ADDENDUM NO. 1

DATE: **March 30, 2026**

OWNER: **Town of Tignall**

PROJECT: **Wastewater Treatment Plant Improvements**

C & S PROJECT NO.: **T7040.003**

ENGINEER: **Martin C. Boyd, P.E.**
CARTER & SLOOPE, INC.
1031 Stonebridge Parkway
Watkinsville, Georgia 30677
Telephone: 706-769-4119
Email: mboyd@cartersloope.com

BID DATE: April 23, 2026 **BID OPENING: 2:00 PM Local Time**

TO ALL BIDDERS:

DOWNLOADING THIS ADDENDUM THROUGH QUESTCDN IS YOUR ACKNOWLEDGMENT OF RECEIPT. NO OTHER ACTION IS NECESSARY TO ACKNOWLEDGE RECEIPT. THIS ADDENDUM FORMS A PART OF THE BID DOCUMENTS WHICH ARE HEREBY MODIFIED IN THE FOLLOWING RESPECTS:

I. Questions / Answers

1. **Question**: The Cash Allowance for Spare Parts described in Section 01020 is $25,000 but the online bid worksheet shows it as $10,000. What is the correct amount?
   Answer: The correct amount for the Spare Parts Cash Allowance is $25,000 and the online Bid Worksheet has been updated.

2. **Question**: What is the landfill the City has contracted with to accept the dewatered biosolids?
   Answer: The Town is not under contract with any landfill. The Contractor will need to locate a landfill that will accept "high moisture content waste" and negotiate a disposal fee. The Specifications are modified by this addendum to reflect this change. We know that Waste Management's landfill in Homer, GA and Richmond County Municipal Solid Waste Landfill has historically accepted "high moisture content waste", but the Town of Tignall does not have any agreement or contract with any facility for solid waste disposal. These landfills may be limited in the amount of high moisture content waste they can take daily, which could affect the Contractor's dewatering and disposal operations.

3. **Question**: Is there any analysis available for land fill approval…TCLP?
   Answer: A TCLP analysis was completed on 12/10/2024 and the results are included

in this addendum.

4. **Question**: Has the landfill already approved the material for disposal?
   Answer: No, the Contractor will need to obtain approval for disposal of the high moisture content waste.

5. **Question**: Is there any other water source besides the ¾ residential?
   Answer: There is a fire hydrant located on Jane Hill Rd. just outside the WWTP fence. The Contractor may use that fire hydrant for water, but they must furnish and install a hydrant meter. The Town does not have a hydrant meter. The location of the hydrant is shown on revised Sheet 5 included in this addendum.

6. **Question**: Dredging the pond will not remove all the biosolids, is 8" – 12" remaining acceptable?
   Answer: See revised language in Section 02325 included below in this addendum.

7. **Question**: What is the estimated start date for the project?
   Answer: We anticipate issuing a Notice to Proceed on or before June 1, 2026

8. **Question**: How can we schedule a site visit?
   Answer: The gate at the treatment facility is unlocked daily from 8 am to 5 pm so the Bidder may visit the site at their convenience. As a courtesy, please contact Clyde Davis at (706) 990-5098, and leave him a message that you are visiting the treatment plant. Please ensure that the gate is closed when you leave and you may leave the gate unlocked unless instructed otherwise by Mr. Davis.

II. CONTRACT DOCUMENTS AND SPECIFICATIONS

1. Section 00200 – Instructions to Bidders

A. Add the following paragraph to this section:

"ARTICLE 26—SALES AND USE TAXES

26.01 The Owner intends to request a reimbursement from the Georgia Department of Revenue on sales and use taxes paid on equipment purchased for the primary purpose of reducing or eliminating water pollution. The Contractor will include in his lump sum price all costs to assist the Owner and Engineer with completing and submitting Forms ST-12 and ST-12(a) and other forms as required by the Georgia Department of Revenue."

2. Section 00410 – Basis of Bd

A. The online Bid Form will be updated on QuestCDN to address allowances. Also, the Major Materials and Mechanical Equipment Schedule has been updated and the revised Section 00410A-1 is included here-in.

3. Section 01020 - Allowances

A. Refer to Paragraph 2.A. Add the following paragraph:

"2. <u>Testing</u> – The Contractor shall allow the sum as listed on the Bid Form for Cash Allowance for concrete testing and soil testing. This allowance may be utilized by the Owner and/or Engineer to pay for any testing required in accordance with Section 01410. No money from this allowance shall be used to pay for any re-testing of failed tests. The Contractor shall provide coordination and labor to assist the testing company

with collection of testing samples on the jobsite. To receive authorization to use Allowance money to pay for testing services, the Contractor must submit invoices from the approved testing agency with the monthly pay request for review and approval."

4. Section 01025 – Measurement and Payment

A. Refer to Paragraph 3.1.A. Add the following paragraph after the existing second paragraph:
"The Owner intends to request a reimbursement from the Georgia Department of Revenue on sales and use taxes paid on equipment purchased for the primary purpose of reducing or eliminating water pollution. The Contractor will include in his lump sum price all costs to assist the Owner and Engineer with completing Forms ST-12 and ST-12(a) including, but not limited to, obtaining the required information from subcontractors and suppliers and submitting completed forms to the Engineer."

B. Refer to Paragraph 3.1.C. Replace this entire paragraph with the following revised paragraph:
"C. Item 3 – Unit Price Items

1. Mechanical or Hydraulic Dredging

Measurement: Quantities for sediment removal, dewatering, and disposal shall be expressed in DRY TON. The Engineer has furnished an estimate on the basis as described in the Contract Drawings. The Contractor must furnish the tickets from the landfill that shows the gross weight (loaded) and tare weight (empty) of the trucks hauling the material to determine the exact tonnage disposed using the calibrated scales at the landfill.

Payment: Mechanical or Hydraulic Dredging, Dewatering, and Disposal shall be paid for the unit price as shown on the Bid Form for each DRY TON of sediment dredged, dewatered, and legally disposed of off-site. The Contractor shall include in the unit price the cost for furnishing all materials and equipment and performing all labor necessary to dredge accumulated sediment from the ponds as shown on the Contract Drawings, all costs associated with dewatering the sediment onsite, and all costs associated with the complete removal and off-site disposal of the dredged material from the dewatering site, including transport services of all dewatered sediment to a permanent disposal site selected by the Contractor and paying all tipping fees. This shall include mechanical or hydraulic dredging, dewater devices, expendables, truck and/or container transportation, fuel, hauling of the material to a permanent disposal site that is located and selected by the Contractor, tipping fees to the landfill for "high moisture content waste", permanent grassing and stabilization and any BMPS's that may be required at the treatment plant site for dredging operations include, but not limited to, all other appurtenances necessary for permanent stabilization of disturbed areas. The Contractor shall be responsible for locating and/or providing an off-site disposal location that can legally receive the dredged materials from the WWTP, including all hauling costs and landfill tipping fees that may be required."

CLARIFICATION: In Section 02325, the specifications require that the material removed from the existing pond meet a minimum of 15% solids prior to disposal at the landfill to reduce landfill tipping fees. Material meeting the minimum of 15% solids is

called "DRY TON", but may still be considered "high moisture content waste" by the landfill. The Contractor will be responsible for locating a landfill that will accept this material, hauling it to the landfill and paying all tipping fees for disposal.

C. Refer to Paragraph 3.1.D. Add the following to this paragraph.
"b. Testing – The Contractor shall allow the sum as listed in the Bid Form for Cash Allowance for concrete testing and soil testing. This allowance may be utilized by the Owner and/or Engineer to pay for any testing required in accordance with Section 01410. No money from this allowance shall be used to pay for any re-testing of failed tests. The Contractor shall provide coordination and labor to assist the testing company with collection of testing samples on the jobsite. To receive authorization to use Allowance money to pay for testing services, the Contractor must submit invoices from the approved testing agency with the monthly pay request for review and approval."

D. Refer to Paragraph 3.1. Add the following the paragraph to this section.
"E. Additions/Deductions
1. Modular Insulated Pond Cover (Section 11234)
The Contractor shall list the deduct amount for **not** furnishing all equipment and materials, and **not** performing all labor necessary to install the Modular Insulated Pond Cover as shown on the Drawings and as specified in Section 11234 of the Contract Documents."

5. Section 02325 – Dredging
A. Replace this entire section with the enclosed revised Section 02325.

III. CONTRACT DRAWINGS

1. Revised Sheets
A. Please remove and replace the following sheets with the attached revised sheets: 2, 4, 7, 8, 10, 12, 13, 14, 15, 16, 17, 18, 23, 24

2. Sheets E.1 – E.8
A. Insert the attached electrical sheets into the plans.

END OF ADDENDUM NO. 1

SECTION 02325
DREDGING
INDEX

SECTION 02325
DREDGING

PART 1. GENERAL

1.1 SCOPE

A. The Contractor shall be responsible for all labor, supervision, equipment, materials, fuel, and all other appurtenances required for mechanically and/or hydraulically dredging, dewatering, transportation, delivery, processing, and where required at the project site, final placement or disposal of all dredged material. During all project activities, the Contractor shall be responsible for Best Management Practices (BMPs) to minimize the turbidity of any effluent discharged from sediment removal and dewatering, and to minimize erosion of disturbed land areas. All work shall be completed in accordance with applicable Federal, State, and local rules and regulations.

B. No dredged material shall be stockpiled in wetlands or upland areas or outside of the designated disposal area as shown on the plans. All dredged material removed from the pond is to be transported directly to the dewatering area, and from the dewatering area directly to the disposal site. Long-term stockpiling dewatered material onsite is prohibited.

C. The Contractor shall determine the means and methods for sludge removal and dewatering. Acceptable dredging methods include, but are not limited to, hydraulic and mechanical methods. An area on the Drawings has been designated for dewatering operations, and the Contractor may utilize this area as needed, but it should be returned to its existing conditions at the completion of the project including restoring any disturbed areas and final grassing and stabilization. Any water removed during the dredging operation or removed during the dewatering operation should be returned back to the head of the plant or to another treatment pond onsite at a rate not to exceed the plant's permitted flow of 0.078 mgd including normal flow into the plant from other sources. The Contractor shall be responsible for removing and hauling all dewatered sludge from the project site to a sanitary landfill and shall pay for the landfill disposal cost. The Owner recognizes that the dewatered sludge will be considered "high moisture content waste" as defined in O.C.G.A. 391-3-4-.01 Definitions. The Owner will sample the sludge and run a paint filter test in accordance with EPA SW-846 Method 9095B – Paint Filter Liquids Test on the material before the Contractor hauls it to the landfill. If the sampled sludge does not pass the paint filter test, additional dewatering by the Contractor will be required at their expense. While there is no minimum percent solids for passing the paint filter test, the Owner will require that the dewatered sludge meet a minimum of 15% solids prior to disposal at the landfill to reduce landfill tipping fees. The Contractor shall provide all the means, methods and any equipment, polymers, etc. to meet the minimum 15% solids, which will be called "DRY TONS" for bidding purposes (See Section 01025), but the landfills will still

consider this "high moisture content waste". See the Drawings for additional information.

D. The Contractor shall become familiar with the location of the proposed work, the actual field conditions and requirements of the work, including risks, means of access, character of the soil and subsoil, and restrictions and regulations. Failure to do so will not relieve the Contractor of his/her obligations to furnish all labor necessary to carry out the Work described in the Specifications. The submission of a Bid shall constitute and imply full knowledge of such conditions and regulations and acceptance of the risks therein contained.

1.2 SUBMITTALS

A. Contractor shall be responsible for submitting a Dredging and Dewatering Operation Plan listing sequence of dredging operation; pipe location; proposed locations of pumps (if any), location and type of dewatering equipment and anticipated performance characteristics, mobilization and demobilization sequence and schedule, final disposal location; and all other items as listed in these Specifications.

B. Contractor shall submit dredge, pipeline, dewatering equipment, and auxiliary pump station (if any) specifications and operating parameters such as proposed pumping rates (if any), pipeline velocities, pipeline strength and maximum allowable pipeline pressure specifications, and noise levels for review by Owner or Owner's Representative prior to Mobilization.

1.3 MATERIAL TO BE REMOVED

A. This project does not involve dredging beyond the original contours of the pond or expanding the pond beyond their original shoreline configuration. It is the intent that sediment and biological sludge within the existing pond be dredged down to original contours (hard bottom) or other overlying hard layer including compacted sediment. Hard bottom shall be defined as the original grades or bottom of the unlined pond. It is acceptable to leave up to 8-inches of material in the bottom of the pond if dredging operations prevent all the material from being removed as long as it does not interfere or conflict with the installation and operation of the proposed aerators to be installed per Section 11231. The Contractor should coordinate with the aeration manufacture before leaving up to 8-inches of material in the pond bottom.

B. The accumulated material to be removed is composed primarily of sediment in organic solids and biological sludge from wastewater treatment process. The Contractor shall examine the site of the work and verify the character of the materials. Any discrepancies discovered with sludge characterization should be immediately brought to the attention of the Engineer.

C. The Contractor shall provide a survey showing top of sludge prior to the start of dredging to verify and determine the existing sediment quantity in the pond. The

Contractor shall verify all existing conditions and notify Engineer of any differences, including sediment quantity and characteristics, prior to start of dredging. A post-dredge survey shall be conducted by the Contractor to verify the extents of sludge removal.

D. Data supplied to Contractors is presented for informational purposes only. The Owner and/or Owner's Representative, the Engineer, do not guarantee the accuracy or validity of the data, nor do they assume any responsibility for the Contractor's interpretation of the data.

PART 2. PRODUCTS (Not Used)

PART 3. EXECUTION

3.1 GENERAL

A. Contractor shall keep records of work performed including volume pumped, area dredged, depth of dredging, character of material dredged, hours of operation and down time, and weather conditions. Contractor shall ensure that gauges, targets, ranges, and other markers are in place and usable for the intended purpose. Furnish, at the request of the Engineer, boats, boatmen, laborers, and materials necessary for observation, supervising, and surveying the work. When required, provide transportation for the Engineer to and from the dredge and adjacent points on shore.

3.2 CONDUCT OF DREDGING, DEWATERING AND DISPOSAL WORK

A. Furnish, set, and maintain ranges, buoys, and markers needed to define the work and to facilitate observation. Establish and maintain gauges in locations observable from each part of the work so that the depth may be determined.

B. Maintain the dredge, pipelines, and associated equipment to meet the requirements of the work. Promptly repair leaks or breaks along any pipelines. Remove dredged material placed due to leaks and breaks and notify the Engineer if any biological sludge leaks onto the ground or in any other surface water.

C. The Contractor shall remove accumulated sediment and sludge as described herein by mechanical or hydraulic methods. If hydraulic methods are used, the Contractor. shall determine the pumping rates.

D. The discharge of sediment or dredged material back into State Waters is prohibited.

E. All dewatered materials shall be taken off-site for permanent disposal. The Contractor is responsible for locating, hauling, and disposing of the material at a permitted disposal site.

F. The completion of work shall ensure the stability of any pipes and structures within the pond, insofar as they may be jeopardized by dredging operations. Contractor shall repair any and all damage resulting from dredging operations.

G. At the completion of all dredging work, the Contractor shall remove all temporary components, piping, dredge, dewatering equipment and other support equipment, and miscellaneous materials from the site.

H. At the completion of all dewatering and excavation work, all disturbed areas shall be smoothed and restored to pre-dredging conditions. Stabilization shall be achieved with re-establishment of permanent grassing.

END OF SECTION

Analytical Laboratories, Inc.
1005 Emmett St., Suite D
Augusta, Ga. 30904
Phone: 706.733.0848
email: csralabs@bellsouth.net

Analysis Report

Report # 62462
Report Date: 12/10/2024
Samples Received: 11/20/2024

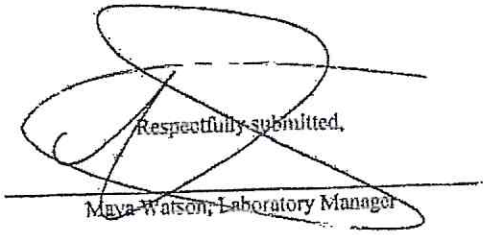
Client: City of Tignall
Address: P.O. Box 218
Tignall, GA

Project: Influent to Pond
Location:
Sample Type: Grab/SL

Analysis (Method): TCLP Metals (Method SW1311/6010D/SW3010A), TCLP Mercury (Method SW1311/7470A), TCLP VOC (Method SW1311/8260D/SW5030B), TCLP SVOC (Method SW1311/8270E/SW3510C), TCLP Pesticides (Method SW1311/8081B/SW3510C), TCLP Herbicides (Method SW1311/8151A/SW3510C), Polychlorinated Biphenyls (PCBs) (Method SW846 8082A)

CSRA ID #	Sample Description/Location	Date Sampled	Time	Analysis	Result	Reporting Limit	Units	Date Analyzed	Time	Analyst
24-10336	Influent to Pond	11/19/24	0740	**TCLP Metals**						
				Arsenic	BRL	0.25	mg/L	11/26/24	2216	DS[2]
				Barium	BRL	0.50	mg/L	11/26/24	2216	DS[2]
				Cadmium	BRL	0.025	mg/L	11/26/24	2216	DS[2]
				Chromium	BRL	0.050	mg/L	11/26/24	2216	DS[2]
				Lead	BRL	0.050	mg/L	11/26/24	2216	DS[2]
				Selenium	BRL	0.10	mg/L	11/26/24	2216	DS[2]
				Silver	BRL	0.025	mg/L	11/26/24	2216	DS[2]
				Mercury	BRL	0.0050	mg/L	11/26/24	2130	GR[2]
				TCLP Semivolatile Organic Compounds						
				2-Methylphenol	BRL	0.10	mg/L	11/29/24	1752	RS[2]
				3& 4 Methlphenol	BRL	0.10	mg/L	11/29/24	1752	RS[2]
				1,4-Dichlorobenzene	BRL	0.10	mg/L	11/29/24	1752	RS[2]
				2,4,5-Trichlorophenol	BRL	0.25	mg/L	11/29/24	1752	RS[2]
				2,4,6-Trichlorophenol	BRL	0.10	mg/L	11/29/24	1752	RS[2]
				2,4-Dinitrotoluene	BRL	0.10	mg/L	11/29/24	1752	RS[2]
				Hexachlorobenzene	BRL	0.10	mg/L	11/29/24	1752	RS[2]
				Hexachlorobutadiene	BRL	0.10	mg/L	11/29/24	1752	RS[2]
				Hexachloroethane	BRL	0.10	mg/L	11/29/24	1752	RS[2]
				Nitrobenzene	BRL	0.10	mg/L	11/29/24	1752	RS[2]
				Pentachlorophenol	BRL	0.25	mg/L	11/29/24	1752	RS[2]
				Pyridine	BRL	0.10	mg/L	11/29/24	1752	RS[2]

CSRA ID #	Sample Description/Location	Date Sampled	Time	Analysis	Result	Reporting Limit	Units	Date Analyzed	Time	Analyst
24-10336	Influent to Pond	11/19/24	0740	**Polychlorinated Biphenyls**						
				PCB 1016	BRL	730	ug/Kg	12/2/24	1614	UH[2]
				PCB 1221	BRL	730	ug/Kg	12/2/24	1614	UH[2]
				PCB 1232	BRL	730	ug/Kg	12/2/24	1614	UH[2]
				PCB 1242	BRL	730	ug/Kg	12/2/24	1614	UH[2]
				PCB 1248	BRL	730	ug/Kg	12/2/24	1614	UH[2]
				PCB 1254	BRL	730	ug/Kg	12/2/24	1614	UH[2]
				PCB 1260	BRL	730	ug/Kg	12/2/24	1614	UH[2]
				PCB 1262	BRL	730	ug/Kg	12/2/24	1614	UH[2]
				PCB 1268	BRL	730	ug/Kg	12/2/24	1614	UH[2]



CSRA ID #	Sample Description/Location	Date Sampled	Time	Analysis	Result	Reporting Limit	Units	Date Analyzed	Time	Analyst
24-10336	Influent to Pond	11/19/24	0740	**TCLP Volatile Organic Compounds**						
				1,1-Dichloroethene	BRL	100	ug/L	11/30/24	2024	ZHZ[2]
				1,2-Dichloroethane	BRL	100	ug/L	11/30/24	2024	ZHZ[2]
				2-Butanone	BRL	1000	ug/L	11/30/24	2024	ZHZ[2]
				Benzene	BRL	100	ug/L	11/30/24	2024	ZHZ[2]
				Carbon Tetrachloride	BRL	100	ug/L	11/30/24	2024	ZHZ[2]
				Chlorobenzene	BRL	100	ug/L	11/30/24	2024	ZHZ[2]
				Chloroform	BRL	100	ug/L	11/30/24	2024	ZHZ[2]
				Tetrachloroethene	BRL	100	ug/L	11/30/24	2024	ZHZ[2]
				Trichloroethene	BRL	100	ug/L	11/30/24	2024	ZHZ[2]
				Vinyl Chloride	BRL	100	ug/L	11/30/24	2024	ZHZ[2]
				TCLP Pesticides						
				Chlordane	BRL	0.00050	mg/L	12/3/24	1730	NT[2]
				Endrin	BRL	0.00010	mg/L	12/3/24	1730	NT[2]
				gamma-BHC	BRL	0.000050	mg/L	12/3/24	1730	NT[2]
				Heptachlor	BRL	0.000050	mg/L	12/3/24	1730	NT[2]
				Heptachlor epoxide	BRL	0.000050	mg/L	12/3/24	1730	NT[2]
				Methoxychlor	BRL	0.00050	mg/L	12/3/24	1730	NT[2]
				Toxaphene	BRL	0.0050	mg/L	12/3/24	1730	NT[2]
				TCLP Herbicides						
				2,4,5-TP (Silvex)	BRL	0.040	mg/L	11/28/24	0058	AF[2]
				2,4-D	BRL	0.040	mg/L	11/28/24	0058	AF[2]

CSRA Analytical Laboratories, Inc.

Sample Receipt Form

1 Client: City of Tignall **CSRA Sample ID#'s:** 24-10336

2 Carrier: [ ] CSRA [ ] Client [x] Other UPS **Dated Initials:** SH 11/20/24

		Yes	No	N/A	Details/Comments
3	Cooler Temperature(s) within limits of 0-6°C?			x	Temp.: °C
4	Chain of Custody (COC) present?	x			
5	COC signed, dated, and timed when relinquished and received?	x			COC Created by CSRA
6	Sampler name and /or signature of COC?	x			COC Created by CSRA
7	Were all samples received within holding time?	x			
8	Turn Around Time marked on the COC?		x		If no TAT indicated, proceeded with standard TAT.
9	Were sample containers intact upon receipt?	x			
10	Do sample container labels match the COC?	x			
11	Are analyses requested indicated on the COC?	x			
12	Were all of the samples listed on the COC received?	x			
13	Was the sample collection date/time noted?	x			
14	Did we receive sufficient sample volume for indicated analysis?	x			
15	Were samples received in appropriate containers?	x			
16	Were VOA samples received without headspace (<1/4" bubble)?			x	

This section only applies to samples where pH can be checked at Sample Receipt.* pH test strip standard chemical ID# : _____

17	Have containers needing chemical preservation been checked?*			x	
18	Do containers meet preservation guidelines?	x			
19	Was pH adjusted at Sample Receipt?			x	

*Note: Certain analyses require chemical preservation but must be checked in the laboratory and not upon Sample Receipt such as Coliforms, Oil & Grease/TPH, and VOC's.

Analytical Laboratories, Inc.
1005 Emmett St., Suite D
Augusta, Ga 30904
Phone: 706.733.0848
email: csralabs@bellsouth.net web: www.csralabs.com

Chain of Custody

CSRA Report : 62462

Name: Clyde Davis
Company: City of Tignall
Address:
City, State, Zip:
Phone: E-mail:

Client:
Project:
Location:
Report To:
Invoice To:

Certification Required?: ☐ NELAC ☐ DHEC

Sampler Signature: Date/Time:

CSRA ID #	Sample Description/ Location	Sampled		Matrix Code*	Sample Type**	Sample Container		Analysis Requested	Preservative
		Date	Time			#	Volume		
24-10336	Influent to pond	11/19/24	0740	SL	G	3	4oz	Complete TCLP, 8082 PCB and Pesticides	

Relinquished By:	Date:	Time:	Received By:	Date:	Time:
			D. Davis	11/20/24	1550

Turnaround Time Request	
	Standard 7-10 Business Days
	Rush 5-7 Business Days
	Rush 3-5 Business Days
	Rush 2-3 Business Days
	Special Request:

*Matrix Codes: WW=Waste Water; SW=Surface Water; DW=Drinking Water; GW=Ground Water; SO=Soil; SL=Sludge; PC=Paint Chips; O=Other(specify)
**Sample Type: C=Composite; G=Grab

GENERAL CONSTRUCTION NOTES

1. THIS SET OF PLANS REFERENCES RECORD DRAWINGS AND FIELD EVENTS FROM THE PROJECT SITE AS SHOWN BELOW. THESE DRAWINGS ARE AVAILABLE FOR CONTRACTOR REVIEW.

• SANITARY SEWER SYSTEM EXPANSION,PRECISION PLANNING, INC. 1992

2. THE LOCATION OF EXISTING UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE. FURTHERMORE, INFORMATION REGARDING UNDERGROUND UTILITIES SHOWN ON THESE PLANS IS NOT GUARANTEED AS TO ACCURACY OR COMPLETENESS. AT LEAST 3 DAYS PRIOR TO BEGINNING ANY WORK, THE CONTRACTOR SHALL REQUEST A FIELD UTILITY LOCATE THROUGH GEORGIA'S UTILITY PROTECTION CENTER BY DIALING 811 OR 800-282-7411. THE CONTRACTOR SHALL COMPARE THESE FIELD-MARKED LOCATIONS WITH THE PROJECT PLANS AND NOTIFY THE ENGINEER OF ANY ANTICIPATED PROBLEMS OR NEED FOR CONTRACT CHANGES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO EXCAVATE OR CAUSE THE UTILITY OWNER TO EXCAVATE FOR THE PURPOSE OF DETERMINING EXACT ELEVATIONS OR LOCATIONS AT UTILITY CROSSINGS AND OTHER CRITICAL LOCATIONS WELL IN ADVANCE OF THE WORK UNDER THIS CONTRACT.

3. UTILITY COORDINATION SHALL BE INCLUDED IN THE PROJECT SCHEDULE, AND IT IS THE EXPLICIT RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT THE PROJECT SCHEDULE INCLUDES COORDINATION. THE CONTRACTOR WILL NOT BE PAID ADDITIONALLY FOR THIS COORDINATION. THE CONTRACTOR SHOULD SEEK ASSISTANCE FROM ALL UTILITY COMPANIES TO LOCATE AND PROTECT THEIR FACILITIES.

4. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT ANY DISRUPTIONS OF UTILITY SERVICE. ANY UTILITIES DAMAGED MUST BE REPAIRED THE SAME DAY UNLESS WRITTEN PERMISSION FROM OWNER IS GIVEN.

5. IF THE CONTRACTOR DAMAGES ANY EXISTING UTILITIES OR FACILITIES DURING CONSTRUCTION, HE SHALL, AT HIS OWN EXPENSE, REPAIR OR REPLACE THEM TO THEIR ORIGINAL CONDITION AND QUALITY, AS APPROVED BY THE ENGINEER.

6. CONTRACTOR SHALL BE RESPONSIBLE FOR HOLDING ANY POWER POLES AS REQUIRED DURING CONSTRUCTION AT HIS OWN EXPENSE.

7. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO BEGINNING ANY WORK AND ORDERING ANY EQUIPMENT. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.

8. THE CONTRACTOR SHALL MAINTAIN FIELD "AS-BUILT" DRAWINGS AND SHALL MEASURE AND SHOW LOCATION OF ALL PROPOSED IMPROVEMENTS.

9. ALL CONSTRUCTION DEBRIS SHALL BE REMOVED FROM THE SITE AND LEGALLY DISPOSED OF AT THE CONTRACTOR'S EXPENSE.

10. THE CONTRACTOR SHALL COORDINATE ALL WORK WITH THE OWNER AND MAKE ALL EFFORTS TO MINIMIZE INTERRUPTION TO OPERATION OF THE WATER POLLUTION CONTROL PLANT. CONTRACTOR SHALL NOTIFY OWNER TWO WEEKS IN ADVANCE OF ANY WORK WHERE SERVICE INTERRUPTION WILL BE REQUIRED. OWNER MUST APPROVE WORK SCHEDULE BEFORE WORK MAY BEGIN.

11. ALL CONSTRUCTION STAKING AND LAYOUT SHALL BE CONTRACTOR'S SOLE RESPONSIBILITY.

12. CONTRACTOR SHALL ABIDE BY ALL COUNTY WEIGHT LIMIT RESTRICTIONS ON ROADS WHEN HAULING EQUIPMENT AND MATERIALS TO SITE. ANY UTILITIES OR FACILITIES DAMAGED BY CONTRACTOR WHEN HAULING MATERIALS AND EQUIPMENT TO SITE SHALL BE REPAIRED OR REPLACED TO THEIR ORIGINAL QUALITY AND CONDITIONS AT CONTRACTOR'S EXPENSE.

13. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL BUILDING PERMITS REQUIRED BY WILKES COUNTY.

14. CONTRACTOR SHALL COORDINATE MATERIAL LAYDOWN & CONTRACTOR TRAILER LOCATIONS WITH OWNER PRIOR TO BEGINNING CONSTRUCTION.

15. CARTER & SLOOPE WILL NOT SUPERVISE, DIRECT, CONTROL, OR HAVE AUTHORITY OVER OR BE RESPONSIBLE FOR CONTRACTOR'S MEANS, METHODS, TECHNIQUES, OR SAFETY PRECAUTIONS AND PROGRAMS INCIDENT TO THE WORK, OR WITH ANY FAILURE OF CONTRACTOR TO COMPLY WITH APPLICABLE LAWS AND REGULATIONS PERTAINING TO THE PERFORMANCE OF THE WORK. UNLESS NOTED OTHERWISE, CARTER & SLOOPE WILL NOT SUPERVISE, DIRECT, CONTROL, OR HAVE AUTHORITY OVER OR BE RESPONSIBLE FOR CONTRACTOR'S SEQUENCES OR PROCEDURES OF CONSTRUCTION.

16. THIS DESIGN IS VALID ONLY FOR THIS PROJECT AND SITE.

17. CARTER & SLOOPE IS NOT RESPONSIBLE FOR CONSTRUCTION SITE SAFETY. THIS INCLUDES THE FOLLOWING:

18. THE CONTRACTOR SHALL FOLLOW FEDERAL AND STATE STANDARDS TOWARDS SAFETY.

19. THE CONTRACTOR MUST PROVIDE AN ON-SITE COMPETENT PERSON, AS DEFINED BY OSHA TO EVALUATE THE GROUNDS CONDITIONS ENCOUNTERED DURING EXCAVATION TO DETERMINE THEIR CONFORMANCE TO THE ASSUMED GROUND CONDITIONS DESCRIBED HEREIN.

20. CARTER & SLOOPE HAS NOT EVALUATED THE SITE FOR THE PRESENCE OF HAZARDOUS MATERIALS OR ENVIRONMENTAL CONTAMINATES.

21. CONTRACTOR SHALL FLAG ANY 25' UNDISTURBED BUFFER PRIOR TO CONSTRUCTION.

22. STRUCTURE & PIPING ABANDONMENT REQUIREMENTS:

23. ALL EXISTING SEWER & FORCE MAINS SHOWN TO BE ABANDONED MAY BE LEFT IN PLACE UNLESS CONFLICTING WITH NEW CONSTRUCTION. ALL OPEN ENDS OF ABANDONED PIPE LINES SHALL BE PLUGGED WITH MANUFACTURED OR GROUT TYPE PLUGS.

24. MANHOLES TO BE ABANDONED: CONTRACTOR SHALL REMOVE MANHOLE FRAME & COVER, ADJUSTMENT RINGS, AND TOP RISER PORTION TO A MINIMUM OF 24" BELOW GRADE. PLUG ALL PIPE CONNECTIONS WITH FABRICATED OR GROUT TYPE PLUGS. CONTRACTOR SHALL BREAKUP INVERT SECTION OF THE MANHOLE TO PREVENT WATER RETENTION AND THEN BACKFILL WITH SUITABLE ONSITE MATERIAL. ALTERNATELY, CONTRACTOR MAY LEAVE THE INVERT IN PLACE AND FILL WITH CEMENTITIOUS MATERIAL (FLOWABLE FILL) UP TO A MAXIMUM DEPTH 24" BELOW GRADE.

25. PIPES TO BE ABANDONED SHALL BE CUT IN PLACE AND CAPPED WITH AN MJ CAP

1

1

YARD PIPING

1. MATERIALS AND DIAMETERS OF EXISTING PIPING ARE PROVIDED ON SHEETS # - # BASED ON THE BEST AVAILABLE INFORMATION PROVIDED BY THE OWNER. CONTRACTOR SHALL POT HOLE & FIELD VERIFY PIPE MATERIALS AND DIAMETERS PRIOR TO ORDERING VALVES, FITTINGS, SLEEVES, AND APPURTENANCES.

2. WHERE UTILITY EXCAVATION IS REQUIRED FOR REPLACEMENT OF PIPE, INSTALLATION OF VALVES OR FITTINGS WITHIN THE PUMP STATION SITE, CONTRACTOR SHALL BE RESPONSIBLE FOR PERFORMING EXCAVATION AND TRENCHING IN ACCORDANCE WITH ALL STATE AND FEDERAL LAWS AND REGULATIONS FOR SAFETY, LIFE, HEALTH, AND PROPERTY PROTECTION. PROVIDE ALL NECESSARY SHEETING, SHORING, AND/OR BRACING FOR EXCAVATION REQUIREMENTS.

3. BEDDING OF PRESSURE PIPE SHALL BE A MINIMUM OF TYPE 2 IN ACCORDANCE WITH ANSI/AWWA C600 FOR DUCTILE IRON PIPE AND ANSI/AWWA C605 FOR PVC PIPE. BACKFILL SHALL BE COMPACTED TO 98% OF MAXIMUM DRY DENSITY.

4. PERMANENT GRASSING SHALL BE RE-ESTABLISHED FOR ALL DISTURBED AREAS AFTER CONSTRUCTION IS COMPLETE. SEEDING RATES, PLANTING DATES, FERTILIZER REQUIREMENTS, AND MULCH REQUIREMENTS SHALL BE AS SPECIFIED IN THE SECTION TITLED DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION - DS3) OF THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA, LATEST EDITION. GRASSING VARIETY SHALL MATCH EXISTING SPECIES WHERE POSSIBLE BUT CONTRACTOR SHALL SUBMIT FINAL SPECIES SELECTION, FERTILIZER, AND MULCH INFORMATION TO ENGINEER FOR APPROVAL PRIOR TO PLANTING.

PROTECTIVE COATINGS

1. CONTRACTOR SHALL APPLY PROTECTIVE COATINGS TO EXISTING DUCTILE IRON PIPE, CHANNEL WEIRS & TRAVELING SLIDE GATES IN THE HEADWORK CHANNELS, INFLUENT JUNCTION BOX, AND RETURN SLUDGE FLUME STRUCTURE PER THE SCHEDULE BELOW. MATERIALS SPECIFIED ARE THOSE MANUFACTURED BY TNEMEC COMPANY, INC. EQUIVALENT MATERIALS AS MANUFACTURED BY THE ALTERNATE MANUFACTURERS LISTED FOR EACH APPLICATION MAY BE USED.

2. CONTRACTOR SHALL APPLY PROTECTIVE COATINGS TO ALL INTERIOR WET WELL AND PROPOSED MANHOLE CONCRETE SURFACES EXPOSED TO RAW WASTEWATER AND/OR WASTEWATER FORMS PER THE SCHEDULE BELOW. MATERIALS SPECIFIED ARE THOSE AS MANUFACTURED BY TNEMEC OR ENGINEER APPROVED EQUAL.

3. CONTRACTOR SHALL ENSURE THAT THE PROTECTIVE COATINGS USED SHALL BE COMPATIBLE WITH THE UNDERLYING CONCRETE REPAIR GROUTS AND CHEMICAL GROUTS USED FOR CONCRETE REHABILITATION.

4. CONTRACTOR SHALL ENSURE ALL NON-CONCRETE INTERIOR SURFACES WITHIN THE WET WELL ARE MASKED WITH PLASTIC OR ALUMINUM OF SUITABLE THICKNESS FOR PROTECTION, PRIOR TO COATING INSTALLATION.

5. WHERE NEW DIP IS INSTALLED, THE INTERIOR OF THE PIPE SHALL BE LINED WITH TNEMAC SERIES 431 OR ENGINEER APPROVED EQUAL AND THE EXTERIOR SHALL BE COATED AS REQUIRED IN THE 'EXTERIOR EXPOSED' TABLE.

6. WORK SHALL BE PERFORMED BY SKILLED APPLICATORS THOROUGHLY TRAINED IN COATING APPLICATIONS AND FAMILIAR WITH THE SPECIFIC REQUIREMENTS OF THE COATING MANUFACTURER. IN ADDITION TO A ONE-YEAR WARRANTY AGAINST COATING FAILURE, THE CONTRACTOR SHALL ALSO PROVIDE A TWO-YEAR ADHESION WARRANTY ON THE COATING SYSTEM FROM THE DATE OF SUBSTANTIAL COMPLETION. ANY FAILURES WILL BE REPAIRED BY THE CONTRACTOR AT THEIR EXPENSE AND AN ADDITIONAL TWO-YEAR WARRANTY SHALL BE PROVIDED ON ANY REPAIRS. THE COATINGS SUPPLIER SHALL PROVIDE A FIVE-YEAR MANUFACTURER'S LIMITED MATERIAL WARRANTY FROM THE DATE OF SUBSTANTIAL COMPLETION TO REPLACE THE PRODUCT IN THE EVENT OF A DEFECTIVE CONDITION OF THE PRODUCT.

EXTERIOR EXPOSED (TNEMEC, DEVOE, CARBOLINE)		
A	PREPARATION:	PER MANUFACTURER'S INSTRUCTIONS
B	PRIMER:	SERIES N69 HI-BUILD EPOXYLINE, DFT 3.0 TO 5.0 MILLS
C	INTERMEDIATE:	SERIES N69 HI-BUILD EPOXYLINE, DFT 4.0 TO 6.0 MILLS
D	FINISH:	SERIES 1075U ENDURA-SHIELD, DFT 2.0 TO 3.0 MILLS
E	TOTAL DFT:	9.0 TO 14.0 MILLS

1

INTERIOR LINED CONCRETE HEADWORKS		
A	PREPARATION:	REMOVE THE EXISTING LINING SYSTEM IN ACCORDANCE WITH NACE NO. 6/SSPC-SP13 JOINT SURFACE PREPARATION STANDARDS AND ICRI TECHNICAL GUIDELINES. ABRASIVE BLAST, SHOT-BLAST, WATER JET OR MECHANICALLY ABRADE CONCRETE SURFACES TO PROVIDE A MINIMUM ICRI-CSP 5 SURFACE PROFILE.
B	SKIM COAT/ RESURFACER:	SERIES 218 APPLIED UP TO ½" OR SERIES 217 APPLIED ½" TO 4"
C	PERMA-SHIELD BODY COAT:	SERIES 434 OR G436 APPLIED AT 125 MILS
D	GLAZE FINISH COAT:	SERIES G435 APPLIED AT 15-20 MILS

PIPING & WEIR (TNEMEC, SAEREISEN, DUDICK)		
A	PREPARATION:	PER MANUFACTURER'S INSTRUCTIONS
B	PRIMER:	SERIES 1140-1211 POT-O-POX PLUS, DFT 4.0 TO 6.0 MILLS
C	FINISH:	SERIES 431 PERMA-SHIELD PL, DFT 40.0 MILLS
D	TOTAL DFT:	44.0 TO 46.0 MILLS
BELOW GROUND		
A	PREPARATION	FACTORY SHOP COATED
B	PRIMER	ASPHALTIC COATING, 7.0 MIL THICK PER AWWA C151

PIPING, VALVES & ACCESSORIES

1. WHERE DUCTILE IRON PIPE IS REPLACED WITHIN THE HEADWORKS, THE PIPE SHALL CONFORM TO ANSI 21.50 (AWWA C-150) AND ANSI A21.5 (AWWA C-151). PRESSURIZED PIPE LESS THAN 12" IN DIAMETER SHALL BE PRESSURE CLASS 350. GASKETS SHALL BE SBR ELASTOMER.

2. PIPE AND FITTINGS SHALL HAVE AN INTERIOR AND EXTERIOR COATING AS DESCRIBED IN PROTECTIVE COATINGS. PUSH-ON MECHANICAL JOINTS SHALL CONFORM TO ANSI A21.11 (AWWA C-111) AND FLANGED JOINTS SHALL BE FACED AND DRILLED PER ABSI B16.1, 125 POUND STANDARD.

3. BOLTS, WASHERS AND NUTS FOR EXPOSED FLANGED JOINTS SHALL BE GRADE B, ATSM A-307 CARBON STEEL AND CONFORM TO ANSI B16.1 FOR CLASS 125. BOLTS AND ACCESSORIES FOR BELOW GROUND MECHANICAL OR FLANGE JOINTS SHALL BE HIGH-STRENGTH, LOW-ALLOY STEEL PER AWWA C-111.

4. PLUG VALVES SHALL BE QUARTER-TURN, ECCENTRIC TYPE WITH A MINIMUM PORT AREA OF 80% AND SHALL CONFORM TO AWWA C-517. VALVE BODY SHALL BE CAST IRON MEETING ASTM A126, CLASS B WITH A MINIMUM WORKING PRESSURE OF 150 PSI. VALVE SEAT SHALL BE 90% NICKEL AND BEARINGS SHALL BE RADIAL SHAFT, PERMANENTLY LUBRICATED TYPE AND STEM SHALL BE STAINLESS STEEL. PLUGS SHALL BE CAST IRON WITH BUNA RUBBER FACING. VALVES SHALL BE AS MANUFACTURED BY DEZURIK, CLOW OR VAL-MATIC.

5. ALL PIPE AND MATERIALS REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE PROPERLY DISPOSED OF OFF-SITE.

ELEVATION DATA INFORMATION

"THE TOPOGRAPHIC ELEVATION DATA SHOWN HEREON WAS OBTAINED FROM USGS AND IS NOT CERTIFIED AS CORRECT BY THIS ENGINEER. USERS OF THIS DATA DO SO AT THEIR OWN RISK."

"THE EXISTING STRUCTURES ELEVATION DATA SHOWN HEREON WAS PRODUCED BY AGENTS OF THIS FIRM."

PROTECTIVE COATINGS

1. CONTRACTOR SHALL APPLY PROCTECTIVE COATING TO THE INTERIOR PROPOSED MANHOLE A-4 ONLY. NO OTHER CONCRETE SURFACES SHALL BE COATED. THE CONTRACTOR SHALL COAT MANHOLE A-4 USING ONE THE SYSTEMS SCHEDULED BELOW:

1

MANHOLE COATING SCHEDULE

PRODUCT	SURFACE PREP	PRIME/BUILD BACK	INTERMEDIATE	FINISH
DURAMER 1030 SERIES (TWO COMPONENT COATING SYSTEM)	PHYSICALLY REMOVE LOOSE PARTICULTES, ACID ETCH SMOOTH SURFACES,POWER WASH AT SURFACE	1.5 MIL DFT	45 MIL DFT	10 MIL DFT
RAVE 405 (ULTRA HIGH-BUILD EPOXY SYSTEM)	SSPC-SP13/ NACE 6	RAVEN 755 REINFORCED CEMENTITIOUS BUILD-BACK AS REQUIRED FOR PROPER FINISH COAT ½" MINIMUM	N/A	RAVEN 405 ULTRA HIGH-BUILD EPOXY, 150 MIL DFT
TNEMEC 218/435 SERIES (ULTRA HIGH-BUILD EPOXY SYSTEM)	SSPC-SP13/ NACE 6	TNEMEC SERIES 218 EPOXY CEMENTITIOUS RESURFACER, THICKNESS AS REQUIRED TO FILL ALL VOIDS AND PINHOLES, ¼-INCH MINIMUM THICKNESS	TNEMEC SERIES 434 PERMA-SHIELD AGGREGATE REINFORCED EPOXY LININGM 125 MIL DFT	TNEMEC SERIES 435 PERMA-GLAZE, 15 MIL DFT
SPECTRASHIELD (POLYURATHANE/POLYMETRIC FOAM AND MODIFIED POLYMER CORROSION BARRIER)	SSPC-SP13/ NACE 6	SPECTROSHIELD MODIFIED POLYMER MOISTURE BARRIER, 40 MIL DFT	SPECTRASHIELD POLYURETHANE/POLYMETRIC BLEND FOAM, 400 MIL DFT	SPECTROSHIELD MODIFIED POLYMER CORROSION BARRIER, 60 MIL DFT

RELEASES	
03/16/26	RELEASE FOR BID
03/30/26	ADDENDUM #1

WWTP IMPROVEMENTS
FOR THE
TOWN OF TIGNALL
WILKES COUNTY, GEORGIA

Carter & Sloope
CONSULTING ENGINEERS
1031 STONEBRIDGE PARKWAY. WATKINSVILLE, GA 30677 . 706.769.4119 TEL
GA COA LICENSE# PEF001004 EXPIRES 6/30/2026

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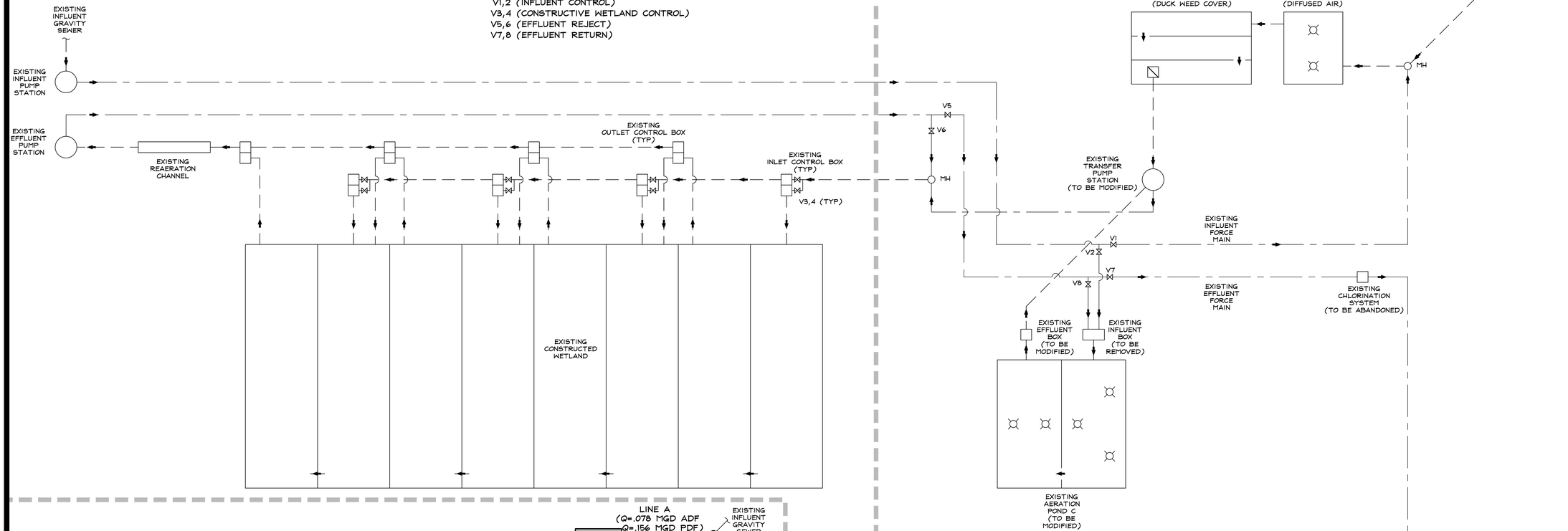
DSGN: MB	DRWN: JB
SCALE: AS SHOWN	
PROJ. NO.: T7040.003	
DATE: 03/16/26	SHEET NO.: 2

GEORGIA REGISTERED No. 25423 PROFESSIONAL ENGINEER MARTIN C. BOYD
03/12/2026

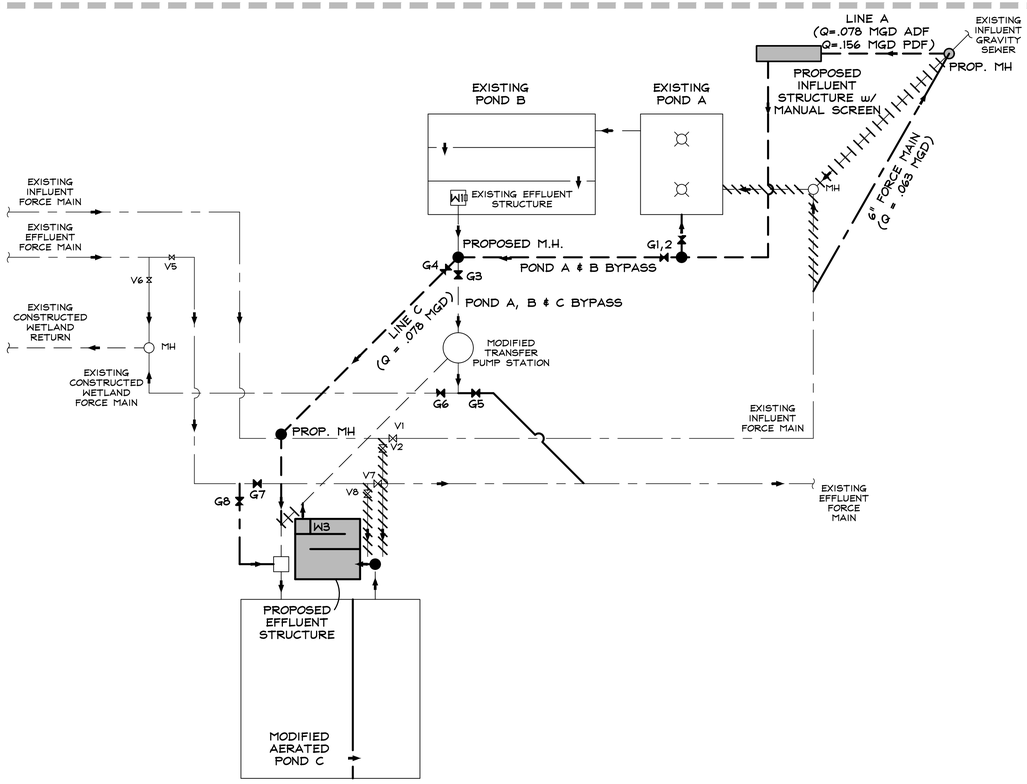
LEVEL II CERTIFIED DESIGN PROFESSIONAL, CERT. #3581
EXPIRES: 12/21/2026

GENERAL CONSTRUCITON NOTES

EXISTING VALVE SCHEDULE
V1,2 (INFLUENT CONTROL)
V3,4 (CONSTRUCTIVE WETLAND CONTROL)
V5,6 (EFFLUENT REJECT)
V7,8 (EFFLUENT RETURN)

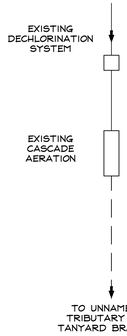


EXISTING PLANT FLOW SCHEMATIC



PROPOSED PLANT FLOW SCHEMATIC

LEGEND
- EXISTING VALVE
- EXISTING EFFLUENT STRUCTRUE
- EXISTING AERATORS
- EXISTING MANHOLE
- PROPOSED VALVE
- PROPOSED MANHOLE



ADDENDUM No. 1
REPLACE WITH REVISED SHEET

PLANT FLOW SCHEMATIC

GEORGIA REGISTERED No. 25423 PROFESSIONAL ENGINEER MARTIN C. BOYD
03/12/2026
LEVEL II CERTIFIED DESIGN PROFESSIONAL, CERT. #3581
EXPIRES: 12/21/2026

RELEASES	
03/16/26	RELEASE FOR BID
03/30/26	ADDENDUM #1

WWTP IMPROVEMENTS
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PROJ. NO.: T7040.003	
DATE: 03/16/26	SHEET NO.: 4

D:\AUTODESK\DOCS\ACCDOCS\CARTERSLOOPE\T7040.003 WWTP IMPROVEMENTS\PROJECT FILES\CADD\WORKING DRAWINGS\POND STRUCTURES

EXISTING STRUCTURE KEY		
TAG	STRUCTURE	NOTES
1	AERATION BASIN POND "A"	TO BE MODIFIED
2	LEMNA SYSTEM POND "B"	TO BE MODIFIED
3	PARTIAL MIX POND "C"	TO BE MODIFIED
4	OPERATIONS BUILDING	TO BE MODIFIED
5	CHEMICAL INJECTION POINT	TO BE ABANDONED
6	STORAGE BUILDING	
7	STORAGE BUILDING	TO BE MODIFIED
8	EQUIPMENT STORAGE	
9	EQUIPMENT STORAGE	
10	PUMP STATION	TO BE MODIFIED
11	LEMNA SYSTEM EFFLUENT BOX	TO BE MODIFIED
12	PARTIAL MIX POND INFLUENT STRUCTURE	TO BE REMOVED
13	PARTIAL MIX POND EFFLUENT STRUCTURE	TO BE MODIFIED
14	CHEMICAL INJECTION POINT (ABANDONED)	TO BE DEMOED

EXISTING CONSTRUCTED WETLANDS

EXISTING EFFLUENT STRUCTURE (TO BE MODIFIED, SEE SHEET 12)

EXISTING PUMPS ARE TO BE REMOVED AND REPLACED AS DIRECTED BY THE ENGINEER

EXISTING PARTIAL MIX POND "C" (TO BE MODIFIED SEE SHEET 18 - 22)

EXISTING LEMNA EFFLUENT BOX (TO BE MODIFIED SEE SHEET 11)

EXISTING INFLUENT STRUCTURE (TO BE REMOVED, SEE SHT 12)

EXISTING 6" FORCE MAIN (TO BE ABANDONED IN PLACE)

EXISTING LEMNA POND "B"

EXISTING DRYING BED

EXISTING ACCESS DRIVE

ABANDONED CHEMICAL INJECTION POINT (TO BE ABANDONED IN PLACE)

EXISTING BLOWERS SHALL BE RELOCATED FROM OPERATIONS BUILDING TO EXISTING CONCRETE PAD

EXISTING 10" EQUALIZATION LINE (TO BE REMOVED AND REPLACED)

EXISTING AERATION POND "A"

PLUG W/ CAP

PLUG & ABANDON EXIST. PIPE

PLUG & ABANDON EXISTING MH (TYP. 2 PL)

EXISTING CARPORT TO BE RELOCATED

EXISTING 6" FORCE MAIN (TO BE ABANDONED BY CUT & CAP)

EXISTING 8" SANITARY SEWER (TO BE ABANDONED IN PLACE BY CUT & CAP)

EXISTING FIRE HYDRANT

N/F
PUBLIC PROPERTY
PI: 058 058A01
JANE HILL RD

N/F
BROOME RANDALL T & HINES
PI: 058 059
JANE HILL RD

JANE HILL RD

N/F
DENARD ELIZABETH H
PI: 059 007
JANE HILL RD

N/F
DENARD ELIZABETH H
PI: 059 007 01
JANE HILL RD

GRAPHIC SCALE IN FEET: 1" = 30'

EXISTING SITE PLAN - SOUTH

RELEASES	
03/16/26	RELEASE FOR BID
03/30/26	ADDENDUM #1

WWTP IMPROVEMENTS
FOR THE
TOWN OF TIGNALL
WILKES COUNTY, GEORGIA

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PROJ. NO.: T7040.003	
DATE: 03/16/26	SHEET NO.: 5

GEORGIA REGISTERED No. 25423 PROFESSIONAL ENGINEER MARTIN C. BOYD
03/12/2026
LEVEL II CERTIFIED DESIGN PROFESSIONAL, CERT. #3581
EXPIRES: 12/21/2026

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Sd1-NS ±70 LF

PROPOSED BLOWERS W/ RELOCATED CARPORT (SEE SHEET 16)

EXISTING EFFLUENT STRUCTURE (TO BE MODIFIED, SEE SHEET 12)

8" PLUG VALVE, MJ W/ VALVE BOX

PR SSMH A-1
STA. 1+06
N: 1404768.60
E: 477218.21

LINE A: 8" SDR 26 PVC GRAVITY SEWER

PROPOSED 4" AIR PIPING (SEE SHEET 13)

CONTRACTOR TO RELOCATE EXISTING FORCE MAIN (SEE SHEET 13)

12" PLUG VALVE, MJ W/ VALVE BOX

12" PLUG VALVE, MJ W/ VALVE BOX

EXISTING PARTIAL MIX POND (TO BE MODIFIED SEE SHEET 18 - 22)

PROPOSED POLISHING REACTOR (SEE SHEET 14-15)

8" PLUG VALVE, MJ W/ VALVE BOX

PR SSMH A-2 (DOGHOUSE)
STA. 0+35
N: 1404740.93
E: 477248.58

EXISTING LEMNA EFFLUENT BOX (SEE SHEET 11)

PROPOSED AERATION POND EFFLUENT STRUCTURE (SEE SHEET 12)

PROPOSED 8' x 14' FRP CHEMICAL STORAGE BUILDING (SEE SHEET 17)

EXISTING LEMNA POND "B"

LINE A: 12" SDR 26 PVC GRAVITY SEWER

EXISTING INFLUENT STRUCTURE (TO BE REMOVED, SEE SHT 12)

ABANDONED CHEMICAL INJECTION POINT (TO BE DEMOED IN PLACE)

EXISTING BLOWERS SHALL BE RELOCATED FROM OPERATIONS BUILDING TO EXISTING CONCRETE PAD AND ANCHORED TO PAD

LINE B 12" EQUALIZATION LINE (SEE SHEET 8)

CONTRACTOR TO PROVIDE SHELTER FOR EXISTING BLOWERS (SEE MISC. NOTE 1 THIS SHEET)

CONNECT TO EXISTING AIR PIPING. CONTRACTOR TO FIELD LOCATE EXISTING AIR PIPING. COORDINATE ALL PIPING CONNECTIONS WITH ENGINEER

EXISTING AERATION POND "A"

Sd1-NS ±170 LF

DEWATERING AREA (±11,500 SF)

PROPOSED 12" SDR 26 PVC GRAVITY SEWER
I.E.: 579.55'

2 - 12" PLUG VALVE, MJ W/ VALVE BOX

Cd-Fs TYP. 2

PROPOSED BAR SCREEN (SEE SHEET 9 - 10)

PR SSMH A-3
STA. 3+40
N: 1404549.06
E: 477267.48

N/F
BROOME RANDALL T & HINES
PI: 058 059
JANE HILL RD

EXISTING 6" FORCE MAIN (TO BE ABANDONED IN PLACE ± 31LF)

CONNECT TO EXISTING FORCE MAIN

1 - 6" 90° BEND, MJ CONC. BLOCKING

EXISTING 8" SANITARY SEWER (TO BE ABANDONED IN PLACE ± 125LF)

PR SSMH A-4 (DOGHOUSE)
STA. 1+84
N: 1404503.87
E: 477405.37

Sd1-S ±280 LF DOUBLE ROW

N/F
PUBLIC PROPERTY
PI: 058 058A01
JANE HILL RD

PROPOSED (2) 8' WIRE-FILLED SWING GATES - DOUBLE SWING,16' TOTAL OPENING

LINE C: PROPOSED 6" DR 18 PVC FORCE MAIN

6" 90° BEND, MJ CONC. BLOCKING

Sd1-NS ±370 LF

Co Wo

EXACT WASHOUT AND CONSTRUCTION EXIT LOCATIONS TO BE FIELD LOCATED PRIOR TO ANY LAND DISTURBANCE

EXISTING ACCESS DRIVE

JANE HILL RD

Du	TO BE PLACED ON ALL DISTURBED AREAS TO MATCH EXISTING CONDITIONS
Ds1	
Ds2	
Ds3	
Ss	SEE NOTE 16, EC1

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20 0 20 40 60
GRAPHIC SCALE IN FEET: 1" = 20'

YARD PIPING NOTES:

1. LOCATION OF EXISTING YARD PIPING IS APPROXIMATE AND SHOWN FOR CONTRACTOR'S REFERENCE ONLY. CONTRACTOR SHALL POTHOLE ALL EXISTING BURIED PIPING AT ALL PROPOSED CROSSING LOCATIONS PRIOR TO LAYING NEW YARD PIPING AND NOTIFY ENGINEER OF ANY CONFLICTS.
2. BURIED FITTINGS NOT LABELED ON THIS SHEET CAN BE FOUND ON THE FOLLOWING SITE PLAN SHEETS OR THE CIVIL DRAWINGS.
3. ALL BURIED DUCTILE IRON PRESSURE FITTINGS SHALL BE MECHANICAL JOINT AND HAVE CONCRETE BLOCKING OR RESTRAINED JOINTS.
4. ALL BURIED PVC PRESSURE FITTINGS SHALL HAVE CONCRETE BLOCKING.
5. IF ANY PIPE INSTALLED UNDER EXISTING OR PROPOSED ROADWAYS HAS LESS THAN 2.5' OF COVER, INSTALL 6" CONCRETE CAP OVER PIPE TO SPRINGLINE.
7. ALL PIPING 4" AND LARGER IS DIP UNLESS OTHERWISE NOTED.
8. DUCTILE IRON PIPE PRESSURE CLASSES SHALL BE AS SHOWN BELOW:
   - 12" DIP & SMALLER: CLASS 350
   - 14" & 16" DIP: CLASS 250
   - 24" DIP: CLASS 200
   - 30" DIP: CLASS 150
9. ALL BURIED PVC PIPING GREATER THAN 4" IN DIAMETER IS SDR 26, AND ALL BURIED PVC PIPING 4" OR LESS IS SCHEDULE 40 UNLESS OTHERWISE NOTED. ALL EXPOSED PVC PIPING IS SCHEDULE 80 UNLESS OTHERWISE NOTED.
10. ANYWHERE THAT PROPOSED ELECTRICAL DUCT BANK CROSSES EXISTING OR PROPOSED YARD PIPING, A MINIMUM OF 18" VERTICAL SEPARATION IS REQUIRED.
11. ALL NEW, BURRIED DIP AND PVC, PIPING SHALL HAVE TRACING WIRE w/ TRACER WIRE TESTING STATIONS (SEE DETAIL SHT. 23) AND WARNING TAPE.
12. SEE SHEET 1 FOR ADDITIONAL INFORMATION

MISC. NOTES:

1. BLOWER SHELTER SHALL BE 7-FT X 7-FT RUBBERMAID STORAGE SHED (MOD. NO. 2119053 OR ENGINEER APPROVED EQUAL.)
2. BLOWER SHELTER SHALL BE MOUNTED PER MANUFACTURE'S RECOMMENDATIONS.

YARD PIPING LINE LEGEND

	EXISTING	PROPOSED
WATER MAIN	W	W
POTABLE WATER	PW	PW
NON-POTABLE WATER	NPW	NPW
REUSE WATER	RW	RW
SANITARY SEWER	SS	SS
FORCE MAIN	FM	FM
GAS LINE	GAS	GAS
UNDERGROUND ELECTRIC	UGE	OHP
OVERHEAD POWER	OHP	OHP
STORM DRAIN		
CHLORINE FEED LINE	CL	CL
EXISTING PIPING TO BE ABANDONED		

RELEASES	
03/16/26	RELEASE FOR BID
03/30/26	ADDENDUM #1

WWTP IMPROVEMENTS
FOR THE
TOWN OF TIGNALL
WILKES COUNTY, GEORGIA

Carter & Sloope
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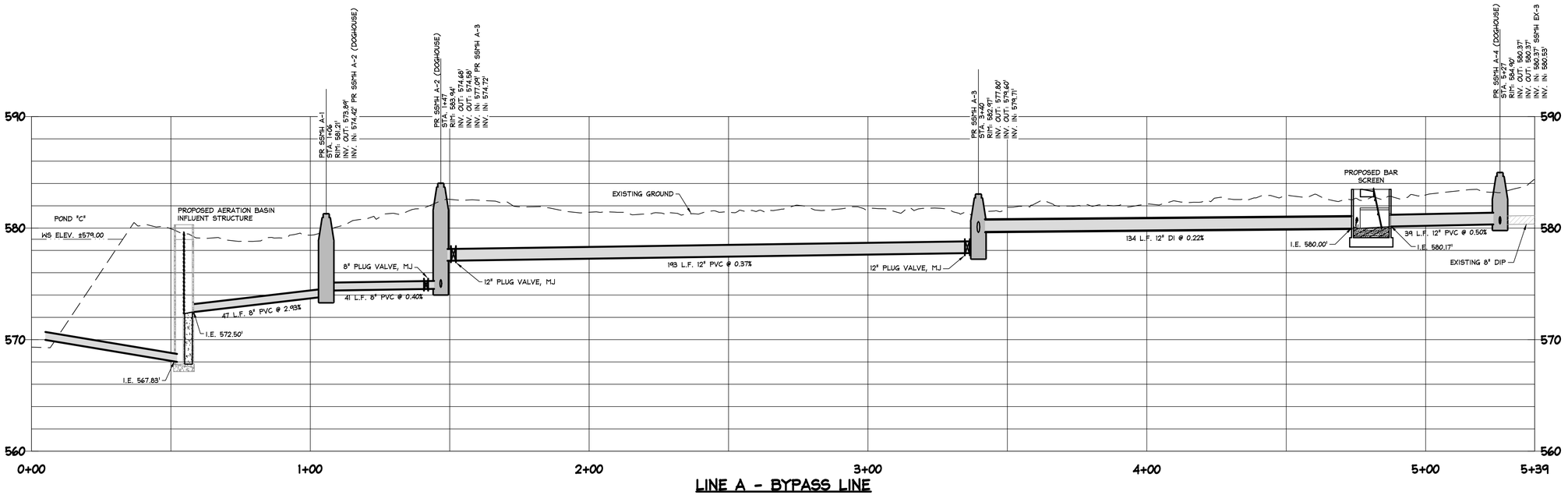
1031 STONEBRIDGE PARKWAY. WATKINSVILLE, GA 30677 . 706.769.4119 TEL
GA COA LICENSE# PEF001004 EXPIRES 6/30/2026

GEORGIA REGISTERED No. 25423 PROFESSIONAL ENGINEER MARTIN C. BOYD
03/12/2026

THIS LINE IS ONE INCH LONG WHEN DRAWING IS PLOTTED FULL SCALE

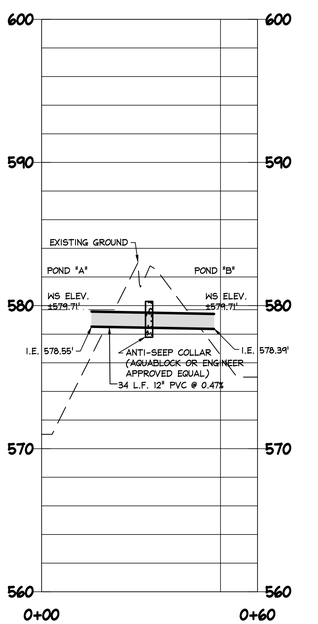
DSGN: MB	DRWN: JB
SCALE: AS SHOWN	
PROJ. NO.: T7040.003	
DATE: 03/16/26	SHEET NO.: 7

PROPOSED SITE PLAN - SOUTH



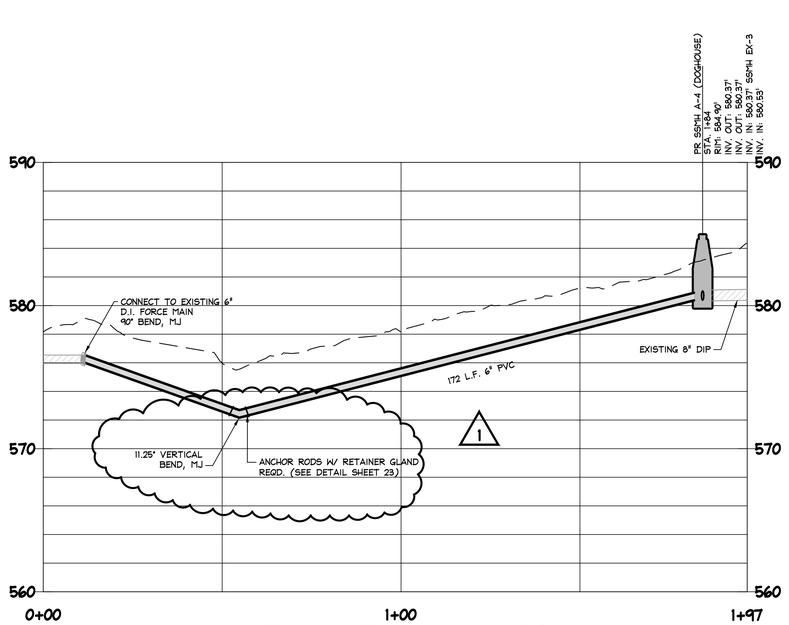
LINE A - BYPASS LINE

STATION 0+00 TO 5+39
SCALE: 1"=20'H/1"=5'V



LINE B - 12IN EQUALIZATION LINE

STATION 0+00 TO 0+60
SCALE: 1"=20'H/1"=5'V



LINE C - 6IN PVC FORCE MAIN

STATION 0+00 TO 1+97
SCALE: 1"=20'H/1"=5'V

YARD PIPING PROFILES

RELEASES	
03/16/26	RELEASE FOR BID
03/30/26	ADDENDUM #1

WWTP IMPROVEMENTS
FOR THE
TOWN OF TIGNALL
WILKES COUNTY, GEORGIA

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GEORGIA REGISTERED No. 25423 PROFESSIONAL ENGINEER MARTIN C. BOYD
03/12/2026
LEVEL II CERTIFIED DESIGN PROFESSIONAL, CERT. #3581
EXPIRES: 12/21/2026

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PROJ. NO.: T7040.003	
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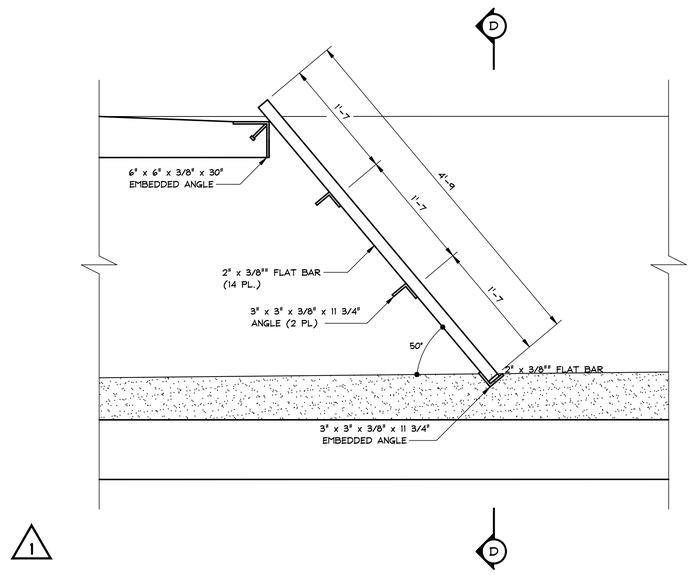
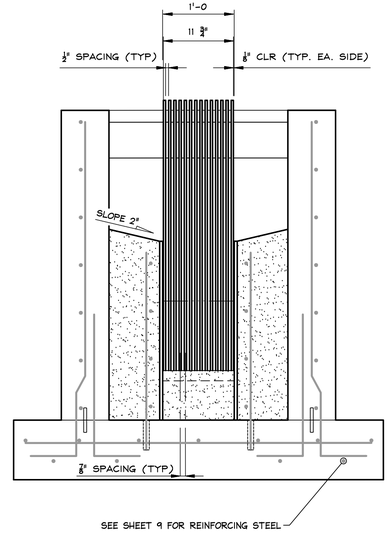
NOTES:

1. OWNER TO PROVIDE BAR SCREEN RAKE.

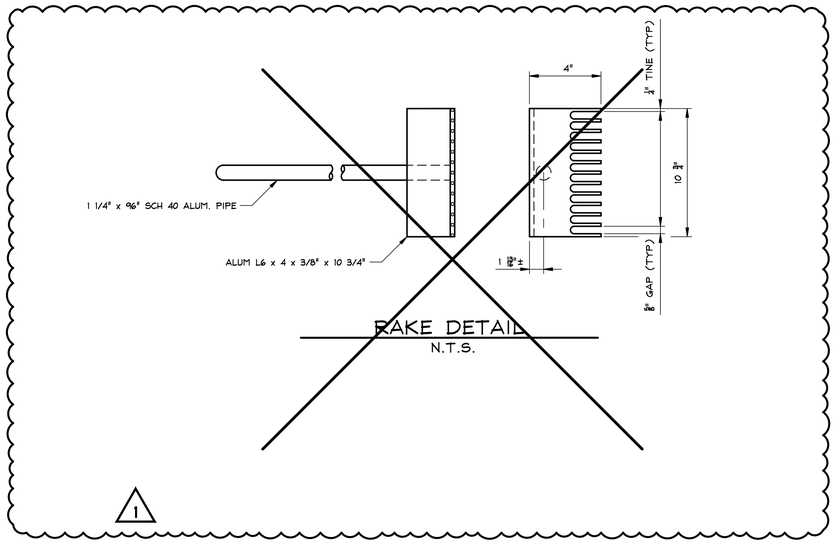


PARTIAL SECTION A-A



SECTION D-D

SCREEN DETAIL
SCALE: 1" = 1'-0"



RAKE DETAIL
N.T.S.

PROPOSED INFLUENT STRUCTURE DETAILS

RELEASES	
03/16/26	RELEASE FOR BID
03/30/26	ADDENDUM #1

WWTP IMPROVEMENTS
FOR THE
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03/12/2026
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EXPIRES: 12/21/2026

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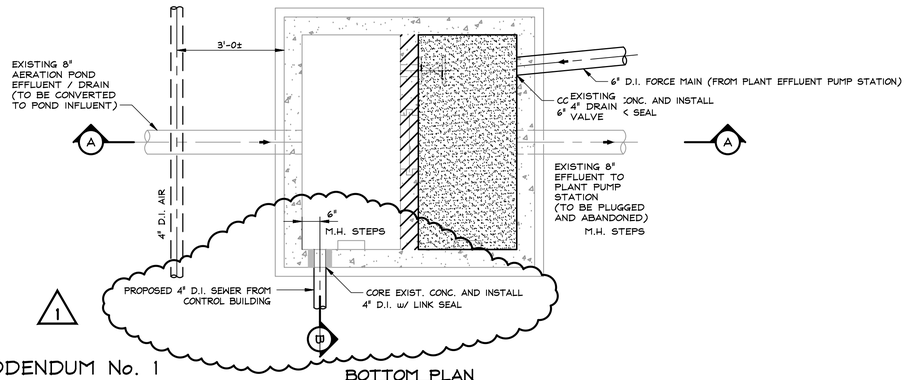
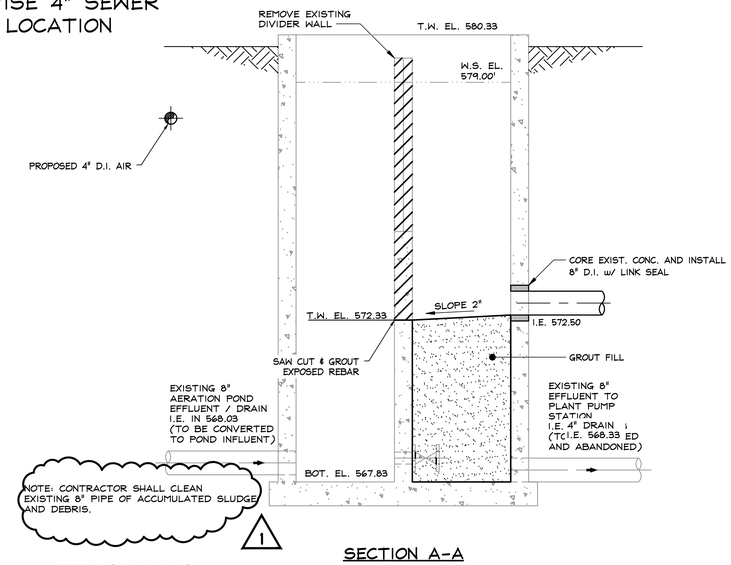
SCALE: AS SHOWN	
PROJ. NO.: T7040.003	
DATE: 03/16/26	SHEET NO.: 10



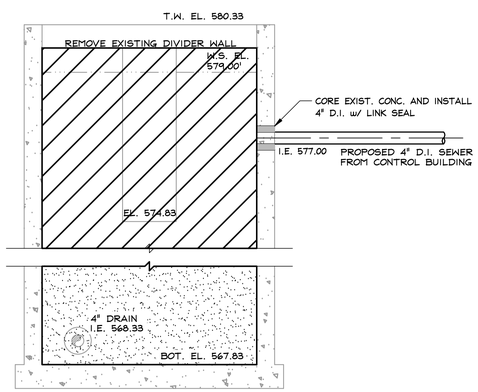
ADDENDUM No. 1
REVISE 4" SEWER LOCATION

BOTTOM PLAN

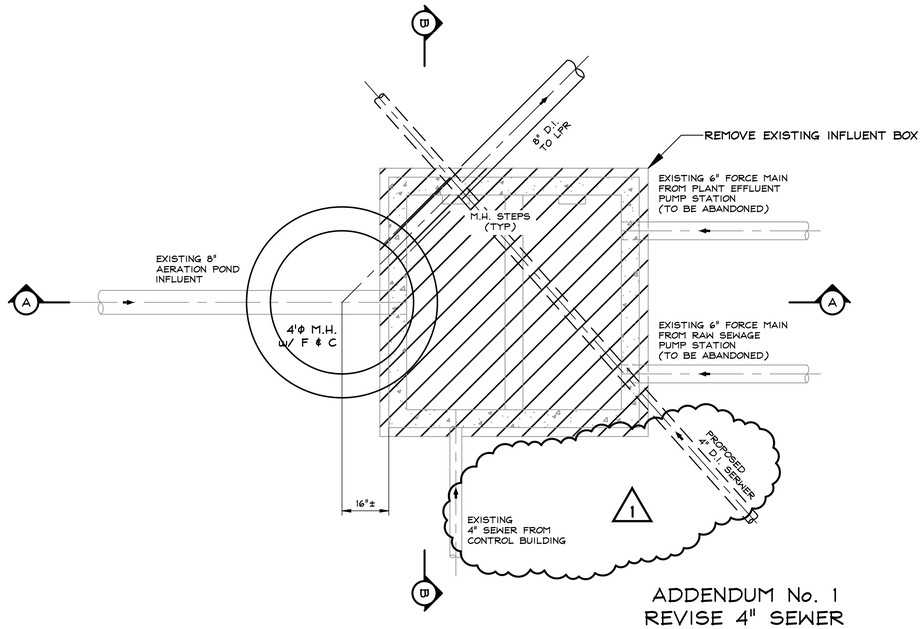


SECTION A-A

ADDENDUM No. 1
ADD NOTE

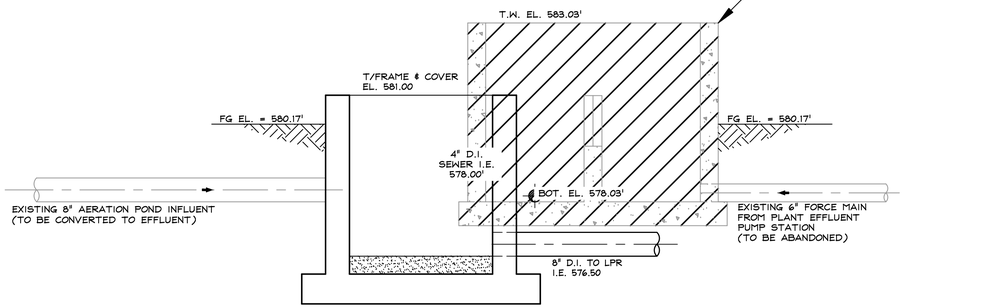


MODIFICATIONS TO EXISTING
AERATION BASIN EFFLUENT STRUCTURE
SCALE: 1/2" = 1'-0"

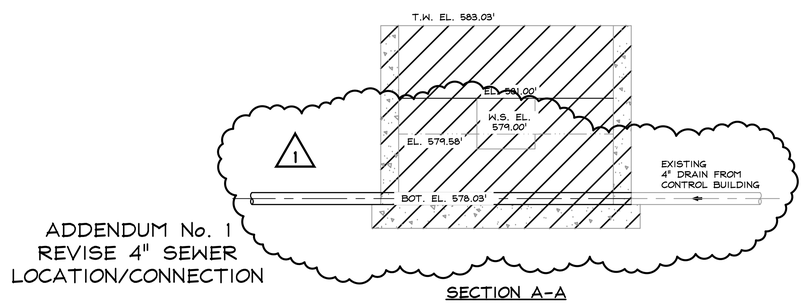


ADDENDUM No. 1
REVISE 4" SEWER
LOCATION/CONNECTION

BOTTOM PLAN



SECTION A-A



ADDENDUM No. 1
REVISE 4" SEWER
LOCATION/CONNECTION

SECTION A-A

MODIFICATIONS TO EXISTING
AERATION BASIN INFLUENT STRUCTURE
SCALE: 1/2" = 1'-0"

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MODIFICATION TO EXISTING AERATION BASIN STRUCTURES

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EXPIRES: 12/21/2026

RELEASES	
03/16/26	RELEASE FOR BID
03/30/26	ADDENDUM #1

WWTP IMPROVEMENTS
FOR THE
TOWN OF TIGNALL
WILKES COUNTY, GEORGIA

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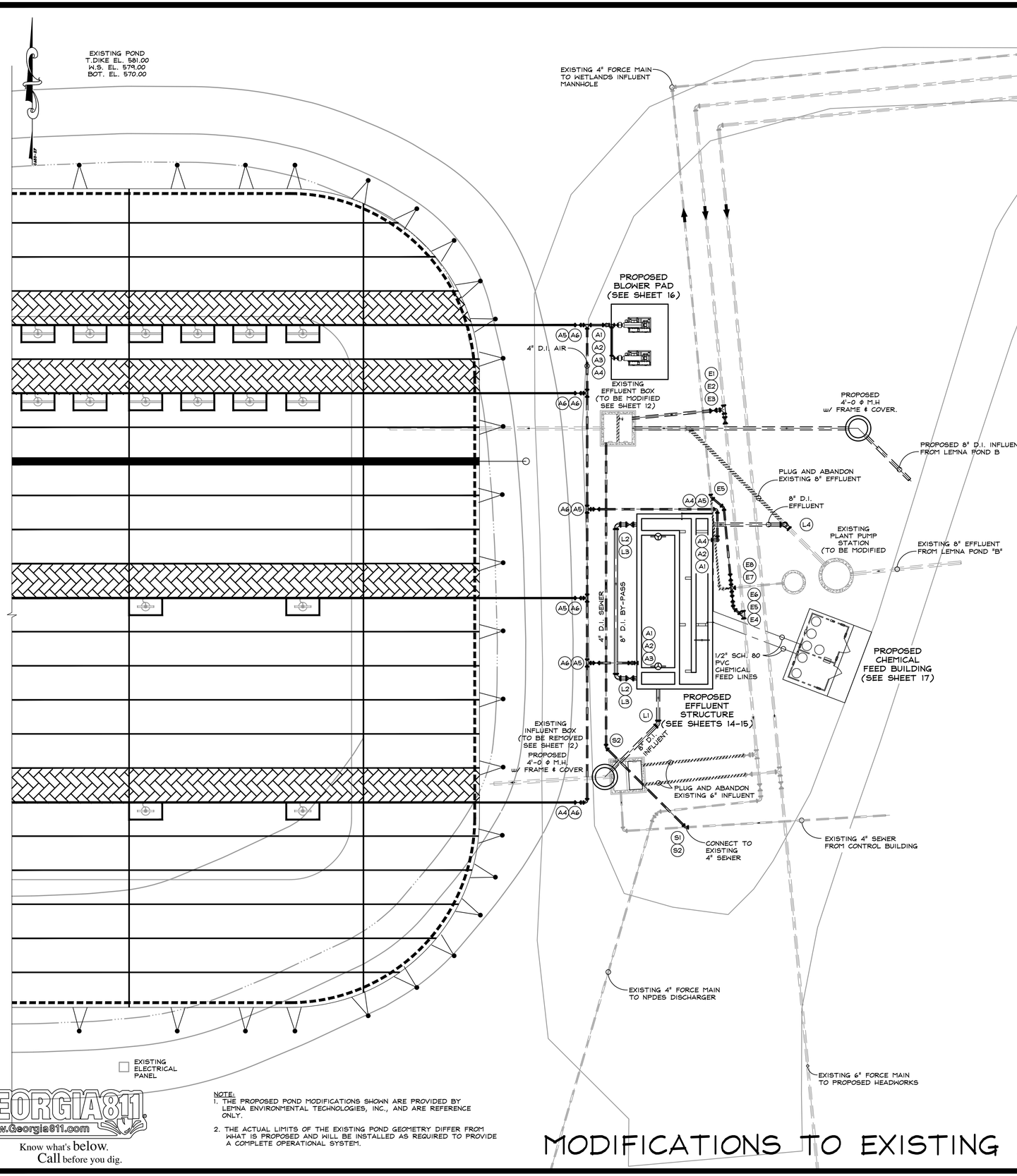
SCALE: AS SHOWN	
PROJ. NO.: T7040.003	
DATE: 03/16/26	SHEET NO.: 12



AIR PIPING SCHEDULE		
ITEM	QUAN.	DESCRIPTION
A1	4	4" WAFER STYLE BUTTERFLY VALVE
A2	4	4" FL 90° BEND
A3	1	4" x 4" FL TEE
A4	5	4" MJ 90° BEND
A5	5	4" x 4" MJ TEE
A6	6	4" MJ GATE VALVE AND VALVE BOX
EFFLUENT FORCE MAIN SCHEDULE		
ITEM	QUAN.	DESCRIPTION
E1	2	6" MJ SLEEVE
E2	1	6" MJ TEE
E3	2	6" MJ PLUG VALVE AND VALVE BOX
E4	1	6" x 4" MJ WYE
E5	3	4" MJ 45° BEND
E6	2	4" MJ PLUG VALVE AND VALVE BOX
E7	1	4" MJ TEE
E8	1	4" MJ SLEEVE
LPR INFLUENT		
ITEM	QUAN.	DESCRIPTION
L1	1	8" MJ 45° BEND
LPR BY-PASS		
ITEM	QUAN.	DESCRIPTION
L2	2	8" MJ 90° BEND
L3	2	8" MJ PLUG VALVE AND VALVE BOX
LPR EFFLUENT		
ITEM	QUAN.	DESCRIPTION
L4	2	8" MJ 45° BEND
GRAVITY SEWER		
ITEM	QUAN.	DESCRIPTION
S1	1	8" MJ SLEEVE
S2	2	8" MJ 45° BEND

NOTES:
1. CONTRACTOR SHALL FIELD VERIFY EXISTING PIPE LOCATIONS, SIZES AND MATERIAL.
2. ALL NEW PIPE MATERIALS SHALL BE DUCTILE IRON UNLESS NOTED OTHERWISE.
3. QUANTITIES SHOWN ARE APPROXIMATE. CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL REQUIRED VALVES AND FITTINGS FOR A COMPLETE SYSTEM.
4. ALL AIR LINES SHALL BE UNLINED D.I.P. WITH VITON GASKETS. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.

NOTE:
1. THE PROPOSED POND MODIFICATIONS SHOWN ARE PROVIDED BY LEMNA ENVIRONMENTAL TECHNOLOGIES, INC., AND ARE REFERENCE ONLY.
2. THE ACTUAL LIMITS OF THE EXISTING POND GEOMETRY DIFFER FROM WHAT IS PROPOSED AND WILL BE INSTALLED AS REQUIRED TO PROVIDE A COMPLETE OPERATIONAL SYSTEM.

1
ADDENDUM No. 1
REPLACE WITH REVISED SHEET

MODIFICATIONS TO EXISTING AERATION BASIN PLAN

MODIFICATIONS TO EXISTING AERATION POND C PLAN
SCALE: 3/32" = 1'-0"

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RELEASES	
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WWTP IMPROVEMENTS
FOR THE
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GEORGIA REGISTERED No. 25423 PROFESSIONAL ENGINEER MARTIN C. BOYD
03/12/2026
LEVEL II CERTIFIED DESIGN PROFESSIONAL, CERT. #3581 EXPIRES: 12/21/2026

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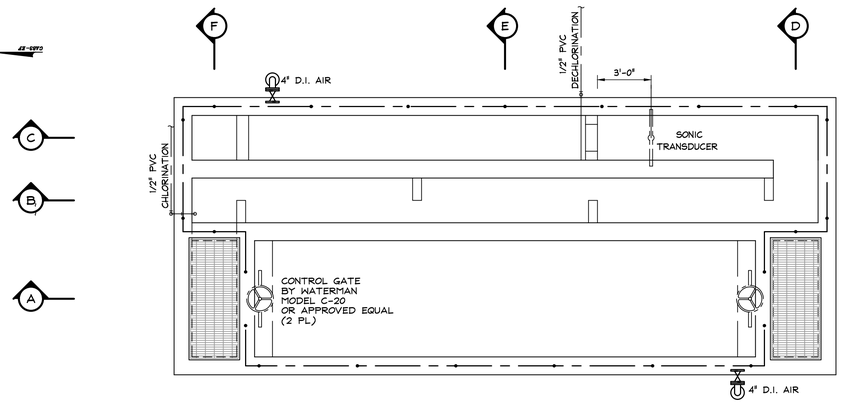
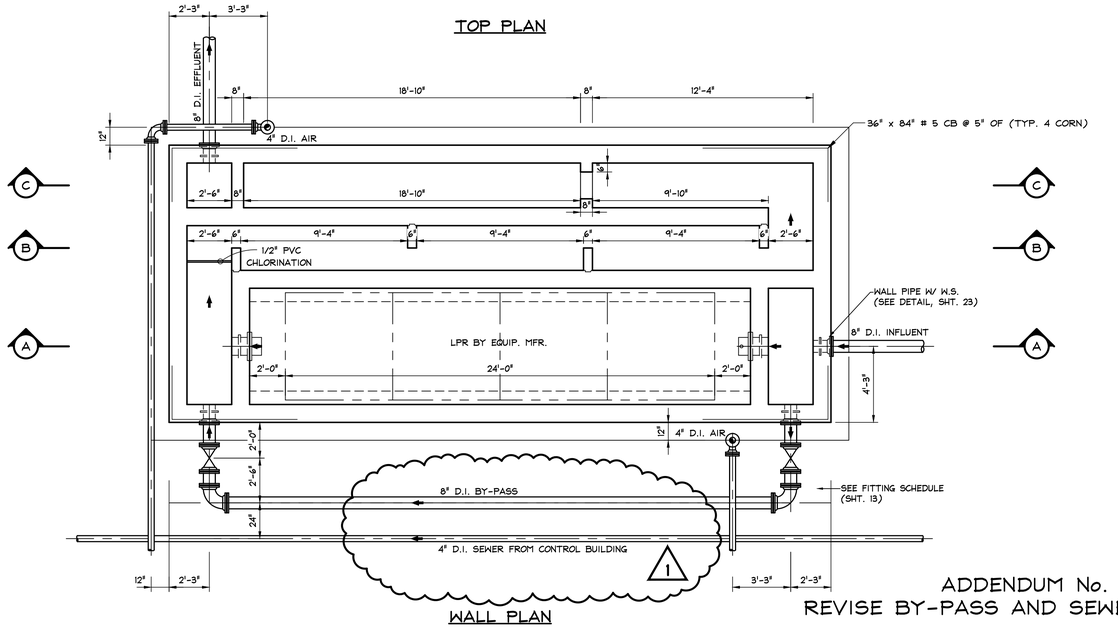
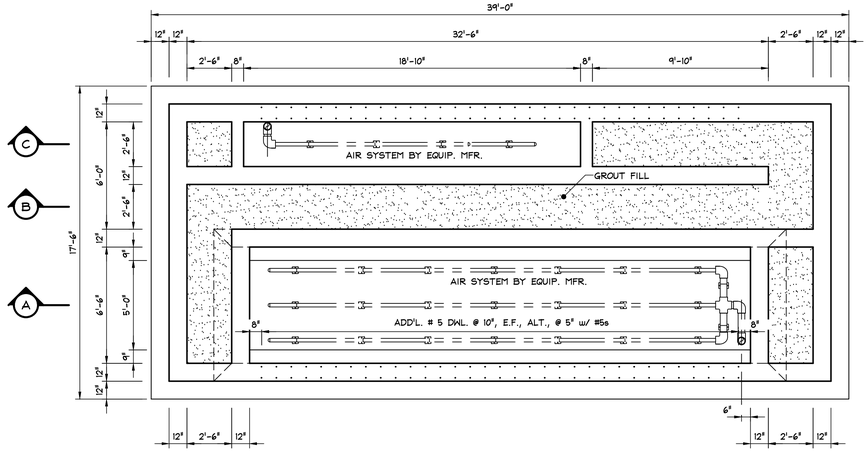
SCALE: AS SHOWN	
PROJ. NO.: T7040.003	
DATE: 03/16/26	SHEET NO.: 13



TOP PLAN

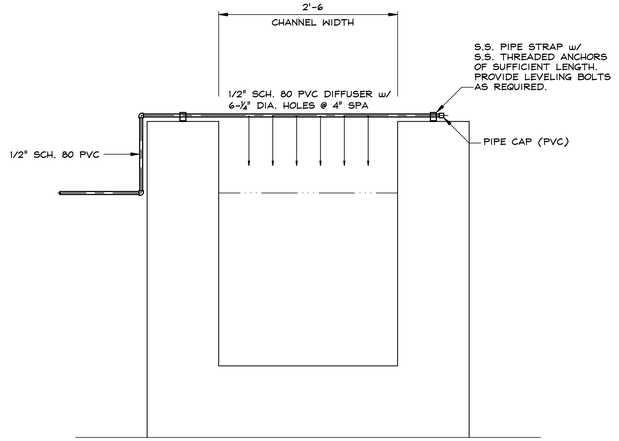


WALL PLAN

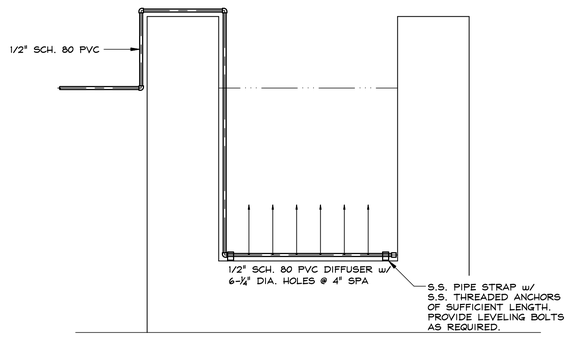


FOUNDATION PLAN

ADDENDUM No. 1
REVISE BY-PASS AND SEWER LOCATION



DECHLORINATION



CHLORINATION

TYPICAL DIFFUSER DETAILS
N.T.S.

EFFLUENT STRUCTURE
PLANS & SECTIONS
SCALE: 1/4" = 1'-0"

PROPOSED AERATION EFFLUENT STRUCTURE PLAN & SECTION

RELEASES	
03/16/26	RELEASE FOR BID
03/30/26	ADDENDUM #1

WWTP IMPROVEMENTS
FOR THE
TOWN OF TIGNALL
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03/12/2026
LEVEL II CERTIFIED DESIGN PROFESSIONAL, CERT. #3581
EXPIRES: 12/21/2026

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PROJ. NO.: T7040.003	
DATE: 03/16/26	SHEET NO.: 14

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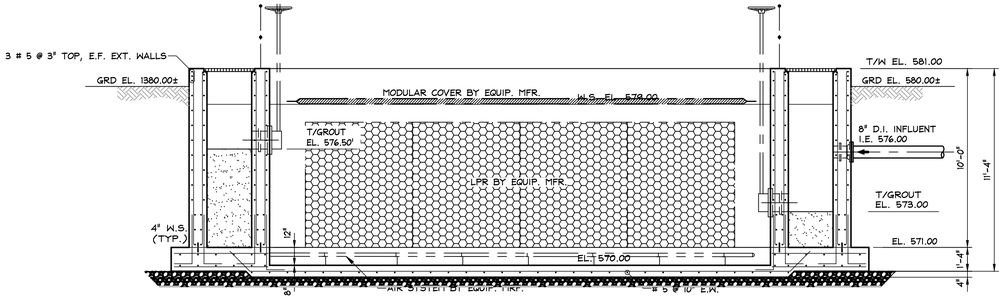
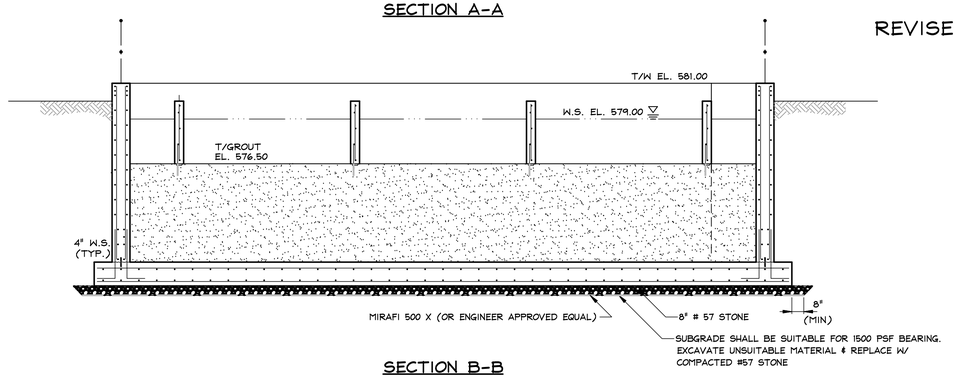
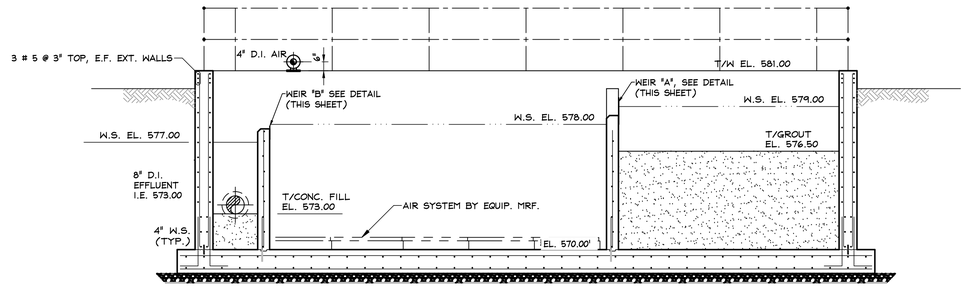


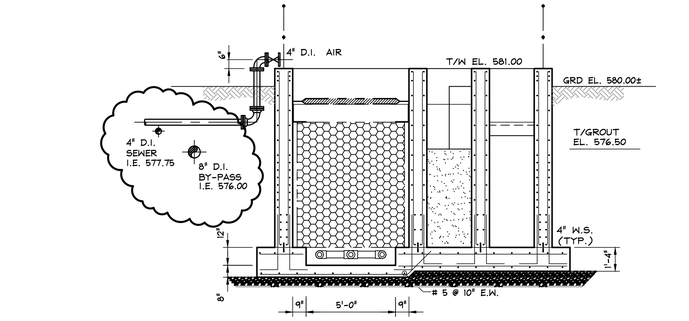
SECTION A-A



SECTION B-B

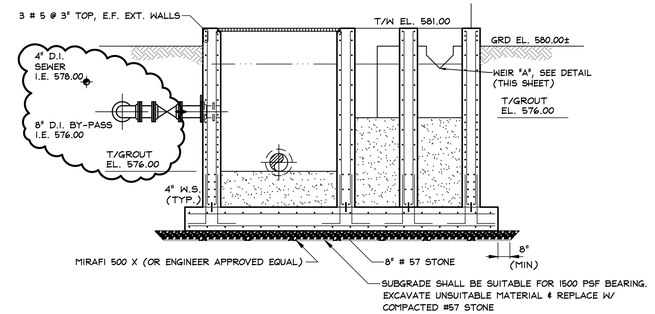


SECTION C-C

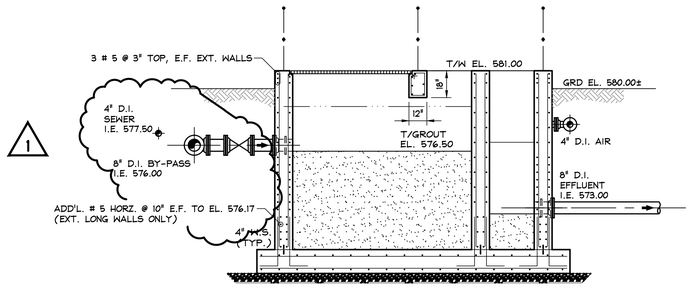


SECTION E-E

ADDENDUM No. 1
REVISE BY-PASS AND SEWER LOCATION



SECTION D-D



SECTION F-F

REINF NOTES:
1. ALL REINF SHALL BE AS LISTED U.N.O.

2. 3" MIN CLR SHALL BE PROVIDED FOR ALL BOT SLAB REINF.

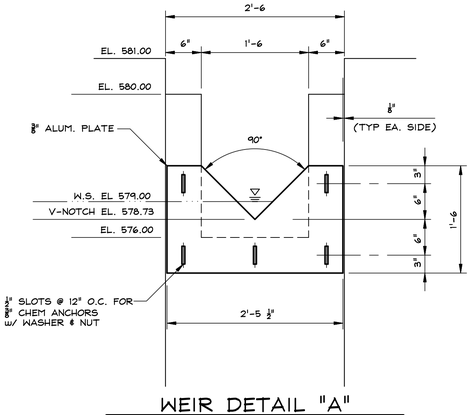
3. 16" BASE SLABS
   # 6 @ 10" L.W., TOP
   # 5 @ 10" L.W., BOT
   # 5 @ 10" S.W., T&B

4. 12" WALLS
   # 5 DWLS. @ 10" I.F + ADD'L. WHERE SHOWN
   # 4 @ 10" E.F., VERT.
   # 5 @ 10" E.F., HORZ.+ ADD'L. WHERE SHOWN

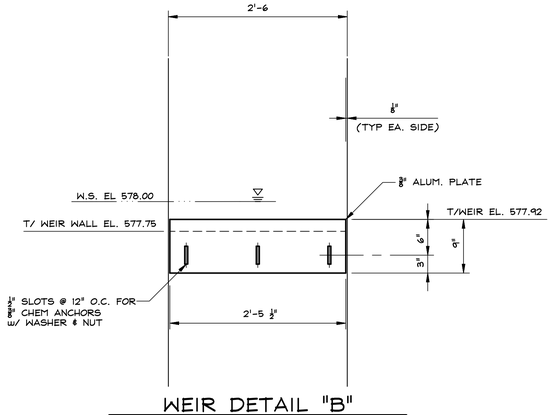
5. 8" WALLS
   # 4 DWLS. @ 10" w/ 8" EMB
   # 4 @ 10" VERT.
   # 4 @ 10" CENTER WALL

5. 6" WALLS
   # 4 DWLS. @ 10" w/ 5" EMB
   # 4 @ 10" VERT.
   # 4 @ 10" CENTER WALL

6. 12" x 18" BEAM
   3 # 4 E.F. w/ # 3 TIES @ 8"



WEIR DETAIL "A"
SCALE: 1" = 1'-0"



WEIR DETAIL "B"
SCALE: 1" = 1'-0"

PROPOSED AERATION EFFLUENT STRUCTURE SECTION & DETAIL

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RELEASES	
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GA COA LICENSE# PEF001004 EXPIRES 6/30/2026

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03/12/2026
LEVEL II CERTIFIED DESIGN PROFESSIONAL, CERT. #3581
EXPIRES: 12/21/2026

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DATE: 03/16/26	SHEET NO.: 15

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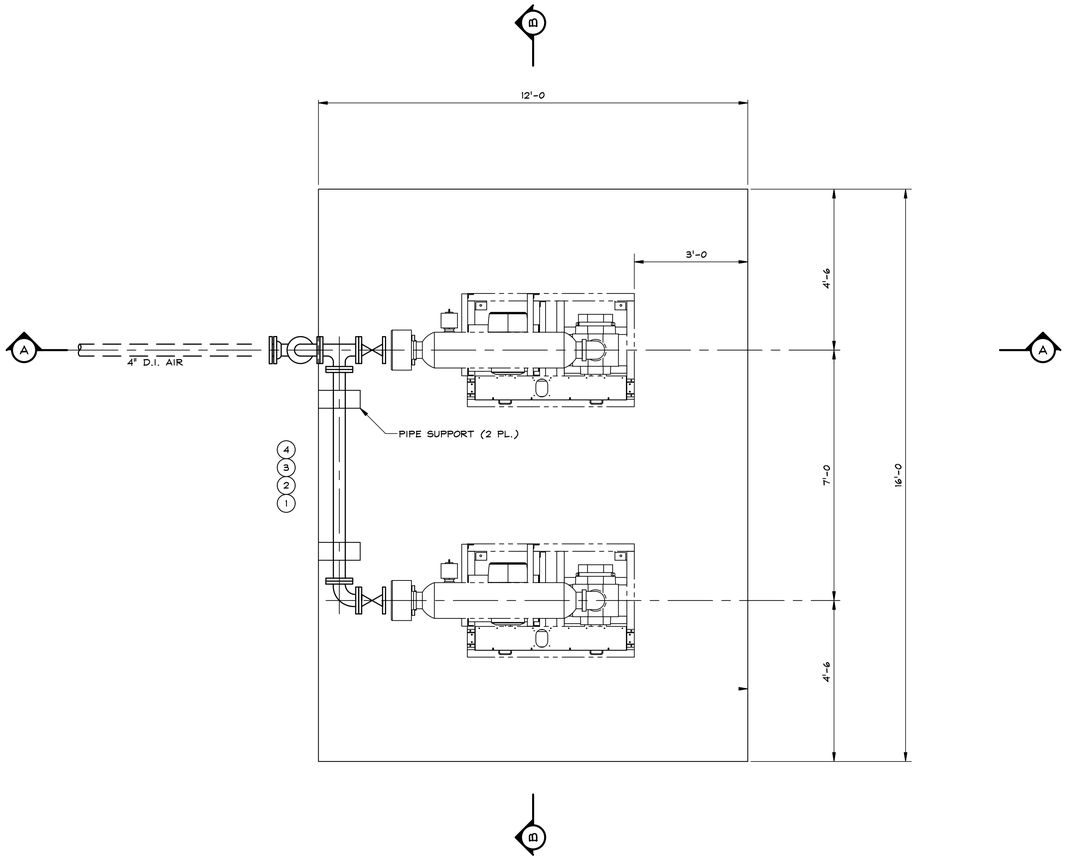
AIR PIPING SCHEDULE		
ITEM	QUAN.	DESCRIPTION
1	4	4" WAFER STYLE BUTTERFLY VALVE
2	4	4" FL 90° BEND
3	1	4" x 4" FL TEE
4	6	4" MJ 90° BEND

NOTES:
1. ALL MEW PIPE MATERIALS SHALL BE DUCTILE IRON UNLESS NOTED OTHERWISE.

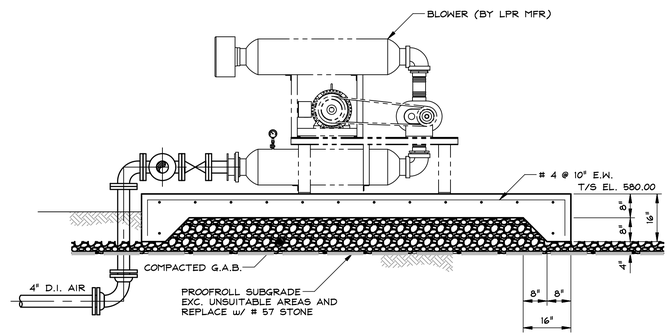
3. QUANTITIES SHOWN ARE APPROXIMATE. CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL REQUIRED VALVES AND FITTINGS FOR A COMPLETE SYSTEM.



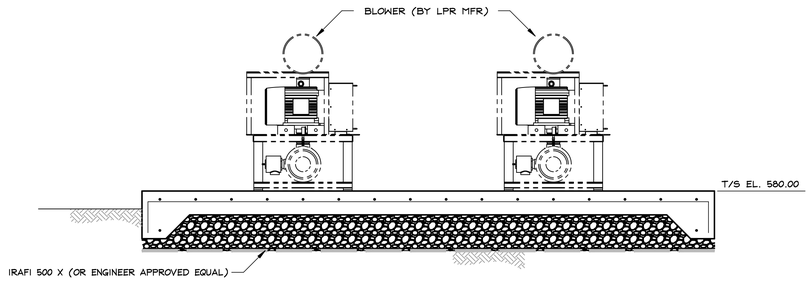
NOTE: CONTRACTOR SHALL RELOCATE EXISTING CANOPY LOCATED OVER EXISTING CHLORINE SYSTEM AND PLACE OVER BLOWER PAD

PLAN

NOTE: BLOWER ENCLOSURE NOT SHOWN FOR CLARITY. (SEE SHEET 22 FOR MANUFACTURE DETAILS)



SECTION A-A



SECTION B-B

1 ADDENDUM No. 1
REPLACE WITH REVISED SHEET

BLOWER
PLANS & SECTIONS
SCALE: 1/2" = 1'-0"

PROPOSED BLOWER AND CHEMICAL STORAGE PLAN & SECTION

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03/12/2026
LEVEL II CERTIFIED DESIGN PROFESSIONAL, CERT. #3581
EXPIRES: 12/21/2026

RELEASES	
03/16/26	RELEASE FOR BID
03/30/26	ADDENDUM #1

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Carter & Sloope
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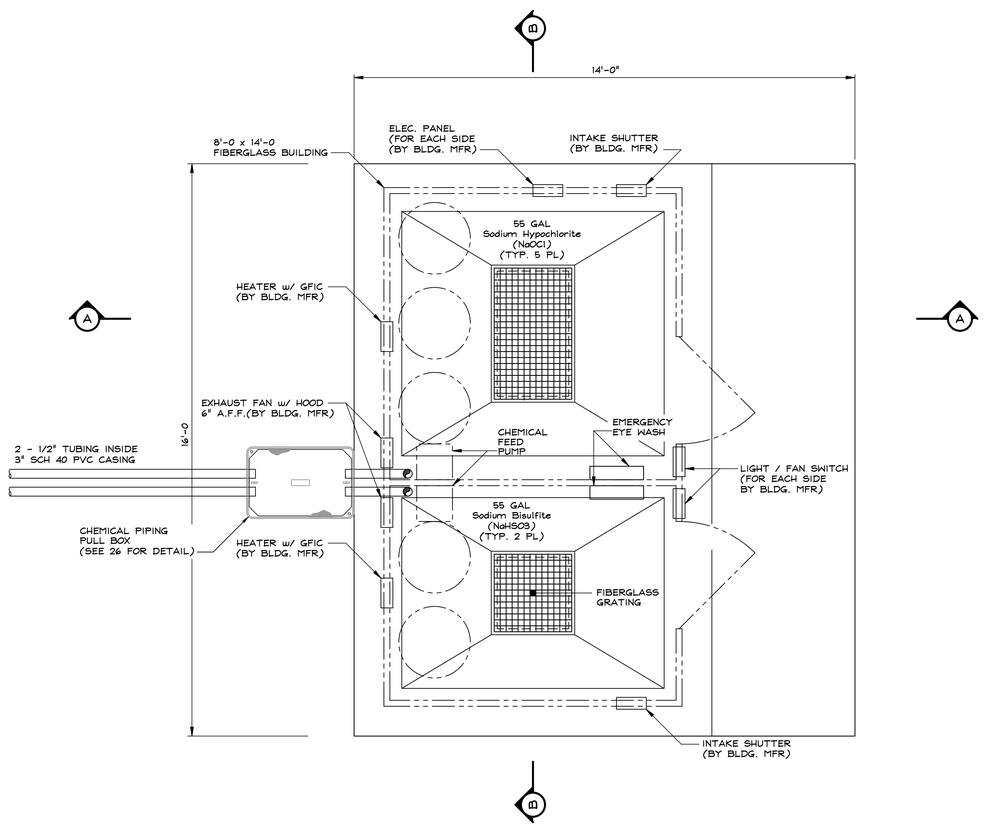
1031 STONEBRIDGE PARKWAY. WATKINSVILLE, GA 30677 . 706.769.4119 TEL
GA COA LICENSE# PEF001004 EXPIRES 6/30/2026

THIS LINE IS ONE INCH LONG WHEN DRAWING IS PLOTTED FULL SCALE

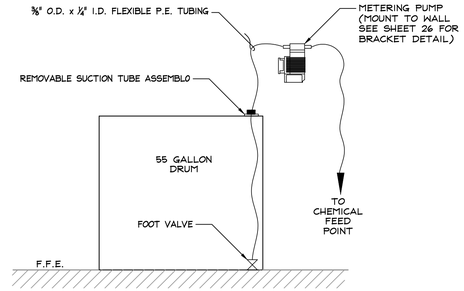
DSGN: MB	DRWN: JB
SCALE: AS SHOWN	
PROJ. NO.: T7040.003	
DATE: 03/16/26	SHEET NO.: 16



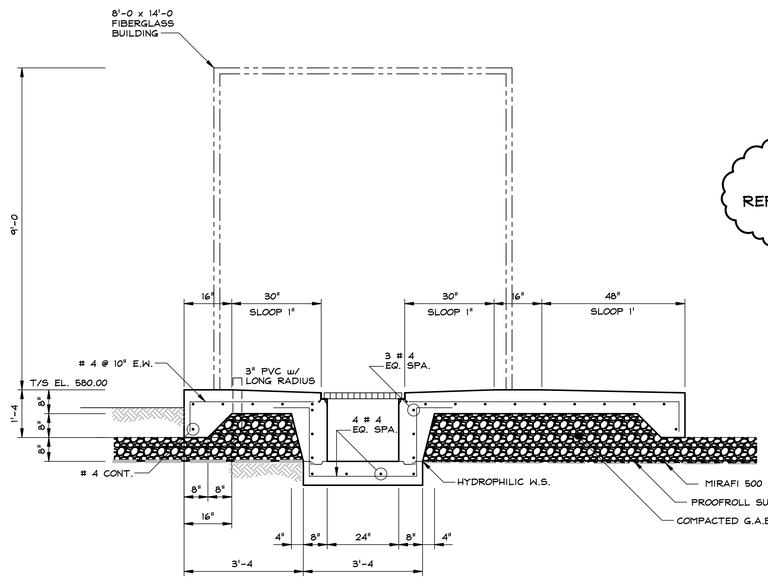
PLAN

NOTES
1. SEE PLANS & ELEVATION VIEWS FOR LOCATIONS OF SIGNS.
2. CONTRACTOR SHALL PROVIDE ALL MOUNTING HARDWARE FOR MOUNTING SIGNS TO CONCRETE & MASONRY UNITS, GATES, FENCE, POSTS, ETC. AS REQ'D.
3. SIGNS SHALL BE 0.040" THICK ALUMINUM WITH OSHA COLOR SCHEME.

TYPICAL SIGN DETAILS
N.T.S.



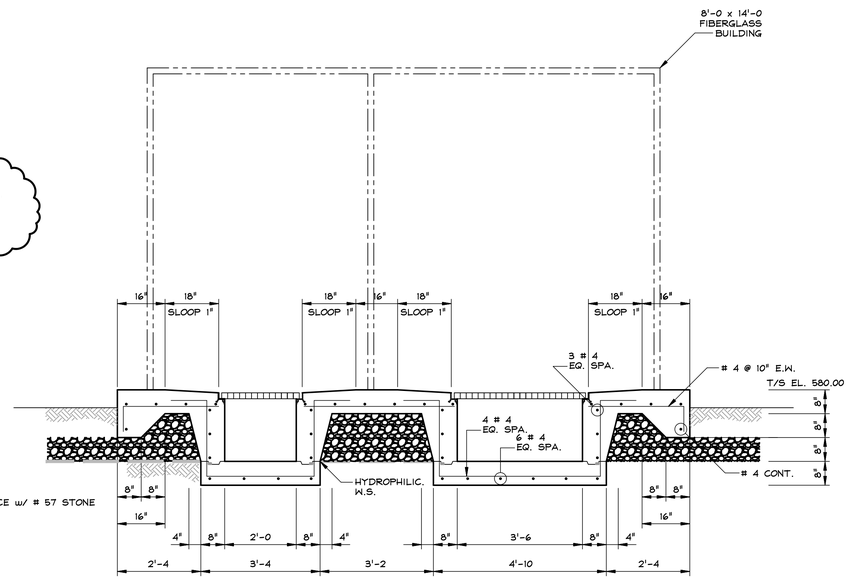
TYPICAL CHEMICAL FEED SCHEMATIC
N.T.S.



SECTION A-A

1

ADDENDUM No. 1
REPLACE WITH REVISED SHEET



SECTION B-B

CHEMICAL STORAGE
PLANS & SECTIONS
SCALE: 1/2" = 1'-0"

PROPOSED CHEMICAL STORAGE PLANS &SECTIONS

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GEORGIA REGISTERED No. 25423 PROFESSIONAL ENGINEER MARTIN C. BOYD
03/12/2026
LEVEL II CERTIFIED DESIGN PROFESSIONAL, CERT. #3581 EXPIRES: 12/21/2026

RELEASES

03/16/26	RELEASE FOR BID
03/30/26	ADDENDUM #1

WWTP IMPROVEMENTS
FOR THE
TOWN OF TIGNALL
WILKES COUNTY, GEORGIA

Carter & Sloope
CONSULTING ENGINEERS
1031 STONEBRIDGE PARKWAY. WATKINSVILLE, GA 30677 . 706.769.4119 TEL
GA COA LICENSE# PEF001004 EXPIRES 6/30/2026

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DSGN: MB	DRWN: JB
SCALE: AS SHOWN	
PROJ. NO.: T7040.003	
DATE: 03/16/26	SHEET NO.: 17

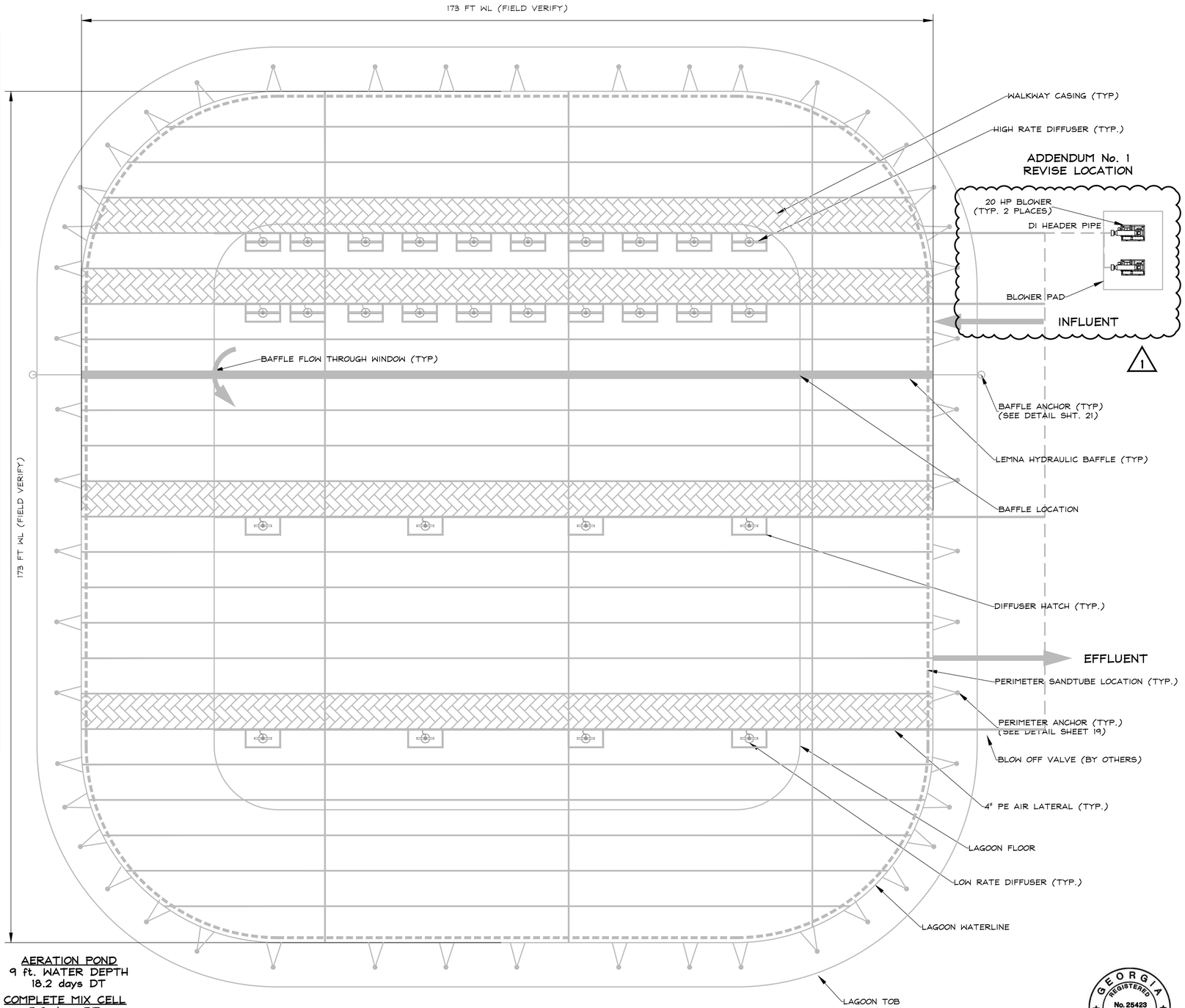
NOTE:
1. COVER: R-8 INSULATION, 40mil HDPE
2. THIS DRAWING IS PROVIDED FOR DESIGN PURPOSES. FINAL MODULAR COVER LAYOUT AND BAFFLE FABRICATION DRAWING FOR INSTALLATION PURPOSE WILL BE PROVIDED AFTER REQUIRED SITE SURVEY.
   MODULAR COVER LAYOUT WILL CHANGE BASED ON SITE CONDITIONS AND LOCATION OF IN-BASIN PIPES AND STRUCTURES.
   LOCATION OF ALL OTHER EQUIPMENT SUPPLIED BY LEMNA ENVIRONMENTAL TECHNOLOGIES OR ENGINEER APPROVED EQUAL WILL BE BASED ON FINAL MODULAR COVER LAYOUT AFTER SURVEY.
3. AIR HEADER PIPE IS RECOMMENDED TO BE INSTALLED AFTER MODULAR COVER IS INSTALLED. CONTRACTOR MUST ENSURE AIR LATERALS LINE UP WITH MODULAR COVER SEAMS AND AIR HEADER VALVES LOCATIONS.
4. IN INSTANCES WHERE MODULAR COVER IS INSTALLED AFTER AIR PIPE IS IN PLACE, LET WILL LOCATE IT DURING LAGOON SURVEY.
5. ALL PERSONNEL SHALL WEAR OSHA APPROVED PERSONAL FLOTATION DEVICE WHEN WORKING ON WASTEWATER PONDS

GENERAL NOTES:

1. SEE SHEET 1 FOR ADDITIONAL CONSTRUCTION NOTES.
2. CONTRACTOR SHALL FIELD VERIFY ALL PIPING LOCATION & ELEVATIONS BEFORE BEGINNING CONSTRUCTION.
3. EXISTING YARD PIPING IS BASED UPON BEST AVAILABLE INFORMATION. ENGINEER ASSUMES NO RESPONSIBILITY FOR INACCURACIES. CONTRACTOR SHALL INCLUDE IN THEIR BID PRICE ALL EQUIPMENT, MATERIALS, & LABROR TO POT HOLE AND/OR TO USE GROUND PENETRATING RADAR TO LOCATE EXISTING UTILITIES. ANY UTILITIES FOUND SHALL BE NOTED ON "AS-BUILTS".
4. THE CONTRACTOR MAY USE WATER FROM THE ON-SITE HOSE BIBS. THE WATER LINE WILL BE METERED AND THE OWNER WILL PROVIDE A WATER METER TO BE INSTALLED BY THE CONTRACTOR. A RPZ BACKFLOW PREVENTER MUST BE FURNISHED AND INSTALLED BY THE CONTRACTOR IF POTABLE WATER IS TO BE USED.

DREDGING & DEWATERING NOTES:

1. CONTRACTOR MAY USE MECHANICAL OR HYDRAULIC DREDGING METHODS TO REMOVE ACCUMLATED SLUDGE FROM THE COMPLETE MIX AERATION POND. THE SLUDGE SHALL BE REMOVED AND MAY BE TRANSPORTED TO THE IDENTIFIED STAGING AREA ONSITE FOR DEWATERING. CONTRACTOR SHALL DEWATER THE SLUDGE TO SPECIFIED CAKE SOLIDS PERCENTAGE. CONTRACTOR SHALL PROVIDE NECESSARY EQUIPMENT AND CONTAINERS TO TRANSPORT THE DEWATERED SLUDGE TO AN APPROVED LANDFILL. IN ORDER TO PREVENT UNINTENTIONAL SPILLAGE OF SPOIL MATERIAL DURING TRANSPORTATION, TRUCK BED/TRAILER TAILGATES SHALL BE EQUIPPED WITH A GASKET AND A PNEUMATIC ACTUATOR AND LOCKING MECHANISM, OR A LATCH WITH CLEVIS AND BRACKET ENHANCED WITH EITHER TURNBUCKLES OR CHAIN AND BINDER TO ASSURE A POSITIVE SEAL OF THE TAILGATE TO THE BED/TRAILER.
2. CONTRACTOR MUST PROTECT THE CLAY LINER DURING DREDGING OPERATIONS. ANY DAMAGE TO THE LINER MUST BE REPAIRED BY THE CONTRACTOR.
3. THE CONTRACTOR SHALL, EITHER THROUGH USE OF TEMPORARY BAFFLES OR BY CLOSING THE STRUCTURE'S SHEAR GATES, ENSURE THAT EFFLUENT LEAVING THE LAGOON REMAINS REASONABLY FREE OF SOLIDS THAT MAY BE STIRRED UP DURING DREDGING.
4. THE CONTRACTOR IS RESPONSIBLE FOR RETURNING ALL WATER REMOVED DURING DREDGING INTO THE PLANT PUMP STATION.
5. CONTRACTOR IS RESPONSIBLE FOR HAUL-OFF AND DISPOSAL OF ALL DREDGED MATERIAL.
6. THE CONTRACTOR SHALL FURNISH ALL NECESSARY EQUIPMENT, PIPING, VALVES, ETC. REQUIRED TO DREDGE THE MATERIAL FROM THE POND AND TRANSPORT IT TO THE DEWATERING LOCATION. THE CONTRACTOR SHALL ENSURE THAT THE DRIVEWAY IS UNOBSTRUCTED AT ALL TIMES DURING WASTEWATER TREATMENT PLANT OPERATIONS.
7. THE CONTRACTOR IS REQUIRED TO PROVIDE NECESSARY POWER SUPPLY FOR ALL PUMPING AND DREDGING.
8. WHILE DREDGING OPERATIONS ARE TAKING PLACE, THE CONTRACTOR SHALL MAINTAIN FULL ACCESS ON ROADS TO THE WASTEWATER TREATMENT PLANT AND ALL SURROUNDING ROADS.



AERATION POND
9 ft. WATER DEPTH
18.2 days DT

COMPLETE MIX CELL
5.2 days DT

SETTLING CELL
13.0 days DT

AERATION POND LAYOUT
SCALE: 3/32" = 1'-0"±

MODIFICATIONS TO EXISTING AERATION BASIN LAYOUT

RELEASES	
03/16/26	RELEASE FOR BID
03/30/26	ADDENDUM #1

WWTP IMPROVEMENTS
FOR THE
TOWN OF TIGNALL
WILKES COUNTY, GEORGIA

Carter & Sloope
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GA COA LICENSE# PEF001004 EXPIRES 6/30/2026

L·E·T
LEMNA ENVIRONMENTAL TECHNOLOGIES, INC.
4215 WHITE BEAR PARKWAY, SUITE 200 • VADNAIS HEIGHTS, MN 55110
PHONE: 612-253-2000 FAX: 612-253-2003 WWW.LEMNATECHNOLOGIES.COM

GEORGIA REGISTERED No. 25423 PROFESSIONAL ENGINEER MARTIN C. BOYD
03/12/2026
LEVEL II CERTIFIED DESIGN PROFESSIONAL, CERT. #3581
EXPIRES: 12/21/2026

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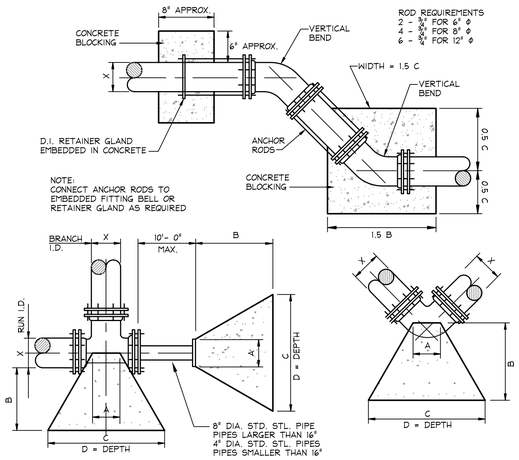
DSGN: MB	DRWN: JB
SCALE: AS SHOWN	
PROJ. NO.: T7040.003	
DATE: 03/16/26	SHEET NO.: 18

D:\AUTODESK\DC\ACCDOCS\CARTERSLOOPE\T7040.003 WWTP IMPROVEMENTS\PROJECT FILES\CADD\WORKING DRAWINGS\POND STRUCTURES



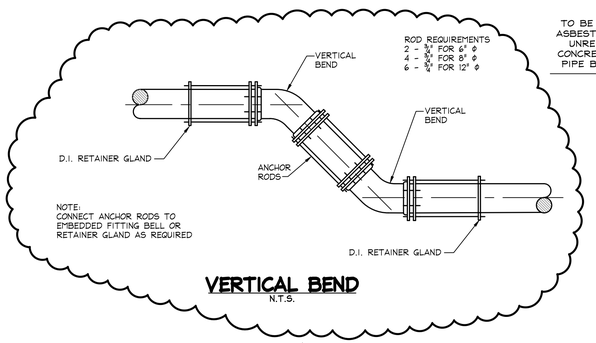
BLOCKING DIMENSIONS

		BENDS					BENDS				
		X	A	B	C	D	X	A	B	C	D
90° BEND	30"	2'-0"	11'-6"	15'-3"	6'-0"	30"	1'-0"	2'-10"	4'-3"	3'-0"	
	24"	2'-0"	7'-9"	10'-9"	5'-6"	24"	1'-0"	2'-6"	3'-8"	2'-6"	
	20"	1'-9"	6'-0"	8'-6"	5'-0"	20"	10"	2'-0"	3'-0"	2'-0"	
	16"	1'-3"	4'-0"	6'-0"	4'-6"	16"	16"	1'-8"	2'-6"	1'-6"	
	12"	10"	2'-9"	4'-0"	4'-0"	12"	8"	1'-0"	1'-6"	1'-6"	
	10"	10"	2'-6"	3'-9"	3'-0"	10"	10"	1'-0"	1'-6"	1'-0"	
	8"	8"	1'-9"	2'-6"	2'-6"	8"	8"	1'-0"	1'-6"	1'-0"	
	6"	6"	1'-3"	2'-0"	2'-0"	6"	6"	1'-0"	1'-0"	1'-0"	
	4"	4"	1'-0"	1'-6"	1'-6"	4"	4"	1'-0"	1'-0"	9"	
45° BEND	30"	1'-6"	7'-6"	10'-0"	5'-0"						
	24"	1'-3"	5'-9"	8'-0"	4'-0"						
	20"	1'-0"	4'-9"	6'-8"	3'-6"						
	16"	1'-3"	3'-3"	5'-0"	3'-3"						
	12"	10"	1'-9"	3'-0"	2'-9"						
	10"	10"	1'-9"	3'-0"	2'-0"						
	8"	8"	1'-6"	2'-0"	2'-0"						
	6"	6"	1'-3"	1'-6"	1'-6"						
	4"	4"	1'-0"	1'-0"	1'-0"						
22-½° BEND	30"	1'-0"	4'-8"	6'-4"	4'-0"						
	24"	1'-0"	3'-9"	5'-0"	3'-6"						
	20"	1'-0"	2'-6"	4'-4"	3'-0"						
	16"	1'-0"	1'-9"	3'-0"	2'-6"						
	12"	10"	1'-3"	2'-3"	2'-0"						
	10"	10"	1'-0"	2'-0"	1'-6"						
	8"	8"	1'-0"	1'-9"	1'-6"						
	6"	6"	1'-0"	1'-6"	1'-6"						
	4"	4"	1'-0"	1'-3"	1'-3"						

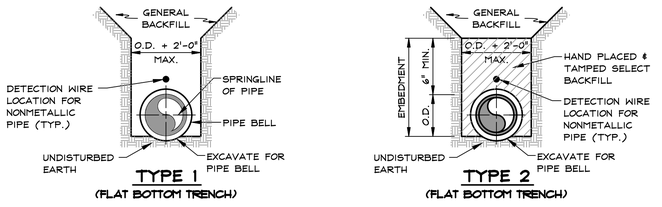
TEES & DEAD ENDS				
X	A	B	C	D
30"	3'-0"	8'-9"	13'-0"	5'-0"
24"	2'-6"	7'-3"	10'-8"	3'-9"
20"	2'-0"	5'-3"	8'-0"	3'-6"
16"	1'-0"	4'-8"	6'-4"	3'-0"
12"	10"	2'-9"	4'-6"	2'-6"
10"	10"	2'-0"	3'-3"	2'-6"
8"	8"	1'-9"	2'-6"	2'-0"
6"	6"	1'-3"	2'-0"	1'-6"

NOTE: 200 P.S.I. TEST PRESSURE SOIL BEARING OF 2500 P.S.F. 3000 P.S.I. CONCRETE PIPE LESS THAN 4" IN DIAMETER SHALL HAVE THE SAME REQUIREMENTS AS 4" DIAMETER PIPE

THRUST BLOCK
N.T.S.

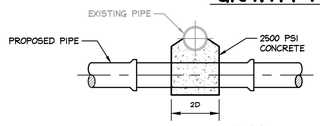


VERTICAL BEND
N.T.S.

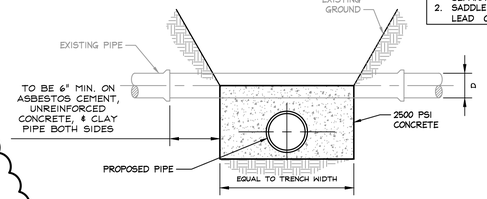


NOTES
1. TYPE 1 AND 2 CAN ONLY BE USED IN DRY EARTH TRENCHES.
2. TYPE 2 SHALL BE USED FOR PVC & D.I. FORCE MAINS & WATER MAINS UNLESS ROCK IS ENCOUNTERED OR OVER EXCAVATION OCCURS, IN WHICH CASE 6" MIN. OF GRANULAR CRUSHED STONE SHALL BE USED AS BEDDING.
3. SEE SPECIFICATION SECTION 02315 FOR ADDITIONAL REQUIREMENTS.

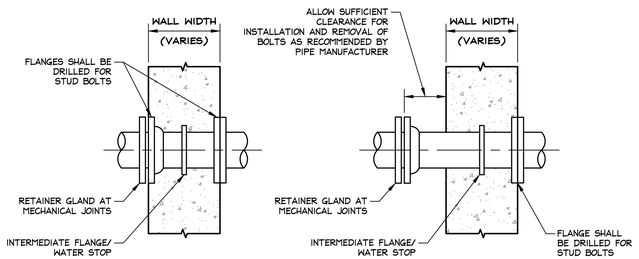
PIPE BEDDING AND HAUNCHING DETAILS GRAVITY AND PRESSURE PIPES
N.T.S.



NOTE:
1. SADDLE REQUIRED IF LESS THAN 18" SEPARATION BETWEEN PIPES.
2. SADDLE NOT REQUIRED FOR PLASTIC, STEEL, LEAD OR COPPER PIPE 2" OR SMALLER.

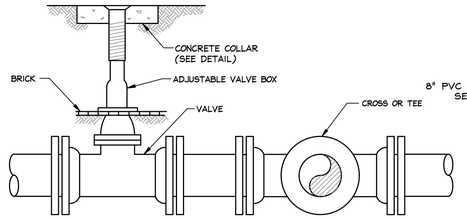


PIPE SADDLE DETAIL
N.T.S. C4S STD. W79

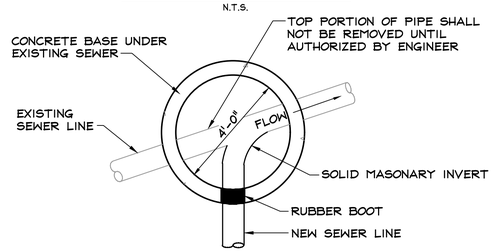


NOTES:
1. FURNISH RESTRAINED MECHANICAL JOINT WHERE INDICATED ON THE DRAWINGS OR SPECIFIED.
2. FURNISH JOINT TYPES AS SHOWN ON THE DRAWINGS. JOINTS SHOWN IN DETAIL ARE CONCEPTUAL ONLY.
3. PIPE SIZE AND PIPE MATERIAL VARIES.

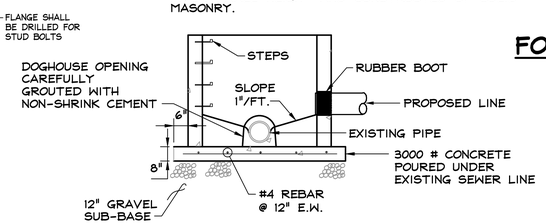
PIPE WALL DETAIL
N.T.S.



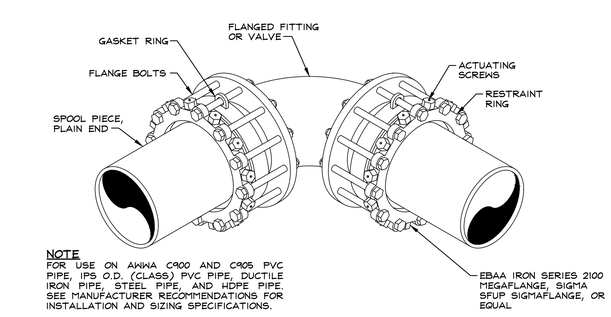
VALVE SETTING & BOX
N.T.S.



NOTES
1. PROVIDE PRECAST MANHOLE RISER COMPLETE WITH UP-SIDE DOWN U-SHAPED OPENING TO SUIT EXISTING LINES.
2. CORED AND BOOTED OPENINGS TO SUIT PROPOSED PIPELINES.
3. TABLES ARE TO BE GENTLY SLOPED AND TROWELED SMOOTH FROM MANHOLE WALL TO INVERT WALL HEIGHT AND CONSTRUCTED OF SOLID MASONRY.

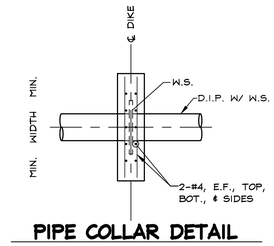


DOGHOUSE MANHOLE
N.T.S. C4S STD. S537



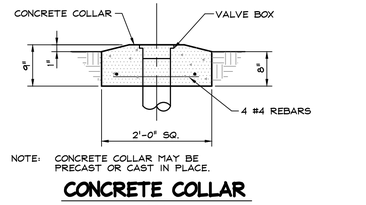
NOTE
FOR USE ON AWWA C900 AND C905 PVC PIPE, IPS O.D. (CLASS) PVC PIPE, DUCTILE IRON PIPE, STEEL PIPE, AND HDPE PIPE. SEE MANUFACTURER RECOMMENDATIONS FOR INSTALLATION AND SIZING SPECIFICATIONS.

RESTRAINED FLANGED ADAPTOR DETAIL
N.T.S.



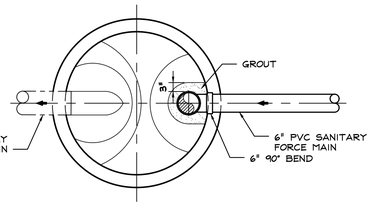
PIPE COLLAR DETAIL
N.T.S.

NOTES:
1. BOTTOMS AND SIDES SHALL BE POURED AGAINST UNDISTURBED EARTH.
2. WALL HEIGHT SHALL BE MIN. PIPE DIAMETER PLUS 1' BELOW PIPE AND 1' ABOVE PIPE.

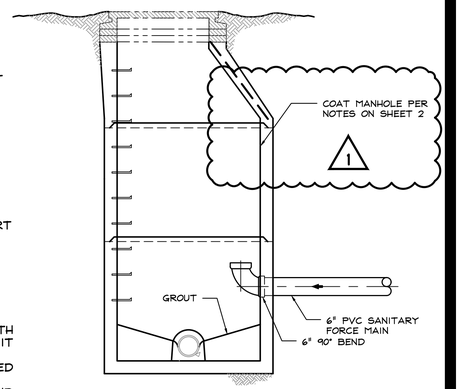


NOTE: CONCRETE COLLAR MAY BE PRECAST OR CAST IN PLACE.

CONCRETE COLLAR
N.T.S.



PLAN



SECTION

FORCE MAIN CONNECTION TO MANHOLE
SCALE: 1/2" = 1'

RELEASES	
03/16/26	RELEASE FOR BID
03/30/26	ADDENDUM #1

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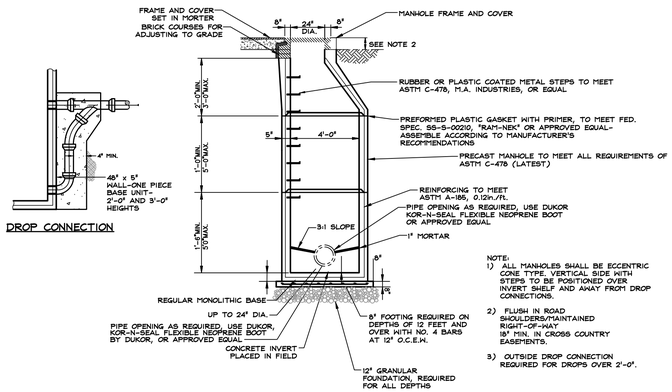
DSGN: MB	DRWN: JB
SCALE: AS SHOWN	
PROJ. NO.: T7040.003	
DATE: 03/16/26	SHEET NO.: 23

GEORGIA REGISTERED No. 25423 PROFESSIONAL ENGINEER MARTIN C. BOYD
03/12/2026
LEVEL II CERTIFIED DESIGN PROFESSIONAL, CERT. #3581 EXPIRES: 12/21/2026

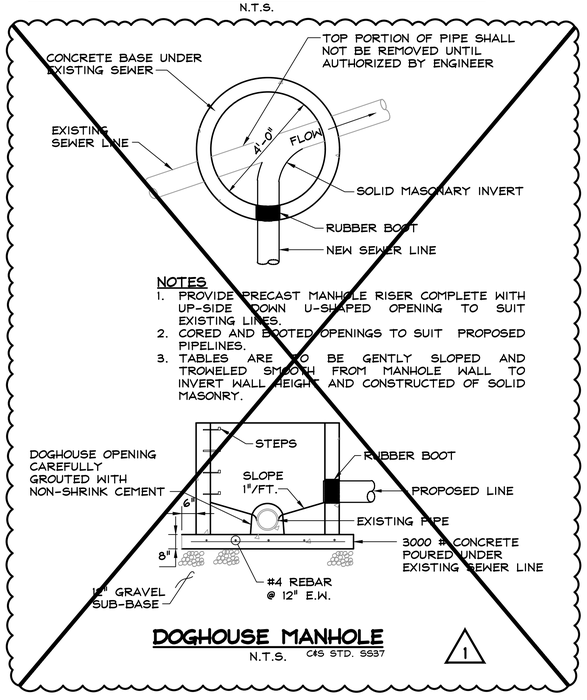
PIPING DETAILS

D:\AUTODESK\DCA\ACCDOCS\CARTERSLOOPE\T7040.003 WWTP IMPROVEMENTS\PROJECT FILES\CADD\WORKING DRAWINGS\DETAILS



PRECAST MANHOLE DETAIL W/ DROP

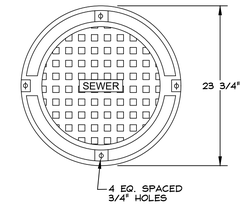
N.T.S.



DOGHOUSE MANHOLE

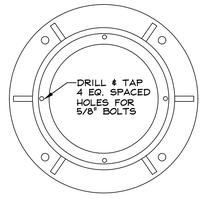
N.T.S. GA STD. 5937

1



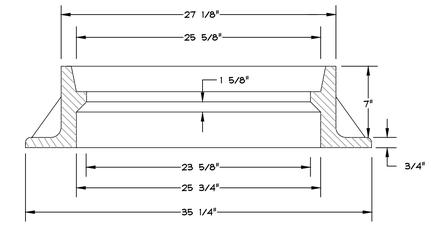
COVER FACE

N.T.S.



FRAME PLAN

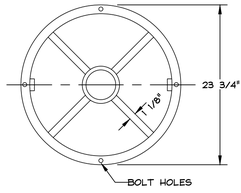
N.T.S.



NOTE: PICKHOLES SHALL BE NON-PENETRATING AND WATER TIGHT. CORRUGATION AND TWO PICKHOLES IN COVER, NO PERFORATION. SEATING SURFACE OF FRAMES AND COVERS TO BE MACHINED TO FIT.
FRAME AND COVER SHALL WEIGH 280 POUNDS MINIMUM.

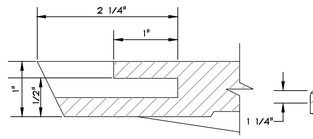
FRAME SECTION

N.T.S.



COVER BACK

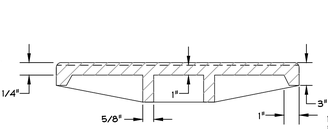
N.T.S.



NOTE: PICKHOLE SHALL BE MIN. 1 1/4" WIDE, TWO PER COVER

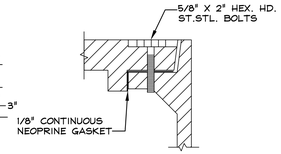
PICKHOLE DETAIL

N.T.S.



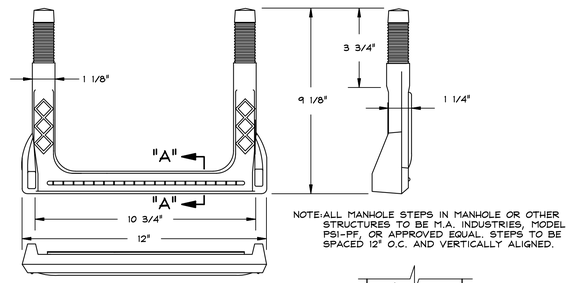
COVER SECTION

N.T.S.

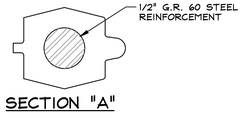


WATERTIGHT DETAIL

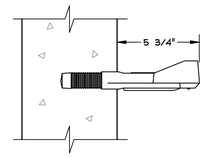
N.T.S.



NOTE: ALL MANHOLE STEPS IN MANHOLE OR OTHER STRUCTURES TO BE M.A. INDUSTRIES, MODEL PSI-PF, OR APPROVED EQUAL. STEPS TO BE SPACED 12" O.C. AND VERTICALLY ALIGNED.



SECTION "A"



PVC MANHOLE STEPS DETAIL

N.T.S.

GEORGIA811 www.Georgia811.com
Know what's below. Call before you dig.

SITE DETAILS

GEORGIA REGISTERED No. 25423 PROFESSIONAL ENGINEER MARTIN C. BOYD
03/12/2026
LEVEL II CERTIFIED DESIGN PROFESSIONAL, CERT. #3581
EXPIRES: 12/21/2026

RELEASES

03/16/26	RELEASE FOR BID
03/30/26	ADDENDUM #1

WWTP IMPROVEMENTS
FOR THE
TOWN OF TIGNALL
WILKES COUNTY, GEORGIA

Carter & Sloope
CONSULTING ENGINEERS
1031 STONEBRIDGE PARKWAY. WATKINSVILLE, GA 30677 . 706.769.4119 TEL
GA COA LICENSE# PEF001004 EXPIRES 6/30/2026

THIS LINE IS ONE INCH LONG WHEN DRAWING IS PLOTTED FULL SCALE

DSGN: MB	DRWN: JB
SCALE: AS SHOWN	
PROJ. NO.: T7040.003	
DATE: 03/16/26	SHEET NO.: 24

D:\AUTODESK\DCA\ACCDOCS\CARTERSLOOPE\T7040.003 WWTP IMPROVEMENTS\PROJECT FILES\CADD\WORKING DRAWINGS\DETAILS

CONTROL SCHEMATIC SYMBOLS

- CONDUCTORS CONNECTED
- CONDUCTORS NOT CONNECTED
- CONNECTION POINT
- TERMINAL POINT
- CB 30A — MOLDED CASE CIRCUIT BREAKER, THERMAL MAGNETIC UNLESS NOTED OTHERWISE, TRIP SIZE & NUMBER OF POLES AS INDICATED
- MCP 30A — MOTOR CIRCUIT PROTECTION, TRIP SIZE AS INDICATED
- DS-XXX 100A — DISCONNECT SWITCH, ID DS-XXX, CONTINUOUS RATING AS INDICATED, 600V MINIMUM UNLESS NOTED OTHERWISE
- 30A — FUSED DISCONNECT, CONTINUOUS RATING AS INDICATED, 600V MINIMUM UNLESS NOTED OTHERWISE
- 5A — FUSE CONTINUOUS RATING AS INDICATED
- M-XXX (XX) — MOTOR ID M-XXXX HORSE POWER AS INDICATED
- OL — MOTOR OVERLOADS, THERMAL UNLESS NOTED OTHERWISE
- MS-XX — MOTOR STARTER COIL
- (X) — INDICATOR LIGHT, X = LENS COLOR
  - R = RED
  - G = GREEN
  - A = AMBER
  - W = WHITE
  - B = BLUE
- M-XX / M-XX — MOTOR STARTER COIL
- PB-XX / PB-XX — PUSH BUTTON NORMALLY OPEN & CLOSED
- SS-XX / SS-XX (OX) — SELECTOR SWITCH NORMALLY OPEN & CLOSED
- TR-XX 0-15 SEC / TR-XX 0-15 SEC — TIME DELAY SWITCH NORMALLY OPEN & CLOSED TIME TO CLOSE/OPEN
- FS-XX / FS-XX — FLOAT SWITCH NORMALLY OPEN & CLOSED
- PS-XX / PS-XX — PRESSURE SWITCH NORMALLY OPEN & CLOSED
- LS-XX / LS-XX — LIMIT SWITCH NORMALLY OPEN & CLOSED
- LS-XX / LS-XX — LIMIT SWITCH NORMALLY OPEN HELD CLOSED & NORMALLY CLOSED HELD OPEN
- PCS-XX / PCS-XX — PULLCORD SWITCH NORMALLY OPEN & CLOSED
- PRS-XX / PRS-XX — PROXIMITY SWITCH NORMALLY OPEN & CLOSED
- TAS-XX / TAS-XX — TEMPERATURE SWITCH NORMALLY OPEN & CLOSED
- FLS-XX / FLS-XX — FLOW SWITCH NORMALLY OPEN & CLOSED
- SOL-XX — SOLENOID VALVE
- XL-XX — ALARM LIGHT
- XH-XX — ALARM HORN
- MOTOR / PANEL HEATER
- PANEL LIGHT
- C.T. CT — CURRENT TRANSFORMER
- H1 H2 / X1 X2 XF-XX — CONTROL POWER TRANSFORMER, SIZE AS INDICATED OR SPECIFIED

PLAN SYMBOLS

CIRCUIT AND RACEWAY SYMBOLS

- PROVIDE RACEWAY, CONCEALED IN CEILING OR WALL.
- PROVIDE RACEWAY, CONCEALED IN FLOOR OR UNDERGROUND.
- PROVIDE RACEWAY, EXPOSED.
- PROVIDE RACEWAY, FLEXIBLE.
- CONCRETE ENCASED DUCT BANK

BRANCH FEEDER CIRCUIT / HOMERUN

- HD-2,4,6 — 2#12 & 1#12G UNLESS NOTED OTHERWISE
  EXAMPLE: HOMERUN TO PANEL D CIRCUITS 2, 4 & 6
- 3#12 & 1#12G UNO (TICK MARKS INDICATE CONDUCTOR QTY NOT INCLUDING GROUND WIRE)
- HOMERUN WITH 2/C SHIELDED, TWISTED NO. 16 SIGNAL CABLE IN 3/4" C.

GROUNDING SYMBOLS

- 5/8"X10' COPPERCLAD GROUND ROD DRIVEN FULL DEPTH INTO EARTH
- GROUND ROD & WELL
- G — BARE COPPER GROUNDING CONDUCTOR - #2/0 UNO INSTALLED A MINIMUM 30" BELOW GRADE
- EXOTHERMIC (CADWELD) CONNECTION TO GROUND

POWER PLAN SYMBOLS

- WALL OUTLET, DUPLEX RECEPTACLE, 20A, 125V, NEMA 5-20R, NUMBER DESIGNATES CIRCUIT IDENTIFICATION
- WALL OUTLET, DUPLEX GFCI RECEPTACLE, 20A, 125V, NEMA 5-20R
- WALL OUTLET, QUADRUPLEX RECEPTACLE, TWO - 20A, 125V, 3W, NEMA 5-20R
- RECEPTACLE AS INDICATED W/ WEATHER-PROOF, IN-USE, COVER
- COUNTER OUTLET, ALUMINUM NOZZLE COUNTER MOUNTED LEW ELECTRIC FDN-300-A
- FLOOR OUTLET, RECEPTACLE AS INDICATED, BRASS POP UP FLOOR PLATE LEW ELECTRIC PUFP-BD
- MOTOR RATED SWITCH OUTLET, A.C. TYPE, 30A, 600V. HUBBLE CAT. NO. HBL7832FWMD
- J — JUNCTION BOX
- 50 — MOTOR HORSE POWER AS INDICATED
- 30/3/4X — SAFETY SWITCH, AMPS / POLES / ENCLOSURE NEMA RATING
- MOTOR STARTER, STAND ALONE
- DEVICE - SENSOR, TRANSDUCER, CONTROL SWITCH ETC.
- CONTROL PANEL
- DISTRIBUTION PANEL
- PANELBOARD FLUSH OR SURFACE MOUNTED.

MISCELLANEOUS COMMUNICATIONS SYMBOLS

- T/N — 6" BRASS POP UP FLOOR PLATE LEW ELECTRIC PUFP-BC, 3/4"C. HOMERUN CAT6E TO THE TELEPHONE BACKBOARD OR NETWORK SWITCH, (T=TELEPHONE, F=FAX, N=NETWORK)
- COMMUNICATION OUTLET WITH BUSHED COVER PLATE, 3/4"C. HOMERUN CAT6E TO THE TELEPHONE BACKBOARD OR NETWORK SWITCH, (T=TELEPHONE, F=FAX, N=NETWORK, A=ALL)

LIGHTING PLAN SYMBOLS

- SWITCH A.C. TYPE, SINGLE POLE, 15A, 125/277V, NUMBER DESIGNATES CIRCUIT IDENTIFICATION
- SWITCH OUTLET, A.C. TYPE, THREE / FOUR WAY, 15A, 125/277V. (3, DENOTES THREE WAY, 4 DENOTES FOUR WAY)
- SWITCH OUTLET W/ PASSIVE INFRARED OCCUPANCY SENSOR & NIGHT LIGHT
- SWITCH OUTLET W/ PILOT LIGHT
- D — SWITCH OUTLET W/ DIMMER

SINGLE LINE DIAGRAM SYMBOLS

- 30A 3P CB — LOW VOLTAGE POWER CIRCUIT AND BREAKER DRAW OUT TYPE, TRIP SIZE & NUMBER OF POLES AS INDICATED
- 30A 3P CB — MOLDED CASE CIRCUIT BREAKER, THERMAL MAGNETIC UNLESS NOTED OTHERWISE, TRIP SIZE & NUMBER OF POLES AS INDICATED
- 30A MCP — MOTOR CIRCUIT PROTECTION, TRIP SIZE AS INDICATED
- DS-XXXX 100/80A 3 POLE NEMA 4X SS — FUSED DISCONNECT ID DS-XXXX
  DISCONNECT / FUSE CONTINUOUS RATING
  NUMBER OF POLES
  NEMA ENCLOSURE RATING
- DS-XXXX 100A 3 POLE NEMA 4X SS — DISCONNECT ID
  CONTINUOUS RATING
  NUMBER OF POLES
  NEMA ENCLOSURE RATING
- NEMA 1 FVNR OL — FULL VOLTAGE NON-REVERSING MOTOR STARTER
  NEMA SIZE AS INDICATED
- NEMA 1 FVR OL — FULL VOLTAGE REVERSING MOTOR STARTER
  NEMA SIZE AS INDICATED
- RVSS — REDUCED VOLTAGE SOLID STATE STARTER
  SOFT STARTER
- VFD — VARIABLE FREQUENCY DRIVE
  SEE SPECIFICATIONS FOR DETAILS
- OL — MOTOR OVERLOADS
  SOLID STATE UNLESS OTHERWISE NOTED
- XX HP M-XXXX — MOTOR HORSE POWER AS INDICATED
  MOTOR IDENTIFICATION M-XXXX
- FLA 30 L-XXXX LOAD — MISCELLANEOUS LOAD, FLA AS SHOWN
- X A/V/VAR METER SPAN UNITS — METER:
  A - AMMETER
  V - VOLTMETER
  VAR - VAR METER
- LR — LINE REACTOR
- CURRENT TRANSFORMER
- POTENTIAL TRANSFORMER
- GENERATOR
- GENERATOR RECEPTACLE
- SPD — SURGE PROTECTIVE DEVICE
- GROUND
- DISC — UTILITY / POWER TRANSFORMER

TYPICAL CABLE & CONDUIT DESIGNATIONS

2 SETS OF 4#600KCM , 1#250KCM(G) - 4"C.

- 2 SETS OF 4#600KCM — QUANTITY OF PARALLEL SETS OF PHASE/NEUTRAL/GROUND CONDUCTORS & CONDUITS INDICATED
- 4#600KCM — QUANTITY & GAUGE OF PHASE/NEUTRAL CONDUCTORS
- 1#250KCM(G) — QUANTITY & GAUGE OF GROUND CONDUCTORS
- 4" — CONDUIT SIZE

2 TSP #16 - 3/4" C.

- 2 TSP — QUANTITY TWISTED SHIELDED PAIR CABLES
- #16 — WIRE GUAGE
- 3/4" — CONDUIT SIZE

GEORGIA REGISTERED PROFESSIONAL ENGINEER — CHARLES K. BUTTERFIELD — 03/24/2026 — NO. 31217

ELECTRICAL SYMBOLS

BFIELD ENGINEERING, LLC
4180 Providence Road, Suite 325
Marietta, GA 30062
Phone: (678) 650-0732

RELEASES

WWTP IMPROVEMENTS
FOR THE
TOWN OF TIGNALL
WILKES COUNTY, GA

Carter & Sloope
CONSULTING ENGINEERS
115 WOODLAND WAY, SUITE 120, CANTON, GA 30114. 770.479.8782 TEL
GA COA LICENSE# PEF001004 EXPIRES 6/30/2026

THIS LINE IS ONE INCH LONG WHEN DRAWING IS PLOTTED FULL SCALE

DSGN: RV	DRWN: RV
SCALE: AS SHOWN	
PROJ. NO.: T7040.003	
DATE: 03/24/2026	SHEET NO.: E.1

ABBREVIATIONS

A	AMP(S)
A/C	AIR CONDITIONING
AC	ALTERNATING CURRENT
AFCI	ARC FAULT CIRCUIT INTERRUPTER
AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
AIC	AMPERE INTERRUPTING CAPACITY
AL	ALUMINUM
AR	ALARM RELAY
ATS	AUTOMATIC TRANSFER SWITCH
AUX	AUXILIARY
AWG	AMERICAN WIRE GAUGE
BC	BARE COPPER CONDUCTOR
BKR	BREAKER
C	CONDUCTOR/CONTACTOR
CB	CIRCUIT BREAKER
CKT	CIRCUIT
CLG	CEILING
CND	CONDUIT
CONC	CONCRETE
CPT	CONTROL POWER TRANSFORMER
CR	CONTROL RELAY
CS	CONTROL SWITCH
CT	CURRENT TRANSFORMER
CU	COPPER
DB	DUCT BANK
DC	DIRECT CURRENT
DIA	DIAMETER
DP	DISTRIBUTION PANEL
DPSH	DIFFERENTIAL PRESSURE SWITCH
DS	DISCONNECT SWITCH
DWG	DRAWING
EC	ELECTRICAL CONTRACTOR
EF	EXHAUST FAN
EG	EQUIPMENT GROUND
EL	ELEVATION
ELEC	ELECTRIC(AL)
EM	EMERGENCY
EMH	ELECTRICAL MANHOLE
EMT	ELECTRICAL METALLIC TUBING
ENCL	ENCLOSURE/ENCLOSED
EQUIP	EQUIPMENT
ES	EMERGENCY STOP SWITCH
EX	EXISTING OR EXAMPLE
FC	FLOW CONTROLLER
FDR	FEEDER
FLA	FULL LOAD AMPS
FMC	FLEXIBLE METAL CONDUIT
FOR	FORWARD-OFF-REVERSE
FPP	FIBER OPTIC PATCH PANEL
FS	FLOW SWITCH
FU	FUSE
FUT	FUTURE
FVNR	FULL VOLTAGE NON-REVERSING
FVR	FULL VOLTAGE REVERSING
G, GND	GROUND
GALV	GALVANIZED
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GFR	GROUND FAULT RELAY
GRC	GROUNDING ELECTRODE CONDUCTOR
GRMC	GALVANIZED RIGID METAL CONDUIT
HH	HAND HOLE
HOA	HAND-OFF-AUTOMATIC SWITCH
HS	HAND SWITCH (STATION)
HTR	MOTOR SPACE HEATER
HVAC	HEATING, VENTILATION, AIR CONDITIONING
HZ	HERTZ
I/O	INPUT/OUTPUT
IG	INSIDE DIAMETER
IMC	INTERMEDIATE METAL CONDUIT
INST	INSTANTANEOUS
INT	INTERLOCK
JB	JUNCTION BOX
KCMIL	THOUSAND CIRCULAR MILS
KV	KILOVOLTS
KVA	KILOVOLT-AMPS
KVAR	KILOVOLT-AMPS REACTIVE
KW	KILOWATT
KWH	KILOWATT-HOUR
LA	LIGHTNING ARRESTOR
LC	LIGHTING CONTACTOR
LCP	LOCAL CONTROL PANEL
LFMC	LIQUID TIGHT FLEXIBLE METAL CONDUIT
LOR	LOCAL-OFF-REMOTE
LP	LIGHTING PANELBOARD
LRA	LOCK ROTOR AMPS
LSC	LIMIT SWITCH CLOSED
LSH	LIMIT SWITCH HIGH
LSL	LIMIT SWITCH LOW
LSO	LIMIT SWITCH OPEN
LTG	LIGHTING
LV	LOW VOLTAGE
M	MOTOR CONTACTOR
MA	MILLIAMP(S)
MC	METAL CLAD CABLE
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MCM	THOUSANDS OF CIRCULAR MILS
MCP	MOTOR CIRCUIT PROTECTION
MFR	MANUFACTURE(R)
MH	MANHOLE
MHC	MECHANICALLY HELD CONTACTOR
MISC	MISCELLANEOUS
MLO	MAIN LUGS ONLY
MOP	MOTOR OPERATOR PANEL
MOV	MOTOR OPERATED VALVE
MPR	MOTOR PROTECTION RELAY
MTR	MOTOR
N	NEUTRAL
N/A	NOT APPLICABLE
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NIC	NOT IN CONTRACT
NL	NIGHT LIGHT
NO	NORMALLY OPEN OR NUMBER
NOM	NOMINAL
NP	NAME PLATE
NTS	NOT TO SCALE
P	POLE
PB	PUSH BUTTON, PANIC BUTTON OR PULL BOX
PE	PHOTOELECTRIC CELL
PF	POWER FACTOR
PFR	PHASE FAILURE / PHASE REVERSAL RELAY
PH	PHASE
PLC	PROGRAMMABLE LOGIC CONTROLLER
PNL	PANEL
PRI	PRIMARY
PS	PRESSURE SWITCH
PT	POTENTIAL TRANSFORMER
PVC	POLYVINYL CHLORIDE
PWR	POWER
QSH	SHEAR PIN LIMIT SWITCH
QTY	QUANTITY
RCT	REACTOR
REC	RECEPTACLE
REF	REFERENCE
REQD	REQUIRED
RMC	RIGID METAL CONDUIT
RMS	ROOT MEAN SQUARED
RNC	RIGID NON-METALLIC CONDUIT
RTD	RESISTANCE TEMPERATURE DETECTOR
RTU	REMOTE TERMINAL UNIT
SCH	SCHEDULE
SEC	SECONDARY
SHH	SIGNAL HAND HOLE
SP	SPARE
SPB	SIGNAL PULL BOX
SPDT	SINGLE POLE DOUBLE THROW
SPEC	SPECIFICATION
SS	STAINLESS STEEL
SV	SOLENOID OPERATED VALVE
SW	SWITCH
SYM	SYMMETRICAL
SYS	SYSTEM
TB	TERMINAL BOX
TBB	TELEPHONE BACKBOARD
TGB	TELECOMMUNICATIONS GROUNDING BUSBAR
TH	THERMOSTAT
TMCB	THERMAL MAGNETIC CIRCUIT BREAKER
TR	TIMED RELAY
TSH	TEMPERATURE SWITCH HIGH
TSP	TWISTED SHIELDED PAIR
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
TYP	TYPICAL
UG	UNDER GROUND
UH	UNIT HEATER
UL	UNDERWRITER'S LABORATORY
UNO	UNLESS NOTED OTHERWISE
V	VOLT
VA	VOLT-AMPERE
VAR	VOLT-AMPERE REACTIVE
VFD	VARIABLE FREQUENCY DRIVE
VIS	VIBRATION SWITCH
VPS	VACUUM PRESSURE SWITCH
VT	VOLTAGE TRANSFORMER
W	WATT OR WIRE
WH	WATER HEATER
WP	WEATHERPROOF OR WATERPROOF
XFMR	TRANSFORMER
XH	WARNING HORN
XL	WARNING LIGHT
XP	EXPLOSION PROOF
XX	ITEM IDENTIFIER NUMBER PLACEHOLDER
ZS	POSITION LIMIT SWITCH
ZSC	POSITION LIMIT SWITCH CLOSED
ZSO	POSITION LIMITS SWITCH OPEN
ZT	POSITION TRANSMITTER

GENERAL NOTES

1. ALL ELECTRICAL WORK BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF THE NFPA 70, NATIONAL ELECTRICAL CODE (NEC), NFPA 101 LIFE SAFETY CODE, NFPA 820, STANDARDS FOR FIRE PROTECTION IN WASTEWATER TREATMENT AND COLLECTION FACILITIES AND LOCAL AUTHORITIES HAVING JURISDICTION.
2. ELECTRICAL SYMBOLS, ABBREVIATIONS, AND NOTATIONS USED ON THE DRAWINGS WILL BE AS PER THE PROVIDED LEGEND, SHEET E1.1.
3. ALL ELECTRICAL EQUIPMENT AND MATERIALS WILL BE LISTED AND APPROVED FOR THEIR INTENDED USE.
4. CONDUIT AND DEVICE LOCATIONS ARE SHOWN ON THE DRAWINGS SCHEMATICALLY. THE CONTRACTOR MUST FIELD LOCATE THE DEVICES AND ROUTE THE CABLES AND CONDUITS AS REQUIRED.
5. THE ELECTRICAL CONTRACTOR WILL COORDINATE WITH OTHER TRADES TO ENSURE PROPER INSTALLATION AND AVOID CONFLICTS. ELECTRICAL CONTRACTOR WILL WORK CLOSELY WITH GENERAL CONTRACTOR AND VERIFY EXACT TYPES OF EQUIPMENT AND DIMENSIONS TO BE INSTALLED WHICH MAY AFFECT THE EXACT PLACEMENT OF ELECTRICAL WORK.
6. APPRAISE ALL TRADES OF ELECTRICAL EQUIPMENT THAT AFFECTS WALL THICKNESSES, PLUMBING, MECHANICAL, ETC.
7. VERIFY THE EXACT LOCATION OF ALL MOTORS AND EQUIPMENT BEFORE ROUGHING IN.
8. ELECTRICAL PLANS INDICATE TYPICAL WIRING REQUIREMENTS FOR PROCESS EQUIPMENT. PRIOR TO ROUGH-IN, ENSURE THE EXACT WIRING REQUIREMENTS AND DEVICE LOCATIONS BY REFERENCING APPROVED MANUFACTURER SHOP DRAWINGS. THE OWNER WILL NOT COVER THE COST OF MINOR WIRING ADJUSTMENTS NEEDED TO COMPLY WITH THE MANUFACTURERS INSTALLATION DETAILS.
9. CONTRACTOR TO VERIFY MECHANICAL EQUIPMENT REQUIREMENTS FROM MANUFACTURER PRIOR TO ROUGHING IN CONDUITS. ADJUST CONDUIT, WIRE, AND CIRCUIT PROTECTION SIZE ACCORDINGLY. NOTIFY ENGINEER IF REQUIREMENTS EXCEED THOSE DEPICTED ON THE ELECTRICAL PLANS.
10. ANY DEVIATIONS FROM THE APPROVED ELECTRICAL PLAN WILL BE COMMUNICATED AND APPROVED BY THE ENGINEER OF RECORD. ALL SUBSTITUTIONS TO MATERIALS OR EQUIPMENT MUST BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.
11. THE CONTRACTOR WILL CHECK ALL LIGHTING FIXTURES FOR EXACT TYPE AND MOUNTING BEFORE ROUGHING IN.
12. ELECTRICAL PANELS AND DISTRIBUTION EQUIPMENT WILL HAVE CLEAR ACCESS AND MAINTAIN THE REQUIRED WORKING CLEARANCES AS PER THE NEC.
13. EMERGENCY SHUT-OFF SWITCHES WILL BE PROVIDED AT DESIGNATED LOCATIONS FOR THE SAFETY OF PERSONNEL IN CASE OF ELECTRICAL EMERGENCIES.
14. ALL CONDUITS AND CABLES WILL BE ADEQUATELY SUPPORTED AND SECURELY FASTENED AS PER NEC REQUIREMENTS. ALL SUPPORTING AND FASTENING DEVICES SHALL BE STAINLESS STEEL.
15. ALL EXTERIOR ELECTRICAL ENCLOSURES SHALL BE NEMA 4X STAINLESS STEEL UNLESS OTHERWISE NOTED.
16. GROUNDING AND BONDING WILL BE INSTALLED IN ACCORDANCE WITH NEC REGULATIONS TO ENSURE ELECTRICAL SAFETY. ALL CONNECTIONS TO THE GROUNDING ELECTRODE WILL BE MADE USING AN EXOTHERMAL PROCESS, CADWELD OR EQUAL.
17. ALL EQUIPMENT WILL BE GROUNDED AND BONDED IN ACCORDANCE WITH THE NEC.
18. ELECTRICAL SERVICE ENTRANCE EQUIPMENT WILL BE INSTALLED AND SIZED IN ACCORDANCE WITH THE UTILITY COMPANY'S REQUIREMENTS.
19. ALL NEW OR MODIFIED INSTRUMENTS, UTILIZATION EQUIPMENT, CONTROL DEVICES, PANELS, ETC., WILL BE CLEARLY LABELED FOR EASY IDENTIFICATION, PER SPECIFICATION REQUIREMENTS.
20. THE ELECTRICAL CONTRACTOR WILL PROVIDE AND INSTALL APPROPRIATE WARNING AND SAFETY SIGNAGE AS REQUIRED BY LOCAL REGULATIONS.
21. THE ELECTRICAL CONTRACTOR WILL PROVIDE AS-BUILT DRAWINGS REFLECTING ANY CHANGES MADE DURING THE CONSTRUCTION PROCESS.
22. ALL INDICATING TRANSMITTER DEVICES IN EXTERIOR ENVIRONMENTS MUST BE INSTALLED WITHIN SUN/RAIN SHIELDS AS DETAILED. CONTRACTOR TO PROVIDE SUN/RAIN SHIELDS AND COORDINATE WITH INSTRUMENT SUPPLIERS BEFORE SUBMITTING SHOP DRAWINGS.
23. CONTRACTOR RESPONSIBLE FOR PROVIDING 120V AND ANALOG SURGE PROTECTION DEVICES FOR ALL INSTRUMENTS IN EXTERIOR ENVIRONMENTS. SURGE PROTECTION DEVICES MUST MEET SPECIFIED REQUIREMENTS.
24. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR INSTALLING AND MOUNTING ALL INSTRUMENTATION DEVICES, EXCLUDING THOSE PRE-INSTALLED ON SKIDS BY THE MANUFACTURER. COORDINATE REQUIREMENTS WITH SUPPLIERS BEFORE ROUGH-IN.
25. CONTROL AND POWER CONDUITS SHALL BE SEPARATED BY 1 FT AND SHALL BE IN SEPARATE JUNCTION BOXES AND DUCT BANKS. MAINTAIN 1 FT SEPARATION BETWEEN DUCT BANKS. POWER AND CONTROL RACEWAYS MAY ONLY BE COMBINED IN THE SAME RACEWAY WHEN EXPLICITLY INDICATED ON THE PROJECT DRAWINGS.
26. CONTRACTOR MUST VISIT THE WORK SITE(S) BEFORE SUBMITTING A BID TO ASSESS LOCAL CONDITIONS AND POTENTIAL CHALLENGES. ANY DISCREPANCIES BETWEEN PLANS AND EXISTING CONDITIONS MUST BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER.
27. NEW CONDUITS ARE REQUIRED FOR NEW CIRCUIT HOMERUNS. EXISTING OR SPARE CONDUITS MEETING PROJECT REQUIREMENTS MAY BE UTILIZED IF THEY ARE IN SERVICEABLE CONDITION.
28. DEMOLISH/REMOVE ALL EXISTING ELECTRICAL EQUIPMENT AND WIRING MADE OBSOLETE BY THIS RENOVATION AND RETURN TO THE OWNER OR DISPOSE OF AS DIRECTED BY THE ENGINEER.
29. CONTRACTOR TO PROVIDE ALL MATERIALS AND LABOR REQUIRED TO EXTEND CIRCUITS AND MAKE RECONNECTIONS TO ACTIVE ELECTRICAL DEVICES AS SHOWN ON THE DRAWINGS.
30. THE ELECTRICAL CONTRACTOR WILL OBTAIN ALL NECESSARY PERMITS AND APPROVALS BEFORE COMMENCING WORK. CONTRACTOR SHALL PAY ALL FEES ASSESSED BY ELECTRICAL UTILITY CO.
31. THE ELECTRICAL CONTRACTOR SHALL COORDINATE INSTALLATION OF THE ELECTRICAL SERVICE WITH THE LOCAL UTILITY COMPANY, CONTRACTOR, AND OWNER TO ENSURE TIMELY AVAILABILITY OF ELECTRIC POWER AS NEEDED.
32. ANY NECESSARY SHUTDOWNS WILL BE APPROVED IN WRITING BY THE OWNER AT LEAST TWO WEEKS IN ADVANCE. CONTRACTOR TO PROVIDE TEMPORARY/PUMP PUMPING PROVISIONS AND OTHER NECESSARY TEMPORARY ARRANGEMENTS IF OWNER-MANDATED MAXIMUM SHUTDOWN PERIODS ARE ANTICIPATED.
33. THE ELECTRICAL CONTRACTOR WILL CONDUCT THOROUGH TESTING AND COMMISSIONING OF ALL ELECTRICAL SYSTEMS BEFORE FINAL HANDOVER.

ELECTRICAL NOTES & ABBREVIATIONS

BFIELD ENGINEERING, LLC
4180 Providence Road, Suite 325
Marietta, GA 30062
Phone: (678) 650-0732

GEORGIA REGISTERED 28/04/2025 NO. 31217 PROFESSIONAL ENGINEER CHARLES K. BUTTERFIELD

RELEASES

WWTP IMPROVEMENTS
FOR THE
TOWN OF TIGNALL
WILKES COUNTY, GA

Carter & Sloope
CONSULTING ENGINEERS
115 WOODLAND WAY, SUITE 120, CANTON, GA 30114 . 770.479.8782 TEL
GA COA LICENSE# PEF001004 EXPIRES 6/30/2026

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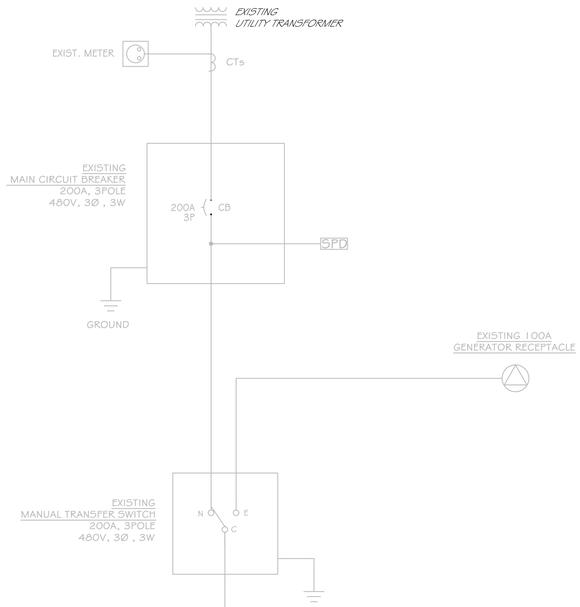
DSGN: RV	DRWN: RV
SCALE: AS SHOWN	
PROJ. NO.: T7040.003	
DATE: 03/24/2026	SHEET NO.: E.2

C:\BFIELD\ACCDOCS\BFIELD\GENERAL\PROJECT FILES\TIGNALL WWTP - T7040.003\CAD\1 DWGS\1 SHTS\TIGNALL ELECTRICAL



NOTES:

1. HOME RUN NEW CONDUCTORS FROM NEW BLOWER CONTROL PANEL TO MOTOR CONTROL CENTER. ROUTE CONDUIT THROUGH NEW CONDUIT FROM BLOWERS TO MOTOR CONTROL CENTER. ADD NEW 100A CIRCUIT BREAKER IN THE MOTOR CONTROL CENTER AS SHOWN.

2. PROVIDE NEW CIRCUIT BREAKERS IN EXISTING PANELBOARDS AS SHOWN ON PANELBOARD SCHEDULES.

EXISTING SINGLE PHASE LIGHTING PANEL "PANEL LA" LOCATION: OPERATIONS BUILDING

VOLTAGE, PHASE & AMPS: 120/240—1Ø 3W. 70AMP 70AMP KVA AIC: 10kAIC

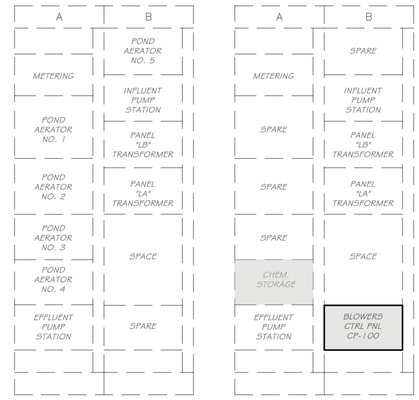
MOUNTING: SURFACE ENCLOSURE: NEMA 1 CONNECTED KVA OTHER:

CKT	DESCRIPTION	CB/P	PHASE A		PHASE B		CB/P	DESCRIPTION	CKT
1	EXIST. AERATOR CP	20/1	0.2	0.5			20/1	EXIST. AERATOR SPACE HEATERS	2
3	EXIST. AC UNIT	30/			2.0	0.3	20/1	EXIST. EXTERIOR & TOILET LIGHTS	4
5	|	/2	2.0	0.7			20/1	EXIST. LIGHTS	6
7	EXIST. WATER HEATER	30/			2.3	0.6	20/1	EXIST. DISHWASHER	8
9	|	/2	2.3	0.8			20/1	EXIST. RECEPTACLES	10
11	EXIST. REFRIGERATOR RECEPTACLE	20/1			0.2	0.1	20/1	EXIST. ATTIC VENTILATOR	12
13	EXIST. WIREMOLD OUTLETS	20/1	0.4	0.1			20/	EXIST. OUTLET	14
15	EXIST. WIREMOLD OUTLETS	20/1			0.4	0.1	/2	|	16
17	EXIST. WIREMOLD OUTLETS	20/1	0.4	0.1			20/	EXIST. OUTLET	18
19	EXIST. WIREMOLD OUTLETS	20/1			0.4	0.1	/2	|	20
21	EXIST. BLOWER CONT. POWER	20/1	0.1	-			20/1	EXIST. POLE OUTLETS	22
23	EXIST. P5 CONTROL POWER	20/1			0.2	-	20/1	EXIST. ELECTRIC ROOM OUTLETS	24
25	EXIST. POLE MOUNTED LIGHTS	20/	0.6	-			20/1	EXIST. A/C 120	26
27	|	/2			0.6	-	20/1	SPARE	28
29	EXIST. POLE MOUNTED RECEPT.	20/1	0.8	-			20/1	EXIST. CHLORINE PUMP RECEPT.	30
31	SCADA PANEL RTU-1	20/1			0.5	-	60/	SPARE	32
33	EFFLUENT FLOW METER FIT-200	20/1	0.5	-			/2	|	34
35	SPACE	20/1			-	-		SPACE	36
37	SPACE	20/1	-	-				SPACE	38
39	SPACE				-	-		SPACE	40
41	SPACE		-	-				SPACE	42

NOTE 2

SINGLE LINE DIAGRAM

SCALE: N.T.S.



EXISTING PROPOSED

NOTES:
1) PROVIDE NEW 100A CIRCUIT BREAKER TO FEED BLOWERS CONTROL PANEL CP-100.
2) PROVIDE NEW 50A CIRCUIT BREAKER TO FEED PROPOSED CHEMICAL STORAGE PANELBOARD LC.
3) RELABEL EXISTING MCC BUCKETS FEEDING AERATORS TO "SPARE".
4) SHADED CIRCUITS REPRESENT NEW CIRCUIT BREAKERS/STARTERS TO BE PROVIDED AND INSTALLED BY CONTRACTOR.

MCC ELEVATION

SCALE: N.T.S.

ONE LINE DIAGRAM

BFIELD ENGINEERING, LLC
4180 Providence Road, Suite 325
Marietta, GA 30062
Phone: (678) 650-0732

GEORGIA REGISTERED 03/24/2026 NO. 31217 PROFESSIONAL ENGINEER CHARLES K. BUTTERO

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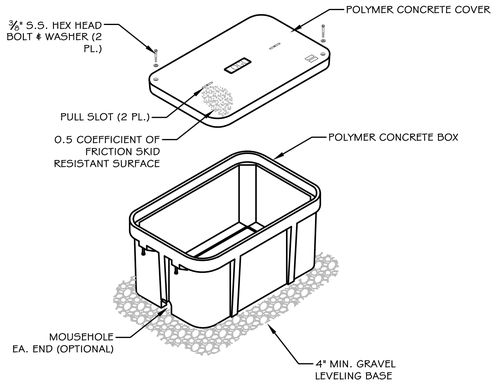
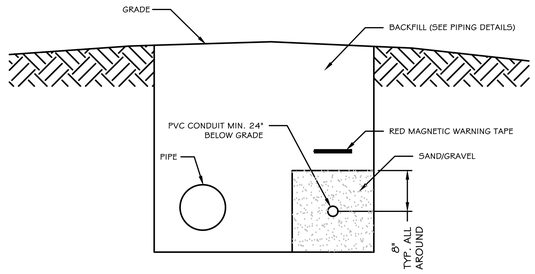


NOTES:
1) HANDHOLE TO BE POLYMER CONCRETE HUBBLE QUARTZITE OR EQUAL.
2) HANDHOLE DIMENSIONS AS REQUIRED PER THE QUANTITY AND SIZE OF CONDUCTORS & CONDUITS PER THE DUCT BANK SCHEDULE.
3) PROVIDE KNOCKOUTS OR LONG RADIUS CONDUIT BENDS UNDER BOX AS REQUIRED.
4) PROVIDE TRAFFIC RATED HANDHOLE AND COVER FOR HANDHOLES LOCATED IN ASPHALT OR CONCRETE PAVEMENT.
5) ALL REQUIRED SPLICES MADE IN THE PULL/JUNCTION BOXES SHALL BE MADE WATER TIGHT WITH HEAT SHRINKABLE INSULATORS WITH INTERNAL ADHESIVE SEALANT EQUAL TO "SHRINK-KON", 3M OR EQUAL.
6) INSTALL 5/8" x 10' COPPERCLAD GROUND ROD IN HAND HOLE, CONNECT ALL GROUNDING CONDUCTORS AND #4/0 COUNTERPOISE TOGETHER & BOND W/ EXOTHERMIC WELD.

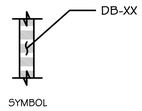
1 ELECTRICAL HANDHOLE DETAIL
SCALE: N.T.S.

HH-XX
SYMBOL

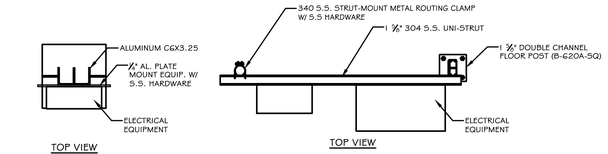


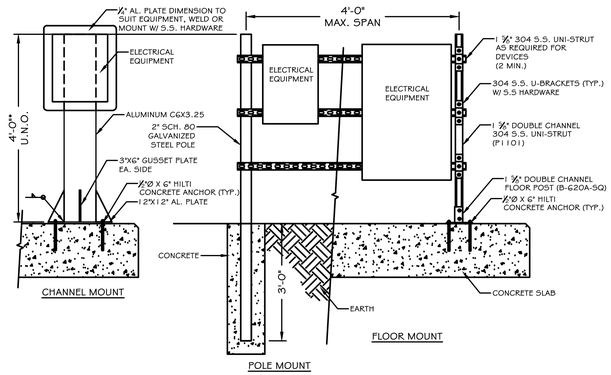
NOTES:
1) CONDUIT ROUTING DETAIL MAYBE BE USED FOR ROUTING CONDUITS WITH TWO (2) OR FEWER CONDUITS, SEE DUCT BANK SCHEDULE.
2) SIGNAL RACEWAY SHALL BE RUN AT LEAST ONE (1) FOOT AWAY FROM POWER & CONTROL RACEWAY. EACH PVC DUCT SHALL CONTAIN A #10 MIN. AWG GREEN GROUNDING CONDUCTOR. POWER & CONTROL MAY BE RUN IN THE SAME RACEWAY.

2 CONDUIT ROUTING DETAIL
SCALE: N.T.S.



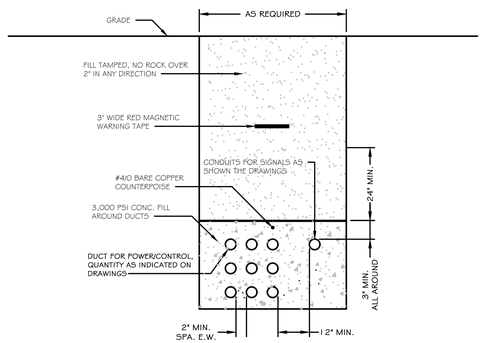
SYMBOL

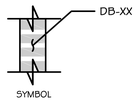




NOTES:
1) IF EQUIPMENT RACK EXCEEDS MAXIMUM SPAN PROVIDE ADDITIONAL SUPPORT MEMBERS.
2) USE POLE MOUNT SUPPORTS IN CONCRETE SIDEWALKS/DRIVES. IF REQUIRED, THICKEN SLABS UNDER FLOOR POST SUPPORT TO MINIMUM 12".
3) *MAXIMUM SUPPORT HEIGHT IS 5'-0".
4) COAT ALUMINUM IN CONTACT W/ CONCRETE WITH AN ASPHALT OR BITUMINOUS COATING.

3 EQUIPMENT SUPPORT DETAIL
SCALE: N.T.S.





SYMBOL

4 DUCTBANK INSTALLATION DETAILS
SCALE: N.T.S.

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ELECTRICAL DETAILS

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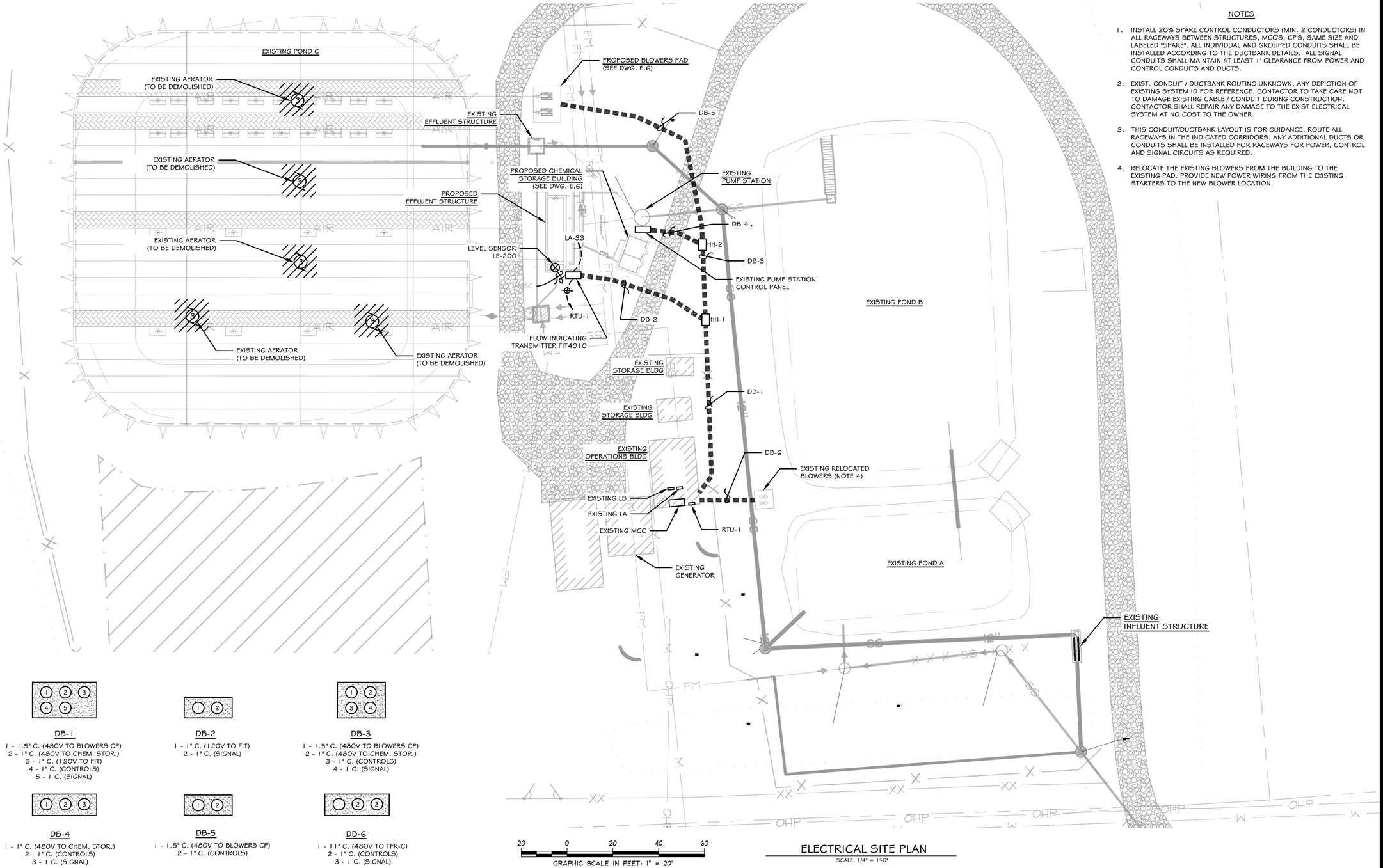

ELECTRICAL SITE PLAN
SCALE: 1/4" = 1'-0"

DB-1
1 - 1.5" C. (480V TO BLOWERS CP)
2 - 1" C. (480V TO CHEM. STOR.)
3 - 1" C. (120V TO FIT)
4 - 1" C. (CONTROLS)
5 - 1 C. (SIGNAL)

DB-2
1 - 1" C. (120V TO FIT)
2 - 1" C. (SIGNAL)

DB-3
1 - 1.5" C. (480V TO BLOWERS CP)
2 - 1" C. (480V TO CHEM. STOR.)
3 - 1" C. (CONTROLS)
4 - 1 C. (SIGNAL)

DB-4
1 - 1" C. (480V TO CHEM. STOR.)
2 - 1" C. (CONTROLS)
3 - 1 C. (SIGNAL)

DB-5
1 - 1.5" C. (480V TO BLOWERS CP)
2 - 1" C. (CONTROLS)

DB-6
1 - 1 1" C. (480V TO TFR-C)
2 - 1" C. (CONTROLS)
3 - 1 C. (SIGNAL)

NOTES:

1. POWER CIRCUIT CONDUITS SHALL BE SCHEDULE 40 RIGID PVC.

LEGEND

(#) DUCTBANK W/ SAND HATCH INDICATES SAND FILLED DUCTBANKS SEE CONDUIT ROUTING DETAIL SHEET E.3.

ELECTRICAL DUCTBANK SCHEDULE
SCALE: N.T.S.

NOTES

1. INSTALL 20% SPARE CONTROL CONDUCTORS (MIN. 2 CONDUCTORS) IN ALL RACEWAYS BETWEEN STRUCTURES, MCC'S, CP'S, SAME SIZE AND LABELED "SPARE". ALL INDIVIDUAL AND GROUPED CONDUITS SHALL BE INSTALLED ACCORDING TO THE DUCTBANK DETAILS. ALL SIGNAL CONDUITS SHALL MAINTAIN AT LEAST 1' CLEARANCE FROM POWER AND CONTROL CONDUITS AND DUCTS.
2. EXIST. CONDUIT / DUCTBANK ROUTING UNKNOWN, ANY DEPICTION OF EXISTING SYSTEM ID FOR REFERENCE. CONTACTOR TO TAKE CARE NOT TO DAMAGE EXISTING CABLE / CONDUIT DURING CONSTRUCTION. CONTACTOR SHALL REPAIR ANY DAMAGE TO THE EXIST ELECTRICAL SYSTEM AT NO COST TO THE OWNER.
3. THIS CONDUIT/DUCTBANK LAYOUT IS FOR GUIDANCE, ROUTE ALL RACEWAYS IN THE INDICATED CORRIDORS. ANY ADDITIONAL DUCTS OR CONDUITS SHALL BE INSTALLED FOR RACEWAYS FOR POWER, CONTROL AND SIGNAL CIRCUITS AS REQUIRED.
4. RELOCATE THE EXISTING BLOWERS FROM THE BUILDING TO THE EXISTING PAD. PROVIDE NEW POWER WIRING FROM THE EXISTING STARTERS TO THE NEW BLOWER LOCATION.

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ELECTRICAL SITE PLAN

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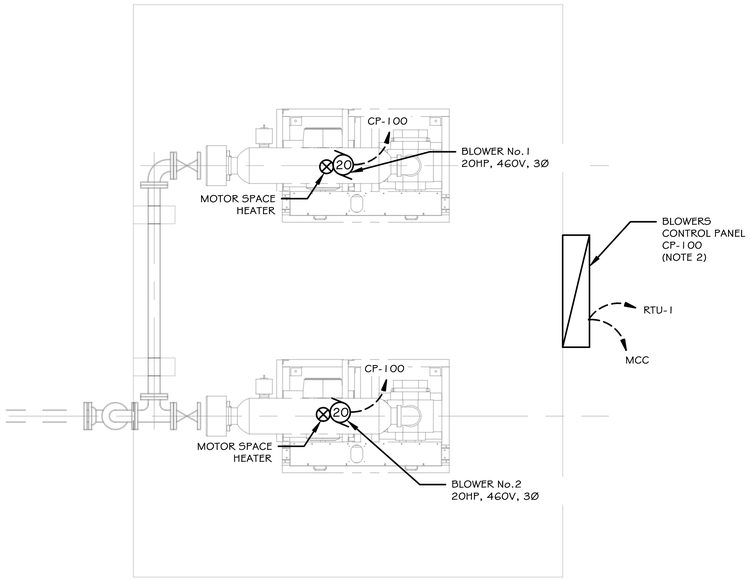
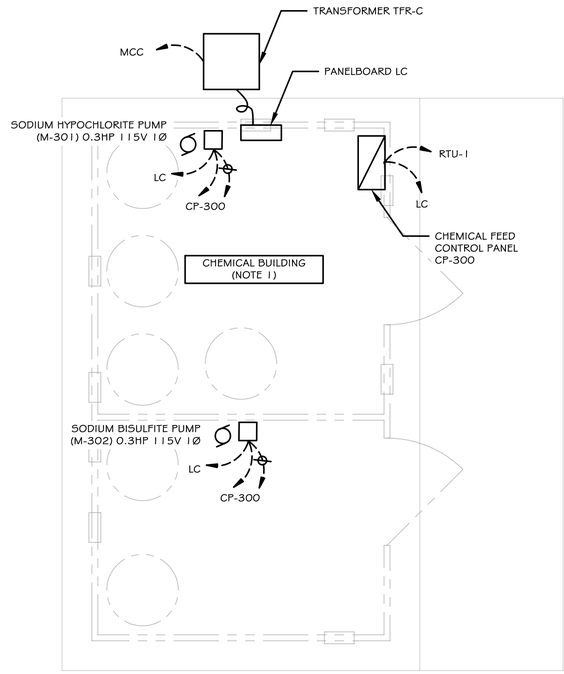


PROPOSED BLOWERS PAD ELECTRICAL PLAN

SCALE: 1/2" = 1'-0"



CHEMICAL STORAGE ELECTRICAL PLAN

SCALE: 1/2" = 1'-0"

NOTES

1. CONTROL BUILDING TO COME PREWIRED WITH THE FOLLOWING EQUIPMENT:
   1.1. HVAC
   1.2. LIGHTING
   1.3. PANEL LA
   1.4. RECEPTACLES
2. MOUNT ELECTRICAL BLOWER CONTROL PANEL CP-100 TO EQUIPMENT SUPPORT SEE DETAIL SHEET E.4.
3. GENERAL ELECTRIC NOTES APPLY TO THE ELECTRICAL PLAN SEE SHEET E.2.
4. THE ELECTRICAL CONTRACTOR WILL COORDINATE WITH OTHER TRADES TO ENSURE PROPER INSTALLATION AND AVOID CONFLICTS. ELECTRICAL CONTRACTOR WILL WORK CLOSELY WITH GENERAL CONTRACTOR AND VERIFY EXACT TYPES AND LOCATIONS OF EQUIPMENT AND PIPING TO BE INSTALLED WHICH MAY AFFECT THE PLACEMENT OF ELECTRICAL WORK.

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ENLARGED ELECTRICAL PLANS

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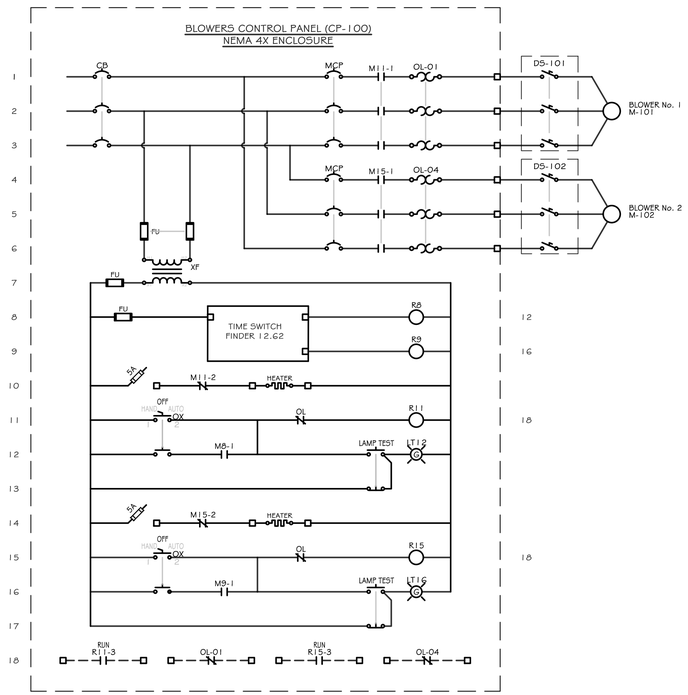
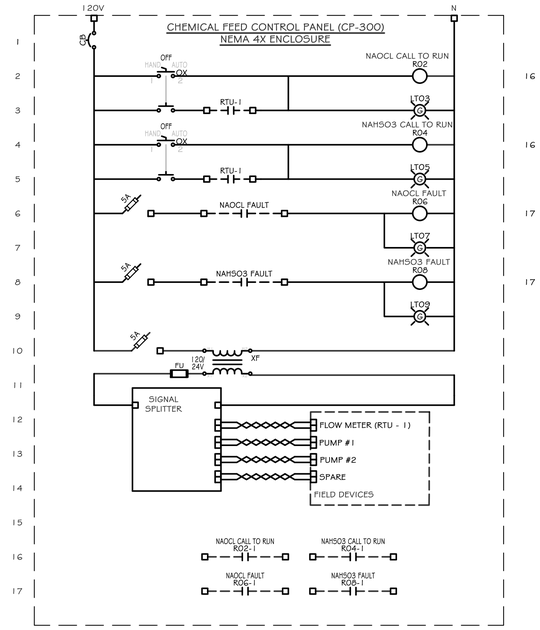




CHEMCIAL FEED CONTROL PANEL CP-300

SCALE: N.T.S

NOTE:

1) THE CONTRACTOR SHALL PROVIDE WIRING DIAGRAM DRAWINGS, A BILL OF MATERIALS, & A LAYOUT PLAN FOR THE CONTROL PANEL AND ALL ASSOCIATED COMPONENTS. THESE DOCUMENTS MUST BE SUBMITTED FOR THE ENGINEER'S REVIEW & APPROVAL PRIOR TO FABRICATION.

2) CP-100 & CP-300 MAY BE COMBINED INTO A SINGLE CONTROL PANEL.

BLOWERS CONTROL PANEL SCHEMATIC

SCALE: N.T.S

BLOWER CONTROL PANEL CP-100

A. SCOPE OF WORK

1. CONTRACTOR SHALL PROVIDE ONE PANEL TO POWER AND CONTROL THE TWO (2) PROPOSED 20HP BLOWERS.
2. THE POWER SERVICE FOR EACH BLOWER WILL BE 460VOLTS, 3-PHASE, 60 HERTZ.
3. THE CONTROL PANEL LIST OF DEVICES IS DESCRIBED BELOW. THE EQUIPMENT LISTED BELOW IS A GUIDE AND DOES NOT RELIEVE THE CONTROLLER MANUFACTURER FROM SUPPLYING A SYSTEM THAT WILL FUNCTION AS REQUIRED.

B. ENCLOSURE

1. THE ENCLOSURE SHALL BE A NEMA 4X WATERPROOF, CORROSION RESISTANT, 304 STAINLESS STEEL WITH INNER DEAD FRONT DOOR. THE ENCLOSURE SHALL ADEQUATELY HOUSE ALL OF THE COMPONENTS. THE DOOR GASKET SHALL BE RUBBER COMPOSITION WITH A RETAINER TO ASSURE A POSITIVE SEAL.
2. FOR NEMA 4X ENCLOSURES, A POLISHED ALUMINUM DEAD FRONT SHALL BE MOUNTED ON A CONTINUOUS AIRCRAFT TYPE HINGE, CONTAIN CUTOUTS FOR MOUNTED EQUIPMENT, AND PROVIDE PROTECTION OF PERSONNEL FROM LIVE INTERNAL WIRING. "HAND-OF-AUTO" CONTROL SWITCHES, INDICATOR PILOT LIGHTS, AND ELAPSED TIME METERS, SHALL BE MOUNTED ON THE EXTERNAL SURFACE OF THE DEAD FRONT. THE DEAD FRONT SHALL OPEN A MINIMUM OF 150 DEGREES TO ALLOW ACCESS TO EQUIPMENT FOR MAINTENANCE.

C. BACK PLATE

1. THE BACK PLATE SHALL BE MANUFACTURED OF 12 GAUGE SHEET STEEL AND BE FINISHED WITH A PRIMER COAT AND TWO (2) COATS OF BAKED ON WHITE ENAMEL. ALL HARDWARE MOUNTED TO THE SUBPANEL SHALL BE ACCOMPLISHED WITH MACHINE THREAD TAPPED HOLES. SHEET METAL SCREWS ARE NOT ACCEPTABLE. ALL DEVICES SHALL BE PERMANENTLY IDENTIFIED.

D. PILOT DEVICES

1. ALL PILOT DEVICES SHALL BE 30MM SIEMENS CLASS 52 OR EQUAL.
2. FOR NEMA 4X ENCLOSURES, ALL PILOT DEVICES SHALL BE MOUNTED ON THE INNER DEAD FRONT DOOR FOR UNLESS OTHERWISE NOTED.
3. THE CONTROL PANEL SHALL INCLUDE THE FOLLOWING FOR EACH BLOWER:
   a. RUNNING LIGHT
   b. HOA SELECTOR SWITCHES
   c. ELAPSED TIME METER

E. MAIN DISCONNECT, CIRCUIT BREAKERS, LIGHTNING PROTECTION

1. THE CONTROL PANEL SHALL HAVE A MAIN CIRCUIT BREAKER DISCONNECT.
2. EACH CONSTANT SPEED MOTOR STARTER SHALL HAVE CIRCUIT BREAKERS THAT ARE HEAVY DUTY THERMAL MAGNETIC OR MOTOR CIRCUIT PROTECTORS SIMILAR AND EQUAL TO SIEMENS. EACH BREAKER SHALL BE SIZED TO MEET THE PUMP MOTOR OPERATING CHARACTERISTICS AND SHALL HAVE A MINIMUM OF 22,000 AMPS INTERRUPTING CAPACITY AT 480 VAC.
3. CIRCUIT BREAKERS SHALL BE INDICATING TYPE PROVIDING "ON-OFF-TRIP" POSITIONS OF THE OPERATING HANDLE WHEN THE BREAKER IS TRIPPED AUTOMATICALLY, THE HANDLE SHALL ASSUME A MIDDLE POSITION INDICATING "TRIP".

F. MOTOR STARTERS

1. MAGNETIC MOTOR STARTERS SHALL BE FURNISHED FOR EACH BLOWER MOTOR. STARTERS OF NEMA SIZE 1 AND ABOVE SHALL BE DESIGNED FOR ADDITION OF AT LEAST TWO AUXILIARY CONTACTS. STARTERS RATED "0", "00", OR FRACTIONAL SIZE ARE NOT ACCEPTABLE. POWER CONTACTS SHALL BE DOUBLE-BREAK AND MADE OF CADMIUM OXIDE SILVER. ALL MOTOR STARTERS SHALL BE EQUIPPED TO PROVIDE UNDER-VOLTAGE RELEASE AND OVERLOAD PROTECTION ON ALL THREE PHASES. PROVIDE SOLID STATE OVERLOADS. BIMETALLIC TYPE THERMAL OVERLOADS ARE NOT ACCEPTABLE. STARTERS SHALL BE EQUAL TO SIEMENS CLASS 14.

G. TRANSFORMER

1. THE 3KVA CONTROL TRANSFORMER SHALL BE LARGE ENOUGH TO PROVIDE 120 VAC FOR CONTROL CIRCUITS AND SEPARATE DUPLEX CONTROL POWER RECEPTACLE. THE TRANSFORMER SHALL UTILIZE CONTROL FUSES ON THE PRIMARY AND SECONDARY CIRCUITS. ONE LEG OF THE SECONDARY SHALL BE GROUNDED.

H. LOCAL & REMOTE ALARMS

1. INDIVIDUAL CONTROL RELAYS SHALL BE USED FOR REMOTE ALARMS. RELAYS SHALL HAVE ISOLATED NO & NC CONTACTS WIRED TO TERMINAL BLOCKS FOR FIELD INTERFACE.

I. ELECTRONIC TIMERS

1. FINDER MODEL 12.62 DIGITAL TIME SWITCH, WEEKLY PROGRAMMING-CAN BE PROGRAMMED IN "CLASSIC" MODE VIA THE JOYSTICK, OR "SMART" MODE VIA SMARTPHONES WITH NFC COMMUNICATIONS.

J. ANCILLARY EQUIPMENT

1. THE ANCILLARY EQUIPMENT LISTED BELOW SHALL BE INCLUDED WITH THE CONTROL PANEL.
   a. PHASE MONITOR FOR MONITORING INCOMING POWER.
   b. CONTROL PANEL ANTI-CONDENSATION HEATER.

K. MISCELLANEOUS

1. PANEL MARKINGS
   a. ALL COMPONENT PARTS IN THE CONTROL PANEL SHALL BE PERMANENTLY MARKED AND IDENTIFIED AS THEY ARE INDICATED ON THE DRAWING. MARKING SHALL BE ON THE BACK PLATE ADJACENT TO THE COMPONENT. ALL CONTROL CONDUCTORS AND TERMINALS SHALL BE IDENTIFIED WITH HEAT SHRINK TYPE, NON-ADHESIVE WIRE MARKERS.
2. TESTING
   a. ALL PANELS SHALL BE TESTED TO THE POWER REQUIREMENTS AS SHOWN ON THE PLANS TO ASSURE PROPER OPERATION OF ALL THE COMPONENTS. EACH CONTROL FUNCTION SHALL BE ACTIVATED TO CHECK FOR PROPER OPERATION AND INDICATION.
   b. FIELD COMMISSIONING AND STARTUP. THE PANEL SHALL BE TESTED IN THE FIELD BY AN AUTHORIZED STARTUP TECHNICIAN ASSURING ALL CONTROL DEVICES FUNCTION PROPERLY AND SEQUENCE OF OPERATION IS IN ACCORDANCE WITH SPECIFICATION REQUIREMENTS.
3. WARRANTY
   a. ALL EQUIPMENT SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF ACCEPTANCE. THE GUARANTEE SHALL BE EFFECTIVE AGAINST ALL DEFECTS IN WORKMANSHIP OR DEFECTIVE COMPONENTS.
4. MANUFACTURER
   a. THE CONTROL PANEL MANUFACTURER SHALL BE A UL508 LISTED SHOP FOR INDUSTRIAL CONTROL SYSTEMS SHALL PROVIDE EVIDENCE OF SUCH ON REQUEST FROM THE ENGINEER OR USING AUTHORITY. THE PANEL SHALL BE PROVIDED WITH A UL LABEL. THE PANEL SHOP SHALL HAVE BUILT UL508 CONTROL PANELS FOR NO LESS THAN 5 YEARS. PANEL SHALL BE PROVIDED BY APPLIED INDUSTRIAL CONTROLS (770) 614-7022, DUBLIN AUTOMATION (478) 353-1142 OR EQUAL.

CHEMICAL FEED CONTROL PANEL SPECIFICATIONS

A. SCOPE OF WORK

1. CONTRACTOR SHALL PROVIDE ONE PANEL TO CONTROL THE METERING PUMPS AND OTHER DEVICES AS SHOWN.
2. THE POWER SERVICE FOR THE CONTROL PANEL WILL BE 120VOLTS, 1-PHASE, 60 HERTZ.
3. THE CONTROL PANEL LIST OF DEVICES IS DESCRIBED BELOW. THE EQUIPMENT LISTED BELOW IS A GUIDE AND DOES NOT RELIEVE THE CONTROLLER MANUFACTURER FROM SUPPLYING A SYSTEM THAT WILL FUNCTION AS REQUIRED.
4. THE CONTRACTOR SHALL PROVIDE WIRING DIAGRAM DRAWINGS, A BILL OF MATERIALS, & A LAYOUT PLAN FOR THE CONTROL PANEL AND ALL ASSOCIATED COMPONENTS. THESE DOCUMENTS MUST BE SUBMITTED FOR THE ENGINEER'S REVIEW & APPROVAL PRIOR TO FABRICATION.
5. THE PANEL TO BE SUPPLIED WITH RELAY LADDER LOGIC, ALTERNATORS & ANALOG SPLITTERS AS REQUIRED AS REQUIRED.

B. ENCLOSURE

1. THE ENCLOSURE SHALL BE A NEMA 4X WATERPROOF, CORROSION RESISTANT, 304 STAINLESS STEEL WITH INNER DEAD FRONT DOOR. THE ENCLOSURE SHALL ADEQUATELY HOUSE ALL OF THE COMPONENTS. THE DOOR GASKET SHALL BE RUBBER COMPOSITION WITH A RETAINER TO ASSURE A POSITIVE SEAL.

C. BACK PLATE

1. THE BACK PLATE SHALL BE MANUFACTURED OF 12 GAUGE SHEET STEEL AND BE FINISHED WITH A PRIMER COAT AND TWO (2) COATS OF BAKED ON WHITE ENAMEL. ALL HARDWARE MOUNTED TO THE SUBPANEL SHALL BE ACCOMPLISHED WITH MACHINE THREAD TAPPED HOLES. SHEET METAL SCREWS ARE NOT ACCEPTABLE. ALL DEVICES SHALL BE PERMANENTLY IDENTIFIED.

D. PILOT DEVICES

1. ALL PILOT DEVICES SHALL BE 30MM SIEMENS CLASS 52 OR EQUAL.
2. THE CONTROL PANEL SHALL INCLUDE THE FOLLOWING FOR THE WELL PUMP:
   a. ALARM LIGHTS
   b. HOA SWITCH

E. TRANSFORMER

1. PROVIDE CONTROL CIRCUIT TRANSFORMER AS NEEDED.

F. LOCAL & REMOTE ALARMS

1. INDIVIDUAL CONTROL RELAYS SHALL BE USED FOR REMOTE ALARMS. RELAYS SHALL HAVE ISOLATED NO & NC CONTACTS WIRED TO TERMINAL BLOCKS FOR FIELD INTERFACE.

H. PUMP CONTROL DEVICES

1. THE METERING PUMP CALL TO RUN WILL BE PROVIDED BY RTU-1.

I. ANCILLARY EQUIPMENT

1. THE ANCILLARY EQUIPMENT LISTED BELOW SHALL BE INCLUDED WITH THE CONTROL PANEL.
   a. CONTROL PANEL ANTI-CONDENSATION HEATER.
   b. BATTERY
   c. ANALOG DISPLAYS W/ SPDT RELAYS
   d. RED NEMA 4X ALARM LIGHT PROVIDED LOOSE FOR MOUNTING TO THE OUTSIDE OF THE BUILDING.

J. MISCELLANEOUS

1. PANEL MARKINGS
   a. ALL COMPONENT PARTS IN THE CONTROL PANEL SHALL BE PERMANENTLY MARKED AND IDENTIFIED AS THEY ARE INDICATED ON THE DRAWING. MARKING SHALL BE ON THE BACK PLATE ADJACENT TO THE COMPONENT. ALL CONTROL CONDUCTORS AND TERMINALS SHALL BE IDENTIFIED WITH HEAT SHRINK TYPE, NON-ADHESIVE WIRE MARKERS.
2. TESTING
   a. ALL PANELS SHALL BE TESTED TO THE POWER REQUIREMENTS AS SHOWN ON THE PLANS TO ASSURE PROPER OPERATION OF ALL THE COMPONENTS. EACH CONTROL FUNCTION SHALL BE ACTIVATED TO CHECK FOR PROPER OPERATION AND INDICATION.
   b. FIELD COMMISSIONING AND STARTUP. THE PANEL SHALL BE TESTED IN THE FIELD BY AN AUTHORIZED STARTUP TECHNICIAN ASSURING ALL CONTROL DEVICES FUNCTION PROPERLY AND SEQUENCE OF OPERATION IS IN ACCORDANCE WITH SPECIFICATION REQUIREMENTS.

K. WARRANTY

1. ALL EQUIPMENT SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF ACCEPTANCE. THE GUARANTEE SHALL BE EFFECTIVE AGAINST ALL DEFECTS IN WORKMANSHIP OR DEFECTIVE COMPONENTS. VFDS SHALL BE GUARANTEED FOR A PERIOD NO LESS THAN THREE (3) YEARS.

L. MANUFACTURER

1. THE CONTROL PANEL MANUFACTURER SHALL BE A UL508 LISTED SHOP FOR INDUSTRIAL CONTROL SYSTEMS SHALL PROVIDE EVIDENCE OF SUCH ON REQUEST FROM THE ENGINEER OR USING AUTHORITY. THE PANEL SHALL BE PROVIDED WITH A UL LABEL. THE PANEL SHOP SHALL HAVE BUILT UL508 CONTROL PANELS FOR NO LESS THAN 5 YEARS. PANEL SHALL BE PROVIDED BY APPLIED INDUSTRIAL CONTROLS (770) 614-7022, OR APPROVED EQUAL.

RELEASES

WWTP IMPROVEMENTS
FOR THE
TOWN OF TIGNALL
WILKES COUNTY, GA

Carter & Sloope
CONSULTING ENGINEERS
115 WOODLAND WAY, SUITE 120, CANTON, GA 30114 . 770.479.8782 TEL
GA COA LICENSE# PEF001004 EXPIRES 6/30/2026

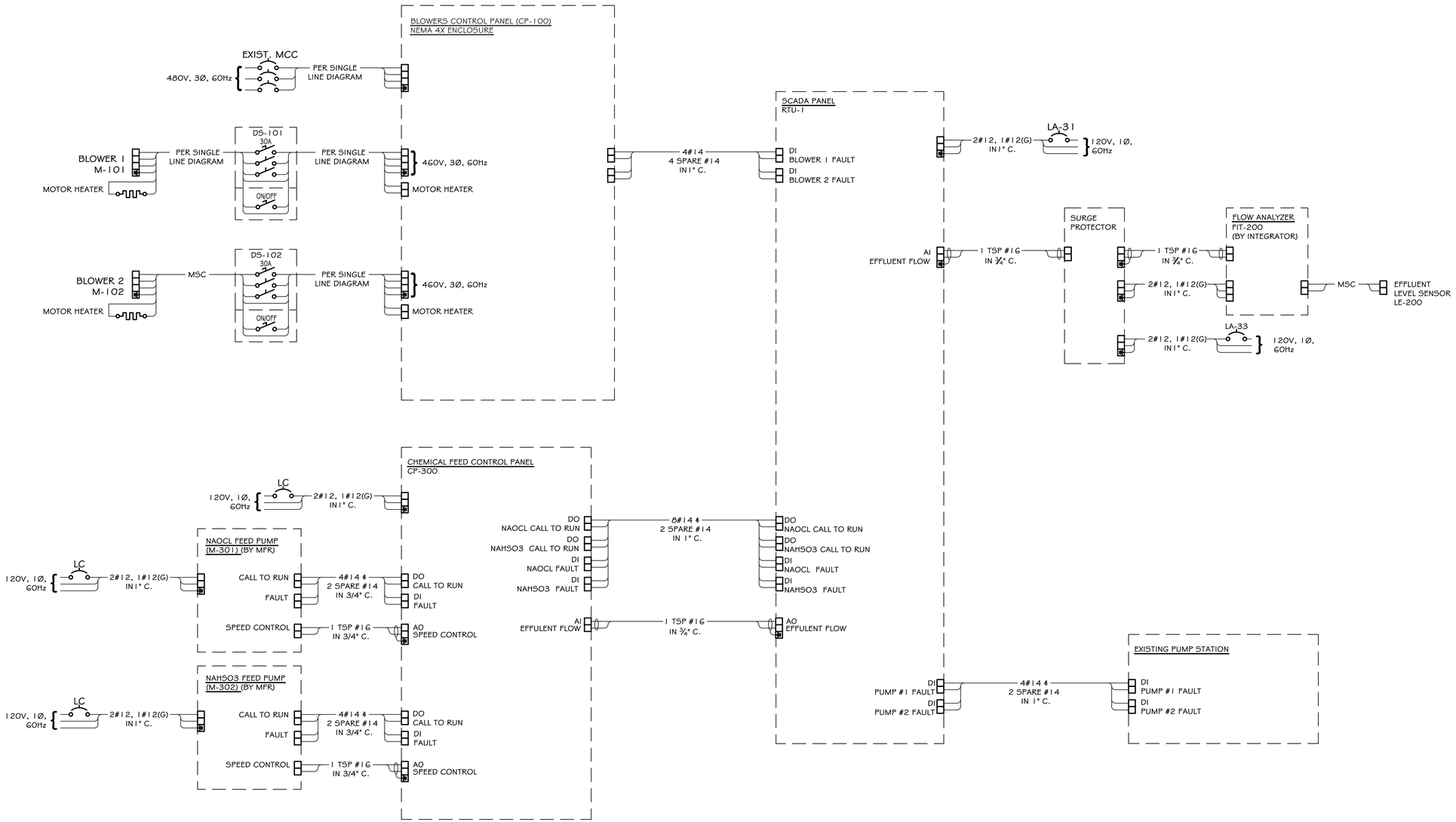
GEORGIA REGISTERED 28/04/2025 NO. 31217 PROFESSIONAL ENGINEER CHARLES K. BUTTERFIELD

THIS LINE IS ONE INCH LONG WHEN DRAWING IS PLOTTED FULL SCALE

DSGN: RV	DRWN: RV
SCALE: AS SHOWN	
PROJ. NO.: T7040.003	
DATE: 03/24/2026	SHEET NO.: E.7

ELECTRICAL SCHEMATICS

BFIELD ENGINEERING, LLC
4180 Providence Road, Suite 325
Marietta, GA 30062
Phone: (678) 650-0732



ELECTRICAL SCHEMATIC WIRING DIAGRAM

SCALE: N.T.S

WWTP IMPROVEMENTS
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TOWN OF TIGNALL
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RELEASES

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DSGN: RV	DRWN: RV
SCALE: AS SHOWN	
PROJ. NO.: T7040.003	
DATE: 03/24/2026	SHEET NO.: E.8

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