

King Street Pump Station Improvements (Volume I) & ASR Lime System Improvements (Volume II) - RFCSP Solicitation Number: CO-00670 Job No.: 20-6002 and 22-8603

ADDENDUM 3 October 19, 2023

To Respondent of Record:

This addendum, applicable to work referenced above, is an amendment to the price proposal, plans and specifications and as such will be a part of and included in the Contract Documents. Acknowledge receipt of this addendum by entering the Addendum number and issue date on the space provided in submitted copies of the Respondent Questionnaire.

RESPONSES TO QUESTIONS

- Question: We kindly request extending the bid two weeks, considering the prevailing market conditions. This
 additional time will enable us to submit a more thorough and competitive bid.
 <u>Response</u>: Refer to "Changes to the Specifications" item No. 1 REQUEST FOR COMPETITIVE SEALED PROPOSALS
 and No. 2 ELECTRONIC BID OPENING INSTRUCTIONS. The date for electronic submittal of proposals is changed
 to November 9, 2023, at 10:00 am.
- 2. Question: The seal block for Well no. 6 is paid under bid item 1.7 and 2.21. Please advise which one is correct. It would make sense to have Well 5 seal block paid under bid item 1.6 with Wells 3 & 4, and Well 6 seal block to be paid under item 2.21. Leaving bid item 1.7 for the furnish, install, and test new pumps. <u>Response:</u> Refer to "Changes to the Specifications" item No. 3, Section 01025 Payment Procedures. Sealing block and above ground pipe discharge assembly for Well no. 5 moved to bid item 1.6. Sealing block for Well no. 6 removed from bid item 1.7 and will be paid under bid item 2.21.
- 3. Question: S-302- The legend on Plan Sheet S-302 indicates aluminum guardrail is "By Others". Please advise if this isn't something you want included with the bid. <u>Response</u>: Refer to "Changes to Plans" item No. 1 in this addendum. The handrail shall be provided by the contractor. The handrail design shall be by the handrail manufacturer.
- 4. Question: A-302- Plan Sheet A-302 only indicates two areas inside the building are to receive chemical resistant protective coatings, however the spec section 09850.1.01 calls the Fluoride Building Pad and Brine concrete pad area. Are we to go by the spec or sheet A-302?

<u>*Response*</u>: The architectural plans depict only what is within the OSHG and HSPS Buildings. They do not depict the scope that is required for elements outside of the buildings. The full extent of the areas that are to receive the protective coatings are described in the specification. Specification 09850 is to be followed.

5. Question: D-302- Can you provide a cut of the south wall inside the Hypo Generation Room? We need to see how the pipe is laid out.

<u>*Response*</u>: There is flexibility in the piping layout. Contractor should rely on the process flow diagram to determine the required piping. Provide basket strainers, pressure gauges, additional supports, and fittings to mount the piping on the wall in an accessible location.

6. Question: D-302- Can you provide a cut of the north wall inside the Fluoride Building? We need to see how the pipe is laid out.

Response: Refer to the response to question No. 5 of this addendum.

7. This pertains to the ARS Lime System Areas - Do the new hot dipped galvanized spiral stairs, handrails, guardrails, platform beams and bracing require field coatings and prep?

<u>*Response*</u>: We do not require the use of epoxy or topcoats. However, it is necessary to perform touch-ups (using cold-applied galvanized coatings) to address any irregularities or imperfections that may occur during the construction phase.

8. Again ARS Lime System Area - Does the 09900 coating system actually pertain to this area? It does not appear that it does. Please advise.

<u>Response</u>: Volume II Section 099000 – Painting and Coating applies to the ASR Lime System area.

9. ARS Lime System - Please confirm that all of the new lime feed system equipment going into the existing lime silo's is all getting coated at the manufacturer's shop? Spec section 463613 does read like it will all be shop coated.

<u>*Response*</u>: This shall be confirmed by the contractor. It is the intent of the specifications that all finished work is adequately provided with the protective coatings whether they are shop applied or field applied.

10. New Pump Station - Drawings D101 & D102 Note 4 states to repair the interior and exterior coating of the existing ground storage tank per 09900. First there is no mention of this in 09900 and secondly, we cannot quantify a sq footage for coating repairs on the tank. Can you either add a bid item with a quantity of sq footage and then clarify what and how the repairs need to be done (prep, coatings etc)?

<u>Response</u>: Refer to "Changes to Plans" item No. 2 and item No. 3 in this addendum. Interior and exterior coating to be performed as per specification Sections 09871 and 09872 of the contract documents. Drawing D-101 and D-102 refer to the coating damage caused by the demolition and replacement of the inlet nozzle, installation of the inlet reinforcement plate, installation of chemical analyzer sample taps, modifications to the tank overflow pipe, and other work on the tank. The extent of the coating repairs will depend on the means and methods employed by the contractor to accomplish the work and cannot be quantified per sq ft basis. The work is incidental to the tank modifications mentioned above.

CHANGES TO THE SPECIFICATIONS

1. REQUEST FOR COMPETITIVE SEALED PROPOSALS. The last three paragraphs of the Request for Competitive Sealed Proposals are deleted in its entirety and replaced with the following:

Proposals will be received <u>electronically only</u>, until <u>10:00 AM (CDT), November 9, 2023</u>. Electronic proposals will be received via the secure SAWS FTP site. See the Electronic Proposal Opening Instructions attachment for additional information regarding an electronic proposal submittal. Electronic proposals shall be accompanied by a bid bond in an amount not less than five percent of the total proposal price. (Or, if providing SAWS with a cashier's check or certified check in an amount not less than five percent of the total proposal price, SAWS will request this within 24 hours from the Respondent who did not submit a bid bond). Proposals will then be publicly opened and read aloud by Contract Administration via WebEx.

LINK: https://saws.webex.com/saws/j.php?MTID=m7dd96d507c35c9fac9c06309b56a5ef2

Meeting Number: 2490 177 0430 Meeting Password: CO-00670 Join by Phone: +1-408-418-9388 US Toll 210-233-2090 Local Only

Respondents will need to submit a request by <u>November 8, 2023</u> by 10:00 AM (CDT) to receive access to the File Transfer Protocol (FTP) site via email to <u>Stella.Manzello@saws.org</u>. Respondent's email requesting access to the FTP site shall provide the legal name of the Respondent's company and the intended recipient's email address and phone number. No requests for FTP site access will be accepted after <u>November 8, 2023</u> by 10:00 AM (CDT).

- **2.** ELECTRONIC BID OPENING INSTRUCTIONS. Deleted the Electronic Bid Opening Instruction in its entirety and replaced with the revised version attached to this Addendum.
- 3. SECTION 01025 PAYMENT PROCEDURES

- Paragraph 1.13 Group 1 Item No. 1.6 Improvements to Wells no. 3, 4, and 5; ADD the following as item v. in paragraph 1.b "New sealing block."
- Paragraph 1.13 Group 1 Item No. 1.7 Well Pump Installation for Wells 5 & 6; DELETE paragraph 1.a.ii "Sealing block and above-ground pipe discharge assembly and ancillary items" and REPLACE with the following "Above-ground pipe discharge assembly and ancillary items."
- Paragraph 1.13 Group 1 Item No. 1.7 Well Pump Installation for Wells 5 & 6; DELETE Paragraph 1.b.ii "Sealing block and above ground pipe discharge assembly and ancillary items" and REPLACE with the following "Above ground pipe discharge assembly and ancillary items."

CHANGES TO THE PLANS

- 1. DRAWING S-302 NEW CHEMICAL BUILDING FOUNDATION FRAMING PLAN
 - DELETE in its entirety and REPLACE with the attached.
- 2. DRAWING D-101 STATIC MIXER AND TANK OUTLET PLAN AND SECTION
 - DELETE in its entirety and REPLACE with the attached.
- 3. DRAWING D-102 EXISTING 0.5 MG GST MODIFICATIONS
 - DELETE in its entirety and REPLACE with the attached.
- 4. DRAWING M-301 CHEMICAL BUILDING PLAN
 - DELETE in its entirety and REPLACE with the attached.
- 5. DRAWING M-401 HSPS BUILDING PLAN
 - DELETE in its entirety and REPLACE with the attached.
- 6. DRAWING M-501 MECHANICAL SCHEDULES
 - DELETE in its entirety and REPLACE with the attached.
- 7. DRAWING P-301 CHEMICAL BUILDING PLUMBING UNDERFLOOR PLAN
- DELETE in its entirety and REPLACE with the attached.
- 8. DRAWING P-302 CHEMICAL BUILDING PLUMBING FLOOR PLAN
 - DELETE in its entirety and REPLACE with the attached.
- 9. DRAWING P-401 HSPS BUILDING UNDER FLOOR PLAN
- DELETE in its entirety and REPLACE with the attached.
- 10. DRAWING P-501 PLUMBING SCHEMATIC AND SCHEDULES
 - DELETE in its entirety and REPLACE with the attached.

END OF ADDENDUM

This Addendum, including these three (3) pages, is fourteen (14) pages with attachments in its entirety.

Attachments:

- 1. DRAWING S-302 NEW CHEMICAL BUILDING FOUNDATION FRAMING PLAN (1 page)
- 2. DRAWING D-101 STATIC MIXER AND TANK OUTLET PLAN AND SECTION (1 page)
- 3. DRAWING D-102 EXISTING 0.5 MG GST MODIFICATIONS (1 page)
- 4. DRAWING M-301 CHEMICAL BUILDING PLAN (1 page)
- 5. DRAWING M-401 HSPS BUILDING PLAN (1 page)
- 6. DRAWING M-501 MECHANICAL SCHEDULES (1 page)
- 7. DRAWING P-301 CHEMICAL BUILDING PLUMBING UNDERFLOOR PLAN (1 page)
- 8. DRAWING P-302 CHEMICAL BUILDING PLUMBING FLOOR PLAN (1 page)
- 9. DRAWING P-401 HSPS BUILDING UNDER FLOOR PLAN (1 page)
- 10. DRAWING P-501 PLUMBING SCHEMATIC AND SCHEDULES (1 page)



Don Burger, P.E. Tetra Tech



King Street Pump Station Improvements Project and ASR Facilities Lime Improvements Project Solicitation Number: CO-00670

ELECTRONIC PROPOSAL OPENING INSTRUCTIONS November 9, 2023 - 10:00 AM (CDT)

FTP PRICE PROPOSAL UPLOAD

In order to receive electronic proposals for this project, SAWS will utilize a SAWS secured File Transfer Protocol (FTP) site. Only Respondents submitting as Prime Contractors will need to submit their request prior to **November 8, 2023, 10:00 AM (CDT)** to receive access to the FTP site via email to <u>Stella.Manzello@saws.org</u>. Respondent's email shall provide the legal name of the Respondent's company and the intended recipient's email address and phone number. No requests for FTP site access will be accepted after <u>November 8, 2023, 10:00 AM</u> (CDT). Once a Respondent is approved for access, an email with a hyperlink to the FTP site and a unique password for the Respondent will be provided to the Respondent's email recipient.

Once access is received, Respondent's may upload the required documents per the Respondent's Proposal Checklist any time before <u>November 9, 2023, 10:00 AM (CDT)</u>. <u>Please ensure to allow sufficient time should</u> <u>Respondent's experience technical difficulties in uploading the required documents. No changes to the proposal price can be made once the Proposal has been submitted.</u>

Respondents shall comply with the following:

- 1) Limit files to three (3) pdf files that includes all items as indicated on the revised Respondent's Proposal Checklist. ONLY 3 SUBMITTALS PER RESPONDENT WILL BE ACCEPTED PER REQUEST. Do not upload zip files.
- 2) Ensure that the itemized General Price Proposal Items is the first page(s) of File 1.
- 3) Respondents may protect the documents from editing by adding a password. <u>However, the document must be</u> <u>accessible for viewing by SAWS without requiring a password.</u>
- 4) Files shall be titled as required on the Respondent's Proposal Checklist.
- 5) DO NOT SHARE ACCESS AND/OR PASSWORD WITH OTHER PARTIES OUTSIDE YOUR COMPANY.
- 6) ENSURE THE PROPOSAL IS RECEIVED NO LATER THAN THE DUE DATE AND TIME. PROPOSALS RECEIVED AFTER THE PROPOSAL OPENING DEADLINE WILL NOT BE ACCEPTED.

If the Respondent is in need of help, they may contact the SAWS Contract Administrator, **Stella Manzello**, at **210-233-3854** or view troubleshooting tips at <u>http://www.Serv-U.com/sharefiles</u>

WEBEX BID OPENING MEETING

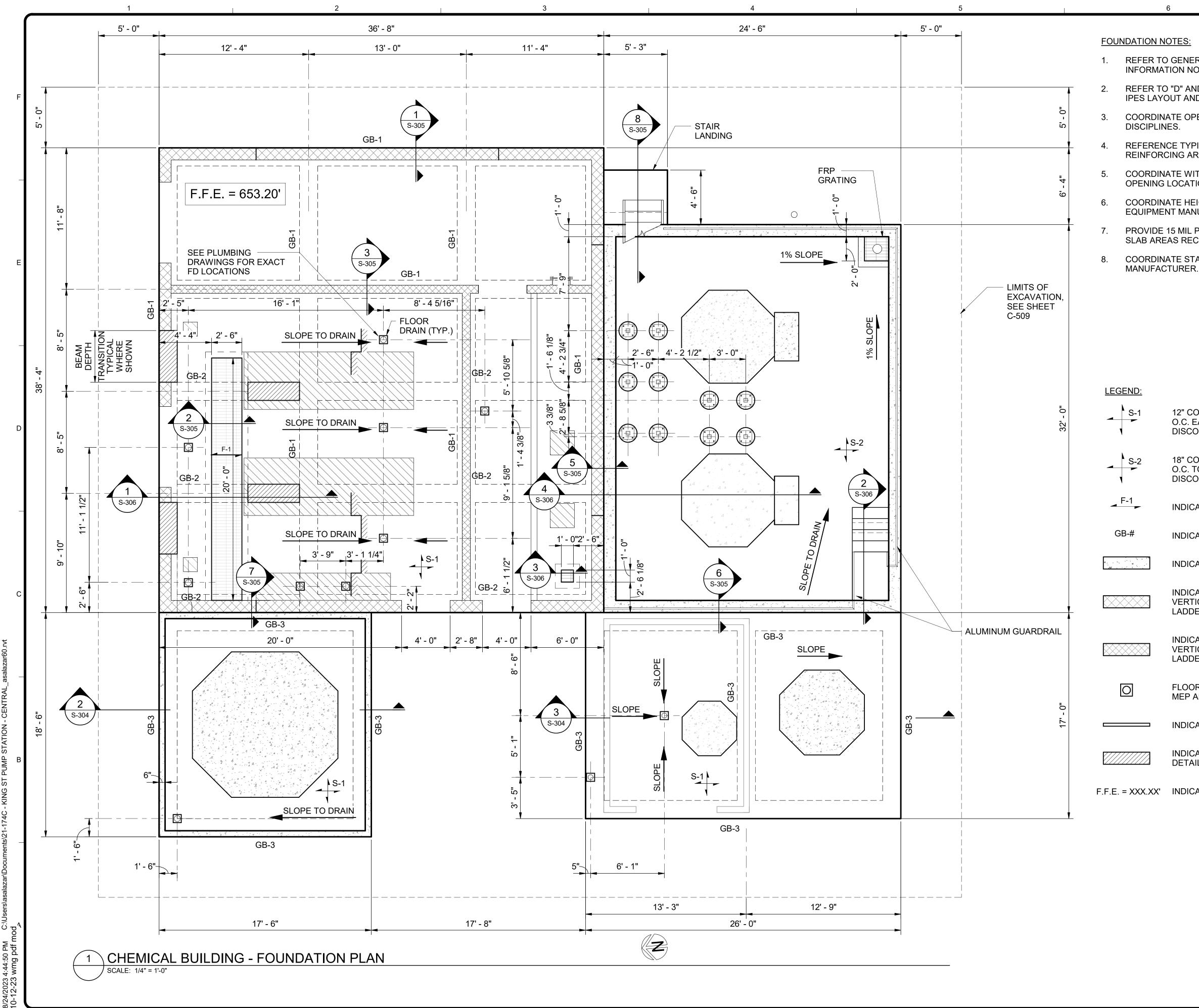
The WebEx meeting details are below if you would like to view the public opening of the proposals.

When it's time, start or join the WebEx meeting from https://saws.webex.com/saws/j.php?MTID=m7dd96d507c35c9fac9c06309b56a5ef2

Access Information Meeting Number: 2490 177 0430 Meeting Password: CO-00670 Audio Connection: 210-233-2090 (SAWS WebEx)

If you have any questions or concerns, please feel free to contact me.

Thank you, Stella Manzello Contract Administrator 2800 U.S. Highway 281 North, Ste. 171 | San Antonio, TX 78212 Office | 210-233-3854 Email |Stella.Manzello@saws.org



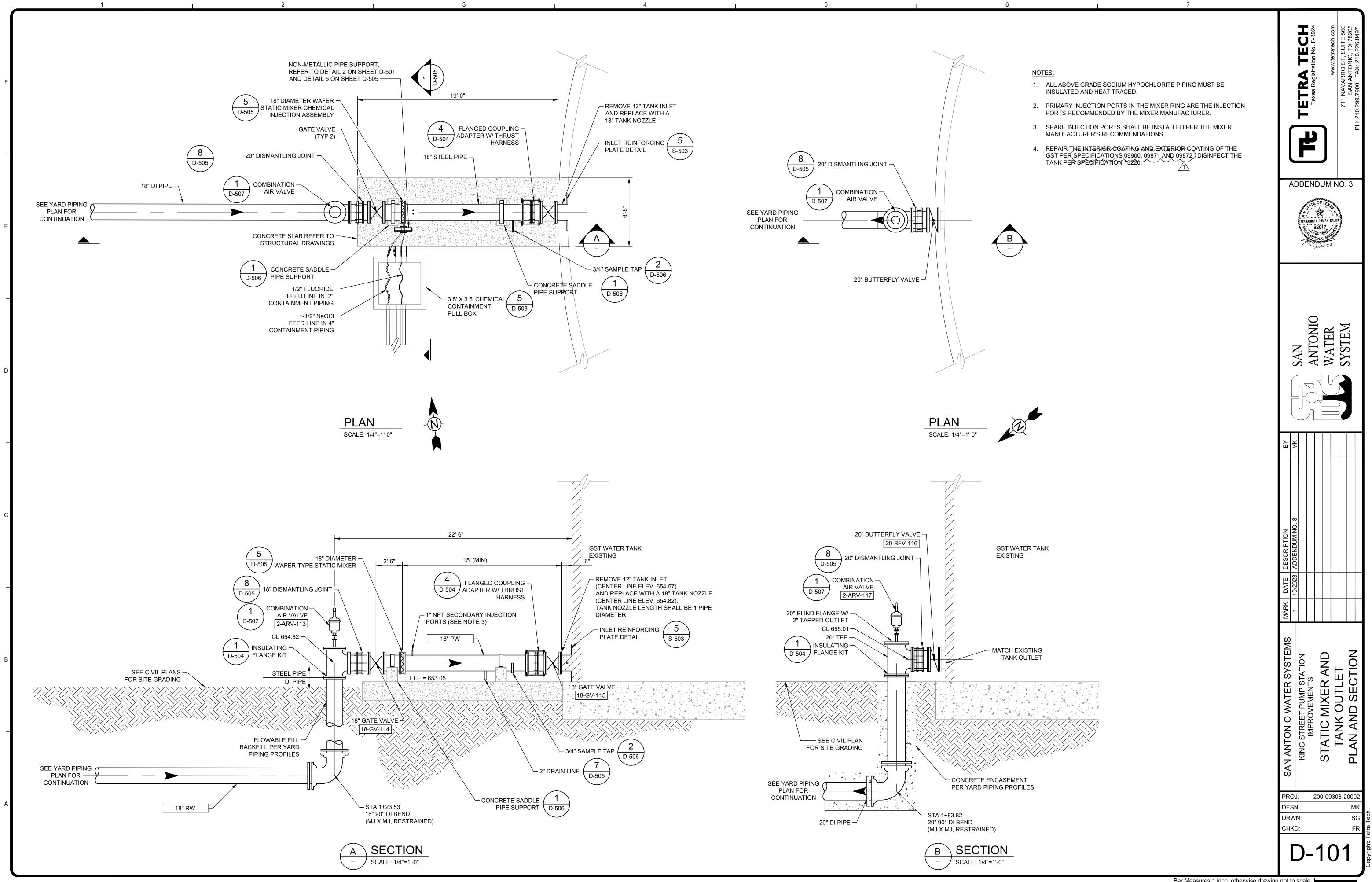
- 1. REFER TO GENERAL STRUCTURAL NOTES SHEETS FOR INFORMATION NOT GIVEN.
 - REFER TO "D" AND "MEP" DRAWINGS FOR EQUIPMENT AND IPES LAYOUT AND SIZING.
- 3. COORDINATE OPENINGS, CONDUITS, RAILINGS, ETC. WITH ALL
 - REFERENCE TYPICAL DETAIL SHEETS FOR ADDED **REINFORCING AROUND OPENINGS ETC..**
- 5. COORDINATE WITH ARCHITECTURAL FOR CMU WALL OPENING LOCATIONS.
 - COORDINATE HEIGHT OF CONCRETE PEDESTAL WITH EQUIPMENT MANUFACTURER'S.
- 7. PROVIDE 15 MIL POLYETHYLENE VAPOR BARRIER UNDER ALL SLAB AREAS RECEIVING FLOOR TREATMENTS.
- 8. COORDINATE STAIR PEDESTAL LOCATIONS WITH STAIR

- 12" CONCRETE SLAB ON GRADE WITH #6 BARS AT 12" O.C. EACH WAY. PROVIDE 90 DEGREE BEND AT DISCONTINUOUS ENDS.
- 18" CONCRETE SLAB ON GRADE WITH #7 BARS AT 10" O.C. TOP AND BOTTOM. PROVIDE 90 DEGREE BEND AT DISCONTINUOUS ENDS OF TOP BARS.
- INDICATES SPAN DIRECTION OF 1 1/2" FRP GRATING
- INDICATES CONCRETE GRADE BEAM. SEE SHEET S-501
- INDICATES CONCRETE
- INDICATES 12" CMU WALL WITH #5 BARS AT 32" O.C. VERTICAL IN FULLY GROUTED CELL AND 9 GAUGE WIRE LADDER AT 16" O.C. HORIZONTAL
- INDICATES 8" CMU WALL WITH #5 BARS AT 32" O.C. VERTICAL IN FULLY GROUTED CELL AND 9 GAUGE WIRE LADDER AT 16" O.C. HORIZONTAL
- FLOOR DRAIN. COORDINATE EXACT LOCATION WITH MEP AND PROCESS PLANS

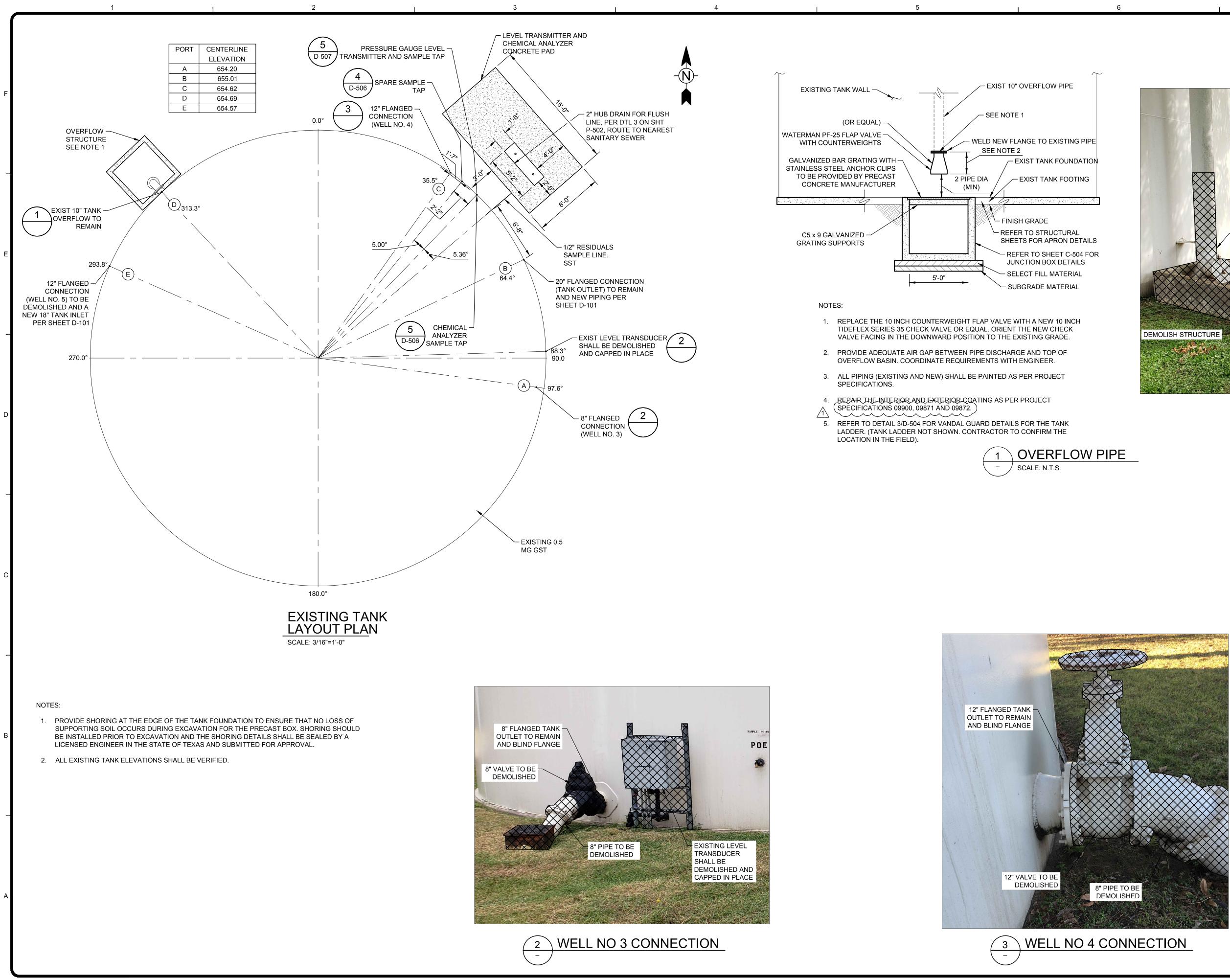
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- INDICATES ALUMINUM GUARDRAIL
- INDICATES GRADE BEAM DEPTH TRANSITION. SEE DETAIL 1 ON SHEET S-306.
- F.F.E. = XXX.XX' INDICATES TOP OF SLAB ELEVATION

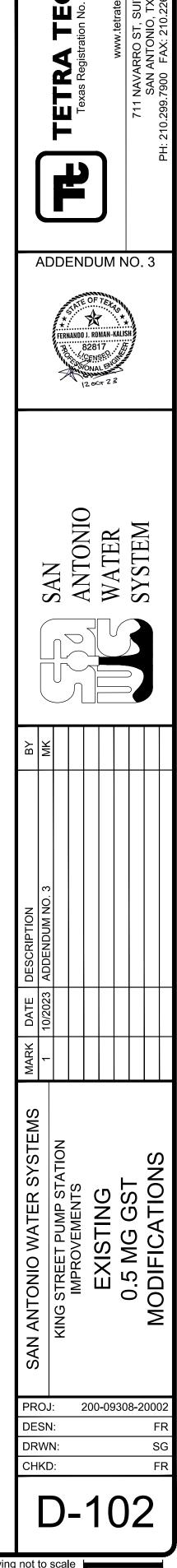
STRUCTURAL STRUCTURAL ENGINEERING ASSOCIATES TEXAS REGISTERED ENGINEERING FIRM F-199			Mww.tetratech.com	0. 3	SAN ANTONIO, TX 78205 PH: 210.299.7900 FAX: 210.226.8497
	3 WMG		WATER	NELSAS SASTEM	
	MARK DATE DESCRIPTION				
	SAN ANTONIO WATER SYSTEMS	ATION	NEW CHEMICAL BUILDING	FOUNDATION FRAMING	PLAN
	PRO DESI DRW CHKI	N: /N: D:	 0-093 BC		WG AGS JOJ



Bar Measures 1 inch, otherwise drawing not to scale

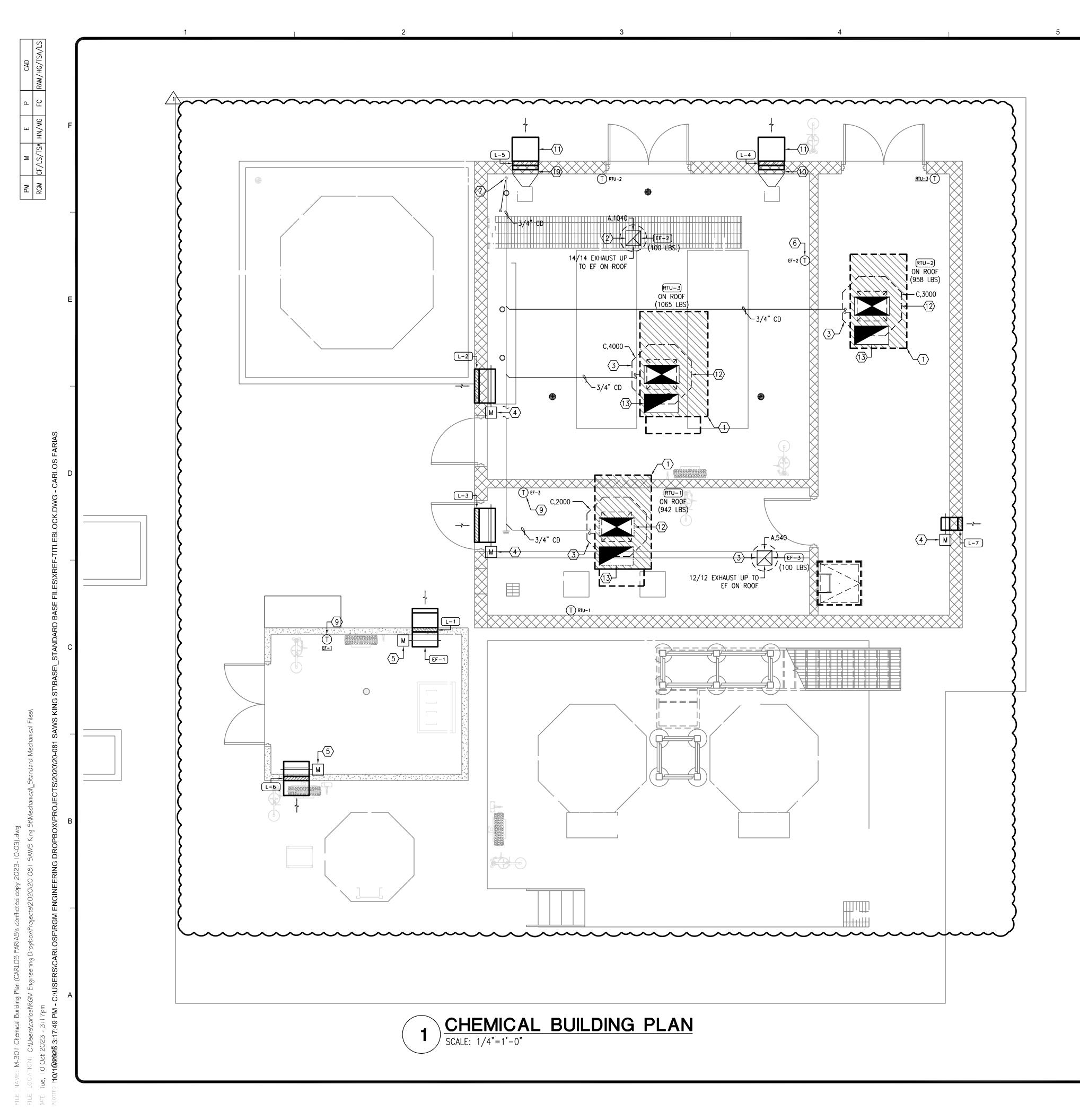






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MECHANICAL GENERAL NOTES:

- 1. ALL MECHANICAL EQUIPMENT SHALL BE 10'-0" MIN. FROM EDGE OF ROOF.
- 2. CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR FOR ALL ELECTRICAL POWER REQUIREMENTS.
- 3. THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL LOCATION OF EQUIPMENT, DUCTS, AND GRILLES, ETC. IT IS THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS THAT COMPLETE MECHANICAL SYSTEMS BE FURNISHED, INSTALLED, TESTED AND READY FOR OPERATION WHETHER EVERY ITEM OF EQUIPMENT, ACCESSORY, DEVICE, ETC. IS SHOWN. REFERENCE SHALL BE MADE TO THE FULL DRAWING PACKAGE INCLUDING ARCHITECTURAL, STRUCTURAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR COORDINATION AND POTENTIAL CONFLICTS. THE MECHANICAL SUBCONTRACTOR SHALL, WITHOUT EXTRA CHARGE, MAKE REASONABLE MODIFICATIONS IN THE LAYOUT AS NEEDED TO PREVENT CONFLICTS WITH OTHER TRADES, OR FOR PROPER EXECUTION OF THE WORK. FIELD VERIFY ALL DIMENSIONS BEFORE FABRICATING DUCTWORK.
- 4. DUCT DIMENSIONS INDICATED ON DRAWINGS ARE CLEAN INSIDE AIR STREAM DIMENSIONS.
- 5. NEW A/C EQUIPMENT SHALL BE CLEANED AFTER THE FINISHING OF DRYWALL AND PRIOR TO THE RELEASE OF BUILDING TO OWNER. MECHANICAL CONTRACTOR TO PROVIDE ALL DOCUMENTATION WITH DATE AND TIME OF UNIT CLEANING AND CONSTRUCTION FILTER REPLACED WITH NEW.
- 6. ALL UNITS GREATER THAN 2,000 CFM REQUIRE A DUCT MOUNTED SMOKE DETECTOR. VERIFY CURRENT ADOPTED STATE AND LOCAL CODE REQUIREMENTS FOR MOUNTING LOCATION OF SMOKE DETECTOR.
- 7. EQUIPMENT SIZES, DIMENSIONS, AND REQUIRED CONNECTIONS SHALL BE VERIFIED WITH THE MANUFACTURER DRAWINGS AND CUTSHEETS BEFORE FABRICATING OF DUCTWORK, PIPING, OR POURING OF HOUSEKEEPING PADS.
- 8. ALL DUCTWORK AND ASSOCIATED ACCESSORIES SHALL BE CONSTRUCTED TO MEET THE LATEST SMACNA STANDARDS FOR LOW, MEDIUM, AND HIGH PRESSURE DUCTWORK.
- 9. MECHANICAL CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF ALL OUTSIDE AIR INTAKES TO MAINTAIN 10 FEET DISTANCE BETWEEN OUTSIDE AIR INTAKES AND ANY EXHAUST AIR OUTLET, FLUES, OR PLUMBING VENTS. COORDINATE WITH PLUMBING CONTRACTOR AND OTHER TRADES.
- 10. COORDINATE LOCATIONS OF ROOF OPENINGS WITH ARCHITECT AND STRUCTURAL ENGINEER. 11. FIRE/SMOKE DAMPERS SHALL BE INSTALLED AT ALL DUCT PENETRATIONS OF FIRE/SMOKE RATED
- WALLS. 12. PROVIDE VOLUME DAMPERS AT ALL SUPPLY, RETURN, AND EXHAUST BRANCH LINES AS ESTABLISHED BY THE LATEST EDITION OF SMACNA DUCT CONSTRUCTION MANUAL AND MECHANICAL
- DETAILS ON SHEET M3.1. 13. ALL DUCTWORK SHALL BE CONSTRUCTED OF A MINIMUM OF 26 GAUGE GALVANIZED STEEL OR GREATER OF U.S. STANDARD SHEET METAL A GAUGE ONE HOUR RATED, UNLESS NOTED
- OTHERWISE ON THE DRAWINGS. 14. THE EXHAUST GRILLES ARE LOCATED CLOSE TO THE SOURCE AT THE HEIGHT INDICATED, PREFERABLE AT CORNERS, REFER TO DETAIL 4/M3.01. REVIEW EXACT LOCATION WITH THE LATEST FURNITURE. EXHAUST GRILLES ON RESTROOMS AND JANITOR AREAS ARE CEILING MOUNTED.

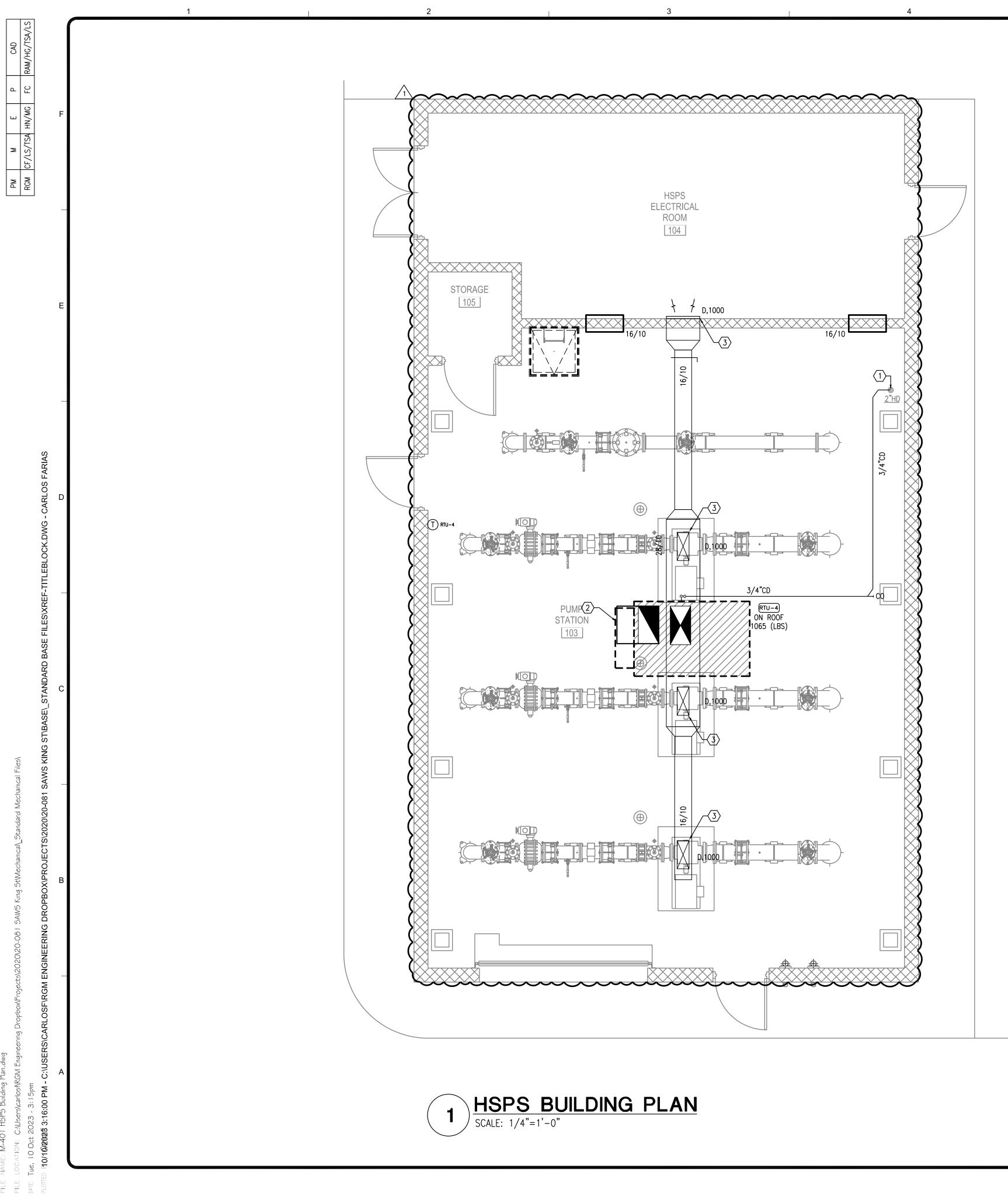
MECHANICAL KEYED NOTES:

- $\langle 1 \rangle$ ROOF TOP UNIT REFER TO SCHEDULE AND DETAIL 1/M-502.
- $\langle 2 \rangle$ exhaust fan on roof refer to schedule and detail 3/M-502. INSTALL 10'-0" FROM ALL O.A. INTAKES.
- 3 AIR DEVICE REFER TO SCHEDULE, BALANCE FOR CFM INDICATED. TRANSITION AND OFFSET DISCHARGE DUCT AS REQUIRED.
- $\langle 4 \rangle$ motorized damper to open 100% when associated RTU fan
- IS ENERGIZED.
- $\langle 5 \rangle$ motorized damper to open 100% when exhaust fan is ENERGIZED.
- $\langle 6 \rangle$ FAN WILL OPERATE CONTINUOUSLY. PROVIDE DISCONNECT FOR MEANS OF START AND STOP.
- $\langle 7 \rangle$ provide time clock for means of operation.
- $\langle 8 \rangle$ provide copper condensate drain on roof to hub drain BELOW. REFER TO PLUMBING. SIZE AS INDICATED.
- $\langle 9 \rangle$ provide thermostat for exhaust fan. Set to ENERGIZE/DE-ENERGIZE ASSOCIATED FAN AT 80° F, ADJUSTABLE.
- $\langle 10 \rangle$ provide duct transition to connect wall louver to HYDROGEN VENT BLOWER.
- TI PROVIDE WEATHER HOODS. SEE LOUVER SCHEDULE FOR MORE INFORMATION.
- $\langle 12 \rangle$ provide duct drop from rtu and connect to air device SHOWN ON PLAN. FOLLOW AIR DEVICE MANUFACTURER'S RECOMMENDATIONS TO MAKE CONNECTION TO AIR DEVICE.
- $(\overline{13})$ provide return duct drop sized to match return OPENING. TERMINATE WITH ELBOW AND BIRDSCREEN. ·····

ENGINEERING FIRM F-10487 6243 IH 10, SUITE 501 SAN ANTONIO, TX 78201 WWW.RGMENGINEERING.NET PHONE: 210.299.4522 FAX: 210.299.4525



SAN ANTONIO WATER SYSTEMS KING STREET PUMP STATION IMPROVEMENTS CHEMICAL BUILDING PLAN



MECHANICAL GENERAL NOTES:

- REQUIREMENTS.

- DETECTOR.
- POURING OF HOUSEKEEPING PADS.

- WALLS.
- DETAILS ON SHEET M3.1.
- OTHERWISE ON THE DRAWINGS.

MECHANICAL KEYED NOTES:

- 2 PROVIDE 34/10 RETURN ELBOW CONNECTED TO RETURN SIDE OF RTU.

ENGINEERING FIRM F-10487 6243 IH 10, SUITE 501 SAN ANTONIO, TX 78201 WWW.RGMENGINEERING.NET PHONE: 210.299.4522 FAX: 210.299.4525

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY CARLOS FARIAS, P.E. 112838 ON <u>08/22</u>,20<u>2</u>3



1. ALL MECHANICAL EQUIPMENT SHALL BE 10'-0" MIN. FROM EDGE OF ROOF.

2. CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR FOR ALL ELECTRICAL POWER

3. THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL LOCATION OF EQUIPMENT, DUCTS, AND GRILLES, ETC. IT IS THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS THAT COMPLETE MECHANICAL SYSTEMS BE FURNISHED, INSTALLED, TESTED AND READY FOR OPERATION WHETHER EVERY ITEM OF EQUIPMENT, ACCESSORY, DEVICE, ETC. IS SHOWN. REFERENCE SHALL BE MADE TO THE FULL DRAWING PACKAGE INCLUDING ARCHITECTURAL, STRUCTURAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR COORDINATION AND POTENTIAL CONFLICTS. THE MECHANICAL SUBCONTRACTOR SHALL, WITHOUT EXTRA CHARGE, MAKE REASONABLE MODIFICATIONS IN THE LAYOUT AS NEEDED TO PREVENT CONFLICTS WITH OTHER TRADES, OR FOR PROPER EXECUTION OF THE WORK. FIELD VERIFY ALL DIMENSIONS BEFORE FABRICATING DUCTWORK.

4. DUCT DIMENSIONS INDICATED ON DRAWINGS ARE CLEAN INSIDE AIR STREAM DIMENSIONS.

5. NEW A/C EQUIPMENT SHALL BE CLEANED AFTER THE FINISHING OF DRYWALL AND PRIOR TO THE RELEASE OF BUILDING TO OWNER. MECHANICAL CONTRACTOR TO PROVIDE ALL DOCUMENTATION WITH DATE AND TIME OF UNIT CLEANING AND CONSTRUCTION FILTER REPLACED WITH NEW.

6. ALL UNITS GREATER THAN 2,000 CFM REQUIRE A DUCT MOUNTED SMOKE DETECTOR. VERIFY CURRENT ADOPTED STATE AND LOCAL CODE REQUIREMENTS FOR MOUNTING LOCATION OF SMOKE

7. EQUIPMENT SIZES, DIMENSIONS, AND REQUIRED CONNECTIONS SHALL BE VERIFIED WITH THE MANUFACTURER DRAWINGS AND CUTSHEETS BEFORE FABRICATING OF DUCTWORK, PIPING, OR

8. ALL DUCTWORK AND ASSOCIATED ACCESSORIES SHALL BE CONSTRUCTED TO MEET THE LATEST SMACNA STANDARDS FOR LOW, MEDIUM, AND HIGH PRESSURE DUCTWORK.

9. MECHANICAL CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF ALL OUTSIDE AIR INTAKES TO MAINTAIN 10 FEET DISTANCE BETWEEN OUTSIDE AIR INTAKES AND ANY EXHAUST AIR OUTLET FLUES, OR PLUMBING VENTS. COORDINATE WITH PLUMBING CONTRACTOR AND OTHER TRADES.

10. COORDINATE LOCATIONS OF ROOF OPENINGS WITH ARCHITECT AND STRUCTURAL ENGINEER.

11. FIRE/SMOKE DAMPERS SHALL BE INSTALLED AT ALL DUCT PENETRATIONS OF FIRE/SMOKE RATED

12. PROVIDE VOLUME DAMPERS AT ALL SUPPLY, RETURN, AND EXHAUST BRANCH LINES AS ESTABLISHED BY THE LATEST EDITION OF SMACNA DUCT CONSTRUCTION MANUAL AND MECHANICAL

13. ALL DUCTWORK SHALL BE CONSTRUCTED OF A MINIMUM OF 26 GAUGE GALVANIZED STEEL OR GREATER OF U.S. STANDARD SHEET METAL A GAUGE ONE HOUR RATED, UNLESS NOTED

14. THE EXHAUST GRILLES ARE LOCATED CLOSE TO THE SOURCE AT THE HEIGHT INDICATED, PREFERABLE AT CORNERS, REFER TO DETAIL 4/M3.01. REVIEW EXACT LOCATION WITH THE LATEST FURNITURE. EXHAUST GRILLES ON RESTROOMS AND JANITOR AREAS ARE CEILING MOUNTED.

1 PROVIDE COPPER CONDENSATE DRAIN ON ROOF TO FLOOR DRAIN BELOW. REFER TO PLUMBING. SIZE AS INDICATED.

3 AIR DEVICE REFER TO SCHEDULE, BALANCE FOR CFM INDICATED. TRANSITION AND OFFSET DISCHARGE DUCT AS REQUIRED.

	HETRA TECH Texas Registration No. E-3924		711	SAN ANTONIO, TX 78205 PH: 210.299.7900 FAX: 210.226.8497
	JAIN ANTONIO	WATER	SVSTFM	
ΒΥ RCM	RGM			
MARK DATE DESCRIPTION				
SAN ANTONIO WATER SYSTEMS	KING STREET PUMP STATION IMPROVEMENTS	HSPS BUILDING PLAN		
PRO. DESM DRW CHKI	N:	200-09	308-2	0002
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Schedules.
Mechanical Schedules
M-50
NAME:

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MARK	L-1	L-2	L-3	L-4	L-5	L-6	L-7		
SERVES	FLUORIDE RM	HYPO RM	PUMP RM	HYPO RM	HYPO RM	FLUORIDE RM	ELECTRICAL ROOM		
CFM	525	1,040	CI	300	300	525	125		
MAX. P.D. (IN. W.G.)	0.1	0.1	0.1	0.1	0.1	0.1	0.1		
INTAKE/EXHAUST	INTAKE	INTAKE	INTAKE	INTAKE	INTAKE	RELIEF	RELIEF		
SIZE W X H (IN)	24 X 24	32 X 24	24 X 16	24 X 24	24 X 24	24 X 24	12 X 12		
FREE AREA (MIN)	1.92	1.7	1.0	1.92	1.92	1.92	0.18		
MANUFACTURER	RUSKIN	RUSKIN	RUSKIN	RUSKIN	RUSKIN	RUSKIN	RUSKIN		
MODEL NO.	ELF375DX	ELF375DX	ELF375DX	ELF375DX	ELF375DX	ELF375DX	ELF375DX		
NOTES	4, 5	1, 2	1, 2	1, 2, 6	1, 2, 6	4	-		
NOTES 4, 3 1, 2 1, 2 1, 2, 0 1, 2, 0 4 NOTES: 1. GRAVITY DAMPER. 2. PROVIDE BIRD SCREEN. 3. PROVIDE MOTORIZED DAMPER 4 <									

AIR DEVICE SCHEDULE

MARK	MANUFACTURER / MODEL	TYPE	NC	REMARKS
A	TITUS/50F	24"X24" EGGCRATE RETURN	20	ALUMINUM CONSTRUCTION.
В	TITUS / CSR-P	48 X 24	20	ALUMINUM CONSTRUCTION, FOR 5 TON RTU.
с	TITUS / CSR-P	48 X 48	20	ALUMINUM CONSTRUCTION, FOR 6-10 TON RTU.
D	TITUS / 300FS	24 X 10	30	ALUMINUM CONSTRUCTION., PROVIDE INTEGRATED OPPOSED BLADE DAMPER
E	TITUS / 350FL	24 X 8	30	ALUMINUM CONSTRUCTION.

NOTES:

1. PROVIDE STANDARD WHITE FINISH FOR ALL AIR DEVICES UNLESS NOTED OTHERWISE ON PLAN.

2. PAINT ALL SURFACES VISIBLE THROUGH FACE OF RETURN AIR GRILLES FLAT BLACK. THIS SHALL INCLUDE PIPING, CONDUIT, DUCTWORK, AND STRUCTURAL MEMBERS.

FAN SCHEDULE							
MARK	EF-1	EF-2	EF-3				
SERVES	FLUORIDE RM	HYPO RM	PUMP RM				
CFM	525	1,040	540				
E.S.P. (IN W.G.)	0.15	0.5	0.5				
TYPE	WALL MTD.	UPBLAST	UPBLAST				
DIRECT/BELT DRIVE	DIRECT	BELT	BELT				
FAN RPM	1,075	1432	1,400				
MOTOR HORSEPOWER	1/6	1/4	1/6				
VOLTS/PHASE/HERTZ	120/1/60	120/1/60	120/1/60				
SONES	3.5	12	10				
MANUFACTURER	СООК	COOK	соок				
MODEL NO.	12XW26D103	120ACRUB	100ACRUB				
NOTES	1, 2	1	1				
NOTES	· ·		•				

NOTES:

1. PROVIDE STD DISCONNECT, WHITE ALUM GRILLE, FAN SPEED CONTROLLER 5A, 120V PREWIRED, DAMPER & INSOLATORS.

2. PROVIDE CORROSION RESISTANT WALL MOUNTED EXHAUST FAN WITH INTEGRAL FIBERGLASS GRAVITY DAMPER, FIBERGLASS REINFORCED POLYPROPYLENE FAN BLADES, FIBERGLASS CANOPY, EPOXY COATED WIRE GUARD. FAN PROVIDED BY BUILDING MANUFACTURER.

R4	10A ELECTRIC / ELE	CTRIC		
DESIGNATION	RTU-1	RTU-2	RTU-3	RTU-4
TRANE MODEL#	THC060	TSC090	TSC120	TSC120
NOMINAL TONS	5	7.5	10	10
ARI RATINGS (EER)	15 EER	11.2 EER	11.3 EER	11.3 EER
SUPPLY AIRFLOW (CFM)	2000	3000	4000	4000
OUTSIDE AIRFLOW (CFM)	60	100	125	300
EXTERNAL STATIC PRESSURE (INWC)	1.30	0.80	2.00	2.00
FAN SIZE (HP)	1	1	2	2
ENTERING MIX-AIR TEMPERATURE (DEG-F, DB)	80	80	80	80
ENTERING MIX-AIR TEMPERATURE (DEG-F, WB)	67	67	67	67
AMBIENT AIR TEMPERATURE (DEG-F, DB)	105	105	105	105
TOTAL CAPACITY (MBH)	57.6	83.9	111.6	111.6
SENSIBLE CAPACITY (MBH)	43.7	63.5	88.2	88.2
ELECTRIC HEAT (KW)	12.0	18.0	18.0	18.0
POWER (V / PH / HZ)	460 / 3 / 60	460 / 3 / 60	460 / 3 / 60	460 / 3 / 60
MCA (A)	23	29.3	32.5	32.5
MOCP (A)	25	30	35	35
BASE UNIT WEIGHT (LBS)	942	958	1065	1065
COND. DRAIN LINE SIZE (IN)	3/4	3/4	3/4	3/4

Standard Notes:

1. PROVIDE 5 YEAR COMPRESSOR WARRANTY.

- 2. NOT USED.
- 3. PROVIDE CONDENSER COIL HAIL GUARDS.
- 4. PROVIDE FOIL FACE INSULTATION. 5. PROVIDE FACTORY INSTALLED HIGH AND LOW PRESSUE CUT-OUT SWITCHES.
- 6. PROVIDE 2" THROWAWAY FILTERS.
- 8. PROVIDE FACTORY INSTALLED EXPANSION VALVE.
- 9. PROVIDE SINGLE SIDE SERVICE CONNECTIONS.
- 11. PROVIDE STANDARD 14" KNOCKDOWN FACTORY ROOF CURB.
- 12. PROVIDE 24/7 PROGRAMMABLE THERMOSTAT.
- 14. PROVIDE LOW AMBIENT COOLING DOWN TO 40 DEG-F.

RGM ENGINEERING TEXAS REGISTERED ENGINEERING FIRM F-10487 6243 IH 10, SUITE 501 SAN ANTONIO, TX 78201 WWW.RGMENGINEERING.NET

PHONE: 210.299.4522 FAX: 210.299.4525 THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY

CARLOS FARIAS, P.E. 112838 ON <u>08/22</u>,20<u>2</u>3

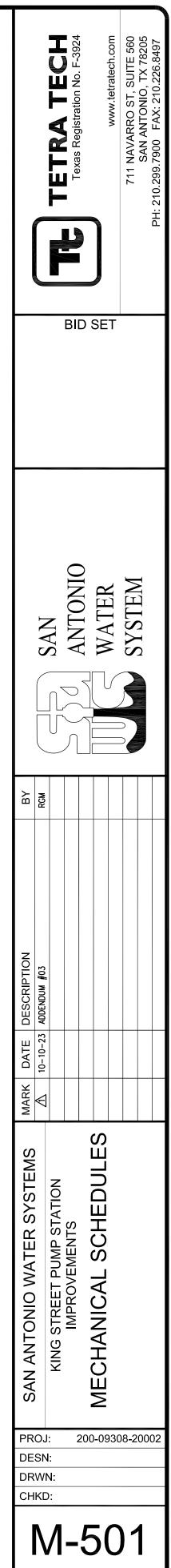


ROOFTOP UNIT SCHEDULE

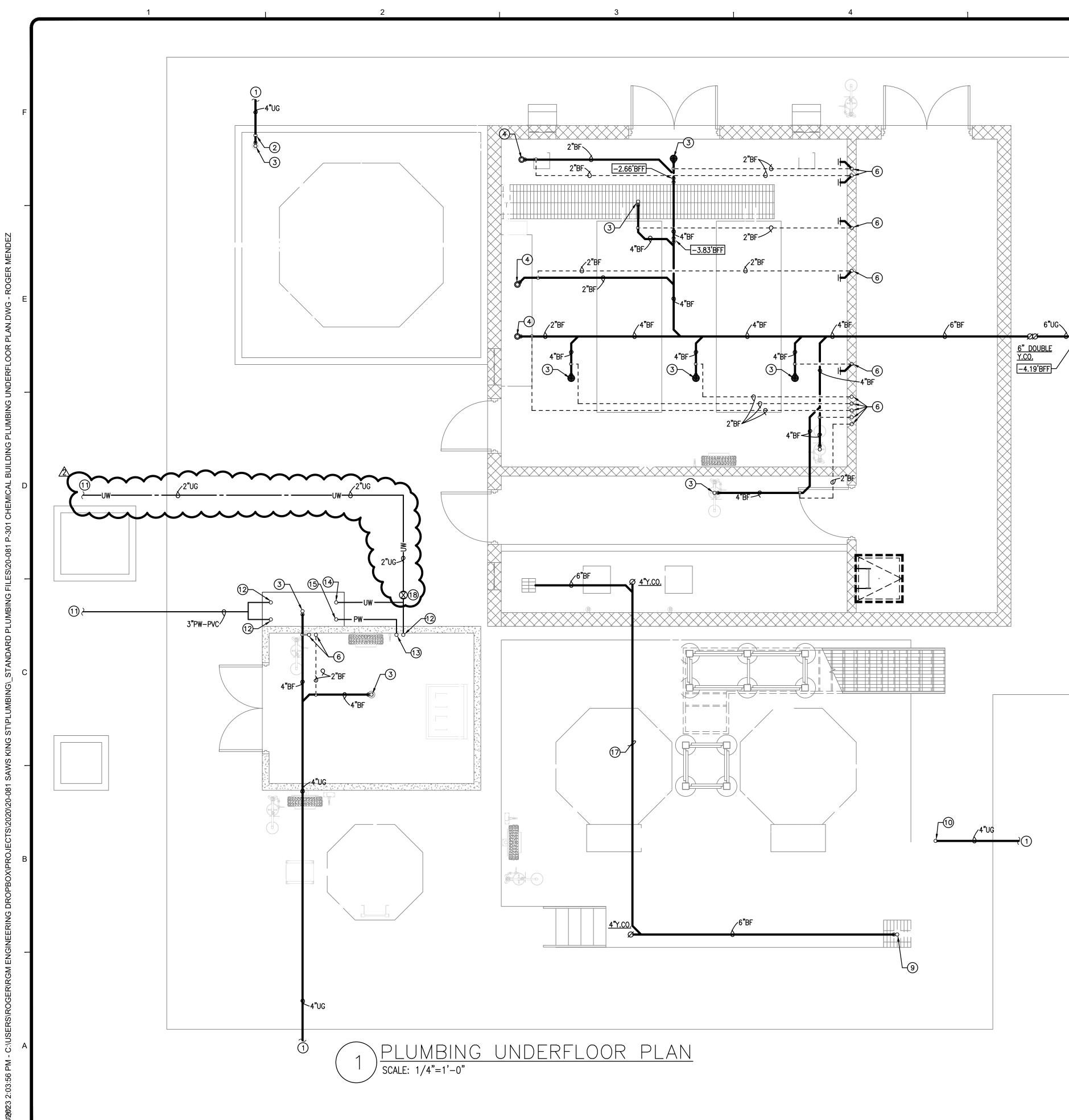
7. PROVIDE FACTORY INSTALLED NON-CORROSIVE DUAL SLOPED CONDENSATE DRAIN PAN.

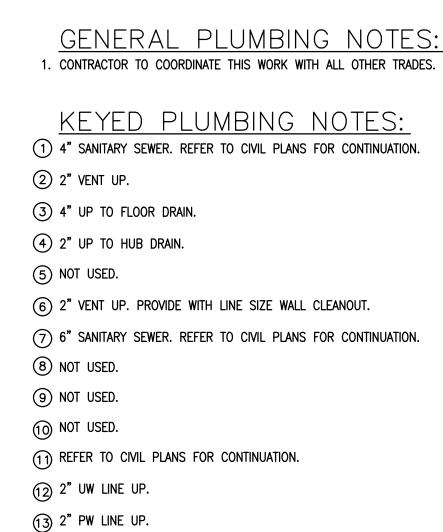
10. PROVIDE 0-100% MODULATING DUAL ENTHALPY CONTROLLED ECONOMIZER.

13. ROVIDE PHASE MONITORING PROTECTION, I.E.: PHASE LOSS, PHASE IMBALANCE, OR PHASE REVERSAL.









(14) 2" UW LINE FROM ABOVE.

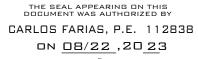
15 2" PW LINE FROM ABOVE.

16 4" UP TO HUB DRAIN.

(18) 2" ISOLATION VALVE



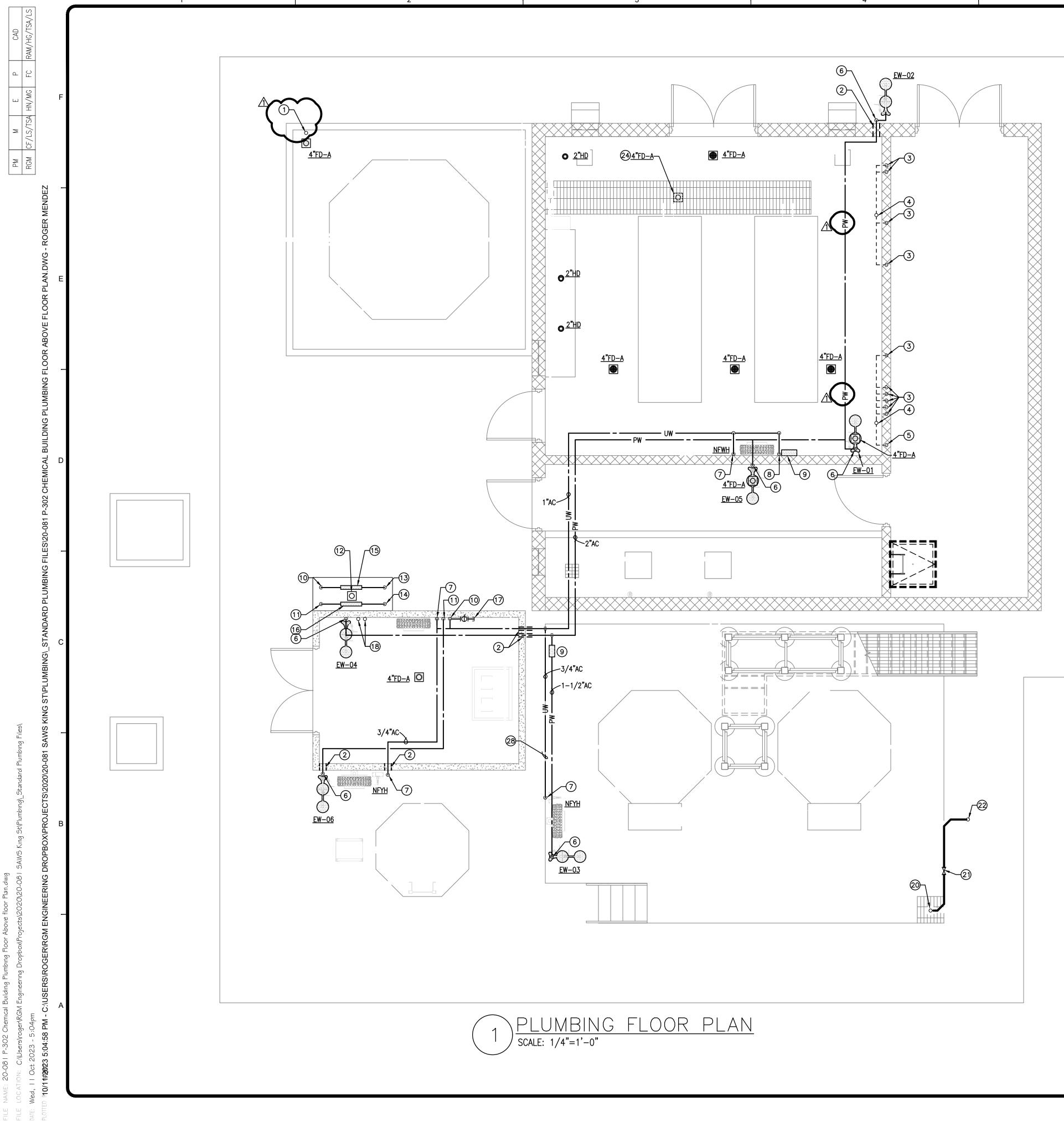
TEXAS REGISTERED ENGINEERING FIRM F-10487 6243 IH 10, SUITE 501 SAN ANTONIO, TX 78201 WWW.RGMENGINEERING.NET PHONE: 210.299.4522 FAX: 210.299.4525





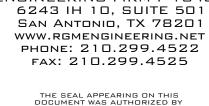
17 6" DISCHARGE FROM METERING ROOM SUMP TO HYPOCHTORITE SUMP

TECH ation No. F-3924 ETRA Texas Redictor | <u>⊿</u> % E BID SET SAN ANTONIO WATER SYSTEM JERFLOOR SAN ANTONIO WATER SYSTEMS PLUMBING PROJ: 200-09308-20002 DESN: DRWN: CHKD: P-301



GENERAL PLUMBING NOTES: 1. CONTRACTOR TO COORDINATE THIS WORK WITH ALL OTHER TRADES. 2. BACKFLOW PREVENTER ENCLOSURES AS NEEDED SHALL BE WATTSBOX CONSTRUCTED OF REINFORCED ALUMINUM WITH ACCESS DOOR, DRAIN OPENING TO HANDLE THE MAXIMUM DISCHARGE OF THE RPZ ASSEMBLY. FIELD VERIFY REQUIRED MODEL SELECTION AND KW FOR HEATING ELEMENT. COORDINATE ELECTRICAL WORK REQUIREMENTS. KEXER RUHNBING NOTES: 1 2" VENT FROM BELOW UP. FLAGPOLE VENT TERMINATION PER CODE. 2) SLEEVE PIPING THRU WALL. PROVIDE INSECT SCREEN BOTH ENDS. \bigcirc 2" vent from below. 4 3" VENT UP THRU ROOF. (5) 3" VENT FROM BELOW. (6) 1-1/2" PW DOWN TO EYE WASH. 7 3/4" UW DOWN. (8) UW DOWN TO TP-B TRAP PRIMER ASSEMBLY FIELD VERIFY SIZE. (9) HEAT TRACE CONTROLLER STATION. 10 2" UW LINE FROM BELOW. (1) 2" PW LINE FROM BELOW. 12 2" hub drain with deep seal P-trap inside backflow preventer enclosure. (13) 2" UW LINE DOWN. (14) 2" PW LINE DOWN. (15) 2" UW LINE BACKFLOW PREVENTER IN ENCLOSURE. (16) 2" PW LINE BACKFLOW PREVENTER IN ENCLOSURE. (17) 2" UW LINE FOR PROCESS. (18) 2-2" VENTS FROM BELOW. 1-3" VENT UP THRU ROOF. 19 3/4" UW FROM BELOW. 20 NOT USED. 21 NOT USED. 2 NOT USED. 3/4" UW/1-1/2" PW PIPING ROUTED HORIZONTALLY 24" A.F.F. TIGHT TO WALL. FLOOR DRAIN LOCATED AT BOTTOM OF TRENCH DRAIN SUMP. FIELD VERIFY EXACT FINAL LOCATION.

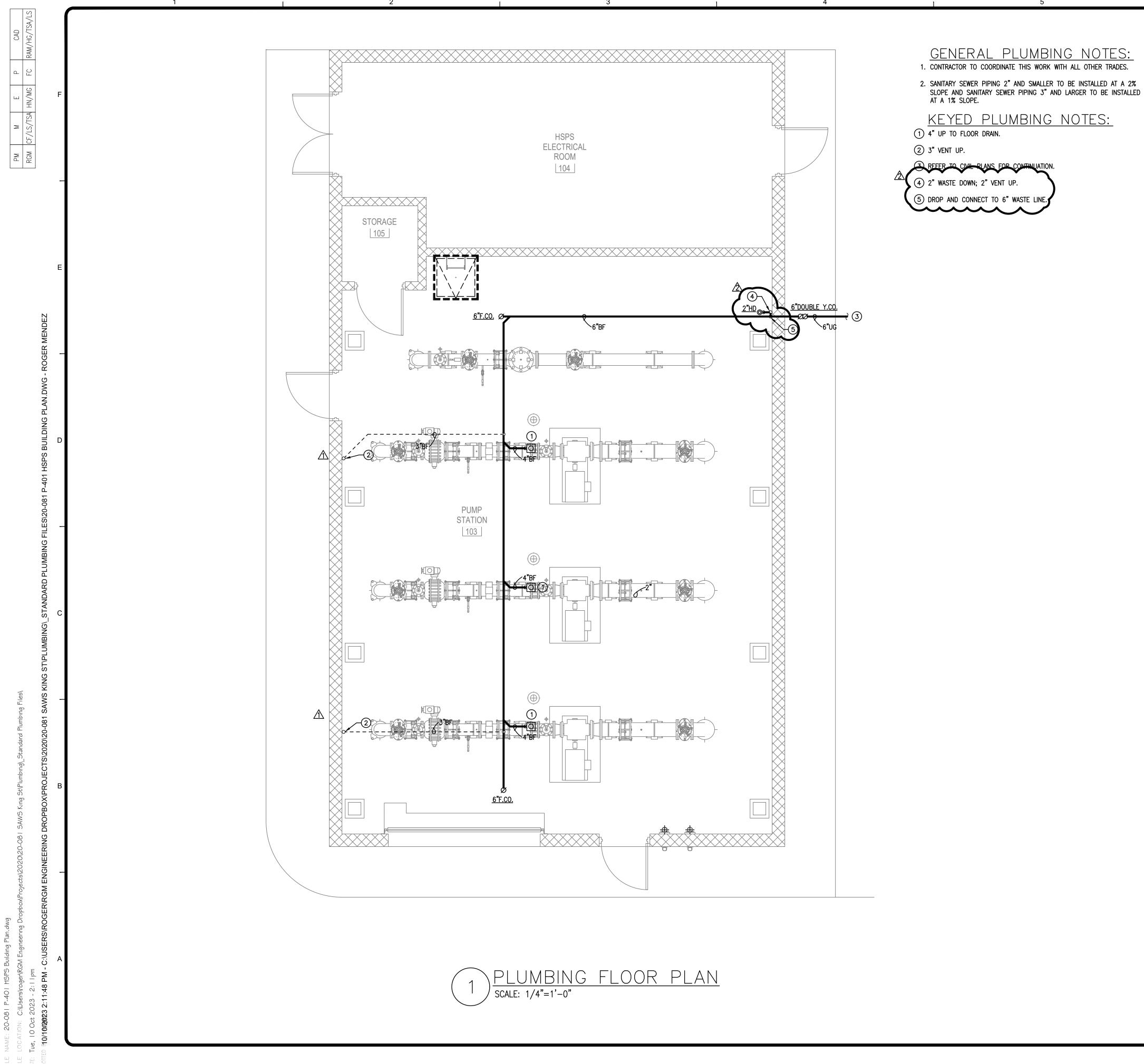
RGM ENGINEERING TEXAS REGISTERED ENGINEERING FIRM F-10487 6243 IH 10, SUITE 501

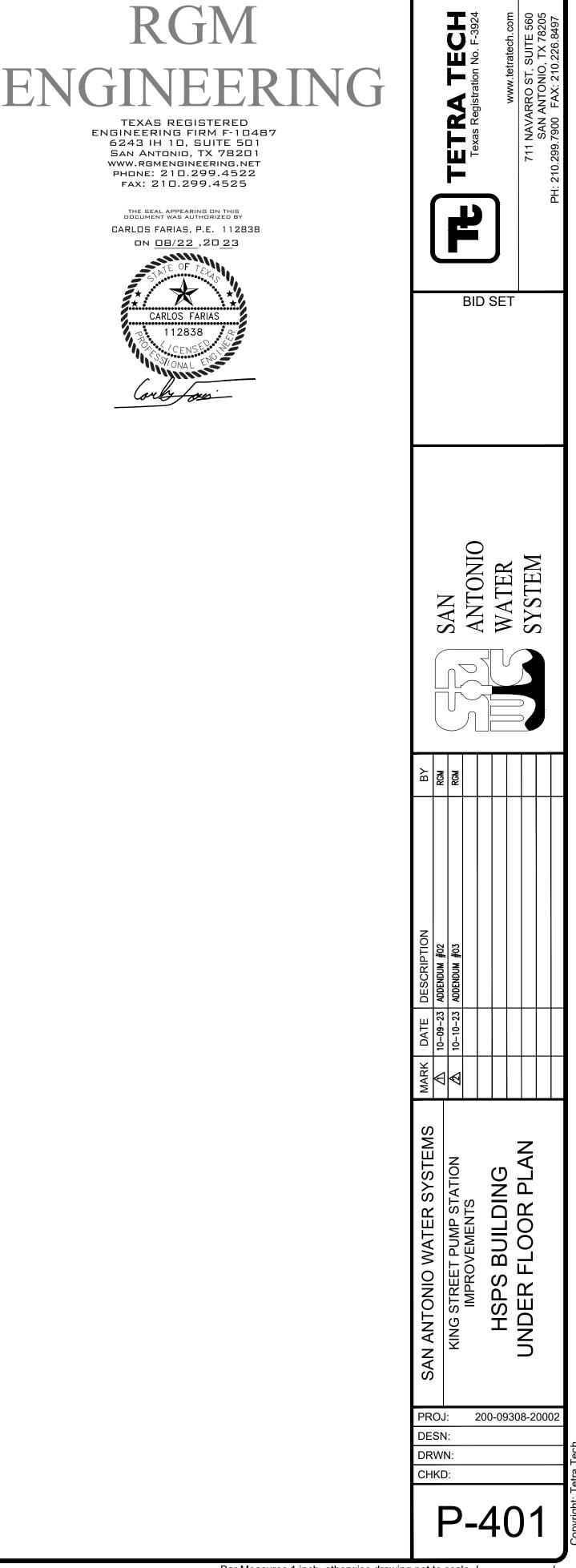


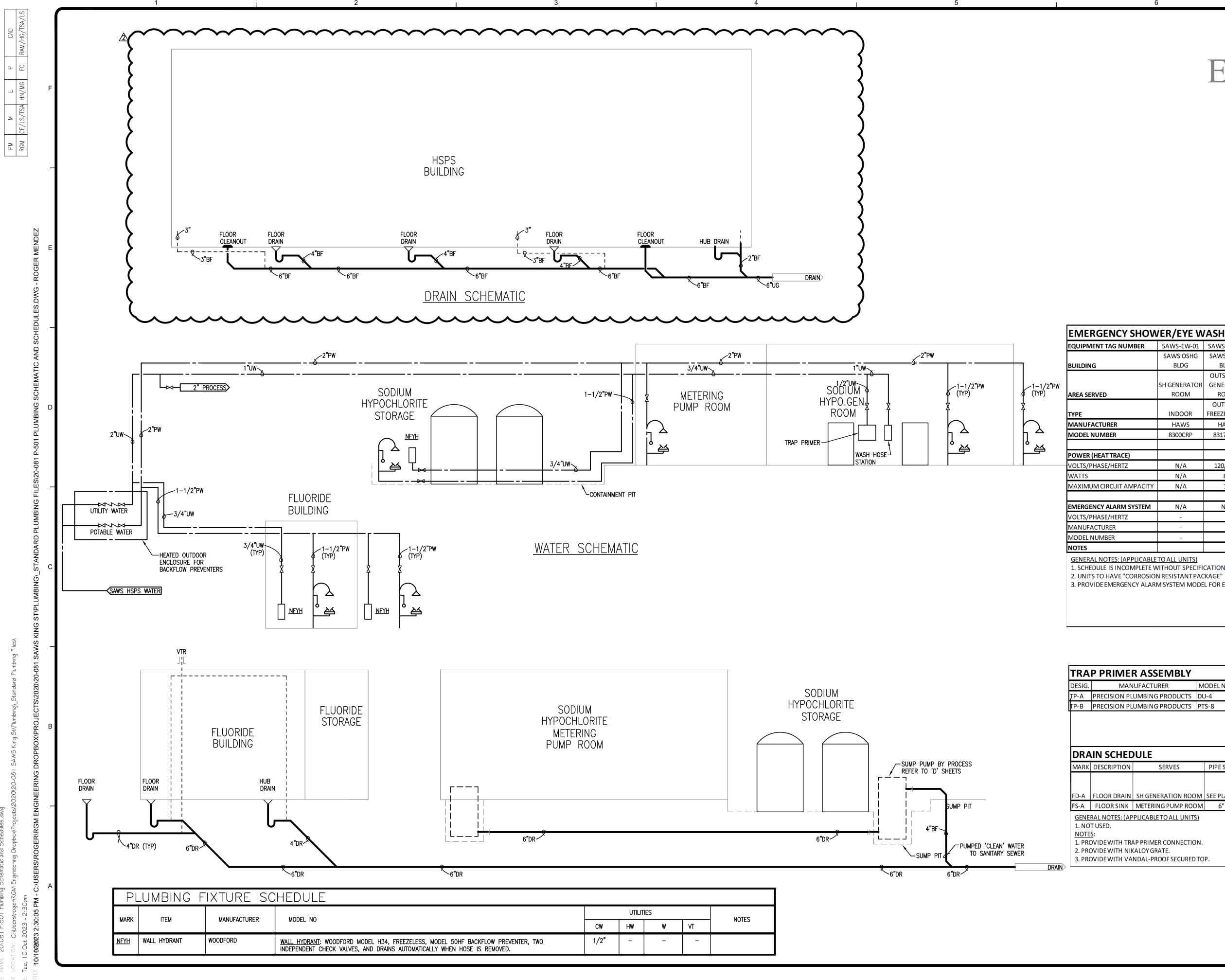


		TETRA TECH	I axas Redistration No F-3024) SE	L www.tetratech.com	711 NAVARRO ST, SUITE 560	SAN ANTONIO, TX 78205	PH: 210.299.7900 FAX: 210.226.8497	
BY	RGM CLANT						QUCTEM			
MARK DATE DESCRIPTION	▲ 10-10-23 ADDENDUM #03									
SAN ANTONIO WATER SYSTEMS		KING STREET PUMP STATION	IMPROVEMENTS		CCHEMICAL BUILDING		PLUMBING FLOOR PLAN			
PR DE DR CH	SN WI	1: N:		200			8-2		02	Convisible Totso Toob

Bar Measures 1 inch, otherwise drawing not to scale







δΞ

6243 IH 10, SUITE 501 SAN ANTONIO, TX 78201 WWW.RGMENGINEERING.NET PHONE: 210.299.4522 FAX: 210.299.4525

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY CARLOS FARIAS, P.E. 112838 ON <u>08/22</u>,20<u>2</u>3



Λ	VER/EYE W	ASH UNIT	SCHEDUL	E	
	SAWS-EW-01	SAWS-EW-02	SAWS-EW-03	SAWS-EW-04	SAWS-EW-05
	SAWS OSHG	SAWS OSHG	SAWS OSHG	SAWS OSHG	SAWS OSHG
	BLDG	BLDG	BLDG	BLDG	BLDG
		OUTSIDE SH	INSIDE		INSIDE
	SH GENERATOR	GENERATOR	CONTAINMENT	INSIDE PUMP	FLUORIDE
	ROOM	ROOM	AREA	ROOM	BUILDING
		OUTDOOR	OUTDOOR		
	INDOOR	FREEZEPROOF	FREEZEPROOF	INDOOR	INDOOR
	HAWS	HAWS	HAWS	HAWS	HAWS
	8300CRP	8317CTFP	8317CTFP	8300CRP	8300CRP
	N/A	120/1/60	120/1/60	N/A	N/A
	N/A	80	80	N/A	N/A
Y	N/A	15	15	N/A	N/A
	N/A	N/A	N/A	N/A	N/A
	-	-	-	-	-
	-	-	-	-	-
	-	-	-	-	-

1. SCHEDULE IS INCOMPLETE WITHOUT SPECIFICATION SECTION 15412 - EMERGENCY PLUMBING FIXTURES.

3. PROVIDE EMERGENCY ALARM SYSTEM MODEL FOR EACH EMERGENCY SHOWER/EYEWASH UNIT SPECIFIED.

SSEMBLY					
TURER	MODEL NUMBER	WATTS	VOLTAGE	PHASE	DESCRIPTION/REMARKS
NG PRODUCTS	DU-4	-	-	-	NON-POWERED ASSEMBLY
NG PRODUCTS	PTS-8	-	120	1	POWERED ASSEMBLY

SERVES	PIPE SIZE	TOP SIZE	E MANUFACTURER		NOTES
		2 IN PIPE=5 IN STRAINER,			
		3 IN PIPE=6 IN STRAINER,			
ENERATION ROOM	SEE PLANS	4 IN PIPE=8 IN STRAINER	JAY R. SMITH	2010	1,2,3
RING PUMP ROOM	6"	16 1/2" X 16 1/2"	JAY R. SMITH	3200	1,2,3

