ADDENDUM NO. ONE

to

BID DOCUMENTS, CONTRACT DOCUMENTS, CONSTRUCTION SPECIFICATIONS AND DRAWINGS

for the

KEG CREEK WATER POLLUTION CONTROL PLANT

for the

CITY OF SENOIA, GEORGIA

PROJECT NO. 172121

Bids Received Until 2:00 p.m. Wednesday, December 16, 2020

ACKNOWLEDGE RECEIPT OF THIS ADDENDUM BY INSERTING ITS NUMBER IN THE PROPOSAL. FAILURE TO DO SO MAY SUBJECT BONA FIDE BIDDERS TO DISQUALIFICATION. THIS ADDENDUM FORMS A PART OF THE PROJECT DOCUMENTS; IT MODIFIES THEM AS FOLLOWS:

December 7, 2020



Atlanta • 2255 Cumberland Parkway • Building 400 • Atlanta, Georgia 30339 • Tel: 770-333-0700 Augusta • 4210 Columbia Road • Building 3 • Augusta, Georgia 30907 • Tel: 706-863-8800

BID DOCUMENTS

For your reference, refer to attached Bid Questions – Part One.

Refer to Advertisement for Bids, Paragraph 5, Page AB-1.

Revise Paragraph 5 to read:

"Time allotted for construction is 540 consecutive calendar days for substantial completion and 570 days for final completion."

Refer to Proposal Pages P-4 and P-8.

Replace Proposal Pages P-4 and P-8 with enclosed revised Pages P-4 and P-8. [Directions to Bidder: Either replace sheets in bound book or staple revised sheets to originals.]

CONTRACT DOCUMENTS

Refer to Contract Agreement, Paragraph 6, Page CA-1.

Revise Paragraph 6 to read:

"That the Contractor shall commence the work to be performed under this Agreement on a date to be specified in a written order of the Owner's Engineer and shall within 540 consecutive calendar days from said date substantially complete all work hereunder, except as otherwise provided in these documents for extension of the time limit, and shall within 570 consecutive calendar days from said date achieve final completion with 100% of punch list items complete....."

CONSTRUCTION SPECIFICATIONS

Refer to Section 4.04.F.3., Crystalline Waterproofing Admixture, Page 4-3.

Revise the first paragraph of Section 4.04.F.3. to read:

"Class A-2 concrete in liquid containment structure walls only shall contain Xypex C-500/C-500NF admixture, Penetron Admix SB or approved equal for concrete work containing liquids. Xypex C-500 admixture shall be dosed at a rate equal to 2% by the weight of Portland cement. For concrete containing fly ash the dosage rate shall be 2% by the combined weight of cement and fly ash. Dosage rate for Penetron Admix SB and Xypex C-500NF is 1% by weight of total cementing materials."

Refer to Section 6.21.M., Gate Operators, Page 6-13.

Revise the first paragraph of Section 6.13.M to read:

"Provide and install automatic electrical motorized gate operators on both entrance gate

leaves. Gate operators shall be manufactured by HySecurity, Liftmaster or approved equal."

Refer to Section 6.21.M.9., <u>Control Devices</u>, Page 6-15.

Revise Section 6.13.M.9 to read:

Control Devices: Vehicle detector, keypad with access card entry programmed to City access card system"

Refer to Section 7.09.C., Iron Pipe and Fittings, Page 7-3.

Revise Section 7.09.C. to read:

".....Ductile iron pipe shall conform to AWWA C151 (ANSI a21.51) for diameter through 24" and shall be a minimum pressure Class 350 or thickness Class 50 unless otherwise specified or shown on the Drawings."

Refer to Section 9.04, Concrete Block Masonry, Page 9-4.

Revise Section 9.04 to read:

"9.04 <u>Concrete Block Masonry</u>: The Contractor shall furnish and place all blockwork required as shown on the Drawings or as required for the proper completion of this item inclusive of common blockwork and exterior architectural blockwork together will all ties and all pointing and cleaning.

- A. Products: Concrete masonry construction shall conform to all requirements of "Specification for Concrete Masonry Construction (ACI-531.1-76)" as published by ACI except as modified by supplemental requirements in these Specifications. Concrete block masonry shall be furnished and installed at the places and in the manner shown on the Drawings and as required for the proper completion of this item of the work. Concrete masonry shall be made of hollow loadbearing units meeting the requirements of the latest ASTM Standard Specification C 90 for Grade A units. Cinder blocks will not be accepted. Exterior face of perimeter walls shall be architectural or split face standard gray color. Optional color samples shall be submitted for selection by the Owner. If the Owner chooses an optional color, the *Owner will pay for the difference in cost between standard gray and optional color* selected. All interior block shall be standard smooth face block. All masonry units shall be obtained from one supplier whose manufacturing and curing facilities must be approved by the Engineer. Masonry units shall be $8'' \times 16''$ nominal face size, and of nominal thickness as indicated on the Drawings. Masonry cement for all blockwork shall conform to ASTM Specifications C-144 and sand shall be white in color. If Owner chooses an optional color, pigment shall be added to the mortar to *match block color.*
- B. <u>Wall Reinforcement</u>: Wall reinforcement shall be standard reinforcement truss design for block wall construction with No. 9 gauge, deformed galvanized side rods and No. 9 gauge galvanized continuous cross rods. Out to out spacing of side rods shall be approximately 2" less than the nominal thickness of the wall or wythe. Wall

reinforcement shall be as manufactured by Dur-O-Wal, AA Wire Products Co., Wire-Bond or equal. Reinforcement shall be placed in first and second bed joint (8" c. to c.) above and below openings, as specified above, and in every second bed joint (16" c. to c.) throughout the remainder of the wall. Reinforcement in the first bed joint immediately above and below openings shall be continuous. In the second bed joint, it shall extend 2' beyond each side of the opening. Reinforcing shall be lapped a minimum of 6" at splices. Corner and abutting wall reinforcement shall be prefabricated corner and tee sections. Wall ties of at least 16-gauge galvanized metal and of quality known as "Dovetail" masonry anchors or equal shall be used in all cases where blocks are laid against concrete and where proper bonding of courses cannot otherwise be obtained as elsewhere required by the Engineer.

C. Execution: Prior to starting blockwork if optional color block is to be selected, Contractor shall lay up sample panels of block using various shades of mortar as directed by the Engineer. Mortar color shall be of an approved type that is compatible with the brand of masonry cement used. Block shall be laid in all cases from scaffolds erected on the exterior side of the wall. No overhand work will be permitted. All exposed joints shall be $\frac{3}{8}$ ", finished brick shall be delivered thoroughly protected against chipping, and in no case will chipped brick be permitted to remain installed in walls. Blocks shall be laid in running bond with 3/8" joints horizontal and vertical. The masonry units shall be struck flush with the block face. It shall then be firmly compacted with a tooling joint. Full mortar bedding shall be used on the first course on the concrete base. Interior walls shall be of the thickness shown on the Drawings and laid as specified above. Provide "bull-nose" units at exterior corners where partitions intersect at right angles and at other locations where edge of block is exposed. Walls shall be reinforced as detailed on the Drawings. Where vertical bars are required cells shall be completely filled with 3,000 pounds of concrete. All metal doorframes, exterior and interior, shall be set plumb, square and braced before masonry wall construction is started. Masonry anchors shall be placed as specified by doorframe manufacturer, during masonry wall construction, to properly anchor doorframes. All metal doorframes shall be filled with grout. Reglets shall be left in blockwork where required for the installation of sheet metal work or expansion joints where shown or specified. The Contractor shall build in all flashing and lintels as shown, specified or required.

The Contractor shall lay out his own blockwork. All anchor bolts and wood blocks shall be built in and chases, slots, sleeves or openings shall be built into the walls as the work is performed, where required for wall plates, beams or other ironwork, piping, electric wiring, heating or ventilating pipes, ducts or equipment. A neat finish shall be made around all slots or openings. Whenever block masonry is left for the night or is left unfinished for any reason, the masonry must be raked off or toothed, as directed, and all mortar removed from the exposed surface of the block. All work shall be covered with tarred felt or polyethylene after each day's work. Upon completion, the Contractor shall clean down all exposed surfaces of blockwork removing all dirt and mortar stains, raking out all loose joints and repointing the same to give the appearance of the original joint, also pointing in against work of other items that has not been completed, and making the completed installation free from defects, thoroughly watertight and satisfactory to the Engineer. The use of sapolio or wire brushes in cleaning down of blockwork is positively forbidden. Dilute muriatic acid and a fiber brush shall be used for cleaning down masonry walls. Walls shall be thoroughly rinsed off during cleaning operations."

Refer to Section 9.23.Q., Hoist Equipment, Page 9-38.

Revise Section 9.23.Q. to read:

"..... Provide one 2.0 ton electric chain host lift Coffing EC Series with overload protection. The hoist shall be provided with the following:

- Lifting Chain:
- Lifting Speed:
- Voltage:
- Hoist Suspension:
- *Chain Container:*
- Hoist Power Cord Length
- NEMA 3R Hoist Protective Weather Cover
- Motorized Trolley Weatherproofing
- IP 66 Push Button Control Drop"

Refer to Section 10.01, Scope, Page 10-1.

Revise the following table items to read:

"10.20	Rotary Screw Blower Package	1
10.21	Post Air Blower	1"

Refer to Section 10.13.C., <u>Materials and Construction</u>, Page 10-6.

Revise the third sentence of Section 10.13.C. to read:

"The side frames shall be minimum 5/32" formed to a channel profile."

Refer to Section 10.13.C.1., Page 10-6.

Revise the second sentence of Section 10.13.C.1. to read:

"The bar rack shall consist of continuous taper or teardrop section bars."

Refer to Section 10.13.C.2., Page 10-6.

Revise the first sentence of Section 10.13.C.2. to read:

"Dead plate of Grade 304 stainless steel plate (thickness is minimum 5/32") shall extend to the point of discharge."

35' 16 fpm (single speed) 460V-3phase-60Hz TEFC motors Motorized Trolley – 35 fpm Fabric Chain Container Refer to Section 10.13.C.4., Page 10-7.

Revise the first sentence of Section 10.13.C.4.c. to read:

"c. End Plate Minimum:

Revise the last paragraph of Section 10.13.C.4.f. to read:

"Bearings for lower submerged sprockets shall be of proven self-lubricating polyethylene or silicon carbide material and be maintenance-free. Lower bearing should not require periodical lubrication."

1/4" "

Refer to Section 10.13.C.6., Page 10-7.

Revise Section 10.13.C.6. to read:

"The upper sprocket shall be 304 stainless steel with a 125 mm pitch and minimum 25 mm tooth width. The lower sprocket shall be solid 304 stainless steel with a 125 mm pitch, a tooth width of 27 mm and a bore of 70 mm minimum."

Refer to Section 10.13.C.7., Page 10-7.

Revise the second sentence of Section 10.13.C.7. to read:

"The average ultimate strength of the chain to be minimum 25,000 pound force."

Refer to Section 10.17.D.8.b., Page 10-51.

Revise the first paragraph of Section 10.17.D.8.b. to read:

"Each filter shall include two 2" backwash valves. Valves shall be 2-piece, flanged end, ASTM A351 Grade CF8M stainless steel body, 316 stainless steel ball and stem, fullport, with a 115 volt, single phase, 60 Hz, open / close service electric actuator. Valve / actuator combination...."

Refer to Section 10.17.D.8.b., Page 10-51.

Revise the third paragraph of Section 10.17.D.8.b. to read:

"Each filter shall include one 2" solids waste valve. Valve shall be 2-piece, flanged end, ASTM A351 Grade CF8M stainless steel body, 316 stainless steel ball and stem, fullport, with a 115 volt, single phase, 60 Hz, open / close service electric actuator. Valve / actuator combination...."

Refer to Section 10.17.D.15.r., Page 10-57.

Revise the first sentence of Section 10.17.D.15.r. to read:

"Automatic operation of the filter shall be controlled through an Allen Bradley MicroLogix 1100 programmable logic controller (PLC) mounted inside the main control panel."

Refer to Section 10.19.GG.1., Page 10-82.

Revise the first sentence of Section 10.19.GG.1. to read:

"This section covers the supply and delivery of two shaftless screw conveyors for the convevance of dewatered solids to roll off dumpsters."

Refer to Section 10.19.GG.3.g., Page 10-83.

Revise the following rows of Section 10.19.GG.3.g. to read:

"Approximate Incline	23°	5°
Discharge Type (Axial or Vertical)	Vertical	Vertical
Drive Horsepower	7.5 max.	5"

Refer to Section 10.20, Rotary Screw Blower Package, Page 10-97.

Revise the first paragraph of Section 10.20 to read:

"Rotary Screw Blower Package:Blowers shall be manufactured by Kaeser Compressors, Inc. Model EBS410CL – SFC, Aerzen Model D 36S, or equal"

Refer to Section 10.20.A.3.j., Blower Package Sound Level, Page 10-97.

Revise Section 10.20.A.3.j. to read:

"Blower	r Package Sound L	level:		72 dB(A) at 3' "
			 _	

Refer to Section 10.20.D.1.i.19., <u>Bearing Design</u>, Page 10-101. Revise Section 10.20.D.1.i.19. to read:

"Bearing Design:

Ball Type"

Refer to Section 10.20.F.2., Warranty, Page 10-110.

Revise the first paragraph of Section 10.20.F.2. to read:

"F. Warranty: Blower packages shall be warranted to be free of defects in material and workmanship for a minimum period of twelve months from date of start-up. The screw blower elements are warranted to be free of defects in material and workmanship for a period of 60 months from the date of start-up not to exceed 66 months from the date of shipment from the manufacturer, whichever occurs first."

Refer to Section 10.20.G, Field Quality Control, Page 10-110.

Revise the first paragraph of Section 10.20.G. to read:

"Furnish the services of a manufacturer's authorized representative for proper installation to inspect and approve the installation, and to supervise a test run of the blower package for a minimum of one 8-hour day."

Refer to Section 10.21.A, Post Air Blower, Page 10-111.

Revise Section 10.21.A. to read:

"The blower enclosure shall be provided in a 72 dBa sound attenuating enclosure."

Refer to Section 10.21.B, <u>Blower Casing</u>, Page 10-111.

Revise Section 10.21.B. to read:

"B. The blower casing shall be of one-piece construction with separate sideplates that are bolted and pinned to the housing. Materials shall be close-grained gray cast iron ASTM A48 or EN GG20 suitably ribbed to prevent distortion under the specified operating conditions...."

Refer to Section 10.21.D, Accessories, Page 10-111.

Revise Section 10.21.D. to read:

- "D. Blower accessories shall include:
 - 1. Inlet filter / silencer with filter media meeting 99% SAE fine dust, particles larger than 0.0005mm separated to 100%.
 - 2. The discharge silencer type shall be a combination of absorption, reflection and diffusion.
 - 3. A web reinforced silicone rubber sleeve with corrosion resistant clamps shall be provided
 - 4. V-belt drive with belt guard compliant with OSHA regulations
 - 5. Pressure safety valve sized to pass 100% of design flow
 - 6. Check valve, flapper type design
 - 7. Instrumentation consisting of inlet vacuum gauge, discharge pressure gauge, and discharge temperature gauge/switch with 2.5" dials
 - 8. The sound enclosure assembly shall have a metal powder coated back with a lift off front panel made of rotomolded polymer polyethylene. The sound enclosure acoustic material shall comply to FMVSS 302 with a burning rate B or lower than 100 mm/min.
 - 9. One spare air filter
 - 10. One spare set of V-belts"

Refer to Section 10.21.E, Field Service, Page 10-112.

Revise the first sentence of the second paragraph of Section 10.21.E. to read:

"A total of one 8-hour day shall be provided."

Refer to Section 10.22.B.2.a.2), Page 10-113.

Revise Section 10.22.B.2.a.2) to read:

"2). Material of construction for the drop pipe shall be Schedule 10, stainless steel."

Refer to Section 10.22.D.6., <u>SOTE (minimum)</u>, Page 10-114.

Revise Section 10.22.D.6., to read: *"SOTE (minimum):*

6.3%"

Refer to Section 10.24.E., Page 10-133.

Revise Section 10.22.E., to read:

"Pumps shall be manufactured by Peerless Pump Company, Layne Vertiline, Sulzer or equal."

Refer to Section 10.25.F., Page 10-150

Add the following after Section 10.25.F., to read:

- "G <u>Fiberglass Building</u>: The Contractor shall furnish and install 8'-0 W minimum \times 8'-0 D \times 7'-6" H factory fabricated, single-piece, pre-engineered fiberglass structure. The structure shall be capable of withstanding 125 miles per hour wind load and 30-psf snow load. The building shall be a single compartment layout suitable for the housing of polymer equipment. The fiberglass building shall be manufactured by Plasti-Fab, TraCom, Shelter Works or equal.
 - 1. <u>Laminate</u>: Isophthalic polyester resin and chopped commercial grade Eglass strand fiberglass with a coupling agent that will provide a suitable bond between the glass reinforcement and the resin with a minimum glass content of 25%
 - a. <u>Exterior Surface</u>: 15-mil gel coat with U.V. inhibitors and a satin finish, lightly textured and free from fiber pattern, roughness or other irregularities
 - b. <u>Exterior laminate</u>: ¹/₈" thick (minimum); chemically bonded to the surface gel coat and encapsulating the foam core
 - c. <u>Foam Core</u>: See Paragraph 2
 - *d.* <u>Interior Laminate</u>: ¼" thick (minimum); chemically bonded to the interior gel coat and encapsulating the foam core
 - e. <u>Interior Surface</u>: White (#1540) gel coat with satin finish, and free from exposed glass or other irregularities
 - f. <u>Laminate Properties</u>:
 - Tensile strength (ASTM D 638): 11,000 psi
 - Flexural strength (ASTM D 790): 18,000 psi
 - Shear strength (ASTM D 732): 12,000 psi
 - Barcol hardness (ASTM D 2583): 40
 - Impact (ASTM D 256): 12-ft. lbs/inch

- Density/specific gravity (ASTM D 792): 93.6 PCF/1.5
- Surface burning characteristics (ASTM E 84): Flame spread, less than 150 Smoke density, less than 1000
- 2. <u>Core:</u>
 - a. Rigid closed cell, self extinguishing, polyisocyanurate foam with a density of 2.0 pounds per cubic foot
 - b. *1-inch thick with a minimum insulating value of* R=7
 - c. Core Properties:
 - Thermal Conductivity:
 - (ASTM C 518): 0.13 BTU inch / hr. SF F
 - Density / Specific Gravity: (ASTM D 1622): 2.0 PCF/0.03
 - Surface Burning Characteristics (ASTM E 84):

Flame Spread - 35 Smoke Density - 240

- *d. Coupons prepared in accordance with ASTM D 618.*
- 3. <u>Doors</u>: One-piece molded fiberglass construction $1\frac{3}{4}$ " thick
 - a. Mount door with two T-304 stainless steel 5" laminated strap hinges (continuous piano hinges are not acceptable)
 - b. Door Gasket: Neoprene rubber P-type bulb gasket with flexible lock to retain permanent grip
 - *c. Provide single-point keyed stainless steel cylindrical latch in ball knob and stainless steel door stop chain*
 - d. Provide one-piece, purpose built, 3" deep fiberglass drip cap over doors; drip cap to extend 2" each side past door (40" overall length)
 - e. Provide single-flap neoprene insert style door sweep
 - *f.* Provide $\frac{1}{2}$ " high by $5\frac{1}{2}$ " wide heavy duty black vinyl full threshold
 - g. Provide 12" high by 12" wide Lexan window in each door.
- 4. <u>Base Mounting Flange</u>: ¹/₄" thick by 3" wide with closed cell neoprene sponge rubber gasket ³/₈" thick by 2" wide to provide a weather tight seal around the building perimeter
- 5. <u>Louver</u>: Provide one 10" by 10" fiberglass gravity shutter with heavy duty fiberglass frame using stainless steel pins and bearings at pivot points.
- 6. <u>Lifting Eye Bolts</u>: Provide two removable ³/₄" to 10" partially threaded steel eye bolts (5,200 pounds work load limit) with 6" shank length in each roof end.

- 7. <u>Equipment:</u>
 - a. <u>Exhaust Fan</u>: Shutter-mounted 585-CFM 10" diameter exhaust fan with gravity shutter, fiberglass canopy, and OSHA compliant wire guard. Exhaust fan to be wired to the exterior weatherproof fan / light switch. Fan shall be wired to automatically come on if door is opened.
 - b. <u>Lights</u>: Lights shall be as shown on the electrical Drawing.
 - c. <u>Switch Box</u>: Weatherproof duplex switch box
 - d. <u>Heater</u>: 1,500 watt, wall heater with thermal cutout, safety light and 1-pole thermostat in surface wall box with northern white baked enamel finish on 20-gauge steel.
 - e. <u>Thermostat</u>: Integral thermostat shall be provided.
 - f. <u>Receptacle</u>: GFCI receptacle 15A 125V, 20 A 125V feed-through with 5mA +/- 1mA trip threshold in weatherproof outlet box in locations as shown on the electrical Drawing
 - g. <u>Unistruts</u>: Four 4'-0" long P-500 Unistruts mounted for securing chemical feed equipment
 - h. <u>Circuit Breaker Panel</u>: 125 amp, 60A main circuit breaker, 8 branch, NEMA 1 inside NEMA 4x enclosure
 - *i.* <u>Conduit</u>: Electrical wiring in flexible, liquid tight, PVC jacketed galvanized steel Anaconda conduit TYPE EF.
- 8. <u>Finishes</u>: Manufacturer shall supply standard color chart for selection by *Owner*.
- 9. Installation: Install products in accordance with Engineer's instructions, plans, blueprints, etc., local codes, and in a manner consistent with the installation instruction and recommendation of the manufacturer. Move and position the shelter using the lifting eyes provided. The neoprene gasket provided should be positioned between the concrete slab and the building mounting flange. If more than one lifting eye is provided, USE A SPREADER BAR. After closing the building door(s), lay out the anchor bolt pattern. Drill and set the anchor bolts starting with one on each side of the door(s). The anchor bolts behind and in front of the door(s) should be flat head anchors if the mounting flange is external. Drill the anchor bolt holes to the depth and diameter required by the anchor bolt manufacturer. Wedge style concrete anchors $(\frac{1}{2}'')$ diameter $\times 4\frac{1}{2}''$ length) are required. Verify the operation of the door(s) before installing the remaining anchor bolts. The anchor bolts should be installed on maximum 24" centers or as otherwise specified. Seal the flange with sealant or grout. Install and test the building accessories in accordance with the manufacturer's instructions."

CONSTRUCTION DRAWINGS

Refer to Sheet 6 of 105.

Revise Chemical Feed Call Out Number One to read:

"1 – ½" SCHEDULE 40 PVC CAUSTIC"

Refer to Sheet 8 of 105.

Add the following note:

"Provide a 30'x20' compacted crusher run upkeep pad around the plant pump station."

Refer to Sheet 14 of 105.

Add the following notes:

"12" CMU channel reducing walls shall be filled with class "B" concrete.

Revise Wall Plan per enclosed Attachment No. 1."

Refer to Sheet 15 of 105.

Revise Sections B-B and C-C per enclosed Attachment No. 2.

Refer to Sheet 18 of 105.

Add the following note:

"Plain end section of 14" pipe with 45° angle entering the grit structure shall be provided by the manufacturer. Contractor to provide flanged pipe with mega lugs to connect to plain end pipe approximately 1'-4" outside the grit structure."

Refer to Sheet 19 of 105, Fluidizing Assembly Riser Diagram.

Add the following note:

"Manufacturer to provide a 2" fluidizing assembly. All values and devices depicted as $1\frac{1}{2}$ " shall be 2"."

Refer to Sheet 30 of 105, Effluent Box Top Plan.

Revise "Effluent Box Top Plan" with Enclosed Attachment 7.

Refer to Sheet 32 of 105.

Revise the Callouts on the "Clarifier Composite Section" to read: "ALUM. F.R.P. SCUM BAFFLE, ALUM. F.R.P. WEIR PLATE." Refer to Sheet 35 of 105.

Revise the following note to read:

"18" BFV (BY FILTER MFR. CONTRACTOR)"

Add the following note to read:

"There will be three total valves installed in this phase including two automatic backwash valves and one automatic solids waste valve per filter"

Refer to Sheet 37 of 105.

Add the following note:

"9. Galvanized frame members do not require a coating."

Refer to Sheet 38 of 105.

Add the following note:

"There will be three total valves installed in this phase including two automatic backwash valves and one automatic solids waste valve per filter."

Refer to Sheet 41 of 105.

Add the following note:

"Form the slab penetration for the future effluent pump and cover with 2'-6" square x $\frac{1}{4}$ " thick aluminum diamond plate, seal with construction adhesive."

Refer to Sheet 43 of 105.

Add the following notes:

"Add the enclosed Sump Base and Wall plan Attachment No. 3.

Revise Sections A-A, B-B, & C-C per the enclosed Attachment No. 4."

Refer to Sheet 45 of 105.

Add the following note:

"The entire walkway requires a hand rail, the hand rail shall extend around the end of the walkway above the transfer port."

Refer to Sheet 46 of 105.

Revise "Typical Wall/Slab Section" elevations to read:

"T/ WALL EL. 330.25 805.67 T/ BASE EL. 311.75 787.67." Revise Decant Section note to read:

"8" ADJUSTABLE DECANT LINE (SCH 10 TYPE 304SS)"

Refer to Sheet 60 of 105.

Revise "Caustic Feed Piping Diagram" to read:

"Raw Sewage Pump Station"

Delete item 16 – Pressure Switch

Delete "Typ. Channel Diffuser" detail

Refer to Sheet 64 of 105.

Add the following note:

"Exposed CMU blocks shall be architectural split face standard gray color."

Refer to Sheet 74 of 105.

Add the following note:

"Electronic gate consists of two gate operators, key pad, access card entry, vehicle detector and protection circuits as required by manufacturer."

Refer to Sheet 79 of 105.

Add the following notes:

"There will be one backwash pump, three total valves installed in this phase including two automatic backwash valves and one automatic solids waste valve per filter.

Revise the filter drive motor call out to read 0.75 horse power."

Refer to Sheet 81 of 105.

Add the following note:

"Aerzen blower requires 50HP circuit."

Add the following note:

"Revise Chemical feed building panel home run to read HA-8,10."

Refer to Sheet 86 of 105.

Revise Cable & Conduit Schedule 18 to read:

"2#4, 1#10(G), 1¼"C. (CHEM FEED PANEL)"

Refer to Sheet 87 of 105.

Add the following note:

"Revised Panel HA Chemical feed building circuit to 60A two poles"

Refer to Sheet 94 of 105.

Delete "Bollard Detail".

Add the following note to "Hand Rail Design Specifications":

"7. BASE FLANGES MAY BE USED IN LIEU OF SLEEVES, ONLY IF APPROVED BY THE ENGINEER. BASE FLANGES SHALL BE 2- HOLE TYPE WITH MINIMUM 3 %" WIDTH. ANCHORS SHALL BE ½" ADHESIVE TYPE, 6000# MIN. TENSILE STRENGTH."

Refer to Sheet 95 of 105.

Add the following note to the "Alternate Wall Detail":

"For Alternate 4, standard smooth face CMUs shall be provided behind the brick wall. The smooth face CMUs shall receive the water repellent barrier Chemprobe sealer as the split face blocks."

Refer to Sheet 96 of 105.

Revise "Door Elevation" to read:

"STEEL WOOD FRAME"

Refer to Sheet 97 of 105.

Add the enclosed Attachment 6 "Fence Detail".

Add the following note to the "Floor Drain Detail":

"Type "B" floor drain shall be used unless noted otherwise."

Refer to Sheet 98 of 105.

Delete "Concrete Wheel Stop Detail":

Refer to Sheet 101 of 105.

Revise Drawing per enclosed Attachment 5.

Refer to Sheet 105 of 105.

Delete the 30" Duck Bill Check Valve from the Sd-3 detail.

END OF ADDENDUM NO. ONE

City of Senoia, Keg Creek WPCP, Project 172134 Bid Questions

- 1. Site Visit / Site Address Address: HWY 85, Senoia, GA 30276
- 2. MFCC Referencing bid item 3c Rip-Rap (Ch-Rp) and looking at plan sheets 100 & 101 for the Intermediate & Final Erosion Control. Can you tell us exactly which items shown on the erosion control sheets this bid item is intended to pay for and which items should be in the base bid? Example, will it be used for Cd Check dams?

See revised proposal page P-5. Rp is for the rip-rap (Rp) shown on sheets 100 and 101.

3. MFCC – Referencing plan sheet 104 there is a detail for an "Enhanced Swale". We do not see this on the plans, please advise where the enhanced swale is to be located.

See enclosed attachment 5.

4. MFCC – Referencing plan sheet 105 the detail for the temporary sediment basin shows a 30" Duck Bill Check Valve on the end of the outlet pipe. We want to confirm this is what is required as it will be very expensive for a temporary service. Also, is there a spec for this valve?

Deleted the referenced valve.

5. MFCC – Referencing the bid form. Items 3 a, b, c, d and Items 4 a & b do not have quantities.

See revised proposal page P-5.

6. MFCC – Please clarify who pays for testing specifically soils & concrete. There is conflicting information in the specifications. Example Section 2 paragraph 2.02 and Section 4 paragraph 4.06.

Section 2.02 states that the contractor is responsible unless otherwise specified. Owner will pay for the concrete testing per paragraph one in specifications Section 4.06. The Owner will pay for geotechnical testing per Section 6.23.C.

7. MFCC – Related to the Horizontal Aluminum Handrail, are standard base flanges with field installed anchors an acceptable alternative to the cores with epoxy grout at each post?

Base flanges can be used in lieu of sleeves see revised note sheet 94.

8. MFCC – Are any Pipe Bollards required on the Project?

12/3/2020 1:24 PM

There are no bollards required for the project, the Bollard Detail was deleted from sheet 94.

9. MFCC – Are the cells of the 12" CMU at the Raw Sewage Pump Station grout/concrete filled or left void?

12" CMU shall be filled with class "B" concrete.

10. MFCC – Does the Handrail on the outboard side of the Aeration Basin Walkway at Elevation 799.25' run continuously from the Effluent Box Area, past the Flow Control Gate and to the Stairs or stop as currently shown on Drawing 25?

The handrail on the outside of the walkway stops as shown on sheet 25.

11. MFCC – Please confirm the Weir Plates and Scum Baffles at the proposed Clarifiers are FRP and not Aluminum. Re: Clarifier Composite Section on Sheet 32.

The baffles shall be FRP as specified.

12. MFCC – Please clarify the slab/wall elevations and overall height of the Digester shown on Drawing 46.

The top of wall elevation is 805.67 and the top of slab elevation is 787.67.

13. MFCC – Does the Roof Canopy Framing of the Effluent Structure receive a field applied paint coating or is galvanized the required finish?

The canopy frame members shall be galvanized. These galvanized members do not require an additional field coating.

14. MFCC – Does the Future Effluent Pump shown on Sheet 41 have a formed deck opening, and pump pedestal, in this Project? If so, does this opening require a cover plate?

Form the pump opening for the future pump and cover with 2'-6" square $\frac{1}{4}$ " thick diamond plate.

15. MFCC – Does the entire Walkway at the Digester require Handrail on the outboard side? Re: Sheet 45 in the area above the Transfer Port.

The walkway area above the transfer port requires hand rail.

16. MFCC – Are the 8" Split Face CMU Walls of the Sludge Dewatering Building and Control Building to be Gray or Colored?

Standard grey color, see revised section 9.04

17. MFCC – Spec SGC #14 states that the Contractor is responsible for providing his own water. Plan sheet 5 shows a new water line being brought in to the plant site. Will this be available when the plant construction begins? If not can the Contractor tap in to the line that is shown running parallel to Highway 85? Can you tell us what the cost of the water be?

The Owner will provide a 1" meter connected to an existing 2" water line at the plant entrance for temporary use during construction. The Contractor will provide any temporary piping required to connect to this meter. The basins can be filled for testing using the proposed 6" water line by others which will be available towards the end of 2021. The Owner will provide the water.

18. MFCC – There is a detail for concrete wheel stops on sheet 98 however we do not see them on the drawings. Will they be required?

There are no concrete wheel stops the detail will be deleted.

19. MFCC – On sheet 97 of the drawings, Yard Hydrant Detail, what is the 1" piping material going into and out of the CTS Comp Curb Stop?

CTS Comp. x CTS Comp. Stands for compression by compression, the compression fittings are shown.

20. MFCC – In the Specifications, Sheet 8-15 paragraph 8.26, it is stated that heat trace and insulation is required for all exposed water and chemical lines smaller than 8". Sheet 46 of the drawings, note 1 on the Chemical Feed at Digester detail reads that the Alum line does not require heat trace. Please clarify which is correct and if it applies to other locations on the project.

As stated, the line at this location does not require heat trace, the insulation is sufficient.

21. MFCC – Sheet 7 of the drawings indicates 2" water, 3/8" alum tubing and 3/8" spare tubing go to the Aeration Basin Effluent Box. I cannot find details of what happens with these lines on the Aeration Basin drawings. Sheet 68 of the drawings indicate a diffuser for the Alum only. Would the Alum go up and over through the deck or penetrate the wall below grade?

See enclosed attachment 7.

22. MFCC – Sheet 72 indicates NaOH feeds to the Raw Sewage PS from the chemical skid, Sheet 6 shows only Alum to the Raw Sewage PS from the Chem Bldg. Please clarify what chemicals go to the Raw Sewage PS. *Reference question #4 in the e-*

mail below. THIS QUESTION I wanted to point out that on Sheet 60 of the drawings, the 'Caustic Feed Piping Diagram' shows an NaOH feed line to the 'Influent Splitter Box' also.

Caustic shall be supplied to the raw sewage pump station not Alum. Caustic will be fed into the Raw Sewage Pump Station, not the Influent Splitter Box.

23. MFCC – Chemical lines feeding to the Raw Sewage PS and Plant Pump Station; is it intended that the tubing transitions to ½" pipe (similar to Digester detail)? Is it intended that the lines penetrate the walls of the pump stations below grade or route up, over and through the decks of these structures? How should these lines terminate?

See attachment 7.

24. MFCC – Referencing spec section 4, paragraph 4.04.G.3. This states that "Class A-2 concrete in liquid containment structure walls only shall contain Xypex C-500 admixture....". Please confirm this would not apply to interior walls such as in the Aeration Basin.

Interior aeration basin walls do not provide for water containment and will not require the Xypex additive.

25. MFCC – Referencing the bid form Item 8 Aeration Basin Velocity and Oxygen Testing Allowance. Will this test require potable water? If so, is it the intent we include the cost of the water and getting it to the basin in the base bid or will the allowance cover this cost?

Owner will provide water; Contractor should provide any temporary piping to get water to the basin.

26. MFCC – Referencing plan sheet 56. There is a note in the composite section that says "Compacted Crusher Run" with a leader pointing between the PS and valve vault. We do not see this called out on the plan sheet. Will it be required? If so what is the extent?

Provide a 30'x20' crusher run upkeep pad around the plant pump station.

27. MFCC – Referencing plan sheet 58 on the right hand of the plan view there is a call out for an 8' x 8' Prefabricated Fiberglass building. We cannot find a specification for this, please advise.

See enclosed specification Section 10.25.D.

28. MFCC – Plan sheet 4 shows fencing around the site with a "Double Swing Gate" at the entrance. Plan sheet 74 Electrical site plan shows an electric gate. There is a spec 6.21.M for an electric gate operator. Please clarify what type of gate is required. Also, are there any details for the fence other than the spec?

Provide a double swing gate with electric operators. Added note to sheet 74 and fence detail to sheet 97.

29. MFCC – Will burning of clearing debris be allowed on site?

Construction burning is not allowed within City limits.

30. Kahn – Please clarify if the intent is to submit a complete set of specifications with the bid proposal, or can the original (yellow and green) sheets be extracted and submitted in its original form as required.

Complete set of intact specifications shall be submitted. The "yellow pages" must be filled out and submitted as part of a complete bid package, see Instructions to Bidders 6.E.

31. Kahn – There are several GEFA/DBE forms included within the specifications. Please confirm that these are to be submitted by the apparent low bidder prior to contract commencement.

The Contractor is responsible to all GEFA/DBE requirements, the mentioned forms will be submitted to GEFA for approval after the bid.

32. Kahn – Please clarify the wall make up and details on interior gypsum and CMU walls for the Control Building on page 63.

The exterior walls are CMU and the interior walls are gypsum as shown on the control building floor plan on sheet 62 and sections on sheet 63. A finish schedule is also shown on the 63.

33. Kahn – Will the Owner pay for water used for testing and preloading of tanks, as required? 5. Please clarify if the entire footprint of the Aeration Basin is to receive a 6" layer of #57 stone.

The Owner will provide the water. The basins can be filled for testing using the proposed 6" water line by others which will be available towards the end of 2021. The whole basin has a stone base layer from the T/ subgrade elevation to the concrete slab.

34. Kahn – Please clarify drawing #93 where the wood doors in the detail say they have wood frames but the schedule says steel frame.

The frame is steel.

35. Foote – The brick veneer shown on Sheets 64 and 95 appears to reference Addition No. 4. Additive Alternate A-4 does not appear to be listed on the current Bid Form. Please clarify the intent. Also, if the brick option is selected, does the split face behind the brick area change to CMU? Is Dampproofing or Rigid Insulation required?

Added A-4 to the proposal sheet, the CMUs behind the brick can be split face and all the block require Chemprobe or equal coating.

36. Foote – What pressure class of pipe should be used on sizes larger than 16"? Spec section 7.09C says sizes up to 16" should be class 350 but it doesn't mention larger sizes.

Revised to include up to 24".

37. Foote – Sheet 97 shows details for floor drain types A, B and C. Other than a type C specifically called out on sheet 38, all other locations only read "floor drain". What type of drain should be used in the Chemical Structure, Control Building, Sludge Building, Raw water Pump Station and RAS Pump Station?

Type "B" unless noted otherwise.

38. Foote-Phone call, asked for alternate supplier on aluminum covers, said Haestead would not be bidding.

Aluminum cover and hatch system can be supplied by any manufacturer / aluminum fabricator.

39. Moon – Do we put a miter cut on the 14" Raw Sewage DIP at the grit structure as it appears to be shown on sheet 18?

That section of pipe provided by manufacturer.

40. Moon – Is the air line from the Post Air Blower on sheet 40 stainless steel all the way from the blower to the diffusers?

S.S. transitions to ductile iron as pipe passes over the Aerobic Digester wall, see composite section sheet 46.

41. Moon – How do the water line and chemical lines tie in to the effluent box at the aeration basin on sheets 7 and 30?

See attachment 7.

CITY OF SENOIA, GEORGIA

KEG CREEK WATER POLLUTION CONTROL PLANT

Subtotal, Item 2a through 2p inclusive, the amount of:

Subtotal, Items 1 and 2 inclusive, the amount of:

Item No.

Qty. Unit Description

Unit Price

\$

\$

Total Price

3.			SOIL EROSION CONTROL DEVICES	
a.	3,125	LF	Silt Fence (Type Sd-1c)	
b.	4	EA	Check Dam (Cd-S)	
c.	7.5	СҮ	Riprap (Rp)	
d.	1	LS	Grassing of Disturbed Areas	

4.	4. STORMWATER MONITORING				
a.	1	EA	Monitoring Site (establish, construct and operate all sites)		
b.	2	EA	Sampling Events		
5.	1	LS	LANDSCAPING ALLOWANCE	\$40,000.00	\$40,000.00
6.	1	LS	SPARE PARTS ALLOWANCE	\$10,000.00	\$10,000.00
7.	1	LS	LABORATORY EQUIPMENT ALLOWANCE	\$30,000.00	\$30,000.00
8.	1	LS	AERATION BASIN VELOCITY AND OXYGEN TESTING ALLOWANCE	\$40,000.00	\$40,000.00
9.	1	LS	SEED SLUDGE HAULING ALLOWANCE	\$5,000.00	\$5,000.00

CITY OF SENOIA, GEORGIA

KEG CREEK WATER POLLUTION CONTROL PLANT

- Provide a 1.7 meter sludge dewatering press in lieu of the 1.2 meter press as described in A-2 Section 10.19 of these Specifications, add the following amount:
- To coat the interior of the raw sewage pump station per Section 14 of these Specifications, A-3 add the following amount:
- To add brick feature to control building wall as shown on the Drawings, add the following A-4 amount:
- To delete the brick entrance sign, delete the following amount: **D-1**
- To delete the Excell velocity enhancer as described in Section 10.15.G.5. of these **D-2** Specifications, including the velocity enhancer concrete wall, delete the following amount:
- Provide a 500 kw generator in lieu of the 750 kw generator, deduct the following amount: **D-3**
- To delete the density current baffle called for in Specificaton Section 10.16.K, deduct the **D-4** following amount:
- To construct the asphalt access road with 8" graded aggregate base in lieu of asphalt, deduct **D-5** the following amount:
- To delete the Plant SCADA system components as described in Section 11, including SCADA field wiring, conduit to remain, as shown on the control wiring diagram, deduct the **D-6** following amount:

To replace the tertiary filters specified with the alternate Kruger Model HSF2212/6-2C. Bid amount shall include the cost of all required modifications and any additional engineering **D-7** design and review required. Any additional changes shall be made at no additional cost to Owner.

P-8

Deduct the following amount:





\$

\$

\$











\$













