

November 26, 2024

Please find the following addendum to the below-mentioned BID.

Addendum No.:4

Bid#: 24-62-2

Project Name: Cross Gates Wastewater Treatment Plant Improvements

Bid Due Date: Tuesday, December 3, 2024

GENERAL INFORMATION:

- 1. Specification Section 17100 Instrumentation: Remove this section in its entirety and replace with the revised section included herein.
- 2. Drawing Sheet G-2: Add the following to the end of Phasing Note 7: "Start up Site Lift Station and Septage Receiving Station."
- 3. Drawing Sheet G-5: Remove this sheet and replace with the revised sheet included herein.
- 4. Drawing Sheet C-3: Remove this sheet and replace with the revised sheet included herein.
- 5. Drawing Sheet C-4: Remove this sheet and replace with the revised sheet included herein.
- 6. Drawing Sheet GM-3: On the Instrument Schedule, change the size of the Effluent Flow Meter from 12" to 16".
- 7. Drawing Sheet 2S-1: Remove this sheet and replace with the revised sheet included herein.
- 8. Drawing Sheet 3S-1: Remove this sheet and replace with the revised sheet included herein.
- 9. Drawing Sheet 3S-5: Remove this sheet and replace with the revised sheet included herein.
- 10. Drawing Sheet E500: Remove this sheet and replace with the revised sheet included herein.



QUESTIONS & ANSWERS:

QUESTION 1: Will UV basin require hand rails? ANSWER 1: Yes, hand rails are required. Drawing Sheet 3S-1 has been revised to indicate the requirement. Details have been added to Sheet 3S-5.

QUESTION 2: Do not see details on the staircase for the UV Basin. What are they made of? ANSWER 2: Details have been added to Sheet 3S-5.

QUESTION 3: Sheet C-3 general note 2 - is that note correct or should that read Plant 1? Routing from Plant 3 is unclear.

ANSWER 3: The effluent line from Plant 3 will remain connected to the existing plant discharge line throughout construction.

QUESTION 4: Sheet G-2 phasing note 7 – SFM line from Site Lift Station - plans show that being pumped to Plant 2. Is that note correct, Routing to Plant 3 is unclear. ANSWER 4: The note is correct as written, but it has been revised to clarify. Sheet C-4 has been revised to show the connection to Plant 3.

QUESTION 5: Will contractor be responsible for providing means for pumping from Site lift station or can proposed pumps be activated and used once lift station is completed? ANSWER 5: The intent is for the Site Lift Station to be started up as soon as it is complete. See answer to Question 4 above.

QUESTION 6: Will STP provide an alternate receiving station/location for offloading any remaining sludge removed by contractor from plants prior to demolition. ANSWER 6: See answer to Question 6 in Addendum #3.

QUESTION 7: Sheet G-5 Process Flow Diagram – the flow diagram shows a separate sludge pump station for WAS between the new plant and the belt press. Where is that intended to be? Is that included in the plans?

ANSWER 7: There is no sludge pump station. It has been removed from Sheet G-5.

QUESTION 8: Sheet 2S-1 show FFE for tank foundation at 25.5'. Civil drawings have finished elevations much less that than approx..13'. Is the 25.5 an error? ANSWER 8: The correct elevation of the tank slab is 13.0'. Sheet 2S-1 has been revised.



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QUESTION 9: Sheet 2S-1 General note 1. what does that mean? ANSWER 9: Since the tank is divided into three different sections by bulkheads, it must be filled in stages to prevent over/uneven stressing to any of the walls, bulkheads, or the foundation.

QUESTION 10: Drawings E201 note #2 and E202 note #1call for disconnect switches to have Auxiliary contacts wired back to the VFD. Please provide locations for the VFD's. ANSWER 10: The notes referenced only apply to VFD driven equipment. Not all equipment is VFD driven. Refer to specific equipment requirements for details.

QUESTION 11: What is the NEMA classification for disconnects called out on drawings E201 note#2 and E202 note #1?

ANSWER 11: All disconnects called out on E201 note#2 and E202 note #1 shall be NEM-4X, and mounted in unclassified areas around new plant in accordance with NFPA-820, table 5.2.2 and figure A.5.2. Disconnects shall be mounted with bottom of disconnect minimum 24 inches above lip of new plant or 10 feet horizontally beyond wall of new plant.

QUESTION 12: Are the disconnects inside the Electrical building to be NEMA 3r as called out per note #5 on drawing E203.

ANSWER 12: All electrical equipment inside Electrical building shall be provide with NEMA-1 enclosures.

QUESTION 13: Drawing E201 note #4 calls for 4-2" conduits to Blower and Screen area. Is that four conduits to each area? Please clarify.

ANSWER 13: Provide 2-2" conduits each area for future SCADA/instrumentation installations.

QUESTION 14: Panel H1 has a KAIC rating of 10 and Panel L1 has a KAIC rating of 65, is that correct?

ANSWER 14: Panel H1shall be rated 65 KAIC, and panel L1 shall be rated 22 KAIC.

QUESTION 15: Panel H1 has (20) twenty 200 amp 3 pole breakers listed as spares, is this correct as it affects the size of the panel?

ANSWER 15: Panel H1 shall be main lugs only, with feed thru lugs and identified branch breakers as shown. In lieu of spare breakers shown on the panel schedule, provide the following spare breakers; (1) 400A/3P spare breaker, (1) 200A/3P spare breaker. Provide nominal maximum 76-inch-high panelboard, with filler panels in any remaining spaces.



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QUESTION 16: The effluent flowmeter is called out as 12" on the equipment schedule and is shown as 16" on C3. Please confirm the size. ANSWER 16: The correct size is 16". The schedule has been corrected.

QUESTION 17: Do we need a chart recorder for each flowmeter? Only one is shown on the instrument schedule, but one for each flowmeter is called out in specifications. ANSWER 17: A chart recorder is only required for the effluent flowmeter. See revised specification for details and for additional revisions.

ATTACHMENTS:

- 1. Revised Specification Section 17100
- 2. Revised Drawing Sheet G-5
- 3. Revised Drawing Sheet C-3
- 4. Revised Drawing Sheet C-4
- 5. Revised Drawing Sheet 2S-1
- 6. Revised Drawing Sheet 3S-1
- 7. Revised Drawing Sheet 3S-5
- 8. Revised Drawing Sheet E500

End of Addendum #4

SECTON 17100 – INSTRUMENTATION

PART 1 - GENERAL

1.1 GENERAL REQUIREMENTS:

A. The Contractor shall furnish and install all instrumentation as shown on the drawings and as indicated herein.

PART 2 - PRODUCTS

2.1 MAGNETIC FLOW METERS AND ACCESSORIES

A. The Contractor shall furnish and install all instrumentation equipment as shown on the drawings and as specified herein and as required to provide a complete and operational system. The flow sensor tube shall be made of stainless steel with carbon steel or stainless steel flanges pressure rated as required for the piping system as specified in other sections of the specifications. A wafer style sensor will not be acceptable. The flow sensor shall be to NEMA 6 (IP-68) suitable for permanent submersion to 30 feet. The signal transmitter shall translate the signal induced in the flow sensor into proportional analog output. There shall also be provided a digital indicator representing actual flow and total flow. The transmitter shall be remote, wall mounted in the electrical building. The signal transmitter shall have automatic zero stability and built-in "zero", "span", and "calibration" check circuitry. There shall be no need for external calibration devices. The flow range shall be digitally adjustable from 0-33 fps with a

1/100th resolution. The output signal shall represent the true volumetric flow with a maximum error under application conditions not only under "reference" or laboratory calibration conditions. Accuracy: ±0.5% of reading for flows 1.0 fps – 33 fps. The transmitter shall have bi-directional flow capability and provide isolated 4-20 ma and scaleable pulse frequency outputs from separate terminals. A reverse flow indicator shall be provided. The signal transmitter shall be "user friendly". No programming knowledge shall be required for its operation. The enclosure shall meet NEMA 4X and IP65 standards. Furnish and install grounding rings where they are required or necessary for proper operation of the system such as where they are used in non-conductive piping or non-conductive piping lining systems. The contractor and vendor shall identify these locations and submit the ring drawings and installation instructions with flow meter submittals. Units and all accessories shall be rated for outdoor service with UV exposure.

- B. Flow meters shall be ABB Watermaster FEW 325 or equal with polymer liner and remote transmitter/display. Transmitter shall be ABB Watermaster FET or equal. Remote Display shall indicate totalized flow and instantaneous flow. Contractor shall provide and install the required length of Manufacturer's cabling for connection between the flow meter and the remote mounted transmitters.
- C. Magnetic flow meter shall be guaranteed for a period of 3 years after placing into operation. Flow range shall be as shown on drawings or determined during shop drawing review.

2.2 CIRCULAR CHART RECORDERS

- A. The Contractor shall furnish and install a circular chart recorder for the effluent flow meter. Chart recorder shall be mounted on outside wall of electrical building.
- B. Recorders shall be 10' circular with a 1 year supply of charts scaled 0-100%. Charts shall be daily or weekly as selected by Owner. Recorder shall indicate instantaneous flow and totalized flow on an

electronic display. Recorder shall be ABB C1300 or approved equal. Case shall be for wall mounting. Supply 1 year supply of charts scaled 0-100%. Recorder shall have the capability of being switched from daily to weekly recording.

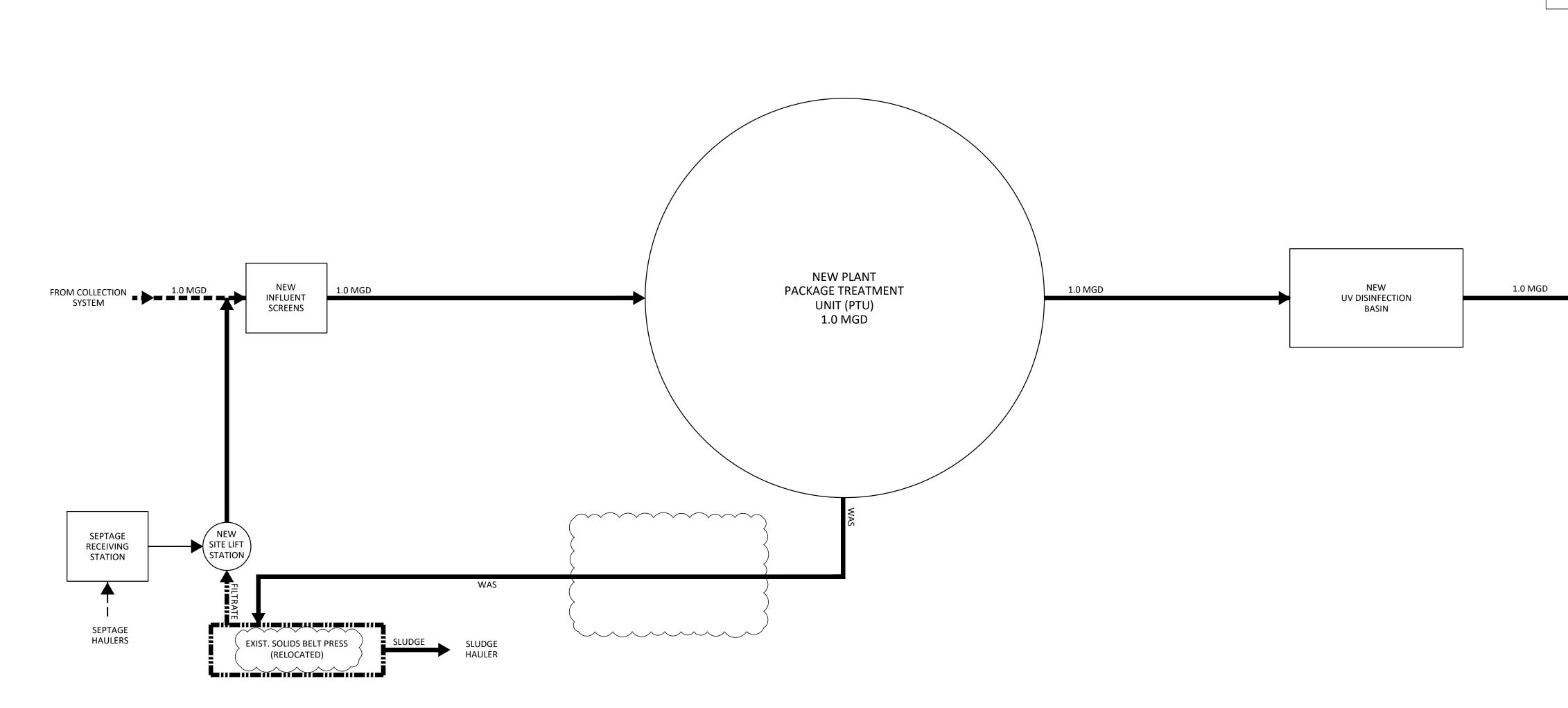
C. The recorder shall be mounted in a NEMA 4X non-metallic enclosure with a Plexiglas cutout for extra rain protection and for viewing from the outside.

PART 3 – EXECUTION

3.1 INSTALLATION

A. Installation shall be in accordance with the manufacturer's recommendations.

END OF SECTION 17100



PROCESS DESIGN INFORMATION

GENERAL

FLOW EXISTING ADF

EXPANSION DESIGN PROCESS ADF PLANT TOTAL ADF PEAKING FACTOR PLANT TOTAL PHF PROCESS POPULATION EQUIVALENT

PACKAGE TREATMENT UNIT

EXTENDED AERATION PROCESS

VOLUME DETENTION TIME AT ADF BOD LOADING AT ADF

VOLUMETRIC BOD LOADING PROCESS AIR REQUIREMENT MLSS RAS FLOW, MAXIMUM BLOWERS CAPACITY, EACH DISCHARGE PRESSURE

0.850 MILLION GALLONS PER DAY

1.0 MILLION GALLONS PER DAY 1.0 MILLION GALLONS PER DAY 2.95 2.95 MILLION GALLONS PER DAY 10,000

1,147,993 GALLONS 28 HOURS 1,671 POUNDS PER DAY 11.1 POUNDS PER DAY PER 1000 CUBIC FEET 2,380 CUBIC FEET PER MINUTE 3,500 MILLIGRAMS PER LITER 694 GALLONS PER MINUTE 3 TOTAL; 2 DUTY + 1 STANDBY 1,200 CUBIC FEET PER MINUTE 9 POUNDS PER SQUARE INCH

AEROBIC SLUDGE DIGESTION VOLUME PROCESS AIR REQUIREMENT BLOWERS CAPACITY, EACH DISCHARGE PRESSURE

CLARIFICATION DIAMETER SIDE WATER DEPTH

SURFACE OVERFLOW RATE AT PHF

WEIR LOADING RATE AT PHF

ADF = AVERAGE DAILY FLOW BOD = BIOCHEMICAL OXYGEN DEMAND MLSS = MIXED LIQUOR SUSPENDED SOLIDS PHF = PEAK HOURLY FLOW RAS = RETURN ACTIVATED SLUDGE

234,304 GALLONS 940 CUBIC FEET PER MINUTE 2 TOTAL; 1 DUTY + 1 STANDBY 950 CUBIC FEET PER MINUTE

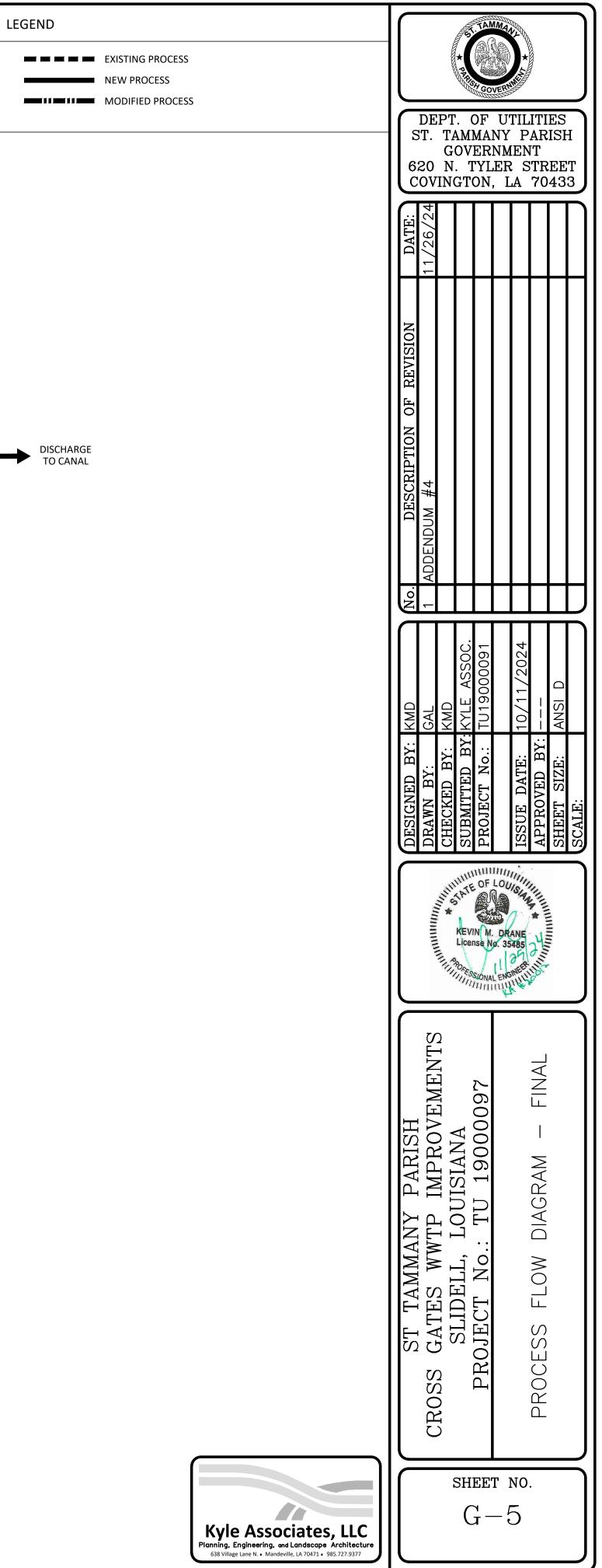
9 POUNDS PER SQUARE INCH

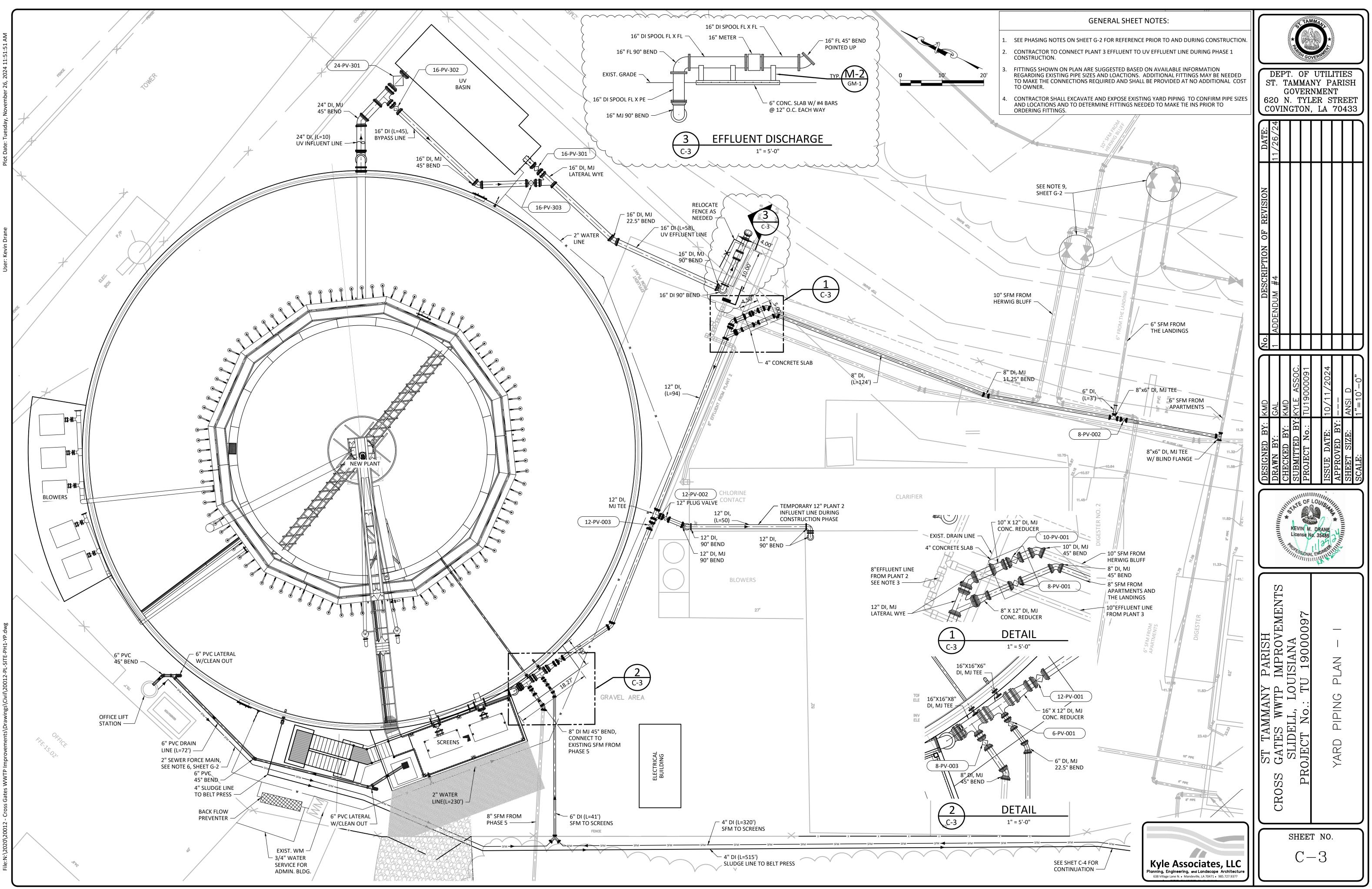
68 FEET

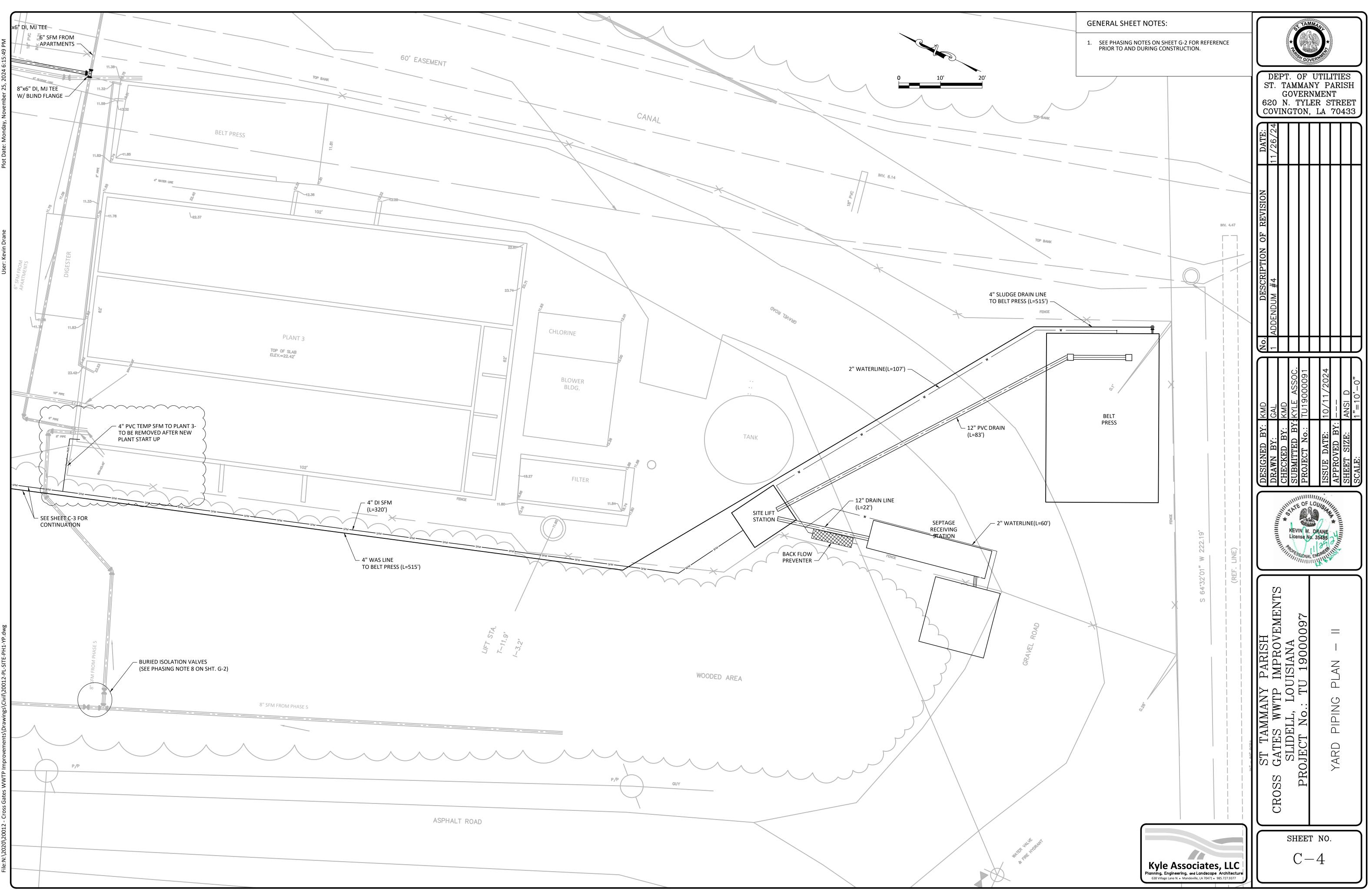
13 FEET

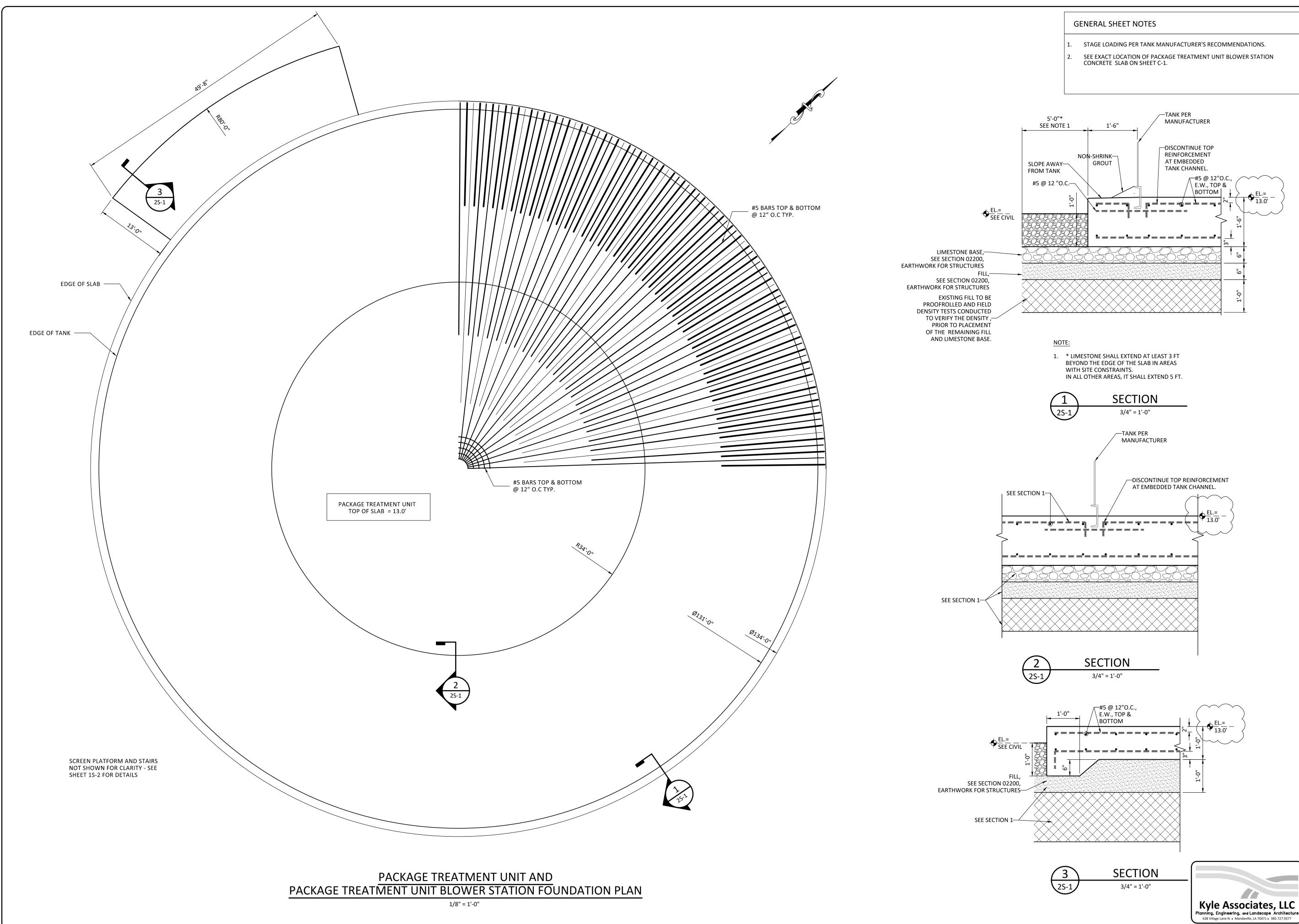
814 GALLONS PER DAY PER SQUARE FOOT 14,772 GALLONS PER DAY PER LINEAR FOOT

PROCESS FLOW DIAGRAM











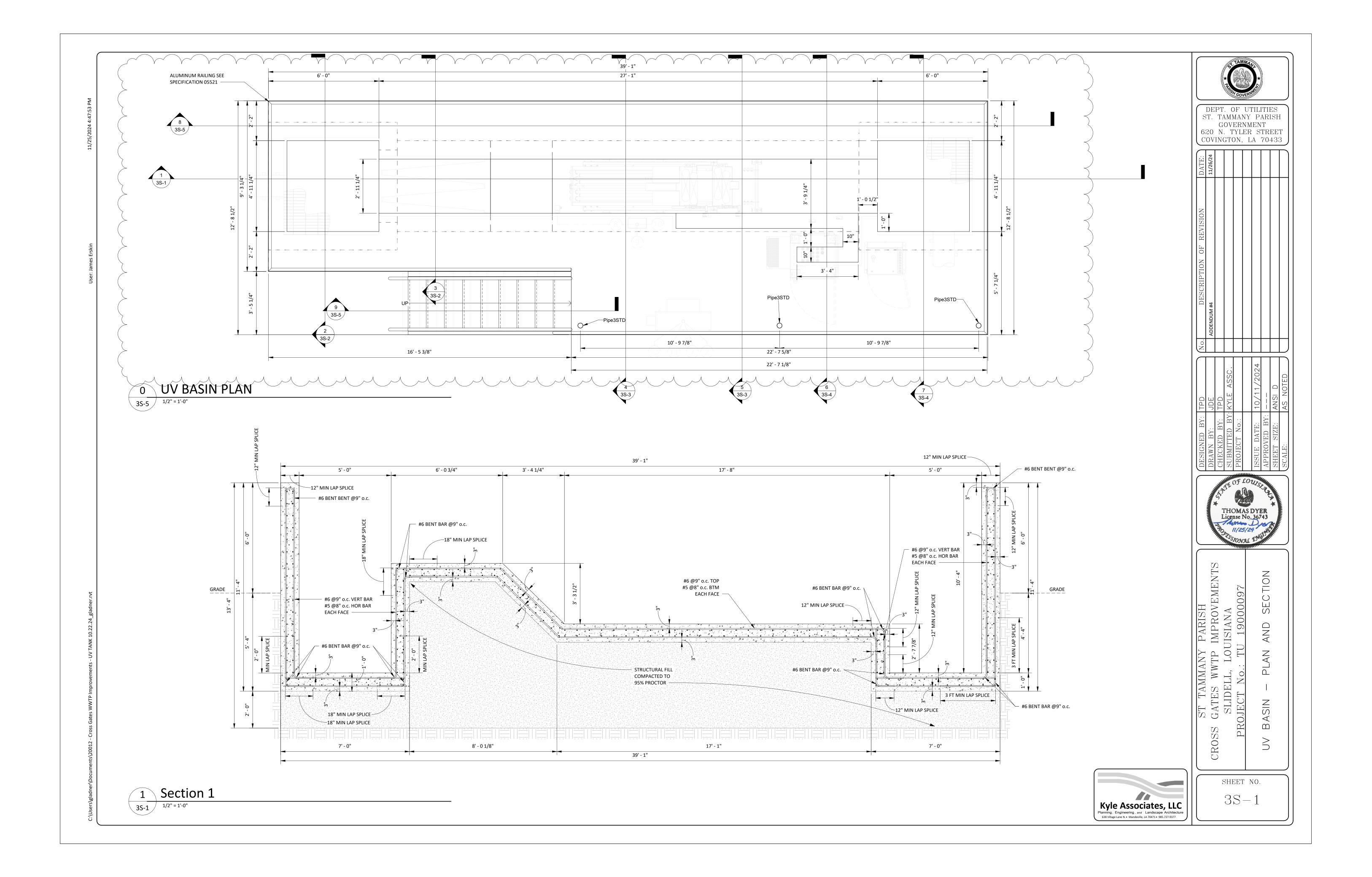
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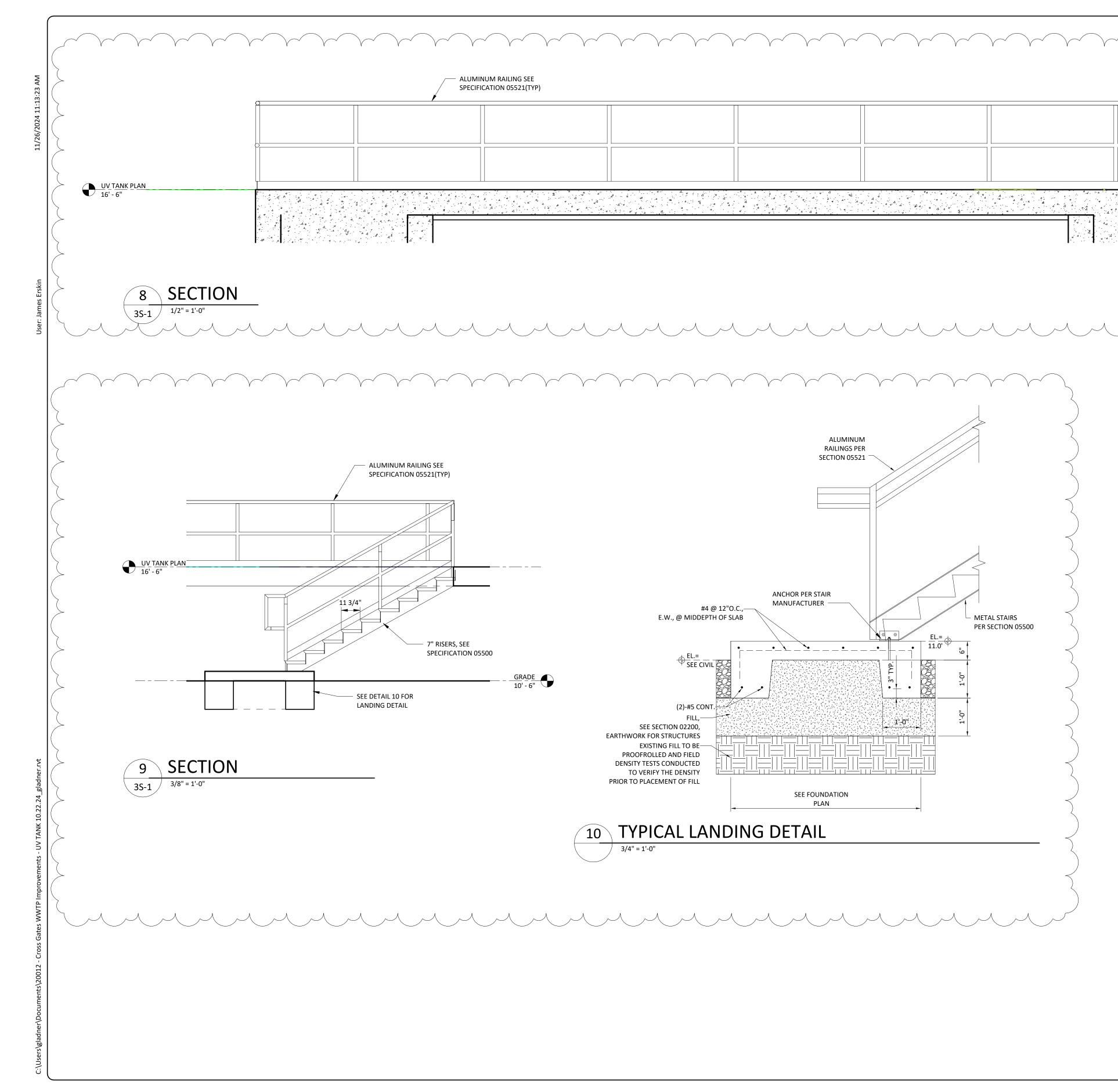
REVISION

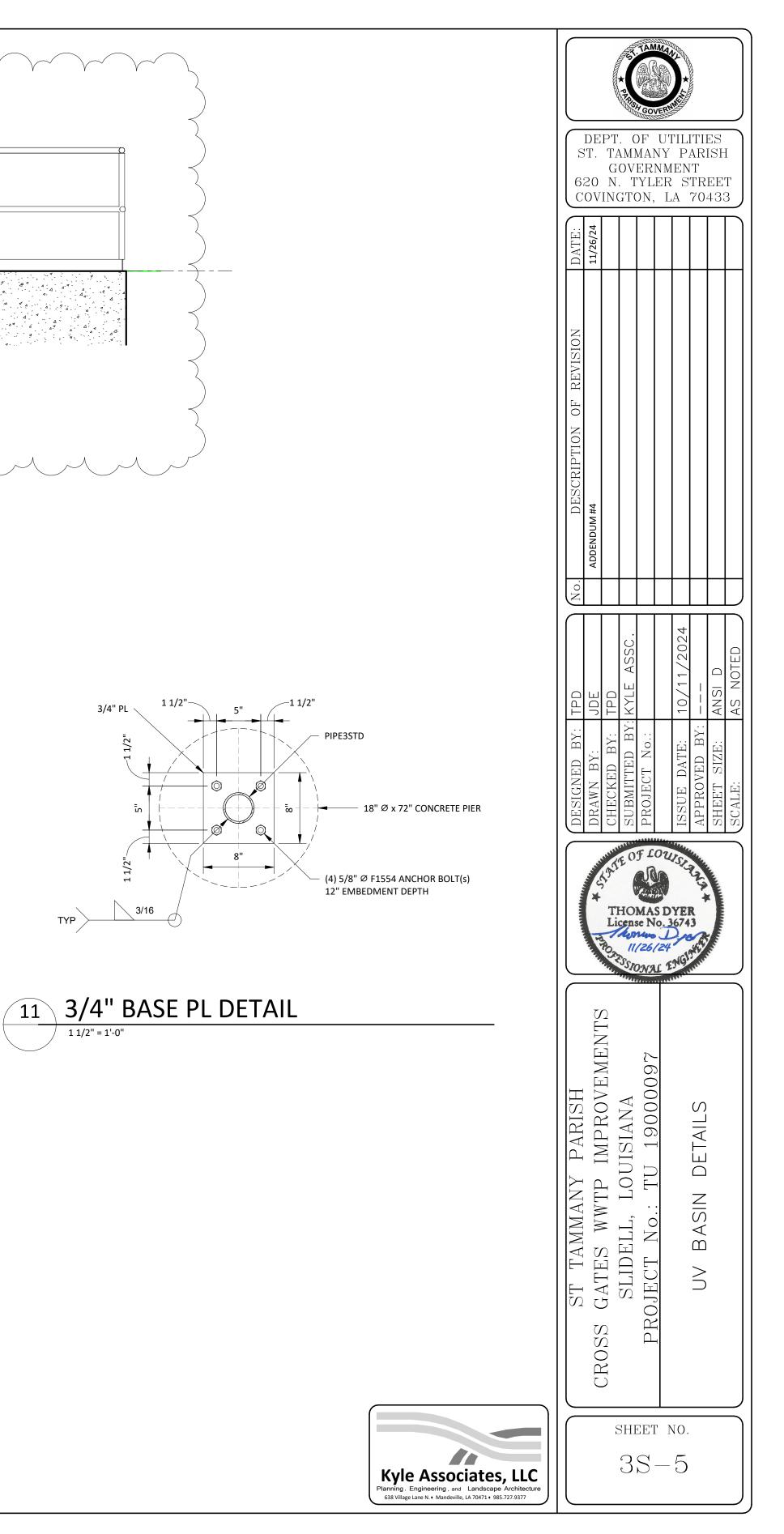
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DESCRIPTION

o ΣŪ INTE OF LOUIS KEVIN M. DRANE License No. 35485 ST TAMMANY PARISH GATES WWTP IMPROVEMENTS SLIDELL, LOUISIANA OJECT No.: TU 19000097 FOUNDATION TANK AND ATMENT PLAN R CROSS Ш И Ċ SHEET NO. 2S-1







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	PHASE B:	47889	173			KITCHEN		0	1.00	0							
	PHASE C:	47889	173			ELEVAT	OR	0	1.00	0							
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