

Steven M. Clouse WRC Digester Mixing and System Enhancements Phase 3 Project – RFCSP

Ila Drzymala, P.E.

Project Engineer

Stella Manzello

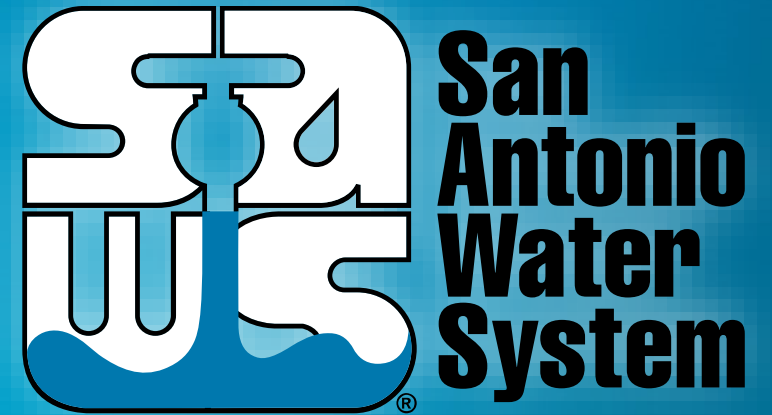
Contract Administrator

Marisol V. Robles

SMWVB Program Manager, SAWS

Alan Draper, P.E.

Project Engineer of Record, WRA



Non-Mandatory Pre-Proposal Meeting

January 4, 2022 – 11:00 AM

MAKING SAN ANTONIO
WATERFUL



Oral Statements

Oral statements or discussion during the pre-proposal meeting today will not be binding, nor will it change or affect the terms or conditions within the Plans and Specifications of this Project. Changes, if any, will be addressed in writing only via an Addendum.

Agenda

- Key Project Information
- SMWB
- Contract Requirements
- Evaluation Process
- Required Experience
- Proposal Packet Preparation
- Evaluation Criteria
- Additional Reminders
- Communication Reminders
- Key Dates
- Submission Due Date
- Project Outline
- Questions

Key Project Information

- This is a Non-Mandatory Pre-Proposal meeting
- Construction duration is 1080 calendar days
- Construction estimate \$24,573,000.00
- Procured under Chapter 2269 of Texas Government Code as a Request for Competitive Sealed Proposals (RFCSP)
- Geotechnical Data Report is available on the SAWS website with execution of a disclaimer

Aspirational SMWB Goal

Industry	Aspirational SMWB Goal
Construction	20%

The aspirational SMWB goal is expressed as
20% of your total price proposal

SMWB Scoring: SIR 10 & 11

Proposed SAWS Construction Alternative Delivery Method SMWB Scoring:

All respondents may earn the maximum number of SMWB points (10 points). Firms may use any combination of points below when attempting to meet the SMWB goals. Self-performance and subcontracting may be used to achieve the aspirational goals and earn points. SMWB prime contractors and/or subcontractors must be certified by the South Central Texas Regional Certification Agency, and must have a local presence in the San Antonio Metropolitan Statistical Area in order to be eligible for SMWB points.

1. M/WBE Scoring Method: 10 Points (By percentage) 20.00% M/WBE Goal

- MBE Participation Percentage between 1% and 4.99%: 1 Point
- MBE Participation Percentage between 5% and 9.99%: 2 Points
- MBE Participation Percentage between 10% and 14.99%: 4 Points
- MBE Participation Percentage between 15% and 16.99%: 5 Points
- MBE Participation Percentage between 17% and 19.99%: 8 Points
- MBE Participation Percentage meeting or exceeding 20.00%: 10 Points

2. SBE (Non-M/WBE) Scoring Method: 5 Points (By percentage) 5% SBE Goal

- SBE Participation Percentage between 1% and 1.99%: 1 Point
- SBE Participation Percentage between 2% and 2.99%: 2 Points
- SBE Participation Percentage between 3% and 3.99%: 3 Points
- SBE Participation Percentage between 4% and 4.99%: 4 Points
- SBE Participation Percentage meeting or exceeding 5.00%: 5 Points

Good Faith Effort Plan (GFEP) FAQs

- **Q: Is the 20% SMWB goal mandatory?**
A: No, but we ask prime contractors to do their best with good faith outreach efforts. If the goal is not met, proof of outreach efforts is required with the submittal.
- **Q: What if I am having trouble finding SMWB subcontractors?**
A: The South Central Texas Regional Certification Agency (SCTRCA) has a search portal at www.sctrca.sctrca.org, or you may reach out to the SMWVB Program Manager for assistance.
- **Q: What if my business is SMWB-certified? Do I need to find SMWB subs?**
A: If your firm is SMWB-certified, you will most likely meet the goal. However, the GFEP is a required document, and a good faith outreach effort is still necessary.
- **Q: Do I need to include all my subcontractors in the GFEP or just those that qualify towards the SMWB goal?**
A: All subcontractors need to be included in the GFEP, even those that may not count towards the SMWB goal.
- **Q: What if I have questions about the GFEP?**
A: Please contact the SMWVB Program Manager at 210-233-3420, or at Marisol.Robles@saws.org. GFEP questions can be asked at any time before the submittal is due.

Post Award: Subcontractor Payment & Utilization Reporting (S.P.U.R.) System

1. Subcontractor & Supplier Payment Tracking
2. Subcontractor and Supplier Additions or Substitutions
3. Must be Current and Accurate before Retainage is released

<https://saws.smwbe.com>

The screenshot shows the homepage of the San Antonio Water System's Subcontractor Payment & Utilization Reporting System. The page features a dark blue header with the San Antonio Water System logo on the left, a link to the main site, and a 'CONTACT SUPPORT' button. The main content area has a background image of industrial water treatment equipment. The title 'Subcontractor Payment & Utilization Reporting System' is prominently displayed in white text, with a 'Log In' button below it. Below the title, there are three columns of links: 'System Training' (with a 'Training' button), 'About the System' (with an 'Information for Vendors' button), and 'Account Access' (with 'Account Lookup' and 'Forgot Password' buttons). A footer at the bottom states: 'The Subcontractor Payment & Utilization Reporting System is powered by B2Gnow Software © Copyright 2018.'

Contract Requirements

- Prevailing Wage Rate and Labor Standards – Section 2.10 of the General Conditions
 - Certified payroll to be submitted on weekly basis
 - Wage decisions are included within the specifications
 - Contractors to utilize LCP Tracker
 - Site visits are random and unannounced
 - Interviews will be conducted and will be private & confidential
 - Payroll records are subject to review
 - All apprenticeship programs will need to be approved by Department of Labor prior to starting
 - Contractors are responsible for sub-contractor payroll
 - Late payrolls delay contractor payments from SAWS

Contract Requirements

- Insurance – Found in Section 5.7 of the General Conditions
 - Pollution Liability, and Installation Floaters are required
 - Selected contractor must be compliant with all other contracts in order for SAWS to award the contract
 - SAWS will request insurance certificate prior to Board award to ensure insurance compliance and expedite execution of the contract
 - Insurance must be compliant prior to executing the contract

Contract Requirements

- Supplemental Conditions
 - Contractor shall perform the Work with its own organization on at least 30% of the total original contract price confirmed in the GFEP
 - Liquidated Damages will be assessed at **\$1,075.00** per day

Evaluation Process

- Technical Evaluation Committee (TEC) will score the proposals based on the evaluation criteria published in the Supplementary Instructions to Respondents (SIR) to determine the Respondent who can provide the best value to SAWS
- Price will be calculated (lowest price receives the most points)
- SMWB will be added to final scores
- Selection Evaluation Committee reviews final scores and recommends firm
- Negotiations, if any
- Board award

Required Experience

- Respondents submitting a proposal for this RFCSP should clearly demonstrate, completely and sufficiently, that making improvements to existing treatment facilities, rehabilitating, and upgrading wastewater treatment plants (specifically the biosolids facilities) is a primary business focus and service, and such services have been successfully provided for at least five (5) continuous years.

Proposal Packet Preparation

- Request FTP Site for proposal upload
- Proposal page limits do apply; reference SIR for required forms that do not count
- Thoroughly review both the Instructions to Respondents and SIR
- Utilize the Proposal Response Checklist
 - 3 files required for electronic submittal
 - Follow file naming convention
- Utilize Evaluation Criteria Forms

Steven M. Clouse WRC Digester Mixing and System Enhancements Phase 3 SAWS Job No. 20-6501
Solicitation No. CO-00455

EVALUATION CRITERIA FORM

The intent of this document is to provide Respondents a structure for their responses. While there are page limits for this solicitation, there are no character limitations.

Respondents should provide answers to the questions below in the order and spaces provided to ensure continuity between Respondent's submissions.

When responding to the questions below, Respondents should use the space provided in this form, unless otherwise indicated. Stating "See Attached" or "See Following Pages" are not acceptable responses. If the Response Forms provided here are not utilized, the information provided by the Respondent will not be considered and the Respondent's score for the evaluation criteria in question may be reduced and/or Respondent's proposal may be deemed non-responsive.

If all fields are not completed, the proposal may be deemed non-responsive.

1. Team Qualifications and Experience (18 Points)

a. Organizational Structure and Information of the Prime Contractor

- Provide current business organizational structure, type of business structure, and stability of organization.
(Provide answer here)

- Provide total number of employees and annual company revenues as of December 31, 2020.
(Provide answer here)

EV-1

Proposal Packet Preparation

- Entire proposal should create a clear picture of Project Qualifications and Experience (Org chart, similar relevant project references, and resumes for Key Personnel and Key Subcontractors)
- Thoroughly review scope and ensure project references and Key Personnel resumes clearly show similar and relevant experience
- Thoroughly review evaluation criteria and respond with all required information to maximize points
- Avoid “boilerplate” responses

Proposal Packet Preparation

- Verify contact information for all project references, if SAWWS is not able to contact reference points may be deducted or proposal deemed non-responsive
- Ensure required documents are submitted and signed (i.e., Respondent Questionnaire, CIQ, etc.)
- Price Proposal
 - Acknowledge Addendums on Proposal Signature Page
 - Verify all formula extensions and mobilization and demobilization

Evaluation Criteria

Criteria	Weight	Page No.
Team Qualifications and Experience	18%	SIR-3
Quality, Reputation, and Ability to Deliver Projects on Schedule and within Budget	20%	SIR-5
Project Approach, Schedule, and Availability	15%	SIR-8
Price	37%	SIR-9
Small, Minority, and Woman-owned Business Participation	10%	SIR-10
TOTAL	100%	

Evaluation Criteria

TEAM QUALIFICATIONS AND EXPERIENCE (18 POINTS)

- Organizational Structure and Information on Prime Contractor
 - Provide current business organizational structure, type of business structure, and stability of organization
 - Provide total number of employees and annual company revenues as of December 31, 2020
 - Provide debarment history for the company for the last ten (10) years
 - Provide any litigation, arbitration, and claims history for the last three (3) years and any litigation, arbitration, and claims history with SAWS regardless of the year they occurred
 - Indicate the number of years performing contracting/construction work under current legal business name and/or previous legal business name(s)
 - Provide company financial information

Evaluation Criteria

TEAM QUALIFICATIONS AND EXPERIENCE (18 POINTS)

- Proposed Team Structure and Key Personnel Roles and Responsibilities
 - Provide a 1-page organizational chart that describes the composition of the team for this project
 - Include proposed Key Personnel for the Prime Contractor and Key Subcontractor(s)
 - Include percent availability (as percentage of total individual's workload) for Key Personnel (Prime and Key Subcontractor(s)) and their proposed role for the duration of the Project
 - Provide a clear description of the proposed team identifying Key Subcontractor(s), their role on the project, and teaming history
 - If the Prime Contractor has not worked previously with proposed Key Subcontractor(s), describe the proposed approach for ensuring successful completion of the project in accordance with Contract Documents
 - Provide a clear description of the proposed team's Key Personnel roles and responsibilities, including Key Personnel from Key Subcontractor(s)

Evaluation Criteria

TEAM QUALIFICATIONS AND EXPERIENCE (18 POINTS)

- Qualifications and Experience of Key Personnel Proposed for this Project
 - Resumes of Key Personnel on 8 ½” x 11”, one per person, not to exceed one (1) page for the prime contractor’s key personnel identified on the Org. Chart with Project Manager’s resume being first.
 - Name, job title, education
 - Number of years of total professional experience
 - Number of years/months with current company
 - Number of years/months of experience in proposed role for this project
 - Description of professional qualifications (to include degrees, licenses, certifications, and associations)
 - Brief overview of professional experience
 - Detailed description of capabilities and experience relevant to this project
 - List of all other active projects the team member is assigned to for the duration of the Project, to include the phase and percentage of time allocated to each of the other projects. For each project included in each resume, please clearly identify whether the project is with current firm or part of the person’s past professional experience

Evaluation Criteria

QUALITY, REPUTATION & ABILITY TO DELIVER PROJECTS ON SCHEDULE AND WITHIN BUDGET (20 POINTS)

- Prime Contractor On-time Completion on Similar Projects in the Past 15 Years
 - List 4 completed projects within the last 15 years of similar size, scope, and complexity to the work described in the Contract Documents for this Project
 - Respondents should provide references with contact information to include a valid, recently verified email and telephone number for each project listed
 - Key Personnel must have participated in a minimum of 2 of the 4 projects listed. The proposed Project Manager must have participated in a minimum of 2 of the 4 projects listed. Proposed Project Superintendent must have participated in a minimum of 1 of the 4 projects listed. Proposed QC Manager must have participated in a minimum of 1 of the 4 projects listed. Key Personnel's role on project reference must have been the same as the role proposed for this Project
 - If Respondent has SAWS experience, at a minimum, 1 SAWS project of similar size, scope, and complexity must be included in the list of 4 projects provided

Evaluation Criteria

QUALITY, REPUTATION & ABILITY TO DELIVER PROJECTS ON SCHEDULE AND WITHIN BUDGET (20 POINTS)

- Prime Contractor On-time Completion on Similar Projects in the Past 10 Years
 - The Respondent shall also list all current and recently completed wastewater treatment facilities improvement, and new construction projects performed in the last 5 years for all Utility Owners in the State of Texas.
 - The Respondent shall provide a list of **all** projects currently under construction in which Key Personnel are involved, as identified in the organization chart provided in the response for this RFCSP, and the expected completion date that demonstrates Respondent's ability to start and complete the work required by the project.

Evaluation Criteria

QUALITY, REPUTATION & ABILITY TO DELIVER PROJECTS ON SCHEDULE AND WITHIN BUDGET (20 POINTS)

- Key Subcontractor(s) Performance on Similar Projects in the Past 10 years
 - Provide list of 2 projects that identified Key Subcontractors' Project Manager and/or Project Superintendent participated in of similar size, scope, and complexity to the work described that have been completed in the State of Texas within the last 10 years
 - Provide a list of 2 project that identify the Key Instrumentation and Controls Subcontractors' Project Superintendent participated in that were of similar size, scope, and complexity to the work described in the Contract Documents that have been completed in the State of Texas within the last 10 years.
 - Provide a list of 2 project that identify the Key Tank Cleaning Subcontractors' Project Superintendent participated in that were of similar size, scope, and complexity to the work described in the Contract Documents that have been completed in the State of Texas within the last 10 years.

Evaluation Criteria

QUALITY, REPUTATION & ABILITY TO DELIVER PROJECTS ON SCHEDULE AND WITHIN BUDGET (20 POINTS)

- Key Subcontractor(s) Performance on Similar Projects in the Past 10 years
 - If Prime Contractor is planning to self-perform the Work in accordance with the Contract Documents and no Key Subcontractor(s) have been identified in the Response, Respondent shall provide a list of 2 additional project for each Key Subcontractor role being replaced, that were of similar scope to the Work that would have been performed by the Key Subcontractor being replaced and that have been completed in the State of Texas within the last 15 years. Prime Contractor's Key Personnel shall have participated in at least 1 of 2 projects listed.

Evaluation Criteria

PROJECT APPROACH, SCHEDULE AND AVAILABILITY (15 POINTS)

- Project Approach
 - Narrative of Project Approach to complete project, including key milestones, specific critical processes and critical path items, construction phases and/or sequencing, permits, etc.
 - Identify potential risks and describe proposed mitigation measures to ensure on-time completion of the Project
 - Provide a description of the approach specifically addressing the procurement of the following items: pumps, valves, heat exchanger systems, and other long-lead time equipment and devices.
 - Provide any innovative ideas for cost savings (due to sequencing, method of duration) for this project.
 - Provide QMP describing how the Prime Contractor will ensure that the necessary steps, safeguards, subcontractor oversight, QC processes, and document controls will be implemented in a rigorous manner as to ensure the completeness, workmanship, accuracy and successful completion of the Project.

Evaluation Criteria

PROJECT APPROACH, SCHEDULE AND AVAILABILITY (15 POINTS)

- Project Schedule and Unforeseen Conditions
 - Critical path method (CPM) schedule Primavera or Microsoft project - Assume NTP of **April 26, 2022**
 - Explain how Respondent will complete the project within schedule taking into consideration existing commitments
 - Identify long-lead time items and critical path shop drawing submittals
 - Provide details for the procurement and delivery of pumps, valves, heat exchanger systems and other long-lead time equipment and devices.
 - List and describe prior instances of unforeseen conditions
 - Approach for mitigating and managing unforeseen conditions on this project

Evaluation Criteria

PROJECT APPROACH, SCHEDULE AND AVAILABILITY (15 POINTS)

- Availability of Key Personnel and Equipment
 - Describe availability of Key Personnel for Prime Contractor for the duration of the project
 - Describe availability of equipment and facilities for this project
 - List available workforce for various disciplines required including the number of work crews, and number of personnel for each skill classification (per Org. Chart)

Evaluation Criteria

- Safety Information for Prime and Key Sub(s)
 - Records showing Total Recordable Incident Rate (TRIR) past 5 years for the Prime Contractor and Key Subcontractor(s)
 - Provide records showing the company's Experience Modification Rate (EMR) past 3 years for the Prime Contractor and Key Subcontractor(s)
 - List fatalities in company's safety history for Prime Contractor and Key Subcontractors

Evaluation Criteria

PRICE/SMWB (37 & 10 POINTS, RESPECTIVELY)

- Lowest total price will receive 37 points
- Remaining proposals will receive points based on comparison to the lowest price proposal

Proposal	Price	Calculation	Points Earned
A	\$9,350,000	$(7,750,665/9,350,000) \times 37$	30.67
B	\$10,125,800	$(7,750,665/10,125,800) \times 37$	28.32
C	\$7,750,665	$(7,750,665/7,750,665) \times 37$	37.00
D	\$8,565,450	$(7,750,665/8,565,450) \times 37$	33.48
E	\$12,700,000	$(7,750,665/12,700,000) \times 37$	22.58

- Complete Good Faith Effort Plan (reference Supplementary Instructions to Respondents)

Additional Reminders

- Register with Vendor Registration Program on the SAWS website at www.saws.org to ensure access to the latest information
- To receive updates on specific projects, registered vendors should subscribe to the project by selecting the project, and clicking ‘Subscribe’ under the Notify Me box



Notify Me

Receive updates sent straight to your
inbox.

Subscribe

Communication Reminders

- There shall not be any communication with the following during the Proposal period:
 - ✓ Design Engineer
 - ✓ SAWS Project Manager or Project Engineer
 - ✓ Any other SAWS staff
 - ✓ City Council member or staff
 - ✓ SAWS Board of Trustees
- This includes phone calls, emails, letters, or any direct or indirect discussion of the Proposal

Key Dates

- January 4, 2022 by 2:00 PM
 - January 5, 2022 (9:00 AM to 11:00 AM)
 - January 12, 2022 by 4:00 PM
 - January 19, 2022 by 4:00 PM
 - January 26, 2022 by 10:00 AM
 - January 27, 2022 by 10:00 AM
 - February 2022
 - March 2022
 - April 2022
 - April 2022
- RSVP to Site Visit
 - Site Visit
 - Questions Due
 - Addendum Posted
 - Deadline to request FTP Site
 - Proposals Due
 - Proposals Evaluated
 - Selected Contractor Notified
 - SAWS Board Approval/Award
 - NTP Issued

Submission Due Date

- Proposals due no later than **10:00 AM CT January 27, 2022**
- **Electronic Proposals Only**
- Follow specific electronic proposal delivery instructions:
 - Request the FTP Site for Upload no later than January 26, 2022 at 10:00 AM
 - Follow naming convention provided in the Respondent Proposal Checklist for all 3 files
 - Late responses will not be accepted and will not be opened
 - A WebEx proposal opening meeting will be held on January 27, 2022 at 10:00 AM
- SAWS continues to monitor and adhere to the current COVID-19 guidelines and may modify the proposal submission instructions

Project Outline

- Project Scope
 - ✓ Digester - Empty, Clean, Repair
 - ✓ Digester Mixing Upgrades
 - ✓ Digester Heat Exchanger Upgrades
 - ✓ Replace Boiler
 - ✓ Digester Gas Upgrades/Modifications
 - ✓ Miscellaneous Upgrades and Demolition
 - ✓ Electrical & Instrumentation
- Equipment Suppliers/Vendors
- Suggested Construction Phasing
- Special Conditions
- Supplemental Conditions



• [Open Comments](#)

Steven M. Clouse WRC Digester Mixing and System Enhancements Phase 3

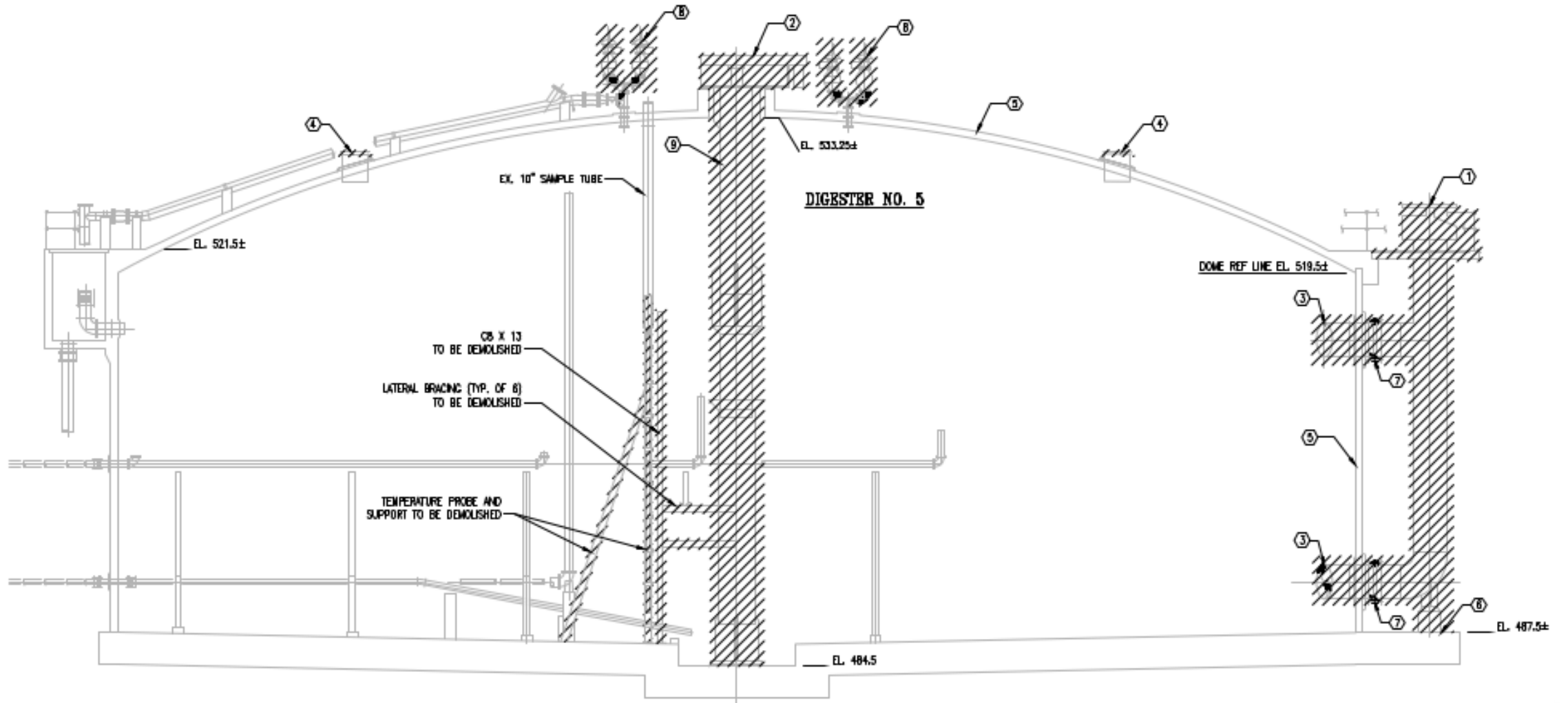
Project Scope

1. Empty and clean Digester Nos. 1 – 8 and 10
2. Repair liners, digester tank and covers, and floors/foundations, as identified during construction, for Digester Nos. 5, 7 and 8
3. Demolish draft tube mixing systems and install nozzle mixing systems on Digesters Nos. 5 – 8
4. Replace on Digester Nos. 5 – 8 the following:
 - a) Dome three-way valve and vacuum/pressure relief
 - b) 6-ft x 6-ft dome hatch
 - c) 30-inch dome manways with pressure relief hatches
5. Replace sludge recirculation and transfer piping plug valves

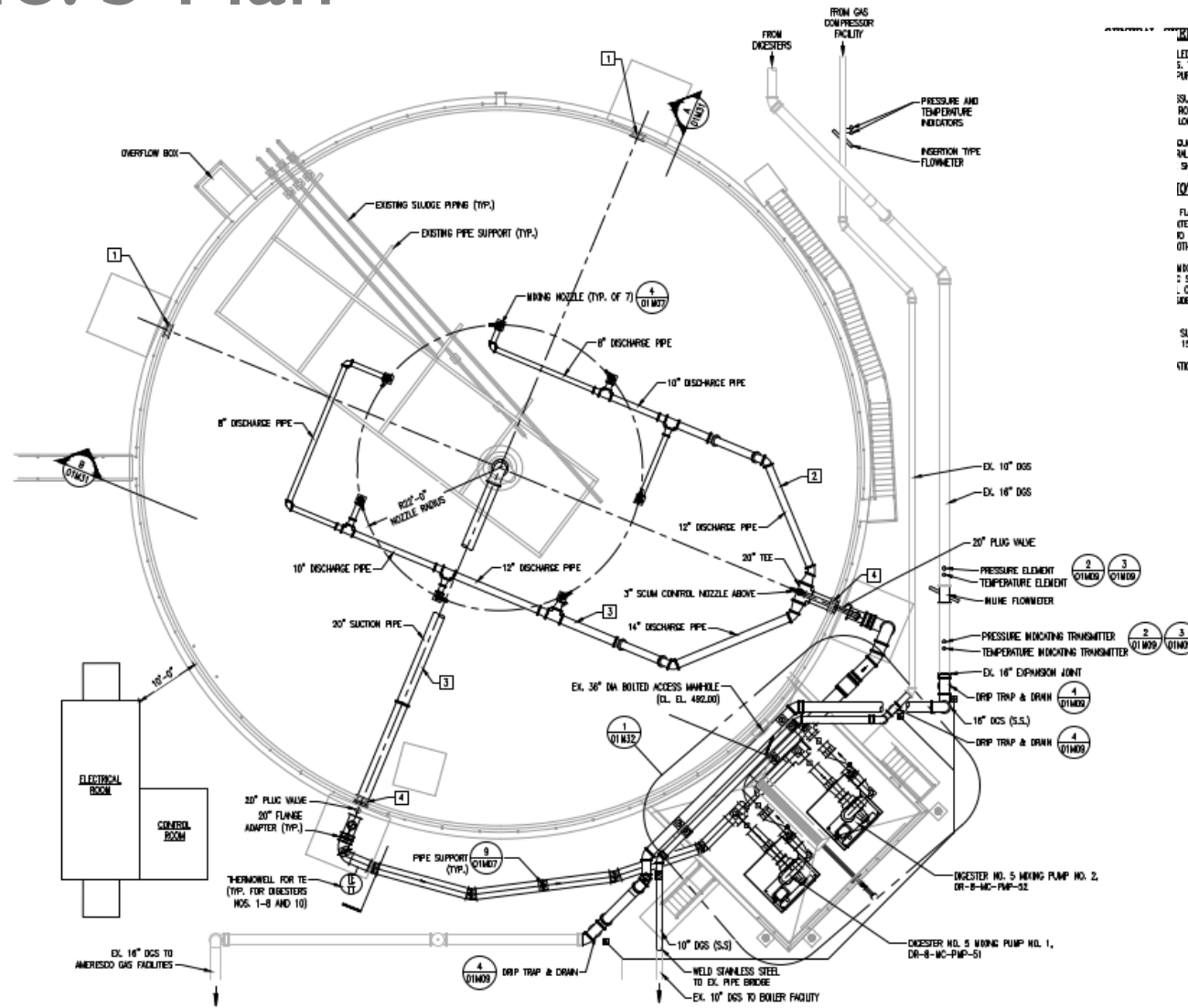
Project Scope

6. Provide new pressure relief hatches for digesters that do not currently have them - on Digester Nos. 1-8 and 10
7. Provide flow meters on pump mixing discharge line on Digester Nos. 4 and 10
8. Remove temperature sensors from Digester Nos. 1 - 8 and 10 domes. Install, on Digester Nos. 1 - 8 and 10, temperature sensors on recirculation pump suction line and pump mixing suction line
9. Install overflow lines on Digester Nos. 1 - 5, 7 and 8

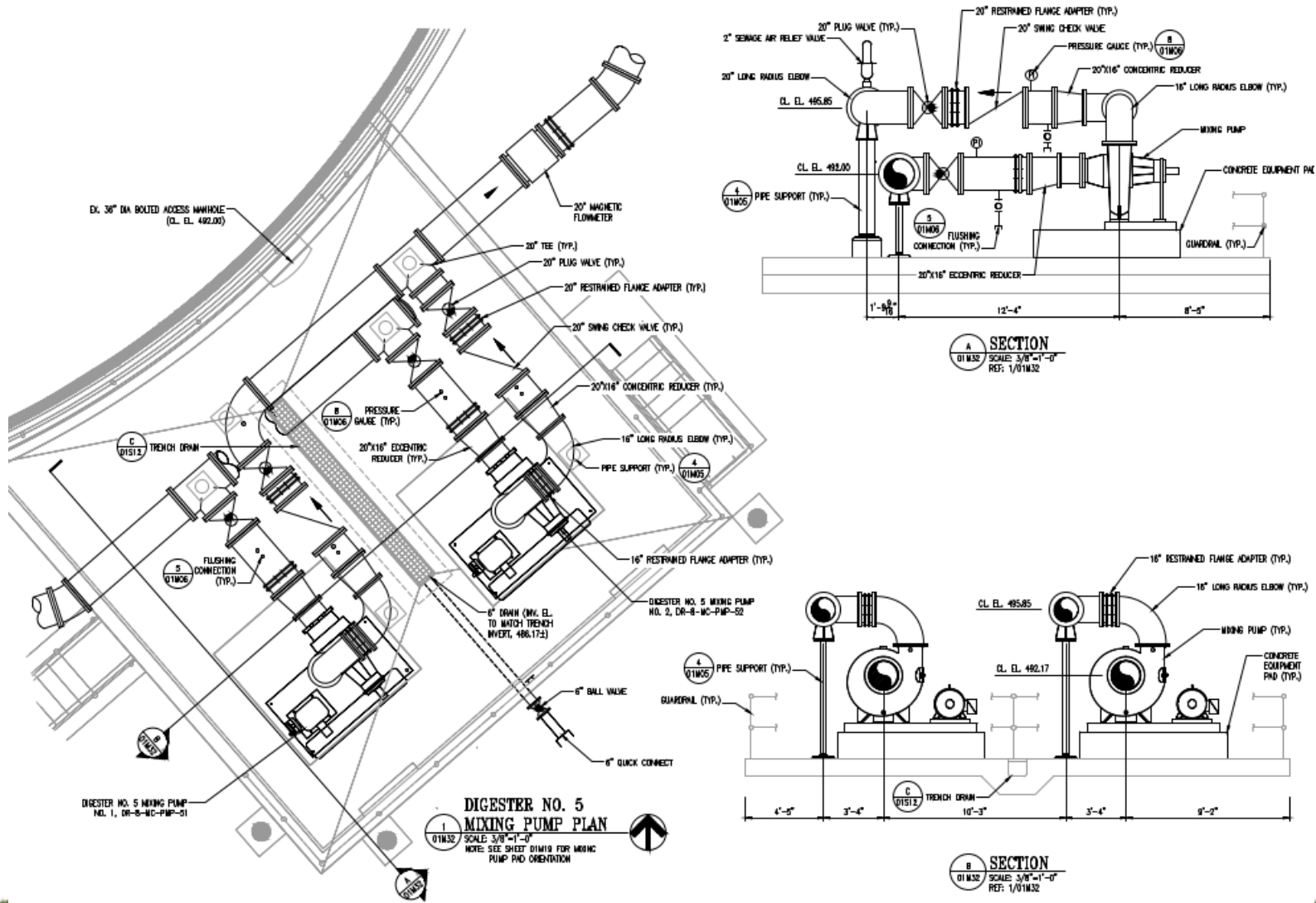
Digester No. 5 Demolition



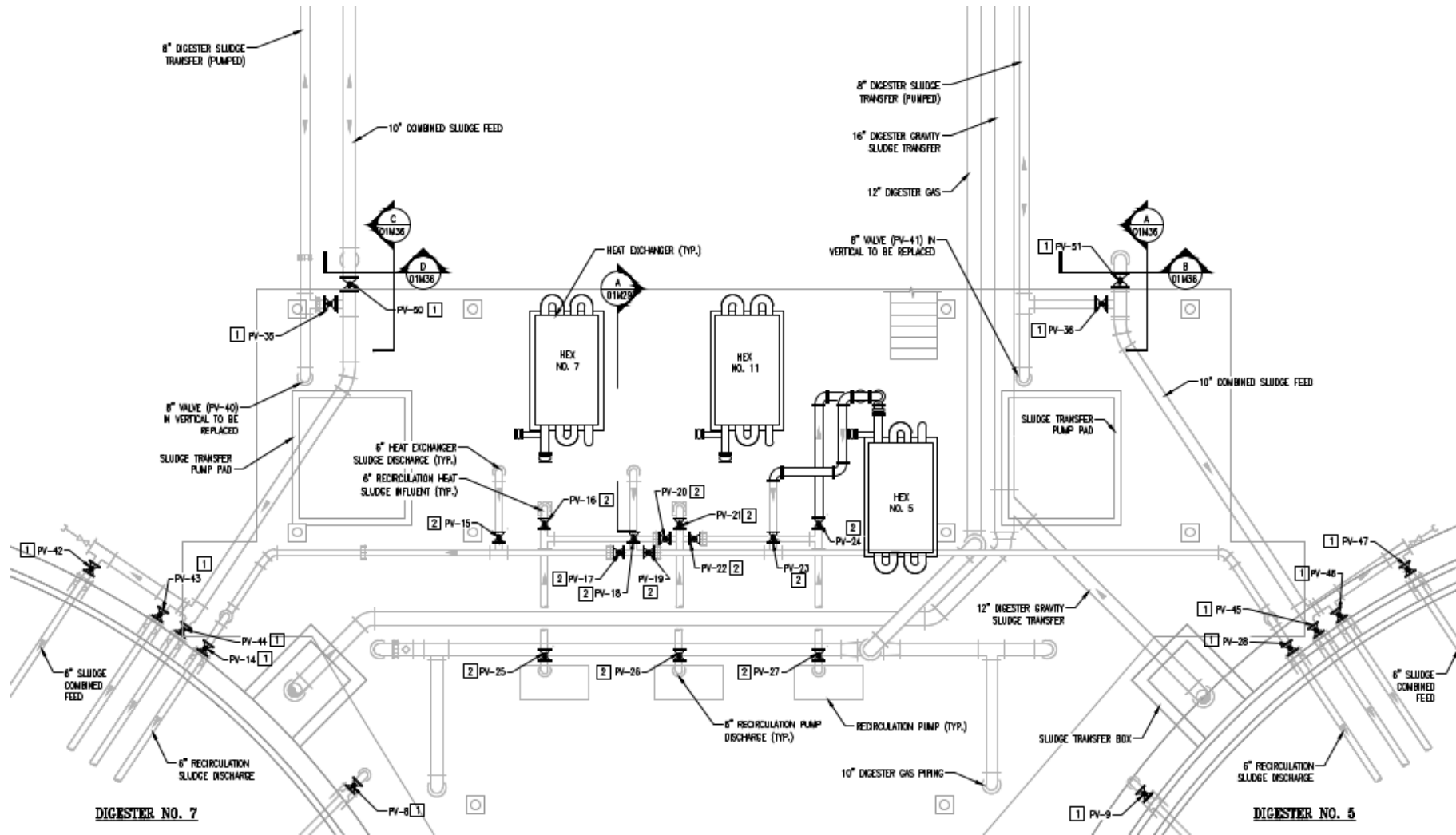
Digester No. 5 Plan



Digester No. 5 Plan and Sections



Partial Valve Replacement Plan



Project Scope

10. Pump Station Nos. 1 and 2, and Digester No. 10

- a) Relocate heat exchangers as indicated in Contract Documents
- b) Install three-way modulating control valve, flow meter, and in-line hot water pump and associated piping and appurtenances at each heat exchanger
- c) Install temperature sensors on hot water and sludge lines to and from heat exchangers

11. Replace six (6) heat exchangers in Pump Station Nos. 3 and 4

- a) Install three-way modulating control valves and in-line hot water pump and piping and appurtenances at each heat exchanger
- b) Install temperature sensors on hot water and sludge lines to and from heat exchangers

Pump Station No. 3 Demolition



DESCRIPTION: AERIAL VIEW OF PUMP STATION NO. 3 HIGHLIGHTING ALL THREE HEAT EXCHANGERS. PUMP STATION NO. 4 IS TYPICAL OF PUMP STATION NO. 3 HOWEVER THE LAYOUT IS MIRRORED.

A PHOTOGRAPH
01MD15 SCALE: NOT TO SCALE



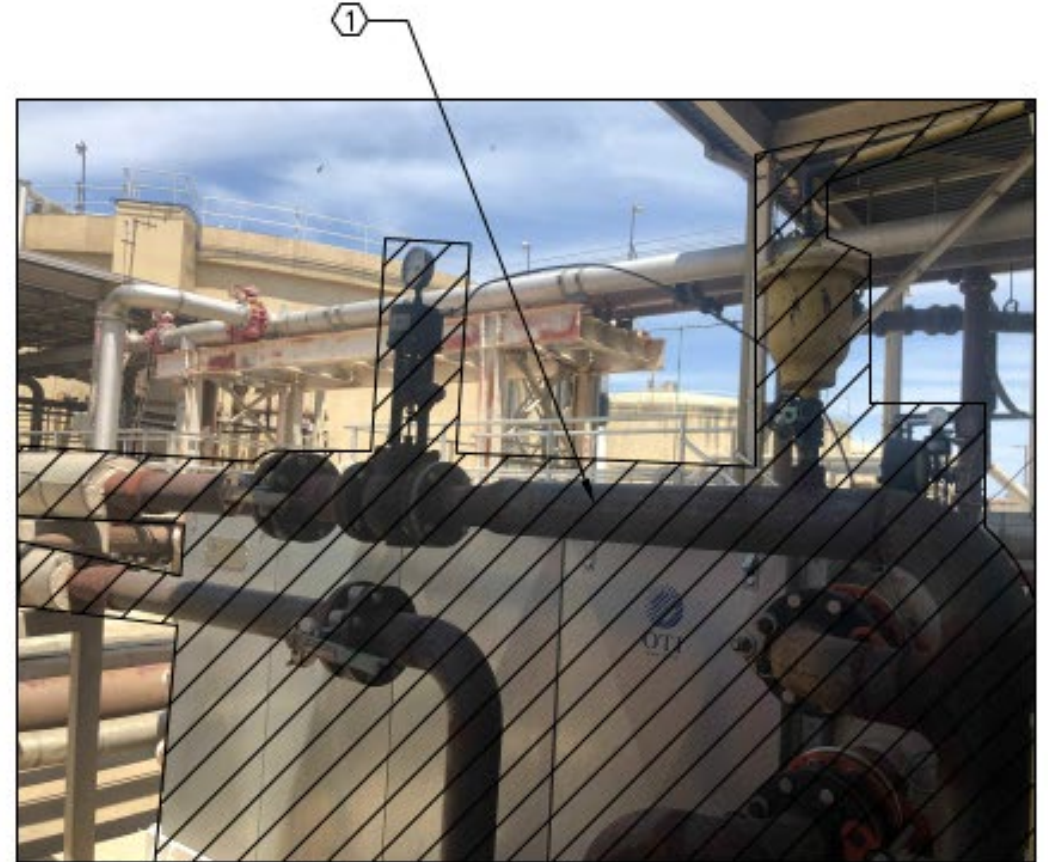
DESCRIPTION: TYPICAL FRONT VIEW OF HEAT EXCHANGER HIGHLIGHTING THE SLUDGE AND HOT WATER INLET AND OUTLET CONNECTIONS.

B PHOTOGRAPH
01MD15 SCALE: NOT TO SCALE

Pump Station No. 3 Demolition

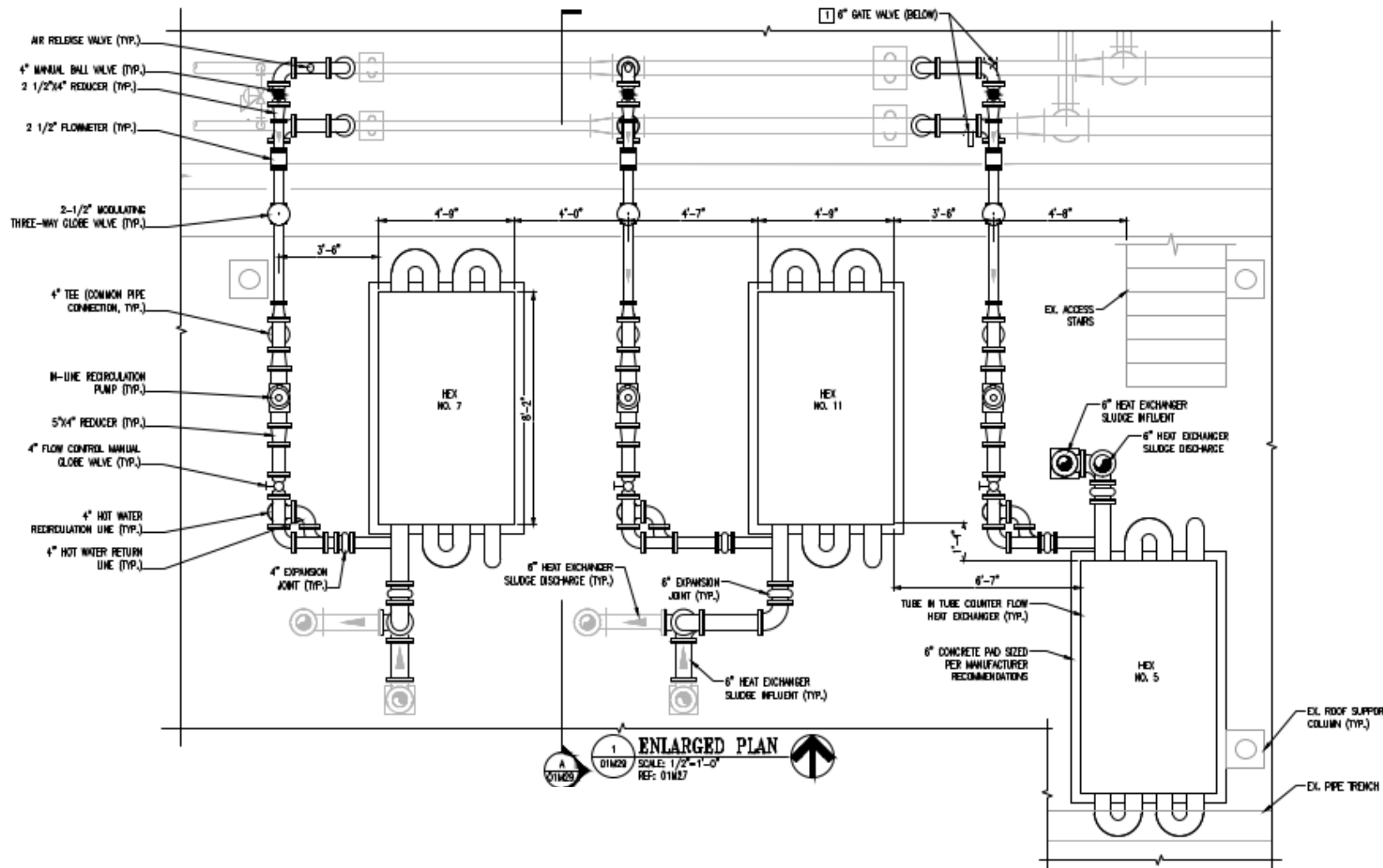


DESCRIPTION: TYPICAL SIDE VIEW OF HEAT EXCHANGER HIGHLIGHTING HOT WATER PIPING AND EQUIPMENT AS WELL AS GENERAL INSTRUMENTS.

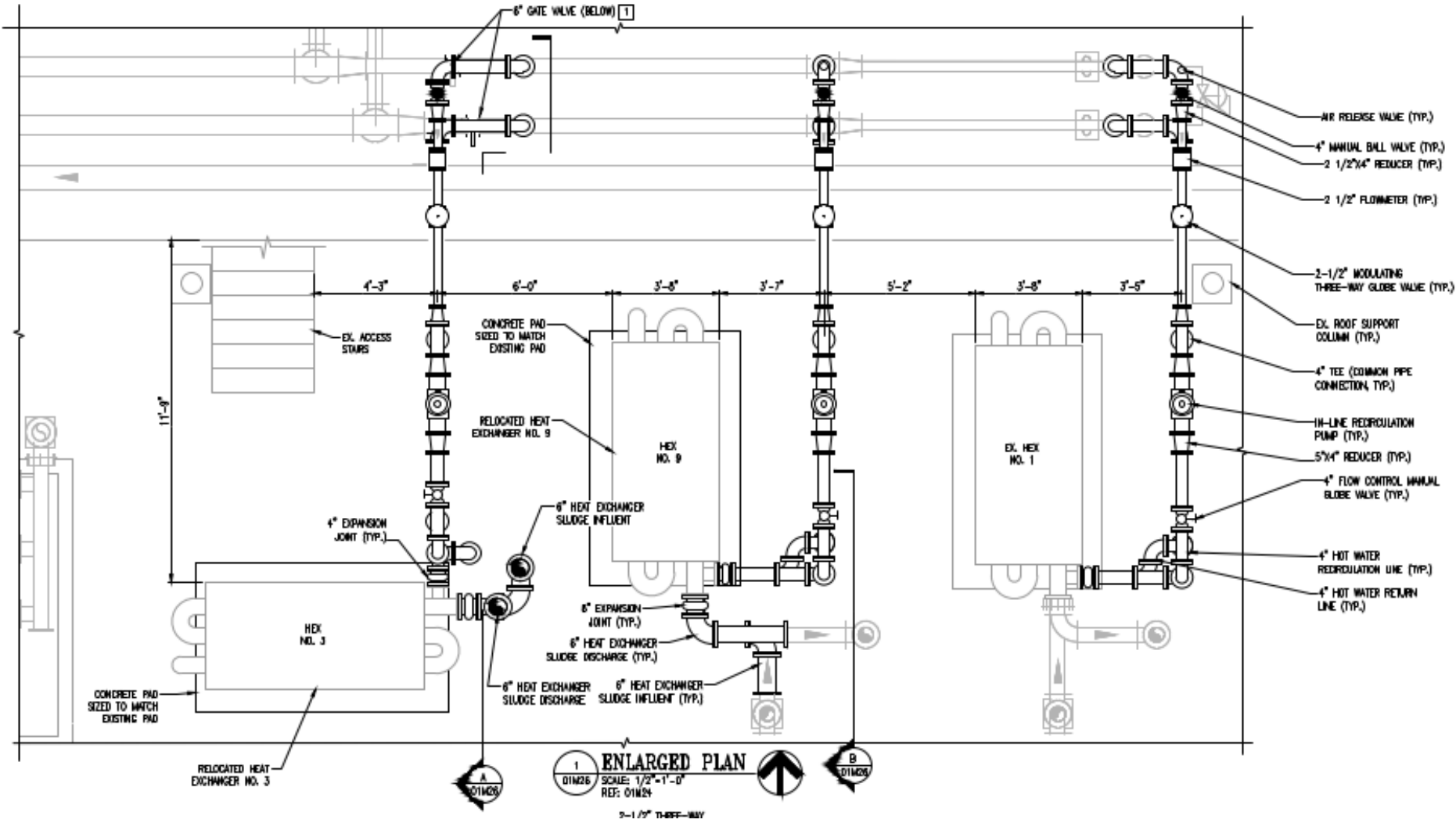


DESCRIPTION: TYPICAL ENLARGED VIEW HIGHLIGHTING HOT WATER RECIRCULATION PIPING AND VALVES.

Pump Station No. 3 Heat Exchanger Plan



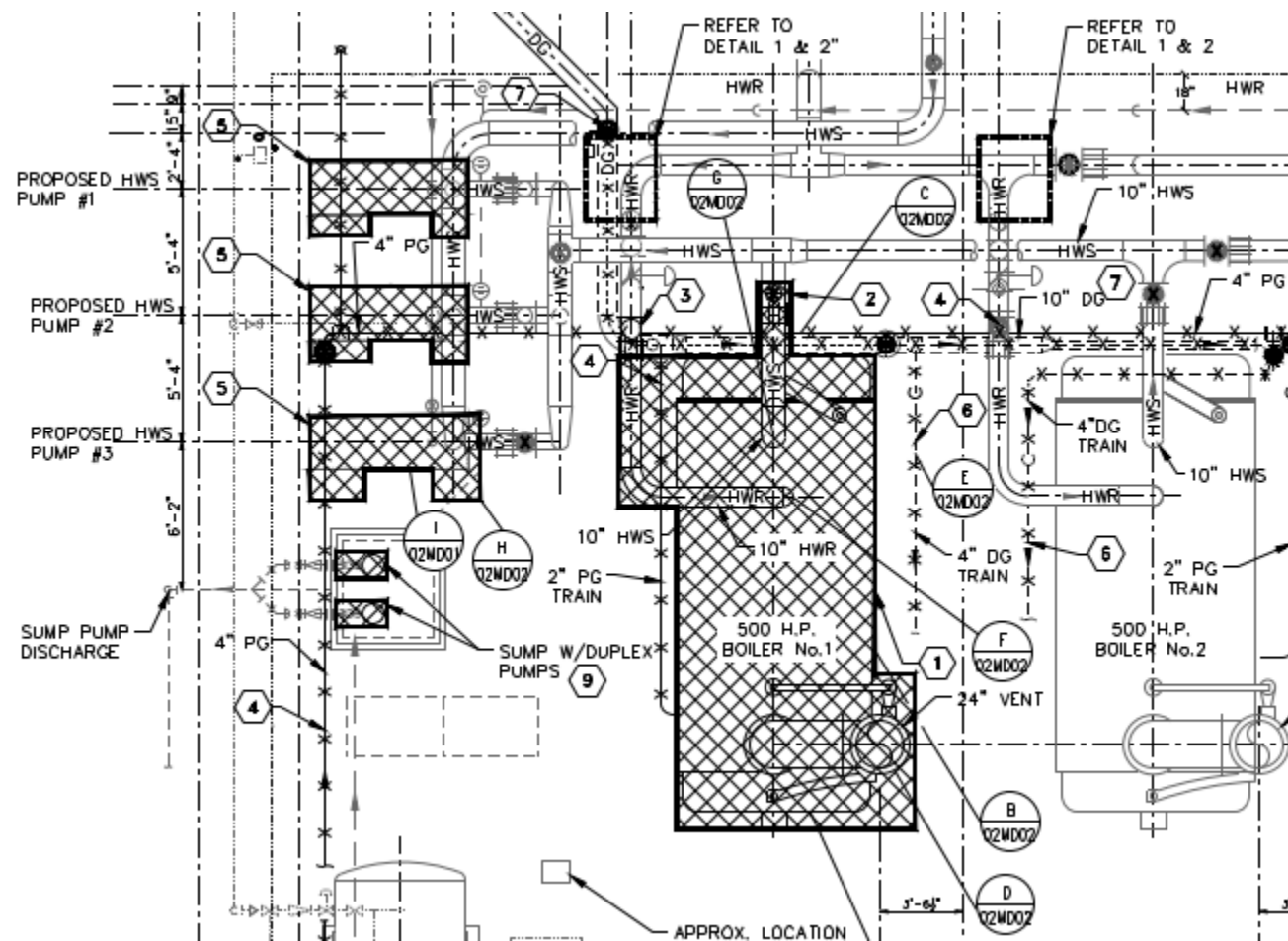
Pump Station No. I Heat Exchanger Plan



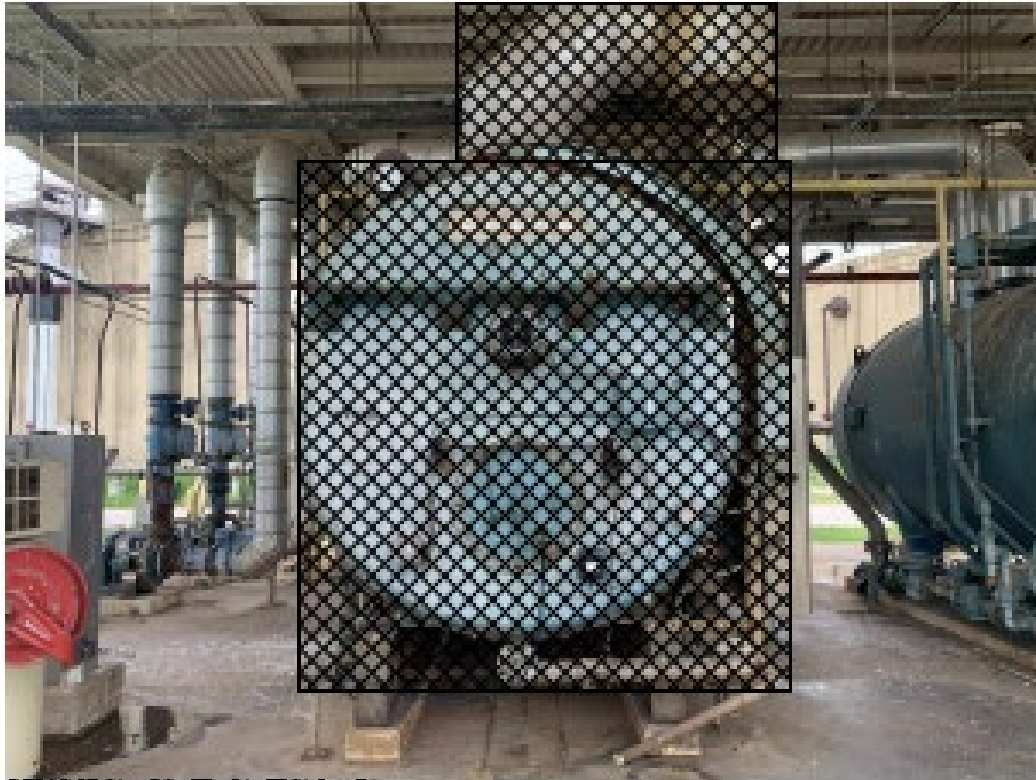
Project Scope

- I2. Replace 500 hp Boiler No. 1
- I3. Replace three (3) hot water recirculation pumps; install hot water flow meter
- I4. Replace boiler area canopy metal roof
- I5. Replace boiler area two (2) sump pumps with submersible pumps, recoat sump, replace level switches, control panel and sump cover
- I6. Provide eighteen (18) digester gas condensate removal automatic valves
- I7. Demolish Digester Building and associated grinder pump station and valve pad, and provide new 460V panel
- I8. Demolish digester gas iron sponges, and modify associated piping

Boiler Area Demolition Plan



Boiler No. 1 Demolition

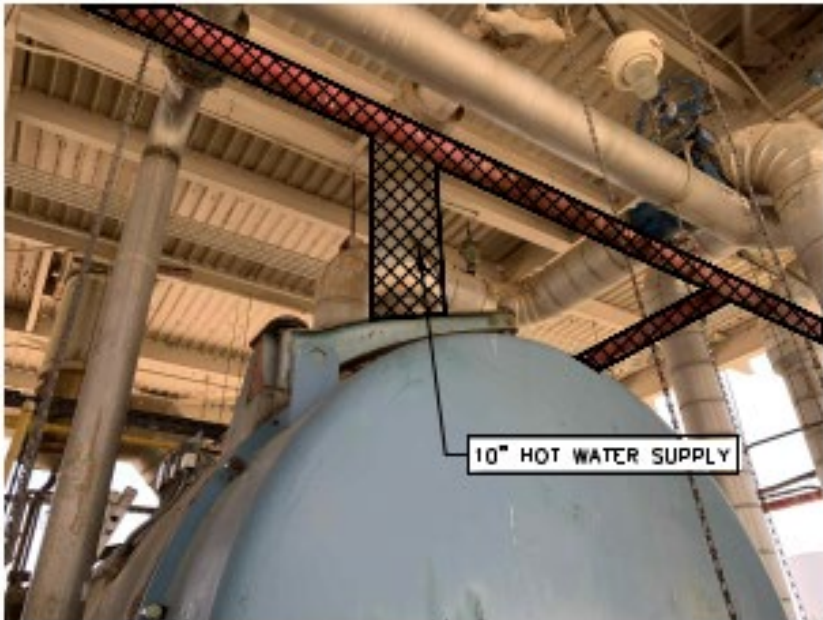


DESCRIPTION: BOILER #1 FRONT VIEW



DESCRIPTION: BOILER #1 CONTROL PANEL

Boiler LP Gas and Hot Water



10" HOT WATER SUPPLY

DESCRIPTION: BOILER #1 TYPICAL HOT WATER SUPPLY (HWS)



4" PROPANE GAS

DESCRIPTION: BOILER #1 PROPANE GAS LINE (PG)



HOT WATER SUPPLY PUMP

DESCRIPTION: HOT WATER SUPPLY PUMP

Iron Sponge Demolition

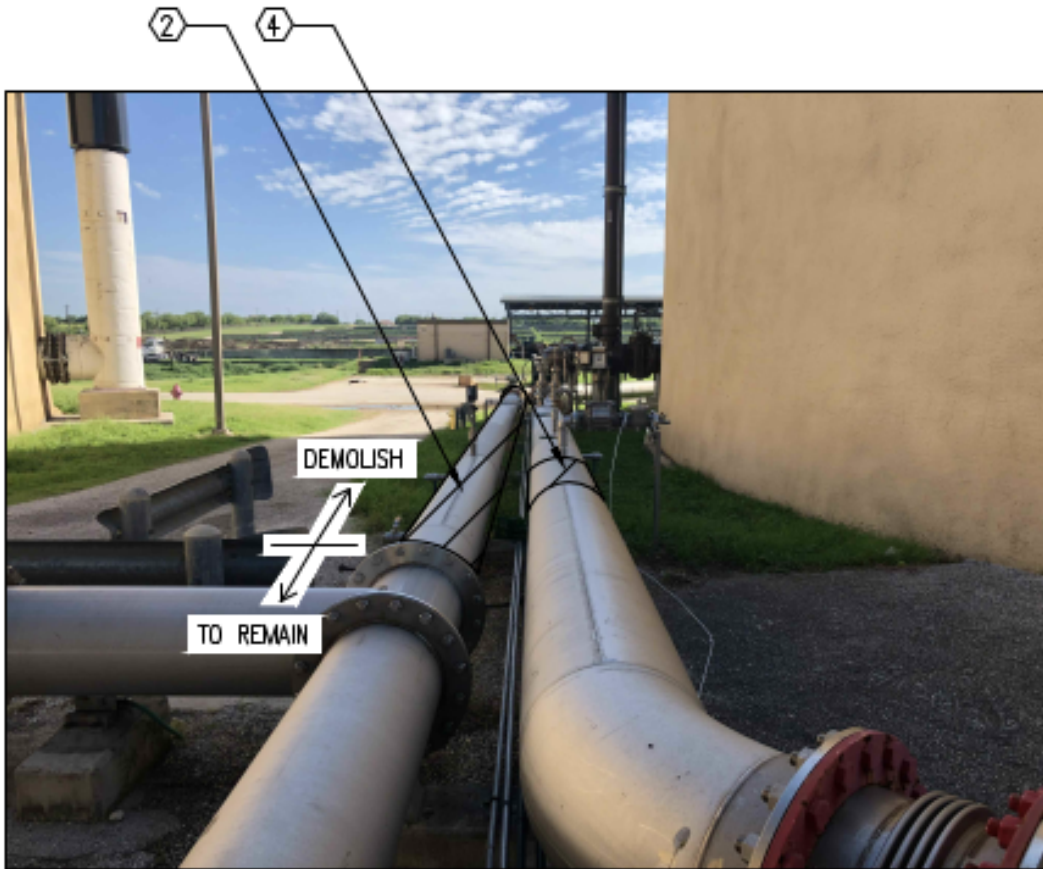


DESCRIPTION: VIEW OF IRON SPONGES FACING EAST.

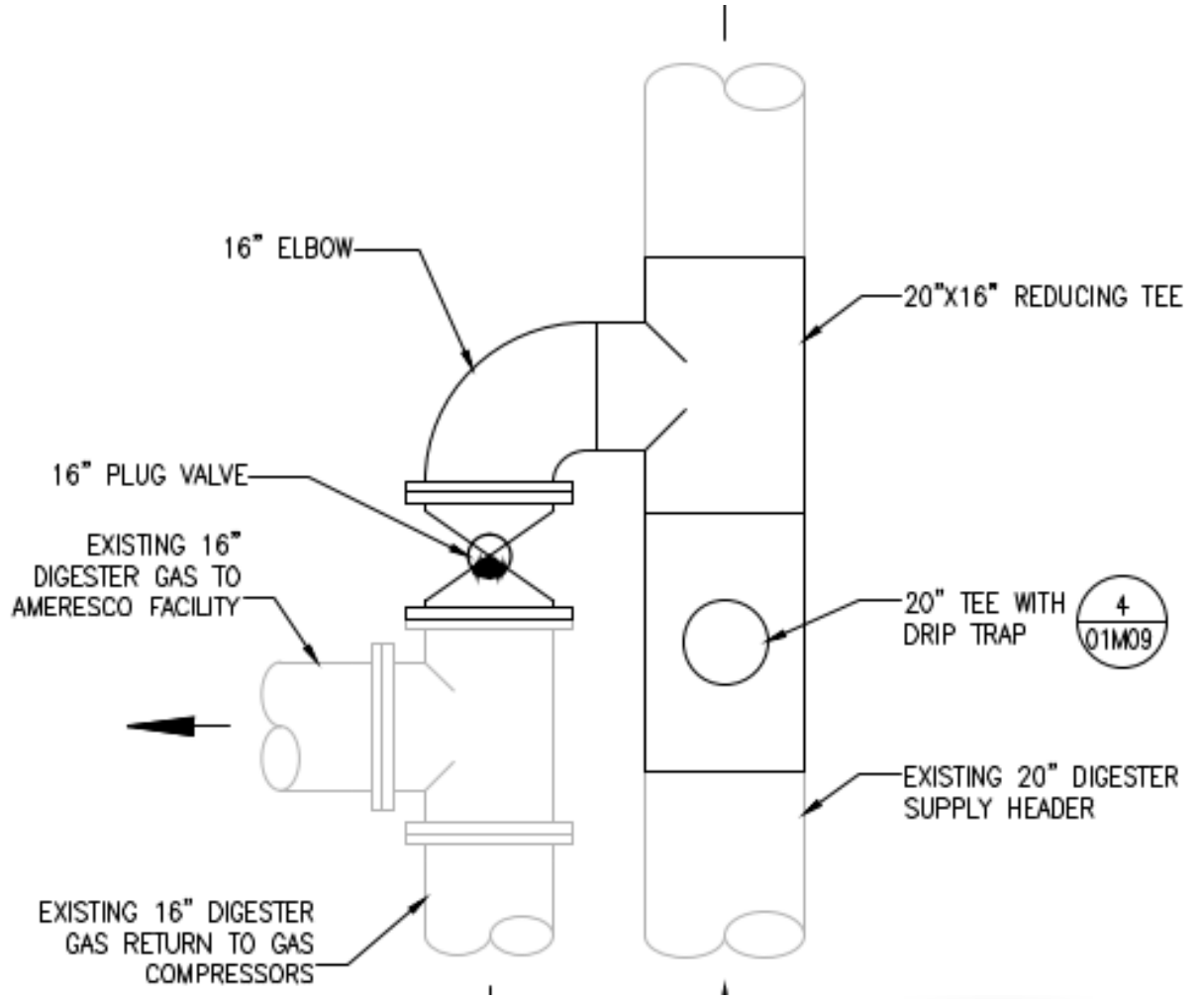


DESCRIPTION: VIEW OF IRON SPONGE PIPING FACE WEST. THE HEADER SHOWN RUNS WEST TO THE GAS FLARE STATION.

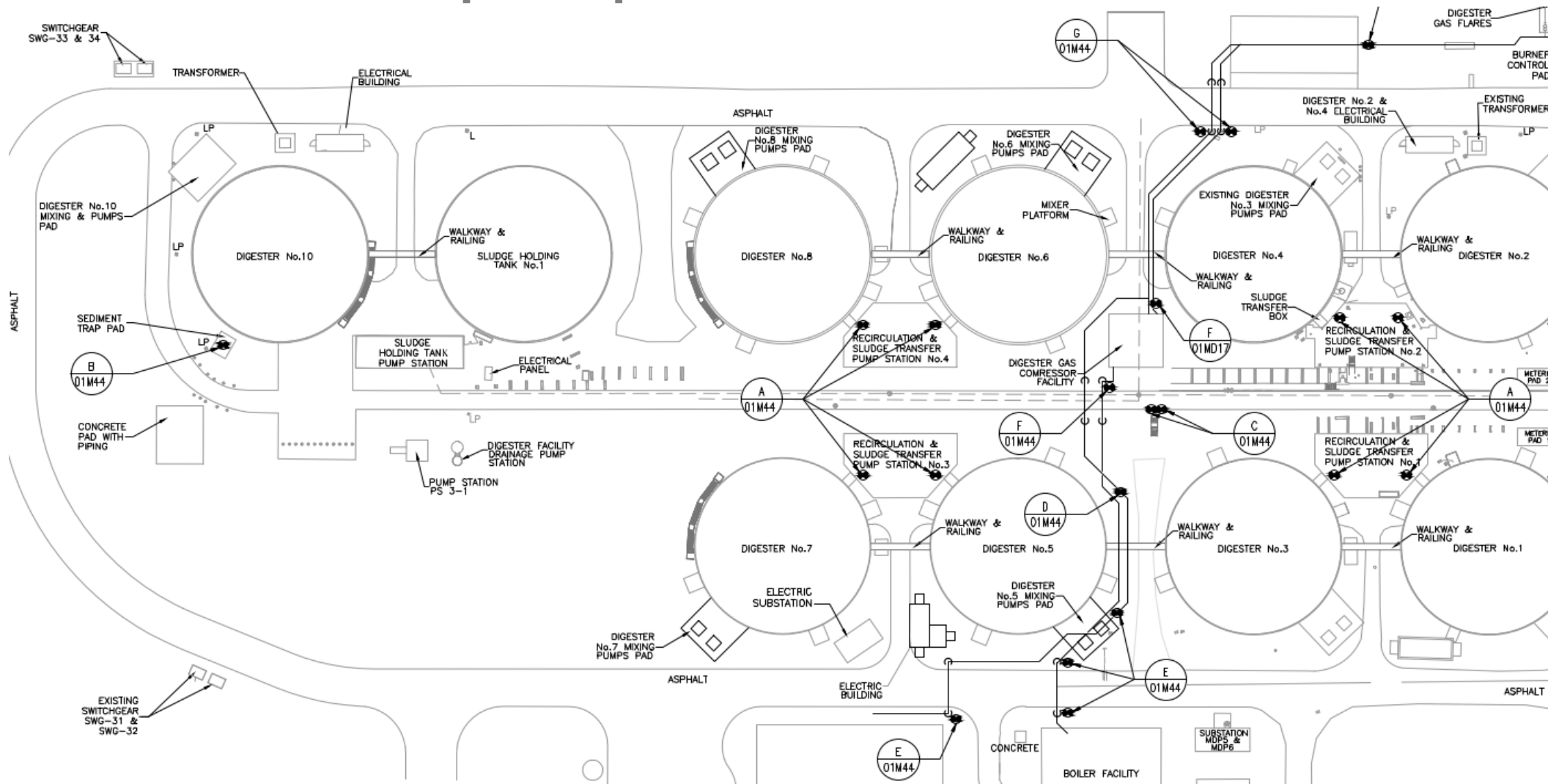
Digester Gas Modifications



DESCRIPTION: VIEW OF DIGESTER GAS SUPPLY AND RETURN HEADERS, FACING NORTH, AT THE DIGESTER GAS COMPRESSOR FACILITY.



Condensate Drip Traps



Digester Building Demolition



DESCRIPTION: VIEW OF SOUTH SIDE OF DIGESTER BUILDING, GRINDER PUMP STATION, AND VALVE PAD.



DESCRIPTION: VIEW OF NORTH SIDE OF DIGESTER BUILDING AND CONCRETE RETAINING WALL FACING WEST.

Project Scope

19. Upgrade electrical power distribution system including two (2) replacement MCCs, each in a new air-conditioned building
20. Replace the Emerson Ovation control system (DCS) for digester facilities with a PLC based system

Vendor and Equipment Suppliers

Equipment	Vendor
Digester Mixing System	Evoqua/JetMix - Allowance
Plastic Liner Repairs	Linabond Ameron/Arrow-Lock
Hot Water Recirc Pumps – End Suction	Crane/Weinman Armstrong Bell and Gossett
In Line Recirc Pumps	Armstrong Aurora Bell and Gossett Crane/Weinman
Tube in Tube Heat Exchangers	Olympus Technologies Inc. - Allowance
Boiler	Cleaver Brooks- Allowance
Digester Gas Equipment	Shand and Jurs- Allowance

Vendor and Equipment Suppliers

Equipment	Vendor
Hot Water Plug Valve	DeZurik Milliken
Sludge and Digester Gas Plug Valve	DeZurik ValMatic
LP Gas Lubricated Plug Valve	Nordstom Walworth
3-Way Control Valves	Fisher
Switchboards/ Panelboards	Cutler-Hammer-Eaton Square D/Schneider Siemens
Transformers	Cutler-Hammer-Eaton Square D – Schneider Siemens

Vendor and Equipment Suppliers

Equipment	Vendor
Motor Control Center	Cutler-Hammer-Eaton Square D – Schneider
Instruments Pressure Mag Meter Level	Endress+Hauser
Digester Gas Flow	Baker Hughes - Allowance
Split System A/C	Mitsubishi Sanyo Samsung Carrier
Pre Cast Concrete Buildings	Lonestar Prestress Manufacturing GFRC Shelters

Construction Phasing Requirements

Refer to Spec Section 01106 - Construction Scheduling for additional requirements

- A maximum of two digesters may be offline at any time
- A maximum of one boiler may be offline at any time
- Work on Digester Nos. 5 and 7 and the associated Electrical Building must be completed and operational prior to taking any other digesters offline
- Digester gas modifications require 30 days written notice to Owner prior to start of work
- Digester gas tie into existing gas lines are limited in shutdown duration (e.g. < 8 hours)

Suggested Construction Phasing Plan

- I. Perform digester gas modifications including rerouting of piping near Digester No. 5

- 2. Digester Nos. 5 and 7 work**
 - A. Inspect digesters while in service for digester gas leaks using soapy water on dome
 - B. Owner will take Digester Nos. 5 and 7 out of service and partially drain
 - C. Remove, dewater, and dispose of remaining contents of digester
 - D. Clean interior of digesters
 - E. Perform recorded drone inspection of digester interiors and exteriors with Tank Subcontractor and Engineer present
 - F. Demolish existing draft tube mixers

Suggested Construction Phasing Plan (Cont.)

- G. Write a Report on digester deficiencies,; Owner/Engineer will review/approve
- H. Install new mixing system and dome equipment
- I. Install overflows
- J. Perform liner and tank repairs as detailed in Drawings and Report
- K. Complete work at Pump Station No. 3
 - a) Replace heat exchangers and modify piping
 - b) Replace sludge valves
 - c) Modify hot water piping and install
 - i. 3-way control valves
 - ii. In line water pumps
 - iii. Hot water flowmeters
 - iv. Instrumentation

Suggested Construction Phasing Plan (Cont.)

- L. Replace sludge valves
- M. Install Electrical Building: This building must be complete and operational before taking any other digesters offline
- N. Electrical and I&C work
- O. Fill digesters with water to test repairs
- P. Coordinate with Owner to drain water and bring digesters back online

Suggested Construction Phasing Plan (Cont.)

3. **Digester Nos. 6 and 8 work**

- A. Once Digester Nos. 5 and 7 are online and operational, repeat Step 2 (above) for Digester Nos. 6 and 8
- B. Note that Digester No. 6 liner/tank repairs and overflow installation have previously been completed

Suggested Construction Phasing Plan (Cont.)

4. **Digester Nos. 1 through 4 work**

- A. Remove, dewater, and dispose of remaining contents of digesters
- B. Clean interior of digesters
- C. Install new flow meter on Digester No. 4 sludge recirculation line
- D. Install overflows
- E. Electrical and I&C work
- F. Fill digester with water to test repairs.
- G. Coordinate with Owner to drain water and bring digesters back online

Suggested Construction Phasing Plan (Cont.)

- H. Complete work at Pump Station Nos. 1 and 2
 - a) Relocate heat exchangers and modify piping
 - b) Modify hot water piping and install
 - i. 3-way control valves
 - ii. In-line water pumps
 - iii. Hot water flowmeters
 - iv. Instrumentation

Suggested Construction Phasing Plan (Cont.)

5. **Digester No. 10 work**

- A. Remove, dewater, and dispose of remaining contents of digester
- B. Clean interior of digester
- C. Install new flow meter on sludge recirculation line
- D. Electrical and I&C work

6. Demolition of Digester Building and Iron Sponges, and the Boiler area work are not directly linked to which digesters are offline

Special Conditions

- SC3: Construction Phasing and Sequencing – Alternative sequence of construction is allowed if approved in writing
- SC4 and SC7-SC11: Agreements and Vendor Quotes - No agreements exist between SAWS and vendors
- SC12: Subsurface Utility Investigation - An allowance has been provided for this item
- SC18: Geotechnical Data Report provided for information only, and can be obtained via the link provided in Contract Documents

Supplemental Conditions

- Contractor shall perform the work with its own organization on at least 30% of the total original contract price
- Liquidated Damages of \$1,075.00 per day

QUESTIONS?

Reminder: Oral statements or discussion during the pre-bid meeting today will not be binding, nor will it change or affect the terms or conditions within the Plans and Specifications of this Project. Changes, if any, will be addressed in writing only via an Addendum.

Steven M. Clouse WRC Digester Mixing and System Enhancements Phase 3 Project – RFCSP

Ila Drzymala, P.E.

Project Engineer

Stella Manzello

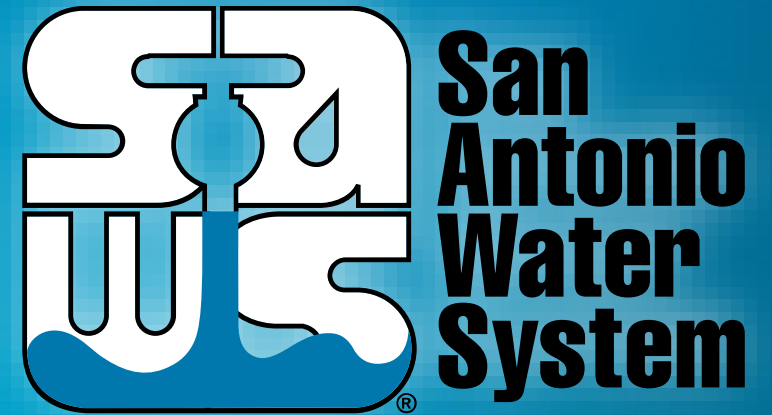
Contract Administrator

Marisol V. Robles

SMWVB Program Manager, SAWS

Alan Draper, P.E.

Project Engineer of Record, WRA



Non-Mandatory Pre-Proposal Meeting

January 4, 2022 – 11:00 AM

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