

ADVERTISEMENT FOR BIDS

Town of River Bend
WWTP Enhancements
River Bend, North Carolina

Sealed bids will be received by the **Town of River Bend** in the **Town Hall Meeting Room** located at **45 Shoreline Drive, River Bend, North Carolina 28562** on **Thursday, April 18, 2024** until **2:00 PM** local time and immediately thereafter publicly opened and read, for constructing the following facilities:

Town of River Bend
WWTP Enhancements

The major items of work include:

Rehabilitation and enhancement to the existing 330,000 gpd River Bend WWTP, including rehabilitation of two (2) existing carbon steel circular treatment units, one (1) existing equalization basin, chlorine and dechlorination feed systems, as well as installation of a new Preliminary Treatment Unit, alum feed system, filter feed pump station, denitrification filters, chlorine contact chamber/reaeration basin, and aerobic digester with ancillary equipment and devices as required.

Bids must be submitted on the complete project. Bids must be enclosed in a sealed envelope, addressed to the **Town of River Bend, 45 Shoreline Drive, River Bend, North Carolina 28562** and the outside of the envelope must be marked “Bid for River Bend **WWTP Enhancements**”. All bids must be made on blank forms provided and included in the bound document. The name, address, and license number with limitation and classification of the Bidder must be plainly marked thereon.

Each bid must be accompanied by cash or a certified check, drawn on a bank or trust company authorized to do business in North Carolina, payable to **Town of River Bend** in an amount at least equal to five percent (5%) of the total amount of the Bid, as a guarantee that a contract will be entered into. In lieu of cash or a certified check, the Bidder may submit a bid bond in the form prescribed in G.S. 143-129 as amended by Chapter 1104 of the Public Laws of 1951.

Contractors are notified that North Carolina G.S. 87 relating to licensing of contractors will be observed in receiving bids and awarding contracts.

In accordance with the Minority Participation Goals, potential prime Contractor(s), should attend the Pre-Bid Conference to be held in the **Town Hall Meeting Room** located at **45 Shoreline Drive, River Bend, North Carolina 28562** on **Tuesday, April 2, 2024**, at **2:00 PM** local time.

The Issuing Office for the Bidding Documents is Rivers & Associates, Inc. Prospective Bidders may examine the Bidding Documents at the Issuing Office on Mondays through Fridays between the hours of 8:00 AM - 5:00 PM local time, and may obtain copies of the Bidding Documents from the Issuing Office as described below.

Bidding Documents also may be examined online at ConstructConnect Plan Room www.constructconnect.com and at the **Town Hall, 45 Shoreline Drive, River Bend, North Carolina 28562**.

Printed copies of the Bidding documents may be obtained from the Issuing Office, during the hours indicated above, upon payment of a deposit of \$200.00 for each set. Bona fide bidders who return full sets of the Bidding Documents in good condition (suitable for re-use) within 10 days after receipt of Bids will receive a full refund. An additional electronic (.pdf) version of plans and specifications may be purchased for an additional \$35.00 non-refundable fee. Checks for Bidding Documents shall be payable to “Rivers & Associates, Inc.”. Upon request and receipt of the document deposit indicated above, the Issuing Office will transmit the Bidding Documents. The date that the Bidding Documents are transmitted by the Issuing Office will be considered the Bidder’s date of receipt of the Bidding Documents. Partial sets of Bidding Documents will not be available from the Issuing Office. Neither Owner nor Engineer will be responsible for full or partial sets of Bidding Documents, including Addenda if any, obtained from sources other than the Issuing Office.

The right is reserved to reject any or all bids, to waive informalities, and to award contract or contracts which, in the opinion of the Owner, appear to be in its best interest.

Owner: Town of River Bend

By: Delane Jackson

Title: Town Manager

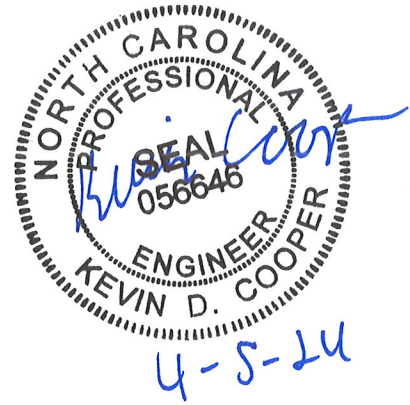
Date: March 14, 2024

Rivers and Associates, Inc.
Engineers - Planners - Surveyors
Post Office Box 929
107 East Second Street
Greenville, North Carolina 27835 (*P.O. Box*) **OR** 27858 (*Street Address*)
Phone: (252) 752-4135
Fax: (252) 752-3974

ADDENDUM NO. 1

APRIL 5, 2024

TOWN OF RIVER BEND
WASTEWATER TREATMENT PLANT ENHANCEMENTS
DWI PROJECT NO. SRP-W-ARP-0241
DRAWING NO. W-3575-A



A. SCOPE

This Addendum No. 1 consists of pages AD1-1 through AD1-13.

BIDDERS are hereby notified of the following changes in the specifications and/or drawings.

B. SPECIFICATIONS

1. ADVERTISEMENT FOR BIDS

Page AB-1 revise the first paragraph as follows:

“Sealed bids will be received by the Town of River Bend in the Town Hall Meeting Room located at 45 Shoreline Drive, River Bend, North Carolina 28562 on ~~Thursday, April 18, 2024~~ Thursday, May 2, 2024 until 2:00 PM local time...”

2. SECTION 00520 – AGREEMENT

Page A-1 revise the Article 1.01 as follows:

“1.01 Contractor shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows:

Rehabilitation and enhancement to the existing 330,000 gpd River Bend WWTP, including rehabilitation of two (2) existing carbon steel circular treatment units, one (1) existing equalization basin, dechlorination feed system, as well as installation of a new Preliminary Treatment Unit, positive displacement blowers, dissolved oxygen control, alum feed system, filter feed pump station, denitrification filters, chlorine feed system, chlorine contact chamber/reaeration basin, and aerobic digester with ancillary equipment and devices as required. ~~Rehabilitation of the existing River Bend WWTP, including replacement, modification, or cleaning of existing filtration and softening system, high service pumps, controls and other water treatment facilities.”~~

Page A-2 delete Article 4.03B from the Agreement.

~~“B. When the construction time exceeds the time stated in the BID, the CONTRACTOR shall be liable for any and all additional costs incurred by the OWNER for engineering and resident project representative fees which occur as a result of the contract time exceeding the time in the BID even if the time was extended by a change order.”~~

3. SECTION 05100 – STRUCTURAL AND MISCELLANEOUS METALS

Page 05100-13, add the following paragraph above “STRUCTURAL AND MISCELLANEOUS ALUMINUM:” as shown below:

“PLATFORM AND STAIRS:

Platform and stairs shall be provided as shown on the drawings. Grating shall be 1-1/2” aluminum I-bar. Stairs, grating, handrail and installation shall be galvanized steel.

The tank mounted platform shall be made of structural steel shapes 1/4" minimum thickness and shall be supported on the tank wall. The platform to have 36” wide x 8’-0” long deck made with 1-1/2” aluminum grating and shall be designed to withstand a uniform live load of 300 lbs. per square foot plus the dead load of the structure. The platform shall be provided with anodized aluminum handrails on all sides consisting of an upper, intermediate rail, and vertical posts fabricated from 1½" diameter schedule 40, anodized aluminum pipe. Handrails to include ¼” x 4” aluminum toeplate.

Access to the platform shall be provided by a 36” wide stairway with top landing as shown on the drawings. The stairway shall be provided with handrails on both sides consisting of 2-rail 1½” diameter sch. 40 anodized aluminum pipe. The steps shall consist of 1-1/2" aluminum grating stair treads with nosing. The landing shall have a deck made of 1-1/2” aluminum grating and shall be designed to withstand a uniform live load of 300 lbs. per square foot.

All anchor bolts and fasteners shall be 304 stainless steel. Coordinate with tank manufacturer to provide accommodation for welded or drilled anchors and fasteners as required.”

4. SECTION 13411 – STEEL FIELD ERECTED AEROBIC DIGESTER

Page 13411-1, replace paragraph three under “SCOPE:” as shown below:

“Coordinate with General Contractor to provide proper location and support for welded anchors and fasteners for the access platform and stairs. ~~To ensure sole source responsibility, compatibility, and proper support, the supplier of the aerobic digester tank shall provide the platform and stairs as specified herein and supplemented by related specifications.~~”

Page 13413-5, delete paragraph entitled “PLATFORM AND STAIRS:” as shown below:

“PLATFORM AND STAIRS:

~~Platform and stairs shall be provided as shown on the drawings. Grating shall be 1-1/2” aluminum I-bar. Stairs, grating, handrail and installation shall be as specified in Section 05100.~~

~~The tank mounted platform shall be made of structural steel shapes 1/4" minimum thickness and shall be supported on the tank wall. The platform to have 36” wide x 8’-0”~~

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~~long deck made with 1-1/2" aluminum grating and shall be designed to withstand a uniform live load of 300 lbs. per square foot plus the dead load of the structure. The platform shall be provided with anodized aluminum handrails on all sides consisting of an upper, intermediate rail, and vertical posts fabricated from 1-1/2" diameter schedule 40, anodized aluminum pipe. Handrails to include 1/4" x 4" aluminum toeplate.~~

~~Access to the platform shall be provided by a 36" wide stairway with top landing as shown on the drawings. The stairway shall be provided with handrails on both sides consisting of 2-rail 1-1/2" diameter sch. 40 anodized aluminum pipe. The steps shall consist of 1-1/2" aluminum grating stair treads with nosing. The landing shall have a deck made of 1-1/2" aluminum grating and shall be designed to withstand a uniform live load of 300 lbs. per square foot."~~

Page 13413-5, replace paragraph entitled "ANCHOR BOLTS AND FASTENERS:" as shown below:

"ANCHOR BOLTS AND FASTENERS:

Coordinate with General Contractor to provide proper location and support for welded anchors and fasteners for the access platform and stairs. ~~All anchor bolts and fasteners shall be 304 stainless steel, furnished and set by the Manufacturer with proper projection in accordance with approved, certified drawings furnished by the Manufacturer."~~

5. SECTION 13413 – PRESTRESSED COMPOSITE CONCRETE TANK

Page 13413-1, replace paragraph four under "DESCRIPTION OF WORK" as shown below:

~~"Coordinate with General Contractor to provide proper location, wall thickness and support for drilled anchors and fasteners for the access platform and stairs. To Ensure sole source responsibility, compatibility, and proper support, the supplier of the aerobic digester tank shall provide the platform and stairs as specified herein and supplemented by related specifications."~~

Page 13413-10, delete paragraph entitled "PLATFORM AND STAIRS:" as shown below:

"PLATFORM AND STAIRS:

~~Platform and stairs shall be provided as shown on the drawings. Grating shall be aluminum with 1-1/2 inch x 1/4 inch bearing bars spaced at 1-1/2 inches O.C., and 1-1/2 inches x 1/4 inch cross bars spaced at 1-1/2 inches O.C. Stairs, grating, handrail and installation shall be as specified in Section 05100.~~

~~The tank mounted platform shall be made of structural steel shapes 1/4" minimum thickness and shall be supported on the tank wall. The platform to have 36" wide x 8'-0" long deck made with 1-1/2" aluminum grating and shall be designed to withstand a uniform live load of 300 lbs. per square foot plus the dead load of the structure. The platform shall be provided with anodized aluminum handrails on all sides consisting of~~

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~~an upper, intermediate rail, and vertical posts fabricated from 1½" diameter schedule 40, anodized aluminum pipe. Handrails to include ¼" x 4" aluminum toeplate.~~

~~Access to the platform shall be provided by a 36" wide stairway with intermediate landing as shown on the drawings. The stairway shall be provided with handrails on both sides consisting of 2 rail 1½" diameter sch. 40 anodized aluminum pipe. The steps shall consist of 1-1/2" aluminum grating stair treads with nosing. The intermediate landing shall have a deck made of 1-1/2" aluminum grating and shall be designed to withstand a uniform live load of 300 lbs. per square foot."~~

Page 13413-10, replace paragraph entitled "ANCHOR BOLTS AND FASTENERS:" as shown below:

ANCHOR BOLTS AND FASTENERS:

~~"Coordinate with General Contractor to provide proper location, wall thickness and support for drilled anchors and fasteners for the access platform and stairs. All anchor bolts and fasteners shall be 304 stainless steel, furnished and set by the Manufacturer with proper projection in accordance with approved, certified drawings furnished by the Manufacturer."~~

C. DRAWINGS

1. SHEET E-1

Revise GENERAL ELECTRICAL NOTE No. 20 as follows:

~~"Maintain existing Caterpillar Standby Generator & Cummins Onan Standby Generator. Verify all generator to functions to restart on new equipment load layout. Provide startup maintenance vendor per River Bend requirements. Coordinate and contract with River Bend's maintenance vendor: Mr. Reed Sheffield, Coastal Diesel Service, Inc., 1700 Highway 70 East, New Bern, NC 28564, 252-633-2025, reed@coastaldiesel.net."~~

D. GENERAL

1. Attached is a copy of a Memorandum (AD1-5 through AD1-13) which documents the minutes from the Pre-Bid Conference held on Tuesday, April 2, 2024. This Memorandum is not a part of the Addendum or Contract Documents. It is provided for information only. All necessary revisions are included in the appropriate Addendum.

This Addendum No. 1 is submitted this 5th day of April, 2024. Each BIDDER is requested to acknowledge receipt of this Addendum in the space provided in the Bid Form.

RIVERS & ASSOCIATES, INC.
107 East Second Street
Greenville, North Carolina 27858

MEMORANDUM

TO: Attendees and Plan holders

FROM: Kevin Cooper, P.E. **KC**

SUBJECT: Pre-Bid Conference
Town of River Bend
Wastewater Treatment Plant Enhancements

DATE: Tuesday, April 2, 2024 at 2:00 P.M.

This memorandum has been prepared to document the items of discussion from the Town of River Bend Wastewater Treatment Plant Enhancements Pre-Bid Conference. The meeting was conducted by Rivers and Associates, Inc. (the Engineer) of Greenville, NC, and was held at the River Bend Town Hall on Tuesday, April 2, 2024.

The Owner and Engineer have made an effort to address any questions posed during the meeting. Should any additional questions arise, prospective bidders should contact the Engineer in writing by emailing kcooper@riversandassociates.com AND gchurchill@riversandassociates.com. The Engineer cannot guarantee that any questions submitted within 7-days of the bid opening will be addressed prior to the bid opening. The information contained herein is for informational purposes. Prospective bidders should rely upon the written language in the contract documents and any Addenda issued during the bidding process.

1. Introductions

The Engineer began the meeting by welcoming all attendees and providing brief introductions of the representatives of Rivers and Associates, Inc. and the Town of River Bend. The representatives that were in attendance are as follows:

- a. Engineer – Rivers & Associates, Inc.:
 - i. Kevin Cooper, P.E. – Project Engineer
 - ii. Colten Vainright – Resident Project Representative
 - iii. Greg Churchill, P.E. – Sr. Project Manager
- b. Owner – Town of River Bend:
 - i. Delane Jackson – Town Manager
 - ii. Brandon Mills – Public Works Director and ORC

- c. Although not in attendance, the Engineer acknowledged the following subconsultants:
 - i. Ron Pledger, P.E. – Electrical Engineering Subconsultant
 - ii. William Dixon, P.E. – Structural Engineering Subconsultant

Following the introduction of the representatives above, the remaining attendees were given the opportunity to introduce themselves. A sign-in sheet was distributed and is attached to these meeting minutes. The sign-in provides contact information for all attendees.

2. Project Overview

Following introductions, the Engineer provided a brief project overview as follows:

- a. The project was designed by Rivers and Associates, Inc. of Greenville, NC.
- b. The project is being funded by the American Rescue Plan Act (ARPA) from the State Fiscal Recovery Fund (Project No. SRP-W-ARP-0241).
- c. The WWTP site is located 102 Gull Pointe in River Bend, NC.
- d. The project is referred to as the WWTP Enhancements which includes some demolition/abandonment of existing components, rehabilitation of existing components, as well proposed structures. The project does not increase treatment capacity, but improves the quality of the wastewater effluent. One of the more challenging parts of the work will be to keep critical components of the WWTP operational while performing the rehabilitation and upgrades.
- e. The construction time limit for this project will be 456 consecutive calendar days (approximately 15 months) for substantial and final completion. Liquidated damages are set at \$1,000.00 for each day after substantial completion and for each day after final completion.
- f. Basic Horizontal and Vertical control have been provided by the Engineer, but all other staking requirements will be the responsibility of the Contractor.
- g. Contractor shall limit construction to the limits of disturbance as shown on the plans.
- h. A Preliminary Construction Sequence and bypass pumping plan is included on the drawings. Deviations from the proposed schedule, may be proposed by the Contractor for consideration and approval by the Engineer and Owner. No deviations will be approved which will adversely impact the Owners' ability to maintain operations of the WWTP.

- i. The project includes two phases that are segregated on the plans and in the Bid Schedule. The phasing was intended to prepare the new portions of the WWTP site to accommodate upgrades before significantly disrupting treatment capability at the existing treatment units.
 - i. Phase I: Initial Grading and Pre-load/Surcharge
 - Removal of a number of existing spoil and debris piles. The Owner will remove any suitable materials before construction begins. The remaining debris should be appropriately disposed of offsite.
 - Install erosion control measures to protect existing wetlands to remain.
 - Clearing and grubbing of the existing wetlands within the Limits of Disturbance indicated on the plans. No on-site burning is permitted.
 - Muck out existing ditches and low areas and push clean sand into wet areas to a depth of 12"-18" above water levels and compact.
 - Undercut unsuitable soils to the depth required by the Engineer in the field. Replace with select borrow material and compact in layers.
 - Place and grade soil piles for the surcharge areas as shown. Grade adjacent ditch to ensure proper drainage during surcharging.
 - Monitoring plates will be used to survey the consolidation of soils beneath the surcharging areas. This process could last for several weeks.
 - ii. Phase II: General Construction and Demolition
 - Includes all demolition/abandonment work and general construction.
 - General demolition work includes abandoning the existing digester, grit settling tanks, static screen discharge piping and dumpster, air valve vault, etc. Reference Sheet CS3 of the plans for a complete list.
 - General construction work/upgrades to existing facilities includes a new packaged preliminary treatment unit, surge dosing pumps and ancillary equipment, filter feed pumps and ancillary equipment, effluent denitrification and filter equipment & controls, a new aerobic digester, blowers, etc.
 - Phase II will also require re-grading the site following surcharging. Reference Sheet CS4.

- The WWTP must remain in operation during the construction of proposed improvements. A preliminary bypass pumping plan has been provided by the Engineer on sheet CS7.
- The Engineer has made every effort to provide a construction sequence that will minimize construction downtime and allow for the WWTP to remain in operation during construction.

3. Bid Procedure and Documents

- a. Due to a conflict with another treatment plant project bidding on April 18th, the Owner has elected to postpone the bid opening to Thursday, May 2nd, at 2:00 pm. This will be included in Addendum #1.
- b. Bid documents may be accessed online via Construct Connect plan room (www.constructconnect.com), in person at the Issuing Office (Rivers and Associates, Inc., 107 East 2nd Street, Greenville, NC 27858), or in person at the Town of River Bend Town Hall at 45 Shoreline Drive, River Bend, NC 28562.
- c. Bid documents may be purchased from the issuing office for \$200.00 per set; electronic, PDF versions can be purchased for an additional \$35.00. Bona fide bidders who return full sets of the bidding documents in good condition within 10-days after receipt of Bids will be issued a full refund.
- d. The specifications contain Instructions to Bidders (IB-1 through IB1-5) and the Bid Form (B-1 through B-14).
- e. Bidders should fill out their bids on the forms provided in the specifications. If any revisions are issued via addenda, use the new Bid Form provided with the addendum.
- f. Bidders are required to list their proposed subcontractors (if any) on the Bid Form.
- g. Bidders are also required to list the equipment/suppliers for various components of the project (B-9 through B-10). Circle the proposed supplier or write in an approved equal on the space provided.
- h. Bid Schedule
 - i. Phase I Bid Schedule line items are by unit price.
 - ii. Phase II Bid Schedule line items are lump sum. The majority of Bid items have a Base Bid and Alternate.
 - iii. Certain bid line-item alternatives will have different components and varying construction procedures. For example, the aerobic digester may be steel (base bid) or prestressed concrete (alternate). The steel aerobic digester is proposed to have stainless steel air piping throughout (sheet C15 of the plans). The prestressed concrete aerobic digester is proposed to have a 40 HP floating aerator with pivotal mooring (sheet C16 of the

- plans). Prospective bidders should understand these variations while preparing their bids.
- iv. There is one Add Alternate for removal and disposal of existing blowers and air piping within the existing blower building.
 - v. A Utility Service Entrance Allowance, Spare Parts Allowance, and Testing Allowance are all included on the Bid Schedule for Phase II.
 - vi. There are various items that are considered either subsidiary obligations or are to be included in the unit price or lump sum items. Refer to the Payment Section – Section 01150.
 - vii. Bidders are strongly encouraged to read Section 01150 – Payment of the specifications to ensure a proper understand of all equipment, materials, labor, etc. are included in each Bid line item.
 - i. Minority goals have been set for this project, as required by North Carolina State Construction Laws. The percentages of minority participation established in the Contract Documents are “goals” and not set-asides. The Bidder is required to make “good faith efforts” to recruit minority participation on this construction project.
 - j. The “good faith actions” established by North Carolina Construction Law includes, but are not limited to, working with minority organizations to recruit minority construction firms, notifying minorities of bidding opportunities, negotiating in good faith with minority businesses, providing financial assistance by helping with bonding or credit, entering into joint ventures, providing quick-pay agreements, and other financial assistance.
 - k. Bidders are reminded that Chapter 87, Articles 1, 2, & 4 of the North Carolina General Statute will be observed in the Bidding process. Refer to Article 3.02 in the Instruction to Bidders. Electrical subcontractors shall meet the requirements outlined in Specification Section 16050. Be sure to list the electrical subcontractor on the bid form.
 1. Required Bid Attachments to be considered a responsive bidder (as outlined in Article 7 of the Bid Form):
 - i. Bid security in the form of a Bid Bond or Certified Check.
 - ii. List of proposed subcontractors.
 - iii. List of proposed suppliers.
 - iv. Evidence of Authority to do business in NC.
 - v. Contractor’s license number.
 - vi. Bidder’s Qualification Statement
 - vii. Minority Business documentation. Reference NC Division of Water Infrastructure MBW/WBE (DBE) Compliance Supplement.
 - viii. E-Verify Certification.

- ix. Iran Divestment Act Certification.
 - x. American Iron and Steel Certification.
- m. Bidders should be aware of the importance of the Bidder Qualifications, outlined in Article 3 of “Instructions to Bidders”. The information must be submitted by the successful bidder within five days of Owner’s request, and must be accompanied by the “CONTRACTOR’S QUALIFICATION STATEMENT” (Bid Form 7.04).
- n. The lowest responsive Bidder will also be required to provide additional documentation for the Minority Business requirements.
5. Miscellaneous Considerations
- a. The Contractor is responsible for complying with a number of regulatory permits for this project. The following permits are provided in Appendix B of the specifications:
 - i. Erosion & Sediment Control Permit
 - ii. NPDES General Permit (NCG01)
 - iii. Stormwater Management Permit
 - iv. US Army Corp of Engineers Nationwide 58 Permit
 - v. NCDEQ 401 Water Quality Certification
 - vi. NCDEQ DWR Authorization to Construct
 - b. The Contractor shall maintain permits on the project site at ALL times during construction.
 - c. It is the Contractor’s responsibility to keep and maintain proper field notes including as-built information, record drawings, ESC self-monitoring reports, etc. As-built information is a condition of payment.
 - d. Project cannot be considered complete until system can be certified to by Engineer, to be operational and approved by the State agencies.
 - e. A Geotechnical Investigation is included in Appendix A with five (5) boring locations for proposed structures. Also included in this investigation is information in regard to surcharging requirements.
 - f. Following Phase I work of clearing and grubbing, mucking out the wetlands, etc., there will be additional room on the site for a lay down yard. Prior to the completion of Phase I work, the Owner has indicated that the grassy area in front of the fenced boat storage yard (west of the WWTP) could be used for a field office.

After discussing the items outlined above, the Engineer and Owner opened the meeting for attendees to ask questions or provide comments about the project or bid procedure.

ATTENDEE QUESTIONS/COMMENTS:

1. Question: Does the area in front of the boat yard have electrical service for a field office?
 - a. Answer: There is not a service drop within the vicinity. However, there is overhead electric that serves the WWTP in the area. Therefore, obtaining a service drop for temporary power is feasible.
2. Question: The Bid Schedule lists “Unclassified Excavation” as a part of Phase I work. How will this be measured and paid for?
 - a. Answer: Truck load tickets will be used to measure earthwork quantities where possible. Otherwise, the Engineer’s Resident Project Representative (RPR) will be on site to field measure items of unit price work including the total number of cubic yards of unclassified excavation and disposal.
3. Question: What is the plant capacity?
 - a. Answer: The WWTP is designed to treat up to 330,000 gallons per day. The average daily flow is approximately 100,000 – 110,000 gallons per day.
4. Question: Are there any alternative routes to access the site during construction?
 - a. Answer: The only primary access to the site is via Gull Pointe, Plantation Drive and Shoreline Drive. The Contractor will need to take care while transporting heavy machinery through residential areas.
5. Question: As the existing generators are to remain, what are the requirements for generator re-start up? Is anyone contracted by the Town to service/maintain the generators?
 - a. Answer: Refer to General Electrical Note #20 on Construction Plan Sheet E-1. Per Addendum #1, Electrical subcontractor should coordinate and contract with River Bend’s maintenance vendor: Mr. Reed Sheffield, Coastal Diesel Service, Inc., 1700 Highway 70 East, New Bern, NC 28564, 252-633-2025, reed@coastaldiesel.net.
6. Question: Can the sludge removal from the existing treatment units/aerobic digester be listed as a unit price?
 - a. Answer: The Engineer and Owner will discuss this request. Any revisions to the Bid Schedule will be handled via Addenda.

7. Question: Who is the best point of contact to schedule another site visit?

- a. Answer: Prospective bidders wishing to conduct a site visit should contact Mr. Brandon Mills with the Town of River Bend. His contact information is included on the sign-in sheet attached to these meeting minutes.

Following the meeting at Town Hall, the Engineer invited all attendees to convene at the Wastewater Treatment Plant for a guided tour of the project site. Additional questions asked during the site visit are also included above.

The meeting concluded at approximately 3:00 P.M. The Engineer reminded all attendees that the bid date will be revised via Addendum No. 1 to Thursday, May 2, 2024 at 2:00 P.M. Bids will be received by the Town at Town Hall (45 Shoreline Drive, River Bend, NC 28562); the bid opening will be hosted at the same location.

Town of River Bend - Wastewater Treatment Plant Enhancements
 Tuesday, April 2, 2024

OWNER: Town of River Bend
 PROJECT: Wastewater Treatment Plant Enhancements
 MEETING LOCATION: Town Hall
 45 Shoreline Drive
 River Bend, NC 28562

Name	Firm	Telephone / Email
Delane Jackson	Town of River Bend	(252) 638-3870 x213/manager@riverbendnc.org
Brandon Mills	Town of River Bend	(252) 638-3870 x206/wrdsupt@riverbendnc.org
Greg Churchill, P.E.	Rivers & Associates	(252) 752-4135/gchurchill@riversandassociates.com
Kevin Cooper, P.E.	Rivers & Associates	(252) 773-8583/kcooper@riversandassociates.com
Colten Vainright	Rivers & Associates	(252) 814-9724/cvainright@riversandassociates.com
Scott Stewart	Haren Cons	cosborne@harenconstruction.com
Adam Lefiere	Turner Murphy Co	(803) 487-5216 r.murphy@turnermurphy.com alefriere@turnermurphy.com
STEVE BRYANT	SUNSTATE TIRENCH	984-789-9407 STEVE.BRYANT@sunstateequip.com
Kim Drmiston	BG Industrial	704.996.3070 Kim@BGIndustrialVAC.com
Darren Quidley	Peter + White	757-617-8577 darrenquidley@gmail.com
DAVID HERMAN	PITTELECTRIC	252-227-2332 DHERMAN@PITTELECTRIC.COM
Steven Young	Premier Water	704-231-9964 steven@premier-water.com
Luke Webster	Unitel Rentals	843 241 6434 lwebster@unitelrentals.com
Taylor Herron	united Rentals Pump	9104089536 therron@ur.com
McKae Bumgarner	State Utility Contractors	704-261-1151 mbumgarner@SUCcontractors.com

ADDENDUM NO. 2

APRIL 11, 2024

**TOWN OF RIVER BEND
WASTEWATER TREATMENT PLANT ENHANCEMENTS
DWI PROJECT NO. SRP-W-ARP-0241
DRAWING NO. W-3575-A**



A. SCOPE

This Addendum No. 2 consists of pages AD2-1 through AD2-14.

BIDDERS are hereby notified of the following changes in the specifications and/or drawings.

B. SPECIFICATIONS

1. SECTION 00410 – BID FORM

Page B-8 revise the Bid Schedule as shown below:

<u>ITEM NO.</u>	<u>QTY.</u>	<u>UNIT</u>	<u>DESCRIPTION</u>	<u>ALTERNATE</u>	<u>BASE BID</u>
28.	700	CY	Sludge Removal		\$
28- 29.	1	LS	Utility Service Entrance Allowance		\$10,000.00
29- 30.	1	LS	Spare Parts Allowance		\$5,000.00
30- 31.	1	LS	Testing Allowance		\$8,000.00 60,000.00
TOTAL BASE BID FOR CONTRACT I:					\$

ADD ALTERNATES:

31- 32.	1	LS	Remove & Dispose of Existing Blowers & Air Piping within Blower Building	\$
A LUMP SUM OF:				

Attached with this Addendum is a revised Bid Schedule (AD2-5 through AD2-8). Bidders should use the attached Bid Schedule for their bid submittal.

2. SECTION 01150 – PAYMENT

Page 01150-7, add the following paragraph after “Automated Cellular SCADA System Missions Communications Alternate”:

Sludge Removal: This item shall include all necessary labor and equipment to remove sludge residuals from existing WWTP structures to accommodate rehabilitation or proper abandonment as outlined on the plans. Contractor shall schedule and coordinate with the WWTP Operator to recycle, pump and treat as much supernatant as practical to minimize the water content of the solids prior to removal. Sludge should be hauled off site in sealed

**ADDENDUM NO. 2
 APRIL 11, 2024
 TOWN OF RIVER BEND
 WASTEWATER TREATMENT PLANT ENHANCEMENTS
 DWI PROJECT NO. SRP-W-ARP-0241
 DRAWING NO. W-3575-A**

tanker or vac trucks which are designed for the purpose of transporting liquid waste. Sludge should be disposed of only at properly permitted waste disposal facilities. Payment will be per cubic yard of sludge removed and hauled.

3. SECTION 05100 – STRUCTURAL AND MISCELLANEOUS METALS

Page 05100-18 in the first paragraph under “CASTINGS” revise the following:

“...All manhole frames and covers installed below the 100-year flood elevation (~~41.0’~~**9’** MSL) shall be bolted and watertight.”

Page 05100-18 in the first paragraph under “PIT DOORS” revise the following:

“Pit doors installed below the 100-year flood elevation (~~41.0’~~**9.0’** MSL) shall be watertight hatches.”

4. SECTION 09910 – PAINTING

Page 09910-15, add the following under “CONCRETE-MASONRY”

Exterior, prestressed composite concrete tank

Above grade:

Prime Coat	SP13	156 Enviro-Crete	1	5 Mils
Finish Coat	SP13	156 Enviro-Crete	1	5 Mils

Below grade:

Finish Coat	SP13	46H-413 Tneme-Tar	1	16-20 Mils
-------------	------	-------------------	---	------------

5. SECTION 11235 – LIQUID CHEMICAL FEED SYSTEM

Page 11235-3, revise the first paragraph under “LIQUID SODIUM HYPOCHLORITE” as follows:

“Liquid Chemical Feed Pumps: Chemical metering pumps (2 each) shall be positive displacement, non-hydraulic, solenoid driven, diaphragm-type. The pumps shall have an adjustable capacity of 0 to ~~250~~**2.5** gph at 150 psi maximum discharge backpressure. Turndown ratio shall be 100:1 in external (automatic) mode, and ~~1000:1~~**100:1** in Manual (hand) mode.

6. SECTION 13413 – PRESTRESSED COMPOSITE CONCRETE TANK

Page 13413-3, revise the minimum base slab thickness under “GENERAL DESIGN CRITERIA” as follows:

Minimum base slab thickness, inches	12 4
-------------------------------------	------------------------

Page 13413-4, revise the first paragraph of “Core Wall” as shown below:

“Core Wall: The tank core wall shall have a minimum thickness of ~~4 inches~~**3 1/2 inches** and shall incorporate the following reinforcing steel...”

7. SECTION 15100 – VALVES

Page 15100-8, revise the paragraph under “FLOOR TYPE HYDROSTATIC PRESSURE RELIEF VALVES” as follows:

“**Four-inch (4”) diameter floor-type** ~~Floor-type~~ hydrostatic pressure relief valves installed in the structures shown on the drawings shall be cast iron body, with neoprene seat on both the body and cover...”

C. DRAWINGS

1. SHEET G3 – LEGEND AND NOTES

Revise General Note No. 16 as follows:

“100 YEAR BASE ELEVATION FOR THE WASTEWATER TREATMENT PLANT IS ELEVATION ~~+8.0’~~ **+9.0’** MSL

This revision will be incorporated into the drawings released for construction.

2. SHEET C1 – HYDRAULIC PROFILE

Revise the 100-year flood elevation note as follows:

“100 YEAR FLOOD ELEV. = ~~8.0’~~ **9.0’** MSL”

Attached with this Addendum are two (2) 8.5”x11” drawings of the revisions to Sheet C1 including the 100-year flood elevation outlined above. Revisions are also included to affected weir invert and water surface elevations for the proposed reaeration basin, chlorine contact chamber, and tertiary filter clearwell due to the revised 100-year flood. See page AD2-9 through AD2-10 attached. Full size revised plan sheets will be incorporated into the drawings released for construction.

3. SHEET C11 – CHLORINE CONTACT – PLAN AND SECTION

Revise the weir elevations for the proposed chlorine contact chamber as shown on the attached 8.5”x11” drawing. See page AD2-11 attached. Full size revised plan sheets will be incorporated into the drawings released for construction.

4. SHEET C12 – CHLORINE CONTACT DETAILS

Revise Detail 1 - FIXED WEIR SCHEDULE and Detail 3 – FIXED V-NOTCH WEIR – DETAIL as shown on the attached 8.5”x11” drawing. See page AD2-12 attached. Full size revised plan sheets will be incorporated into the drawings released for construction.

ADDENDUM NO. 2
APRIL 11, 2024
TOWN OF RIVER BEND
WASTEWATER TREATMENT PLANT ENHANCEMENTS
DWI PROJECT NO. SRP-W-ARP-0241
DRAWING NO. W-3575-A

5. SHEET C16 – AEROBIC DIGESTER – PRESTRESSED CONCRETE – ALTERNATE BID

On Section 1 – PLAN VIEW, revise the “30” MANWAY” note to read as follows:

~~“30” MANWAY~~ **MANUFACTURER’S STANDARD MANWAY”**

On Section 8 – SLUDGE OUTLET WITH QUICK CONNECT, add an invert elevation of 4.90’ to the sludge outlet wall pipe.

On Detail C – STAIR AND PLATFORM ELEVATION, delete the “4’-0” (MIN)” extended base note. Also revise “~~12” (MIN)~~ REINFORCED CONCRETE SLAB” note.

Attached with this Addendum is an 8.5”x11” drawing of the revisions to Sheet C16 for Section 8 and Detail C as outlined above. See page AD2-13 attached. Full size revised plan sheets will be incorporated into drawings released for construction.

6. SHEET D1- VAULT DETAILS

Add a detail No.11 to Sheet D1 entitled “PRESSURE RELIEF VALVE WITH EXTENSION”

Attached with this Addendum is an 8.5”x11” drawing of the revisions to Sheet D1 as outlined above. See page AD2-14 attached. Full size revised plan sheets will be incorporated into the drawings released for construction.

This Addendum No. 2 is submitted this 11th day of April, 2024. Each BIDDER is requested to acknowledge receipt of this Addendum in the space provided in the Bid Form.

RIVERS & ASSOCIATES, INC.
107 East Second Street
Greenville, North Carolina 27858

**BID SCHEDULE
CONTRACT I - WWTP ENHANCEMENTS**

PHASE I - INITIAL GRADING AND PRE-LOAD/ SURCHARGE

ITEM NO.	QTY.	UNIT	DESCRIPTION	UNIT PRICE	BASE BID
1.	1.0	AC	Clearing and Grubbing W/ Offsite Disposal	\$ _____	\$ _____
2.	450	CY	Removal of Aggregate, Debris & Spoil Piles	\$ _____	\$ _____
3.	500	CY	Muckout Ditches W/ Offsite Disposal	\$ _____	\$ _____
4.	500	CY	Undercut Excavation W/ Offsite Disposal	\$ _____	\$ _____
5.	1,000	CY	Offsite Select Borrow Material	\$ _____	\$ _____
6.	4,000	CY	Offsite Select Borrow & Backfill for WWTP Structures	\$ _____	\$ _____
7.	400	CY	Unclassified Excavation w/ Onsite Disposal	\$ _____	\$ _____
8.	1,000	LF	Silt Fence	\$ _____	\$ _____
9.	4	EA	Silt Fence Outlet	\$ _____	\$ _____
10.	3	EA	Temporary Rock Check Dam	\$ _____	\$ _____
11.	40	TN	Class B Rip Rap	\$ _____	\$ _____
12.	100	SY	Excelsior Matting	\$ _____	\$ _____
13.	1.3	AC	Temporary Seeding	\$ _____	\$ _____
14.	1.5	AC	Permanent Seeding and Mulching	\$ _____	\$ _____

BID SCHEDULE

PHASE II - GENERAL CONSTRUCTION:

ITEM						<u>ALTERNATE</u>	<u>BASE BID</u>
<u>NO.</u>	<u>QTY.</u>	<u>UNIT</u>	<u>DESCRIPTION</u>				
15.	1	LS	Mobilization			\$	_____
16.	1	LS	Wastewater Treatment Plant including all work and materials except equipment, allowances and unit price items listed below. A LUMP SUM OF:			\$	_____
17A.	1	LS	Packaged Preliminary Treatment Unit Equipment - Base Bid A LUMP SUM OF:			\$	_____
17B.	1	LS	Packaged Preliminary Treatment Unit Equipment - Huber - Alternate A LUMP SUM OF:		\$		_____
18A.	1	LS	Surge Dosing Pumps and Auxilliary Equipment - Base Bid A LUMP SUM OF:			\$	_____
18B.	1	LS	Surge Dosing Pumps and Auxilliary Equipment - Hydromatic - Alternate A LUMP SUM OF:		\$		_____
19A.	1	LS	Concentric Circular Treatment Unit Rehabilitation - Base Bid A LUMP SUM OF:			\$	_____
19B.	1	LS	Concentric Circular Treatment Unit Rehabilitaton -Evoqua/Davco Products - Alternate A LUMP SUM OF:		\$		_____
20A.	1	LS	Filter Feed Pumps and Ancillary Equipment - Base Bid A LUMP SUM OF:			\$	_____
20B.	1	LS	Filter Feed Pumps and Ancillary Equipment - Hydromatic - Alternate A LUMP SUM OF:		\$		_____
21A.	1	LS	Effluent Denitrification Filter Equipment & Controls - Base Bid A LUMP SUM OF:			\$	_____
21B.	1	LS	Effluent Denitrification Filter Equipment and Controls - De Nora Tetra - Alternate A LUMP SUM OF:		\$		_____

BID SCHEDULE

PHASE II - GENERAL CONSTRUCTION:

ITEM				<u>ALTERNATE</u>	<u>BASE BID</u>
<u>NO.</u>	<u>QTY.</u>	<u>UNIT</u>	<u>DESCRIPTION</u>		
22A.	1	LS	Aerobic Digester Tank - Field Erected Steel - Base Bid A LUMP SUM OF:		\$ _____
22B.	1	LS	Aerobic Digester Tank - Field Erected Steel - Evoqua/Davco Products - Alternate A LUMP SUM OF:	\$ _____	
22C.	1	LS	Aerobic Digester Tank - Prestressed Composite Concrete Tank - Alternate A LUMP SUM OF:	\$ _____	
22D.	1	LS	Aerobic Digester Tank - Prestressed Composite Concrete Tank - Crom - Alternate A LUMP SUM OF:	\$ _____	
23A.	1	LS	Coarse Bubble Diffuser Equipment Package (EQ Basin & Reaeration Basin) - Base Bid A LUMP SUM OF:		\$ _____
23B.	1	LS	Coarse Bubble Diffuser Equipment Package (EQ Basin & Reaeration Basin) - Evoqua/Davco Products - Alternate A LUMP SUM OF:	\$ _____	
24A.	1	LS	Coarse Bubble Diffuser Equipment Package (Aerobic Digester) - Base Bid A LUMP SUM OF:		\$ _____
24B.	1	LS	Coarse Bubble Diffuser Equipment Package (Aerobic Digester) - Evoqua/Davco Products - Alternate A LUMP SUM OF:	\$ _____	
24C.	1	LS	Positive Displacement Blower Package System (Aerobic Digester) - Base Bid A LUMP SUM OF:		\$ _____
24D.	1	LS	Positive Displacement Blower Package System (Aerobic Digester) - Atlas Copco - Alternate A LUMP SUM OF:	\$ _____	
24E.	1	LS	High Speed Floating Aerator Equipment Package (Aerobic Digester) - Alternate A LUMP SUM OF:	\$ _____	

BID SCHEDULE

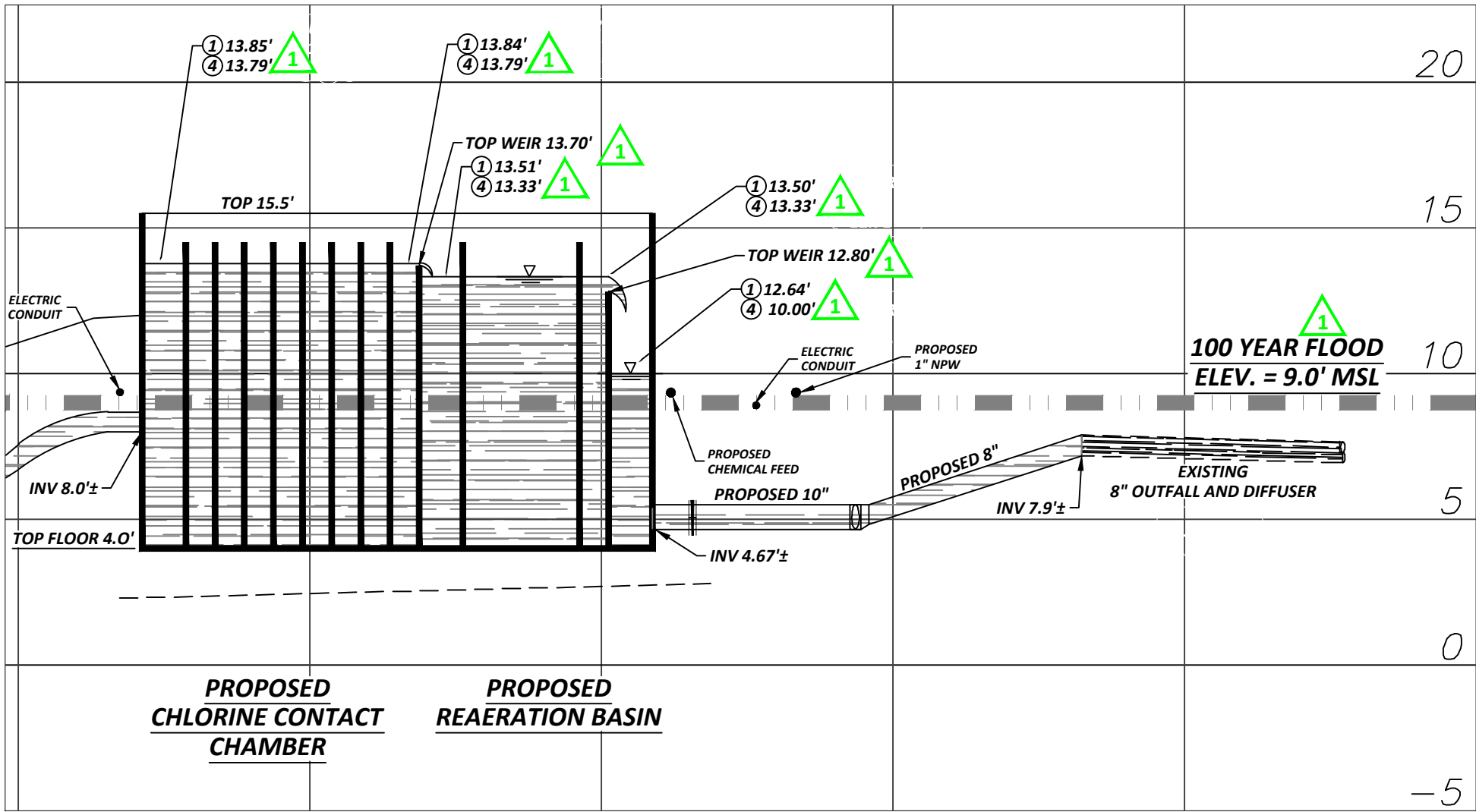
PHASE II - GENERAL CONSTRUCTION:

ITEM				<u>ALTERNATE</u>	<u>BASE BID</u>
<u>NO.</u>	<u>QTY.</u>	<u>UNIT</u>	<u>DESCRIPTION</u>		
24F.	1	LS	High Speed Floating Aerator Equipment Package (Aerobic Digester) - Aqua-Aerobic Systems - Alternate A LUMP SUM OF:	\$ _____	
25A.	1	LS	Positive Displacement Blower Package System (Treatment Units #1-2, EQ Basin & Reaeration Basin) - Base Bid A LUMP SUM OF:		\$ _____
25B.	1	LS	Positive Displacement Blower Package System (Treatment Units #1-2, EQ Basin & Reaeration Basin) - Atlas Copco - Alternate A LUMP SUM OF:	\$ _____	
26A.	1	LS	Painting - Base Bid A LUMP SUM OF:		\$ _____
26B.	1	LS	Painting - Tnemec - Alternate A LUMP SUM OF:	\$ _____	
27A.	1	LS	Automated Cellular SCADA System - Base Bid A LUMP SUM OF:		\$ _____
27B.	1	LS	Automated Cellular SCADA System - Missions Communications - Alternate A LUMP SUM OF:	\$ _____	
28.	700	CY	Sludge Removal		\$ _____
29.	1	LS	Utility Service Entrance Allowance		\$ 10,000.00
30.	1	LS	Spare Parts Allowance		\$ 5,000.00
31.	1	LS	Testing Allowance		\$ 60,000.00

TOTAL BASE BID FOR CONTRACT I: \$ _____

ADD ALTERNATES:

32.	1	LS	Remove & Dispose of Existing Blowers & Air Piping Within Blower Building A LUMP SUM OF:	\$ _____
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**PROPOSED
CHLORINE CONTACT
CHAMBER**

**PROPOSED
REAERATION BASIN**

**100 YEAR FLOOD
ELEV. = 9.0' MSL**

1 ADDENDUM NO. 2 4/11/24 GJC

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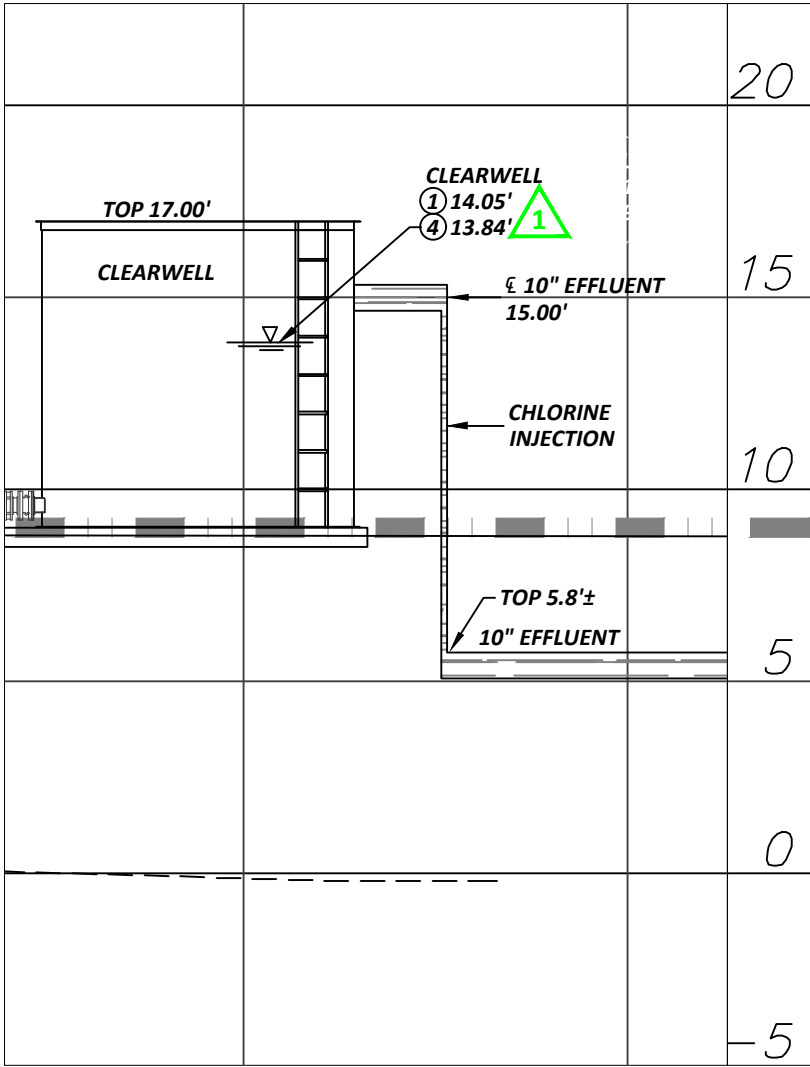
HYDRAULIC PROFILE

WWTP 2022 ENHANCEMENTS
TOWN OF RIVER BEND
 CRAVEN COUNTY - NORTH CAROLINA

DESIGNED BY:	GJC	PROJECT No.	2022129	SHEET No.	C1-A
DRAWN BY:	IM/EDN	DRAWING No.	W-3575-A		
CHECKED BY:	GJC	SCALE	AS NOTED		
		DATE	12/5/2023		

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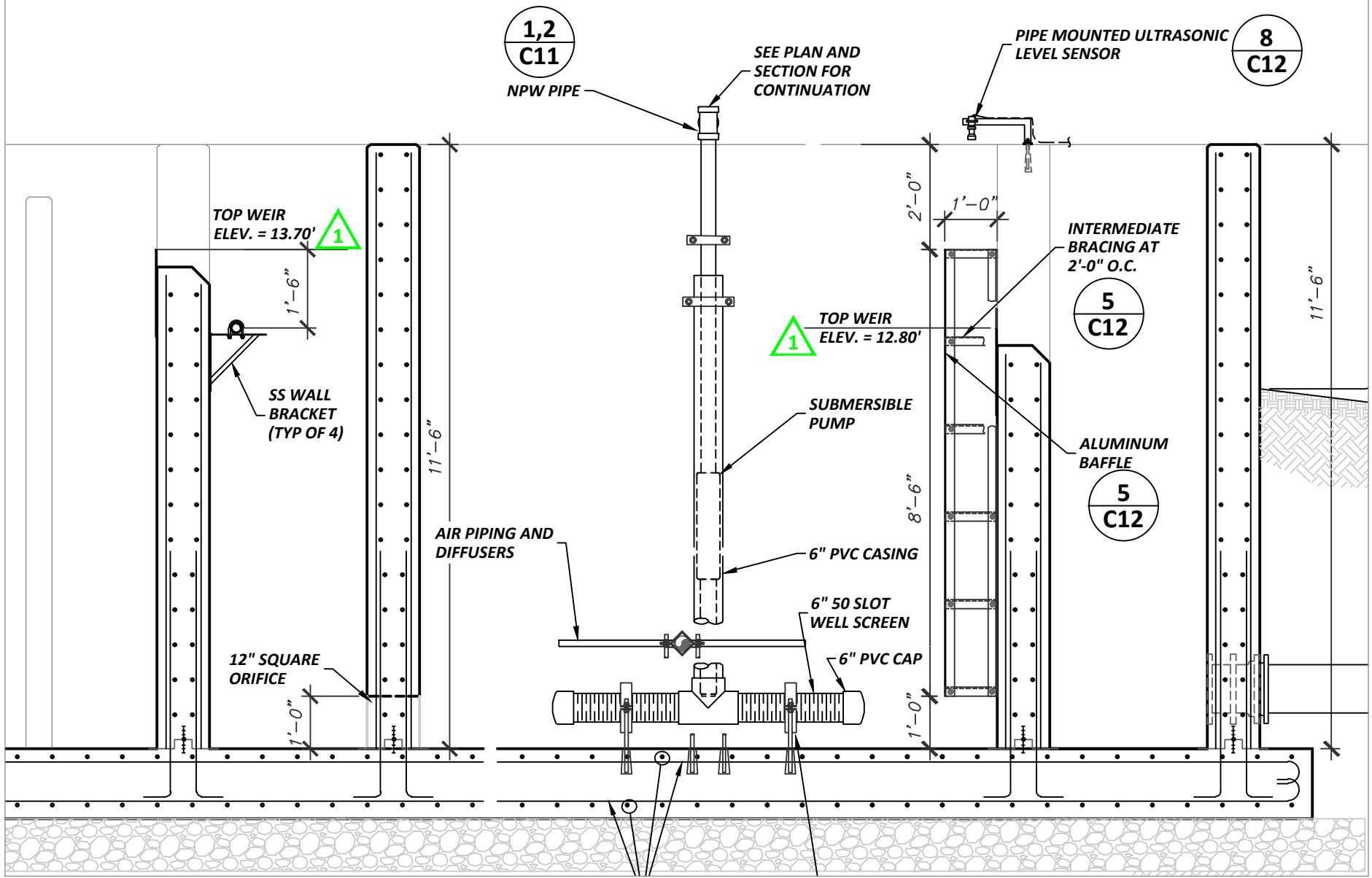
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1 ADDENDUM NO. 2 4/11/24 GJC

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HYDRAULIC PROFILE WWTP 2022 ENHANCEMENTS TOWN OF RIVER BEND CRAVEN COUNTY - NORTH CAROLINA			
DESIGNED BY:	GJC	PROJECT No. 2022129	SHEET No.
DRAWN BY:	IM/EDN	DRAWING No. W-3575-A	C1-B
CHECKED BY:	GJC	SCALE AS NOTED	
		DATE 12/5/2023	



1 ADDENDUM NO. 2 4/11/24 GJC

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CHLORINE CONTACT - PLAN AND SECTION

WWTP 2022 ENHANCEMENTS
TOWN OF RIVER BEND
CRAVEN COUNTY - NORTH CAROLINA

DESIGNED BY:	GJC	PROJECT No. 2022129	SHEET No.
DRAWN BY:	IM/EDN	DRAWING No. W-3575-A	C11
CHECKED BY:	GJC	SCALE AS NOTED	
		DATE 12/5/2023	

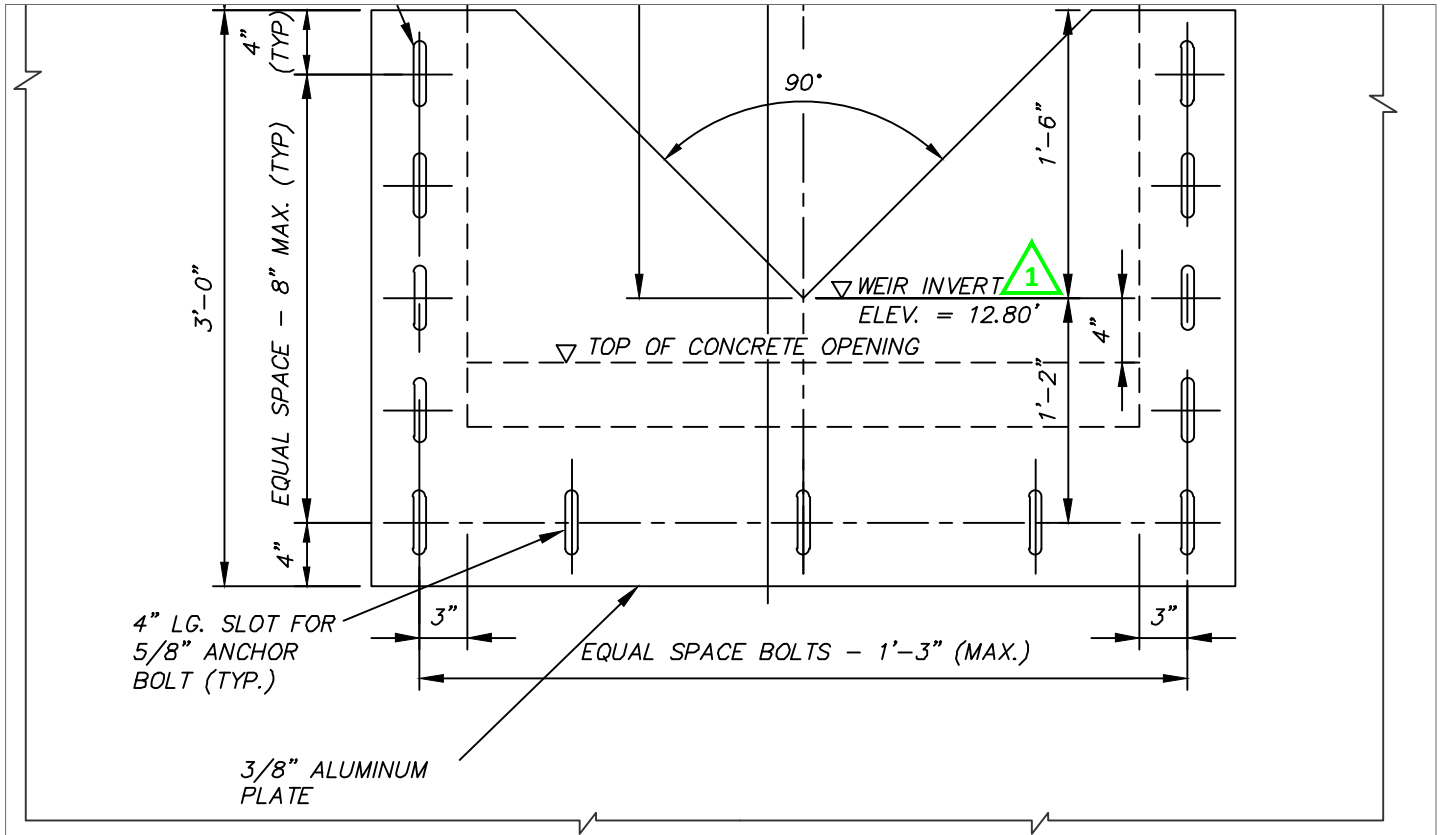
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FIXED WEIR SCHEDULE

CHLORINE CONTACT CHAMBER

NO.	DESCRIPTION	DETAIL(S)	HEIGHT	WIDTH	OPENING	ELEV (CONCRETE)	ELEV (TOP OF WEIR)
FW 1	FIXED HEIGHT RECTANGULAR WEIR	4/C12	1'-8"	4'-0"	3'-0"	13.37'	13.70' MSL
FW 2	FIXED HEIGHT RECTANGULAR WEir	4/C12	1'-8"	4'-0"	3'-0"	13.37'	13.70' MSL

① FIXED WEIR SCHEDULE



③ FIXED V-NOTCH WEIR - DETAIL

NOT TO SCALE

1 ADDENDUM NO. 2 4/11/24 GJC

CHLORINE CONTACT DETAILS

WWTP 2022 ENHANCEMENTS

TOWN OF RIVER BEND

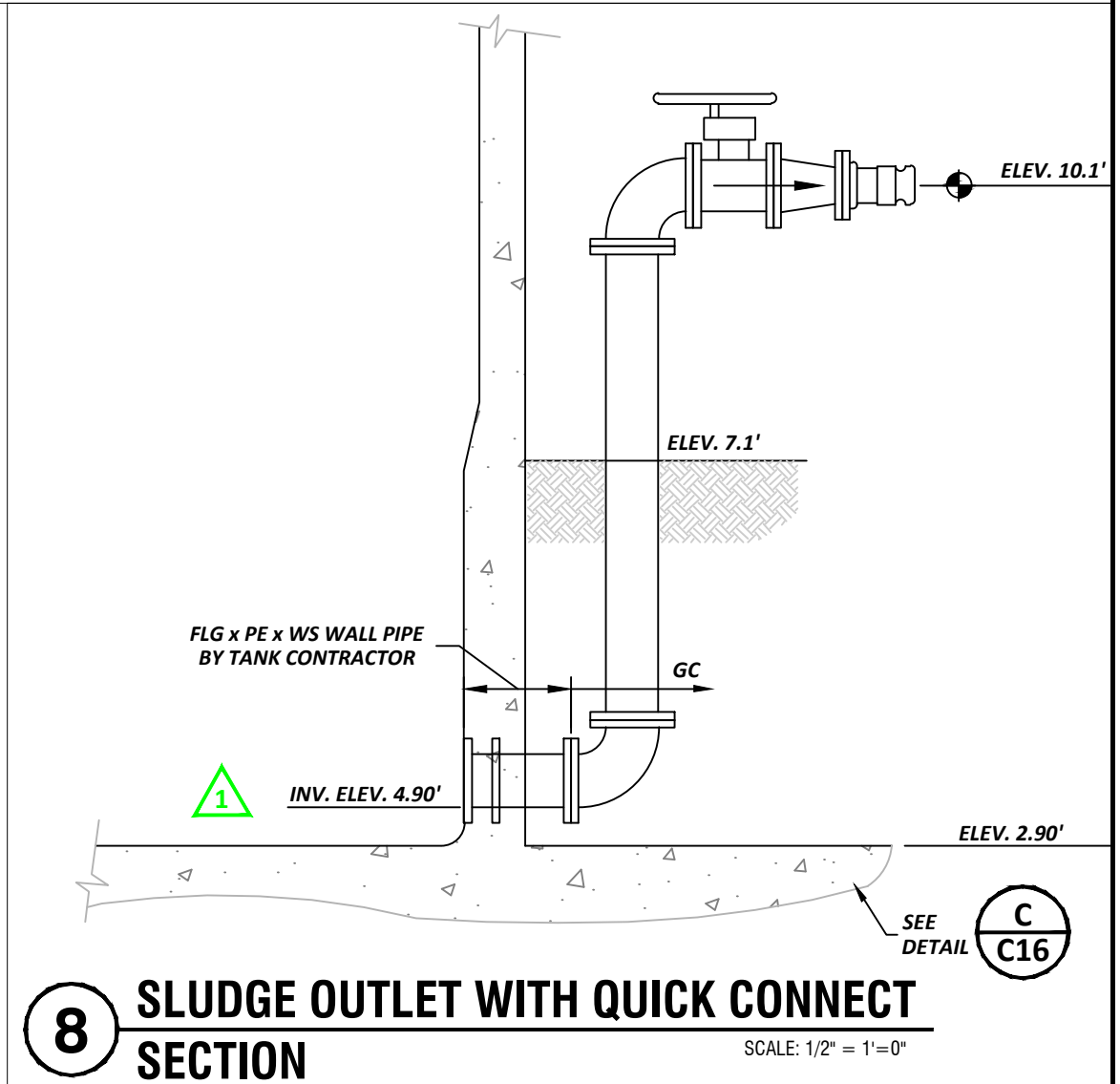
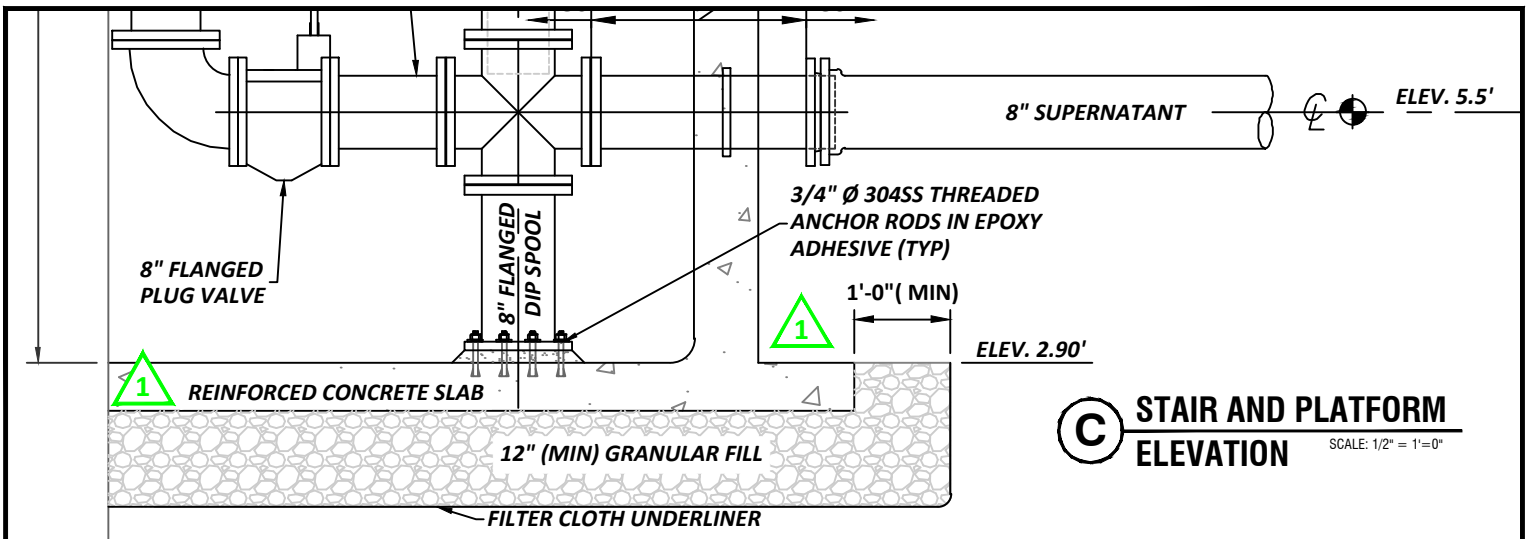
CRAVEN COUNTY - NORTH CAROLINA

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DESIGNED BY: GJC	PROJECT No. 2022129	SHEET No.
DRAWN BY: IM/EDN	DRAWING No. W-3575-A	C12
CHECKED BY: GJC	SCALE AS NOTED	
	DATE 12/5/2023	

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**AEROBIC DIGESTER -
PRESTRESSED CONCRETE -
ALTERNATE BID**

WWTP 2022 ENHANCEMENTS

TOWN OF RIVER BEND

Craven County - North Carolina

1 ADDENDUM NO. 2

4/11/24 GJC



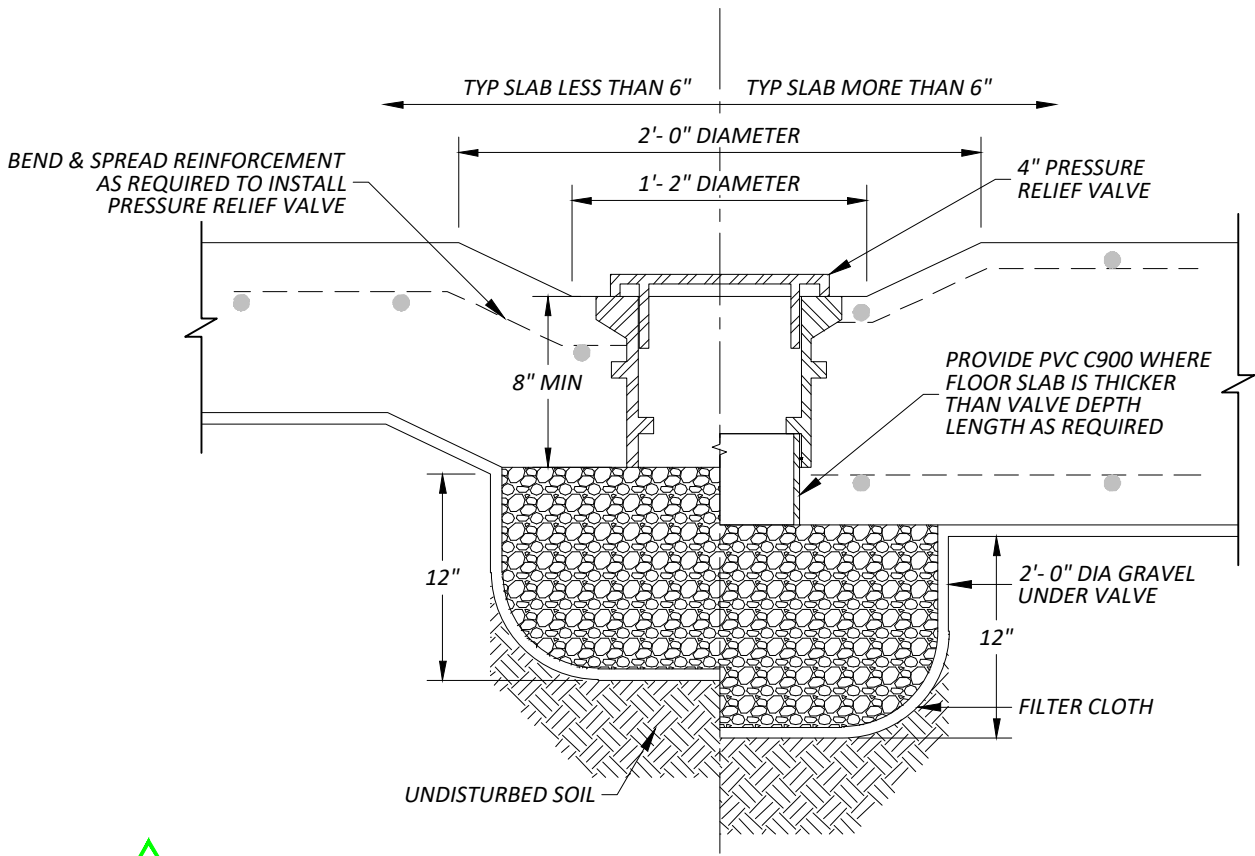
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DESIGNED BY:	GJC	PROJECT No.	2022129	SHEET No.	
DRAWN BY:	IM/EDN	DRAWING No.	W-3575-A		
CHECKED BY:	GJC	SCALE	AS NOTED		
		DATE	12/5/2023		

C16



1

11

PRESSURE RELIEF VALVE WITH EXTENSION

N.T.S.
PLNT-23C

EVALUATED: 3/11/2023, J. LINDSEY, P.E. / REVISED: 4/11/2023, G.J.C. / CHECKED: 4/11/2023, G.J.C. / DESIGNED: 4/11/2023, G.J.C. / DRAWN BY: IM/EDN

1 | **ADDENDUM NO. 2** | **4/11/24** | **GJC**

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VAULT DETAILS			
WWTP 2022 ENHANCEMENTS TOWN OF RIVER BEND CRAVEN COUNTY - NORTH CAROLINA			
DESIGNED BY:	GJC	PROJECT No.	2022129
DRAWN BY:	IM/EDN	DRAWING No.	W-3575-A
CHECKED BY:	GJC	SCALE	AS NOTED
		DATE	12/5/2023
			D1

ADDENDUM NO. 3

APRIL 23, 2024

**TOWN OF RIVER BEND
WASTEWATER TREATMENT PLANT ENHANCEMENTS
DWI PROJECT NO. SRP-W-ARP-0241
DRAWING NO. W-3575-A**



A. SCOPE

This Addendum No. 3 consists of pages AD3-1 through AD3-3.

BIDDERS are hereby notified of the following changes in the specifications and/or drawings.

B. SPECIFICATIONS

1. SECTION 13620 – INSTRUMENTATION AND CONTROLS

Page 13620-9, add the following section entitled “Magnetic Flow Meter Systems” immediately before the paragraph entitled “Electronic Signal Boosters or Isolators”

“Magnetic Flow Meter Systems: Provide magnetic flow meters in the locations indicated on the drawings to meet the following criteria:

Location	Flow Tube Diameter	Flow Range
Influent Meter Vault	6 in	70 – 750 gpm
Surge Dosing Force Main	6 in	70 - 750 gpm
Filter Feed Meter Vault	6 in	70 – 750 gpm

Magnetic flow meter systems shall include a magnetic flow tube and a microprocessor-based "smart" transmitter that is capable of converting and transmitting a signal from the flow tube. Magnetic flow meters shall utilize the characterized field principle of electromagnetic induction, and shall produce DC signals directly proportional to the liquid flow rate.

Each meter shall be furnished with a stainless steel or carbon steel metering tube and carbon steel flanges with a polyurethane, ceramic, neoprene, or Teflon liner as required by the application and/or as specified herein. Liner shall have a minimum thickness of 0.125 inches. The inside diameter of the liner shall be within 0.125 inches of the inside diameter of the adjoining pipe. Liner protectors shall be provided on all flow tubes.

ADDENDUM NO. 3
APRIL 23, 2024
TOWN OF RIVER BEND
WASTEWATER TREATMENT PLANT ENHANCEMENTS
DWI PROJECT NO. SRP-W-ARP-0241
DRAWING NO. W-3575-A

The flow tube shall be provided with flush mounted electrodes or bullet nose as indicated in the equipment schedule. Ultrasonic electrode cleaning shall not be needed or acceptable. Grounding rings shall be provided for all meters.

All materials of construction for metallic wetted parts (electrodes, grounding rings, etc.) shall be minimum 316 stainless steel, but shall be compatible with the process fluid for each meter in accordance with the recommendations of the manufacturer.

Flow tube shall be rated for pressures up to 1.1 times the flange rating of adjacent piping. System shall be rated for ambient temperatures of -30 to +65 degrees C. Meter and transmitter housings shall meet NEMA 4X requirements as a minimum. When meter and transmitter are located in classified explosion hazard areas, the meter and transmitter housings shall be selected with rating to meet the requirements for use in those areas. Non-metallic transmitter housings shall not be acceptable.

The transmitter shall provide pulsed DC coil drive current to the flow tube and shall convert the returning signal to a linear, isolated 4-20 mA DC signal. The transmitter shall utilize "smart" electronics and shall contain automatic, continuous zero correction, signal processing routines for noise rejection, and an integral LCD readout capable of displaying flow rate and totalized flow. The transmitter shall continuously run self-diagnostic routines and report errors via English language messages.

The transmitter's preamplifier input impedance shall be a minimum of 109-1011 ohms which shall make the system suited for the amplification of low-level input signals and capable of operation with a material build up on the electrodes.

The transmitter shall provide an automatic low flow cutoff below a user configurable low flow condition (0-10%). The transmitter's outputs shall also be capable of being forced to zero by an external contact operation.

Each flow tube shall be factory calibrated and assigned a calibration constant or factor to be entered into the associated transmitter as part of the meter configuration parameters. Manual calibration of the flow meter shall not be required. Meter configuration parameters shall be stored in non-volatile memory in the transmitter. An output hold feature shall be provided to maintain a constant output during configuration changes.

The transmitter shall be capable of communicating digitally with a remote configuration device via a frequency-shift-keyed, high frequency signal superimposed on the 4-20 mA output signal. The remote configuration device shall be capable of being placed anywhere in the 4-20 mA output loop. A

ADDENDUM NO. 3
APRIL 23, 2024
TOWN OF RIVER BEND
WASTEWATER TREATMENT PLANT ENHANCEMENTS
DWI PROJECT NO. SRP-W-ARP-0241
DRAWING NO. W-3575-A

password-based security lockout feature shall be provided to prevent unauthorized modification of configuration parameters.

Accuracy shall be 0.50% of rate over the flow velocity range of 0.3 to 10.0 m/s. Repeatability shall be 0.1% of rate; minimum turndown shall be 100:1. Minimum required liquid conductivity shall not be greater than 5 uS/cm. Maximum response time shall be adjustable between 1 and 100 seconds as a minimum. Transmitter ambient temperature operating limits shall be -10 to +50 degrees C. Power supply shall be 115 VAC, 60 Hz.

Flow tubes shall be 150-lb flange mounted unless otherwise noted. The cables for interconnecting the meter and transmitter shall be furnished by the manufacturer. Magnetic flow meter systems shall be as manufactured by Rosemount, Model 8750W flow meter with the Model 8712D transmitter; Foxboro; Yokogawa; or approved equal. Magnetic flow meters shall have remote transmitters mounted on the electrical rack as indicated on the drawings."

This Addendum No. 3 is submitted this 23rd day of April, 2024. Each BIDDER is requested to acknowledge receipt of this Addendum in the space provided in the Bid Form.

RIVERS & ASSOCIATES, INC.
107 East Second Street
Greenville, North Carolina 27858