

PROJECT: Town of Wedowee

CWSRF Project. No. CS010883-02 & CS010883-04

ARC Project No. AL-20358-2021

KG Project #20-0016

ADDENDUM NO. Two (2)

DATE: September 15, 2023

TO: All Recorded Contract Document Holders

This Addendum is issued to all registered plan holders pursuant to the Conditions of the Contract.

This Addendum serves to clarify, revise, and supersede information in the Project Manual, Drawings, and previously issued Addenda. This addendum and its attachments shall become a part of the plans and specifications and shall apply to the bid proposals for the above-named project.

The bidder(s) shall notify all affected subcontractors, material suppliers, and others to incorporate necessary cost and schedule updates, to the bid proposal and the work changes affected by this Addendum.

The Bidder shall acknowledge receipt of this Addendum in the appropriate space on the Bid Form. Bidders must also acknowledge receipt by email to jessica@kelleynetwork.com.

In the event of conflict between plans and specifications and this addendum, the addendum shall take precedence. Any modifications necessary to incorporate the revisions shall be included in the appropriate bid prices. The bid documents are hereby corrected, modified, and/or amended in the following manner:

General:

1. Bid security shall be 5% of total contract amount, not to exceed \$10,000.00 for all contracts.

Labor Contract:

- 1. Remove and replace Section 01 11 13 SUMMARY OF WORK with Section 01 11 13 SUMMARY OF WORK ADDENDUM #2 attached hereto.
- 2. The Labor Contract bid opening for this project has been delayed until Thursday October 5th, 2023. Bid opening will occur at 1:30 PM at the same location as originally advertised.
- Coordination with the local power utility (Alabama Power Company) for payment and execution of
 upgraded 3-Phase power service shall be the responsibility of the OWNER and shall be coordinated
 with the CONTRACTOR for any required site access, grading requirements, access requirements, etc.



Material Contract:

- All bidding SUPPLIERS shall take note of Section 00 21 13 INSTRUCTIONS TO BIDDERS Article 1
 DEFINED TERMS as it relates to Bidders and Successful Bidders. As well, bidding SUPPLIERS shall note
 Section 01 11 13 SUMMARY OF WORK, 1.01-C and Section 00 43 13 BID BOND as the contract
 documents relate to bid bonds and material bonds.
- 2. The following questions were issued during the bid advertisement:
- 2.1) Q: C12 depicts qty 1 2" LB and qty 2 1" LB conduit connections. E12 depicts qty 5 1" connections, qty 1 3/4" connection, and qty 1 of an unknown size; by past experience and sticking with the most stringent requirements, Ebara is defaulting to drawing E12 being the job requirement unless otherwise stated. With the number of required connections Ebara will provide the station less any interconnect conduit connections so that the electrical contractor can locate as required on site. All conduit penetrations to the FRP enclosure, control panel, and junction box will be the responsibility of others in accordance to the plans and specifications.
 - A: All conduits/circuits specified on the electrical pans are rquired. The labor CONTRACTOR shall coordinate all work between electrical sub-contractor and pump station SUPPLIER.
- 2.2) Q: C12 represents the conduit connections to be on the right side of the FRP enclosure when looking from the j-box side. E20 and E12 represent the control panel to be on the left side of the enclosure. Please advise which side is proper.
 - A: The location of the control panel shown on electrical plans (on the left side of the enclosure when viewed from front) is due to the slope of the grade in the area and the location of the driving path in the area. The electrical conduit connections to the FRP enclosure and the routing of conduits should be coordinated by the labor CONTRACTOR and pump SUPPLIER.
- 2.3) Q: Section 22 13 42 2.12.T calls for 2 duplex GFCI outlets to be installed on the control panel; Ebara will require an additional GFCI to be installed on the junction box to power the plug in heater and auxiliary hand held lamp.
 - A: The electrical plans show all of these outlets. See the two (2) receptacles mounted to the exterior of the control panel plus the two heater/plug-in lamp receptacles at the FRP enclosure on Detail "E-IPS" of contract documents.
- 2.3) Q: Section 22 13 42 2.14.H calls for bellows to be attached to the transducer. Ebara typically provides a dessicant filter in lieu of bellows as typical wastewater applications do not require the additional accuracy that bellows provide.



- A: We do not take exception to either approach (dessicant filter or bellows)
- 2.4) Q: Section 22 13 42 2.15.D calls for the anchor scientific P40NO-SST backup floats. Should these not be the W40NOSSTNM? The P floats are to be pipe mounted and the W floats are to be wire rope kit mounted. The W40NOSSTNM with a WRW-30 wight kit is Ebara's standard.
 - A: Wire rope mounted floats (with weight kit) are preferred.
- 2.5) Q: Confirm that Junction Box can have an aluminum internal barrier between low voltage instrumentation and high voltage pump power.
 - A: An aluminum barrier is acceptable.
- 2.6) Q: Confirm that the method to measure the wet well level will be with a Submersible level transducer, plans show an ultrasonic sensor installation. My assumption is that this is generic representation of the installation.
 - A: The electrical plans indicate submersible level/pressure transducers for the influent pump station and effluent pump stations (see sheets E15 and E20 respectively).
- 2.7) Q: Enclosure for control panel can be wall mount or floor mount, plans do not show available size in the concrete pad. This is a large control panel, around 60-72" wide.
 - A: Electrical plans indicate an equipment stand by the electrical contractor to support each of these control panels (see notes on electrical plans and Detail E-ES on sheet E30. We would not take exception to freestanding control panels mounted to leg kits 18" or higher.
- 2.8) Q: Flow meter Supply By Others? Is the transmitter "Display Controller" to be located in the control panel?
 - A: Sheet E15 indicates the location of the flow transmitter (not within the control panel). Flow meter is provided by SUPPLIER as described in Section 40 71 12.
- 2.9) Q: What is the environment/classification of the area that the Control Panel is located? a. 26 29 00-2.06. A states that if the panel is located in a non-conditioned or exterior/process area then everything inside needs to be conformal-coated.
 - A: The Micro Strainer CP is shown outside the hazardous zone. See Detail E-HAOC and Sheet E21 note 1. This area is a non-conditioned and exterior/process area. This would require conformal coatings of device in CP per spec section 26 29 00. Supplier can propose a deductive alternate for non-conformal-coated devices if there is a significant cost or leadtime issue with this specification requirement.



- 2.10) Q: We are assuming that a stainless steel solar shield will not be required for this project, as the 5kVA transformer will be exterior mounted.
 - A: Section 26 29 00 1.03.D.1 requires control panel submittals to include thermal calculations showing the amount of ventilation and heating required for each control panel. The design/selection of the method of thermal controls is required to be determined by the panel supplier to comply with the calculation requirements. Specification section 26 29 00 1.03.D.1 and 26 29 00 2.04.d only requires solar shielding as required to allow the use of forced air ventilation as the cooling method rather than air conditioning. The use of a solar shield should be determined by the supplier based on the thermal calculations required by the specifications.
- 2.11) Q: The only reference to the customer wanting a dead front is located in 26 29 00-2.04.I. The main specification 46 21 24-2.04 does not require a dead front. Please let us know how Lakeside would like us to quote.
 - A: A door mounted keypad should be provided in an enclosure deadfront for any control panel containing a VFD or RVSS per specification requirements. Compliance with spec section 26 29 00 is required.
- 2.12) Q: Specification 46 21 24-2.04-F.4 asks for three (3) 20A feeds for a convenience Receptacle, Heat Trace, and Spare. Allowing this sixty (60) Amps would required a much larger transformer than the already large 5kVA transformer they are asking for. Please confirm these are required, or see if they can provide us with the exact Wattage of heat trace required. The drawings do no depict what Heat Trace is required.
 - a. Will Lakeside also be requiring Heat Trace? If so, how many Watts
 - b. Even if we removed the spare 20A breaker, the two (2) other 20A feeds would be too much and we would need a larger transformer than the 5kVA
 - c. Typically Lakeside provides a 20A convenience receptacle, fused at 2Amps max.
 - A: A 5KVA transformer should be sufficient for the required circuitry. The load calculations should not be based on branch circuit breaker handle ratings, but on actual loads. see below for description:
 - o 15/1P or 20A/1P breakers for controls: this should be determined by the supplier but is typically less than 1000VA
 - o 20/1P panel mounted GFCI convenience receptacle: Typically, will not be loaded to more than 1000VA
 - O Heat tracing: Typically, not more than 1000VA. Heat tracing is 6W/linear foot. Others are to determine lengths of the specified heat tracing....but it should be noted that electrical plans specify this heat tracing/insulation to be on "all exposed small diameter water piping in this area".
 - o Total anticipated load is roughly 3000VA.



- 2.12) Q: 10m of cable being offered, confirm if more needed.
 - A: Based on the location of the control panel on Sheet E15 and the proposed location of the flow transmitter/display, 10 m is assumed to be sufficient. Should more cable be required by the labor CONTRACTOR, ENGINEER shall coordinate with SUPPLIER.
- 3. Equipment vendors shall be required to hold material pricing for ninety (90) calendar days after bid opening. Please disregard the one year price hold requirement stated in the contract documents.
- 4. The intent of the contract plans is for two pump hoist bases one at influent pump station and one at effluent pump station and one pump hoist to be furnished by the SUPPLIER. Pump hoist bases at both locations shall be installed per the detail on contract plan Sheet C15. The pump hoists shall be considered incidental to Bid Item No. 2 and Bid Item No. 7. Pump hoist shall provided by the specifications as follows:
 - A. Crane (1) Thern First Mate 500, 5PF5 Series Portable Davit Crane
 - B. Winch (1) Thern 4WM2-K Worm Gear Hand Winch, Drill Drivable
 - C. Base (2) Thern 5BP5 Pedestal Base
 - D. Crane and base to be finish powder coated
 - E. Wire Rope shall be 7x19 galvanized aircraft cable with swivel hook and latch.

Drawings:

- 1. Remove and replace Sheet C1 from the contract documents with Sheet C1 attached hereto.
- 2. Remove and replace Sheet C9 from the contract documents with Sheet C9 attached hereto.
- 3. Remove and Replace Sheet C13 from the contract documents with Sheet C13 attached hereto.
- 4. Remove and Replace Sheet C15 from the contract documents with Sheet C15 attached hereto.
- 5. Insert Sheet C20 to the contract documents, attached hereto.

This Addendum No. 2 shall be attached to the front of your set of Specifications and made a part of the Specifications and Contract Documents. Acknowledgment of receipt of Addendum No. 2 shall be noted on Page 00 41 43-1 of the Bid Form.

THE KELLEY GROUP, LLC.

Bv:

Bart Taft, P.E.

Addendum #2 is total pages.



This concludes Addendum #2.

SECTION 01 11 13 SUMMARY OF WORK

PART 1 – GENERAL

1.01 CONTRACT DESCRIPTION

- A. Contract Type: Unit Price as described in Agreement EJCDC
- B. The contract award, if made, will be made to the low-responsive bidder. A "responsive" bid shall be evidenced by: (1) A Bid form complete in accordance with the Instructions to Bidders and with instructions and/or requests contained in any other sections of the Contract Documents; (2) A Bid Form not evidencing any apparent unbalanced pricing for the performance of the Items of Work; (3) a Bid Form without excisions, special conditions or qualifications made by the Bidder; and (4) a Bid Form containing no alternative bids or offerings for any items unless such alternative bids or offerings are requested in the Technical Specifications or Contract Documents.
- C. The successful bidder must furnish a <u>Performance Bond for one hundred (100%) percent</u> of the bid amount and a <u>Labor and Material Payment Bond for one hundred (100%) percent of the bid amount</u> and must secure his bond from a bonding company's representative or agent in the State of Alabama.
- D. The attention of bidders is called to provisions of State Law Governing General Conditions, as set forth in Chapter 4 (Section 65 to 82, inclusive) of Title 46 of the Code of Alabama of 1940, as amended; and bidders shall be governed by law insofar as it is applicable. The above-mentioned provisions of the Code make it illegal for the OWNER to consider a Bid from anyone who is not properly licensed under such code provisions. The OWNER, therefore, will not consider any bid unless the bidder produces evidence that he is so licensed. Neither will the OWNER enter into a Contract with a foreign corporation that is not qualified under State Law to do business in the State of Alabama. The bidder must be licensed by the Alabama Licensing Board for General Contractors with a major classification of MU (Municipal & Utility). The CONTRACTOR must include his General Contractor's license number and classification on the outside of the sealed bid envelope.

E. Unit Price

- 1. Bidders shall submit a Bid on a unit price basis for each item of Work listed in the Bid schedule.
- 2. The total of all estimated prices will be determined as the sum of the products of the estimated quantity of each item and the unit price Bid for the item. The final quantities and Contract Price will be determined in accordance with paragraph 11.03 of the General Conditions.
- 3. Discrepancies between the multiplication of units of Work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any

column of figures and the correct sum thereof will be resolved in favor of the correct sum. Discrepancies between words and figures will be resolved in favor of the words.

1.02 WORK UNDER THIS CONTRACT

- A. The Contract provides all labor to make improvements to the sewer system.
- B. The work to be performed, but not limited to, shall be in accordance with specifications prepared by The Kelley Group.
- C. The CONTRACTOR will notify the ENGINEER by 8 a.m. Friday of the next week's operations and promptly notify the ENGINEER of any work stoppages due to weather or other conditions preventing work, partial or complete days. The CONTRACTOR will provide the OWNER and ENGINEER with the lift stations to be worked on.
- D. The Engineer will host one Teams meeting between the Engineer, Owner, Supplier, and Contractor to answer any questions after the delivery of the Supplier's approved shop plans. Additional meetings can be scheduled as needed.

E. Line Item #3 – Dredging of Sewer Lagoon

- 1. The sewer lagoon has been in operation for approximately 60 years and has built up solids. A lagoon sludge survey was performed and is included in these specifications. The report describes the dry tonnage of solids expected to be encountered.
- 2. This Line item shall provide for all Labor, Materials, and incidentals required, including but not limited to providing all Sludge Pumps; Polymer, Polymer Makeup Tank, Dosing Pumps, Piping, Geomembrane Bags or Sludge Press, Erosion Control; Dry Cake Transportation to Licensed Landfill or Land Application Area; Sludge Testing of metals levels for Landfill Disposal; Removal of all Dredging and Dewatering Equipment and Restoring Workplace back into Original Condition.
- 3. The existing lagoon baffles may be utilized along with additional baffles supplied by the dredging contractor to confine dredging operations into manageable segments allowing the lagoon to continue normal operation during dredging operations. All direct dredging operations are to be completed prior to the removal of existing baffle curtains or installation of new curtains and appurtenances.
- 4. The option of utilizing geomembrane bags to hold pumped sludge mixed with polymer and allow drying has been proposed. The dredging contractor will be allowed to utilize his own means and methods to accomplish de-sludging the existing lagoon acknowledging that the lagoon shall remain in operation and all water associated with de-sludging operations will be confined to the site and returned to the lagoon for processing without contamination of adjacent streams.

F. Line Item #4 – Demolition

Eductor Pumps

- 1. Past attempts to impart aeration and mixing in the first lagoon cell chamber utilized Recycling Eductor pumps.
- 2. This line item includes all Labor and Materials for the Demolition of Existing Recycle Eductor Pumps, Piping, and associated Electrical.
- 3. Pumps to remain in possession of the Owner and to be transported and offloaded with proper storage at the location selected and as directed by the Owner.
- 4. Coordinate the removal and or relocation of power as needed after consultation with Alabama Power for the establishment and supplying of 3-Phase Power around the lagoon to all Owner supplied equipment.

Existing Lagoon Curtains

- 5. The existing lagoon curtains have been in service for a number of years, and the existing curtains and their construction are detailed in this project's plan set from Owner supplied record drawings.
- 6. This line item includes all Labor, Equipment, and fees for the Demolition, Removal, and Disposal of Existing 553 LF & 482 LF of Lagoon Curtains, floats, and cabling.
- 7. Existing end anchors in the levee may remain in place where they do not conflict with the installation of new horizontal rotor floating aerators and associated appurtenances.

V-notch Weir

- 8. The existing V-notch weir is noted on record drawings as being a 15-degree v-notch. The existing v-notch weir angle is too small and becomes inundated during periods of high flow, causing the existing Greyline flow metering equipment to return a maximum flow of .34 MGD until flows recede, sometimes taking days.
- 9. The intent of this line item is to supply all materials and labor to remove the existing v-notch weir and ready the effluent structure for the installation of a new 60-degree v-notched weir.
- 10. The existing effluent box has a drain valve that can be used to lower the lagoon water level allowing access to all v-notch anchor bolts.
- 11. The engineer has not verified the operation of the drain. The contractor should exercise the drain prior to beginning the work to verify proper operation. The contractor is urged to take all necessary precautions to prevent dropping the existing v-notched weir plate in the lagoon and possibly blocking the effluent structure drain.

12. The intent of removing the existing 15-degree v-notch weir is to replace the weir with a new 60-degree v-notch weir as described in Line Item #6, to allow the existing flow recording equipment to be used if the Owner so chooses in the future.

Existing Effluent Pumps

- 13. The effluent lagoon box houses the existing dual effluent pumps. Line Item #6 shall provide all labor, materials, and bypass pumping required for the demolition, removal, and disposal of the existing effluent pumps, base, rails, riser piping, electrical connections, and associated level and electrical controls.
- 14. The centerline elevation of the effluent piping is not reported on record drawings. The Contractor shall record the centerline elevation of the existing pipe before removal and report that elevation to the Engineer.
- 15. As noted in G.4 above, the effluent box has a drain valve, but the operability of the valve has not been verified. The contractor should verify this valve can be closed prior to beginning the work.

Existing Chlorination & Dechlorination System

- 16. The existing lagoon achieves disinfection with passive flow-through chlorination and dechlorination boxes located in the existing effluent piping from the effluent structure. To date, the existing chlorination and dechlorination equipment has operated without numerous E. Coli violations. With the intent to increase the pump flow rate using new effluent pumps, the chorine contact time will decrease.
- 17. This line item includes all Labor and Fees for the Demolition, Removal, and Disposal of Existing Chlorination and Dechlorination System, and abandonment of related effluent piping.

Existing Fencing

- 18. This line item includes all labor to remove the existing security fencing in the areas shown on the plans. The intent is to remove the existing fencing to allow the Contractor working room for extension of the lagoon levee during the construction of an earthen pad.
- 19. Two locations are shown on the plans at opposite ends of the Lagoon. Remove existing fencing and store it in a safe location. Remove fencing to a point beyond the Contractor's limit of construction for the lagoon levee pad extension.

G. Line Item #5 – Vertical Cylindrical Micro-Screen Headworks

- 1. The Owner is requesting Material Only bids for the major process equipment. The Owner will arrange for direct payment to the Supplier for the new Vertical Cylindrical Micro-Screen Headworks. The Contractor agrees to act as the Owner's agent to work with the Supplier on the delivery schedule, delivery, and safe storage of equipment until such time the Contractor installs the Owner purchased equipment.
- 2. The Supplier will provide delivery to the Contractor's control. The Contractor will be provided with a copy of the Supplier's approved shop plans approximately 8 weeks after the bid closing. The Contractor is urged to discuss actual installation operations and have a thorough understanding of the Supplier's extent of material delivery and installation instructions.
- 3. The Contractor is responsible for providing all labor, materials, and incidentals to install the new screening assembly, including but not limited to excavation, stone base, wet well, ballast concrete, cored and rubber booted connection of 40' extension of influent gravity sewer line with plug for future connection by the CDBG gravity sewer contractor, stone backfill of all excavation and beneath concrete site slab, concrete site base slab with 3/4" chamfer all around, return drain to the lagoon, roll-off hopper for vector control bags and screenings collection, coordination with service within 30 miles to pick up and carry screenings hopper to a licensed landfill for disposal, pad drain line to return drainage to lagoon, core and boot effluent piping from the screenings headworks wet well and supply gravity sewer pipe to the new pump station, and coordinate and install all electrical connections to the supplied equipment with disconnects as stated in the electrical plans.
- 4. Coordinate electrical service to the screenings headworks during the coordination of 3-phase power around the lagoon.

H. Line Item #6 Lagoon Equipment Installation

New Fencing

1. Contractor shall furnish and install new six-foot chainlink fencing with three-strand barbed wire top at each lagoon levee extension where fencing was demolished, and to extend around the lagoon levee extensions. Fencing shall match existing lagoon fencing and shall connect to existing lagoon fencing at each end.

Package Influent Sewage Lift Station

2. The Owner is requesting Material Only bids for the major process equipment. The Owner will arrange for direct payment to the Supplier for the New Package Influent Sewage Lift Station with Polymer Wet Well and Associated Piping. The Contractor agrees to act as the Owner's agent to work with the Supplier on the delivery schedule, delivery, and safe storage of equipment until such time the Contractor installs the Owner purchased equipment.

- 3. The Supplier will provide delivery and offloading to the Contractor's control. The Contractor will be provided with a copy of the Supplier's approved shop plans approximately 8 weeks after the bid award. The Contractor is urged to discuss actual installation operations and have a thorough understanding of the Supplier's extent of material delivery and installation instructions.
- 4. The Contractor is responsible for providing all labor, materials, and incidentals to install the Owner purchased New Package Influent Sewage Lift Station with Polymer Wet Well and associated internal piping, rails, hatch, chain, hoist, and above-ground housed piping.
- 5. Furnish and install watertight connections and effluent piping from the pump station to the lagoon's gravity sewer influent manhole, core and boot connection to the manhole, and Electrical disconnect and connections to make complete the Influent Sewage Lift Station at the manufacturer's direction, including but not limited to excavation, stone base, ballast concrete, core and boot influent gravity sewer from the screenings headworks, stone backfill, coordinate power to the new pump station during installation of 3 phase power around the lagoon.

Floating Lagoon Baffle Curtains

- 6. The Owner is requesting Material Only bids for the Baffle Curtains and associated hardware. The Owner will arrange for direct payment to the Supplier for the New 560' and 500' Baffle Curtains, cables, wiring, and floats.
- 7. The Contractor is responsible for all installation and anchoring of the new baffles. The Contractor will verify the slope of lagoon banks, the distance across the lagoon at the coordinates identified on the plan set, and the depth of the lagoon after the completion of sludge removal activities. Report the area of each zone to be created to the Supplier for verification of the process equipment sizing.
- 8. The Contractor agrees to act as the Owner's agent to work with the Supplier on the delivery schedule, delivery, and safe storage of equipment until such time the Contractor installs the Owner purchased equipment.
- 9. The Supplier will provide delivery and offloading to the Contractor's control. The Contractor will be provided with a copy of the Supplier's approved shop plans approximately 8 weeks after bid closing. The Contractor is urged to discuss actual installation operations with the Supplier and have a thorough understanding of the Supplier's extent of material delivery and installation instructions.

10. The Contractor is responsible for providing all labor, materials, and incidentals to install the Owner purchased baffle curtains, as shown on the plans to divide the lagoon into 3 cell operations.

Floating Nitrification Rotor Baffle Curtains

- 11. The Owner is requesting Material Only bids for the Baffle Curtains and associated hardware to be installed. The Owner will arrange for direct payment to the Supplier for Seven (7) new 8' x 35' x 35' Floating Baffle Curtains enclosing the Floating Nitrification Rotors and the Lagoon Outfall Structure.
- 12. The Contractor will be responsible for labor and incidental materials to install and anchor the baffles as described in Section 46 60 01 Lagoon Wastewater Treatment Equipment System and noted on the plan set.
- 13. The Contractor will verify the slope of lagoon banks, the distance across the lagoon at the coordinates identified on the plan set, and the depth of the lagoon after the completion of sludge removal activities.
- 14. The Contractor agrees to act as the Owner's agent to work with the Supplier on the delivery schedule, delivery, and safe storage of equipment until such time the Contractor installs the Owner purchased equipment.
- 15. The Supplier will provide delivery and offloading to the Contractor's control. The Contractor will be provided with a copy of the Supplier's approved shop plans approximately 8 weeks after the bid closing. The Contractor is urged to discuss actual installation operations and have a thorough understanding of the Supplier's extent of material delivery and installation instructions.

Aeration/Mixing System

- 16. The Owner is requesting Material Only bids for the Eight (8) 20 Hp horizontal rotor floating aerators, equipment wiring, control panel, and associated hardware that is to be installed. The Owner will arrange for direct payment to the Supplier for the new 20 Hp horizontal rotor floating aerators.
- 17. The Contractor is responsible for providing all labor and incidental materials to install the aeration equipment, anchoring, anchoring materials, coordinating electrical service, and disconnects to Supplier provided control panel as shown on the plans and in these specifications.
- 18. The Contractor will provide the required erosion control riprap to the lagoon bottom beneath the horizontal rotors at the direction of the aerator manufacturer. Over-

- excavation may be required to achieve the thickness of erosion control specified by the manufacturer.
- 19. After placement of riprap, provide the Engineer and the Owner with the minimum and maximum distance between the riprap and the tip of the horizontal rotors.
- 20. The Contractor agrees to act as the Owner's agent to work with the Supplier on the delivery schedule, delivery, and safe storage of equipment until such time the Contractor installs the Owner purchased equipment. The Supplier will provide delivery and offloading to the Contractor's control.
- 21. The Contractor will be provided with a copy of the Supplier's approved shop plans approximately 8 weeks after the bid closing. The Contractor is urged to discuss actual installation operations with the Supplier and have a thorough understanding of the Supplier's extent of material delivery and installation instructions.

Nitrification System

- 22. The Owner is requesting Material Only bids for the Six (6) 10Hp Floating Nitrification Rotors and Control Panels to be installed. The Owner will arrange for direct payment to the Supplier for the new 10Hp Floating Nitrification Rotors, Cabling, Wiring, and Control Panels.
- 23. The Contractor will be responsible for labor and incidental materials to install the Owner provided 10Hp Floating Nitrification Rotors complete, including but not limited to, anchoring, electrical disconnects wired to the supplied control panel, and providing electrical service to each floating nitrification rotor when coordinating 3 Phase power around the lagoon as described in Section 46 60 01 Lagoon Wastewater Treatment Equipment System and noted on the plan set.
- 24. The Contractor agrees to act as the Owner's agent to work with the Supplier on delivery schedule, delivery, and safe storage of equipment until such time the Contractor installs the Owner purchased equipment.
- 25. The Supplier will provide delivery and offloading to the Contractor's control. The Contractor will be provided with a copy of the Supplier's approved shop plans approximately 8 weeks after the bid closing. The Contractor is urged to discuss actual installation operations with the Supplier and have a thorough understanding of the Supplier's extent of material delivery and installation instructions.

Installation of New V-notch Weir

26. This line item provides for all labor, materials, and incidentals to fabricate, construct, and install the new 60-degree v-notch weir after the removal of the existing 15-degree v-notch weir noted in Item H above.

- 27. As stated in item H, the Owner is requesting material only bids on a new electromagnetic flow metering structure and reserves the right to value engineer the 60-degree v-notch weir fabrication, construction, and installation should the bid for the electromagnetic flow meter and vault be in the Owner's best interests.
- 28. With the installation of the new 60-degree v-notch weir, the Contractor will be responsible for re-calibration of the existing Greyline Flowmeter and transducer to accurately read flow across the new 60-degree v-notch weir.

Installation of New Effluent Pumps

- 29. The Owner is requesting Material Only bids for the Two (2) New Effluent Pumps, Base and Anchors, Quick Connect Flange, Stainless Rails, Riser Piping, Lifting Chain, Level Sensor, Electrical Control Panel, and Hoist. The Owner will arrange for direct payment to the Supplier for the new effluent pumps and equipment mentioned here.
- 30. The Contractor agrees to act as the Owner's agent to work with the Supplier on the delivery schedule, delivery, and safe storage of equipment until such time the Contractor installs the Owner purchased equipment.
- 31. The Supplier will provide delivery and offloading to the Contractor's control. The Contractor will be provided with a copy of the Supplier's approved shop plans approximately 8 weeks after the bid closing. The Contractor is urged to discuss actual installation operations with the Supplier and have a thorough understanding of the Supplier's extent of material delivery and installation instructions.
- 32. The Contractor will be responsible for labor and incidental materials to install the Owner provided Two (2) New Effluent Pumps, Base and Anchors, Quick Connect Flange, Stainless Rails, Riser Piping, Lifting Chain, Level Sensor, Electrical Control Panel, and Hoist, make any required modifications to the existing pipe penetrations, and provide by-pass pumping as necessary.
- 33. The Contractor will be responsible for all labor, materials, and ancillary equipment to completely install the Owner purchased equipment, including but not limited to piping from the effluent structure to the valve vault, coring new or enlargement of existing wall penetrations in the effluent structure, electrical disconnect and coordinating electrical service to the new pump control panel to make complete the New Effluent Lift Station system at the manufacturer's direction.

Installation of Electromagnetic Flowmeter

34. The Owner is requesting Material Only bids for a new Electromagnetic Flowmeter with Grounding Rings, and HMI Totalizer with non-volatile memory. The Owner will arrange for direct payment to the Supplier for the new effluent pumps and equipment mentioned here.

- 35. The Contractor agrees to act as the Owner's agent to work with the Supplier on the delivery schedule, delivery, and safe storage of equipment until such time the Contractor installs the Owner purchased equipment.
- 36. The Supplier will provide delivery and offloading to the Contractor's control. The Contractor will be provided with a copy of the Supplier's approved shop plans approximately 8 weeks after the bid closing. The Contractor is urged to discuss actual installation operations with the Supplier and have a thorough understanding of the Supplier's extent of material delivery and installation instructions.
- 37. The Contractor will be responsible for labor and incidental materials to install the Owner provided Electromagnetic Flowmeter with Grounding Rings, and HMI Totalizer.
- 38. The Contractor will be responsible for furnishing all Labor, Materials and ancillary equipment, including but not limited to excavation for the concrete vault placing the flow meter in an inverted syphon condition allowing the meter to maintain a full wet barrel at all times, stone bedding, backfill, stone sump for vault drain, concrete vault with drain and aluminum hatch; excavation, stone bedding and pipe from the effluent valve pit to the flow meter; excavation, bedding, and pipe from the flow meter vault to the cloth disk filter; coring vault penetrations and installing watertight boot joints; associated fittings; pipe stands; electrical connections; piping restraints and concrete kickers; and grading to make complete the effluent flow measurement system as shown on the plan set and in these specifications.
- 39. The Owner reserves the right to value engineer this line item if bids are not considered in the best interest of the Owner and rely on the removal of the existing 15-degree vnotch weir in Line Item #4 and installation of the fabricated 60-degree v-notch weir in Line Item #6.

Line item #6 Continued – 3-Phase Power

- 40. The Contractor will be responsible for coordinating with Alabama Power to establish 3-phase power around the lagoon with disconnects and placing power at each 20 Hp horizontal mixer, each 10 Hp Floating Nitrification Rotor, Influent Headworks Screening, Influent pump Station, Electromagnetic Meter Vault, Cloth Disk Filter, and U.V. Disinfection Assembly as described in the electrical plans and specifications.
- 41. The Contractor will work with Alabama Power to establish the account in the Owner's name and provide all equipment not provided by Alabama Power to make all electrical connections to equipment as detailed in the plans and specifications.

Reconnection of Effluent Piping

- 42. This line item provides for all Labor, Materials, by-pass pumping, and ancillary equipment to reconnect the effluent piping from the UV Disinfection Assembly to the existing sewer discharge line to the creek.
- 43. The contractor shall cap and abandon in place the eliminated portion of an effluent sewer line.

Construction of Yard Hydrant

44. This line item provides for all Labor, Materials, and ancillary items to tap the existing potable water main on AL 48, install the water meter provided by the Owner, meter box with check valve and curb stop, 1.5" water main along the Unnamed Lagoon Entrance Road, extend the water main to the screening and influent pump station, installing one (1) frost proof hydrant to serve the Screening Headworks and Influent pump station, make a connection of potable water to the Screening Headworks, extend the water main around the East side of the Lagoon in the shoulder of the levee pathway to the Cloth Disk Filter and UV Disinfection Assembly, and place one (1) frost proof hydrant to serve the Cloth Disk Filter and UV Disinfection Assembly.

Erosion Control

- 45. This line item provides for the Labor, Materials, and all ancillary equipment required to install and construct Erosion Control for all disturbed areas and around all Sludge Dewatering Activities.
- 46. The Contractor shall monitor all Erosion Control on a daily basis and especially after each rainfall of 0.25" in a 24-hour period. Any Erosion Control found to be damaged shall immediately be corrected.
- 47. This line item also provides payment for the removal of all erosion control materials at the completion of the project and after proper stands of grass have been established.

Seeding & Grassing

48. This Line Item provides payment for all Seeding and Grassing of disturbed areas for the duration of the project. The contractor will be required to maintain all seeding and grassing efforts until a permanent stand of vegetation is established.

I. Line item #7 – Installation of Cloth Filter Disk Assembly

- 1. The Owner is requesting Material Only bids for a new Cloth Disk Filter Assembly. The Owner will arrange for direct payment to the Supplier for the new Cloth Filter Disk Assembly.
- 2. The Contractor agrees to act as the Owner's agent to work with the Supplier on delivery schedule, delivery, and safe storage of equipment until such time the Contractor installs the Owner purchased equipment.
- 3. The Supplier will provide delivery and offloading to the Contractor's control. The Contractor will be provided with a copy of the Supplier's approved shop plans approximately 8 weeks after the bid closing. The Contractor is urged to discuss actual installation operations with the Supplier and have a thorough understanding of the Supplier's extent of material delivery and installation instructions.
- 4. The Contractor will be responsible for labor and incidental materials to install the Owner provided Cloth Disk Filter Assembly.
- 5. The Contractor will be responsible for furnishing all Labor, Materials, and ancillary equipment, including but not limited to excavation for the concrete site pad, stone base, reinforced concrete pad with 3/4" chamfer all around, anchoring of the Cloth Disk Filter to concrete pad as directed by the manufacturer, the connection of piping, piping to and from the cloth disk filter, stone bedding for pipe, backfill, associated fittings; joint restraint and concrete kickers, electrical service to the Cloth Disk Filter, disconnect and electrical connections to the Cloth Disk Filter control panel; backwash piping with return to the Lagoon, and grading to make complete and operational the Cloth Disk Filter system as shown on the plan set and in these specifications.

J. Line item #8 – Ultraviolet Disinfection Assembly

- 1. The Owner is requesting Material Only bids for a new Ultraviolet Disinfection Assembly. The Owner will arrange for direct payment to the Supplier for the new Ultraviolet Disinfection Assembly.
- 2. The Contractor agrees to act as the Owner's agent to work with the Supplier on delivery schedule, delivery, and safe storage of equipment until such time the Contractor installs the Owner purchased equipment.
- 3. The Supplier will provide delivery and offloading to the Contractor's control. The Contractor will be provided with a copy of the Supplier's approved shop plans approximately 8 weeks after the bid closing. The Contractor is urged to discuss actual

- installation operations with the Supplier and have a thorough understanding of the Supplier's extent of material delivery and installation instructions.
- 4. The Contractor will be responsible for furnishing all Labor, Materials, and ancillary equipment, including but not limited to excavation for the concrete site pad, stone base, reinforced concrete pad with ³/₄" chamfer all around, anchoring of the Ultraviolet Disinfection Assembly to the concrete pad as directed by the manufacturer, the connection of piping, piping to and from the Ultraviolet Disinfection Assembly, stone bedding for pipe, backfill, associated fittings; joint restraint and concrete kickers, electrical service to the Ultraviolet Disinfection Assembly, disconnect and electrical connections to the Ultraviolet Disinfection Assembly control panel; backwash piping with a return to the Lagoon, and grading to make complete and operational the Ultraviolet Disinfection Assembly system as shown on the plan set and in these specifications.

K. Line item #9 – Fill Dirt for Headworks Lagoon Levee Extension

1. This line item provides for all Labor, Materials, sourcing, and hauling of suitable fill material, erosion control, placement, and compaction of fill material to construct the Headworks Screening, New Lift Station, and Generator Set pad extension to the Lagoon Levee. This shall include, but not be limited to, fill dirt installation, grading, compaction, erosion control, grassing, and site cleanup. This item is paid on a cubic yard basis, and could be increased/decreased per the Owner's or Engineer's discretion.

L. Line item #10 – Fill Dirt for Filter and UV Lagoon Levee Extension

1. This line item provides for all Labor, Materials, sourcing, and hauling of suitable fill material, erosion control, placement, and compaction of fill material to construct the Disk Filter and UV System pad extension to the Lagoon Levee. This shall include, but not be limited to, fill dirt installation, grading, compaction, erosion control, grassing, and site cleanup. This item is paid on a cubic yard basis, and could be increased/decreased per the Owner's or Engineer's discretion.

M. Line Item #11 – Existing Creek Ford Allowance

- 1. One entrance to the Wedowee Lagoon has an existing ford. This line item provides for all Labor, Materials, and ancillary equipment required to maintain the crossing for the duration of the project.
- 2. The Contractor is not required to use this entrance, but if the entrance is used, the Contractor is expected to maintain the crossing and place it back in its original condition at the end of the project.

3. An allowance is offered for the replacement of the creek ford after work is completed. This allowance is only to be used if the ford is damaged during the work and shall be done at the recommendation of the Contractor and approval of the Owner and Engineer.

N. Line Item #12 – Backup Generator

1. This line item provides for the Contractor to furnish and install a backup generator, automatic transfer switch, and related appurtenances per the Electrical Plans and Specifications.

1.03 PROJECT DESCRIPTIONS

A. Wedowee obtained assistance through the Alabama Department of Environmental Management (ADEM) Clean Water State Revolving Fund (CWSRF/ARPA-BIL) and a grant through the Appalachian Regional Commission (ARC) to make improvements to the sewer system.

1.04 PROJECT OBJECTIVES

A. The project objective is to make improvements to the sewer system.

1.05 SERVICES AND PRODUCTS

A. OWNER's Responsibilities

- 1. Review shop drawings and submittal data following approval by ENGINEER within ten (10) days following receipt.
- 2. Arrange for and deliver OWNER reviewed Shop Drawings, Product Data, and Samples to the CONTRACTOR.
- 3. Recipients are hereby notified that Buy America Provision must be adhered to. All steel, iron, and manufactured products used in this project are required to be produced in the United States.
- 4. Make payments on properly submitted and approved payment requests within 30 days of ENGINEER's review of the submitted invoice.

B. CONTRACTOR's Responsibilities

- 1. Provide detailed instructions for the construction process/timetable. Supply the OWNER and ENGINEER by 8 am each Friday with the planned location of work for the following week.
- 2. Schedule for delivery with Supplier; Receive and unload products at the site; inspect for completeness or damage and secure all materials until installation.

- 3. Handle, store, and install finished products in accordance with manufacturer instructions. Provide the engineer with written, planned execution of the work, including the plan for the handling, storage, and installation of the supplied products.
- 4. Provide ENGINEER with CONTRACTOR's invoice by the Friday nearest the 25th of each month.
- 5. Attend progress meetings that will be held monthly as close to the 20th of the month as possible, or as needed, to review installations prior to submitting an invoice.

1.06 STORED MATERIALS (NOT USED)

1.07 CONTRACTOR'S USE OF SITE

- A. Cooperate with OWNER and adjacent property OWNERs to minimize conflict.
- B. All attempts shall be made to keep all public roads and private drives open during construction. In the event a road closing is unavoidable, the road shall be open within a reasonable time approved by the OWNER, and an alternate route shall be provided during the interruption. All public services, i.e., police and fire, shall be notified by CONTRACTOR prior to any road closing.

1.08 WORK SEQUENCE

A. Coordinate construction schedule and operations with the OWNER and ENGINEER.

1.09 LICENSES AND PERMITS

- A. The CONTRACTOR shall be responsible for securing from the Local Municipalities all permits, licenses and for paying all taxes required to perform the Contract Work.
- B. The CONTRACTOR shall be responsible for compliance with all Federal, State and local laws and ordinances regarding licenses and permits.

1.10 PROTECTION OF THE OWNER, WORKMEN, AND THE PUBLIC

- A. The CONTRACTOR is responsible for the safe execution of the work.
- B. The ENGINEER and the OWNER shall not be required to act as Safety Engineers or Safety Supervisors.
- C. The CONTRACTOR is solely responsible for the safe prosecution of the work.
- D. It is the CONTRACTOR's responsibility to secure advice from the Safety officer from his insurance company.
- 1.11 LOCATION OF UNDERGROUND OBSTRUCTIONS.

- A. The CONTRACTOR shall be responsible for carefully protecting utilities during the execution of the work.
- B. Utilities that are damaged due to activities of the CONTRACTOR shall be repaired at no expense to the OWNER.

1.12 REGULATORY REQUIREMENTS

- A. Secure from the office of the Inspection Services, Division of the Public Works Department of the Local Municipalities, Information for regulatory licenses and permits required.
- B. Obtain permits and licenses from each Municipality.
- C. Requirements contained in each individual authority's permit shall become the provisions and requirements for completion of the work.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

END OF SECTION

PLANS OF THE

SEWER SYSTEM IMPROVEMENTS

FOR THE

TOWN OF WEDOWEE

RANDOLPH COUNTY, ALABAMA

SHEET INDEX

	SHEET No.	DESCRIPTION
	C1	TITLE SHEET
	C2	GENERAL NOTES
	C3	LEGEND SHEET
	C4	VICINITY MAP
	C5	EXIST. LAGOON OVERALL PLAN
	C6	BATHYMETRIC SLUDGE SURVEY
	C7	LAGOON EQUIPMENT DEMOLITION
	C8	OUTLET STRUCTURE DEMOLITION
	C9	LAGOON OVERALL PLAN PROPOSED
	C10	WATER LINE PLAN PROPOSED
	C11	OUTLET STRUCTURE IMPROVEMENTS
^	C12	INFLUENT PUMP STATION DETAILS
/ 1\(C13-C20	STANDARD DETAILS
— `	ÉI	ELECTRICAL LEGEND AND NOTES
	E2	TYPICAL SINGLE LINE DIAGRAM
	E3	ELECTRICAL SCHEDULES
	E10	ELECTRICAL DEMOLITION PLAN
	E11	OVERALL SITE ELECTRICAL PLAN
	E12	INFLUENT P.S. LARGE SCALE ELECTRICAL
	E12	TYDICAL ELOATING AEDATOD ELEC DI AN

EL ELECTRICAL LEGEND AND NOTES

E2 TYPICAL SINGLE LINE DIAGRAM

E3 ELECTRICAL SCHEDULES

E10 ELECTRICAL DEMOLITION PLAN

E11 OVERALL SITE ELECTRICAL PLAN

E12 INFLUENT P.S. LARGE SCALE ELECTRICAL PLAN

E13 TYPICAL FLOATING AERATOR ELEC. PLAN

E14 FLOATING NITR. ROTORS ELEC. PLAN

E15 EFFLUENT PUMP STATION ELECTRICAL PLANS

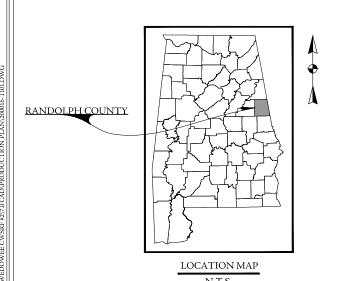
E20 INFLUENT PUMP STATION ELECTRICAL PLANS

E21 STRAINER ELECTRICAL PLANS

E22 FILTER ASSEMBLY ELECTRICAL PLAN

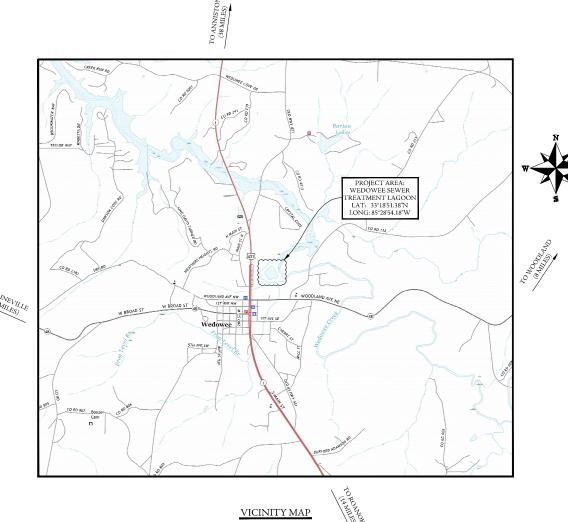
E23 UV SYSTEM ELECTRICAL PLAN

ELECTRICAL DETAILS



E30-E33

CWSRF PROJECT No. CS010883-02 & CS010883-04
ARC PROJECT No. AL-20358-2021
KG PROJECT NUMBER 20-0016
AUGUST 2023



PREPARED BY:

THE KELLEY GROUP

• A CIVIL ENGINEERING COMPANY •

850 Corporate Pwky, Suite 104 Birmingham, AL 35242

301 N Dickson St, Tuscumbia, AL 35674



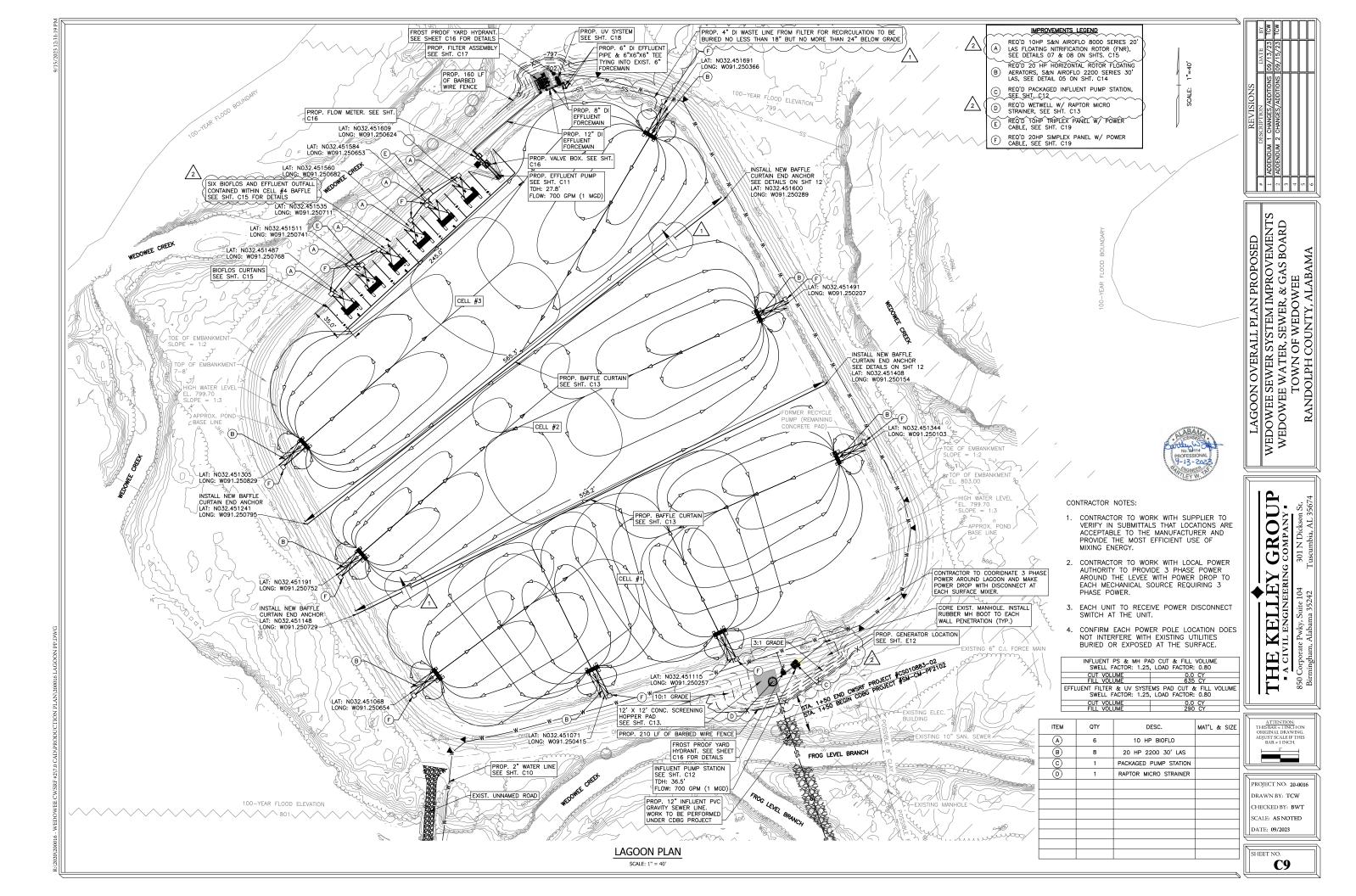


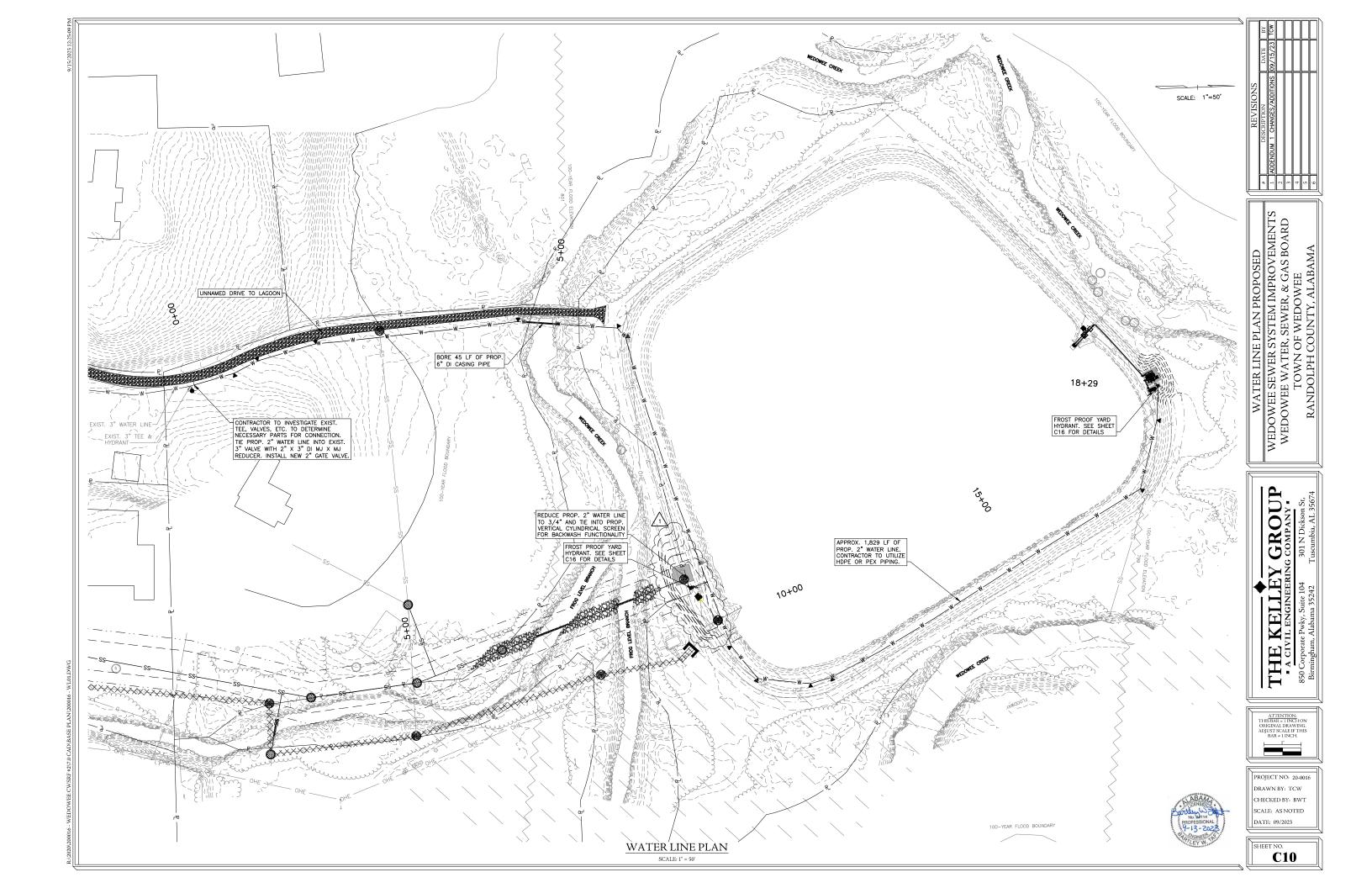


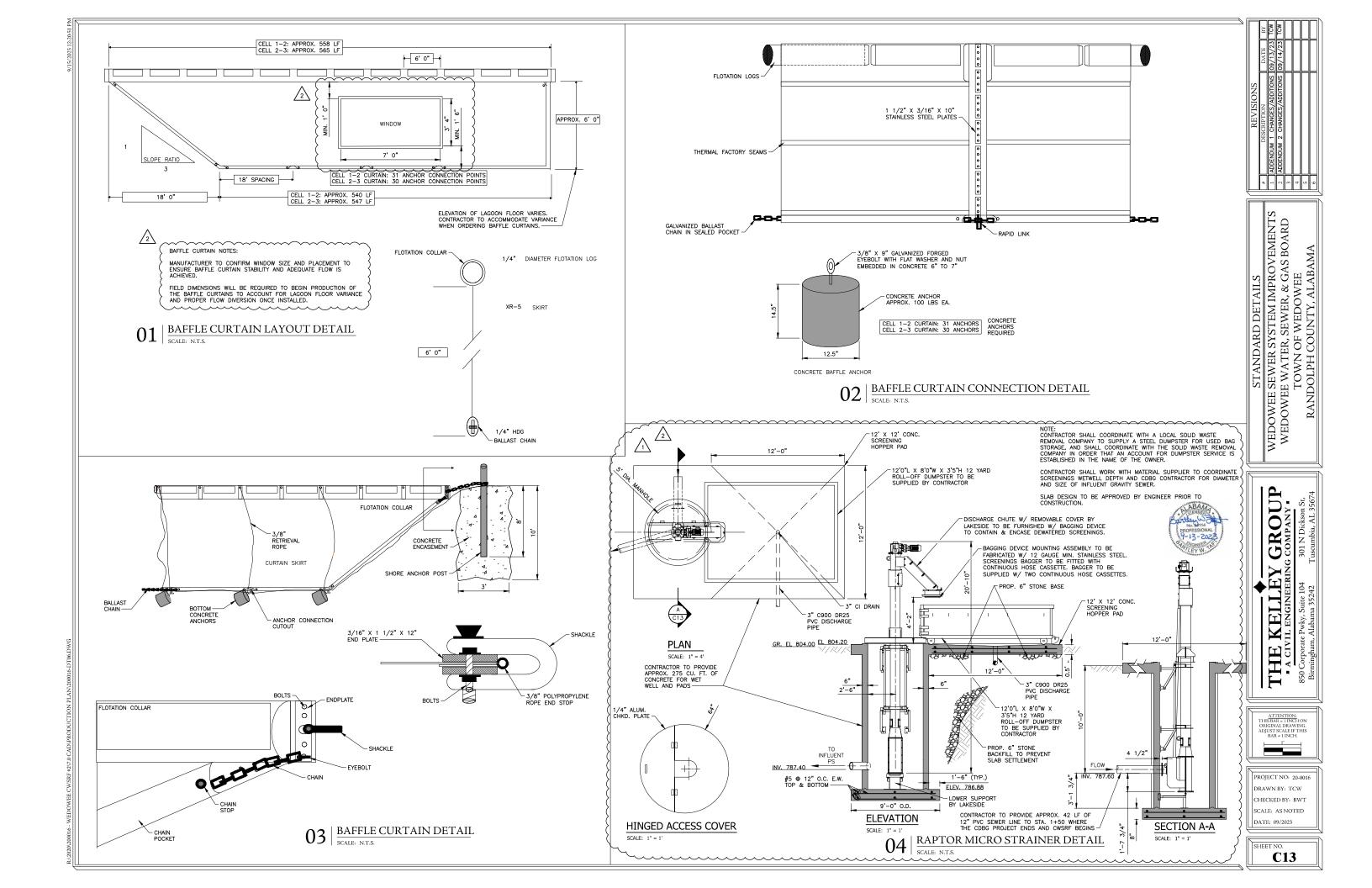
PROJECT NO: 20-0016 DRAWN BY: TCW CHECKED BY: BWT SCALE: AS NOTED DATE: 09/2023

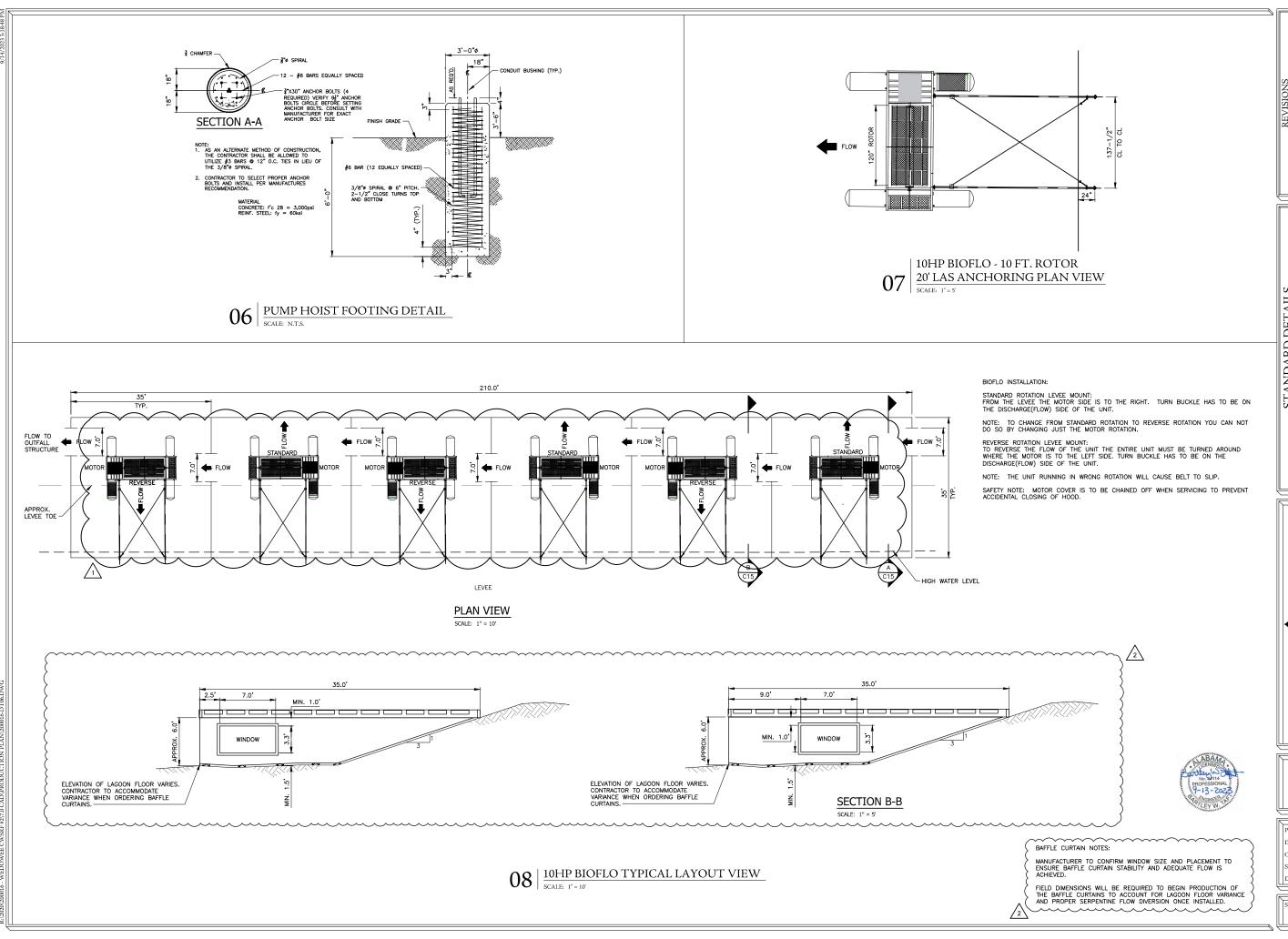












STANDARD DETAILS
WEDOWEE SEWER SYSTEM IMPROVEMENTS
WEDOWEE WATER, SEWER, & GAS BOARD
TOWN OF WEDOWEE
RANDOLPH COUNTY, ALABAMA

THE KELLEY GROUP

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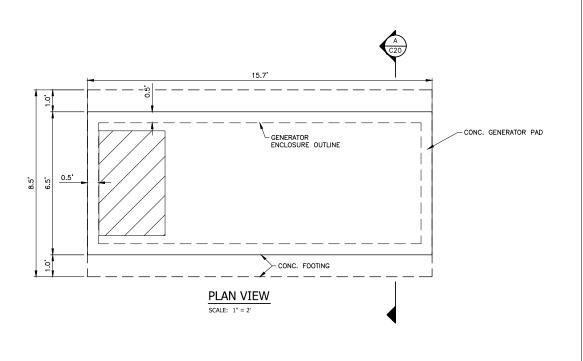
850 Corporate Pwky, Suite 104

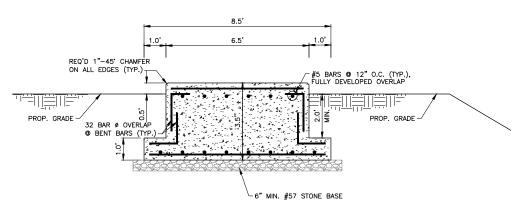
301 N Dickson St,

ATTENTION:
THIS BAR = 1 INCH ON
ORIGINAL DRAWING.
ADJUST SCALE IF THIS
BAR = 1 INCH.

PROJECT NO: 20-0016
DRAWN BY: TCW
CHECKED BY: BWT
SCALE: AS NOTED
DATE: 09/2023

C15

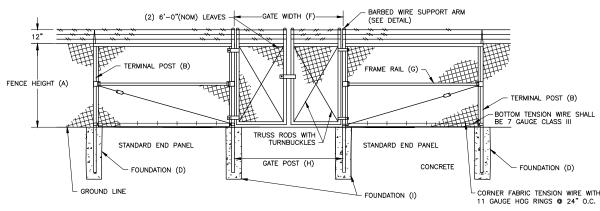




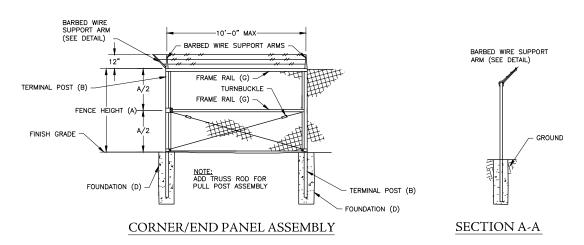
SECTION A-A

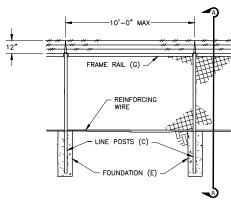
NOTES:

- CONTRACTOR IS RESPONSIBLE FOR DETERMINING LOCATION AND SIZE OF ELECTRICAL CONDUIT STUB-UP AREA THROUGH CONC. PAD.
- 2. GENERATOR ENCLOSURE SHALL BE ANCHORED TO THE SLAB WITH MANUFACTURE'S STANDARD HARDWARE AND IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
- 3. PAD DIMENSIONS SHOWN ARE FOR BID PURPOSES, CONTRACTOR TO VERIFY ACTUAL EQUIPMENT DIMENSIONS WITH EQUIPMENT MANUFACTURER AND INCREASE SIZES AS NEEDED.
- CONCRETE TO HAVE A MINIMUM STRENGTH OF 3,000 PSI.
- CONC, PAD DEPTH TO BE FIELD VERIFIED. DOWNHILL FOOTER TO BE A MINIMUM OF 2' BENEATH EXISTING GRADE. CONTRACTOR TO VERIFY PAD DEPTH PRIOR TO CONSTRUCTION WITH ENGINEER.
- 6. DO NOT EXCAVATE FOR CONDUIT ON THE TOE SIDE OF THE GENERATOR.



DOUBLE PANEL GATE DETAIL





GATE POST REQUIRED							
F	G	н	1				
GATE WIDTH (FEET)	FRAME DIAM. (INCH)	GATE POST DIAM. (INCH)	GATE POST FOUNDATION DIMENSIONS (DIAM. x DEPTH)				
<13	1.90	4.000	12" x 36"				

TERMINAL AND LINE POST REQUIRED							
Α	В	С	D	E			
FENCE HEIGHT (FEET)	TERMINAL POST DIAM. x THICKNESS (INCH)	LINE POST DIAM. x THICKNESS (INCH)	TERMINAL POST FOUNDATION DIMENSIONS (DIAM. x DEPTH)	LINE POST FOUNDATION DIMENSIONS (DIAM. x DEPTH)			
6-8	3.000 x 0.110	2.375 x 0.095	10" x 36"	10" x 36"			

TYPICAL LINE FENCE DETAIL

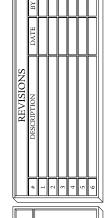
NOTES:

- 1. ALL FENCING AND GATES TO BE BLACK PVC COATED.
- 2. ALL FENCING AND GATES TO HAVE BLACK PRIVACY SLATS.
- 3. ALL FENCING AND GATES TO HAVE 3 STRAND BARBED WIRE.
- 4. WHEN GATES ARE INSTALLED ADJACENT TO CORNER OR END PANES, INSTALL TRUSS RODS AS IN PULL POST ASSEMBLIES.
- 5. ALL POSTS ARE SET IN CONCRETE 9" FROM TOTAL DEPTH.
- 6. CONTRACTOR TO PROVIDE FENCE SUBMITTAL TO ENGINEER FOR APPROVAL.

20 GENERATOR CONC. PAD DETAILS
SCALE: AS NOTED

21 CHAIN LINK FENCE





STANDARD DETAILS
WEDOWEE SEWER SYSTEM IMPROVEMENTS
WEDOWEE WATER, SEWER, & GAS BOARD
TOWN OF WEDOWEE
RANDOLPH COUNTY, ALABAMA

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850 Corporate Pwky, Suite 104

301 N Dickson St,

1. A 12524



PROJECT NO: 20-0016 DRAWN BY: TCW CHECKED BY: BWT SCALE: AS NOTED DATE: 09/2023

C20

 $21 \mid \frac{\text{CHAIN LINK FENCE DETAILS}}{\text{SCALE: N.T.S.}}$