



Lemon Creek Ranch Lift Station RFCSP
Solicitation Number: CO-00490
Job No.: 21-3000

ADDENDUM 3
December 15, 2021

To Respondent of Record:

This addendum, applicable to work referenced above, is an amendment to the bid 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.

CHANGES TO SPECIFICATIONS

- 1. REQUEST FOR COMPETITIVE SEALED PROPOSALS.** The last three paragraphs are hereby modified to read as follows:

Due to the COVID-19 emergency and to protect the health of the public, SAWS is implementing new procedures for the submission of proposals. Proposals will be received electronically only, until 10:00 AM (CDT), December 22, 2021 (CDT). 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.

<https://saws.webex.com>
Meeting number (access code): 2483 212 1025
Meeting password: eFiDkD5Um32
Audio Connection: (210) 233-2090

Respondents will need to submit a request by **December 21, 2021 at 10:00 AM (CDT)** to receive access to the File Transfer Protocol (FTP) site via email to.florinda.gonzales@saws.org. Respondent's email requesting access to the FTP site shall provide the legal name of Respondent's company and the intended recipient's email address and phone number. No requests for FTP site access will be accepted after **December 21, 2021 at 10:00 AM (CDT).**"

2. Remove and replace entire "Bid Proposal" with the attached updated Bid Proposal. Construction Duration has been revised. Line item 1 has been revised. Alternate bid items have been removed. Bidders shall use the revised bid proposal when submitting a bid for this project. Failure to use the revised version may result in the bid being found non-responsive.
3. Remove and replace entire "Proposal Certification" PC-1 with the attached updated Proposal Certification PC-1. Construction Duration Has Been Revised.
4. Remove and replace "Special Conditions" with the attached updated Special Conditions.

5. Remove and replace the Specifications Table of Contents with the attached updated Table of Contents. Specification 02741 has been removed from the table of contents. Specification 264510 has been updated to Specification 264511 in the table of contents.

CHANGES TO PLANS

1. Remove and sheets S1-A, S2, S2A, S3, S3A, S4, S4A, S5, S5A, S6-A, S7-A, S8, and S9. Replace with new sheets S1-S11 included in this addendum.
2. Remove and replace sheet LS17 with the version included with this addendum.
3. Remove and replace sheet E8 with the version included with this addendum.

RESPONSES TO QUESTIONS

1. Question: With the current market conditions/lead times and solid rock site conditions, the 12 month contract duration is nearly impossible. Will consideration be given to extending the contract length? We would recommend 16 months.

Response: The contract duration for this project has been revised to substantial completion within 365 consecutive calendar days after notice to proceed and full completion within 425 calendar days after notice to proceed. Substantial completion and full completion are defined in Special Condition 2.0.

2. Question: Also, will 7 day work weeks be allowed?

Response: Work on Sundays will not be allowed. Work on Saturdays may be allowed with approval by SAWS on a week-to-week basis.

3. Question: Can you please provide me with the flow data of the line to be bypassed (sheet G18)? Also, will we need to trench the bypass discharge line under Nichols Creek to keep the road open?

Response: Peak Wet Weather Flow for this pipe is 1.36 mgd. Contractor is to assume full-flow conditions for bidding purposes.

Per SAWS specification 865.3 (w) Contractor shall maintain pedestrian and vehicular traffic and comply with ADA regulations for access to all residential and commercial property unless written approval is otherwise obtained from the property owner allowed for reduced access. Installing sewer line underground or utilizing vehicular ramps is acceptable.

4. Question: Specifications 02741 and 264510 are missing per the Table of Contents for the Lemon Creek Ranch Lift Station.

Response: Please refer to updated Table of Contents provided in this Addendum. Specification 02741 has been removed from the table of contents. Specification 264510 has been updated to Specification 264511 in the table of contents. Any reference to Specification 264510 should instead reference Specification 264511.

5. Question: Can y'all extend the deadline for questions at least another week? It is extremely difficult to get feedback/concerns from vendors and subcontractors when the deadline is almost 3 weeks before the bid date.

Response: Deadline for questions was extended to December 8th per Addendum 1.

6. Question: The 8.96 LF of 15” PVC entering the lift station from the manhole is the same size as the two 15” PVC lines bringing flow to that manhole. Can you consider upsizing the 15” PVC stub out entering the lift station?

Response: Yes, sewer line on sheet LS 4 from manhole 1+08.92 to Wet Well were updated from 15-inch sewer line to a 24-inch sewer line. See revised sheets provided in Addendum 2.

7. Question: Cannot find any details on the HVAC system requirements for this project. Referencing sheet LS16, E9 etc. and cannot find any Basis of Design for the HVAC equipment, duct sizes, grill selections etc. The only reference I see is Specs Section 13120 Precast building para 2.06 which provides a small detail of the HVAC units. Want to ensure that there isn't any additional requirements that have not been released.

Response: Additional dimensions have been added to sheet LS17. There are no additional requirements for the HVAC system. The HVAC system specified in Specification Section 13120 Precast Electrical Building paragraph 2.06 has been designed per SAWS cooling/heating requirements and building insulation requirements which include the following:

- *Maintaining an internal temperature of 70 degrees while the external ambient temperature is 105 degrees.*
- *Maintaining an internal temperature of 45 degrees while the external ambient temperature is 25 degrees.*

8. Question: My suppliers for cement treated base have all come back and said that they are out of it. Can you please let me know if lime would be an acceptable replacement instead of the cement treated base?

Response: No. Based on Bexar County Requirements, Lime will not be an acceptable replacement. Only cement stabilized base or flowable fill will be accepted.

9. Question: On drawing E9 you show the Pump Control Panel as a double door enclosure. On drawing E10 you show the same panel as a single door enclosure. Please advise?

Response: The Pump Control Panel is double door, as shown on drawing E9 and E 10 [Detail B (swing panel layout) & Detail C (back panel layout)]. The pump panel motor starters are single door as shown on E9 and E10 [(Detail E (swing panel layout) & Detail F (back panel layout)]. SAWS wanted the 120V and 480V separated. Therefore 120V is in the pump control panel and 480V is in the pump panel motor starter.

10. Question: On drawing E8 the Tower notes call out for a Rohn Self-Supported Tower. In the Tower specs #40 60 00 it calls out for a Saber Tower. Which one is recommended?

Response: A Saber tower is recommended. Sheet E8 has been revised to call out a Saber tower instead of a Rohn Self-Supported Tower.

11. Question: Reference Spec Section 26 92 10 (pg. 8&9) 3.06 B.1. Please provide class name and training course number so we can get a quote for Rockwell.

B. Programmable Logic Controller (PLC) Hardware and Software and Top End System Software: 1. Provide 32-40 hours of manufacturer's standard training course for five (5) of the Owner's personnel in the operation, configuration, programming, installation, and maintenance of the HMI software, SAWS Programmer staff will provide the Rockwell course number at a late date.

Response: This course is provided as an example only. Course: Factory Talk Vantage Point. Course Number: FTVP

END OF ADDENDUM 3

This Addendum is twenty-five (25) pages in its entirety with attachments.

Attachments:

- Table of Contents
- Bid Proposal
- Proposal Certification
- Special Conditions
- Sheets LS17, E8, S1, S2, S3, S4, S5, S6, S7, S8, S9, S10, S11



12/15/2021

**SAN ANTONIO WATER SYSTEM
LEMON CREEK RANCH – UPSTREAM SANITARY SEWER PHASE 1B –
REGIONAL LIFT STATION**

TECHNICAL SPECIFICATIONS

Division 1 – General Requirements

01110	Summary of Work
01200	Project Meeting
01270	Measurement and Payment
01300	Submittals
01321	Progress Schedule
01322	Construction Photographs and Video
01400	Quality Control
01500	Construction Facilities and Controls
01640	Manufacturer’s Field Services
01700	Contract Closeout
01730	Operation and Maintenance Data
01752	Facility Startup and Commissioning Requirements
01756	Testing, Training, Demonstration, and Start-up Requirements

Division 2 – Site Work

02001	Materials
02240	Dewatering
02300	Earthwork
02764	Paving Joint Sealants
02820	Chain Link Fencing and Gates

Division 3 – Pavement

03315	Watertightness Test for Hydraulic Structures
03600	Grout

Division 9 - Finishes

09900	Painting
09910	Epoxy Liners for Sanitary Sewer Structures

Division 11 - Equipment

11100	Non-Clog Submersible Sewage Pumps
11200	Guide Rail System
11266	Odor Control System Equipment – Provided by vendor
11300	Access Hatches

Division 13 - Equipment

13120	Precast Concrete Building
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Division 15 – Mechanical

15020	Ductile Iron Pipe and Fittings
15080	Flexible Joints and Couplings
15104	Check Valves
15108	Plug Valves
15118	Surge Relief Valves

Division 26 – Electrical

260100	Basic Electrical Requirements
260500	Basic Electrical Materials and Methods
260519	Low-Voltage Electrical Power Conductor and Cables
260520	Hangers and Supports for Electrical Systems
260573	Power System Study
260800	Commissioning of Electrical Systems
261100	Raceways
261200	Conductors
262200	Transformers- General Purpose 3-Phase
264100	Safety-Switches Heavy Duty
264210	Soft Start Motor Controller
264313	Surge Protective Devices
264511	Grounding and Lightning Protection
265010	Automatic Transfer Switches
266000	Standby Generator
269210	SCADA System and Local Station Control Monitoring
269300	Instrumentation
269400	Heat Trace System
269500	Electrical Testing

Division 40 – Instrumentation and Control

404000	Control Loop Descriptions
406000	Communication Towers

PRICE PROPOSAL

PROPOSAL OF _____, a
corporation

a partnership consisting of _____

an individual doing business as _____

THE SAN ANTONIO WATER SYSTEM:

Pursuant to Instructions and Request for Competitive Sealed Proposals, the undersigned proposes to furnish all labor and materials as specified and perform the work required for the project as specified, in accordance with the Plans and Specifications for the following prices in the bid proposal to wit:

PLEASE SEE ATTACHED LIST OF BID ITEMS.

RESPONDENT'S SIGNATURE & TITLE

FIRM'S NAME (TYPE OR PRINT)

FIRM'S ADDRESS

FIRM'S PHONE NO. /FAX NO.

FIRM'S EMAIL
ADDRESS

The Contractor herein acknowledges receipt of the following: Addendum Nos. _____

OWNER RESERVES THE RIGHT TO ACCEPT THE OVERALL MOST RESPONSIBLE PROPOSAL.

The Respondent offers to construct the Project in accordance with the Contract Documents for the contract price, and to complete the Project within **425** calendar days after the start date, as set forth in the Authorization to Proceed. **The Respondent understands and accepts the provisions of the contract Documents relating to liquidated damages of the project if not completed on time.**

Complete the additional requirements of the Proposal which are included on the following pages.

Statement on President's Executive Orders

Has your firm previously performed work subject to the President's Executive Orders Numbers 11246 and 11375 or any preceding similar executive orders (Numbers 10925 and 11114)?

Yes No

Texas Government Code Chapter 2274 Verifications

Are you, Contractor, held or controlled by individuals who are citizens of China, Iran, North Korea, Russia or a country designated by the Governor of the State of Texas pursuant to Texas Government Code Chapter 2274?

Yes No

Are you, Contractor, held or controlled by a company or other entity, including a governmental entity, that is owned or controlled by citizens of or directly controlled by the government of China, Iran, North Korea, Russia or a country designated by the Governor of the State of Texas pursuant to Texas Government Code Chapter 2274?

Yes No

Are you, Contractor, headquartered in China, Iran, North Korea, Russia or a country designated by the Governor of the State of Texas pursuant to Texas Government Code Chapter 2274?

Yes No

Base Bid Quotes

Line No.	Item No.	Item Description	Unit	Quantity	Unit Price	Total
1		Lift Station	LS	1		
2	103.1	Remove Concrete Curb	LF	90		
3	103.3	Remove Concrete Driveways	SF	60		
4	201.1	Cement Treated Base (6" Compacted Depth)	SY	1,872		
5	202.1	Prime Coat	GAL	474		
6	203.1	Tack Coat	GAL	237		
7	205.2	HMAC - Type B (10" Compacted Depth)	SY	1,520		
8	205.4	HMAC - Type D (2" Compacted Depth)	SY	2,322		
9	208.1	Salvaging, Hauling, & Stockpiling Reclaimable Asphaltic Pavement (2" Depth)	SY	654		
10	413.1	Flowable Fill (Low Strength)	CY	7		
11	500.1	Concrete Curb	LF	90		
12	503.1	Portland Cement Concrete Driveway	SY	69		
13	503.4	Asphaltic Concrete Driveway	SY	1,587		
14	513.1	Remove and Relocate Mailbox (All Types)	EA	11		
15	515.1	Topsoil (4" Depth)	CY	2,700		
16	520.1	Hydromulching	SY	24,244		
17	530.1	Barricades, Signs, and Traffic Handling	LS	1		
18	535.1	4" Wide Yellow Line	LF	2,520		
19	535.2	4" Wide White Line	LF	1,799		
20	535.7	24" Wide White Line	LF	45		
21	540	Temporary Erosion, Sediment, and Water Pollution Prevention and Control	LS	1		
22	550.1	Trench Excavation Safety Protection	LF	7,449		
23	828	16" Plug Valve	EA	6		
24	846	2" Dual Air Release Assembly	EA	2		
25	848	16" DR-11 HDPE Force Main	LF	13,713		
26	848A	24" PVC Gravity Sewer Pipe (ASTM F679, 0'-6' Depth)	LF	116		
27	848A	24" PVC Gravity Sewer Pipe (ASTM F679, 6'-10' Depth)	LF	229		
28	848A	24" PVC Gravity Sewer Pipe (ASTM F679, 10'-14' Depth)	LF	69		
29	848A	24" PVC Gravity Sewer Pipe (ASTM F679, 14'-18' Depth)	LF	77		
30	851	Existing Manhole Adjustments	EA	1		
31	853A	Fiber Reinforced Sanitary Sewer Manhole (5' Diameter)	EA	5		

32	853A	Extra Depth (>6') Fiberglass Manhole (5' Diameter)	VF	19		
33	865	Bypass Pumping, Small Diameter Sanitary Sewers (<24")	LS	1		
34	866	Sewer Main Television Inspection	LF	489		
35	ALW 1	CPS Energy Allowance	ALW	1		\$25,000
36	ALW 2	Start-Up/Commission Allowance	ALW	1		\$50,000
SUBTOTAL - (ITEMS 1-36)						

37	100	Mobilization Maximum 5% of line items 1-36	LS	5%		
38	100A	Intermediate Mobilization and Demobilization (Open Cut Work)- This item shall include project move-in and move-out of personnel and equipment, for all work including furnishing all labor, materials, tools, equipment, and incidentals required to mobilize, demobilize, bond and insure the Work for the project in accordance with the Contract Documents, complete in place.	EA	2		
39	100B	Intermediate Mobilization and Demobilization (Lift Station Work) - This item shall include project move-in and move-out of personnel and equipment, for all work including furnishing all labor, materials, tools, equipment, and incidentals required to mobilize, demobilize, bond and insure the Work for the project in accordance with the Contract Documents, complete in place.	EA	1		
40		Preparation of Right-of-Way - This item shall include preparing the right-of-way for construction operations by removing and disposing all obstructions from the right-of-way and from designated easements where removal of such obstructions is not otherwise provided for in the contract documents. Maximum 5% of line items 1-36	LS	5%		

MOBILIZATION SHALL BE LIMITED TO THE MAXIMUM PERCENTAGE SHOWN. IF THE PERCENTAGE WRITTEN EXCEEDS THE ALLOWABLE MAXIMUM STATED FOR MOBILIZATION, SAWS RESERVES THE RIGHT TO CAP THE AMOUNT AT THE PERCENTAGES SHOWN AND ADJUST THE EXTENSIONS OF THE BID ITEMS ACCORDINGLY.

PROPOSAL CERTIFICATION

Accompanying this proposal is a Bid Bond or Certified or Cashier's Check payable to the Order of the San Antonio Water System for _____ dollars (\$ _____), which amount represents five percent (5%) of the total bid price. Said bond or check is to be returned to the bidder unless the proposal is accepted and the bidder fails to execute and file a contract within **10** calendar days after the award of the Contract, in which case the check shall become the property of said San Antonio Water System, and shall be considered as payment for damages due to delay and other inconveniences suffered by said San Antonio Water System due to the failure of the bidder to execute the contract. The San Antonio Water System reserves the right to reject any and all bids.

It is anticipated that the Owner will act on this proposal within **90** calendar days after the bid opening. Upon acceptance and award of the contract to the undersigned by the Owner, the undersigned shall execute standard San Antonio Water System Contract Documents and make Performance and Payment Bonds for the full amount of the contract within **10** calendar days after the award of the Contract to secure proper compliance with the terms and provisions of the contract, to insure and guarantee the work until final completion and acceptance, and the guarantee period stipulated, and to guarantee payment of all lawful claims for labor performed and materials furnished in the fulfillment of the contract.

It is anticipated that the Owner will provide written Authorization to Proceed within **30** days after the award of the Contract.

The work called for in this Contract shall commence on the date indicated in the SAWS written Authorization to Proceed Under no circumstances shall the work commence prior to the date provided for in the SAWS issued, written Authorization to Proceed. Work shall be completed in full within **425** consecutive calendar days.

The undersigned further acknowledges compliance with "Wage and Labor Standard Provisions" of this contract and the use of the Blue Book rental rates for establishment of equipment rental rates whether owned or leased during the course of this Contract.

In completing the work contained in this proposal the undersigned certifies that bidder's practices and policies do not discriminate on the grounds of race, color, religion, sex or national origin and that the bidder will affirmatively cooperate in the implementation of these policies and practices.

Signed: _____
Company Representative

Company Name

Address

Please return bidder's check to:

Company Name

Address

Special Conditions

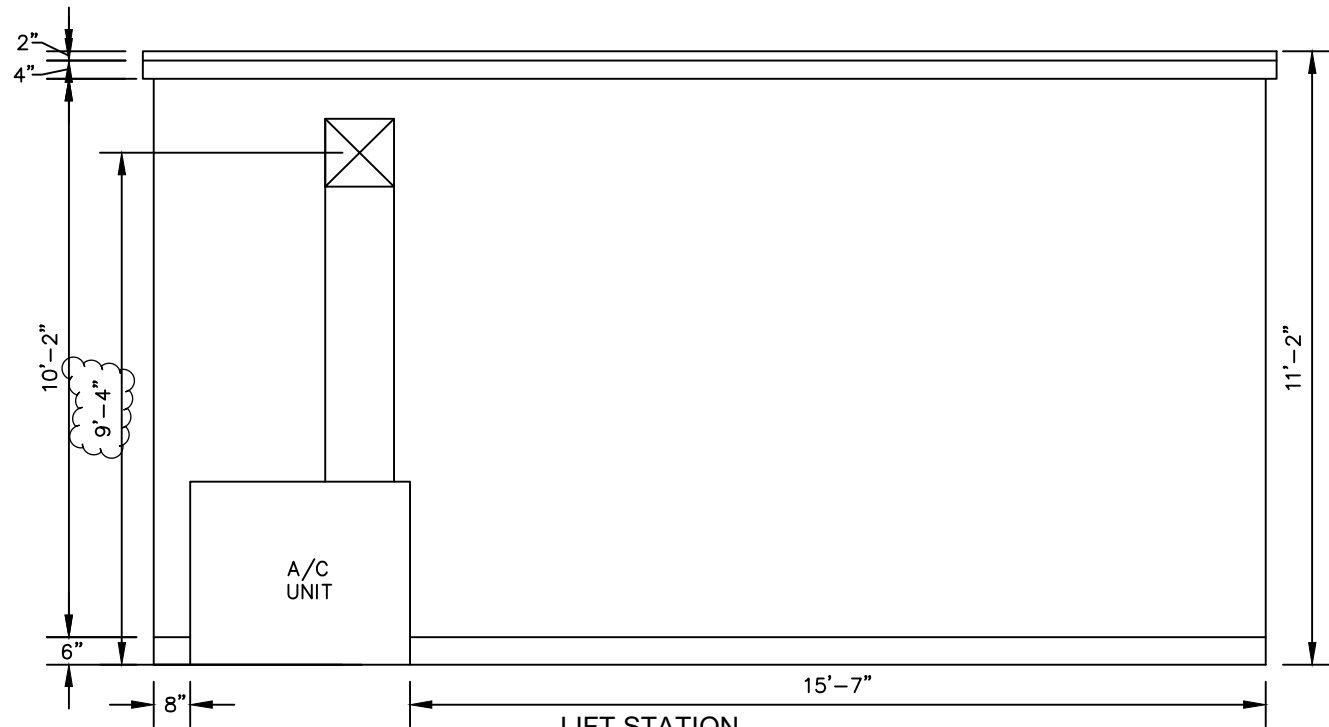
SC 1.0 A Geotechnical Data Report has been developed for SAWS on this project and has been made available for Contractors for informational purposes only. SAWS will require the execution of a SAWS disclaimer form by the Contractor as a condition of and prior to the release of the report. To complete the disclaimer form and obtain the report, please go to the following link on the SAWS website:

http://www.saws.org/business_center/ContractSol/

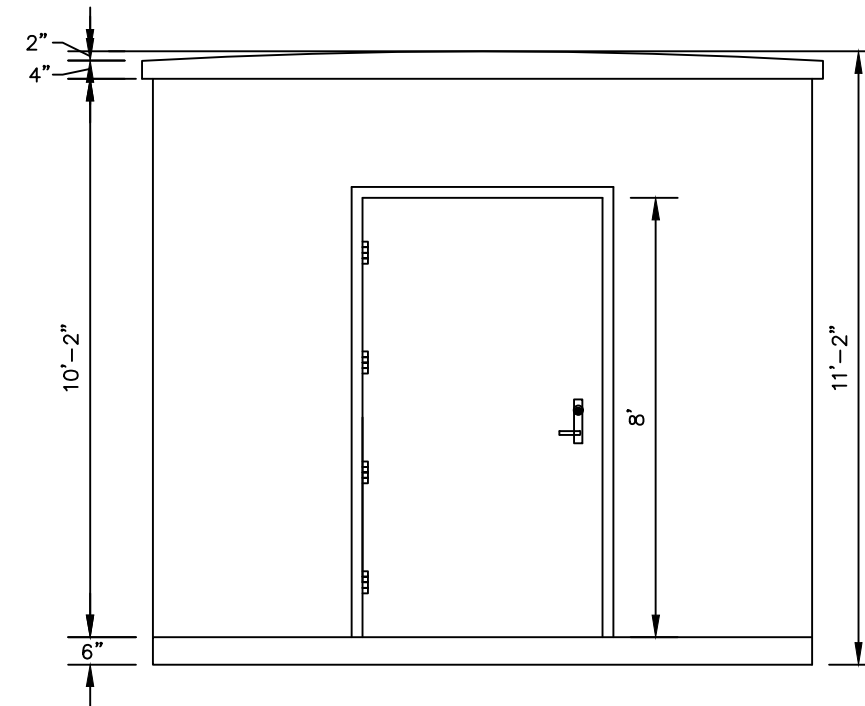
SC 2.0 Construction Duration: Contractor shall have lift station substantially complete within 365 calendar days. Final completion shall be no later than 425 calendar days. Substantial completion is defined as lift station being fully operational, secured per Texas Commission on Environmental Quality, and accessible including all testing having been performed by the contractor and approved by SAWS (Reference General Condition Article I). “Fully operational” shall include all controls, instrumentation, SCADA, dual force mains, paving within fence limits, and back-up generator for a fully functional system.

Acceptable final completion items include, paving outside of lift station, striping, signage, seeding, sidewalk, and other items not defined under substantial completion.

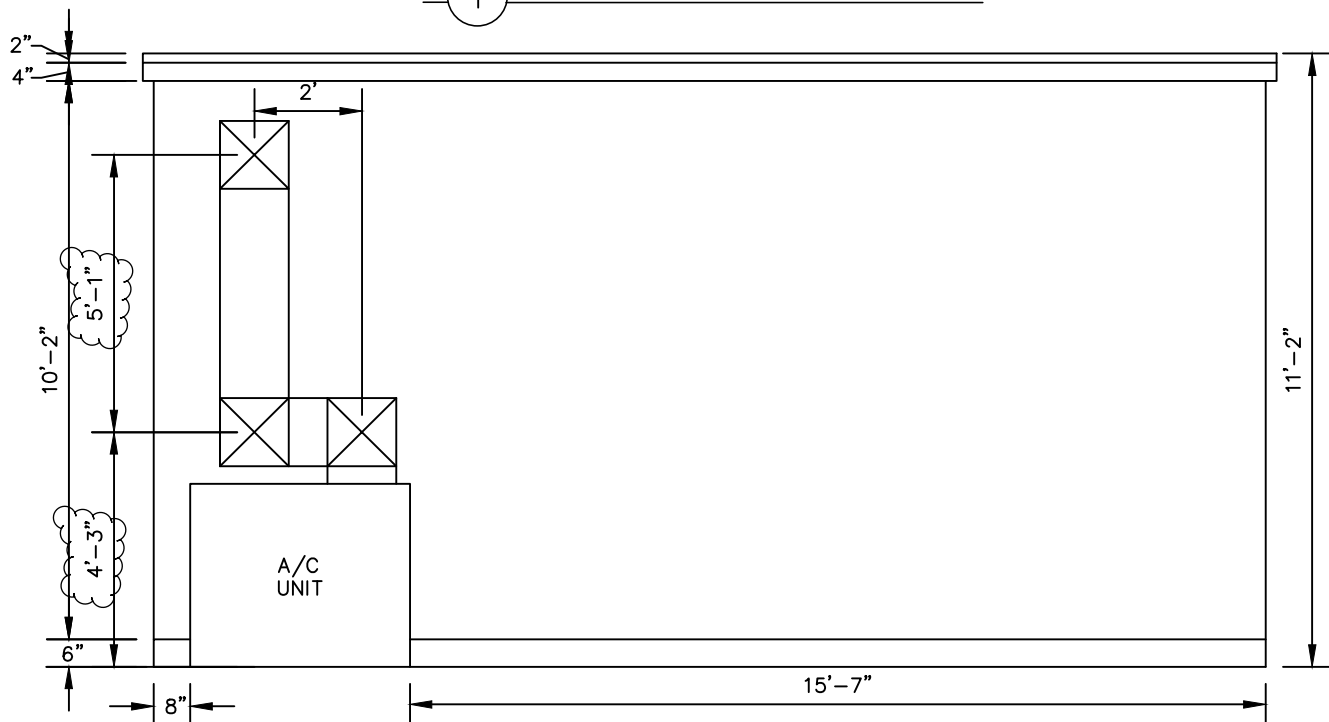
1. CONTRACTOR SHALL VERIFY ALL DUCT LOCATIONS IN THE FIELD PRIOR TO PROJECT LAYOUT AND A/C DUCT SHOP DRAWING SUBMITTAL AND FABRICATION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE ALL DUCTS AND CONCRETE PADS ARE ADJUSTED APPROPRIATELY TO ANY AIR CONDITIONER LOCATION CHANGE.



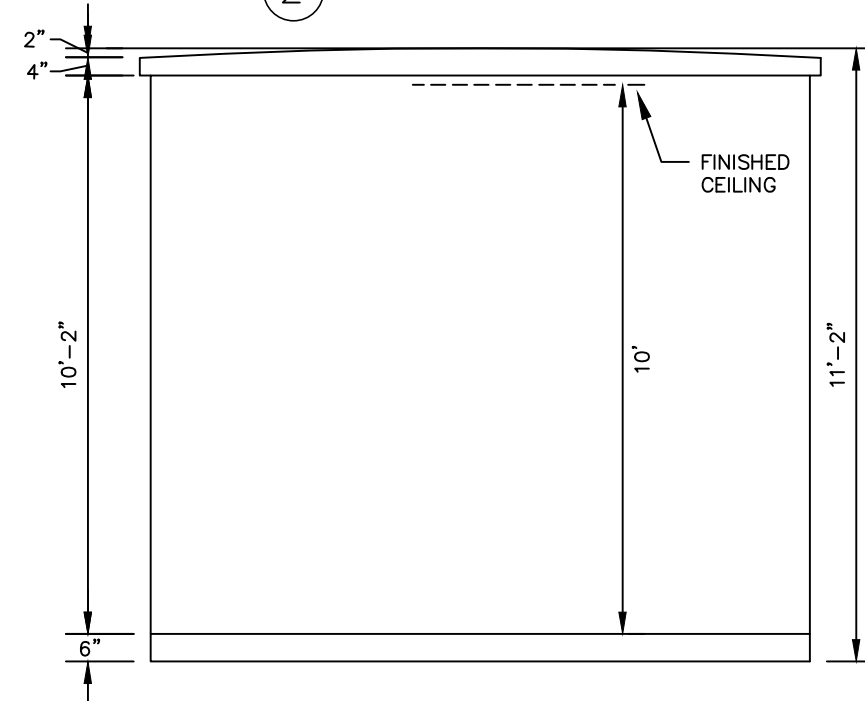
1 LIFT STATION ELEVATION - WEST WALL



2 LIFT STATION ELEVATION - SOUTH WALL



3 LIFT STATION ELEVATION - EAST WALL



4 LIFT STATION ELEVATION - NORTH WALL

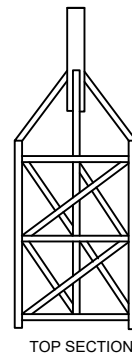
Kimley»Horn
 Texas Registered Firm, No. F-928
 601 NW Loop 410 Suite 350 San Antonio, TX 78216
 Tel No. 210-541-9166 Fax No. 210-541-8699

No.	Revision	By	Date
A	ADDENDUM NO. 3	MAV	12/14/2021

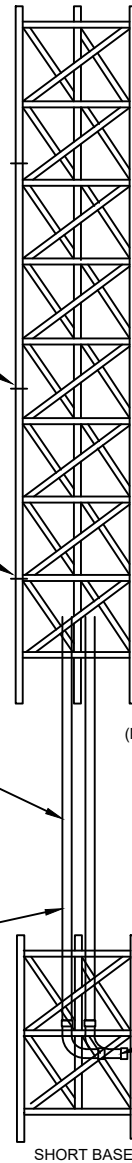
LEMON CREEK RANCH – UPSTREAM SANITARY SEWER PHASE 1B
 SHEET
 ELECTRICAL BUILDING WALL PROFILES

DATE: SEPTEMBER 2021	SAWS PROJECT NO. 21-3000	SHEET NO. LS17
DESIGN: MAV	KHA PROJECT NO. 068716102	
DRAWN: TLS		
CHECKED: VRS		

PLOTTED BY: STOKER, TREVOR 12/14/2021 9:53 AM
 DWG NAME: K:\SNA UTILITIES\068716102\CAD\PLANS\068716102.DWG
 DATE PLOTTED: 12/14/2021 9:53 AM



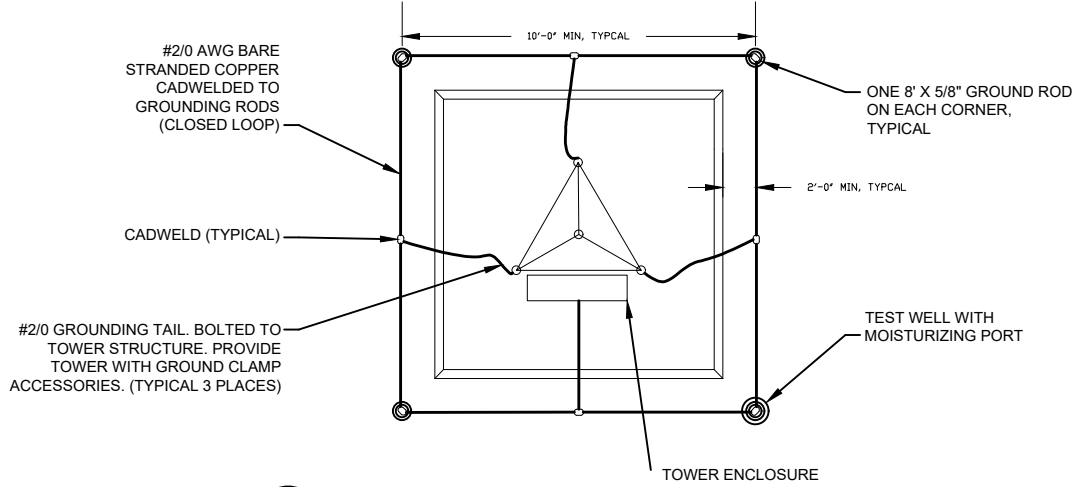
- NOTES:
1. TOWER SHALL BE SABRE SELF-SUPPORTED TOWER MODEL S3TL, (STAINLESS STEEL), OR OWNER APPROVED.
 2. TOWER MAXIMUM HEIGHT IS 60 FT.
 3. 10-FOOT CLIMB GUARDS SHALL BE PROVIDED TO EACH SIDE OF TOWER.



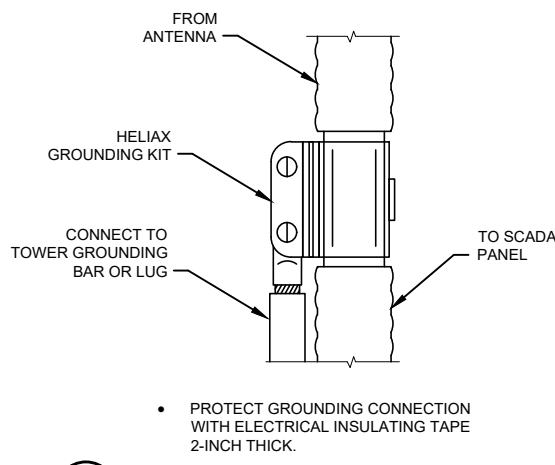
A SCADA TOWER SECTIONS
SCALE: N.T.S.



ANTENNA ORIENTATION

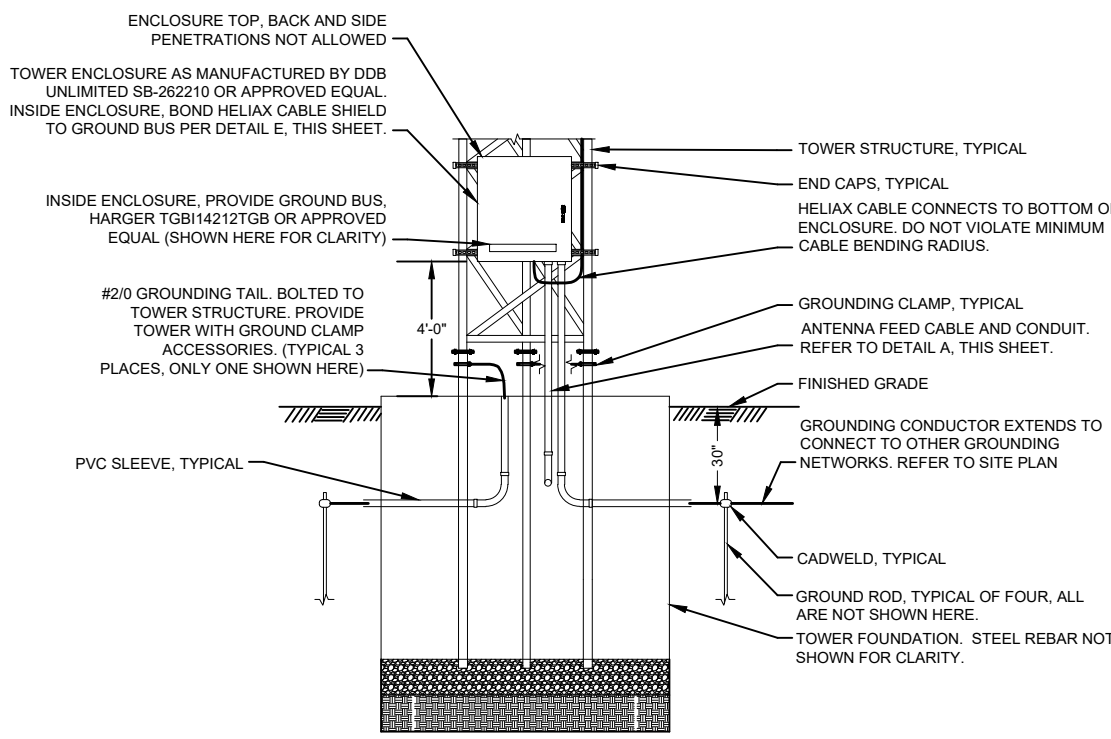


B ANTENNA GROUNDING DETAILS PLAN VIEW
SCALE: N.T.S.

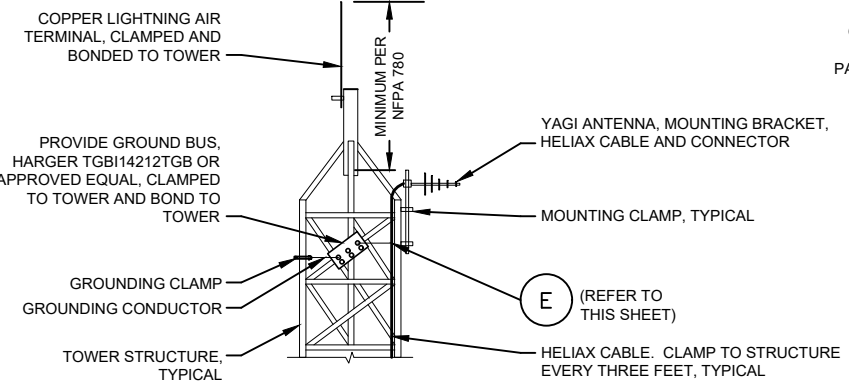


E HELIX CABLE GROUNDING DETAIL
SCALE: N.T.S.

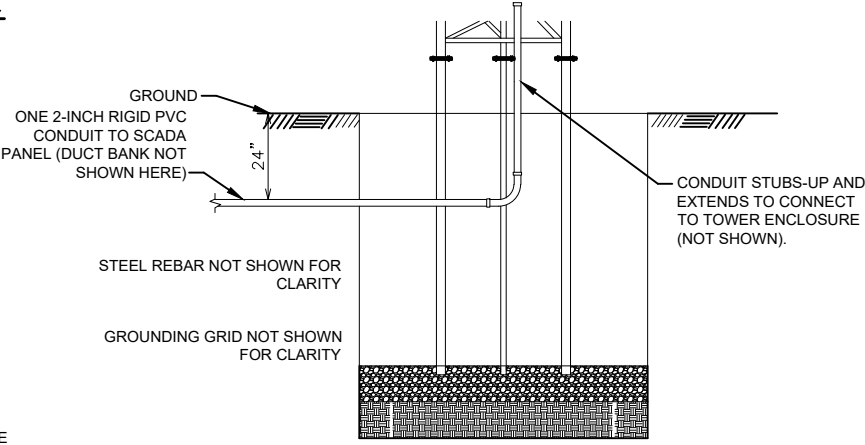
- NOTES:
1. CONTRACTOR SHALL PROVIDE TOWER PER SPECIFICATION 17600.
 2. CONTRACTOR TO USE CABLE CLAMPS AND HANGERS BY ANDREW OR EQUAL SUITABLE FOR HANGING COAX CABLE. HOSE CLAMPS AND WIRE TIES ARE NOT ALLOWED.
 3. ANTENNA TOWER SHOWN IS FOR DIAGRAMMATIC PURPOSES ONLY. FOR REQUIRED MATERIAL SPECIFICATIONS, EQUIPMENT INSTALLATION, NOTES AND TOLERANCES SEE MANUFACTURER DRAWINGS.
 4. AZIMUTH IS BASED ON THE CLOCKWISE ANGLE FROM TRUE NORTH AS SHOWN ABOVE.
 5. CONTRACTOR SHALL SUPPLY ALL ASSOCIATED EQUIPMENT FOR TOWERS PER SPECIFICATION 17600.
 6. REFER TO SAWS LATEST DESIGN GUIDELINES AS REQUIRED BY SAWS, FOR TOWER GROUNDING DETAIL, COMPLY WITH TOWER GROUNDING REQUIREMENTS PER TOWER MANUFACTURER.
 7. TOWER GROUND BAR OR LUG SHALL BE MADE OF TIN PLATED COPPER. DO NOT DRILL TOWER STRUCTURE. USE HARGER P/N TGB114212TGBKT FOR MOUNTING. USE TWO HOLE LUGS AT BUSBARS.
 8. COAX CABLE SHALL BE ROUTED THROUGH PULLBOX AND UP TOWER USING CABLE CLAMPS. CABLE SHALL NOT BE ROUTED THROUGH TOP OF PULLBOX. TOP PENETRATIONS WILL NOT BE ACCEPTED.
 9. ALL UNDERGROUND ELECTRIC CONDUIT SHALL BE CONCRETE ENCASED 24 INCHES BELOW GRADE.
 10. ALL ENCLOSURES AND DISCONNECTS SHALL BE PAD-LOCKABLE.
 11. ALL MOUNTING HARDWARE AND STRUT CHANNEL SHALL BE 316 STAINLESS STEEL. ALL ENCLOSURES SHALL BE NEMA 4X, UNLESS OTHERWISE NOTED.
 12. GROUND RESISTANCE SHALL BE AS MINIMUM AS POSSIBLE, BUT IN NO CASE SHALL EXCEED 5 OHMS.
 13. CONTRACTOR SHALL PROVIDE ALL ASSOCIATED EQUIPMENT FOR MOUNTING ANTENNA TO THE TOWER AT AN ELEVATION OF 50' ON A 60 FOOT TOWER.
 14. NOTE THAT TOWER SHALL BE EXPANDABLE TO 80' FOR FUTURE PURPOSES. REFER TO NOTE 12. REFER TO SPECIFICATION 17600 FOR ADDITIONAL DETAILS.
 15. THE COMPLETED INSTALLATION OF THE LIGHTNING PROTECTION SYSTEM SHALL MEET THE "INSTALLATION REQUIREMENTS FOR LIGHTNING PROTECTION SYSTEMS UL96A OF UNDERWRITERS LABORATORIES CURRENT EDITION AND NFPA 780 CURRENT EDITION. A CERTIFICATE OF COMPLETION FROM AN AUTHORITY HAVING JURISDICTION SHALL BE FURNISHED TO THE OWNER UPON COMPLETION. CONTRACTOR TO REFER TO TOWER MANUFACTURER GUIDELINES FOR INSTALLATION OF LIGHTNING PROTECTION SYSTEM. CONTRACTOR TO REFER TO RADIO MANUFACTURER FOR AIR TERMINAL MOUNTING REQUIREMENTS.
 16. COXIAL CABLE SHALL BE ROUTED THROUGH PULLBOX AND UP TOWER USING CABLE CLAMPS. CABLE SHALL NOT BE ROUTED THROUGH TOP OF PULLBOX. TOP PENETRATIONS WILL NOT BE ACCEPTED.
 17. THE LIGHTNING PROTECTION UNIT WILL BE CONTAINED IN AN LPU ENCLOSURE NEMA3R AT THE BASE OF THE TOWER TO INCLUDE A BUS BAR FOR BONDING AND GROUNDING. ONE BUS BAR AND A TOWER LIGHTNING 4 FT COPPER TINNED AIR TERMINAL SHALL BE REQUIRED TO BE BONDED AT TOP OF TOWER. LIGHTNING PROTECTION UNITS, SURGE PROTECTION MODULES, BUS BARS AND AIR TERMINALS WILL BE BONDED AND GROUNDED IN ACCORDANCE WITH MANUFACTURERS' STANDARDS AND MEET OR EXCEED TIA-607D STANDARDS. AS TECHNOLOGY ADVANCES OVER TIME, COORDINATE WITH SAWS STANDARDS ON LIGHTNING PROTECTION DEVICES.
 18. CONTRACTOR TO USE #6 AWG 19 STRAND CABLE WITH GREEN INSULATION.
 19. CONTRACTOR TO USE #2 AWG SOLID BARE TINNED COPPER. MUST BE EXOTHERMIC WELD ON THE TOWER AND AT THE CENTER OF BUS BAR
 20. TELECOMMUNICATIONS BONDING AND GROUNDING OF TOWER MUST COMPLY WITH ANSI/TIA/EIA-607-D AND TIA/EIA-222 LATEST EDITIONS.
 21. ALL MECHANICAL CONNECTIONS FOR BONDING AND GROUNDING MUST USE ANTIOXIDANT COMPOUND.
 22. CONTRACTOR TO USE #4/0 BARE COPPER TINNED FOR TOWER GROUNDING RING SYSTEM.
 23. CONTRACTOR TO USE #4/0 BARE COPPER TINNED BOND TO TOWER GROUND RING. MUST BE EXOTHERMIC WELD AT THE CENTER OF THE BUSBAR AND AT THE TOWER GROUND RING.



C TOWER BASE GROUNDING DETAIL
SCALE: N.T.S.



D TOWER TOP GROUNDING DETAIL
SCALE: N.T.S.



F ANTENNA CABLE CONDUIT RUN DETAIL
SCALE: N.T.S.

Kimley»Horn
Texas Registered Firm, No. F-928
601 NW Loop 410 Suite 350 San Antonio, TX 78216
Tel No. 210-541-9166 Fax No. 210-541-8699

No.	Revision	By	Date
	ADDENDUM NO. 3		

LEMON CREEK RANCH – UPSTREAM SANITARY SEWER PHASE 1B
SHEET
ANTENNA MAST AND MISCELLANEOUS DETAILS

DATE: OCTOBER 2021	SAWS PROJECT NO. 21-3000	SHEET NO. E8
DESIGN: MG	KHA PROJECT NO. 068716102	
DRAWN: SG		
CHECKED: MG		

PLOTTED BY: DWG NAME: 25/01/2021 2:17 PM
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 25/01/2021 2:17 PM

DESIGN CRITERIA

- 1. THIS CONSTRUCTION DOCUMENT ARE BASED ON THE REQUIREMENT OF INTERNATIONAL BUILDING CODE (IBC) LATEST EDITION.
2. THIS STRUCTURE WAS DESIGNED IN ACCORDANCE WITH ACI 350-20 "CODE REQUIREMENTS FOR ENVIRONMENTAL ENGINEERING CONCRETE STRUCTURES"
3. LOADING:
A. LIVE LOAD:
TOP SLAB:
TYPICAL = 100 PSF
WALLS:
SURCHARGE = 500 PSF
B. WIND LOAD:
ULTIMATE DESIGN WIND SPEED, Vult = 118 MPH (3-SECOND GUST)
NOMINAL DESIGN WIND SPEED, Vasd = 92 MPH (3-SECOND GUST)
EXPOSURE = C
INTERNAL PRESSURE COEFFICIENT, GCpi = +/- 0.18
RISK CATEGORY = IV
C. SEISMIC LOAD:
RISK CATEGORY = IV
SEISMIC IMPORTANT FACTOR, Ie = 1.50
SITE CLASS = C
Ss = 0.048g
S1 = 0.023g
SDS = 0.042g
SD1 = 0.023g
SEISMIC DESIGN CATEGORY A
D. FUTURE EXPANSION:
NO PROVISION HAVE BEEN MADE FOR FUTURE VERTICAL OR HORIZONTAL EXPANSION OF THE STRUCTURE.

DATUM

- 1. ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM (NAVD88).
2. REFER TO CIVIL DRAWINGS FOR STRUCTURE LOCATION COORDINATES.

GENERAL CONDITION

- 1. IT IS THE RESPONSIBILITY OF GENERAL CONTRACTOR TO OBTAIN ALL CONTRACT DOCUMENTS AND LATEST ADDENDA AND TO SUBMIT SUCH DOCUMENTS TO ALL SUBCONTRACTORS AND MATERIAL SUPPLIERS PRIOR TO THE SUBMITTAL OF THE SHOP DRAWINGS.
2. THE CONTRACT STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE, AND EXCEPT WHERE SPECIFICALLY SHOWN, DO NOT INDICATE THE MEANS AND METHODS OF CONSTRUCTION.
3. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH JOB SPECIFICATIONS AND CIVIL, MECHANICAL, ELECTRICAL, PLUMBING, AND SITE DRAWINGS.
4. THE GENERAL CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSION AND CONDITIONS AND COORDINATE WITH THE CONTRACT DOCUMENTS AND SHOP DRAWINGS.
5. CONTRACTOR SHALL VERIFY ALL DIMENSIONS WITH THE MECHANICAL DRAWINGS PRIOR TO CONSTRUCTION AND FABRICATION.
6. GENERAL CONTRACTOR SHALL VERIFY SIZE AND LOCATION OF PIPE OPENINGS, GRILLES, LOUVERS, HATCHES ETC., WITH THE MECHANICAL CONTRACTOR BEFORE PROCEEDING WITH THE WORK.
7. THE STRUCTURE HAS BEEN DESIGNED FOR THE LOAD IDENTIFIED WITHIN THESE STRUCTURAL DRAWINGS THAT ARE ANTICIPATED TO BE APPLIED TO THE FINAL STRUCTURE ONCE COMPLETED.
8. ALL WORK SHALL BE DONE IN ACCORDANCE WITH ALL PERTINENT LOCAL, STATE, AND FEDERAL BUILDING REGULATIONS.
9. SHOP DRAWINGS:
A. THE GENERAL CONTRACTOR SHALL REVIEW EACH SUBMITTAL BEFORE FORWARDING TO THE ENGINEER.
B. THE ENGINEER OF RECORD'S REVIEW IS ONLY FOR CONFORMANCE WITH THE DESIGN CONCEPT OF THE PROJECT AND COMPLIANCE WITH THE INFORMATION PROVIDED IN THE CONTRACT DOCUMENTS.

RESPONSIBLE FOR DIMENSIONS TO BE CONFIRMED AND CORRELATED AT THE SITE; FOR INFORMATION THAT PERTAINS SOLELY TO THE FABRICATION, PROCESSES, OR THE MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES OF CONSTRUCTION; AND FOR COORDINATION OF THE WORK OF ALL TRADES. THE ENGINEER'S APPROVAL OF A SPECIFIC ITEM SHALL NOT INCLUDE APPROVAL OF AN ASSEMBLY OF WHICH THE ITEM IS A COMPONENT.
C. FOR COMPONENTS DESIGNED BY A SPECIALTY ENGINEER: PROVIDE SHOP DRAWINGS, DESIGN CALCULATIONS, AND A COVER LETTER SIGNED AND SEALED BY PROFESSIONAL ENGINEER.
D. DELEGATED DESIGN AND DEFERRED SUBMITTALS ARE MANUFACTURER'S OR GENERAL CONTRACTOR'S DESIGNED COMPONENTS PER THE CONTRACT DOCUMENTS.

SITE WORK

GEOTECHNICAL DESIGN DATA:

- 1. GEOTECHNICAL INVESTIGATION REPORT: GEOTECHNICAL BASELINE REPORT (GBR) FOR THE SAWS LEMON CREEK RANCH PROJECT PHASE 1 - LIFT STATION SITE, ROCK ENGINEERING AND TESTING LABORATORY INC., APRIL 22, 2021.

EARTHWORK AND EXCAVATION:

- 1. THE CONTRACTOR IS PERMITTED TO BACKFILL THE BELOW GRADE WALLS TO A MAXIMUM OF 10 FEET ABOVE THE FOUNDATION LEVEL ONCE THE WALLS HAVE REACHED THEIR DESIGN STRENGTH.
2. BACKFILL BEHIND THE WALLS SHALL BE FREE DRAINING GRAVELS, WITH LESS THAN 5-PERCENT PASS THE #200 SIEVE.
3. THE GENERAL CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL EXCAVATION PROCEDURES INCLUDING, BUT NOT LIMITED TO: LAGGING, SHORING, AND PROTECTION OF ADJACENT PROPERTY, STRUCTURES, STREETS, AND UTILITIES.
4. EXCAVATION SHALL NOT OCCUR WITHIN ONE FOOT OF THE ANGLE OF REPOSE OF ANY SOIL BEARING FOUNDATION UNLESS THE FOUNDATION IS PROTECTED AGAINST SETTLEMENT.
5. THE EXTENT OF SUBGRADE PREPARATION SHALL EXTEND A MINIMUM OF 5'-0" BEYOND THE STRUCTURE'S PERIMETER.
6. THE GENERAL CONTRACTOR SHALL PROVIDE A SUBGRADE BENEATH THE SLAB ON GRADE PER GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.
7. COMPACT FILL TO 95% OF MAXIMUM DRY DENSITY AS DETERMINED BY MODIFIED PROCTOR ASTM D-1557.
8. PLACEMENT OF FILL AND COMPACTION SHALL BE MONITORED AND ACCEPTED BY A RETAINED TESTING AGENCY.
9. THE GENERAL CONTRACTOR SHALL DETERMINE THE EXTENT OF THE CONSTRUCTION DEWATERING SYSTEMS REQUIRED FOR THE EXCAVATION.
10. THE GENERAL CONTRACTOR SHALL SUBMIT CONSTRUCTION DEWATERING PLAN TO THE GEOTECHNICAL ENGINEER FOR APPROVAL PRIOR TO BEGINNING EXCAVATION.
11. THE GENERAL CONTRACTOR SHALL INSTALL ALL NECESSARY DEWATERING SYSTEMS.

FOUNDATIONS:

- 1. FOUNDATIONS ARE DESIGNED IN ACCORDANCE WITH GEOTECHNICAL INVESTIGATION REPORT.
2. FOUNDATION SIZE AND REINFORCEMENT ARE BASED ON AN ALLOWABLE BEARING PRESSURE OF 2,500 PSF PER GEOTECHNICAL INVESTIGATION REPORT.
3. SOIL BELOW FOUNDATIONS NOT MEETING THE ALLOWABLE BEARING PRESSURE SHALL BE REMEDIATED PER GEOTECHNICAL INVESTIGATION REPORT AND APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF THE FOUNDATIONS.

CAST IN PLACE CONCRETE

CONCRETE:

- 1. ALL CONCRETE CONSTRUCTION TECHNIQUES SHALL CONFORM TO "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS" (ACI 301)
2. THE FOUNDATIONS AND WALLS ARE CONSIDERED MASS CONCRETE.
A. THE STRUCTURE WALLS ARE CONSIDERED MASS CONCRETE AND SHALL BE CONSTRUCTED IN ACCORDANCE WITH ACI 207 RECOMMENDATIONS AND GUIDELINES.

- B. TYPE V CEMENT SHALL BE USED.
C. AVERAGE AGGREGATE SIZE D50 = 1-1/2"
D. MAX AGGREGATE SIZE = 3"
E. THE MAXIMUM CONCRETE TEMPERATURE SHALL NOT EXCEED 160 DEGREES FAHRENHEIT DURING CURING, AND THE MAXIMUM TEMPERATURE DIFFERENTIAL BETWEEN THE CENTER AND SURFACE OF PLACEMENT SHALL NOT EXCEED 35 DEGREES FAHRENHEIT.
F. ANY CRACKS DUE TO THERMAL STRESSES SHALL BE PAID FOR AND REPAIRED BY THE CONTRACTOR.
3. THE CONTRACTOR SHALL UTILIZE CONSHIELD® ANTI-BACTERIAL ADDITIVE IN THE STRUCTURAL CONCRETE MIX DESIGN PER MANUFACTURER'S RECOMMENDATIONS.
4. THE CONTRACTOR SHALL SUBMIT THE CONCRETE MIX DESIGNS TO THE ENGINEER FOR REVIEW PRIOR TO CONSTRUCTION.
5. ALL CONCRETE SHALL BE NORMAL WEIGHT CONCRETE (145 PCF) AND STRENGTH SHALL MEET THE FOLLOWING 28 DAY COMPRESSIVE STRENGTH:
A. FOUNDATIONS = 5,000 PSI
B. BEAMS = 5,000 PSI
C. WALLS = 5,000 PSI
6. MAXIMUM WATER TO CEMENT RATIO = 0.45
7. PROVIDE A 3/8 INCH CHAMFER AT ALL EXPOSED CORNER OF BEAMS, WALLS, UNLESS NOTED OTHERWISE.
8. THE USE OF CALCIUM CHLORIDE AND OTHER CHLORIDE CONTAINING AGENT IS PROHIBITED.
9. CONSTRUCTION JOINTS WILL BE PERMITTED ONLY AT THE LOCATIONS INDICATED ON THE PLANS.

CONCRETE REINFORCEMENT:

- 1. ALL CONCRETE SHALL INCLUDE REINFORCEMENT.
2. REINFORCEMENT SHALL CONFORM TO THE FOLLOWING STANDARDS AND MATERIALS PROPERTIES.
A. DEFORMED BARS = ASTM A615, GRADE 60
3. DETAIL REINFORCEMENT BASED ON THE PROJECT REQUIREMENT, ACI-318 AND ACI-315.
4. WHERE A 90-DEGREE, 135-DEGREE OR 180-DEGREE HOOK IS GRAPHICALLY INDICATED, PROVIDE CORRESPONDING ACI STANDARD HOOKS.
5. DOWELS SHALL MATCH SIZE AND SPACING OF MAIN REINFORCEMENT UNLESS NOTED OTHERWISE.
6. REINFORCEMENT SHALL HAVE CONCRETE PROTECTION (CLEAR COVER) AS NOTED ON THE DRAWINGS.
7. ALL HORIZONTAL INTERSECTING ELEMENTS, SUCH AS TIE BEAMS, FOOTINGS, AND GRADE BEAMS SHALL BE PROVIDED WITH CORNER REINFORCEMENT BARS OF THE SAME SIZE AND GRADE AS THE INTERSECTING LONGITUDINAL REINFORCEMENT BARS.
8. SPREAD BARS AROUND SMALL OPENINGS AND SLEEVES IN SLABS WHERE POSSIBLE.
9. REINFORCING STEEL IN FOOTINGS SHALL BE ASSEMBLED AS MATS WITH BARS EQUALLY SPACED AND WIRED TOGETHER AT EACH INTERSECTION BEFORE CONCRETE IS PLACED.
10. ALL LAP SPLICES ARE TO BE PER REINFORCEMENT LAP SPLICE SCHEDULE UNLESS NOTED OTHERWISE.

FORMWORK, SHORING AND RESHORING:

- 1. PROVIDE COMPLETE SHORING AND RESHORING DRAWINGS PREPARED UNDER THE DIRECT SUPERVISION OF A DELEGATED ENGINEER.
2. FORMWORK REMOVAL IS THE SOLE RESPONSIBILITY OF GENERAL CONTRACTOR.
3. FORMWORK SHALL NOT BE REMOVED UNTIL THE CONCRETE STRENGTH HAS REACHED 75% OF THE SPECIFIED DESIGN STRENGTH.

HATCHES

- 1. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR REVIEW
2. CONTRACTOR SHALL VERIFY HATCH SIZES AND LOCATIONS WITH THE MECHANICAL DRAWINGS AND NOTIFY OF THE ENGINEER OF ANY DISCREPANCIES.
3. HATCHES SHALL BE ALUMINUM WITH 316 STAINLESS STEEL HARDWARE.
4. HATCHES SHALL BE INSTALLED PER MANUFACTURER'S REQUIREMENTS.
5. ALUMINUM SHALL BE COATED WITH BITUMASTIC COATING WHEN IN DIRECT CONTACT WITH CONCRETE.

HATCH SCHEDULE table with columns: HATCH SIZE, MANUFACTURER, PRODUCT #/TYPE, NOTES. Rows include 84"x53.5", 72"x48", 30"x30", and 24"x24" hatches.

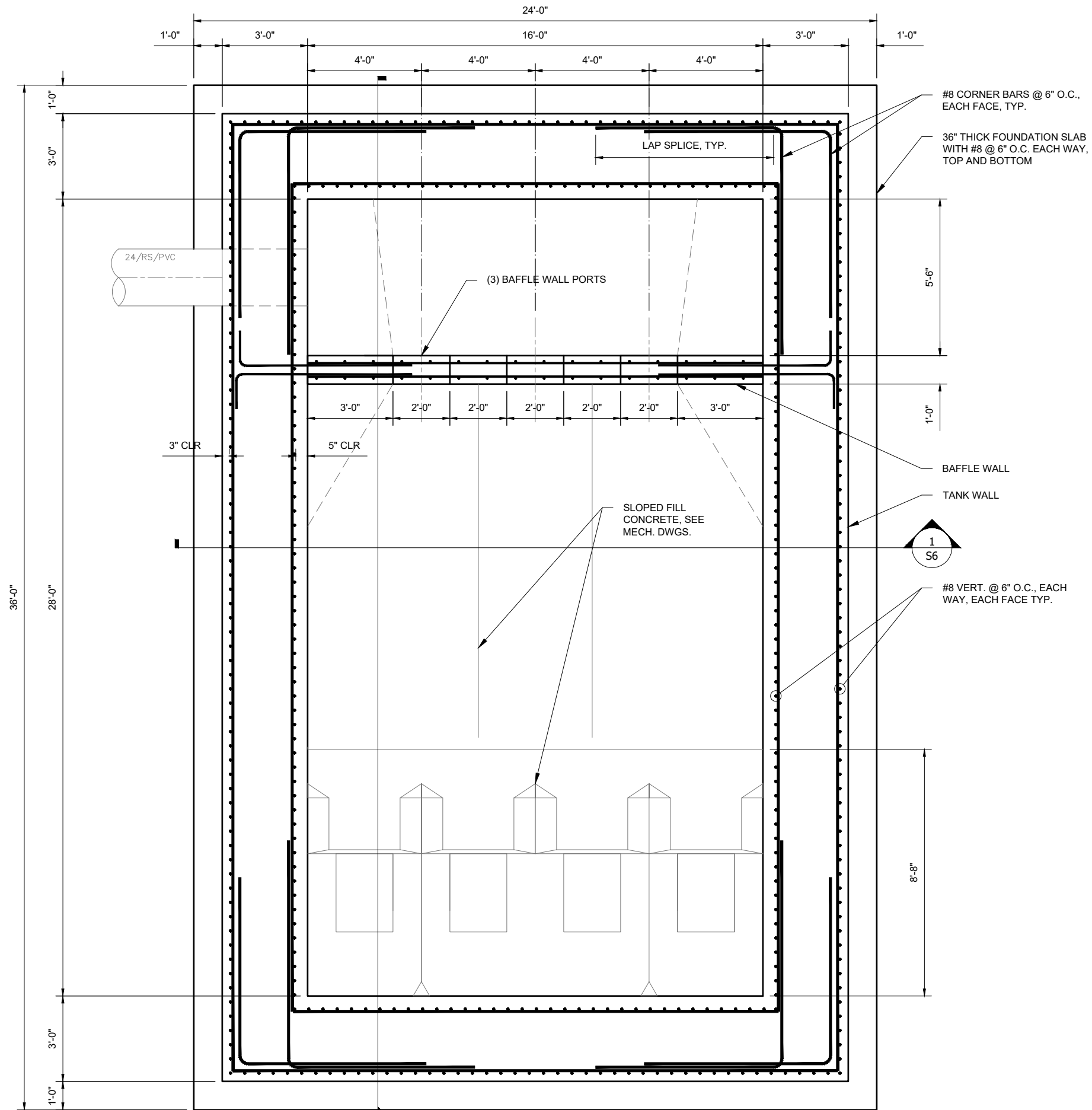
REINFORCEMENT LAP SPLICE SCHEDULE table with columns: BAR SIZE (#3-#10) and 5,000 PSI. Rows show lap lengths for various bar sizes.

THOMAS JUSTIN 12/14/21 8:19 AM
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12/14/21 8:17 AM

PLOTTED BY
DWG NAME
LAST SAVER

100% DRAWINGS

Professional Engineer seal for Thomas J. Justin, State of Texas, License No. 141194. WGI logo and address: 5710 W. Hausman Rd., Suite 115, San Antonio, TX 78216. Project title: LEMON CREEK RANCH - UPSTREAM SANITARY SEWER PHASE 1B. SHEET GENERAL NOTES. Revision table with ADDENDUM NO. 3. Date: 12/14/21.



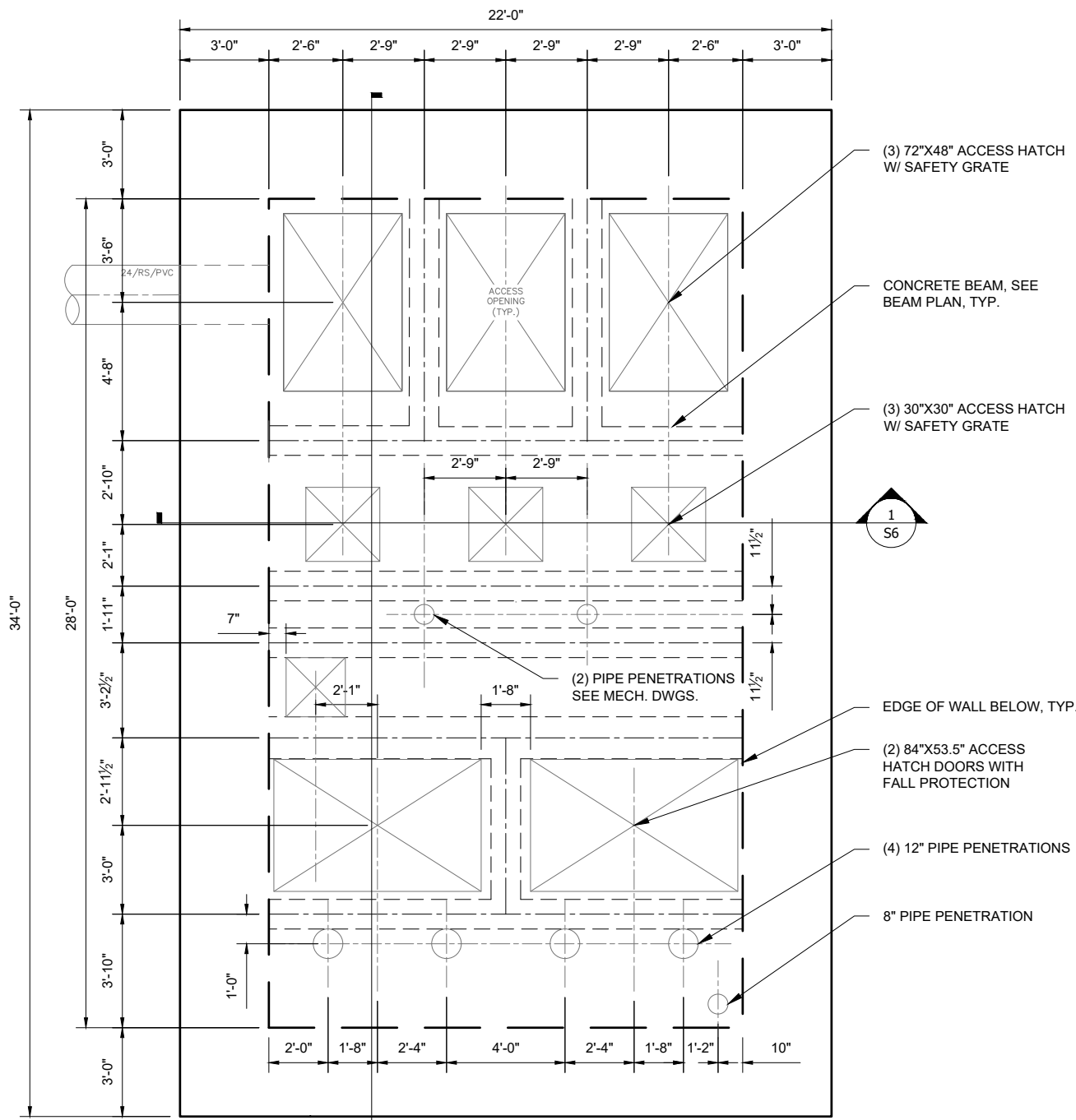
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1 S5 **BOTTOM PLAN VIEW**
 1/4" = 1'-0"

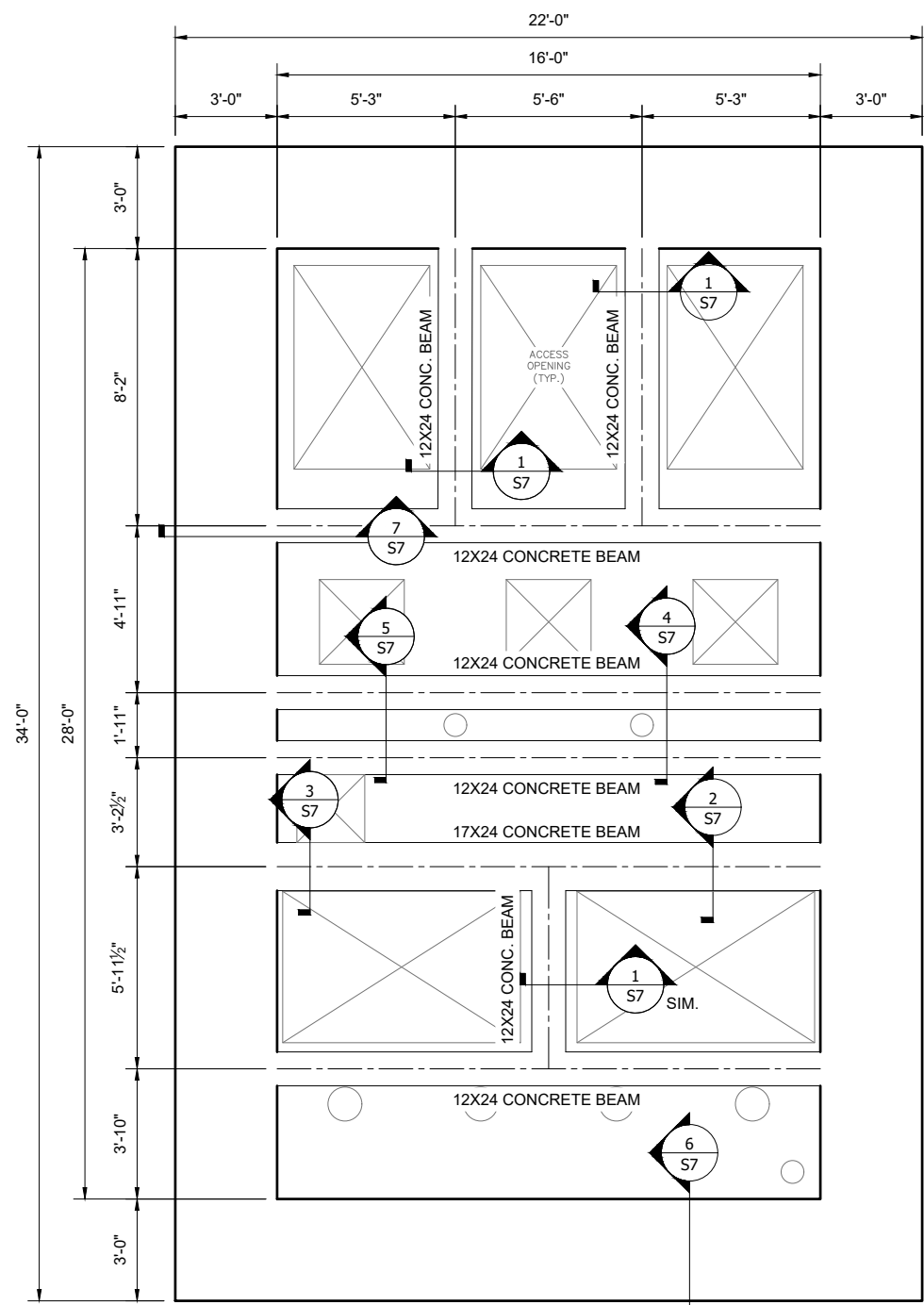
100% DRAWINGS

	Phone No. 210.860.9224 Texas Firm No. F-15085		5710 W. Hausman Rd., Suite 115 San Antonio, TX 78216
No.	Revision	By	Date
▲	ADDENDUM NO. 3	TJT	12/14/21
	LEMON CREEK RANCH – UPSTREAM SANITARY SEWER PHASE 1B SHEET FOUNDATION PLAN VIEW		
DATE: DECEMBER 2021	SAWS PROJECT NO. 21-3000	SHEET NO. S2	
DESIGN: TJT	WGI PROJECT NO. 7673.00		
DRAWN: TJT			
CHECKED: JRB			

- NOTES:**
1. CONTRACTOR SHALL VERIFY OPENING SIZES AND LOCATIONS WITH THE MECHANICAL DRAWINGS.
 2. SEE GENERAL NOTES FOR HATCH INFORMATION
 3. ALL OPENINGS AND PENETRATIONS SHALL BE FORMED OR BLOCKED OUT DURING CONCRETE PLACEMENT. SAW CUTTING AND CORE DRILLING SHALL NOT BE PERMITTED



1 TOP SLAB PLAN VIEW
 S3 3/16" = 1'-0"

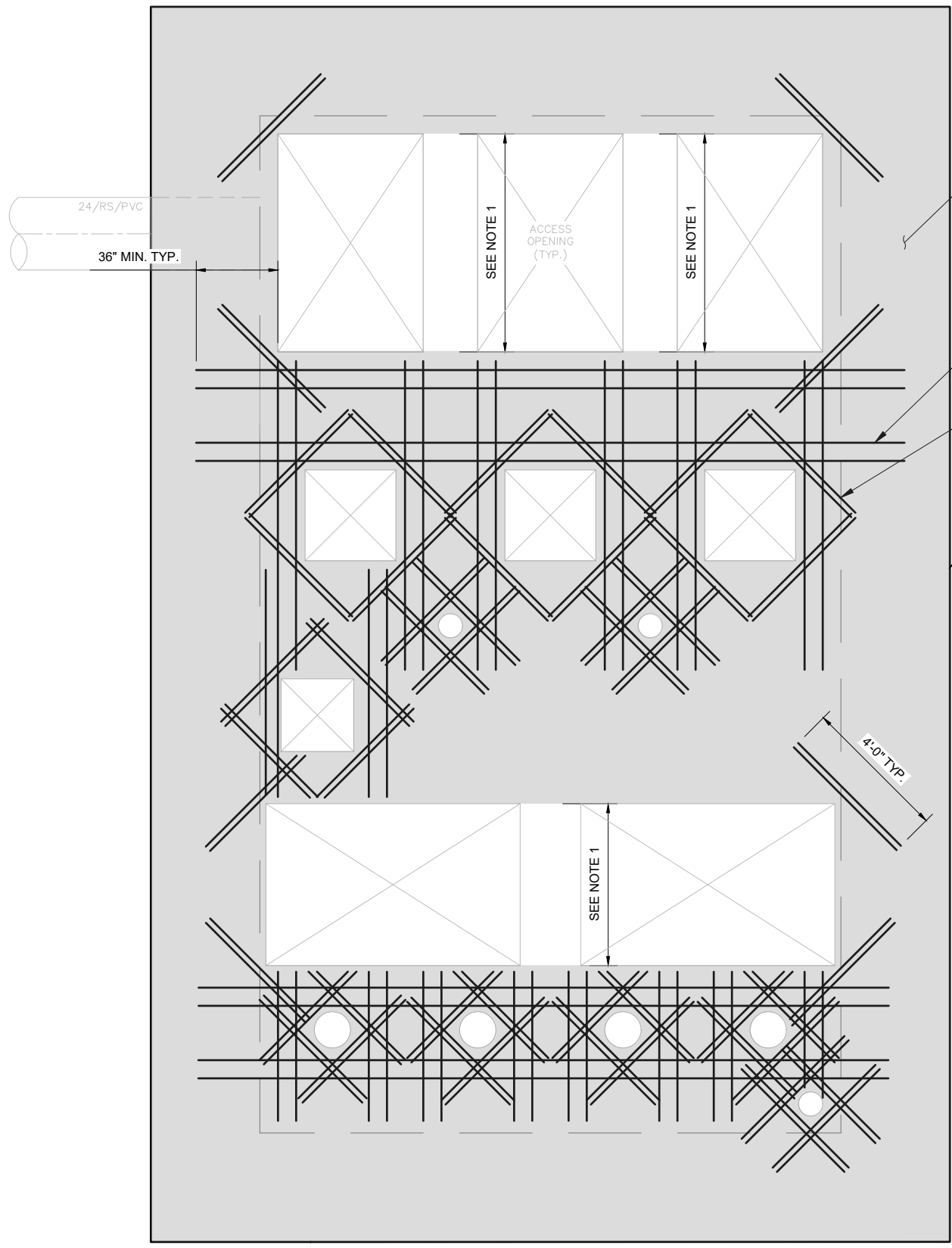


2 REFLECTED TOP SLAB BEAM LAYOUT
 S3 3/16" = 1'-0"

100% DRAWINGS

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No.	Revision	By	Date
ADDENDUM NO. 3		TJT	12/14/21
		LEMON CREEK RANCH – UPSTREAM SANITARY SEWER PHASE 1B SHEET TOP PLAN VIEW	
DATE: DECEMBER 2021	SAWS PROJECT NO.	SHEET NO.	
DESIGN: TJT	21-3000	S3	
DRAWN: TJT	WGI PROJECT NO.		
CHECKED: JRB	7673.00		

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 DWG NAME: EAST SAVID



GRAY HATCHING DENOTES AREA WHERE TYPICAL SLAB REINFORCEMENT APPLIES (#6 @ 6" O.C., EACH WAY, TOP & BOTTOM)

ADDITIONAL #6 REINFORCEMENT AROUND OPENINGS. SEE NOTE 3 & 4

ADDITIONAL #4 DIAGONAL "CRACK" BARS. SEE NOTE 5

OUTSIDE EDGE OF WALL/SLAB

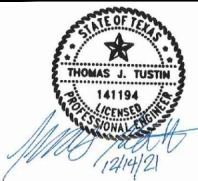


NOTES:

1. TYPICAL SLAB REINFORCEMENT IS NOT REQUIRED BETWEEN THE OPENINGS NOTED.
2. ADDITIONAL #6 BAR REINFORCEMENT SHALL BE ADDED AROUND OPENINGS AS SHOWN. ADDITIONAL REINFORCEMENT SHALL BE SPACED EQUAL TO THE TYPICAL REINFORCEMENT SPACING. ADDITIONAL REINFORCEMENT SHALL BE PLACED CENTERED BETWEEN TYPICAL REINFORCEMENT.
3. ADDITIONAL REINFORCEMENT SHALL EXTEND A MINIMUM OF 36" PAST THE ADJACENT OPENINGS.
4. ADDITIONAL (2) #4 X 48" LONG (MINIMUM) @ 3" O.C. DIAGONAL "CRACK" BARS SHALL BE PLACED DIAGONALLY, AT A 45 DEGREE ANGLE TO THE TYPICAL REINFORCEMENT, AT EACH OPENING CORNER AND AT EACH CIRCULAR OPENING.
5. ADDITIONAL SLAB AND DIAGONAL REINFORCEMENT SHOWN APPLIES TO BOTH THE TOP AND BOTTOM REINFORCEMENT MATS.
6. ALL TOP SLAB REINFORCEMENT BARS TERMINATING AT AN OPENING OR OUTSIDE EDGE OF WALL SHALL HAVE A STANDARD ACI HOOK.
7. SLAB REINFORCEMENT SHALL BE CONTINUOUS THROUGH BEAMS, UNLESS NOTED OTHERWISE.
8. CONCRETE BEAMS NOT SHOWN FOR CLARITY

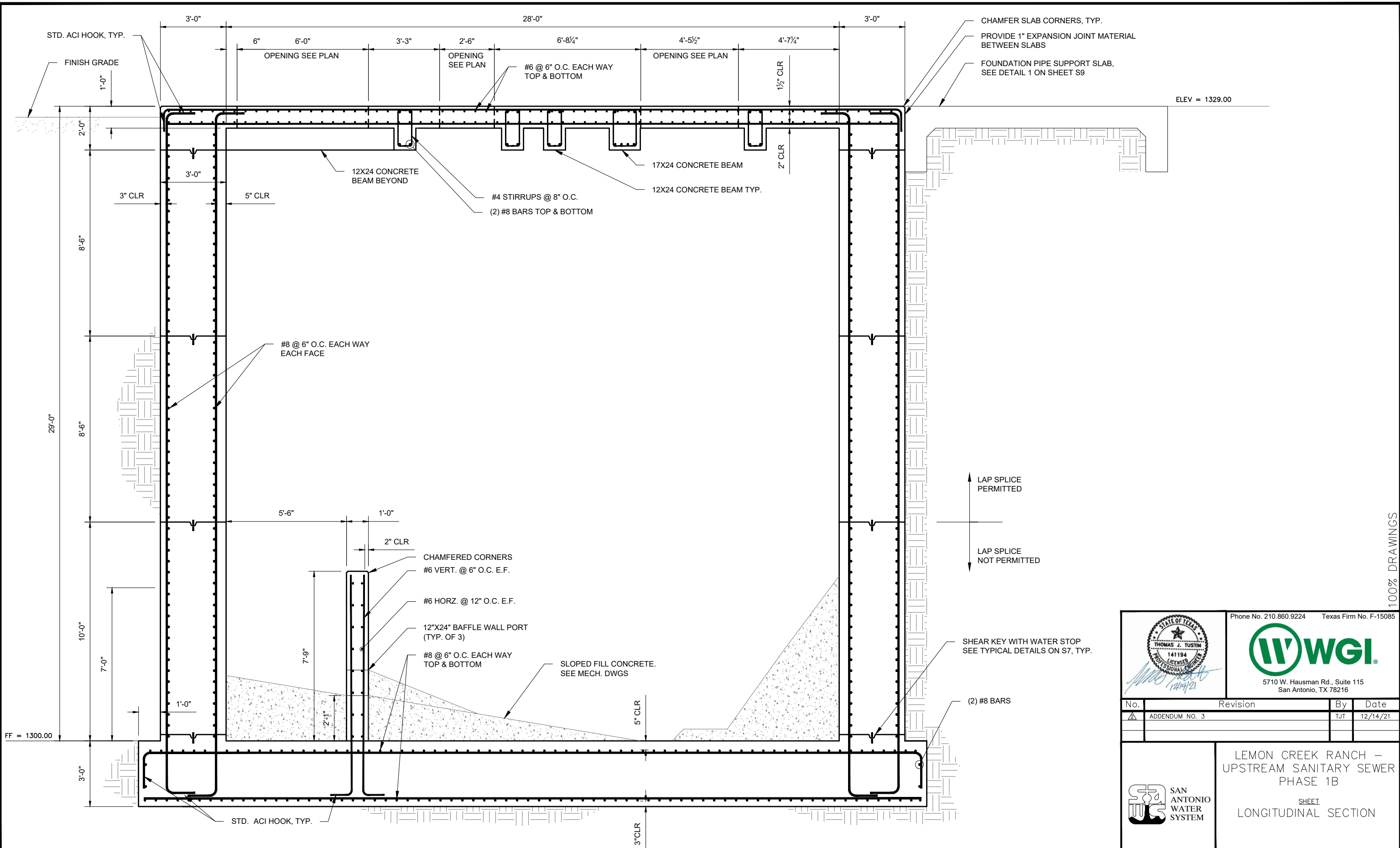
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 DWG NAME
 LAST SAVID

100% DRAWINGS

1
S4
TOP SLAB REINFORCEMENT PLAN
 1/4" = 1'-0"

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No.	Revision	By	Date
▲	ADDENDUM NO. 3	TJT	12/14/21
 SAN ANTONIO WATER SYSTEM		LEMON CREEK RANCH – UPSTREAM SANITARY SEWER PHASE 1B SHEET TOP SLAB REINFORCEMENT PLAN	
DATE: DECEMBER 2021	SAWS PROJECT NO. 21-3000	SHEET NO. S4	
DESIGN: TJT	WGI PROJECT NO. 7673.00		
DRAWN: TJT			
CHECKED: JRB			

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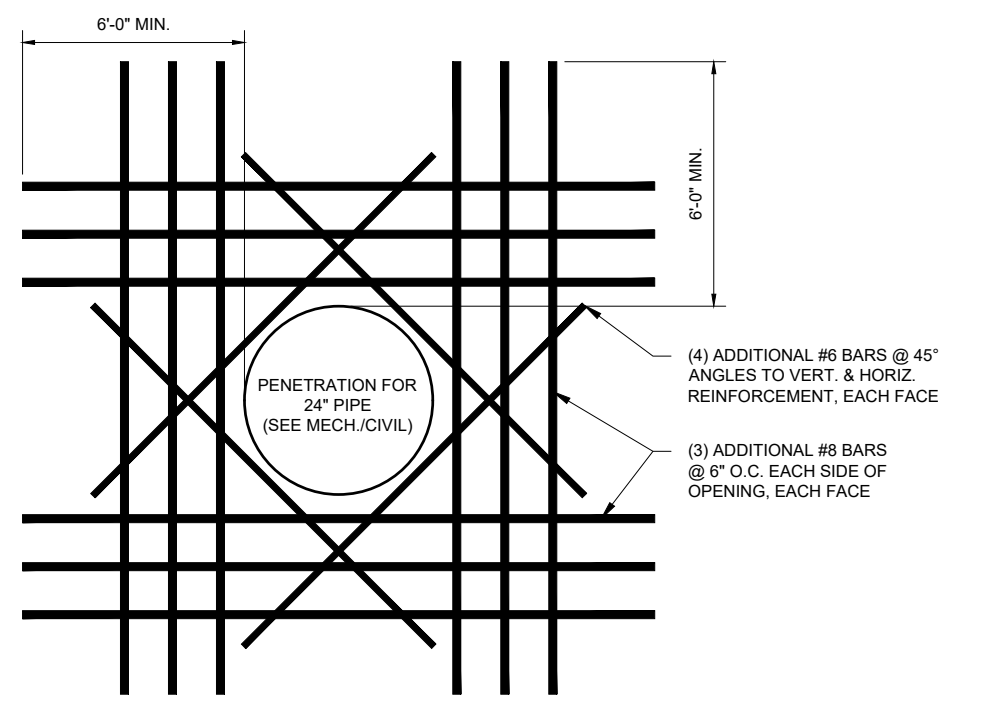
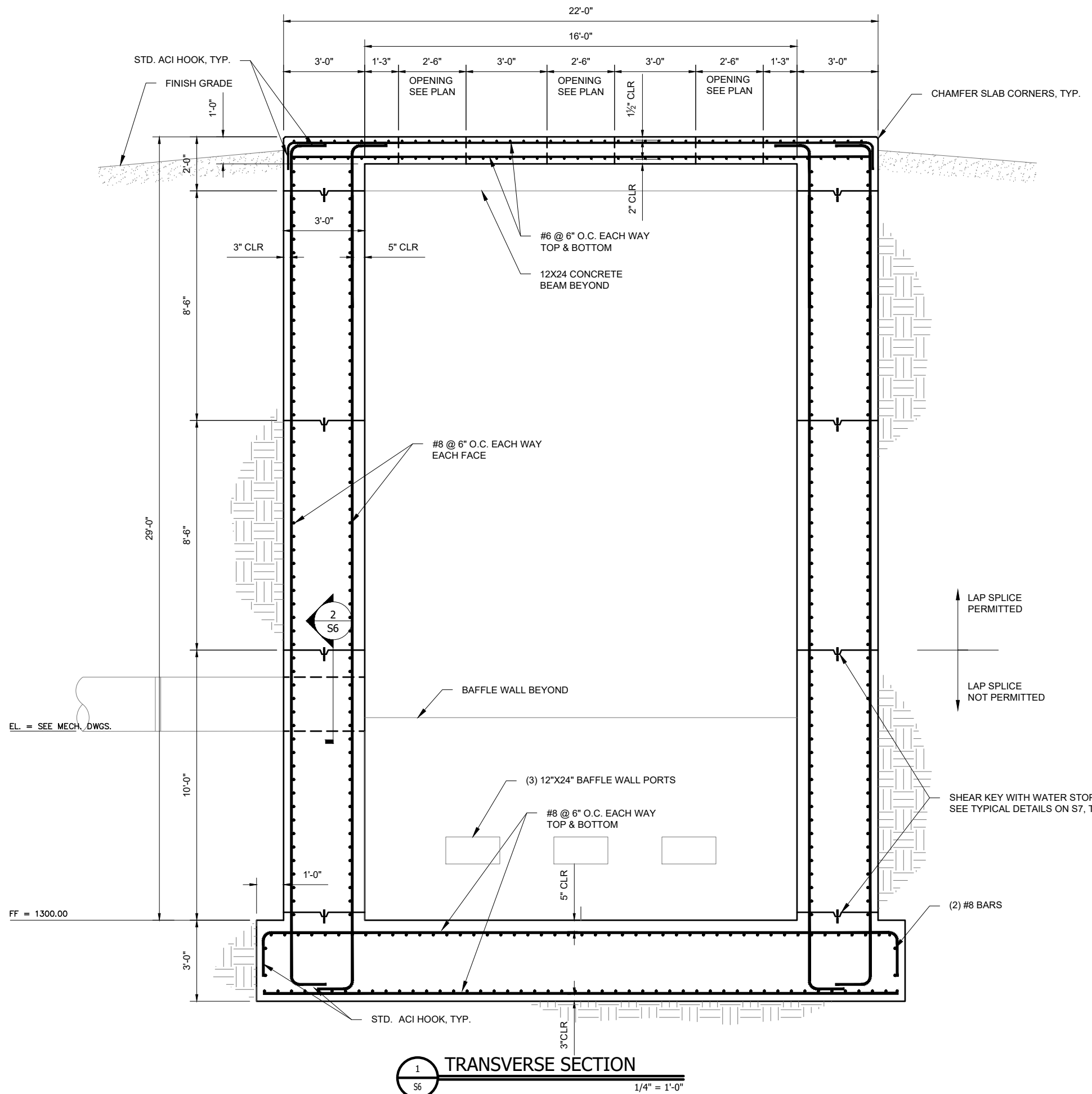


1 **LONGITUDINAL SECTION**
 S5 1/4" = 1'-0"

100% DRAWINGS

	Phone No. 210.860.9224 Texas Firm No. F-15085 5710 W. Hausman Rd., Suite 115 San Antonio, TX 78216		
	LEMON CREEK RANCH – UPSTREAM SANITARY SEWER PHASE 1B SHEET LONGITUDINAL SECTION		
DATE: DECEMBER 2021 DESIGN: TJT DRAWN: TJT CHECKED: JRB	SAWS PROJECT NO. 21-3000 WGI PROJECT NO. 7673.00	SHEET NO. S5	

No.	Revision	By	Date
A	ADDENDUM NO. 3	TJT	12/14/21



NOTE: SEE MECHANICAL/CIVIL DRAWINGS FOR PIPE PENETRATION THIMBLE

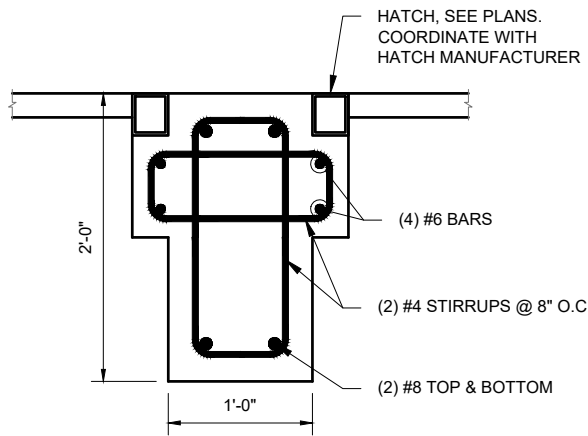
2 WALL PIPE PENETRATION DETAIL
S6 N.T.S.

1 TRANSVERSE SECTION
S6 1/4" = 1'-0"

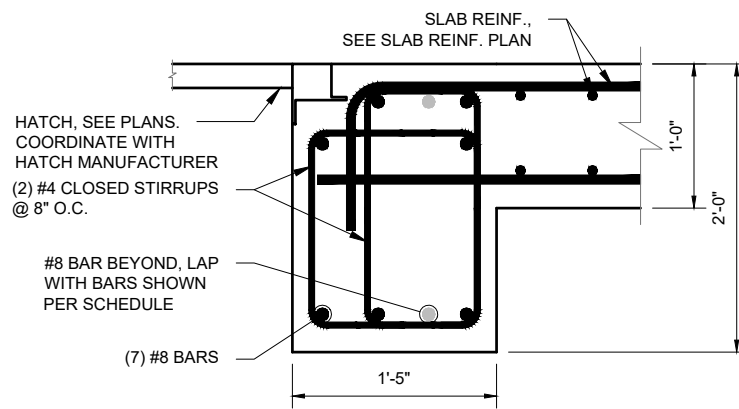
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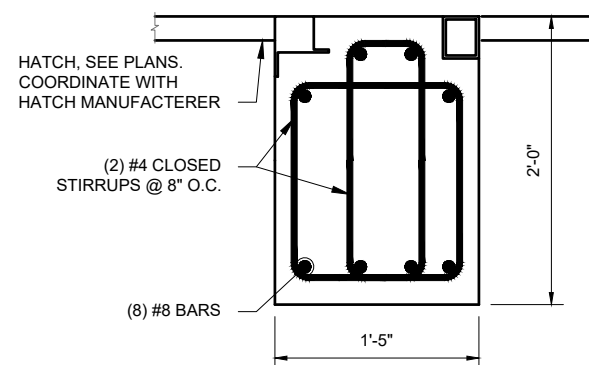
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No.	Revision	By	Date
ADDENDUM NO. 3		TJT	12/14/21
		LEMON CREEK RANCH – UPSTREAM SANITARY SEWER PHASE 1B SHEET TRANSVERSE SECTION	
DATE: DECEMBER 2021	SAWS PROJECT NO.	SHEET NO.	
DESIGN: TJT	21-3000	S6	
DRAWN: TJT	WGI PROJECT NO.		
CHECKED: JRB	7673.00		



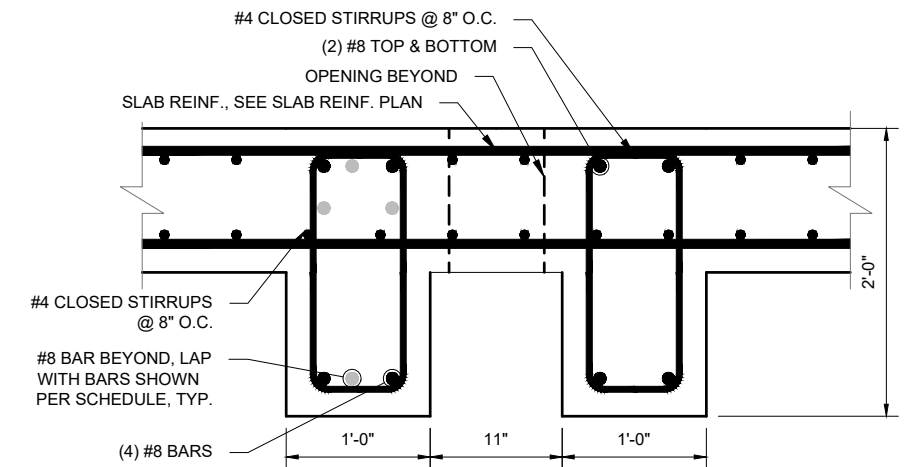
1 BEAM DETAIL
S7 3/4" = 1'-0"



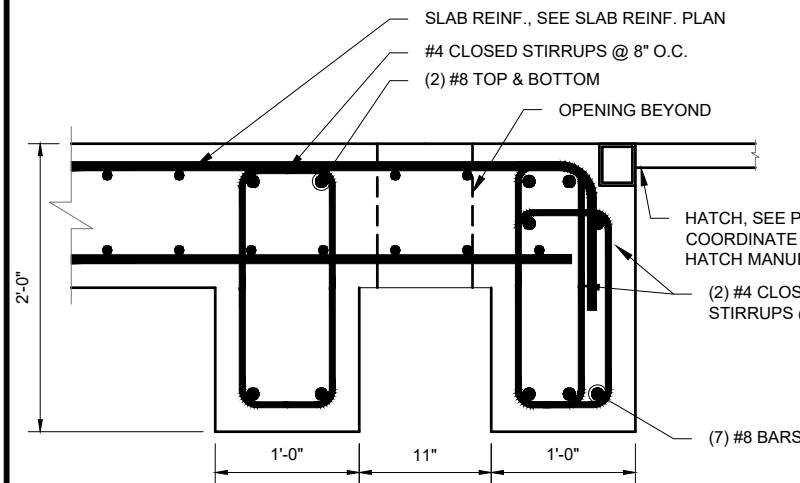
2 BEAM DETAIL
S7 3/4" = 1'-0"



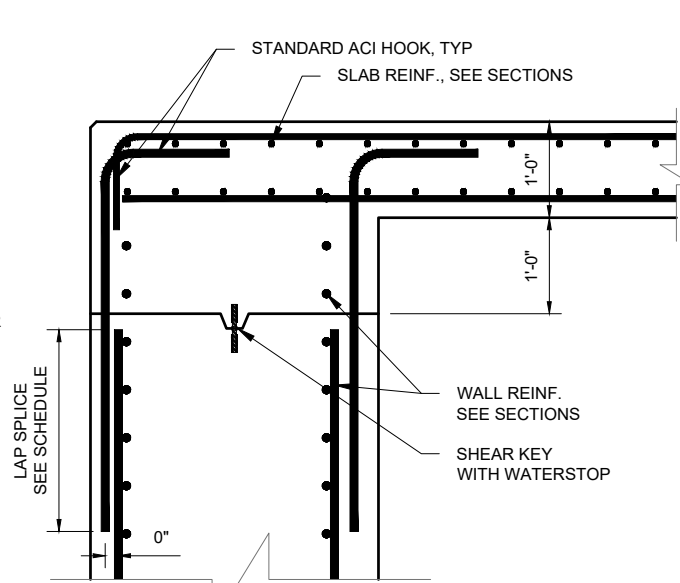
3 BEAM DETAIL
S7 3/4" = 1'-0"



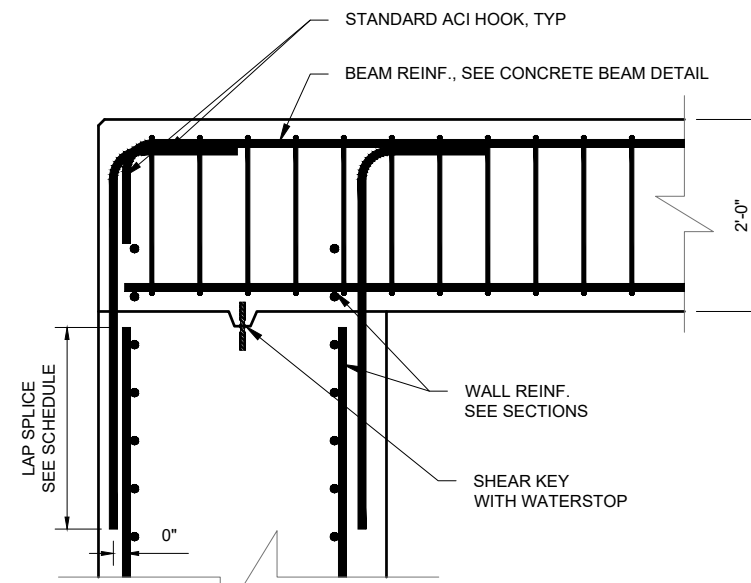
4 BEAM DETAIL
S7 3/4" = 1'-0"



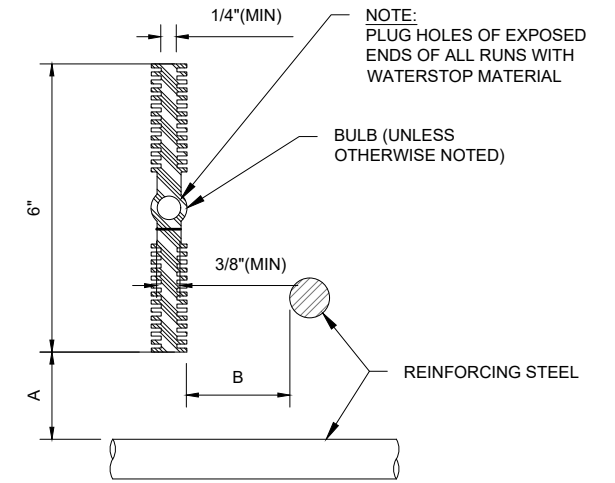
5 BEAM DETAIL
S7 3/4" = 1'-0"



6 SLAB TO WALL DETAIL
S7 NTS

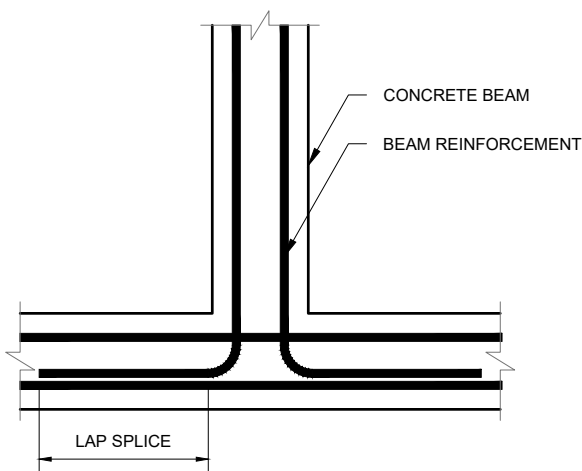


7 BEAM TO WALL DETAIL
S7 NTS

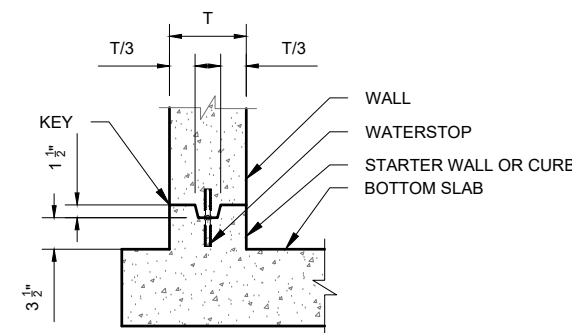


- NOTE:
- MINIMUM CLEARANCE (A OR B) BETWEEN REINFORCING STEEL AND THE WATERSTOP SHALL BE TWICE THE MAXIMUM AGGREGATE SIZE.
 - WATERSTOPS SHALL BE SIKA® GREENSTREAK® PVC WATERSTOP NO. 717 OR ENGINEER APPROVED EQUIVALENT

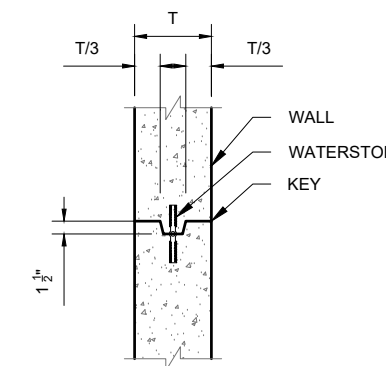
8 WATERSTOP DETAIL
S7 NTS



9 TYPICAL BEAM INTERSECTION REINFORCEMENT
S7 NTS



10 TYPICAL FOUNDATION KEY DETAIL
S7 NTS

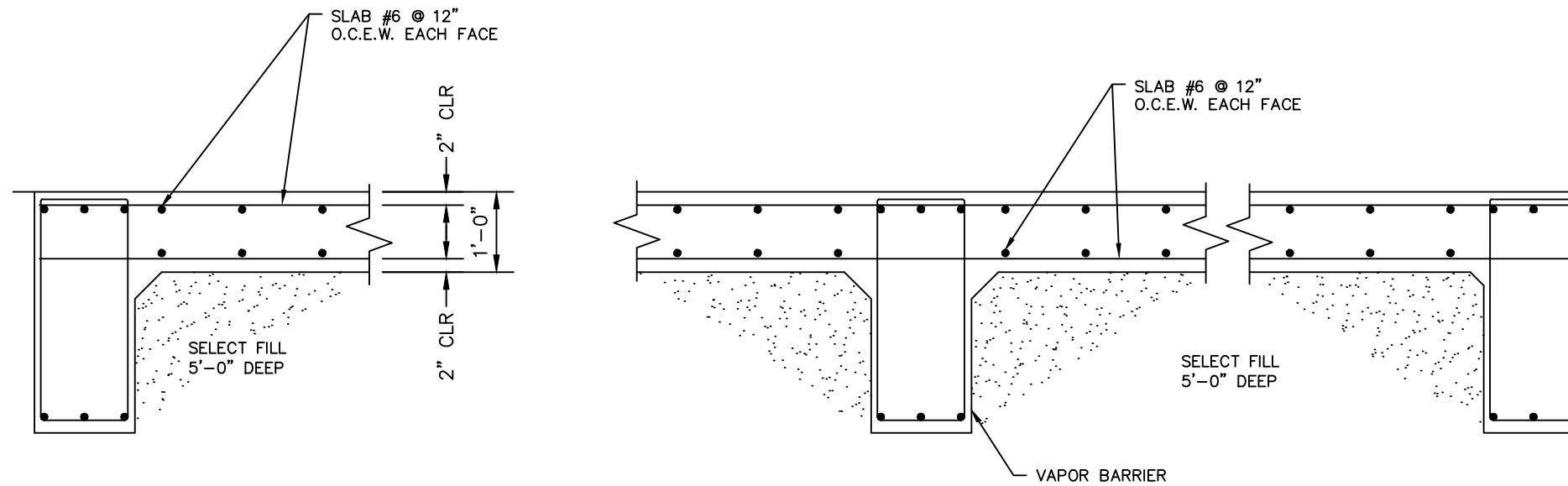


11 TYPICAL KEY DETAIL
S7 NTS

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100% DRAWINGS

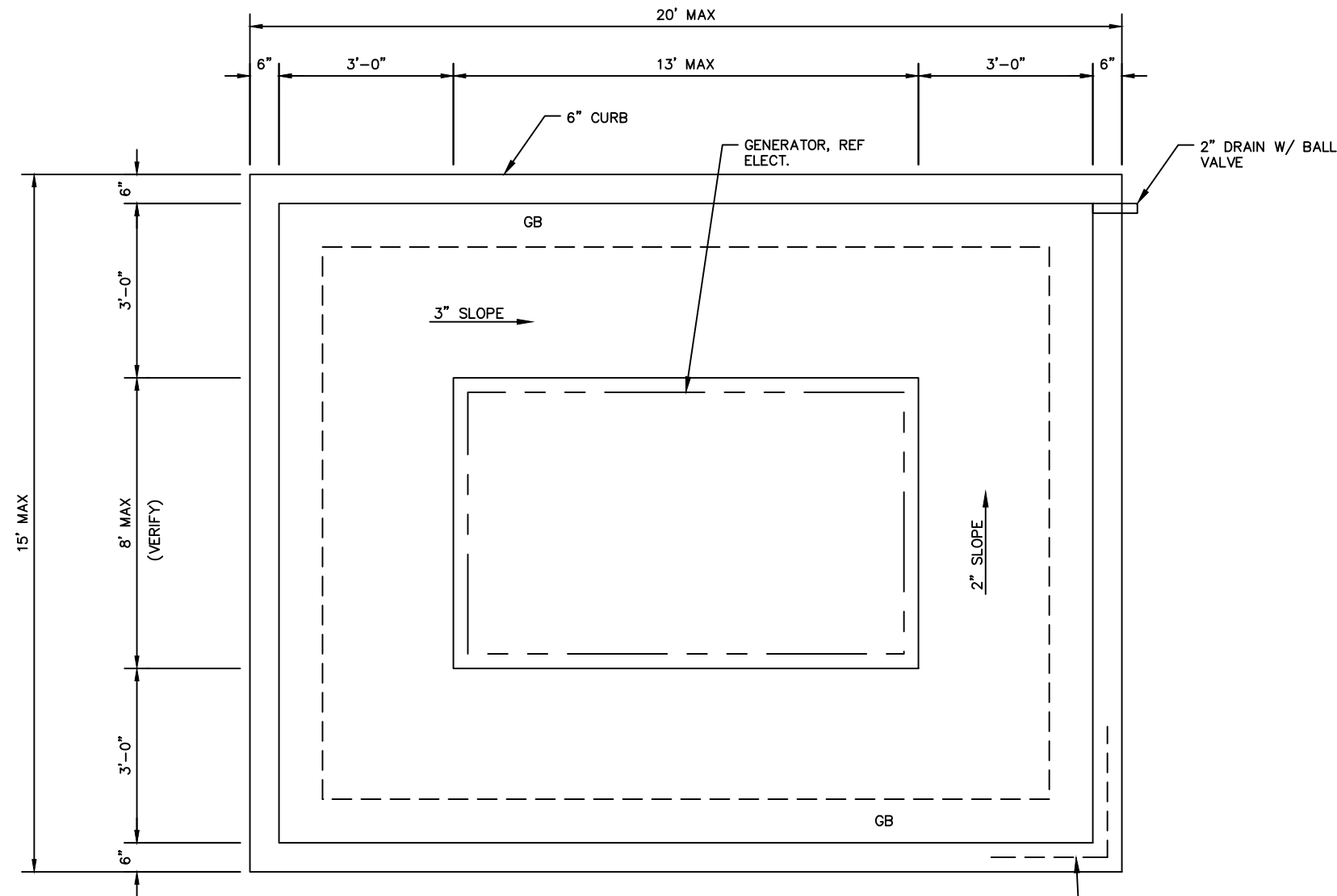
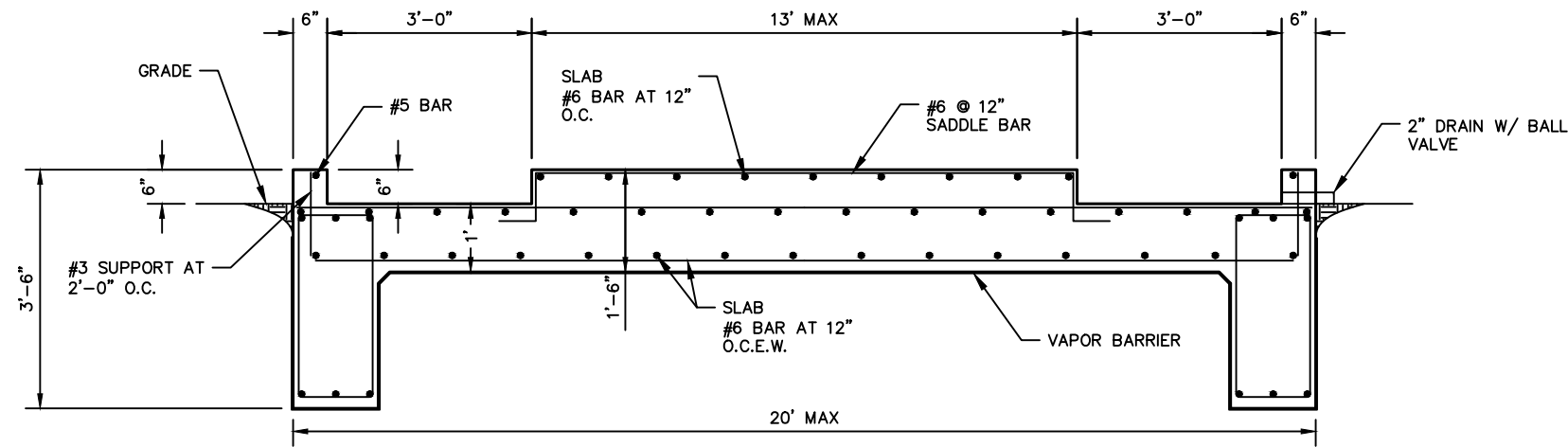
		Phone No. 210.860.9224 Texas Firm No. F-15085 	
5710 W. Hausman Rd., Suite 115 San Antonio, TX 78216			
No.	Revision	By	Date
ADDENDUM NO. 3		TJT	12/14/21
		LEMON CREEK RANCH – UPSTREAM SANITARY SEWER PHASE 1B SHEET DETAILS	
DATE: DECEMBER 2021	SAWS PROJECT NO.	SHEET NO.	
DESIGN: TJT	21-3000	S7	
DRAWN: TJT	WGI PROJECT NO.		
CHECKED: JRB	7673.00		



1 SLAB REINFORCEMENT DETAIL
SCALE: 3/8" = 1'

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 DWG NAME: K:\SNA_UTILITIES\066716102\CADD\PLANS\STRUCTURAL\FOUNDATIONS\066716102.DWG
 DATE: 12/14/2021 12:48 PM
 USER: STOKES.TREVOR

		Kimley»Horn Texas Registered Firm, No. F-928 601 NW Loop 410 Suite 350 San Antonio, TX 78216 Tel No. 210-541-9166 Fax No. 210-541-8699							
		<table border="1"> <thead> <tr> <th>No.</th> <th>Revision</th> <th>By</th> <th>Date</th> </tr> </thead> <tbody> <tr> <td>▲</td> <td>ADDENDUM NO. 3</td> <td>JEL</td> <td>12/14/2021</td> </tr> </tbody> </table>		No.	Revision	By	Date	▲	ADDENDUM NO. 3
No.	Revision	By	Date						
▲	ADDENDUM NO. 3	JEL	12/14/2021						
		LEMON CREEK RANCH – UPSTREAM SANITARY SEWER PHASE 1B SHEET PIPE SLAB REINFORCEMENT DETAIL							
		DATE: AUGUST 2021 DESIGN: JEL DRAWN: ELR CHECKED: AF	SAWS PROJECT NO. 21-3000 KHA PROJECT NO. 068716102	SHEET NO. <div style="border: 1px solid black; border-radius: 50%; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center; margin: 0 auto;"> S9 </div>					



NOTES:

1. GENERATOR FRAME SHALL BE SOLIDLY ANCHORED TO CONCRETE SLAB. ALL COMPONENTS USED TO FASTEN THE GENERATOR SHALL BE MADE OF STAINLESS STEEL 316.D
2. CONDUIT STUB-UP AREA SHOWN IN THIS DRAWINGS IS FOR ILLUSTRATION PURPOSES ONLY. CONTRACTOR MUST VERIFY THE LOCATION OF THE STUB-UP AREA WITH THE GENERATOR MANUFACTURER AND ELECTRICAL DRAWINGS. DUCT BANK SHALL BE PLACED UNDER BOTTOM OF GRADE BEAM.
3. CONTRACTOR SHALL VERIFY GENERATOR AND PAD DIMENSION REQUIREMENTS WITH THE GENERATOR MANUFACTURER AND ELECTRICAL DRAWINGS.
4. THE BOTTOM OF GRADE BEAMS SHALL BE PLACED 30" BELOW GRADE OR AT ELEVATION INDICATED ON THE PLAN, WHICHEVER IS DEEPER.

GRADE BEAM SCHEDULE

PLAN MARK	MIN. BEAM DEPTH	MIN. BEAM WIDTH	TOP BARS	BOTTOM BARS	STIRRUP	SPACING
GB	3'-0"	1'-4"	3-#8	3-#8	#3 STIR.	12" OC

1 GENERATOR SLAB-ON-GROUND FOUNDATION
SCALE: 3/8" = 1'

SEE TYPICAL CORNER BAR DETAIL FOR PLACEMENT OF CORNER BARS

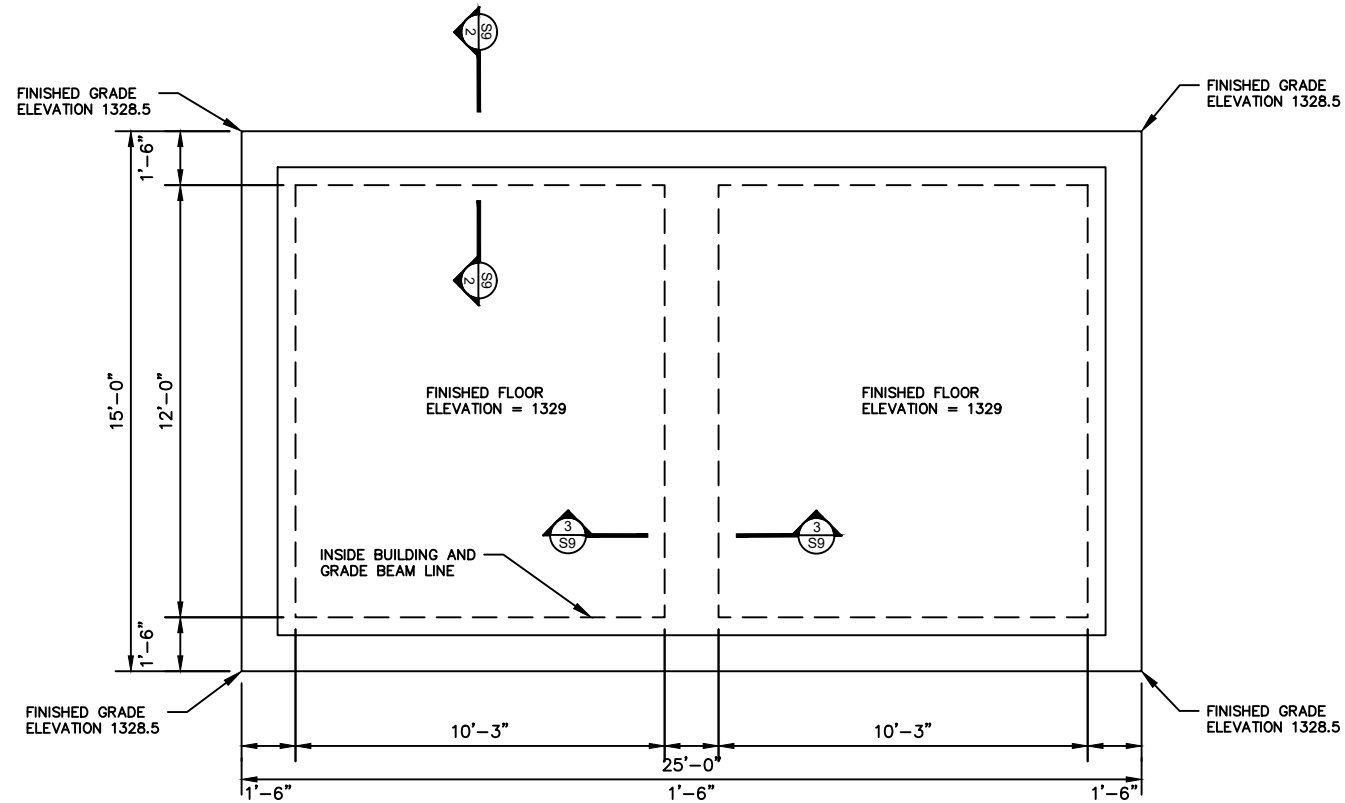
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No.	Revision	By	Date
▲	ADDENDUM NO. 3	JEL	12/14/2021

LEMON CREEK RANCH – UPSTREAM SANITARY SEWER PHASE 1B
SHEET
GENERATOR FOUNDATION PLAN

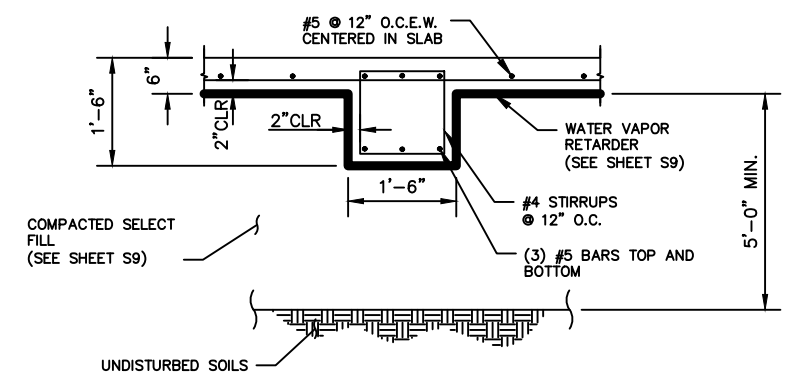
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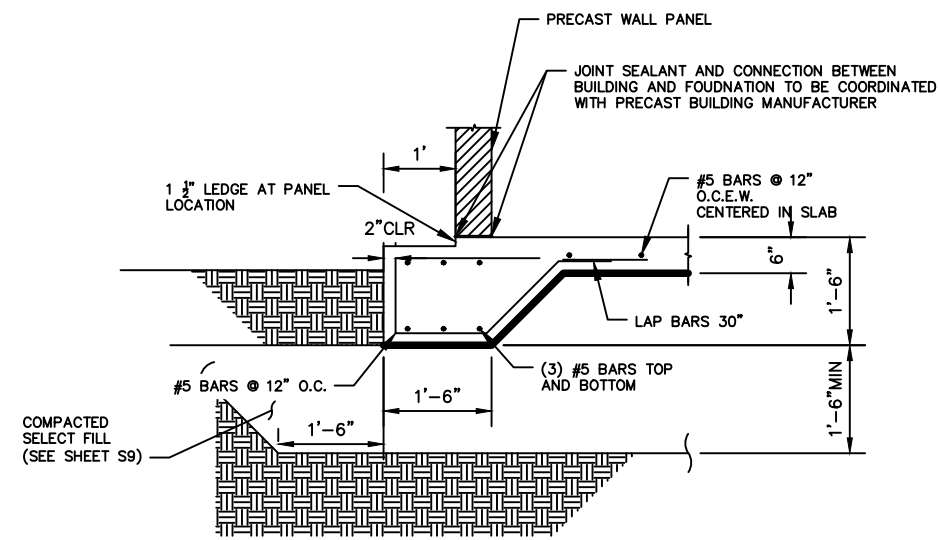
1 ELECTRICAL BUILDING STRUCTURAL PLAN VIEW

SCALE: 3/16" = 1'



2 TYPICAL INTERIOR BEAM

SCALE: 3/8" = 1'



3 TYPICAL EXTERIOR BEAM

SCALE: 3/8" = 1'

- NOTES:**
1. REFER TO GEOTECHNICAL REPORT FOR EXCAVATION, SUBGRADE PREPARATION, AND BACKFILL REQUIREMENTS.
 2. REFER TO ELECTRICAL DRAWINGS FOR BUILDING LAYOUT
 3. WATER VAPOR RETARDER SHALL BE ASTM E1745, CLASS A 10 MILS

JASEN E. LENKER
128011
LICENSED PROFESSIONAL ENGINEER

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No.	Revision	By	Date
A	ADDENDUM NO. 3	JEL	12/14/2021

SAN ANTONIO WATER SYSTEM

LEMON CREEK RANCH – UPSTREAM SANITARY SEWER PHASE 1B

SHEET
ELECTRICAL BUILDING FOUNDATION

DATE: AUGUST 2021	SAWS PROJECT NO. 21-3000	
DESIGN: JEL	KHA PROJECT NO. 068716102	
DRAWN: ELR		
CHECKED: AF		

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 PLOT SCALE: 3/8" = 1'