Addendum

Addendum Number: 04

Addendum Issue Date: January 30, 2026

Owner: Robinson-Palestine Water Commission

Project Name: Water Treatment Plant and Campus

Project Number: 0210007.00

Containing: 7 Pages; 0 Drawings; 1 Specifications

This addendum amends the drawings and specifications of the above reference project and is hereby incorporated into the contract documents as part thereof. Bidders must acknowledge receipt of this Addendum in the space provided on the Bid Form. ***FAILURE TO DO SO MAY SUBJECT BIDDER TO DISQUALIFICATION****.*

General:

Questions:

Drawings:

Specifications:

1. Specification 46 12 00 – Water Main Piping Valves Fittings and Accessories
   Replace the entire specification section with the attached. Attached specification revised wording in section 2.1 Water Main (Site Piping). Watermain pipe material will be size dependent, **Unless Otherwise Noted on the plans**.

Bids are Due: No Change | local time: *No Change*

END OF ADDENDUM

Issued By: Mokammel Sanju

FARNSWORTH GROUP, INC.
Andy Hanfland
Enter Title

Attachments: *46 12 00*

DIVISION 46 - WATER AND WASTEWATER EQUIPMENT
SECTION 46 12 00 – WATER MAIN PIPING, VALVES, FITTINGS AND ACCESSORIES

PART 1 GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General Conditions, Special Provisions, and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes process piping, fittings, valves, supports and accessories necessary for installation of piping and connection to equipment and structures as shown on the Plans.

1. Section 01 10 10 – Summary of Work Sequence
2. Section 01 14 00 – General Coordination
3. Section 01 33 00 – Submittals
4. Section 09 96 00 – High Performance Coatings
5. Section 46 10 00 – General Requirements
6. Section 46 11 00 – Process Piping, Valves Fitting and Accessories
7. Section 46 11 05 – Electric Actuators
8. Division 46 – Process Equipment
9. Division 26 - Electrical

1.3 SYSTEM PERFORMANCE REQUIREMENTS

B. Minimum Working Pressure Ratings: Except where otherwise indicated, the following are minimum pressure requirements for water system piping.

1. Underground Piping, 200 psi (1380 kPa).

1.4 QUALITY ASSURANCE

C. Comply with requirements of the authority supplying water, including tapping of water mains and backflow prevention.

D. Codes and Standards: Comply with the requirements of the latest edition of the following:

2. Standard Specifications for Water and Sewer Main Construction in Illinois, Eighth Edition, hereinafter referred to as the Standard Specifications, shall apply as modified below and by the Special Provisions Modifying these Standard Specifications.

a. Pertinent standard drawings contained in the Specifications shall also apply except as modified in the Special Provisions or on the Plan Sheets.

1.5 SUBMITTALS

A. Manufacturers' literature and shop drawings demonstrating compliance with this Specification.

B. Submittals required by this section shall be made in one (1) group for review by the Engineer.

C. Contractor shall provide a piping layout, shop drawing and schedule of materials for all proposed piping, fitting, valves and supports 8-in. diameter and larger between process units and between process units and equipment. All piping installation shall be provided with flexibility to allow removal and re-installation of select piping and fittings.

D. Provide a tabulated schedule identifying valve or pipe size, type, location, Plan Sheet and accessories. A submittal with a general list of materials that does not identify specific locations of the equipment will be rejected.

E. Operation and Maintenance Manual: The Manufacturer shall submit two (2) complete copies of an Operation and Maintenance Manual and an electronic copy per Section 01 33 00 – Submittals. The manuals shall be in a 3-ring binder and be sectioned by component with appropriate indexing. Addresses, phone numbers and points of contact for repair and replacement equipment parts and service shall be included.

PART 2 PRODUCTS

2.1 WATER MAIN (Site Piping)

A. PVC SDR 21 – All Water Main Pipe Less than 18-inches Diameter (**Unless otherwise noted on the plans**).
1. Conforming to the latest Edition of ASTM D2241, ASTM F477, and NSF/ANSI 61.

B. Ductile Iron (D.I.) Pipe – All Water Main pipe Greater than 18-inches diameter (**Unless otherwise noted on the plans**)
1. Latest edition AWWA C-151/C21.51. Cement lining, ANSI/AWWA C-104/A21.4;

a. Class 52 or as noted. Joints Mechanical ANSI/AWWA C-111/A21.11 (Below Ground). All fittings shall be restrained by a mechanical device. Fittings, Latest edition ANSI/AWWA C-110

C. PVC C-900: For all Watermain Casing Pipe (**Unless otherwise noted on the plans**)
1. ANSI/AWWA C-900 Pipe Must meet the specifications laid out on the latest edition ASTM D1784, ASTM F477, and ASTM D3139.

2.2 VALVES AND ACCESSORIES

A. Tapping Valve and Sleeve

1. Tapping sleeve shall be manufactured in the U.S.A. and the sleeve shall be three hundred four (304) stainless steel body with a ductile iron flange that has a rubber seal. The sleeve shall have a full gridded SBR rubber gasket that wraps completely around the pipe for

the full length of the sleeve. All nuts and bolts shall be three hundred four (304) stainless steel. The sleeve shall have a built-in tolerance for variances in type and class for each pipe material as shown on the material proposal. All tapping sleeves shall be furnished with a three hundred four (304) stainless steel 3/4" NPT test plug for pressure testing and have a locator groove on the mating surface between tapping valve and sleeve to allow for positive alignment. Tapping Sleeve shall be ROMAC, POWERSEAL or MUELLER

B. Gate Valves

1. Non-rising stem gate valves 12” (600 mm) and smaller –Mueller A-2360; AWWA C-515 resilient wedge with restrained, mechanical joints compatible with pipe furnished.
2. Non-rising stem gate valves 14-24” (600 mm)–Mueller A-2360; AWWA C-515 resilient wedge with restrained, mechanical joints compatible with pipe furnished. With bevel gear operator for direct bury of valve on its side.
3. Valve boxes: Screw adjustable and cast iron with "WATER" on the cover.

C. FIRE HYDRANT

1. Dry-barrel fire hydrants: AWWA C-502
2. 3-Way Fire Hydrant (6”) (150 mm) inlet as shown on the Plans.
4. Joints to be restrained from the hydrant through the main.
4.. Mueller Super Centurion 250, A-423, 5 ¼” three way. The City will only accept an equal if pre-approved.

D. MECHANICAL JOINT RESTRAINT DEVICES

1.. Mechanical Joint Fitting Restraint Devices for both Ductile Iron Pipe and PVC shall have the restraint of mechanical joints incorporated into the follower gland and shall include a mechanism to impart multiple wedging action that increases with increasing pipe pressure. Follower glands shall be manufactured of ductile iron in accordance with ASTM A536.

2. Dimensions of the follower gland shall conform to and shall be compatible with mechanical joints in accordance with ANSI/AWWA C111/A21.11 or ANSI/AWWA C153/A21.53.

3. The device shall be rated for a minimum of 250 psi working pressure and a minimum safety factor of 2:1. The device shall incorporate torque nuts that twist off to assure proper torque is applied when installing.

5. Manufacturers shall be Romac, EBAA Iron, Uni-Flange or Tyler Union.

E. FLEXIBLE EXPANSION JOINT

1. Flexible expansion joints shall be installed in the locations indicated on the drawings and shall be manufactured of ductile iron conforming to the material requirements of ASTM A536 and ANSI/AWWA C153/A21.53. Foundry certification of material shall be readily available upon request.

2. Each flexible expansion joint shall be pressure tested prior to shipment against its own restraint to a minimum of 350 PSI for 3 inch through 16 inch and 250 PSI for 18 inch and greater. A minimum 2:1 safety factor, determined from the published pressure rating, shall apply.

3. Each flexible expansion joint shall consist of an expansion joint designed and cast as an integral part of a ball and socket type flexible joint, having a minimum per ball deflection of: 20º for sizes 4-inch through 12-inch; 15º for sizes 14-inch through 36-inch and 12 º for size 48-inch. The flexible expansion fitting shall not expand or exert an axial imparting thrust under internal water pressure. The flexible expansion fitting shall not increase or decrease the internal water volume as the unit expands or contracts. The minimum total linear travel shall be 8-inches.

4. All internal surfaces (wetted parts) shall be lined with a minimum of 15 mils of fusion bonded epoxy conforming to the applicable requirements of ANSI/AWWA C213. Sealing gaskets shall be constructed of EPDM. The coating shall meet ANSI/NSF-61.

5. Exterior surfaces shall be coated with a minimum of 6 mils of fusion bonded epoxy conforming to the applicable requirements of ANSI/AWWA C116/A21.16.

6. Polyethylene sleeves, meeting ANSI/AWWA C105/A21.5, shall be included for direct buried applications.

7. Manufacturer’s certification of compliance to the above standards and requirements shall be readily available upon request. The purchaser (or owner) shall reserve the right to inspect the manufacturer’s facility for compliance. All flexible expansion joints shall be The Force Balanced FLEX-TEND as manufactured by EBAA Iron, Inc. Eastland, TX., U.S.A.

PART 3 EXECUTION

1.3 INSTALLATION

A. Pipe shall be installed in accordance with the plans and above referenced specifications except as modified below.

B. Installation shall be in accordance with manufacturer's instructions.

C. All pipe shall be tested per Section 41.2.14 and 42.2.15 of the Standard Specifications for Water and Sewer Construction in Illinois, 8th Edition. Minimum test pressure of 1.5 x static pressure or 100 psi (620 kPa), whichever is greater. Pressure test shall be held for one hour and no

leakage is allowed.

B. All Traffic Control measures, layout and equipment shall be in accordance with the Illinois Department of Transportation standards for Traffic Control. Traffic Control will not be paid for separately but included in the unit price of the water main.

C. All excavated material shall be loaded into trucks or other means of removing the excavated material.

1.4 EXISTING UTILITIES

A. Joint Utility Location Information for Excavators: Call the toll-free J.U.L.I.E. telephone number, 1-800-892-0123, before starting excavation. Allow 48 hours for other than emergency assistance. It shall be the Contractor's responsibility to locate or have located all utilities.

1.5 RIGHT-OF-WAY

A. Working Right-of-Way: The Contractor shall confine his operations to the limits of the working right-of-way and easements as shown on the plans. He will be held responsible for any damage to adjacent property not within the limits of the right-of-way.

1.6 PIPING INSTALLATION

A. Disconnecting Existing Water Mains: Where shown on the plans, the existing water mains shall be disconnected. The separation shall be made in one of two ways. It may consist of removing the water main from an existing valve or fitting and plugging the opening, or the Contractor may remove a section of the main, including the fitting, install two sleeves, and a short length of pipe.

B. Connect Existing Service to New Main: Where existing water mains are to be abandoned, the existing services shall be disconnected from the existing water main and reconnected to the proposed water main after the proposed water main is constructed, tested, sterilized, and placed into service. The work shall include furnishing and installing a corporation stop in the new main with saddle, cutting and disconnecting the existing service from the old main, plugging the existing service at the point of connection to the existing water main, and connecting the service pipe to the new corporation stop.

C. Tracer Cable: Furnish and install a direct bury #12 THWN single strand copper electrical cable suitable for direct burial with 4-inch (100 mm) and larger proposed water mains. Cable to be taped or attached in an approved manner to all water mains during installation and prior to backfilling. Cable shall extend continuously up through all test stations to a point 2-feet (600 mm) minimum above finish grade. No field splices permitted except above ground at test stations. All test stations shall be located at each hydrant or determined by the Engineer.

1.7 FIELD QUALITY CONTROL

A. Construction Observation and Inspection: Owner will employ a qualified engineering agency or staff to perform construction observation and inspection.

B. Disinfection of Water Mains

1. Flushing of new mains: There will be no charge by the Owner to the Contractor for the water used to flush the mains, chlorinate, and flush the mains a second time. If it is necessary to flush the mains more than twice as noted, Contractor will be charged by the Owner for water used to flush the mains. Contractor shall provide and install any hose necessary to direct the water being flushed away from any area it might damage.

C. Final Flushing and Testing

1. All samples must be collected by the Contractor and observed by a designated sample collector of the Owner and tested at an EPA approved laboratory. Contractor shall transport the samples to the laboratory and pay all lab fees.

2. Water mains that fail the initial bacterial test shall be flushed again before additional sampling is commenced. If the second sample also fails the bacterial test, disinfection shall be repeated and the main flushed again prior to the third sampling. If the third sample fails the bacterial test, the next step shall be determined by the Owner and the Engineer. All sterilization shall be performed with a designated representative by the Owner in attendance.

Test results shall be mailed or emailed scans to the Engineer. Water sample bottles shall be furnished by the laboratory.

1.8 CLEAN UP

A. Excess Excavation: All excess excavated materials shall become the responsibility of the Contractor for disposal off the construction site as approved by the Engineer except that the Owner reserves the right to have selected excavated materials deposited at designated locations within the City Limits at no additional cost to the Owner.

B. Property of the Owner: All pipe fittings, valves, hydrants and accessories removed from the existing mains shall become the responsibility of the Contractor for disposal off the construction site, except that the Owner reserves the right to have selected excavated materials (including pipe, hydrants, etc.) delivered to a location specified by the Owner at no additional cost to the Owner.

END OF SECTION 46 12 00