515 N. Main Street | Hinesville, GA 31313
PO Box 649 | Hinesville, GA 31310
912.368.5212
www.mesack.com
ME Sack Engineering
@mesackengineering
mesack

ADDENDUM No. ONE

Date: May 19, 2025

Project: Pembroke WWTP Expansion, MES No. 2020-48

Engineer: M.E. Sack Engineering
Hinesville, Georgia

The original plans, specifications, and bid documents are amended to include the following:

Advertisement for Request for Proposals:

- Replace the previous Advertisement with the enclosed of the same. Note that the bid date has changed from June 3, 2025 to July 1, 2025.

Instructions to Offerors:

- Replace the previous Instructions to Offerors (pgs. 2, 3, & 5) with the enclosed of the same. Note that the bid date and the schedule for the events following has changed.

Proposal Submission Form:

- Replace the previous Proposal Submission Form (ps. 15) with the enclosed of the same. Note that the Submission Deadline was revised.

Specifications:

- Replace the previous Section 15300 Valves (Sewer) with the enclosed of the same. Note that revisions were made to the plug valve port minimum percentage and the air release valve model.

Plans:

- Replace the previous sheets G6, C1, C2, C17, and M3 with the enclosed of the same. Description of changes can be found in the clarifications provided below.

The following clarifications are offered for questions received:

1. *There are notes saying "12 THK Conc. Mat Slab & Reinf. Details, Per Plan," where is the detail located?*
   - The headworks rebar is called out on the Headworks Slab and Wall Plan (Detail 1) on page 1S-1. It will have #5 @ 12" top and bottom, each way.

2. *Drawing M21 shows a valve vault with a plug valve and an air release valve at the station 11+43. However, there is no details about this vault. Will one be provided?*
   - A detail was provided on sheet C17.

3. *Spec. 02650.2.08.E calls for plug valve port of 70%, whereas spec. 15300.2.03.b calls for 90% port minimum. Should the buried valves be different than the exposed valves or should they all be 90% minimum?*
   - It should say “at least 70% of full pipe area”. Specification 15300 was updated accordingly.

4. *15300.2.03.D.3 indicates the air release valve for sewer should be similar to APCO model 200A. However, the 200A is a clean water air release valve.*
   - The air release valve on specification 15300 should read Series 400 similar to specification 02650.

5. *The plans call for PVC fittings on the pressurized force mains. Drawing C16 shows the restraint requirements and reflects wedge action restraining along with a detail of the same. However, with PVC fittings there will be no bolts to utilize a wedge action restrain gland and a bell type restraint will be required at these joints. Is this the intent of restraining requirements for the PVC force mains?*
   - For PVC pipes, a bell type restraint must be used.

6. *Is it acceptable for all drain lines to be DIP under structures and transition to PVC outside the structure, except for locations specifically noted as DIP?*
   - Yes, it is acceptable.

7. *Drawing M3 indicates that the drain from the influent channel to the reject pump station is 6", while G6 and C2 show this line as 4". Which is correct?*
   - The correct size is 4”. Drawing M3 was updated to show the correct size.

8. *At drawing M3, should there be a valve on the drain line from the influent channel to the reject pump station?*
   - Each channel drain must have a valve. Drawings C2 and M3 were updated to include valves.

9. *At drawing M3, should there be a floor pipe with water collar from the influent channel and the drain line to prevent leakage to underground?*
   - Yes, all drain lines should have a water collar to prevent leakage to underground.

10. *Is the odor control pipe/duct work fiberglass or PVC and if PVC what schedule?*
    - Odor Control duct pipe should be fiberglass.

11. *Where PVC lines are above grade, what schedule solvent weld pipe should be used?*
    - Schedule 80 should be used for PVC lines above grade.

12. *Is Schedule 40 DWV PVC acceptable for gravity drains 3" and under since SDR35 is not made smaller than 4"?*
    - Yes, schedule 40 DWV PVC is acceptable material.

13. *On drawing M3, are sleeves w/link seals required at all pipe penetrations through slabs?*
    - Yes, a seal is required for pipe penetrations.

14. *Are grated floor drains required for drain lines at slabs?*
    - Yes, grated floor drain is required for all drain lines at slabs.

15. *On drawing M3, the screen side elevation view shows "front spray wash" and "rear spray wash" locations, however we find no NPRL lines shown on the plans to this equipment. Are NPRL lines to be run to the screen?*
    - The screen must have an NPRL line for the "front spray wash" and "rear spray wash". Drawings on C1 and M3 were updated to show this line.

16. *Should an isolation ball valve be included on the 1" NPRL supply line to the odor control system?*
    - Yes, it should be included as shown on sheets C1 and M3.

-END-

SECTION I: ADVERTISEMENT FOR REQUEST FOR PROPOSALS

The City of Pembroke, Georgia publicly advertises its intention to contract for site construction and renovation of a wastewater treatment facility owned by the City and, based on present information, generally described as the project entitled “WWTP Expansion”.

This Notice further advertises a Request for Competitive Sealed Proposals from qualified firms pursuant to O.C.G.A. 36-91-20 et. Seq. for “WWTP Expansion”, dated **April 17, 2025.** In this regard, all interested persons desiring to contract with the City for the construction of this project shall submit sealed proposals marked “WWTP Expansion” regarding the same to M.E. Sack Engineering at its offices located at 515 N. Main Street, Hinesville, Georgia 31313, no later than **10:00 a.m., EST, on July 1, 2025.** At such time and place, all sealed proposals shall be opened so as to avoid disclosure of contents to competing offers.

Copies of RFP and material are available, by depositing a non-refundable five hundred dollars ($500.00) for each set of plans requested, from the project Engineer **M.E. Sack Engineering, 515 N. Main Street, P.O. Box 649, Hinesville, Georgia 31310,** telephone No.: 912.368.5212, email: bidding@mesack.com. All offerors are directed to review the complete set of RFP documents for complete and inclusive RFP requirements.

A **mandatory** pre-proposal conference and facility visit will be held on **May 20, 2025 at 10:00 a.m**. The meeting will be conducted at the City of Pembroke WWTP, 1784 Sims Road, Pembroke, Georgia 31321. A site visit will be required immediately following the meeting.

Each Contractor must prequalify by submitting a completed "Statement of Qualifications" form supplied by the Engineer. Proposals will be accepted from prequalified offerors only.

Proposals must be accompanied by a “Proposal Security” in an amount equal to at least five percent (5%) of the total amount proposed for the completed work.

No proposals may be withdrawn for a period of ninety (90) days after the closing time schedule for receipt of proposals.

The Owner reserves the right to accept or reject any or all proposals and to waive informalities. Award of the contract, if it is awarded, will be to the lowest responsible offeror. The City of Pembroke is committed to providing all persons with equal access to its services, programs, activities, education, and employment regardless of race, color, national origin, religion, sex, familial status, disability, or age.

NOTE: Plans and Specifications must be obtained no later than five (5) working days before the proposal date. No exceptions.

SECTION II: INSTRUCTIONS TO OFFERORS

A. SUBMISSION OF PROPOSALS:

1. A **mandatory** pre-proposal conference and facility visit will be held at the City of Pembroke WWTP, 1784 Sims Road, Pembroke, Georgia 31321 at 10:00 a.m. local time on May 20, 2025. A site visit will be required immediately following the meeting. Note: attendance by offerors is required, and any proposal received from an offeror who did not attend the pre-proposal conference will not be considered.

2. Sealed proposals will be received on behalf of the City of Pembroke by M.E. Sack Engineering located at 515 N. Main Street, P.O. Box 649, Hinesville, Georgia 31310 until 10:00 a.m. local time, on July 1, 2025 for all labor, materials, and equipment required to fully complete the work identified in the plans and specifications for the WWTP Expansion.

3. Failure to submit a proposal in the form requested or the inclusion of any alternates, conditions, limitations, or provisions not called for, will render the proposal irregular, and shall be considered sufficient cause for rejection of the proposal.

4. Proposal shall be enclosed in a sealed, opaque envelope, marked "WWTP Expansion", and shall bear the name and address of the Offeror, and other required documents. If the Proposal is sent through the mail or other delivery system, the sealed envelope shall be enclosed in a separate envelope with the notation **"PROPOSAL ENCLOSED"** on the face of it.

5. Each Offeror is responsible for seeing that its Proposal is received by the Owner not later than the advertised time set for the deadline of the Proposals, or authorized extension thereof. No proposal will be received after that time.

6. Proposals, together with the "Proposal Security", may be withdrawn by Offerors prior to the time set for official opening. After time has been called, no proposal may be withdrawn for a period of ninety (90) days after the time and date of the opening.

B. THE PROJECT:

1. The City of Pembroke is seeking proposals from qualified firms for the construction and renovation of the City's WWTP Expansion project. The work to be performed consists of furnishing all labor, materials, and equipment to complete the WWTP Expansion. More specifically, the project will consist of grading, demolition, granite roadway base, rock drive, asphalt paving, discharge, gravity sewer, drainage pipe and structures, electrical and controls, erosion control and grassing, complete influent pump station, complete

headworks and dump truck station, complete inline pump station, complete SBR system-based treatment plant, complete disk filtration system, complete UV disinfection, complete reject pump station, complete underdrain pump station, complete reclaimed water pump station, complete sludge dewatering system, emergency power supply, transformer, and laboratory casework. **The Owner desires that construction and/or renovation for this project commence on or before October 8, 2025.**

Any and all transactions made necessary by this RFP, as well as the Proposal Documents, shall be subject to the approval of the City of Pembroke (the "City").

C. GENERAL INFORMATION ABOUT THE SERVICES:

1. The Successful Offeror will assume responsibility for the project by issuing a lump sum proposal for the services which shall constitute a contractual obligation. The Offeror shall be required to prepare a project schedule and will be responsible for all methods of construction, safety, and coordination of all construction work and contracts related to ensure successful project completion. Minimum requirements for work to be performed are attached as the plans, specifications, and this RFP in its entirety to include all grant funding and EJCDC requirements.

D. PERMITS, INSPECTIONS, TESTING, AND INSURANCE:

1. All materials and construction shall conform to the requirements of all building codes and sanitary laws in effect in the City and/or in which the work is performed. The Contractor shall obtain and pay for all necessary permits, inspections, test, and insurance required by law, except the cost of any permit issued by the City and/or County in which the project is performed, shall be at no cost to the contractor or the project. In addition, if applicable to this project, the Owner shall pay for all utility connection fees, tap fees, impact fees, and any other fees associated with the utility connection/service to this project as well as Land Disturbance/Notice of Intent fees.

2. Whenever, in these Contract Documents, inspecting, testing, or certification of material(s) is called for, the selection of bureaus, laboratories, and/or agencies for such inspecting and testing shall be made by an Independent Testing Laboratory and the character of the test shall be stipulated by the Engineer. Documentary evidence satisfactory to the Engineer that the materials have passed the required inspection and test must be furnished in quadruplicate to the Engineer by the bureau, agency, or laboratory selected. Materials satisfactorily meeting the requirements of the inspection or tests shall be approved by the Engineer and the Contractor notified of the results. The cost of such inspecting and testing shall be paid for by the Contractor.

authorized negotiations following opening of the Proposals. For violation of this provision, the Owner reserves the right to reject the Proposal of the offending Offeror.

G. SCHEDULE OF RFP EVENTS:

1. The following Schedule of Events represents the Owner's best estimate of the schedule that will be followed. All times indicated are prevailing times in Hinesville, Georgia. The Owner reservices the right to adjust the schedule as it deems necessary or convenient.

Mandatory pre-proposal meeting (project site)	**May 20, 2025**	**10:00 AM**
Deadline for submission of questions	**May 27, 2025**	**5:00 PM**
Deadline to register and qualify for proposal	**May 27, 2025**	**5:00 PM**
Deadline for submission of proposals	**July 1, 2025**	**10:00 AM**
Selection committee concludes evaluations	**July 8, 2025**	**N/A**
Project Award	**July 10, 2025**	**N/A**
Ninety (90) day value engineering with Successful Offeror		
Project Commencement	**October 8, 2025**	**N/A**

NOTE: Attendance at the pre-proposal conference is required, and any proposal received from an offeror who did not attend the pre-proposal conference will not be considered.

H. PROPOSAL FORM AND CONTENT:

1. All Proposals shall be prepared in accordance with this RFP, and shall include the following (i) a Statement of Qualification (see Sec. III.H below); (ii) a Proposal Form (see Sec. III); (iii) Contractor Affidavit (see Sec. III.N); (iv) Local Preference Certification (see Sec. III.P); (v) Contract (see Sec. IV); and (vi) any and all other items or documents required or authorized by this RFP. Offerors must be sure to execute all required exhibits. Offerors must provide one (1) original, and two (2) hard copies of the completed Proposal for a total of three (3) sets of the Proposal. Each such set shall be identical and include a transmittal letter. Proposals must be typed on standard (8 ½" x 11") paper. All Proposals shall be prepared simply, succinctly, and economically to provide a straightforward and concise description of the matters requested. Emphasis must be on completeness, relevance, and clarity of content. To expedite the review of Proposals, it is essential that Offerors follow the format and instructions set forth herein. The Proposal shall be signed as follows:

   a) A Proposal submitted by a partnership shall list the names of all partners and shall be signed in the partnership name by one of the authorized members of the partnership. If there is no partner who is a Georgia resident, the name and address of an entity designated to receive service of process for the partnership in Georgia must be provided.

SECTION III: PROPOSAL SUBMISSION FORMS

MANDATORY PROPOSAL FORM: These forms must be submitted and returned to the Owner at the offices of M.E. Sack Engineering located at 515 North Main Street, Hinesville, Liberty County, Georgia 31313, prior to the Submission Deadline (i.e. 10:00 a.m. on July 1, 2025, unless changed by Addenda), and must be accompanied by the following documents:

(a) The Request for Proposals, and any and all other forms, documents, materials, and other information (e.g. Statement of Qualifications pursuant to Sec. II.Q, listing of subcontractors pursuant to Sec. II.L, etc.) required to be made a part of this Proposal, as indicated herein or in the Proposal Documents.

The above materials must be submitted in a sealed envelope in the manner provided in the Proposal Documents. If this form is not fully and accurately completed and submitted to the City, together with the other documents listed above, as required in the Proposal Documents, the City may (in its sole and absolute discretion) reject the Proposal.

A. TERMS OF PROPOSAL

This Proposal is submitted in accordance with the Proposal Documents and made subject to the following:

(a) The undersigned Offeror agrees, if this Proposal is accepted, to enter into with the City such contract(s) and warranties collectively as is necessary or appropriate for the subject Project in the form included in the Proposal Documents (or if not included, in such form as may be reasonably prescribed by the City) and to fully perform and observe the obligations and terms on its part to be performed therein. Said Agreement shall be executed by Offeror in the manner indicated therein and returned to the City after Offeror's notification of acceptance of the Proposal. Failure to execute the Agreement in a timely manner may result in disqualification of the Offeror.

(b) Offeror accepts all of the terms and conditions set forth in the Proposal Documents, including without limitation those dealing with the disposition of the Proposal Security. This Proposal will remain subject to acceptance for ninety (90) days following the Submission Deadline, or for such longer period of time that Offeror may agree to in writing upon request of the City.

(c) In submitting this Proposal, Offeror represents, as may be more fully set forth in the Proposal Documents, that:

SECTION 15300
VALVES (SEWER)

PART 1 - GENERAL

1.01 REFERENCE

A. Requirements of Section 1500 apply to all work under this section.

1.02 GENERAL

A. All valves two inches in diameter and smaller shall be constructed of brass or bronze except the hand wheel which shall be of malleable iron construction. Valves two inches in diameter and smaller shall have screwed ends unless approved otherwise. All valves 2½ inches in diameter and larger shall have flanged ends unless otherwise approved. They shall be iron body, bronze mounted, except that in the smaller sizes the valves may be all bronze at the Contractors option and expense.

B. The Contractor shall prepare and submit for approval complete detailed drawings of all valves in accordance with the requirements of the appropriate section of these specifications. All valves of the same type shall be from a single manufacturer. Parts of valves of the same type and size shall be interchangeable. Spare parts shall be furnished as specified under the proposal items. Special tools required for repacking or disassembling valves shall be provided.

C. All valves shall be carefully mounted in their respective positions free from all distortion and strain. All valves shall be properly packed and left in satisfactory operating condition at the completion of the project. All valves shall open left.

PART 2 - PRODUCTS

2.01 NUTS AND BOLTS

A. Flanged: square head MB/SF, hexagon nuts; ASTM 307B; ANSI B18.2, zinc plated.

2.02 GASKETS

A. Flanged pipe gaskets shall conform to requirements of ASA A21.10 and shall be suitable for the indicated services.

2.03 VALVES

A. Gate Valves

1. Unless otherwise specified or directed, gate valves three inches and larger shall have non rising stems and shall meet the requirements of AWWA Standard C 500. Valves for lighter pressures than the AWWA Standard shall meet the requirements of the above specifications except that the requirements for metal thicknesses and strengths and structural designs shall be adjusted as required to meet hydrostatic test pressures not less than 100 psi.

2. Unless otherwise specified or directed, gate valves smaller than three inches shall meet the requirements of Federal Specification WW V 54, Class A, 125 pounds.
3. All gate valves shall have standard stuffing box seals. Bonnet bolts, studs and nuts shall be cadmium plated. Seating devices shall be bronze to iron or bronze to bronze as specified or required. The glands shall be bronze or bronze brushed. Gland bolts and nuts shall be bronze.

4. All gate valves 2½ inches in diameter and larger shall be of the double disk type. All gate valves two inches in diameter and smaller may be of the double disk or the solid wedge type.

B. Plug Valves

1. Two way type.

2. Nonlubricated, eccentric with resilient faced plugs.

3. Port area of 4 to 20 inch valves shall be at least 70 percent of full pipe area.

4. Valves to be designed for 125 psi working pressure.

5. Bodies to be semi steel with raised seats.

6. Seats to have either a welded in overlay of approximately 90 percent pure nickel on surfaces contacting the plug face or shall be bronze conforming to ASTM B 62 and attached to the body by stainless steel set screws.

7. Upper and lower plug stem bushings to be stainless steel and shall be permanently lubricated.

8. Exposed nuts, bolts and washers to be zinc plated.

9. Flanges to be faced and drilled to ASA 125 pound standard.

C. Check Valves

1. Type: Ball Check

2. Ends: Flanged

3. Body: Cast Iron

4. Ball: Hollow steel with vulcanized nitril rubber coating.

5. Pressure Rating: 150 psi

6. Valves shall be suitable for sewage service as required.

7. Valve to be Flygt HDL or equal.

D. Automatic Sewage Air Release Valve

1. The automatic sewage air release valve shall be designed to allow entrapped air to escape from the sewage force main line. After the air escapes out of the air release valve, the valve shall shut off until more air accumulates in it and the opening cycle will repeat automatically.

2. The sewage release valve must have a compound internal linkage of precision molded delrin or stainless steel. All other internals must be stainless steel to positively prevent galvanic action. The float rod shall be 20" long to provide an air gap between the linkage and waste level inside the valve to retard the waste solids from clogging the linkage. The stainless steel float must withstand a minimum 1000 psi pressure. Each valve shall be complete with hose and blow off valves to permit back flushing without dismantling valve.

Body and cover cast iron	ASTM A48 Class 30
Internal Delrin linkage	ASTM D2133 (or Stainless Steel)
Stainless Float	ASTM A240
Buna N	ASTM SB800
Exterior Paint Red Lead	TTP 86 B Type IV

Valve height 28" with back flushing attachments 33 1/2".

If depth of trench is not deep enough, furnish short valve.

Valve height 17½" with back flushing attachments 23 ½".

3. Automatic sewage air release valve to be as manufactured by Crispin, Val-matic, or APCO equal to APCO Series 400 with accessories.

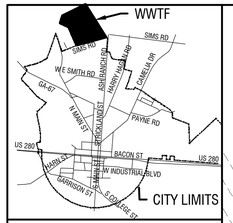
2.04 ACCESSORIES, PLUG AND GATE VALVES

A. Valves to have a two-inch square operating nut unless otherwise indicated.

B. Valves buried in ground or located in vaults or structures to have suitable extensions for socket operation with top of operating nut located six inches below finished grades.

C. Furnish one wrench for each group of two (2) valves having the same service and which can be served from one operating location.

END OF SECTION



VICINITY MAP
NOT TO SCALE

TREATMENT POND #1
TREATMENT POND #3
OPERATIONS BUILDING
MCC ROOM
BACKUP POWER GENERATOR
MAINTENANCE SHOP
FUTURE EXPANSION
BELT PRESS BUILDING
CHEMICAL BUILDING
BLOWER BUILDING
FUTURE EXPANSION
SBR BASIN #2
SBR BASIN #1
DIGESTER
POST EQ BASIN
FUTURE EXPANSION AREA
INFLUENT PUMP STATION
GRIT SEPARATION SYSTEM
HEADWORKS
REJECT PUMP STATION
TRUCK DUMP STATION
TERTIARY FILTRATION
FUTURE EXPANSION
UV DISINFECTION
FUTURE EXPANSION
RECLAIMED WATER PUMP STATION
EXISTING LAS VALVE VAULT
EXISTING LAS PUMP STATION
8" TREATMENT POND INFLUENT
EXISTING 10" LAS FM
10" LAS FM
10" SBR INFLUENT
42" BOLLARDS
50' UNDISTURBED BUFFER ZONE BOUNDARY FOR MECHANICAL WWTP
4" DRAIN LINE
6" NPRL
4" WATER LINE
8" DRAIN LINE
YARD SPIGOT
4" DRAIN LINE
2" LATERAL
6" AIR LINE
10" SBR INFLUENT
8" AIR LINE
2" DRAIN LINE
4" WATER LINE
4" DRAIN LINE
12" FILTER REJECT
42" BOLLARDS
10" LAS FM
10" INFLUENT FM
10" INFLUENT FM
4" UNDERDRAIN FM
4" WATER LINE
42" BOLLARDS
4" NPRL
10" LAS FM
12" EFFLUENT DISCHARGE
10" LAS FM
12" GRAVITY DISCHARGE
10" PVC PIPE
TREATMENT POND EFFLUENT STORAGE
10" INFLUENT FM
10" INFLUENT FM

SCALE BAR: 1"=15'
15 0 7.5 15 30 60

REVISIONS:

1	SBR TANK SIZE
2	GSWCC ESP&C
3	ADDENDUM 1

DESIGN PROFESSIONAL:
MARCUS E. SACK
GSWCC LEVEL II # 70248
EXPIRES: 06/14/2026
MARCUS@MESACK.COM

515 NORTH MAIN STREET
P.O. BOX 649
HINESVILLE, GA 31313
TEL: (912) 368-5212

GEORGIA REGISTERED No. 35515 PROFESSIONAL ENGINEER MARCUS E. SACK

DATE: May 19, 2025

M.E. SACK ENGINEERING 00

MUNICIPALITY:
CITY OF PEMBROKE

COUNTY:
BRYAN

Owner:
City of Pembroke
160 N Main St
Pembroke, GA 31321
(912) 653-4413
streets@pembrokega.net

24 HOUR CONTACT:
Keith Cook
160 N Main St
Pembroke, GA 31321
(912) 653-4413
streets@pembrokega.net

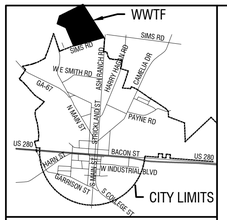
WASTEWATER TREATMENT PLANT EXPANSION

SITE PLAN PHASE II

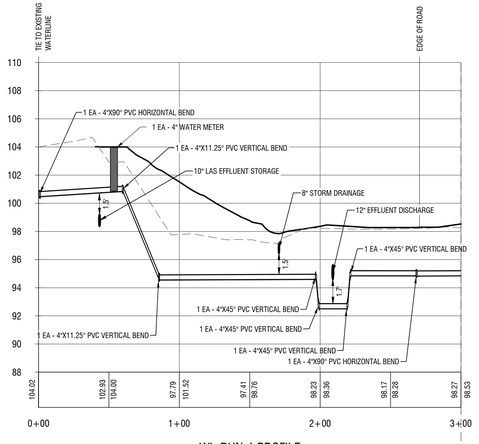
G6

FILE NO: 2020-48

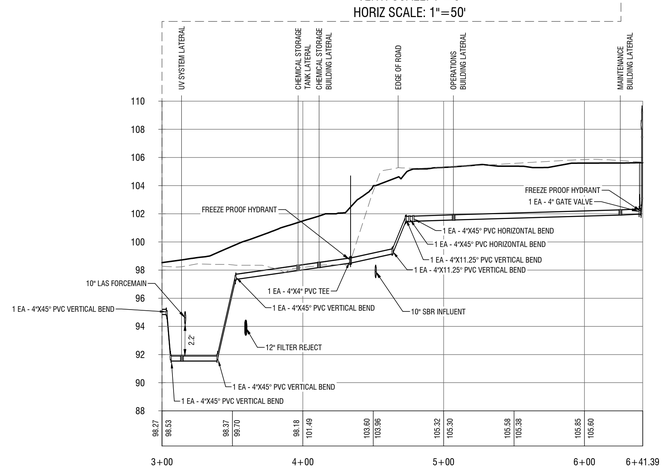
PLOT DATE: May 19, 2025



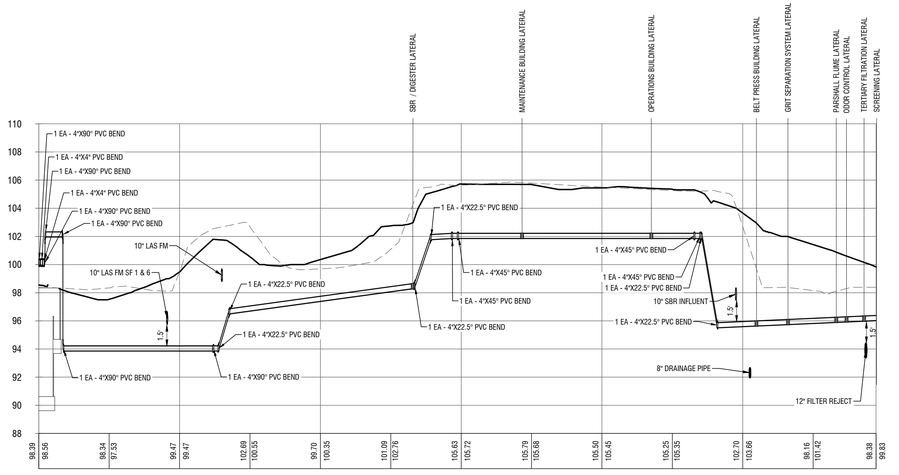
VICINITY MAP
NOT TO SCALE



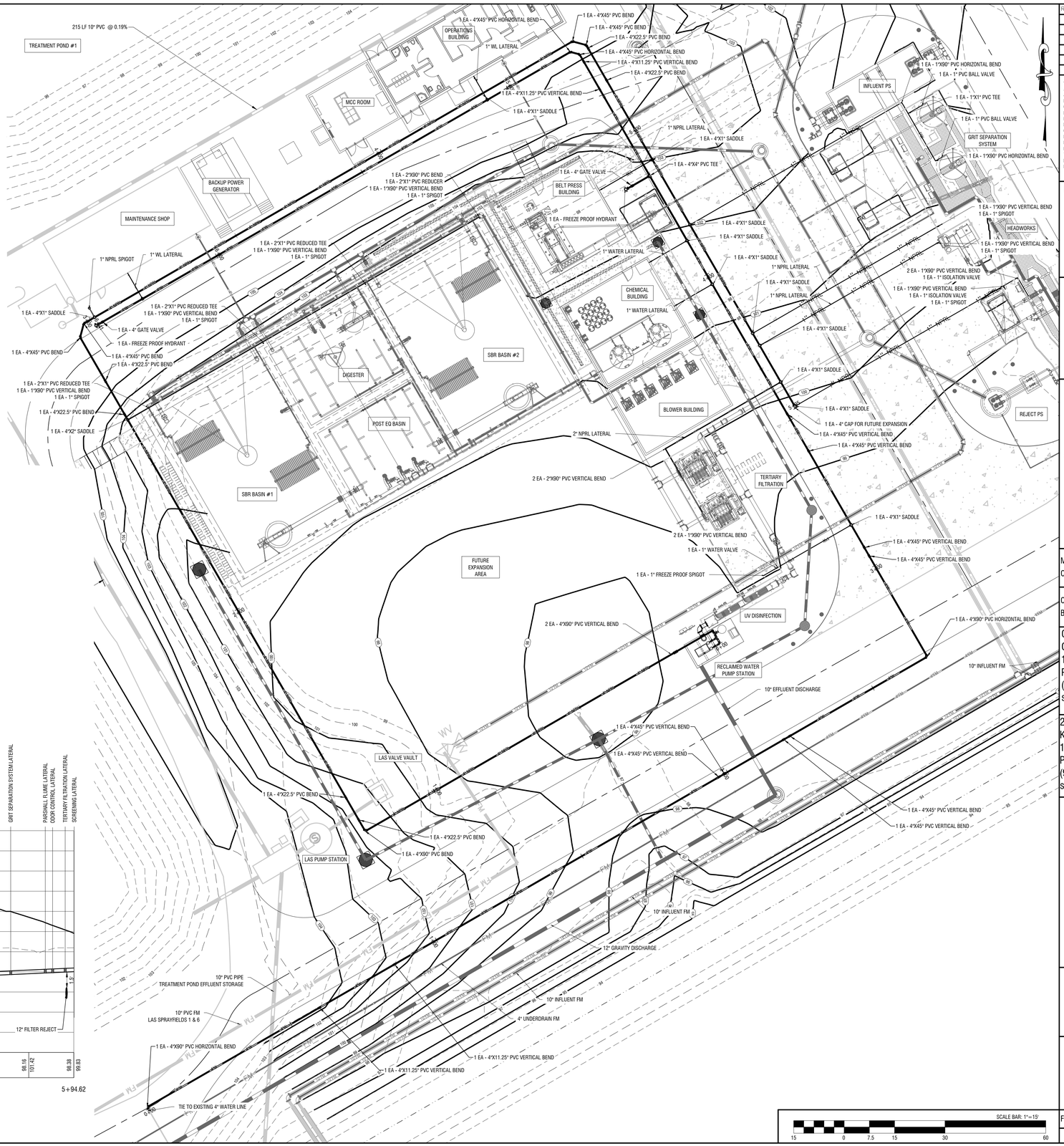
WL-RUN-1 PROFILE
VERT. SCALE: 1"=5'
HORIZ SCALE: 1"=50'



WL-RUN-1 PROFILE
VERT. SCALE: 1"=5'
HORIZ SCALE: 1"=50'



NPRL PROFILE
VERT. SCALE: 1"=5'
HORIZ SCALE: 1"=50'



REVISIONS:		
1	SBR TANK SIZE	
2	GSWCC ESP&C	
3	ADDENDUM 1	

DESIGN PROFESSIONAL:
MARCUS E. SACK
GSWCC LEVEL II # 70248
EXPIRES: 06/14/2026
MARCUS@MESACK.COM

515 NORTH MAIN STREET
P.O. BOX 649
HINESVILLE, GA 31313
TEL: (912) 368-3212

GEORGIA REGISTERED No. 33 PROFESSIONAL ENGINEER MARCUS E. SACK

DATE: May 19, 2025

M.E. SACK ENGINEERING 1980

MUNICIPALITY:
CITY OF PEMBROKE

COUNTY:
BRYAN

Owner:
City of Pembroke
160 N Main St
Pembroke, GA 31321
(912) 653-4413
streets@pembrokega.net

24 HOUR CONTACT:
Keith Cook
160 N Main St
Pembroke, GA 31321
(912) 653-4413
streets@pembrokega.net

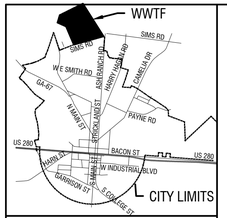
WASTEWATER TREATMENT PLANT EXPANSION

WATER PLAN

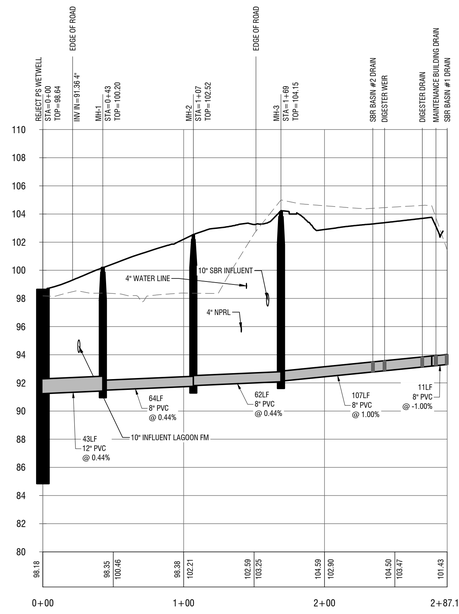
C1

FILE NO: 2020-48

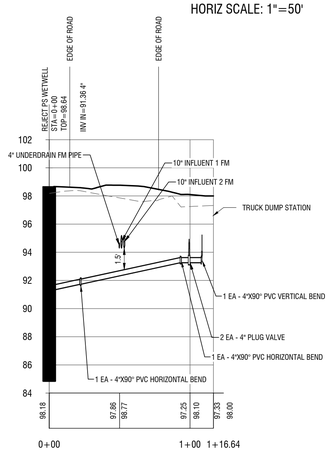
PLOT DATE: May 19, 2025



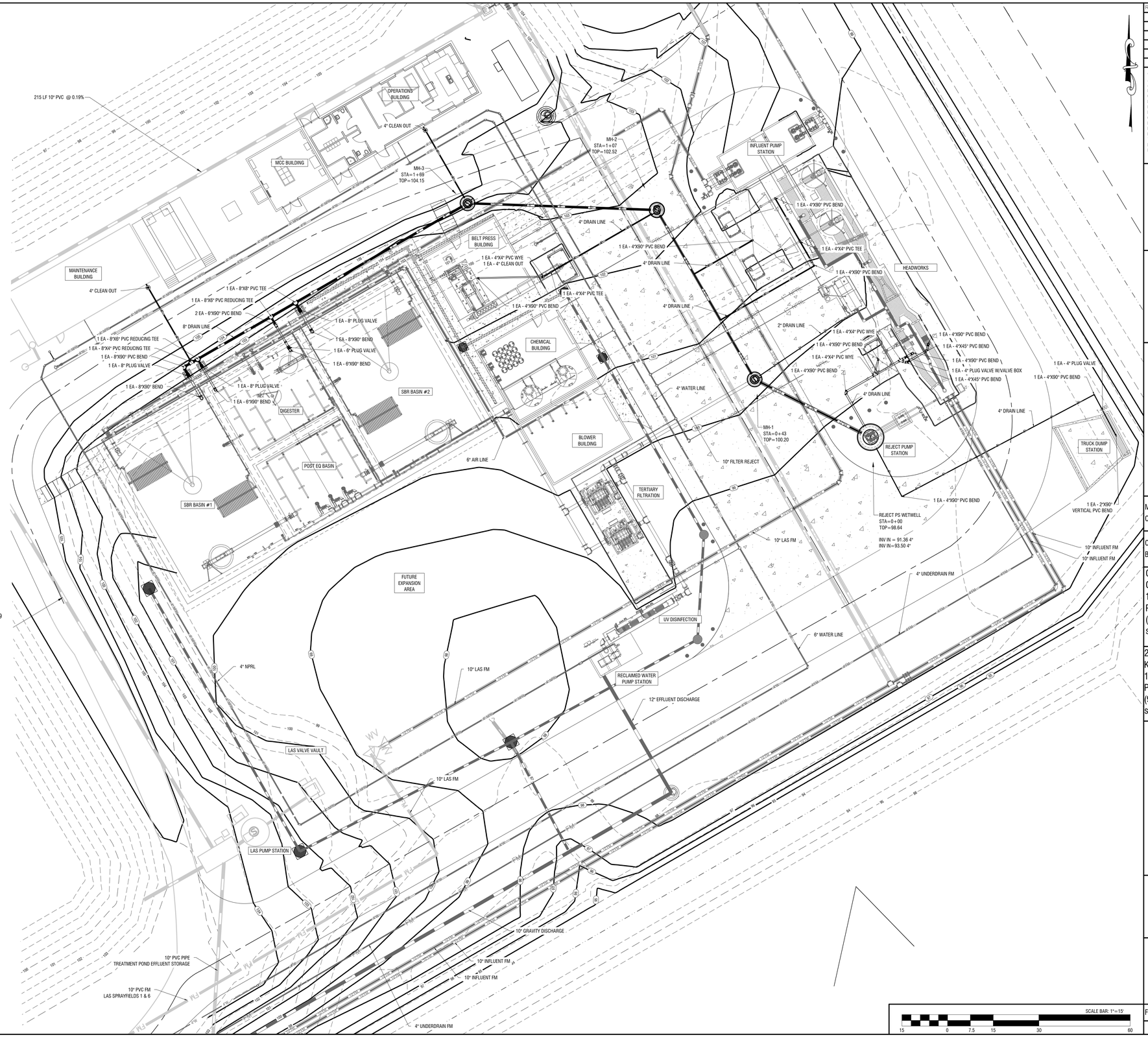
VICINITY MAP
NOT TO SCALE



DRAINAGE-RUN-1 PROFILE
VERT. SCALE: 1"=5'
HORIZ SCALE: 1"=50'



WASTE DRAINAGE-RUN-2 PROFILE
VERT. SCALE: 1"=5'
HORIZ SCALE: 1"=50'



REVISIONS:	
1	SBR TANK SIZE
2	GSWCC ESP&C
3	ADDENDUM 1

DESIGN PROFESSIONAL:
MARCUS E. SACK
GSWCC LEVEL II # 70248
EXPIRES: 06/14/2026
MARCUS@MESACK.COM

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TEL: (912) 368-5212

GEORGIA REGISTERED No. 33800 PROFESSIONAL ENGINEER MARCUS E. SACK

DATE: May 19, 2025

M.E. SACK ENGINEERING 33800

MUNICIPALITY:
CITY OF PEMBROKE

COUNTY:
BRYAN

Owner:
City of Pembroke
160 N Main St
Pembroke, GA 31321
(912) 653-4413
streets@pembrokega.net

24 HOUR CONTACT:
Keith Cook
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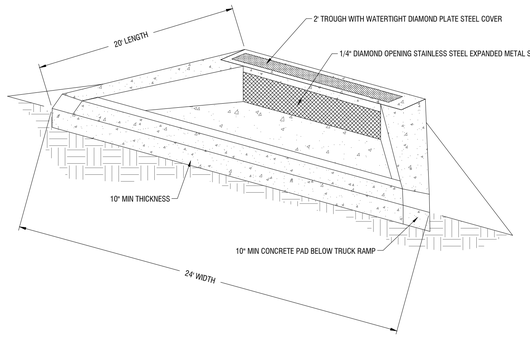
WASTEWATER TREATMENT PLANT EXPANSION

WASTE DRAINAGE PLAN

C2

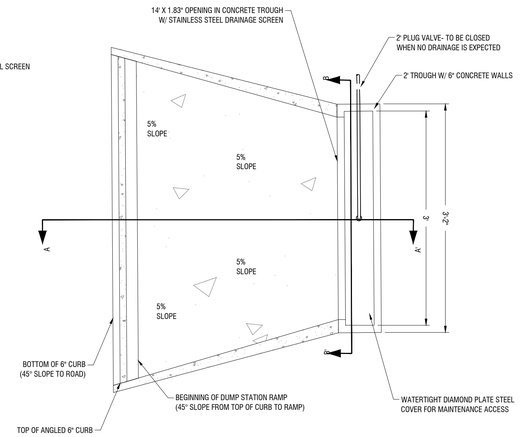
FILE NO: 2020-48

PLOT DATE: May 19, 2025



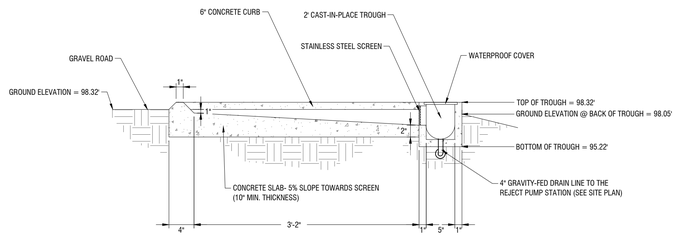
TRUCK DUMP STATION DETAIL

N.T.S.



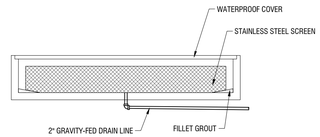
TRUCK DUMP STATION PLAN VIEW

SCALE: 1" = 5'



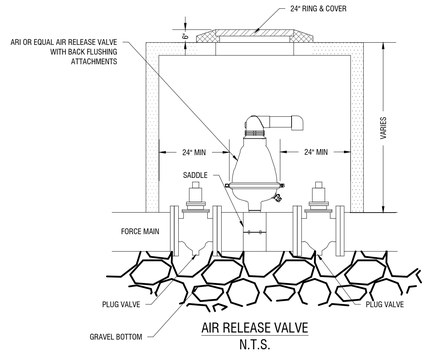
TRUCK DUMP STATION
SECTION A-A'

SCALE: 1" = 5'



TRUCK DUMP STATION
SECTION B-B'

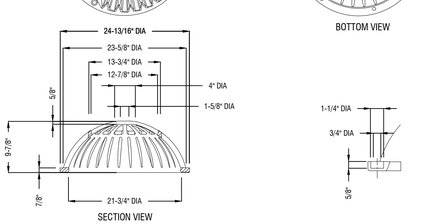
SCALE: 1" = 5'



AIR RELEASE VALVE

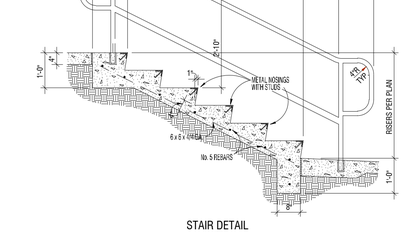
N.T.S.

NOTES:
1. GRAY IRON MATERIAL NON-TRAFFIC LOAD RATING; 163 SQIN OPEN AREA; UNDIPPED COATING; ASTM 148 CERTIFICATION



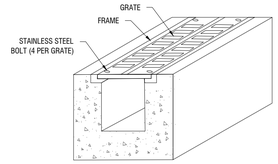
BEEHIVE CIRCULAR GRATE

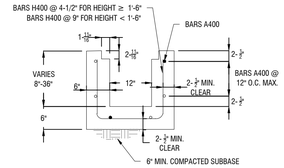
N.T.S.



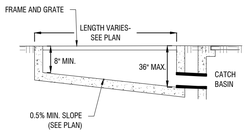
STAIR DETAIL

N.T.S.





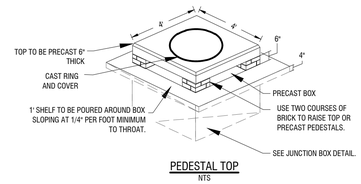
TRENCH CROSS SECTION



TRENCH PROFILE

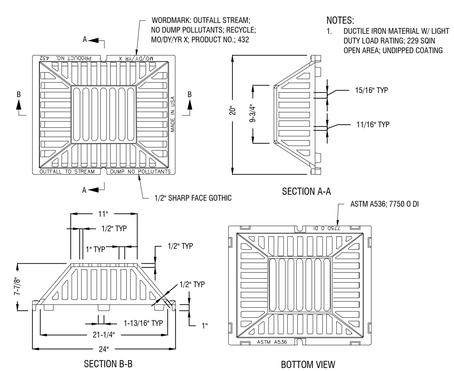
CONCRETE CHANNEL TRENCH DRAIN

N.T.S.



PEDESTAL TOP

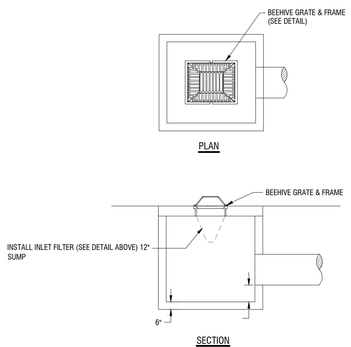
NTS



NOTES:
1. DUCTILE IRON MATERIAL W/ LIGHT DUTY LOAD RATING; 229 SQIN OPEN AREA; UNDIPPED COATING

BEEHIVE GRATE

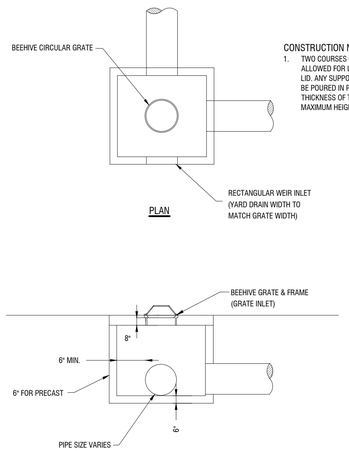
N.T.S.



CONSTRUCTION NOTES:
1. TWO COURSES OF BRICK MAX SHALL BE ALLOWED FOR LEVELING AND ADJUSTMENT OF LID. ANY SUPPORT OTHER THAN BRICK SHALL BE POURED IN PLACE MATCHING THE THICKNESS OF THE PRECAST WALL TO A MAXIMUM HEIGHT OF 24 INCHES.

GRATE INLET

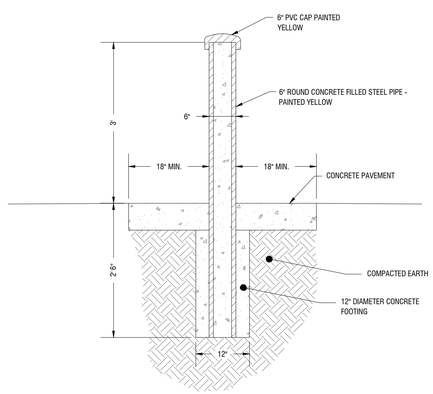
N.T.S.



CONSTRUCTION NOTES:
1. TWO COURSES OF BRICK MAX SHALL BE ALLOWED FOR LEVELING AND ADJUSTMENT OF LID. ANY SUPPORT OTHER THAN BRICK SHALL BE POURED IN PLACE MATCHING THE THICKNESS OF THE PRECAST WALL TO A MAXIMUM HEIGHT OF 24 INCHES.

JUNCTION BOX / GRATE INLET

N.T.S.



PIPE BOLLARD DETAIL

NTS

REVISIONS:

1	SBR TANK SIZE
2	GSWCC ESP&C
3	ADDENDUM 1

DESIGN PROFESSIONAL:
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GSWCC LEVEL II # 70248
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MARCUS@MESACK.COM

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P.O. BOX 649
HINESVILLE, GA 31313
TEL: (912) 368-5212

GEORGIA REGISTERED No. 33556 PROFESSIONAL ENGINEER MARCUS E. SACK

DATE: May 19, 2025

M.E. SACK 19 80 ENGINEERING

MUNICIPALITY:
CITY OF PEMBROKE

COUNTY:
BRYAN

Owner:
City of Pembroke
160 N Main St
Pembroke, GA 31321
(912) 653-4413
streets@pembrokega.net

24 HOUR CONTACT:
Keith Cook
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Pembroke, GA 31321
(912) 653-4413
streets@pembrokega.net

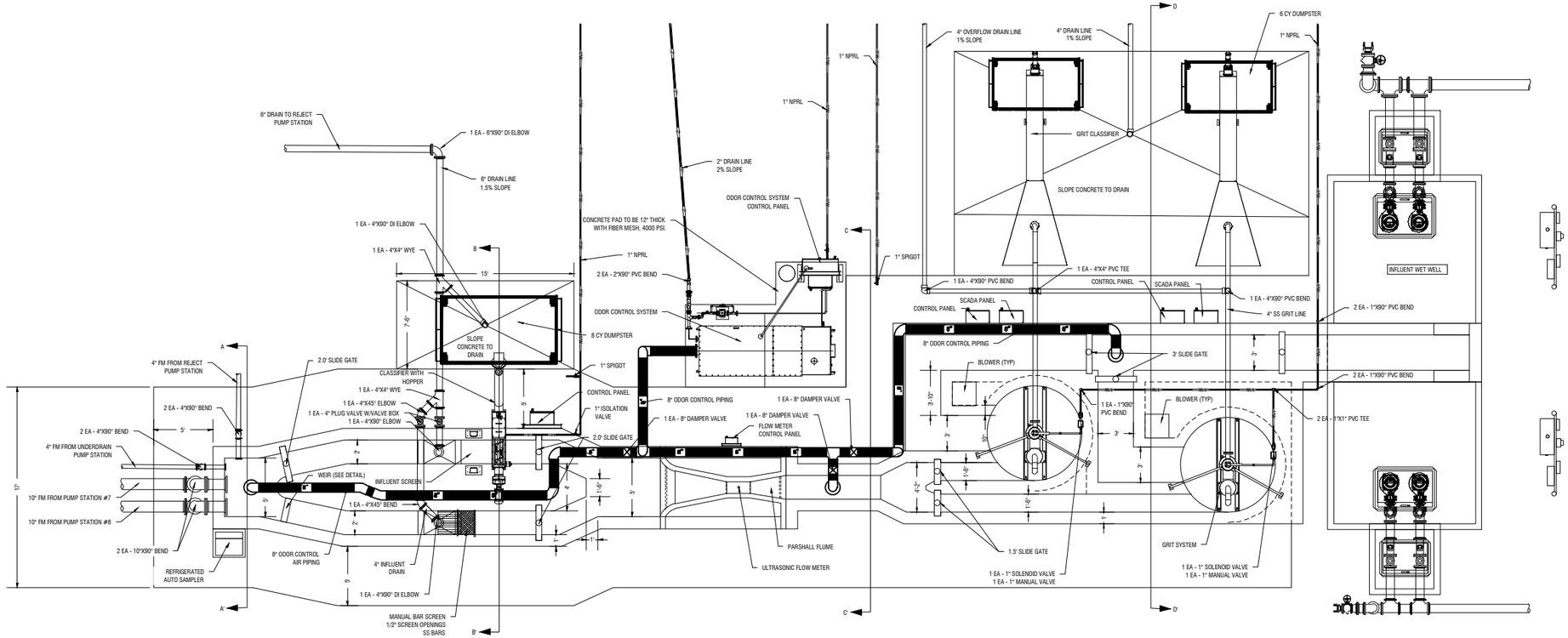
WASTEWATER TREATMENT PLANT EXPANSION

GENERAL DETAILS

C17

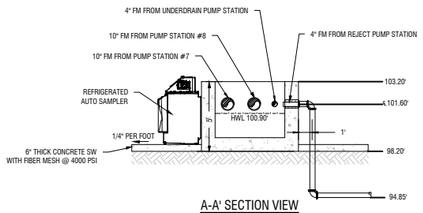
FILE NO: 2020-48

PLOT DATE: May 19, 2025



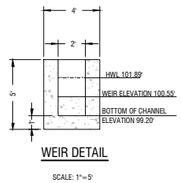
PLAN VIEW

SCALE: 1"=5'



A-A' SECTION VIEW

SCALE: 1"=5'



WEIR DETAIL

SCALE: 1"=5'

NOTES:

1.ALL CONCRETE SURFACES IN THE HEADWORKS ABOVE THE LOW WATER LEVEL WILL BE COATED WITH AN EPOXY IN ACCORDANCE WITH THE SPECIFICATIONS.

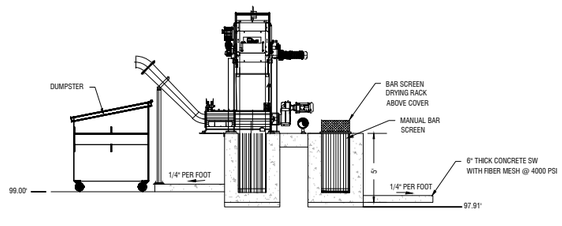
2.THE HEADWORKS WILL BE COVERED WITH ALUMINUM DIAMOND PLATE TO CREATE AN AIR AND WATER TIGHT COVER CAPABLE OF MEETING NEGATIVE PRESSURE REQUIREMENTS OF THE ODOR CONTROL SYSTEM. ANGLE FOR DIAMOND PLATE SHALL BE RUN FOR ENTIRE LENGTH OF CHANNEL. LEAVE 3/8" GAP FOR EXPANSION. IMPERMEABLE GASKET REQUIRED WITH DIAMOND PLATE.

CONTRACTOR SHALL AIR TEST HEAD WORKS AND PROVIDE SUCTION VENT NEEDED FOR BALANCED AIRFLOW TO ODOR CONTROL

3.PARSHALL FLUMES WILL BE PRECAST FIBERGLASS UNIT AND INSTALLED WITH SPECIFIC ATTENTION TO THE ELEVATION OF OTHER COMPONENTS IN THE HEADWORKS.

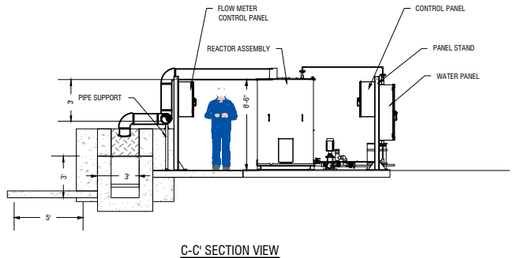
PROVIDE TELEDYNE ISCO FLOW METER SYSTEM AT FLUME

4.SEE STRUCTURAL DRAWINGS FOR CONCRETE DETAILS AND INSTALLATION.



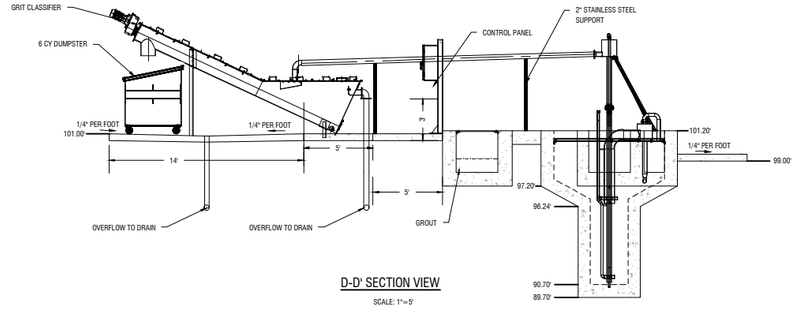
B-B' SECTION VIEW

SCALE: 1"=5'



C-C' SECTION VIEW

SCALE: 1"=5'



D-D' SECTION VIEW

SCALE: 1"=5'

SCALE BAR: 1"=5'

5 0 2.5 5 10 20

REVISIONS:	
1	SBR TANK SIZE
2	GSWCC ESP&C
3	ADDENDUM 1

DESIGN PROFESSIONAL:
MARCUS E. SACK
GSWCC LEVEL II # 70248
EXPIRES: 06/14/2026
MARCUS@MESACK.COM

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GEORGIA REGISTERED No. 33564 PROFESSIONAL ENGINEER MARCUS E. SACK

DATE: May 19, 2025

M.E. SACK ENGINEERING 00

MUNICIPALITY:
CITY OF PEMBROKE

COUNTY:
BRYAN

Owner:
City of Pembroke
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24 HOUR CONTACT:
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Pembroke, GA 31321
(912) 653-4413
streets@pembrokega.net

WASTEWATER TREATMENT PLANT EXPANSION

HEADWORKS

M3

FILE NO: 2020-48

PLOT DATE: May 19, 2025