PREBID CONFERENCE MINUTES (NON-MANDATORY)

New River Regional Water Authority Water Treatment Plant Expansion

April 18, 2024 1:00 P.M. 289 Kohler Ave., Austinville, VA 24312

Order of Business Review of Agenda Questions and Comments Site Visits (Treatment Plant & Raw Water Intake)

- 1. Introduction
 - Sign-up sheet.
 - Agenda distribution.
 - Identification of Owner and Engineer.

1.)	Engineer:	Peed & Bortz, LLC	(540) 394-3214 (office)
		Russell Jackson, PE	(540) 250-3792 (cell)
			russell@peed-bortz.com

2.)	Owner:	New River Regional Water Authority	
		Zachary (Zac) Slate, Superintendent	(276) 699-8101
		Philip Moore, Chief Operator	(276) 699-8103

2. Scope of Work

Capacity expansion from 4.0 to 6.33 MGD and upgrades of the water treatment plant located at 289 Kohler Avenue and the remote raw water intake on the New River at 243 Store Hill Road. Work at the treatment plant includes replacement of chemical feed pumps, installation of sedimentation basin sludge collectors and tube settlers, development of a fourth gravity sand filter and refurbishment of existing filters, installation of an additional finished water pump, construction of sludge thickener tanks, and construction of sludge dewatering facilities. Work at the intake includes replacement of existing submersible pumps with vertical turbine pumps and associated wetwell structure modifications.

<u>Base Bid:</u> The Base Bid includes all work identified in the plans, specifications, or other contract documents including, but not limited to, improvements to the raw water intake, chemical feed and mixing systems, sedimentation and sludge collection systems, gravity filters, finished water pumping system, solids handling basins, and electrical and control systems; and construction of new sludge pump station, thickener tanks, Sludge Dewatering Building, Dry Solids Shelter, and dewatering centrifuge and conveyor system.

<u>Deductive Alternate #1</u> – Centrifuge and Conveyor System: This deductive alternate is the amount subtracted from the Base Bid amount to delete the centrifuge and conveyor system from the project scope. The deductive alternate is limited to deleting the materials and associated installation of work specified in Section 11390 – Sludge Dewatering Equipment including the centrifuge, polymer feed

system, sludge feed pump flow meter, auger and belt conveyor system to the dry solids shelter, and centrifuge/conveyor control panel. All other piping, switchgear, SCADA controls, and other items shall remain in project scope to allow the centrifuge and conveyor systems to be installed in the future. A 4" bland flange shall be installed on the 4" base elbow at the northern corner of the Dewatering Building for future extension to the sludge feed pump. The Dewatering Building wall opening for the conveyor shall be constructed and filled with a 6" wide wood stud framed panel with painted plywood on interior and exterior sides. The Dry Solids Shelter shall be designed for future conveyor loads and mounting. Fabric wall opening for the opening to be installed in the future.

<u>Deductive Alternate #2</u> – Dry Solids Shelter: This deductive alternate is the additional amount subtracted from the Base Bid and Deductive Alternate #1 net amounts to delete the Dy Solids Shelter from the project scope. This deductive alternate is limited to deleting the materials and labor associated with the tensioned fabric structure, concrete foundation and knee walls, and concrete pavement and approximately 2,400 square feet of gravel access road to the north east of the dry solids shelter.

- 3. Contract Times
 - <u>Partial Substantial Completion Water Treatment Plant Capacity Expansion</u>: A partial substantial completion will be issued when the work to expand the treatment plant capacity to 6.33 MGD is complete and the treatment plant is capable of normal operation at the expanded rate. This partial substantial completion applies to all work other than the solids handling and sludge dewatering facilities downstream of the sedimentation basins. Partial Substantial Completion deadline is **365** days after the date when the Contract Times commence to run.
 - <u>Full Project Substantial Completion</u>: Full project substantial completion applies to all project work including the capacity expansion and solids handling and sludge dewatering elements of the project. Full Substantial Completion deadline is **545** days after the date when the Contract Times commence to run.
 - <u>Final Completion</u>: Final Completion deadline is **590** days after the date when the Contract Times commence to run.

Liquidated damages are indicated in the Agreement to be **\$500** for each day past Substantial Completion deadline and **\$250** dollars per day exceeding Final Completion deadline.

4. Scheduling

Bid Opening: Bids will be received at the Authority office of:

New River Regional Water Authority Attn: Michael Watson, Chairperson 289 Kohler Ave. Austinville, VA 24312

until **2:00 PM** local prevailing time on **Thursday May 9, 2024**. Bids shall be publicly opened and read aloud at that time and place.

Award of Contract: Authority anticipates recommending contract award at their May Board Meeting on May 16, 2024. Notice To Proceed date to be coordinated with Contractor. Target Notice to Proceed time is July 2024.

5. Bid Form:

Bid will be Lump Sum with a Base Bid and two Deductive Alternates. The Base Bid is a Lump Sum amount for all contract work. Each Deductive Alternate is the lump sum amount deducted from the Base Bid amount, if Owner selects the alternate.

Bidders <u>must</u> provide lump sum amounts for the Base Bid and each Deductive Alternate.

Information Required to Be Included with Bid:

- Acknowledgement of Addenda (Article 7 on Page 2 of Bid Form)
- Bid Bond/ Security (at least 5% of the Bidder's maximum Base Bid price)
- 6. Evaluation of Bids:

To determine the Bid prices for purposes of comparison, Owner will announce to all bidders a "Base Bid with alternates" budget after receiving all Bids, but prior to opening them. In the comparison of Bids, deductive alternates will be applied in the same order of priority as listed in the Bid Form.

For comparison purposes, Base Bids will first be evaluated to identify if the lowest responsive Base Bid is within the announced budget; otherwise, Bids will continue to be reevaluated with each deductive alternate, following the order of priority established in the Bid Form, until an apparent responsive low bidder is within the announced budget, or all deductive alternates have been considered. After determination of the Successful Bidder based on this comparative process and on the responsiveness, responsibility, and other factors set forth in these Instructions, the award may be made to said Successful Bidder on its base Bid and any combination of its deductive alternate Bids for which Owner determines funds will be available at the time of award *and at Owner's discretion in selecting any alternates to be awarded*.

7. Qualification Statement

To demonstrate qualifications to perform the work, each bidder must be prepared to submit within 48 hours of Owner's request written evidence, such as financial data, previous experience, present commitments and other such data as may be called for in these Contract Documents. Qualification Statement is <u>not</u> required with Bid, but may be requested by Owner following Bid opening. Please see Section 00451 of the Contract Documents for the required information.

- 8. Insurance and Bonds
 - a. Bid Bond Each Bid must be accompanied by Bid security made payable to the Owner in an amount of five percent of the Bidder's maximum Bid Price and in the form of a certified or bank check or a Bid Bond (on Section 00430 form or similar EJCDC form) issued by a surety meeting the requirements of Article 6 of the General and Supplementary Conditions.

b. Standard Labor and Material Payment and Performance Bonds – Article 6 of the General and Supplementary Conditions. When the successful Bidder delivers the executed Agreement to Owner, it must be accompanied by the required Performance and Payment Bonds.

Performance and Payment Bonds shall be

- Written for 100% of the contract amount
- Completely filled out and properly signed and dated
- Date of bond does not precede the date of the contract
- Surety company is on the Department of the Treasury's Listing of Certified Companies
- All bonds are supported by a signed and dated Power of Attorney, issued by the Surety Company
- c. Insurance Required Section 00800 of the Contract Documents outlines the insurance requirements for this project.
- d. Official Contract Documents are posted on the Peed & Bortz web site at <u>http://peed-bortz.com/request-for-bids/</u>.

Contract Documents include:

- Plans: "22-18 NRRWA WTP Expansion Bid Plans 03_05_2024.pdf"
- Upfront Contract Documents and Technical Specifications:
 "22-18 NRRWA WTP Expansion Contract Documents 03_12_2024.pdf" &
 "22-18 NRRWA WTP Expansion Electrical Specifications.pdf" (contains additional specification sections listed in the Table of Contents in the first file, but omitted from that file)

Additional Reference Documents are posted, including:

- Geotechnical Engineering Report
- Record Plans from Original Treatment Plant construction
- Original Control Panel Drawings and Bill of Materials
- Plan of Filter #1 Upgrade performed in 2021 to replace original filter wheeler bottom underdrain porous plate inserts with porcelain spheres and replace media. Plan includes dimensions and elevations representative of proposed work to be performed in Filters #2 & #3.

Pre-Bid Conference Minutes and Attendance List will be posted as soon as available.

At least one addenda will be posted to incorporate the minutes of the Pre-Bid Conference into the Contract Documents.

All Bidders are responsible for checking the official site to ensure that they have all documents, including all addenda.

9. Federal (EDA) Funds

This project will be partially funded with Federal funds from the United States Department of Commerce, Economic Development Administration (EDA) and therefore is subject to the Federal laws and regulations associated with that program.

- Section 00810 of the Contract Documents contains supplementary EDA Contract Inserts
- Contractor will be required to maintain an active SAM.gov account throughout the project.
- Shall comply with Davis-Bacon Act and Wage Rates. Refer to Section 00810 for requirements and Wage Rate Determinations.
- MBE/WBE Refer to Section 00810 for details and Goals for Minority and Female Participation.

The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.

- Form CD-512 Certification Regarding Lobbying Lower Tier Covered Transactions Contractor must complete the Certification Form to be provided to the Owner with the executed Agreement. It requires that the language of the certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.
- Project Sign Contractor shall provide Project Sign with EDA logo in conformance with requirements indicated in Section 00810.
- Buy America Per Section 00810: "To the greatest extent practicable, contractors are <u>encouraged</u> to purchase American made equipment and products with funding provided under EDA financial assistance awards."

10. Sales Tax:

This project is not exempt from sales tax. Bidders must include all sales tax in their Bid.

- 11. Property, Easements, and Existing Utilities
 - a. Property All work will be performed at the existing Authority Water Treatment Plant and Raw Water Intake sites.
 - b. Utilities Contractor is responsible for contacting Miss Utility and for locating all underground utilities prior to construction.
 - c. Permits required for this project:
 - 1.) Wythe County Building and E&S Permits permit shall be obtained by the Contractor.

12. Inspection & Testing

- a. On-site inspection will be provided by Owner.
- b. Contractor shall coordinate with County building inspector in accordance with terms of Building Permit.

- c. The Contractor will furnish an Owner approved testing agency for soil and concrete testing services for this project in accordance with the specifications.
- d. Sludge Thickener Tank foundation is to be undercut a minimum of 3 feet below the bottom of the elevation, as indicated on the plans. Following the undercuts, a Geotechnical Engineer furnished by the Contractor shall observe the excavations for signs of potential karst related conditions/features. Provided that no obvious karst related features are observed during the undercutting operations, the undercuts should be backfilled with a graded stone aggregate (VDOT No. 21-A or approved alternative), and compacted to 95% of the maximum dry density. Alternatively, lean concrete/flowable fill may also be used to backfill the undercuts below foundation; however, open graded stone (such as but not limited to No. 57 stone) shall not be used for backfill below foundation elements due to drainage considerations. Bid contract work includes the indicated undercut and backfill. If additional soil remediation measures are required, cost of the additional work will be negotiated between Owner and Contractor.

13. Materials

Contractor is responsible for providing all project materials. All materials required to construct this project are listed in the Specifications.

14. Special Conditions

- a. Record Drawings The Contractor will maintain Record Drawings as revisions are made. The Contractor will submit to the Engineer at the Final Completion inspection, record drawings of the project. The Engineer will provide Contractor with one set of reproducible plan sheets upon request. Record drawing will include one legible set of drawings upon completion of construction. Final payment will not be paid until suitable "Record Drawings" are provided to the Engineer.
- b. OSHA Requirements The Contractor will be responsible for complying with all OSHA requirements. The Contractor's responsibility also extends to providing a "Competent Person" as defined by the OSHA regulation referenced above on the job site.
- c. Sequence of Construction Sequence of Construction is detailed on Sheet G02 of the plans, with additional sequence notes on additional plan sheets. Sequence is intended to minimize disruption to treatment facility operations and limit interruptions. Construction sequence may be adjusted in coordination and with approval of Owner and Engineer.
- d. Treatment Plant Operations The existing treatment plant operates every day, typically between 12 and 16 hours per day. Treatment plant will remain in operation during construction. Contractor shall make every effort to avoid interruptions to total treatment production rate. Contractor will typically be permitted to schedule interruptions with the owner for up to 4 hours at a time, with minimum 72 hours request notice, contingent on owner's approval. Longer interruptions may be permitted in special circumstances. The treatment facility includes two separate treatment trains from the raw water feed pipe into the main building through the sedimentation basins, allowing portions of the treatment facility to be isolated during construction while flow continues through the opposite treatment train. The sequence of

construction notes allowable interruption times and steps intended to maintain maximum treatment capacity during construction.

A limited number of interruptions up to 8 hours at a time are anticipated at the raw water intake. The plans note that the Contractor shall provide a temporary portable pump at the raw water intake at all times when operation is disrupted for more than 4 hours at a time. Interruptions up to 8 hours will be permitted without the requirement of having a temporary pump on site, if Contractor makes arrangements with an approved portable pump provider (such as Godwin) and provides evidence that a pump can be delivered and setup within 24 hours, in case that operation of permanent facilities is not restored within 8 hours. Contractor is responsible for cost of temporary pump rental and all associated work to maintain operations.

- e. Network Security Contractors shall be responsible for providing their own on site broadband internet service if desired for their use. In order to protect the Authority network security, the Authority computer system and network shall only be used as required for work directly on the facility SCADA system.
- 15. Technical Specification Clarifications and Revisions:
 - a. "Section 02080 Utility Pump and Materials": Amend Paragraph 2.2.2.2 to note that all bolts, nuts, washers, and other hardware shall be stainless steel.
 - b. "Section 00910 Exterior Painting" & "Section 00920 Interior Painting": Add paragraph for Submerged Metals, Piping, and Equipment to be NSF 61 approved and shall be Tnemec Series 21 Epoxoline, or approved equal.
 - c. "Section 11210 Water Pumps": Replace references to Tnemec Series 20 Pota-Pox with Tnemec Series 21 Epoxoline to reflect current NSF approved coating.
 - d. "Section 11220 Static Mixers": The static mixers described in the specifications and shown on the pans are based on a double helix style mixer similar to the existing mixers. It was anticipated that the units would be similar length with potentially larger diameter to accommodate the higher treatment rates.

Paragraph 2.1 is revised to note that the Westfall Model 6000 static mixer is an approved equal mixer, conditional on meeting the flow, headloss, and anti-cavitation performance criteria indicated. Preliminary information provided to the Engineer by Westfall indicated a proposed 12" all stainless steel tube model with 20.75" length. Contractor would be responsible for confirming all dimensions with manufacturer as required to provide a mixer meeting the indicated performance requirements. Installation of a new static mixer shorter than the existing units shall be made by mounting the upstream end of the mixer in the same position as the upstream end of the existing mixer, and installing a new 12" pipe on the outlet side to the downstream dismantling joint (of flange adapter).

- e. "Section 11690 Tube Settlers": Append Paragraph 2.2.C to indicate that tube settler material shall be NSF approved. Additionally note that polypropylene is acceptable as an alternative to PVC tube material.
- f. "Section 11680 Sludge Collector": As indicated in Paragraph 1.3.B, sludge collector shall be by Meurer Research (MRI), Jim Myers & Sons (JMS), or approved equal. Minor revisions to this specification section are anticipated in a future addendum to ensure the specification is appropriate to both named systems.

- g. "Section 11310 Wastewater Pumps": Paragraph 2.1.A is revised to indicate named submersible pump manufacturers as Flygt, Ebara, Fairbanks Nijhuis, Wilo, or approved equal.
- h. "Section 16482 Variable Frequency Drives": Paragraph 2.1.X notes that "Drives for vertical turbine pump and thickener tank mixers shall have 120 volt control power supply with sufficient capacity to power a 192 watt, 120 volt motor space heater in addition to standard control devices in the drive." As an alternative, Contractor may install a new 10 amp 120V circuit breaker in the facility panelboard to power the heater through the drive contact.

16. Comments/Questions/Miscellaneous:

- a. Staging & Lay Down Area Contractor shall coordinate with Owner to identify suitable material staging and laydown areas at the existing treatment plant and/or raw water intake sites for Contractor use which will not interfere with existing plant operations. Potential areas considered include the cleared field near the proposed solids handling and dewatering facilities and the area between Sedimentation Basin #2 and the security fence.
- b. Filter #3 Console Ethernet Switch The plans indicated for Contractor to install a second ethernet switch in Filter #3 Console for additional communication ports. During Pre-Bid walkthrough, it was observed that an additional ethernet switch has previously been installed in the console and adequate ports are available for proposed communications. The requirement to install an additional ethernet switch in Filter #3 Console is hereby deleted.
- c. Filter #4 Waste Valve The plans and specifications indicate a 24" electrically actuated angle waste valve to be provided and installed at Filter #4. An alternative was discussed and approved to allow a 24" electrically actuated butterfly valve to be installed instead with fabricated stainless steel transition box to provide flanged connections to existing square filter outlet flange and butterfly valve.
- d. Raw Water Intake Panelboard "MDPRW" The plans indicated for existing Panelboard "MDPRW" to be replaced with a new panelboard to provide additional breakers to feed the proposed Active Harmonic Filter and Surge Protection Device. Concern was raised regarding the amount of downtime needed for this work. Further evaluation has developed an alternate method of feeding these additional devices without replacing the existing panelboard. In lieu of replacing the existing panelboard, contractor shall install a separate enclosed circuit breaker for the filter (feeder wire connected to Panelboard MDPRW main lugs or feeder) and install one new 3 pole breaker in existing Panelboard MDPRW. Further details are anticipated in upcoming addendum.