

**CITY OF FERNDALE  
CHURCH ROAD WATER PUMP STATION UPGRADE**

**ADDENDUM NO. 1 (5 pages total)  
Issue Date: August 26, 2022**

General: Recitations of each and every section of the bid documents impacted by this addendum are not given. The described changes impact all relevant portions of the bid documents whether specifically cited below or not.

**CONTRACT CLARIFICATIONS:**

**1. Prebid Meeting:**

The prebid meeting agenda and sign in sheet information has been uploaded to the project website: <https://wilsonengineering.com/bidding-documents.aspx/>

**2. City of Ferndale Business License:**

The Contractor and all Subcontractors are required to obtain a City of Ferndale business license prior to performing on-site work.

**3. Traffic Control:**

If the Contractor needs to work in the road, the Contractor must follow requirements in Section 34 00 00 – Traffic Maintenance. In addition, at least one lane must be maintained for vehicle traffic on Church Road. Contractor is to notify City prior to scheduling any traffic control activities, and Contractor is to comply with all City right-of-way permit requirements.

**4. Tree Trimming:**

The existing tree (just west of the pump station vault) will be trimmed by the City as agreed in the field during the pre-bid meeting. Limbs directly above the pump station access hatch will be removed to a height of 15-ft above the surface of the pump station vault. The Contractor is not responsible for tree trimming work. Contractor is to avoid doing anything that will adversely impact the health of the adjacent trees.

**5. VFD Lead Time Questions:**

TSI indicated that the specified VFDs are available and can be shipped within 10 weeks if ordered now from North Coast Electric. The specified project deadline appears to be feasible based on current information for equipment lead time; however, Contractor is to document agreed delivery schedules and to keep the Owner in the loop on any potential schedule delays.

**SUPPLEMENTAL CONDITIONS:**

**15. COMPLETION DATE:**

REPLACE with the following:

The Contracted work is to be substantially completed by no later than **April 7, 2023** (not March 3, 2023). The Contractor will be limited to **50 working days ( 10 weeks)** on-site work. The Contractor shall plan accordingly to meet this completion requirement.

## 18. LIQUIDATED DAMAGES:

Replace with the following:

Liquidated damages will be assessed in accordance with WSDOT 1-08.9 for each working day beyond the Contracted completion date. Liquidated damages for failure to complete the physical Work of a Contract on time shall be as follows:

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

Where:

LD = liquidated damages per working day (rounded to the nearest dollar)

C = original Contract amount

T = original time for Physical Completion

## SPECIFICATIONS:

### **SECTION 01 11 00 – SUMMARY OF WORK, 1.01, B.:**

Remove reference to radio telemetry and replace with cellular telemetry. Clarification: work consists of replacing the existing radio telemetry with new cellular telemetry equipment.

### **SECTION 01 50 00 – TEMPORARY FACILITIES, 1.09, A., 1.:**

AMEND Section 1. “Vertical Turbine Pump Replacement Shut Down” with the following requirements:

Contractor is to plan to remove and replace each of the 2 vertical turbine pumps and associated check valve/pipe/fitting assemblies as shown on sheet C3.2 and sheet C3.3 during separate shut down events dedicated to each of the 2 vertical turbine pumps. Prior to shut down, the Contractor is to plan to isolate the pump assembly with the two nearest butterfly valves (buried valve just upstream and new 8” valve just downstream). With this configuration, the alternate pump is to remain on-line and in-service.

Please note that the Butterfly Valve Replacement Work (shown on sheet C3.1) is to be completed prior to scheduling Vertical Turbine Pump Replacement Work.

### **SECTION 01 50 00 – TEMPORARY FACILITIES, 1.09, A., 2.:**

AMEND Section 2. “Butterfly Valve Replacement Shut Down” with the following requirements:

Contractor is to plan to remove and replace all 5 butterfly valves (shown on sheet C3.1) during one shut down event. The allowable time duration for this shut down event is not to exceed 12 hours, and this 12-hour timeline is to include flushing and grabbing samples for bacteriological tests. The 12-hour timeline will need to be scheduled overnight during low water demand periods, starting at 5:00pm and ending at 5:00am. Contractor is to coordinate carefully with the City, selecting the best day that works for both City staff and Contractor staff, and providing ample time for neighborhood notifications. It is anticipated that approx. 6 service connections will be off-line during this shut down.

### **SECTION 26 00 10 – BASIC ELECTRICAL REQUIREMENTS, 3.06, A.:**

DELETE the following paragraph A:

The contractor shall remove, relocate, and temporarily reconnect the existing Shop Well #1 Generator and sub-base fuel tank.

**SECTION 26 00 10 – BASIC ELECTRICAL REQUIREMENTS, 3.06:**

ADD paragraph D:

- D. Only 1 pump shall be out of service at a time. If both pumps are out of service longer than 8 hours the contractor shall provide temporary measures to ensure operation, including a 250KW generator to power one existing 100HP pump, or a 150KW generator to power one 60HP pump.

**SECTION 26 00 10 – BASIC ELECTRICAL REQUIREMENTS, 3.09:**

ADD paragraph C:

- C. Only 1 pump shall be out of service at a time. If both pumps are out of service longer than 8 hours the contractor shall provide temporary measures to ensure operation, including a 250KW generator to power one existing 100HP pump, or a 150KW generator to power one 60HP pump.

**SECTION 26 00 10 – BASIC ELECTRICAL REQUIREMENTS, 3.10:**

ADD paragraph C:

- C. Contractor shall plan the following work sequence:
1. Only 1 pump shall be out of service at a time. If both pumps are out of service longer than 8 hours the contractor shall provide temporary measures to ensure operation, including a 250KW generator to power one existing 100HP pump, or 150KW generator to power one existing 60HP pump.
  2. Coordinate electrical sequence work with Civil work.
  3. Install new electrical enclosure, underground conduits, and cables so that it is complete and ready for energization and operation.
  4. Install new underground conduits and cables to PSE handhole and coil cables for PSE connection. Keep existing service energized.
  5. Retain one existing 100HP pump on existing system.
  6. Disconnect the other existing 100HP pump from existing system and connect one new 60HP pump to new system.
  7. Coordinate PSE shutdown, disconnect existing power service and remaining existing 100HP pump still connected on old service, energize new power service and new electrical enclosure. Energize the one new 60HP pump and operate on new system. Include integration, controls, and devices to support pump operation. If outage is longer than 8 hours provide temporary measures, including a temporary generator connected to the new electrical enclosure generator receptacle.
  8. After new power service, above grade electrical enclosure, and one new 60HP pump is operational, disconnect the remaining existing 100HP pump and complete remaining work to connect second new 60HP pump on the new system.

**SECTION 26 05 00 – COMMON WORK RESULTS FOR ELECTRICAL, 2.01, A:**

DELETE paragraph 3, b: Pump Vault interior.

ADD paragraph 2, a: Pump Vault interior.

**SECTION 33 30 00 – PIPING SYSTEMS, 3.04, 9. Water Line Testing and Disinfection, c:**

REPLACE part c. with the following:

- c. The Contractor shall disinfect and flush all new sections of pipe, valving, fittings, and pump assembly per ANSI/AWWA C651-14 (Disinfecting Water Mains). See section 4.10.1. The fittings and valves required for this connection may be spray disinfected and/or swabbed with a chlorine solution. Contractor to take care to ensure no contamination in piping system. Chlorinated flush water will need to be dechlorinated per WSDOT 7-093(24)A and discharged at an agreed flowrate and directed to an agreed discharge location. Coordinate with the City. Ensure that flush volume is at

least 3 volumes of pipe run from pump station to the hydrant. Liquid sodium hypochlorite solution (per WSDOT 7-09.3(24)G) is to be used for disinfection. Contractor is to ensure that all new and disturbed wetted parts (fittings, valves, pumps, etc) are carefully cleaned, swabbed with liquid chlorine solution, fully disinfected, and to ensure that no contamination is introduced into City's pump station piping system. Coordinate all activities with Owner.

## **DRAWINGS:**

### **Sheet C3.1:**

#### **Add the following pressure gauge info:**

Approved Manufacturer: The pressure gauges shall be Ashcroft Duragauge 1279, or approved equal.

General: The pressure gauges shall be glycerin filled type and shall have all internal parts immersed. Pressure gauges shall be minimum 4.5-inch dial size, with non-metallic case, stainless steel bourdon tube with plastic bushings and pinion, and stainless steel selector. Gauges shall be ANSI grade A or better with an accuracy of  $\pm 0.5$  percent. Gauges measuring liquids shall be supplied with bronze pressure snubber.

### **Sheet C3.1:**

Remove and replace all piping, fittings, and accessories that are identified on sheet C3.1 as items 11, 12, 13, 14, 16, 22, and 23. See attached sheet C3.1 with new portions highlighted. This work is to be included with the "Butterfly Valve Replacement Shut Down" work described in SECTION 01 50 00 – TEMPORARY FACILITIES, 1.09, A., 2.

In addition, Contractor is to add restrained dismantling joints for all five (5) replaced butterfly valves. Dismantling joints are to be configured so that butterfly valves can be removed and replaced in the future without removal of piping alignment.

Contractor to field measure and configure new piping to meet actual field measurements, as needed.

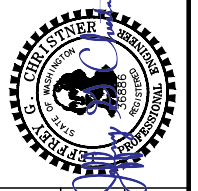
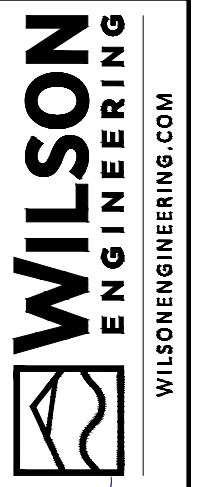
Furthermore, all new piping, fittings, and pipe accessories are to be provided with a factory prime coat and finish coat for corrosion protection in accordance with Section 09 90 00 - Service Condition B - Epoxy. New hardware (nuts, bolts, restraining rods, etc.) are to be stainless steel.

## **ATTACHMENTS INCLUDED ON FOLLOWING PAGES:**

- Sheet C3.1 with additional pipe and fittings highlighted (1 page total)

PLOT SETTINGS: WE Autocad PDF (High Quality Print).pc3, ANSI full bleed B (17.00 x 11.00 inches), Portrait, 1:2, WE APWA\_UNSCREENED.ctb  
 W:\2022\2022-029 FERDALE CHURCH RD WATER PS - FINAL DESIGN\DWG\2022-029 - C3.1 - BUTTERFLY VALVE REPLACEMENT PLAN.DWG - 8/9/2022 5:06 PM - Mark Wu

| NO. | REVISIONS | BY | DATE |
|-----|-----------|----|------|
|     |           |    |      |



DESIGNED BY: JGC  
 DRAWN BY: JGS  
 CHECKED BY: AWL

CITY OF FERDALE  
 WASHINGTON  
 CHURCH ROAD WATER BOOSTER PUMP STATION UPGRADE

BUTTERFLY VALVE REPLACEMENT PLAN

DATE: 8-9-2022  
 SCALE: AS SHOWN  
 JOB NUMBER: 2022-029

SHEET: C3.1  
 PAGE: 8 of 21

**REMOVE AND REPLACE**

REMOVE & REPLACE

**REMOVE AND REPLACE**

**REMOVE AND REPLACE**

EQUIPMENT SCHEDULE

| ITEM No. | DESCRIPTION  | QTY | REQ'D |
|----------|--|-----|-------|
| 1        | 12" DIA. FL. BUTTERFLY VALVE W/CRANK OPERATOR  | 1   | 1     |
| 2        | 8" DIA. FL. BUTTERFLY VALVE W/CRANK OPERATOR   | 1   | 1     |
| 3        | 12" DIA. MT. BUTTERFLY VALVE W/BURIED OPERATOR, EXTENSION, AND INDICATING TYPE ROSS COP  | 2   | 2     |
| 4        | 8" DIA. MT. FL. BUTTERFLY VALVE W/CRANK OPERATOR   | 2   | 2     |
| 5        | 8" DIA. BRONZE TYPE PUMP CONTROL VALVE W/LIMIT SWITCH, CLAYTON MODEL 80-01   | 2   | 2     |
| 6        | 8" DIA. PRESSURE REGULATING VALVE AND SCHEIDT SHUTOFF VALVE, CLAYTON MODEL 93-01 OR APPROVED EQUAL                                   | 1   | 1     |
| 7        | 200 GPM CANNED VERTICAL TURBINE PUMP W/100 HP MOTOR BYRON JACKSON 12-5L OR APPROVED EQUAL  | 1   | 1     |
| 8        | 12" DIA. MT 45° ELL  | 5   | 5     |
| 9        | 12" X 12" MT WYE   | 2   | 2     |
| 10       | 4" DIA. SHING ANTI-SUCK BACK VALVE, CLAYTON MODEL 52-03 TO BE GALVANIZED FROM NTP 250 ANSI   | 1   | 1     |
| 11       | 12" X 8" FL. BELLER  | 2   | 2     |
| 12       | 8" X 8" FL. WYE  | 1   | 1     |
| 13       | 12" X 8" FL. WYE   | 2   | 2     |
| 14       | 12" DIA. FLXPE PIPE, LENGTH AS REQ'D   | 4   | 4     |
| 15       | 8" DIA. FLXPE PIPE, LENGTH AS REQ'D  | 2   | 2     |
| 16       | 12" DIA. FLX MJ COUPLING ADAPTER, PRESSURE STYLE 127 OR APPROVED EQUAL   | 2   | 2     |
| 17       | 4" DIA. PRESSURE GAGES, 0-150 PSI, CONNECTION ASSEMBLY TO INCLUDE 1/2" TAP, GAGES, ISOLATION VALVE, AND HOSE TYPE SERVICE CONNECTION | 1   | 1     |
| 18       | MT CONNECTION TO PUMP SUCTION BELL   | 2   | 2     |
| 19       | MT XPE 12" DIA. 45° ELL  | 3   | 3     |
| 20       | 12" X 8" MT WYE  | 1   | 1     |
| 21       | 4" DIA. FL. BUTTERFLY VALVE W/CRANK OPERATOR   | 2   | 2     |
| 22       | 4" DIA. FLX MJ COUPLING ADAPTER, PRESSURE STYLE 127 OR APPROVED EQUAL  | 2   | 2     |
| 23       | 4" DIA. FLXPE PIPE, LENGTH AS REQ'D  | 3   | 3     |
| 24       | 4" DIA. 45° ELL 250 ANSI PSL   | 1   | 1     |

THRUST BLOCK SCHEDULE

| STYLE No. | BEARING AREA |
|-----------|--------------|
| ▲         | 5 SQ FT      |
| △         | 15 SQ FT     |

THRUST BLOCKS SHALL BE CONSTRUCTED OF CLASS "B" CONCRETE AND SHALL BEAR DOWN ON UNDISTURBED SOIL.

- KEYED NOTES**
- 1 = INSTALL NEW PRESSURE TRANSMITTERS, TWO (2) TOTAL INCLUDE 1/2" STAINLESS STEEL TAPPING NIPPLE, 1/2" STAINLESS STEEL ISOLATION BALL VALVE, AND ALL ASSOCIATED APPURTENANCES. ALL WETTED PARTS ARE TO BE NSF 60/61 CERTIFIED.
  - 2 = INSTALL NEW PRESSURE GAUGES, TWO (2) TOTAL (0-200 psi). INCLUDE 1/2" STAINLESS STEEL TAPPING NIPPLE, 1/2" STAINLESS STEEL ISOLATION BALL VALVE, AND ALL ASSOCIATED APPURTENANCES. ALL WETTED PARTS ARE TO BE NSF 60/61 CERTIFIED.



**BID SET**

NOTE:

1. ALL EQUIPMENT AT THE CHURCH ROAD RIMPING STATION SHALL INCORPORATE 15 ANSI PSI MINIMUM PRESSURE RATED COMPONENTS, EXCEPT AS NOTED. Δ

AS BUILT

DESIGNED BY:  
  
 NORTHWEST ENGINEERING COMPANY  
 Seattle, Washington • 206-422-6000  
 470003.2

**RONALD T. JEPSON & ASSOC., INC.**  
 REGISTERED PROFESSIONAL ENGINEERS AND LAND SURVEYORS  
 1508 CORNWALL AVE BELLINGHAM, WASHINGTON 98225

SCALE: AS SHOWN  
 CHECKED BY: GRP 8/6/20  
 APPROVED BY: [Signature]  
 FERDALE U.L.I.D. NO. 5.  
 CHURCH ROAD RIMPING STATION PLAN 1A  
 N2A  
 4  
 JOB NO. 79008