

**GS #323-024 ARPA INFR. – WASTE CENT. TREATMENT
SOUTH MISSISSIPPI CORRECTIONAL INSTITUTION
LEAKESVILLE, MISSISSIPPI**

ADDENDUM NO. 3
June 18, 2024

The Contract Documents for GS #323-024 ARPA INFR. –WASTE CENT. TREATMENT South Mississippi Correctional Institution Leakesville, Mississippi, are amended as follows:

1. Replace pages i, ii, iii, iv, v, vi, and vii of the index in toto with the enclosed pages i, ii, iii, iv, v, vi, and vii.
2. Replace the Proposal Bid Items in toto with the enclosed Bid Proposal.
3. Replace the Measurement and Payment in toto with the enclosed Measurement and Payment.
4. The local control stations (LCS) shall be Class I, Division 1, Group D rated for the coarse screen, fine screen, and all pump stations. All enclosures shall be NEMA 4X rated, stainless steel.
5. The measurements for all man doors shall be three feet (3') wide by seven feet (7') tall.
6. All Air Conditioning Units shall be 208 Volt, 1-Phase.
7. The OWNER and USING AGENCY will provide temporary power and domestic water to the CONTRACTOR at no cost to the CONTRACTOR. The CONTRACTOR shall provide all materials, equipment and labor to connect to the USING AGENCY's existing electrical and water distribution systems. All temporary connections shall be removed upon completion of the project. All electrical installations shall be in compliance with the National Electric Code and all other applicable local, State, and Federal codes.
8. Replace Section 25 31 02 SCADA System Specification in toto with the enclosed attachment of Section 25 31 02 SCADA System.
9. Add enclosed SECTION 25 31 06 SCUM PUMP STATION CONTROL PANEL as stated with the attached section.
10. Replace the following drawings in toto with the enclosed drawings:

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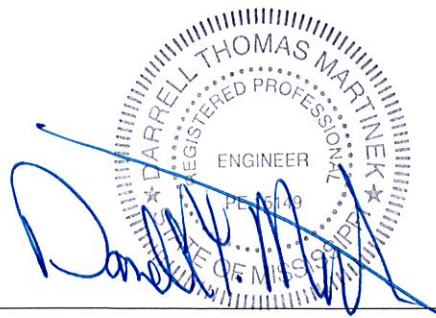
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11. Add enclosed drawing DETAILS – UV DISINFECTION STAIRS C-705 to the Contract Drawings

A circular professional engineer seal for Darrell Thomas Martinek, Registered Professional Engineer, State of Mississippi, License No. PE 05149. The seal is partially obscured by a blue ink signature that reads "Darrell T. Martinek".

Darrell T. Martinek, P.E., P.S.

**State of Mississippi
Bureau of Building, Grounds and Real Property Management**

**GS# 323-024
ARPA Infr. – Waste Cent. Treatment
South Mississippi Correctional Institution
Leakesville, Mississippi**

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PROPOSAL FORM
SECTION 00 4200

To: Bureau of Building, Ground and Real Property Management
501 North West Street, Suite 1401B [Woolfolk Building]
Jackson, Mississippi 39201

Re: Project # - GS# 323-024
Project Title - ARPA Infr. - Waste Cent. Treatment
Location - South Mississippi Correctional Institution, Leakesville, Mississippi

I propose to complete all work in accordance with the Project Manual and Drawings within **500 consecutive calendar days** for the following unit price(s):

Base Bid Items					
Pay Item	Description	Quantity	Units	Unit Price	Total Amount
1	Mobilization/Demobilization, Complete	1	LS		
2	Relocation of Existing Lagoon Aerators, Complete	1	LS		
3	Relocation of Existing Lagoon Aerators Electrical System, Complete	1	LS		
4	Dewater East Lagoon System, Complete	1	LS		
5	Demolition of East Lagoon Liner System, Complete	1	LS		
6	Demolition of Existing Fencing, All Types, Complete	1	LS		
7	Demolition of Existing Sanitary Sewer Piping, Manholes, and Appurtenances, Complete	1	LS		
8	Demolition of Existing Screen Structure, Piping and Appurtenances, Complete	1	LS		
9	Demolition of Existing Pavements, All Types and All Depths, Complete	1	LS		
10	Course Screen System, Complete	1	LS		
11	Course Screen System Electrical, Complete	1	LS		
12	Influent Pump Station, Complete	1	LS		
13	Influent Pump Station Electrical, Complete	1	LS		
14	Fine Screen System, Complete	1	LS		
15	Fine Screen System Electrical, Complete	1	LS		
16	Soda Ash Feed System, Complete	1	LS		
17	Soda Ash Feed System Electrical, Complete	1	LS		
18	Installation of East Lagoon Liner System, Complete	1	LS		
19	Biological Treatment Lagoon System, Complete	1	LS		
20	Biological Treatment Lagoon System Electrical, Complete	1	LS		
21	North Clarifier System, Complete	1	LS		
22	South Clarifier System, Complete	1	LS		
23	North Clarifier System Electrical, Complete	1	LS		
24	South Clarifier System Electrical, Complete	1	LS		
25	Scum Pump Station, Complete	1	LS		
26	Scum Pump Station Electrical, Complete	1	LS		
27	Filter System, Complete	1	LS		
28	Filter System Electrical, Complete	1	LS		
29	Parshall Flume System, Complete	1	LS		

**PROPOSAL FORM
SECTION 00 4200**

Base Bid Items					
Pay Item	Description	Quantity	Units	Unit Price	Total Amount
30	UV Disinfection System, Complete	1	LS		
31	UV Disinfection System Electrical, Complete	1	LS		
32	Effluent Pump Station, Complete	1	LS		
33	Effluent Pump Station Electrical, Complete	1	LS		
34	Erosion Control, Complete	1	LS		
35	Site Lighting, Complete	1	LS		
36	Backup Generator, Complete	1	LS		
37	SCADA System, Complete	1	LS		
38	Removal of Existing Trees All Sizes and Species, Complete	1.00	ACRES		
39	Clearing & Grubbing, Complete	1.3	ACRES		
40	Turfing, Complete	1.3	ACRES		
41	Installation of Fencing, Complete	1,750	LF		
42	Installation of 4" Gravity Sewer, All Depths, Complete	142	LF		
43	Installation of 6" Gravity Sewer, All Depths, Complete	225	LF		
44	Installation of 10" Gravity Sewer, All Depths, Complete	572	LF		
45	Installation of 12" Gravity Sewer, All Depths, Complete	470	LF		
46	Installation of 14" Gravity Sewer, All Depths, Complete	626	LF		
47	Installation of 15" Gravity Sewer, All Depths, Complete	295	LF		
48	Installation of 18" Gravity Sewer, All Depths, Complete	324	LF		
49	Installation of 3" Sanitary Sewer Force Main, All Depths, Complete	105	LF		
50	Installation of 4" Sanitary Sewer Force Main, All Depths, Complete	96	LF		
51	Installation of 8" Sanitary Sewer Force Main, All Depths, Complete	269	LF		
52	Installation of 10" Sanitary Sewer Force Main, All Depths, Complete	80	LF		
53	Installation of Water Line Piping, All Depths, Complete	715	LF		
54	Installation of Water Faucets, Complete	7	EA		
55	Installation of Sanitary Sewer Manhole, 4 Feet Diameter, All Depths, Complete	6	EA		
56	Installation of Sanitary Sewer Manhole, Over 4 Feet in Diameter, All Depths, Complete	1	EA		
57	Installation of 6" Gravel Surface, Complete	1,770	SY		
58	Asphalt Pavement, Complete	840	SY		
59	Installation of 4" Concrete Pavement, Complete	145	SY		
60	Installation of 8" Concrete Pavement, Complete	308	SY		
61	Installation of 8" Storm Sewer Line, Complete	248	LF		
62	Installation of 12" Storm Sewer Line, Complete	85	LF		
63	Backflow Preventer with Enclosure, Complete	1	EA		
64	Installation of Surface Inlet, 24" x 24" Lockable Cast Iron Grate, Complete	6	EA		

**PROPOSAL FORM
SECTION 00 4200**

65	Backflow Preventer Removal/ Replacement, Complete	1	EA		
		Total Bid-Base Bid Items			

Add Alternate #1					
Description: Complete all work required on to replace the lagoon liner system in the West Lagoon					
Pay Item	Description	Quantity	Units	Unit Price	Total Amount
1	Dewater West Lagoon System, Complete	1	LS		
2	Demolition of West Lagoon Liner System, Complete	1	LS		
3	Installation of West Lagoon Liner System, Complete	1	LS		
		Total Additive Alternate 1 Items			

Add Alternate #2					
Description: Complete all work required on to remove and dispose of all sludge in both the East and West Lagoons					
Pay Item	Description	Quantity	Units	Unit Price	Total Amount
1	Mobilization - Portable De-watering Equipment	1	LS		
2	Erosion Control	1	LS		
3	Sludge Removal & Disposal, Complete	225	Dry Ton		
		Total Additive Alternate 2 Items			

Bidder acknowledges that (1) each bid unit price includes an amount considered by bidder to be adequate to cover tax, bond, insurance, permit fees, overhead, profit, labor, equipment, and materials for each separately identified bid item, and (2) estimated quantities are not guaranteed, and are solely for the purpose of comparison of bids, and final payment for all unit price bid items will be based on actual quantities, determined as provided in the Section 01 8000 Part 7, Measurement and Payment. The Bidder also agrees to perform any increased or decreased quantities of work at the unit prices bid for each item.

PART 7 - MEASUREMENT AND PAYMENT**7.01 LUMP SUM**

Payment items for the work of this contract for which contract lump sum payments will be made are listed in the PROPOSAL FORM and described below. All costs for items of work, which are not specifically mentioned to be included in a particular lump sum payment item, shall be included in the listed item cost most closely associated with the work involved. The lump sum price and payment made for each item listed shall constitute full compensation for furnishing all plant, labor, materials and equipment, and performing any associated quality control, tests and reports, and for performing all work required for which separate payment is not otherwise provided.

7.02 LUMP SUM ITEMS**A. "Mobilization/Demobilization, Complete"**

1. Payment will be made for all costs associated with the mobilization/demobilization of personnel and equipment to/from the project site(s) located in Leakesville, Greene County, MS. Mobilization also includes providing all initial services, bonds, insurance, temporary facilities, Davis-Bacon Poster, and any other required signage.
2. Unit of measure: lump sum.

B. "Relocation of Existing Lagoon Aerators, Complete"

1. Payment will be made for all costs associated with relocating (removing and reinstalling) the existing lagoon aerators in accordance with the Contract Documents. All deteriorated or unusable accessories such as anchorage, connection items, cables, etc. shall be replaced with new accessories of same type and material removed. No separate payment will be made for required accessories to complete relocation.
2. Unit of measure: lump sum.

C. "Relocation of Existing Lagoon Aerators Electrical System, Complete"

1. Payment will be made for all costs associated with relocating (removing and reinstalling) the electrical system for the existing lagoon aerators in accordance with the Contract Documents. All deteriorated or unusable accessories such as wire, connectors, etc. shall be replaced with new accessories of same type and material removed. No separate payment will be made for required accessories to complete relocation.

Division One

2. Unit of measure: lump sum.

D. "Dewater East Lagoon System, Complete"

1. Payment will be made for all costs, materials, equipment, labor, quality control services, sampling, testing, and analysis, reports, fees and all costs incidental thereto associated with the transferring of wastewater, sludge, vegetation, and/or other undesirable materials from the eastern lagoon to west lagoon in accordance with the Contract Documents.
2. Unit of measure: lump sum.

E. "Demolition of East Lagoon Liner System, Complete"

1. Payment will be made for all costs, materials, equipment, labor, quality control services, sampling, testing and analysis, reports, fees and all costs incidental thereto associated with the removal, loading, weighing, transporting, unloading and disposal of the existing lagoon liner, vegetation and/or other undesirable materials in accordance with the Contract Documents. Contractor shall furnish to the Professional all truck weight tickets and copies of the waste manifest for all loads hauled to the landfill at no additional cost to the Owner.
2. Unit of measure: lump sum.

F. "Demolition of Existing Fencing, All Types, Complete"

1. Payment will be made for all costs, materials, equipment, labor, and all costs incidental thereto associated with the removal and disposal of the existing fencing (all types) in accordance with the Contract Documents.
2. Unit of measure: lump sum.

G. "Demolition of Existing Sanitary Sewer Piping, Manholes, and Appurtenances, Complete"

1. Payment will be made for all costs associated with the removal and disposal of the existing sanitary sewer piping, manholes, and all associated appurtenances to be demolished as shown in the Contract Documents. Compensation for excavation, backfill, fill, equipment, labor, tests, and incidental items necessary for demolition of existing sanitary sewer piping, manholes, and all associated appurtenances, as shown in the Contract Documents, shall also be included.

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2. Unit of measure: lump sum.

H. "Demolition of Existing Screen Structure, Piping, and Appurtenances, Complete"

1. Payment will be made for all costs associated with the removal and disposal of the existing screen structure, piping, and all associated appurtenances to be demolished as shown in the Contract Documents. Compensation for excavation, backfill, fill, equipment, labor, tests, and incidental items necessary for demolition of existing screen structure, piping, and all associated appurtenances, as shown in the Contract Documents, shall also be included.

2. Unit of measure: lump sum.

I. "Demolition of Existing Pavements, All Types and All Depths, Complete"

1. Payment will be made for all costs associated with the removal and disposal of the existing pavements (all types and all depths) and all associated appurtenances to be demolished as shown in the Contract Documents. Compensation for excavation, backfill, fill, equipment, labor, tests, and incidental items necessary for demolition of existing pavements and all associated appurtenances, as shown in the Contract Documents, shall also be included.

2. Unit of measure: lump sum.

J. "Course Screen System, Complete"

1. Payment will be made for all costs associated with supplying, assembly, and installation of the multi-rake Course Screen Systems; including but not limited to; fuel, temporary pumps, piping, structures, concrete, reinforcement, grating, fittings, cutting, drilling, joint restraints, labor, equipment, traffic control, demolition, excavation, trench safety, shoring, dewatering, base/sub-base preparation, backfill, utility locate anchoring, spare parts, controls, quality control testing and inspection, and all work and/or appurtenances required for a complete and operational coarse screen system, in accordance with the Contract Documents. Compensation shall also be for providing all submittals, shop drawings, samples, and information, as required by the Contract Documents. Payment also includes the removal of all items required for the installation of the coarse screen systems, start-up and training of Using Agencies' personnel or designated representatives, and all items incidental thereto to complete the fully operational coarse screen system as required by the Contract Documents. Compensation shall also include providing an

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Operation and Maintenance Manual for the system, as well as start-up and training for Using Agencies' personnel or designated representatives.

2. Unit of measure: lump sum.

K. "Course Screen System Electrical, Complete"

1. Payment will be made for all costs associated with purchasing, transporting, supplying, assembling, and installation of electrical coarse screen system improvements, including but not limited to; installation of the control panel, power supply, ultrasonic level sensors, transmitters, sensor and transmitter mounting, connection to existing SCADA system, electrical box enclosures, displays, monitors, mounting equipment, electrical work, cabling, conduit, conductors, equipment grounding, wiring, process demonstration, training, software, hardware, website development, programming, testing, materials, equipment, tools, labor, trenching, excavating, demolition, de-watering, backfilling, turfing, restoration of the site, traffic control, utility locates, and all other work/materials necessary for a fully operational electrical coarse screen system improvement in accordance with the Contract Documents.

2. Unit of measure: lump sum.

L. "Influent Pump Station, Complete"

1. Payment shall include furnishing all materials, equipment, and labor for installation of the pump equipment for the Influent Pump Station. This encompasses the pumps, motors, enclosure, fittings, gauges, valves, controls, control panel(s), flow meter, instruments, electrical conduits, and testing. Additionally, it covers concrete equipment pad, pump vaults, structural concrete, mix design, admixtures, water, reinforcing steel, forms, coatings, curing materials, joint filler, sealants, dowel bars, anchors (nuts, bolts, washers, etc.), waterstops, wall pipes, hatch assemblies, thrust blocks, pipe bends and connections, metallic tape, water meter, pipe supports, ladder/rungs, controls, electrical connections, drainage pipes and structures, utility services (power, water, etc.), gravity sewer pipe, pressure sewer pipe, pressure sewer valves, connections to existing sewer, and testing. Payment shall also extend to miscellaneous items necessary for completion, such as utility locates, verification of pipe alignment, excavating, trench safety, shoring, dewatering, base/sub-base preparation, process water by-passing, temporary pumps and piping, fuel, backfill, fill, bedding material, and any associated quality control testing or other work incidental thereto to complete a fully operational pump station system as required by the Contract Documents. Compensation shall also include providing an Operation and Maintenance Manual for the system, as well

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as start-up and training for Using Agencies' personnel or designated representatives.

2. Unit of measure: lump sum.

M. "Influent Pump Station Electrical, Complete"

1. Payment will be made for all costs associated with purchasing, transporting, supplying, assembling, and installation of electrical influent pump station improvements, including but not limited to; installation of the control panel, power supply, ultrasonic influent flowmeters, transmitters, sensors, sensor and transmitter mounting, connection to existing SCADA system, electrical box enclosures, displays, monitors, mounting equipment, electrical work, cabling, conduit, conductors, equipment grounding, wiring, process demonstration, training, software, hardware, website development, programming, testing, materials, equipment, tools, labor, trenching, excavating, demolition, de-watering, backfilling, turbing, restoration of the site, traffic control, utility locates, and all other work/materials necessary for a fully operational electrical influent pump station system improvement in accordance with the Contract Documents.

2. Unit of measure: lump sum.

N. "Fine Screen System, Complete"

1. Payment will be made for all costs associated with supplying, assembly, and installation of the multi-rake Fine Screen Systems; including but not limited to fuel, temporary pumps, piping, structures, concrete, reinforcement, grating, fittings, cutting, drilling, joint restraints, labor, equipment, traffic control, demolition, excavation, trench safety, shoring, dewatering, base/sub-base preparation, backfill, utility locate, anchoring, spare parts, controls, quality control testing and inspection, and all work and/or appurtenances required for a complete and operational fine screen system, in accordance with the Contract Documents. Compensation shall also be for providing all submittals, shop drawings, samples, and information, as required by the Contract Documents. Payment also includes the removal of all items required for the installation of the fine screen systems, start-up and training of Using Agencies' personnel or designated representatives, and all items incidental thereto to complete the fully operational fine screen system as required by the Contract Documents. Compensation shall also include providing an Operation and Maintenance Manual for the system, as well as start-up and training for Using Agencies' personnel or designated representatives.

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2. Unit of measure: lump sum.

O. "Fine Screen System Electrical, Complete"

1. Payment will be made for all costs associated with purchasing, transporting, supplying, assembling, and installation of electrical fine screen system improvements, including but not limited to; installation of control panel, power supply, the ultrasonic level sensors, transmitters, sensor and transmitter mounting, connection to existing SCADA system, electrical box enclosures, displays, monitors, mounting equipment, electrical work, cabling, conduit, conductors, equipment grounding, wiring, process demonstration, training, software, hardware, website development, programming, testing, materials, equipment, tools, labor, trenching, excavating, demolition, de-watering, backfilling, turfing, restoration of the site, traffic control, utility locates, and all other work/materials necessary for a fully operational electrical fine screen system improvement in accordance with the Contract Documents.

2. Unit of measure: lump sum.

P. "Soda Ash Feed System, Complete"

1. Payment will be made for all costs associated with supplying, assembly, and installation of the Soda Ash Feed System; including but not limited to; fuel, temporary pumps, piping, structures, metal work and metal building, HVAC, concrete, reinforcement, grating, fittings, cutting, drilling, joint restraints, labor, equipment, traffic control, demolition, excavation, trench safety, shoring, dewatering, base/sub-base preparation, backfill, utility locate anchoring, spare parts, controls, quality control testing and inspection, and all work and/or appurtenances required for a complete and operational soda ash feed system, in accordance with the Contract Documents. Compensation shall also include providing all submittals, shop drawings, samples, an Operation and Maintenance Manual for the system, and shall include start-up/training for Using Agencies' personnel or designated representatives.

2. Unit of measure: lump sum.

Q. "Soda Ash Feed System Electrical, Complete"

1. Payment will be made for all costs associated with purchasing, transporting, supplying, assembling, and installation of electrical work for soda ash feed system and building improvements, including but not limited to; installation of the power supply, building breaker panel, transmitters, sensors, sensor and transmitter mounting, connection to

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existing SCADA system, electrical box enclosures, displays, monitors, mounting equipment, electrical work for HVAC, electrical work soda ash feed system, electrical work for lifts or cranes, lighting, cabling, conduit, conductors, controls, equipment grounding, wiring, process demonstration, training, software, hardware, website development, programming, testing, materials, equipment, tools, labor, trenching, excavating, demolition, de-watering, backfilling, turfing, restoration of the site, traffic control, utility locates, and all other work/materials necessary for a fully operational soda ash feed system, building wiring, or other electrical improvements in accordance with the Contract Documents.

2. Unit of measure: lump sum.

R. "Installation of East Lagoon Liner System, Complete"

1. Payment will be made for all cost associated with completely installing the East Lagoon Liner System including, but not limited to, site preparation, material procurement, stockpiling, protection, waste management, surface preparation, layout, installation, anchoring and securing, seaming, testing, quality assurance, and reporting in accordance with the contract drawings and specifications. The HDPE liner system will be installed with precise, straight lines, and all grading will adhere to the Contract Documents. The contractor must include provisions for waste, scrap, and overlap in their pricing; no additional payment will be provided for these aspects.
2. Unit of measure: lump sum.

S. "Biological Treatment Lagoon System, Complete"

1. The Contractor shall be responsible for all material, equipment, labor, quality control, submittals, shop drawings, sampling, testing, analysis, fees, permitting, reporting, and scheduling associated with constructing the Biological Treatment Lagoon System. This includes, but is not limited to, the cost of fuel, excavation, grading, temporary pumps, piping, structures, concrete, reinforcement, mix designs, grating, fittings, cutting, drilling, joint restraints, labor, equipment, traffic control, demolition, trench safety, shoring, dewatering, base/sub-base preparation, backfill, utility locate, anchoring, spare parts, controls, quality control testing and inspection, and all work and/or appurtenances required for a complete and fully operational biological treatment system in accordance with the Contract Documents. Compensation shall also include providing an Operation and Maintenance Manual for the system, as well as start-up and training for Using Agencies' personnel or designated representatives.
2. Unit of measure: lump sum.

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T. "Biological Treatment Lagoon System Electrical, Complete"

1. Payment will cover all costs associated with purchasing, transporting, supplying, assembling, and installing electrical components for the biological treatment lagoon system. This includes, but is not limited to, the installation of control panel, power supply, flowmeters, transmitters, sensors, sensor and transmitter mounting, connection to the existing SCADA system, electrical box enclosures, displays, monitors, mounting equipment, temperature control systems, lighting, cabling, conduit, conductors, controls, equipment grounding, wiring, process demonstration, training, software, hardware, website development, programming, testing, materials, equipment, tools, labor, trenching, excavating, demolition, dewatering, backfilling, turfing, restoration of the site, traffic control, utility locates, and all other electrical work necessary for a fully operational biological treatment lagoon system in accordance with the Contract Documents..
2. Unit of measure: lump sum.

U. "North Clarifier System, Complete"

1. The Contractor shall be responsible for all material, equipment, labor, quality control, submittals, shop drawings, sampling, testing, analysis, fees, permitting, reporting, and scheduling associated with constructing the North Clarifier System. This includes, but is not limited to, the cost of fuel, excavation, grading, temporary pumps, piping, structures, concrete, reinforcement, mix designs, grating, fittings, cutting, drilling, joint restraints, labor, equipment, traffic control, demolition, trench safety, shoring, dewatering, base/sub-base preparation, backfill, utility locate, anchoring, spare parts, controls, quality control testing and inspection, and all work and/or appurtenances required for a complete and fully operational clarifier system in accordance with the Contract Documents. Compensation shall also include providing an Operation and Maintenance Manual for the system, as well as start-up and training for Using Agencies' personnel or designated representatives.
2. Unit of measure: lump sum.

V. "South Clarifier System, Complete"

1. The Contractor shall be responsible for all material, equipment, labor, quality control, submittals, shop drawings, sampling, testing, analysis, fees, permitting, reporting, and scheduling associated with constructing the South Clarifier System. This includes, but is not limited to, the cost of fuel, excavation, grading, temporary pumps, piping, structures, concrete,

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reinforcement, mix designs, grating, fittings, cutting, drilling, joint restraints, labor, equipment, traffic control, demolition, trench safety, shoring, dewatering, base/sub-base preparation, backfill, utility locate, anchoring, spare parts, controls, quality control testing and inspection, and all work and/or appurtenances required for a complete and fully operational clarifier system in accordance with the Contract Documents. Compensation shall also include providing an Operation and Maintenance Manual for the system, as well as start-up and training for Using Agencies' personnel or designated representatives.

2. Unit of measure: lump sum.

W. "North Clarifier System Electrical, Complete"

1. Payment will cover all costs associated with purchasing, transporting, supplying, assembling, and installing electrical components for the North Clarifier System. This includes, but is not limited to, the installation of control panel, power supply, transmitters, sensors, sensor and transmitter mounting, connection to the existing SCADA system, electrical box enclosures, displays, monitors, mounting equipment, temperature control systems, lighting, cabling, conduit, conductors, controls, equipment grounding, wiring, process demonstration, training, software, hardware, website development, programming, testing, materials, equipment, tools, labor, trenching, excavating, demolition, dewatering, backfilling, turfing, restoration of the site, traffic control, utility locates, and all other electrical work necessary for a fully operational clarifier system in accordance with the Contract Documents..
2. Unit of measure: lump sum.

X. "South Clarifier System Electrical, Complete"

1. Payment will cover all costs associated with purchasing, transporting, supplying, assembling, and installing electrical components for the South Clarifier System. This includes, but is not limited to, the installation of control panel, power supply, transmitters, sensors, sensor and transmitter mounting, connection to the existing SCADA system, electrical box enclosures, displays, monitors, mounting equipment, temperature control systems, lighting, cabling, conduit, conductors, controls, equipment grounding, wiring, process demonstration, training, software, hardware, website development, programming, testing, materials, equipment, tools, labor, trenching, excavating, demolition, dewatering, backfilling, turfing, restoration of the site, traffic control, utility locates, and all other electrical work necessary for a fully operational clarifier system in accordance with the Contract Documents..

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2. Unit of measure: lump sum.

Y. "Scum Pump Station, Complete"

1. Payment shall include furnishing all materials, equipment, and labor for installation of the pump equipment for the Scum Pump Station. This encompasses the pumps, motors, enclosure, fittings, gauges, valves, controls, instruments, and testing. Additionally, it covers concrete equipment pad, pump vaults, structural concrete, mix design, admixtures, water, reinforcing steel, forms, coatings, curing materials, joint filler, sealants, dowel bars, anchors (nuts, bolts, washers, etc.), waterstops, wall pipes, hatch assemblies, thrust blocks, pipe bends and connections, metallic tape, water meter, pipe supports, ladder/rungs, drainage pipes and structures, utility services (water, etc.), gravity sewer pipe, pressure sewer pipe, pressure sewer valves, connections to existing sewer, and testing. Payment shall also extend to miscellaneous items necessary for completion, such as utility locates, verification of pipe alignment, excavating, trench safety, shoring, dewatering, base/sub-base preparation, process water by-passing, temporary pumps and piping, fuel, backfill, fill, bedding material, and any associated quality control testing or other work incidental thereto to complete a fully operational pump station system as required by the Contract Documents. Compensation shall also include providing an Operation and Maintenance Manual for the system, as well as start-up and training for Using Agencies' personnel or designated representatives.

2. Unit of measure: lump sum.

Z. "Scum Pump Station Electrical, Complete"

1. Payment will cover all costs associated with purchasing, transporting, supplying, assembling, and installing electrical components for the Scum Pump Station. This includes, but is not limited to, the installation of control panel, power supply, flowmeters, transmitters, sensors, sensor and transmitter mounting, connection to the existing SCADA system, electrical box enclosures, displays, monitors, mounting equipment, temperature control systems, lighting, cabling, conduit, conductors, controls, equipment grounding, wiring, process demonstration, training, software, hardware, website development, programming, testing, materials, equipment, tools, labor, trenching, excavating, demolition, dewatering, backfilling, turfing, restoration of the site, traffic control, utility locates, and all other electrical work necessary for a fully operational pump station system in accordance with the Contract Documents.

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2. Unit of measure: lump sum.

AA. "Filter System, Complete"

1. Payment will be made for all costs associated with equipment, supplying, assembly, and installation of the Filter System; including but not limited to; fuel, temporary pumps, piping, structures, metal work and metal building, HVAC, bridge crane system, concrete, reinforcement, grating, fittings, cutting, drilling, joint restraints, labor, equipment, traffic control, demolition, excavation, trench safety, shoring, dewatering, base/sub-base preparation, backfill, utility locate, anchoring, spare parts, controls, quality control testing and inspection, and all work and/or appurtenances required for a complete and operational filtration system, in accordance with the Contract Documents. Compensation shall also include providing all submittals, shop drawings, samples, an Operation and Maintenance Manual for the system, and shall include start-up/training for Using Agencies' personnel or designated representatives.

2. Unit of measure: lump sum.

BB. "Filter System Electrical, Complete"

1. Payment will be made for all costs associated with purchasing, transporting, supplying, assembling, and installation of electrical work for filter system and building improvements, including but not limited to; installation of control panels, power supply, electrical breaker panel, transmitters, sensors, sensor and transmitter mounting, connection to existing SCADA system, electrical box enclosures, displays, monitors, mounting equipment, electrical work for HVAC, electrical work for lifts or cranes, lighting, cabling, conduit, conductors, controls, equipment grounding, wiring, process demonstration, training, software, hardware, website development, programming, testing, materials, equipment, tools, labor, trenching, excavating, demolition, de-watering, backfilling, turfing, restoration of the site, traffic control, utility locates, and all other work/materials necessary for a fully operational filtration system, building wiring, or other electrical improvements in accordance with the Contract Documents.

2. Unit of measure: lump sum.

CC. "Parshall Flume System, Complete"

1. The Contractor shall be responsible for all material, equipment, labor, quality control, submittals, shop drawings, sampling, testing, analysis, fees, permitting, reporting, and scheduling associated with constructing

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the Parshall Flume System. Payment shall also include, but is not limited to, the cost of fuel, excavation, grading, temporary pumps, piping, structures, concrete, reinforcement, mix designs, grating, fittings, cutting, drilling, joint restraints, labor, equipment, traffic control, demolition, trench safety, shoring, dewatering, base/sub-base preparation, backfill, utility locate, anchoring, spare parts, controls, quality control testing, and inspection. Additionally, payment shall cover all electrical work, including, but not limited to, the installation of control panel, power supply, flowmeters, transmitters, sensors, mounting, connection to SCADA system, electrical box enclosures, displays, monitors, mounting equipment, temperature control systems, lighting, cabling, conduit, conductors, controls, equipment grounding, wiring, training, software, hardware, website development, programming, utility locates, and all other electrical work necessary for a fully operational parshall flume system in accordance with the Contract Documents. Compensation shall also include providing, submittals, shop drawings, an Operation and Maintenance Manual for the system, and start-up training for Using Agencies' personnel or designated representatives.

2. Unit of measure: lump sum.

DD. "UV Disinfection System, Complete"

1. Payment will be made for all costs associated with equipment, supplying, assembly, and installation of the UV Disinfection System; including but not limited to; fuel, temporary pumps, piping, structures, metal work and metal building, HVAC, bridge crane system, concrete, reinforcement, grating, fittings, cutting, drilling, joint restraints, labor, equipment, traffic control, demolition, excavation, trench safety, shoring, dewatering, base/sub-base preparation, backfill, utility locate, anchoring, spare parts, controls, quality control testing and inspection, and all work and/or appurtenances required for a complete and operational disinfection system, in accordance with the Contract Documents. Compensation shall also include providing all submittals, shop drawings, samples, an Operation and Maintenance Manual for the system, and shall include start-up/training for Using Agencies' personnel or designated representatives.

2. Unit of measure: lump sum.

EE. "UV Disinfection System Electrical, Complete"

1. Payment will be made for all costs associated with purchasing, transporting, supplying, assembling, and installation of electrical work for the UV Disinfection System and associated building improvements, including but not limited to; installation of control panel, power supply,

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the ultrasonic influent flowmeters, transmitters, sensors, sensor and transmitter mounting, connection to existing SCADA system, electrical box enclosures, displays, monitors, mounting equipment, electrical work for HVAC, electrical work for lifts or cranes, lighting, cabling, conduit, conductors, controls, equipment grounding, wiring, process demonstration, training, software, hardware, website development, programming, testing, materials, equipment, tools, labor, trenching, excavating, demolition, de-watering, backfilling, turfing, restoration of the site, traffic control, utility locates, and all other work/materials necessary for a fully operational disinfection system, building wiring, or other electrical improvements in accordance with the Contract Documents.

2. Unit of measure: lump sum.

FF. "Effluent Pump Station, Complete"

1. Payment shall include furnishing all materials, equipment, and labor for installation of the pump equipment for the Effluent Pump Station. This encompasses the pumps, motors, enclosure, fittings, gauges, valves, controls, and testing. Additionally, it covers concrete equipment pad, pump vaults, structural concrete, mix design, admixtures, water, reinforcing steel, forms, coatings, curing materials, joint filler, sealants, dowel bars, anchors (nuts, bolts, washers, etc.), waterstops, wall pipes, hatch assemblies, thrust blocks, pipe bends and connections, metallic tape, pipe supports, ladder/rungs, controls, electrical connections, drainage pipes and structures, utility services (water, etc.), gravity sewer pipe, pressure sewer pipe, pressure sewer valves, connections to existing sewer, and testing. Payment shall also extend to miscellaneous items necessary for completion, such as utility locates, verification of pipe alignment, excavating, trench safety, shoring, dewatering, base/sub-base preparation, process water by-passing, temporary pumps and piping, fuel, backfill, fill, bedding material, and any associated quality control testing or other work incidental thereto to complete a fully operational pump station system as required by the Contract Documents. Compensation shall also include providing an Operation and Maintenance Manual for the system, as well as start-up and training for Using Agencies' personnel or designated representatives.

2. Unit of measure: lump sum.

GG. "Effluent Pump Station Electrical, Complete"

1. Payment will be made for all costs associated with purchasing, transporting, supplying, assembling, and installation of electrical effluent pump station improvements, including but not limited to; installation of

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control panel, power supply, transmitters, sensors, sensor and transmitter mounting, connection to existing SCADA system, electrical box enclosures, displays, monitors, mounting equipment, electrical work, cabling, conduit, conductors, equipment grounding, wiring, process demonstration, training, software, hardware, website development, programming, testing, materials, equipment, tools, labor, trenching, excavating, demolition, de-watering, backfilling, turfing, restoration of the site, traffic control, utility locates, and all other work/materials necessary for a fully operational electrical effluent pump station system improvement in accordance with the Contract Documents.

2. Unit of measure: lump sum.

HH. "Erosion Control, Complete"

1. Payment will be made for all costs associated with preparing a Small Construction Stormwater Pollution Prevention Plan. Payment also includes providing, installing, maintaining, replacement, and removal of all erosion control devices. Payment further includes all inspections, reports and record retention as required by both the Mississippi Department of Environmental Quality (MDEQ) and the Professional.
2. Unit of measure: lump sum.

II. "Site Lighting, Complete"

1. Payment will be made for all labor, materials, equipment, and other associated cost necessary to complete site lighting installations. Payment shall include, but not be limited to, primary line connections, transformer connections, switch panels, secondary service connections, metering, circuiting, lighting control, fixtures, poles, bases, electrical box enclosures, conduit, equipment grounding, wiring, trenching, excavating, de-watering, backfilling, turfing, restoration of the site, traffic control, utility locates, and all other work/materials necessary for complete and fully operational site lighting in accordance with the Contract Documents.
2. Unit of measure: lump sum.

JJ. "Backup Generator, Complete"

1. Payment will be made for all electrical work, tools, labor, materials, equipment, start-up, fuel, and other associated cost necessary to construct and/or install the treatment system backup generator. Payment shall include, but not be limited to, generator set, transfer switch, trenching, excavating/backfilling, turfing, conduits, wiring, service risers, conductors, standoff bracing, demolition of select existing electrical

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appurtenances, and all work incidental thereto necessary to completely install the treatment system backup generator in accordance with the Contract Documents. Compensation shall also include providing an Operation and Maintenance Manual for the system, as well as start-up and training for Using Agencies' personnel or designated representatives.

2. Unit of measure: lump sum.

KK. "SCADA System, Complete"

1. Payment will be made for all costs associated with supplying, assembling, and installation of the SCADA system, transmitters, sensor and transmitter mounting, connection to existing SCADA system, electrical box enclosures, displays, monitors, mounting equipment, electrical work, cabling, conduit, equipment grounding, wiring, and all other materials, equipment, labor, and any quality control services incidental to completing the work as shown in the Contract Documents. Payment also includes compensation for all items incidental to the installation of a complete and operational SCADA and flow monitoring system, including but not limited to, process demonstration, training, software, hardware, website development, programming, testing, and all work incidental thereto necessary to install and monitor the SCADA and flow monitoring system, in accordance with the Contract Documents. Compensation shall also include providing an Operation and Maintenance Manual for the system, as well as start-up and training for Using Agencies' personnel or designated representatives.
2. Unit of measure: lump sum.

LL. "Alternate #1 – Dewater West Lagoon System, Complete"

1. Payment will be made for all costs, materials, equipment, labor, quality control services, sampling, testing and analysis, reports, fees and all costs incidental thereto associated with the transferring of wastewater, sludge, vegetation, and/or other undesirable materials from the western lagoon to the east lagoon in accordance with the Contract Documents.
2. Unit of measure: lump sum

MM. "Alternate #1 - Demolition of West Lagoon Liner System, Complete"

1. Payment will be made for all costs, materials, equipment, labor, quality control services, sampling, testing and analysis, reports, fees and all costs incidental thereto associated with the removal, loading, weighing, transporting, unloading and disposal of the existing lagoon liner,

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vegetation and/or other undesirable materials in accordance with the Contract Documents. Contractor shall furnish to the Professional all truck weight tickets and copies of the waste manifest for all loads hauled to the landfill at no additional cost to the Owner.

2. Unit of measure: lump sum.

NN. "Alternate #1 - Installation of West Lagoon Liner System, Complete"

1. Payment will be made for all cost associated with completely installing the West Lagoon Liner System including, but not limited to, site preparation, material procurement, stockpiling, protection, waste management, surface preparation, layout, installation, anchoring and securing, seaming, testing, quality assurance, and reporting in accordance with the contract drawings and specifications. The HDPE liner system will be installed with precise, straight lines, and all grading will adhere to the Contract Documents. The contractor must include provisions for waste, scrap, and overlap in their pricing; no additional payment will be provided for these aspects.

2. Unit of measure: lump sum

OO. "Alternate #2 – Mobilization-Portable De-Watering Equipment"

1. Payment will be made for all costs associated with the mobilization/demobilization of dewatering equipment and personnel to/from the project site located in Leakesville, Greene County, Mississippi. The cost for mobilization shall include dewatering equipment which has the capacity to provide the dewatering of sludge acceptable to the Professional.

2. Unit of measure: lump sum

PP. "Alternate #2 – Erosion Control"

1. Payment will be made for costs associated with including necessary area for operations associated with Alternate #2 work to the stormwater pollution prevention plan. Payment also includes providing, installing, maintaining, replacement, and removal of all erosion control devices. Payment further includes all inspections, reports and record retention as required by both the Mississippi Department of Environmental Quality (MDEQ) and the Professional.

2. Unit of measure: lump sum

7.03 UNIT PRICE

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Payment items for the work of this contract on which the contract unit price payments will be made are listed in the PROPOSAL FORM and described below. All costs for items of work, which are not specifically mentioned to be included in a particular unit price payment item, shall be included in the listed item cost most closely associated with the work involved. The unit price and payment made for each item listed shall constitute full compensation for furnishing all plant, labor, materials, and equipment, and performing any associated quality control, tests and reports, and for performing all work required for each of the price items.

7.04 UNIT PRICE ITEMS

A. "Removal of Existing Trees All Sizes and Species, Complete"

1. Payment will be made for all costs associated with the complete removal and disposal of existing trees (all sizes and species) as specified in the Contract Documents.
2. Unit of measure: acre.

B. "Clearing and Grubbing, Complete"

1. Payment will be made for all costs associated with the clearing and grubbing of the project site as specified in the Contract Documents.
2. Unit of measure: acre.

C. "Turfing, Complete"

1. Payment will be made for all costs associated with the establishment of turf. Payment shall include all testing, fertilizer, seed planting, mulching and all incidentals thereto as specified in the Contract Documents. Measurement for turf will be taken on the slope of the ground to compute the actual surface area.
2. Unit of measure: acre.

D. "Installation of Fencing, Complete"

1. Payment will be made for all costs associated with the repairs or new installations of security fencing as shown and/or specified in the Contract Documents. Payment for all work and materials shall include, but not be limited to, framing bars, barbed wire, razor wire, wire fabric, tie rods, tie wire, stretching bars, fittings, gate post, footings, materials, equipment, labor, and all costs incidental thereto.
2. Unit of measure: linear foot.

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E. "Installation of 4" Gravity Sewer, All Depths, Complete"

1. Payment will be made for all costs associated with constructing the 4" gravity sewer line system, including but not limited to, temporary pumps, fuel, temporary piping, piping supports, fittings, connections, manhole penetrations, outfalls, cleanouts, joint restraints, labor, equipment, traffic control, excavation, trench safety, shoring, dewatering, base/sub-base preparation, demolition, backfill, fill, utility locates, testing, restoration of the site, and all work incidental thereto necessary to construct the 4" gravity sewer line system in accordance with the Contract Documents.
2. Unit of measure: linear foot.

F. "Installation of 6" Gravity Sewer, All Depths, Complete"

1. Payment will be made for all costs associated with constructing the 6" gravity sewer line system, including but not limited to, temporary pumps, fuel, temporary piping, piping supports, fittings, connections, manhole penetrations, outfalls, cleanouts, joint restraints, labor, equipment, traffic control, excavation, trench safety, shoring, dewatering, base/sub-base preparation, demolition, backfill, fill, utility locates, testing, restoration of the site, and all work incidental thereto necessary to construct the 6" gravity sewer line system in accordance with the Contract Documents.
2. Unit of measure: linear foot.

G. "Installation of 10" Gravity Sewer, All Depths, Complete"

1. Payment will be made for all costs associated with constructing the 10" gravity sewer line system, including but not limited to, temporary pumps, fuel, temporary piping, piping supports, fittings, connections, manhole penetrations, outfalls, cleanouts, joint restraints, labor, equipment, traffic control, excavation, trench safety, shoring, dewatering, base/sub-base preparation, demolition, backfill, fill, utility locates, testing, restoration of the site, and all work incidental thereto necessary to construct the 10" gravity sewer line system in accordance with the Contract Documents.
2. Unit of measure: linear foot.

H. "Installation of 12" Gravity Sewer, All Depths, Complete"

1. Payment will be made for all costs associated with constructing the 12" gravity sewer line system, including but not limited to, temporary pumps, fuel, temporary piping, piping supports, fittings, connections, manhole penetrations, outfalls, cleanouts, joint restraints, labor, equipment, traffic control, excavation, trench safety, shoring, dewatering, base/sub-base

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preparation, demolition, backfill, fill, utility locates, testing, restoration of the site, and all work incidental thereto necessary to construct the 12" gravity sewer line system in accordance with the Contract Documents.

2. Unit of measure: linear foot.

I. "Installation of 14" Gravity Sewer, All Depths, Complete"

1. Payment will be made for all costs associated with constructing the 14" gravity sewer line system, including but not limited to, temporary pumps, fuel, temporary piping, piping supports, fittings, connections, manhole penetrations, outfalls, cleanouts, joint restraints, labor, equipment, traffic control, excavation, trench safety, shoring, dewatering, base/sub-base preparation, demolition, backfill, fill, utility locates, testing, restoration of the site, and all work incidental thereto necessary to construct the 14" gravity sewer line system in accordance with the Contract Documents.

2. Unit of measure: linear foot.

J. "Installation of 15" Gravity Sewer, All Depths, Complete"

1. Payment will be made for all costs associated with constructing the 15" gravity sewer line system, including but not limited to, temporary pumps, fuel, temporary piping, piping supports, fittings, connections, manhole penetrations, outfalls, cleanouts, joint restraints, labor, equipment, traffic control, excavation, trench safety, shoring, dewatering, base/sub-base preparation, demolition, backfill, fill, utility locates, testing, restoration of the site, and all work incidental thereto necessary to construct the 15" gravity sewer line system in accordance with the Contract Documents.

2. Unit of measure: linear foot.

K. "Installation of 18" Gravity Sewer, All Depths, Complete"

1. Payment will be made for all costs associated with constructing the 18" gravity sewer line system, including but not limited to, temporary pumps, fuel, temporary piping, piping supports, fittings, connections, manhole penetrations, outfalls, cleanouts, joint restraints, labor, equipment, traffic control, excavation, trench safety, shoring, dewatering, base/sub-base preparation, demolition, backfill, fill, utility locates, testing, restoration of the site, and all work incidental thereto necessary to construct the 18" gravity sewer line system in accordance with the Contract Documents.

2. Unit of measure: linear foot.

L. "Installation of 3" Sanitary Sewer Force Main, All Depths, Complete"

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1. Payment will be made for all costs associated with constructing the 3" sanitary sewer force main, including but not limited to, temporary pumps, fuel, temporary piping, piping supports, fittings, connections, manhole penetrations, outfalls, cleanouts, joint restraints, labor, equipment, traffic control, excavation, trench safety, shoring, dewatering, base/sub-base preparation, demolition, backfill, fill, utility locates, testing, restoration of the site, and all work incidental thereto necessary to construct the 3" sanitary sewer force main in accordance with the Contract Documents.
2. Unit of measure: linear foot.

M. "Installation of 4" Sanitary Sewer Force Main, All Depths, Complete"

1. Payment will be made for all costs associated with constructing the 4" sanitary sewer force main, including but not limited to, temporary pumps, fuel, temporary piping, piping supports, fittings, connections, manhole penetrations, outfalls, cleanouts, joint restraints, labor, equipment, traffic control, excavation, trench safety, shoring, dewatering, base/sub-base preparation, demolition, backfill, fill, utility locates, testing, restoration of the site, and all work incidental thereto necessary to construct the 4" sanitary sewer force main in accordance with the Contract Documents.
2. Unit of measure: linear foot.

N. "Installation of 8" Sanitary Sewer Force Main, All Depths, Complete"

1. Payment will be made for all costs associated with constructing the 8" sanitary sewer force main, including but not limited to, temporary pumps, fuel, temporary piping, piping supports, fittings, connections, manhole penetrations, outfalls, cleanouts, joint restraints, labor, equipment, traffic control, excavation, trench safety, shoring, dewatering, base/sub-base preparation, demolition, backfill, fill, utility locates, testing, restoration of the site, and all work incidental thereto necessary to construct the 8" sanitary sewer force main in accordance with the Contract Documents.
2. Unit of measure: linear foot.

O. "Installation of 10" Sanitary Sewer Force Main, All Depths, Complete"

1. Payment will be made for all costs associated with constructing the 10" sanitary sewer force main, including but not limited to, temporary pumps, fuel, temporary piping, piping supports, fittings, connections, manhole penetrations, outfalls, cleanouts, joint restraints, labor, equipment, traffic control, excavation, trench safety, shoring, dewatering, base/sub-base preparation, demolition, backfill, fill, utility locates, testing, restoration of

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the site, and all work incidental thereto necessary to construct the 10" sanitary sewer force main in accordance with the Contract Documents.

2. Unit of measure: linear foot.

P. "Installation of Water Line Piping, All Depths, Complete"

1. Payment will be made for all costs associated with constructing the water line piping (all sizes and installation depths), including but not limited to, temporary pumps, fuel, temporary piping, piping supports, fittings, connections, joint restraints, splash blocks, labor, equipment, traffic control, excavation, trench safety, shoring, dewatering, base/sub-base preparation, demolition, backfill, fill, utility locates, testing, restoration of the site, and all work incidental thereto necessary to construct the required water lines in accordance with the Contract Documents.
2. Unit of measure: linear foot.

Q. "Installation of Water Faucets, Complete"

1. Payment will be made for all costs associated with labor, materials, and equipment required for furnishing and installing the water faucets, and all associated items thereof to complete the work in accordance with the Contract Documents. Payment shall also include, but not be limited to, labor, utility locates, verification of existing and required pipe alignment, connections, fittings, piping, valves, unions, excavating, trenching, shoring, dewatering, base/sub-base preparation, process water by-passing, temporary pumps, fuel, backfill, fill, bedding material, turf establishment and any associated quality control testing, and all work incidental thereto.
2. Unit of measure: each.

R. "Installation of Sanitary Sewer Manhole, 4 Feet Diameter, All Depths, Complete"

1. Payment will be made for all costs associated with constructing the sanitary sewer manhole (all depths), including but not limited to, temporary pumps, fuel, temporary piping, piping, wall pipes, waterstops, fittings, connections, concrete, covers, frame, reinforcement, joint restraint, labor, equipment, traffic control, excavation, trench safety, shoring, dewatering, base/sub-base preparation, pipe alignment, demolition, backfill, fill, bedding material, utility locates, testing, restoration of the site, and all work incidental thereto necessary to

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construct the sanitary sewer manhole in accordance with the Contract Documents.

2. Unit of measure: each.

S. "Installation of Sanitary Sewer Manhole, Over 4 Feet In Diameter, All Depths, Complete"

1. Payment will be made for all costs associated with constructing the sanitary sewer manhole (all depths), including but not limited to, temporary pumps, fuel, temporary piping, piping, wall pipes, waterstops, fittings, connections, concrete, covers, frame, reinforcement, joint restraint, labor, equipment, traffic control, excavation, trench safety, shoring, dewatering, base/sub-base preparation, pipe alignment, demolition, backfill, fill, bedding material, utility locates, testing, restoration of the site, and all work incidental thereto necessary to construct the sanitary sewer manhole in accordance with the Contract Documents.

2. Unit of measure: each.

T. "Installation of 6" Gravel Surface, Complete"

1. Payment will be made for all fuel, labor, materials, testing, reporting, submittals and equipment cost associated with the installation of the 6" Gravel Surface as specified in the Contract Documents.

2. Unit of measure: square yard.

U. "Asphalt Pavement, Complete"

1. Payment will be made for all costs associated with the construction of the required asphalt pavement. Payment shall include, but not be limited to all labor, materials, equipment, submittals, testing and reporting needed to construct the required asphalt pavement as specified in the Contract Documents.

2. Unit of measure: square yard.

V. "Installation of 4" Concrete Pavement, Complete"

1. Payment will be made for all costs associated with the construction of the required 4" concrete pavement. Payment shall include, but not be limited to all labor, materials, equipment, submittals, testing and reporting needed to construct the required 4" concrete pavement as specified in the Contract Documents.

2. Unit of measure: square yard.

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W. "Installation of 8" Concrete Pavement, Complete"

1. Payment will be made for all costs associated with the construction of the required 8" concrete pavement. Payment shall include, but not be limited to all labor, materials, equipment, submittals, testing and reporting needed to construct the required 8" concrete pavement as specified in the Contract Documents.
2. Unit of measure: square yard.

W. "8-Inch Storm Sewer Line, Complete"

1. Payment will be made for all costs associated with constructing the 8-inch storm sewer piping, including but not limited to, temporary pumps, fuel, temporary piping, piping, fittings, connections, outfalls, cleanouts, joint restraints, waterstops, labor, equipment, traffic control, excavation, trench safety, shoring, dewatering, base/sub-base preparation, demolition, backfill, utility locates, testing, restoration of the site, and all work incidental thereto necessary to construct the 8-inch storm sewer in accordance with the Contract Documents.
2. Unit of measure: linear foot.

X. "12-Inch Storm Sewer Line, Complete"

1. Payment will be made for all costs associated with constructing the 12-inch storm sewer piping, including but not limited to, temporary pumps, fuel, temporary piping, piping, fittings, connections, outfalls, cleanouts, joint restraints, waterstops, labor, equipment, traffic control, excavation, trench safety, shoring, dewatering, base/sub-base preparation, demolition, backfill, utility locates, testing, restoration of the site, and all work incidental thereto necessary to construct the 12-inch storm sewer in accordance with the Contract Documents.
2. Unit of measure: linear foot.

Y. "Backflow Preventer with Enclosure, Complete"

1. Payment will be made for all cost associated with the removal/replacement of the backflow preventer that must be replaced, including but not limited to all cost for labor, materials, equipment, coordination, and appurtenances at the locations indicated in the Contract Documents. The cost associated with this pay item is the new backflow preventer along with the enclosure.

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2. Unit of measure: each.

Z. "Surface Inlet, 24" x 24" Lockable Cast Iron Grate, Complete"

1. Payment will be made for all costs associated with constructing the surface inlet 24"x24" lockable cast iron grate, including but not limited to, temporary pumps, fuel, temporary piping, piping, fittings, connections, concrete, grating, frame, reinforcement, joint restraint, waterstops, labor, equipment, traffic control, excavation, trench safety, shoring, dewatering, base/sub-base preparation, demolition, backfill, utility locates, testing, restoration of the site, and all work incidental thereto necessary to construct the surface inlet 24"x24" lockable cast iron grate in accordance with the Contract Documents.
2. Unit of measure: each.

AA. "Backflow Preventer Removal/ Replacement, Complete"

2. Payment will be made for all cost associated with the removal/ replacement of the backflow preventer that must be replaced, including but not limited to all cost for labor, materials, equipment, coordination, and appurtenances at the locations indicated in the Contract Documents. The cost associated with this pay item is just the removal/ replacement of the backflow preventer, no enclosure.
3. Unit of measure: each.

AB. "Alternate #2 – Sludge Removal & Disposal, Complete"

1. Measurement for sludge removal and disposal shall be with the appropriate means and methods for accurate measurements for payment on basis of actual "dry" tons of sludge loaded, weighed, transported, unloaded and landfilled. There are no certified scales at the Waste Water Treatment Plant (WWTP) or in the immediate vicinity of the project site. The Contractor shall weigh each truck/load at a certified scale or install a certified portable scale on site. The Contractor shall provide proof of certification for either option. Contractor shall be responsible for coordinating the location of the portable scale, procurement, installation and removal of portable scale, obtaining the required certification, and all rental and maintenance costs associated with the scale. All vehicles used for hauling, are to be inspected, measured and assigned a three digit number. After accurate measurement, the Owner's representative will certify a decal or marking affixed on the equipment which shall identify the number assigned to the equipment, the date of measurement and the capacity of the unit equipment. Each individual truck or transport vehicle

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to be used in “over-the-road” hauling of sludge shall be weighed upon each mobilization at approved certified scales both empty and full so as to determine the net weight of load being transported to the landfill. Singular measure samples from loads being transported will be combined and thoroughly mixed so as to obtain a representative composite sample on a daily basis. Said composite sample will then be tested for its percent of solid contents. This percentage will be applied to the total of all transported loads for that day. At the end of each day the Contractor shall provide the Owner’s representative with truck weight tickets and a copy of the waste manifest for all loads hauled to the landfill. Payment will be made for all costs, materials, equipment, labor, quality control services, sampling, testing and analysis, reports, fees and all costs incidental thereto associated with decanting, treatment and dewatering, loading, weighing, transporting, unloading and landfill disposal of lagoon sludge/residuals (and other associated undesirable materials thereof) from the WWTP.

2. Unit of measure: dry ton.

- End of Section -

SECTION 25 31 02

SCADA SYSTEM

PART 1 - GENERAL

1.01 SUMMARY

A. This Section includes the following:

1. SCADA System for transmission of data between the Waste Water Treatment Plant Central Terminal Unit (CTU) and Remote Terminal Units (RTU's). The Plant SCADA System shall communicate with the existing Owner's Network. The SCADA System shall include all equipment, devices, wiring, and incidental materials to operate the system and display or relay information in accordance with these specifications. The intention of this Section is to secure a complete SCADA System that will operate and monitor equipment in accordance with narratives and requirements indicated in the plans, these specifications, and manufacturer's literature for the equipment installed. All circuits and devices for protection of installed equipment shall be included in the price bid.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Section 26 05 00 - General Electrical Provisions
- B. Section 26 05 33 - Conduits
- C. Section 26 05 19 - Wire and Cables
- D. Section 26 05 35 - Junction Boxes
- E. Section 26 05 29 - Supporting Devices
- F. Section 26 05 26 - Grounding
- G. Section 25 31 00 - Process Instrumentation and Controls
- H. Section 25 31 02 - Control System Integration
- I. Section 27 13 43 - Communications Services Cabling

1.03 SYSTEM DESCRIPTION

- A. System shall consist of a fiber optic backbone for communications between the Waste Water Treatment Plant CTU and all RTU's. In addition, local connections to control panels and Owner's network shall consist of Category 6 Ethernet cabling. Instrument cabling shall be including where applicable.
- B. Remote Terminal Units located at the following:
 1. Clarifiers (includes connections to Aerators and Clarifier Rakes).

2. Filters & Biolac System
3. UV Disinfection System.
4. Effluent Pump Statopm
5. Headworks (includes connections to Influent Pump Station, Fine Screen, and Coarse Screen).

1.04 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Shop Drawings: Show fabrication and installation details for SCADA System equipment.
 1. Include plans, elevations, sections, details, and attachments to other work.
 2. For coaxial cable, include the following installation data for each type used:
 - a. Nominal OD.
 - b. Minimum bending radius.
 - c. Maximum pulling tension.
 3. Wiring diagrams.
 4. Design Calculations including line of sight and antenna requirements.
 5. Control Panel Drawings
- C. Equipment list.
- D. Field quality-control test reports.
- E. Operation and Maintenance Data: Submit bound copies of operating and programming instructions, and include card replacement, adjustments, and preventive maintenance procedures and materials.

1.05 QUALITY ASSURANCE

- A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
- B. Comply with NFPA 70.

PART 2 - PRODUCTS

2.01 BASIS OF DESIGN

- A. Provide products to meet requirements, acceptable SCADA Integrators are:
 1. Dexter Fortson.

2.02 CENTRAL OFFICE

- A. The Central Office location shall consist of the following SCADA hardware, software, terminal devices, and accessories:
 1. Rack mounted HMI Server Computer shall be a Dell desktop computer with Dual

24"LCD monitors with minimum requirements:

- a. Dell Precision 7910XL, Xeon Processor, 64GB RAM, Dual 2TB SDD
- b. Windows® Office Professional 2021 w/ Window® 11 License
- c. CD-RW/DVD Combo
- d. 3 Year Basic Limited Warranty
- e. Microsoft antivirus protection
- f. Wireless Keyboard & Mouse
- g. Adobe Acrobat X Standard
- h. Rack mount Tripplite 1500VA UPS SMART 1500RM2U
- i. HP OfficeJet All-in-One inkjet Printer.

2. Wall Mount Rack Enclosure with the following:

- a. 12U rack spaces
- b. Lightning arrestor protection as required.
- c. Fiber Patch Panel with connector shelf, Black Box JPM427A-R2
- d. Networking Patch Panel, Black Box JPM624A with panel adapters
- e. 24 Port Ethernet Network Switch with integral Fiber Optic Media Converters.
- f. Voice Synthesized Dialer.

3. HMI SCADA software shall be provided. Installation integrator shall have an installed base of this platform of HMI applications. Once install is complete and tested integrator must provide a hard drive image with restore disk as part of deliverables. This should include a manual for hard drive restore process. The Software shall include the following:

- a. Backup / Imaging software installed on HMI Server to meet or exceed the following:
 - 1) A disk image file contains the exact, byte-by-byte copy of a hard drive, partition or logical disk and can be created with various compression levels on the fly without stopping Windows OS and therefore without interrupting your business.
 - 2) Drive image files can then be stored in a variety of places, including various removable media such as CD-R(W)/DVD and Cloud Storage.
 - 3) Restores the images on the original disks, on any other partitions or even on a hard drive's free space on the fly.
- b. Remote Alarm Software shall be installed on HMI server as listed above. Alarm notifications will be noted in each section as well as alarm method.
- c. All HMI Data logging will be logged to a database server for long term storage. The Database server shall be installed on the HMI server as listed above. Logged data points will be listed in each section. In addition to general logged data points the following shall be logged.
 - 1) Activity Log
- d. All SCADA, RTU and system component collateral shall be able to be viewed from within the HMI. This includes but is not limited to the

following:

- 1) Installation and configuration manuals (PDF)
- 2) RTU Drawings with component list (PDF)
- 3) System and network drawings (PDF)

e. Integrator shall provide and install interface to SCADA HMI Screens allow remote access via existing LCIDA SCADA Network.

f. Include the following SCADA Software:

- 1) Tag Database System (National Instruments Labview backbone)
- 2) Reports Generation Toolkit
- 3) Ethernet/IP Driver
- 4) OpenLink Protocol Driver
- 5) Alarm Notification System (Voice, Text, E-mail)
- 6) Compatible with existing LCIDA SCADA System.

B. Central Office shall include a Central Terminal Unit (CTU). The CTU shall be provided per paragraph 2.04 "REMOTE TERMINAL UNIT (RTU)".

2.03 COMMUNICATIONS CABLING

A. Provide Fiber Optic Backbone for Plant SCADA Communications between RTU and SCADA Network Equipment. Provide Category 6 Ethernet Cable for Horizontal Cabling from CTU, Server, and SCADA Network Equipment. Refer to Specifications Section 27 13 43 - Communications Services Cabling.

2.04 REMOTE TERMINAL UNIT (RTU)

A. Each Remote Terminal Unit shall include but is not limited to the following specifications. Each RTU shall be interchangeable where the only difference is in program and enclosure type. All components shall be off the shelf products and non-proprietary. With exception of Ethernet radios, all components shall be available to be purchased locally within 250 miles of installation area:

1. Each RTU shall use a PLC controller. Allen-Bradley Compactlogix 1769-L33ER Processor (I/O Build 32DI, 8DO, 8AI, 4AO).
2. Each RTU shall include a Fiber Optic Media Converter and Ethernet CAT 6 Eight Port Switch.
3. Each RTU shall include a power supply and a UPS.
4. Each RTU shall include terminals.
5. Each RTU shall include Line Surge Protection and Line Filter.
6. Each of the RTU controller outputs shall be individually fused to protect controller's outputs.
7. Each wire shall be labeled with Brady label that correspond to number on associated drawing.
8. Each RTU shall be protected with main breaker and duplex receptacle.
9. Each RTU shall contain wire way with covers to protect internal wiring.
10. Each RTU shall include battery backup. A SPDT relay will be installed into each RTU such that each node's battery backup and power fail indicator can be tested remotely from HMI.

11. Each RTU Enclosure shall be as follows. Accepted manufacturers include, Hoffman, Hubbell, and Hammond enclosures will be accepted.
 - a. Enclosures that are located outside shall be of NEMA type 4X stainless steel.
 - b. Enclosures that are located inside shall be NEMA type 1.
 - c. Minimum enclosure dimensions shall be 36"H x 36"W x 12"D with 3-point latch and capable of wall or unistrut mounting.
 - d. Include Door Position Switch for Intrusion Alarm.

B. Remote Terminal Unit (RTU) I/O Schedules:

1. Electrical Power Distribution System
 - a. Alarm: Power Fail
 - b. Status: Generator Run Status
 - c. Status: ATS Position (Normal/Emergency)
2. All CTU's & RTU's
 - a. Alarm: Comm Fail
 - b. Alarm: Power Fail
 - c. Alarm: Intrusion Detection
3. Headworks System
 - a. Alarm: Influent Pump Station Control Panel Power Fail
 - b. Alarm: Influent Pump Station Control Panel Comm Fail
 - c. Alarm: Influent Pump Motor(s) Fail
 - d. Alarm: Fine Screen Motor(s) Fail
 - e. Alarm: Coarse Screen Motor(s) Fail
 - f. Status: Influent Pump Motor(s) Running
 - g. Status: Influent Pump(s) H-O-A Selector Switch Position
 - h. Status: Fine Screen Motor(s) Running
 - i. Status: Coarse Screen Motor(s) Running
 - j. Status: Coarse Screen Motor(s) H-O-A Selector Switch Position
 - k. Status: Influent Pump Station Flow Meter.
 - l. Analog Out: IPS Flow Meter signal to Soda Ash Control Panel.
4. Aerators
 - a. Alarm: Aerator Control Panel Power Fail
 - b. Alarm: Aerator Control Comm Fail
 - c. Alarm: Aerator Motor(s) Fail
 - d. Status: Aerator Motor(s) Running
 - e. Status: Aerator Motor(s) H-O-A Selector Switch Position
5. Clarifiers
 - a. Alarms: Rake Drive Motor(s) Fail
 - b. Alarms: Scum Pump Motor(s) Fail
 - c. Status: Rake Drive Motor(s) Running
 - d. Status: Rake Drive Motor(s) H-O-A Selector Switch Position
 - e. Status: Scum Pump Motor(s) Running
 - f. Status: Scum Pump Motor(s) H-O-A Selector Switch Position
 - g. Status: Scum Pump Float Position(s)

6. Filters & Blowers

- a. Alarm: Filter Control Panel(s) Power Fail
- b. Alarm: Filter Control Panel(s) Comm Fail
- c. Alarm: Biolac Control Panel Power Fail
- d. Alarm: Biolac Control Panel Comm Fail
- e. Alarm: Blower Motor(s) Fail
- f. Status: Blower Motor(s) Running
- g. Status: Blower(s) H-O-A Selector Switch Position

7. UV Disinfection

- a. Alarms: SCC, PDC #1A, PDC #1B, PDC #1C & HSC Power Fail
- b. Alarm: SCC Comm Fail
- c. Alarm: No Flow
- d. Status: PDC #1A, PDC #1B and PDC #1C ON/OFF
- e. Status: Parshall Flume Flow from SCC
- f. Status: Level Sensor Alarm

8. Effluent Pump Station

- a. Alarm: Effluent Pump Station Control Panel Power Fail
- b. Alarm: Effluent Pump Station Control Panel Comm Fail
- c. Alarm: Effluent Pump Motor(s) Fail
- d. Status: Influent Pump Motor(s) Running
- e. Status: Influent Pump(s) H-O-A Selector Switch Position

PART 3- EXECUTION

3.01 INSTALLATION

- A. Install surge suppressors.

3.02 GENERAL WIRING

- A. Wiring Method: Install cables in raceways except as otherwise indicated.
- B. Splices, Taps, and Terminations: For power and control wiring, use numbered terminal strips in junction, pull, and outlet boxes; terminal cabinets; and equipment enclosures.
- C. Grounding: According to recommendations in IEEE 142 and IEEE 1100.

3.03 IDENTIFICATION

- A. Identify system components, wiring, cabling, and terminals according to Section 26 05 53 "Identification of Electrical Systems".

3.04 FIELD QUALITY CONTROL

- A. Manufacturer's Field Service: Engage a factory-authorized service representative to

inspect field-assembled components and equipment installation, including connections, and to assist in field testing. Report results in writing.

- B. Test Schedule: Schedule tests after pretesting has successfully been completed and system has been in normal functional operation for at least 14 days. Provide a minimum of 10 days' notice of test schedule.
- C. Operational Tests: Perform operational system tests to verify that system complies with Specifications. Include all modes of system operation. Test equipment for proper operation in all functional modes.
- D. Train Owner Representatives in operation and maintenance of SCADA System. Include a minimum of 16 hours of instruction.

END OF SECTION

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SECTION 25 31 06

SCUM PUMP STATION CONTROL PANEL

PART 1 - GENERAL

1.01 SCOPE

- A. The work covered under this section of the specifications includes the furnishing and installation of a complete scum pump station electrical control system as hereinafter described and all necessary appurtenances to provide a complete control system for this installation.
- B. The scum pump station control panel shall be factory assembled, wired and tested and covered by complete electrical drawings and instructions.
- C. The scum pump control panel and control system described hereafter shall be supplied by the pump supplier to provide single source responsibility for complete functioning system.
- D. The CONTRACTOR shall include in the bid all cost for factory-trained service personnel to adjust all the equipment until the system has been completely accepted.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Section 26 05 00 - General Electrical Provisions
- B. Section 26 05 06 - Grounding
- C. Section 26 05 29 - Supporting Devices
- D. Section 26 05 33 - Conduits

1.03 REFERENCES

- A. National Electrical Manufacturers Association:
 - 1. NEMA ICS 3 - Industrial Control and Systems: Factory Built Assemblies.
 - 2. NEMA ICS 6 - Industrial Control and Systems: Enclosures.

1.04 SUBMITTALS

- A. Manufacturer's data shall be submitted in accordance with paragraph entitled SUBMITTALS in Section 26 05 00 of these Specifications.
- B. Hardware Submittals: Before any components are fabricated, and/or integrated into assemblies or shipped to the job site, furnish to the ENGINEER, for their review, submittal documents in accordance with Section 26 05 00. Submittals shall include full details, shop drawings, catalog cuts and such other descriptive matter and

documentation as may be required to fully describe the equipment and to demonstrate its conformity to these specifications. Specifically, the CONTRACTOR shall submit the following materials:

1. Block diagram and operational description of the system showing all major components and their interconnections and interrelationships. Label each diagram and specify all external power and communications interfaces. All diagrams shall be in an 11 by 17 format. Required documentation sets shall be furnished in bound hardcopy and final documentation shall also be provided in electronic format on CD.
 2. Drawings of equipment to be supplied shall include, as a minimum: overall dimension details for each panel, console, etc., including internal and external arrangements and door mounted operator devices with nameplate designations. Wiring diagrams of equipment including field device connections shall be included and specific installation/wiring requirements identified.
 3. Operational Description shall include the principal functions/capabilities of the control systems as provided and configured /programmed. Included shall be a description of system communications.
 4. Provide a detailed Bill of Materials along with descriptive literature identifying component name, manufacturer, model number, and quantity supplied.
- C. Test Outlines and Procedures Submittals: Test descriptions shall be in sufficient detail to fully describe the specific tests to be conducted to demonstrate conformance with this specification.
- D. Operations and Maintenance Data: At a minimum, include the following information in accordance with Section 26 05 00.
1. Operating and Calibration instructions.
 2. Troubleshooting Information.
 3. Wiring Diagrams with wire numbers and termination point.

1.05 CLOSEOUT SUBMITTALS

- A. Project Record Documents: Record actual locations of control panels and input and output devices connected to control system. Include interconnection wiring and cabling information, and terminal block layouts in controller cabinets. Include copy of manufacturer's certified drawings.

- B. Operation and Maintenance Data: Submit bound copies of operating and programming instructions, and include card replacement, adjustments, and preventive maintenance procedures and materials.

1.06 QUALITY ASSURANCE

- A. All instrumentation and control systems equipment shall be furnished and installed by the CONTRACTOR. The CONTRACTOR shall provide and be responsible for the proper operation of the pumping station control system. The CONTRACTOR shall perform in house submittal drawings and assembly of products. Subcontracting submittal drawings and equipment assembly will not be permitted.
- B. The CONTRACTOR shall be responsible for all coordination necessary in order to furnish, to supervise installation and connections, to calibrate, and to place into operation all the controls along with all other equipment and accessories as specified.
- C. Guarantee on the control system function and equipment shall be one (1) year from date of final acceptance by the OWNER. The CONTRACTOR shall promptly replace, without additional cost to the OWNER, any part of this process and control installation which is found to be defective within said period of one year, ordinary wear and tear and lighting damage excepted.

1.07 GENERAL REQUIREMENTS

- A. All control wires shall be stranded copper Type THHN or MTW respectively, except where indicated on the Drawings. All 4-20 ma signal control wire shall be #16 shielded TC cable or as shown on the Drawings.
- B. All materials, equipment, and devices shall meet the requirements of UL where UL standards are established for those items and the requirements of NFPA-70.
- C. All electrical components of the system shall operate on 120 VAC, 60 Hz, single phase power source except as otherwise noted. Any other devices necessary to obtain proper operation of the instrumentation and control system from these energy sources shall be furnished with the system.
- D. Instrumentation equipment and enclosures shall be suitable for the environmental conditions specified. All system elements shall operate properly in the presence of telephone lines, power lines and electrical equipment.
- E. All work and materials shall comply with the National Electrical Code and applicable local regulations and ordinances. Where required by applicable codes, panel assemblies, materials and equipment shall be approved, identified, labeled or listed by Underwriters' Laboratories or other testing organization acceptable to the governing authority.

- F. All instrumentation shall meet or exceed I.S.A. Standards and Recommended Practices, ANSI OSHA and any other applicable code.

1.08 INTERFACE WITH OTHER PRODUCTS AND EQUIPMENT

- A. Provide all required cables, cords, and connective devices for interface with other control system components.
- B. Coordinate size and configuration of enclosure to meet project requirements.

1.09 TRAINING

- A. A training program for the OWNER'S personnel shall be included. The training program shall instruct the owner's personnel in the operation and philosophy of the equipment so that they have a firm understanding of the configuration and operation of the system. The training program shall additionally instruct the OWNER's personnel in the use of the various maintenance aids and equipment available to isolate and correct each circuit malfunction in the minimum possible time.
- B. A minimum of four (4) hours training shall be provided on the pumping station control system operation and maintenance and shall be scheduled with the OWNER or OWNER'S representative.

1.09 CONTROL STRATEGY

- A. **FOR SCUM PUMP STATION**, pumps shall operate on a lead/lag basis as controlled by the duplex pump controller. In the automatic mode, the duplex pump controller shall receive stop and start commands based upon the level in the pump station wet well as determined by the floats.
- B. Pump(s) shall not be allowed to operate on high temperature and shall automatically switch to the other pump.
- C. Pump(s) shall alternate on pump failure and seal failure when a failure condition is detected, and the pumps are in the automatic mode. The failed pump shall become the lag pump on future cycles until the failure condition is corrected.
- D. Pumps shall automatically alternate and exercise uniformly. Each motor shall be able to be selected for Lead operation or fully automatic alternation on each call-for cycle.
- E. All electronic controls shall be bypassed (including delays) when the Man-Off-Auto switches are in the Manual or Off positions to allow motor control even in the event of a circuit failure.

- F. Provide variable delays for Power-On, Pump Failure and Improper Sequence Pump Off delays. Field adjustable motor failure delays shall be provided in the range of five (5) seconds to eight (8) minutes. Upon motor failure, the remaining functional motor shall be made Lead until the failure is corrected and manually reset. The failed motor shall only be called to operate at the lag pump operating level. Individual, adjustable power-on delays shall also be supplied which delay pump start during initial startup or after a power failure. In the event that both motors are called for at the same time, there shall be a minimum of five (5) seconds between motor starts and stops.
- G. Float levels shall be approved by the Project Engineer.

PART 2 - CONTROL PANEL SPECIFICATIONS

2.01 GENERAL

- A. The described equipment shall be housed in a NEMA 4X stainless steel enclosure, properly sized in accordance with manufacturer's recommendations. The enclosure shall be designed specifically for mounting in an unprotected outdoor location. The enclosure shall have a gasketed hinged, front weather door with locking capability and an internally mounted hinged deadfront panel so that all the components normally actuated by Operating Personnel are accessible without opening the dead front panel and yet are not exposed to the elements or to unauthorized personnel. The exterior door of the enclosure shall be provided with a lockable door operator with a three point latching system.
- B. The control panel shall be designed for the voltage available at each site as indicated on the drawings.
- C. Provide a properly sized Main Circuit Breaker. In addition, provide a deadfront operator mounted on the interior deadfront door. The operator shall prevent the deadfront door from being opened while the breaker is in the "ON" position. The main circuit breaker must have a minimum ampere interrupting capacity of 42,000 at symmetrical RMS amps. The main circuit breaker shall have a trip rating to allow full voltage starting and continuous operation of the motors. The circuit breaker shall be manufactured by Square-D or as accepted.
- D. Individual thermal magnetic circuit breakers or motor circuit protectors shall be supplied as branch circuit protection for each pump motor. The circuit breaker must have a minimum ampere interrupting capacity of 42,000 at symmetrical RMS amps. The circuit breakers or motor circuit protectors shall be provided with adjustable trip units. The circuit breaker shall be operable through the operator's door of the enclosure and shall have a trip rating to allow full voltage starting and continuous operation of the motors. The circuit breaker shall be manufactured by Square-D, Eaton, or as accepted. The circuit breaker or motor circuit protector shall be provided with lockout-tag out

provisions to allow the operator to padlock the circuit breaker or motor circuit protector in the OFF position.

- E. Provide properly sized Power Distribution Block(s) (PDB), as required for the control panel. Power distribution blocks shall be manufactured by Marathon, Square D, or as accepted.
- F. Provide a service entrance rated Type 2, AC power distribution Surge Protection Device designed to protect all types of loads fed from the distribution panels, branch panels and/or individual equipment panels. Units shall be UL listed and shall bear a UL label. Surge Protection Device shall be rated for 160kA per phase and 80kA per mode. Unit shall come complete with a properly rated sized circuit breaker for disconnect means.
- G. The control panel shall be supplied with a properly sized control power circuit breaker and fused control power transformer where necessary. The control power circuit breaker shall supply power to all control wiring within the enclosure.
- H. Independent voltage monitors shall be provided on the load side of the pump disconnects to monitor incoming voltage and provide protection to the motors. These monitors shall detect incoming service abnormalities including unbalance, reversal, over voltage, under-voltage and rapid cycling protection and provide automatic cutout of pumps and provide local alarm. Upon detection that incoming power has returned to normal, the unit will restore pump operation and discontinue alarm. This device shall have a nominal 2-4 second dropout delay and (2-300 second) adjustable restoration time delay. Phase monitor shall be protected by 1 amp fuses on the primary side.
- I. **FOR SCUM PUMP STATION**, the control panel shall be provided with NEMA rated full-voltage, non-reversing, motor starters for each pump motor. Each starter shall be equipped with auxiliary contacts on the starter contactor and the overload relay for all required interlocking and "overload tripped" indication. Each starter shall include an adjustable solid-state overload protection relay and a H-O-A selector switch. Each motor starter and overload relay shall be properly sized for the motors furnished on this project.
- J. The control panel shall be provided with elapsed time meters for each pump motor.
- K. 120 VAC control power for each motor starter coil and H-O-A selector switch shall be provided.
- L. A control power circuit breaker shall be provided and operable through the inner dead front panel of the control panel to provide a disconnect means and short circuit protection for any 120 VAC (or less) devices not powered from motor starter circuits.
- M. The control panel shall have three position selector switches mounted on the interior dead front panel for Hand-Off-Auto operation of each pump. In the Hand position the

motor shall be called to operate. In the Off mode the motor shall not be allowed to operate. In the Auto mode, the motor shall operate in response to control signals from the controller. Selector Switch(s) shall be of the maintained position type. The selector switch(s) shall be operator's door mounted, 30.5mm diameter, NEMA Type 4X furnished with industrial rated heavy duty NEMA Type 4X with modular contact block assemblies. Contact Blocks shall be stacking screw together type with parallel double break contacts with wiping action. Contact blocks shall be rated NEMA A600, 600 Volt, 10A continuous duty, 7200VA make, 720VA break AC. Contacts shall have compression type screw terminals with self lifting spring washers to insure that the wire remains secure even under severe vibration. Snap together contact blocks are not acceptable. Selector switches shall be Square D Series 9001, Siemens Class 52, or Allen-Bradley 800-H Line.

- N. Provide a single "Lamp Test" pushbutton with dual-input lights for all specified alarm conditions. Lamp test shall also test the external, top mounted, common alarm light. Door-mounted indicator lights shall be the LED type, NEMA 4X rated.
- O. **FOR SCUM PUMP STATION**, provide a duplex pump controller, to interface with wet well floats to provide control of the pump station pumps. The duplex pump controller shall be a microprocessor based pump controller or shall consist of a level/meter controller and a separated duplex controller for monitoring and automatically controlling two submersible pumps in a pump down mode of operation in response to wet well fluid levels. The controller shall provide the following float controls:
 - 1. High Level Alarm (Rising Level)
 - 2. Lag Pump Start (Rising Level)
 - 3. Lead Pump Start (Rising Level)
 - 4. Pump(s) Stop (Falling Level)
 - 5. Low Level Alarm (Falling Level)

The duplex pump controller shall additionally control the operation of the pumps. The controller shall be able to control the pumps via floats. The controller shall be provided with dry contact outputs for All-Stop, Lead Start and Lag Start during normal operation. Each dry contact shall be rated for a minimum of 10 amps at 120 VAC or 5 Amps at 240 VAC. In the automatic mode, the duplex pump controller shall provide stop and start commands based upon the fluid level in the station wetwell as sensed by the floats. The duplex controller shall exercise the pumps uniformly. All electronic controls shall be bypassed (including delays) when the Man-Off-Auto switches are in the Manual or Off positions to allow motor control even in the event of a circuit failure. The Duplex Pump Controller shall provide adjustable variable delays for Power-On, Motor Failure, Motor Start, and Short Cycle. Field adjustable motor failure delays shall be provided in the range of five (5) seconds to five (5) minutes. Adjustable power-on delay shall also be included for the pump during initial startup or after a power failure. The controller shall provide local display of each pump run status, each pump total run time, each pump

average daily starts. The controller shall be provided with pump high temperature/seal failure controls. The controller shall disable/fail the affected pump when a high temperature or seal failure signal is received and provide local alarm. The controller shall disable the affected pump and automatically operate the non-affected pump. The controller shall include built-in Pump Failure detection logic. In the event the pump has been called into operation and the pump run signal is not received within a pre-adjustable time period. A motor failure shall be produced. The failed motor shall be disabled, an alarm shall be displayed, and the next available pump based on the selected alternation sequence shall be requested to start. The controller shall contain all relays and electronic equipment required to interface with each pump motor thermal protection and seal failure switches. The controller shall also be furnished with all relays and electronic devices required to interface with the solid state motor overload relays, and motor contactor auxiliary switches. The duplex pump controller shall be constructed for industrial applications for use in harsh environments. Unit(s) shall have a Temperature Operating range of -40 to + 85 Deg C, and be able to operate in environments with 10-90% non condensing humidity. Unit shall be UL Listed and in compliance with FCC part 15 Class A emissions and CE IEC61000 Surge Withstand certifications. The Duplex Pump Controller shall be a standard, catalogued product of a water and wastewater automation equipment manufacturer regularly engaged in the design and manufacture of such equipment for a period of at least fifteen (15) years.

- P. Provide terminals for connections to SCADA system Remote Terminal Unit. Refer to Section 25 31 02 "Scada System" for required I/O.
- Q. Provide an analog signal Line Filter for the pump controller. Line filter shall protect associated equipment from transient voltage surges and induced voltages.
- R. Provide and install all control relays to interface between control devices as required.
- S. Provide a single phase, in-line (series) 120 volt, single-phase, continuous power Surge Protection Device designed to protect all of the loads fed from the control power circuit. Device shall have protection modes and protection status indication of each mode when power is present (L-N, L-G, N-G).
- R. Provide a condensation protective heater and adjustable high temperature cutout thermostwitch in the control panel. The heater shall operate at 120 VAC. The heater's surface area for heat dissipation shall be large enough to prevent a skin burn (if an operator's hand should inadvertently come in contact with the unit when energized). The heater shall be regulated by a humidistat located within the control panel enclosure.
- T. Provide a 120-volt, 15-amp, Weatherproof Duplex GFCI Receptacle mounted on the side of the enclosure for electrical hand tool use. Receptacle shall come complete with a weatherproof cover. Cover shall be UL listed for wet locations and shall be constructed of tough plastic that is resistant to high impact and sunlight. In addition, the cover shall be non-corrosive, non-conductive and protect against rain, snow and ice.

- U. Provide thermostatically controlled exhaust fans to properly ventilate the controller enclosure. Exhaust fans shall operate based on temperature setting. Exhaust fans shall be mounted near the top of the enclosure.
- V. Provide a weatherproof exterior common Alarm Light with red Lexan lens mounted on side of enclosure. The alarm light shall burn dim during normal conditions to indicate “Power On” and “Light Bulb Good” and shall flash brightly during any alarm condition.

PART 3 FIELD INSTRUMENTATION AND MODIFICATIONS

- 3.01 FLOAT SWITCHES: Provide a float control system for the pumping station to operate the pumps standalone for Scum Pump Station. Provide a High Level, Low Level, Lead and Lag Start, and an All Stop Float Switches mounted in wet well. High and Low Level Float switches shall be set at one foot (1') above (High) and below (Low) normal operating levels. Normal operating levels shall be set per Project Engineers direction. The float switch shall be a direct acting switch and contain a single pole mercury switch, which actuates when the longitudinal axis of the float is horizontal and deactuates when the liquid level falls 1" below the actuation elevation. The float shall have a chemical resistant polypropylene casing with a firmly bonded electrical cable protruding. One end of the cable shall be permanently connected to the enclosed mercury switch and the entire assembly shall be encapsulated to form a completely watertight and impact resistance unit. Provide the following float switches:

- A. High Level Alarm/All Run
- B. Lag Pump Start
- C. Lead Pump Start
- D. Pump(s) Stop
- E. Low Level Alarm/All Stop

PART 4 EXECUTION

4.01 CONTROL PANEL SERVICE AND TRAINING

- A. The services of a factory trained, qualified representative shall be provided to inspect the completed installation, make all adjustments necessary to place the system in trouble-free operation and instruct the operating personnel in the proper care and operation of the equipment.
- B. After the control panel has been installed, the Supplier shall demonstrate with performance of each unit, and document that the system operates properly as specified.
- C. The Supplier shall provide systems training for operations staff totaling no less than 4 hours, refer to Section 1.09 Training.

- D. All training shall be conducted at the job site. Travel expenses are the responsibility of the supplier.

4.02 GENERAL INSTALLATION

- A. Installation of instrumentation and controls shall be in strict compliance with the manufacturer's instructions. The location of these items as shown on the Contract Drawings are approximate only. Exact locations shall be as approved by the ENGINEER during construction. It is the duty of the CONTRACTOR to obtain in the field all relevant information required for proper placement of instrumentation and controls. In the case of interference with other work, proceed as instructed by the ENGINEER and provide all materials and labor required to prevent construction delays.
- B. Execution of the installation shall be in full accordance with codes and local rulings. The CONTRACTOR shall be responsible for any expenses that are a result of work performed contrary to said codes and regulations.

END OF SECTION

DRAWING INDEX	
DRAWING NO.	DRAWING NAME
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C-101	DRAWING INDEX & GENERAL NOTES
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C-103	PLAN VIEW - EXISTING CONDITIONS AND REQUIRED DEMOLITION
C-104	PLAN VIEW - EXISTING CONDITIONS AND REQUIRED DEMOLITION
C-105	SECTIONS - EXISTING LAGOONS
C-200	FLOW SCHEMATIC
C-201	PLAN VIEW - REQUIRED WORK
C-202	HYDRAULIC PROFILE
C-203	PLAN VIEW - REQUIRED LAYOUT
C-204	PLAN VIEW - REQUIRED GRADING
C-205	PLAN VIEW - REQUIRED GRADING HEADWORKS
C-206	PLAN VIEW - REQUIRED GRADING FILTERS
C-207	PLAN VIEW - REQUIRED GRADING UV DISINFECTION
C-208	PLAN VIEW - REQUIRED EROSION CONTROL
C-210	PLAN VIEW - REQUIRED PIPING
C-211	PLAN & PROFILE - MH-8 TO HEADWORKS
C-212	PLAN & PROFILE - REQUIRED FORCEMAIN TO EAST LAGOON
C-213	PLAN & PROFILE - COARSE SCREEN TO INFLUENT PUMP STATION
C-214	PLAN & PROFILE - VALVE BOX TO FINE SCREEN
C-215	PLAN & PROFILE - FINE SCREEN TO EAST LAGOON
C-216	PLAN & PROFILE - NORTH CLARIFIER TO FILTER
C-217	PLAN & PROFILE - FILTER TO PARSHALL FLUME
C-218	PLAN & PROFILE - PARSHALL FLUME TO DISINFECTION SYSTEM
C-219	PLAN & PROFILE - DISINFECTION SYSTEM TO EFFLUENT PUMP STATION
C-220	PLAN & PROFILE - EFFLUENT PUMP STATION TO EXISTING FORCE MAIN
C-221	PLAN & PROFILE - WEST LAGOON TO EXISTING INFLUENT PUMP STATION
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C-229	PLAN & PROFILE - MH#3 TO MH#4
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C-302	PLAN VIEW - COARSE MECHANICAL BAR SCREENS LAYOUT
C-303	PLAN VIEW - CONCRETE STRUCTURE FOR COARSE MECHANICAL BAR SCREENS
C-304	COARSE SCREEN SECTIONS & DETAILS
C-305	PLAN VIEW - FINE MECHANICAL BAR SCREENS LAYOUT
C-306	PLAN VIEW - CONCRETE STRUCTURE FOR FINE MECHANICAL BAR SCREENS
C-307	FINE SCREEN SECTIONS & DETAILS
C-310	PLAN VIEW - INFLUENT PUMP STATION
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C-330	PLAN VIEW - PH ADJUSTMENT
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C-502	SECTION - FILTERS
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C-601	PLAN VIEW - PARSHALL FLUME
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C-803	PLAN VIEW - REQUIRED SCUM PUMP STATION
C-804	DETAILS - REQUIRED SCUM PUMP STATION
C-901	DETAILS - SANITARY SEWER
C-902	DETAILS - SANITARY SEWER
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E-203	POWER RISER DIAGRAM (MAIN PLANT)
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GENERAL NOTES:

- EXISTING INFORMATION SHOWN IS BASED UPON W.L. BURLE ENGINEERS, P.A. SURVEY DATED AUGUST 10, 2023.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING HIS OPERATIONS WITH THE OWNER (BUREAU OF BUILDING, GROUNDS AND REAL PROPERTY, MANAGEMENT), AND USING AGENCY (SOUTH MISSISSIPPI CORRECTIONAL INSTITUTION) TO ENSURE ADEQUATE ACCESS TO FACILITIES AT ALL TIMES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING TRAFFIC CONTROL WITH THE OWNER AND USING AGENCY THROUGHOUT THE COURSE OF THE PROJECT.
- ALL CONSTRUCTION STAGING OR DEMOLITION, CONSTRUCTION FENCING, REQUIRED CONSTRUCTION AND/OR TEMPORARY DRIVES, AND REQUIRED SITE WORK SHALL CONFORM TO THE CONTRACT DOCUMENTS.
- THE CONTRACTOR SHALL PROVIDE A TEMPORARY SAFETY FENCING AROUND OPEN EXCAVATIONS THROUGHOUT THE COURSE OF THE PROJECT. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE LAYOUT OF SAFETY FENCING WITH THE OWNER AND USING AGENCY.
- EXISTING UNDERGROUND INSTALLATIONS, SUCH AS WATER MAINS, GAS MAINS, SANITARY/STORM SEWER LINES, TELEPHONE LINES, POWER LINES, AND BURIED STRUCTURES IN THE VICINITY OF THE WORK AREA ARE INDICATED ON THE DRAWINGS ONLY TO THE EXTENT SUCH INFORMATION HAS BEEN MADE AVAILABLE TO OR DISCOVERED BY THE PROFESSIONAL IN PREPARING THE DRAWINGS. THERE IS NO GUARANTEE AS TO THE ACCURACY OR COMPLETENESS OF UNDERGROUND UTILITY LOCATIONS SHOWN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR LOCATING AND/OR VERIFYING ALL EXISTING UNDERGROUND INSTALLATIONS AND ASSOCIATED INVERTS OR INSTALLATION DEPTHS, INCLUDING SERVICE CONNECTIONS, IN ADVANCED OF PURCHASING MATERIALS, EXCAVATING OR TRENCHING.
- CONTRACTOR SHALL SAW CUT AND REMOVE EXISTING CONCRETE AND/OR ASPHALT PAVEMENT TO FULL DEPTH ALONG NEAT STRAIGHT LINES.
- ALL TOP ELEVATIONS OF REQUIRED PAVEMENT REPAIRS AND ABUTMENTS SHALL MATCH FLUSH WITH TOP ELEVATIONS OF EXISTING PAVEMENTS.
- ALL BARRICADES, WARNING SIGNS, LIGHTS, TEMPORARY SIGNALS, OTHER PROTECTIVE DEVICES, FLAGGERS AND SIGNALING DEVICES SHALL MEET OR EXCEED THE MINIMUM REQUIREMENTS CONTAINED IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) WHICH IS CURRENT AT THE TIME BIDS ARE RECEIVED.
- TEMPORARY STAGING AREAS, CONSTRUCTION DRIVES, TRAFFIC CONTROL OPERATIONS AND DUMPSTER BIN RELOCATION AREAS SHALL BE COORDINATED WITH SOUTH MISSISSIPPI CORRECTIONAL INSTITUTION ADMINISTRATION AND FACILITIES MANAGEMENT PRIOR TO MOBILIZATION OF EQUIPMENT AND MATERIALS.
- CONTRACTOR SHALL REMOVE AND REINSTALL FENCING AS REQUIRED TO COMPLETE THE REQUIRED WORK. ALL FENCING SHALL BE REINSTALLED TO THE SATISFACTION OF THE PROFESSIONAL, USING AGENCY, AND OWNER.
- MISSISSIPPI 811 WILL NOT LOCATE UTILITIES ON SITE. CONTRACTOR SHALL RETAIN THE SERVICES OF A UTILITY LOCATION COMPANY TO LOCATE EXISTING UTILITIES.
- INCLUDED IN THE COST FOR THIS PROJECT, CONTRACTOR SHALL BE RESPONSIBLE FOR THE SHORING/BRACING OF EXISTING UTILITIES ENCOUNTERED IN ALL EXCAVATIONS. ALL UTILITY SHORING/BRACING EFFORTS SHALL BE COORDINATED BY CONTRACTOR WITH CORRESPONDING UTILITY PROVIDERS.
- CONTRACTOR SHALL MAINTAIN AN OPERATIONAL SANITARY SEWER COLLECTION SYSTEM AND TREATMENT PLANT THROUGHOUT THE DURATION OF THE PROJECT.
- NO WASTEWATER SHALL BE DISCHARGED IN NATURAL WATERWAYS, STORM SEWERS, OR ON THE SURFACE. ANY DAMAGE RESULTING FROM PLUGGING LINES OR BYPASS PUMPING SHALL EXCLUSIVELY BE THE RESPONSIBILITY OF CONTRACTOR. ALL PUMPS, PLUGS, HOSES, PIPING, FITTINGS, EQUIPMENT AND NECESSARY SEWER FLOW CONTROL APPURTENANCES SHALL BE PROVIDED AND MAINTAINED BY CONTRACTOR, AT NO ADDITIONAL COST TO OWNER. LIABILITY FOR ANY DAMAGES TO PROPERTY, PUBLIC OR PRIVATE, RESULTING FROM THE ACTIVITIES OF CONTRACTOR, SHALL EXCLUSIVELY BE THE RESPONSIBILITY OF CONTRACTOR.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGES CAUSED TO EXISTING UNDERGROUND INSTALLATIONS (SUCH AS SEWER LINES, GAS MAINS, WATER MAINS, ETC.) AS A RESULT OF CONSTRUCTION OPERATIONS OR EXCAVATIONS. ANY SUCH REPAIRS SHALL BE TO THE SATISFACTION OF PROFESSIONAL AND THE UTILITY OWNER AT NO ADDITIONAL COST TO OWNER.
- CONTRACTOR SHALL REPAIR ALL INTENTIONALLY AND UNINTENTIONALLY DAMAGED AREAS TO AS-BUILT CONDITIONS, AT NO ADDITIONAL COST TO OWNER.
- CONTRACTOR SHALL NOT BE PAID FOR ANY ADDITIONAL MOBILIZATION(S)/DEMOBILIZATION(S) TO SITE(S) FOR ANY REASON.
- PIPING CONFLICTS SHALL BE RESOLVED ACCORDING TO THE FOLLOWING PRECEDENCE
 - PROCESS PIPING (GRAVITY). PROCESS PIPING IS DEFINED AS PIPING BETWEEN TREATMENT PROCESSES, INCLUDING REQUIRED INFLUENT AND EFFLUENT PUMP STATIONS
 - GRAVITY SEWER
 - PROCESS PRESSURE PIPING
 - NON-PROCESS SEWER PRESSURE PIPING
 - NON-POTABLE WATER PIPING
 - POTABLE WATER PIPING.
- ALL PIPING BENDS SHALL BE RESTRAINED.

WORK SEQUENCE - BASE BID

- PRIOR TO BEGINNING WORK, CONTRACTOR SHALL COMPLETE MISSISSIPPI DEPARTMENT OF CORRECTIONS (MDOC) VENDOR-RELEASE OF INFORMATION FORMS.
- PREPARE A SMALL CONSTRUCTION STORMWATER POLLUTION PREVENTION PLAN (SWPPP).
- HAVE ALL UTILITIES LOCATED WITHIN THE LIMITS OF EXCAVATIONS.
- INSTALL REQUIRED GRAVITY SEWER PIPING AND MANHOLES BETWEEN THE WEST LAGOON AND THE EXISTING INFLUENT PUMP STATION. THIS INCLUDES MANHOLES MH#1, MH#2, MH#3, AND MH#4.
- INSTALL REQUIRED GRAVITY SEWER PIPING AND MANHOLE MH#3A BETWEEN EXISTING MANHOLES MH#3 AND MH#4.
- RELOCATE THE TWO (2) EXISTING AERATORS IN THE EAST LAGOON TO THE WEST LAGOON.
- PUMP BIOSOLIDS FROM EAST LAGOON TO WEST LAGOON.
- ONCE ALL OF THE ABOVE-MENTIONED WORK HAS BEEN COMPLETED TO THE SATISFACTION OF THE PROFESSIONAL, ALL REMAINING WORK MAY BEGIN.
- ONCE ALL PROCESS EQUIPMENT, PIPING, AND ELECTRICAL WORK HAS BEEN COMPLETED, TREATED EFFLUENT FROM THE EXISTING EFFLUENT PUMP STATION SHALL BE DIRECTED TO THE NEWLY CONSTRUCTED COARSE SCREEN.
- ONCE ALL PROCESS EQUIPMENT AND PUMP STATIONS HAVE BEEN ADJUSTED AND INSTALLATIONS HAVE BEEN APPROVED BY THE EQUIPMENT MANUFACTURER WHICH SUPPLIED THE EQUIPMENT AND/OR PUMPS, THE CONTRACTOR SHALL PUMP ALL MATERIAL IN THE EXISTING OXIDATION DITCH AND INTEGRAL CLARIFIER TO THE NEWLY CONSTRUCTED COARSE SCREEN AND ALL RAW SEWAGE FLOW SHALL BE DIRECTED TO THE NEW TREATMENT PLANT .

WORK SEQUENCE - ADD ALTERNATE NO. 1

- PRIOR TO BEGINNING WORK, CONTRACTOR SHALL COMPLETE MISSISSIPPI DEPARTMENT OF CORRECTIONS (MDOC) VENDOR-RELEASE OF INFORMATION FORMS.
- PREPARE A SMALL CONSTRUCTION STORMWATER POLLUTION PREVENTION PLAN (SWPPP).
- HAVE ALL UTILITIES LOCATED WITHIN THE LIMITS OF EXCAVATIONS.
- PUMP/REMOVE ALL WATER AND/OR BIOSOLIDS FROM WEST LAGOON TO THE EAST LAGOON.
- REPLACE THE LINER IN THE WEST LAGOON.
- INSTALL REQUIRED GRAVITY SEWER PIPING AND MANHOLES BETWEEN THE WEST LAGOON AND THE EXISTING INFLUENT PUMP STATION. THIS INCLUDES MANHOLES MH#1, MH#2, MH#3, AND MH#4.
- INSTALL REQUIRED GRAVITY SEWER PIPING AND MANHOLE MH#3A BETWEEN EXISTING MANHOLES MH#3 AND MH#4.
- RELOCATE THE TWO (2) EXISTING AERATORS IN THE EAST LAGOON TO THE WEST LAGOON.
- ONCE ALL OF THE ABOVE-MENTIONED WORK HAS BEEN COMPLETED TO THE SATISFACTION OF THE PROFESSIONAL, ALL REMAINING WORK MAY BEGIN.
- ONCE ALL PROCESS EQUIPMENT, PIPING, AND ELECTRICAL WORK HAS BEEN COMPLETED, TREATED EFFLUENT FROM THE EXISTING EFFLUENT PUMP STATION SHALL BE DIRECTED TO THE NEWLY CONSTRUCTED COARSE SCREEN.
- ONCE ALL PROCESS EQUIPMENT AND PUMP STATIONS HAVE BEEN ADJUSTED AND INSTALLATIONS HAVE BEEN APPROVED BY THE EQUIPMENT MANUFACTURER WHICH SUPPLIED THE EQUIPMENT AND/OR PUMPS, THE CONTRACTOR SHALL PUMP ALL MATERIAL IN THE EXISTING OXIDATION DITCH AND INTEGRAL CLARIFIER TO THE NEWLY CONSTRUCTED COARSE SCREEN AND ALL RAW SEWAGE FLOW SHALL BE DIRECTED TO THE NEW TREATMENT PLANT .

WORK SEQUENCE - ADD ALTERNATE NO. 2

- PRIOR TO BEGINNING WORK, CONTRACTOR SHALL COMPLETE MISSISSIPPI DEPARTMENT OF CORRECTIONS (MDOC) VENDOR-RELEASE OF INFORMATION FORMS.
- PREPARE A SMALL CONSTRUCTION STORMWATER POLLUTION PREVENTION PLAN (SWPPP).
- HAVE ALL UTILITIES LOCATED WITHIN THE LIMITS OF EXCAVATIONS.
- PUMP/REMOVE ALL WATER AND/OR BIOSOLIDS FROM WEST LAGOON AND DISPOSE OF OFF-SITE AT A PERMITTED SOLID WASTE DISPOSAL FACILITY.
- REMOVE ALL BIOSOLIDS FROM THE EAST LAGOON AND DISPOSE OF OFF-SITE AT A PERMITTED SOLID WASTE DISPOSAL FACILITY.
- REPLACE THE LINER IN THE WEST LAGOON.
- INSTALL REQUIRED GRAVITY SEWER PIPING AND MANHOLES BETWEEN THE WEST LAGOON AND THE EXISTING INFLUENT PUMP STATION. THIS INCLUDES MANHOLES MH#1, MH#2, MH#3, AND MH#4.
- INSTALL REQUIRED GRAVITY SEWER PIPING AND MANHOLE MH#3A BETWEEN EXISTING MANHOLES MH#3 AND MH#4.
- RELOCATE THE TWO (2) EXISTING AERATORS IN THE EAST LAGOON TO THE WEST LAGOON.
- ONCE ALL OF THE ABOVE-MENTIONED WORK HAS BEEN COMPLETED TO THE SATISFACTION OF THE PROFESSIONAL, ALL REMAINING WORK MAY BEGIN.
- ONCE ALL PROCESS EQUIPMENT, PIPING, AND ELECTRICAL WORK HAS BEEN COMPLETED, TREATED EFFLUENT FROM THE EXISTING EFFLUENT PUMP STATION SHALL BE DIRECTED TO THE NEWLY CONSTRUCTED COARSE SCREEN.
- ONCE ALL PROCESS EQUIPMENT AND PUMP STATIONS HAVE BEEN ADJUSTED AND INSTALLATIONS HAVE BEEN APPROVED BY THE EQUIPMENT MANUFACTURER WHICH SUPPLIED THE EQUIPMENT AND/OR PUMPS, THE CONTRACTOR SHALL PUMP ALL MATERIAL IN THE EXISTING OXIDATION DITCH AND INTEGRAL CLARIFIER TO THE NEWLY CONSTRUCTED COARSE SCREEN AND ALL RAW SEWAGE FLOW SHALL BE DIRECTED TO THE NEW TREATMENT PLANT .

STRUCTURAL GENERAL NOTES

DESIGN CRITERIA :

- BUILDING CODE AND DESIGN STANDARDS
 - A. 2018 INTERNATIONAL BUILDING CODE
 - B. AISC MANUAL OF STEEL CONSTRUCTION, FIFTEENTH EDITION
 - C. ACI 318-14 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE

GENERAL NOTES :

- BEFORE WORK BEGINS, THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS SHOWN ON THE STRUCTURAL DRAWINGS WITH DIMENSIONS SHOWN ON THE CIVIL DRAWINGS. IF ANY DISCREPANCIES EXIST, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE CIVIL ENGINEER AND WORK SHALL NOT BEGIN UNTIL THE DISCREPANCY IS RESOLVED.
- THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO SHOP DRAWING SUBMITTAL, FABRICATION AND CONSTRUCTION. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE CIVIL ENGINEER OF ANY EXISTING CONDITIONS WHICH ARE IN CONFLICT WITH THE CONTRACT DOCUMENTS. SHOP DRAWINGS SHALL BE BASED ON FIELD VERIFIED CONDITIONS AND DIMENSIONS ONLY.
- THE DOCUMENTS REPRESENT STRUCTURAL SYSTEMS AND COMPONENTS IN THEIR FINAL AND FINISHED STATE. THE DESIGN, ADEQUACY AND SAFETY OF ERECTION BRACING, SHORING, TEMPORARY SUPPORTS, ETC. DURING ALL INTERMEDIATE STAGES OF CONSTRUCTION IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- NOTES AND SPECIFIC DETAILS SHOWN ON THE DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS. THE CONTRACTOR SHALL CONTACT THE CIVIL ENGINEER FOR CLARIFICATION IF ANY QUESTION OR DISCREPANCY EXISTS.

FOUNDATION NOTES :

- THE SUBSURFACE INFORMATION AND FOUNDATION DESIGN ARE BASED ON A REPORT PREPARED BY W.L. BURLE ENGINEERS, P. A.:

GEOTECHNICAL INVESTIGATION AND ENGINEERING REPORT FOR
GSH 323-024
ARPA INFR. - WASTE CENT. TREATMENT
SOUTH MISSISSIPPI CORRECTIONAL INSTITUTE
LEAKSVILLE, MISSISSIPPI
DATED
AUGUST 19, 2021

- PER THE GEOTECHNICAL REPORT, THE CONTRACTOR SHALL RETAIN THE SERVICES OF A DEWATERING EXPERT PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN, AND OPERATE AT HIS EXPENSE ALL NECESSARY PUMPS, WELL POINTS, DEEP WELLS, AND/OR OTHER EQUIPMENT REQUIRED FOR DEWATERING THE VARIOUS PARTS OF THE WORK, AND FOR MAINTAINING THE FOUNDATIONS, EMBANKMENTS AND OTHER PARTS OF THE WORK, FREE FROM WATER AS REQUIRED FOR CONSTRUCTION.
- ALLOWABLE SOIL BEARING PRESSURE - 1700 PSF
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION, SHORING, UNDERPINNING, BRACING, ISOLATION, ETC. OF ALL EXISTING CONDITIONS AS REQUIRED TO PREVENT ANY DISTURBANCE TO EXISTING BUILDINGS AND/OR STRUCTURES OR EXISTING CONDITIONS AS A RESULT OF THIS WORK.
- GENERAL CONTRACTOR SHALL NOTIFY THE STRUCTURAL ENGINEER A MINIMUM OF 48 HOURS PRIOR TO PLACEMENT OF CONCRETE.
- PLACEMENT OF ALL CONCRETE INCLUDING THE CHANNELIZING INTERIOR CONCRETE OF THE CLARIFIER SHALL BE IN PLACE BEFORE EXTERIOR BACKFILLING BEGINS.

CONCRETE NOTES :

- CONCRETE MIX REQUIREMENTS:
 - A. MIN. COMPRESSIVE STRENGTH (FC) @ 28 DAYS 4500 PSI
 - B. AIR ENTRAINED 6.0%
- THE CONTRACTOR SHALL SUBMIT ALL CONSTRUCTION JOINT PROPOSED LOCATIONS PRIOR TO CONSTRUCTION. ONLY APPROVED LOCATIONS WILL BE ACCEPTABLE FOR CONSTRUCTION JOINT LOCATIONS.
- PROVIDE WATERSTOPS AT ALL EXPANSION, CONTRACTION, AND CONSTRUCTION JOINTS IN ALL LIQUID RETAINING STRUCTURES.

REINFORCING STEEL NOTES:

- REINFORCING BARS SHALL CONFORM TO ASTM A615, GRADE 60. REINFORCING BARS ARE NOT TO BE WELDED.
- CONTRACTOR SHALL PROVIDE NECESSARY REINFORCING ACCESSORIES IN ORDER TO HOLD BARS IN THE PROPER POSITION. PROVIDE CORNER BARS OF THE SAME SIZE AND NUMBER AS HORIZONTAL BARS AT ALL CORNERS AND T INTERSECTIONS.
- LAP SPLICES SHALL BE A CLASS B TENSION LAP, UNLESS NOTED OTHERWISE.
- CONCRETE COVER FOR REINFORCING SHALL BE AS INDICATED IN THE DRAWINGS OR 2" CLEAR IF NOT INDICATED.

STRUCTURAL STEEL (STAIRS AND PLATFORMS):

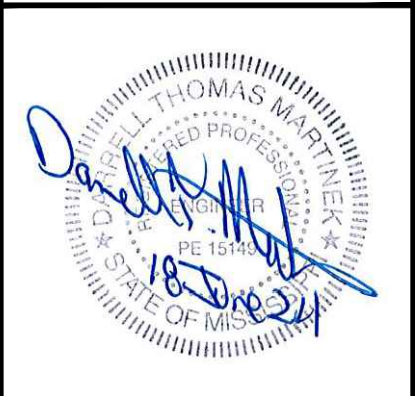
- ALL MAIN STRUCTURAL MEMBERS AND MISCELLANEOUS STEEL COMPONENTS SHALL CONFORM TO 304 - ASTM A-240 STAINLESS STEEL.
- STAINLESS STEEL BOLTS FOR CONNECTIONS SHALL CONFORM TO ASTM SPECIFICATION F594 (UNLESS NOTED OTHERWISE).
- ANCHOR BOLTS SHALL STAINLESS BE STEEL.
- ALL CONNECTIONS FOR STRUCTURAL STEEL SHALL BE SUFFICIENT TO FULLY DEVELOP THE CONNECTED MEMBERS.
- SUBMIT COMPLETE SHOP DRAWINGS TO ENGINEER FOR APPROVAL. DRAWINGS SHALL INDICATED THE PROFILES, SIZES, SPACING, CAMBER, ASTM GRADE, AND LOCATIONS FOR ALL STRUCTURAL MEMBERS, CONNECTIONS, ATTACHMENTS AND FASTENERS. INCLUDE SUPPLEMENTARY MEMBERS AND PARTS TO COMPLETE STRUCTURAL STEEL WORK, MISCELLANEOUS STEEL AND ANGLES FOR FRAMED OPENINGS AND HEADED SHEAR CONNECTORS.
- SUBMIT WELDER'S QUALIFICATIONS WHICH INDICATE THAT THE WELDER HAS AWS QUALIFICATIONS FOR THE INTENDED WORK WITHIN THE PREVIOUS 12 MONTHS.

STAINLESS STEEL BAR GRATING:

- ALL BAR GRATING SHALL BE: STANDARD-DUTY WELDED, 304 ASTM A-240 STAINLESS STEEL, 1-1/4" X 1/8" RECTANGULAR BAR SECTIONS, BY MCNICHOLS OR APPROVED EQUAL.
- GRATING TO BEAR ON STEEL ARMORED NOTCH IN CONCRETE AS DETAILED IN THE PLANS OR STEEL ANGLES CAPABLE OF SUPPORTING THE ANTICIPATED LOADING ATTACHED TO CONCRETE. MINIMUM LIVE LOAD FOR GRATING AND BEAM DESIGN IS 60 POUNDS PER SQUARE FOOT. GRATING SUPPLIER TO SUBMIT SHOP DRAWINGS OF GRATING SECTIONS FOR REVIEW BY THE PROJECT ENGINEER.

FIBER VOIDS:

- SUBMIT MANUFACTURER'S DATA FOR FIBER VOIDS. FIBER VOIDS SHALL BE BY SAVWAY CARTON FORMS, INC., SUREVOID PRODUCTS, INC., OR APPROVED EQUAL, AND BE OF THE SIZE INDICATED ON THE DRAWINGS. FORMS SHALL BE OF THE TYPE THAT ARE IMPREGNATED WITH PARAFFIN AND LAMINATED WITH MOISTURE RESISTANT ADHESIVE.
- FIBER VOIDS SHALL BE DESIGNED TO SUPPORT NOT LESS THAN 1,000 POUNDS PER SQUARE FOOT. STORE FIBER VOIDS ABOVE GROUND LEVEL AND IN A DRY LOCATION. FIBER VOIDS MUST BE KEPT DRY UNTIL CONCRETE IS POURED.



GSH323-024 ARPA INFR. - WASTE
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LEAKESVILLE, MISSISSIPPI

Burle Proj. No.:
08194-1-0122

File Name:
C-101 - DRAWING INDEX &
GENERAL NOTES.dwg

Date: 04/29/2024

Scale: N.T.S.

Drawn by: MJJ/JRG

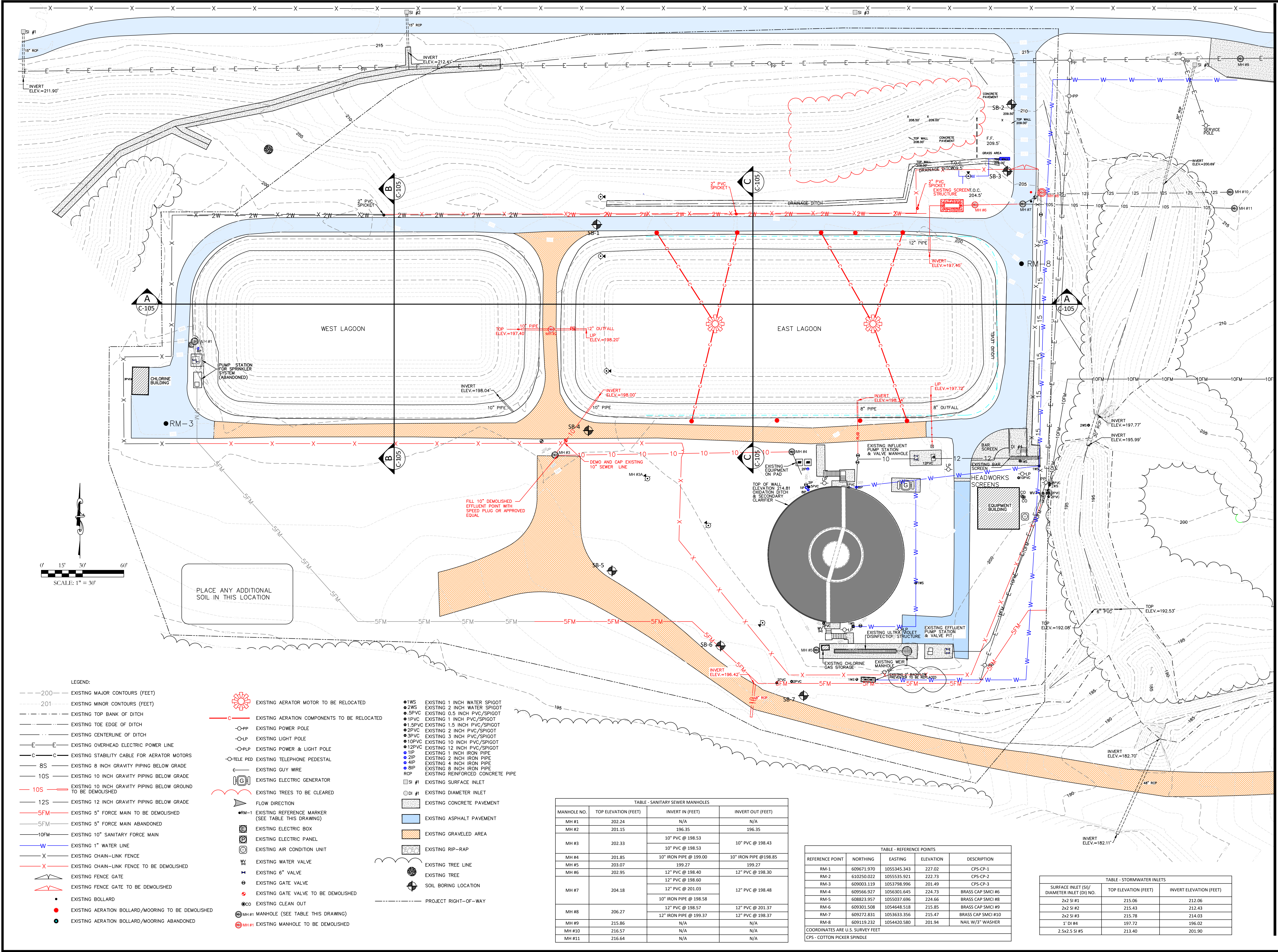
Checked: DTM

Revisions:
6/18/2024
ADDENDUM 3

Revisions:

DRAWING INDEX &
GENERAL NOTES

C-101
Drawing Number



- LEGEND:
- 200 --- EXISTING MAJOR CONTOURS (FEET)
 - 201 --- EXISTING MINOR CONTOURS (FEET)
 - - - - - EXISTING TOP BANK OF DITCH
 - --- EXISTING TOE EDGE OF DITCH
 - - - - - EXISTING CENTERLINE OF DITCH
 - - - - - EXISTING OVERHEAD ELECTRIC POWER LINE
 - - - - - EXISTING STABILITY CABLE FOR AERATOR MOTORS
 - 8S --- EXISTING 8 INCH GRAVITY PIPING BELOW GRADE
 - 10S --- EXISTING 10 INCH GRAVITY PIPING BELOW GRADE
 - 10S --- EXISTING 10 INCH GRAVITY PIPING BELOW GROUND TO BE DEMOLISHED
 - 12S --- EXISTING 12 INCH GRAVITY PIPING BELOW GRADE
 - 5FM --- EXISTING 5" FORCE MAIN TO BE DEMOLISHED
 - 5FM --- EXISTING 5" FORCE MAIN ABANDONED
 - 10FM --- EXISTING 10" SANITARY FORCE MAIN
 - W --- EXISTING 1" WATER LINE
 - X --- EXISTING CHAIN-LINK FENCE
 - X --- EXISTING CHAIN-LINK FENCE TO BE DEMOLISHED
 - --- EXISTING FENCE GATE
 - --- EXISTING FENCE GATE TO BE DEMOLISHED
 - EXISTING BOLLARD
 - EXISTING AERATION BOLLARD/MOORING TO BE DEMOLISHED
 - EXISTING AERATION BOLLARD/MOORING ABANDONED
- ⊙ EXISTING AERATOR MOTOR TO BE RELOCATED
 - ⊙ EXISTING POWER POLE
 - ⊙ EXISTING LIGHT POLE
 - ⊙ EXISTING POWER & LIGHT POLE
 - ⊙ EXISTING TELEPHONE PEDESTAL
 - ⊙ EXISTING GUY WIRE
 - ⊙ EXISTING ELECTRIC GENERATOR
 - ⊙ EXISTING TREES TO BE CLEARED
 - ⊙ EXISTING FLOW DIRECTION
 - ⊙ EXISTING REFERENCE MARKER (SEE TABLE THIS DRAWING)
 - ⊙ EXISTING ELECTRIC BOX
 - ⊙ EXISTING ELECTRIC PANEL
 - ⊙ EXISTING AIR CONDITION UNIT
 - ⊙ EXISTING WATER VALVE
 - ⊙ EXISTING 6" VALVE
 - ⊙ EXISTING GATE VALVE
 - ⊙ EXISTING GATE VALVE TO BE DEMOLISHED
 - ⊙ EXISTING CLEAN OUT
 - ⊙ EXISTING MANHOLE (SEE TABLE THIS DRAWING)
 - ⊙ EXISTING MANHOLE TO BE DEMOLISHED
- ⊙ EXISTING 1 INCH WATER SPIGOT
 - ⊙ EXISTING 2 INCH WATER SPIGOT
 - ⊙ EXISTING 0.5 INCH PVC/SPIGOT
 - ⊙ EXISTING 1 INCH PVC/SPIGOT
 - ⊙ EXISTING 1.5 INCH PVC/SPIGOT
 - ⊙ EXISTING 2 INCH PVC/SPIGOT
 - ⊙ EXISTING 3 INCH PVC/SPIGOT
 - ⊙ EXISTING 10 INCH PVC/SPIGOT
 - ⊙ EXISTING 12 INCH PVC/SPIGOT
 - ⊙ EXISTING 1 INCH IRON PIPE
 - ⊙ EXISTING 2 INCH IRON PIPE
 - ⊙ EXISTING 4 INCH IRON PIPE
 - ⊙ EXISTING 8 INCH IRON PIPE
 - ⊙ EXISTING REINFORCED CONCRETE PIPE
 - ⊙ EXISTING SURFACE INLET
 - ⊙ EXISTING DIAMETER INLET
 - ⊙ EXISTING CONCRETE PAVEMENT
 - ⊙ EXISTING ASPHALT PAVEMENT
 - ⊙ EXISTING GRAVELED AREA
 - ⊙ EXISTING RIP-RAP
 - ⊙ EXISTING TREE LINE
 - ⊙ EXISTING TREE
 - ⊙ EXISTING SOIL BORING LOCATION
 - ⊙ PROJECT RIGHT-OF-WAY

TABLE - SANITARY SEWER MANHOLES			
MANHOLE NO.	TOP ELEVATION (FEET)	INVERT IN (FEET)	INVERT OUT (FEET)
MH #1	202.24	N/A	N/A
MH #2	201.15	196.35	196.35
MH #3	202.33	10" PVC @ 198.53	10" PVC @ 198.43
		10" PVC @ 198.53	
MH #4	201.85	10" IRON PIPE @ 199.00	10" IRON PIPE @ 198.85
MH #5	203.07	199.27	199.27
MH #6	202.95	12" PVC @ 198.40	12" PVC @ 198.30
		12" PVC @ 198.60	
MH #7	204.18	12" PVC @ 201.03	12" PVC @ 198.48
		10" IRON PIPE @ 198.58	
MH #8	206.27	12" PVC @ 198.57	12" PVC @ 201.37
		12" IRON PIPE @ 199.37	12" PVC @ 198.37
MH #9	215.86	N/A	N/A
MH #10	216.57	N/A	N/A
MH #11	216.64	N/A	N/A

TABLE - REFERENCE POINTS			
REFERENCE POINT	NORTHING	EASTING	ELEVATION
RM-1	609671.970	1055345.343	227.02
RM-2	610250.022	1055535.921	222.73
RM-3	609003.119	1053798.996	201.49
RM-4	609566.927	1056301.645	224.73
RM-5	608823.957	1055037.696	224.66
RM-6	609301.508	1054648.518	215.85
RM-7	609272.831	1053633.356	215.47
RM-8	609119.232	1054420.580	201.94
COORDINATES ARE U.S. SURVEY FEET			
CPS - COTTON PICKER SPINDLE			

TABLE - STORMWATER INLETS		
SURFACE INLET (SI)/ DIAMETER INLET (DI) NO.	TOP ELEVATION (FEET)	INVERT ELEVATION (FEET)
2x2 SI #1	215.06	212.06
2x2 SI #2	215.43	212.43
2x2 SI #3	215.78	214.03
1' DI #4	197.72	196.02
2.5x2.5 SI #5	213.40	201.90

MATCH LINE

W.L. BURLE
ENGINEERS, P.A.
111 South Walnut Street
Greenville, MS 38701

GS#323-024 ARPA INFR. - WASTE
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SOUTH MISSISSIPPI CORRECTIONAL INSTITUTION
LEAKESVILLE, MISSISSIPPI

Burle Proj. No.:
08194-1-0122

File Name:
C-102 EXISTING CONDITIONS AND
REQUIRED DEMOLITION.DWG

Date: 04/29/2024

Scale: 1"=30'

Drawn by: MJJ/JRG

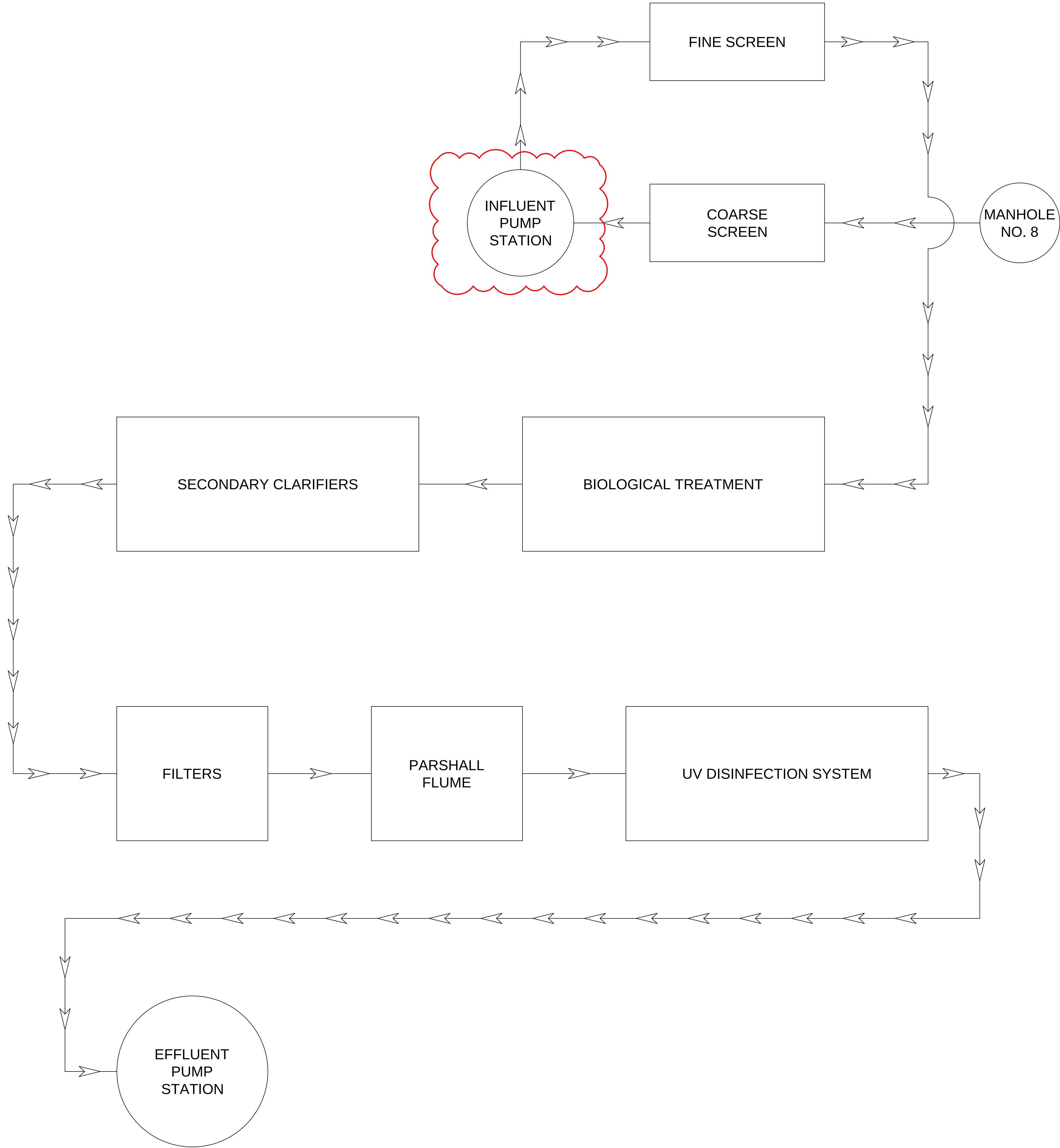
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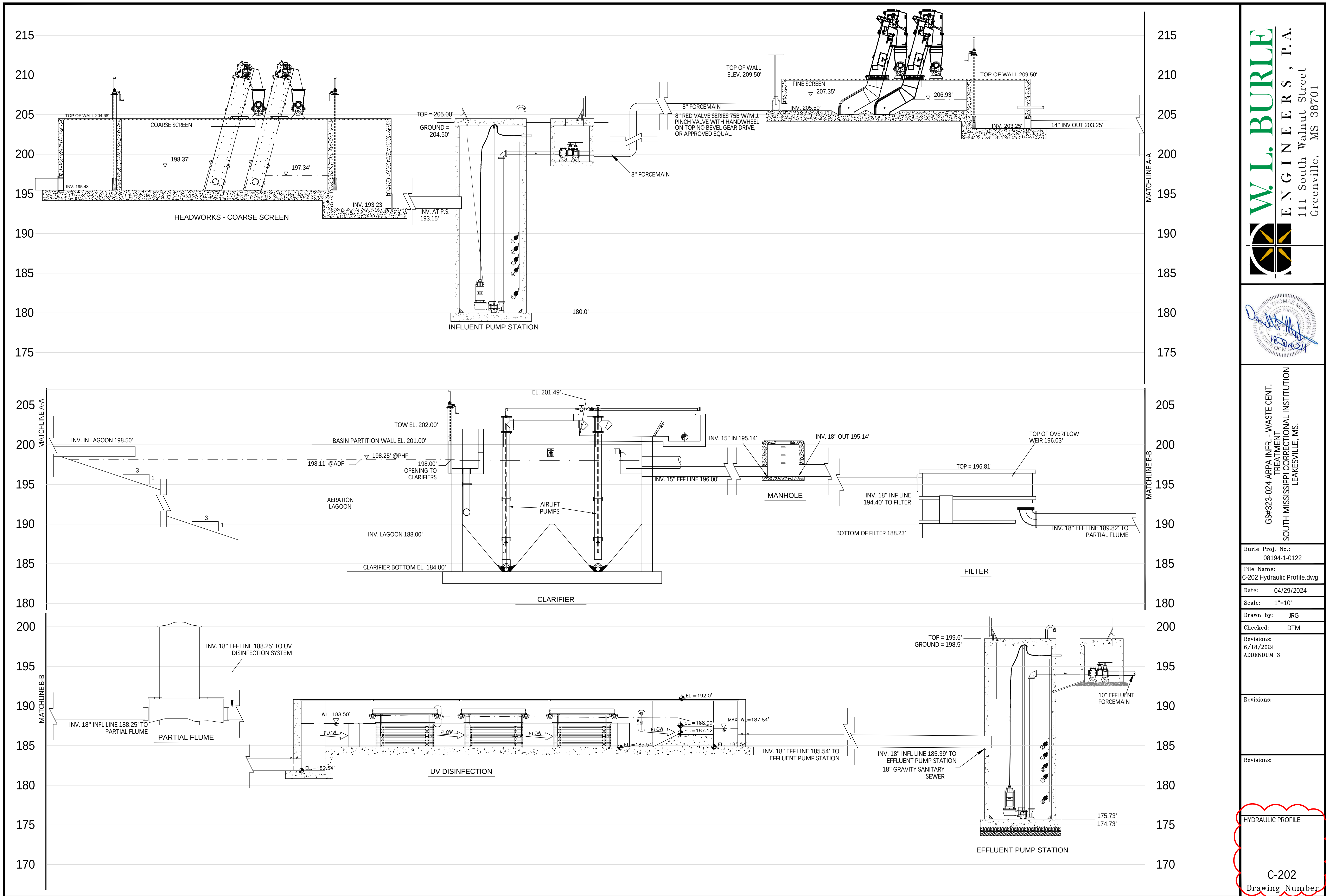
Revisions:
6/18/2024 ADDENDUM 3

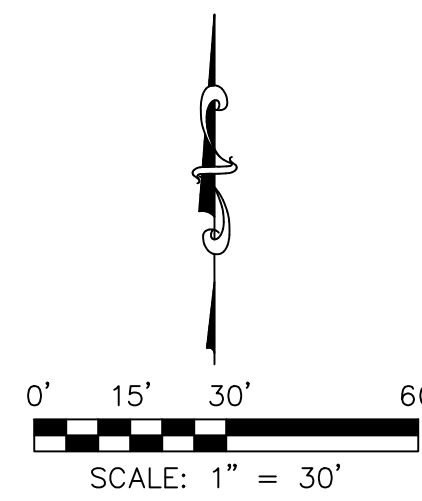
Revisions:

PLAN VIEW -
EXISTING CONDITIONS
AND REQUIRED DEMOLITION

C-102
Drawing Number







- LEGEND:
- EXISTING TOP BANK OF DITCH
 - EXISTING TOE EDGE OF DITCH
 - EXISTING OVERHEAD ELECTRIC POWER LINE
 - EXISTING STABILITY CABLE FOR RELOCATED MOTORS
 - 8S --- 8S EXISTING 8 INCH GRAVITY PIPING BELOW GRADE
 - 10S --- 10S EXISTING 10 INCH GRAVITY PIPING BELOW GRADE
 - 12S --- 12S EXISTING 12 INCH GRAVITY PIPING BELOW GRADE
 - 10FM --- 10FM EXISTING 10" SANITARY FORCE MAIN
 - X --- EXISTING CHAIN-LINK FENCE
 - X --- EXISTING CHAIN-LINK FENCE (REQUIRED)
 - REQUIRED AERATION BOLLARD/MOORING (SEE DETAIL DRAWING C-904)
 - EXISTING AERATION BOLLARD/MOORING TO BE ABANDONED
 - RELOCATED AERATOR MOTOR
 - PP EXISTING POWER POLE
 - EXISTING GUY WIRE
 - EXISTING ELECTRIC GENERATOR
 - EXISTING AIR CONDITION UNIT
 - EXISTING WATER VALVE
 - EXISTING 6" VALVE
 - EXISTING GATE VALVE
 - EXISTING CLEAN OUT
 - MH #1 EXISTING MANHOLE
 - 1WS EXISTING 1 INCH WATER SPIGOT
 - 2WS EXISTING 2 INCH WATER SPIGOT
 - 5WPC EXISTING 0.5 INCH PVC/SPIGOT
 - 1PVC EXISTING 1 INCH PVC/SPIGOT
 - 1.5PVC EXISTING 1.5 INCH PVC/SPIGOT
 - 2PVC EXISTING 2 INCH PVC/SPIGOT
 - 3PVC EXISTING 3 INCH PVC/SPIGOT
 - 10PVC EXISTING 10 INCH PVC/SPIGOT
 - 12PVC EXISTING 12 INCH PVC/SPIGOT
 - 1IP EXISTING 1 INCH IRON PIPE
 - 2IP EXISTING 2 INCH IRON PIPE
 - 4IP EXISTING 4 INCH IRON PIPE
 - 8IP EXISTING 8 INCH IRON PIPE
 - RCP EXISTING REINFORCED CONCRETE PIPE
 - SI #1 EXISTING SURFACE INLET
 - DI #1 EXISTING DIAMETER INLET
 - EXISTING CONCRETE PAVEMENT
 - EXISTING ASPHALT PAVEMENT
 - EXISTING GRAVELED AREA
 - EXISTING RIP-RAP
 - EXISTING TREE LINE
 - EXISTING TREE LINE TO REMAIN
 - EXISTING TREE
 - PH ADJ. REQUIRED PH ADJUSTMENT (SEE DETAIL DRAWING C-330)
 - CCB REQUIRED CONTROL BOX
 - REQUIRED FLOWMETER (SEE DETAIL DRAWING C-901)
 - REQUIRED PINCH GATE VALVE (SEE DETAIL DRAWING C-901)
 - 15 RFPs REQUIRED POINTS
 - SOIL BEARING LOCATIONS
 - REQUIRED HEADWORKS FINE SCREEN (SEE DRAWING C-305)
 - REQUIRED HEADWORKS COARSE SCREEN (SEE DRAWING C-302)
 - REQUIRED EFFLUENT PUMP STATION (SEE DETAIL DRAWING C-802)
 - REQUIRED INFLUENT PUMP STATION (SEE DETAIL DRAWING C-311)
 - REQUIRED SCUM PUMPING STATION (SEE DETAIL DRAWING C-804)
 - REQUIRED SURFACE INLET (SEE DETAIL DRAWING C-907) (SEE TABLE DRAWING C-204)
 - REQUIRED GRAVEL (SEE DETAIL DRAWING C-904)

REQUIRED STRUCTURE POINTS				
Point #	Description	Northing	Easting	DISCRIPTION
22	RSP1	608931.77	1054151.28	NORTHEAST CORNER FILTER BUILDING
23	RSP2	608889.77	1054151.28	SOUTHEAST CORNER FILTER BUILDING
24	RSP3	608851.16	1054109.88	PARSHALL FLUME
25	RSP4	608854.24	1054124.46	NORTHWEST CORNER UV BUILDING
26	RSP5	608854.24	1054194.85	NORTHEAST CORNER UV BUILDING
27	RSP6	608835.43	1054227.46	EFFLUENT PUMP STATION
44	RSP7	609064.75	1054102.87	SCUM PUMP STATION
29	RSP8	609172.70	1054353.51	INFLUENT PUMP STATION
45	RSP10	609005.05	1054022.62	AERATION BOLLARD MOORING
53	RSP11	609004.87	1053866.14	AERATION BOLLARD MOORING
47	RSP12	609135.48	1053844.64	AERATION BOLLARD MOORING
48	RSP13	609141.84	1053899.28	AERATION BOLLARD MOORING
49	RSP14	609141.84	1053960.21	AERATION BOLLARD MOORING
50	RSP15	609141.90	1054019.55	AERATION BOLLARD MOORING
51	RSP16	609165.64	1054123.19	NORTHWEST CORNER CLARIFIER
52	RSP17	608982.64	1054123.19	SOUTHWEST CORNER CLARIFIER
54	RSP18	609177.36	1054364.63	NORTHWEST CORNER COARSE SCREEN
55	RSP19	609177.36	1054406.63	NORTHEAST CORNER COARSE SCREEN
56	RSP20	609196.24	1054358.93	NORTHWEST CORNER FINE SCREEN
57	RSP21	609197.24	1054390.26	NORTHEAST CORNER FINE SCREEN
59	RSP22	609165.64	1054146.26	NORTH INFLUENT SCUM REMOVAL
60	RSP23	609166.64	1054131.00	NORTH SCUM REMOVAL
61	RSP24	609119.64	1054123.19	NORTH EFFLUENT LINE
62	RSP25	609028.64	1054123.19	SOUTH EFFLUENT LINE
63	RSP26	608981.64	1054131.00	SOUTH SCUM REMOVAL
64	RSP27	608982.64	1054146.26	SOUTH INFLUENT SCUM REMOVAL

REQUIRED FENCE POINTS				
Point #	Description	Northing	Easting	DISCRIPTION
14	RFP1	608988.53	1053816.47	FENCE CORNER
15	RFP2	608959.84	1053815.72	FENCE CORNER
16	RFP3	608855.06	1054002.44	FENCE CORNER
17	RFP4	608794.24	1054068.47	FENCE CORNER
18	RFP5	608788.95	1054233.79	FENCE CORNER
19	RFP6	608753.26	1054372.36	FENCE CORNER
20	RFP7	608824.37	1054433.96	FENCE CORNER
21	RFP8	608944.30	1054434.64	TIE TO EXISTING FENCE
65	RFP9	609265.43	1054433.00	RFP9
66	RFP10	609265.31	1054413.00	FENCE CORNER
67	RFP11	609228.26	1054351.05	FENCE CORNER
68	RFP12	609228.26	1054332.30	RFP12
69	RFP13	609176.29	1054332.30	RFP13
70	RFP14	609176.29	1054092.85	RFP14

REQUIRED FENCE POINTS				
Point #	Description	Northing	Easting	DISCRIPTION
80	RFP15	609155.44	1054042.31	RFP15
81	RFP16	609155.09	1053956.87	TIE TO EXISTING FENCE

REQUIRED PINCH VALVE POINTS				
Point #	Description	Northing	Easting	DISCRIPTION
30	RPV1	609194.60	1054355.93	RPV1
36	RPV2	609190.60	1054355.93	RPV2

REQUIRED MANHOLE POINTS				
Point #	Description	Northing	Easting	DISCRIPTION
4	RMH1	608966.60	1053857.86	RMH1
37	RMH2	608950.64	1054101.10	RMH2
6	RMH3	608994.80	1054260.82	RMH3
7	RMH4	608998.02	1054328.38	RMH4
38	RMH5	608969.89	1054134.71	RMH5
89	RMH6	609028.64	1054109.89	RMH6

PLAN VIEW - REQUIRED LAYOUT

SCALE: 1" = 30'



GS#323-024 ARPA INFR. - WASTE
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SOUTH MISSISSIPPI CORRECTIONAL INSTITUTION
LEAKESVILLE, MISSISSIPPI

Burle Proj. No.:
08194-1-0122

File Name:
C-203 PLAN VIEW - REQUIRED
LAYOUT-

Date: 04/29/2024

Scale: 1"=30'

Drawn by: MJJ/RG

Checked: DTM

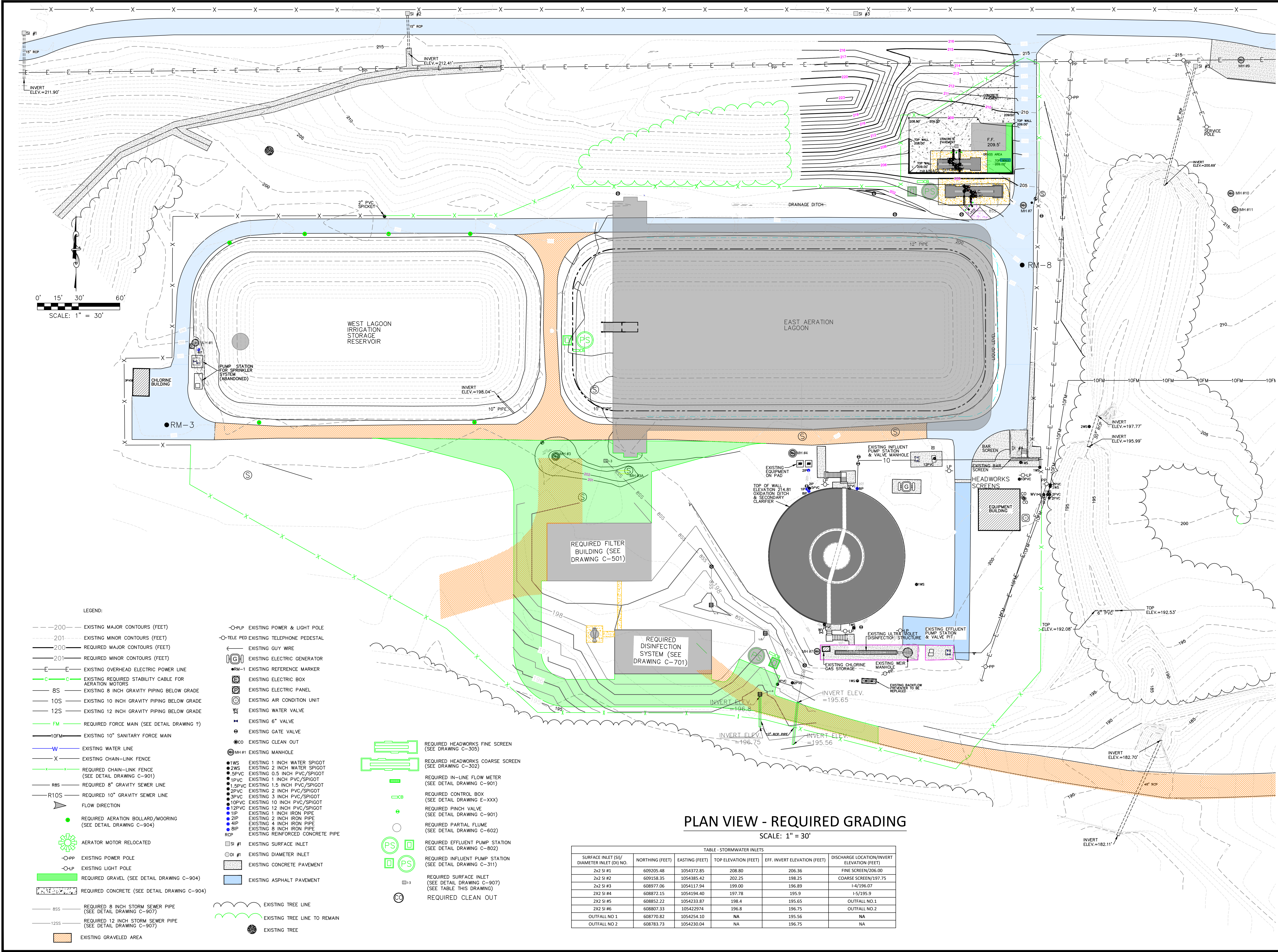
Revisions:
6/18/2024
ADDENDUM 3

Revisions:

Revisions:

PLAN VIEW -
REQUIRED LAYOUT

C-203
Drawing Number



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State of Mississippi

10/20/2024

GS#323-024 ARPA INFR. - WASTE

CENT. TREATMENT

SOUTH MISSISSIPPI CORRECTIONAL INSTITUTION

LEAKESVILLE, MISSISSIPPI

Burle Proj. No.:

08194-1-0122

File Name:

C-204 - PLAN VIEW - REQUIRED GRADING

Date:

04/29/2024

Scale:

1"=30'

Drawn by:

JRG

Checked:

DTM

Revisions:

6/18/2024

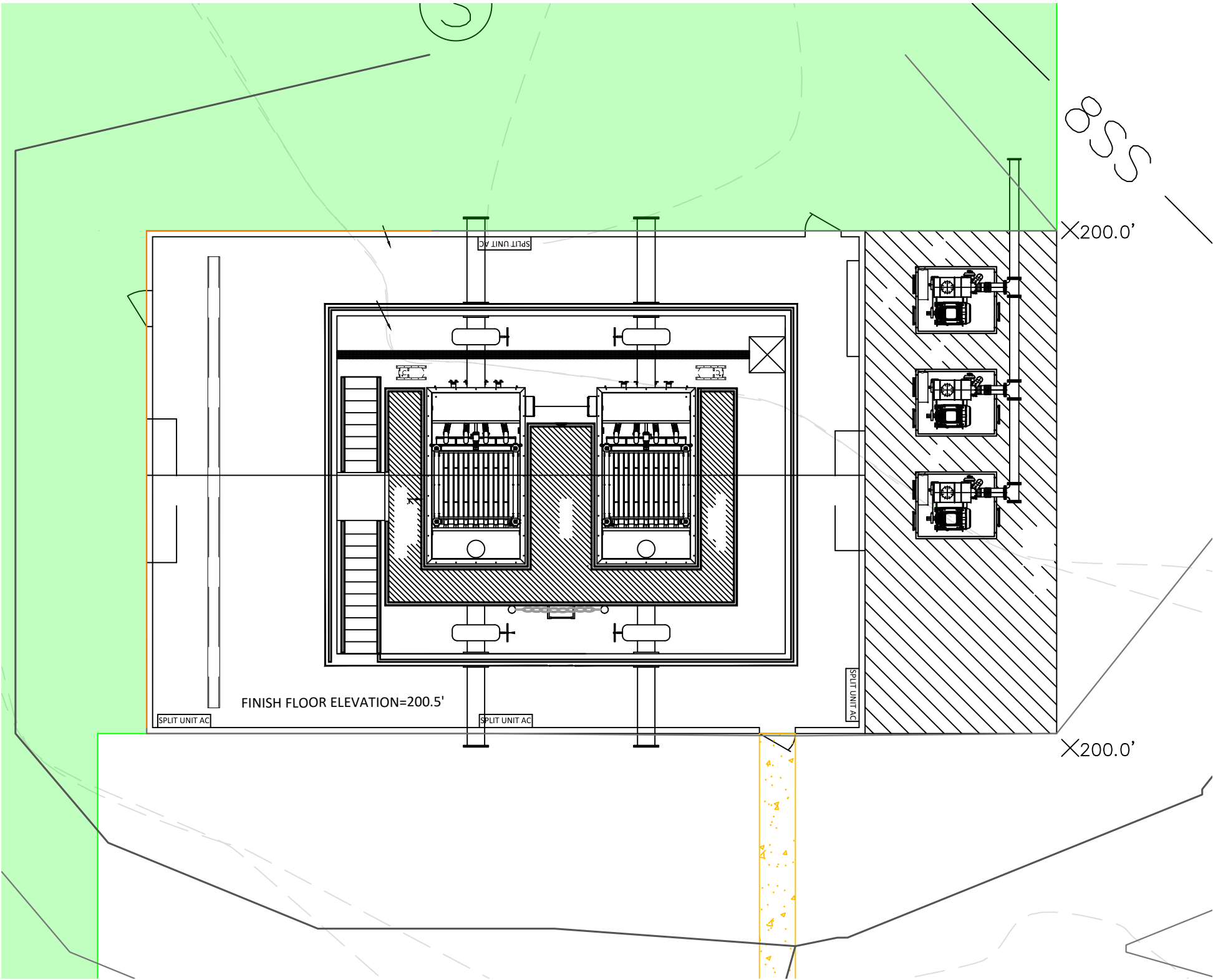
ADDENDUM 3

Revisions:

C-204

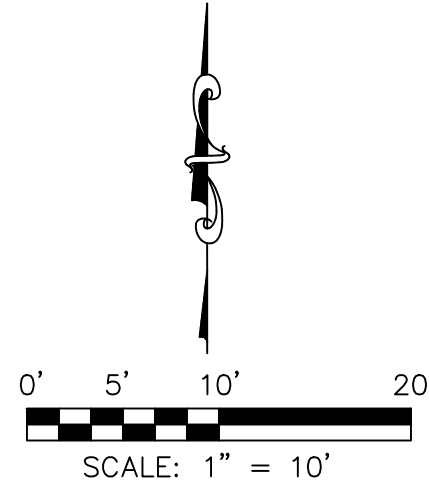
Drawing Number

NOTE: PROCESS PIPING NOT SHOWN FOR CLARITY.



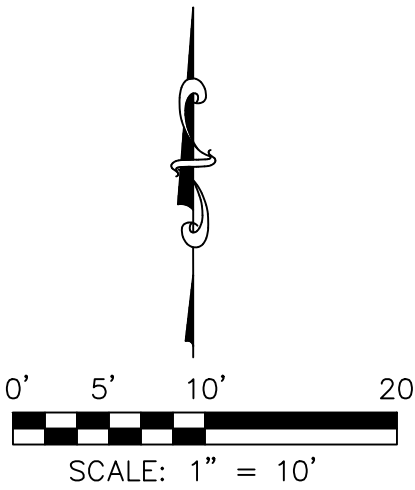
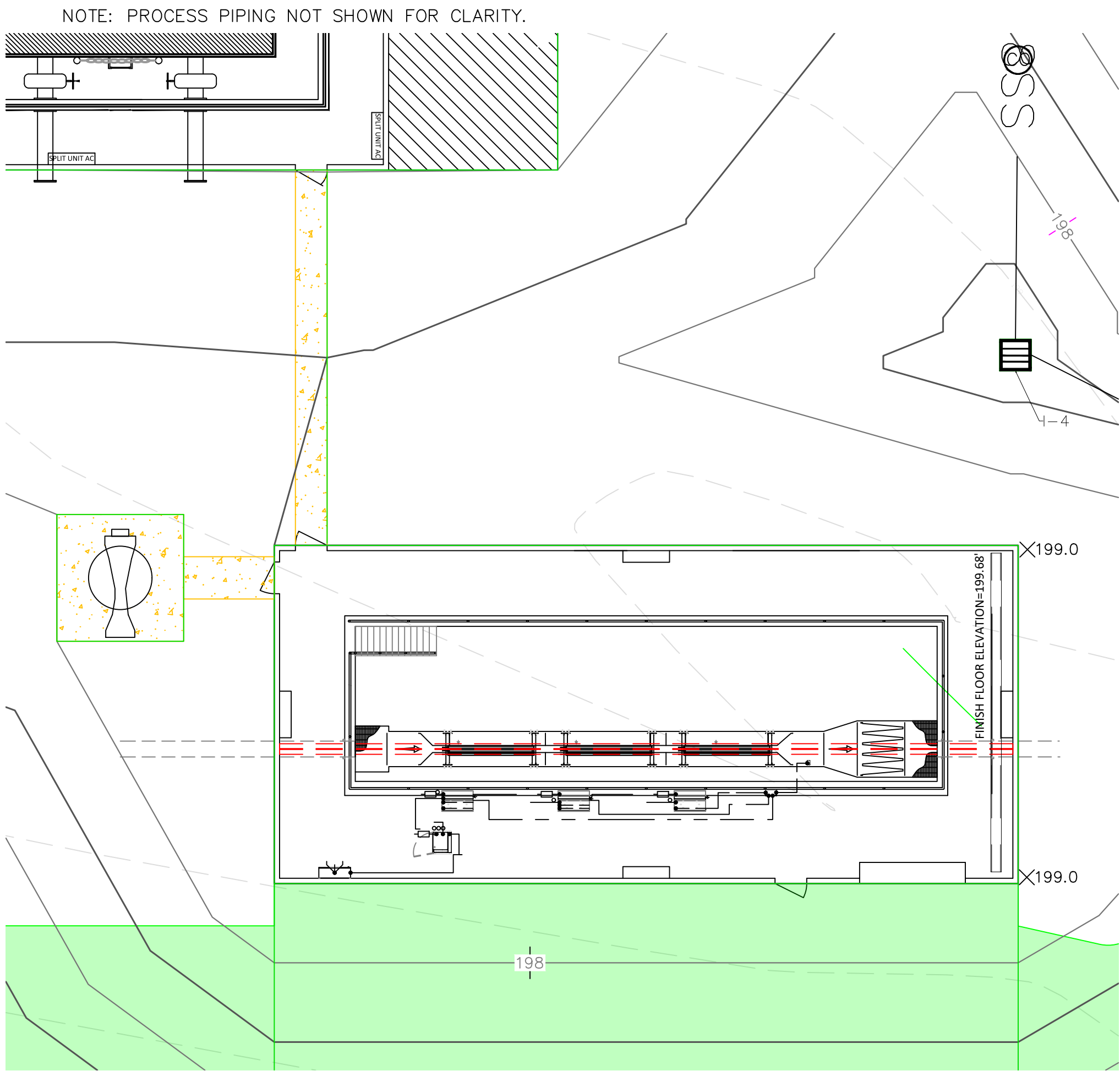
PLAN VIEW - REQUIRED GRADING FILTERS

SCALE: 1" = 10'

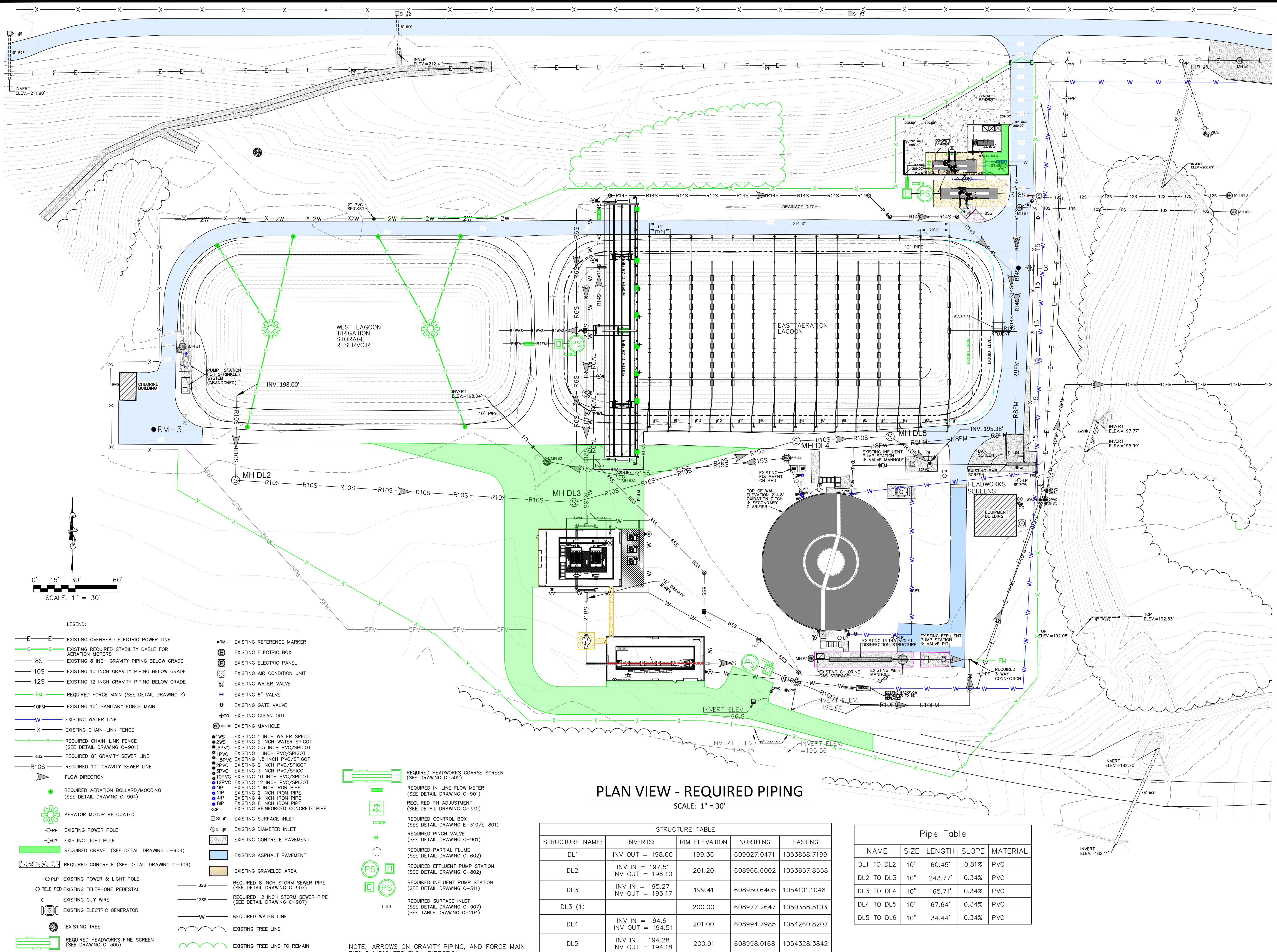


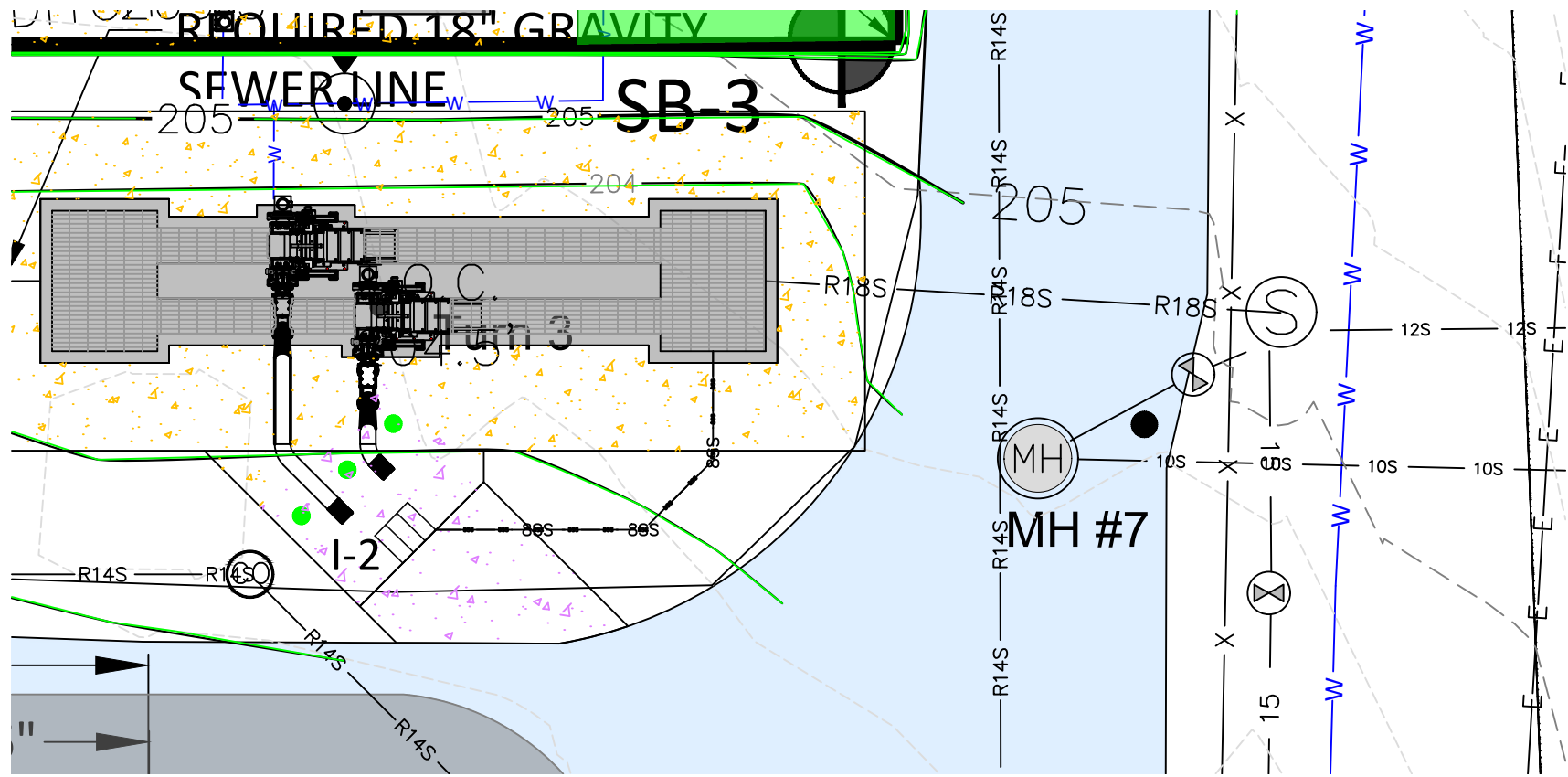
LEGEND:

- 200 EXISTING MAJOR CONTOURS (FEET)
- 201 EXISTING MINOR CONTOURS (FEET)
- 200 REQUIRED MAJOR CONTOURS (FEET)
- 201 REQUIRED MINOR CONTOURS (FEET)
- REQUIRED GRAVEL (SEE DETAIL DRAWING C-904)
- REQUIRED 4 INCH CONCRETE
- REQUIRED MANHOLE
- REQUIRED SPOT ELEVATION (FEET)

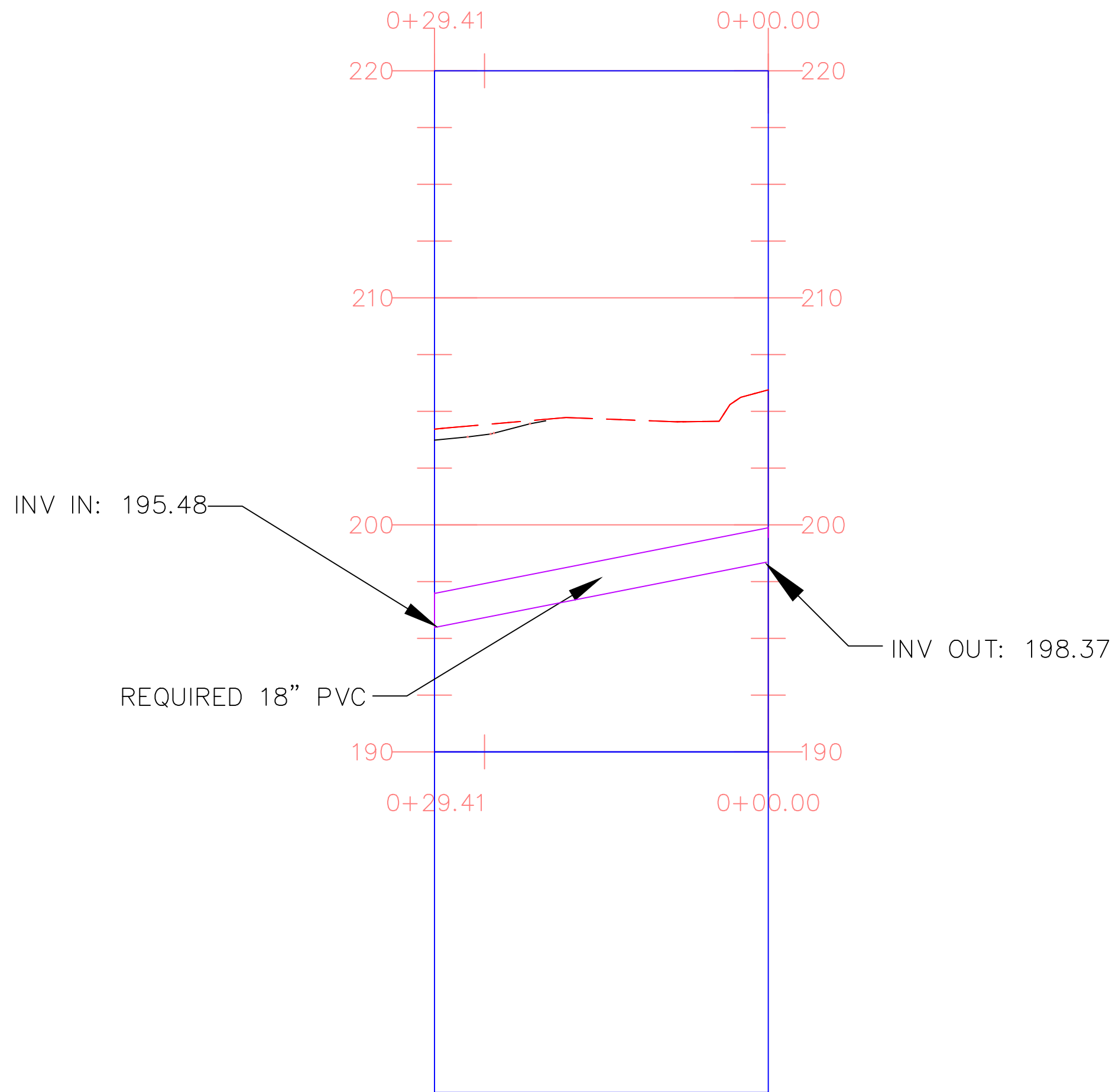


- LEGEND:
- 200 --- EXISTING MAJOR CONTOURS (FEET)
 - 201 --- EXISTING MINOR CONTOURS (FEET)
 - 200 --- REQUIRED MAJOR CONTOURS (FEET)
 - 201 --- REQUIRED MINOR CONTOURS (FEET)
 - REQUIRED GRAVEL (SEE DETAIL DRAWING C-904)
 - REQUIRED 4 INCH CONCRETE
 - REQUIRED PARTIAL FLUME (SEE DETAIL DRAWING C-602)
 - REQUIRED SPOT ELEVATION (FEET)

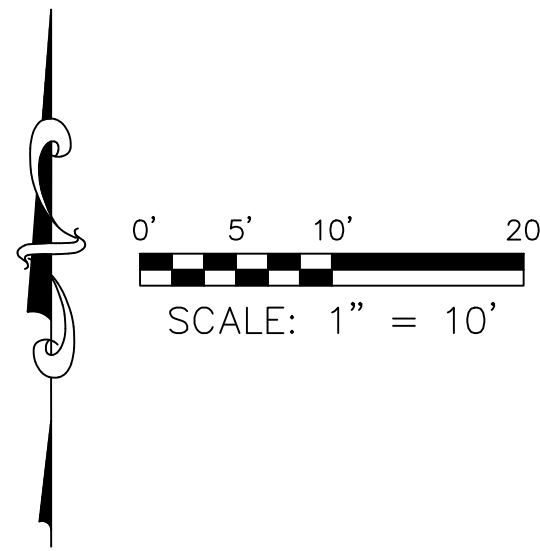




PLAN VIEW
MH-8 TO COARSE SCREEN
SCALE: 1"=10'



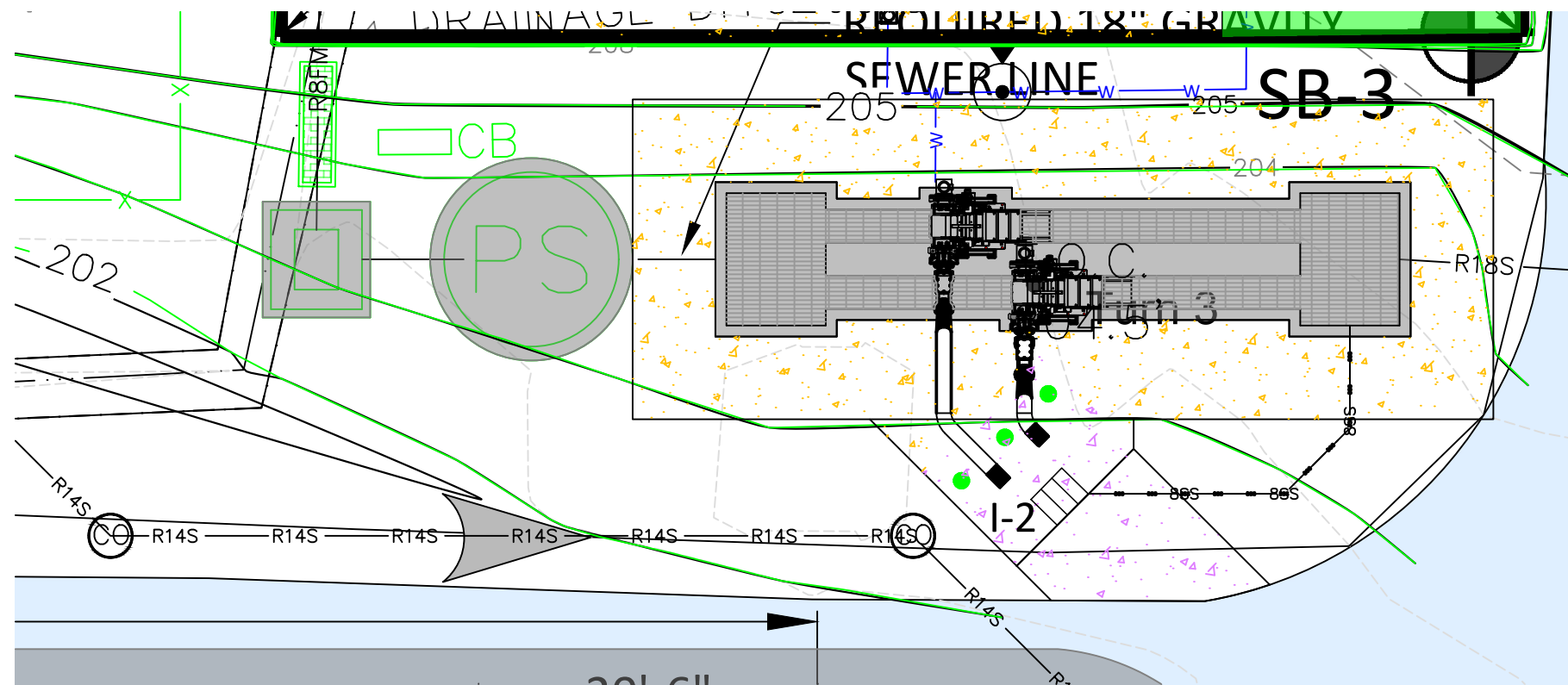
PROFILE VIEW
MH-8 TO COARSE SCREEN
SCALE: 1"=10'H/1"=5'V



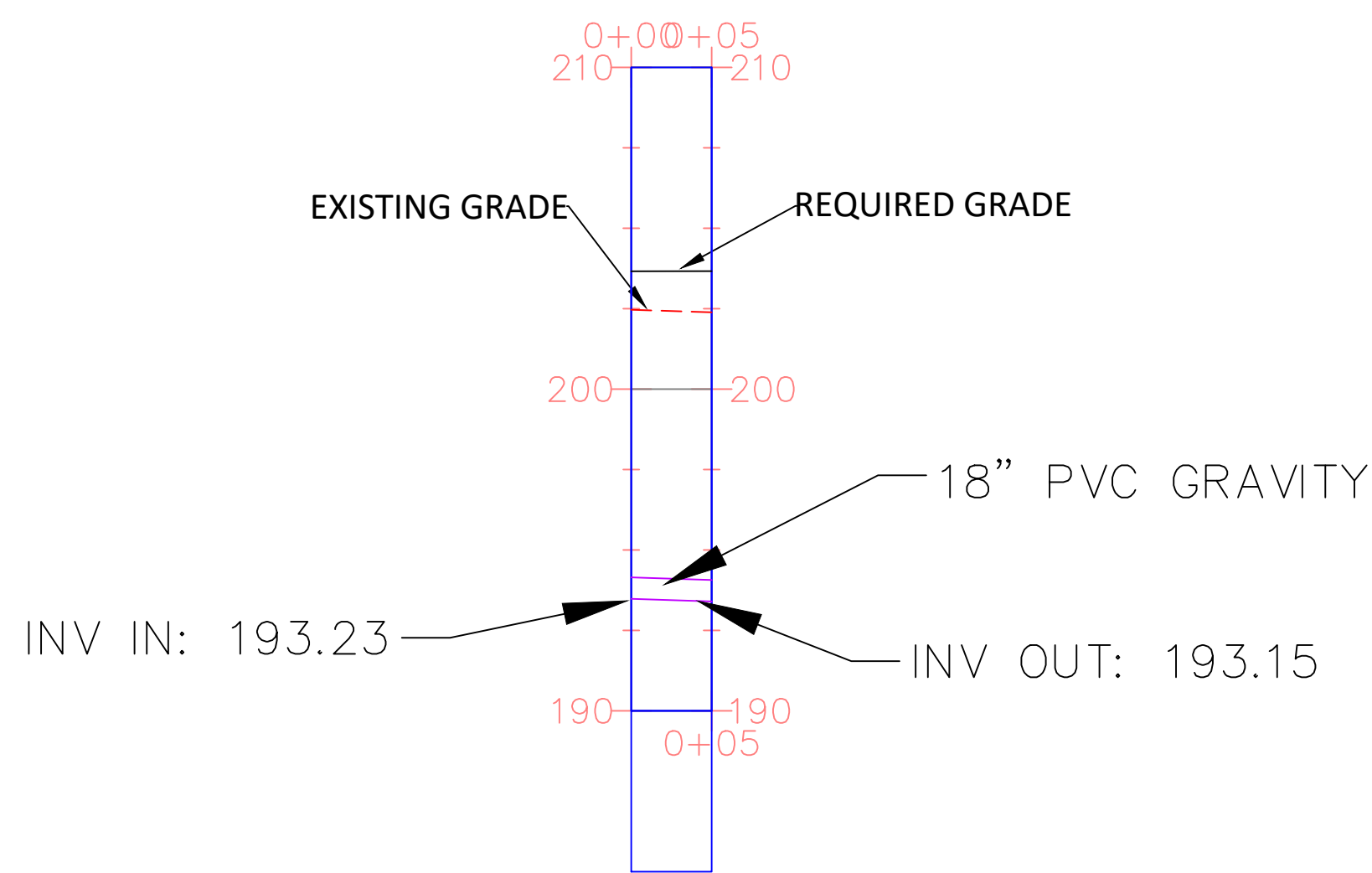
- LEGEND:
- 200--- EXISTING MAJOR CONTOURS (FEET)
 - 201--- EXISTING MINOR CONTOURS (FEET)
 - 200--- REQUIRED MAJOR CONTOURS (FEET)
 - 201--- REQUIRED MINOR CONTOURS (FEET)
 - EXISTING TOP BANK OF DITCH
 - EXISTING TOE EDGE OF DITCH
 - EXISTING CENTERLINE OF DITCH
 - 12S---12S--- EXISTING 12 INCH GRAVITY PIPING BELOW GRADE
 - W---W--- EXISTING WATER LINE
 - W---W--- REQUIRED WATER LINE
 - 8SS---8SS--- REQUIRED 8 INCH STORM SEWER PIPE (SEE DETAIL DRAWING C-907)
 - ➔ FLOW DIRECTION
 - ⊙ MH #1 EXISTING MANHOLE
 - EXISTING ASPHALT PAVEMENT
 - REQUIRED 4" CONCRETE (SEE DETAIL DRAWING C-904)
 - REQUIRED 8" CONCRETE (SEE DETAIL DRAWING C-904)
 - REQUIRED HYDRANT (SEE DETAIL DRAWING C-903)
 - REQUIRED BOLLARD (SEE DETAIL DRAWING C-904)
 - REQUIRED HEADWORKS COARSE SCREEN (SEE DRAWING C-302)
 - REQUIRED SURFACE INLET (SEE DETAIL DRAWING C-907) (SEE TABLE DRAWING C-204)

STRUCTURE TABLE				
STRUCTURE NAME:	INVERTS:	RIM ELEVATION	NORTHING	EASTING
COARSE SCREEN		199.45	609170.8864	1054435.3184
MH-8	INV OUT = 198.37	199.45	609170.8864	1054435.3184

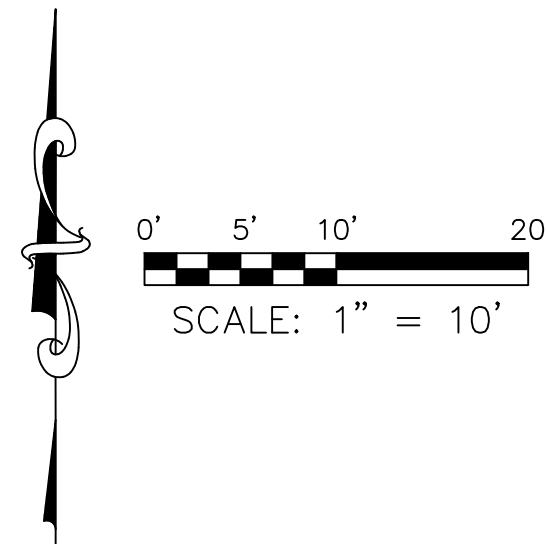
Pipe Table				
NAME	SIZE	LENGTH	SLOPE	MATERIAL
MH-8 TO HEADWORKS	18"	29.41'	9.83%	PVC



PLAN VIEW
COARSE SCREEN TO INFLUENT PUMP STATION
SCALE: 1"=10'



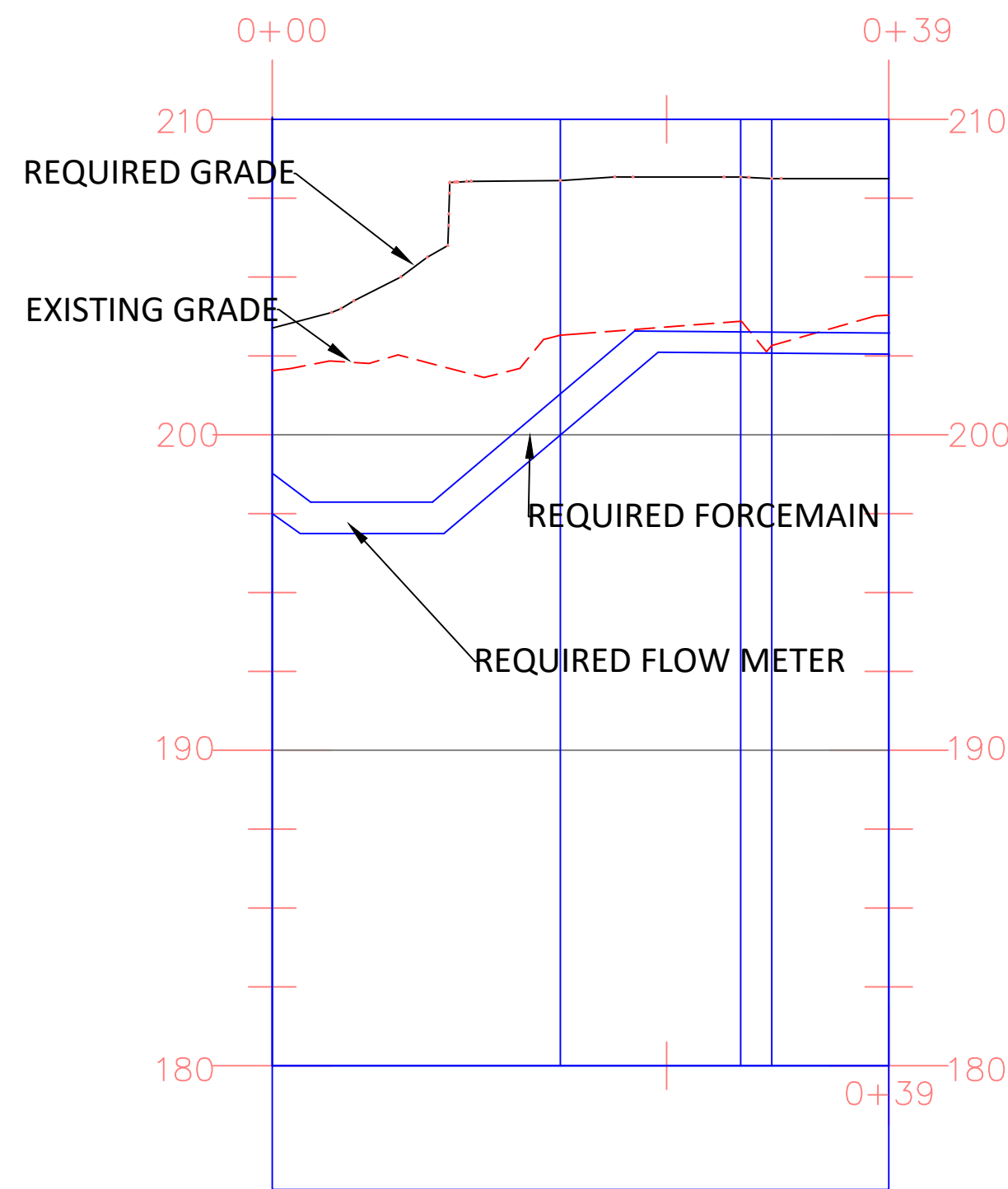
PROFILE VIEW
COARSE SCREEN TO INFLUENT PUMP STATION
SCALE: 1"=10'H/1"=5'V



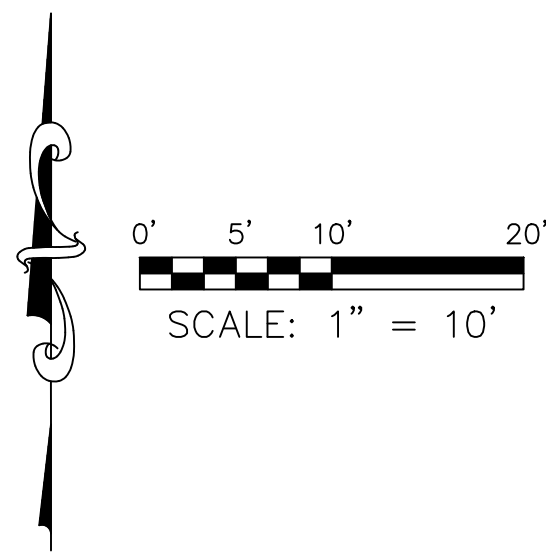
LEGEND:	
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	EXISTING MINOR CONTOURS (FEET)
	REQUIRED MAJOR CONTOURS (FEET)
	REQUIRED MINOR CONTOURS (FEET)
	REQUIRED 8 INCH STORM SEWER PIPE (SEE DETAIL DRAWING C-907)
	REQUIRED 12" GRAVITY SEWER LINE
	REQUIRED 18" GRAVITY SEWER LINE
	REQUIRED INFLUENT PUMP STATION (SEE DETAIL DRAWING C-310)
	REQUIRED MECHANICAL COARSE SCREEN (SEE DRAWING C-302)
	REQUIRED IN-LINE FLOW METER (SEE DRAWING C-901)
	FLOW DIRECTION
	REQUIRED BOLLARD (SEE DRAWING C-904)
	EXISTING ASPHALT PAVEMENT
	REQUIRED 4" CONCRETE (SEE DETAIL DRAWING C-904)
	REQUIRED 8" CONCRETE (SEE DETAIL DRAWING C-904)
	REQUIRED HYDRANT (SEE DETAIL DRAWING C-903)
	REQUIRED SURFACE INLET (SEE DETAIL DRAWING C-907) (SEE TABLE DRAWING C-204)



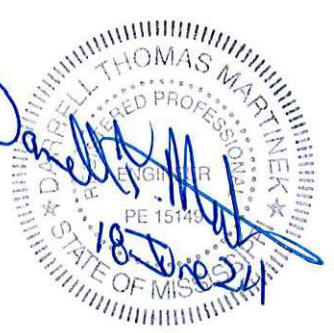
PLAN VIEW
VALVE BOX TO FINE SCREEN
SCALE: 1"=10'



PROFILE VIEW
VALVE BOX TO FINE SCREEN
SCALE: 1"=10'H/1"=5'V



LEGEND:	
	EXISTING MAJOR CONTOURS (FEET)
	EXISTING MINOR CONTOURS (FEET)
	REQUIRED MAJOR CONTOURS (FEET)
	REQUIRED MINOR CONTOURS (FEET)
	REQUIRED 8 INCH STORM SEWER PIPE (SEE DETAIL DRAWING C-907)
	REQUIRED 8" FORCE MAIN
	REQUIRED 12" GRAVITY SEWER LINE
	REQUIRED 14" GRAVITY SEWER LINE
	REQUIRED WATER LINE
	REQUIRED 8" STORM SEWER WATER LINE
	REQUIRED INFLUENT PUMP STATION (SEE DETAIL DRAWING C-310)
	REQUIRED MECHANICAL FINE SCREEN (SEE DRAWING C-305)
	REQUIRED MECHANICAL COARSE SCREEN (SEE DRAWING C-302)
	REQUIRED IN-LINE FLOW METER (SEE DRAWING C-901)
	REQUIRED BACK FLOW PREVENTOR (SEE DRAWING C-903)
	REQUIRED SURFACE INLET (SEE DETAIL DRAWING C-907)
	REQUIRED PINCH VALVE (SEE DETAIL DRAWING C-901)
	REQUIRED BOLLARD (SEE DRAWING C-904)
	EXISTING ASPHALT PAVEMENT
	REQUIRED 4" CONCRETE (SEE DRAWING C-904)
	REQUIRED 8" CONCRETE (SEE DRAWING C-904)
	REQUIRED HYDRANT (SEE DRAWING C-903)
	FLOW DIRECTION
	REQUIRED SURFACE INLET (SEE DETAIL DRAWING C-907) (SEE TABLE DRAWING C-204)



Burle Proj. No.:
08194-1-0122

File Name:
PLAN AND PROFILES.dwg

Date: 04/29/2024

Scale: AS SHOWN

Drawn by: MJJ/JRG

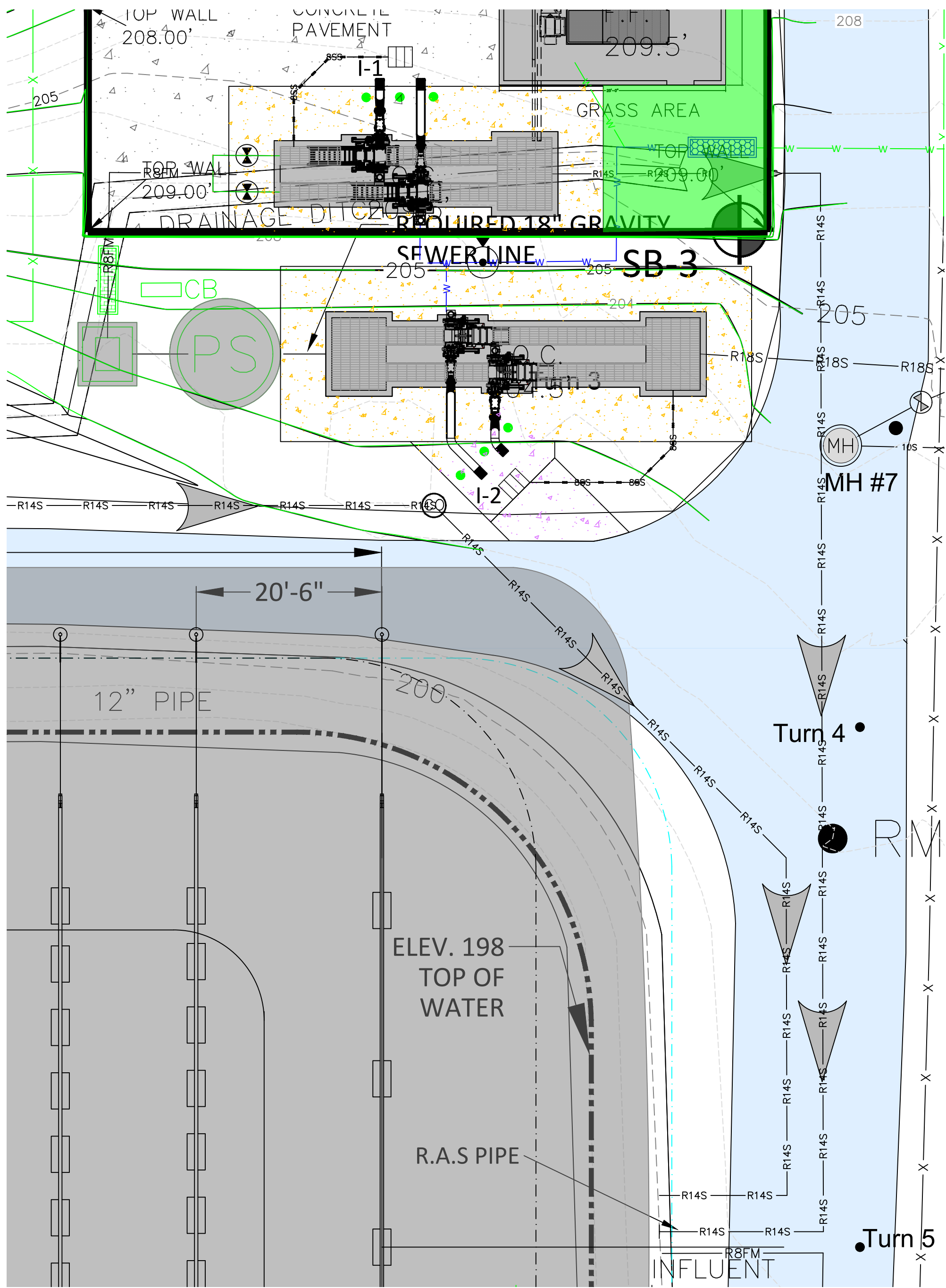
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Revisions:
6/18/2024
ADDENDUM 3

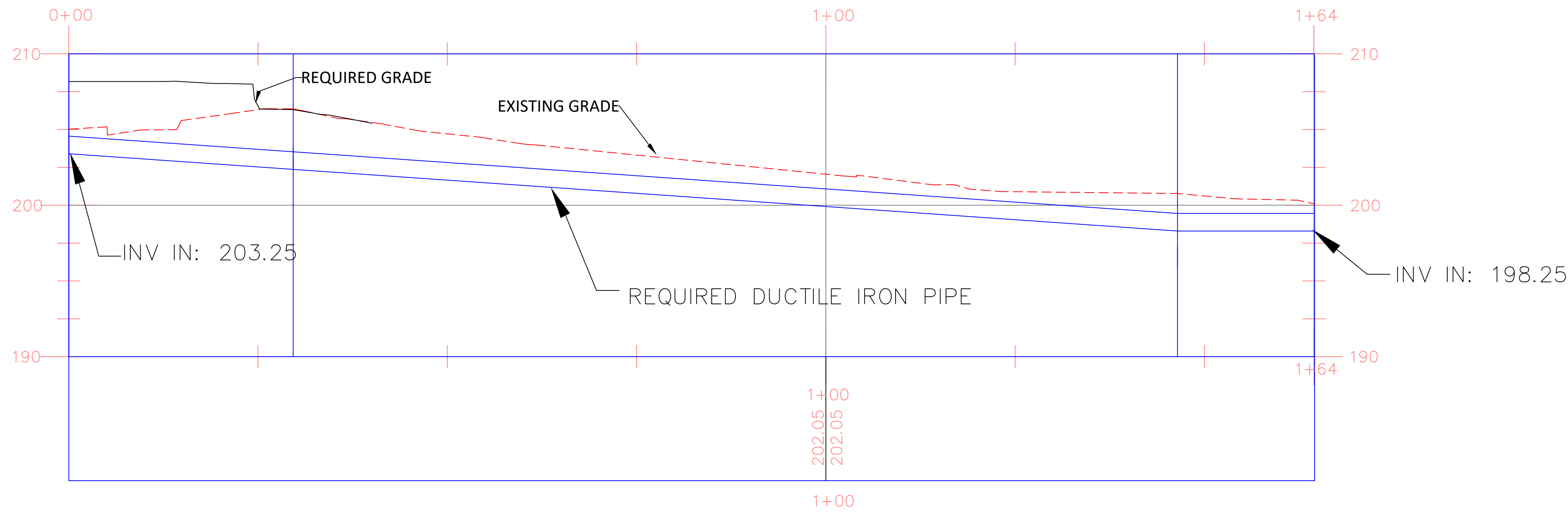
Revisions:

Revisions:

PLAN & PROFILE -
VALVE BOX TO FINE
SCREEN

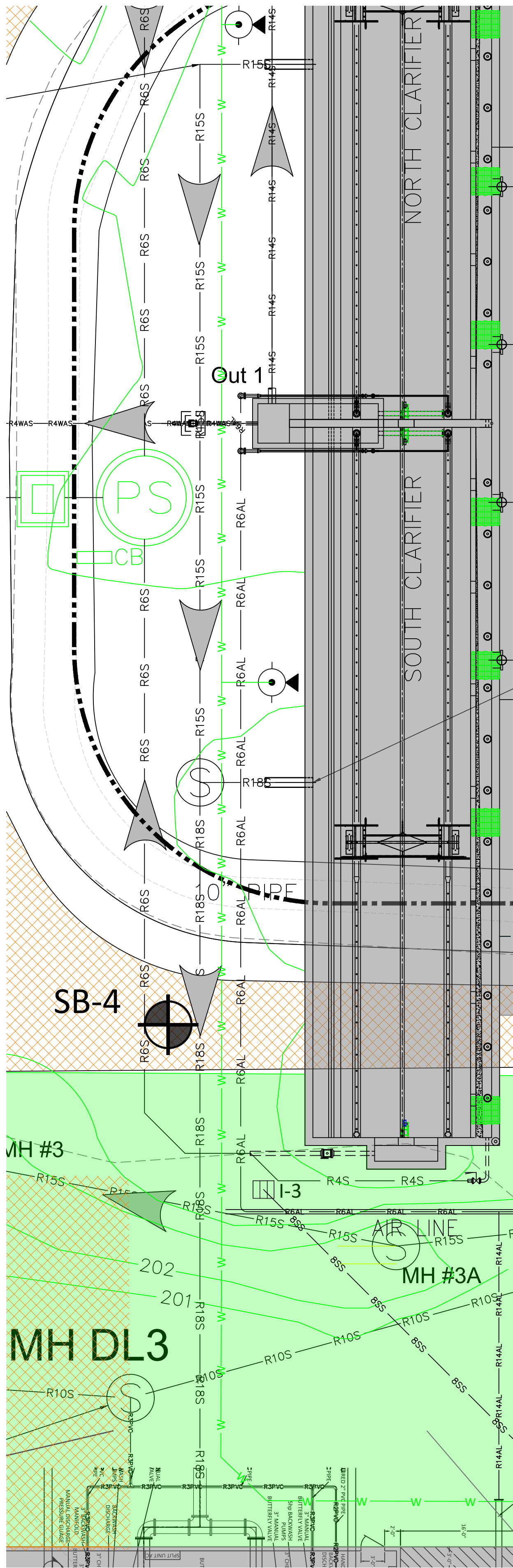


PLAN VIEW
FINE SCREEN TO EAST LAGOON
SCALE: 1"=10'

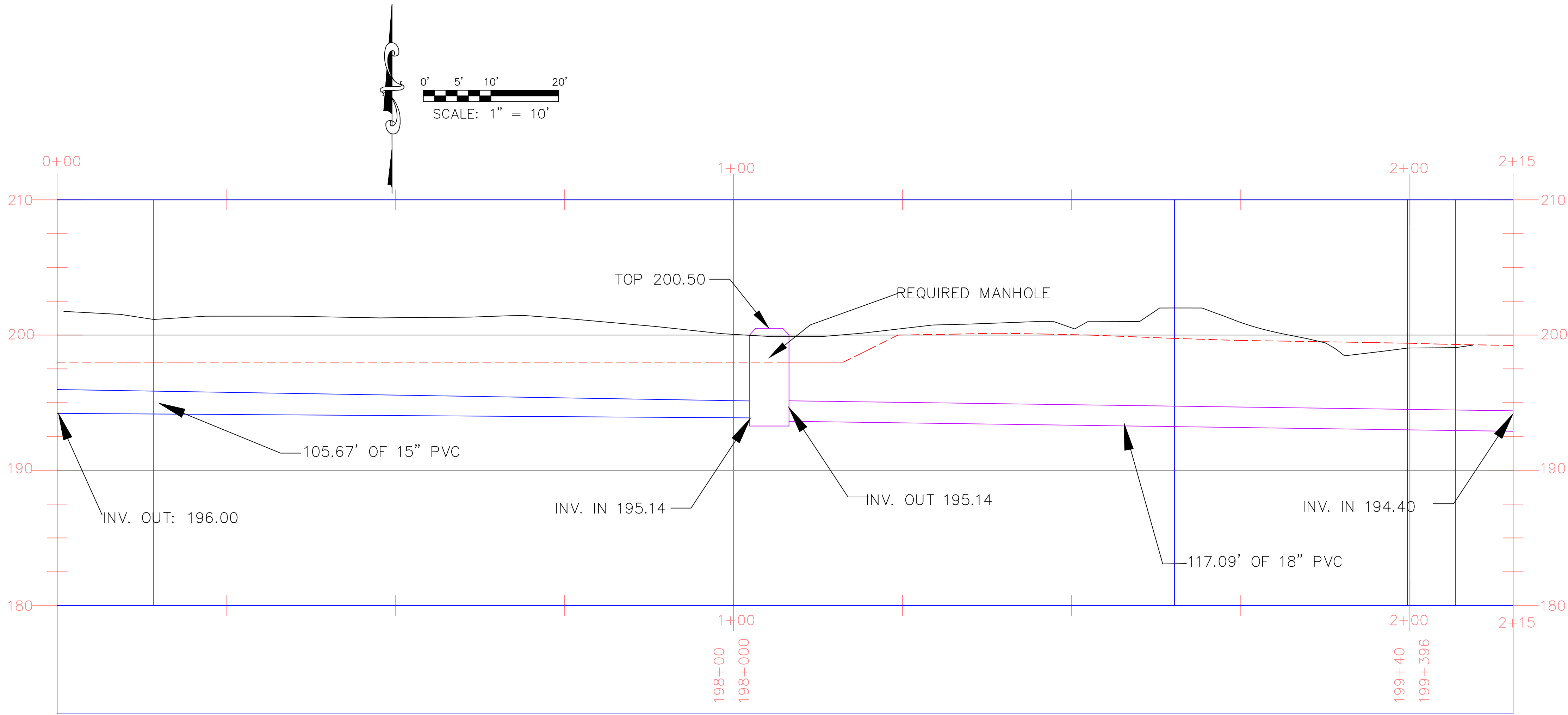


PROFILE VIEW
FINE SCREEN TO EAST LAGOON
SCALE: 1"=10'H/1"=5'V

LEGEND:		
	200	EXISTING MAJOR CONTOURS (FEET)
	201	EXISTING MINOR CONTOURS (FEET)
	200	REQUIRED MAJOR CONTOURS (FEET)
	201	REQUIRED MINOR CONTOURS (FEET)
		EXISTING TOP BANK OF DITCH
		EXISTING TOE EDGE OF DITCH
		EXISTING CENTERLINE OF DITCH
		REQUIRED 12" GRAVITY SEWER LINE
		REQUIRED 14" GRAVITY SEWER LINE
		REQUIRED 8" FORCE MAIN
		REQUIRED 8 INCH STORM SEWER PIPE (SEE DETAIL DRAWING C-907)
		FLOW DIRECTION
		REQUIRED MECHANICAL FINE SCREEN (SEE DRAWING C-305)
		REQUIRED MECHANICAL COARSE SCREEN (SEE DRAWING C-302)
		REQUIRED INFLUENT PUMP STATION (SEE DRAWING C-310)
		REQUIRED IN-LINE FLOWMETER (SEE DRAWING C-901)
		REQUIRED BACK FLOW PREVENTOR (SEE DRAWING C-903)
		REQUIRED CONTROL BOX (SEE DETAIL DRAWING E-310)
		REQUIRED 4" CONCRETE (SEE DETAIL DRAWING C-904)
		REQUIRED 8" CONCRETE (SEE DETAIL DRAWING C-904)
		REQUIRED SURFACE INLET (SEE DETAIL DRAWING C-907) (SEE TABLE DRAWING C-204)

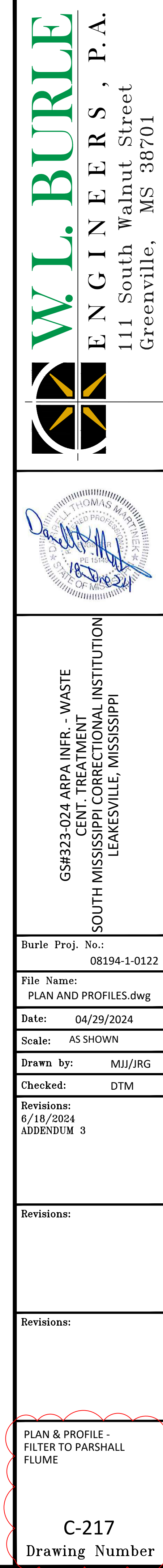
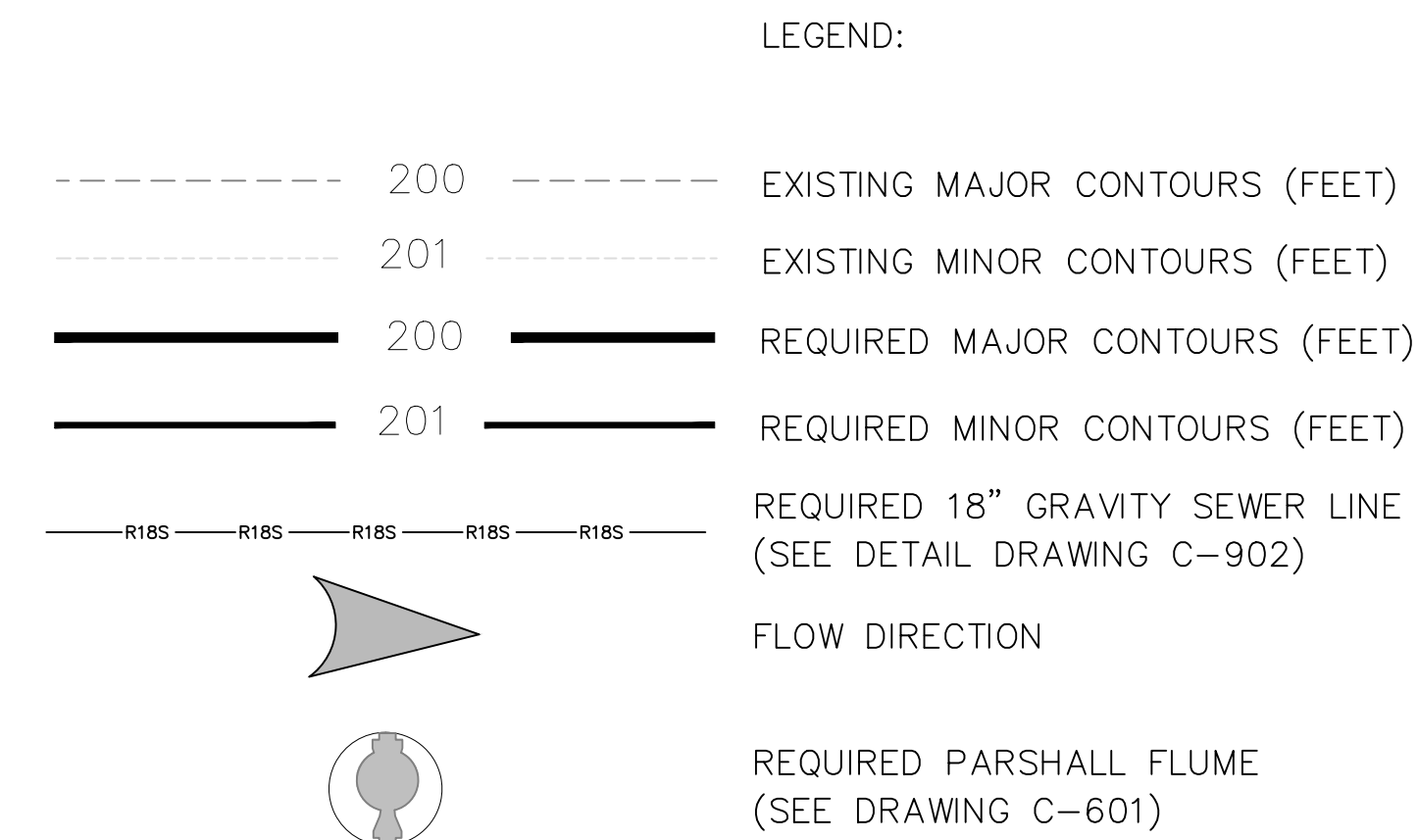


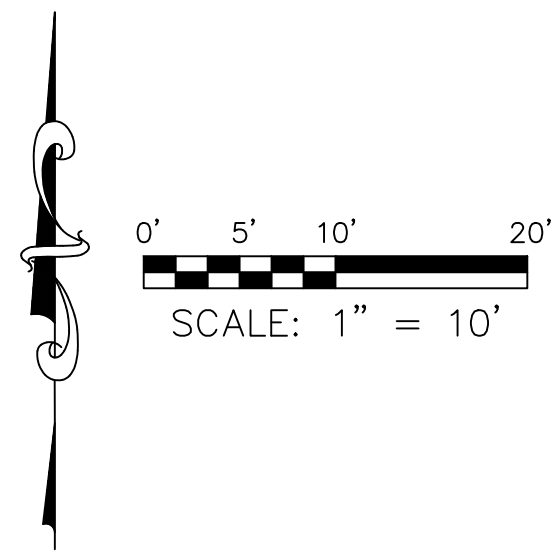
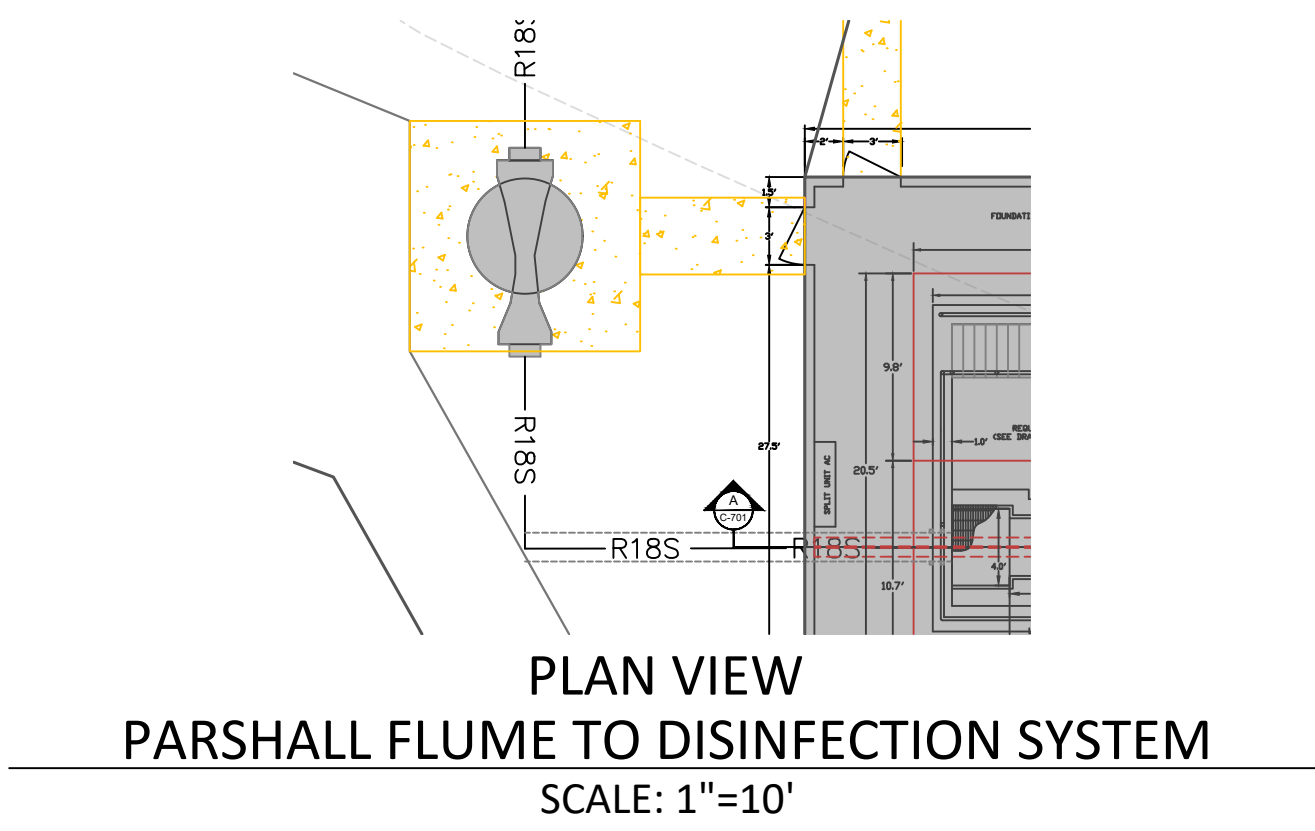
PLAN VIEW
NORTH CLARIFIER TO FILTER
SCALE: 1"=10'



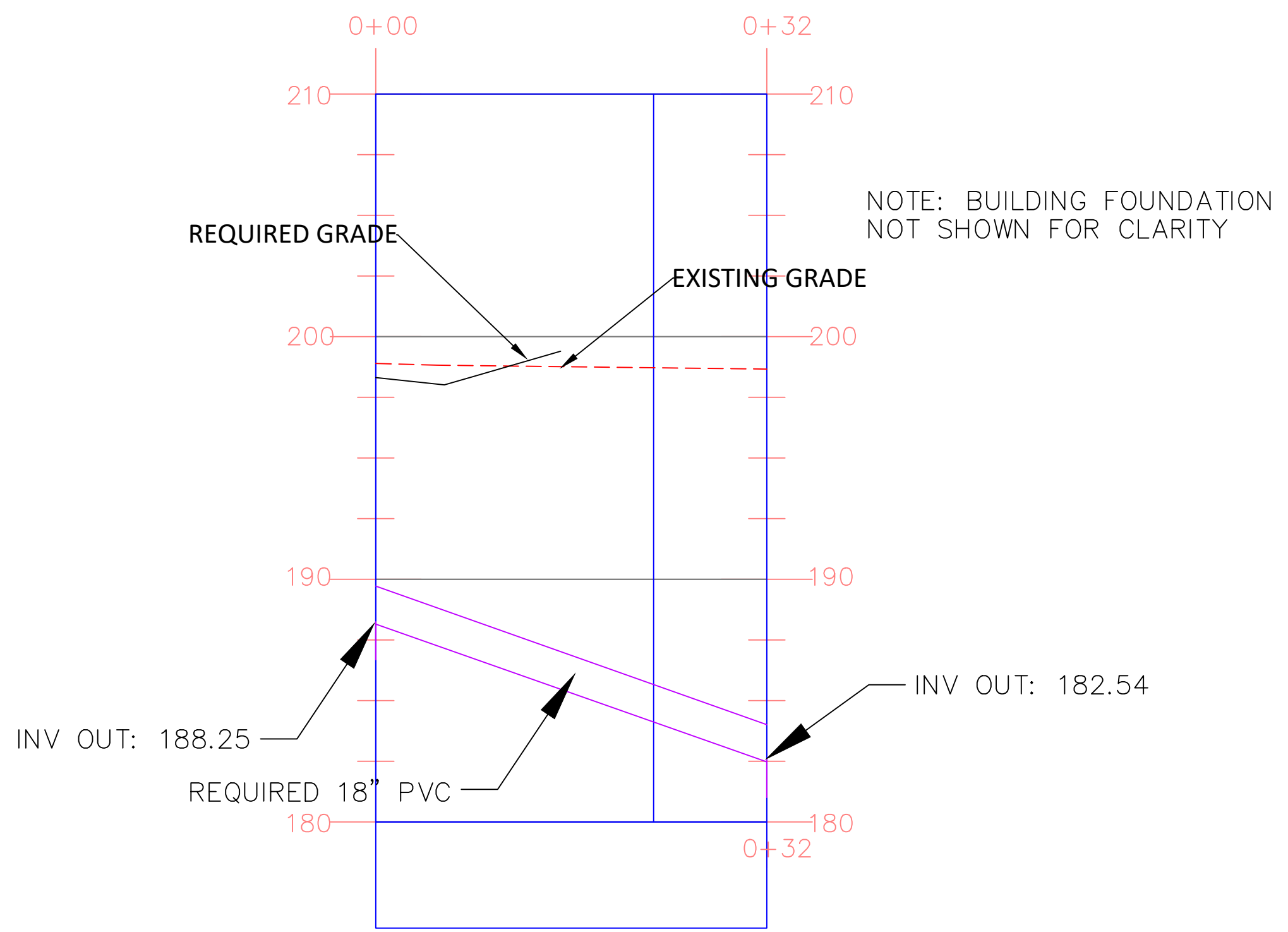
PROFILE VIEW
NORTH CLARIFIER TO FILTER
SCALE: 1"=10'H/1"=5'V

- LEGEND:
- 200 --- EXISTING MAJOR CONTOURS (FEET)
 - 201 --- EXISTING MINOR CONTOURS (FEET)
 - 200 — REQUIRED MAJOR CONTOURS (FEET)
 - 201 — REQUIRED MINOR CONTOURS (FEET)
 - - - - - EXISTING TOP BANK OF DITCH
 - — — — — EXISTING TOE EDGE OF DITCH
 - — — — — EXISTING CENTERLINE OF DITCH
 - R8FM — R8FM — REQUIRED 8" FORCE MAIN (SEE DETAIL DRAWING C-902)
 - R4WAS — R4WAS — REQUIRED 4" WAS LINE (SEE DETAIL DRAWING C-902)
 - 8S — 8S — REQUIRED 8" GRAVITY SEWER LINE (SEE DETAIL DRAWING C-902)
 - R10S — R10S — REQUIRED 10" GRAVITY SEWER LINE (SEE DETAIL DRAWING C-902)
 - R12S — R12S — REQUIRED 12" GRAVITY SEWER LINE (SEE DETAIL DRAWING C-902)
 - R12S — R12S — REQUIRED 12" STORM SEWER PIPE (SEE DETAIL DRAWING C-907)
 - R18S — R18S — REQUIRED 18" GRAVITY SEWER LINE (SEE DETAIL DRAWING C-902)
 - RDGL — RDGL — REQUIRED GRAVITY DECANT LINE (SEE DETAIL DRAWING C-902)
 - W — W — REQUIRED WATER LINE (SEE DETAIL DRAWING C-903)
 - R14AL — R14AL — REQUIRED 14" AIR LINE (SEE DETAIL DRAWING C-902)
 - R6AL — R6AL — REQUIRED 6" AIR LINE (SEE DETAIL DRAWING C-902)
 - [PS] REQUIRED SCUM PUMPING STATION (SEE DETAIL DRAWING C-804)
 - [I-3] REQUIRED SURFACE INLET (SEE DETAIL DRAWING C-907) (SEE TABLE DRAWING C-204)





- LEGEND:
- 200 --- EXISTING MAJOR CONTOURS (FEET)
 - 201 --- EXISTING MINOR CONTOURS (FEET)
 - 200 — REQUIRED MAJOR CONTOURS (FEET)
 - 201 — REQUIRED MINOR CONTOURS (FEET)
 - R18S — REQUIRED 18" GRAVITY SEWER LINE (SEE DETAIL DRAWING C-902)
 - ▲ FLOW DIRECTION
 - REQUIRED PARSHALL FLUME (SEE DRAWING C-601)



PROFILE VIEW
PARSHALL FLUME TO DISINFECTION SYSTEM
SCALE: 1"=10'H/1"=5'V

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111 South Walnut Street
Greenville, MS 38701



GS#323-024 ARPA INFR. - WASTE
CENT. TREATMENT
SOUTH MISSISSIPPI CORRECTIONAL INSTITUTION
LEAKESVILLE, MISSISSIPPI

Burle Proj. No.:
08194-1-0122

File Name:
PLAN AND PROFILES.dwg

Date: 04/29/2024

Scale: AS SHOWN

Drawn by: MJJ/JRG

Checked: DTM

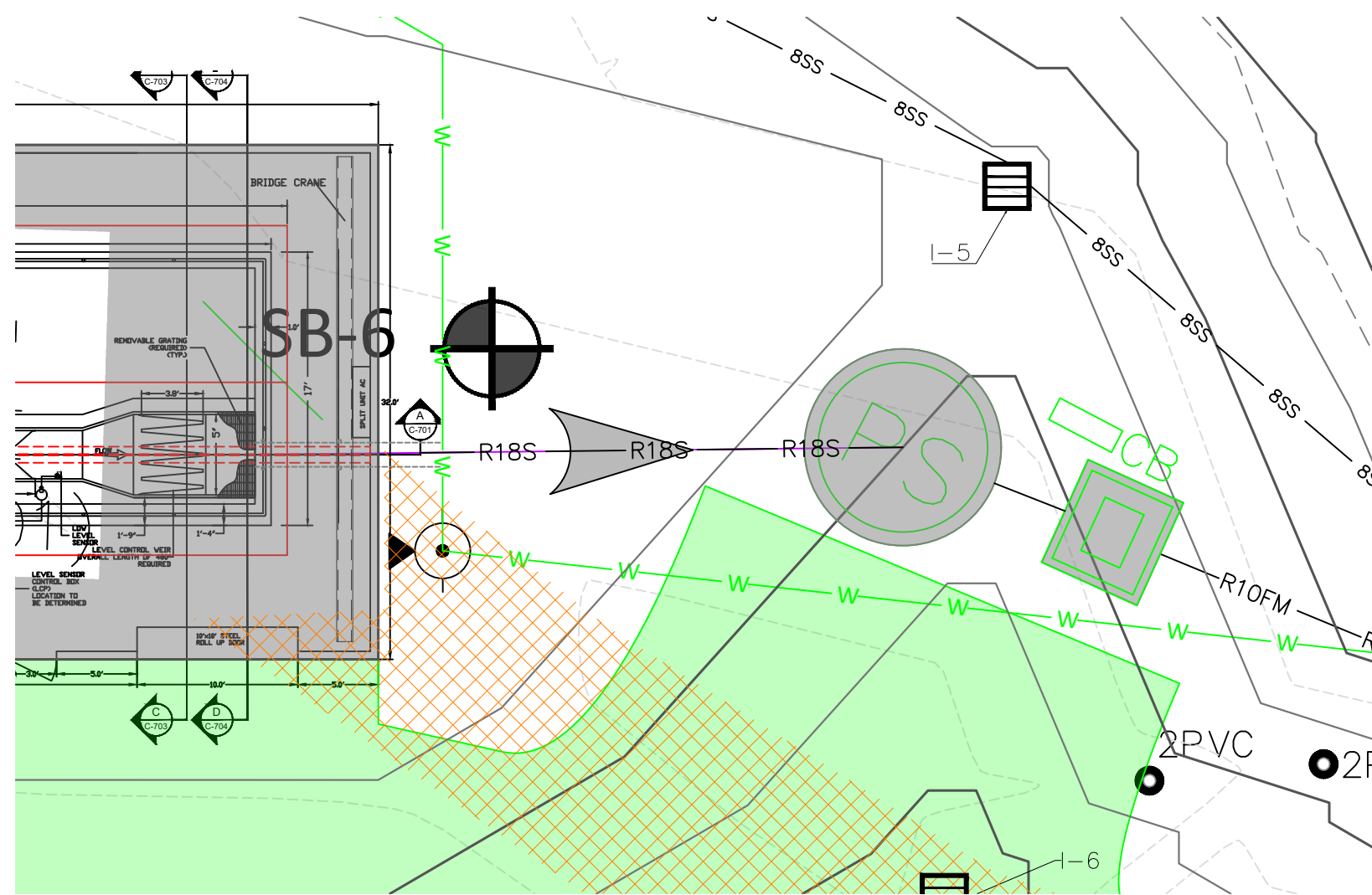
Revisions:
6/18/2024
ADDENDUM 3

Revisions:

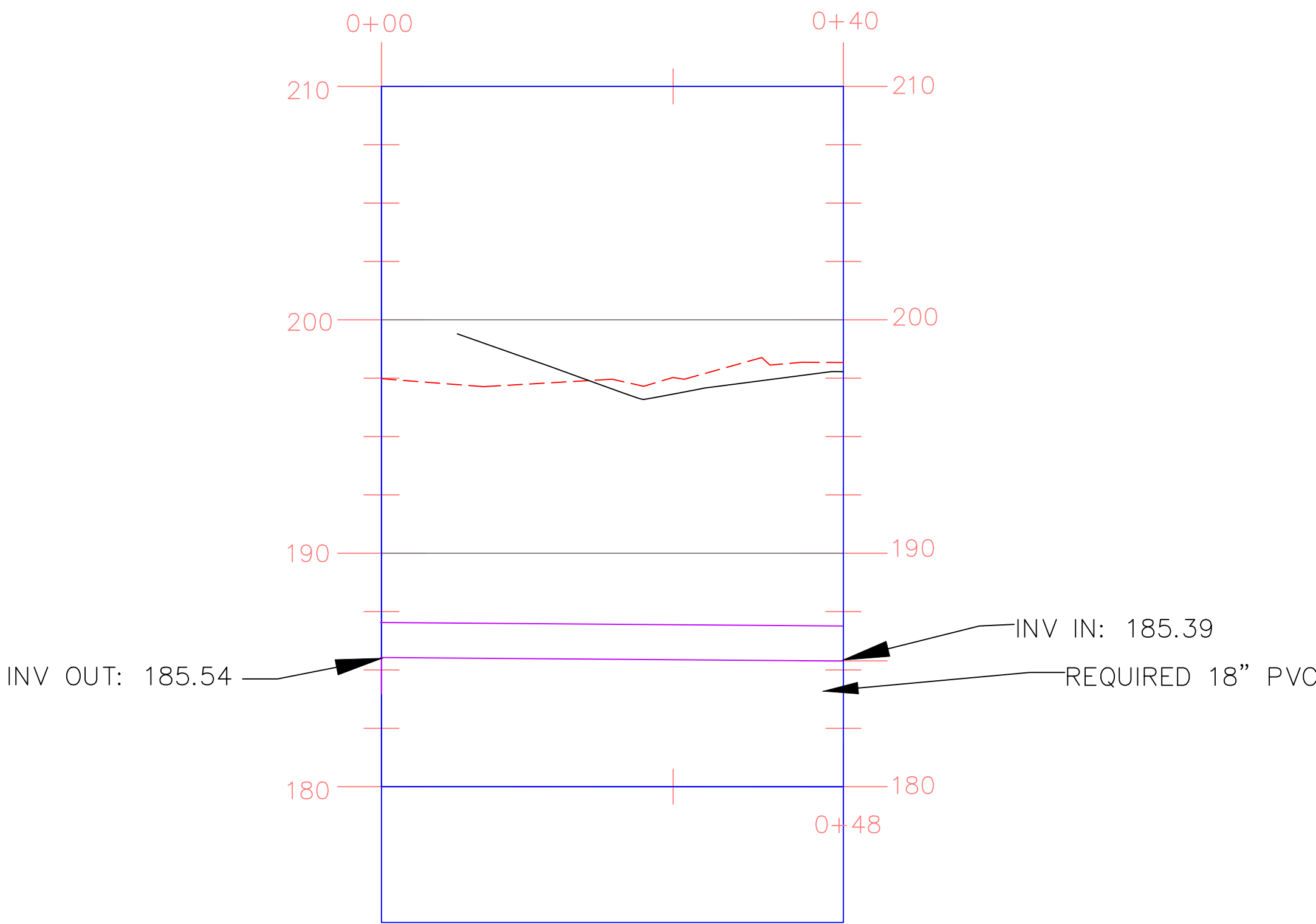
Revisions:

PLAN & PROFILE -
PARSHALL FLUME TO
DISINFECTION SYSTEM

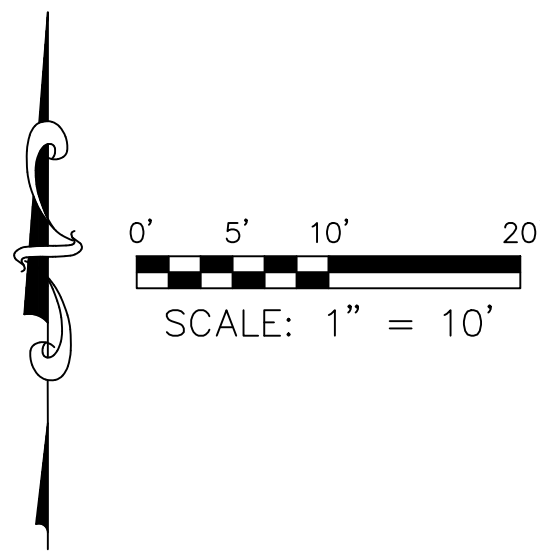
C-218
Drawing Number



PLAN VIEW
DISINFECTION SYSTEM TO EFFLUENT PUMP STATION
SCALE: 1"=10'



PROFILE VIEW
DISINFECTION SYSTEM TO EFFLUENT PUMP STATION
SCALE: 1"=10'H/1"=5'V



- LEGEND:
- 200 --- EXISTING MAJOR CONTOURS (FEET)
 - 201 --- EXISTING MINOR CONTOURS (FEET)
 - 200 — REQUIRED MAJOR CONTOURS (FEET)
 - 201 — REQUIRED MINOR CONTOURS (FEET)
 - R18S — REQUIRED 18" GRAVITY SEWER LINE (SEE DETAIL DRAWING C-902)
 - ▲ FLOW DIRECTION
 - EXISTING GRAVEL AREA
 - PS REQUIRED EFFLUENT PUMP STATION (SEE DRAWING C-802)



GSH323-024 ARPA INFR. - WASTE
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SOUTH MISSISSIPPI CORRECTIONAL INSTITUTION
LEAKESVILLE, MISSISSIPPI

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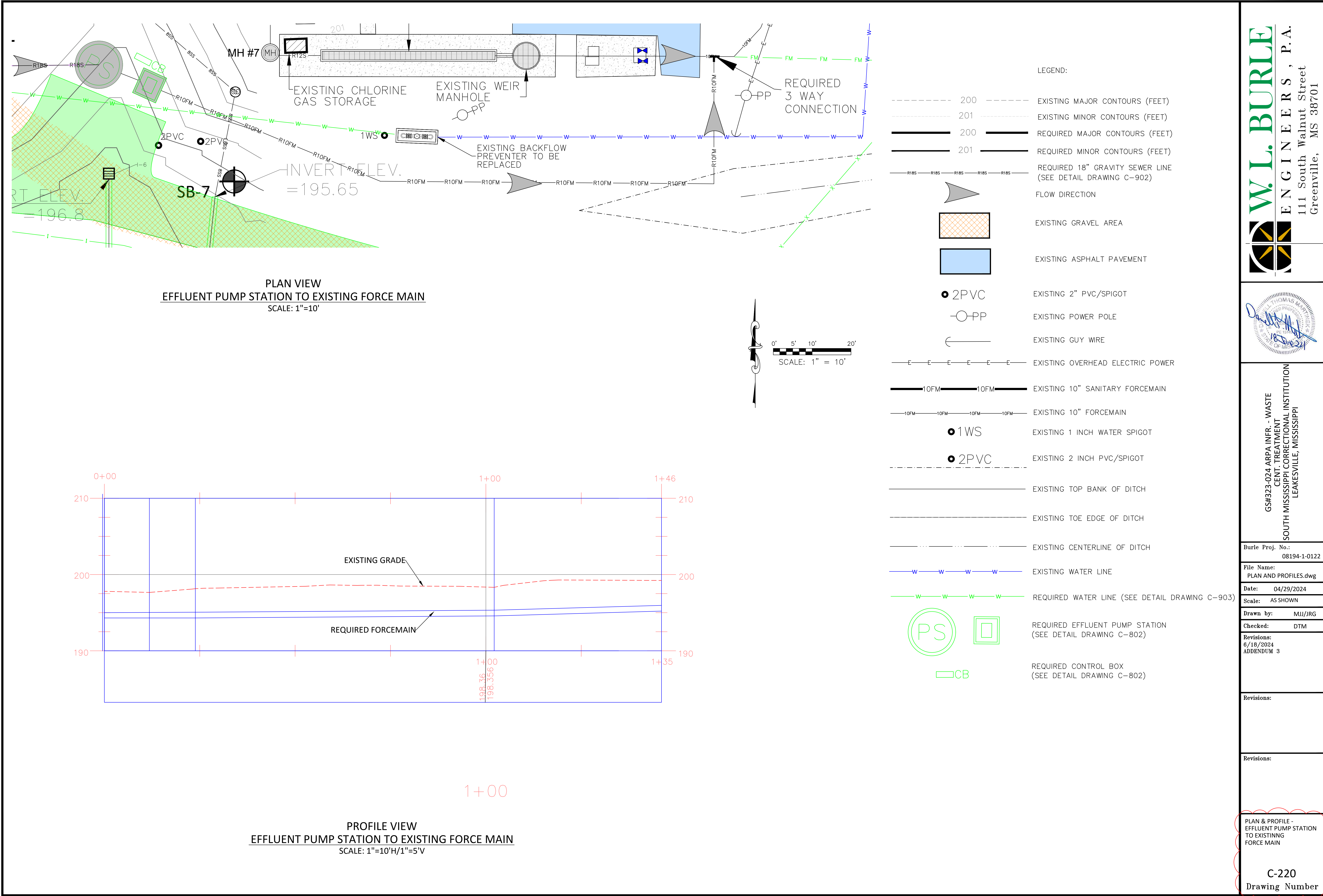
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Revisions:
6/18/2024
ADDENDUM 3

Revisions:

Revisions:

PLAN & PROFILE -
DISINFECTION SYSTEM TO
EFFLUENT PUMP STATION



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Scale: AS SHOWN

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Checked: DTM

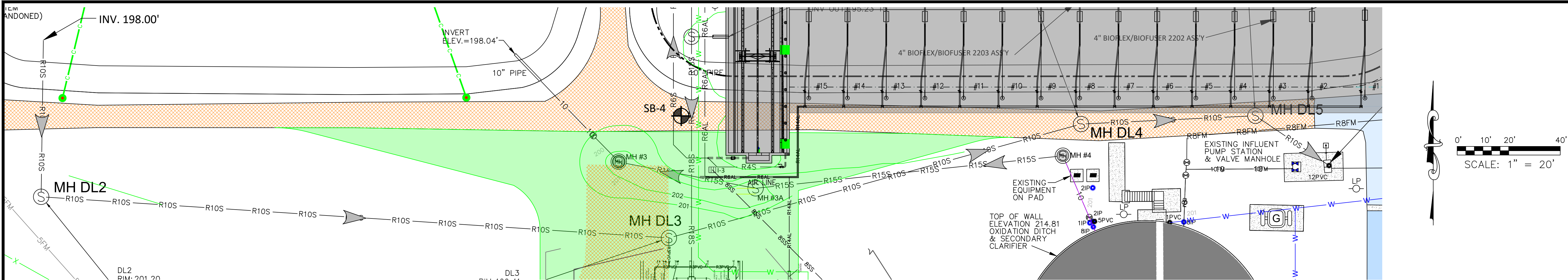
Revisions:
6/18/2024
ADDENDUM 3

Revisions:

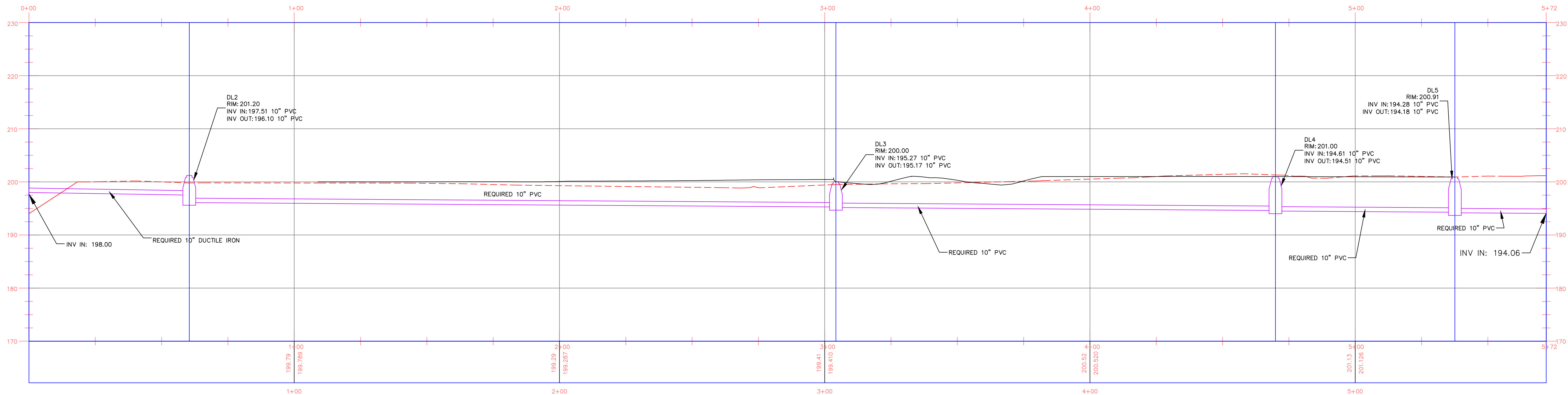
Revisions:

PLAN & PROFILE -
EFFLUENT PUMP STATION
TO EXISTING
FORCE MAIN

C-220
Drawing Number



PLAN VIEW
WEST LAGOON TO EXISTING INFLUENT PUMP STATION
SCALE: 1"=20'



PROFILE VIEW
WEST LAGOON TO PROCESS LIFT STATION
SCALE: 1"=10'H/1"=5'V

LEGEND:

	EXISTING MAJOR CONTOURS (FEET)
	EXISTING MINOR CONTOURS (FEET)
	REQUIRED MAJOR CONTOURS (FEET)
	REQUIRED MINOR CONTOURS (FEET)
	FLOW DIRECTION
	EXISTING GRAVEL AREA
	EXISTING ASPHALT PAVEMENT

	EXISTING POWER POLE
	EXISTING GUY WIRE
	EXISTING OVERHEAD ELECTRIC POWER
	EXISTING 10" SANITARY FORCEMAIN
	EXISTING 1 INCH WATER SPIGOT
	EXISTING 2 INCH PVC/SPIGOT
	EXISTING TOP BANK OF DITCH
	EXISTING TOE EDGE OF DITCH
	EXISTING CENTERLINE OF DITCH

	EXISTING WATER LINE
	REQUIRED WATER LINE (SEE DETAIL DRAWING C-903)
	REQUIRED 8" GRAVITY SEWER LINE (SEE DETAIL DRAWING C-902)
	REQUIRED 10" GRAVITY SEWER LINE (SEE DETAIL DRAWING C-902)
	REQUIRED 12" GRAVITY SEWER LINE (SEE DETAIL DRAWING C-902)
	REQUIRED 18" GRAVITY SEWER LINE (SEE DETAIL DRAWING C-902)
	REQUIRED GRAVITY DECANT LINE (SEE DETAIL DRAWING C-902)
	REQUIRED 4" WAS LINE (SEE DETAIL DRAWING C-902)
	REQUIRED WATER LINE (SEE DETAIL DRAWING C-903)
	REQUIRED 12 INCH STORM SEWER PIPE (SEE DETAIL DRAWING C-907)
	EXISTING FORCEMAIN TO BE ABAANDONED
	EXISTING 10" SANITARY FORCE MAIN

	MH #1	EXISTING MANHOLE
		REQUIRED PINCH VALVE (SEE DETAIL DRAWING C-901)
	I-3	REQUIRED SURFACE INLET (SEE DETAIL DRAWING C-907) (SEE TABLE DRAWING C-204)

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111 South Walnut Street
Greenville, MS 38701

Professional Engineer Seal
State of Mississippi
No. 10000

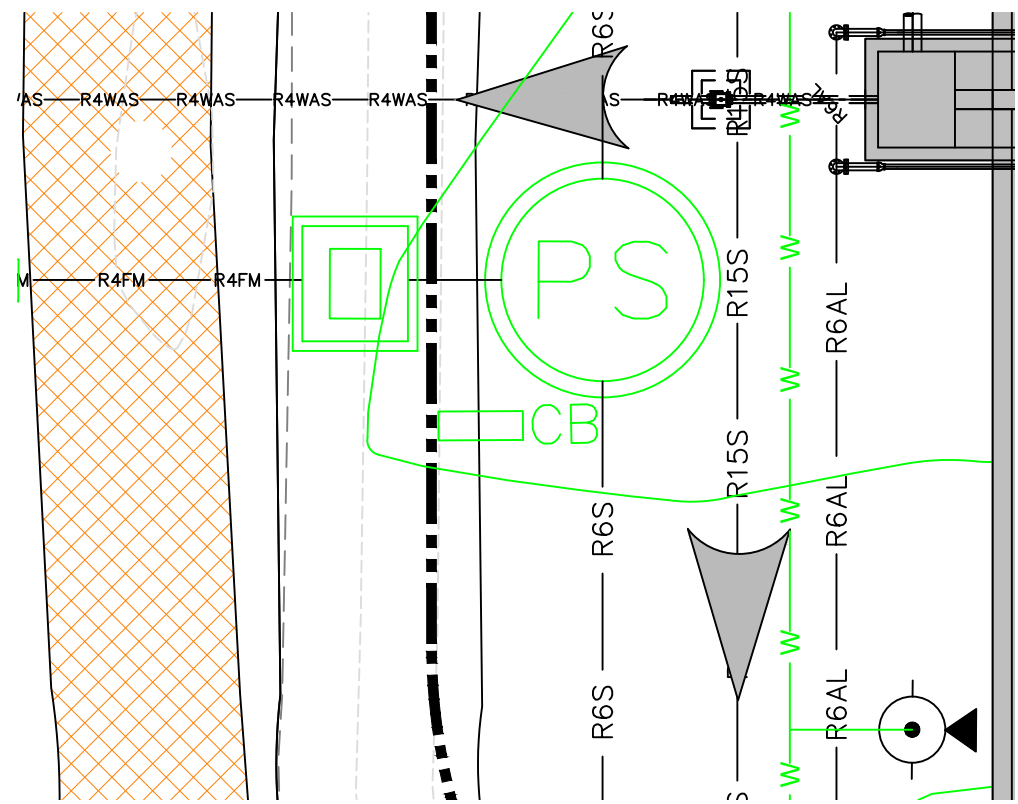
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SOUTH MISSISSIPPI CORRECTIONAL INSTITUTION
LEAKESVILLE, MISSISSIPPI

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Drawn by: MJJ/JRG
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Revisions: 6/18/2024 ADDENDUM 3

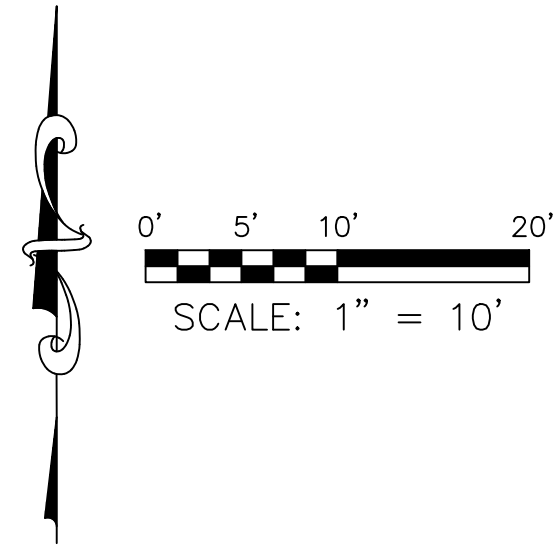
Revisions:

PLAN & PROFILE - WEST LAGOON TO EXISTING INFLUENT PUMP STATION

C-221
Drawing Number

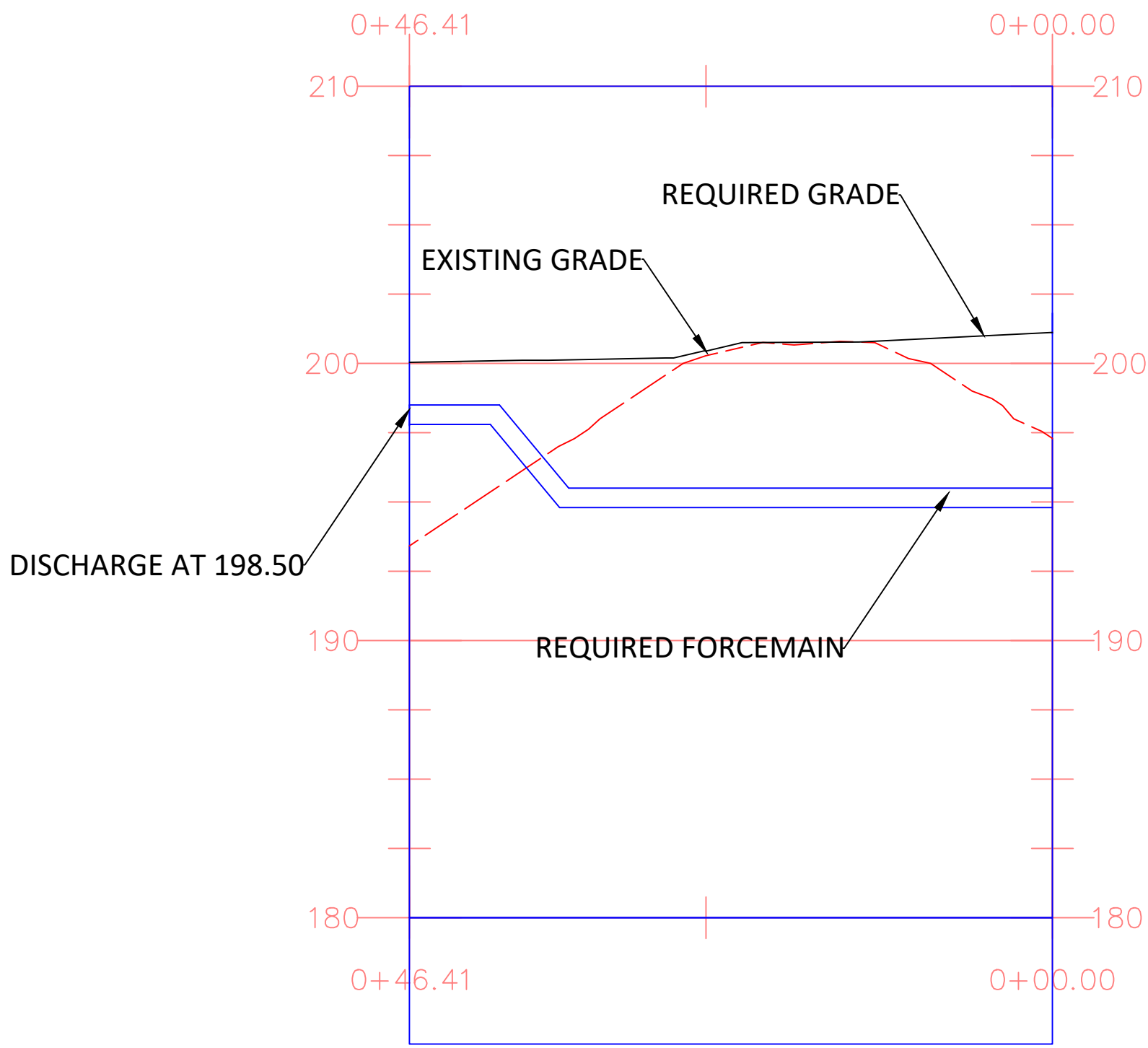


PLAN VIEW
SCUM PUMP STATION TO WEST LAGOON
SCALE: 1"=10'

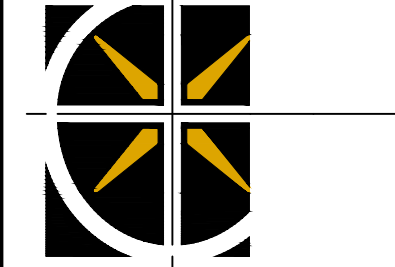


LEGEND:

- 200 --- EXISTING MAJOR CONTOURS (FEET)
- 201 --- EXISTING MINOR CONTOURS (FEET)
- 200 — REQUIRED MAJOR CONTOURS (FEET)
- 201 — REQUIRED MINOR CONTOURS (FEET)
- FLOW DIRECTION
- EXISTING GRAVEL AREA
- REQUIRED WATER LINE (SEE DETAIL DRAWING C-903)
- REQUIRED 4" WAS LINE (SEE DETAIL DRAWING C-902)
- REQUIRED 6" GRAVITY SEWER LINE (SEE DETAIL DRAWING C-902)
- REQUIRED 15" GRAVITY SEWER LINE (SEE DETAIL DRAWING C-902)
- REQUIRED 6" AIR LINE (SEE DETAIL DRAWING C-902)
- REQUIRED SCUM PUMPING STATION (SEE DETAIL DRAWING C-804)



PROFILE VIEW
SCUM PUMP STATION TO WEST LAGOON
SCALE: 1"=10'H/1"=5'V



GS#323-024 ARPA INFR. - WASTE
CENT. TREATMENT
SOUTH MISSISSIPPI CORRECTIONAL INSTITUTION
LEAKESVILLE, MISSISSIPPI

Burle Proj. No.:
08194-1-0122

File Name:
PLAN AND PROFILES.dwg

Date: 04/29/2024

Scale: AS SHOWN

Drawn by: MJJ/JRG

Checked: DTM

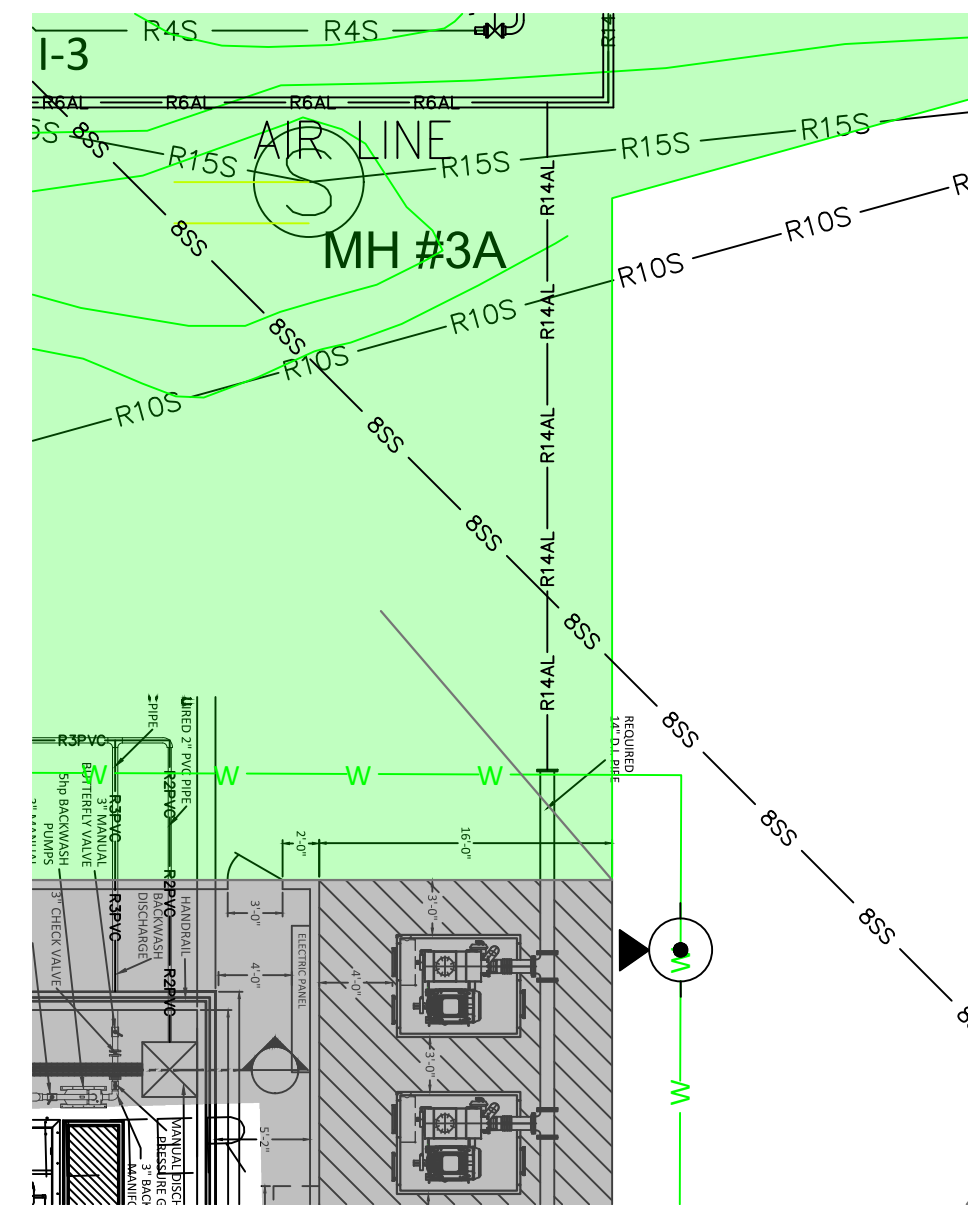
Revisions:
6/18/2024
ADDENDUM 3

Revisions:

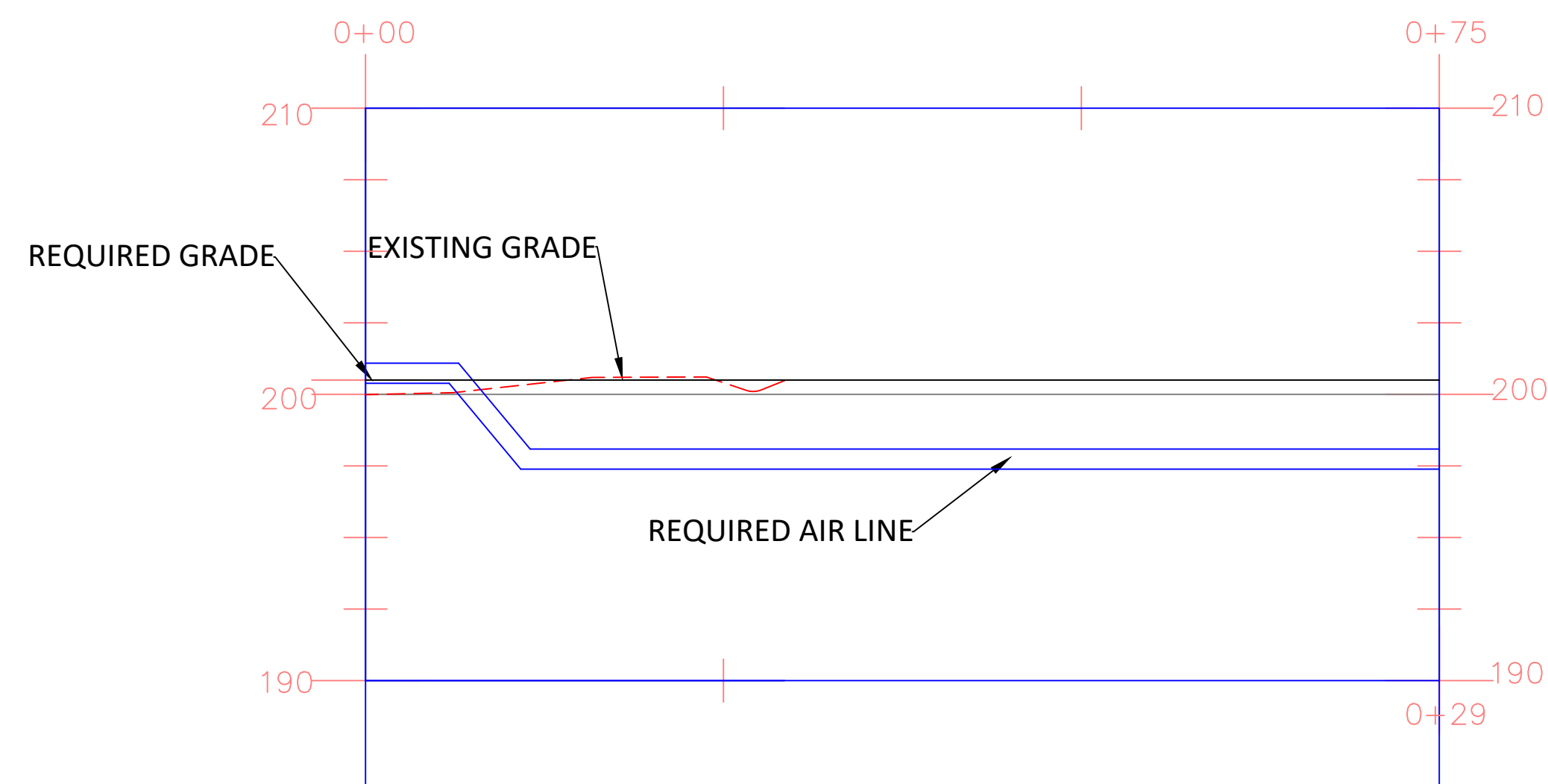
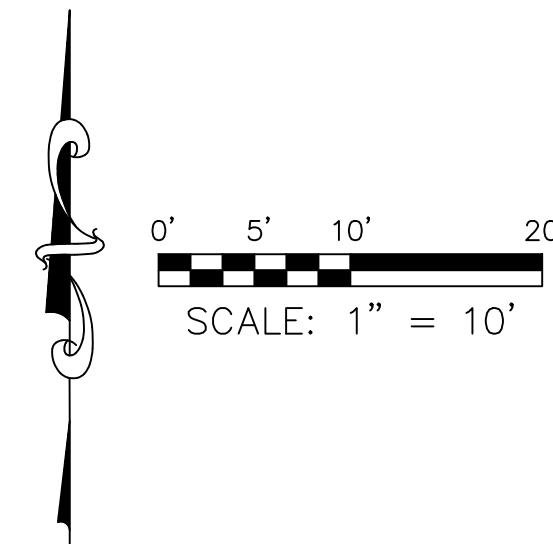
Revisions:

PLAN & PROFILE -
SCUM PUMP STATION TO
WEST LAGOON

C-222
Drawing Number

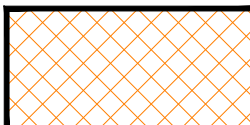


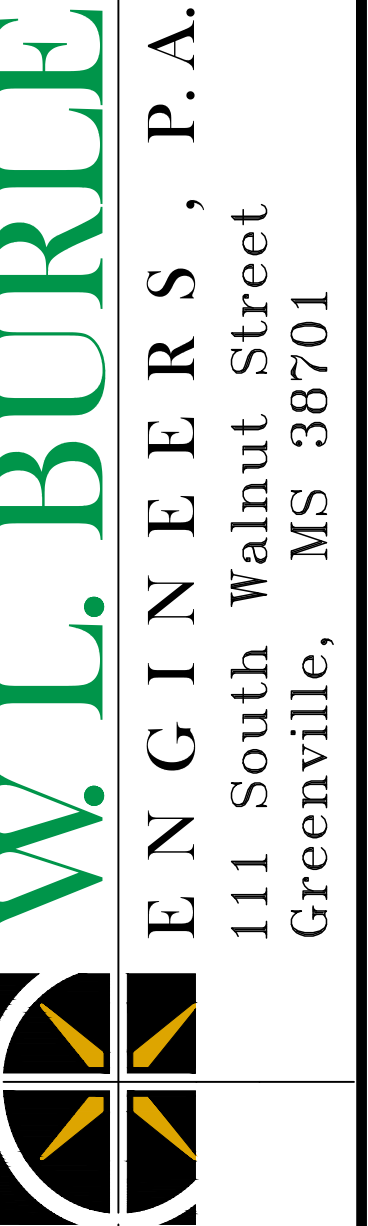
PLAN VIEW
AIR BLOWERS TO EAST LAGOON
SCALE: 1"=10'



PROFILE VIEW
AIR BLOWERS TO EAST LAGOON
SCALE: 1"=10'H/1"=5'V

LEGEND:

----- 200 -----	EXISTING MAJOR CONTOURS (FEET)
----- 201 -----	EXISTING MINOR CONTOURS (FEET)
===== 200 =====	REQUIRED MAJOR CONTOURS (FEET)
===== 201 =====	REQUIRED MINOR CONTOURS (FEET)
----- R14AL ----- R14AL ----- R14AL ----- R14AL ----- R14AL -----	REQUIRED 14" AIR LINE (SEE DETAIL DRAWING C-902)
----- R6AL ----- R6AL ----- R6AL ----- R6AL ----- R6AL -----	REQUIRED 6" AIR LINE (SEE DETAIL DRAWING C-902)
----- R4S ----- R4S ----- R4S ----- R4S ----- R4S -----	REQUIRED 4" GRAVITY SEWER LINE (SEE DETAIL DRAWING C-902)
----- R10S ----- R10S ----- R10S ----- R10S ----- R10S -----	REQUIRED 10" GRAVITY SEWER LINE (SEE DETAIL DRAWING C-902)
----- R15S ----- R15S ----- R15S ----- R15S ----- R15S -----	REQUIRED 15" GRAVITY SEWER LINE (SEE DETAIL DRAWING C-902)
----- W ----- W ----- W ----- W ----- W -----	REQUIRED WATER LINE (SEE DETAIL DRAWING C-903)
----- R3PVC ----- R3PVC ----- R3PVC ----- R3PVC ----- R3PVC -----	REQUIRED 3" PVC (SEE DETAIL DRAWING C-902)
----- R2PVC ----- R2PVC ----- R2PVC ----- R2PVC ----- R2PVC -----	REQUIRED 2" PVC (SEE DETAIL DRAWING C-902)
	REQUIRED GRAVEL (SEE DETAIL DRAWING C-904)
	EXISTING GRAVELED AREA



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LEAKESVILLE, MISSISSIPPI

Curle Proj. No.: 08194-1-0122

File Name:	PLAN AND PROFILES.dwg
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scale: AS SHOWN

Drawn by: MJJ/JRG

checked:	DTM
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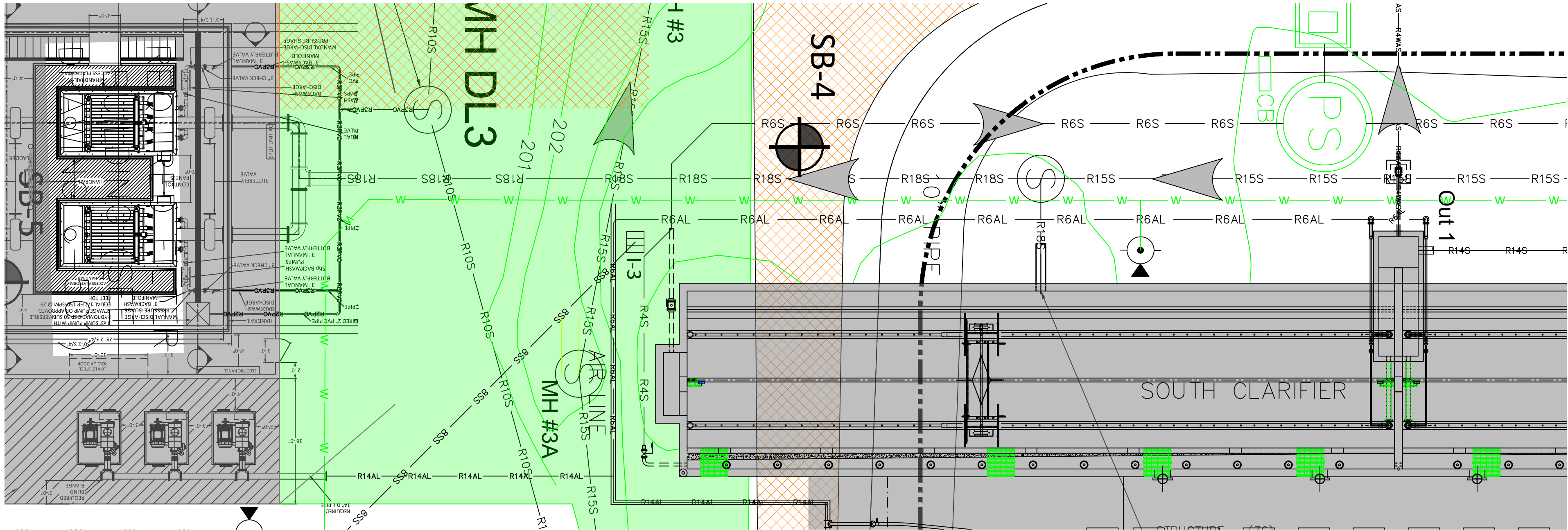
Revisions:
1/18/2024
ADDENDUM 3

Revisions:

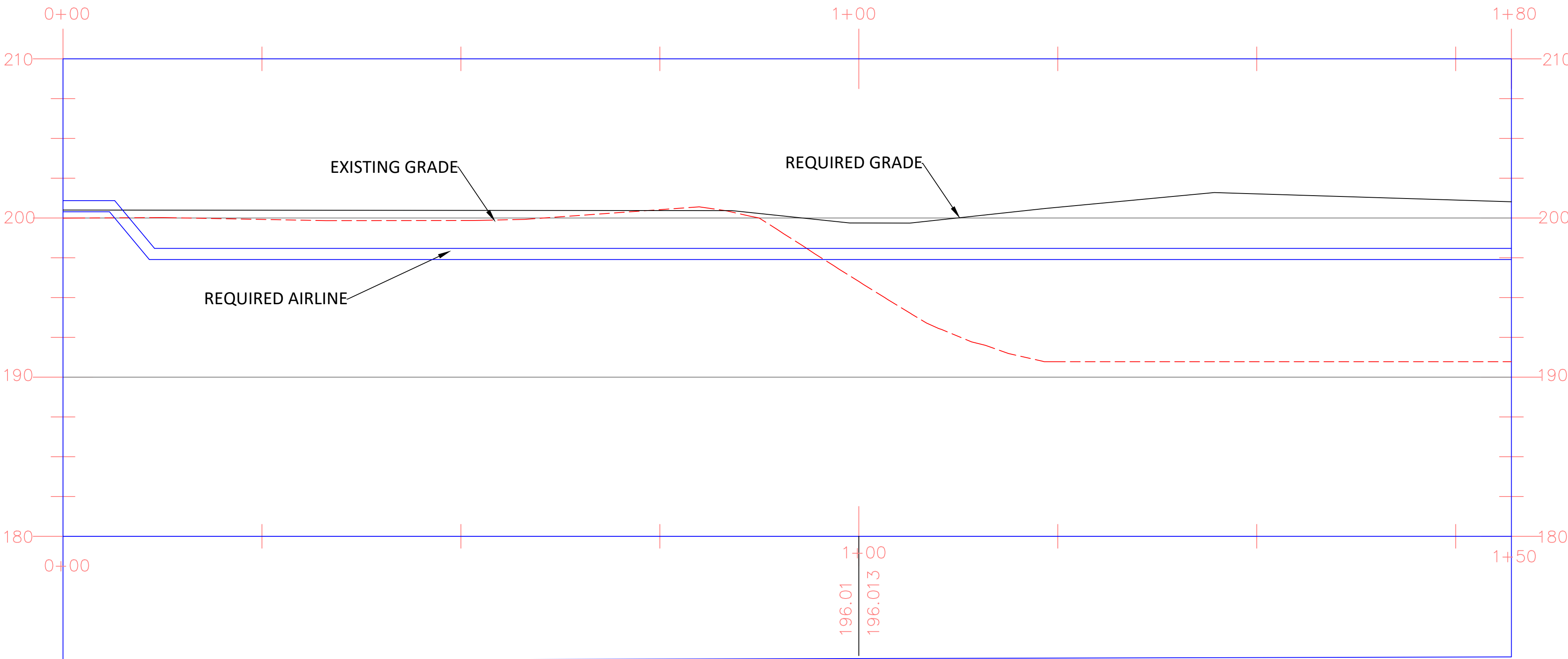
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PLAN & PROFILE -
AIR BLOWERS TO EAST
LAGOON

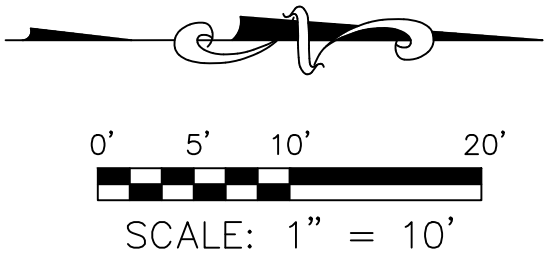
C-223
Drawing Number



PLAN VIEW
AIR BLOWERS TO CLARIFIER
SCALE: 1"=10'

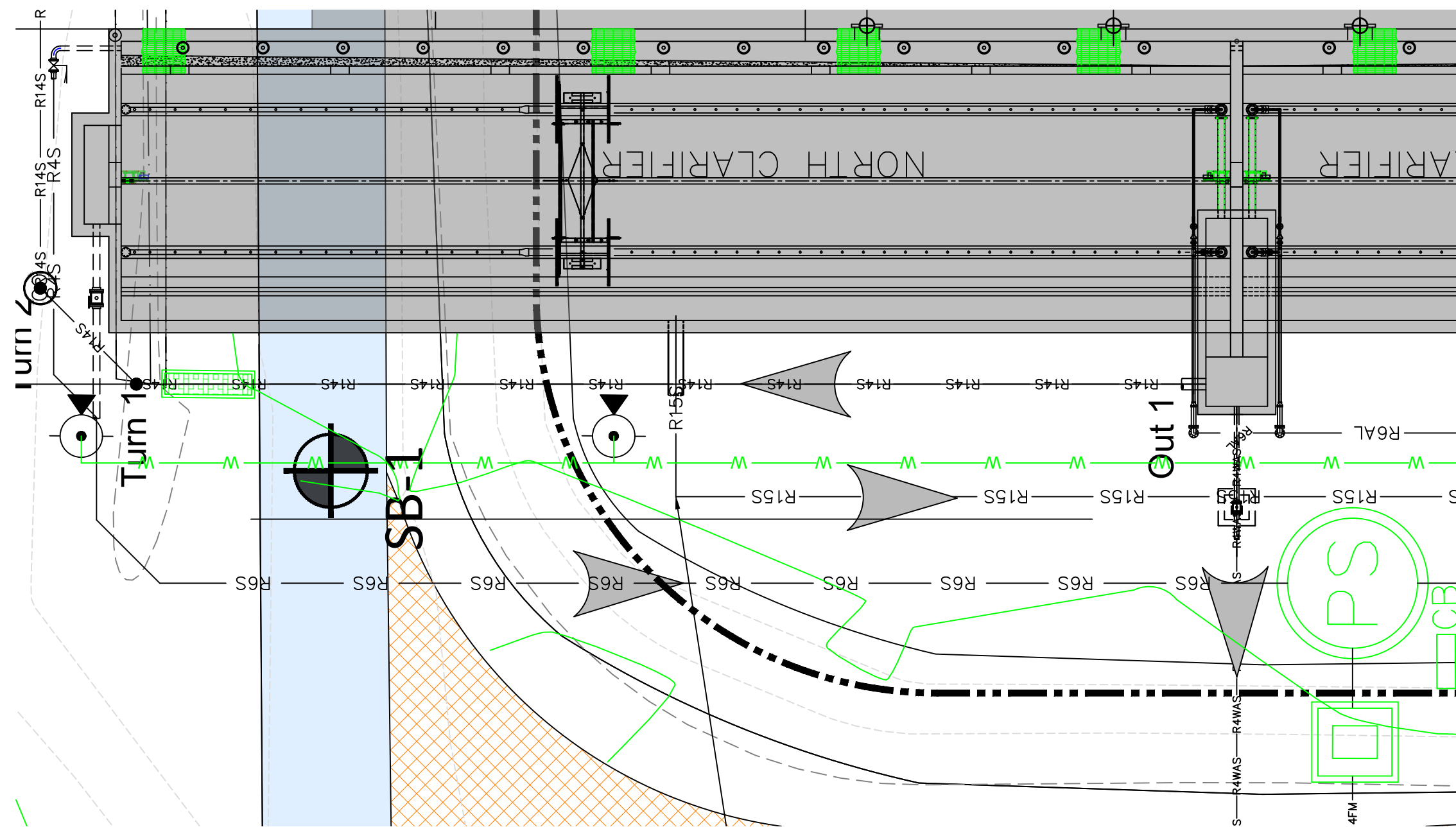


PROFILE VIEW
AIR BLOWERS TO CLARIFIER
SCALE: 1"=10'H/1"=5'V

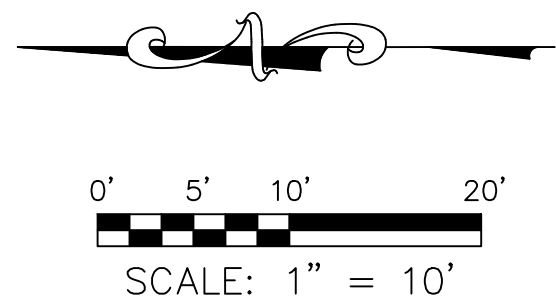


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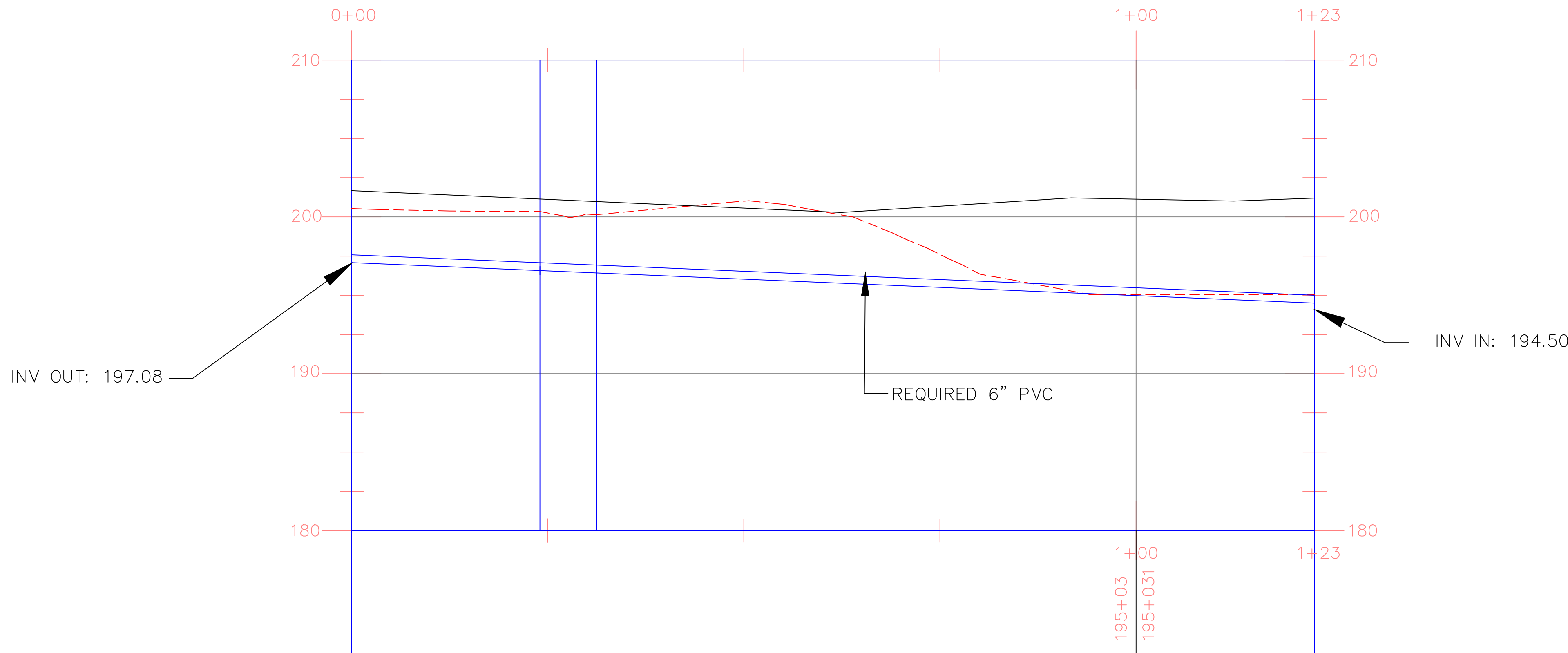
- 200 --- EXISTING MAJOR CONTOURS (FEET)
--- 201 --- EXISTING MINOR CONTOURS (FEET)
--- 200 --- REQUIRED MAJOR CONTOURS (FEET)
--- 201 --- REQUIRED MINOR CONTOURS (FEET)
--- R14AL --- R14AL --- R14AL --- R14AL --- R14AL --- REQUIRED 14" AIR LINE (SEE DETAIL DRAWING C-902)
--- R6AL --- R6AL --- R6AL --- R6AL --- R6AL --- REQUIRED 6" AIR LINE (SEE DETAIL DRAWING C-902)
--- R4S --- R4S --- R4S --- R4S --- R4S --- REQUIRED 4" GRAVITY SEWER LINE (SEE DETAIL DRAWING C-902)
--- R10S --- R10S --- R10S --- R10S --- R10S --- REQUIRED 10" GRAVITY SEWER LINE (SEE DETAIL DRAWING C-902)
--- R15S --- R15S --- R15S --- R15S --- R15S --- REQUIRED 15" GRAVITY SEWER LINE (SEE DETAIL DRAWING C-902)
--- R18S --- R18S --- R18S --- R18S --- R18S --- REQUIRED 18" GRAVITY SEWER LINE (SEE DETAIL DRAWING C-902)
--- W --- W --- W --- W --- W --- REQUIRED WATER LINE (SEE DETAIL DRAWING C-903)
--- R3PVC --- R3PVC --- R3PVC --- R3PVC --- R3PVC --- REQUIRED 3" PVC (SEE DETAIL DRAWING C-902)
--- R2PVC --- R2PVC --- R2PVC --- R2PVC --- R2PVC --- REQUIRED 2" PVC (SEE DETAIL DRAWING C-902)
--- 12SS --- 12SS --- 12SS --- 12SS --- 12SS --- REQUIRED 12 INCH STORM SEWER PIPE (SEE DETAIL DRAWING C-907)
--- REQUIRED GRAVEL (SEE DETAIL DRAWING C-904)
--- EXISTING GRAVELED AREA
--- REQUIRED HYDRANT (SEE DETAIL DRAWING C-903)
--- REQUIRED SURFACE INLET (SEE DETAIL DRAWING C-907) (SEE TABLE DRAWING C-204)



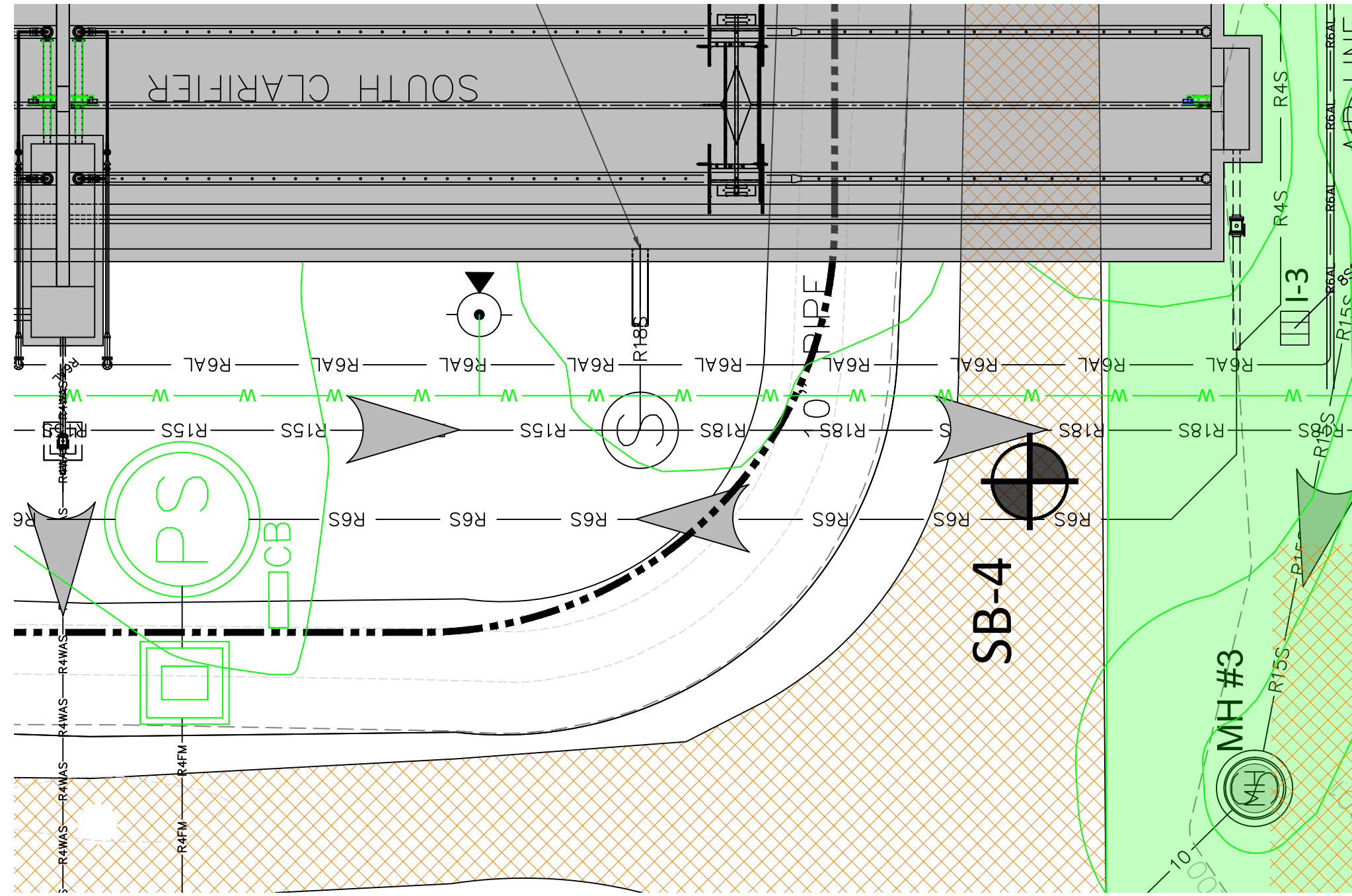
PLAN VIEW
NORTH CLARIFIER TO SCUMP PUMP
SCALE: 1"=10'



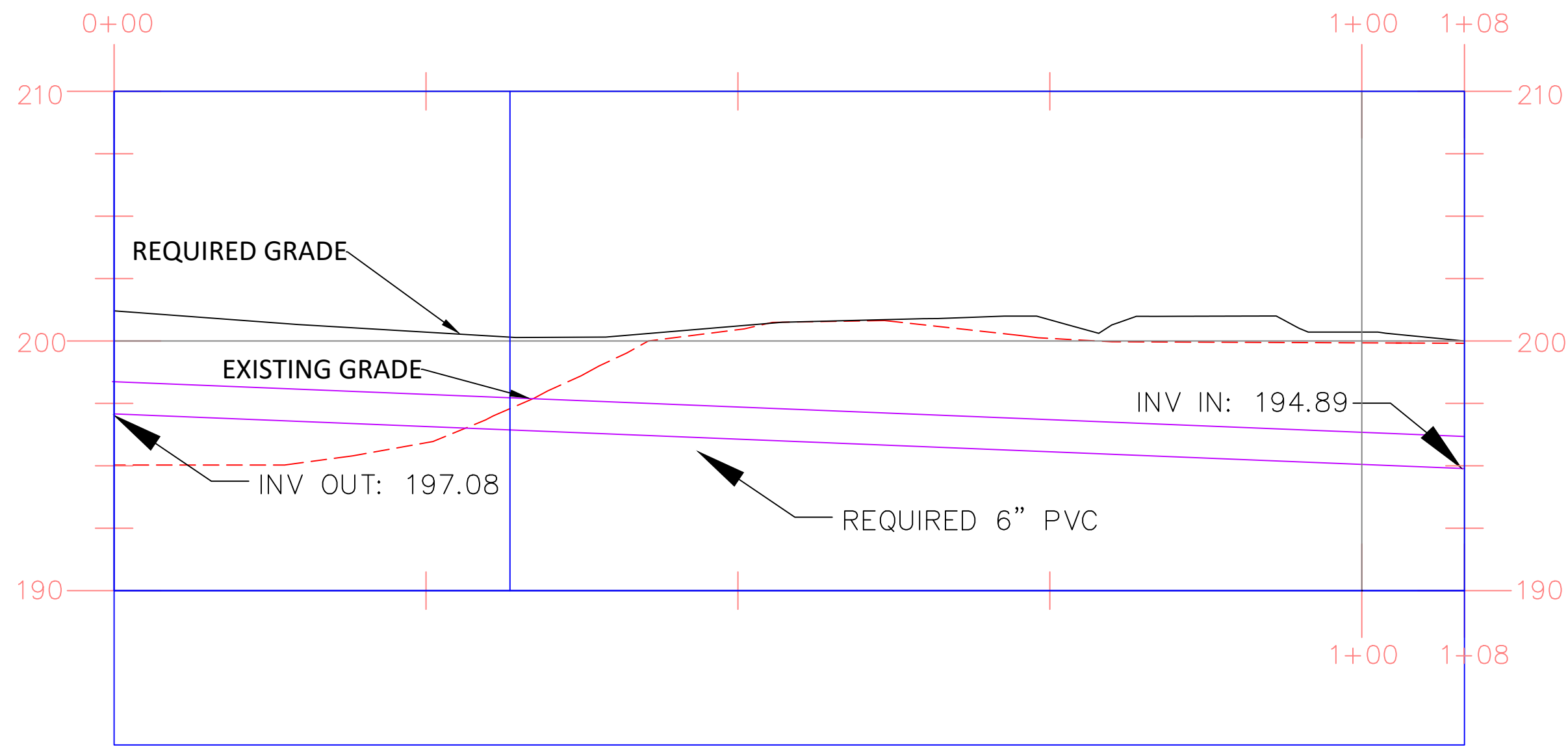
LEGEND:		
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---	201	EXISTING MINOR CONTOURS (FEET)
---	200	REQUIRED MAJOR CONTOURS (FEET)
---	201	REQUIRED MINOR CONTOURS (FEET)
---	R4WAS	REQUIRED 4" WAS LINE (SEE DETAIL DRAWING C-902)
---	R6S	REQUIRED 6" GRAVITY SEWER LINE (SEE DETAIL DRAWING C-902)
---	R6AL	REQUIRED 6" AIR LINE (SEE DETAIL DRAWING C-902)
---	R12S	REQUIRED 12" GRAVITY SEWER LINE (SEE DETAIL DRAWING C-902)
---	R15S	REQUIRED 15" GRAVITY SEWER LINE (SEE DETAIL DRAWING C-902)
---	W	REQUIRED WATER LINE (SEE DETAIL DRAWING C-903)
---		REQUIRED GRAVEL (SEE DETAIL DRAWING C-904)
---		EXISTING GRAVELED AREA
---		REQUIRED SCUM PUMPING STATION (SEE DETAIL DRAWING C-804)
---		REQUIRED HYDRANT (SEE DETAIL DRAWING C-903)



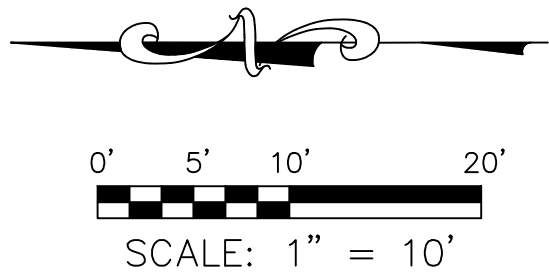
PROFILE VIEW
NORTH CLARIFIER TO SCUMP PUMP
SCALE: 1"=10'H/1"=5'V



PLAN VIEW
SOUTH CLARIFIER TO SCUMP PUMP
SCALE: 1"=10'

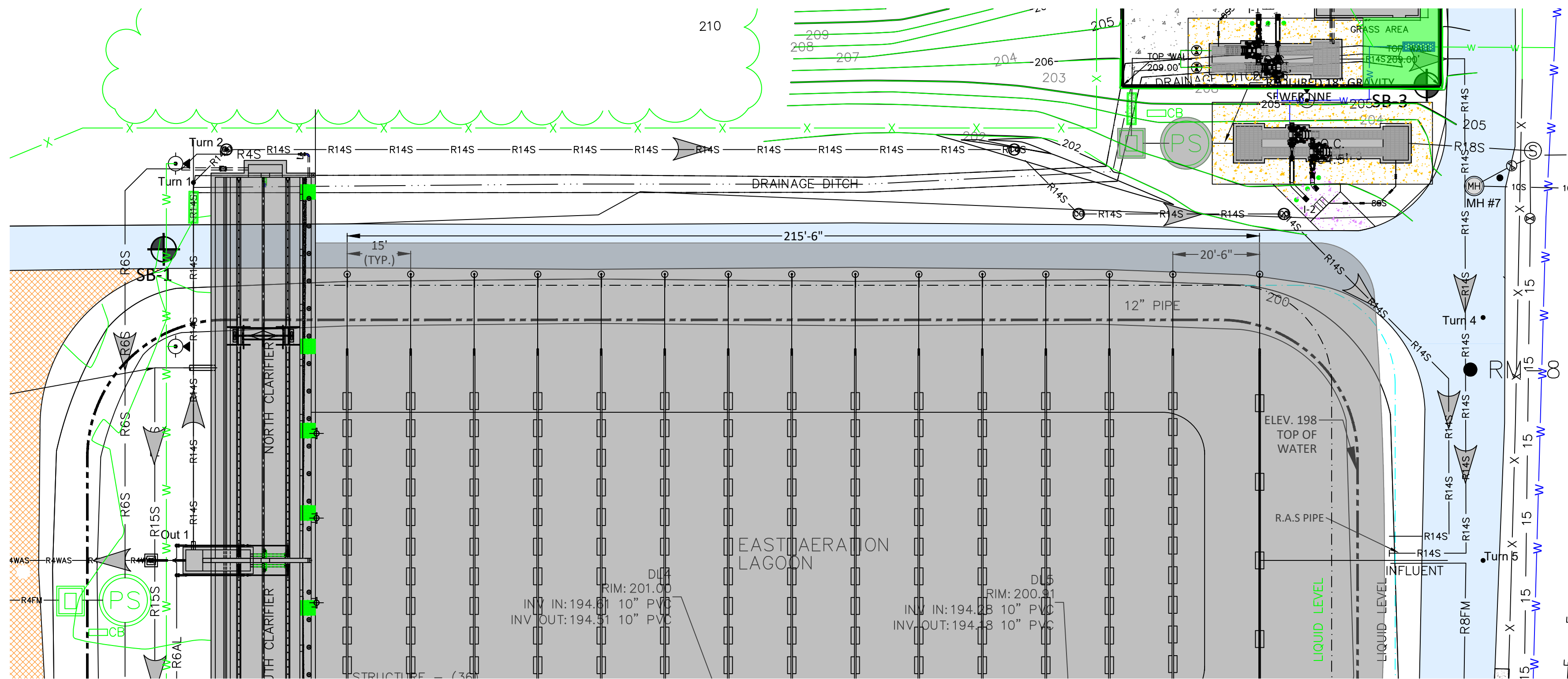


PROFILE VIEW
SOUTH CLARIFIER TO SCUMP PUMP
SCALE: 1"=10'H/1"=5'V

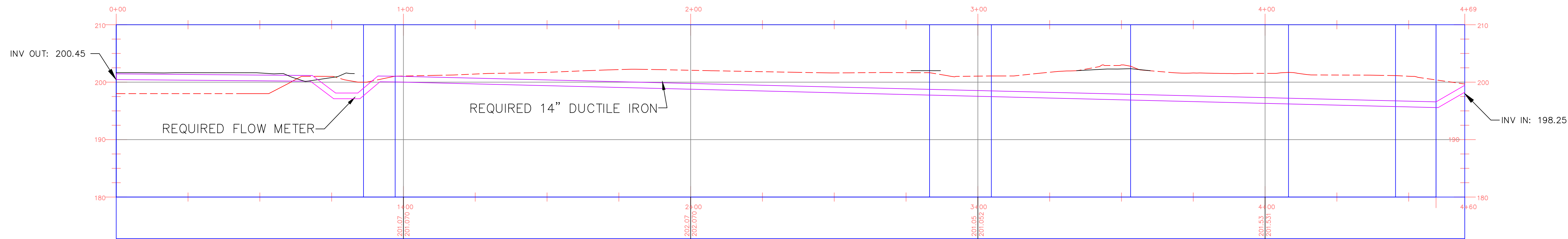


LEGEND:

- | | | | |
|-----|-------|-----|--|
| --- | 200 | --- | EXISTING MAJOR CONTOURS (FEET) |
| --- | 201 | --- | EXISTING MINOR CONTOURS (FEET) |
| --- | 200 | --- | REQUIRED MAJOR CONTOURS (FEET) |
| --- | 201 | --- | REQUIRED MINOR CONTOURS (FEET) |
| --- | R4WAS | --- | REQUIRED 4" WAS LINE (SEE DETAIL DRAWING C-902) |
| --- | R4S | --- | REQUIRED 4" GRAVITY SEWER LINE (SEE DETAIL DRAWING C-902) |
| --- | R6S | --- | REQUIRED 6" GRAVITY SEWER LINE (SEE DETAIL DRAWING C-902) |
| --- | R6AL | --- | REQUIRED 6" AIR LINE (SEE DETAIL DRAWING C-902) |
| --- | R12S | --- | REQUIRED 12" GRAVITY SEWER LINE (SEE DETAIL DRAWING C-902) |
| --- | R15S | --- | REQUIRED 15" GRAVITY SEWER LINE (SEE DETAIL DRAWING C-902) |
| --- | R18S | --- | REQUIRED 18" GRAVITY SEWER LINE (SEE DETAIL DRAWING C-902) |
| --- | R6FM | --- | REQUIRED 8" FORCE MAIN (SEE DETAIL DRAWING C-902) |
| --- | W | --- | REQUIRED WATER LINE (SEE DETAIL DRAWING C-903) |
| --- | | --- | REQUIRED GRAVEL (SEE DETAIL DRAWING C-904) |
| --- | | --- | EXISTING GRAVELED AREA |
| --- | MH #1 | --- | EXISTING MANHOLE |
| --- | PS | --- | REQUIRED SCUM PUMPING STATION (SEE DETAIL DRAWING C-804) |
| --- | | --- | REQUIRED HYDRANT (SEE DETAIL DRAWING C-903) |



PLAN VIEW
RAS LINE TO EAST LAGOON
SCALE: 1"=20'



PROFILE VIEW
RAS LINE TO EAST LAGOON
SCALE: 1"=20'H/1"=10'V

LEGEND:

- 200 --- EXISTING MAJOR CONTOURS (FEET)
- 201 --- EXISTING MINOR CONTOURS (FEET)
- == 200 == REQUIRED MAJOR CONTOURS (FEET)
- == 201 == REQUIRED MINOR CONTOURS (FEET)
- - - - - EXISTING WATER LINE
- X-X-X- EXISTING CHAIN-LINK FENCE
- RBFM-RBFM-RBFM-RBFM-RBFM- REQUIRED 8" FORCE MAIN (SEE DETAIL DRAWING C-902)
- X-X-X- EXISTING CHAIN-LINK FENCE
- X-X-X-X-X- REQUIRED CHAIN-LINK FENCE (SEE DETAIL DRAWING C-905)
- E-E-E-E-E- EXISTING OVERHEAD ELECTRIC POWER LINE
- RAWAS-RAWAS-RAWAS-RAWAS-RAWAS- REQUIRED 4" WAS LINE (SEE DETAIL DRAWING C-902)
- R6S-R6S-R6S-R6S-R6S- REQUIRED 6" GRAVITY SEWER LINE (SEE DETAIL DRAWING C-902)

- R12S-R12S-R12S-R12S-R12S- REQUIRED 12" GRAVITY SEWER LINE (SEE DETAIL DRAWING C-902)
- R14S-R14S-R14S-R14S-R14S- REQUIRED 14" GRAVITY SEWER LINE (SEE DETAIL DRAWING C-902)
- R15S-R15S-R15S-R15S-R15S- REQUIRED 15" GRAVITY SEWER LINE (SEE DETAIL DRAWING C-902)
- R18S-R18S-R18S-R18S-R18S- REQUIRED 18" GRAVITY SEWER LINE (SEE DETAIL DRAWING C-902)
- W-W-W-W-W- REQUIRED WATER LINE (SEE DETAIL DRAWING C-903)
- 8SS-8SS-8SS-8SS-8SS- REQUIRED 8 INCH STORM SEWER PIPE (SEE DETAIL DRAWING C-907)
- - - - - EXISTING TREE LINE TO REMAIN
- [PS] REQUIRED SCUM PUMPING STATION (SEE DETAIL DRAWING C-804)

- [Symbol] REQUIRED HYDRANT (SEE DETAIL DRAWING C-903)
- [Symbol] REQUIRED GRAVEL (SEE DETAIL DRAWING C-904)
- [Symbol] EXISTING GRAVELED AREA
- [Symbol] EXISTING MANHOLE
- [Symbol] REQUIRED SURFACE INLET (SEE DETAIL DRAWING C-907) (SEE TABLE DRAWING C-204)



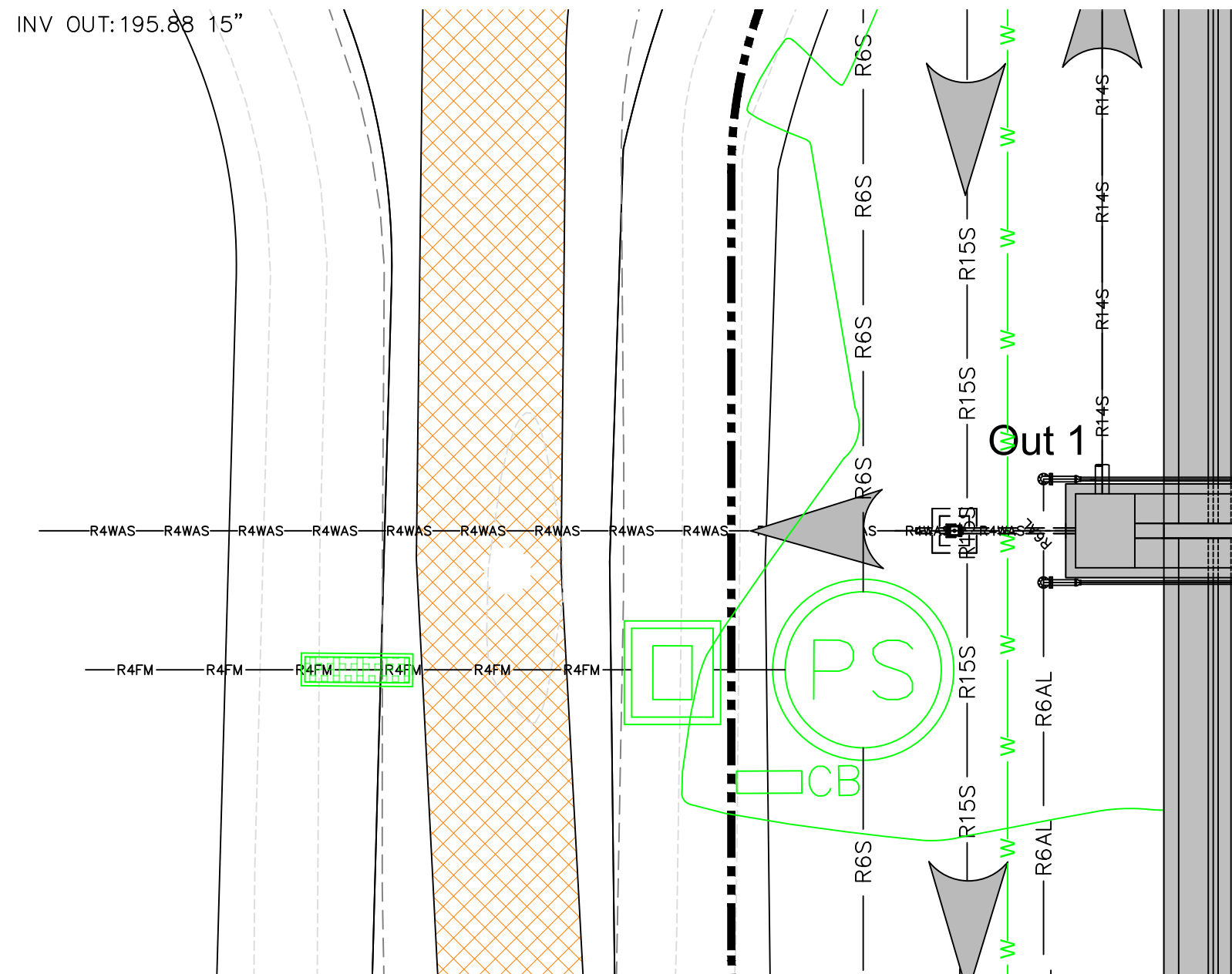
GSH323-024 ARPA INFR. - WASTE
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6/18/2024
ADDENDUM 3

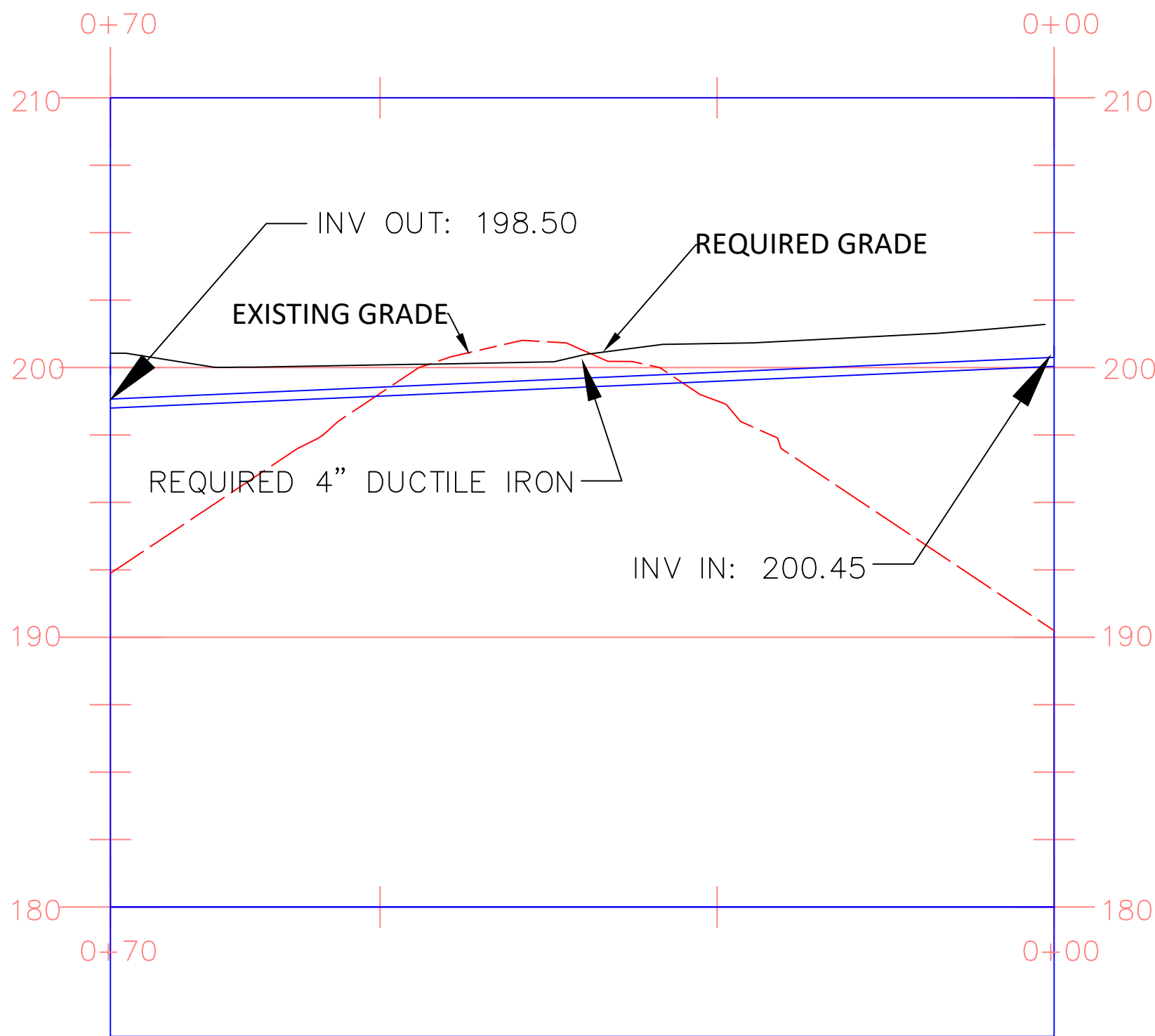
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Revisions:

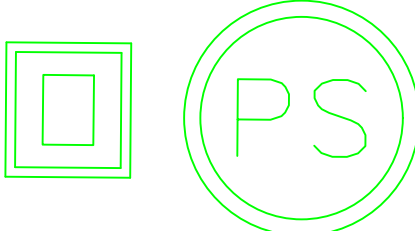
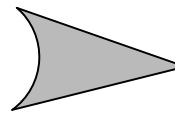
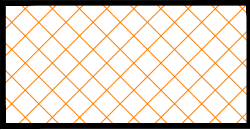
PLAN & PROFILE -
RAS LINE TO EAST LAGOON

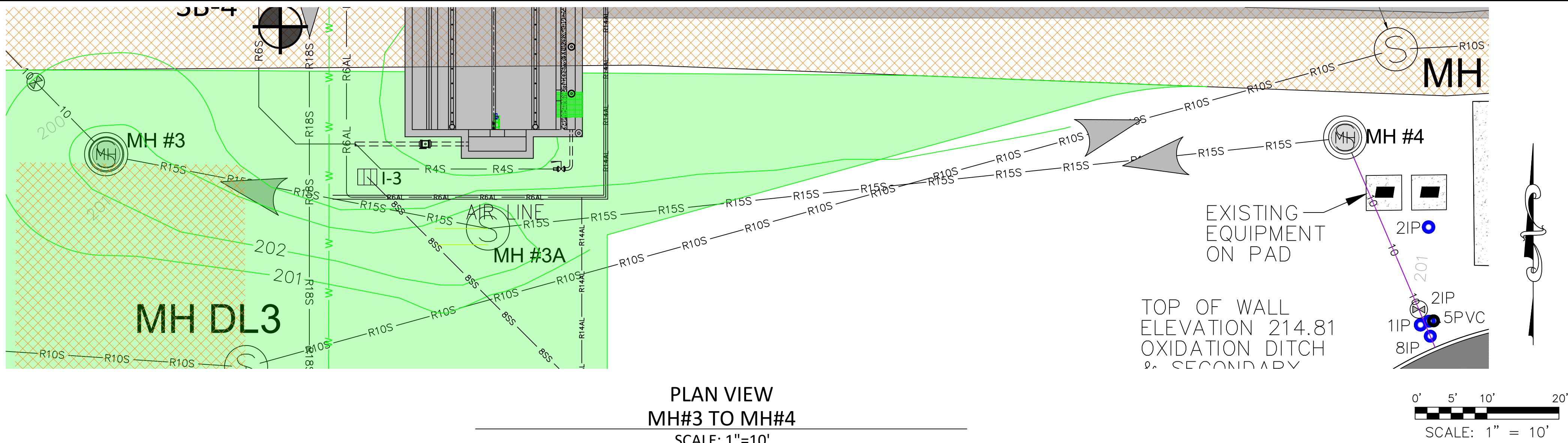


PLAN VIEW
WAS LINE TO WEST LAGOON
SCALE: 1"=10'

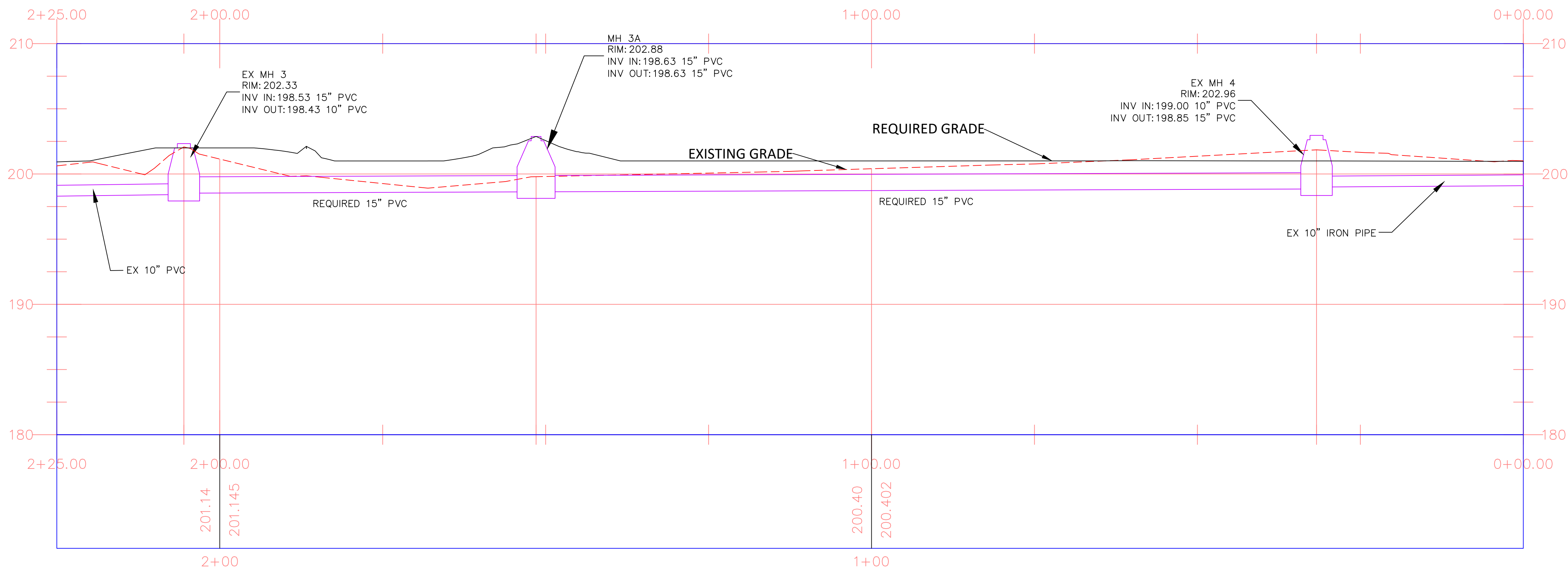


PROFILE VIEW
WAS LINE TO WEST LAGOON
SCALE: 1"=10'H/1"=5'V

- LEGEND:
- 200 --- EXISTING MAJOR CONTOURS (FEET)
 - 201 --- EXISTING MINOR CONTOURS (FEET)
 - 200 — REQUIRED MAJOR CONTOURS (FEET)
 - 201 — REQUIRED MINOR CONTOURS (FEET)
 - W — W — W — W — W — REQUIRED WATER LINE (SEE DETAIL DRAWING C-903)
 - R4WAS — R4WAS — R4WAS — R4WAS — R4WAS — R4WAS — REQUIRED 4" WAS LINE (SEE DETAIL DRAWING C-902)
 - R6S — R6S — R6S — R6S — R6S — R6S — REQUIRED 6" GRAVITY SEWER LINE (SEE DETAIL DRAWING C-902)
 - R12S — R12S — R12S — R12S — R12S — R12S — REQUIRED 12" GRAVITY SEWER LINE (SEE DETAIL DRAWING C-902)
 - R15S — R15S — R15S — R15S — R15S — R15S — REQUIRED 15" GRAVITY SEWER LINE (SEE DETAIL DRAWING C-902)
 - R6AL — R6AL — R6AL — R6AL — R6AL — R6AL — REQUIRED 6" AIR LINE (SEE DETAIL DRAWING C-902)
 - R4FM — R4FM — R4FM — R4FM — R4FM — R4FM — REQUIRED 4" FORCE MAIN (SEE DETAIL DRAWING C-902)
 -  REQUIRED SCUM PUMPING STATION (SEE DETAIL DRAWING C-804)
 -  FLOW DIRECTION
 -  EXISTING GRAVEL AREA



PLAN VIEW
MH#3 TO MH#4
SCALE: 1"=10'

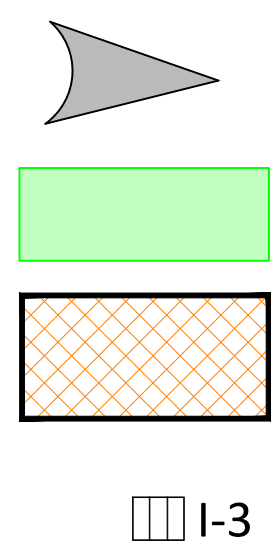


PROFILE VIEW
MH#3 TO MH#4
SCALE: 1"=10'H/1"=5'V

LEGEND:

- 200 --- EXISTING MAJOR CONTOURS (FEET)
- 201 --- EXISTING MINOR CONTOURS (FEET)
- 200 --- REQUIRED MAJOR CONTOURS (FEET)
- 201 --- REQUIRED MINOR CONTOURS (FEET)
- W --- W --- W --- W --- W --- REQUIRED WATER LINE (SEE DETAIL DRAWING C-903)
- R4S --- R4S --- R4S --- R4S --- R4S --- REQUIRED 4" GRAVITY SEWER LINE (SEE DETAIL DRAWING C-902)
- R10S --- R10S --- R10S --- R10S --- R10S --- REQUIRED 10" GRAVITY SEWER LINE (SEE DETAIL DRAWING C-902)
- R15S --- R15S --- R15S --- R15S --- R15S --- REQUIRED 15" GRAVITY SEWER LINE (SEE DETAIL DRAWING C-902)
- R18S --- R18S --- R18S --- R18S --- R18S --- REQUIRED 18" GRAVITY SEWER LINE (SEE DETAIL DRAWING C-902)
- R6AL --- R6AL --- R6AL --- R6AL --- R6AL --- REQUIRED 6" AIR LINE (SEE DETAIL DRAWING C-902)

- 12SS --- 12SS --- 12SS --- 12SS --- 12SS --- REQUIRED 12 INCH STORM SEWER PIPE (SEE DETAIL DRAWING C-907)
- MH #1 --- EXISTING MANHOLE
- 1/2" PVC --- REQUIRED PINCH VALVE
- 1/2" PVC --- EXISTING 0.5 INCH PVC/SPIGOT
- 1" IP --- EXISTING 1 INCH IRON PIPE
- 2" IP --- EXISTING 2 INCH IRON PIPE
- 8" IP --- EXISTING 8 INCH IRON PIPE
- --- REQUIRED HYDRANT (SEE DETAIL DRAWING C-903)



- FLOW DIRECTION
- REQUIRED GRAVEL (SEE DETAIL DRAWING C-904)
- EXISTING GRAVEL AREA
- REQUIRED SURFACE INLET (SEE DETAIL DRAWING C-907) (SEE TABLE DRAWING C-204)



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Drawn by: MJJ/JRG

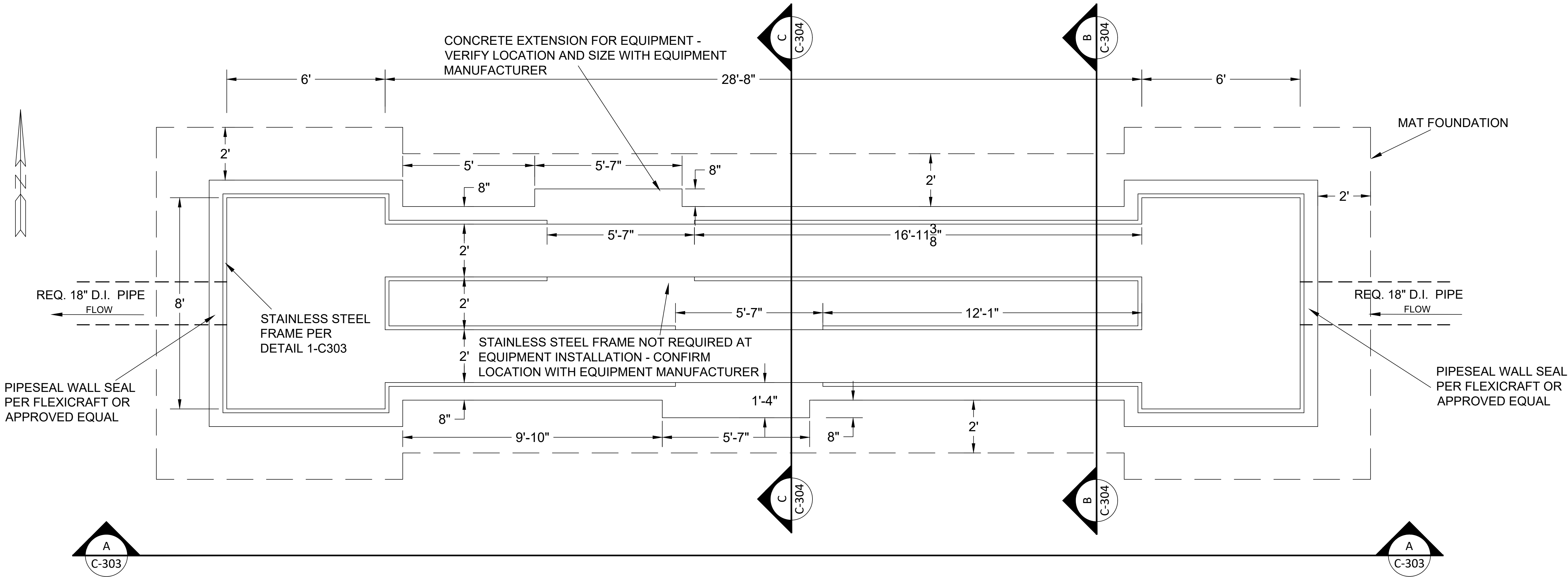
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6/18/2024
ADDENDUM 3

Revisions:

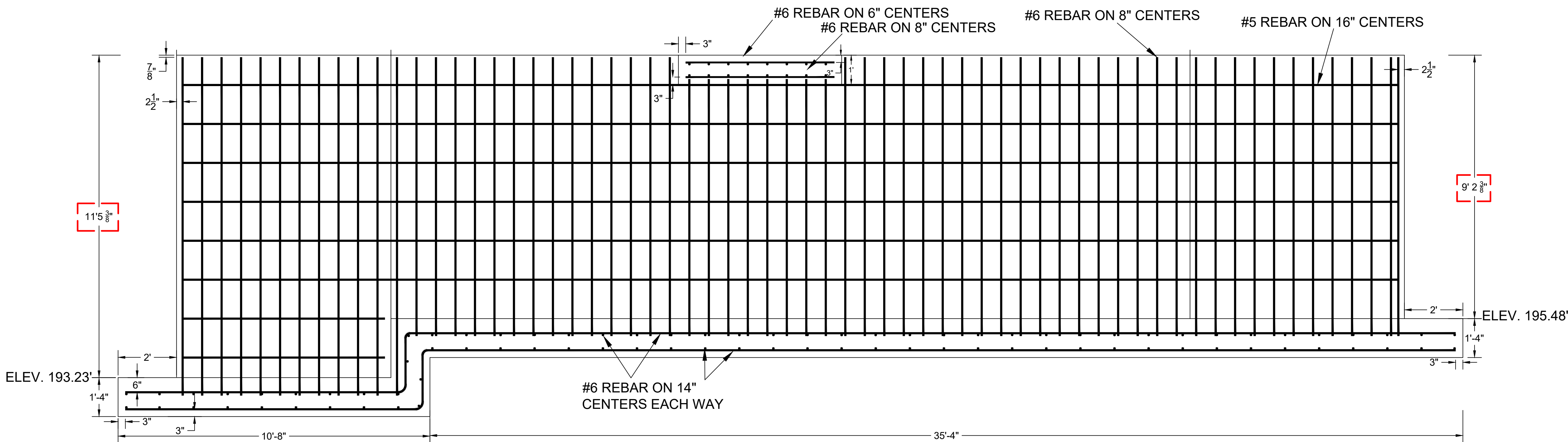
Revisions:

PLAN & PROFILE -
MH#3 TO MH#4



PLAN VIEW - CONCRETE STRUCTURE FOR COARSE MECHANICAL BAR SCREENS

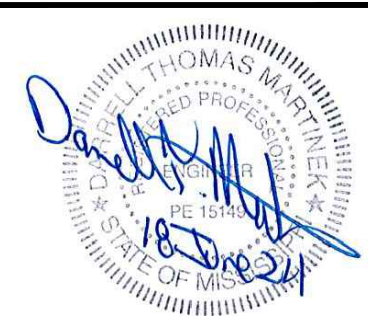
SCALE: 1/2" = 1'



A
C-303

SECTION - COARSE MECHANICAL BAR SCREENS

SCALE: 1/2" = 1'



G5#323-024 ARPA INFR. - WASTE
CENT. TREATMENT
SOUTH MISSISSIPPI CORRECTIONAL INSTITUTION
LEAKESVILLE, MISSISSIPPI

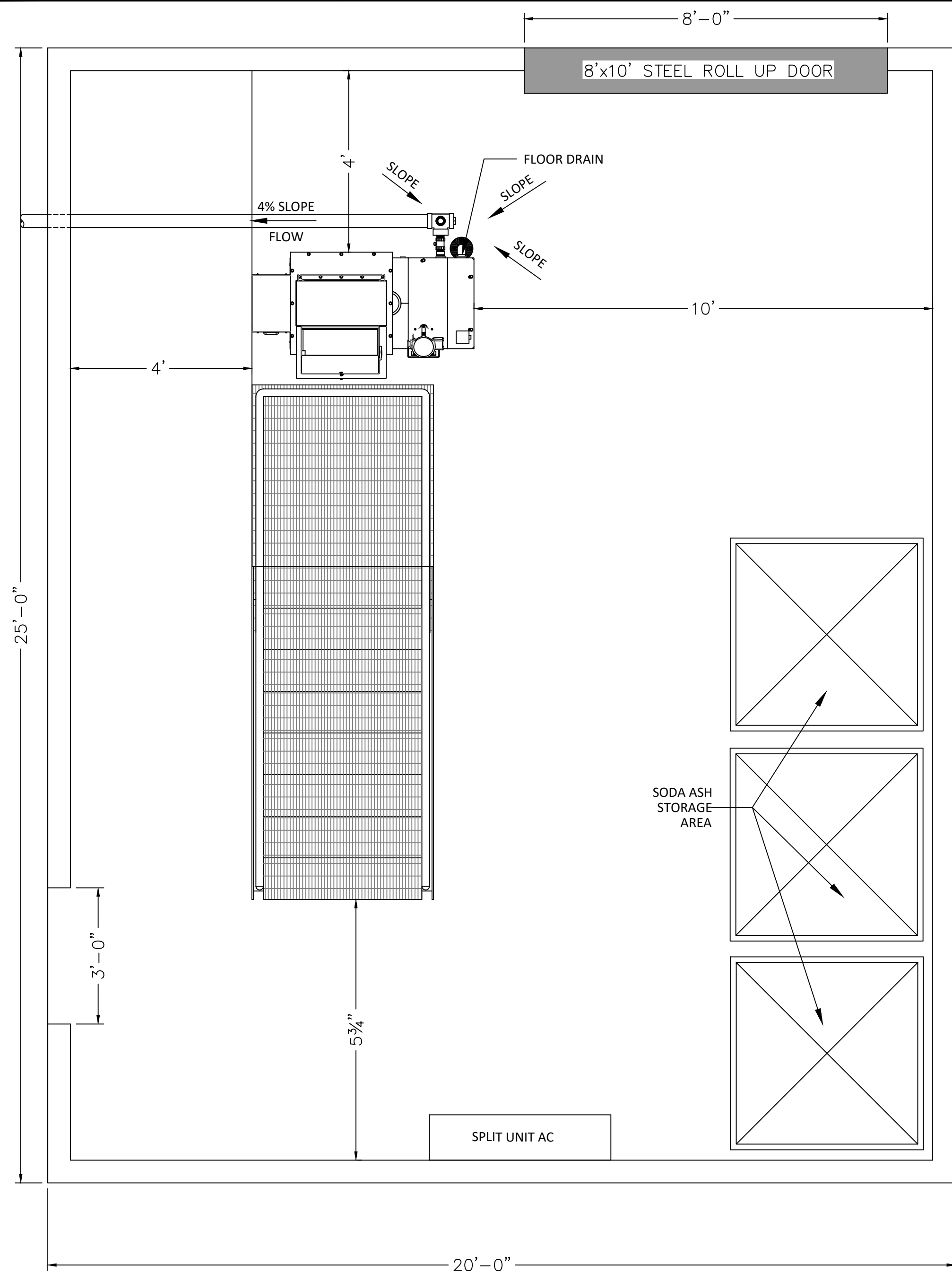
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Revisions:

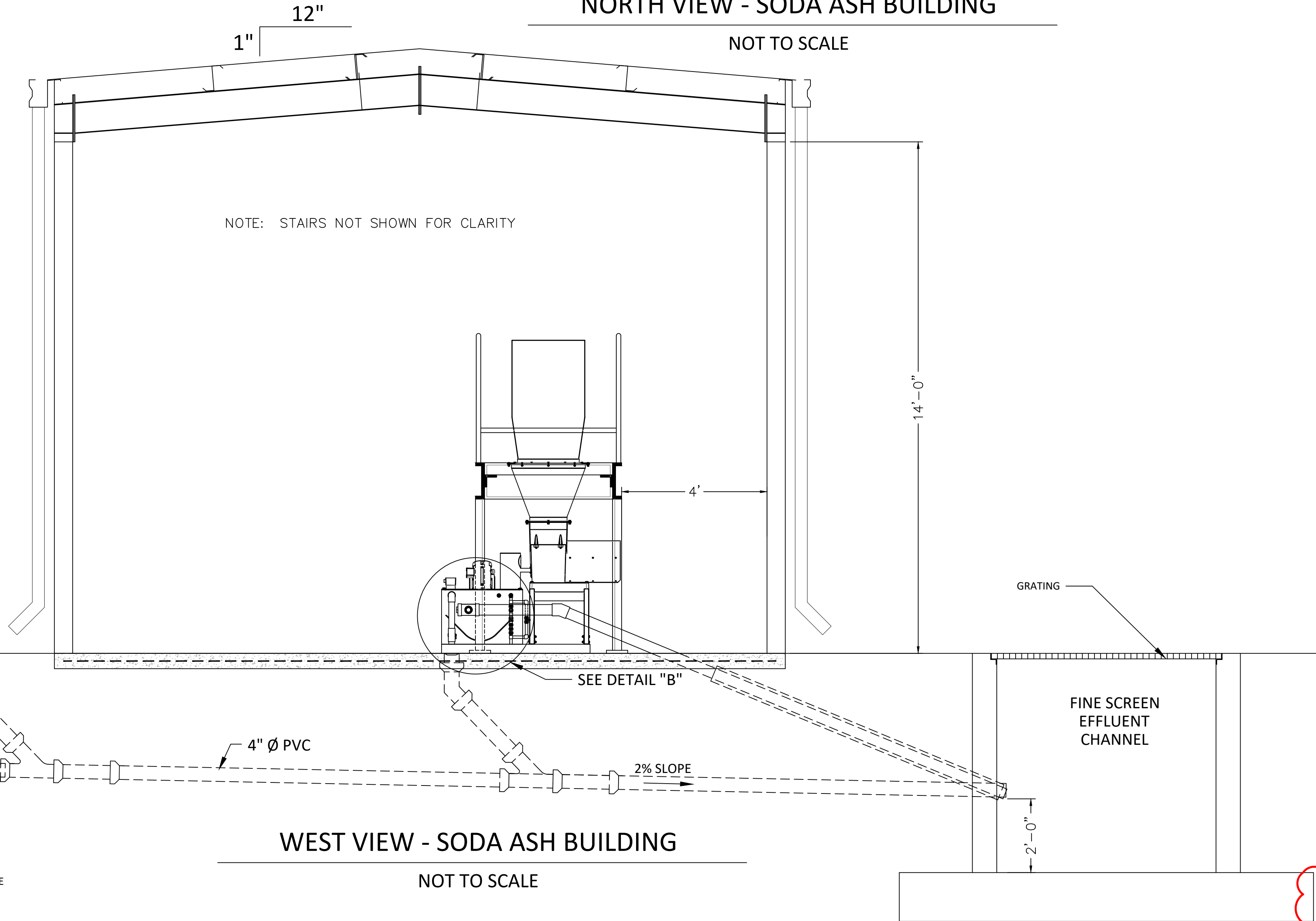
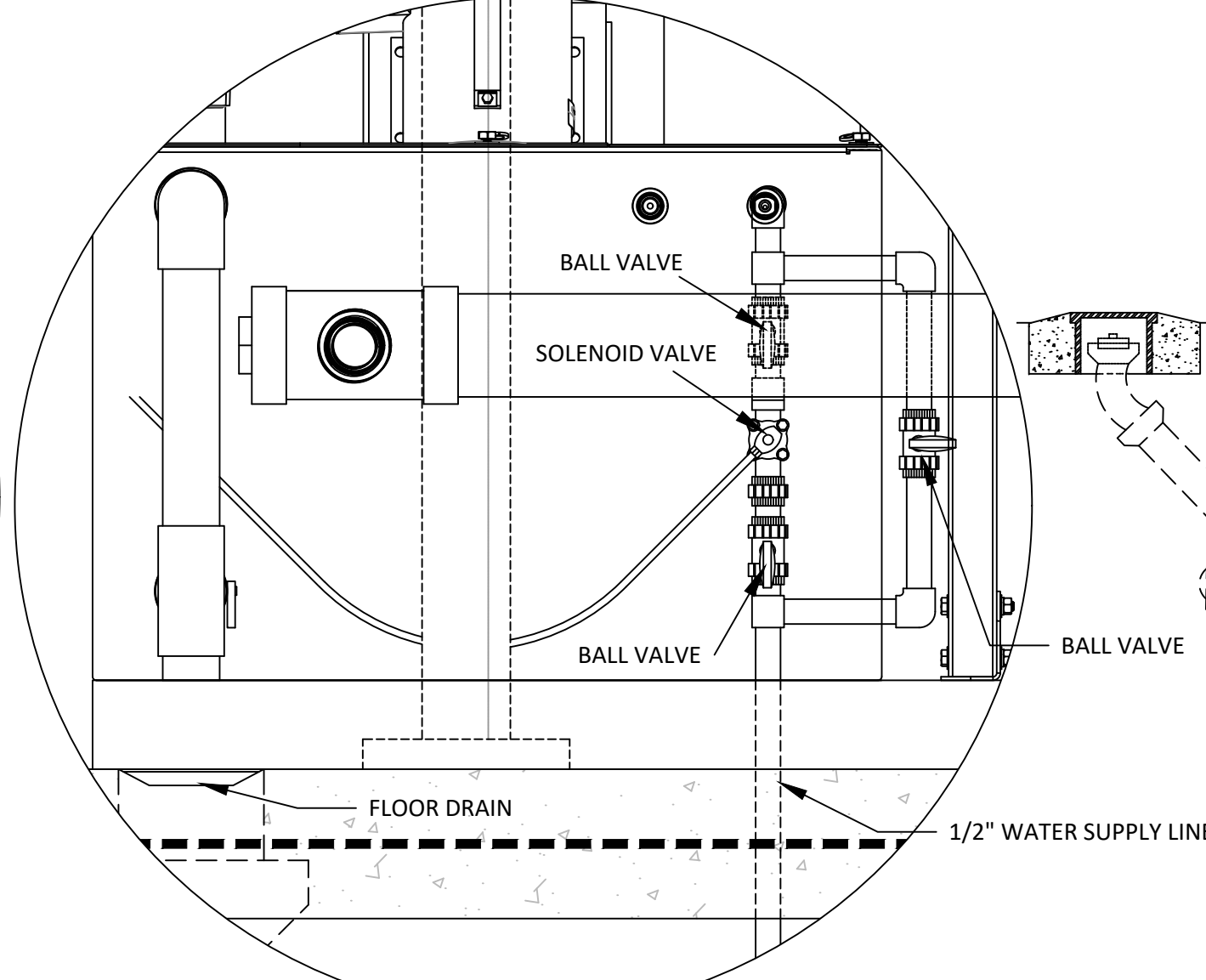
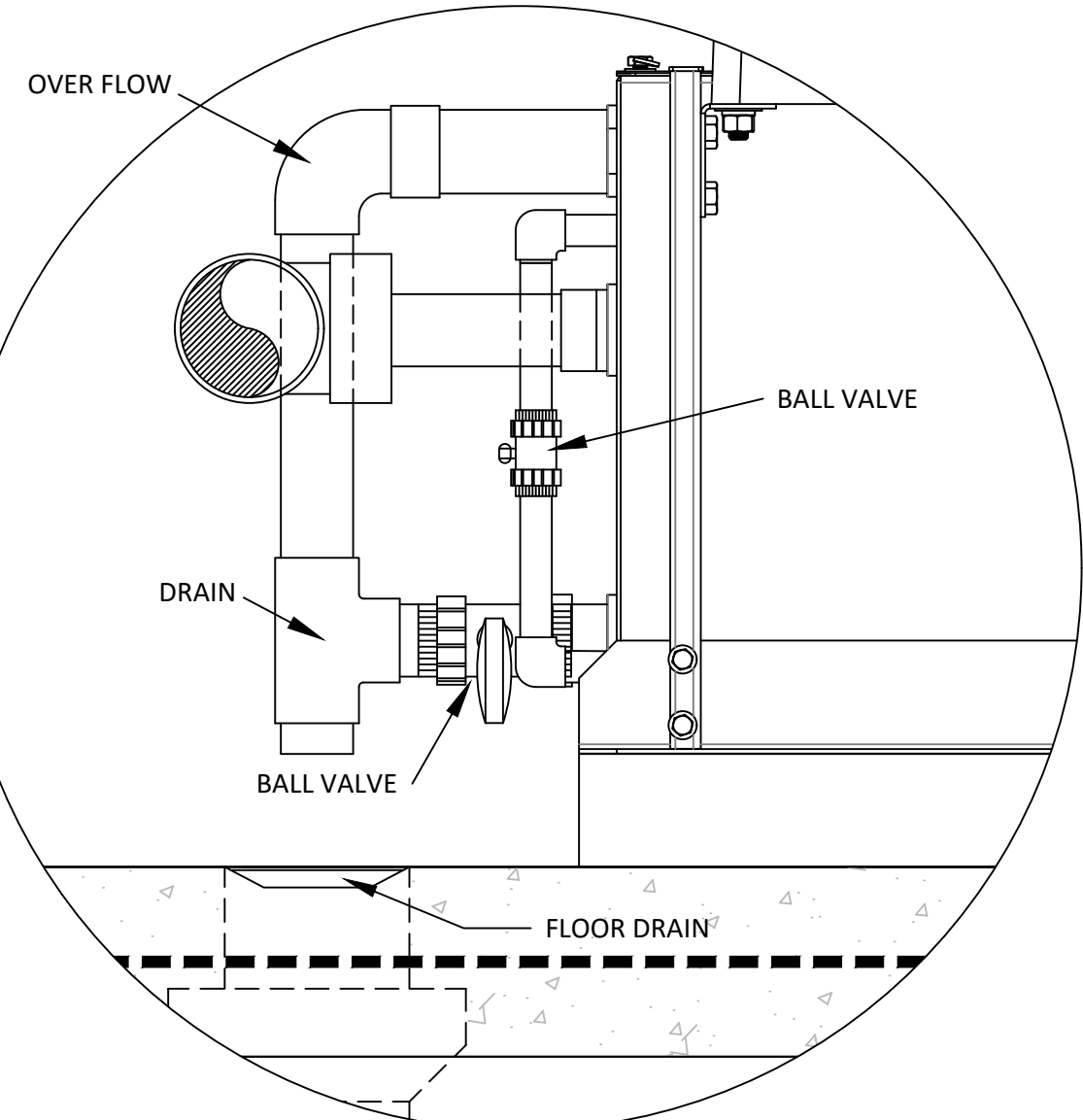
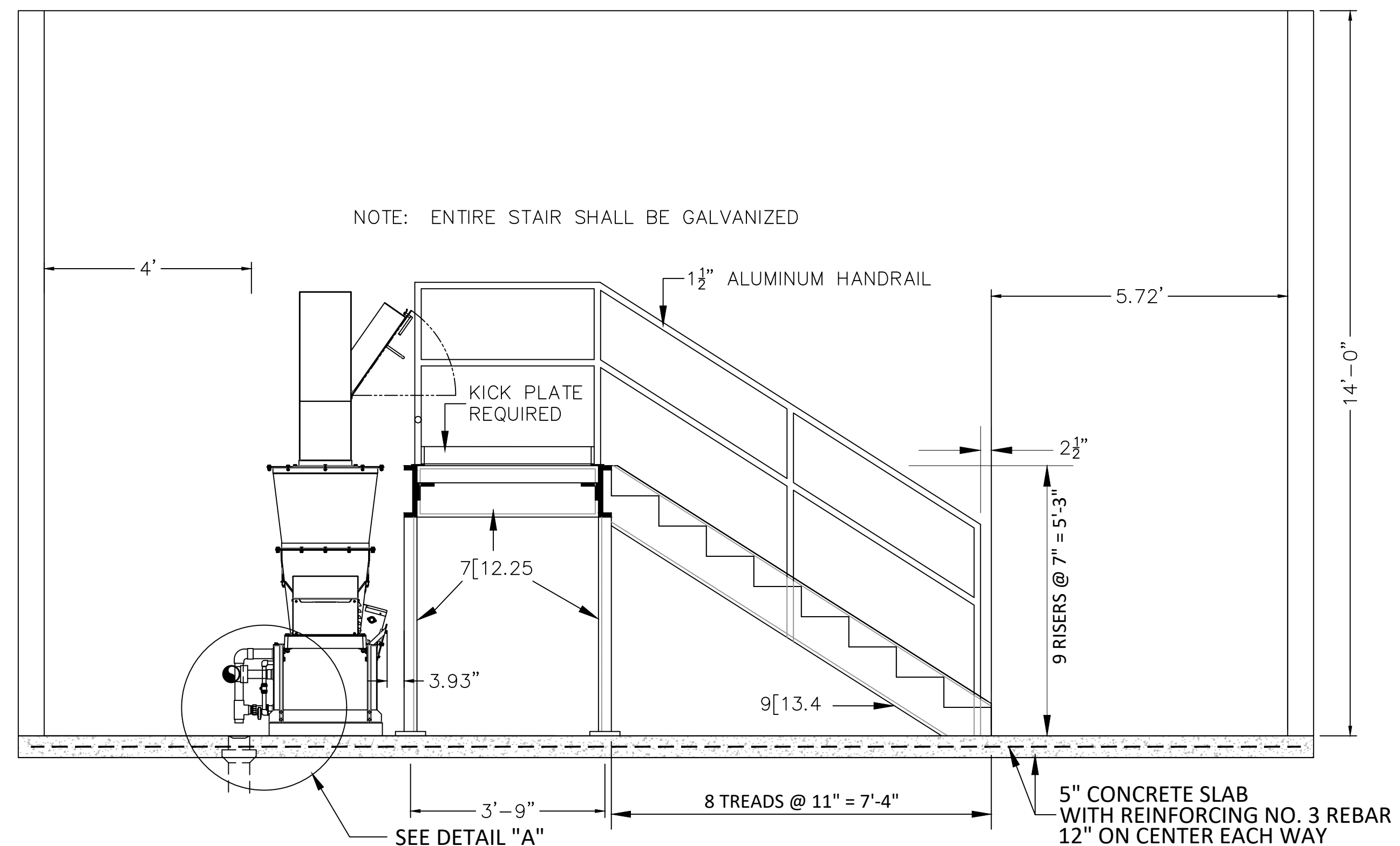
Revisions:

PLAN VIEW - CONCRETE
STRUCTURE FOR COARSE
MECHANICAL BAR
SCREENS

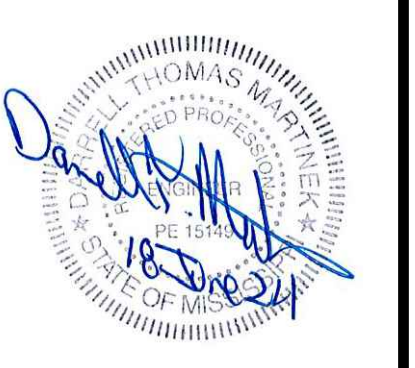
C-303
Drawing Number



- NOTES:
1. ENCLOSED METAL BUILDING SHALL BE PRE-ENGINEERED, METAL FRAMED STRUCTURE. PLANS AND SPECIFICATIONS BEARING PROFESSIONAL ENGINEER'S SEAL SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL. COLOR OF METAL BUILDING EXTERIOR SHEETS SHALL BE SELECTED BY THE OWNER.
 2. BRIDGE CRANE SHALL HAVE A $\frac{1}{2}$ TON CAPACITY AND BE ELECTRICALLY OPERATED IN LIFTING DIRECTION WITH A LIFT SPEED OF 15 FEET PER MINUTE. THE AVAILABLE LIFT SHALL BE 20 FEET AND FEATURE AN UPPER LIMIT SWITCH. THE TROLLEY TYPE SHALL BE PUSH/PULL WITH RUBBER BUMPERS AND SAFETY LUGS. CRANE POWER SUPPLY SHALL BE 120 VOLT, SINGLE PHASE, 60 HERTZ. CROSS CONDUCTORS SHALL BE ROUND FESTOONED CABLE. BRIDGE CRANE AND SUPPORT SYSTEM SHALL BE CONNECTED TO METAL BUILDING STRUCTURAL MEMBERS. DESIGN OF BRIDGE CRANE AND SUPPORT SYSTEM BEARING PROFESSIONAL ENGINEER'S SEAL SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
 3. FOOTINGS AND REINFORCEMENT SHOWN FOR INFORMATION ONLY, PLANS AND SPECIFICATIONS BEARING PROFESSIONAL ENGINEER'S STAMP TO BE SUBMITTED TO ENGINEER FOR APPROVAL BASED UPON AN ALLOWABLE SOIL BEARING PRESSURE OF 1,000 POUNDS PER SQUARE FEET.
 4. SPLIT AIR CONDITIONING UNITS SHALL BE THREE (3) TON UNIT AS MANUFACTURED BY MITSUBISHI OR APPROVED EQUAL.



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CENT. TREATMENT
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LEAKESVILLE, MISSISSIPPI

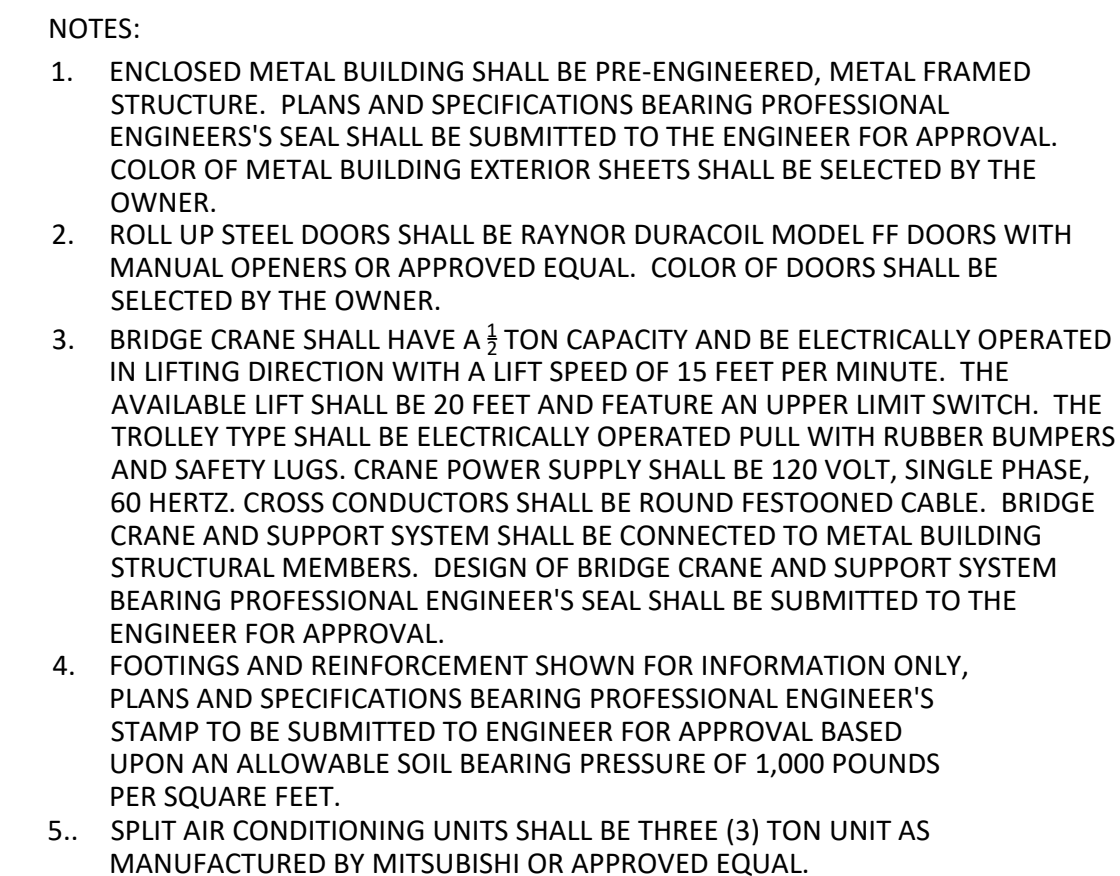
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Date: 04/29/2024
Scale: 1"=30'
Drawn by: MJJ/JRG
Checked: DTM
Revisions:
06/18/2024
ADDENDUM NO. 3.

Revisions:

Revisions:

PLAN VIEW -
PH ADJUSTMENT

C-330
Drawing Number



W. L. BURL
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Surle Proj. No.: 08194-1-0122

File Name:
C-502 FILTERS.dwg

Date: 04/29/2024

Scale: SHOWN

Drawn by: JRG/AGG

Checked: DTM

Revisions:
06/18/2024
ADDENDUM NO. 3.

Revisions:

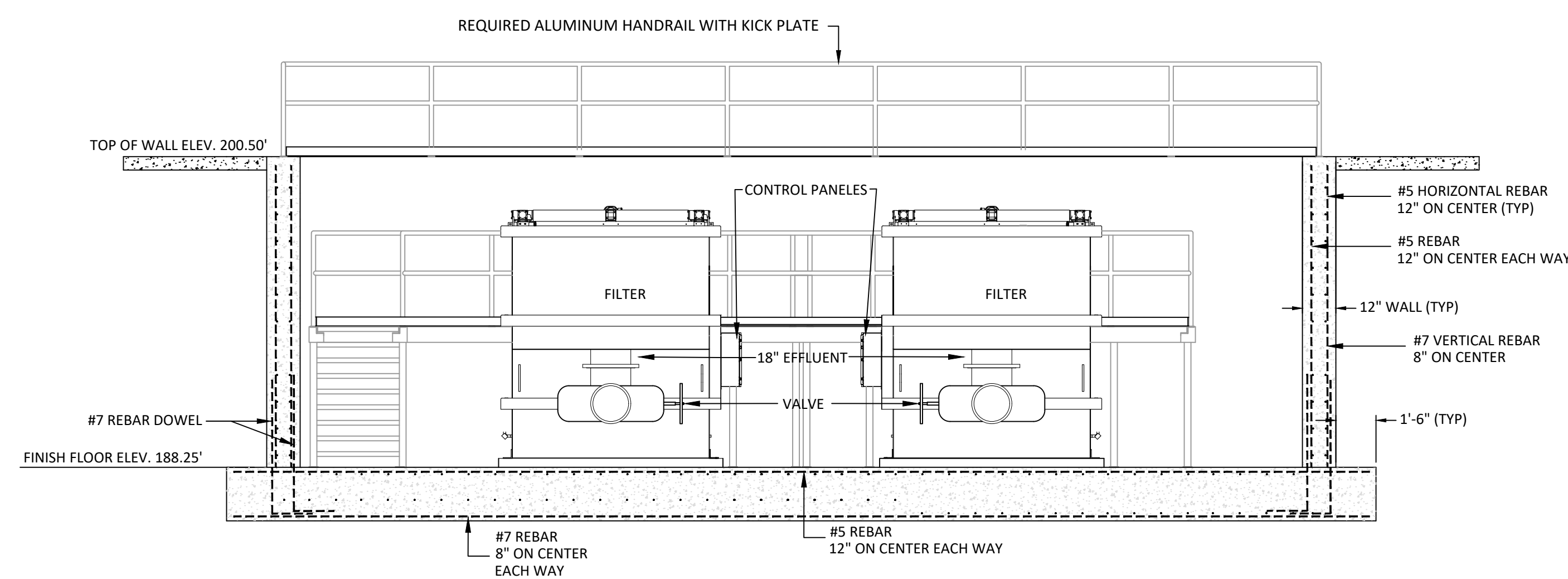
Revisions:

PLAN VIEW - FILTERS

C-501
Drawing Number

-

NOTE: BUILDING NOT SHOWN FOR CLARITY



SECTION - DRAIN

SCALE: 1"=3/8"

NOTE: EQUIPMENT AND STAIRS NOT SHOWN FOR CLARITY

EQUIPMENT PAD

1/2% SLOPE

ALUMINUM GRATING

3'-0"

6"

8"

BLOWUP

SCALE: 1"=3/8"

B

C-502

6"

BOTTOM OF TRENCH DRAIN 1/2% SLOPE

9 3/4"

3'-0"

3' SUMP

3'-0"

D
C-502

SECTION - TRENCH DRAIN
SCALE: 1"=3'/16"

SEE SUMP DETAILS

[illegible]

SUMP PLAN VIEW

ENCLOSURE FOOTING

12" ENCLOSURE WALL

#5 Straight Bars (Typ)

#5A Bars (Typ)

3'-0" SUMP

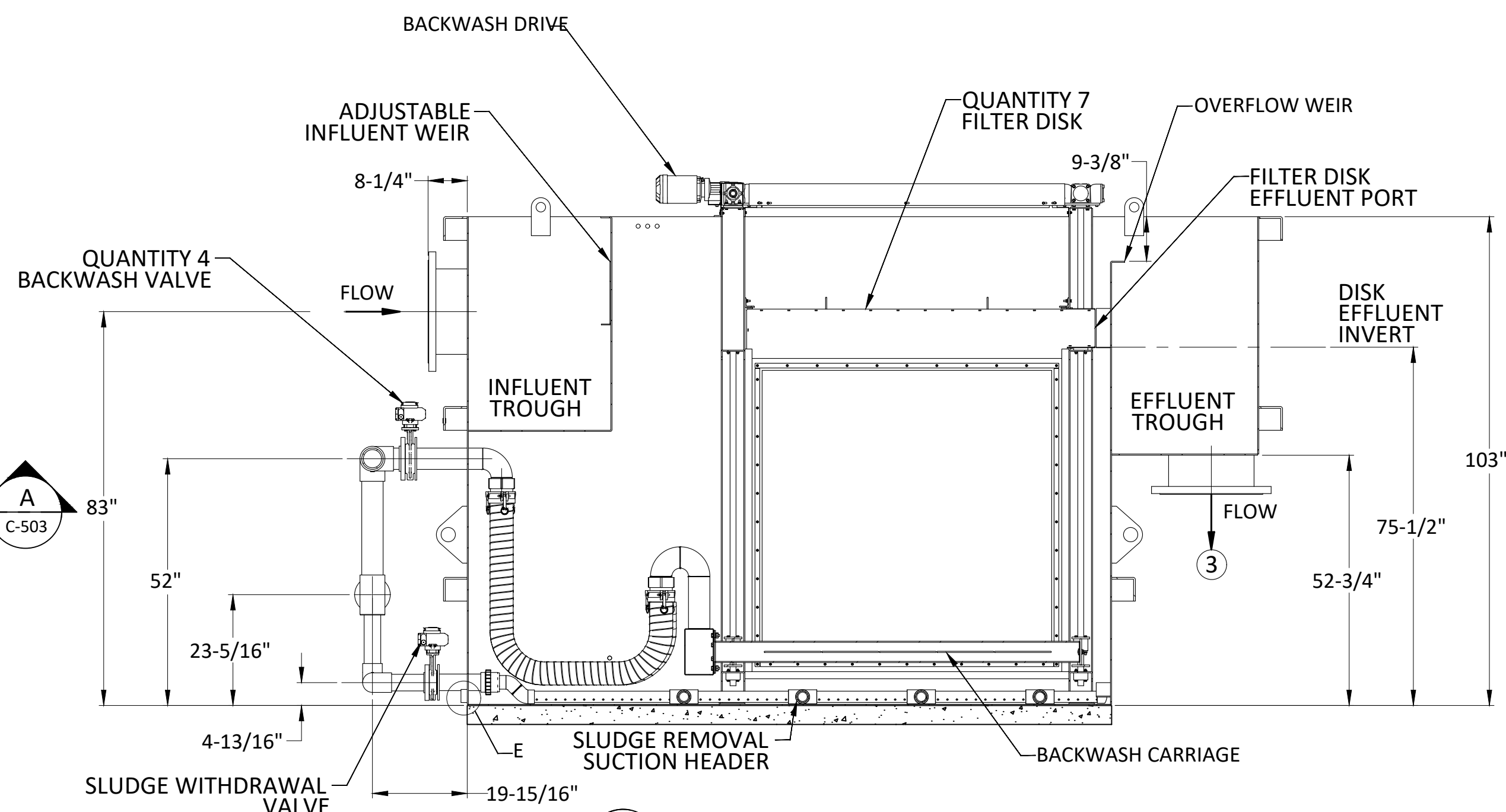
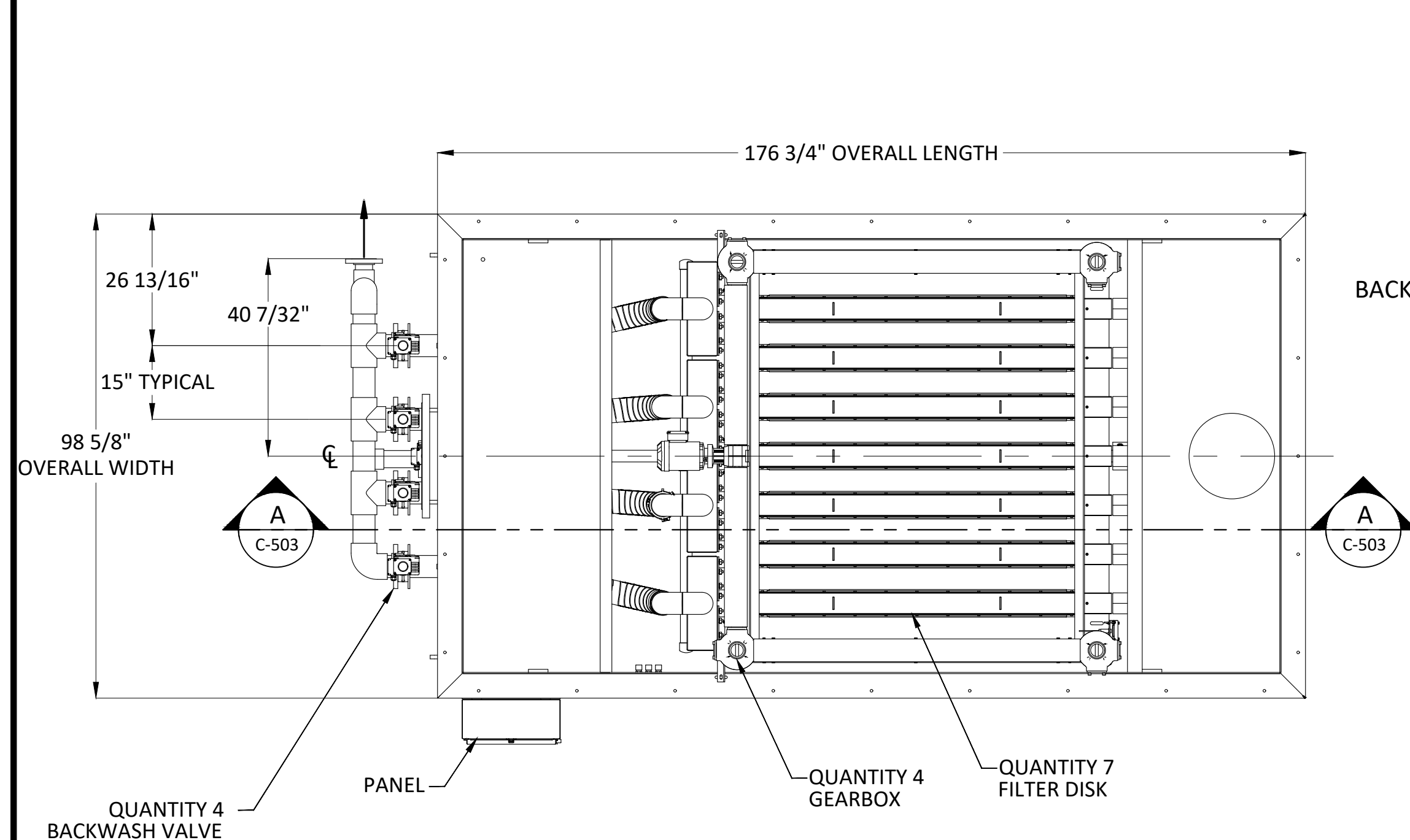
3'-0"

8" (Typ)

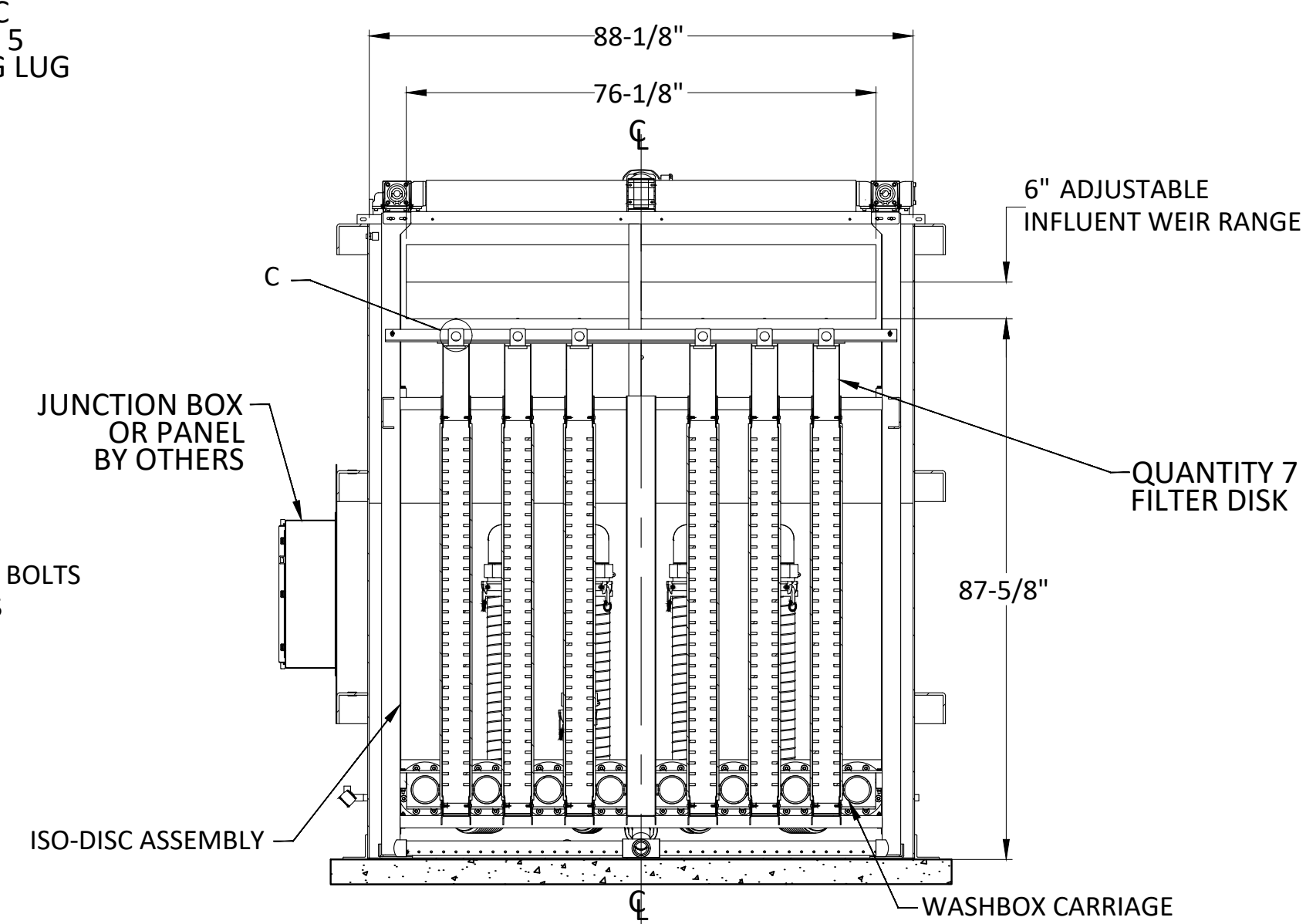
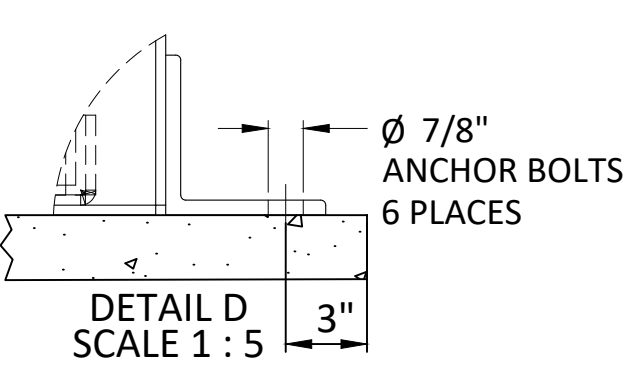
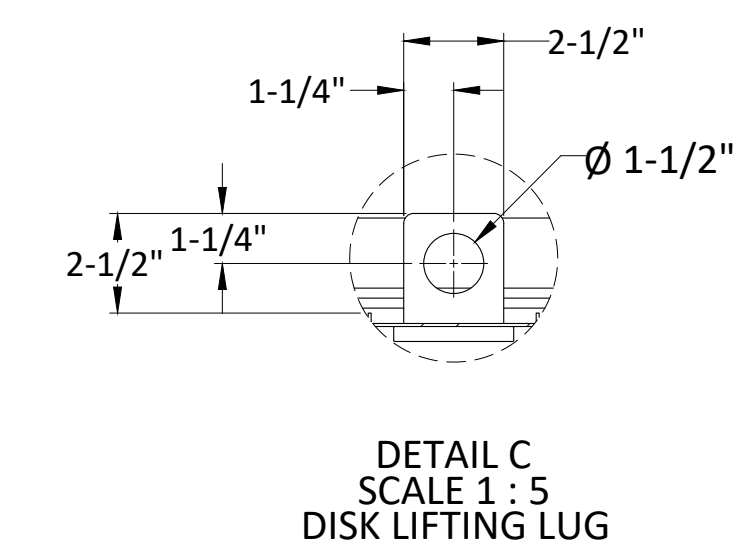
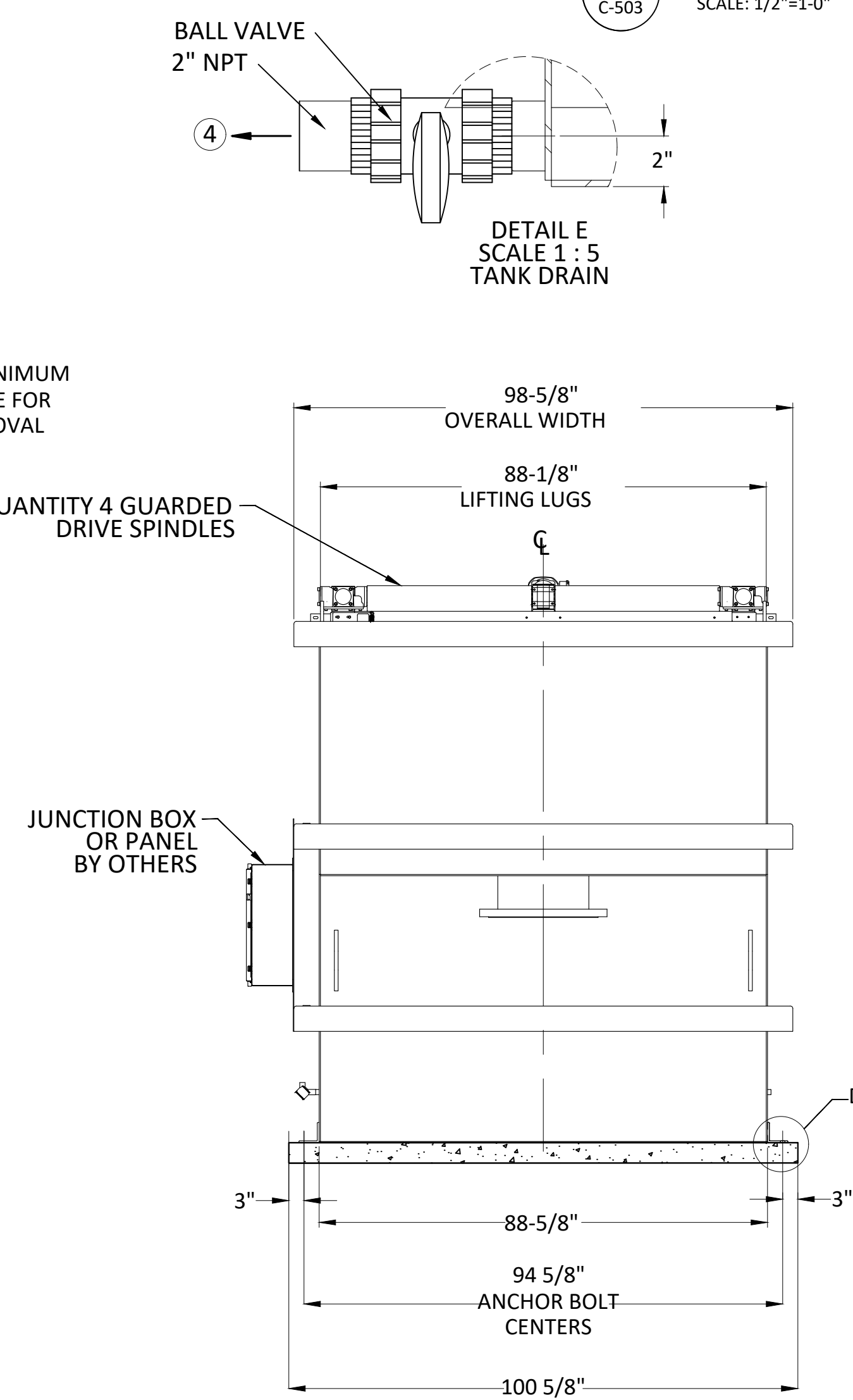
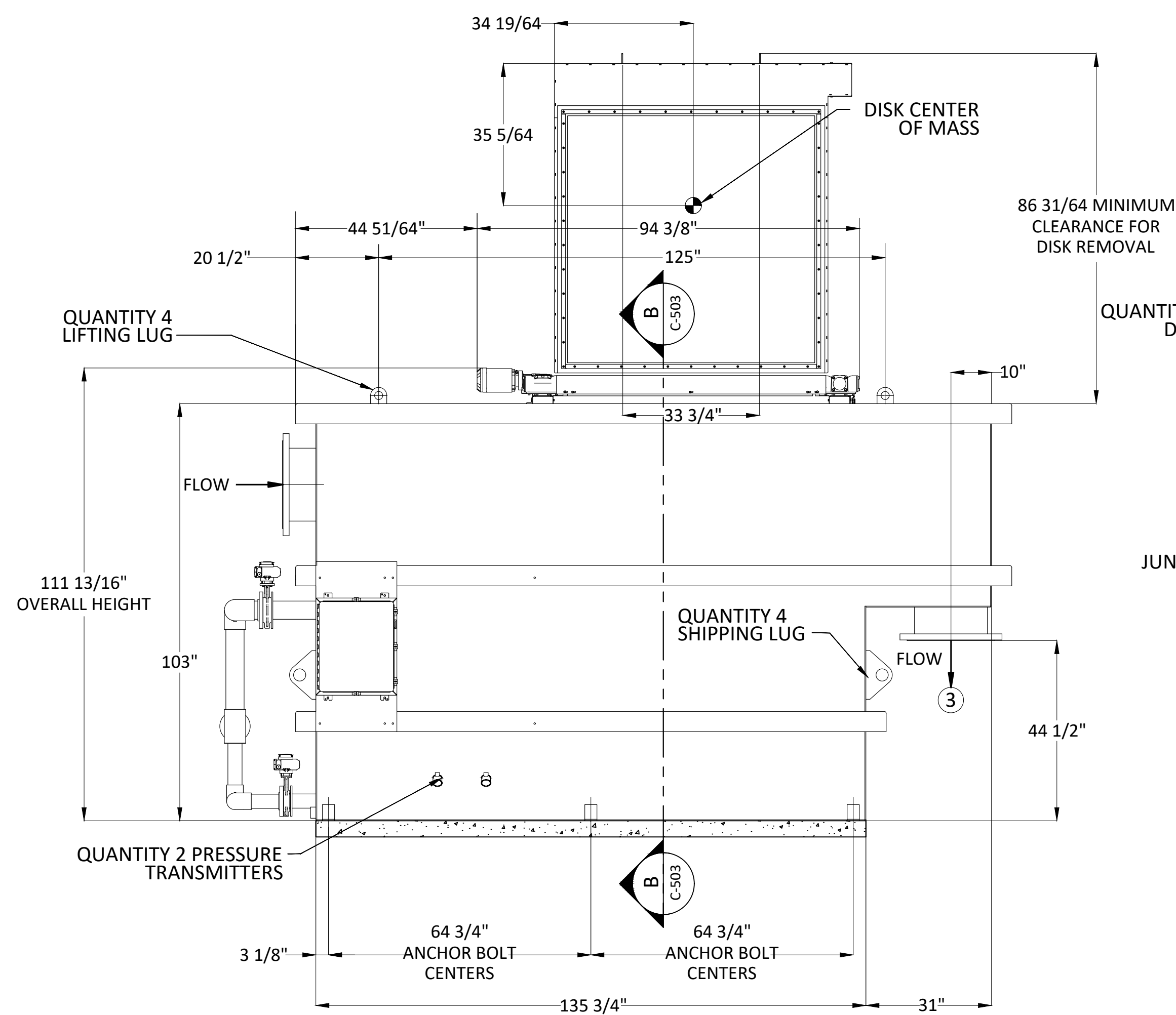
A

A

SUMP DETAILS



Connections			
Ref. No.	Port Description	Size	Type
1	Influent	18"	150#
2	Backwash\Sludge Withdrawl	4"/3"	150#
3	Effluent	18"	150#
4	Tank Drain	2" NB	NPT



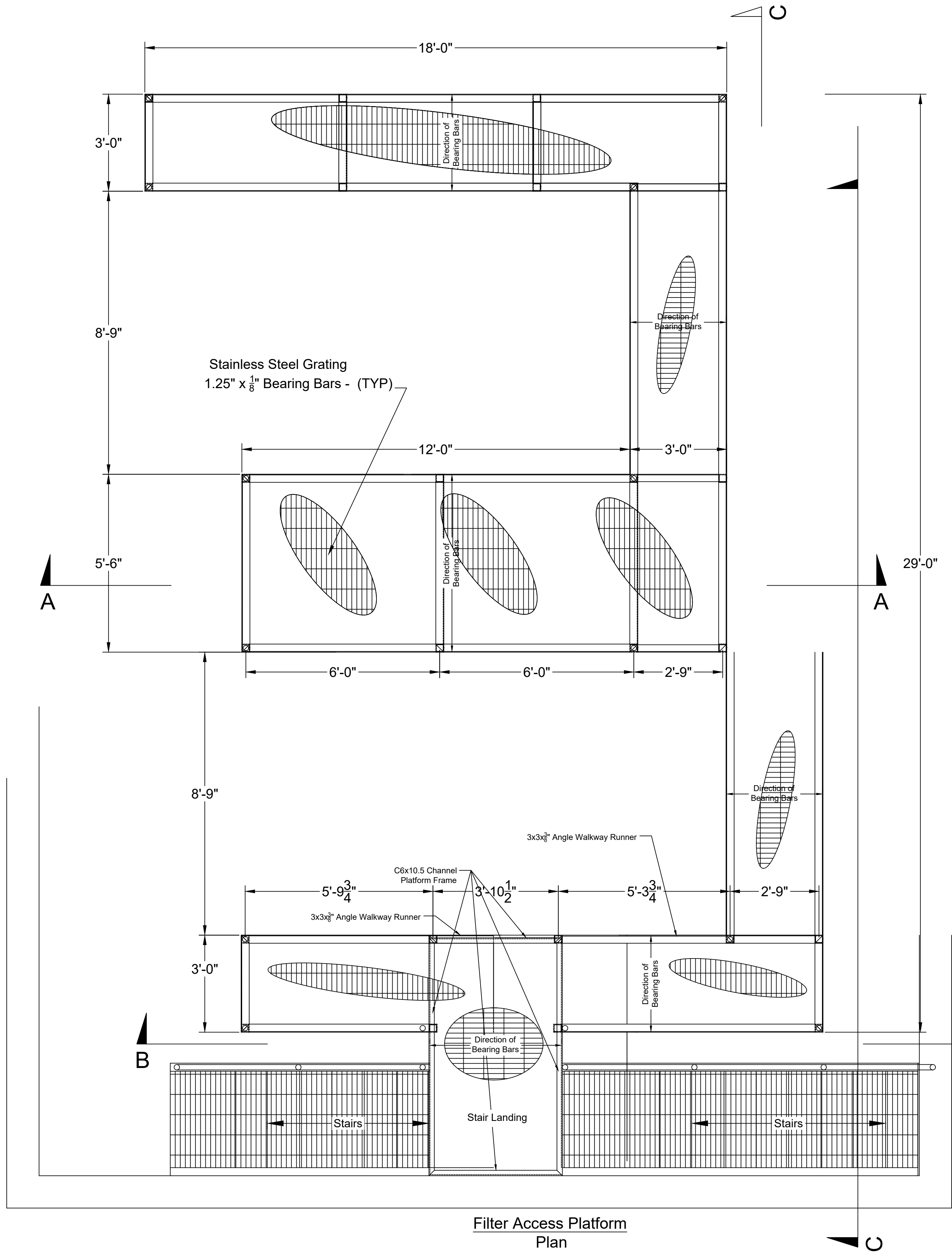
GS#323-024 ARPA INFR. - WASTE CENT.
TREATMENT
SOUTH MISSISSIPPI CORRECTIONAL INSTITUTION
LEAKESVILLE, MS.

Burle Proj. No.: 08194-1-0122
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Date: 04/29/2024
Scale: 1/2"=1'-0"
Drawn by: JRG
Checked: DTM
Revisions: 06/18/2024
ADDENDUM NO. 3.

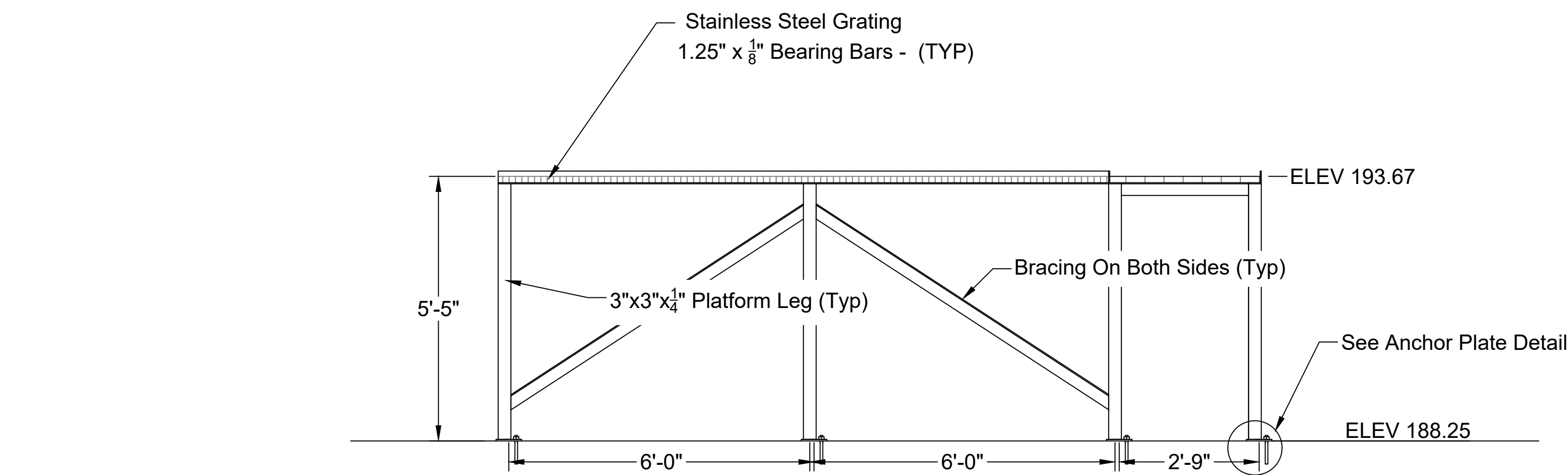
Revisions:

DETAILS - FILTERS

C-503
Drawing Number



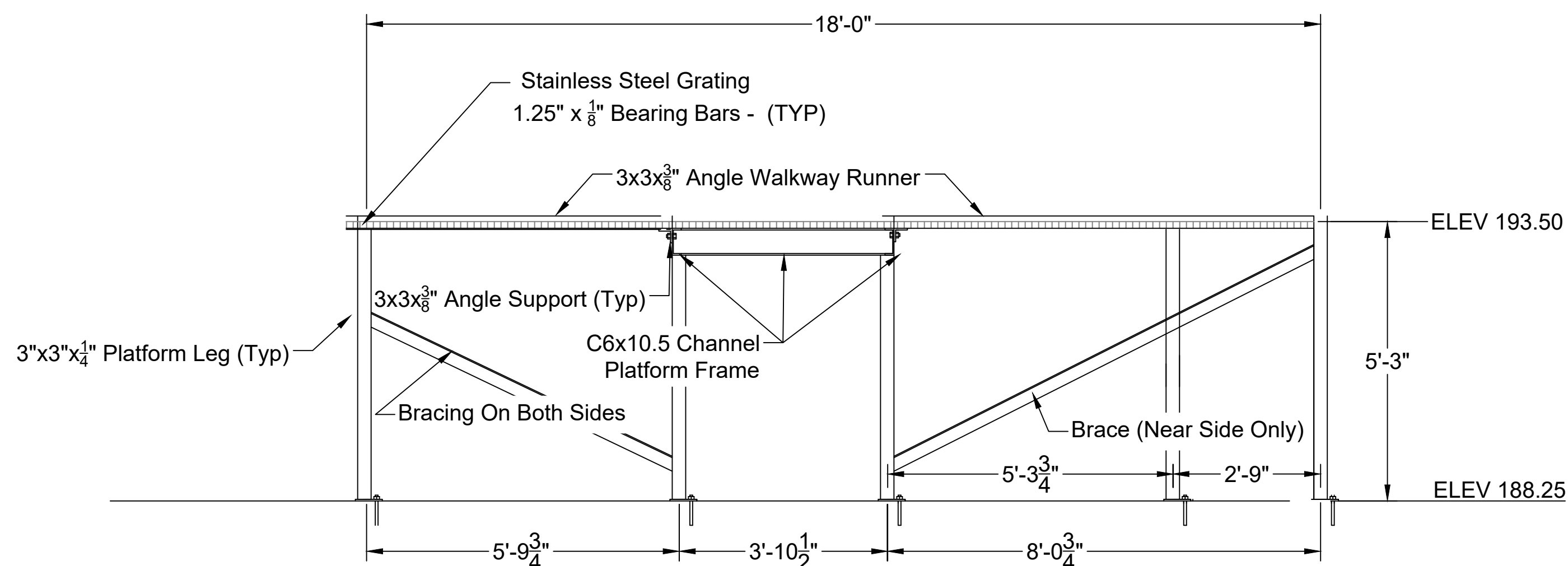
Filter Access Platform
Plan



Section A - A

Platform Runners and Bracing are 3"x3"x³/₈"
Stainless Steel Single Angles

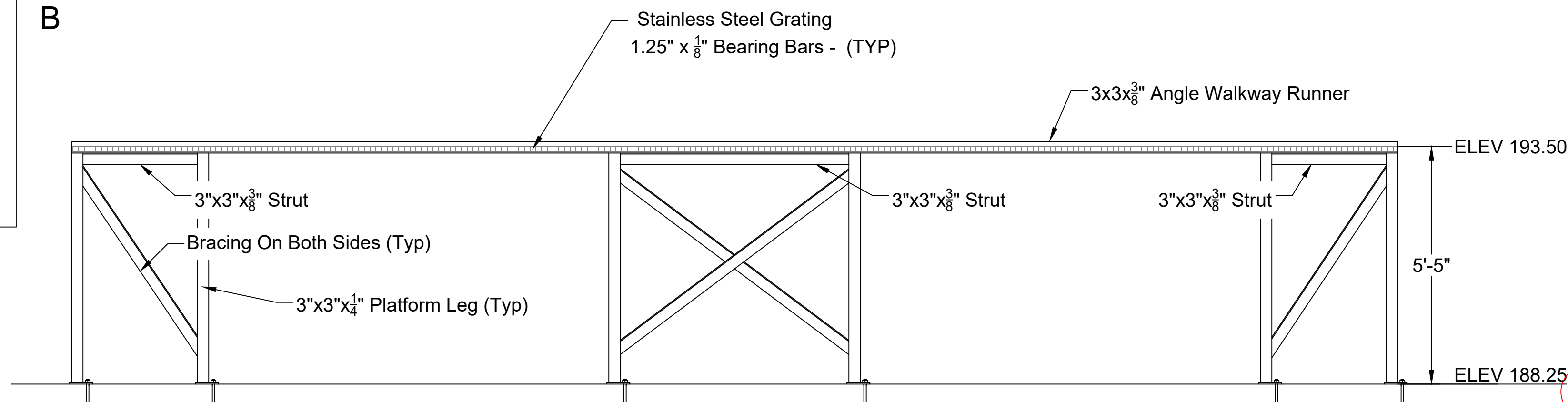
Platform Legs are 3"x3"x¹/₄" Stainless Steel
Square Tubing



Section B - B

Platform Runners and Bracing are 3"x3"x³/₈"
Stainless Steel Single Angles

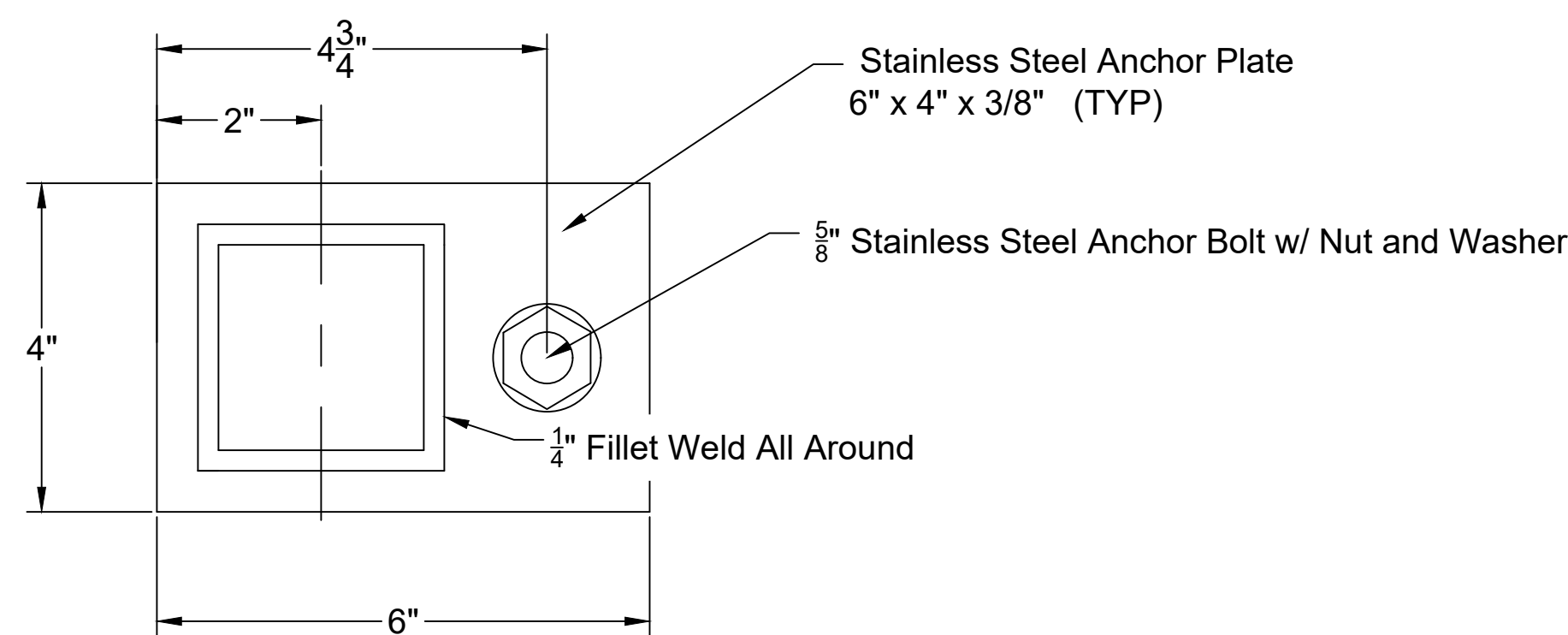
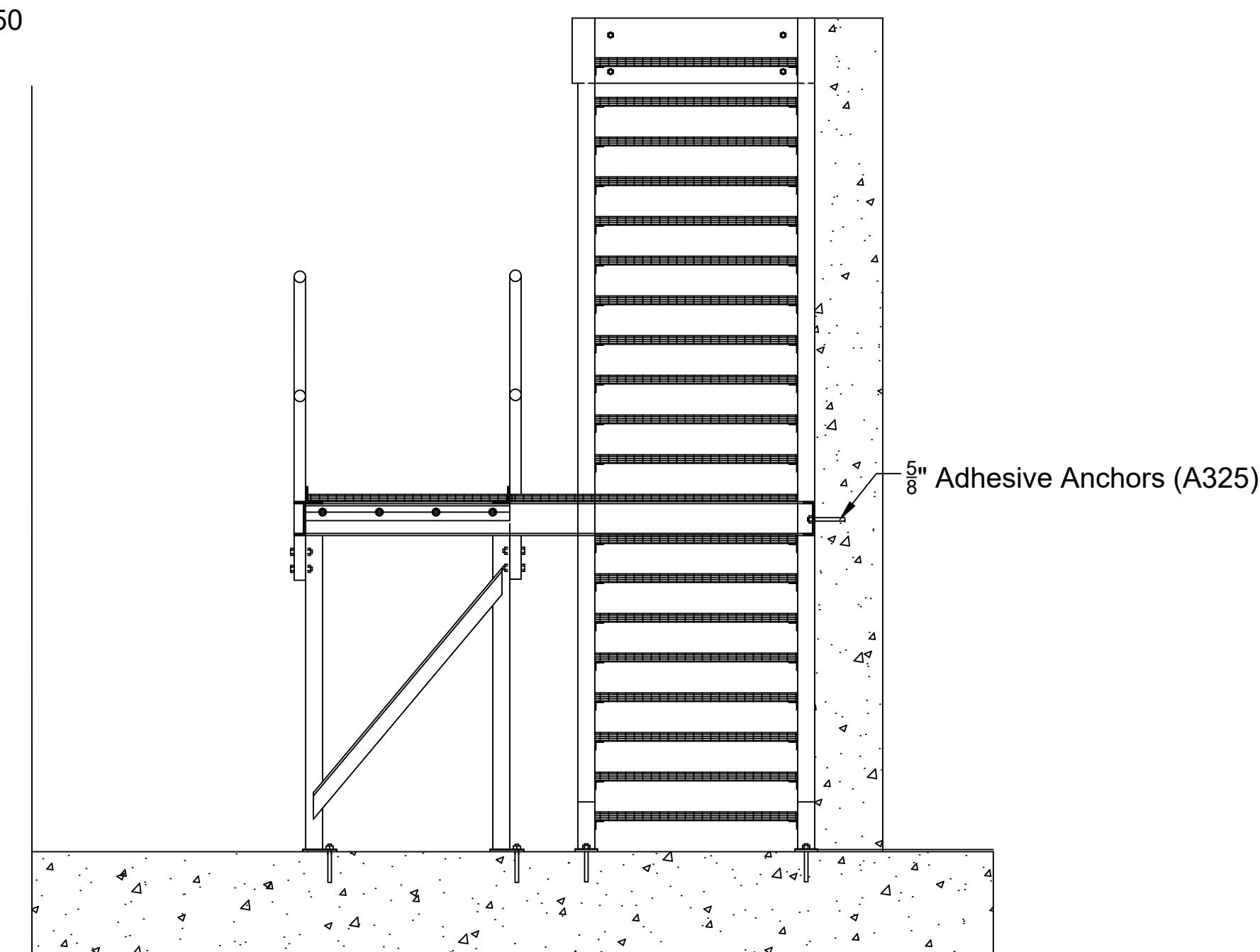
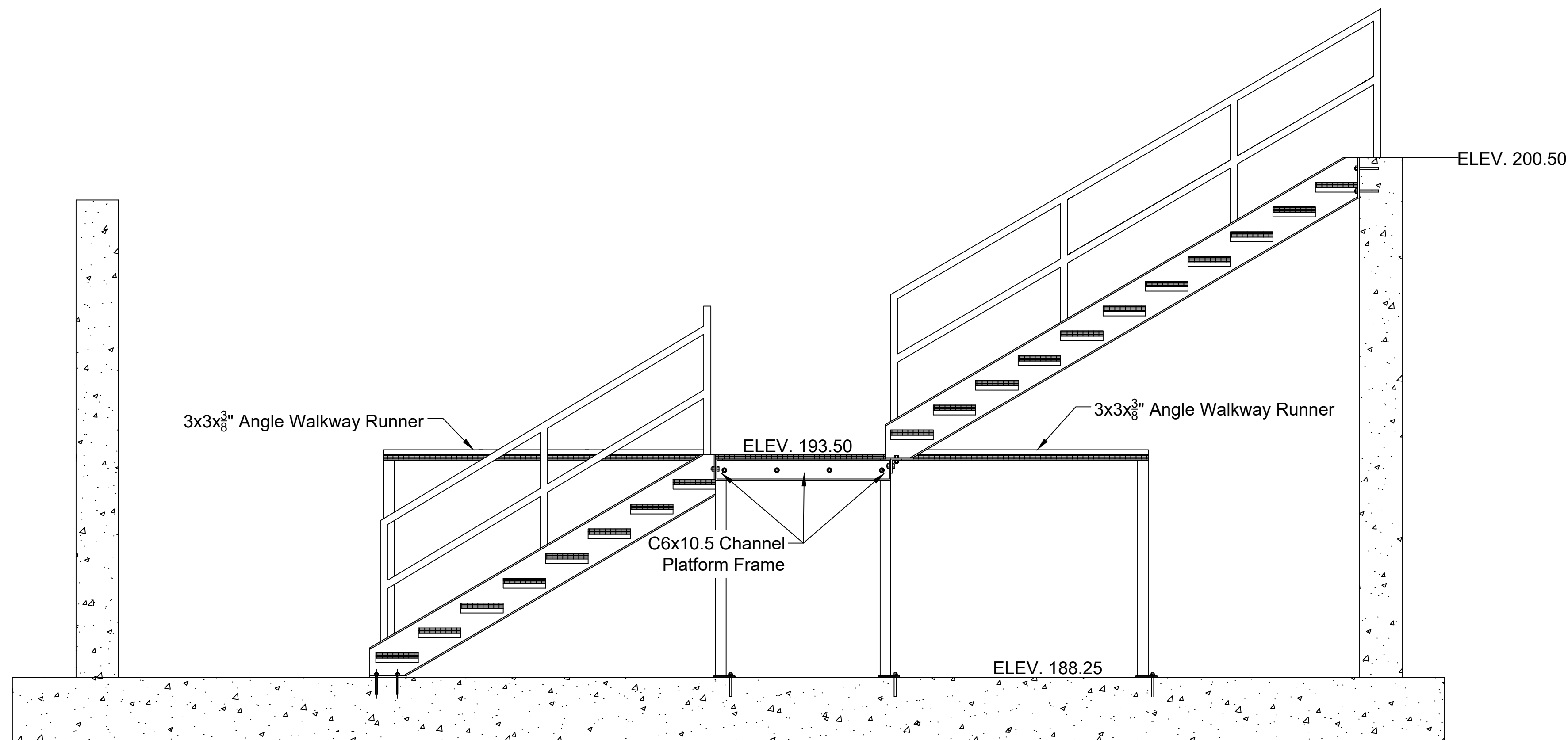
Platform Legs are 3"x3"x¹/₄" Stainless Steel
Square Tubing



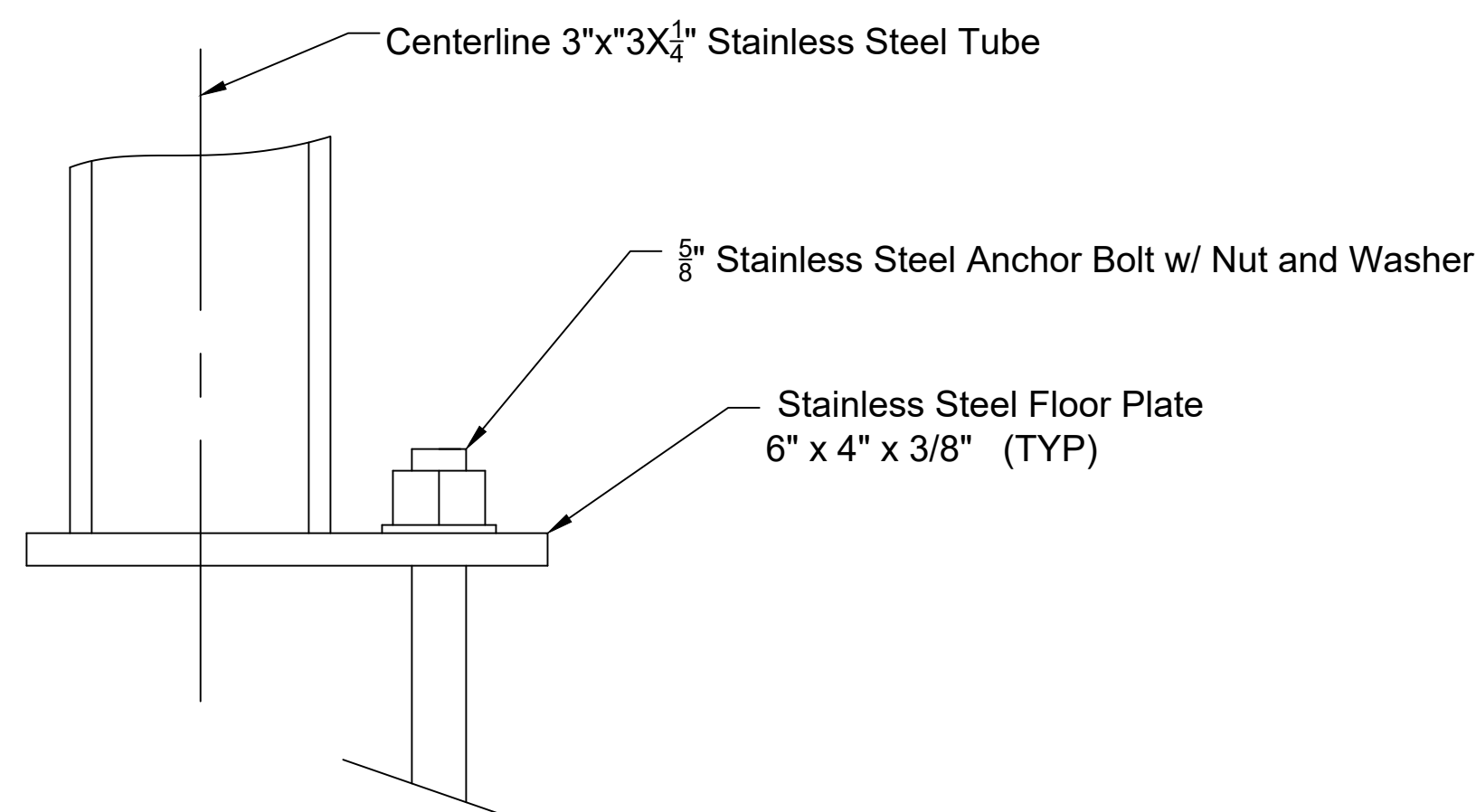
View C - C

Platform Runners and Bracing are 3"x3"x³/₈"
Stainless Steel Single Angles

Platform Legs are 3"x3"x¹/₄" Stainless Steel
Square Tubing

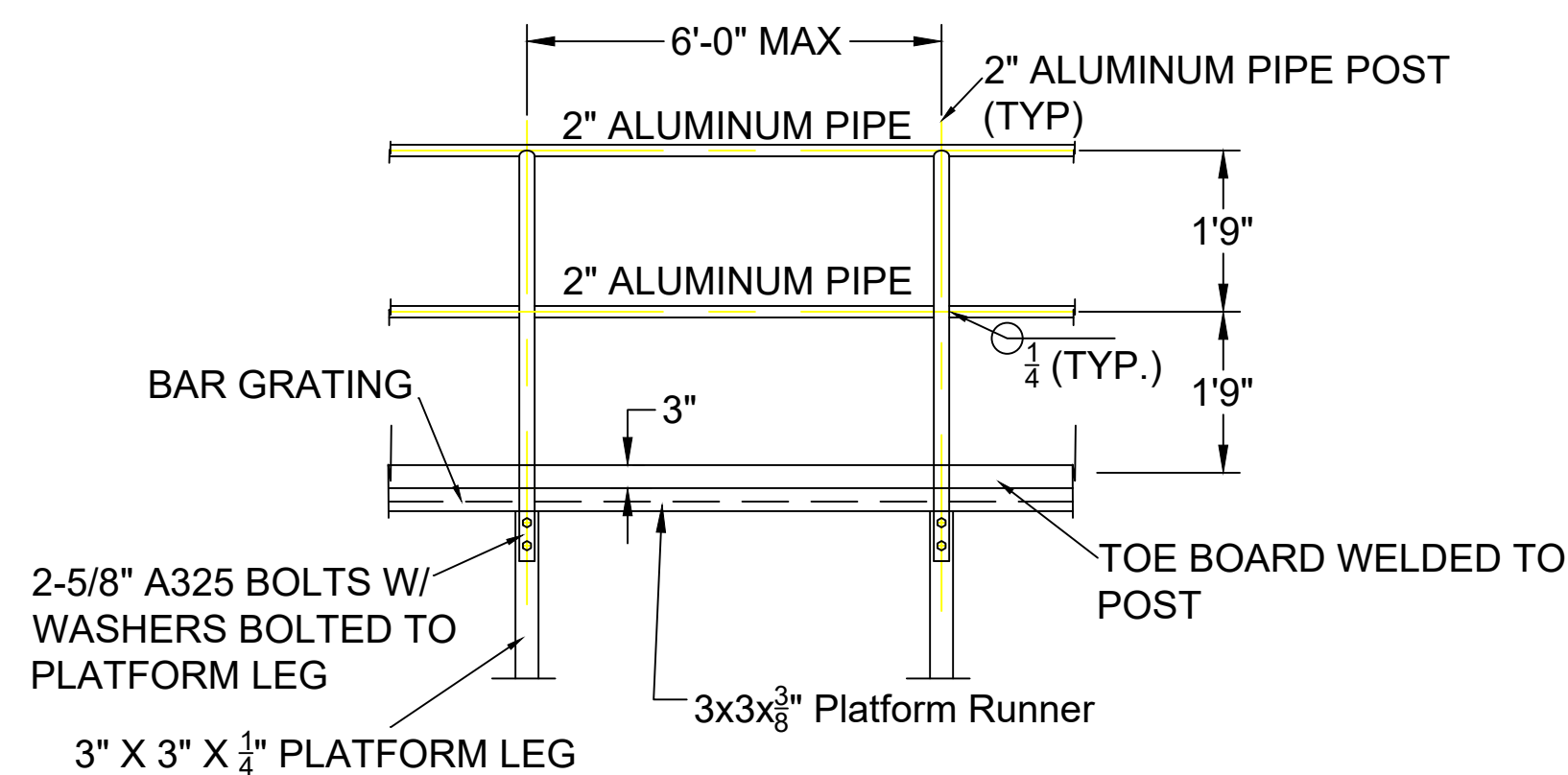


Anchor Plate
Plan



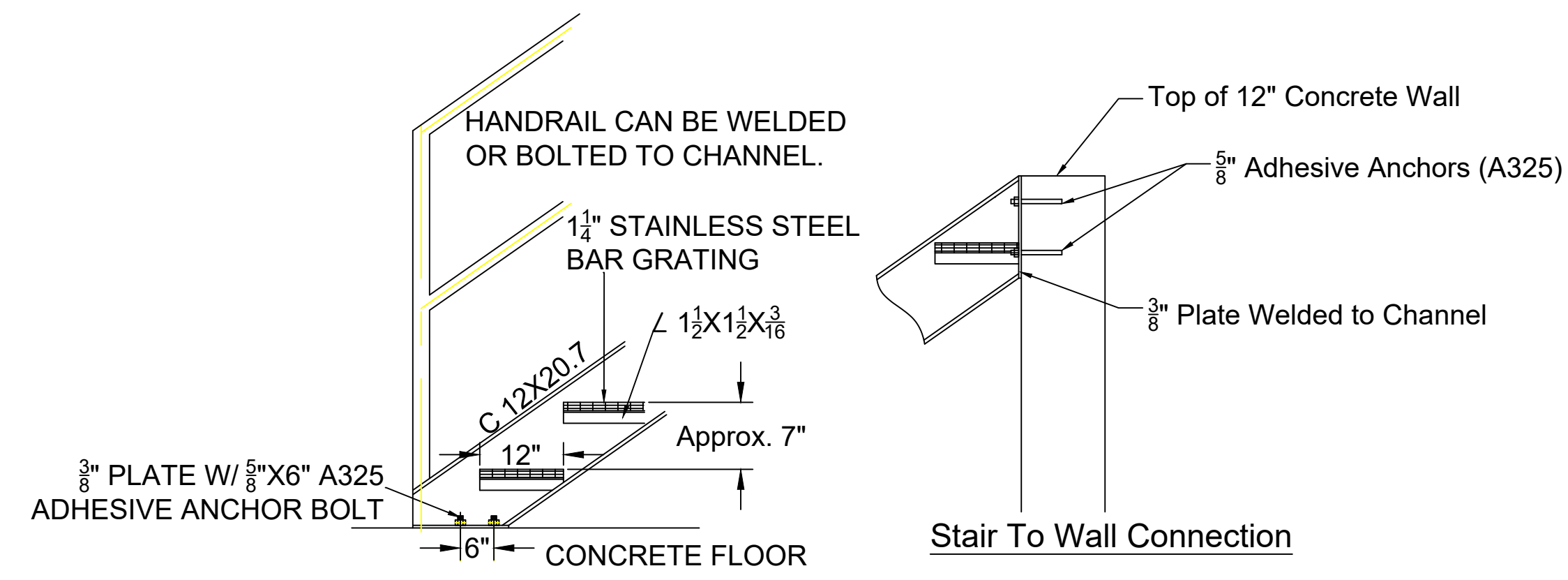
Section A - A

Anchor Plate Detail

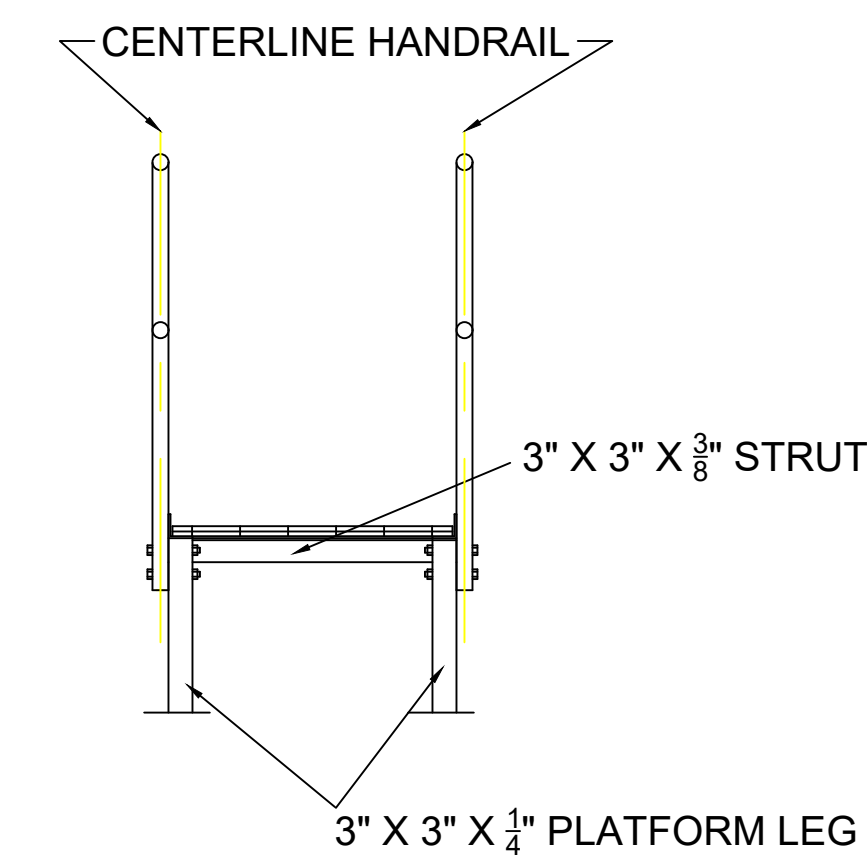


ALUMINUM HANDRAIL ELEVATION

ALUMINUM HANDRAIL DETAIL



Stair Detail



ALUMINUM HANDRAIL CROSS SECTION

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Burle Proj. No.:
08194-1-0122

File Name:
FILTER PIT PLATFORM.dwg

Date: 04/29/2024

Scale: 1"=2'

Drawn by: MC

Checked: DTM

Revisions:
06/18/2024
ADDENDUM NO. 3.

Revisions:

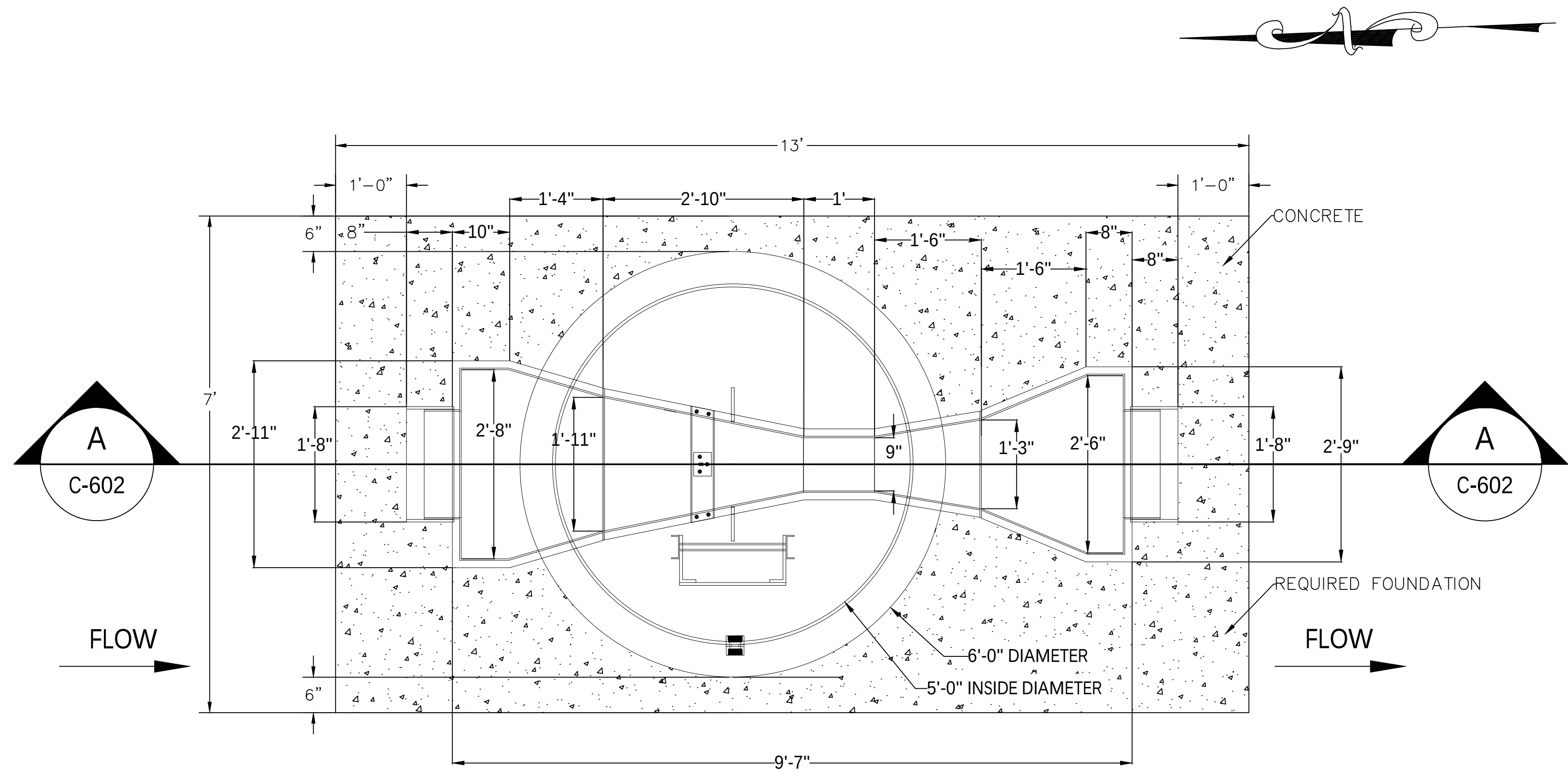
Revisions:

DETAILS - FILTER PIT STAIRS

C-505
Drawing Number

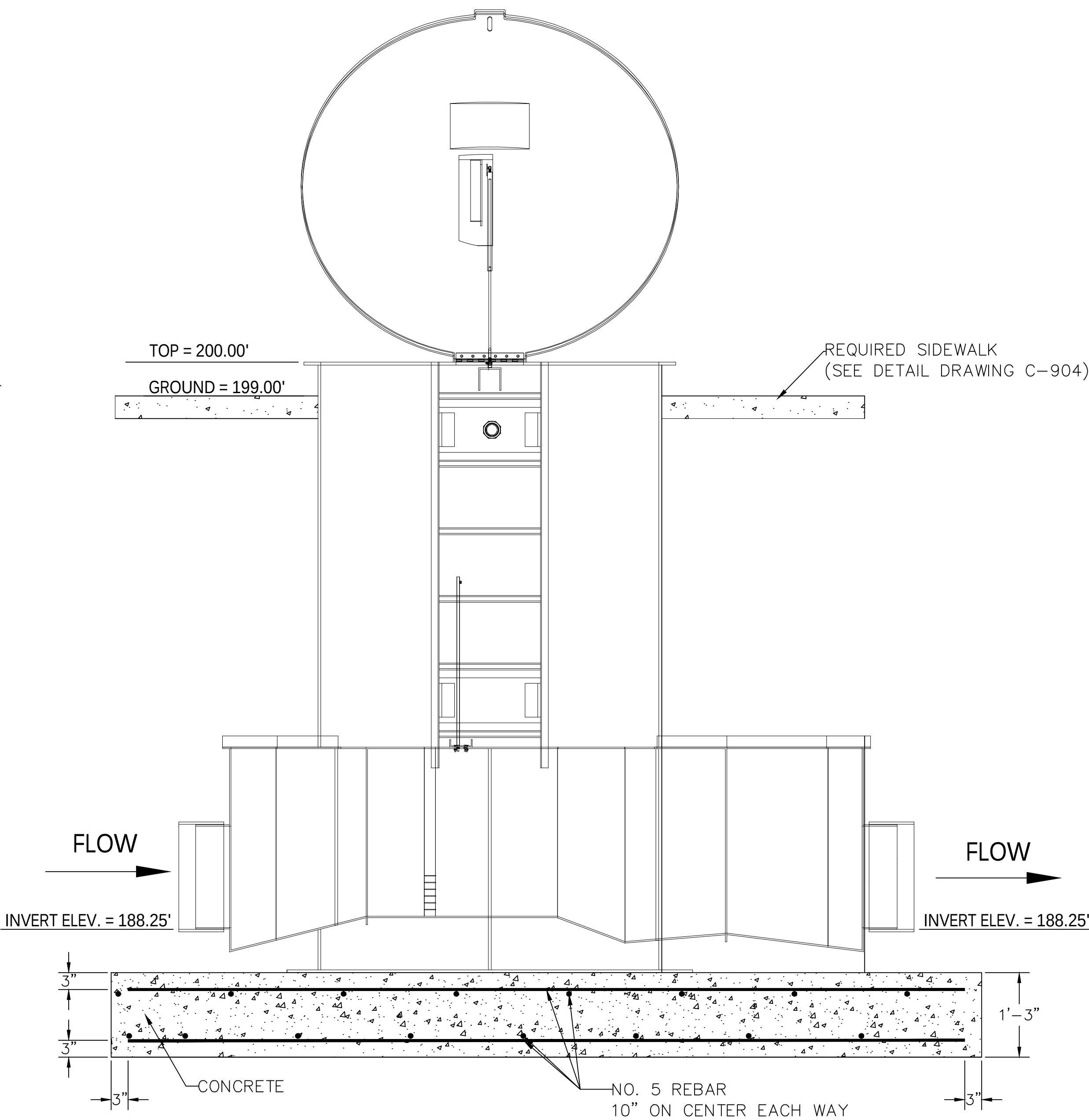
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ENGINEERS, P.A.
111 South Walnut Street
Greenville, MS 38701





NOTE: CONCRETE MAINTENANCE PAD NOT SHOWN FOR CLARITY (SEE DRAWING C-601)

PLAN VIEW - REQUIRED PARSHALL FLUME
NOT TO SCALE



SECTION - PARSHALL FLUME
NOT TO SCALE



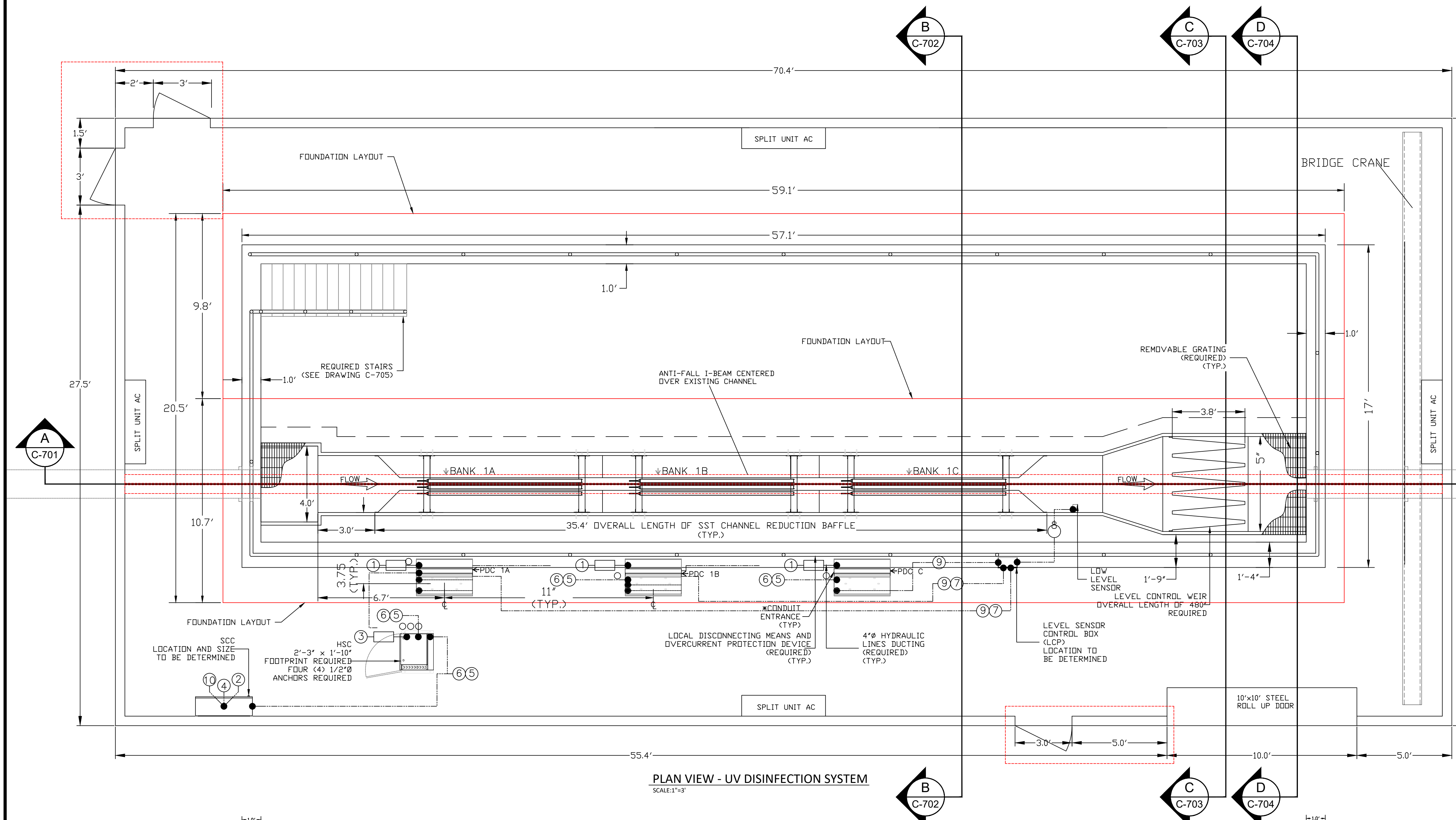
GS#323-024 ARPA INFR. - WASTE
CENT. TREATMENT
SOUTH MISSISSIPPI CORRECTIONAL INSTITUTION
LEAKESVILLE, MISSISSIPPI

Burle Proj. No.:
08194-1-0122
File Name:
C-602 PARSHALL FLUME.dwg
Date: 04/29/2024
Scale: 1"=30'
Drawn by: MJJ/JRG/AGG
Checked: DTM
Revisions:
06/18/2024
ADDENDUM NO. 3.

Revisions:

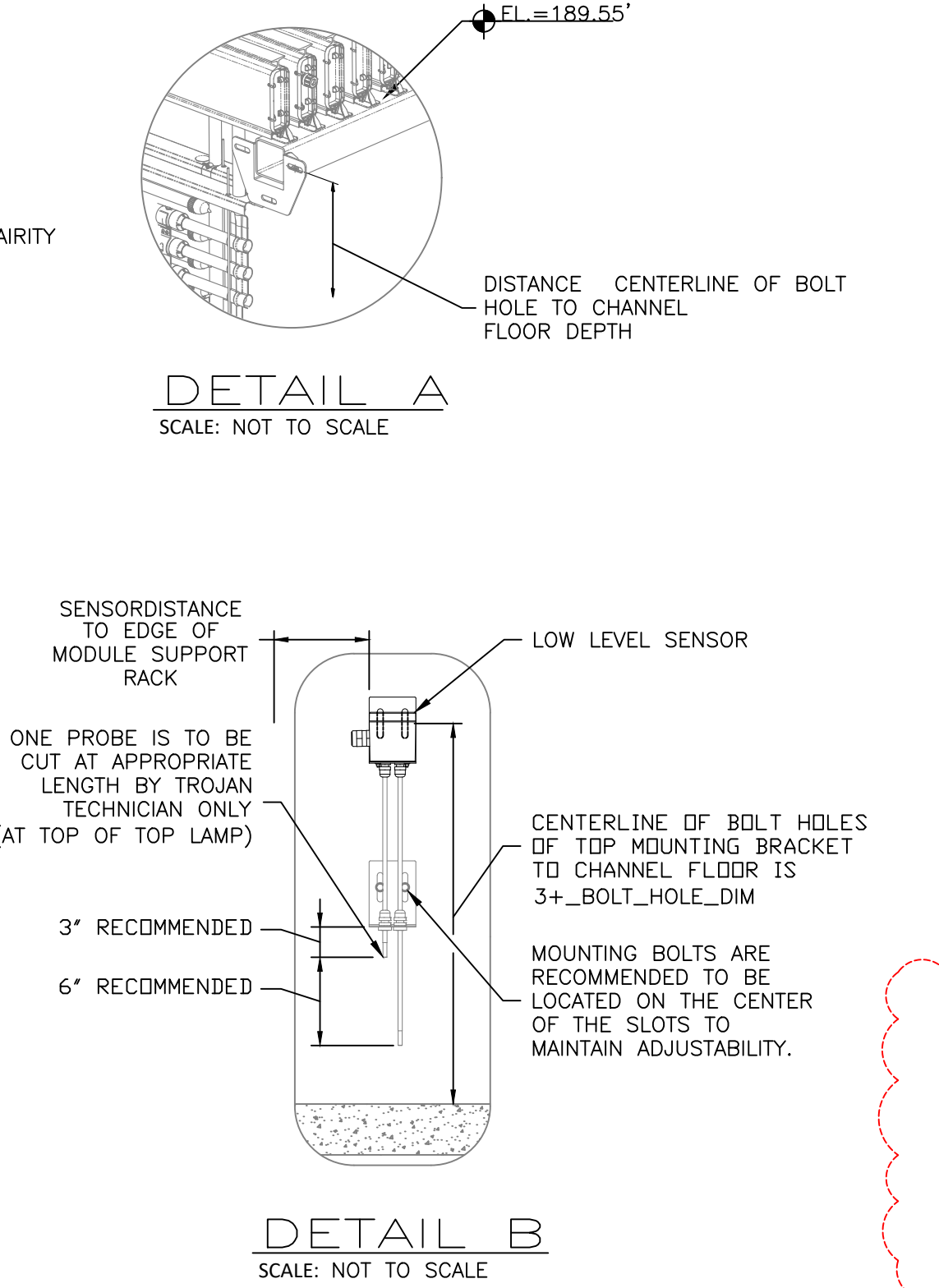
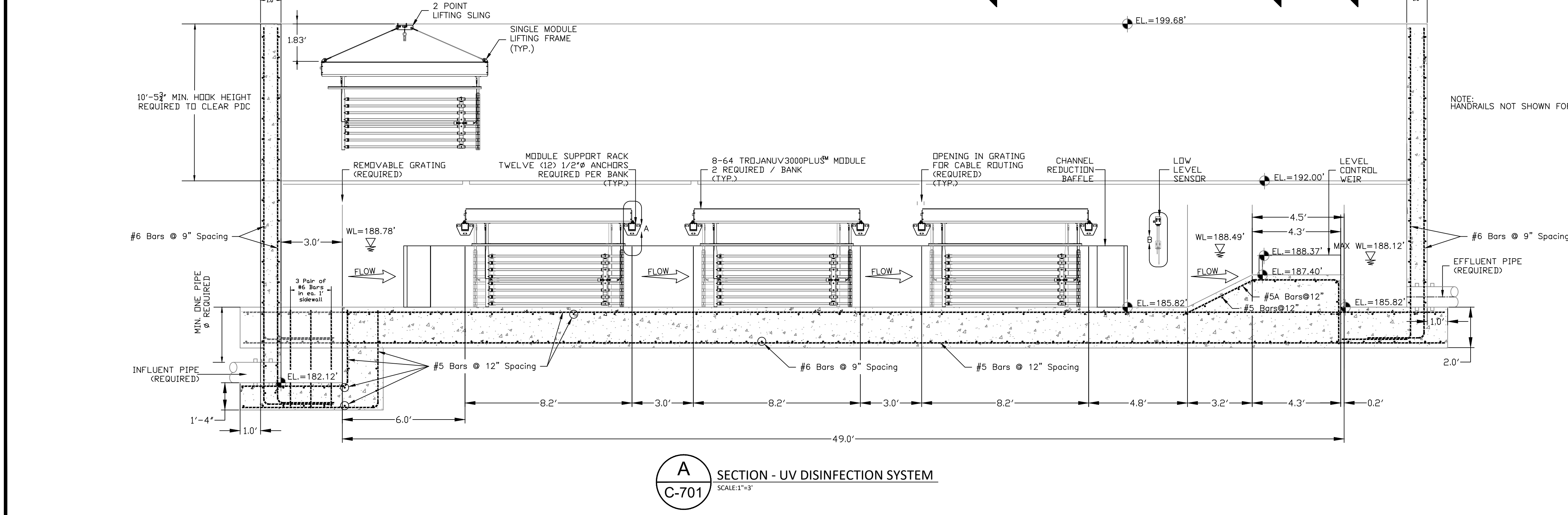
Revisions:

SECTION -
PARSHALL FLUME



No.	DESCRIPTION	FROM	TO
1	POWER DISTRIBUTION CENTER (PDC) POWER SUPPLY 480Y/277V, 3 PHASE, 4 WIRE + GROUND 4.1 kVA/PDC POWER DRAW 8 AMPS MAXIMUM CURRENT/PHASE	DISTRIBUTION PANEL (DP) (REQUIRED) (NOT SHOWN)	PDCs
2	SYSTEM CONTROL CENTER (SCC) POWER SUPPLY 120V, 1 PHASE, 2 WIRE + GROUND 1.44 kVA, 12 AMPS	DISTRIBUTION PANEL (DP) (REQUIRED) (NOT SHOWN)	SCC
3	HYDRAULIC SYSTEMS CENTER (HSC) POWER SUPPLY 480V, 3 PHASE, 3 WIRE + GROUND 2.5 kVA, 3 AMPS	DISTRIBUTION PANEL (DP) (REQUIRED) (NOT SHOWN)	HSC
4	FLOW METER 4-20 mA, DC ANALOG INPUT	FLOW METER PANEL (NOT SHOWN) (REQUIRED)	SCC
5	GROUND LINK 14 AWG TYPE TWH STRANDED	SCC	PDCs THRU HSC (DAISY CHAINED)
6	MODBUS 1 SHIELDED TWISTED PAIR	SCC	PDCs THRU HSC (DAISY CHAINED)
7	LEVEL CONTROL BOX (LCP) POWER SUPPLY 24 VDC - 2 CONDUCTORS	PDC 1A & 1B	LCP
X	DISCRETE LOW LEVEL SIGNAL 24 VDC - 2 CONDUCTORS	SOURCE	FROM
9	DISCRETE WATER LEVEL SIGNAL 24 VDC - 2 CONDUCTORS	LCP	PDCs
10	MODBUS ETHERNET (PLC) COMMUNICATION	SCC	PLANT SCADA (REQUIRED) (NOT SHOWN)

NOTES:
1. DO NOT SLOPE CHANNEL FLOOR.
2. CHANNEL WIDTH & DEPTH MUST BE KEPT WITHIN A TOLERANCE OF + OR - 1/4".
3. SYSTEM CONDUIT, WIRING, DISTRIBUTION PANELS & INTERCONNECTIONS REQUIRED.
4. CONDUIT RUN BETWEEN HSC AND PDC 1A & 1B IS 20' MAXIMUM. CONDUIT RUN BETWEEN HSC AND PDC 1C IS 45' MAXIMUM.
5. HSC HYDRAULIC ENTRANCES NOT BE MORE THAN 1'-0" BELOW PDC MOUNTING ELEVATION TO PREVENT HSC PUMP FLOODING.
6. POWER AND LOW VOLTAGE CONDUITS MUST ENTER LABELED LOCATION ON LEFT SIDE OF PDC.



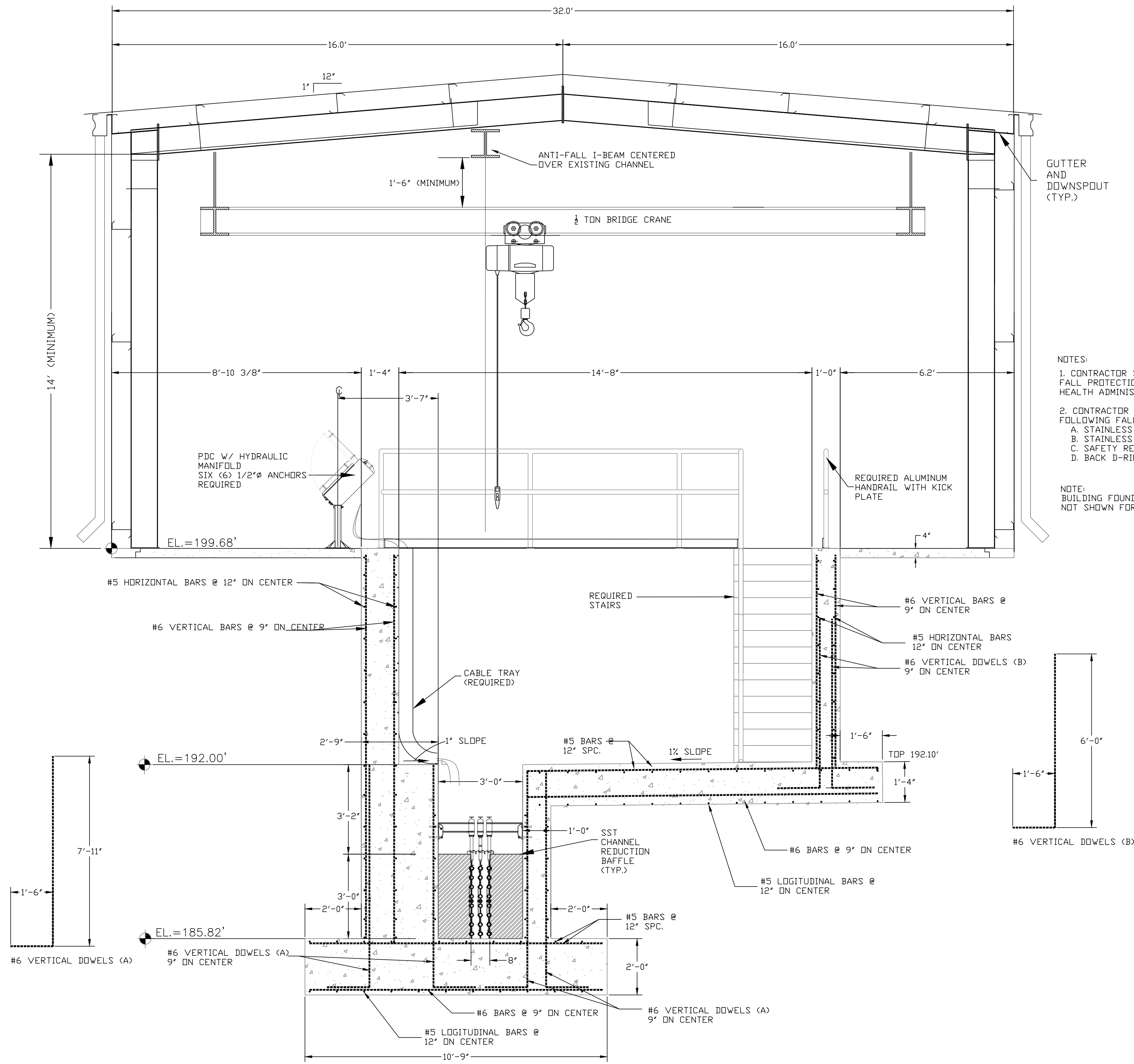
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GS#323-024 ARPA INFR. - WASTE
CENT. TREATMENT
SOUTH MISSISSIPPI CORRECTIONAL INSTITUTION
LEAKESVILLE, MISSISSIPPI

Burle Proj. No.:
08194-1-0122
File Name:
C-701 DISINFECTION SYSTEM.dwg
Date: 04/29/2024
Scale: AS SHOWN
Drawn by: MJJ/JRG/AGG
Checked: DTM
Revisions:
06/18/2024
ADDENDUM NO. 3.

Revisions:
Revisions:
PLAN VIEW - REQUIRED UV
DISINFECTION SYSTEM
C-701
Drawing Number



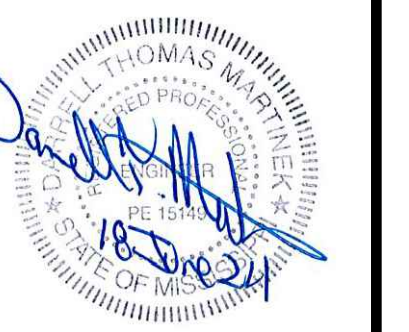
1. ENCLOSED METAL BUILDING SHALL BE PRE-ENGINEERED, METAL FRAMED STRUCTURE. PLANS AND SPECIFICATIONS BEARING PROFESSIONAL ENGINEER'S SEAL SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL. COLOR OF METAL BUILDING EXTERIOR SHEETS SHALL BE SELECTED BY THE OWNER.
2. ROLL UP STEEL DOORS SHALL BE RAYNOR DURACOIL MODEL FF DOORS WITH MANUAL OPENERS OR APPROVED EQUAL. COLOR OF DOORS SHALL BE SELECTED BY THE OWNER.
3. BRIDGE CRANE SHALL HAVE A 1/2 TON CAPACITY AND BE ELECTRICALLY OPERATED IN LIFTING DIRECTION WITH A LIFT SPEED OF 15 FEET PER MINUTE. THE AVAILABLE LIFT SHALL BE 20 FEET AND FEATURE AN UPPER LIMIT SWITCH. THE TROLLEY TYPE SHALL BE PUSH/PULL WITH RUBBER BUMPERS AND SAFETY LUGS. CRANE POWER SUPPLY SHALL BE 120 VOLT, SINGLE PHASE, 60 HERTZ. CROSS CONDUCTORS SHALL BE ROUND FESTOINED CABLE. BRIDGE CRANE AND SUPPORT SYSTEM SHALL BE CONNECTED TO METAL BUILDING STRUCTURAL MEMBERS. DESIGN OF BRIDGE CRANE AND SUPPORT SYSTEM BEARING PROFESSIONAL ENGINEER'S SEAL SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
4. FOOTINGS AND REINFORCEMENT SHOWN FOR INFORMATION ONLY, PLANS AND SPECIFICATIONS BEARING PROFESSIONAL ENGINEER'S SEAL TO BE SUBMITTED TO ENGINEER FOR APPROVAL BASED UPON AN ALLOWABLE SOIL BEARING PRESSURE OF 1,000 POUNDS PER SQUARE FEET.
5. SPLIT AIR CONDITIONING UNITS SHALL BE THREE (3) TON UNIT AS MANUFACTURED BY MITSUBISHI OR APPROVED EQUAL.

NOTES:

1. CONTRACTOR SHALL DESIGN AND PROVIDE OVERHEAD FALL PROTECTION THAT MEETS OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION STANDARDS
2. CONTRACTOR SHALL PROVIDE TWO (2) OF THE FOLLOWING FALL PROTECTION DEVICES:
 - A. STAINLESS STEEL ANTI-FALL STANCHION;
 - B. STAINLESS STEEL SELF RETRACTING LIFE LINE;
 - C. SAFETY RETRIEVAL STATIC LINE; AND
 - D. BACK D-RING HARNESS

NOTE:
BUILDING FOUNDATION
NOT SHOWN FOR CLARITY.

B SECTION - UV DISINFECTION SYSTEM
C-702 SCALE: 1"=2'



GS#323-024 ARPA INFR. - WASTE
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SOUTH MISSISSIPPI CORRECTIONAL INSTITUTION
LEAKESVILLE, MISSISSIPPI

Burle Proj. No.:
08194-1-0122

File Name:
C-701 DISINFECTION SYSTEM.dwg

Date: 04/29/2024

Scale: AS SHOWN

Drawn by: MJJ/JRG/AGG

Checked: DTM

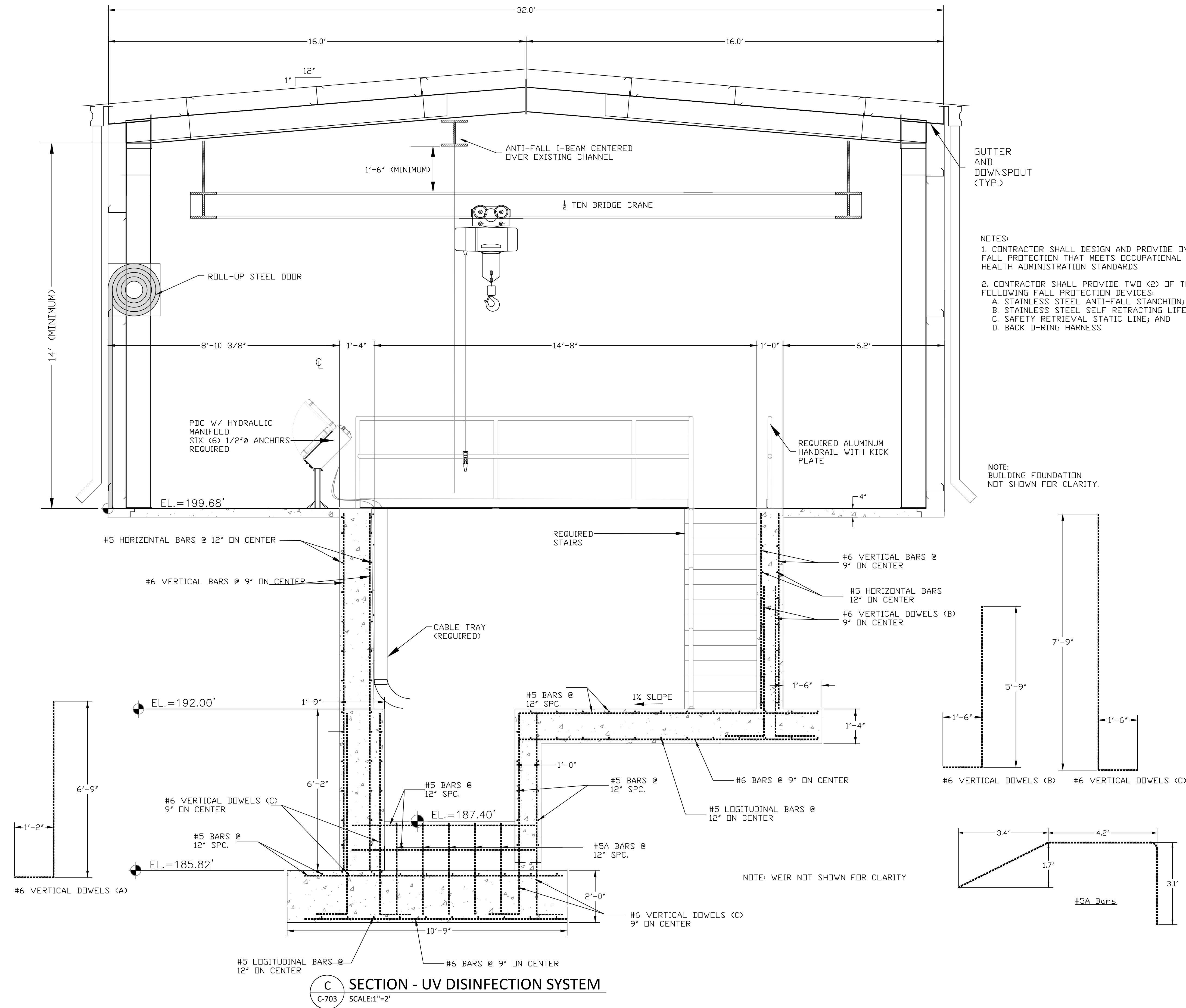
Revisions:
06/18/2024
ADDENDUM NO. 3.

Revisions:

Revisions:

SECTION - UV DISINFECTION
SYSTEM

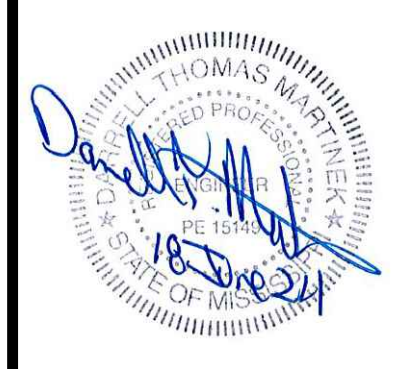
C-702
Drawing Number



GUTTER
AND
DOWNSPOUT
(TYP.)

- NOTES:
1. CONTRACTOR SHALL DESIGN AND PROVIDE OVERHEAD FALL PROTECTION THAT MEETS OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION STANDARDS
 2. CONTRACTOR SHALL PROVIDE TWO (2) OF THE FOLLOWING FALL PROTECTION DEVICES:
A. STAINLESS STEEL ANTI-FALL STANCHION;
B. STAINLESS STEEL SELF RETRACTING LIFE LINE;
C. SAFETY RETRIEVAL STATIC LINE; AND
D. BACK D-RING HARNESS

NOTE:
BUILDING FOUNDATION
NOT SHOWN FOR CLARITY.



GS#323-024 ARPA INFR. - WASTE
CENT. TREATMENT
SOUTH MISSISSIPPI CORRECTIONAL INSTITUTION
LEAKESVILLE, MISSISSIPPI

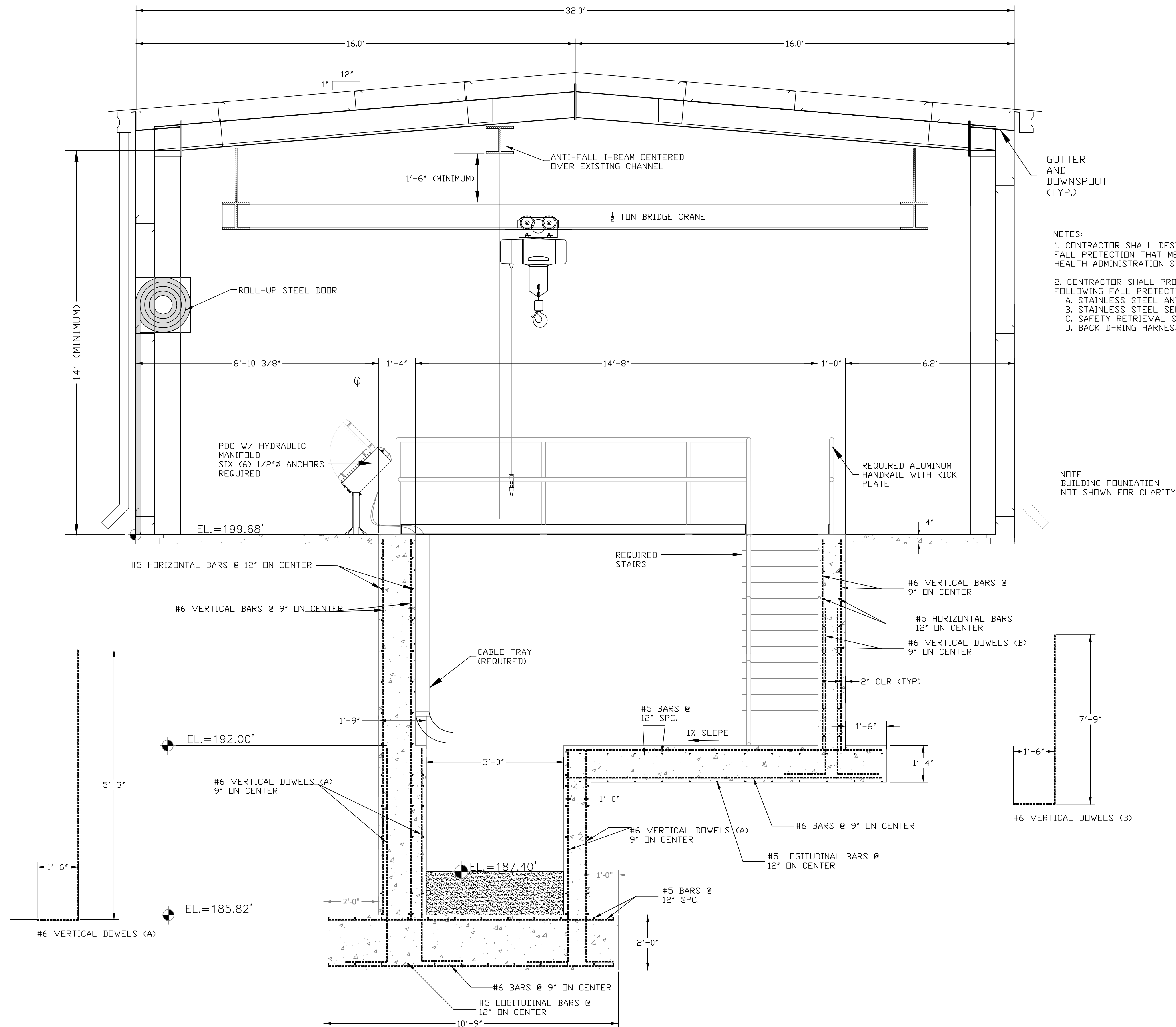
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Revisions:	06/18/2024 ADDENDUM NO. 3.

Revisions:

Revisions:

SECTION - UV DISINFECTION
SYSTEM

C-703
Drawing Number

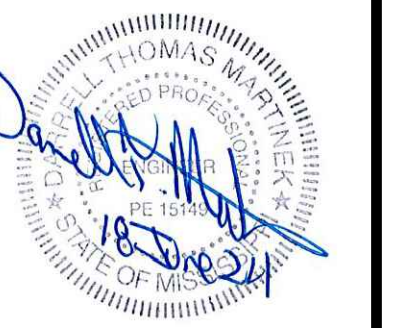


GUTTER
AND
DOWNSPOUT
(TYP.)

- NOTES:
1. CONTRACTOR SHALL DESIGN AND PROVIDE OVERHEAD FALL PROTECTION THAT MEETS OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION STANDARDS
 2. CONTRACTOR SHALL PROVIDE TWO (2) OF THE FOLLOWING FALL PROTECTION DEVICES:
 - A. STAINLESS STEEL ANTI-FALL STANCHION;
 - B. STAINLESS STEEL SELF RETRACTING LIFE LINE;
 - C. SAFETY RETRIEVAL STATIC LINE; AND
 - D. BACK D-RING HARNESS

NOTE:
BUILDING FOUNDATION
NOT SHOWN FOR CLARITY.

D SECTION - UV DISINFECTION SYSTEM
C-704 SCALE:1"=2'



GS#323-024 ARPA INFR. - WASTE
CENT. TREATMENT
SOUTH MISSISSIPPI CORRECTIONAL INSTITUTION
LEAKESVILLE, MISSISSIPPI

Burle Proj. No.:
08194-1-0122

File Name:
C-701 DISINFECTION SYSTEM.dwg

Date: 04/29/2024

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Drawn by: MJJ/JRG/AGG

Checked: DTM

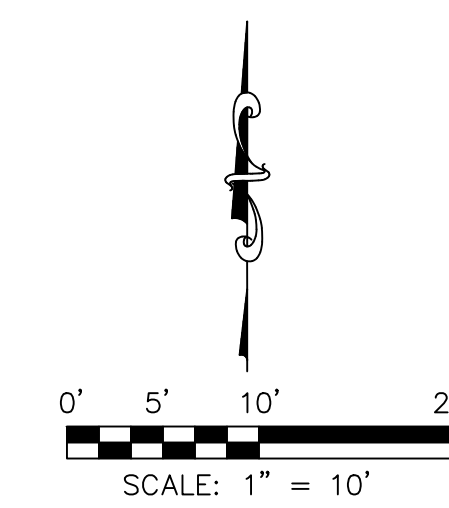
Revisions:
06/18/2024
ADDENDUM NO. 3.

Revisions:

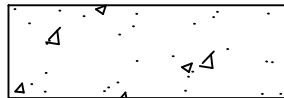
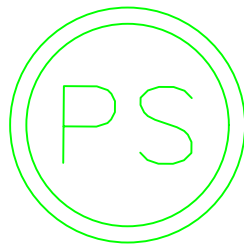
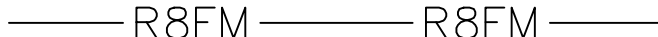
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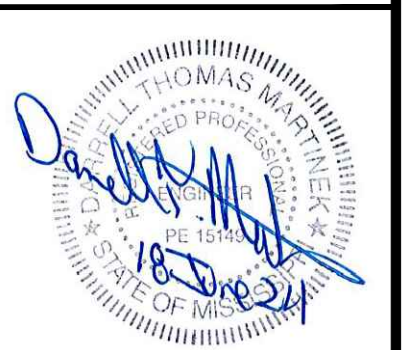
SECTION - UV DISINFECTION
SYSTEM

C-704
Drawing Number



LEGEND:

---	200	---	EXISTING MAJOR CONTOURS (FEET)
- - - - -	201	- - - - -	EXISTING MINOR CONTOURS (FEET)
=====	200	=====	REQUIRED MAJOR CONTOURS (FEET)
=====	201	=====	REQUIRED MINOR CONTOURS (FEET)
			
REQUIRED CONCRETE (SEE DETAIL DRAWING C-904)			
			
REQUIRED EFFLUENT PUMP STATION (SEE DETAIL DRAWING C-802)			
			
REQUIRED CONTROL BOX (SEE DETAIL DRAWING E-801)			
			
REQUIRED 8" FORCE MAIN			
			
REQUIRED 18" GRAVITY SEWER LINE			



GS#323-024 ARPA INFR. - WASTE CENT.
TREATMENT
SOUTH MISSISSIPPI CORRECTIONAL INSTITUTION
LEAKESVILLE, MS.

Burle Proj. No.:
08194-1-0122

File Name:
C-801 PLAN VIEW - EFFLUENT
PUMP STATION.DWG

Date: 04/29/2024

Scale: SHOWN

Drawn by:	JRG
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Checked:	DTM
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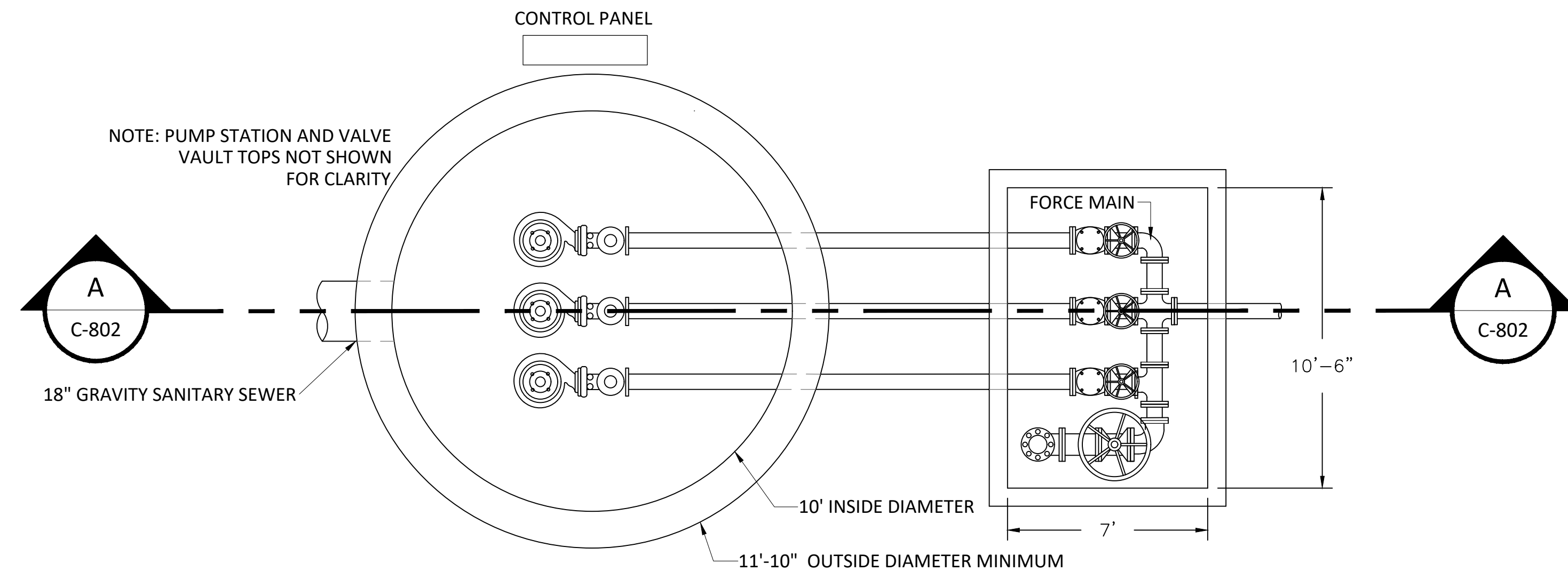
Revisions:	
06/18/2024	ADDENDUM 3

Revisions:

Revisions:

PLAN VIEW - REQUIRED
EFFLUENT PUMP
STATION

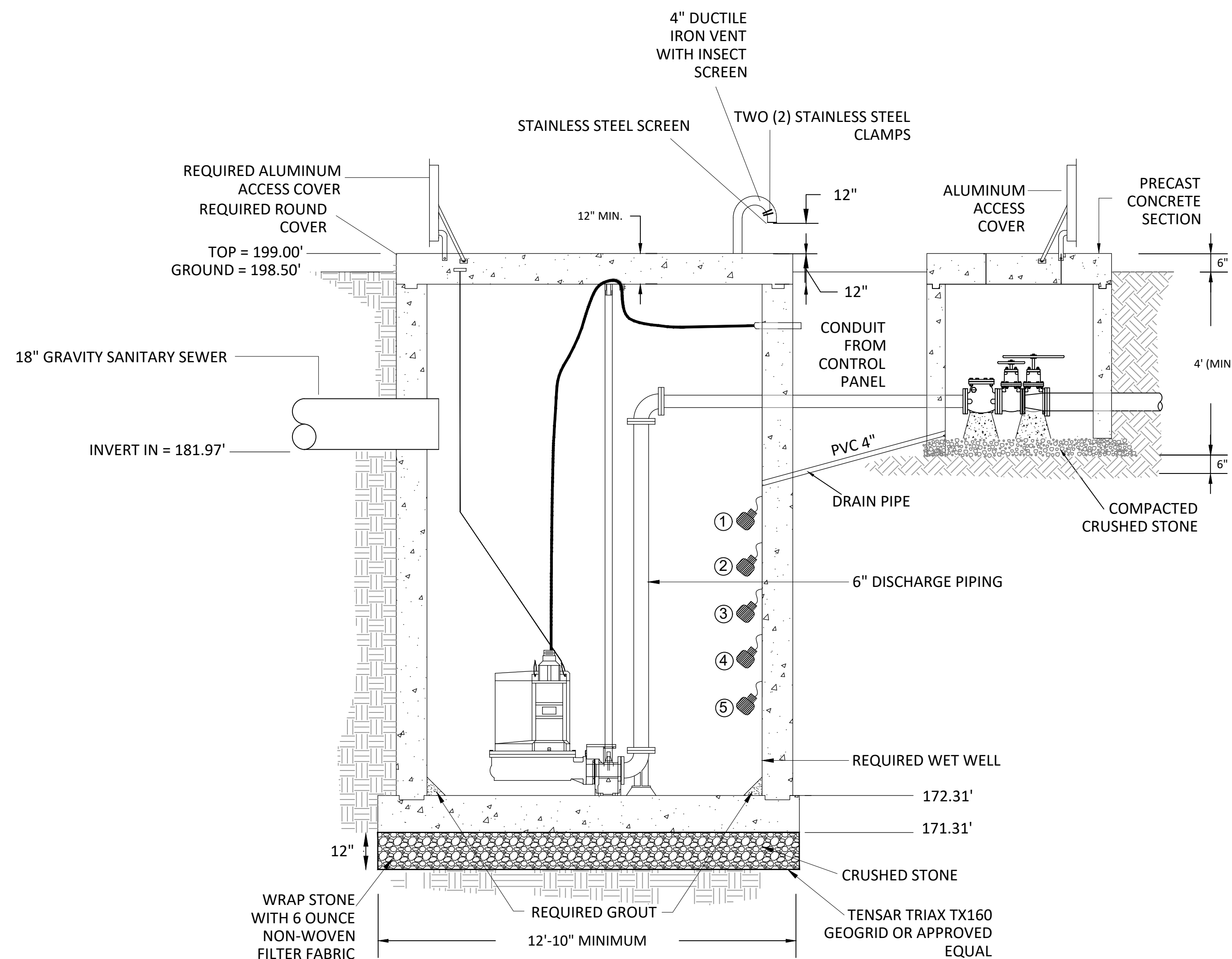
C-801
Drawing Number



PLAN VIEW - REQUIRED EFFLUENT PUMP STATION

NOT TO SCALE

- NOTES:
1. STANDARD PRECAST CONCRETE SECTIONS SHALL COMPLY WITH ASTM C478.
 2. ALL PRECAST CONCRETE SECTIONS SHALL BE COATED WITH A MINIMUM OF 20 MIL THICKNESS COAL TAR EPOXY INSIDE AND OUTSIDE.
 3. ALL JOINTS SHALL BE COATED INSIDE AND OUTSIDE. JOINT MATERIAL SHALL BE PREFORMED FLEXIBLE MASTIC AND SHALL COMPLY WITH ASTM C990.
 4. ALL PIPE ENTERING WETWELLS SHALL BE FITTED WITH WATERSTOP, SEE DETAIL DRAWING C-901.



SECTION-REQUIRED EFFLUENT PUMP STATION

NOT TO SCALE

PUMP STATION CONDITIONS				
QUANTITY	H.P.	G.P.M.	T.D.H.	VOLTAGE
3	60	1,100	107	460(3 PH.)

FLOAT SETTING TABLE	
ALARM NAME	ELEVATION
① HIGH LEVEL ALARM	181.47'
② LAG PUMP 2 ON	180.97'
③ LAG PUMP 1 ON	180.47'
④ LEAD PUMP ON	179.97'
⑤ PUMP OFF	176.23'

1. REFER TO SHEET E-202 FOR SCADA SYSTEM PLAN.
2. REFER TO SHEETS E-301, E-401, E-501, E-701, & E-801 FOR ENLARGED PLANS.
3. REFER TO SHEET E-501 FOR DUCTBANK AND ELECTRICAL DETAILS.
4. REFER TO SHEET E-203 & E-303 FOR POWER RISER DIAGRAMS.
5. REFER TO SPECIFICATIONS FOR CONDUIT AND CONDUCTOR REQUIREMENTS.

- 1 REMOVE EXISTING AERATOR CONTROL PANEL INCLUDING FEEDER CONDUCTORS BACK TO SOURCE. CUT, CAP BELOW GRADE, AND ABANDON CONDUIT IN PLACE AT CONTROL PANEL AND AT SOURCE.
- 2 RELOCATE AERATORS FROM EXISTING LOCATION TO PROPOSED LOCATION AS INDICATED. PROVIDE NEW CONTROL PANEL "CP-AER" AT LOCATION INDICATED. PROVIDE FEEDERS AND SHORE MOUNTED DISCONNECTS PER EQUIPMENT SCHEDULE.
- 3 REMOVE EXISTING SERVICE CONDUCTORS ONCE NEW SERVICE IS INSTALLED AND NEW FEEDER TO EXISTING PANEL "DPA" IS INSTALLED. CUT, CAP BELOW GRADE, AND ABANDON CONDUIT IN PLACE AT EXISTING PANEL "DPA" AND AT EXISTING POWER COMPANY TRANSFORMER SERVICE POLE. COORDINATE POWER OUTAGES FOR TRANSFER TO NEW SERVICE WITH OWNER'S REPRESENTATIVES AND THE POWER COMPANY.
- 4 REMOVE EXISTING AUTOMATIC TRANSFER SWITCH "ATS-DPA". REMOVE EXISTING FEEDER AND CONTROL CONDUCTORS FROM "ATS-DPA" TO EXISTING GENERATOR. CUT, CAP BELOW GRADE, AND ABANDON CONDUIT IN PLACE AT "ATS-DPA" AND AT EXISTING GENERATOR.
- 5 REMOVE EXISTING GENERATOR. MODIFY AND EXTEND PAD TO RECEIVE NEW GENERATOR "A", FEEDER, CONTROL CONDUITS, AND BLOCK HEATER & BATTERY CHARGER BRANCH CIRCUITS. REFER TO SHEET E-304 FOR TYPICAL GENERATOR PAD FOUNDATION REQUIREMENTS.
- 6 COORDINATE RISER CONDUITS AND CONDUCTOR REQUIREMENTS WITH POWER COMPANY PRIOR TO ROUGH-IN. VERIFY LOCATION OF TRANSFORMER SERVICE POLE WITH POWER COMPANY.
- 7 PROVIDE NEW BULLHORN (TWO IN-LINE TYPE) BRACKET MOUNTED ON EXISTING GALVANIZED POLE. BRACKET SHALL BE SIMILAR TO EXISTING BRACKETS. VERIFY TENON FOR ATTACHMENT TO EXISTING POLE. TYPICAL BULLHORN BRACKET SHALL BE LITHONIA #BS28-T35-TD20-GALV.
- 8 UNDERGROUND FEEDER FOR PANEL "DPB" AT HEADWORKS. REFER TO SHEET E-203 FOR CONDUIT AND WIRE SCHEDULE.
- 9 PROVIDE SEPARATE COMMUNICATIONS PULL BOX AT LOCATIONS INDICATED.



— REFER TO SHEET E-404
ENLARGED PLAN -
CLARIFIERS

REFER TO SHEET E-501
ENLARGED PLAN - FILTERS

REFER TO SHEET
ENLARGED PLAN
UV DISINFECTION

— REFER TO SHEET E-801
ENLARGED PLAN -
EFFLUENT PUMP STATION

OVERALL ELECTRICAL SITE PLAN



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OVERALL
ELECTRICAL
SITE PLAN

-201

Drawing Number

LIGHTING FIXTURE SCHEDULE											
MARK	DESCRIPTION	BASIS OF DESIGN PRODUCT(S)		VOLTAGE	LAMP DATA			MOUNTING LOCATION	MOUNTING TYPE	MOUNTING HEIGHT	REMARKS
		MANUFACTURER	CATALOG NUMBER		QTY PER LUMINAIRE	WATTAGE	TYPE				
LVT	LED, VAPORTIGHT STRIP, SURFACE MOUNTED, 4' L, 4900 LUMENS, 4000K. WET LOCATION LISTED. POLYCARBONATE HOUSING & LENS.	LITHONIA	CSV-T-L48-5000LM-MVOLT-40K-80CRI-WLFEND2	120/277	1	42	LED	CEILING	SURFACE	AT CEILING	
LW	LED, WALL PACK, DIE CAST ALUMINUM HOUSING, TEMPERED GLASS LENS, MSU DARK BRONZE FINISH, INTEGRAL PHOTOCELL, WET LOCATION LISTED.	LITHONIA	TWX2-LED-P4-40K-MVOLT-PE-DDBTXD	120/277	1	54	LED	EXTERIOR WALL	SURFACE	10'-0" AFG	
⊗	LED, EXIT SIGN, THERMOPLASTIC HOUSING, UNIVERSAL MOUNT, RED LETTERS, DOUBLE FACED, SELF DIAGNOSTICS.	LITHONIA	LQM-S-W-R-120/277-M6	120/277	FURNISH WITH FIXTURE		LED	CEILING/ WALL	SURFACE	6"8" TO BOTTOM OR JUST ABOVE DOOR	PROVIDE DIRECTIONAL ARROWS & MOUNT AS REQUIRED
PL □ EX	LED, FLOOD TYPE POLE LIGHT, 14K LUMENS, INTEGRAL PHOTOCELL, WET LOCATION LISTED, GALVANIZED BULLHORN BRACKET AS REQUIRED, ON EXISTING POLE.	LITHONIA	FIXTURE: RSXF1-LED-P3-40K-WFL-MVOLT-IS BRACKET: BS28-T35-TD20-GALV	120/277	1	109	LED	EXISTING POLE	BRACKET	30'-0" AFG	PROVIDE NEW BULLHORN BRACKET AS REQUIRED. LITHONIA #BS28-T35-TD20-GALV.
PLP □ PLP	LED, FLOOD TYPE POLE LIGHT (TWO PER POLE), 14K LUMENS, INTEGRAL PHOTOCELL, WET LOCATION LISTED, GALVANIZED BULLHORN BRACKET, ROUND STRAIGHT STEEL GALVANIZED POLE.	LITHONIA	FIXTURE: RSXF1-LED-P3-40K-WFL -MVOLT-IS-PER7 POLE: HOLOPHANE-FRSS-30-50B-F06-HG BRACKET: BS28-T35-TD20-GALV	120/277	1	109	LED	POLE	BRACKET	32'-6" AFG	REFER TO FOUNDATION DETAIL ON SHEET E-305.

MECHANICAL EQUIPMENT SCHEDULE							
MARK	PHASE	WIRE	VOLTAGE	DISCONNECT	BRANCH CIRCUIT WIRING	SOURCE	NOTES
HEADWORKS							
FINE SCREEN (SCREEN DRIVE, COMPACTOR DRIVE, BRUSH DRIVE)							
FSD-1	3	3	480	WITH CONTROL PANEL "CP-FS"	3#12, 1#12G - 3/4"C.	CP-FS	1, 2
FSD-2	3	3	480	WITH CONTROL PANEL "CP-FS"	3#12, 1#12G - 3/4"C.	CP-FS	1, 2
FCD-1	3	3	480	WITH CONTROL PANEL "CP-FS"	3#12, 1#12G - 3/4"C.	CP-FS	1, 2
FCD-2	3	3	480	WITH CONTROL PANEL "CP-FS"	3#12, 1#12G - 3/4"C.	CP-FS	1, 2
FBD-1	3	3	480	WITH CONTROL PANEL "CP-FS"	3#12, 1#12G - 3/4"C.	CP-FS	1, 2
FBD-2	3	3	480	WITH CONTROL PANEL "CP-FS"	3#12, 1#12G - 3/4"C.	CP-FS	1, 2
COARSE SCREEN (SCREEN DRIVE, COMPACTOR DRIVE)							
CSD-1	3	3	480	WITH CONTROL PANEL "CP-CS"	3#12, 1#12G - 3/4"C.	CP-CS	1, 2
CSD-2	3	3	480	WITH CONTROL PANEL "CP-CS"	3#12, 1#12G - 3/4"C.	CP-CS	1, 2
CCD-1	3	3	480	WITH CONTROL PANEL "CP-CS"	3#12, 1#12G - 3/4"C.	CP-CS	1, 2
CCD-2	3	3	480	WITH CONTROL PANEL "CP-CS"	3#12, 1#12G - 3/4"C.	CP-CS	1, 2
SODA ASH METERING PUMP							
SA-1	1	2	120	RECEPTACLE "IN-USE" WP	2#12, 1#12G - 3/4"C.	RP-DPB	1, 2
FILTERS (DRIVES, BACKWASH PUMPS, AUTOMATIC VALVES, SUMP PUMP)							
FD-1	3	3	480	INTEGRAL WITH CONTROL PANEL	3#10, 1#10G - 3/4"C	CP-F1	1, 2
FD-2	3	3	480	INTEGRAL WITH CONTROL PANEL	3#10, 1#10G - 3/4"C	CP-F2	1, 2
FBP-1	3	3	480	INTEGRAL WITH CONTROL PANEL	3#10, 1#10G - 3/4"C	CP-F1	1, 2
FBP-2	3	3	480	INTEGRAL WITH CONTROL PANEL	3#10, 1#10G - 3/4"C	CP-F2	1, 2
AV-1A	1	2	120	INTEGRAL WITH CONTROL PANEL	2#12, 1#12G - 3/4"C.	CP-F1	1, 2
AV-1B	1	2	120	INTEGRAL WITH CONTROL PANEL	2#12, 1#12G - 3/4"C.	CP-F1	1, 2
AV-2A	1	2	120	INTEGRAL WITH CONTROL PANEL	2#12, 1#12G - 3/4"C.	CP-F2	1, 2
AV-2B	1	2	120	INTEGRAL WITH CONTROL PANEL	2#12, 1#12G - 3/4"C.	CP-F2	1, 2
SP-1	1	2	120	RECEPTACLE "IN-USE" WP	2#10, 1#10G - 3/4"C.	RP-MPA	1, 2
BIOLAC SYSTEM							
B-1	3	3	480	NFDS, 200A, 3-POLE, NEMA 4X SS	3#2, 1#6G - 1 1/2"C.	CP-BS	1, 2
B-1	3	3	480	NFDS, 200A, 3-POLE, NEMA 4X SS	3#2, 1#6G - 1 1/2"C.	CP-BS	1, 2
B-3	3	3	480	NFDS, 200A, 3-POLE, NEMA 4X SS	3#2, 1#6G - 1 1/2"C.	CP-BS	1, 2
AIR CONDITION UNITS							
AC-S1	1	2	208	NFDS, 30A, 2-POLE, NEMA 4X SS	2#10, 1#10G - 1"C.	RP-DPB	1, 2
AC-F1 THRU F4	1	2	208	NFDS, 30A, 2-POLE, NEMA 4X SS	2#8, 1#10G - 1"C.	RP-MPA	1, 2
AC-UV1 THRU UV4	1	2	208	NFDS, 30A, 2-POLE, NEMA 4X SS	2#8, 1#10G - 1"C.	RP-MPA	1, 2
BRIDGE CRANE							
BC-1	1	2	120	NFDS, 30A, 2-POLE, NEMA 4X SS	2#10, 1#10G - 3/4"C.	RP-MPA	1, 2
BC-2	1	2	120	NFDS, 30A, 2-POLE, NEMA 4X SS	2#10, 1#10G - 3/4"C.	RP-MPA	1, 2
UV DISINFECTION SYSTEM							
LCP-1			24VDC	N/A	AS REQUIRED BY UV SYSTEM SUPPLIER	PDC-1A, 1B	1, 2
LLS-1			24VDC	N/A	AS REQUIRED BY UV SYSTEM SUPPLIER	LCP	1, 2
FLOW METER							
FM-1	1	2	120	N/A	2#10, 1#10G - 3/4"C.	RP-MPA	1, 2, 3
FM-1			4-20mA		INSTRUMENT CABLE	RTU-3 & UV SCC	1, 2, 3
FM-2	1	2	120	N/A	2#10, 1#10G - 3/4"C.	RP-DPB	1, 2, 3
FM-2			4-20mA		INSTRUMENT CABLE	RTU-5 & SA-1	1, 2, 3
FM-3	1	2	120	N/A	2#10, 1#10G - 3/4"C.	RP-MPA	1, 2, 3
FM-3			4-20mA		INSTRUMENT CABLE	RTU-1 & CP-BS	1, 2, 3
FM-4	1	2	120	N/A	2#10, 1#10G - 3/4"C.	RP-MPA	1, 2, 3
FM-4			4-20mA		INSTRUMENT CABLE	RTU-1 & CP-BS	1, 2, 3

EQUIPMENT SCHEDULE NOTES:
1. VERIFY LOCATION AND REQUIREMENTS WITH C SHEETS.
2. COORDINATE REQUIREMENTS WITH SYSTEM SUPPLIER(S).
3. VERIFY POWER SUPPLY FOR FLOW METER. VERIFY ROUTING OF 4-20mA ANALOG INPUT WITH EQUIPMENT AND SCADA SYSTEM SUPPLIERS.

CONTROL PANEL POWER SCHEDULE									
MARK	PHASE	WIRE	VOLTAGE	DISCONNECT	TAG NO.	BRANCH CIRCUIT WIRING	FED FROM	NOTES	
FINE SCREEN									
CP-FS	3	3	480	INTEGRAL WITH CONTROL PANEL		AS SHOWN ON E-203	DPB		
COARSE SCREEN									
CP-CS	3	3	480	INTEGRAL WITH CONTROL PANEL		AS SHOWN ON E-203	DPB		
INFLUENT PUMP STATION									
CP-IPS	3	3	480	INTEGRAL WITH CONTROL PANEL		AS SHOWN ON E-203	DPB		
AERATORS									
CP-AER	3	3	480	INTEGRAL WITH CONTROL PANEL		AS SHOWN ON E-203	MPA		
CLARIFIERS (SCUM PUMP, RAKES) FED FROM CONTROL PANEL "BS" FOR BIOLAC SYSTEM									
CP-SP	3	3	480	INTEGRAL WITH CONTROL PANEL		3#10, 1#10G - 3/4"C	CP-BS		
CP-CR1	3	3	480	INTEGRAL WITH CONTROL PANEL		3#10, 1#10G - 3/4"C	CP-BS		
CP-CR2	3	3	480	INTEGRAL WITH CONTROL PANEL		3#10, 1#10G - 3/4"C	CP-BS		
FILTERS (DRIVES, BACKWASH PUMPS, AUTOMATIC VALVES)									
CP-F1	3	3	480	INTEGRAL WITH CONTROL PANEL		AS SHOWN ON E-203	MPA		
CP-F2	3	3	480	INTEGRAL WITH CONTROL PANEL		AS SHOWN ON E-203	MPA		
BIOLAC SYSTEM									
CP-BS	3	3	480	INTEGRAL WITH CONTROL PANEL		AS SHOWN ON E-203	MPA		
UV DISINFECTION SYSTEM (SYSTEM CONTROL CENTER, POWER DISTRIBUTION CENTER, HYDRAULIC SYSTEM CENTER)									
SCC-1	1	2	120	INTEGRAL WITH CONTROL PANEL		2#10, 1#10G - 3/4"C.	RP-MPA		
PDC-1A	3	3	277/480	INTEGRAL WITH CONTROL PANEL		AS SHOWN ON E-203	MPA		
PDC-1B	3	3	277/480	INTEGRAL WITH CONTROL PANEL		AS SHOWN ON E-203	MPA		
PDC-1C	3	3	277/480	INTEGRAL WITH CONTROL PANEL		AS SHOWN ON E-203	MPA		
HSC-1	3	3	480	INTEGRAL WITH CONTROL PANEL		AS SHOWN ON E-203	MPA		
SCADA SYSTEM (CENTRAL TERMINAL UNIT & REMOTE TERMINAL UNITS)									
CTU	1	2	120	INTEGRAL WITH CONTROL PANEL		2#10, 1#10G - 3/4"C.	CONTROL BLDG REC.		
RTU-1	1	2	120	INTEGRAL WITH CONTROL PANEL		2#10, 1#10G - 3/4"C.	RP-MPA	NEMA 4X SS	
RTU-2	1	2	120	INTEGRAL WITH CONTROL PANEL		2#10, 1#10G - 3/4"C.	RP-MPA	NEMA 4X SS	
RTU-3	1	2	120	INTEGRAL WITH CONTROL PANEL		2#10, 1#10G - 3/4"C.	RP-MPA	NEMA 4X SS	
RTU-4	1	2	120	INTEGRAL WITH CONTROL PANEL		2#10, 1#10G - 3/4"C.	RP-MPA	NEMA 4X SS	
RTU-5	1	2	120	INTEGRAL WITH CONTROL PANEL		2#10, 1#10G - 3/4"C.	RP-DPB	NEMA 4X SS	

ELECTRICAL OPERATED VALVE SCHEDULE			
MARK	BRANCH CIRCUIT & CONTROL WIRING	SOURCE	NOTES
AIR LIFT CONTROL VALVE			
ACV-1 THRU ACV-4	6#16, 1#16G - 1"C.	CP-BS	1, 2
SCUM CONTROL VALVE			
SCV-1 THRU SCV-2	6#16, 1#16G - 1"C.	CP-BS	1, 2
WAS CONTROL VALVE			
WCV-1	6#16, 1#16G - 1"C.	CP-BS	1, 2
FUTURE VALVE ACTUATORS			
FVA-2 THRU FVA-15	1"C. WITH PULL STRING VIA PULL BOX	CP-BS	1, 2

ELECTRICAL OPERATED VALVE SCHEDULE NOTES:
1. VERIFY LOCATION AND REQUIREMENTS WITH C SHEETS.
2. COORDINATE REQUIREMENTS WITH SYSTEM SUPPLIER(S).



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ELECTRICAL
SCHEDULES

E-205
Drawing Number

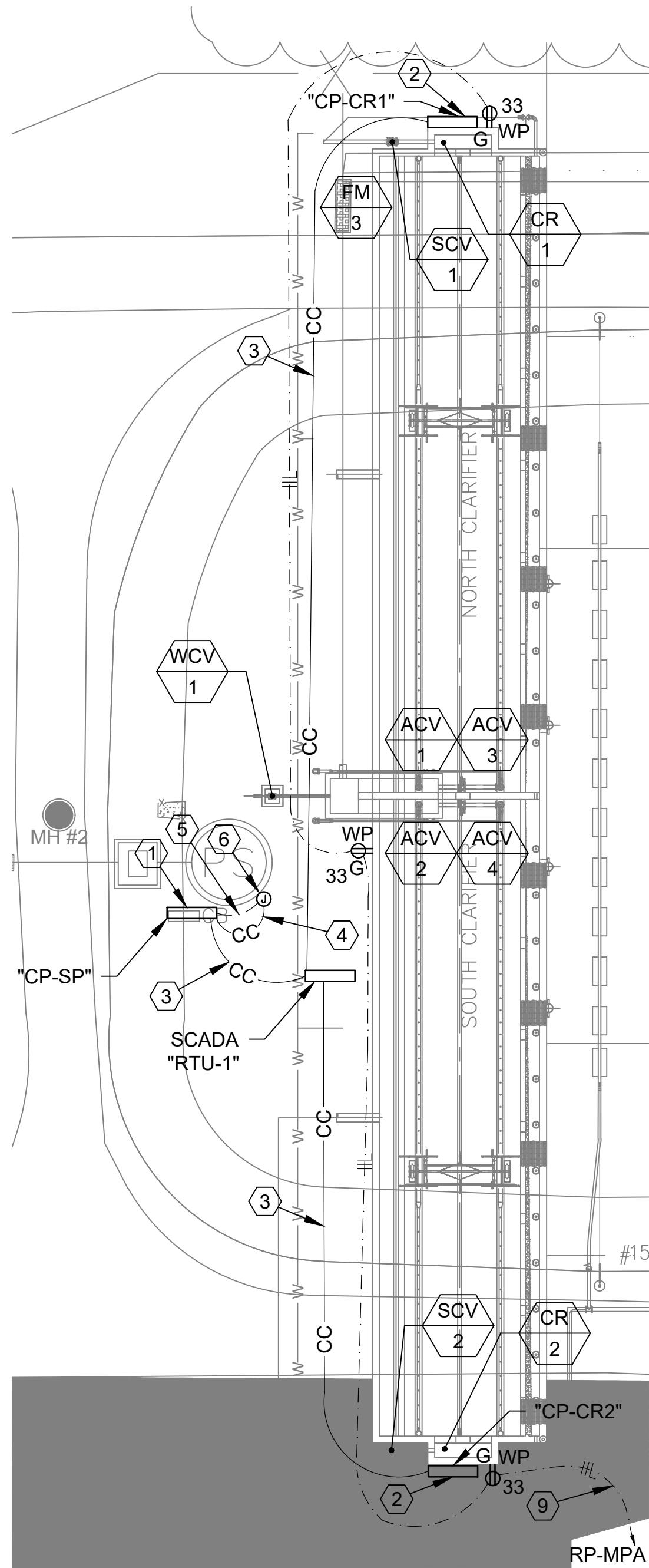
PANELBOARD SCHEDULE								PANEL "MPA"		
277/480 VOLTS, 3 PHASE, 4 WIRE, 1200 AMP MAIN BREAKER - LSIG								I-LINE STYLE PANEL		
ISOLATED NEUTRAL BUS, GROUND BUS, CONCRETE BASE WITH								99" OF MOUNTING SPACE		
EQUIPMENT STAND MOUNT, HINGED FRONT TRIM, NEMA 3R ENCLOSURE								MIN. 65K A (SYM) AVAILABLE FAULT		
CKT NO.	CIRCUIT DESCRIPTION	BRKR A/POLE	CKT VA	VOLT-AMPERES/ PHASE			CKT VA	BRKR A/POLE	CIRCUIT DESCRIPTION	CKT NO.
				PH A	PH B	PH C				
1	EXT. SITE LIGHTS	20/1	2000	88320			86320			
3	FILTER BLDG LTS	20/1	2000		88320		86320	600/3 (LSIG)	EXISTING PANEL "DPA"	2
5	UV BLDG LTS	20/1	2000			88320	86320			
7	TRANSFORMER "T-MPA"	150/3	25000	98538			73538	600/3 (LSIG)	CONTROL PANEL "CP-BS"	4
			25000		98538		73538			
			25000			98538	73538			
9	CONTROL PANEL "CP-F1"	20/3	4150	8300			4150	20/3	CONTROL PANEL "CP-F2"	6
			4150		8300		4150			
			4150			8300	4150			
11	CONTROL PANEL "CP-EPS"	250/3 (LSIG)	17430	23793			6363	40/3	CONTROL PANEL "CP-AER"	8
			17430		23793		6363			
			17430			23793	6363			
13	UV SYSTEM "PDC-1A"	20/3	2213	4426			2213	20/3	UV SYSTEM "PDC-1B"	10
			2213		4426		2213			
			2213			4426	2213			
15	UV SYSTEM "PDC-1C"	20/3	2213	3046			833	15/3	UV SYSTEM "HSC"	12
			2213		3046		833			
			2213			3046	833			
17	PANEL "DPB"	200/3	53708	53708			00	30/3	SPARE	14
			53708		58140		4432			
			53708			53708	0			
23	SPARE	30/3	0	0			0	30/3	SPARE	20
			0		0		0			
			0			0	0			
25	TVSS	30/3	0	0			0	30/3	SPARE	22
			0		0		0			
			0			0	0			
				280131	284563	280131	VA			
FACTORS:					844825		VA	CONN		
EXPANSION		1.15				971549		480	V (L-L)	
DEMAND		.8				777239	VA	DEM	935	A (DEM)
CODE		1.25				971549	VA	CODE	1169	A (CODE)

PANELBOARD SCHEDULE NOTES:

1. "LSIG" DENOTES ELECTRONIC TRIP CIRCUIT BREAKER WITH LONG TIME, SHORT TIME, INSTANTANEOUS, & GROUND FAULT.

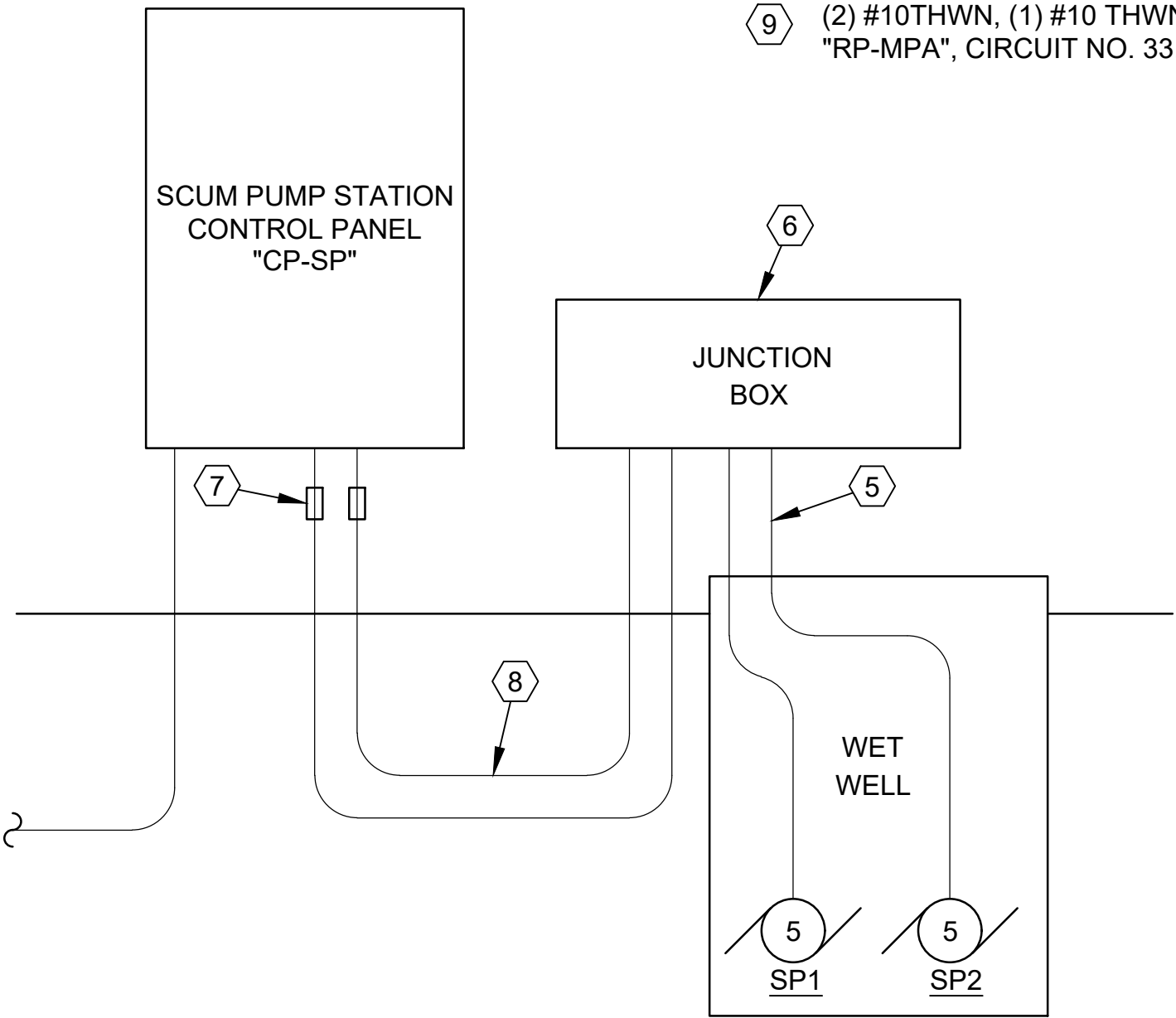
PANELBOARD SCHEDULE							PANEL "RP-MPA"			
120/208 VOLTS, 3 PHASE, 4 WIRE, 250 AMP MAIN BREAKER ISOLATED NEUTRAL BUS, GROUND BUS, SURFACE MOUNT ON EQUIPMENT STAND, HINGED FRONT TRIM, NEMA 3R ENCLOSURE							NQO STYLE PANEL 42 CKT PANEL MIN. 22K A (SYM) AVAILABLE FAULT			
CKT NO.	CIRCUIT DESCRIPTION	BRKR A/POLE	CKT VA	VOLT-AMPERES/ PHASE			CKT VA	BRKR A/POLE	CIRCUIT DESCRIPTION	CKT NO.
				PH A	PH B	PH C				
1	REC - FILTER BLDG	20/1	1000	2000			1000	20/1	REC - FILTER BLDG	2
3	REC - FILTER BLDG	20/1	1000		2000		1000	20/1	REC - FILTER BLDG	4
5	RTU-1	20/1	800			1600	800	20/1	RTU-2	6
7	RTU-3	20/1	800	1600			800	20/1	RTU-4	8
9	REC - UV BLDG	20/1	1000		2000		1000	20/1	REC - UV BLDG	10
11	REC - UV BLDG	20/1	1000			2000	1000	20/1	SUMP PUMP "SP-1"	12
13	UV-SCC	20/1	1440	2440			1000	20/1	BRIDGE CRANE "BC1"	14
15	FM-1 (AS REQUIRED)	20/1	400		1400		1000	20/1	BRIDGE CRANE "BC2"	16
17	AC-F1	30/2	2600			5200	2600	30/2	AC-UV1	18
19			2600	5200			2600			20
21	AC-F2	30/2	2600		5200		2600	30/2	AC-UV2	22
23			2600			5200	2600			24
25	AC-F3	30/2	2600	5200			2600	30/2	AC-UV3	26
27			2600		5200		2600			28
29	AC-F4	30/2	2600			5200	2600	30/2	AC-UV4	30
31			2600	5200			2600			32
33	REC - CLARIFIERS	20/1	600		600		0	20/1	SPARE	34
35	SPARE	20/1	0			0	0	20/1	SPARE	36
37	SPARE	20/1	0	0			0	30/3	TVSS	38
39	SPARE	20/1	0		0		0			40
41	SPARE	20/1	0			0	0			42
				21640	16400	19200	VA			
FACTORS:					57240	VA	CONN			
EXPANSION		1.5		85860		208	V (L-L)			
DEMAND		0.8		68688	VA	DEM	191	A (DEM)		
CODE		1.25		85860	VA	CODE	238	A (CODE)		

PANELBOARD SCHEDULE								PANEL "DPB"		
277/480 VOLTS, 3 PHASE, 4 WIRE, 200 AMP MAIN BREAKER (400 AMP RATED)								NF STYLE PANEL		
ISOLATED NEUTRAL BUS, GROUND BUS, LSIG MAIN BREAKER								42 CKT PANEL		
SURFACE MOUNT, HINGED FRONT TRIM, NEMA 3R ENCLOSURE								MIN. 42K A (SYM) AVAILABLE FAULT		
CKT NO.	CIRCUIT DESCRIPTION	BRKR A/POLE	CKT VA	VOLT-AMPERES/ PHASE			CKT VA	BRKR A/POLE	CIRCUIT DESCRIPTION	CKT NO.
				PH A	PH B	PH C				
1	EXT. SITE LIGHTS	20/1	1000	6000			5000	30/3	TRANSFORMER "T-DPB"	2
3	INTERIOR LIGHTS	20/1	800		5800		5000			4
5	SPARE	20/1	0			5000	5000			6
7	CP-IPS (INFLUENT PUMP STATION)	75/3	17430	26816			9386	60/3	CP-FS (FINE SCREEN)	8
9			17430		26816		9386			10
11			17430			26816	9386			12
13	CP-CS (COARSE SCREEN)	30/3	4683	4683			0	40/3	SPARE	14
15			4683		4683		0			16
17			4683			4683	0			18
19	SPARE	30/3	0	0			0	30/3	SPARE	20
21			0		0		0			22
23			0			0	0			24
25	SPACE	30/3	0	0			0	30/3	SPACE	26
27			0		0		0			28
29			0			0	0			30
31	SPACE	30/3	0	0			0	30/3	SPACE	32
33			0		0		0			34
35			0			0	0			36
37	SPACE	30/3	0	0			0	30/3	TVSS	38
39			0		0		0			40
41			0			0	0			42
				37499	37299	36499	VA			
FACTORS:					111297	VA	CONN			
EXPANSION		1.25		139121		480	V (L-L)			
DEMAND		.8		111297	VA	DEM	134	A (DEM)		
CODE		1.25		139121	VA	CODE	167	A (CODE)		



ENLARGED PLAN - CLARIFIERS
SCALE: 1/16"=1'-0"

SCUM PUMP STATION EQUIPMENT SCHEDULE											
MARK	ITEM DESCRIPTION	VOLTS/ PHASE	HP	AMPS	STARTER			DISCONNECT SWITCH			REMARKS
					SIZE	TYPE	LOCATION	SIZE	FUSE	LOCATION	
SP-1	SCUM PUMP	480/3	5	7.6A	0	FVNR	CONTROL PANEL	N/A	N/A	N/A	
SP-2	SCUM PUMP	480/3	5	7.6A	0	FVNR	CONTROL PANEL	N/A	N/A	N/A	



PUMP STATION POWER RISER DIAGRAM
SCALE: NONE

GENERAL NOTES

- 1. REFER TO SHEET E-201 FOR ELECTRICAL SITE PLAN.
- 2. REFER TO SHEET E-202 FOR SCADA SYSTEM PLAN.
- 3. REFER TO SHEET E-205 FOR MECHANICAL EQUIPMENT SCHEDULE AND CONTROL PANEL SCHEDULE FOR CONDUIT AND WIRE REQUIREMENTS.
- 4. REFER TO SHEET E-206 FOR PANELBOARD SCHEDULES.
- 5. REFER TO SHEET E-203 FOR POWER RISER DIAGRAM.
- 6. REFER TO SPECIFICATIONS FOR CONDUIT AND CONDUCTOR GENERAL REQUIREMENTS.

NUMBERED NOTES

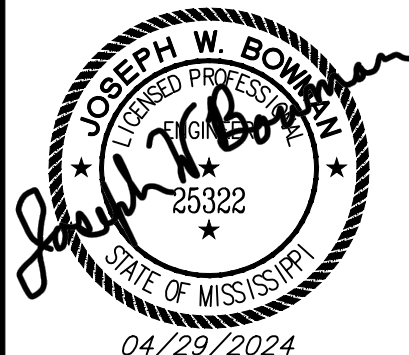
- 1 SCUM PUMP STATION. PROVIDE SEAL OFF FITTINGS AND JUNCTION BOX SIMILAR TO SHEET E-310. REFER TO E-205 FOR MECHANICAL EQUIPMENT SCHEDULE. SCUM PUMP CONTROL PANEL "CP-SP" FED FROM CONTROL "CP-BS" FOR THE BIOLAC SYSTEM. REFER TO E-501 FOR LOCATION OF CONTROL PANEL "CP-BS" IN FILTER BUILDING.
- 2 RAKE CONTROL PANEL FED FROM CONTROL PANEL "CP-BS" FOR THE BIOLAC SYSTEM. REFER TO E-501 FOR LOCATION OF CONTROL PANEL "CP-BS" IN FILTER BUILDING.
- 3 UNDERGROUND SCADA CONDUIT & CONDUCTORS FOR CONNECTIONS TO EACH CONTROL PANEL. REFER TO SPECIFICATIONS.
- 4 CONTROL CIRCUIT(S) TO WET WELL. PROVIDE A MINIMUM OF TWO (2) 1" CONDUITS. PROVIDE CONTROL CONDUCTORS FOR PUMP SEAL FAILURES, FLOAT(S), TRANSDUCER, ETC. AS REQUIRED. VERIFY QUANTITY AND TYPE OF CONTROL CONDUCTORS WITH CONTROL SYSTEM SUPPLIER BEFORE INSTALLATION.
- 5 SUBMERSIBLE PUMPS FEEDER CIRCUITS. (TYPICAL)
- 6 JUNCTION BOX, NEMA 4X FIBERGLASS WITH TERMINAL BLOCKS FOR POWER & CONTROL CABLES. SIZE AS REQUIRED. SEAL ALL CONDUITS ENTERING WETWELL PER SPECIFICATIONS.
- 7 EXPLOSIVE GAS SEAL OFF FITTINGS (TYPICAL FOR POWER & CONTROL CONDUITS).
- 8 (3) #12 THWN, (1) #12 THWN (G), 1" CONDUIT PER PUMP FEEDER.
- 9 (2) #10THWN, (1) #10 THWN (G), 1" CONDUIT HOMERUN TO "RP-MPA", CIRCUIT NO. 33.



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LEAKESVILLE, MISSISSIPPI

Burle Proj. No.:
08194-1-0122

File Name:
E-404 - ENLARGED PLAN -
CLARIFIERS - ADDENDUM (6-18-2024).DWG

Date: 04/29/2024

Scale: AS SHOWN

Drawn by: JWB

Checked: JWB

Revisions:
1
REVISIONS FOR
ADDENDUM (6/18/2024)

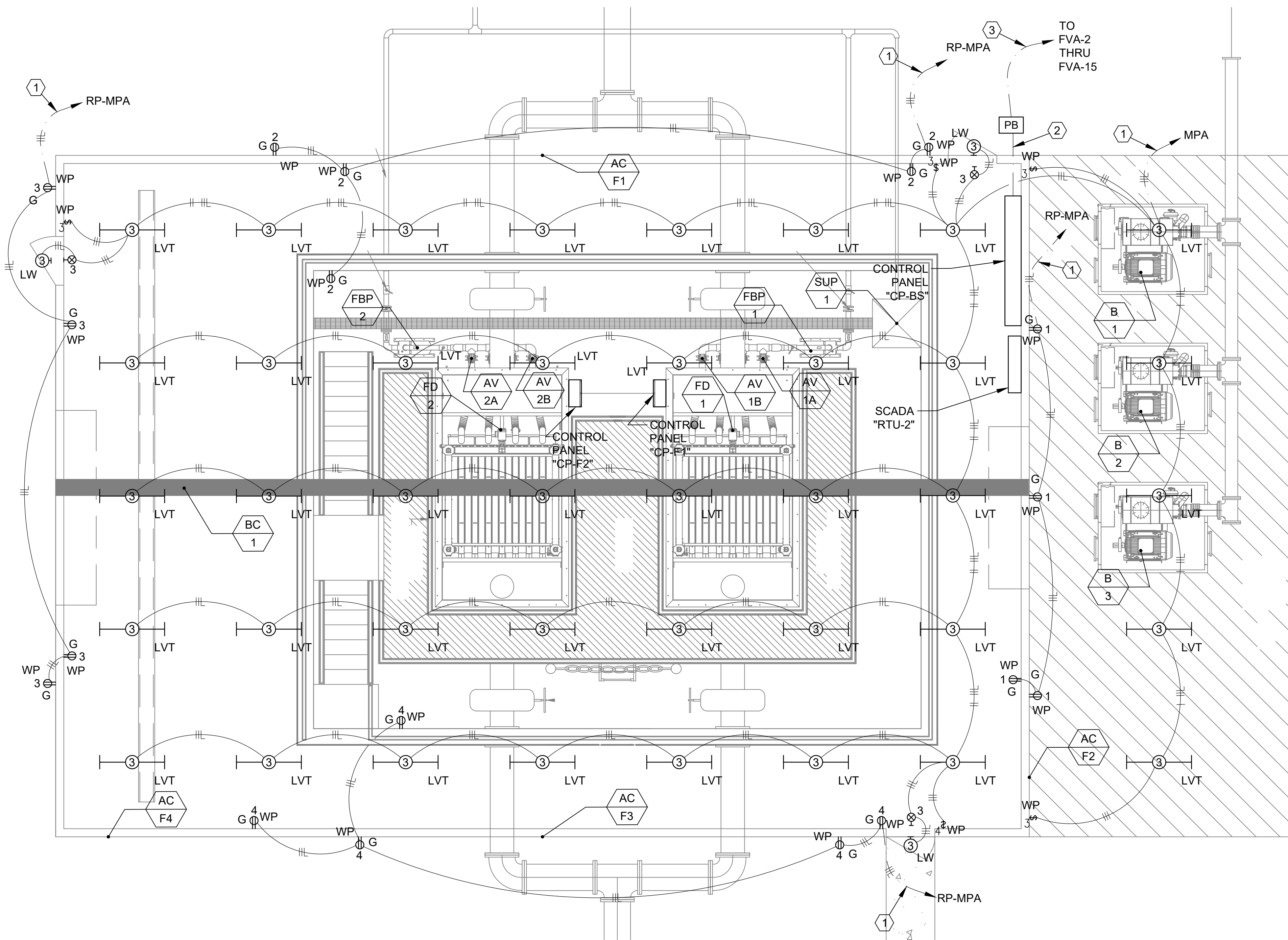
Revisions:

Revisions:

ENLARGED PLAN -
CLARIFIERS

E-404

Drawing Number



ENLARGED PLAN - FILTERS & BLOWERS
SCALE: 1/4"=1'-0"

GENERAL NOTES

1. REFER TO SHEET E-201 FOR ELECTRICAL SITE PLAN.
2. REFER TO SHEET E-202 FOR SCADA SYSTEM PLAN.
3. REFER TO SHEET E-205 FOR MECHANICAL EQUIPMENT SCHEDULE AND CONTROL PANEL SCHEDULE FOR CONDUIT AND WIRE REQUIREMENTS.
4. REFER TO SHEET E-206 FOR PANELBOARD SCHEDULES.
5. REFER TO SHEET E-203 FOR POWER RISER DIAGRAM.
6. REFER TO SPECIFICATIONS FOR CONDUIT AND CONDUCTOR GENERAL REQUIREMENTS.

NUMBERED NOTES

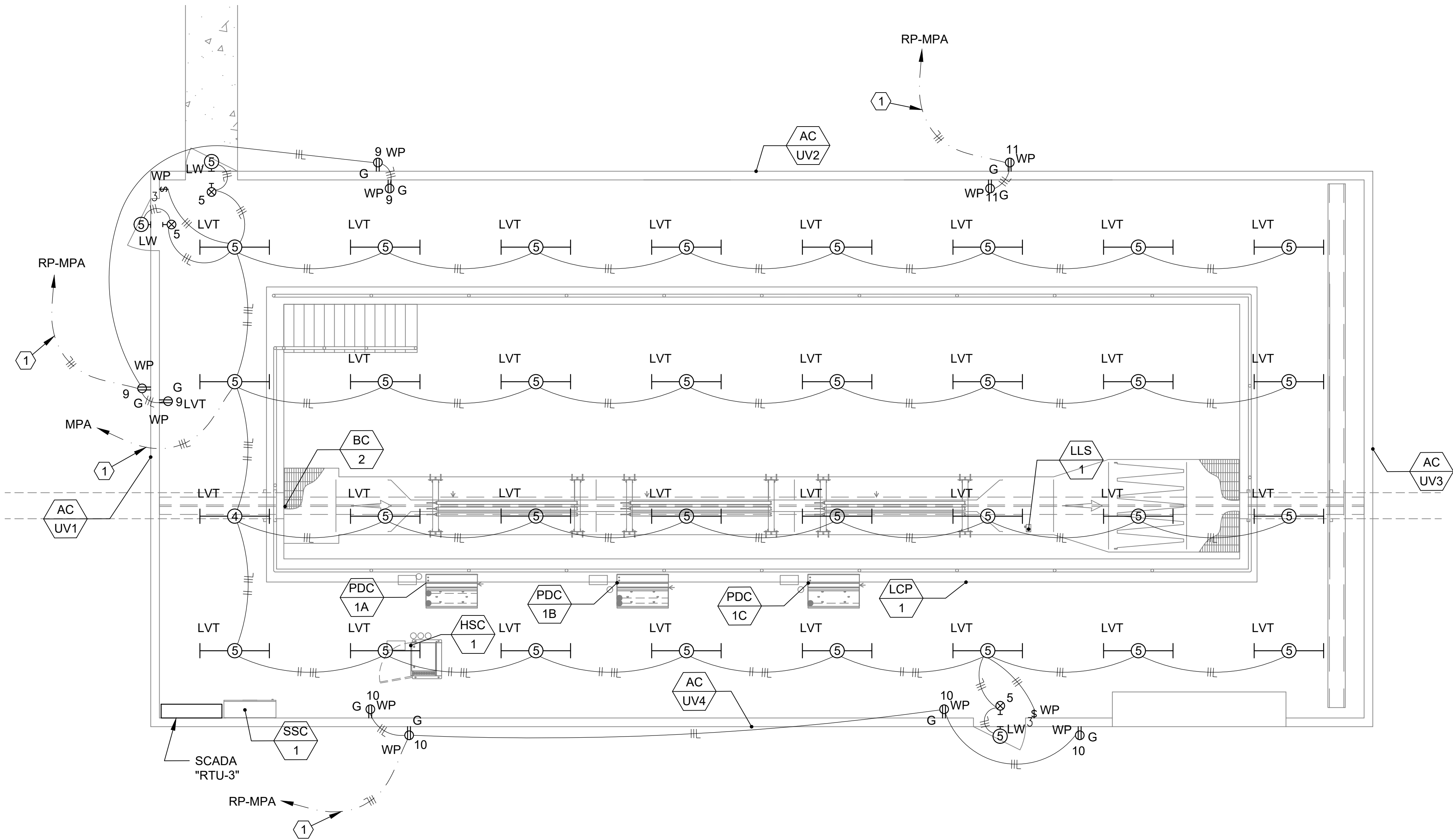
1. UNDERGROUND BRANCH CIRCUIT HOMERUNS SHALL BE MINIMUM #10, 1#10G - 3/4"C.
2. UNDERGROUND POWER SUPPLY AND CONTROL CONDUCTORS FOR FUTURE VALVE ACTUATORS. MINIMUM THREE(3) 2" C. WITH PULL STRINGS.
3. UNDERGROUND POWER SUPPLY AND CONTROL CONDUCTORS FOR FUTURE VALVE ACTUATORS. REFER TO SHEET E-205 FOR ELECTRICAL OPERATED VALVE SCHEDULE.

GENERAL NOTES

- 1. REFER TO SHEET E-201 FOR ELECTRICAL SITE PLAN.
- 2. REFER TO SHEET E-202 FOR SCADA SYSTEM PLAN.
- 3. REFER TO SHEET E-205 FOR MECHANICAL EQUIPMENT SCHEDULE AND CONTROL PANEL SCHEDULE FOR CONDUIT AND WIRE REQUIREMENTS.
- 4. REFER TO SHEET E-206 FOR PANELBOARD SCHEDULES.
- 5. REFER TO SHEET E-203 FOR POWER RISER DIAGRAM.
- 6. REFER TO SPECIFICATIONS FOR CONDUIT AND CONDUCTOR GENERAL REQUIREMENTS.

NUMBERED NOTES

1 UNDERGROUND BRANCH CIRCUIT HOMERUNS SHALL BE MINIMUM 2#10, 1#10G - 3/4"C.



ENLARGED PLAN - UV DISINFECTION SYSTEM
SCALE: 1/4"=1'-0"



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LEAKESVILLE, MISSISSIPPI

Burle Proj. No.:
08194-1-0122

File Name:
E-701 ENLARGED PLAN - UV DISINFECTION
ADDENDUM (6-18-2024).DWG

Date: 04/29/2024

Scale: AS SHOWN

Drawn by: JWB

Checked: JWB

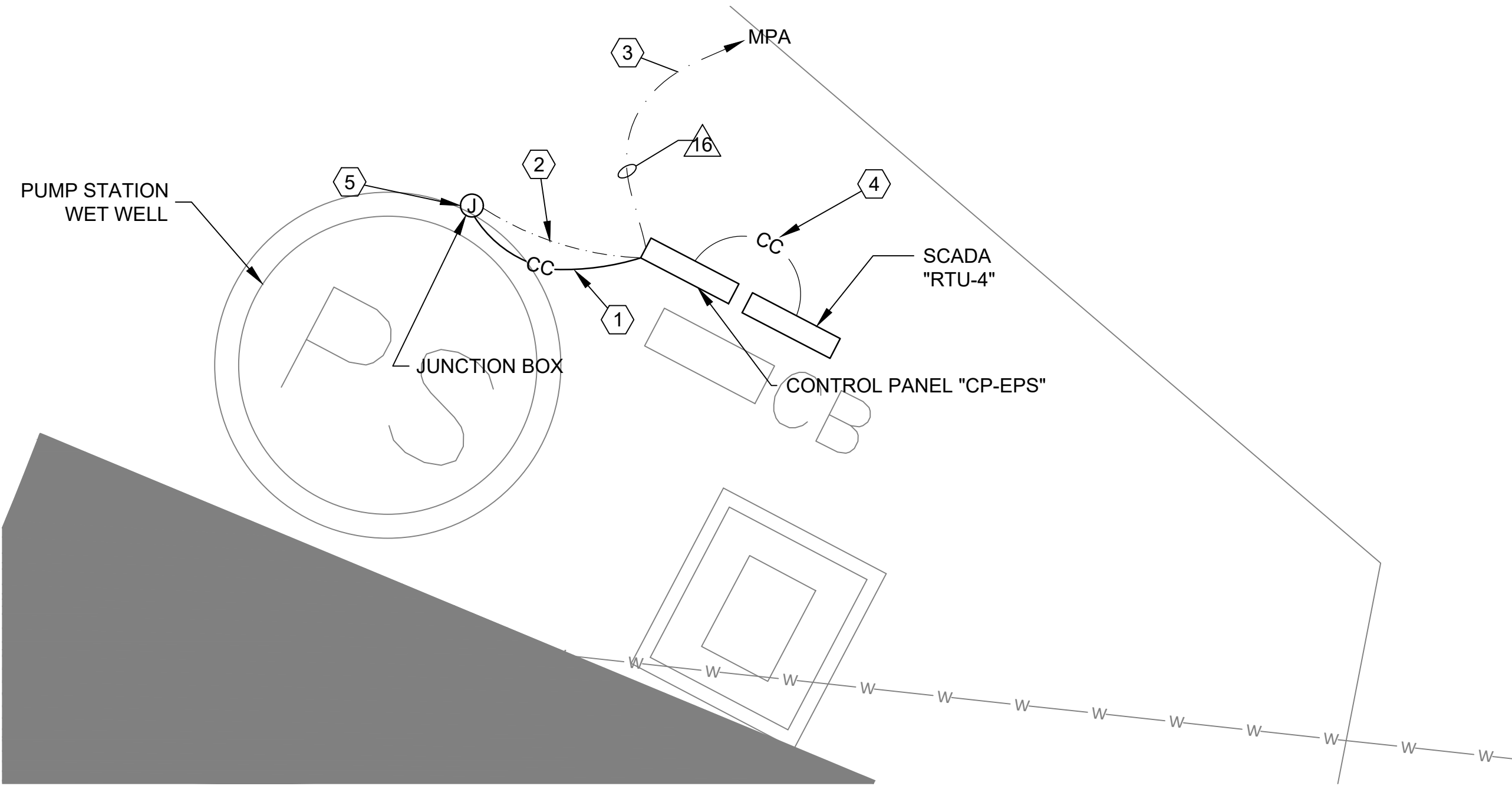
Revisions:
1
REVISIONS FOR
ADDENDUM (6/18/2024)

Revisions:

Revisions:

ENLARGED PLAN -
UV DISINFECTION SYSTEM

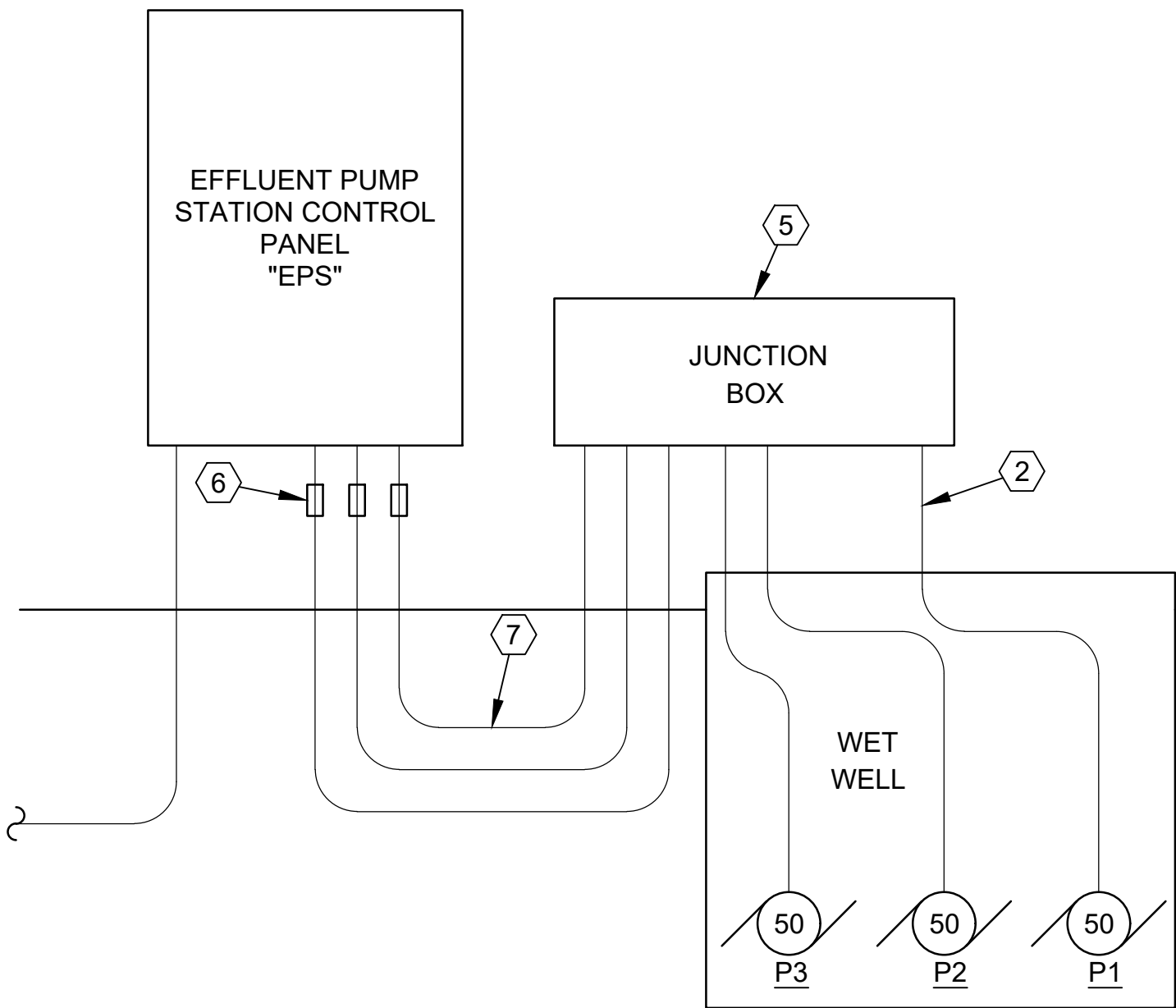
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Drawing Number



ENLARGED PLAN - EFFLUENT PUMP STATION
SCALE: 1/4"=1'-0"

EFFLUENT PUMP STATION EQUIPMENT SCHEDULE

MARK	ITEM DESCRIPTION	VOLTS/ PHASE	HP	AMPS	STARTER			DISCONNECT SWITCH			REMARKS
					SIZE	TYPE	LOCATION	SIZE	FUSE	LOCATION	
P-1	SEWAGE PUMP	480/3	50	65A	50HP	VFD	CONTROL PANEL	N/A	N/A	N/A	VFD SUPPLIED WITH PUMP STATION CONTROL PANEL
P-2	SEWAGE PUMP	480/3	50	65A	50HP	VFD	CONTROL PANEL	N/A	N/A	N/A	VFD SUPPLIED WITH PUMP STATION CONTROL PANEL
P-3	SEWAGE PUMP	480/3	50	65A	50HP	VFD	CONTROL PANEL	N/A	N/A	N/A	VFD SUPPLIED WITH PUMP STATION CONTROL PANEL



PUMP STATION POWER RISER DIAGRAM
SCALE: NONE



GENERAL NOTES

- REFER TO SHEET E-201 FOR ELECTRICAL SITE PLAN.
- REFER TO SHEET E-202 FOR SCADA SYSTEM PLAN.
- REFER TO SHEET E-203 FOR POWER RISER DIAGRAM.
- REFER TO SHEET E-205 FOR MECHANICAL EQUIPMENT SCHEDULE AND CONTROL PANEL SCHEDULE FOR CONDUIT AND WIRE REQUIREMENTS.
- REFER TO SHEET E-206 FOR PANELBOARD SCHEDULES.
- REFER TO SPECIFICATIONS FOR CONDUIT AND CONDUCTOR GENERAL REQUIREMENTS.

NUMBERED NOTES

- CONTROL CIRCUIT(S) TO WET WELL. PROVIDE A MINIMUM OF TWO (2) 1" CONDUITS. PROVIDE CONTROL CONDUCTORS FOR PUMP SEAL FAILURES, FLOAT(S), TRANSDUCER, ETC. AS REQUIRED. VERIFY QUANTITY AND TYPE OF CONTROL CONDUCTORS WITH CONTROL SYSTEM SUPPLIER BEFORE INSTALLATION.
- SUBMERSIBLE PUMPS FEEDER CIRCUITS. (TYPICAL)
- UNDERGROUND POWER FEEDER TO PANEL "DPB". REFER TO SHEET E-203 FOR POWER RISER DIAGRAM CONDUIT & WIRE SCHEDULE.
- UNDERGROUND SCADA CABLES TO RTU-4. REFER TO SPECIFICATIONS.
- JUNCTION BOX, NEMA 4X FIBERGLASS WITH TERMINAL BLOCKS FOR POWER & CONTROL CABLES. SIZE AS REQUIRED. SEAL ALL CONDUITS ENTERING WETWELL PER SPECIFICATIONS.
- EXPLOSIVE GAS SEAL OFF FITTINGS (TYPICAL FOR POWER & CONTROL CONDUITS).
- (3) #2 THWN, (1) #8 THWN (G), 1 1/2" CONDUIT PER PUMP FEEDER.

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Burle Proj. No.:
08194-1-0122
File Name:
E-801 ENLARGED PLAN - EFFLUENT PUMP
STATION - ADDENDUM (6-18-2024).DWG
Date: 04/29/2024
Scale: AS SHOWN
Drawn by: JWB
Checked: JWB

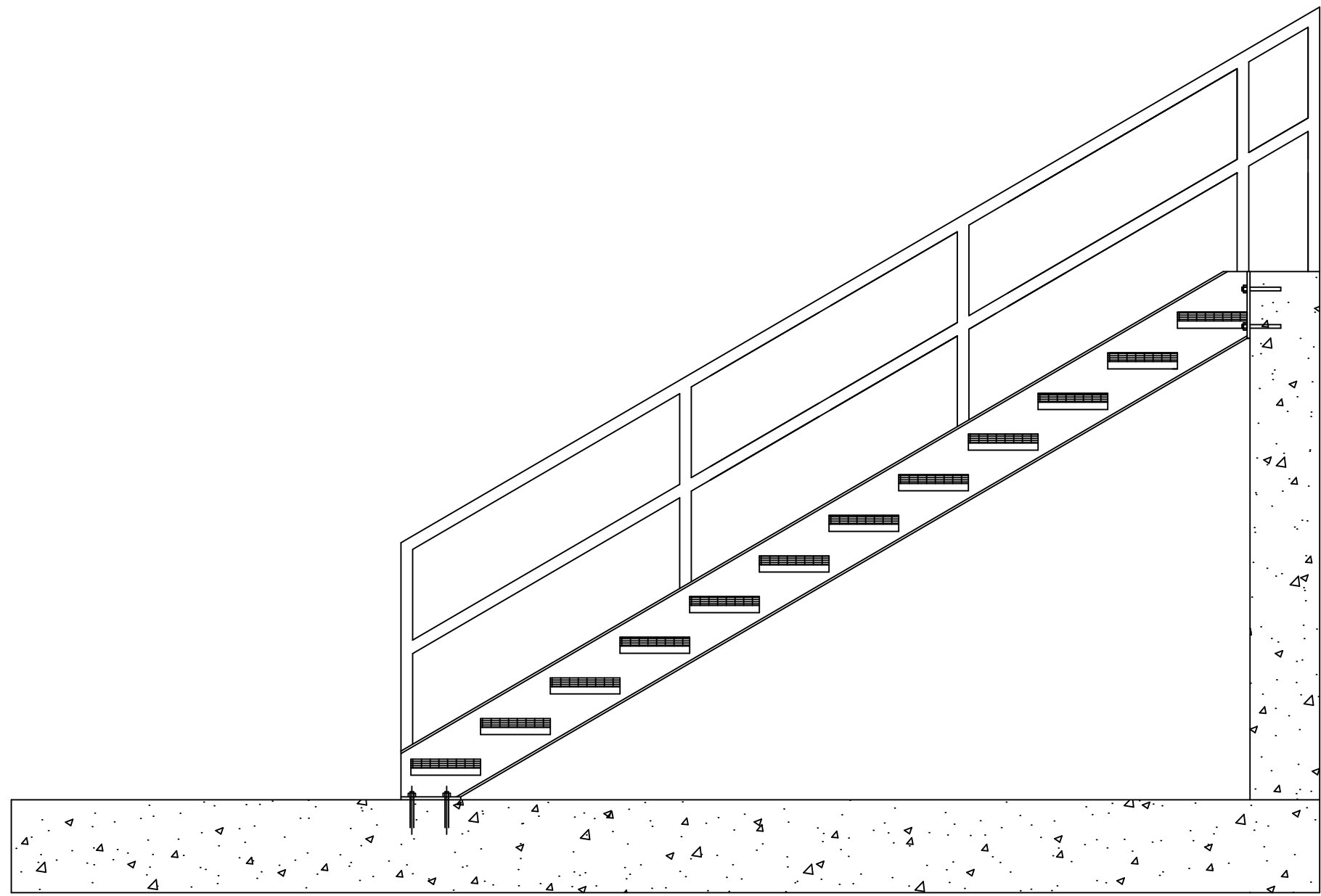
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REVISIONS FOR
ADDENDUM (6/18/2024)

Revisions:

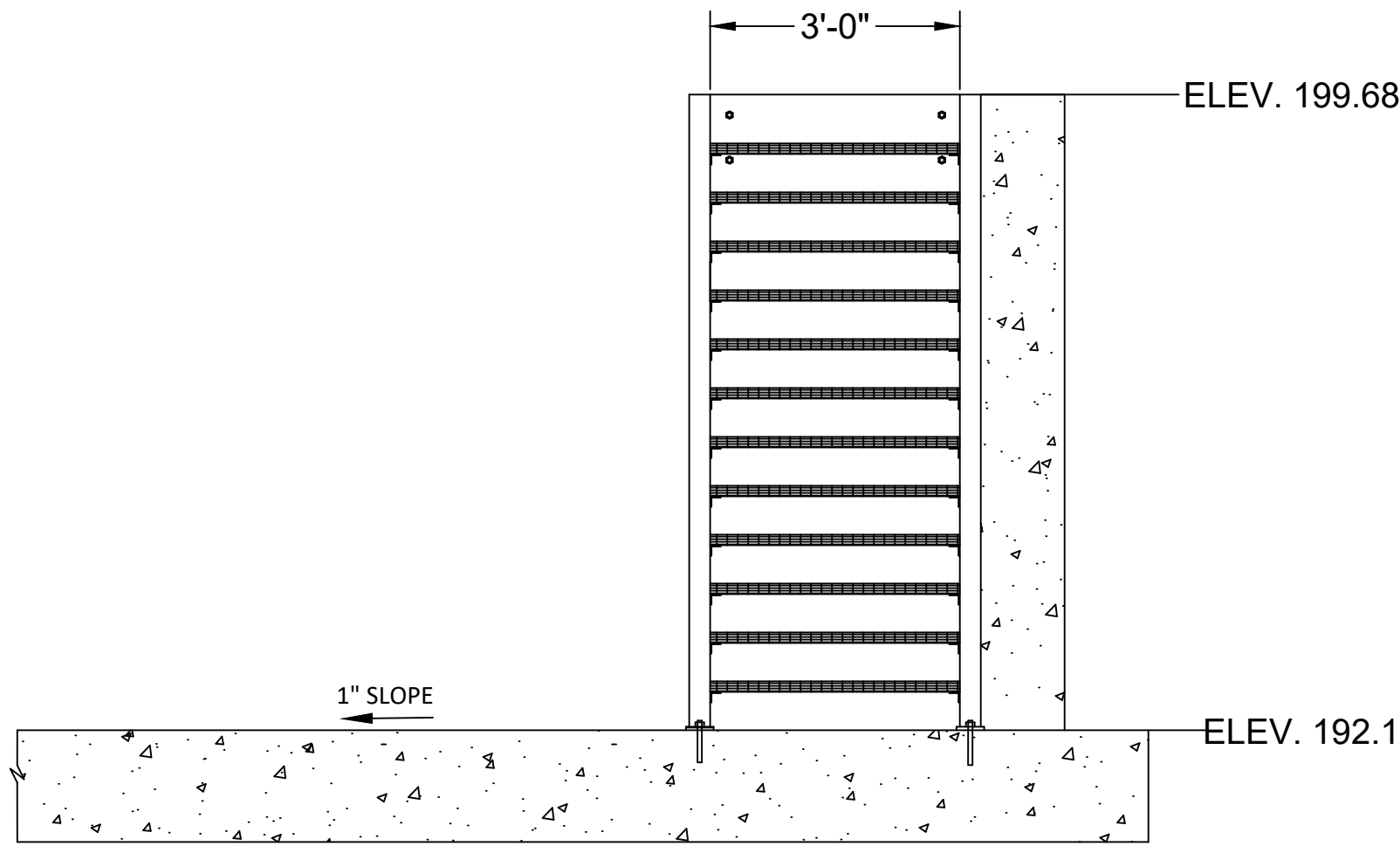
Revisions:

ENLARGED PLAN -
EFFLUENT PUMP STATION

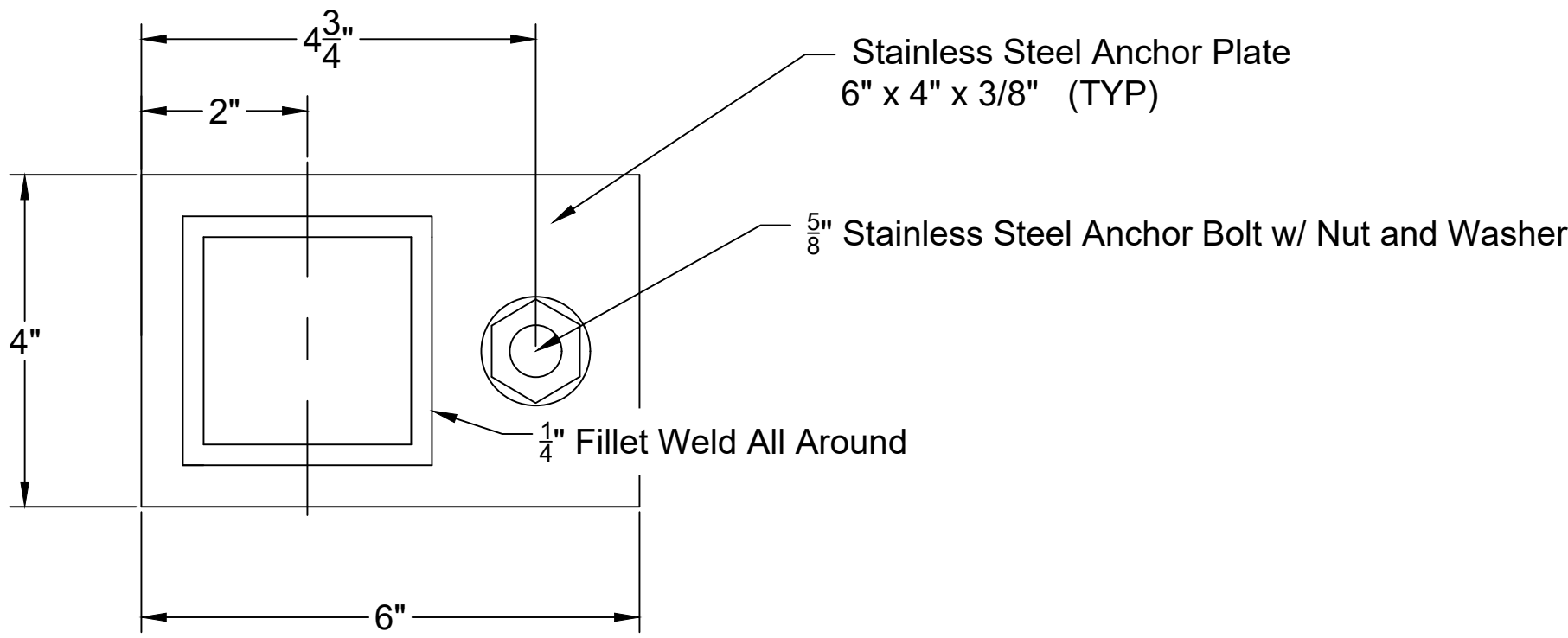
E-801
Drawing Number



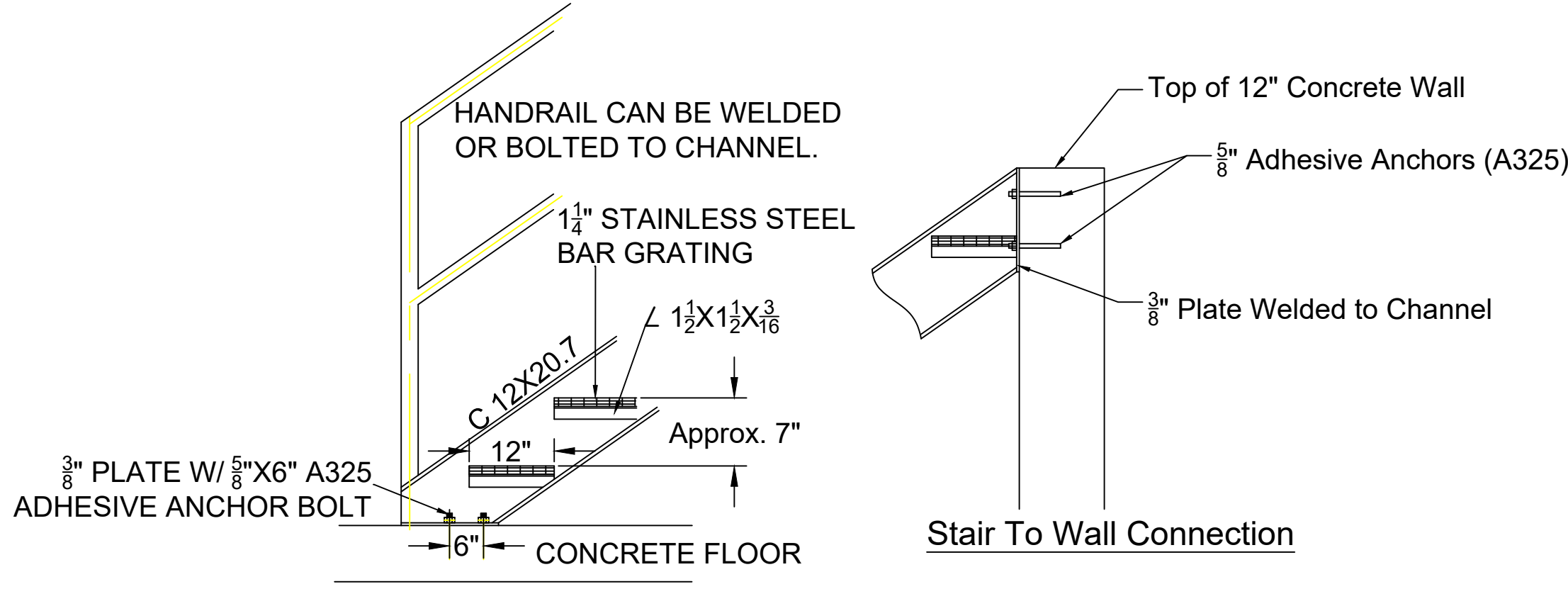
Stair Side Elevation



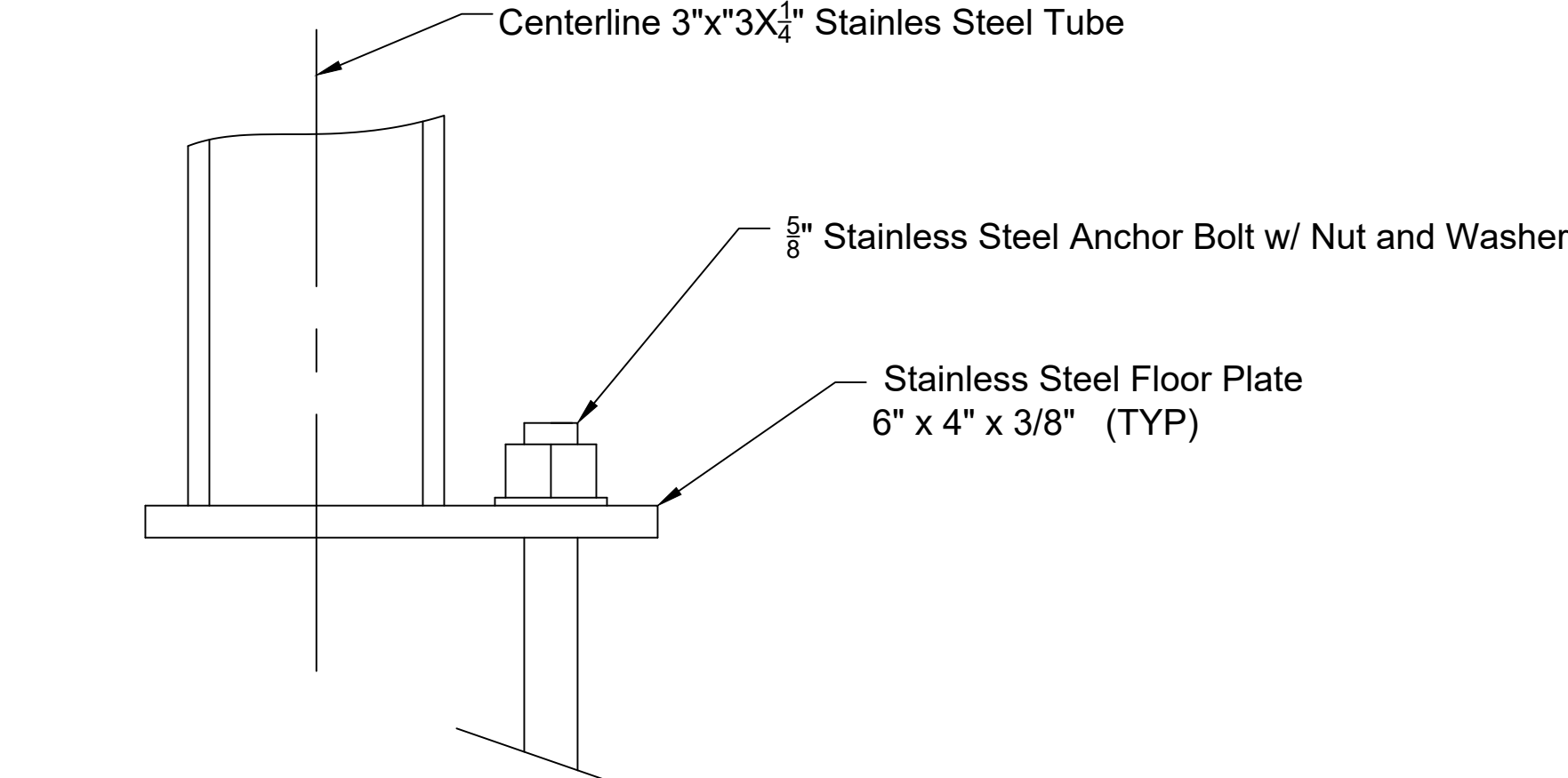
Stair End Elevation



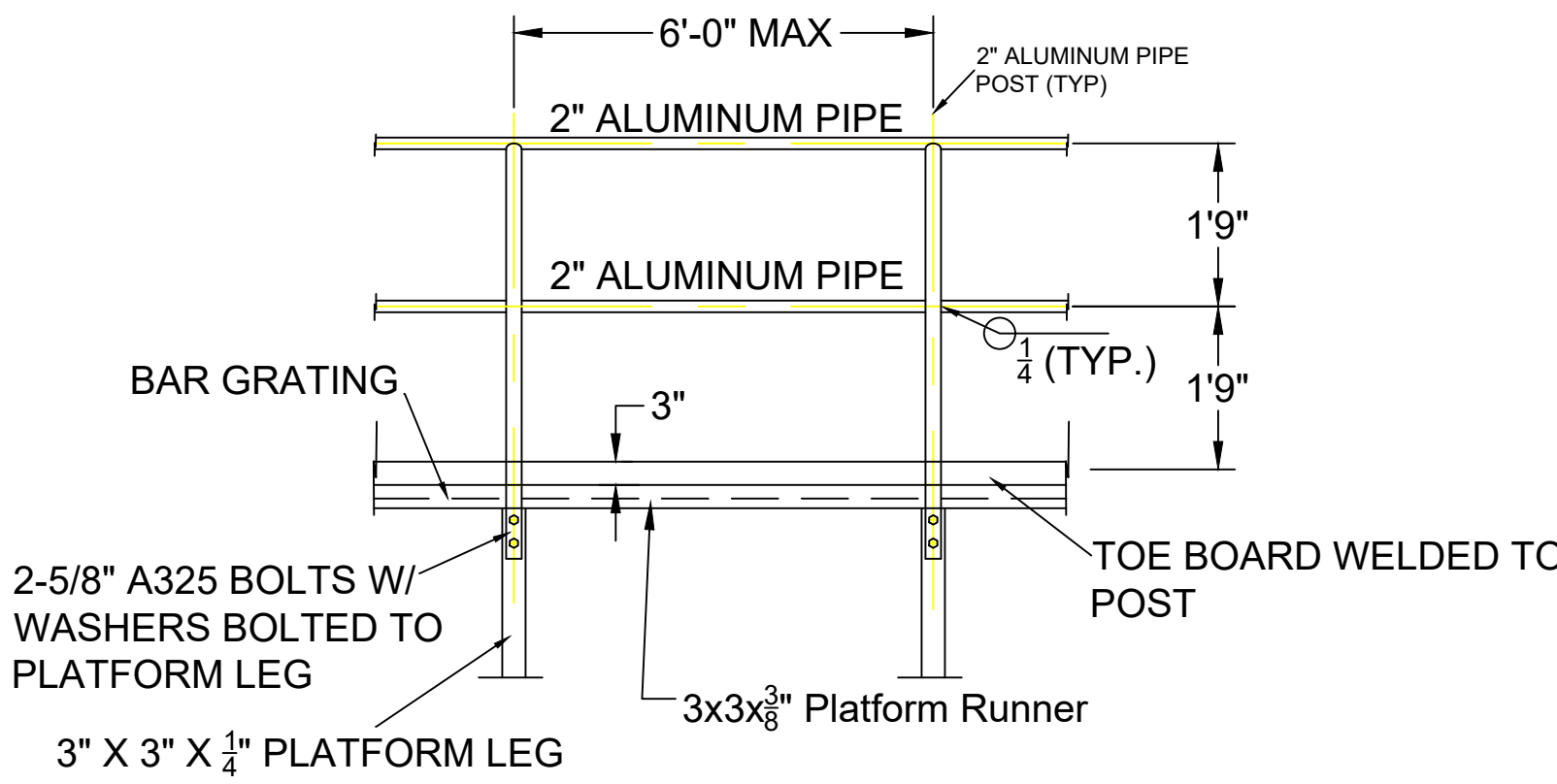
Anchor Plate Plan



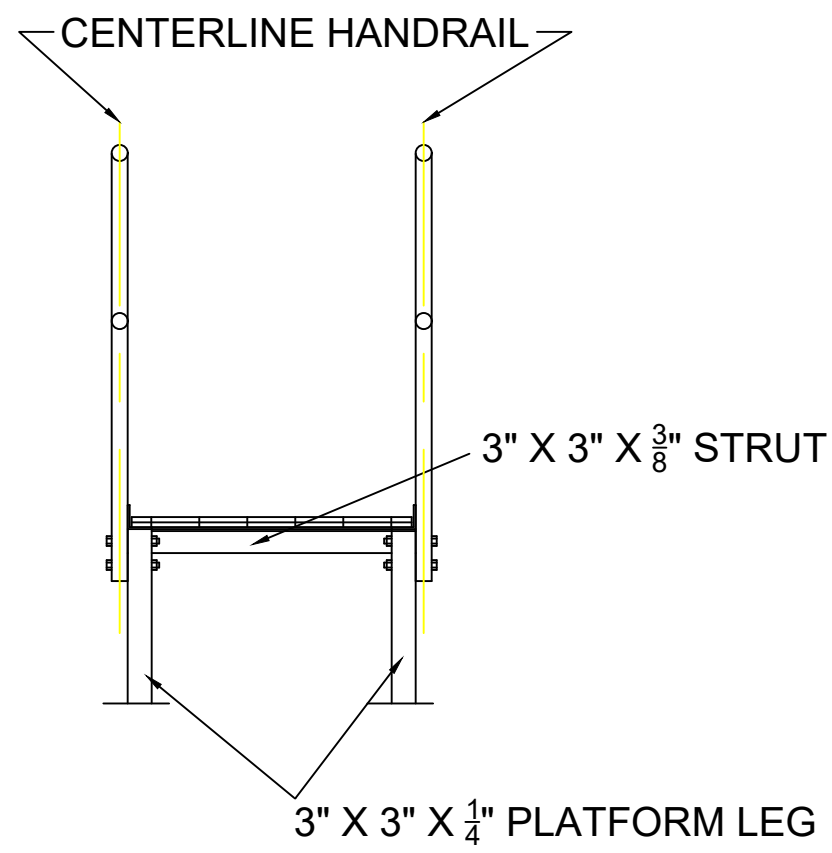
Stair Detail



Anchor Plate Detail



ALUMINUM HANDRAIL ELEVATION



ALUMINUM HANDRAIL CROSS SECTION

ALUMINUM HANDRAIL DETAIL



Burle Proj. No.:	08194-1-0122
File Name:	C-705 DETAILS - UV DISINFECTION STAIRS
Date:	06/18/2024
Scale:	1"=2'
Drawn by:	AGG
Checked:	DTM
Revisions:	
Revisions:	
Revisions:	
Revisions:	