ADDENDUM #2
August 26, 2024
Fort Chiswell South Sewer Extension Phase I
Wythe County

General:

1. Bidders are reminded that the following items are required for a valid bid:
   - Addenda acknowledged (located on page 5 of the bid form)
   - Bid Form properly filled out (including both Additive Alternates)
   - Bid bond
   - Attachment #2 Bidder Compliance Statement/Certification Regarding Equal Employment Opportunity (included with Addendum 1 and Addendum 2)

2. **MBE/WBE Solicitation is required prior to submission of bids.** Bidders do not need to include their solicitation information with the bid package but the low bidder will be required to provide this information no more than 48 hours past the time requested by the Engineer.

3. Owner and Engineer anticipate Notice of Award issued in early October 2024, signing of the Agreement near the middle of October 2024 with a Notice to Proceed in early November 2024. Contractor will provide documentation of material delays (manholes, wet well, etc.) to be reviewed by the Engineer and Owner which may necessitate adjustment of issuance of the Notice to Proceed.

Changes to Technical Specification:

1. Revise Section 11310 – "Wastewater Pumps" as follows

2.1.B Pump Performance: Each pump shall be capable of the following performance:

1. Pump Station

a)	Primary Duty Point Flow (gallons per minute):	**190** GPM
b)	Total Dynamic Head at Primary Rating Point (T.D.H):	**135** FT TDH
c)	Minimum Hydraulic Efficiency at Primary Rating Point:	**48** %
d)	Minimum Motor HP	24.5 HP
e)	Maximum Motor speed (RPM):	1740 RPM
f)	Minimum Shut off Pressure (Ft.):	**155** FT. TDH

2. Minimum Motor Horsepower: Motor shall be non-overloading to at least 500 gpm on the pump curve. Contractor is responsible for providing controls, switchgear, and related electrical equipment to be compatible with the pump motors provided.

2.1.L. Relays: Supplier of new pumps shall provide over-temperature and seal monitoring relays as recommended for installation in pump control panel to ensure proper operation with pumps.

3.1.A The pumps and motors will be covered by a full five (5) year non-prorated warranty that shall comprise the following terms: The initial 5 years from start-up of the equipment shall be covered 100% for parts and labor. This warranty shall not be limited by hours of running time or operation from variable speed drives.

~~Additionally, the pump manufacturer shall warrant the mechanical seal to be free from defects in materials and workmanship and against wear for the life of the pump. Should the mechanical seal fail due to normal use, the pump manufacturer shall repair or replace the seal. This warranty shall be in written form and shall be from the pump manufacturer to the Owner. Warranties from component providers or other third parties shall not be acceptable.~~

2. Revise Section 16210 – "Electric Generators" as follows:

A.1.a Generator Size (minimum) **50** KW

2.4.E.6 Provide dry contacts to indicate common generator alarm and low fuel alarm. Wires from generator dry contacts shall be wired to control building interior and labeled for use by Owner to communicate with monitoring telemetry (to be installed by Owner).

2.6.C.14 Provide dry contacts to indicate generator running (standby power available) and transfer switch on standby power source. Dry contacts shall be labeled for use by Owner to communicate with monitoring telemetry (to be installed by Owner).

3.3.A.5 Perform a **minimum 1 hour** load test of the generator; ensuring full load frequency and voltage are within specification by using a load bank.

3. Revise Section 16001 – "Electrical Detail Specifications" as follows:

2.9.A Panelboards … Provide NEMA Type **1 or 12**, unless otherwise indicated.

4. Revise Section 16900 – "Controls and Instrumentation" as follows:

2.1.B Functional Overview: The pump station controls provide alternating lead/lag duplex control of the station pumps through reduced voltage soft start drives. The controls shall be PLC based using either a custom programmed PLC based on a standardized pump station control program or a standardized controller product similar to Evoqua Intralink LC150 View-at-a-Glance controller. Station operation shall be as follows:

1. A rise in the water level above the "Lead Pump On" level setting starts Lead Pump. The lead pump will continue operation until water level drops to the "All Pumps Off" level setting.
2. A continued rise in wetwell level above the "Lag Pump On" level setting starts Lag Pump. Both pumps will continue operation until water level drops to the "All Pumps Off" level setting.
3. A continued rise in the wet well level above the "High Level Alarm" elevation turns on the warning light, sounds the buzzer, and communicates the alarm to an external telemetry system.
4. A decline in the wet well water level below the "High Level Alarm" elevation turns off the alarm buzzer and light. The buzzer may also be silenced by a manual pushbutton. A dedicated switch or breaker shall allow enabling or disabling of the buzzer only (light will remain active).
5. Continued decline in the wet well level below the "Low Level Alarm" elevation turns on the warning light, sounds the buzzer and communicates the alarm to the external telemetry system. This alarm is deactivated similar to the high level alarm described above.
6. PLC controls shall monitor analog flow rate signal and digital input totalizing flow pulse signal from discharge flow meter and relay signals to external telemetry system. HMI shall indicate flow rate and current day total flow. HMI shall also have detailed history screen to display total daily flow for current and each of the seven previous days.

2.1.D HMI Screens: The control panel HMI for custom programmed PLCs shall include the following screens ...

2.1.E Enclosure: The controls shall be housed in a corrosion resistant welded minimum NEMA 12 enclosure. Enclosure shall be fabricated from stainless steel or painted steel. Units shall include a front door with full height hinges and lever handle operated 3-point latches.

2.1.G Battery Back Up System: … When control panel PLC is operating off battery due to loss of primary station power, controls shall prevent false pump lockout fault alarms until station power is restored and drives have auto reset.

2.1.H PLC Control System: Operations of the Control Panel shall be controlled through a programmable logic controller (PLC) consisting of a power supply, CPU, discrete input and output modules and analog input and output modules. The processor unit shall include built-in USB and two (2) Ethernet IP communication ports. All input and output points supplied (including unused) shall be wired to terminal blocks. The PLC processor shall be an Allen-Bradley CompactLogix 1769 or approved equal. The PLC rack shall provide space for addition of a minimum (2) two future modules. Alternate PLCs for standard control units similar to the Evoqua Intralink LC150 are acceptable.

2.1.I Operator Interface Terminal: A graphical operator Human Machine Interface (HMI) unit shall be provided at the control panel front door. HMI shall be touchscreen type with a minimum diagonal display length of 6.5 inches and display resolution of 640 x 480 WVGA 18-bit color graphics. Interface shall be an Allen- Bradley PanelView Plus 7 Terminal, or approved equal. modules. Alternate HMIs for standard control units similar to the Evoqua Intralink LC150 are acceptable.

2.1.O … Pump over-temperature and seal monitoring relays shall be provided by or coordinated with the pump supplier and integrated in the control panel. Relays shall be as recommended by pump manufacturer for dedicated purpose and shall prevent false signals from occurring after loss control panel power by use of memory state or alternate means.

Delete Paragraph 2.2 Variable Frequency Drives and replace with the following:

2.2 DRIVES

A. Solid State Starters: A NEMA and UL rated solid state starter as manufactured by Cutler-Hammer or Square-D shall be furnished for each pump. Units shall provide open loop voltage control using two (2) SCR's per phase connected anti-parallel for variable AC output voltage with minimal motor heating. Solid State Starters shall be provided with a thermal magnetic circuit breaker disconnect and shall feature:

1) Selectable start modes of operation. To include: voltage ramp (0 -100%), limited voltage, voltage ramp w/impulse and emergency start.

2) LED indicator lights for run, starting/stopping, ready and fail.

3) Selectable run modes of operation to include: full voltage run and energy savings.

4) Stopping modes including: immediate (coast down) and soft stop.

5) Adjustable start and stop times (0 - 240 seconds).

6) Drives shall be configured to attempt auto-reset faults resulting from power loss or other conditions. Number of reset attempts and intervals shall be configurable and set to provide a minimum of 5 reset attempts and 10 second intervals.

5. Delete Section 11010 – "Miscellaneous Equipment" 2.5 Blower and Air Diffuser and replace with the following:

DRUM SCRUBBER

A. Scrubber shall be rated for 100 cfm or greater. Use Purafil DS-100 or approved equal.

Changes to the Plans:

1. Add Note #11 to Drawing C07 stating “Yard hydrant shall be Woodford Model S3 Sanitary Yard Hydrant or approved equal.”

2. Correct the second note #8. to read note #9. under Electrical Notes On Drawing C08 to read:
   9. UNLESS OTHERWISE NOTED, ALL ~~**INTERIOR**~~ ELECTRICAL ENCLOSURES SHALL BE MINIMUM NEMA 1 AND ALL EXTERIOR **(ADJACENT TO THE WET WELL)** ENCLOSURES SHALL BE MINIMUM NEMA 3R.

3. Add note Electrical Note #10. On Drawing C08 to read:
   10. Generator wiring shall be either delta or 4 wire Y.

4. Add drawing A2-1 to Drawing D03 for the water meter detail

5. Revise Drawing C08 Yard Light Detail to indicate fixtures to be minimum 7,300 lumen LED Floodlights.

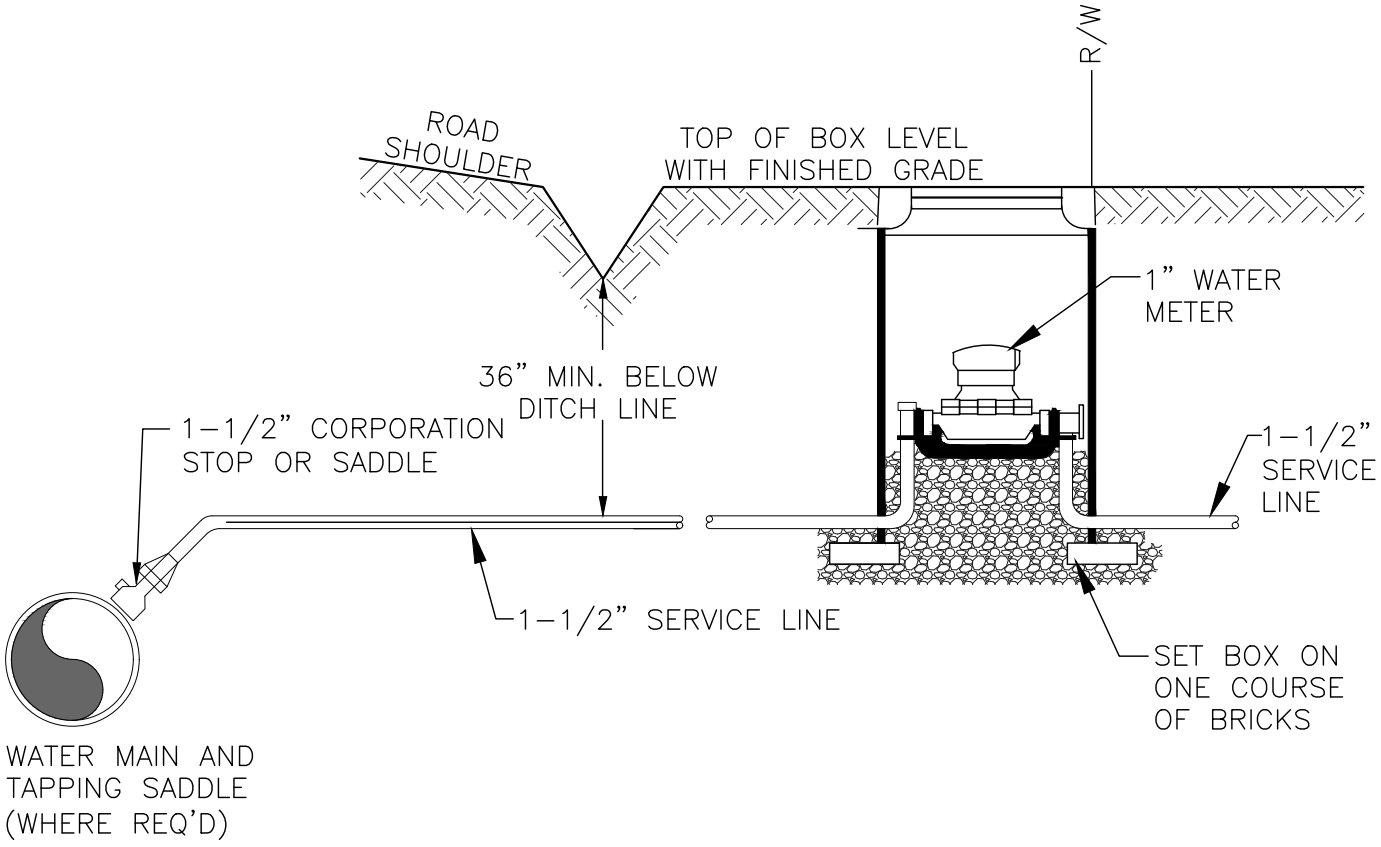
6. Revise Drawing C07 to delete snapcap diffusers and ¾” air line.

NOTES:

1. WATER SERVICES SHALL BE INSTALLED IN ACCORDANCE WITH STATE AND LOCAL BUILDING CODES AND CROSS CONNECTION PROGRAMS.
2. CUSTOMER MAY BE REQUIRED TO INSTALL ADDITIONAL BACKFLOW PREVENTION DEVICES BY THE UTILITY OR BUILDING OFFICIAL. SUCH DEVICES ARE NOT INCLUDED IN THIS CONTRACT.
3. ACTUAL METER LOCATIONS TO BE DETERMINED BY THE INSPECTOR AND COORDINATED WITH THE PROPERTY OWNER DURING CONSTRUCTION.
4. METER SHALL BE SET AT R/W LINE PER DETAIL.
5. INSTALL PE OR PVC PIPE CROSS BRACE AT LEAST 4" LONGER THAN METER BOX WIDTH IN METER SETTER STABILIZATION HOLE.

RESIDENTIAL METER COMPONENTS:

1. METER WILL BE A 1" MUELLER 452 SERIES WITH SSR REGISTER OR APPROVED EQUAL.
2. VALVES WILL BE WILKINS LU70, WATTS OR APPROVED EQUAL.
3. CORPORATION STOP – 1–1/2" WITH MUELLER INLET THREADS (AWWA C800). OUTLET WILL HAVE COMPRESSION COUPLINGS FOR CONNECTION TO COPPER OR PE PIPE.
4. METER BOX – 30" DIAMETER HDPE METER BOX FOR 1" METER, ALL BOXES WILL BE 24" DEEP AND SUPPORTED BY MINIMUM OF ONE ROW OF BRICK. BOXES WILL BE RIBBED FOR STRENGTH
5. FRAME AND COVER – CAST IRON FRAME AND COVER (FORD C32 OR EQUAL) WITH STANDARD PENTAGON BOLT AND WORM LOCK. INCLUDE EXTENSION RING FOR 30" BOX.
6. FORD VBHH74–15W–44–44–G–NL FOR STANDARD SETTER.



RESIDENTIAL WATER METER CONNECTION

NOT TO SCALE

WYTHE COUNTY
FORT CHISWELL SEWER EXTENSION
ADDENDUM 2
DRAWING A2-1
AUGUST 2024

Peed & Bortz, L.L.C.
CIVIL & ENVIRONMENTAL ENGINEERS

ATTACHMENT #2

BIDDER COMPLIANCE STATEMENT/CERTIFICATION REGARDING EQUAL EMPLOYMENT OPPORTUNITY

Applicability: Bid exceeding ten thousand dollars for construction contract/subcontract of unlimited amount and non-construction contract/subcontract of less than one million dollars.

This statement relates to a proposed contract between_____ and Public Body or
(contractor)

subcontract between_____and_____to be
(subcontractor) (contractor)

funded under a federally assisted project. Pursuant to Executive Order 11246 and its implementing regulations at 41 CFR 60-1.7(b) (1), as the undersigned bidder, I certify that:

1) Bidder has participated in a previous contract or subcontract subject to the Equal Opportunity Clause.

Yes No

2) Bidder has developed and has on file at each establishment affirmative action programs pursuant to 41 CFR 60-2 (applies only to non-construction contractor).

Yes No

3) Bidder has filed with the Joint Reporting Committee, the Director (Office of Federal Contract Compliance Programs, U.S. Department of Labor), and agency, or the Equal Employment Opportunity Commission, all reports due under the applicable filing requirements.

Yes No

I understand that if I have failed to file any compliance reports which have been required of me, or have failed to develop and have on file at each establishment affirmative action programs pursuant to 41 CFR 60-2, when required, I am not eligible to have my bid or proposal considered, or to enter into the proposed contact.

I further understand that if awarded the proposed contract, and the contract for the FIRST time brings me under the filing requirements or the written affirmative action programs that I will, as applicable: (a) within 30 days file with the Public Body Standard Form 100 (EEO-1); and (b) within 120 days from the commencement of the contract develop and submit to the Director of OFCCP for approval a Written Affirmative Action Plan.

NAME AND ADDRESS OF BIDDER (Include ZIP Code):

NAME AND TITLE OF SIGNER (Please Type or Print):

SIGNATURE: DATE:

Planholder List
Fort Chiswell Sewer Phase I
Wythe County, VA
8/26/2024

Representing	Bidder Contacts	Phone	Cell	Email
Carolina Grading and Utilities, Inc.	Philip May	(336)-384-3800		pmay@cguinc.com
CT Jamison Precast	Duane Branscome	(304)-921-8228		duane@ctjamison.com
EC Pace Co.	Freddy Spraker	(540)-267-6820		fspraker@ecpace.com
King General Contractors	Van Holden	(276)-285-4596		vann@kingcompany.us
Little B Enterprises	Kevin Hylton	(276)-762-0549		littleb@mounet.com
Littleton & Associates	John Littleton	(540)-759-0841		littletonandassc@aol.com
Main Street Builders	Dusti C. Snider	(304)-487-3912	(304)-922-6558	d.c.snider@outlook.com
Meade Contracting Co.	Doug Meade	(540)-980-4480		meadecontracting@yahoo.com
Mendon Pipeline	Bryan Bair	(304)-712-1878		bryan@mendonpipeline.com
ValMatic	Mike McEwen	(804)-752-1000	(804)-370-4840	mmcewen@acva.com
Morgan Contracting	Blake Begley	(865)-249-8640		estimating@morgan1.com
Metra Industries	Jennifer DeRose	(973)-812-0333		jderose@metraindustries.com
Xylem Dewatering	Chuck Fochi	(423)-914-2946		charles.fochi@xylem.com