged.

**PART 3 - 00703.00 TIME AND SCHEDULE**

**00703.01 PROGRESS AND COMPLETION**

Contractor shall diligently prosecute the Work, with adequate forces, achieve Substantial Completion within the Contract Time, and achieve Final Completion within a reasonable period thereafter.

**00703.02 CONSTRUCTION SCHEDULE**

- A. The Contractor shall, at the Preconstruction Conference and prior to Notice to Proceed, submit a Construction Schedule showing the sequence in which the Contractor proposes to perform the work, including dates on which the contractor plans to start and finish major portions of the work, dates for submitting shop drawings and other submittals, and dates for acquisition of materials and equipment.
- B. The Construction Schedule shall be in the form of a bar chart, or a critical path method analysis, as specified by Owner. The preliminary Construction Schedule may be general, showing the major portions of the Work, with more specific Construction Schedules in subsequent months as directed by Owner.
- C. Owner shall return comments on the preliminary Construction Schedule to Contractor within 14 days of receipt. Review by Owner of Contractor's schedule does not constitute an approval or acceptance of Contractor's construction means, methods, or sequencing, or its ability to complete the Work within the Contract Time. Contractor shall revise and resubmit its schedule, as necessary. Owner may withhold progress payments until a Construction Schedule has been submitted that meets the requirements of this section.
- D. Contractor shall utilize and comply with the Construction Schedule. On a monthly basis, or as otherwise directed by Owner, Contractor shall submit an updated Construction Schedule at its own expense to Owner indicating actual progress. If, in the opinion of the Owner, Contractor is not in conformance with the Construction Schedule for reasons other than acts of *force majeure* as identified in *SECTION 00703.05*, Contractor shall take such steps as are necessary to bring the actual completion dates of its work activities into conformance with the Construction Schedule, or revise the Construction Schedule to reconcile with the actual progress of the Work.

## **DIVISION 0 – GENERAL CONDITIONS**

- E. Contractor shall promptly notify Owner in writing of any actual or anticipated event that is delaying or could delay achievement of any milestone or performance of any critical path activity of the Work. Contractor shall indicate the expected duration of the delay, the anticipated effect of the delay on the Construction Schedule, and the action being or to be taken to correct the problem. Provision of such notice does not relieve Contractor of its obligation to complete the Work within the Contract Time.
- F. The Contractor shall notify the Owner or Owner at least 2 weeks in advance if work is to be performed on a Saturday, Sunday, and/or state holiday.
- G. No excavation work, as defined by *SECTION 00705.09*, will be allowed on Saturdays, Sundays and/or state holidays unless specifically authorized by the Owner.

### **00703.03 OWNER'S RIGHT TO SUSPEND THE WORK FOR CONVENIENCE**

- A. Owner may, at its sole discretion, order the Contractor in writing to suspend all or any part of the Work for up to 90 days, or for such longer period as mutually agreed.
- B. Upon receipt of a written notice suspending the Work, Contractor shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of cost of performance directly attributable to such suspension. Within a period up to 90 days after the notice is delivered to Contractor, or within any extension of that period to which the parties shall have agreed, Owner shall either:
  - 1. Cancel the written notice suspending the Work; or
  - 2. Terminate the Work covered by the notice as provided in the termination provisions of *SECTION 00709.00*.
- C. If a written notice suspending the Work is canceled or the period of the notice or any extension thereof expires, Contractor shall resume the Work.
- D. Contractor shall be entitled to an equitable adjustment in the Contract Time, or Contract Sum, or both, for increases in the time or cost of performance directly attributable to such suspension, provided Contractor complies with all requirements set forth in *SECTION 00707.00*.

### **00703.04 OWNER'S RIGHT TO STOP THE WORK FOR CAUSE**

- A. If Contractor fails or refuses to perform its obligations in accordance with the Contract Documents, Owner may order the Contractor in writing to stop the Work, or any portion thereof, until satisfactory corrective action has been taken.
- B. Contractor shall not be entitled to an equitable adjustment in the Contract Time or Contract Sum for any increased cost or time of performance attributable to Contractor's failure or refusal to perform or from any reasonable remedial action taken by Owner based upon such failure.

00703.05 DELAY

- A. Any delay in or failure of performance by Owner or Contractor, other than the payment of money, shall not constitute a default hereunder if and to the extent the cause for such delay or failure of performance was unforeseeable and beyond the control of the party (*force majeure*). Acts of *force majeure* include, but are not limited to:
1. Acts of God or the public enemy
  2. Acts or omissions of any government entity
  3. Fire or other casualty for which Contractor is not responsible
  4. Quarantine or epidemic
  5. Strike or defensive lockout
  6. Unusually severe weather conditions that could not have been reasonably anticipated
  7. Unusual delay in receipt of supplies or products which were ordered and expedited and for which no substitute reasonably acceptable to Owner was available.
- B. Contractor shall be entitled to an equitable adjustment in the Contract Time for changes in the time of performance directly attributable to an act of *force majeure*, provided it makes a request for equitable adjustment according to *SECTION 00707.03*. Contractor shall not be entitled to an adjustment in the Contract Sum resulting from an act of *force majeure*.
- C. Contractor shall be entitled to an equitable adjustment in Contract Time, and may be entitled to an equitable adjustment in Contract Sum, if the cost or time of Contractor's performance is changed due to the fault or negligence of Owner, provided the Contractor makes a request according to *SECTIONS 00707.02* and *00707.03*.
- D. Contractor shall not be entitled to an adjustment in Contract Time or in the Contract Sum for any delay or failure of performance to the extent such delay or failure was caused by Contractor or anyone for whose acts Contractor is responsible.
- E. To the extent any delay or failure of performance was concurrently caused by the Owner and Contractor, Contractor shall be entitled to an adjustment in the Contract Time for that portion of the delay or failure of performance that was concurrently caused, provided it makes a request for equitable adjustment according to *SECTION 00707.03*, but shall not be entitled to an adjustment in Contract Sum.
- F. Contractor shall make all reasonable efforts to prevent and mitigate the effects of any delay, whether occasioned by an act of *force majeure* or otherwise.



**00703.06 NOTICE TO OWNER OF LABOR DISPUTES**

If Contractor has knowledge that any actual or potential labor dispute is delaying or threatens to delay timely performance in accordance with the Contract Documents, Contractor shall immediately give notice, including all relevant information, to Owner.

Contractor agrees to insert a provision in its Subcontracts and to require insertion in all Sub-subcontracts, that in the event timely performance of any such contract is delayed or threatened by delay by any actual or potential labor dispute, the Subcontractor or Sub-subcontractor shall immediately notify the next higher tier Subcontractor or Contractor, as the case may be, of all relevant information concerning the dispute.

**00703.07 DAMAGES FOR FAILURE TO ACHIEVE TIMELY COMPLETION**

A. Liquidated Damages:

1. Timely performance and completion of the Work is essential to Owner and time limits stated in the Contract Documents are of the essence. Owner will incur serious and substantial damages if Substantial Completion of the Work does not occur within the Contract Time. However, it would be difficult if not impossible to determine the exact amount of such damages. Consequently, provisions for liquidated damages are included in the Contract Documents.
2. The liquidated damage amounts set forth in the Contract Documents will be assessed not as a penalty, but as liquidated damages for breach of the Contract Documents. This amount is fixed and agreed upon by and between the Contractor and Owner because of the impracticability and extreme difficulty of fixing and ascertaining the actual damages the Owner would in such event sustain. This amount shall be construed as the actual amount of damages sustained by the Owner, and may be retained by the Owner and deducted from periodic payments to the Contractor.
3. Assessment of liquidated damages shall not release Contractor from any further obligations or liabilities pursuant to the Contract Documents.

B. Actual Damages:

Actual damages will be assessed for failure to achieve Final Completion within the time provided. Actual damages will be calculated on the basis of direct architectural, administrative, and other related costs attributable to the Project from the date when Final Completion should have been achieved, based on the date Substantial Completion is actually achieved, to the date Final Completion is actually achieved. Owner may offset these costs against any payment due Contractor.

**PART 4 - 00704.00 SPECIFICATIONS, DRAWINGS, AND OTHER DOCUMENTS**

**00704.01 DISCREPANCIES AND CONTRACT DOCUMENT REVIEW**

- A. The intent of the Specifications and Drawings is to describe a complete Project to be constructed in accordance with the Contract Documents. Contractor shall furnish all labor, materials, equipment, tools, transportation, permits, and supplies, and perform the Work required in accordance with the Drawings, Specifications, and other provisions of the Contract Documents.

## **DIVISION 0 – GENERAL CONDITIONS**

- B. The Contract Documents are complementary. What is required by one part of the Contract Documents shall be binding as if required by all. Anything mentioned in the Specifications and not shown on the Drawings, or shown on the Drawings and not mentioned in the Specifications, shall be of like effect as if shown or mentioned in both.
- C. Contractor shall carefully study and compare the Contract Documents with each other and with information furnished by Owner. If during the performance of the Work Contractor finds a conflict, error, inconsistency, or omission in the Contract Documents, it shall promptly and before proceeding with the Work affected thereby report such conflict, error, inconsistency, or omission to A/E in writing.
- D. Contractor shall do no Work without applicable Drawings, Specifications, or written modifications, or shop drawings where required, unless instructed to do so in writing by Owner. If Contractor performs any construction activity, and it knows or should have known that any of the Contract Documents contain a conflict, error, inconsistency, or omission, Contractor shall be responsible for the performance and shall bear the cost for its correction.
- E. Contractor shall provide any work or materials the provision of which is clearly implied in the Contract Documents even if the Contract Documents do not mention them specifically.
- F. Questions regarding interpretation of the requirements of the Contract Documents shall be referred to the A/E.

### **00704.02 PROJECT RECORD**

- A. Contractor shall legibly mark in ink on a separate set of the Drawings and Specifications all actual construction including depths of foundations, horizontal and vertical locations of internal and underground utilities and appurtenances referenced to permanent visible and accessible surface improvements, field changes of dimensions and details, actual suppliers, manufacturers and trade names, models of installed equipment, and Change Order proposals. This separate set of Drawings and Specifications shall be the "Project Record."
- B. The Project Record shall be maintained on the project site throughout the construction and shall be clearly labeled "PROJECT RECORD." The Project Record shall be updated at least weekly noting all changes and shall be available to Owner at all times.
- C. Contractor shall submit the completed and finalized Project Record to A/E prior to Final Acceptance.

### **00704.03 SHOP DRAWINGS**

- A. "Shop Drawings" means documents and other information required to be submitted to A/E by Contractor pursuant to the Contract Documents, showing in detail: the proposed fabrication and assembly of structural elements; and the installation (i.e. form, fit, and attachment details) of materials and equipment. Shop drawings include, but are not limited to, drawings, diagrams, layouts, schematics, descriptive literature, illustrations, schedules, performance and test data, samples, and similar materials furnished by Contractor to explain in detail specific portions of the Work required by the Contract Documents.

## **DIVISION 0 – GENERAL CONDITIONS**

For materials and equipment to be incorporated into the Work, Contractor submittal shall include the name of the manufacturer, the model number, and other information concerning the performance, capacity, nature, and rating of the item. When directed, Contractor shall submit all samples at its own expense. Owner may duplicate, use, and disclose shop drawings provided in accordance with the Contract Documents.

- B. Contractor shall coordinate all shop drawings and review them for accuracy, completeness, and compliance with the Contract Documents and shall indicate its approval thereon as evidence of such coordination and review. Where required by law, shop drawings shall be stamped by an appropriate professional licensed by the State of Washington. Shop drawings submitted to A/E without evidence of Contractor's approval shall be returned for resubmission.

Contractor shall review, approve, and submit shop drawings with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of Owner or separate contractors. Contractor's submittal schedule shall allow a reasonable time for A/E review. A/E will review, approve, or take other appropriate action on the shop drawings. Contractor shall perform no portion of the Work requiring submittal and review of shop drawings until the respective submittal has been reviewed and the A/E has approved or taken other appropriate action. Owner and A/E shall respond to shop drawing submittals with reasonable promptness. Any Work by Contractor shall be in accordance with reviewed shop drawings. Submittals made by Contractor that are not required by the Contract Documents may be returned without action.

- C. Approval or other appropriate action with regard to shop drawings by Owner or A/E shall not relieve Contractor of responsibility for any errors or omissions in such shop drawings, nor from responsibility for compliance with the requirements of the Contract Documents. Unless specified in the Contract Documents, review by Owner or A/E shall not constitute an approval of the safety precautions employed by Contractor during construction, or constitute an approval of Contractor's means or methods of construction. If Contractor fails to obtain approval before installation and the item or work is subsequently rejected, Contractor shall be responsible for all costs of correction.
- D. If shop drawings show variations from the requirements of the Contract Documents, Contractor shall describe such variations in writing, separate from the shop drawings, at the time it submits the shop drawings containing such variations. If A/E approves any such variation, an appropriate Change Order will be issued. If the variation is minor and does not involve an adjustment in the Contract Sum or Contract Time, a Change Order need not be issued; however, the modification shall be recorded on the Project Record.
- E. Unless otherwise provided in *DIVISION 1*, Contractor shall submit to A/E for approval one electronic or paper copy of all shop drawings and submittals, unless otherwise indicated.

### **00704.04 ORGANIZATION OF SPECIFICATIONS**

Specifications are prepared in sections that conform generally with trade practices. These sections are for Owner and Contractor convenience and shall not control Contractor in dividing the Work among the Subcontractors or in establishing the extent of the Work to be performed by any trade.

**00704.05 OWNERSHIP AND USE OF DRAWINGS, SPECIFICATIONS, AND OTHER DOCUMENTS**

- A. Drawings, Specifications, and other documents prepared by A/E are instruments of A/E's service through which the Work to be executed by Contractor is described. Neither Contractor nor any Subcontractor shall own or claim a copyright in the Drawings, Specifications, and other documents prepared by A/E, and A/E shall be deemed the author of them and will, along with any rights of Owner, retain all common law, statutory, and other reserved rights, in addition to the copyright. All copies of these documents, except Contractor's set, shall be returned or suitably accounted for to A/E, on request, upon completion of the Work.
- B. The Drawings, Specifications, and other documents prepared by the A/E, and copies thereof furnished to Contractor, are for use solely with respect to this Project. They are not to be used by Contractor or any Subcontractor on other projects or for additions to this Project outside the scope of the Work without the specific written consent of Owner. Contractor and Subcontractors are granted a limited license to use and reproduce applicable portions of the Drawings, Specifications, and other documents prepared by A/E appropriate to and for use in the execution of their Work.
- C. Contractor and all Subcontractors grant a nonexclusive license to Owner, without additional cost or royalty, to use for its own purposes (including reproduction) all shop drawings, together with the information and diagrams contained therein, prepared by Contractor or any Subcontractor. In providing shop drawings, Contractor and all Subcontractors warrant that they have authority to grant to Owner a license to use the shop drawings, and that such license is not in violation of any copyright or other intellectual property right.
- D. Contractor agrees to defend and indemnify Owner pursuant to the indemnity provisions in *SECTION 00705.22* from any violations of copyright or other intellectual property rights arising out of Owner's use of the shop drawings hereunder, or to secure for Owner, at Contractor's own cost, licenses in conformity with this section.
- E. The shop drawings and other submittals prepared by Contractor, Subcontractors, or its or their equipment or material suppliers, and copies thereof furnished to Contractor, are for use solely with respect to this Project. They are not to be used by Contractor or any Subcontractor on other projects or for additions to this Project outside the scope of the Work without the specific written consent of Owner. The Contractor, Subcontractors of any tier, and material or equipment suppliers are granted a limited license to use and reproduce applicable portions of the shop drawings and other submittals appropriate to and for use in the execution of their Work under the Contract Documents.

**PART 5 - 00705.00 PERFORMANCE**

**00705.01 CONTRACTOR CONTROL AND SUPERVISION**

- A. Contractor shall supervise and direct the Work, using its best skill and attention, and shall perform the Work in a skillful manner. Contractor shall be solely responsible for and have control over construction means, methods, techniques, sequences, and procedures and for coordinating all portions of the Work, unless the Contract Documents give other specific instructions concerning these matters. Contractor shall disclose its means and methods of construction when requested by Owner.

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- B. Performance of the Work shall be directly supervised by a competent superintendent who is satisfactory to Owner, and has authority to act for Contractor. The superintendent shall not be changed without the prior written consent of Owner.
- C. Contractor shall be responsible to Owner for acts and omissions of Contractor, Subcontractors, and their employees and agents.
- D. Contractor shall enforce strict discipline and good order among Contractor's employees and other persons performing the Work. Contractor shall not permit employment of persons not skilled in tasks assigned to them. Contractor's employees shall at all times, conduct business in a manner that assures fair, equal, and nondiscriminatory treatment of all persons. Owner may, by written notice, request Contractor to remove from the Work or Project site any employee Owner reasonably deems incompetent, careless, or otherwise objectionable.
- E. Contractor shall keep on the Project site a copy of the Drawings, Specifications, addenda, reviewed shop drawings, and permits and permit drawings.
- F. Contractor shall ensure that its owner(s) and employees, and those of its Subcontractors, comply with the *Executive Conflict of Interest Act, RCW 42.18*, which, among other things, prohibits state employees from having an economic interest in any Public Works Contract that was made by, or supervised by, that employee. Contractor shall remove at its sole cost and expense any of its or its Subcontractors', employees if they are in violation of this Act.

### **00705.02 PERMITS, FEES, AND NOTICES**

- A. Unless otherwise provided in the Contract Documents, Contractor shall pay for and obtain all permits, licenses, and inspections necessary for proper execution and completion of the Work. Prior to Final Acceptance, the approved, signed permits shall be delivered to Owner.
- B. If allowances for permits or utility fees are called for in the Contract Documents and set forth in Contractor's bid, and the actual costs of those permits or fees differ from the allowances in the Contract Documents, the difference shall be adjusted by Change Order.
- C. Contractor shall comply with and give notices required by all federal, state, and local laws, ordinances, rules, regulations, and lawful orders of public authorities applicable to performance of the Work.
- D. The Contractor shall conform to all local, state, and national codes in all phases of this project. Where conflicts arise between the code requirements and Drawings or Specifications requirements, the code shall govern and prevail unless the Drawings or Specifications impose requirements or limitations that are more stringent than the code requirements, in which case the more stringent requirements or limitations shall govern and prevail...

**00705.03 PATENTS AND ROYALTIES**

Contractor is responsible for, and shall pay, all royalties and license fees. Contractor shall defend, indemnify, and hold Owner harmless from any costs, expenses, and liabilities arising out of the infringement by Contractor of any patent, copyright, or other intellectual property right used in the Work; however, provided that Contractor gives prompt notice, Contractor shall not be responsible for such defense or indemnity when a particular design, process, or product of a particular manufacturer or manufacturers is required by the Contract Documents. If Contractor has reason to believe that use of the required design, process, or product constitutes an infringement of a patent or copyright, it shall promptly notify Owner of such potential infringement.

**00705.04 PREVAILING WAGES**

- A. Contractor shall pay the prevailing rate of wages to all workers, laborers, or mechanics employed in the performance of any part of the Work in accordance with *RCW 39.12* and the rules and regulations of the Department of Labor and Industries (L&I). The schedule of prevailing wage rates for the locality or localities of the Work, as determined by the Industrial Statistician of L&I, is by reference made a part of the Contract Documents as though fully set forth herein.
1. Before commencing the Work, Contractor shall file a statement under oath with Owner and with the Director of L&I certifying the rate of hourly wage paid and to be paid each classification of laborers, workers, or mechanics employed upon the Work by Contractor and Subcontractors. Such rates of hourly wage shall not be less than the prevailing wage rate.
  2. Disputes regarding prevailing wage rates shall be referred for arbitration to the Director of L&I. The arbitration decision shall be final and conclusive and binding on all parties involved in the dispute as provided for by *RCW 39.12.060*.
  3. Each Application for Payment submitted by Contractor shall state that prevailing wages have been paid in accordance with the prefilled statement(s) of intent, as approved. Copies of the approved intent statement(s) shall be posted on the job site with the address and telephone number of the Industrial Statistician of L&I where a complaint or inquiry concerning prevailing wages may be made.
  4. In compliance with *CHAPTER 296-127 WAC*, Contractor shall pay to L&I the currently established fee for each statement of intent and/or affidavit of wages paid submitted to L&I for certification.
  5. Per EHB 2805, public works contracts estimated to cost over \$1 million requires the Contractor and Subcontractor to submit information regarding any off-site, pre-fabricated, non-standard, project-specific items produced under each contract and produced outside Washington.
  6. Contractor and Subcontractor must have the following information on their Affidavit of Wages Paid form:
    - a. The estimated cost of the public works project;
    - b. The name of the awarding agency and the title of the public works project;

## DIVISION 0 – GENERAL CONDITIONS

- c. The contract value of the off-site, pre-fabricated, non-standard, project specific items produced outside Washington; and
  - d. The name, address, and federal employer identification number of the contractor that produced the off-site, pre-fabricated, non-standard, project specific items.
- B. Projects identified as having federal financing, excluding FEMA shall comply with *Federal Davis Bacon Act* requirements.
  - 1. All laborers, mechanics, and other workers employed by the Contractor or Subcontractors to work on construction projects financed by federal assistance must be paid wages not less than those established for the locality of the project by the U.S. Secretary of Labor (40 Stat 1494, Mar, 3, 1921, Chap, 411, 40 USC276A 276A S).
  - 2. When the project is subject to both state and federal wage rates, and when the rates differ for similar kinds of labor, the Contractor shall not pay less than the higher rate. The area in which the worker is physically employed shall determine which federal wage and fringe benefit rate shall be used to compare against the state wage and fringe benefit rate.
  - 3. Washington State's prevailing wage rate for this project can be found at the Department of Labor and Industries' (L&I) website: <https://fortress.wa.gov/lni/wagelookup/prvwagelookup.aspx>.
- C. Projects identified as having FEMA funding shall comply with Stafford Act Requirements. Robert T. Stafford Disaster Relief and Emergency Assistance Act, Public Law 93-288, as amended, 42 U.S.C. 5121 et seq., and Related Authorities.
  - 1. All laborers and mechanics employed by contractors or subcontractors in the performance of construction work financed with the assistance of any contribution of Federal funds made by the Administrator under this subsection shall be paid wages at rates not less than those prevailing on similar construction in the locality as determined by the Secretary of Labor in accordance with sections 3141-3144, 3146, and 3147 of title 40, and every such employee shall receive compensation at a rate not less than one and 1/2 times the basic rate of pay of the employee for all hours worked in any workweek in excess of 8-hours in any workday or 40 hours in the workweek, as the case may be. The Administrator shall make no contribution of Federal funds without first obtaining adequate assurance that these labor standards will be maintained upon the construction work. The Secretary of Labor shall have, with respect to the labor standards specified in this subsection, the authority and functions set forth in Reorganization Plan Numbered 14 of 1950 (5 U.S.C. App.) and section 3145 of title 40.
  - 2. When the project is subject to both state and federal wage rates, and when the rates differ for similar kinds of labor, the Contractor shall not pay less than the higher rate. The area in which the worker is physically employed shall determine which federal wage and fringe benefit rate shall be used to compare against the state wage and fringe benefit rate.

**00705.05 HOURS OF LABOR**

- A. Contractor shall comply with all applicable provisions of *RCW 49.28*, and they are incorporated herein by reference. Pursuant to that statute no laborer, worker, or mechanic employed by Contractor, any Subcontractor, or any other person performing or contracting to do the whole or any part of the Work shall be permitted or required to work more than 8 hours in any one calendar day, provided that in cases of extraordinary emergency, such as danger to life or property, the hours of work may be extended, but in such cases the rate of pay for time employed in excess of 8 hours of each calendar day shall be not less than 1½ times the rate allowed for this same amount of time during 8 hours of service.
- B. Notwithstanding the preceding paragraph, *RCW 49.28* permits a Contractor or Subcontractor in any Public Works Contract subject to those provisions to enter into an agreement with its employees in which the employees work up to 10 hours in a calendar day. No such agreement may provide that the employees work 10 hour days for more than 4 calendar days a week. Any such agreement is subject to approval by the employees. The overtime provisions of *RCW 49.28* shall not apply to the hours, up to 40 hours per week, worked pursuant to any such agreement.

**00705.06 NONDISCRIMINATION**

- A. Discrimination in all phases of employment is prohibited by, among other laws and regulations, *Title VII of the Civil Rights Act of 1964*, the *Vietnam Era Veterans Readjustment Act of 1974*, *Sections 503 and 504 of the Vocational Rehabilitation Act of 1973*, the *Equal Employment Act of 1972*, the *Age Discrimination Act of 1967*, the *Americans with Disabilities Act of 1990*, the *Civil Rights Act of 1991*, *Presidential Executive order 11246*, *Presidential Executive Order 11375*, *Presidential Executive Order 13672*, the *Washington State Law Against Discrimination*, *RCW 49.60*, and *Gubernatorial Executive Order 85-09*. These laws and regulations establish minimum requirements for affirmative action and fair employment practices which Contractor must meet.
- B. During Performance of the Work:
  - 1. Contractor shall not discriminate against any employee or applicant for employment because of race, creed, color, national origin, sex, sexual orientation, age, marital status, or the presence of any physical, sensory, or mental disability, Vietnam era veteran status, or disabled veteran status, nor commit any other unfair practices as defined in *RCW 49.60*.
  - 2. Contractor shall, in all solicitations or advertisements for employees placed by or for it, state that all qualified applicants will be considered for employment without regard to race, creed, color, national origin, sex, sexual orientation, age, marital status, or the presence of any physical, sensory, or mental disability.
  - 3. Contractor shall send to each labor union, employment agency, or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice advising the labor union, employment agency, or workers' representative of Contractor's obligations according to the Contract Documents and *RCW 49.60*.



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4. Contractor shall permit access to its books, records, and accounts, and to its premises by Owner, and by the Washington State Human Rights Commission, for the purpose of investigation to ascertain compliance with this section of the Contract Documents.
5. Contractor shall include the provisions of this section in every Subcontract.

### 00705.07 SAFETY PRECAUTIONS

- A. Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the performance of the Work.
- B. In carrying out its responsibilities according to the Contract Documents, Contractor shall protect the lives and health of employees performing the Work and other persons who may be affected by the Work; prevent damage to materials, supplies, and equipment whether onsite or stored offsite; and prevent damage to other property at the site or adjacent thereto. Contractor shall comply with all applicable laws, ordinances, rules, regulations, and orders of any public body having jurisdiction for the safety of persons or property, or to protect them from damage, injury, or loss; shall erect and maintain all necessary safeguards for such safety and protection; and shall notify owners of adjacent property and utilities when prosecution of the Work may affect them.
- C. Contractor shall maintain an accurate record of exposure data on all incidents relating to the Work resulting in death, traumatic injury, occupational disease, or damage to property, materials, supplies, or equipment. Contractor shall immediately report any such incident to Owner. Owner shall, at all times, have a right of access to all records of exposure.
- D. Contractor shall provide all persons working on the Project site with information and training on hazardous chemicals in their work at the time of their initial assignment, and whenever a new hazard is introduced into their work area.
  1. Information: At a minimum, Contractor shall inform persons working on the Project site of:
    - a. The requirements of *CHAPTER 296-62 WAC, General Occupational Health Standards*
    - b. Any operations in their work area where hazardous chemicals are present
    - c. The location and availability of written hazard communication programs, including the required list(s) of hazardous chemicals and Safety Data Sheets (SDS) required by *CHAPTER 296-62 WAC*.
  2. Training: At a minimum, Contractor shall provide training for persons working on the project site, which includes:
    - a. Methods and observations that may be used to detect the presence or release of a hazardous chemical in the work area (such as monitoring conducted by the employer, continuous monitoring devices, visual appearance or odor of hazardous chemicals when being released, etc.).
    - b. The physical and health hazards of the chemicals in the work area.

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- c. The measures such persons can take to protect themselves from these hazards, including specific procedures Contractor, or its Subcontractors, or others have implemented to protect those on the Project site from exposure to hazardous chemicals, such as appropriate work practices, emergency procedures, and personal protective equipment to be used.
  - d. The details of the hazard communication program developed by Contractor or its Subcontractors, including an explanation of the labeling system and the SDS, and how employees can obtain and use the appropriate hazard information.
- E. Contractor's responsibility for hazardous, toxic, or harmful substances shall include the following duties:
  - 1. Contractor shall not keep, use, dispose, transport, generate, or sell on or about the Project site any substances now or hereafter designated as, or which are subject to regulation as, hazardous, toxic, dangerous, or harmful by any federal, state, or local law, regulation, statute or ordinance (hereinafter collectively referred to as "hazardous substances"), in violation of any such law, regulation, statute, or ordinance, but in no case shall any such hazardous substance be stored more than 90 days on the Project site.
  - 2. Contractor shall promptly notify Owner of all spills or releases of any hazardous substances that are otherwise required to be reported to any regulatory agency and pay the cost of cleanup. Contractor shall promptly notify Owner of all failures to comply with any federal, state, or local law, regulation, or ordinance; all inspections of the Project site by any regulatory entity concerning the same; all regulatory orders or fines; and all responses or interim cleanup actions taken by or proposed to be taken by any government entity or private party on the Project site.
- F. All Work shall be performed with due regard for the safety of the public. Contractor shall perform the Work so as to cause a minimum of interruption of vehicular traffic or inconvenience to pedestrians. All arrangements to care for such traffic shall be Contractor's responsibilities. All expenses involved in the maintenance of traffic by way of detours shall be borne by Contractor.
- G. In an emergency affecting the safety of life or the Work or of adjoining property, Contractor is permitted to act, at its discretion, to prevent such threatened loss or injury, and Contractor shall so act if so authorized or instructed.
- H. Nothing provided in this section shall be construed as imposing any duty upon Owner or A/E with regard to, or as constituting any express or implied assumption of control or responsibility over, Project site safety, or over any other safety conditions relating to employees or agents of Contractor or any of its Subcontractors, or the public.

**00705.08 OPERATIONS, MATERIAL HANDLING, EASEMENTS AND STORAGE AREAS**

- A. Contractor shall confine all operations, including storage of materials, to Owner-approved areas. The Owner has acquired ownership and/or easement of lands for the construction as indicated on the Drawings without cost to the Contractor. It is understood and agreed by the Contractor that if it should appear at any time that the Owner has not acquired title to all of the right-of-ways and lands necessary for the performance of the Work under the provisions of this Contract, and that if any delay in the performance of said Work occasioned by the failure of the Owner, its officers, or employees to acquire a title of any of said lands or right-of-way, such failure shall extend the Contract completion date the number of days equal to the period of such delay. The Contractor waives any and all claims for damages against the Owner, its officers, and employees which the Contractor may sustain by reason of delay in the Work.
- B. Temporary buildings (e.g. storage sheds, shops, offices) and utilities may be provided by Contractor only with the consent of Owner and without expense to Owner. The temporary buildings and utilities shall remain the property of Contractor and shall be removed by Contractor at its expense upon completion of the Work.
- C. Contractor shall use only established roadways or temporary roadways authorized by Owner. When materials are transported in prosecuting the Work, vehicles shall not be loaded beyond the loading capacity recommended by the manufacturer of the vehicle or prescribed by federal, state, or local law or regulation.
- D. Ownership and control of all materials or facility components to be demolished or removed from the Project site by Contractor shall immediately vest in Contractor upon severance of the component from the facility or severance of the material from the Project site. Contractor shall be responsible for compliance with all laws governing the storage and ultimate disposal. Contractor shall provide Owner with a copy of all manifests and receipts evidencing proper disposal when required by Owner or applicable law.
- E. Contractor shall be responsible for the proper care and protection of its materials and equipment delivered to the Project site. Materials and equipment may be stored on the premises subject to approval of Owner. When Contractor uses any portion of the Project site as a shop, Contractor shall be responsible for any repairs, patching, or cleaning arising from such use.
- F. Contractor shall protect and be responsible for any damage or loss to the Work, or to the materials or equipment until the date of Substantial Completion, and shall repair or replace without cost to Owner any damage or loss that may occur, except damages or loss caused by the acts or omissions of Owner. Contractor shall also protect and be responsible for any damage or loss to the Work, or to the materials or equipment, after the date of Substantial Completion, and shall repair or replace without cost to Owner any such damage or loss that might occur, to the extent such damages or loss are caused by the acts or omissions of Contractor, or any Subcontractor.

**00705.09 PRIOR NOTICE OF EXCAVATION**

"Excavation" means an operation in which earth, rock, or other material on or below the ground is moved or otherwise displaced by any means, except the tilling of soil less than 12 inches in depth for agricultural purposes, or road ditch maintenance that does not change the original road grade or ditch flow line. Before commencing any excavation, Contractor shall provide notice of the scheduled commencement of excavation to all owners of underground facilities and utilities through locator services.

**00705.10 UNFORSEEN PHYSICAL CONDITIONS**

- A. If Contractor encounters conditions at the site which are subsurface or otherwise concealed physical conditions which differ materially from those indicated in the Contract Documents, or unknown physical conditions of an unusual nature which differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, then Contractor shall give written notice to Owner promptly before conditions are disturbed and in no event later than 7 days after the first observance of the conditions.
- B. If such conditions differ materially and cause a change in Contractor's cost of, or time required for, performance of any part of the Work, the Contractor may be entitled to an equitable adjustment in the Contract Time or Contract Sum or both, provided it makes a request thereof as provided in *SECTION 00707.00 - CHANGES*.

**00705.11 PROTECTION OF EXISTING STRUCTURES, EQUIPMENT, STOCK, VEGETATION, UTILITIES, AND IMPROVEMENTS**

- A. Contractor shall protect from damage all existing structures, equipment, improvements, utilities, and vegetation at or near the Project site, and on adjacent property of a third party, the locations of which are made known to or should be known by Contractor. Contractor shall repair any damage, including that to the property of a third party, resulting from failure to comply with the requirements of the Contract Documents or failure to exercise reasonable care in performing the Work. If Contractor fails or refuses to repair the damage promptly, Owner may have the necessary work performed and charge the cost to Contractor.
- B. Contractor shall only remove trees when specifically authorized to do so, and shall protect vegetation that will remain in place.
- C. Damage to facility production resulting in death or sickness of stock shall result in claims against the Contractor for loss of production or costs incurred by any extraordinary measures required to save production.

**00705.12 LAYOUT OF WORK**

- A. Contractor shall plan and lay out the Work in advance of operations so as to coordinate all work without delay or revision.

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- B. Contractor shall do all cutting, fitting, or patching that may be required to make its several parts fit together properly, or receive or be received by work of others set forth in, or reasonable implied by, the Contract Documents. Contractor shall not endanger any work by cutting, excavating, or otherwise altering the Work and shall not cut or alter the work of any other contractor unless approved in advance by Owner.
- C. Should any of the Work be found defective, or in any way not in accordance with the Contract Documents, this work, in whatever state of completion, may be rejected by Owner.

### **00705.13 MATERIAL AND EQUIPMENT**

- A. All equipment, material, and articles incorporated into the Work shall be new and of the most suitable grade for the purpose intended, unless otherwise specifically provided in the Contract Documents. References in the Specifications to equipment, material, articles, or patented processes by trade name, make, or catalog number, shall be regarded as establishing a standard quality and shall not be construed as limiting competition. Contractor may, at its option, use any equipment, material, article, or process that, in the judgment of A/E, is equal to that named in the Specifications, unless otherwise specifically provided in the Contract Documents.
- B. It shall be the responsibility of the Contractor to furnish proof of equality in all respects to specified items when proposing alternate brands or items. Any significant deviations from Specifications, Drawings, or equality must be noted by the Contractor when submitting alternate materials for approval. The Owner shall be the sole judge of the equality and suitability of any products, materials, or components proposed by the Contractor as alternates to specified items. The Contractor shall, at their own expense, make any secondary changes required to incorporate an approved substitute or alternate into the project. No offers for substitution will be acknowledged from suppliers, distributors, manufacturers, or Subcontractors.
- C. Contractor shall do all cutting, fitting, or patching that may be required to make its several parts fit together properly, or receive or be received by work of others set forth in, or reasonably implied by, the Contract Documents. Contractor shall not endanger any work by cutting, excavating, or otherwise altering the Work and shall not cut or alter the work of any other contractor unless approved in advance by Owner.
- D. Should any of the Work be found defective, or in any way not in accordance with the Contract Documents, this work, in whatever stage of completion, may be rejected by Owner.

### **00705.14 AVAILABILITY AND USE OF UTILITY SERVICES**

- A. Owner shall make all reasonable utilities available to Contractor from existing outlets and supplies, as specified in the Contract Documents. Unless otherwise provided in the Contract Documents, the utility service consumed shall be charged to or paid for by Contractor at prevailing rates charged to Owner or, where the utility is produced by Owner, at reasonable rates determined by Owner. Contractor will carefully conserve any utilities furnished.

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- B. Contractor shall, at its expense and in a skillful manner satisfactory to Owner, install and maintain all necessary temporary connections and distribution lines, together with appropriate protective devices and all meters required to measure the amount of each utility used for the purpose of determining charges. Prior to Final Completion, Contractor shall remove all temporary connections, distribution lines, meters, and associated equipment and materials.

### **00705.15 TESTS AND INSPECTION**

- A. Contractor shall maintain an adequate testing and inspection program and perform such tests and inspections as are necessary or required to ensure that the Work conforms to the requirements of the Contract Documents. Contractor shall be responsible for inspection and quality surveillance of all its Work and all Work performed by any Subcontractor. Unless otherwise provided, Contractor shall make arrangements for such tests, inspections, and approvals with an independent testing laboratory or entity acceptable to Owner, or with the appropriate public authority, and shall bear all related costs of tests, inspections, and approvals. Contractor shall give Owner timely notice of when and where tests and inspections are to be made. Contractor shall maintain complete inspection records and make them available to Owner.
- B. Owner may, at any reasonable time, conduct such inspections and tests, as it deems necessary to ensure that the Work is in accordance with the Contract Documents. Owner shall promptly notify Contractor if an inspection or test reveals that the Work is not in accordance with the Contract Documents. Unless the subject items are expressly accepted by Owner, such Owner inspection and tests are for the sole benefit of Owner and do not:
  - 1. Constitute or imply acceptance
  - 2. Relieve Contractor of responsibility for providing adequate quality control measures
  - 3. Relieve Contractor of responsibility for risk of loss or damage to the Work, materials, or equipment
  - 4. Relieve Contractor of its responsibility to comply with the requirements of the Contract Documents
  - 5. Impair Owner's right to reject defective or nonconforming items or to avail itself of any other remedy to which it may be entitled.
- C. In addition to any inspections required by local authorities or permitting agencies, the State will appoint its own inspector for the project. Construction inspectors employed by the State shall assist the Owner in making all necessary inspections and measurements and shall enforce a strict compliance with the terms of the Contract and the orders of the Owner. The Inspector will have the authority to reject materials or workmanship which do not fulfill the requirements of these Specifications. In case of dispute, the Contractor may appeal to the Owner whose decision shall be final. The acceptance of any material by the Inspector shall not hinder its subsequent rejection if found defective. Rejected materials and workmanship shall be replaced promptly or be remedied by the Contractor, without additional cost to the Owner.

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- D. Neither observations by an inspector retained by Owner, the presence or absence of such inspector on the site, nor inspections, tests, or approvals by others, shall relieve Contractor from any requirement of the Contract Documents, nor is any such inspector authorized to change any term or condition of the Contract Documents.
- E. Contractor shall promptly furnish, without additional charge, all facilities, labor, material, and equipment reasonably needed for performing such safe and convenient inspections and tests as may be required by Owner. Owner may charge Contractor any additional cost of inspection or testing when Work is not ready at the time specified by Contractor for inspection or testing, or when prior rejection makes re-inspection or retest necessary. Owner shall perform its inspections and tests in a manner that will cause no undue delay in the Work.

### **00705.16 CORRECTION OF NONCONFORMING WORK**

- A. If a portion of the Work is covered contrary to the requirements of the Contract Documents, it must, if required in writing by Owner, be uncovered for Owner's observation and be replaced at the Contractor's expense and without change in the Contract Time.
- B. If any time prior to Final Completion Owner desires to examine the Work or any portion of it that has been covered, Owner may request to see such Work, and it shall be uncovered by Contractor. If such Work is in accordance with the Contract Documents, the Contractor shall be entitled to an adjustment in the Contract Sum for the costs of uncovering and replacement, and if completion of the Work is thereby delayed, an adjustment in the Contract Time, provided it makes a request therefore as provided in *SECTION 00707.00 - CHANGES*. If such Work is not in accordance with the Contract Documents, the Contractor shall pay the costs of examination and reconstruction.
- C. Contractor shall promptly correct Work found by Owner not to conform to the requirements of the Contract Documents, whether observed before or after Substantial Completion and whether or not fabricated, installed, or completed. Contractor shall bear all costs of correcting such nonconforming Work, including additional testing and inspections.
- D. If, within 1 year after the date of Substantial Completion of the Work, or designated portion thereof, or within 1 year after the date for commencement of any system warranties established under *SECTION 00706.08*, or within the terms of any applicable special warranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, Contractor shall correct it promptly after receipt of written notice from Owner to do so. Owner shall give such notice promptly after discovery of the condition. This period of 1 year shall be extended, with respect to portions of Work first performed after Substantial Completion, by the period of time between Substantial Completion and the actual performance of the Work. Contractor's duty to correct with respect to Work repaired or replaced shall run for 1 year from the date of repair or replacement. Obligations under this paragraph shall survive Final Acceptance.
- E. Contractor shall remove from the Project site portions of the Work that are not in accordance with the requirements of the Contract Documents and are neither corrected by Contractor nor accepted by Owner.

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- F. If Contractor fails to correct nonconforming Work within a reasonable time after written notice to do so, Owner may replace, correct, or remove the nonconforming Work and charge the cost thereof to the Contractor.
- G. Contractor shall bear the cost of correcting destroyed or damaged Work, whether completed or partially completed, caused by Contractor's correction or removal of Work which is not in accordance with the requirements of the Contract Documents.
- H. Nothing contained in this section shall be construed to establish a period of limitation with respect to other obligations that Contractor might have according to the Contract Documents. Establishment of the time period of 1 year, as described in *SECTION 00705.16D*, relates only to the specific obligation of Contractor to correct the Work, and has no relationship to the time within which the Contractor's obligation to comply with the Contract Documents may be sought to be enforced, including the time within which such proceedings may be commenced.
- I. If Owner prefers to accept Work that is not in accordance with the requirements of the Contract Documents, Owner may do so instead of requiring its removal and correction, in which case the Contract sum may be reduced as appropriate and equitable.

### **00705.17 CLEANUP**

Contractor shall at all times keep the Project site, including hauling routes, infrastructures, utilities, and storage areas, free from accumulations of waste materials. Before completing the Work, Contractor shall remove from the premises its rubbish, tools, scaffolding, equipment, and materials. Upon completing the Work, Contractor shall leave the Project site in a clean, neat, and orderly condition satisfactory to Owner. If Contractor fails to clean up as provided herein, and after reasonable notice from Owner, Owner may do so and the cost thereof shall be charged to Contractor.

### **00705.18 ACCESS TO WORK**

Contractor shall provide Owner and A/E access to the Work in progress wherever located.

### **00705.19 OTHER CONTRACTS**

Owner may undertake or award other contracts for additional work at or near the Project site. Contractor shall reasonably cooperate with the other contractors and Owner's employees and shall carefully adapt scheduling and perform the Work in accordance with Contract Documents to reasonably accommodate the other work.

### **00705.20 SUBCONTRACTORS AND SUPPLIERS**

- A. Before submitting its first Application for Payment, Contractor shall furnish in writing to Owner the names, addresses, and telephone numbers of all Subcontractors, as well as suppliers providing materials in excess of \$2,500. Contractor shall utilize Subcontractors and suppliers which are experienced and qualified, and meet the requirements of the Contract Documents, if any. Contractor shall not utilize any Subcontractor or supplier to whom the Owner has a reasonable objection, and shall obtain Owner's written consent before making any substitutions or additions.



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- B. All Subcontracts must be in writing. By appropriate written agreement, Contractor shall require each Subcontractor, so far as applicable to the Work to be performed by the Subcontractor, to be bound to Contractor by terms of the Contract Documents, and to assume toward Contractor all the obligations and responsibilities which Contractor assumes toward Owner in accordance with the Contract Documents. Each Subcontract shall preserve and protect the rights of Owner in accordance with the Contract Documents with respect to the Work to be performed by the Subcontractor so that subcontracting thereof will not prejudice such rights. Where appropriate, Contractor shall require each Subcontractor to enter into similar agreements with Sub-subcontractors. However, nothing in this paragraph shall be construed to alter the contractual relations between Contractor and its Subcontractors with respect to insurance or bonds.
- C. Contractor shall schedule, supervise, and coordinate the operations of all Subcontractors. No Subcontracting of any of the Work shall relieve Contractor from its responsibility for the performance of the Work in accordance with the Contract Documents or any other obligations of the Contract Documents.
- D. Each subcontract agreement for a portion of the Work is hereby assigned by Contractor to Owner provided that:
  - 1. The assignment is effective only after termination by Owner for cause pursuant to *SECTION 00709.01* and only for those Subcontracts which Owner accepts by notifying the Subcontractor in writing; and
  - 2. After the assignment is effective, Owner will assume all future duties and obligations toward the Subcontractor that Contractor assumed in the Subcontract.
  - 3. The assignment is subject to the prior rights of the surety, if any, obligated under any bond provided in accordance with the Contract Documents.

### **00705.21 WARRANTY OF CONSTRUCTION**

- A. In addition to any special warranties provided elsewhere in the Contract Documents, Contractor warrants that all Work conforms to the requirements of the Contract Documents and is free of any defect in equipment, material, or design furnished, or workmanship performed by Contractor.
- B. With respect to all warranties, express or implied, for Work performed or materials furnished according to the Contract Documents, Contractor shall:
  - 1. Obtain all warranties that would be given in normal commercial practice.
  - 2. Require all warranties to be executed, in writing, for the benefit of Owner.
  - 3. Enforce all warranties for the benefit of Owner, if directed by Owner.
  - 4. Be responsible to enforce any subcontractor's, manufacturers', or supplier's warranty should they extend beyond the period specified in the Contract Documents.
- C. The obligations under this section shall survive Final Acceptance.

**00705.22 INDEMNIFICATION**

- A. Contractor shall defend, indemnify, and hold Owner and A/E harmless from and against all claims, demands, losses, damages, or costs, including but not limited to damages arising out of bodily injury or death to persons and damage to property, caused by or resulting from:
1. The sole negligence of Contractor or any of its Subcontractors
  2. The concurrent negligence of Contractor, or any Subcontractor, but only to the extent of the negligence of Contractor or such Subcontractor
  3. The use of any design, process, or equipment which constitutes an infringement of any United States patent presently issued or violates any other proprietary interest, including copyright, trademark, and trade secret.
- B. In any action against Owner and any other entity indemnified in accordance with this section by any employee of Contractor, its Subcontractors, Sub-subcontractors, agents, or anyone directly or indirectly employed by any of them, the indemnification obligation of this section shall not be limited by a limit on the amount or type of damages, compensation, or benefits payable by or for Contractor or any Subcontractor under *RCW Title 51, the Industrial Insurance Act*, or any other employee benefit acts. In addition, Contractor waives immunity as to Owner and A/E only, in accordance with *RCW Title 51*.

**00705.23 REQUIRED PAYROLL DOCUMENTS**

- A. The Contractor shall submit to the Owner the following for itself and for each subcontractor and each agent to a Subcontractor that performed work on the Contract:
1. *A Statement of Intent to Pay Prevailing Wages.* The Contracting Agency will make no payment under this Contract for the work performed until this statement has been completed and submitted.
  2. *An Affidavit of Wages Paid with the Final Contract Voucher Certification.* The Contracting Agency will not release to the Contractor any funds retained under *RCW 60.28.010* until all of the *Affidavit of Wages Paid* forms have been completed and submitted.
- B. In addition, the Prime Contractor shall submit a Request for Release to the Washington State Labor and Industries (L&I), (L&I provides the form).
- C. Certified payrolls are required to be submitted by the Contractor to the Owner for the Contractor and all Subcontractors or agents on all federally funded projects, and when requested in writing by the Owner, on projects funded with only Contracting Agency funds. If these payrolls are not supplied within 10 calendar days of the end of the proceeding weekly payroll period for federally funded projects, or within 10 calendar days from the date of the written request on projects with only Contracting Agency funds, any or all payments may be withheld until compliance is achieved. Also, failure to provide these payrolls could result in other sanctions as provided by state laws (*RCW 39.12.050*) and/or federal regulations (*29 CFR 5.12*). All certified payrolls shall be complete and explicit.

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Employee work classification codes used on certified payrolls shall coincide exactly with the occupation codes listed on the minimum wage schedule, unless the Owner specifically approves an alternate method to identify the occupation coding used by the Contractor to compare with the codes listed. When an apprentice is shown on the certified payroll at a rate less than the minimum prevailing journey wage rate, the apprenticeship registration number for that employee from the State Apprenticeship and Training Council shall be shown, along with the correct employee classification code.

### 00705.24 STATEMENT OF APPRENTICE/JOURNEYMAN PARTICIPATION

In accordance with *RCW 39.04.320*, the State of Washington requires a mandatory 15 percent apprenticeship (labor hours) participation for projects estimated to cost \$1,000,000 or more. Apprentice participation under this contract may be counted towards the required percentage (%) only if the apprentices are from an apprenticeship program registered and approved by the Washington State Apprenticeship and Training Council (*RCW 49.04* and *WAC 296-04*).

- A. For each project that has apprentice requirements, the contractor shall submit a **“Statement of Apprentice/Journeyman Participation** (See *SECTION 00670*)” on forms provided by the Washington Department of Fish and Wildlife, with every request for progress payment. The Contractor shall submit consolidated and cumulative data collected by the Contractor and collected from all Subcontractors by the Contractor. The submitted data includes the following:
1. Contractor name and address;
  2. Contract number;
  3. Project name;
  4. Contract value;
  5. Reporting period “Notice to Proceed” through “Invoicing Date”;
  6. Name and registration number of each apprentice;
  7. Total number of apprentices and labor hours worked by them, categorized by trade or craft;
  8. Total number of journeymen and labor hours worked by them, categorized by trade or craft;
  9. Cumulative combined total of apprentice and journeymen labor hours; and
  10. Total percentage of apprentice hours worked.
- B. No changes to the required percentage (%) of apprentice participation shall be allowed without written approval of the Owner. In any request for the change the Contractor shall clearly demonstrate a good faith effort to comply with the requirements for apprentice participation.

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- C. Any substantive violation of the mandatory requirements of this part of the contract may be a material breach of the contract by the Contractor.

### 00705.25 FEDERALLY FUNDED CONTRACT CONDITIONS

A. Equal Employment Opportunity :

1. The Contractor will not discriminate against any employee or applicant for employment because of race, creed, color, national origin, sex, sexual orientation, religion, marital status, age, Vietnam era and disabled veteran's status, or other presence of any sensory, mental, or physical handicap. The Contractor will take affirmative action to ensure that applications are employed and that employees are treated during employment without regard to their race, creed, color, national origin, sex, sexual orientation, religion, marital status, age, Vietnam era and disabled veteran's status or the presence of any sensory, mental, or physical handicap.

Such action shall include, but not be limited to the following: Employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause.

2. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, creed, color, national origin, sex, sexual orientation, religion, marital status, age, Vietnam era and disabled veteran's status, or the presence of any sensory, mental, or physical handicap.
3. The Contractor will send to each labor union, or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided by the agency contracting officer advising the labor union or workers' representative of the Contractor's commitments under *Section 202 of Executive Order No. 11246 of September 24, 1965*, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
4. The Contractor will comply with all provisions of *Executive Order No. 11246 of September 24, 1965*, and the rules, regulations, and relevant orders of the Secretary of Labor.
5. The Contractor will furnish all information and reports required by *Executive Order No. 11246 of September 24, 1965*, and by the rules, regulations, and orders of the Secretary of Labor or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

## DIVISION 0 – GENERAL CONDITIONS

6. In the event of the Contractor's noncompliance with the nondiscrimination clauses of this Contract or with any of the said rules, regulations, or orders, this Contract may be canceled, terminated, or suspended in whole or in part, and the Contractor may be declared ineligible for further government contracts in accordance with procedures authorized in *Executive Order No. 11246 of September 24, 1965*, and such other sanctions may be imposed and remedies invoked as provided in the said Executive Order, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
  7. The Contractor will include the provisions of *Paragraphs "1" through "7"* in every Subcontract or Purchase Order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to *Section 204 of Executive Order No. 11246 of September 24, 1965*, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the contracting agency may direct as a means of enforcing such provisions, including the sanctions for noncompliance, provided however that in the event the Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the contracting agency, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.
- B. *Civil Rights Act of 1964 (P.L. 88-352, 78 STAT. 241)*:
1. *Section 601 (In General)*: No person in the United States shall, on the grounds of race, color, national origin, sex, religion, marital status, age, Vietnam era and disabled veteran status, or the presence of any sensory, mental, or physical handicap be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance.
  2. *Section 602 (Effecting Compliance)*: Each federal department and agency which is empowered to extend federal financial assistance to any program or activity by way of grant, loan, or contract other than a contract of insurance or guaranty, is authorized and directed to effectuate the provisions of *Section 601* with respect to such program or activity by issuing rules, regulations, or orders of general applicability which shall be consistent with achievement of the objectives the statute authorizing the financial assistance in connection with which the action is taken. No such rule, regulation, or order shall become effective unless and until approved by the President. Compliance with any requirement adopted pursuant to this section may be effected by:
    - a.) The termination of or refusal to grant or to continue assistance under such programs or activity to any recipient as to whom there has been an express finding on the record, after opportunity for hearing, of a failure to comply with such requirement, but such termination or refusal shall be limited to the particular political entity, or part thereof, or other recipient as to whom such a finding has been made, and shall be limited in its effect to the particular program, or part thereof, in which such noncompliance has been so found, and;

## DIVISION 0 – GENERAL CONDITIONS

- b.) By any other means authorized by law, provided, however, that no such action shall be taken until the department or agency concerned has advised the appropriate person or persons of the failure to comply with a requirement imposed pursuant to this section, the head of the federal department or agency shall file with the committees of the House and Senate having legislative jurisdiction over the program or activity involved a full written report of the circumstances and the grounds for such action. No such action shall become effective until 30 days have elapsed after the filing of such report.
- 3. Section 603 (Judicial Review): Any department or agency action taken pursuant to Section 602 shall be subject to such judicial review as may otherwise be provided by law for similar action taken by such department or agency on other grounds. In the case of action not otherwise subject to judicial review, terminating or refusing to grant or to continue financial assistance upon finding or failure to comply with any requirement imposed pursuant to Section 602, any assistance upon a finding or failure to comply with any requirement imposed pursuant to Section 602, any person aggrieved (including any State or political subdivision thereof or any agency of either) may obtain judicial review of such action in accordance with Section 10 of the Administrative Procedure Act, and such action shall not be deemed committed to unreviewable agency discretion within the meaning of that section.
- 4. Section 604 (Restriction on Action): Nothing contained in this title shall be construed to authorized action under this title by any department or agency with respect to any employment practice of any employer, employment agency, or labor organization except where a primary objective of the federal financial assistance is to provide employment.
- 5. Section 605 (Existing Authority Not Impaired): Nothing in this title shall add to or detract from any existing authority with respect to any program or activity under which federal financial assistance is extended by way of a contract of insurance or guaranty.
- C. Contracts in excess of \$10,000 shall comply with *Executive Order No. 11246*, entitled *Equal Employment Opportunity*, as amended by *Executive Order No. 11375*, *Executive Order No. 13672* and as supplemented in *Department of Labor Regulations (41 CFR, Part 60)*.
- D. This Contract shall comply with the *Copeland Anti-Kick Back Act (18 U.S.C. 874)* as supplemented in *Department of Labor Regulations (29 CFR, Part 3)*. The Contractor shall not induce by any means any person employed in the construction, completion, or repair of public work to give up any part of the compensation to which he is otherwise entitled.
- E. Contracts in excess of \$2,000 shall comply with the *Davis-Bacon Act (40 U.S.C. 276a to a-7)* and as supplemented by *Department of Labor Regulations (29 CFR, Part 5)*. Contractors shall pay wages to laborers and mechanics at a rate not less than the minimum wages specified in a wage determination made by the Secretary of Labor, and shall pay wages not less often than once a week.

## **DIVISION 0 – GENERAL CONDITIONS**

- F. Contracts in excess of \$2,000 which involve the employment of mechanics or laborers shall comply with *Section 103 and 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 327-330)* as supplemented by *Department of Labor Regulations (29 CFR, Part 5)*. Each Contractor shall compute the wages of every mechanic and laborer on the basis of a standard workday of eight hours, and a standard workweek of 40 hours. Work in excess of the standard workday or workweek is permissible, provided that the worker is compensated at a rate of not less than 1½ times the basic rate of pay for all hours worked in excess of eight hours in any calendar day of 40 hours in the workweek. No laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his health and safety as determined under construction, safety, and health standards promulgated by the Secretary of Labor.
- G. Contracts in excess of \$100,000 require the recipient to agree to comply with applicable standards, orders, or regulations pursuant to the Clean Air Act of 1970 (42 U.S.C. 1857 et seq.) and the Federal Water Pollution Control Act (33 U.S.C. 1251 et seq.), amended.
- H. Contractor shall submit Certified Payrolls as described in *Section 00705.23*.

### **PART 6 - 00706.00 PAYMENTS AND COMPLETION**

#### **00706.01 CONTRACT SUM**

Owner shall pay Contractor the Contract Sum for performance of the Work in accordance with the Contract Documents. The Contract Sum shall include all taxes imposed by law and properly chargeable to the Project, including sales tax.

#### **00706.02 SCHEDULE OF VALUES**

Prior to Notice to Proceed, Contractor shall submit to Owner for approval a breakdown allocating the total Contract Sum to each principle category of work, in such detail as requested by Owner ("Schedule of Values"). The approved Schedule of Values shall include appropriate amounts for demobilization, record drawings, operation and maintenance manuals, and any other requirements for Project closeout and shall be used by Owner as the basis for progress payments. Payment for Work shall be made only for and in accordance with those items included in the Schedule of Values.

#### **00706.03 APPLICATION FOR PAYMENT**

- A. At monthly intervals, unless determined otherwise by Owner, Contractor shall submit to Owner an itemized Application for Payment for Work completed in accordance with the Contract Documents and the approved Schedule of Values. Each application shall be supported by such substantiating data as Owner may require.
- B. By submitting an Application for Payment, Contractor is certifying that all Subcontractors have been paid, less earned retainage in accordance with *RCW 60.28.010*, as their interests appeared in the last preceding certificate of payment. By submitting an Application for Payment, Contractor is recertifying that the representations set forth in *SECTION 00701.03* are true and correct, to the best of Contractor's knowledge, as of the date of the Application for Payment.

## **DIVISION 0 – GENERAL CONDITIONS**

- C. At the time the Contractor submits an Application for Payment, Contractor shall analyze and reconcile, to the satisfaction of Owner, the actual progress of the Work with the Construction Schedule.
- D. If authorized by Owner, the Application for Payment may include request for payment for material delivered to the Project site and suitably stored, or for completed preparatory work. Payment may similarly be requested for material stored off the Project site, provided Contractor complies with or furnishes satisfactory evidence of the following:
  - 1. The material will be placed in a warehouse that is structurally sound, dry, lighted, and suitable for the materials to be stored.
  - 2. The warehouse is located within a 10-mile radius of the Project. Other locations may be utilized if approved in writing by Owner.
  - 3. Only materials for the Project are stored within the warehouse (or secure portion of a warehouse set aside for the Project).
  - 4. Contractor furnishes Owner a Certificate of Insurance extending Contractor's insurance coverage for damage, fire, and theft to cover the full value of all materials stored or in transit.
  - 5. The warehouse (or secure portion thereof) is continuously under lock and key, and only Contractor's authorized personnel shall have access.
  - 6. Owner shall at all times have the right of access in company of Contractor.
  - 7. The Contractor and its surety assume total responsibility for the stored materials.
  - 8. Contractor furnishes to Owner certified lists of materials stored, bills of lading, invoices, and other information as may be required, and shall also furnish notice to Owner when materials are moved from storage to the Project site.

### **00706.04 PROGRESS PAYMENTS**

- A. Owner shall make progress payments, in such amounts as Owner determines are properly due, within 30 days after receipt of a properly executed Application for Payment. Owner shall notify Contractor in accordance with *RCW 39.76* if the Application for Payment does not comply with the requirements of the Contract Documents.
- B. Owner shall retain 5 percent of the amount of each progress payment until 30 days after Final Acceptance and receipt of all documents required by law or the Contract Documents including, at Owner's request, consent of surety to release of the retainage. In accordance with *RCW 60.28*, Contractor may request that monies reserved be retained in a fund by Owner, deposited by Owner in a bank or savings and loan, or placed in escrow with a bank or trust company to be converted into bonds and securities to be held in escrow with interest to be paid to Contractor. Owner may permit Contractor to provide an appropriate bond in lieu of the retained funds.
- C. For Base Bids of \$150,000 or less, Owner may at Contractor Request, retain 10% of the amount of each progress payment, in lieu of payment and performance bonds.



## **DIVISION 0 – GENERAL CONDITIONS**

- D. Title to all Work and materials covered by a progress payment shall pass to Owner at the time of such payment free and clear of all liens, claims, security interests, and encumbrances. Passage of title shall not, however, relieve Contractor from any of its duties and responsibilities for the Work or materials, or waive any rights of Owner to insist on full compliance by Contractor with the Contract Documents.
- E. Payments due and unpaid in accordance with the Contract Documents shall bear interest as specified in *RCW 39.76*.

### **00706.05 PAYMENTS WITHHELD**

- A. Owner may withhold or, on account of subsequently discovered evidence, nullify the whole or part of any payment to such extent as may be necessary to protect Owner from loss or damage for reasons including but not limited to:
  - 1. Work not in accordance with the Contract Documents
  - 2. Reasonable evidence that the Work required by the Contract Documents cannot be completed for the unpaid balance of the Contract Sum
  - 3. Work by Owner to correct defective Work or complete the Work in accordance with *SECTION 00705.16*
  - 4. Failure to perform in accordance with the Contract Documents
  - 5. Cost or liability that may occur to Owner as the result of Contractor's fault or negligent acts or omissions.
- B. In any case where part or all of a payment is going to be withheld for unsatisfactory performance, Owner shall notify Contractor in accordance with *RCW 39.76*.

### **00706.06 RETAINAGE AND BOND CLAIM RIGHTS**

*RCW CHAPTERS 39.08 and 60.28*, concerning the rights and responsibilities of Contractor and Owner with regard to the performance and payment bonds and retainage, are made a part of the Contract Documents by reference as though fully set forth herein.

### **00706.07 SUBSTANTIAL COMPLETION**

Substantial Completion is the stage in the progress of the Work (or portion thereof designated and approved by Owner) when the construction is sufficiently complete, in accordance with the Contract Documents, so Owner can fully occupy the Work (or the designated portion thereof) for the use for which it is intended. All Work other than incidental corrective or punch list work shall have been completed. Substantial Completion shall not have been achieved if all systems and parts are not functional, if utilities are not connected and operating normally, if all required occupancy permits have not been issued, or if the Work is not accessible by normal vehicular and pedestrian traffic routes. The date Substantial Completion is achieved shall be established in writing by Owner. Contractor may request an early date of Substantial Completion, which must be approved by Change Order. Owner's occupancy of the Work or designated portion thereof does not necessarily indicate that Substantial Completion has been achieved.

**0706.08 PRIOR OCCUPANCY**

- A. Owner may, upon written notice thereof to Contractor, take possession of or use any completed or partially completed portion of the Work ("prior occupancy") at any time prior to Substantial Completion. Unless otherwise agreed in writing, prior occupancy shall not: be deemed an acceptance of any portion of the Work; accelerate the time for any payment to Contractor; prejudice any rights of Owner provided by any insurance, bond, guaranty, or the Contract Documents; relieve Contractor of the risk of loss or any of the obligations established by the Contract Documents; establish a date for termination or partial termination of the assessment of liquidated damages; or constitute a waiver of claims.
- B. Notwithstanding anything in the preceding paragraph, Owner shall be responsible for loss or damage to the Work resulting from its prior occupancy. Contractor's 1 year duty to repair and any system warranties shall begin on building systems activated and used by Owner as agreed in writing by Owner and Contractor.

**00706.09 FINAL COMPLETION, ACCEPTANCE, AND PAYMENT**

- A. Final Completion shall be achieved when the Work is fully and finally complete in accordance with the Contract Documents. The date Final Completion is achieved shall be established by Owner in writing.
- B. Final Acceptance is the formal action of Owner acknowledging Final Completion. Prior to Final Acceptance, Contractor shall, in addition to all other requirements in the Contract Documents, submit to Owner a written notice of any outstanding disputes or claims between Contractor and any of its Subcontractors, including the amounts and other details thereof. Neither Final Acceptance nor final payment shall release Contractor or its sureties from any obligations of these Contract Documents or the Public Works Bond, or constitute a waiver of any claims by Owner arising from Contractor's failure to perform the Work in accordance with the Contract Documents.
- C. Acceptance of final payment by Contractor or any Subcontractor shall constitute a waiver and release to Owner of all claims by Contractor or any such Subcontractor for an increase in the Contract Sum or the Contract Time, and for every act or omission of Owner relating to or arising out of the Work, except for those Claims made in accordance with the procedures, including the time limits, set forth in *SECTION 00708.00*.

**PART 7 - 00707.00 CHANGES**

**00707.01 CHANGES IN THE WORK**

- A. Owner may at any time and without notice to Contractor's surety order additions, deletions, revisions, or other changes in the Work. These changes in the Work shall be incorporated into the Contract Documents through the execution of Change Orders. If any change in the Work ordered by Owner causes an increase or decrease in the Contract Sum or the Contract Time, an equitable adjustment shall be made as provided in *SECTION 00707.02* or *00707.03*, respectively, and such adjustment(s) shall be incorporated into a Change Order.

## **DIVISION 0 – GENERAL CONDITIONS**

- B. If Owner desires to order a change in the Work, it may request a written Change Order proposal from Contractor. Contractor shall submit a Change Order proposal within 14 days of the request from Owner, or within such other period as mutually agreed. Contractor's Change Order proposal shall be full compensation for implementing the proposed change in the Work, including any adjustment in the Contract Sum or Contract Time, and including compensation for all delays in connection with such change in the Work and for any expense or inconvenience, disruption of schedule, or loss of efficiency or productivity occasioned by the change in the Work.
- C. Upon receipt of the Change Order proposal, or a request for equitable adjustment in the Contract Sum or Contract Time, or both, as provided in *SECTIONS 00707.02 and 00707.03*, Owner may accept or reject the proposal, request further documentation, or negotiate acceptable terms with Contractor. Pending agreement on the terms of the Change Order, Owner may direct Contractor to proceed immediately with the Change Order Work. Contractor shall not proceed with any change in the Work until it has obtained Owner's approval. All Work done pursuant to any Owner-directed change in the Work shall be executed in accordance with the Contract Documents.
- D. If Owner and Contractor reach agreement on the terms of any change in the Work, including any adjustment in the Contract Sum or Contract Time, such agreement shall be incorporated in a Change Order. The Change Order shall constitute full payment and final settlement of all claims for time and for direct, indirect, and consequential costs, including costs of delays, inconvenience, disruption of schedule, or loss of efficiency or productivity, related to any Work either covered or affected by the Change Order, or related to the events giving rise to the request for equitable adjustment.
- E. If Owner and Contractor are unable to reach agreement on the terms of any change in the Work, including any adjustment in the Contract Sum or Contract Time, Contractor may at any time, in writing, request a final offer from Owner. Owner shall provide Contractor with its written response within 30 days of Contractor's request. Owner may also provide Contractor with a final offer at any time. If Contractor rejects Owner's final offer or the parties are otherwise unable to reach agreement, Contractor's only remedy shall be to file a Claim as provided in *SECTION 00708.00*.

### **00707.02 CHANGE IN THE CONTRACT SUM**

- A. General Application:
  - 1. The Contract Sum shall only be changed by a Change Order. Contractor shall include any request for a change in the Contract Sum in its Change Order proposal.
  - 2. If the cost of Contractor's performance is changed due to the fault or negligence of Owner or anyone for whose acts Owner is responsible, Contractor shall be entitled to make a request for an equitable adjustment in the Contract Sum in accordance with the following procedure. No change in the Contract Sum shall be allowed to the extent that Contractor's changed cost of performance is due to the fault or negligence of Contractor or anyone for whose acts Contractor is responsible; the change is concurrently caused by Contractor and Owner; or the change is caused by an act of force majeure, as defined in *SECTION 00703.05*.

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- a. A request for an equitable adjustment in the Contract Sum shall be based on written notice delivered to Owner within 7 days of the occurrence of the event-giving rise to the request. For purposes of this part, "occurrence" means when Contractor knew, or in its diligent prosecution of the Work should have known, of the event-giving rise to the request. If Contractor believes it is entitled to an adjustment in the Contract Sum, Contractor shall immediately notify Owner and begin to keep and maintain complete, accurate, and specific daily records. Contractor shall give Owner access to any such records and, if requested, shall promptly furnish copies of such records to Owner.
- b. Contractor shall not be entitled to any adjustment in the Contract Sum for any occurrence of events or costs that occurred more than 7 days before Contractor's written notice to Owner. The written notice shall set forth, at a minimum, a description of: the event giving rise to the request for an equitable adjustment in the Contract Sum; the nature of the impacts to Contractor and its Subcontractors, if any; and, to the extent possible, the amount of the adjustment in Contract Sum requested. Failure to properly give such written notice shall, to the extent Owner's interests are prejudiced, constitute a waiver of Contractor's right to an equitable adjustment.
- c. Within 30 days of the occurrence of the event giving rise to the request, unless Owner agrees in writing to allow an additional period of time to ascertain more accurate data, Contractor shall supplement written notice provided in accordance with Subparagraph "a" (above) with additional supporting data. Such additional data shall include, at a minimum: the amount of compensation requested, itemized in accordance with the procedure set forth herein; specific facts, circumstances, and analysis that confirms not only that Contractor suffered the damages claimed, but that the damages claimed were actually a result of the act, event, or condition complained of and that the Contract Documents provide entitlement to an equitable adjustment to Contractor for such act, event, or condition; and documentation sufficiently detailed to permit an informed analysis of the request by Owner.

When the request for compensation relates to a delay or other change in Contract Time, Contractor shall demonstrate the impact on the critical path, in accordance with *SECTION 00707.03C*. Failure to provide such additional information and documentation within the time allowed or within the format required shall, to the extent Owner's interests are prejudiced, constitute a waiver of Contractor's right to an equitable adjustment.

- d. Pending final resolution of any request made in accordance with this paragraph, unless otherwise agreed in writing, Contractor shall proceed diligently with performance of the Work.
- e. Any requests by Contractor for an equitable adjustment in the Contract Sum and in the Contract Time that arise out of the same event(s) shall be submitted together.

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3. The value of any work covered by a Change Order or of any request for an equitable adjustment in the Contract Sum shall be determined by one of the following methods:
    - a. On the basis of a fixed price as determined in *SECTION 00707.02B*.
    - b. By application of unit prices to the quantities of the items involved as determined *SECTION 00707.02C*.
    - c. On the basis of time and material as determined in *SECTION 00707.02D*.
  4. When Owner has requested Contractor to submit a Change Order proposal, Owner may direct Contractor as to which method in Subparagraph 3 (above) to use when submitting its proposal. Otherwise, Contractor shall determine the value of the Work or of a request for an equitable adjustment, on the basis of the fixed price method.
- B. Change Order Pricing - Fixed Price: When the fixed price method is used to determine the value of any Work covered by a Change Order or of a request for an equitable adjustment in the Contract Sum, the following procedures shall apply:
1. Contractor's Change Order Proposal or request for adjustment in the Contract Sum shall be accompanied by a complete itemization of the costs including labor, materials, subcontractor costs, and overhead and profit. The costs shall be itemized in the manner set forth below and shall be submitted on breakdown sheets in a form approved by Owner.
  2. All costs shall be calculated based on appropriate industry standard methods of calculating labor, material quantities, and equipment costs.
  3. If any of Contractor's pricing assumptions are contingent upon anticipated actions of Owner, Contractor shall clearly state them in the proposal or request for an equitable adjustment.
  4. The cost of any additive or deductive changes in the Work shall be calculated as set forth below, except that overhead and profit shall not be included on deductive changes in the Work. Where a change in the Work involves additive and deductive work by the same Contractor or Subcontractor, small tools, overhead, profit, bond, and insurance markups will apply to the net difference.
  5. If the total cost of the change in the Work or request for equitable adjustment does not exceed \$1,000, Contractor shall not be required to submit a breakdown if the description of the change in the Work or request for equitable adjustment is sufficiently definitive for Owner to determine fair value.
  6. If the total cost of the change in the Work or request for equitable adjustment is between \$1,000 and \$2,500, Contractor may submit a breakdown in the following level of detail if the description of the change in the Work or if the request for equitable adjustment is sufficiently definitive to permit the Owner to determine fair value:
    - a. Lump sum labor

## DIVISION 0 – GENERAL CONDITIONS

- b. Lump sum material
  - c. Lump sum equipment usage
  - d. Overhead and profit as set forth below
  - e. Insurance and bond costs as set forth below
7. Any request for adjustment of Contract Sum based upon the fixed price method shall include only the following items:
- a. Craft Labor Costs: These are the labor costs determined by multiplying the estimated or actual additional number of craft hours needed to perform the change in the Work by the hourly labor costs. Craft hours should cover direct labor as well as indirect labor due to trade inefficiencies. The hourly costs shall be based on the following:
    - 1) Basic Wages and Benefits: Hourly rates and benefits as stated on the L&I approved Statement of Intent to Pay Prevailing Wages. Direct supervision shall be a reasonable percentage not to exceed 15 percent of the cost of direct labor. No supervision markup shall be allowed if a working supervisor's hours are included in the breakdown.
    - 2) Worker's Insurance: Direct contributions to the State of Washington for industrial insurance, medical aid, and supplemental pension by the class and rates established by L&I.
      - a. Federal Insurance: Direct contributions required by the *Federal Insurance Compensation Act*, *Federal Unemployment Tax Act*, and the *State Unemployment Compensation Act*.
    - 4) Safety: Costs incurred due to the *Washington Industrial Safety and Health Act*, which shall be a reasonable percentage not to exceed 2 percent of the sum of the amounts calculated in SUBPARAGRAPHS (1), (2), and (3) above.
    - 5) Travel Allowance: Travel allowance and/or subsistence, if applicable, not exceeding those allowances established by regional labor union agreements, which are itemized and identified separately.
  - b. Material Costs: This is an itemization of the quantity and cost of materials needed to perform the change in the Work. Material costs shall be developed from actual known costs, supplier quotations or standard industry pricing guides. Material costs shall consider all available discounts. Freight costs, express charges, or special delivery charges shall be itemized.

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- c. Equipment Costs: This is an itemization of the type of equipment and the estimated or actual length of time the construction equipment appropriate for the Work is or will be used on the change in the Work. Costs will be allowed for construction equipment only if used solely for the changed Work or for additional rental costs actually incurred by the Contractor. Equipment charges shall be developed from the current edition of one of the following sources:
- 1) *Associated General Contractors - Washington State Department of Transportation Equipment Rental Agreement; latest edition.*
  - 2) *The State of Washington Utilities and Transportation Commission* for trucks used on highways.
  - 3) *The National Electrical Contractors Association* for equipment used on electrical work.
  - 4) *The Mechanical Contractors Association of America* for equipment used on mechanical work.
  - 5) *Equipment Watch Rental Rate (Blue Book) for Construction Equipment* shall be used as a basis for establishing rental rates of equipment not listed in the above sources. The maximum rate for standby equipment shall not exceed 50 percent of the applicable rate.
- d. Allowance for Small Tools, Expendables, and Consumable Supplies: Small tools consist of tools that cost \$250 or less and are normally furnished by the performing Contractor. The maximum rate for small tools shall not exceed the following:
- 1) For Contractor, 3 percent of direct labor costs.
  - 2) For Subcontractors, 5 percent of direct labor costs.
- Expendables and consumable supplies directly associated with the change in Work must be itemized.
- e. Subcontractor Costs: This is defined as payments Contractor makes to Subcontractors for changed Work performed by Subcontractors of any tier. The Subcontractors' cost of Work shall be calculated and itemized in the same manner as prescribed herein for Contractor.

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- f. Allowance for Overhead and Profit: This is defined as costs of any kind attributable to direct and indirect delay, acceleration, or impact, added to the total cost to Owner of any Change Order, or any request for additional Work or extra payment of any kind on the Project. This allowance shall compensate Contractor for all non-craft labor, temporary construction facilities, field engineering, schedule updating, as-built drawings, home office cost, Business and Occupation taxes, office engineering, estimating costs, additional overhead because of extended time, and any other cost incidental to the change in the Work. It shall be strictly limited in all cases to a reasonable amount, mutually acceptable, or if none can be agreed upon to an amount not to exceed the following:
- 1) For Contractor, for any Work actually performed by Contractor's own forces, 22 percent of the first \$50,000 of the cost and 10 percent of the remaining cost, if any.
  - 2) For each Subcontractor (including lower tier subcontractors), for any Work actually performed by its own forces, 22 percent of the first \$50,000 of the cost and 10 percent of the remaining cost, if any.
  - 3) For Contractor, for any Work performed by its Subcontractor(s), 8 percent of the first \$50,000 of the amount due each Subcontractor and 6 percent of the remaining amount, if any.
  - 4) For each Subcontractor, for any Work performed by its Subcontractor(s) of any lower tier, 8 percent of the first \$50,000 of the amount due the sub-Subcontractor and 6 percent of the remaining amount, if any.
  - 5) The cost to which overhead and profit is to be applied shall be determined in accordance with *SUBPARAGRAPHS a-e* above.
- g. Cost of Change in Insurance or Bond Premium: This is defined as:
- 1) Contractor's Liability Insurance: The cost of any changes in Contractor's liability insurance arising directly from execution of the Change Order; and
  - 2) Public Works Bond(s): The cost of the additional premium for Contractor's bond arising directly from the changed Work.

The costs of any change in insurance or bond premium shall be added after overhead and profit are calculated in accordance with *SUBPARAGRAPH "f"* above.

### C. Change Order Pricing - Unit Prices:

1. Whenever Owner authorizes Contractor to perform Work on a unit-price basis, Owner's authorization shall clearly state:
  - a. Scope of work to be performed



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- b. Type of reimbursement including pre-agreed rates for material quantities
- c. Cost limit of reimbursement

2. Contractor shall:

- a. Cooperate with Owner and assist in monitoring the Work being performed. As requested by Owner, Contractor shall identify workers assigned to the Change Order Work and areas in which they are working.
- b. Leave access as appropriate for quantity measurement.
- c. Not exceed any cost limit(s) without Owner's prior written approval.

3. Contractor shall submit costs in accordance with *SECTION 00707.02B* and satisfy the following requirements:

- a. Unit prices shall include reimbursement for all direct and indirect costs of the Work, including overhead and profit and bond and insurance costs.
- b. Quantities must be supported by field measurement statements signed by Owner.

D. Change Order Pricing - Time and Material Prices:

1. Whenever Owner authorizes Contractor to perform work on a time-and-material basis, Owner's authorization shall clearly state:

- a. Scope of work to be performed
- b. Type of reimbursement including pre-agreed rates, if any, for material quantities or labor
- c. Cost limit of reimbursement

2. Contractor shall:

- a. Cooperate with Owner and assist in monitoring the Work being performed. As requested by Owner, identify workers assigned to the Change Order Work and areas in which they are working.
- b. Identify on daily timesheets all labor performed in accordance with this authorization. Submit copies of daily timesheets within 2 working days for Owner's review.
- c. Leave access as appropriate for quantity measurement.
- d. Perform all Work in accordance with this section as efficiently as possible.
- e. Not exceed any cost limit(s) without Owner's prior written approval.

## **DIVISION 0 – GENERAL CONDITIONS**

3. Contractor shall submit costs in accordance with *SECTION 00707.02B* and additional verification supported by:
  - a. Labor detailed on daily timesheets
  - b. Invoices for material

### **00707.03 CHANGE IN THE CONTRACT TIME**

- A. The Contract Time shall only be changed by a Change Order. Contractor shall include any request for a change in the Contract Time in its Change Order proposal.
- B. If the time of Contractor's performance is changed due to an act of force majeure or due to the fault or negligence of Owner or anyone for whose acts Owner is responsible, Contractor shall be entitled to make a request for an equitable adjustment in the Contract Time in accordance with the following procedure. No adjustment in the Contract Time shall be allowed to the extent Contractor's changed time of performance is due to the fault or negligence of Contractor or anyone for whose acts Contractor is responsible.
  1. A request for an equitable adjustment in the Contract Time shall be based on written notice delivered within 7 days of the occurrence of the event-giving rise to the request. If Contractor believes it is entitled to adjustment of Contract Time, Contractor shall immediately notify Owner and begin to keep and maintain complete, accurate, and specific daily records. Contractor shall give Owner access to any such records and, if requested, shall promptly furnish copies of such records to Owner.
  2. Contractor shall not be entitled to an adjustment in the Contract Time for any events that occurred more than 7 days before Contractor's written notice to Owner. The written notice shall set forth, at a minimum, a description of: the event giving rise to the request for an equitable adjustment in the Contract Time; the nature of the impacts to Contractor and its Subcontractors of any tier, if any; and, to the extent possible, the amount of the adjustment in Contract Time requested. Failure to properly give such written notice shall, to the extent Owner's interests are prejudiced, constitute a waiver of Contractor's right to an equitable adjustment.
  3. Within 30 days of the occurrence of the event giving rise to the request, unless Owner agrees in writing to allow an additional period of time to ascertain more accurate data, Contractor shall supplement the written notice provided in accordance with *SECTION 00707.03B.2* with additional supporting data. Such additional data shall include, at a minimum: the amount of delay claimed, itemized in accordance with the procedure set forth herein; specific facts, circumstances, and analysis that confirms not only that Contractor suffered the delay claimed, but that the delay claimed was actually a result of the act, event, or condition complained of, and that the Contract Documents provide entitlement to an equitable adjustment in Contract Time for such act, event, or condition; and supporting documentation sufficiently detailed to permit an informed analysis of the request by Owner. Failure to provide such additional information and documentation within the time allowed or within the format required shall, to the extent Owner's interests are prejudiced, constitute a waiver of Contractor's right to an equitable adjustment.

## DIVISION 0 – GENERAL CONDITIONS

4. Pending final resolution of any request in accordance with this paragraph, unless otherwise agreed in writing, Contractor shall proceed diligently with performance of the Work.
- C. Any change in the Contract Time covered by a Change Order or based on a request for an equitable adjustment in the Contract Time shall be limited to the change in the critical path of Contractor's schedule attributable to the change of Work or event(s) giving rise to the request for equitable adjustment. Any Change Order proposal or request for an adjustment in the Contract Time shall demonstrate the impact on the critical path of the schedule. Contractor shall be responsible for showing clearly on the Construction Schedule that the change or event: had a specific impact on the critical path, and except in case of concurrent delay, was the sole cause of such impact; and could not have been avoided by re-sequencing of the Work or other reasonable alternatives.
- D. Contractor may request compensation for the cost of a change in Contract Time in accordance with this section, *00707.03D*, subject to the following conditions:
1. The change in Contract Time shall solely be caused by the fault or negligence of Owner or A/E.
  2. Compensation under this paragraph is limited to changes in Contract Time for which Contractor is not entitled to be compensated under *SECTION 00707.02*.
  3. Contractor shall follow the procedure set forth in *SECTION 00707.03B*.
  4. Contractor shall establish the extent of the change in Contract Time in accordance with *SECTION 00707.03C*.
  5. The daily cost of any change in Contract Time shall be limited to:
    - a. Cost of nonproductive field supervision or labor extended because of the delay
    - b. Cost of weekly meetings or similar indirect activities extended because of the delay
    - c. Cost of temporary facilities or equipment rental extended because of the delay
    - d. Cost of insurance extended because of the delay
    - e. General and administrative overhead in an amount to be agreed upon, but not to exceed 3 percent of Contract Sum divided by the Contract Time for each day of the delay.

**PART 8 - 00708.00 CLAIMS AND DISPUTE RESOLUTION**

**00708.01 CLAIMS PROCEDURE**

- A. If the parties fail to reach agreement on the terms of any Change Order for Owner-directed Work as provided in *SECTION 00707.01*, or on the resolution of any request for an equitable adjustment in the Contract Sum as provided in *SECTION 00707.02* or the Contract Time as provided in *SECTION 00707.03*, Contractor's only remedy shall be to file a Claim with Owner as provided in this section.
- B. Contractor shall file its Claim within the earlier of: 120 days from Owner's final offer in accordance with *SECTION 00707.01E*, or the date of Final Acceptance.
- C. The Claim shall be deemed to cover all changes in cost and time (including direct, indirect, impact, and consequential) to which Contractor may be entitled. It shall be fully substantiated and documented. At a minimum, the Claim shall contain the following information:
  - 1. A detailed factual statement of the Claim for additional compensation and time, if any, providing all necessary dates, locations, and items of Work affected by the Claim
  - 2. The date on which facts arose which gave rise to the Claim
  - 3. The name of each employee of Owner or A/E knowledgeable about the Claim
  - 4. The specific provisions of the Contract Documents that support the Claim
  - 5. The identification of any documents and the substance of any oral communications that support the Claim
  - 6. Copies of any identified documents, other than the Contract Documents, that support the Claim;
  - 7. If an adjustment in the Contract Time is sought: the specific days and dates for which it is sought; the specific reasons Contractor believes an extension in the Contract Time should be granted; and Contractor's analysis of its Construction Schedule to demonstrate the reason for the extension in Contract Time.
  - 8. If an adjustment in the Contract Sum is sought, the exact amount sought and a breakdown of that amount into the categories set forth in, and in the detail required by, *SECTION 00707.02*.
  - 9. A statement certifying, under penalty of perjury, that the Claim is made in good faith, that the supporting cost and pricing data are true and accurate to the best of Contractor's knowledge and belief, that the Claim is fully supported by the accompanying data, and that the amount requested accurately reflects the adjustment in the Contract Sum or Contract Time for which Contractor believes Owner is liable.

## DIVISION 0 – GENERAL CONDITIONS

- D. After Contractor has submitted a fully documented Claim that complies with all applicable provisions of *SECTIONS 00707.00* and *00708.00*, Owner shall respond, in writing, to Contractor as follows:
1. If the Claim amount is less than \$50,000, with a decision within 60 days from the date the Claim is received; or
  2. If the Claim amount is \$50,000 or more, with a decision within 60 days from the date the Claim is received or, with notice to Contractor, of the date by which it will render its decision. Owner will then respond with a written decision in such additional time.
- E. To assist in the review of Contractor's Claim, Owner may visit the Project site or request additional information in order to fully evaluate the issues raised by the Claim. Contractor shall proceed with performance of the Work pending final resolution of any Claim. Owner's written decision, as set forth above, shall be final and conclusive as to all matters set forth in the Claim unless Contractor follows the procedure set forth in *SECTION 00708.02*.
- F. Any Claim of the Contractor against the Owner for damages, additional compensation, or additional time shall be conclusively deemed to have been waived by the Contractor unless timely made in accordance with the requirements of this section.

### 00708.02 ARBITRATION

- A. If Contractor disagrees with Owner's decision rendered in accordance with *SECTION 00708.01D*, Contractor shall provide Owner with a written demand for arbitration. No demand for arbitration of any such Claim shall be made later than 30 days after the date of Owner's decision on such Claim. Failure to demand arbitration within said 30 day period shall result in Owner's decision being final and binding upon Contractor and its Subcontractors.
- B. Notice of the demand for arbitration shall be filed with the *American Arbitration Association (AAA)*, with a copy provided to Owner. The parties shall negotiate or mediate under the *Voluntary Construction Mediation Rules* of the AAA or mutually acceptable service before seeking arbitration in accordance with the *Construction Industry Arbitration Rules of AAA* as follows:
1. Disputes involving \$30,000 or less shall be conducted in accordance with the *Northwest Region Expedited Commercial Arbitration Rules*; or
  2. Disputes over \$30,000 shall be conducted in accordance with the *Construction Industry Arbitration Rules of the AAA*, unless the parties agree to use the expedited rules.
- C. All Claims arising out of the Work shall be resolved by arbitration. The judgment upon the arbitration award may be entered, or review of the award may occur, in the superior court having jurisdiction thereof. No independent legal action relating to or arising from the Work shall be maintained.

## **DIVISION 0 – GENERAL CONDITIONS**

- D. Claims between Owner and Contractor, Contractor and its Subcontractors, Contractor and A/E, and Owner and A/E shall, upon demand by Owner, be submitted in the same arbitration or mediation.
- E. If the parties resolve the Claim prior to arbitration judgment, the terms of the resolution shall be incorporated in a Change Order. The Change Order shall constitute full payment and final settlement of the Claim, including all claims for time and for direct, indirect, or consequential costs including costs of delays, inconvenience, disruption of schedule, or loss of efficiency or productivity.

### **00708.03 CLAIMS AUDITS**

- A. All Claims filed against Owner shall be subject to audit at any time following the filing of the Claim. Failure of Contractor, or Subcontractors of any tier, to maintain and retain sufficient records to allow Owner to verify all or a portion of the Claim or to permit Owner access to the books and records of Contractor, or Subcontractors of any tier, shall constitute a waiver of the Claim and shall bar any recovery.
- B. In support of Owner's audit of any Claim, Contractor shall, upon request, promptly make available to Owner the following documents:
  - 1. Daily time sheets and supervisor's daily reports
  - 2. Collective bargaining agreements
  - 3. Insurance, welfare, and benefits records
  - 4. Payroll registers
  - 5. Earnings records
  - 6. Payroll tax forms
  - 7. Material invoices, requisitions, and delivery confirmations
  - 8. Material cost distribution worksheet
  - 9. Equipment records (list of company equipment, rates, etc.)
  - 10. Vendors', rental agencies', Subcontractors', and agents' invoices
  - 11. Contracts between Contractor and each of its Subcontractors, and all lower-tier Subcontractor contracts and supplier contracts
  - 12. Subcontractors' and agents' payment certificates
  - 13. Canceled checks (payroll and vendors)
  - 14. Job cost report, including monthly totals
  - 15. Job payroll ledger

## **DIVISION 0 – GENERAL CONDITIONS**

16. Planned resource loading schedules and summaries
  17. General ledger
  18. Cash disbursements journal
  19. Financial statements for all years reflecting the operations on the Work. In addition, the Owner may require, if it deems it appropriate, additional financial statements for 3 years preceding execution of the Work.
  20. Depreciation records on all company equipment, whether these records are maintained by the company involved, its accountant, or others.
  21. If a source other than depreciation records is used to develop costs for Contractor's internal purposes in establishing the actual cost of owning and operating equipment, all such other source documents.
  22. All non-privileged documents which relate to each and every Claim together with all documents which support the amount of any adjustment in Contract Sum or Contract Time sought by each Claim.
  23. Worksheets or software used to prepare the Claim establishing the cost components for items of the Claim including but not limited to labor, benefits and insurance, materials, equipment, Subcontractors, all documents which establish the time periods, individuals involved, hours for the individuals, and rates for individuals.
  24. Worksheets, software, and all other documents used by Contractor to prepare its bid.
- C. The audit may be performed by employees of Owner or a representative of Owner. Contractor and its Subcontractors shall provide adequate facilities acceptable to Owner for the audit during normal business hours. Contractor and all Subcontractors shall make a good-faith effort to cooperate with Owner's auditors.

## **PART 9 - 00709.00 TERMINATION OF THE WORK**

### **00709.01 TERMINATION BY OWNER FOR CAUSE**

- A. Owner may, upon 7 days written notice to Contractor and to its surety, terminate (without prejudice to any right or remedy of Owner) the Work or any part of it for cause upon the occurrence of any one or more of the following events:
1. Contractor fails to prosecute the Work or any portion thereof with sufficient diligence to ensure Substantial Completion of the Work within the Contract Time.
  2. Contractor is adjudged bankrupt, makes a general assignment for the benefit of its creditors or a receiver is appointed on account of its insolvency.

## **DIVISION 0 – GENERAL CONDITIONS**

3. Contractor fails in a material way to replace or correct Work not in conformance with the Contract Documents.
  4. Contractor repeatedly fails to supply skilled workers or proper materials or equipment.
  5. Contractor repeatedly fails to make prompt payment due to Subcontractors or for labor.
  6. Contractor materially disregards or fails to comply with laws, ordinances, rules, regulations, or orders of any public authority having jurisdiction.
  7. Contractor is otherwise in material breach of any provision of the Contract Documents.
- B. Upon termination, Owner may at its option:
1. Take possession of the Project site and take possession of or use all materials, equipment, tools, and construction equipment and machinery thereon owned by Contractor to maintain the orderly progress of and to finish the Work
  2. Accept assignment of subcontracts pursuant to *SECTION 00705.21*.
  3. Finish the Work by whatever other reasonable method it deems expedient.
- C. Owner's rights and duties upon termination are subject to the prior rights and duties of the surety, if any, obligated under any bond provided in accordance with the Contract Documents.
- D. When Owner terminates the Work in accordance with this section, Contractor shall take the actions set forth in *SECTION 00709.02B* and shall not be entitled to receive further payment until the Work is accepted.
- E. If the unpaid balance of the Contract Sum exceeds the cost of finishing the Work, including compensation for A/E's services and expenses made necessary thereby and any other extra costs or damages incurred by Owner in completing the Work, or as a result of Contractor's actions, such excess shall be paid to Contractor. If such costs exceed the unpaid balance, Contractor shall pay the difference to Owner. These obligations for payment shall survive termination.
- F. Termination of the Work in accordance with this section shall not relieve Contractor or its surety of any responsibilities for Work performed.
- G. If Owner terminates Contractor for cause and it is later determined that none of the circumstances set forth in *SECTION 00709.01A* exist, then such termination shall be deemed a termination for convenience pursuant to *SECTION 00709.02*.

### **00709.02 TERMINATION BY OWNER FOR CONVENIENCE**

- A. Owner may, upon written notice, terminate (without prejudice to any right or remedy of Owner) the Work or any part of it for the convenience of Owner.



## **DIVISION 0 – GENERAL CONDITIONS**

- B. Unless Owner directs otherwise, after receipt of a written notice of termination for either cause or convenience, Contractor shall promptly:
1. Stop performing Work on the date and as specified in the notice of termination.
  2. Place no further orders or subcontracts for materials, equipment, services or facilities, except as may be necessary for completion of such portion of the Work as is not terminated.
  3. Cancel all orders and subcontracts, upon terms acceptable to Owner, to the extent that they relate to the performance of Work terminated.
  4. Assign to Owner all of the rights, title, and interest of Contractor in all orders and subcontracts.
  5. Take such action as may be necessary or as directed by Owner to preserve and protect the work, Project site, and any other property related to this Project in the possession of Contractor in which Owner has an interest.
  6. Continue performance only to the extent not terminated.
- C. If Owner terminates the Work or any portion thereof for convenience, Contractor shall be entitled to make a request for an equitable adjustment for its reasonable direct costs incurred prior to the effective date of the termination plus a reasonable allowance for overhead and profit on Work performed prior to termination and the reasonable administrative costs of the termination but shall not be entitled to any other costs or damages whatsoever, provided however, the total sum payable upon termination shall not exceed the Contract Sum reduced by prior payments. Contractor shall be required to make its request in accordance with the provisions of *SECTION 00707.00*.
- D. If Owner terminates the Work or any portion thereof for convenience, the Contract Time shall be adjusted as determined by Owner.

## **PART 10 - 00710.00 MISCELLANEOUS PROVISIONS**

### **00710.01 GOVERNING LAW**

The Contract Documents and the rights of the parties herein shall be governed by the laws of the State of Washington. Venue shall be in Thurston County unless otherwise specified by the Owner.

### **00710.02 SUCCESSORS AND ASSIGNS**

Owner and Contractor respectively bind themselves, their partners, successors, assigns, and legal representatives to the other party hereto and to partners, successors, assigns, and legal representatives of such other party in respect to covenants, agreements, and obligations contained in the Contract Documents. Neither party shall assign the Work without written consent of the other, except that Contractor may assign the Work for security purposes, to a bank or lending institution authorized to do business in the State of Washington. If either party attempts to make such an assignment without such consent, that party shall nevertheless remain legally responsible for all obligations set forth in the Contract Documents.

**00710.03 MEANING OF WORDS**

Unless otherwise stated in the Contract Documents, words which have well-known technical or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings. Reference to standard specifications, manuals, or codes of any technical society, organization, or association, or the code of any governmental authority, whether such reference be specific or by implication, shall be to the latest standard specification, manual, or code in effect on the date for submission of bids, except as may be otherwise specifically stated. Wherever in these Drawings and Specifications an article, device, or piece of equipment is referred to in the singular manner, such reference shall apply to as many such articles as are shown on the Drawings or are required to complete the installation.

**00710.04 RIGHTS AND REMEDIES**

No action or failure to act by Owner or A/E shall constitute a waiver of a right or duty afforded them under the Contract Documents, nor shall such action or failure to act constitute approval of an acquiescence in a breach therein, except as may be specifically agreed in writing.

**00710.05 CONTRACTOR REGISTRATION**

Pursuant to *RCW 39.06*, Contractor shall be registered or licensed as required by the laws of the State of Washington, including but not limited to *RCW 18.27*.

**00710.06 TIME COMPUTATIONS**

When computing any period of time, the day of the event from which the period of time begins shall not be counted. The last day is counted unless it falls on a weekend or legal holiday, in which event the period runs until the end of the next day that is not a weekend or holiday. When the period of time allowed is less than 7 days, intermediate Saturdays, Sundays, and legal holidays are excluded from the computation.

**0710.07 RECORDS RETENTION**

The wage, payroll, and cost records of Contractor and its Subcontractors, and all records subject to audit in accordance with *SECTION 00708.03*, shall be retained for a period of not less than 6 years after the date of Final Acceptance.

**00710.08 THIRD-PARTY AGREEMENTS**

The Contract Documents shall not be construed to create a contractual relationship of any kind between: A/E and Contractor; Owner and any Subcontractor; or any persons other than Owner and Contractor.

**00710.09 ANTITRUST ASSIGNMENT**

Owner and Contractor recognize that in actual economic practice, overcharges resulting from antitrust violations are in fact usually borne by the purchaser. Therefore, Contractor hereby assigns to Owner any and all claims for such overcharges as to goods, materials, and equipment purchased in connection with the Work performed in accordance with the Contract Documents, except as to overcharges that result from antitrust violations commencing after the Contract Sum is established and that are not passed on to Owner under a Change Order. Contractor shall put a similar clause in its Subcontracts and require a similar clause in its sub-Subcontracts, such that all claims for such overcharges on the Work are passed to Owner by Contractor.

**00710.10 IDENTIFICATION OF SUBCONTRACTORS FOR PROJECTS GREATER THAN \$1,000,000**

When an Owner's Estimate is in excess of \$1,000,000 for Public Works described in these documents, the bidder must as part of the bid, submit the names of the subcontractors with whom the bidder, if awarded the contract, will subcontract for performance of the work of the following:

- A. Heating, Ventilation, and Air Conditioning (HVAC);
- B. Plumbing, per RCW Chapter 18.106; and
- C. Electrical, per RCW Chapter 19.28 or to name itself for the work.

The Prime Contractor shall not list more than one subcontractor, or self, for each category of work identified.

Failure of the Prime Contractor to submit, as part of the bid names of such sub-contractors or itself to perform such work, or naming two (2) or more subcontractors to perform such work shall render the Contract bidder's bid as non-responsive and therefore void, in accordance with RCW 39.30.060.

END OF SECTION 00700

## DIVISION 0 – SUPPLEMENTAL CONDITIONS

### SECTION 00800 TABLE OF CONTENTS

#### 00800 SUPPLEMENTAL CONDITIONS

In accordance with the *GENERAL CONDITIONS*, *SUPPLEMENTAL CONDITIONS* take precedence over *GENERAL CONDITIONS*.

00802.07	Builders Risk Insurance
00810.13	Abbreviations of Administrative Organizations

**00802.07 BUILDERS RISK INSURANCE**

This section supersedes Section 00702.07.  
Builders Risk Insurance is not required.

**00810.13 ABBREVIATIONS OF ADMINISTRATIVE ORGANIZATIONS**

This section supplements **SECTION 00710.03** of the **GENERAL CONDITIONS**.

<b>TABLE 00810.13</b>	
<b>ABBREVIATIONS OF ADMINISTRATIVE ORGANIZATIONS</b>	
<i>AASHTO</i>	<i>American Association of State Highway and Transportation Officials</i>
<i>ACI</i>	<i>American Concrete Institute</i>
<i>AF&amp;PA</i>	<i>American Forest &amp; Paper Association</i>
<i>AIA</i>	<i>American Institute of Architects</i>
<i>AISC</i>	<i>American Institute of Steel Construction</i>
<i>AISI</i>	<i>American Iron and Steel Institute</i>
<i>AITC</i>	<i>American Institute of Timber Construction</i>
<i>ANSI</i>	<i>American National Standards Institute</i>
<i>APA</i>	<i>APA – The Engineered Wood Association</i>
<i>APWA</i>	<i>American Public Works Association</i>
<i>AREMA</i>	<i>American Railway Engineering and Maintenance-of-Way Association</i>
<i>ASCE</i>	<i>American Society of Civil Engineers</i>
<i>ASME</i>	<i>American Society of Mechanical Engineers</i>
<i>ASTM</i>	<i>ASTM International (formerly American Society of Testing and Materials)</i>
<i>AWPA</i>	<i>American Wood Protection Association</i>
<i>AWPI</i>	<i>American Wood Preservers Institute</i>
<i>AWS</i>	<i>American Welding Society</i>
<i>AWWA</i>	<i>American Water Works Association</i>
<i>CSI</i>	<i>Construction Specifications Institute</i>
<i>NEC</i>	<i>National Electrical Code</i>
<i>IAPMO</i>	<i>International Association of Plumbing and Mechanical Officials</i>
<i>IBC</i>	<i>International Building Code</i>
<i>IEEE</i>	<i>Institute of Electrical and Electronics Engineers</i>
<i>NEMA</i>	<i>National Electrical Manufacturers Association</i>
<i>NFPA</i>	<i>National Fire Protection Association</i>
<i>OSHA</i>	<i>Occupational Safety and Health Administration</i>
<i>RCW</i>	<i>Revised Code of Washington</i>
<i>SAE</i>	<i>SAE International (formerly Society of Automotive Engineers)</i>
<i>SSPC</i>	<i>Society of Protective Coatings (formerly Steel Structures Painting Council)</i>
<i>TAA</i>	<i>The Aluminum Association</i>
<i>UL</i>	<i>Underwriters Laboratories, Inc.</i>
<i>UMC</i>	<i>Uniform Mechanical Code (developed by the IAPMO)</i>
<i>UPC</i>	<i>Uniform Plumbing Code (developed by the IAPMO)</i>
<i>WAC</i>	<i>Washington Administrative Code</i>
<i>WISHA</i>	<i>Washington Industrial Safety and Health Administration</i>
<i>WSDOT</i>	<i>Washington State Department of Transportation</i>
<i>WWPA</i>	<i>Western Wood Products Association</i>

Reference herein to specifications issued by the above named or other organization shall mean the latest edition of said specifications, unless otherwise noted.

## **DIVISION 1 – GENERAL REQUIREMENTS**

### **SECTION 01000 GENERAL REQUIREMENTS**

#### **01010 SUMMARY OF WORK**

This project will decommission and remove the existing on-site septic system and install a new system. The design and permit for the new system is provided as part of these contract documents. Provide all labor, materials, permits, equipment, temporary erosion and sediment control (TESC), grass seed, and mulch to decommission and remove the existing septic system and construct the attached permitted septic system, as well as installation of new electrical service for the septic pump system. Install additional owner-supplied electrical conduit, fittings, and junction boxes for WDFW future use.

#### **01011 OWNER FURNISHED ITEMS**

Electrical conduit, fittings, junction boxes and other components for installation alongside new septic line for future WDFW use.

#### **01012 CONTRACT TIME**

The bidder agrees to achieve Substantial Completion within 25 calendar days after date of Notice to Proceed and achieve Final Completion within 5 calendar days of Substantial Completion.

#### **01025 UNIT PRICE BASE BID MEASUREMENT AND PAYMENT**

Not Used.

#### **01030 SCHEDULE OF VALUES**

- A. Prior to the preconstruction meeting, the Contractor shall submit on the provided form a detailed Schedule of Values to the Owner for approval. The Schedule shall show in detail all items performed on this Project. For each major line item, list sub-values of material and installation. The sum of all values listed in the Schedule shall equal the total Base Bid.
- B. The Contractor shall include a line item identified as "Submittal of Signed Permits, Project Record, and Operation and Maintenance Manuals." This item shall be assigned a value of \$1,000. The amount will be withheld from the final payment until Project Owner has received and approved the above mentioned document(s).

#### **01040 COORDINATION**

- A. The Contractor shall, before preparing the construction schedule, consult with the Owner to determine any particular scheduling or operational coordination conditions that will arise during the course of construction and coordinate work accordingly to minimize disruption to Owner or to progress of the work.
- B. The Contractor shall coordinate all materials, supplies, subcontract work, and its own work to ensure conflict-free and uniform flow of construction activities to completion within time set forth in Paragraph 01012.

**01060 REGULATORY REQUIREMENTS**

- A. Washington Department of Fish and Wildlife has obtained the following listed permits:
- On-Site Septic System Permit
  - 1. The permits with provisions affecting the construction methods or schedule of this project have been incorporated in Attachment 1 at the end of this division. The Contractor shall abide by all restrictions noted in these permits as the construction is in progress.
  - 2. All other permits or fees required by local, state, or federal governmental agencies necessary for the accomplishment of this project shall be obtained and paid for by the Contractor, except that any utility company costs for new permanent service shall be paid directly to the utility company by the State.
  - 3. All costs associated with obtaining the permits, including labor, materials, and equipment shall be included in the Base Bid, except for permit fees.
  - 4. The Contractor shall pay all permit fees. The Contractor shall not include any permit fees in the Base Bid. The State shall reimburse the Contractor by Change Order for the actual fees charged by city, state, or county authorities with no Contractor markup. The Contractor shall provide to the State documentation regarding costs for fees paid.
- B. The Contractor shall notify city, county, and state authorities of any inspections and/or approvals required.
- C. Contractor shall follow the Cultural Resource plan including Inadvertent Discovery Plan shown in Attachment 2.

**01100 SPECIAL PROJECT PROCEDURES**

- A. All WDFW Public Works contracts will adhere with the Governor's guidance for COVID-19 protocol on construction projects.

Additionally, the Contractor must be in compliance all COVID-19 protocol set forth by Washington L&I (<https://lni.wa.gov/safety-health/safety-topics/topics/coronavirus>). The Contractor must also be aware of the specific county COVID-19 procedures and ensure compliance is met with county requirements. The Department of Fish and Wildlife requires masks are worn by everyone on the job site, at all times, working around others.

No newly authorized projects are permitted to break social distancing standards. A written job site safety plan will be submitted, which must be approved by WDFW prior to construction and posted on the job sites during construction.

The written job site safety plan is a comprehensive COVID-19 exposure control, mitigation, and recovery plan. If the 6-foot rule cannot be followed at all times, a hazard assessment and control plan will also need to be submitted.

- B. To reduce wildfire risk, the following conditions apply on the project site, when Industrial Fire Precaution Levels (IFPL) are activated. If any conditions are lifted, it shall be done in writing by the Owner. If any additional conditions are required it shall be done in writing by the Owner.
1. No smoking except in an enclosed vehicle, per WAC 232-13-07000A.
  2. No fires or campfires, per WAC 232-1307000A.

## **DIVISION 1 – GENERAL REQUIREMENTS**

3. No open flame, welding, metal cutting, chainsaw operation, or any activity that may cause a spark or hot metal, per WAC 232-13-05000A.
  4. No operation or parking of a motor vehicle (road vehicles and off-road vehicles) off developed roadways. However, it is permissible to park in an area devoid of vegetation within 10 feet of a developed roadway. For purposes of this paragraph, a developed roadway is a roadway constructed for standard highway vehicles with an asphalt, gravel or dirt surface with no vegetation, 14 feet wide or more. Trails or tracks are not such roadways.
  5. A violation of these provisions is punishable under RCW 77.15.160(5)(b). A violation of these provisions may result in removal of offending personnel from the work, per General Conditions Section 00705.01 Contractor Control and Supervision.
  6. All vehicles shall be equipped with a fire extinguisher, 2 gallons of water, and a shovel. All worksites shall have a fire extinguisher and shovel present. The Contractor shall take all reasonable precautions to prevent fires.
  7. The Contractor shall have an employee remain at the worksite with sufficient firefighting capability, for at least one hour after work has ceased for the day, or if leaving for more than one hour, to ensure no fires have started.
  8. The Contractor shall contact the Site/Facility Manager at the beginning of each week; Monday mornings, for any special instructions.
- C. Any open trenching shall be covered with sufficient steel plating to allow reasonable WDFW Wenas Wildlife Area activities during the workday, or backfilled and compacted in traffic areas after components are placed as allowed by permitting or inspection requirements.

### **01200 PROJECT MEETINGS**

Contractor shall attend a preconstruction meeting with the Owner's representative prior to receiving the Notice to Proceed, to discuss the work and contracting procedures.

### **01300 CONTRACTOR SUBMITTALS**

#### **A. Preliminary Submittals:**

Within 7 calendar days after the date of Notice to Proceed, the Contractor shall submit the following items to the Owner for review:

1. The schedule of submittals shall be based on Contractor's priority, planned construction sequence and schedule, long lead items, and size of submittal package. Allow time for project resubmittals. The Owner is not responsible for any delay associated with project resubmittals. The schedule shall include at a minimum the submittal number, Specification section and description of the submittal contents.
2. A list of permits and licenses the Contractor shall obtain, indicating the agency required to grant the permit, such as building permits, equipment or clearance permits, etc. and the expected date of submittal for the permit and required date for receipt of the permit.

#### **B. Preconstruction Conference Submittals:**

At the preconstruction conference of Paragraph 01010 - Summary of Work, the Contractor shall submit the following items to the Owner for review:

1. A preliminary Schedule of Values.



## DIVISION 1 – GENERAL REQUIREMENTS

2. An Initial Schedule Submittal in accordance with Division 0 – General Conditions 00703.2.

C. Shop Drawings:

Not Used.

D. Samples:

Not Used.

E. Record Drawings:

1. The Contractor shall maintain one set of Drawings at the Project Site for the preparation and weekly update of Record Drawings.
2. The Record Drawings shall mark every project condition, location, configuration, and any other change or deviation which may differ from the Contract Drawings at the time of award, including buried or concealed construction and utility features that are revealed during the course of construction. Special attention shall be given to recording the horizontal and vertical location of buried utilities that differ from the locations indicated, or that were not indicated on the Contract Drawings.
3. Record drawings shall be supplemented by any detailed sketches as necessary or as Contractor is directed, to fully indicate the work as actually constructed. These record drawings are the Contractor's representation of as-built conditions, shall include revisions made by addenda and change orders, and shall be maintained up to date during the progress of the work.

F. Quality Control ("QC") Submittals:

1. Quality control submittals are defined as those required by the Specifications to present documentary evidence to the Owner that the Contractor has satisfied certain requirements of the Contract.
2. Unless otherwise indicated, submit QC submittals before delivery and unloading, for the following types of submittals:
  - a. Manufacturers' installation instructions.
  - b. Manufacturers' and Installers' experience qualifications.
  - c. Ready mix concrete delivery tickets.
  - d. Design calculations.
  - e. Affidavits and manufacturers' certification of compliance with indicated product requirements.
  - f. Laboratory analysis results.
  - g. Factory test reports.
  - h. Inspection results and reports of Contractor's testing firm for special inspections.
3. Unless otherwise indicated, submit QC submittals within 30 business days of the event documented for the following types of submittals:
  - a. Manufacturer's field representative certification of proper installation.
  - b. Field measurement.
  - c. Field test reports.

## **DIVISION 1 – GENERAL REQUIREMENTS**

- d. Receipt of permit.
- e. Receipt of regulatory approval.
- 4. The Owner will record the date that a QC submittal was received and review it for compliance with submittal requirements, but the review procedures and Owner time limits above for Shop Drawings and samples will not apply.

### **01510 TEMPORARY UTILITIES**

- A. The State will pay the energy costs for construction power used from any of the existing state services, but the Contractor shall provide any required connections or extensions.
- B. The Contractor shall provide adequate temporary toilet facilities, where directed, when work is started for all those connected with the work. The Contractor shall keep the toilet facilities in a sanitary condition and remove the toilet facilities at the end of the project and disinfect the premises.
- C. Drinking water is not available at the site. Provide single-service containers or a sanitary drinking device from a proven safe source for all those connected with the work.
- D. Water for construction purposes is available at the site. The State does not guarantee quantity or quality of water sources.

### **01730 OPERATIONS AND MAINTENANCE (O&M) MANUALS**

- A. Before final acceptance, the Contractor shall instruct the Owner on the proper operation and maintenance of all mechanical systems, equipment, and controls under this Contract. A qualified technician for each component of this installation shall be made available by the Contractor for this instruction.
- B. The Contractor shall submit three bound sets of equipment manuals and operating instructions to the Owner.
  - 1. Flysheets: Separate each portion of the manual with neatly prepared flysheets briefly describing contents of the ensuing portion. Flysheets must be in color.
  - 2. Binding: The Contractor shall use heavy-duty plastic or fiberboard front and back covers with 3-ring binders. All binding is subject to the Owner's approval.
- C. The front and back covers will include, at least, the following information:

#### **OPERATIONS AND MAINTENANCE (O&M) INSTRUCTIONS**

Prepared for the Washington Department of Fish and Wildlife  
(Project Title and Number)  
(Name of Contractor)  
(General Subject of this Manual)

- D. Contents: The Contractor shall include at least the following:
  - 1. Neatly typewritten index near the front of the manual giving immediate information as to location within the manual of all emergency information regarding the installation.
  - 2. Complete instructions regarding operation and maintenance of all equipment involved including lubrication, disassembly, and reassembly.

## **DIVISION 1 – GENERAL REQUIREMENTS**

3. Complete nomenclature of all parts of all equipment.
4. Complete nomenclature and part number of all replaceable parts name and address of nearest vendor, and all other data pertinent to procurement procedures.
5. Copy of all guarantees and warranties issued.
6. Manufacturers' bulletins, catalog cuts, and other pertinent descriptive data, clearly indicating the precise items included in the installation and deleting, or otherwise clearly indicating, all manufacturers' data with which this installation is not concerned.
7. A pump performance curve showing head, quantity, net positive suction head required, brake horsepower, and efficiency shall be included in equipment manuals.
8. The operating instructions, in conjunction with the maintenance manuals, shall include written step-by-step detail of start-up and shutdown procedures.
9. Such other data as required in pertinent sections of the Contract Documents.

END OF SECTION 01000

**ATTACHMENT – PERMITS**  
**On-Site Septic System Permit**

**YAKIMA HEALTH DISTRICT ON-SITE SEPTIC SYSTEM PERMIT**  
**PERMIT# HOS2016-00403**  
**Permit Must Be Posted On-Site**

Date Issued: 10/4/2021

Expiration Date: 10/1/2022

Parcel Number: 16162421001



10/4/2021

Name: WA STATE DEPT OF FISH AND WILDLIFE

Issued By: Kait Wolterstorff  
(For Yakima Health District)

Location: 312 MT. VALE RD. - SELAH -

Septic Tank Capacity (in gallons): 1000

Drain Field Area (in square feet): 360

Pump Chamber Capacity (in gallons): n/a

Application Rate: 0.4

Number of Bedrooms: 0

Maximum Depth of Trenches: 36"

Type of Laterals: Gravelless Infiltrator

System Type: Lift to Gravity

1000 gallon lift station.

Office for up to 5 employees at 240 gallons per day.

**SEE DESIGN PACKET FOR CONSTRUCTION DETAILS**

Note: Any deviation from the approved design without prior approval by the Designer and the Yakima Health District may void this permit.

**DO NOT COVER ANY PORTION OF THE SYSTEM WITHOUT APPROVAL OF THE DESIGNER  
AND HEALTH DISTRICT  
COVERING SYSTEM WITHOUT APPROVAL WILL VOID THIS PERMIT**

By my signature I am verifying that septic components have been installed within the confines of the design submitted for the given parcel and stamped by a Washington State Licensed Designer as required by Yakima Health District. I am also verifying that an As-Built document has been submitted and contains both the installer and designer signatures.

INSTALLATION APPROVED \_\_\_\_\_

(Sanitarian's Signature)

(Date)

## **ATTACHMENT 2 – MONITORING PLAN**

### **Inadvertent Discovery Plan for Cultural Resources (IDP)**

**WASHINGTON STATE DEPARTMENT OF FISH & WILDLIFE  
INADVERTENT DISCOVERY PLAN FOR CULTURAL RESOURCES FOR THE  
WENAS WLA REPLACE MT. VALE OFFICE SEPTIC SYSTEM  
PROJECT IN YAKIMA COUNTY, WASHINGTON**

The Inadvertent Discovery Plan is intended to provide clear guidance related to the management of an unexpected discovery or unearthing of cultural artifacts, archaeological features, or other evidence of cultural materials and/or of skeletal material of human or unknown origin during WDFW projects not governed by a DAHP-issued excavation permit, or by a Monitoring or Site Protection Plan for a specific area or activity.

This plan is to be implemented without exception whenever such discoveries occur, and applies to WDFW staff, contractors, subcontractors, volunteers, and others who may be involved with projects initiated by WDFW, or occurring on WDFW-managed land. This plan does not supersede or satisfy requirements for Monitoring, Site Protection, or other plans developed to address concerns at known archaeological and historic sites.

**PRE-FIELD ACTIONS**

Prior to ground disturbance, the WDFW project or program manager (PM) will notify work crews/machine operators that they are obligated to cease work in the immediate area and notify supervisory personnel upon discovery of any bones or objects of human manufacture, particularly suspected Native American artifacts. This action will be repeated prior to commencement of work in new locations, after significant changes in field staff, and if work is re-started after a hiatus. Field supervisors will be made aware of their responsibilities for interim protection and notification as detailed below.

**FIELD ACTIONS**

**Specific Procedures for the Inadvertent Discovery of Archaeological Resources**

In the event that cultural resources (not including human remains) are encountered during project implementation, the following actions will be taken:

1. All work within the discovery area and a surrounding buffer adequate and sufficient to prevent further disturbance will cease. The field supervisor will notify the PM immediately.
2. The PM will immediately contact WDFW archaeologist or archaeological monitor. If an archaeological monitor is present, he/she will notify the WDFW archaeologist.
3. If the WDFW archaeologist determines that potentially significant archaeological materials or historic sites are present, the PM will be advised of interim protective measures. Work may resume outside the buffer, unless the WDFW archaeologist directs otherwise.

4. The WDFW archaeologist will initiate Tribal and DAHP consultation regarding evaluation of the find's significance, potential for effects caused by the project, and subsequent treatment plans or Memoranda of Agreement (MOA).
5. Wherever possible, the preferred treatment of significant archaeological resources and historic sites will be in situ preservation. If a treatment plan requires that such resources be excavated or removed, an agreement must first be reached between WDFW and the consulting parties.

### **Specific Procedures for the Inadvertent Discovery of Human Remains**

Inadvertent finds of what appear to be human remains introduce cultural concerns and legal requirements that initiate a different response than cultural resources. Human remains must be treated with utmost respect. The following language is to be followed to the letter:

#### **Inadvertent Discovery of Human Skeletal Remains on Non-Federal and Non-Tribal Land in the State of Washington (RCWs 68.50.645, 27.44.055, and 68.60.055)**

If ground disturbing activities encounter human skeletal remains during the course of construction, then all activity will cease that may cause further disturbance to those remains. The area of the find will be secured and protected from further disturbance until the State provides notice to proceed. The finding of human skeletal remains will be reported to the county medical examiner/coroner and local law enforcement in the most expeditious manner possible. The remains will not be touched, moved, or further disturbed. The county medical examiner/coroner will assume jurisdiction over the human skeletal remains and make a determination of whether those remains are forensic or non-forensic. If the county medical examiner/coroner determines the remains are non-forensic, then they will report that finding to the Department of Archaeology and Historic Preservation (DAHP) who will then take jurisdiction over the remains. The DAHP will notify any appropriate cemeteries and all affected tribes of the find. The State Physical Anthropologist will make a determination of whether the remains are Indian or Non-Indian and report that finding to any appropriate cemeteries and the affected tribes. The DAHP will then handle all consultation with the affected parties as to the future preservation, excavation, and disposition of the remains.

**Under no conditions are WDFW staff or other project personnel to make the location or contents of inadvertent human remains finds public, unless specifically authorized to do so in the burial treatment plan.**



## CONTACTS

### **WASHINGTON STATE DEPARTMENT OF FISH & WILDLIFE**

#### *Department Archaeologist*

Kayley Bass, CAMP Archaeologist	564-200-2485
Adam Rorabaugh, CAMP Archaeologist	360-789-3290
Katherine Kelly, WDFW Archaeologist	360-688-0676

#### *Project Manager and Alternative Contact*

Robert Beesley	360-280-6586
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### **WASHINGTON ST. DEPT. OF ARCHAEOLOGY AND HISTORIC PRESERVATION:**

Allyson Brooks, State Historic Preservation Officer	360-586-3066
Rob Whitlam, State Archaeologist	360-586-3080
Guy Tasa, State Physical Anthropologist	360-586-3534

### **YAKIMA COUNTY:**

Yakima County Sherriff's Office	509-574-2500
Yakima County Coroner's Office	509-574-1610

### **CONFEDERATED TRIBES AND BANDS OF THE YAKAMA NATION**

Kate Valdez, Tribal Historic Preservation Officer	509-865-1068 kate@yakama.com
The Honorable Delano Saluskin, Chairman	Delano.saluskin@yakama.com
Jerry Meninick, Director of Cultural Resources	509-865-5121 jerry_meninick@yakama.com
Casey Barney, Cultural Resource Program Manager	Casey_Barney@yakama.com
Corrine Camuso, Cultural Resources Program Archaeologist	509-865-5121 ext. 4776 Corrine_Camuso@Yakama.com

*\*Please note Corrine Camuso from the Confederated Tribes and Bands of the Yakama Nation has been the primary point of contact during consultation.*

**Definitions:**

*Archaeological Features* are physical alterations in the natural environment such as pits or house foundations.

*Archaeological materials* are the physical remains of human cultural behavior, including artifacts and features left on the landscape.

*Artifacts* are the physical objects of a culture, including tools with evidence of intentional modification (such as flaked stone blades) as well as those objects such as fire-cracked rock that reflect human activity.

*Burial statutes* include the 2008 Washington State legislation that established current practices for inadvertent burial treatment through additions and amendments to the code, including 27.44 RCW (Indian Graves and Records, as amended), 27.53 (Archaeological Sites and Resources, as amended), as well as chapters 27.34, 43.334, 68.60, and 68.60 RCW.

*Consulting parties* are those which have a legal right to comment on determinations of significance and NRHP eligibility, project effects on cultural resources, and human remains. This may vary according to projects, but typically includes DAHP and Tribes whose Ceded Lands or Usual and Accustomed areas include the project area.

*Coroner* refers to the office of the local county coroner or medical examiner, and is responsible for confirming that the remains are human and determining whether they are forensic (dead less than 50 years, and therefore a law enforcement matter) or non-forensic (more than 50 years, and therefore subject to burial statutes).

*Cultural Deposits* are layers or features of sediment containing cultural materials.

*Cultural Resources* include archaeological resources and historic sites.

*Historic sites* are locations 50 years old or older, where native or non-native events and activities have taken place since the arrival of Euro-Americans, and which are considered by DAHP to be historic site types.

*Human remains* are any physical remains that are known to be human, or could be human but have not yet been positively identified.

*Physical anthropologist* in this case refers to the professional physical anthropologist employed at DAHP, who determines whether human remains are Native American (if possible), and is the individual responsible for handling human remains.

**SECTION 02000  
GENERAL SITE WORK PROVISIONS**

**PART 1 - GENERAL**

**1.01 SECTION INCLUDES**

This section specifies general requirements for all sections of Division 2 – Site Work.

**1.02 RELATED WORK**

Not Used.

**1.03 REFERENCES**

References listed in Division 2 are from the following organizations' publications and reference standards:

AASHTO – American Association of State Highway and Transportation Officials

ANSI – American National Standards Institute

ASTM – ASTM International (formerly American Society for Testing and Materials)

OSHA – Occupational Safety and Health Administration Construction Standards

RCW – Revised Code of Washington

IBC – International Building Code

WAC – Washington Administrative Code

WISHA – Washington Industrial Safety and Health Act

WSDOT – Washington State Department of Transportation Standard Specifications for Road, Bridge, and Municipal Construction, latest edition

**1.04 SUBMITTALS**

Make submittals for items in all sections of Division 2 in accordance with Sections 00704.03 Shop Drawings and 01300 Contractor Submittals.

**1.05 DELIVERY, STORAGE, AND HANDLING**

- A. Protect all materials from exposure to moisture, wind, sunlight, or other excessive weather conditions that will render them unsuitable for usage as intended and be cause for rejection.
- B. Stockpile or store in areas protected from contamination and physical damage.
- C. Contractor is responsible for all costs associated with replacement of all rejected items.

**PART 2 - PRODUCTS**

Not Used.

**PART 3 - EXECUTION**

Not Used.

END OF SECTION 02000

02000 - 1

**SECTION 02010  
SUBSURFACE INVESTIGATION**

**PART 1 - GENERAL**

**1.01 SECTION INCLUDES**

This section summarizes available soil investigations and requirements for additional subsurface investigation, at Contractor's option.

**1.02 SOILS INVESTIGATIONS**

- A. A geotechnical engineering report was not prepared for the design of this project.
- B. It is the responsibility of the Contractor to satisfy themselves as to actual field conditions.
- C. Subject to Owner's approval, Contractor may conduct their own independent subsurface investigation at Contractor's expense following the Notice to Proceed. Receive Owner's written approval prior to performing onsite investigation.
- D. Contractor is responsible for use or interpretations of subsurface information and recommendations.

**1.03 SUBMITTALS**

- A. Prior to any onsite soil investigation work, submit the following:
  - 1. Proposed test locations, depths, and equipment to be used.
  - 2. Work schedule.
  - 3. Proposed backfill placement techniques and levels of compaction equipment to be used.
- B. Submit copies of any reports, results, and findings to Owner.

**PART 2 - PRODUCTS**

Not Used.

**PART 3 - EXECUTION**

Not Used.

END OF SECTION 02010

**SECTION 02050  
DEMOLITION**

**PART 1 - GENERAL**

**1.01 SECTION INCLUDES**

- A. Removing and disposing of or salvaging existing structures, utilities and materials. Underground structures and utilities may not be in the exact locations shown. The work includes the requirements for the removal, wholly or in part, and satisfactory disposal of utilities, pipelines, fences, structures, light fixtures, conduits, wires and other obstructions which are designated to be demolished on the drawings or within these Specifications.
- B. The Demolition work is included on the drawings for guidance only to indicate typical general construction features of the various types of structures and is not to be construed as definitive or adequate to supplant the actual on-site inspection by the Contractor.

**1.02 RELATED SECTION**

Placing and compacting of fill material in holes or pits created by the removals (see Section 02220).

**1.03 JOB CONDITIONS**

The Contractor represents that it has visited the site to become familiar with the quantity and character of all materials to be demolished. The Contractor agrees that the premises were made available prior to deadline for submission of bids for whatever inspection and tests the Contractor deemed appropriate. The Contractor assumes full responsibility for the proper disposal, reuse, recycling or salvage of all demolition materials.

**1.04 SUBMITTALS**

The Contractor shall submit a demolition plan that at a minimum, addresses the following:

- A. Worker safety;
- B. Protection of the public;
- C. Work sequence;
- D. Means and methods to minimize waste and maximize salvage;
- E. Disposal procedures;
- F. Protection of the environment;
- G. Disposal site(s) approved by all environmental agencies, including permits and permissions as necessary.

**PART 2 - PRODUCTS**

Not Used.

**PART 3 - EXECUTION**

**3.01 DEMOLITION**

- A. Prior to demolition, the method of demolition shall be determined by the Contractor and approved by the Engineer.
- B. Blasting is not permitted.

**3.02 REMOVAL**

- A. Remove all structures or designated portions thereof, and other materials without disturbing adjoining facilities.
- B. Where concrete or asphaltic concrete walks, roadways, or floors are to be removed, saw cutting or other approved method shall be performed. Saw cutting shall be to the full thickness of the structure and shall be straight and true.

**3.03 DISPOSAL**

- A. Materials designated to be salvaged shall be carefully and neatly stockpiled in a location shown on the Drawings, or as approved by the Owner.
- B. All materials not designated to be salvaged shall become the property of the Contractor. Remove from the project site and dispose of legally. Prior to disposal, the Contractor shall provide the Owner with the locations of all disposal sites to be used and copies of applicable permits and approvals for each site.
- C. Burning shall not be allowed at the designated disposal site.

**3.04 BACKFILLING**

Holes and pits created by removing existing structures and materials shall be backfilled with structural fill material in accordance with Section 02220.

END OF SECTION 02050

**SECTION 02100  
SITE PREPARATION**

**PART 1 - GENERAL**

**1.01 SECTION INCLUDES**

The work of this section consists of clearing, grubbing, stripping, and storage of topsoil and protection of vegetation to remain, including other related work.

**1.02 JOB CONDITIONS**

Bidders shall examine the work site to determine the character of materials to be encountered, trees to be removed or protected, and nature of the work in general. All required excavation is unclassified.

**PART 2 - PRODUCTS**

Not Used.

**PART 3 - EXECUTION**

**3.01 SITE CLEARING**

- A. Clearing: Clear all trees, stumps, brush, roots, rubbish and other objectionable matter within clearing limits shown on the Drawings, staked in the field, or as directed by the Owner. Do not disturb any vegetation or roots thereof designated to remain more than absolutely necessary to assure completion of new construction.
- B. Grubbing: Remove all stumps and roots within clearing limits to a depth of at least 12 inches below natural ground.
- C. Stripping: Remove all humus, vegetation, existing roadway aggregate or other objectionable material encountered within the top 6 inches of soil in areas of project construction, areas to be excavated, and areas where embankment or excess earth will be placed. Upon removal of objectionable material, the top 6 inches of soil shall be stripped and stockpiled as topsoil at a site designed by the Owner. This material is to be stockpiled separately and not mixed with any other material.

**3.02 PROTECTION**

Trees, shrubs, roots, and other landscape features designated on Drawings or in the field for preservation, or those located outside of the construction limits shall be carefully protected from marring or damage during construction operations. Continual parking and/or servicing of equipment within areas designated for preservation will not be permitted. Trees and shrubs designated for preservation and pruning shall be trimmed as directed. At no time shall excavation be within the drip line of trees designated to remain.

**3.03 DISPOSAL**

All debris resulting from clearing and grubbing shall be removed from the project site and disposed of properly. Prior to disposal, the Contractor shall provide the Owner with the locations of all disposal sites to be used.

END OF SECTION 02100



**SECTION 02150  
SHORING AND UNDERPINNING**

**PART 1 - GENERAL**

**1.01 SECTION INCLUDES**

This section includes shores, needle beams, grillage, underpinning, and slabjacking as required for completion of the work specified.

**1.02 REFERENCES**

Chapter 49.17 RCW Washington State Industrial Safety and Health Act

WAC Chapter 296.155 Part N

WISHA Safety Standards for Construction Work – Excavation, Trenching, and Shoring

WSDOT 7-08.3(1) B-Shoring

**1.03 SUBMITTALS**

Where shoring and underpinning do not conform to prescriptive designs in referenced standards, and engineered design Sealed by a Registered Professional Engineer shall be submitted to the Owner prior to their use.

**PART 2 - PRODUCTS**

Not Used.

**PART 3 - EXECUTION**

**3.01 TRENCHING**

Shoring of trenches and excavations shall comply with all the trench safety requirements of Chapter 49.17 RCW and referenced standards. Open trenches at and along roadways shall be cover-plated, barricaded and signed during periods of construction activity. Open excavations shall be completely and entirely fenced, barricaded, and signed at all times.

END OF SECTION 02150

**SECTION 02200  
EARTHWORK**

**PART 1 - GENERAL**

**1.01 SECTION INCLUDES**

This section specifies general earthwork requirements.

**1.02 JOB SITE CONDITIONS**

- A. Earthwork operations shall not be performed if the weather conditions, in the opinion of the Owner, are inappropriate. Work in muddy or frozen ground will not be allowed.
- B. The Contractor shall maintain proper drainage at all times.
- C. Stockpiles:
  - 1. All stockpile locations shall be approved by the Owner and shall be located so as not to interfere with other work or disturb adjoining property owners.
  - 2. Stockpiles shall not exceed 10 feet in height.
- D. Contractor is responsible for repairing any damage to roads or addition of rock to access work site.
- E. Work area shall be maintained to prevent stormwater or sediment runoff into the river.

**PART 2 - PRODUCTS**

Not Used.

**PART 3 - EXECUTION**

Not Used.

END OF SECTION 02200

**SECTION 02220  
EXCAVATION, BACKFILL, AND COMPACTION**

**PART 1 - GENERAL**

**1.01 SECTION INCLUDES**

The work under this Section includes providing all labor, materials, tools, and equipment necessary for excavation, filling, compaction, grading, trenching, bedding and backfilling, and placement of excess earth, as shown on the Drawings and described in the Specifications.

**1.02 RELATED SECTIONS**

Section 02100 Site Preparation  
Section 02150 Shoring and Underpinning

**1.03 REFERENCES**

ASTM C136 – Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates  
ASTM D1557 – Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort  
ASTM D6938 – Standard Test Method for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)  
RCW 49.17 – Washington State Industrial Safety and Health Act  
WSDOT M 41-10 – Standard Specifications for Roads, Bridges, and Municipal Construction, latest edition

**1.04 SUBMITTALS**

- A. Safety plan.
- B. Authorization for use of selected disposal areas.
- C. Gradation analysis and certified test results for all imported fill material and onsite material to be incorporated into the work.
- D. Compaction test results.

**1.05 JOB SITE CONDITIONS**

- A. Do not perform earthwork operations if the weather conditions, in the opinion of the Owner, are inappropriate. Work in muddy or frozen ground will not be allowed.
- B. Maintain proper drainage, and stormwater and erosion controls at all times.

**1.06 STOCKPILES**

- A. Locate all stockpiles so as not to interfere with other work or disturb adjoining property owners. Obtain Owner's prior approval for stockpile locations.
- B. Maximum stockpile height is ten feet.

**1.07 SAFETY AND PROTECTION**

- A. Barricade open excavations occurring as part of this work and post warning lights. Operate warning lights during hours from dusk to dawn each day and as otherwise required by applicable safety regulations.
- B. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining washout, and other hazards created by all earthwork related operations.
- C. Contact utility companies to locate service lines prior to any excavation.
- D. Proceed with caution in the excavation so that damage to underground structures, both known and unknown, may be avoided.
- E. Take extreme precautions for the protection of utility lines and other subsurface improvements. Repair any improvements damaged by construction operations at the Contractor's expense in compliance with the requirements of the utility owner and to the Owner's satisfaction.
- F. Sheet, shore, and brace trenches and excavations where required in a manner consistent with established safe practices and in accordance with all applicable safety regulations.
- G. Comply with Chapter 49.17 RCW, the Washington State Industrial Safety and Health Act, if trench excavation exceeds four feet in depth. Include the cost of required safety systems in all bid schedules and list as a separate Bid Item on the Bid Proposal Form.
- H. Provide all materials, equipment, and labor necessary to provide support to manholes, footings, and foundation walls during excavation and backfilling at all locations.

**PART 2 - PRODUCTS**

**2.01 EXCAVATION MATERIALS**

- A. Common Excavation: Includes all material other than rock as described below required for the construction of this project. It includes, but is not restricted to earth, gravel, hardpan, cemented gravel, soft or disintegrated rock, and boulders or detached pieces of solid rock not exceeding one cubic yard in volume.
- B. Rock Excavation: consists of rock boulders greater than one cubic yard in volume and bedrock. Rock excavation shall be approved by the Owner and will be considered a change in the work.
- C. For bidding purposes, assume all excavated material meets the specifications for common borrow.
- D. Excavated materials may be used for fill and backfill applications required for construction of this project; provided the material meets the specifications for the intended use and has been properly protected from water conditions that would render it undesirable.

**2.02 FILL MATERIALS**

- A. Common Borrow: Fill required to raise existing grade or backfill excavations beyond five feet of a structure or as trench backfill above pipes or conduits. Common borrow shall be material from common excavation or from a borrow site which is free of deleterious materials.

Deleterious material includes wood, organic waste, or any other objectionable material greater than three percent by weight.

- B. Sand: Clean, uniformly graded sand with the gradation of WSDOT 9-03.1(2)B, Class 1.
- C. Ballast Rock: Hard, sound, and durable rock with at least one face fractured. Rock shall be free of frozen material, debris, and organics, and meet the gradation of WSDOT 9-03.9(1).
- D. Crushed Surfacing Base Course (CSBC) and Top Course (CSTC): Manufactured from ledge rock, talus or gravel, uniform in quality, substantially free of wood and other extraneous material, meeting the requirements of WSDOT 9-03.9(3).
- E. Trench Backfill shall meet the requirements of WSDOT 9-03.10 with 100% of material passing through two 1/2-inch screens.
- F. Structural Fill shall meet the following requirements for Gravel Backfill:

Table 02220 - 2.02F	
Sieve Designation	Percent Passing by Weight
2 Inches	100
1/2 Inch	60-80
No. 4	30 Maximum
No. 200	0-5
Sand Equivalent	45 Minimum

- 1. Foundations: WSDOT 9-03.12(1) A or B
- 2. Walls: WSDOT 9-03.12(2)
- G. Pipe Bedding: Clean sand/gravel mixture free from wood waste or other extraneous materials and conforming to the gradation of WSDOT 9-03.12(3) when tested in accordance with ASTM C136.
- H. Drain Rock: Washed rock with the gradation of WSDOT 9-03.12(4).
- I. Gravel Borrow: Selected granular material, free-draining mineral soil, free from organic matter, frozen or lumpy material, meeting the requirements of WSDOT 9-03.14(1).
- J. Quarry Spalls: Meet the gradation of WSDOT 9-13.1(5).

## **PART 3 - EXECUTION**

### **3.01 EXCAVATION**

- A. Excavation consists of the removal of material required to establish the proposed subgrade surface elevations. Conduct excavations in such a manner as to avoid disturbance to all materials located outside the limits of the work area, unless specifically identified by the Owner as an acceptable borrow source. Methods of excavation will be the Contractor's option. Exercise care when approaching final grade. If final grade is disturbed, replace it with suitable materials and compact at Contractor's expense.
- B. Large rocks, which size qualifies them as common excavation, encountered during excavation or trenching may be partially removed as required to reach subgrade elevations. With Owner's approval, Contractor has the option to remove these rocks by excavation and subsequent backfilling the over excavated portions. No extras will be paid for such over excavations.

- C. Protect bottoms of all excavations from freestanding water and frost. Protect excavations from caving, flooding, or other source of damages. Damage to excavation shall be repaired at the Contractor's expense.
- D. Any excess excavation performed by the Contractor for his convenience shall be at the expense of the Contractor.
- E. Dispose of excavated materials at a permitted offsite location. Provide the Owner with a letter authorizing disposal at selected locations prior to disposal.
- F. Dispose of excavated materials of any nature if quantities exceed the fill or backfill needs of this project. This disposal will not be considered a change in work, and no extra payment will be made.
- G. Dispose of excavated materials determined by the Owner to be unsuitable for use as common borrow. This disposal shall be considered a change in work with extra payment determined per General Conditions Section 00707.00 Changes. The disposal quantity considered for extra payment will be limited to the amount of common borrow imported to replace the unsuitable material.
- H. Any excavation and replacement of unsuitable materials below final grade will be as directed by the Owner. "Unsuitable material" is any type of soil such as clays, silts, or organic materials that will not compact to specified compaction percentage or does not meet the specification for its intended use.

### 3.02 ROCK REMOVAL

- A. Large rocks greater than one cubic yard encountered within the excavation limits may be partially or entirely removed; however, the subsequent backfill for such over excavation shall be done at the Contractor's expense.
- B. Blasting is not allowed.

### 3.03 BACKFILL AND COMPACTION

- A. Dewater and prepare foundations prior to placing backfill materials.
- B. When backfilling, extra care must be taken so that no damage will occur to foundations or related structures.
  - 1. Where backfill is to be placed against both sides of concrete walls, bring the backfill up evenly on both sides of the wall.
  - 2. Where backfill is to be placed against one side of concrete walls, abutting concrete walls, or beams, do not place backfill until the concrete has developed sufficient strength to resist the loading imposed by the backfill. Unless high-early strength concrete has been approved for use, place backfill at least 72 hours after concrete placement and do not exceed the following schedule:

Table 02220 - 3.03B			
Backfill Depth:	1/2 wall height	2/3 wall height	Full wall height
Concrete Age:	72 hours	7 days	28 days

- C. Each lift of fill material shall be spread uniformly in horizontal layers and compacted in accordance with the following table:

Table 02220 - 3.03C			
Type of Material	Max. Loose Lift Placed (inches)	Percent Compaction*	Application
Common borrow	24	90	General fill**
Sand	6	95	Pipe and conduit bedding, fill under structures
Ballast rock	8	90	Fill under other materials, where noted
Crushed surfacing base course	<u>Total Depth</u> 2	95	Subgrade for crushed rock or asphalt pavement surface/finished crushed rock surface such as parking lots, driving areas
Trench backfill	6	95	Fill above pipe bedding to pipe centerline
Trench backfill	12	90	Pipe centerline to top of trench
Structural fill	6	95	Fill under structures and wall backfill***
Structural fill	12	90	Fill around structures**
Pipe bedding	6	95	Pipe and conduit bedding
Drain rock	6	95	Backfill in drain trenches
Gravel borrow	12	90	Select Fill****
Quarry spalls	12	90	Rock lining for outfall channel

\* Percent compaction at maximum dry density as determined in accordance with ASTM D1557.

\*\* All fill and backfill not under structures and beyond 5-feet concrete slabs, walls, and footings.

\*\*\* All fill and backfill under concrete slabs and footings (interior and exterior) and all fill and backfill within 5 feet of concrete slabs, walls and footings.

\*\*\*\* All fill under roadways and trench backfill under paving.

- D. Compact with power-operated tampers, rollers, idlers, or vibratory equipment. Water jetting for compaction purposes is not permitted.
- E. Any application of water or any working of fill material required to bring it within acceptable moisture content and density limits during compaction operations shall be done at the Contractor's expense.
- F. Do not place, spread, or compact backfill materials at an unsuitably high moisture content or during adverse weather conditions. When work is interrupted by heavy rain, do not resume backfill operations until field tests indicate the moisture content density of the backfill areas are within specified limits.

### 3.04 TRENCH EXCAVATION

- A. Do not excavate more than 200 feet of open trench in advance of laying pipe, unless approved by the Owner. All operations shall be carried out in an orderly fashion.
- B. Width of trenches for pipes shall not be less than outside pipe diameter plus 16 inches, nor greater than outside pipe diameter plus 36 inches of the pipe installed unless otherwise shown on the Drawings.

- C. Side walls of the trench shall be vertical from the trench bottom to at least the height of the top of the pipe.
- D. Where soil encountered in the bottom of the trench is unstable or unsuitable as a base, remove such soil to a depth specified by the Owner and replace with compacted common borrow or other material as directed by the Owner. This overexcavation and replacement shall only be done as directed by the Owner and will be paid for as an extra.
- E. Excavate bottom of trench to the lines and grades shown on the Drawings with proper allowance for thickness and type of pipe bedding specified.
- F. Excavation below designated lines shall be filled at the Contractor's expense. Replace excess excavation below pipes with gravel borrow or as directed by the Owner.
- G. Place excavated material a sufficient distance from the trench walls to avoid sliding of materials into the trench.
- H. Notify the Owner at least 48 hours in advance of excavating across existing roads.

**3.05 PIPE BEDDING PLACEMENT**

- A. After bottom of trench has been excavated to proper depth and grade, brought to a reasonably flat surface, and dewatered, place bedding material as shown on the Drawings.
- B. Place pipe bedding in trench without causing any excavated material to slide into trench or any cave in of trench walls. Place and compact pipe bedding into a six-inch minimum depth and provide a continuous, uniform bedding for the full length of the pipe.
- C. Backfill utility lines and flexible pipe, such as PVC, to six inches above the top of pipe or line using bedding material only. Rigid pipe, such as steel, may be backfilled using gravel material as specified.
- D. Remove and replace pipe bedding material required due to unauthorized overexcavation or made unsuitable due to mixture with trench side material or excavated material.

**3.06 TRENCH BACKFILL.**

- A. Test pipeline prior to backfilling trenches at pipe joints.
- B. Remove screeds, shoring, wood forms, debris, and other decomposable matter from areas to be filled.
- C. Pipe bedding shall contact entire periphery of pipe.
- D. Place material evenly on both sides of pipe and compact each subsequent lift so that pipe is not displaced. Repair misalignment of pipe or other damage.
- E. Neatly mound excess trench material no more than three inches high over trenches, except in roadways or parking areas, so that a depression will not be formed if backfill settles. The Contractor is responsible for filling settlement depressions formed within one year after final acceptance.

**3.07 ROAD AND PARKING FILL**

- A. Place base course and top course each in two lifts on top of a prepared and compacted subgrade.



- B. Provide the water and equipment necessary for adequately distributing moisture on the material. Apply water lightly and frequently to avoid having free water running out of the material and building up on the subgrade.
- C. Do not place materials when snow is falling or blowing or when the weather is such that, in the Owner's opinion, satisfactory results cannot be obtained.

**3.08 FIELD QUALITY CONTROL**

- A. Perform field observation and testing as required to control the work.
- B. Density and moisture-content testing of embankment fill and excess earth placements will be performed by the Owner's testing lab in accordance with ASTM D6938.
- C. Level surface check: Unless otherwise shown on the Drawings, the variation above or below a 10-foot straightedge placed between any two contacts with the finished surface shall not exceed one-tenth of a foot.
- D. Any area which has been tested and shown to not meet the requirements of these Specifications shall be reworked and retested at the Contractor's expense until it complies.

END OF SECTION 02220

**SECTION 02740  
SEPTIC SYSTEMS**

**PART 1 - GENERAL**

**1.01 SECTION INCLUDES**

The work of this section consists of furnishing and installing a complete and fully operational septic system.

**1.02 JOB CONDITIONS**

Bidders shall examine the work site and the Drawings to determine the character of materials to be encountered.

**1.03 PERMITS**

A copy of the Permit to Construct a Sewage Disposal System, issued by Yakima County Health Department, has been included in these specifications.

**1.04 QUALIFICATIONS**

The septic system installer must be licensed in Yakima County, Washington.

**PART 2 - PRODUCTS**

**2.01 SUBMITTALS**

- A. Provide complete submittals including cut sheets for all materials for approval prior to beginning work.
- B. Provide complete layout plans for installed components where applicable for approval prior to beginning work.
- C. All materials shall meet State and local standards.

**PART 3 - EXECUTION**

**3.01 INSTALLATION**

- A. All materials shall be installed per State and local standards.
- B. All materials shall be installed per the manufacturer's recommendations and as detailed and/or noted on the Drawings.

**END OF SECTION 02740**

**SECTION 02930  
LAWNS AND GRASSES**

**PART 1 - GENERAL****1.01 SECTION INCLUDES**

This section specifies seed, fertilizer, and mulch to restore areas disturbed by excavations and construction equipment.

**1.02 SEQUENCING**

Seeding shall take place after ground disturbing activities have been completed. Notify Owner at least 72 hours prior for seeding.

**PART 2 - PRODUCTS****2.01 SEED**

Seed shall meet the following requirements:

Table 02930 - 2.01			
Kind/Variety Seed in Mixture	Percent by Weight	Percent Pure Seed	Minimum Percent Germination
Chewing Fescue	40	39.20 Minimum	90
Colonial Bentgrass var. Astoria	10	9.80 Minimum	85
Perennial Rye	40	39.20 Minimum	90
White Clover Pre-Inoculated	10	9.80 Minimum	90
Inert and Other Crops		1.0 Maximum	
Noxious Weed			None
"Ladino"		Not Acceptable	

**2.02 FERTILIZER**

Fertilizer shall consist of a commercial fertilizer with the following formulation:

- A. Nitrogen (inorganic as Ureaform): 12.8 percent.
- B. Phosphoric Acid (P205): 18.0 percent.
- C. Potash (K20): 18.0 percent.

**2.03 MULCH**

Mulch shall consist of a straw mulch or wood cellulose fiber.

**PART 3 - EXECUTION**

**3.01 PREPERATION**

Ensure backfilled excavations have been compacted to match surrounding terrain and scarify disturbed areas to a minimum 2-inch depth.

**3.02 SEEDING, FERTILIZING, AND MULCHING**

A. The hydro-seeding operation shall include the installation of seed, fertilizer, mulch, and tackifier with a tracer to verify uniform application in accordance with WSDOT Spec. 8-01.3(4) A.

B. Seed shall be applied at a rate of 0.3 pounds per 100 square feet.

C. Mulch shall be applied at a rate of 4.6 pounds per 100 square feet

**3.03 WATERING**

Contractor shall be responsible for watering of seeded areas until final project completion.

END OF SECTION 02930

**SECTION 16000  
ELECTRICAL**

**PART 1 - GENERAL**

**1.01 SECTION INCLUDES**

This section includes all equipment, raceways, fittings, supports, wire, terminations, and wiring devices, plates, and other appurtenances required for a complete and operational installation.

**1.02 RELATED WORK**

Not Used.

**1.03 PERMITS AND INSPECTIONS**

- A. All electrical work, including the installation of conduit, wire, breakers, devices, and panel connections shall be performed by a licensed electrical contractor, employing qualified electricians. Both contractor and workers shall be currently licensed to perform electrical work in the state of Washington by the Department of Labor & Industries.
- B. The Contractor is responsible for purchasing all applicable electrical permits (city, state, or other) and for scheduling necessary inspections. The contractor is solely responsible for code compliance and rectifying any corrections issued by the authority having jurisdiction. Contractor shall email a copy of all electrical work permits to [david.miller@dfw.wa.gov](mailto:david.miller@dfw.wa.gov) before beginning work. All permits must be "Finaled" before final payment will be granted.

**1.04 DESIGN REQUIREMENTS**

- A. The Drawings and Specifications are complimentary. What is called for in either is binding, as if called for in both. In case of conflict within the Drawings, Specifications, or between the Drawings and Specifications, the Contractor, in bidding, shall select the most expensive method. The Owner will select the method to be taken.
- B. Conduits, conductors, equipment, and devices shown on the Drawings are the minimum required. The Electrical Contractor shall interface with the Prime Contractor and other trades to ensure and provide for the adequate connection and operation of all equipment specified.
- C. Device, equipment, and trench locations shown on the Drawings are diagrammatic. Confirm all measurements in the field, and coordinate with other trades before installation. Minor adjustments shall be made by the Contractor at no additional cost to the Owner.
- D. Provide "As-Built" record drawings showing final locations of all equipment, conduit routing, and design changes to DFW upon completion of project.

**1.05 SUBMITTALS**

General Submittals for this division shall be in accordance with the General Conditions, and include all breakers, devices, conduit and fittings, luminaires and accessories, and supporting devices as designated by the Owner.

## **PART 2 - PRODUCTS**

### **2.01 PANELS AND DISCONNECTS**

- A. Loadcenters: shall be Cutler-Hammer CH style with Main Breaker installed, or Main Lug Only as shown on drawings. Loadcenters shall be suitable for the location in which they are installed. NEMA 1 for indoors, NEMA 3R for outdoors, or as otherwise specified. Loadcenters shall utilize "plug-on" CH style breakers and have the capacity to hold at least 20% more breakers than are required to serve existing loads. Loadcenters shall have copper buss and be fitted with the proper cover for the mounting method used.
- B. Backfeed Main Breakers: shall be secured with an approved retaining bracket and be identified by code compliant labeling describing its purpose. Leave at least (4) spare single Pole 20-amp breakers in each panel above the minimum needed for existing and added branch circuits. A duplex receptacle shall be installed as shown adjacent to each panel. These shall be fed by a dedicated 20-amp breaker in the appropriate panel.
- C. Disconnects: shall be Non-Fused Safety Switches. Switches shall be EATON brand General Duty (or better) and of the type suitable for the location in which they are installed. Disconnects for septic equipment are permitted to be "pull-out" style, where permitted by code.

### **2.02 GROUNDING**

- A. Provide and install a code compliant grounding system throughout the project, whether specifically detailed in the drawings, or not. Adhere to all applicable NEC and WAC codes at a minimum unless a more stringent installation is called out in the drawings or specifications.
- B. Install a NEC sized grounding conductor in all conduits. Provide an appropriate size ground pigtail to all devices regardless of their rating.
- C. Install a code size bonding jumper to all piping systems as required by code. Clamps shall be readily accessible. Note their locations on as-built drawings. Provide and install ground rods where required by code.

### **2.03 RACEWAYS**

- A. Overhead (OH) Service Mast: shall be minimum 1.25" Schedule 40 PVC. Support OH Mast with approved strut-channel attached to pole by lag-bolts, as shown in Drawings. Secure vertical conduit at intervals not exceeding 48", unless local codes require additional support. Mast shall be square with the pole. Extend mast(s) to a height that provides code compliant clearances over road and walkways. Connect to meter, panel, or disconnect using threaded hub approved for the equipment installed.
- B. Underground (UG) Conduit: shall be schedule 40 PVC and buried a minimum of 24" to the top of pipe. Where shown, or subject to physical damage, PVC shall be schedule 80. Provide a burial marker tape 12" BFG above conduit in backfill. Where metallic (GRC) conduit is in contact with earth or concrete, apply 10mil "pipe wrap" vinyl tape with minimum 1/2 overlap. Do Not direct bury conductors without DFW written approval.
- C. Exterior Conduits: shall be PVC, GRC, or IMC. EMT may be used in exterior covered areas not directly exposed to weather. Above ground PVC shall be supported to NEC minimums or better. Sagging or shrinking conduit found during the warranty period shall be replaced at the contractor's expense. Provide expansion fittings where needed or required.

- D. Conduit Fittings: All EMT fittings shall be steel (no diecast) set-screw for indoor applications, or rain-tight compression for exterior or damp locations. Galvanized fittings, couplings, and connectors shall be galvanized malleable iron or non-corrosive alloy compatible with galvanized conduit and have threaded connections. PVC fittings, couplings, and connectors shall be full weight cementable type. "Condulets" shall be malleable iron or PVC (when installed in a PVC run). Unions and Myers Hubs shall be malleable or galvanized steel. No Zinc, die-cast or pot-metal fittings are allowed. All fittings in a run or area shall be of the same brand and type.
- E. Support: Use only UL approved support methods for the conduit installed. Strut channel shall be galvanized with matching straps.
- F. Sealed Fittings: Provide sealed fittings (Seal-off) where required by local or other code.

#### 2.04 BOXES AND ENCLOSURES

- A. Boxes include device, pull, and junction boxes. Size as required by NEC, or as specified in drawings. In dry locations, boxes shall be galvanized painted steel. In outdoor and wet locations, boxes shall be NEMA 3R weatherproof with weatherproof covers. Exterior device boxes shall have threaded hubs.
- B. Handholes for buried conduit shall be precast concrete with steel top galvanized covers, unless otherwise noted on the Drawings. The covers shall be fabricated from galvanized steel diamond plate and have provisions for grounding the cover and ring. The entire assembly shall be designed with AASHTO HS-20 design loads. Handholes shall be Old Castle or Fog-Tite manufacturer or equal, and correctly sized for the conduit and wire installed. Verify compatibility before ordering. Handhole covers shall be marked for their intended use (ELECT, TEL, ALARM, Etc.). Owner shall provide (3) J-11 Type-1 Handholes for the Contractor to install on this project.

#### 2.05 DEVICES

- A. Switches shall be 20-amp/125-volt toggle-type, Hubbell, Leviton, or other approved type unless called out as special.
- B. General purpose receptacles shall be straight blade, 3-wire, safety-grounded, duplex type, 20-amp/125-volt, Hubbell, Leviton, or other approved type, except where called out as special. GFI-type receptacles shall have an automatic trip device and a sensing and testing circuit. Individual GFCI receptacles shall be 15-amp with 20-amp feed-through rating, unless called out as special.
- C. Device covers for flush switches and receptacles shall be stainless steel. Interior surface mount device boxes shall have a "Raised Industrial Cover" with code compliant device support. Exterior device covers shall be metallic in-use style rainproof.

#### 2.06 CONDUCTORS

- A. All conductors shall be stranded copper (no aluminum), unless otherwise approved by the Owner. Minimum conductor size shall be No. 12 AWG unless otherwise noted. Insulation shall be Type THHN, THWN-2, USE-2, or THW-2, XHHW, 600V, minimum rated 90°C, and be color coded in a consistent manner. All conductors shall be installed in a raceway. No direct burial wire or NM Cable unless approved in writing by Owner.

- B. Conductors shall have colored insulation, except wires larger than No. 6 may be black with colored tape identification at all terminations and splices. Additional colors may be used where such colors will help in identifying wires and different systems. Where conductors of different systems are installed in same raceway, box, or other type enclosure, comply with NEC 300.3 (C) (1). Color-coding of phase conductors shall be accomplished with colored tape approved by Owner for sizes larger than No. 6 AWG. Identify control wire at each end and in all junction boxes, manholes, panels, switchboards, and other enclosures with designated wire number corresponding to control schematics.
- C. Splices above grade shall be in junction or outlet boxes only, using factory manufactured, insulated-wire connectors, or bolted and taped connectors as stated below.
  - 1. Wire No. 10 or Smaller: Pre-insulated twist-on-type spring connector (Wire Nuts) (3M, Ideal, or equal).
  - 2. Wire No. 8 or Larger: Pre-insulated Mechanical Connectors. ILSCO PBTS (or equal). Other methods require Owner approval. Overhead conductors may be spliced using ILSCO "SPA" (or equal) mechanical splices wrapped in rubber splicing tape and overlapped by "Scotch 33" Electrical Tape.
  - 3. Terminator Lugs of No. 10 Wire and Smaller: Insulated, spade-type, tool applied eye connectors.
- D. Underground feeder and branch circuits shall be pulled continuous without splices, unless otherwise shown, or approved in writing by the Owner. In the event that below-grade splices are necessary and approved, they shall be made only by the following approved methods:
  - 1. ILSCO, NSI or equal Mechanical Watertight Underground Splice Kits. ILSCO USPA-SS, or SS SSK. NSI "Polaris Blue" or ISPB, ISPC Series.
  - 2. Solderless connectors (ILSCO "SPA" or equal) overlaid with rubber splicing tape to 2-1/2 times the original insulation thickness, and then covered with (2) half-lap layers of Scotch 33 or equal electrical tape. The splice shall then be sealed with Heat-Shrink type insulating cover (Ideal TS-46 or equal) approved for direct burial.
  - 3. Direct bury or Handhole connector for wire size #10 and smaller: Insulated steel spring twist-on presser connector with plastic cap containing prefilled sealant gel listed for the purpose (Ideal Direct Bury Wire-nut, or equal).

## 2.07 OVERCURRENT PROTECTION

Use only UL listed circuit breakers approved for the panel in which they are installed. "Peanut", half-size, or tandem breakers are not permitted. Circuit breakers installed by contractor for this project shall be new.

## 2.08 LUMINAIRES

- A. Provide the lighting system identified herein and, on the drawings, to obtain a complete and operational system. Furnish lighting fixtures of the types, sizes, and finish as listed on the lighting schedule and on the Drawings. Fixtures shall be new, complete assemblies constructed to ensure full life of components, and minimize amplification and transmission of component noise.
- B. Substituted fixtures must be of equal or better quality than the specified fixtures including general appearance, photometric characteristics, operating temperatures, durability of finish and general quality. The Owner shall approve all substitutes in writing.
- C. Luminaires shall be factory assembled as LED fixtures, unless otherwise specified.



**PART 3 - EXECUTION**

**3.01 PANELS & DISCONNECTS**

- A. Install Panels, Disconnects, Meters, and other equipment at 72" above finished floor/grade unless conditions require adjustments, or drawings note otherwise. Coordinate final mounting height, location, and methods with Owner before installation.
- B. Mount equipment securely to structural members using fasteners intended for the application. Conditions may require additional support methods or backing for a secure mounting. Contractor is responsible for equipment being mounted securely, plumb, and level.

**3.02 GROUNDING**

- A. Grounding system is not shown in its entirety in the drawings Contractor is responsible to provide a code compliant complete grounding system.
- B. Install (2) two 8ft x 5/8" Galvanized Ground Rods where required by code. Connect with # 6 Solid Bare Copper to direct burial clamps. Bonding Jumper shall be #4 stranded copper.

**3.03 RACEWAY INSTALLATION**

- A. Install all conduits level and plumb, following building lines where possible. Field bent conduit shall be free of kinks and flat spots, and be bent and installed in a neat, professional manner. Acceptability is at the discretion of the inspector or Owner.
- B. Connections to exterior weatherproof boxes shall be code compliant. Entry into the top of W/P boxes shall be with factory threaded hubs or Myers Hubs. Entry into side or back shall be in the lower third of box below live parts, and/or utilize insulating locknuts and sealed openings.
- C. Future or spare conduits shall have a pull string installed and the ends capped.

**3.04 ENCLOSURES, BOXES, AND DEVICES**

- A. Mount junction, pull, and device boxes securely to structural material using fasteners approved and appropriate for the application. Mount boxes level and plumb. Maintain adequate clearance to comply with codes and allow ready access for cover removal and replacement.
- B. Seal any unused openings with listed KO seal. Unused or oversized mounting holes shall be sealed with adhesive sealant.
- C. Use appropriate box covers for the environment and application. Mount covers plumb and level using fasteners intended for the purpose. Where gaskets are provided, install them properly with equal material exposed around the cover, so a full seal is achieved.
- D. Handholes and vaults shall be installed bedded with at least six inches of compacted crushed rock or gravel. Top of cover shall be at finished grade level. Where subject to traffic, top of vault shall be flush with surface. Contractor shall be responsible for moving vault if conditions are deemed to contribute to exceptional wear, due to vault's top elevation.

**3.05 DEVICES**

Install switches, receptacles, and other devices in appropriate boxes for the application. Mount devices plumb & straight, solidly connected to the box or surface. Device covers shall fit snugly without gaps or deflection.

**3.06 CONDUCTOR INSTALLATION**

- A. Do not pull any cable or wire in a raceway until conduit system is complete and internal raceway has been cleaned. Strain on cables shall not exceed manufacturer's recommendations during pulling. Pulling shall be done from the conductor and not by the insulation. Use pulling lubricant compatible with insulation and covering that will not cause deterioration of insulation or jacket covers of cables or conductors. Do not make splices except in outlet or junction boxes. Make all feeder cables continuous from origin to panel or equipment terminations without running splices in intermediate pull or boxes, unless specifically indicated on the Drawings or approved in writing by Owner.
- B. All wire shall be stranded copper. Use minimum wire sizes in no case less than shown on the Drawings. Do not exceed conduit fill established by NEC.
- C. Provide each cable or conductor in panels, pull boxes, or troughs with a permanent pressure-sensitive label with suitable color, numbers, or letters for easy identification. Identify control wires at each end and in junction boxes with designated wire numbers corresponding to control schematic drawings.
- D. Provide wires and cables entering equipment or panels with enough slack to eliminate stretched, angular connection. Neatly arrange wiring bundle and fan out to termination panels. Make minimum bending radius for conductors in accord with NEC. Leave at least 6-inch loops or ends at each outlet for installation of devices or fixtures. Roll up all wires in outlet boxes not for connection to a fixture or device at that outlet, connect together, and tape.
- E. Upon completion of cable and wire installation, but before termination to equipment, test each wire for grounds and short circuits. Replace or correct defective wiring.

**3.07 INSTALLATION OF LUMINAIRES**

- A. Fixtures shall be UL listed for the location, environment, and application in which they are installed. All fixtures shall be properly grounded and installed per the manufacture's installation instructions.
- B. Test existing light fixture(s) on pole for function. If the fixtures work properly, re-install them on the pole with proper conduit & wire connections. Provide branch circuit as described in Drawing. Test existing photocell (PC). If existing PC or fixture(s) are not functional, contact Owner for a replacement.

**3.08 PERMITS**

Contractor is responsible for the purchase of all electrical permits for this project. Contractor is to schedule all inspections with L&I and is solely responsible for any corrections or citations issued. Email a copy of the active permit to [david.miller@dfw.wa.gov](mailto:david.miller@dfw.wa.gov) before starting work. Permit must be "finaled" before final acceptance will be given.

END OF SECTION 16000

## ON-SITE SEPTIC SYSTEM DESIGN

COUNTY : YAKIMA

DATE : AUGUST 26 , 2016

System Type : Gravity distribution with gravel-less chamber laterals.

Owner: Washington State Department of Fish & Wildlife  
600 Capital Way N.  
Olympia WA 98501

Location of Property : off Mt Vale Road

Parcel : 161624-21001

Design is for an office and a restroom with 240 gallons per day MAXIMUM.

**SEPTIC DESIGN  
SPECIALIST, LLC**

Septic Design Specialist  
Janoah Nicholls  
301 Brathovde Rd  
Selah, WA 98942

Phone: 509-949-1275

Fax: 509-697-4267

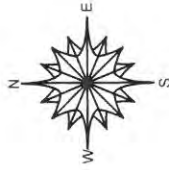
E-mail: janoahnicholls@gmail.com

In the event soil or site conditions vary from design or testhole logs, contact Septic Design Specialist, Janoah Nicholls immediately at 509-949-1275. Design may be void if changes are made without approval. Designs not to be duplicated without express written consent.

DESIGN APPROVED FOR CONSTRUCTION

BY: *Ranulfo Pieg*

DATE: 9-8-16 Yakima County Health District



EXISTING HOME  
TO BE REPLACED  
BY A PROPOSED  
OFFICE BUILDING

LINE (SEE NOTES)

APPROXIMATE  
EXISTING  
SYSTEM  
LOCATION

MT VALE ROAD

25' X 75'  
RESERVE  
AREA

SLOPE

OFFICE

SHOP

3 BR  
HOME

WELL

LINE (SEE  
NOTES)

NOTES:

- THE FOUR INCH SCH 40 PVC TRANSPORT PIPE SHOULD BE ENCASED INSIDE A SIX INCH SCH 40 PVC TRANSPORT PIPE.
- THE 1.25 INCH SCH 40 PVC TRANSPORT LINE SHOULD BE ENCASED INSIDE A 2 INCH SCH 40 PVC LINER UNDER VEHICLE TRAFFIC.
- PROPERTY LINE LOCATION ESTIMATED.
- SMALL MESH CHICKEN WIRE REQUIRED, TO PREVENT Gopher INTRUSION INTO THE INFILTRATOR CHAMBERS.



NOTES:

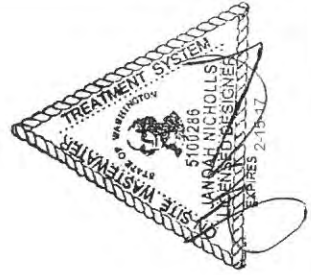
- 1000 GALLON TWO COMPARTMENT SEPTIC TANK
- DISTRIBUTION BOX
- CLEANOUT
- MONITORING PORTS
- 1000 GALLON TWO COMPARTMENT LIFT STATION

SETBACKS:

- COMMUNITY / 2 PARTY WELL  
1. 100' MIN SEPTIC SYSTEM
- PRIVATE WELLS / OPEN WATER  
1. 50' MIN SEPTIC SYSTEM  
2. 100' MIN DRAINFIELD
- SEASONAL DRAINAGE  
1. 30' MIN FROM SEPTIC SYSTEM
- CUT BANK  
1. 25' MIN FROM DRAINFIELD
- WATERLINES  
1. 10' MIN ALL WATERLINES TO SEPTIC SYSTEM
- SEPTIC SYSTEM  
1. 5' MIN PROPERTY, EASEMENT LINES AND DRIVEWAYS
- TANKS & DISTRIBUTION BOX  
1. 5' MIN BUILDINGS  
2. 5' MIN DRAINFIELD / RESERVE
- DRAINFIELD / RESERVE  
1. 10' MIN ALL BUILDINGS  
2. 7' MIN CENTERS  
3. 7' SEPERATION DRAINFIELD AND RESERVE AREA
- 5' MIN PROPERTY AND EASEMENT LINES

LEGEND

- 1000 GALLON SEPTIC TANK
- TEST HOLE
- CLEANOUT
- DRIVEWAYS



**SEPTIC DESIGN SPECIALIST, LLC**  
301 BRATHOVDE RD  
SELAH, WASHINGTON 98901  
Phone: 509.949.1275  
Fax: 509.697.4267  
Email: JanoahNicholls@gmail.com

**WA State Dept of Fish & Wildlife**  
600 Capital Way N.  
Olympia WA 98501  
Property: Mt Vale Road  
Parcel: 161624-21001  
Office building with 240 gallons/day MAX

**SCALE: 1" = 100'**  
**DATE: 8-23-16**  
**PLOT PLAN**  
**SEPTIC SYSTEM PLAN**

THIS IS NOT A SURVEY AND THE PROPERTY LINES SHOWN ARE NOT TO BE USED FOR A SURVEY. THEY MAY NEED TO BE LOCATED OR A SURVEY DONE TO GET THE EXACT LOCATIONS.

# DRAIN FIELD CALCULATIONS

STEP ONE: CALCULATE THE MAXIMUM DAILY SEWAGE FLOW:

OFFICE FOR UP TO 5 EMPLOYEES  
PEAK FLOW = 240 GPD

ABSORPTION AREA NEEDED FOR SITE:

$$\begin{array}{rcl} 240 & \times & .4 \\ \text{PEAK FLOW} & \text{APPLICATION RATE} & \text{SQUARE FEET} \end{array} = 600$$

MAXIMUM TRENCH DEPTH:

$$\begin{array}{rcl} 72" & - & 36" \\ \text{DEPTH OF TEST HOLE FROM RESTRICTIVE LAYER} & \text{RESTRICTIVE LAYER} & \text{TOTAL DEPTH FROM ORIGINAL GRADE TO BOTTOM OF DRAINFIELD} \end{array} = 36"$$

STEP FOUR: SELECT SYSTEM OPTION:

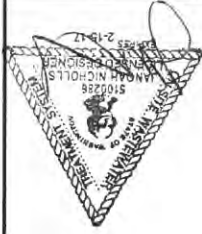
GRAVITY DISTRIBUTION GRAVEL-LESS DRAIN FIELD  
STANDARD TRENCH: 12" MINIMUM TO 36" MAXIMUM DEPTH FROM ORIGINAL GRADE TO THE BOTTOM OF THE GRAVELLESS INFILTRATION CHAMBER.

LATERALS REQUIRED

$$\begin{array}{rcl} 600 & \times & .6 \\ \text{SQ. FT.} & \text{REDUCTION FACTOR} & \text{SQ. FT.} \end{array} = 360$$

$$\begin{array}{rcl} 11.32 \times 32 & + & 1.6 \times 2 \\ \text{SQ FT CHAMBERS} & \text{SQ FT CAPS} & \text{SQ FT TOTAL} \end{array} = 362.24 + 3.2 = 365.44$$

2 LATERALS WITH 16 QUICK FOUR INFILTRATOR CHAMBERS  
APPROXIMATELY 64 FOOT LONG

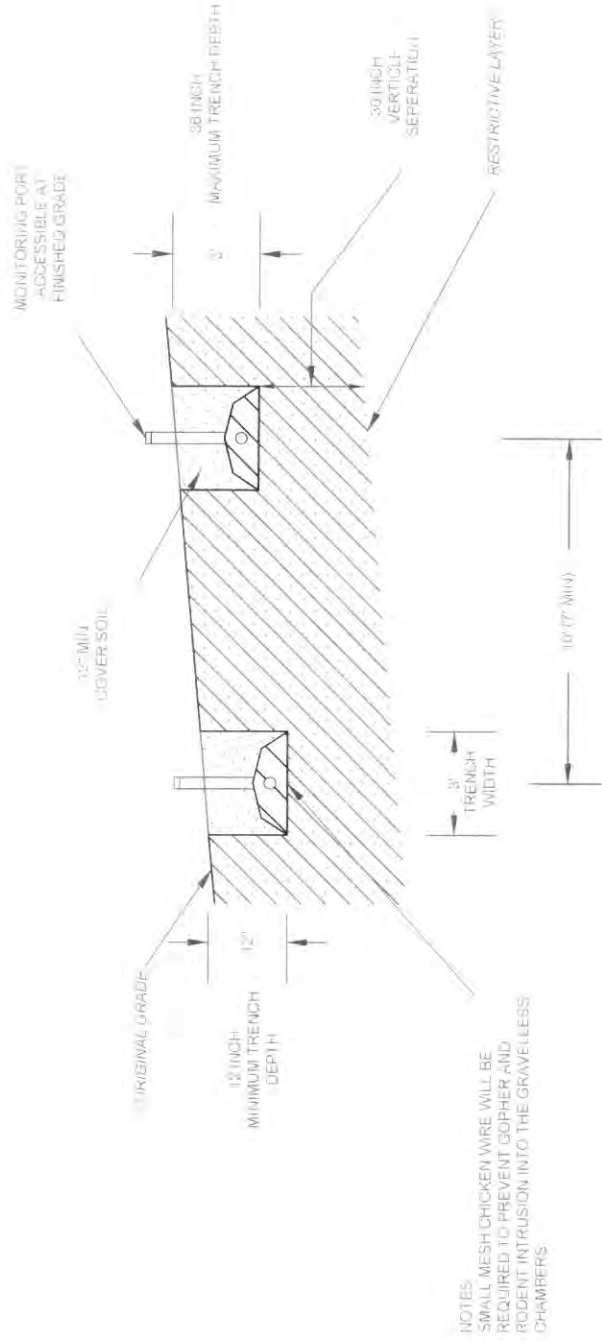


FILE COPY ONLY	SEPTIC SYSTEM PLAN	DATE: 8-23-16	Office building with 240 gallons/day MAX
		SCALE:	WA State Dept of Fish & Wildlife 600 Capital Way N. Olympia WA 98501 Property: Mt Vale Road Parcel: 161624-21001

SEPTIC DESIGN SPECIALIST, LLC  
301 BRATHORDE RD  
SELAH, WASHINGTON 98591  
Phone: 509.949.1275  
Fax: 509.697.4267  
Email: jmoahNichols@gmail.com

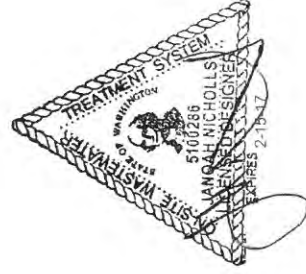


# LATERAL WIDTH CROSS SECTION



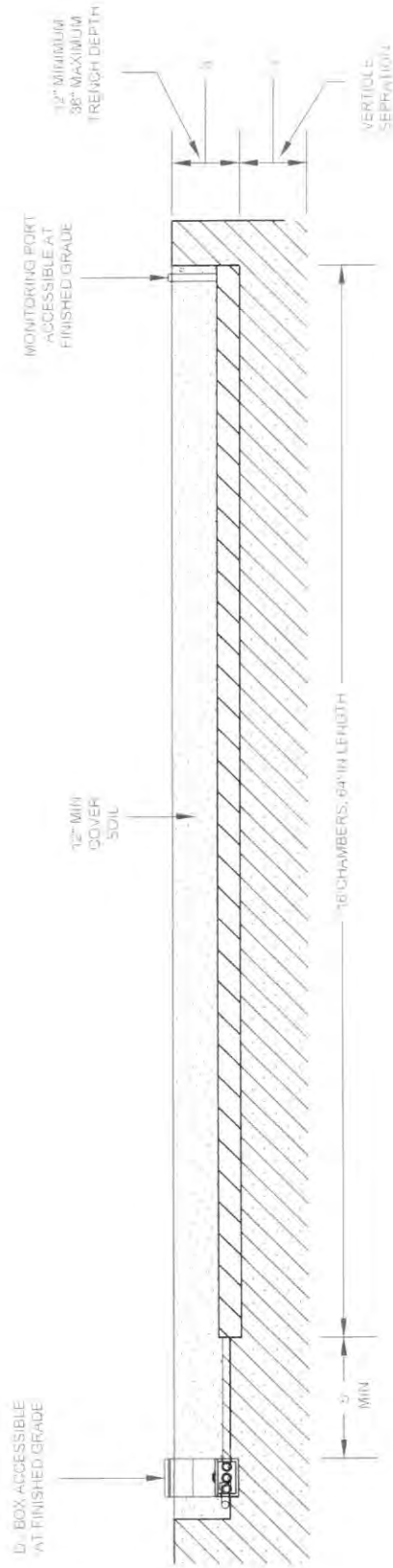
NOTES  
SMALL MESH CHICKEN WIRE WILL BE  
REQUIRED TO PREVENT GOPHER AND  
RODENT INTRUSION INTO THE GRAVELLESS  
CHAMBERS

TRANSPORT PIPE 4" 3034 SEWER PIPE  
GRAVELLESS CHAMBERS: INFILTRATOR  
DISTRIBUTION METHOD: GRAVITY / D-BOX  
NUMBER OF LATERALS: 2  
LATERAL LENGTH: 16 CHAMBERS / APPROXIMATELY 64' LONG  
LATERAL SPACING: 7' MIN CENTERS  
CHAMBER TYPE: INFILTRATOR

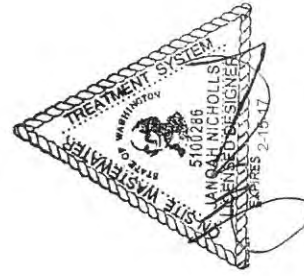


<b>SEPTIC DESIGN SPECIALIST, LLC</b> 301 BRATHOVDE RD SELAH, WASHINGTON 98901 Phone: 509.949.1275 Fax: 509.697.4267 Email: JanoahNicholls@gmail.com	<b>WA State Dept of Fish &amp; Wildlife</b> 600 Capital Way N. Olympia WA 98501 Property: Mt Vale Road Parcel: 161624-21001 Office building with 240 gallons/day MAX		LATERAL WIDTH CROSS SECTION	SEPTIC SYSTEM PLAN	PAGE 2 OF 8
	SCALE: VARIES	DATE: 8-23-16			

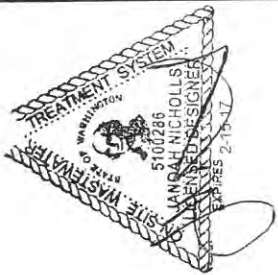
# LATERAL LENGTH CROSS SECTION



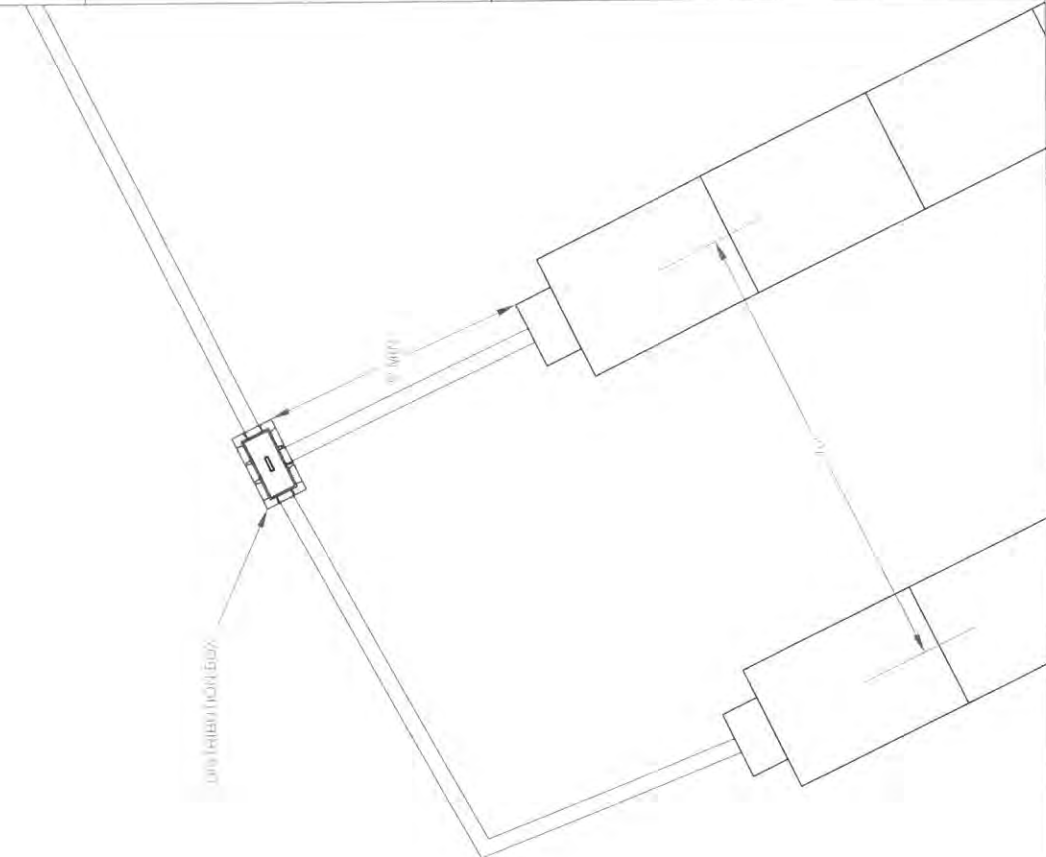
TRANSPORT PIPE: 4" 3034 SEWER PIPE  
 GRAVELLESS CHAMBERS INFILTRATOR  
 DISTRIBUTION METHOD: GRAVITY / D-BOX  
 NUMBER OF LATERALS: 2  
 LATERAL LENGTH: 16 CHAMBERS / APPROXIMATELY 64' LONG  
 LATERAL SPACING: 7' MIN CENTERS  
 CHAMBER TYPE: INFILTRATOR



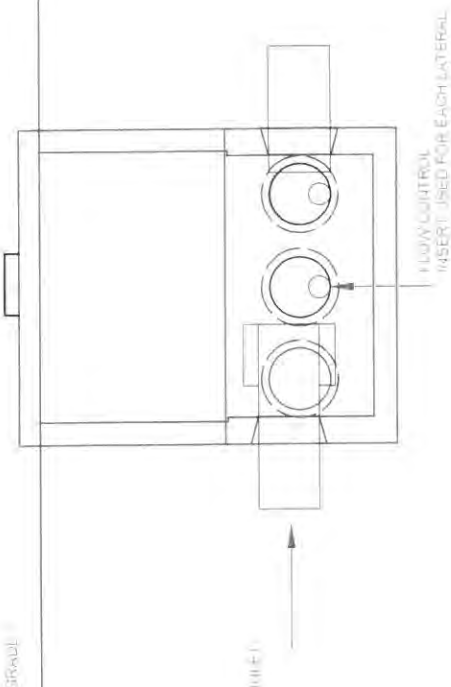
<b>SEPTIC DESIGN SPECIALIST, LLC</b> 301 BRATHOVDE RD SELAH, WASHINGTON 98901 Phone: 509.949.1275 Fax: 509.697.4267 Email: JanoahNicholls@gmail.com	<b>WA State Dept of Fish &amp; Wildlife</b> 600 Capital Way N. Olympia WA 98501 Property: Mt Vale Road Parcel: 161624-21001 Office building with 240 gallons/day MAX		LATERAL LENGTH CROSS SECTION	PAGE 3 OF 8
	SCALE: VARIES	DATE: 8-23-16	SEPTIC SYSTEM PLAN	



D - BOX TOP VIEW



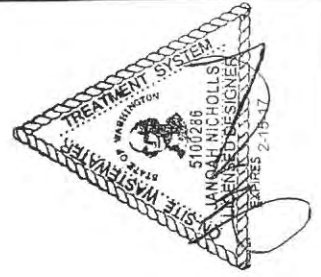
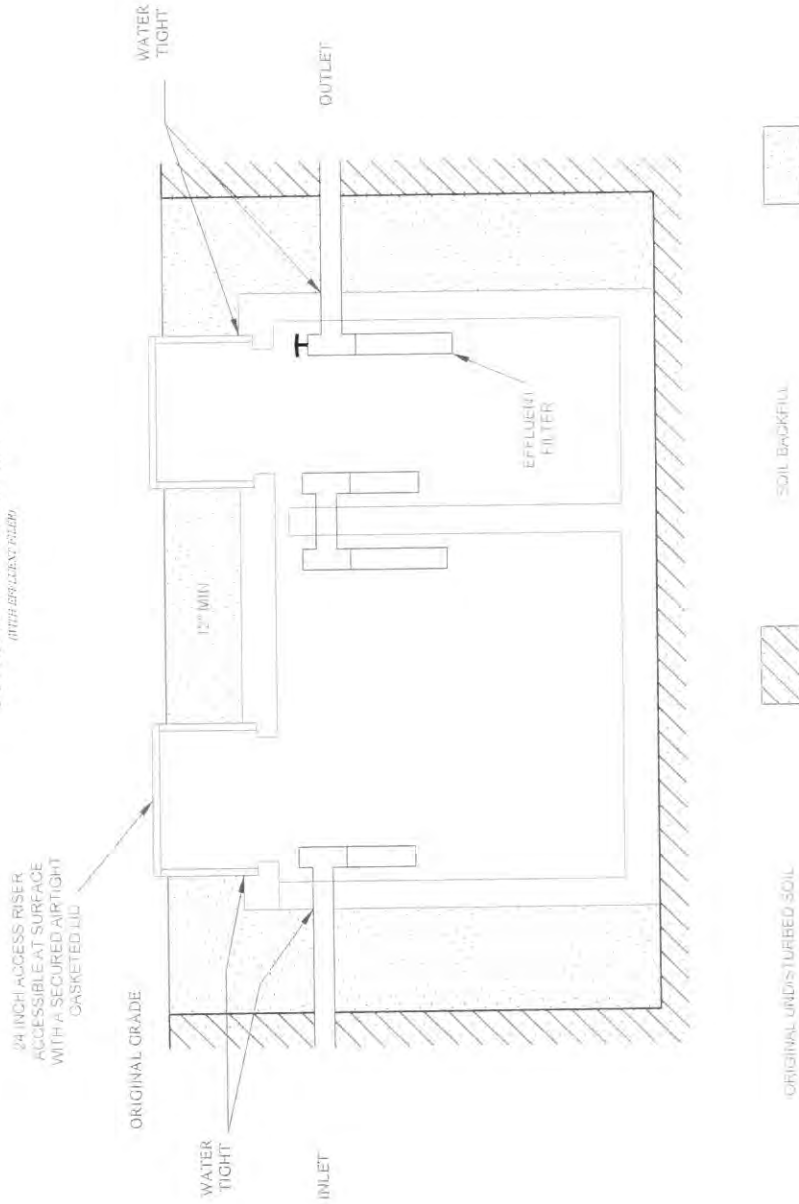
D - BOX CROSS SECTION



<b>SEPTIC DESIGN SPECIALIST, LLC</b> 301 BRATHOVDE RD SELAH, WASHINGTON 98901 Phone: 509.949.1275 Fax: 509.697.4267 Email: JanoahNicholls@gmail.com	<b>WA State Dept of Fish &amp; Wildlife</b> 600 Capital Way N. Olympia WA 98501 Property: Mt Vale Road Parcel: 161624-21001 Office building with 240 gallons/day MAX		SCALE: VARIES	D - BOX DETAIL	PAGE 4 OF 8
	DATE: 8-23-16		SEPTIC SYSTEM PLAN		

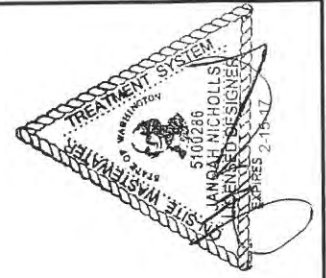
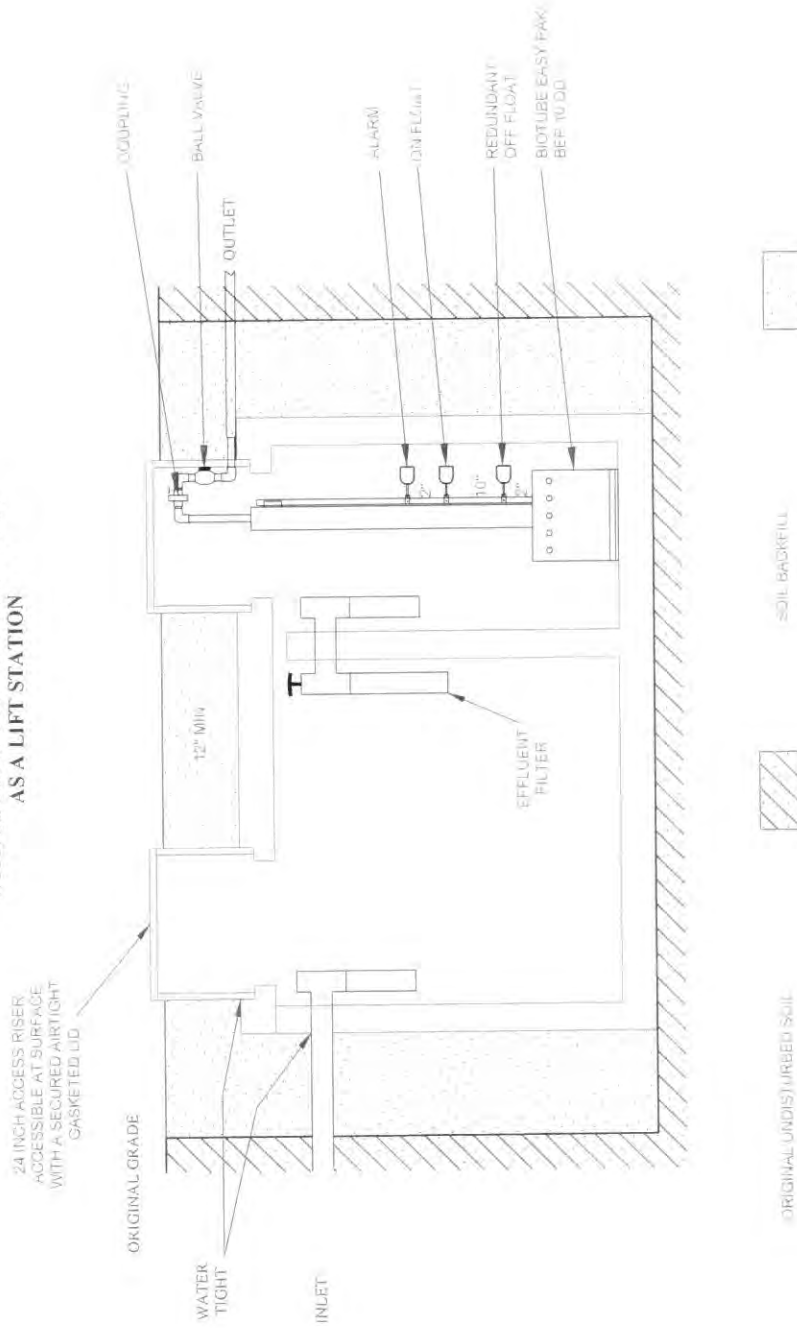


# 1000 GALLON SEPTIC TANK TYPICAL INSTALLATION (WITH EFFLUENT FILTER)

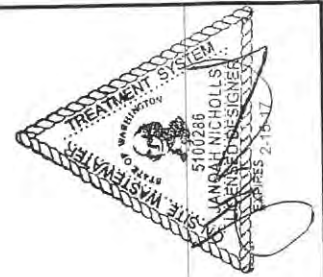


<b>SEPTIC DESIGN SPECIALIST, LLC</b> 301 BRATHOVDE RD SELAH, WASHINGTON 98901 Phone: 509.949.1275 Fax: 509.697.4267 Email: JanoahNicholls@gmail.com	<b>WA State Dept of Fish &amp; Wildlife</b> 600 Capital Way N. Olympia WA 98501 <b>Property: Mt Vale Road</b> <b>Parcel: 161624-21001</b> <b>Office building with 240 gallons/day MAX</b>		1000 GALLON SEPTIC TANK	SEPTIC SYSTEM PLAN	PAGE 5 OF 8
	SCALE: VARIES	DATE: 8-23-16			

1000 GALLON SEPTIC TANK  
WITH SECOND COMPARTMENT USED  
AS A LIFT STATION



<b>SEPTIC DESIGN SPECIALIST, LLC</b> 301 BRATHOVDE RD SELAH, WASHINGTON 98901 Phone: 509.949.1275 Fax: 509.697.4267 Email: JanoahNicholls@gmail.com	<b>WA State Dept of Fish &amp; Wildlife</b> 600 Capital Way N. Olympia WA 98501 Property: Mt Vale Road Parcel: 161624-21001 Office building with 240 gallons/day MAX		1000 GALLON PUMP S.T.	PAGE 6 OF 8
	SCALE: VARIES	DATE: 8-23-16	SEPTIC SYSTEM PLAN	



## PRESSURIZED SEPTIC SYSTEM DESIGN SPECIFICATIONS

PIPE STANDARD: SCH 40  
DAILY FLOW: 240 GALLONS PER DAY  
TRANSPORT DIAMETER: 1.25 INCH  
TRANSPORT PIPE LENGTH: 450 FOOT  
ELEVATION GAIN: 25 FOOT  
PUMP CAPACITY: 10 GALLONS PER MINUTE  
PUMP HEAD: 50 FOOT  
MAXIMUM GALLONS PER DOSE: 30  
DOSEING FREQUENCY: ONCE EVERY SEVERAL DAYS

### PUMP MODEL:

EASY PAK BEP 10 DD  
10 GPM & 50 FOOT HEAD

### TANKS

1000 GALLON TWO COMPARTMENT TANK  
THE SECOND CHAMBER WILL BE USED AS A LIFT STATION.

### PIPE:

- GRAVITY  
4" 3034 SEWER PIPE
- PRESSURE  
SCH 40  
1.25" DIAMETER TRANSPORT

### DESIGN NOTES:

- THE SYSTEM IS DESIGNED WITH A MAXIMUM TRANSPORT LINE LENGTH OF 500 FEET.
- THE TRANSPORT LINE SHOULD BE SET UP TO DRAIN BETWEEN DOSES TO PREVENT FREEZING.
- TRANSPORT PIPE MUST BE SCHEDULE 40 WITH TWO FOOT MINIMUM COVER SOIL.
- THE RESTROOM MUST NOT HAVE A FLOOR DRAIN EMPTYING INTO THE LIFT STATION.
- THERE MAY BE ADDITIONAL DESIGN REQUIREMENTS TO CROSS MOUNT VALE ROAD

PAGE 7 OF 8	
SEPTIC SYSTEM PLAN	
SCALE:	DATE: 8-23-16
WA State Dept of Fish & Wildlife 600 Capital Way N. Olympia WA 98501 Property: Mt Vale Road Parcel: 161624-21001 Office building with 240 gallons/day MAX	
SEPTIC DESIGN SPECIALIST, LLC 301 BRATHOVDE RD SELAH, WASHINGTON 98901 Phone: 509.949.1275 Fax: 509.697.4267 Email: JanoahNicholls@gmail.com	

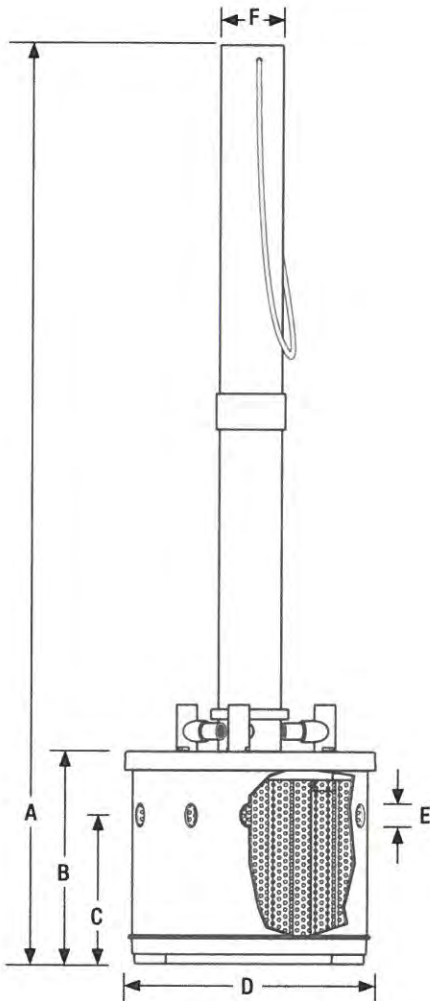
## EasyPak™ Pump Vault

### Materials of Construction

Vault body	PVC
Vault top	ABS
Vault base	Fiberglass
Flow inducer	PVC
Lifting strap	Hollow-braided poly

### Dimensions, in. (mm)

A - Overall height (adjustable)	64 (1625)
B - Vault height	15 (380)
C - Inlet hole center height	12 (305)
D - Vault diameter	15.75 (400)
E - Inlet hole diameter (8 total)	1.38 (35)
F - Flow inducer diameter, nominal	4 (100)



*EasyPak® pump vault*

## Biotube® Filter Cartridge

### Materials of Construction

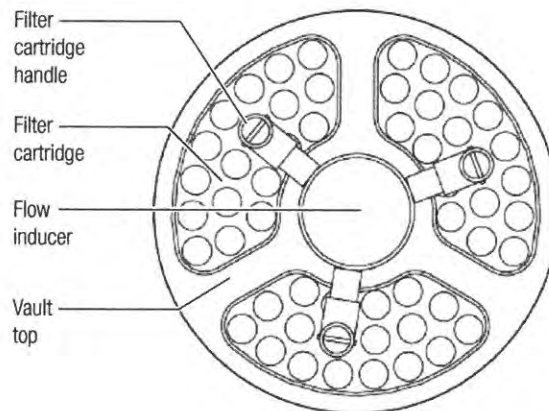
Filter tubes	Polypropylene
Cartridge end plates	Polyurethane
Handle	PVC

### Dimensions, in. (mm)

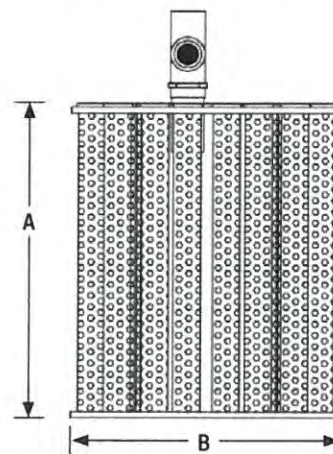
A - Cartridge height	12.0 (305)
B - Cartridge width	10.3 (262)

### Performance

Number of filter cartridges	3
Biotube® mesh opening	0.125 in. (3 mm)
Total filter flow area	4.5 ft² (0.4m²)
Total filter surface area	14 ft² (1.3m²)
Maximum flow rate	75 gpm (4.7 L/sec)



*Filter cartridges in vault, top view*



*Biotube® filter cartridge, front view*



## 4-in. (100-mm) Turbine Effluent Pumps

EasyPak™ Turbine Effluent Pumps are constructed of lightweight, corrosion-resistant stainless steel and engineered plastics.

Power cords for EasyPak turbine effluent pumps are 10-ft (3.1 m) 16/3 Type SOOW 600-V motor cable, suitable for Class I, Division 1 and Division 2 applications (not compatible with Franklin Electric Super Stainless motors).

### Materials of Construction

Discharge:	Glass-filled polypropylene (10- and 30-gpm) stainless steel (50-gpm)
Discharge bearing:	Engineered thermoplastic (PEEK)
Diffusers:	Glass-filled PPO (Noryl GFN3)
Impellers:	Celcon® acetal copolymer (10-gpm) Noryl GFN3 (30- and 50-gpm)
Intake screens:	Polyethylene
Suction connection:	Glass-filled polypropylene (10-gpm) stainless steel (30- and 50-gpm)
Drive shaft:	Stainless steel, 300 series
Coupling:	Sintered stainless steel, 300 series
Shell:	Stainless steel, 300 series
Motor:	Filled with lubricating coolant. Includes thermal overload protection.

### Specifications

Nominal flow (gpm)	Length in. (mm)	Weight lb (kg)	Discharge in., nominal*	Impellers
10	22.0 (559)	23.0 (10.4)	1.25	6
30	20.5 (508)	21.0 (9.5)	1.25	3
50	19.5 (495)	24.0 (10.9)	2.00	2

### Performance

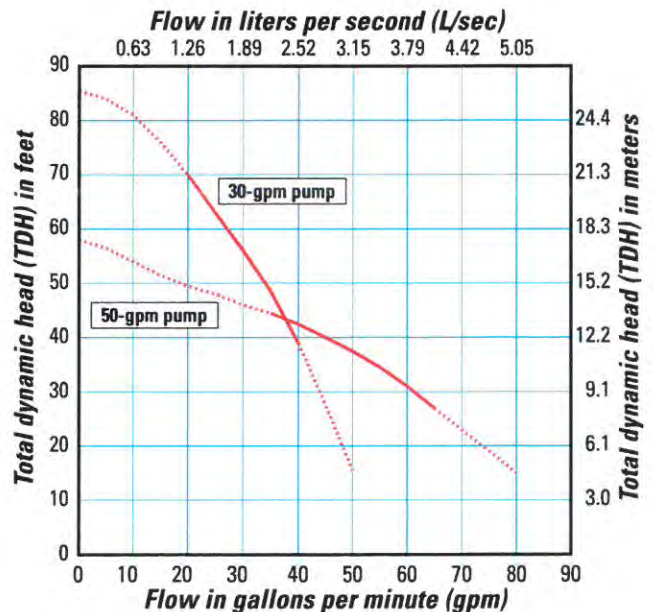
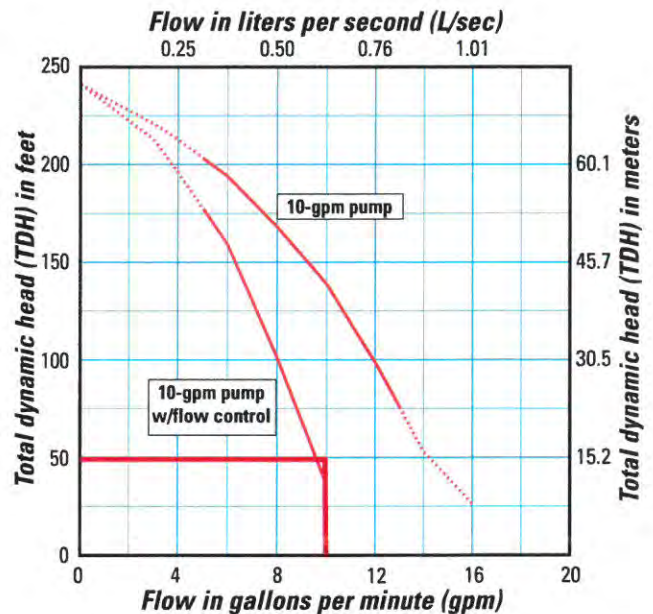
Nominal flow (gpm)	Horsepower (kW)	Design flow amps	Rated cycles per day	Minimum liquid level, in. (mm)**
10	0.5 (0.37)	12.4	300	16 (406)
30	0.5 (0.37)	11.9	300	20 (508)
50	0.5 (0.37)	12.1	300	24 (610)

\* Discharge is female NPT threaded, U.S. nominal size, to accommodate Orenco® discharge hose and valve assemblies. Consult your Orenco Distributor about fittings to connect discharge assemblies to metric-sized piping.

\*\* Minimum liquid level is for single pumps when installed in an Orenco Biotube® EasyPak™ Pump Vault.

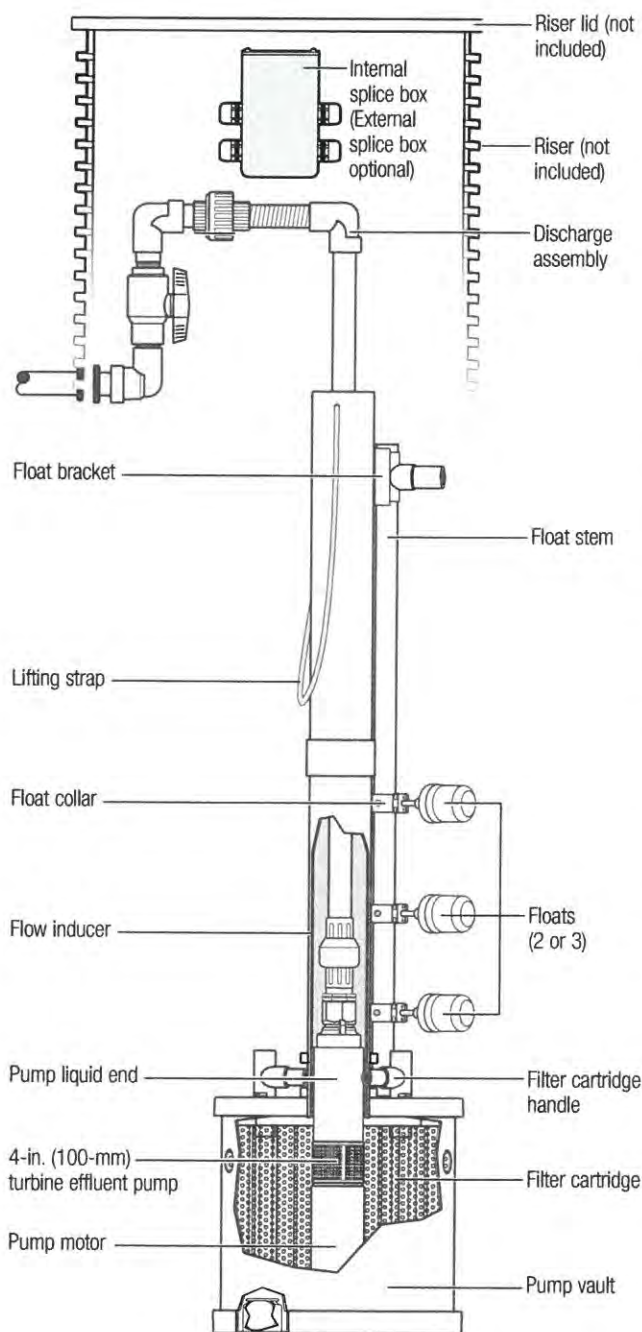
## Pump Curves

Pump curves, such as those shown here, can help you determine the best pump for your system. Pump curves show the relationship between flow (gpm) and pressure (TDH), providing a graphical representation of a pump's optimal performance range. Pumps perform best at their *nominal flow rate*, measured in gpm.



# Biotube® EasyPak™ Pump Package

## 60-Hz Series Pump Packages



**Biotube EasyPak® pump package components.**  
(Control panel not shown: see p. 4.)

## General

Orenco's Biotube® EasyPak™ Pump Package is the first complete pump package specifically for filtering and pumping effluent from pump tanks. The EasyPak pump package makes it easy to select and install the correct pump package for the pump tank. (U.S. Patents #4,439,323 and #5,492,635. Additional U.S. and international patents pending.)

This document provides detailed information on the EasyPak pump vault, effluent filter cartridges, 4-in. (100-mm) 60-Hz turbine effluent pump, and control panel. For more information on other EasyPak components, see the following Orenco technical documents:

- Float Switch Assemblies (NTD-MF-MF-1)
- Discharge Assemblies (NTD-HV-HV-1)
- Splice Boxes (NTD-SB-SB-1)
- External Splice Box (NTD-SBEX-1)

## Applications

The Biotube EasyPak pump package is designed to filter and pump effluent from a pump tank to gravity or pressurized dispersal.

The unique low profile, submersible design of the pump vault makes it well suited to applications where large reserve volumes are required, or when pumping from near the bottom of the tank.

Complete packages for on-demand dosing or timed dosing at 10, 30, and 50 gpm (0.6, 1.9, and 3.2 L/sec) and 50 Hz or 60 Hz are available.

## Standard Models

BEP10DD, BEP10DDCW, BEP30TDD, BEP30TDDCW,  
BEP50TDD, BEP50TDDCW

## Product Code Diagram

BEP 10 DD -

Standard options:  
Blank = standard discharge assembly  
CW = cold weather discharge assembly  
DB = drainback discharge assembly  
SX = external splice box  
Q = cam lock  
MFV = non-mercury float

Control panel application:  
DD = demand-dosing  
TDA = timed-dosing, analog timer  
TDD = timed-dosing, digital timer

Pump flow rate, nominal:  
10 = 10 gpm (0.6 L/sec)  
30 = 30 gpm (1.9 L/sec)  
50 = 50 gpm (3.2 L/sec)

Biotube® EasyPak™ pump vault, 15-inch (380-mm) vault



## Control Panel (Demand Dose)

Orenco's EasyPak® demand dose control panels are specifically engineered for the EasyPak pump package and are ideal for applications such as demand dosing from a pump tank into a conventional gravity drainfield.

### Materials of Construction

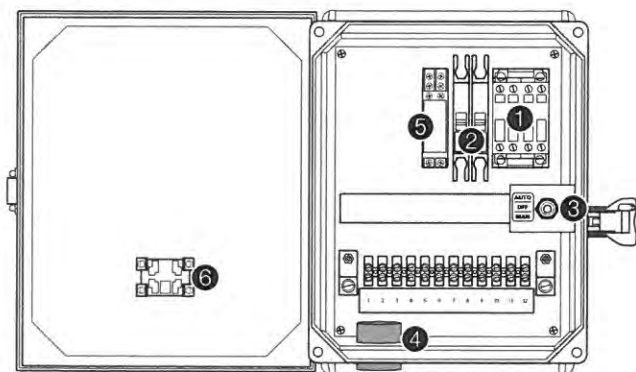
Enclosure	UV-resistant fiberglass, UL Type 4X
Hinges	Stainless steel

### Dimensions, in. (mm)

A - Height	11.5 (290)
B - Width	9.5 (240)
C - Depth	5.4 (135)

### Specifications

Panel ratings	120 V, 3/4 hp (0.56 kW), 14 A, single phase, 60 Hz
1. Motor-start contactor	16 FLA, 1 hp (0.75 kW), 60 Hz; 2.5 million cycles at FLA (10 million at 50% of FLA)
2. Circuit breakers	120 V, 10 A, OFF/ON switch, Single pole
3. Toggle switch	Single-pole, double-throw HOA switch, 20 A
4. Audio alarm	95 dB at 24 in. (600 mm), warble-tone sound, UL Type 4X
5. Audio alarm silence relay	120 V, automatic reset, DIN rail mount
6. Visual alarm	7/8-in. (22-mm) diameter red lens, "Push-to-silence", 120 V LED, UL Type 4X



Control panel, demand-dose

## Control Panel (Timed Dose)

Orenco's EasyPak timed dose control panels are specifically engineered for the EasyPak pump package and are ideal for applications such as timed dosing from a pump tank into a pressurized drainfield or mound. Analog or digital timers are available.

### Materials of Construction

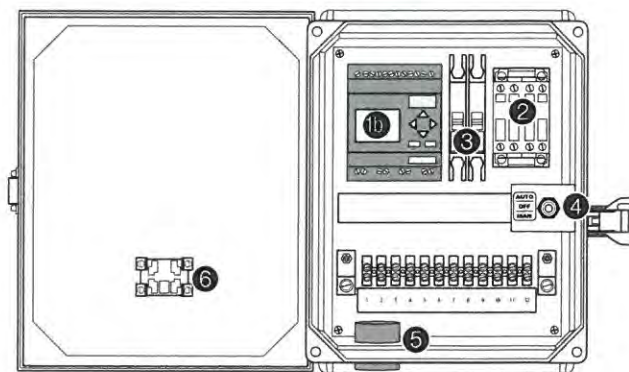
Enclosure	UV-resistant fiberglass, UL Type 4X
Hinges	Stainless steel

### Dimensions, in. (mm)

A - Height	11.5 (290)
B - Width	9.5 (240)
C - Depth	5.4 (135)

### Specifications

Panel ratings	120 V, 3/4 hp (0.56 kW), 14 A, single phase, 60 Hz
Dual-mode	Programmable for timed- or demand-dosing (digital timed-dosing panels only)
1a. Analog timer	120 V, repeat cycle from 0.05 seconds to 30 hours. Separate variable controls for OFF and ON time periods
1b. Digital timer	120-V programmable logic unit with built-in LCD screen and programming keys. Provides control functions and timing for panel operation
2. Motor-start contactor	16 FLA, 1 hp (0.75 kW), 60 Hz; 2.5 million cycles at FLA (10 million at 50% of FLA)
3. Circuit breakers	120 V, 10 A, OFF/ON switch, Single pole 120 V
4. Toggle Switch	Single-pole, double-throw HOA switch, 20 A
5. Audio alarm	95 dB at 24 in. (600 mm), warble-tone sound, UL Type 4X
6. Visual alarm	7/8-in. (22-mm) diameter red lens, "Push-to-silence", 120 V LED, UL Type 4X



Control panel, timed-dose (digital timer model shown)

# Product #1627M Notes And Details

Tank Construction utilizes 6000+ p.s.i. Concrete and Grade 60 Rebar

GALLON CALCS:

1ST COMP: 4'-8" X 5'-0" X 4'-0" X 7.48 = 698 GALS

2ND COMP: 2'-4" X 5'-0" X 4'-0" X 7.48 = 349 GALS

RISERS:

PVC: 24" DIA & FIB. COVER (TO GRADE)

CONCRETE: 24" DIA X 8" OR 12" (6" BELOW GRADE)

BEDDING: 4" PEA GRAVEL OR COMPACTED

CRUSHED GRAVEL (NO WATER PRESENT)

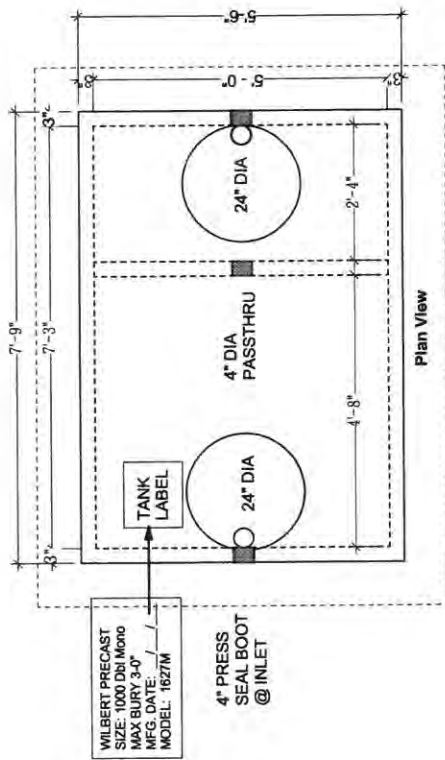
EXCAVATION: 1' LARGER EACH WAY THAN TANK DIM.

## Min. Bury Depth For No Uplift Ring Required with Water at Grade

1000 Gallon Single or Double Compartment Monolithic  
Non-Traffic  
4'

## Min. Bury Depth For No Uplift Ring Required with Water at Top of Tank

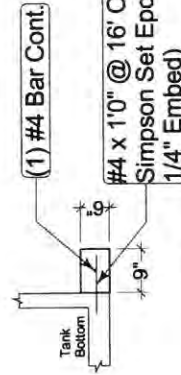
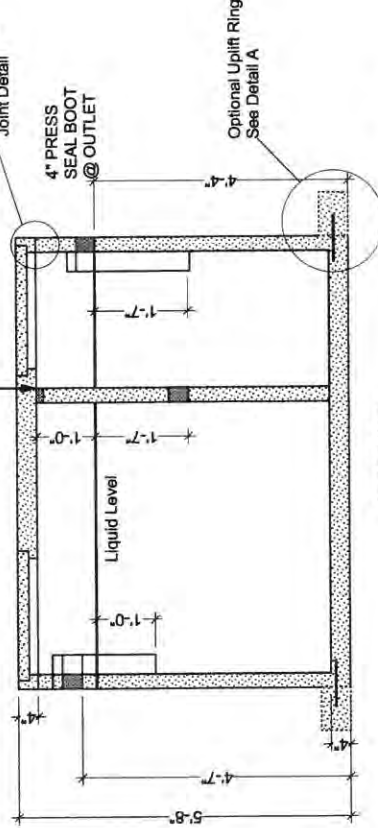
1000 Gallon Single or Double Compartment Monolithic  
Non-Traffic  
2'



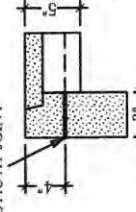
Optional Uplift Ring 9'3" x 7'0"  
Outside Dimensions

1" H x 5' LONG SLOT  
FOR VENT

See Detail B for  
Joint Detail



1" X 1" CONSEAL  
CS-101 BUTYL  
MASTIC AT JOINT



Section View

Scale: 1/2" = 1'-0"

Detail A

Detail B

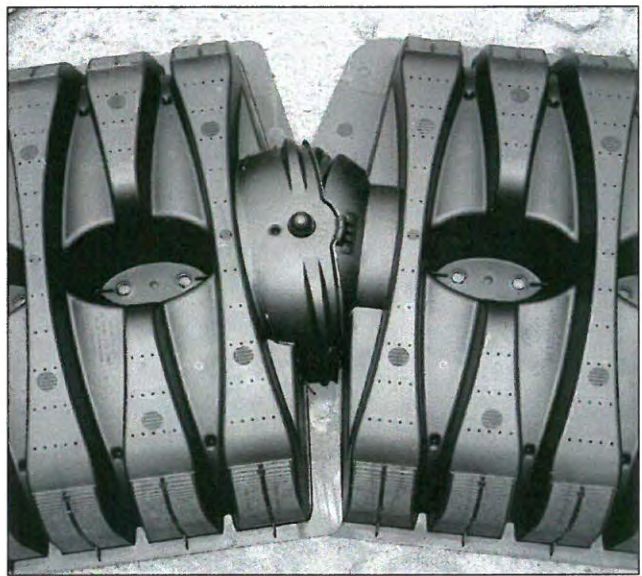
1000 GALLON DOUBLE COMPARTMENT MONO SEPTIC TANK PRODUCT #1627M	<b>NOTES:</b> Reinforcing: #4 Bars @ 6" O.C.E.W. in Top, (2) #4 Each Side of Access 6x6 10 Ga. Wire Mesh in Sides up 12" from Bottom 6 x6 10 Ga. Wire Mesh in Bottom	Revision # and Date Cust. Int. Drawn By: Dan Newbury Date: 5/4/2011	<b>WILBERT PRECAST, INC.</b> 2215 E. BROOKLYN AVE - SPOKANE, WA 99217 TOLL FREE 1-800-888-4573 (509) 325-4573 FAX (509)-325-5098 WILBERTPRECAST.COM SPOKANE - LEWISTON - YAKIMA
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**Quick4<sup>PLUS</sup>**  
STD LOW PROFILE CHAMBER

**Quick4<sup>PLUS</sup>**  
EQ36 LOW PROFILE CHAMBER

## Quick4<sup>®</sup> Plus Low Profile Chamber Installation Instructions



**Note:** When installing in sandy soil conditions, wheeled construction equipment is prohibited from crossing the trenches during backfilling. The use of tracked equipment is approved and recommended with only 6" of cover.



## Before You Begin

This document addresses the installation of Quick4 Plus Standard Low Profile (LP) and Quick4 Plus Equalizer 36 Low Profile (LP) chambers. The Quick4 Plus Standard LP and Quick4 Plus Equalizer 36 LP chambers are designed for shallow placement applications. All chambers may only be installed according to state and/or local regulations. If unsure of the installation requirements for a particular site, contact the local health department. Like conventional systems, the soil and site conditions must be approved prior to installation. Conduct a thorough site evaluation to determine the proper sizing and siting of the system before installation.

### Materials and Equipment Needed

- |   |   |
|---|---|
| <input type="checkbox"/> Quick4 Plus Chambers           | <input type="checkbox"/> Utility Knife                  |
| <input type="checkbox"/> Quick4 Plus Endcaps            | <input type="checkbox"/> 1 1/4-inch Drywall Screws*     |
| <input type="checkbox"/> Quick4 Plus All-in-One Endcaps | <input type="checkbox"/> Drill                          |
| <input type="checkbox"/> PVC Pipe and Couplings         | <input type="checkbox"/> Hole Saw                       |
| <input type="checkbox"/> Backhoe                        | <input type="checkbox"/> Screw Gun*                     |
| <input type="checkbox"/> Laser, Transit or Level        | <input type="checkbox"/> Small Valve-cover Box*         |
| <input type="checkbox"/> Tape Measure                   | <input type="checkbox"/> 4-inch Cap for Inspection Port |
| <input type="checkbox"/> Shovel and Rake                | * Optional  |

### These guidelines for construction machinery must be followed during installation:

- ☐ Avoid direct contact with chambers when using construction equipment. Chambers require a 12-inch minimum of compacted cover to support a wheel load rating of 16,000 lbs/axle or equivalent to an AASHTO H-10 load rating.
- ☐ When installing in sandy soil conditions, wheeled construction equipment is prohibited from crossing trenches during backfilling. Use of tracked vehicles is approved and recommended with only 6" of cover.
- ☐ Avoid stones larger than 3 inches in diameter in backfill. Remove stones this size or larger that are in contact with chambers.

## Excavating and Preparing the Site

*Note: As is the case with conventional systems, do not install the systems in wet conditions or in overly moist soils, as this causes machinery to smear the soil.*

1. Stake out location of all trenches and lines. Set elevations of the tank, pipe, and trench bottom.
2. Install sedimentation and erosion control measures. Temporary drainage swales/berms may be installed to protect the site during rainfall events.
3. Excavate and level trenches with proper width and center-to-center separation. Verify that trenches are level or have the prescribed slope.

*Note: Over excavate the trench width in areas where you are planning to contour.*

4. Rake the bottom and sides if smearing has occurred while excavating. Remove any large stones and other debris. Do not use the bucket teeth to rake the trench bottom.

*Note: Raking to eliminate smearing is not necessary in sandy soils. In fine textured soils (silts and clays), avoid walking in the trench to prevent compaction and loss of soil structure.*

## Preparing the End Cap

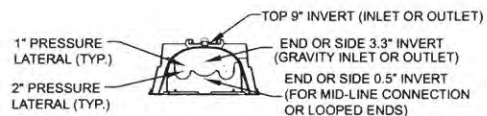
*Note: Quick4 Plus and Quick4 Plus All-in-One Endcaps are available for use with the Quick4 Plus chambers on either end of the trench, depending upon the installer's preference and configuration requirements.*

1. With a hole saw drill an opening appropriate for pipe diameter being used (normally 3 - 4 inches) on front or side of end cap using



Drill end cap.

center point marking (see illustration) as a guide.



2. Snap off the molded splash plate located on the bottom front of the end cap.
3. Install splash plate into the appropriate slots below the inlet to prevent trench bottom erosion.

## Installing the System

1. Check the header pipe to be sure it is level or has the prescribed slope.
2. Set the invert height as specified in the design from the bottom of the inlet.
3. Place the first chamber in the trench.
4. Place the back edge of the end cap over the inlet end of the first chamber. Be sure to line up the locking pins on the top of both the chamber and end cap.

*Optional: Fasten the end cap to the chamber with a screw at the top of the end cap.*



Place end cap inlet end.

5. Insert the inlet pipe 2.5 inches into the opening on the front of the end cap. Insert fully to the internal pipe stop.



Insert inlet pipe.

6. Lift and place the end of the next chamber onto the previous chamber by holding it at a 45-degree angle. Line up the chamber end between the connector hook and locking pin at the top of the first chamber. Lower the chamber to the ground to connect the chambers.

*Note: The connector hook serves as a guide to ensure proper connection and does not add structural integrity to the chamber joint. Broken hooks will not affect the structure or void the warranty.*

7. Swivel the chamber on the pin to achieve the proper direction for the trench layout.

*Note: The chamber allows up to 10-degree swivel in either direction at each joint.*

8. Continue connecting chambers until the trench is completed.



Connect chambers.



Swivel chambers.



*Note: As chambers are installed, verify they are level or have the prescribed slope.*

9. The last chamber in the trench requires an end cap. Lift the end cap at a 45-degree angle and align the connector hook on the top of the chamber with the raised slot on the top of the end cap. Lower the end cap to the ground and into place.

*Note: Place a few shovels of soil around the end cap to secure it during backfill.*



Place end cap outlet end.

10. To ensure structural stability, fill the sidewall area by pulling soil from the sides of the trench with a shovel. Start at the joints where the chambers connect. Continue backfilling the entire sidewall area, making sure the fill covers the louvers.

11. Pack down fill by walking along the edges of trench and chambers.

*Note: In wet or clay soils, do not walk in the sidewalls.*

12. Proceed to the next trench and begin with Step 1.

## Installing Quick4 Plus All-in-One Endcap as a Mid-line Connection

*Note: See mid-line piping options on the back of this document.*

1. With a hole saw drill an opening appropriate for the pipe diameter being used on the side (3.3" invert) or on top (9.0" invert) of the Quick4 Plus All-in-One Endcap.

*Note: Piping configurations are determined by the preference of the installer or designer.*



Drill endcap on side or top.

2. With a hole saw, drill an opening on the end of the Quick4 Plus All-in-One Endcap to create an invert at 0.5 inches. This will allow effluent to fill both sides of the chamber line.

2. Snap off the molded splash plate located on the bottom front of the end cap.

3. Install splash plate into the appropriate slots below the inlet to prevent trench bottom erosion.



Drill endcap on end.

4. Place the back edge of the end cap over the inlet end of the first chamber. Be sure to line up the locking pins on the top of both the chamber and end cap.

*Optional: Fasten end cap to chamber with a screw at the top of endcap.*

5. Insert the connection pipe 2.5 inches into the opening on endcap.

6. Repeat Steps 1 through 5 for additional trenches.



All-in-One as mid-line connection.

## Installing Optional Inspection Ports

*Inspection ports may be installed on the chamber or the Quick4 Plus All-in-One Endcap. The Quick4 Plus Endcap does not allow inspection port construction.*

### Quick4 Plus All-in-One Inspection Port

1. With a hole saw drill the pre-marked area in the top of the Quick4 Plus All-in-One Endcap to create a 4 1/3 to 4 1/2-inch opening based on type of pipe.

2. Set a cut piece of pipe of the appropriate length into the corresponding end cap's inspection port sleeve.

*Note: The sleeve will accommodate up to a 4-inch Schedule 40 pipe.*



All-in-One inspection port.

3. Use two screws to fasten the pipe to the sleeve around the inspection port.

4. Attach a threaded cap or cleanout assembly onto the protruding pipe at the appropriate height.

5. A small valve cover box may be used if the inspection port is below the desired grade.

### Chamber Inspection Port

1. With a hole saw drill the pre-marked area in the top of the chamber to create a 2.5-inch opening.

2. Set a cut piece of pipe of the appropriate length into the corresponding chamber's inspection port hole.

*Note: The sleeve will accommodate up to a 2.5-inch Schedule 40 pipe.*



Chamber inspection port.

3. Use two screws to fasten the pipe to the chamber dome adjacent to the inspection port.

4. Attach a threaded cap or cleanout assembly onto the protruding pipe at the appropriate height.

5. A small valve cover box may be used if the inspection port is below the desired grade.

## Covering the System

**Before backfilling, the system must be inspected by a health officer or other official as required by state and local codes. Create an as-built drawing at this time for future records.**

1. Backfill the trench by pushing fill material over the chambers with a backhoe. Keep a minimum of 12 inches of compacted cover over the chambers before driving over the system.

*Note: Do not drive over the system while backfilling in sand.*

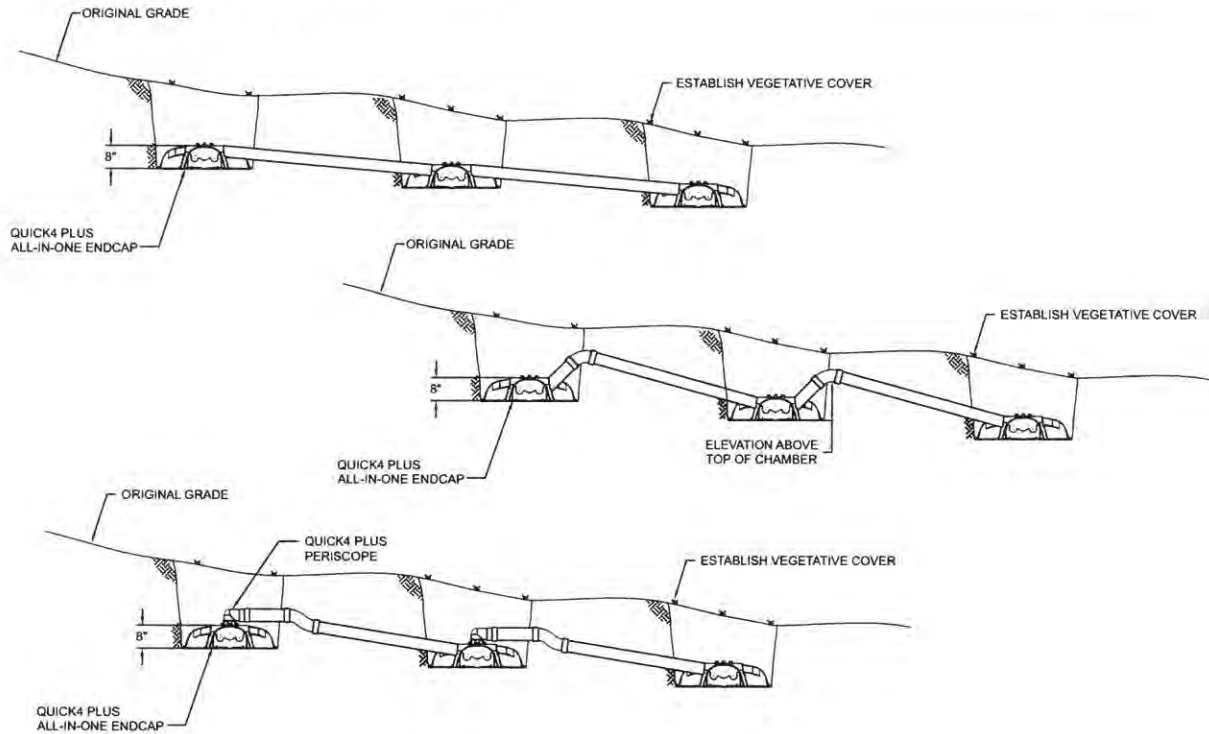
*Note: For shallow cover, sand fill, and sandy soil applications, tracked construction equipment must be used. You must mound 12 inches of soil over the system before driving over it, then grade it back a minimum 4 inches upon completion.*

2. It is best to mound several inches of soil over the finished grade to allow for settling. A slight crown also ensures that runoff water is diverted away from the system trench.

3. After the system is covered, the site should be seeded or sodded to prevent erosion.

*Note: If system is for new home construction, it is important to leave marking stakes along the boundary of the system. This will notify contractors of the system location so they will not cross it with equipment or vehicles.*

## Serial Trench System Configuration Options



### Infiltrator Systems Limited Warranty

(a) The structural integrity of each chamber, end cap and other accessory manufactured by Infiltrator ("Units"), when installed and operated in a leachfield of an onsite septic system in accordance with Infiltrator's instructions, is warranted to the original purchaser ("Holder") against defective materials and workmanship for one year from the date that the septic permit is issued for the septic system containing the Units; provided, however, that if a septic permit is not required by applicable law, the warranty period will begin upon the date that installation of the septic system commences. To exercise its warranty rights, Holder must notify Infiltrator in writing at its Corporate Headquarters in Old Saybrook, Connecticut within fifteen (15) days of the alleged defect. Infiltrator will supply replacement Units for Units determined by Infiltrator to be covered by this Limited Warranty. Infiltrator's liability specifically excludes the cost of removal and/or installation of the Units.

(b) THE LIMITED WARRANTY AND REMEDIES IN SUBPARAGRAPH (a) ARE EXCLUSIVE. THERE ARE NO OTHER WARRANTIES WITH RESPECT TO THE UNITS, INCLUDING NO IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

(c) This Limited Warranty shall be void if any part of the chamber system is manufactured by anyone other than Infiltrator. The Limited Warranty does not extend to incidental, consequential, special or indirect damages. Infiltrator shall not be liable for penalties or liquidated damages, including loss of production and profits, labor and materials, overhead costs, or other losses or expenses incurred by the Holder or any third party. Specifically excluded from Limited Warranty coverage are damage to the Units due to ordinary wear and tear, alteration, accident, misuse, abuse or neglect of the Units; the Units being subjected to vehicle traffic or other conditions which are not permitted by the installation instructions; failure to maintain the minimum ground covers set forth in the installation instructions; the placement of improper materials into the system containing the Units; failure of the Units or the septic system due to improper siting or improper sizing, excessive water usage, improper grease disposal, or improper operation; or any other event not caused by Infiltrator. This Limited Warranty shall be void if the Holder fails to comply with all of the terms set forth in this Limited Warranty.

Further, in no event shall Infiltrator be responsible for any loss or damage to the Holder, the Units, or any third party resulting from installation or shipment, or from any product liability claims of Holder or any third party. For this Limited Warranty to apply, the Units must be installed in accordance with all site conditions required by State and local codes; all other applicable laws; and Infiltrator's installation instructions.

(d) No representative of Infiltrator has the authority to change or extend this Limited Warranty. No warranty applies to any party other than the original Holder.

The above represents the standard Limited Warranty offered by Infiltrator. A limited number of States and counties have different warranty requirements. Any purchaser of Units should contact Infiltrator's Corporate Headquarters in Old Saybrook, Connecticut, prior to such purchase, to obtain a copy of the applicable warranty, and should carefully read that warranty prior to the purchase of Units.



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**www.infiltratorsystems.com**

**Distributed By:**





*Environmental Onsite Wastewater Solutions™*

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## M E M O R A N D U M

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**DATE:** November 8, 2006  
**TO:** Regulators, Engineers and Installers in Asotin County, WA  
**FROM:** Infiltrator Systems Inc. Technical Services Department  
**RE:** Quick4® Standard Installation in Ground Burrowing Rodent Prone Areas

Since first being introduced in 1986, Infiltrator Systems, Inc. (ISI) has manufactured over 42 million chambers, which have been installed in over 1.5 million septic systems in the United States and Canada. Infiltrator chamber systems have been installed in a wide range of soil types, climate conditions and topography with a tremendous success rate.

The incidence of problems associated with ground burrowing animals (gophers and moles) has been minimal with very few reported failures in the Northwest. ISI has investigated this issue through an informal field study of 26 randomly selected sites in gopher prone areas and found no greater incidence of failure. However, since the potential exists, we would like to provide a solution to our customers installing systems in high-risk areas. Please note, however, that in the vast majority of chamber installations in the Northwest and nationwide, ISI recommends installing chambers per our standard installation instructions.

As an additional measure of protection when installing chambers in high-risk gopher areas, ISI suggests (non-mandatory) the installation of chicken wire under the chambers. High-risk gopher areas are defined as:

1. Drainfield areas showing visible signs of rodent activity.
2. Installations that will not be put into service for an extended period of time.
3. Drainfields designed using serial distribution (chicken wire installed on down slope trenches only)

The use of chicken wire when confronted with the specified conditions as outlined above will not void the product warranty. Please see attached Technical Bulletin for additional information. If you have any questions please contact the ISI Technical Services Department at 1-800-221-4436.

**Infiltrator Systems Inc., Technical Bulletin:**  
**Guidelines for Infiltrator Chamber Installations in**  
**Ground Burrowing Rodent Prone areas in Asotin County, WA**

Infiltrator Systems Inc. suggests (non-mandatory) the installation of Chicken Wire under the chambers when installed in areas of known gopher activity and when confronted with the specific conditions as follows:

1. Drainfield area shows visible signs of rodent activity.
2. Installations not put into service for an extended period after installation.
3. Drainfield designed using serial distribution.

Chicken Wire Specifications:

- 1 – 1 ½" Hexagon Netting and or Square Netting
- 34" - 36" Width
- Galvanized

Manufacturers included but not limited to: Jackson-Wire International, Inc.

Please note the following supplemental Installation Instructions:

1. Refer to Chamber Installation Instructions.
2. After the excavation is prepared roll out chicken wire on the trench bottom the entire length of the trench. (See Figure 1a)
3. Install the chambers over the top of the chicken wire base. (See Figure 1b)
4. Complete per Installation Instructions.



Figure 1a: Roll out chicken wire



Figure 1b: Install chambers over the wire base

# PVC Riser Installation

## Installing PVC Access Risers onto Cast-In Orenco® Riser-Tank Adapters

Access risers provide access to septic tank openings, simplifying inspection and maintenance procedures. Access riser-to-tank connections must be watertight for the proper functioning of an onsite septic system or effluent sewer system. Orenco strongly recommends watertightness testing of all access riser-to-tank connections after installation.

Following are instruction sets for prepping and installing access risers, installing grommets, and selecting adhesives for riser installations. Refer to the chart below to determine which instruction set to use.

Instruction Set	Page
1. Riser Preparation	1
2. Grommet Installation	2
3. Riser Installation — PRTA24-2 Adapters	3
4. Riser Installation — RRFTA, RRFTA30 Adapters	4
5. Riser Installation — PRTA24, PRTA30, FRTA-RFV, and FRTA30-FRP Adapters	5
6. Riser Installation — Orenco FRP Tanks with 24-inch-Diameter (600-mm) Risers	6
7. Riser Watertightness Testing	7
8. Adhesive Selection and Quantities	7

## Instruction Set 1: Riser Preparation

### Step 1: Determine Riser Height

Determine how high the riser needs to be.

- The top of the riser should be about 3 inches (75 mm) above finished grade after installation and backfilling — This allows 2 inches (50 mm) for tank settling and 1 inch (25 mm) for ensuring drainage away from the riser.

### Step 2: Cut Riser to Size (if Necessary)

If the riser needs to be cut to size, cut it with a circular saw or table saw.

- Always cut excess length from the bottom of the riser.
- For square, even cuts, a good fit, and a watertight joint between the riser and the adapter, use an Orenco riser-cutting saw guide.
- To install risers less than 30 inches (760 mm) wide onto 500-gallon (2000-L) Orenco FRP tanks, cut the riser so it fits into the tank and the lowest rib rests on the tank's top, as shown.

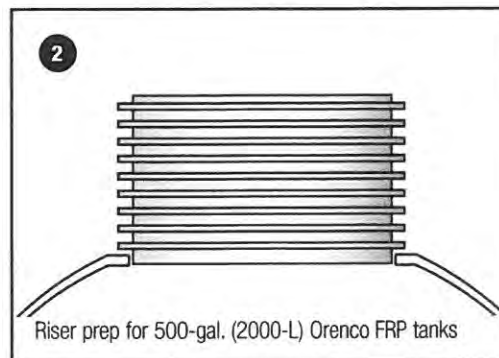
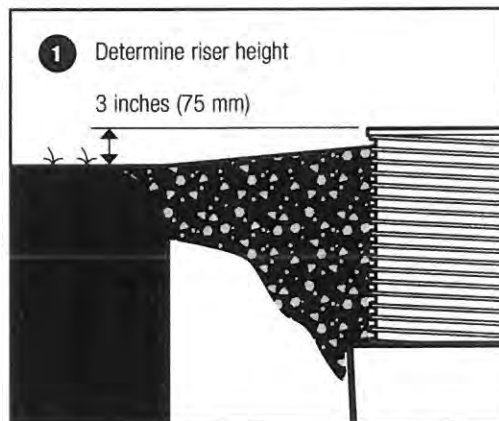
### Step 3: Dry Fit Riser to Adapter

**Step 3a:** Dry fit the riser to the adapter.

- Make sure riser penetrations are the right sizes and in the correct locations.

**Step 3b:** If the riser is higher than 3 inches (75 mm) above the estimated final grade, cut it to size per the instructions in Step 2.

**Step 3c:** If the riser is too short, use an Orenco grade ring to extend it.





## Instruction Set 2: Grommet Installation

### Step 1: Mark Access Riser

**Step 1a:** Use the site plans or drawings to find out if riser penetrations are needed.

**Step 1b:** Use the plans or drawing to mark the locations of the penetrations.

- If plans or drawings aren't available, use Drawing 1b as a general guide for locating riser penetrations.

### Step 2: Drill Holes and Clean Access Riser

**Step 2a:** Drill holes for riser penetrations.

- If you have questions about where to locate various riser penetrations, contact your Distributor for more information.

#### Using Orenco® RKHS Hole Saws ...

Cut the hole and grind the ribs down to make a flat, smooth surface for installing the grommet.

- Make sure your hole saw is the correct size and your drill is at least 18 volts.
- Don't grind too deeply — about 1/16 inch (1.6 mm) is deep enough.

#### Using Standard Hole Saws ...

- 1: Use the correctly sized hole saw to cut a hole, centered on the mark.
  - 2: Trim the riser ribs back 1 inch (25 mm) from around the hole.
- Use a grinder or cutting tool to notch the ribs through to the riser wall.
  - Use a hammer and chisel to break off the notched rib sections.
  - Use a grinder to make a flat, smooth surface around the hole.

**Step 2b:** Clean and deburr the hole and flat surface with a wire brush and deburring knife or tool.

- Be careful not to enlarge the penetration.

### Step 3: Install Grommet

**Step 3a:** Apply a bead of adhesive to the groove in the grommet's outer diameter.

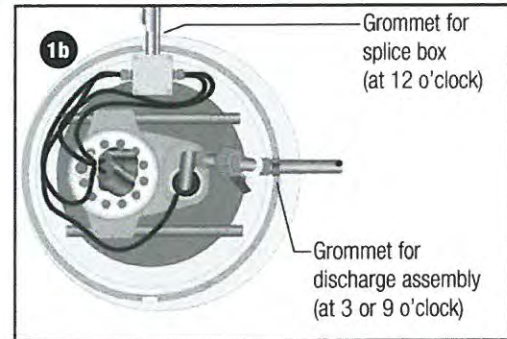
- For adhesive recommendations, see Instruction Set 8.

**Step 3b:** Firmly press the grommet into the penetration.

#### Grommet Hole Sizing Guide

Grommet size, inches (nominal IPS pipe size)	Hole saw size
1/2	1
3/4	1-1/4
1	1-9/16
1-1/4	1-3/4
1-1/2	2-1/8
2	2-3/4
3	3-7/8
4	5

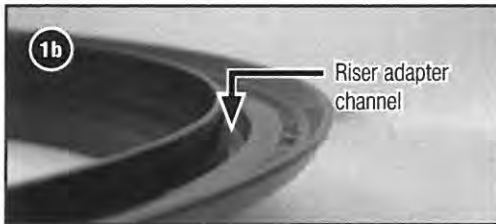
For more information on grommet dimensions and actual pipe O.D., see the Orenco Technical Data Sheet for grommets, NTD-RLA-PG-1







Cutaway view of Orenco® PRTA24-2, cast into concrete tank with 24-inch (600-mm) access riser attached



1b

Riser adapter channel



2



3b

### Instruction Set 3: Riser Installation — PRTA24-2 Adapters

#### Step 1: Prep Adapter Channel and Riser

**Step 1a:** Roughen the adapter channel and the bottom surfaces of the riser with sandpaper.

**Step 1b:** Use a clean cloth and acetone or alcohol to clean the channel and the bottom surfaces of the riser.

- The channel must be clean and dry for a good fit and watertight joint.
- Let the acetone or alcohol dry completely.

#### Step 2: Apply Adhesive

Fill the channel with methacrylate adhesive.

- For adhesive recommendations, see Instruction Set 8.

**Note:** If you're using a methacrylate adhesive that's non-self-leveling, use enough to fully fill the channel, with no voids in the adhesive.

#### Step 3: Install Riser

**Step 3a:** If the riser has penetrations, align the riser correctly.

**Step 3b:** Firmly press the bottom of the riser into the channel.

- Twist the riser back and forth slightly to fully seat it and to create a good bond.
- If the inside seam is not completely filled, add adhesive to form a complete fillet.

**Step 3c:** Use a tongue depressor, putty knife, or clean cloth to make a good fillet over the inside seam.

**Note:** If cold weather conditions or frost heave are a concern at the site, contact a qualified engineer or Orenco for additional recommendations on installing ribbed PVC risers.

**IMPORTANT:** Orenco strongly recommends that all tank risers 12-in. (300-mm) and larger in diameter be equipped with riser safety grates to help prevent accidental or unauthorized entry.

#### Step 4: Test Riser Watertightness

Test the riser-to-tank connections for watertightness by following Instruction Set 7 in this document.

**Note:** Watertight connections are critical for the wastewater system to function effectively and efficiently.

## Instruction Set 4: Riser Installation — RRFTA and RRFTA30 Adapters

### Step 1: Prep Adapter Channel and Riser

**Step 1a:** Roughen the adapter channel and the bottom surfaces of the riser with sandpaper.

- For RRFTA adapters, the smaller channel fits 21-inch (525-mm) risers and the larger channel fits 24-inch (600-mm) risers.
- RRFTA30 adapters have a single channel for 30-inch (750-mm) risers.

**Step 1b:** Use a clean cloth and acetone or alcohol to clean the channel and the bottom surfaces of the riser.

- The channel must be clean and dry for a good fit and watertight joint.
- Let the acetone or alcohol dry completely.

### Step 2: Apply Methacrylate Adhesive

Fill the channel with methacrylate adhesive.

- For adhesive recommendations, see Instruction Set 8.

**Note:** If you're using a methacrylate adhesive that's non-self-leveling, use enough to fully fill the channel, with no voids in the adhesive.

### Step 3: Install Riser

**Step 3a:** If the riser has penetrations, align the riser correctly.

**Step 3b:** Firmly press the bottom of the riser into the channel.

- Twist the riser back and forth slightly to fully seat it and to create a good bond.
- If the inside and outside seams are not completely filled, add adhesive to form complete fillets.

**Step 3c:** Use a tongue depressor, putty knife, or clean cloth to make a good fillet over the seams.

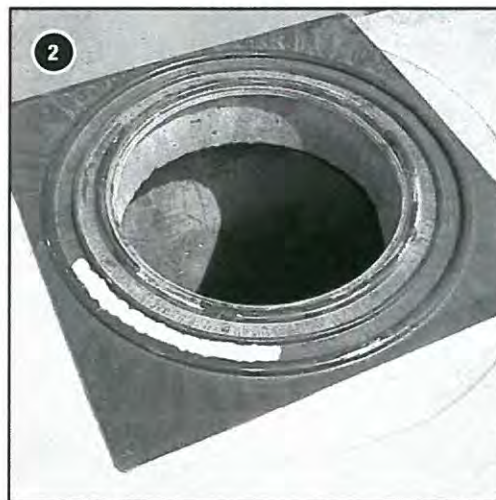
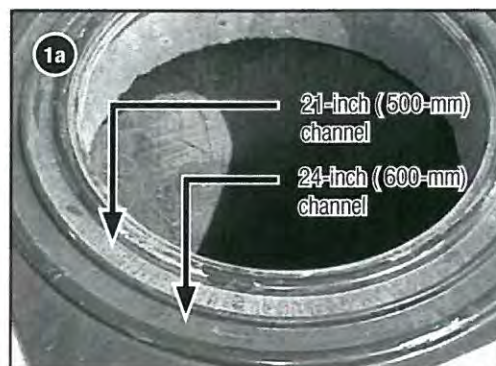
**Note:** If cold weather conditions or frost heave are a concern at the site, contact a qualified engineer or Orenco for additional recommendations on installing ribbed PVC risers.

**IMPORTANT:** Orenco strongly recommends that all tank risers 12-in. (300-mm) and larger in diameter be equipped with riser safety grates to help prevent accidental or unauthorized entry.

### Step 4: Test Riser Watertightness

Follow Instruction Set 7 of this document for testing the riser's watertightness.

**Note:** Watertight connections are critical for the wastewater system to function effectively and efficiently.







## Instruction Set 5: Riser Installation — PRTA24, PRTA30, FRTA-RFV, and FRTA30-FRP Adapters

### Step 1: Prep Adapter and Riser

**Step 1a:** Roughen the bonding surfaces of the adapter and riser with sandpaper.

**Step 1b:** Use a clean cloth and acetone or alcohol to clean the bonding surfaces of the adapter and the riser.

- The bonding surfaces must be clean and dry for a good fit and watertight joint.
- Let the acetone or alcohol dry completely.

### Step 2: Apply Methacrylate Adhesive

Apply a bead of methacrylate adhesive to the outside of the adapter.

- For adhesive recommendations, see Instruction Set 8.

### Step 3: Install Riser

**Step 3a:** If the riser has penetrations, align the riser correctly.

**Step 3b:** Firmly press the riser onto the adapter until the bottom of the riser is resting on the concrete (cast-in adapters) or the adapter flange (bolted-down adapters).

- Twist the riser back and forth slightly to fully seat it and to create a good bond.

**Step 3c:** Apply a bead of methacrylate adhesive to the inside of the access riser-adapter joint.

**Step 3d:** Use a putty knife, tongue depressor, or clean shop rag to make a continuous fillet on the inside of the access riser-adapter joint.

**Note:** If cold weather conditions or frost heave are a concern at the site, contact a qualified engineer or Orenco for additional recommendations on installing ribbed PVC risers.

**IMPORTANT:** Orenco strongly recommends that all tank risers 12-in. (300-mm) and larger in diameter be equipped with riser safety grates to help prevent accidental or unauthorized entry.

### Step 4: Test Riser Watertightness

Follow Instruction Set 7 of this document for testing the riser's watertightness.

**Note:** Watertight connections are critical for the wastewater system to function effectively and efficiently.

## **Instruction Set 6: Riser Installation — Orenco FRP Tanks with 24-inch- Diameter (600-mm) Risers**

### **Step 1: Prep Tank and Riser**

**Step 1a:** Roughen the bonding surfaces of the tank and the riser with sandpaper.

**Step 1b:** Use a clean cloth and acetone or alcohol to clean the roughened tank surface and the bottom surfaces of the riser.

- The surfaces must be clean and dry for a good fit and watertight joint.
- Let the acetone or alcohol dry completely.

### **Step 2: Apply Methacrylate Adhesive**

Apply methacrylate adhesive to the bonding surfaces of the tank and the riser.

- For adhesive recommendations, see Instruction Set 8.

### **Step 3: Install Riser**

**Step 3a:** If the riser has penetrations, align the riser correctly.

**Step 3b:** Press the riser into position

- For 1000-gal. through 2000-gal. tanks (3785-L through 7570-L), firmly press the riser onto the tank opening
- For 500-gal. (1890-L) tanks, firmly press the riser into the tank opening.
- Twist the riser back and forth slightly to fully seat it and create a good bond.
- If the seams aren't completely filled, add adhesive to form a complete fillet.

**Step 3c:** Use a tongue depressor, putty knife, or clean cloth to make a good fillet over the seams.

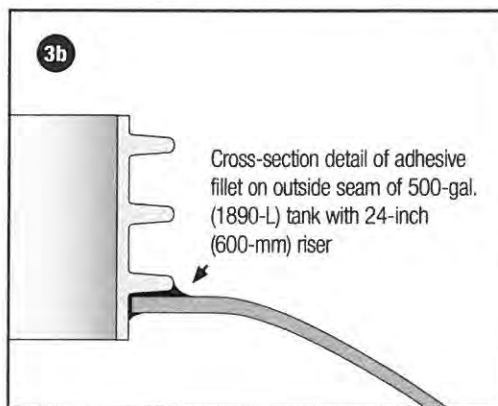
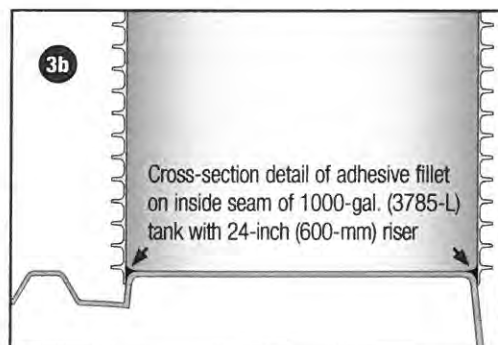
**Note:** If cold weather conditions or frost heave are a concern at the site, contact a qualified engineer or Orenco for additional recommendations on installing ribbed PVC risers.

**IMPORTANT:** Orenco strongly recommends that all tank risers 12-in. (300-mm) and larger in diameter be equipped with riser safety grates to help prevent accidental or unauthorized entry.

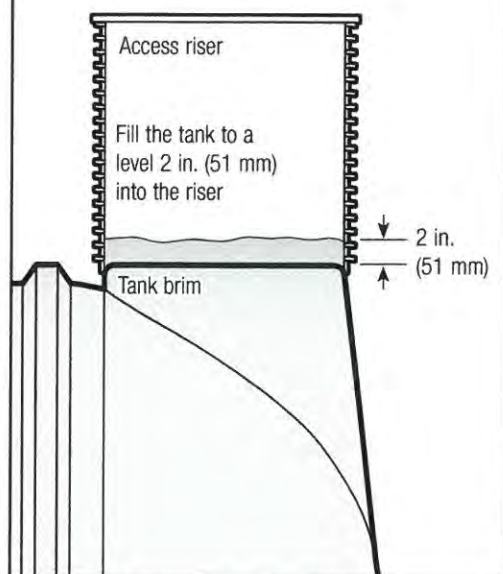
### **Step 4: Test Riser Watertightness**

Follow Instruction Set 7 of this document for testing the riser's watertightness.

**Note:** Watertight connections are critical for the wastewater system to function effectively and efficiently.





**1c Watertightness test****Instruction Set 7: Riser Watertightness Testing**

**IMPORTANT:** A watertight tank and watertight riser-to-tank connections are critical for the wastewater system to function effectively and efficiently.

**Step 1: Prep for Test**

**Step 1a:** Make sure the adhesive seams have set and the tank has been backfilled according to the manufacturer's instructions – typically to the tank's midpoint.

**Step 1b:** Plug the inlet (and outlet, if present) of the tank with watertight plugs.

**Step 1c:** Fill the tank with water to a level 2 inches (51 mm) into the riser.

**Step 2: Test Watertightness**

**Step 2a:** Wait for the required time before inspecting the riser-to-tank connections for leakage.

- Follow the tank manufacturer's recommendations (or applicable local regulations) for wait times before inspecting the tank for leaks.
- Orenco recommends at least 30 minutes for its fiberglass tanks.

**Step 2b:** Check for any drop in the liquid level inside of the riser and any visible leakage from the riser-to-tank connections.

- At the end of the test, there should be no drop in liquid level and no visible leakage from seams, pinholes, or other imperfections.
- If leaks are found during the test, seal the leaks and repeat the test.

**Step 2c:** Once the riser-to-tank connections are proven watertight, remove the plug(s) and drop the water level in the tank to just below the invert of the inlet or outlet, whichever is lower.

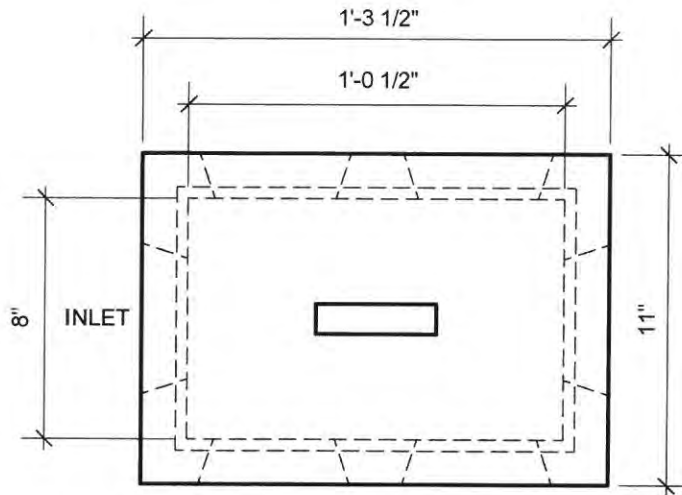
**Instruction Set 8: Adhesive Selection and Quantities**

Use the table below to select the correct adhesive and quantity for your grommet or riser installation(s). Be sure to check the expiration date on the adhesive package. If the adhesive is expired, do not use it to install Orenco components.

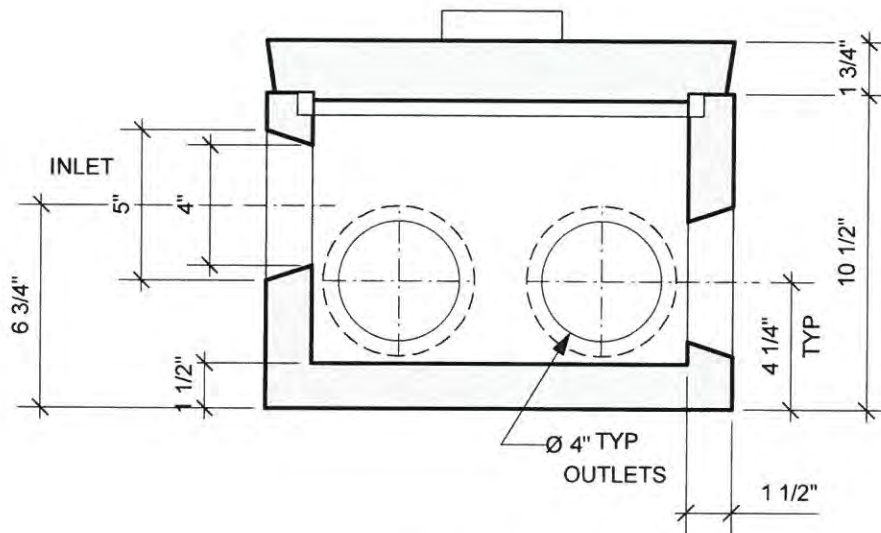
**Note:** Before installing a riser on an Orenco riser-tank adapter with an adhesive not recommended in the table below, contact your Distributor or Orenco.

Component		Adhesive Type and Approximate Usage				
		SA530 300/300-mL cartridge (600-mL total)	SA510 300/300-mL cartridge (600-mL total)	MA320 7-oz (200-mL) packet	IPS 810 1-pint (473-mL) 1-quart (946-mL)	ADH100 10.2-oz (300-mL) tube
<b>Grommets</b>		n/a	n/a	n/a	n/a	various quantities
<b>Riser Tank Adapters</b>	FRTA36	1 cartridge*	1 cartridge*	n/a	n/a	n/a
	PRTA24	½ cartridge*	½ cartridge*	1 packet	n/a	1 tube
	PRTA24-2	≥ ½ cartridge*	≥ ½ cartridge*	n/a	< 1 pint	n/a
	PRTA30	< 1 cartridge*	< 1 cartridge*	2 packets	n/a	2 tubes
	RRFTA	< 1 cartridge	n/a	n/a	1 pint*	n/a
	RRFTA30	1 cartridge	n/a	n/a	1 quart*	n/a

\* Indicates preferred adhesive for this application



**PLAN VIEW**



**SECTION VIEW**

**NOTES:**

1. 4" POLYLOK PIPE SEALS AT INLET AND OUTLETS
2. 4X4 14/14 GALV. MESH IN COVER.
3. WEIGHT: 100#

**PRODUCT NAME**

**SMALL DISTRIBUTION BOX--5 OUTLETS**

**PRODUCT NUMBER**

**1651S**

**Wilbert**

**PRECAST, INC.**

2215 E Brooklyn, Spokane, WA 99217

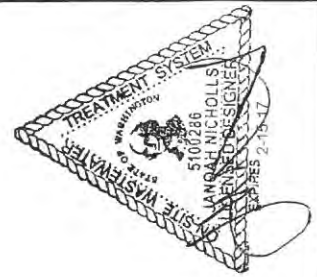
Ph: (509) 325-4573 Fax: (509) 325-5098

Toll Free: 1-800-888-4573

**SPOKANE LEWISTON YAKIMA**

[www.wilbertprecast.com](http://www.wilbertprecast.com)

## ON SITE SEWAGE CONSTRUCTION NOTES



### DRAIN FIELD

- 1 Drain field must run perpendicular to slope and may need to be contoured to accomplish this
- 2 The trench bottom must be level
- 3 Gravel less chambers must be installed per manufacturer's requirements
- 4 Drain field must be protected from encroachment or damage by vehicular and equipment traffic, concentrated livestock, heavy weights or objects, impervious coverings, or anything that can obstruct aeration of the system
- 5 No cutting or filling in the drain field or reserve area are allowed. The drain field must be in original undisturbed soil

### TANKS

- 1 Only install septic tanks that are approved by your counties Health Department
- 2 All shallow systems, 18 inches or less, will require concrete septic tanks without exception
- 3 The inlet and outlet lines must be properly bedded to provide vertical support
- 4 Septic tank must be installed on undisturbed soil
- 5 All connections, risers, joints and pipe used must be water tight

### GRAVITY AND PRESSURIZED PIPING

- 1 Only plastic or PVC pipe is permitted. This pipe must meet or exceed ASTM standards, which include: D 3033, D 3034, or schedule 40
- 2 All pipes must be bedded with ASTM markings turned up
- 3 All joints must be glued and watertight
- 4 The gravity pipe size must be 4-inch minimum
- 5 The pressurized pipe size must be as the design calls for
- 6 At least one cleanout must be installed at the structure. If gravity inlet sewer line exceeds 50 foot additional cleanouts will be required every 50 foot
- 7 The grade on all parts of the building sewer inlet line must be 1/8-inch minimum to 1/4 maximum fall per foot
- 8 All gravity fittings should not exceed 45 degrees or a 90-degree sweep between the structure and the septic tank. If a sweep is used a cleanout is required before it
- 9 All pressurized transport lines must be at a minimum depth of 2 foot
- 10 Any pipe under driving/parking or vehicular encroachment areas must be bedded and enclosed in 5 or 6 inch pvc, steel or concrete pipe which meets or exceeds the crush strength of ASTM 3034. The pipe length must exceed the drive width. Using astm 3034 or better is another option
- 11 If the building sewer crosses any water line, the crossing must be perpendicular or at right angles (90 degrees) to the water line. No joints are allowed within 10 feet in any direction of where these lines cross. When possible, cross the sewer line under the waterline. Waterlines include domestic and irrigation

### GRAVELLESS CHAMBER DRAINFIELD LATERALS

- 1 Small mesh chicken wire may be needed to prevent gopher intrusion into the infiltrator chambers

### DRAINFROCK

- 1 Clean washed gravel or crushed rock ranging in size from threequarters inch to two and one-half inches, and containing no more than two percent by weight passing a US No. 8 sieve and no more than one percent by weight passing a US No. 200 sieve

### GENERAL

- 1 Shoot elevations and stake the septic system prior to excavation. Start from drain field working towards the structure to determine exact elevation depth needed for tank and building stub out
- 2 Roof and surface water runoff or discharge must be directed away from or down slope from the disposal system by means of footing and or foundation floor drains or surface diversion ditches
- 3 Do not cover any portion of the system prior to final inspection without approval
- 4 Call the phone number on the design with any questions before any changes are made or design may be void
- 5 Call the phone number on the design when system is ready for inspection

WENAS WLA SEPTIC ELECTRICAL

PHH1 PROVIDED BY WDFW. INSTALLED BY CONTRACTOR  
COORDINATE EXACT LOCATION IN THE FIELD (TYPICAL)

(3)2"C SPARES PROVIDED BY WDFW.  
INSTALLED BY CONTRACTOR

(3)2"C SPARES PROVIDED BY WDFW.  
INSTALLED BY CONTRACTOR

FUTURE UG CONDUITS. PLACE  
PHH2 INLINE WITH UTILITY POLE

- SITE ELECTRICAL NOTES:
1. GROUNDING & BONDING IS NOT SHOWN IN ITS ENTIRETY. INSTALL GROUNDING ELECTRODES, GEC, EGC, & ALL APPURTENANCES TO FORM A COMPLETE, CODE COMPLIANT GROUNDING SYSTEM.
  2. IT IS THE INTENT OF THIS PROJECT TO INSTALL SPARE CONDUITS IN A COMMON TRENCH ADJACENT TO SEPTIC RUN. COORDINATE TRENCHING AS NEEDED. HAVE UNDERGROUND INSTALLATIONS INSPECTED BY THE AHJ, AND DOCUMENT THE APPROVAL. MAINTAIN MIN. 6" HORIZONTAL CLEARANCE BETWEEN POWER & SEPTIC PIPES.
  3. INSTALL A PVC CAP WITHOUT GLUE ON EACH SPARE STUB, INSIDE & OUTSIDE OF HANDHOLES.
  4. HANDHOLES (HH) SHALL BE OPEN BOTTOM FOGTITE J11 TYPE-1 WITH DIAMOND PLATE LID PERMANENTLY MARKED "ELECTRICAL". HH SHALL BE PROVIDED BY WDFW, INSTALLED BY CONTRACTOR. SECURE LID GROUNDING STRAP & LUG SO THEY WON'T BE LOST. INSTALL HH FLUSH WITH FINISHED GRADE ON A BEDDING OF MINIMUM 6" COMPACTED GRAVEL.
  5. CONDUITS SHALL BE INSTALL 24" TO TOP-OF-PIPE BFG. INSTALL METALLIC "CAUTION RIBBON" OVER CONDUITS AT 12" BFG
  6. BACKFILL & COMPACT ALL CONDUITS. RESTORE DRIVEABLE SERVICES WITH COMPACTED GRAVEL.

MAIN UTILITY POLE WITH  
SERVICE/METER EQUIPMENT

RESIDENCE

SHOP

SEPTIC CONTROLLER

LIFT STATION

3/4" TO DISCONNECT

1" SPARE

OFFICE

2"C SPARE PROVIDED BY WDFW.  
INSTALLED BY CONTRACTOR

2"C SPARE PROVIDED BY WDFW.  
INSTALLED BY CONTRACTOR

PHH3 PROVIDED BY WDFW.  
INSTALLED BY CONTRACTOR  
(TYPICAL)

STORAGE SHED

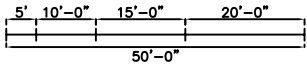
EXISTING UTILITY SECONDARY OH

OVERHEAD (OH) BRANCH  
FEEDERS (TYPICAL)

HORSE CORRAL

STORAGE SHED

WELL  
HOUSE



SITE PLAN  
NOT TO SCALE



- ELECTRICAL NOTES:
- GROUNDING & BONDING IS NOT SHOWN IN ITS ENTIRETY. INSTALL GROUNDING ELECTRODES, GEC, EGC, & ALL APPURTENANCES TO FORM A COMPLETE, CODE COMPLIANT GROUNDING SYSTEM.
  - EQUIPMENT, CONDUITS, & STRUCTURES ARE SHOWN LINEAL FOR CLARITY. FIELD CONDITIONS WILL VARY.
  - CONDUITS & WIRES SHOWN ARE INTENDED TO REPRESENT THE MAXIMUM NEEDED. VERIFY SEPTIC EQUIPMENT REQUIREMENTS WITH INSTALLER. VERIFY CIRCUIT SIZE/VOLTAGE OF STORAGE SHED IN THE FIELD.
  - EXISTING POLE LEANS AT AN ANGLE. INSTALL EQUIPMENT SQUARE WITH POLE. USE GALV. OR STAINLESS HARDWARE.
  - 2" CONDUIT, ELBOWS & FITTINGS, AND (3) HANDHOLES SHALL BE PROVIDED BY WDFW, AND DELIVERED TO THE SITE FOR INSTALLATION BY THE CONTRACTOR. CONTRACTOR SHALL SUPPLY CONDUIT & FITTINGS SMALLER THAN 2".

NEW PANEL (BY OFFICE)		P4		VOLTAGE: 240		1 PHASE	
PANEL AMPS: 125		FEEDER SIZE: #1 THHN CU		ENCLOSURE: 3R			
MAIN BREAKER SIZE: MLO		NEUTRAL SIZE: #1 THHN CU		MOUNTING: SURFACE/POLE			
FEED: BOTTOM		GROUND SIZE: #6 THHN CU		FED FROM EXISTING OVERHEAD LINE			

CKT	DESCRIPTION	LOAD	AMP	POLE	PH	POLE	AMP	LOAD	DESCRIPTION	CKT
1	MAIN BREAKER (BACKFEED)		125	2	A					2
3					B					4
5	POLE LIGHT	20	1	A					WEST OVERHEAD	6
7	120v OUTLET ON POLE	20	1	B		2	100			8
9	SEPTIC CONTROLS	20	1	A		2	40		OFFICE	10
11	SEPTIC PUMP	20	1	B		2				12
13	SPARE	20	1	A		2	20		STORAGE SHED	14
15	SPARE	20	1	B		2				16
17	SPARE	20	1	A		2			SPARE	18
19	SPARE	20	1	B		2	30			20

- ABBREVIATIONS:
- AFCI: ARC-FAULT CIRCUIT INTERRUPTER  
AFG: ABOVE FINISHED GRADE  
AHJ: AUTHORITY HAVING JURISDICTION (INSPECTOR)  
AL: ALUMINUM (BUSS/CONDUCTOR)  
BFG: BELOW FINISHED GRADE  
BLDG: BUILDING  
BRKR: BREAKER/CIRCUIT BREAKER  
CKT: CIRCUIT  
CU: COPPER (BUSS/CONDUCTOR)  
EGC: EQUIPMENT GROUNDING CONDUCTOR  
EX: EXISTING  
GALV: GALVANIZED  
GEC: GROUNDING ELECTRODE CONDUCTOR  
GFCI: GROUND FAULT CIRCUIT INTERRUPTER  
GRS: GALVANIZED RIGID STEEL  
HH: HANDHOLE/ELECTRICAL VAULT  
OH: OVERHEAD  
PUD: LOCAL POWER UTILITY PROVIDER  
UG: UNDERGROUND  
W/P: WEATHERPROOF/RAINTIGHT

WENAS WLA SEPTIC ELECTRICAL

