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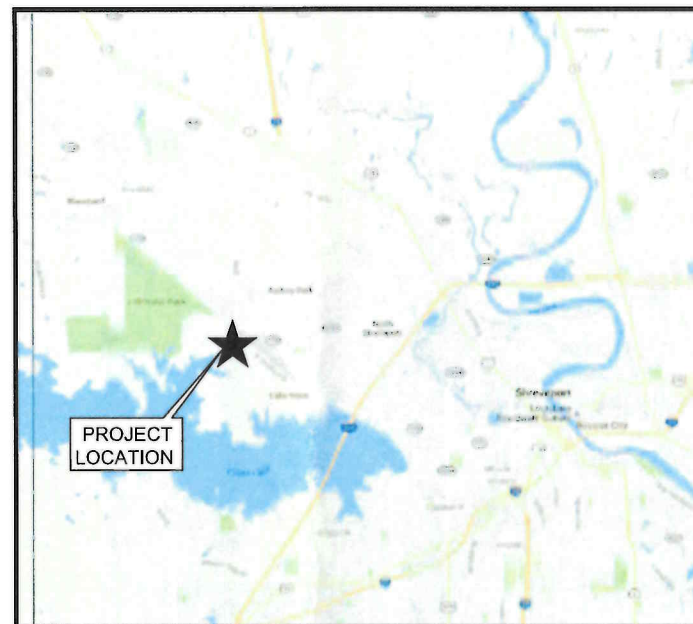
# LAKEVIEW WATERWORKS DISTRICT SHREVEPORT, LOUISIANA

## CONSTRUCTION PLANS FOR CORROSION INHIBITOR EQUIPMENT BUILDING

DECEMBER 2018

**BOARD MEMBERS**

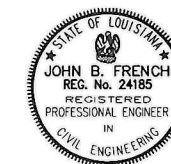
JAMES GILLIAM  
MARY TALLANT  
BOB BROWN  
GREGG LEGRAND  
LARRY ANDERSON



LOCATION MAP

**RECOMMENDED BY:**  
KSA ENGINEERS, INC.

LOUISIANA STATE REG. NO. EF-476



*John B. French*  
JOHN B. FRENCH, P.E., P.L.S.

12/09/18  
DATE



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**ZBA APPROVED**  
*4/21/21* *[Signature]*  
Date By

21-2-BAP

**GENERAL CONSTRUCTION NOTES:**

- CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES IN DETERMINING LOCATION AND DEPTH OF ALL UNDERGROUND UTILITY MAINS AND SERVICE LINES PRIOR TO CONSTRUCTION OF THIS PROJECT. CONTRACTOR SHALL CALL LA ONE CALL AT 1-800-272-3020 TO HAVE ALL UNDERGROUND UTILITIES LOCATED BEFORE ANY BORING OR EXCAVATING. EXTREME CARE SHALL BE MAINTAINED DURING CONSTRUCTION. IF ACTIVE UTILITY LINES ARE CUT, BROKEN OR DAMAGED THEY SHALL BE REPAIRED OR REPLACED IMMEDIATELY AT THE FULL EXPENSE OF THE CONTRACTOR.
- IMPORTED BORROW SHALL BE A-4 MATERIAL OR BETTER.
- CONTRACTOR MUST REPLACE IN KIND ANY AND ALL DRIVEWAYS, STREETS AND SIDEWALKS WHICH BECOME DAMAGED DUE TO CONTRACTOR NEGLIGENCE. SUCH REPLACEMENT SHALL BE DONE AT NO DIRECT PAY.
- THE CONTRACTOR SHALL GIVE 24 HOURS NOTICE TO EACH UTILITY OWNER OF LINES TO BE CROSSED SO THAT SAID OWNER CAN HAVE A REPRESENTATIVE PRESENT, IF THEY DESIRE, BEFORE EXCAVATION AND CROSSING OF THEIR LINE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ALL OF THE NECESSARY, STATE, AND PARISH PERMITS FROM CONTROLLING AGENCIES REQUIRED FOR CONSTRUCTION OF THIS PROJECT, UNLESS OTHERWISE DIRECTED. THE PERMIT SHALL BE OBTAINED IN THE NAME OF THE OWNER.
- IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT LIMITED TO NORMAL WORKING HOURS.
- IT IS THE INTENT OF THE PLANS AND SPECIFICATIONS TO DESCRIBE THE NECESSARY MATERIALS AND WORK PROCEDURE. FAILURE OF THE PLANS AND SPECIFICATIONS TO INCLUDE ANY NECESSARY COMPONENT OR WORK PROCEDURE TO OBTAIN A COMPLETE AND WORKABLE SYSTEM SHALL IN NO WAY LIMIT THE CONTRACTOR'S RESPONSIBILITY TO FURNISH

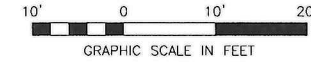
- AND INSTALL SUCH NECESSARY ITEMS FOR A COMPLETE AND WORKABLE SYSTEM.
- THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY ELECTRICAL UTILITIES AS NEEDED TO COMPLETE THIS PROJECT.
- ALL AREAS DISTURBED DURING CONSTRUCTION WILL BE PROPERLY BACKFILLED, GRADED AND REPLACED TO ORIGINAL OR BETTER CONDITION, TO THE SATISFACTION OF THE OWNER.
- ALL DISTURBED AREAS MUST BE SEEDED AND FERTILIZED UNLESS NOTED AS SOLID SOD ON THESE PLANS. FINAL PAYMENT FOR THIS ITEM WILL BE UPON NO EROSION AND THE ESTABLISHMENT OF AN ADEQUATE STAND OF PERMANENT GRASS AS DEEMED SATISFACTORY BY THE ENGINEER AND OWNER.
- THE CONTRACTOR SHALL MAINTAIN EXISTING WATER SERVICES AT ALL TIMES DURING CONSTRUCTION.
- TRENCH DEWATERING SHALL BE PROVIDED AT NO DIRECT PAY. NO SOIL BORINGS FOR THIS PROJECT HAVE BEEN TAKEN.
- THE CONTRACTOR IS RESPONSIBLE FOR REESTABLISHING EXISTING DRAINAGE CONDITIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR LAYOUT AND ALIGNMENT OF THE PROPOSED PROJECT. FIELD ADJUSTMENTS MAY BE NECESSARY TO FACILITATE THE CONSTRUCTION.
- BASE AND SUBGRADE SHALL BE COMPACTED TO 95% PROCTOR BEFORE SURFACE PAVEMENT CAN BE PLACED. IF REQUIRED, THE CONTRACTOR SHALL PAY FOR ALL IN-PLACE COMPACTION TESTS AND MATERIAL PROCTORS. SHOULD ANY MATERIAL PLACED BY THE CONTRACTOR FAIL MINIMUM DENSITY REQUIREMENTS, THE WORK WILL BE REDONE TO THE SATISFACTION OF THE ENGINEER.
- BEFORE FINAL ACCEPTANCE BY THE OWNER AND PRIOR TO ISSUING A "CERTIFICATE OF SUBSTANTIAL COMPLETION" BY THE PROJECT ENGINEER, THE CONTRACTOR MUST PROVIDE TO SAID ENGINEER A

- COMPLETE SET OF LEGIBLE DRAWINGS CLEARLY SHOWING THE AS-BUILT LOCATION (HORIZONTAL AND VERTICAL) OF THE PROJECT. PROJECT SHALL BE REFERENCED (BY DIMENSIONS) FROM EXISTING, EASILY DISTINGUISHABLE TOPOGRAPHIC FEATURES. (NO DIRECT PAY).
- A DILIGENT EFFORT WAS MADE BY THE ENGINEER TO SHOW THE LOCATION OF ABOVE AND BELOW GROUND OBSTRUCTIONS AND UTILITIES. EXTREME CARE SHALL BE MAINTAINED DURING CONSTRUCTION AND IF ACTIVE UTILITY MAINS ARE CUT OR BROKEN, THEY SHALL BE REPAIRED IMMEDIATELY. NO ADDITIONAL OR SUPPLEMENTAL PAY ITEM IS INCLUDED FOR ABOVE REPAIRS, AS THE NUMBER OF REPAIRS IS DIRECTLY DEPENDENT UPON THE CONTRACTORS OPERATION AND CARE.
- CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE ELECTRICAL CODES.
- PIPING AND ALL EQUIPMENT SHALL BE DISINFECTED ACCORDING TO AWWA AND LDH STANDARDS PRIOR TO PLACING INTO SERVICE.
- CONTRACTOR SHOULD BE AWARE THAT THE BEST AVAILABLE INFORMATION WAS USED IN ASSEMBLING THE PLANS, WATER MAIN SIZES AND EXACT LOCATIONS MAY VARY FROM WHAT IS SHOWN ON THE PLANS.
- CONTRACTOR SHALL USE BEST MANAGEMENT PRACTICES TO CONTAIN STORM WATER RUNOFF FROM THE CONSTRUCTION SITE. EROSION CONTROL PROTECTION MUST COMPLY WITH LOCAL, STATE AND FEDERAL STORM WATER REGULATIONS. CONTRACTOR SHALL OBTAIN AND POST ONSITE ALL NECESSARY STORM WATER CONSTRUCTION PERMITS AS REQUIRED.
- SECURITY FENCING INSTALLED SHALL BE A MINIMUM OF SIX FEET (6') TALL AND SHALL BE CLIMB-RESISTANT.
- ALL MATERIALS FOR CLEARING AND GRUBBING SHALL BE HAULED OFF SITE AND NOT BURNED OR BURIED ON SITE.

**GENERAL MASONRY NOTES:**

- ALL CMU SHALL HAVE A SPECIFIED MINIMUM COMPRESSIVE STRENGTH OF 1900 PSI ON NET AREA AT 28 DAYS (fm1500psi). 3 CELL BLOCKS SHALL NOT BE USED.
- ASTM C270 TYPE "S" MORTAR SHALL BE USED.
- ALL REINFORCED CELLS SHALL BE FILLED SOLID WITH 2000 PSI CONCRETE GROUT. ALL MASONRY BELOW GRADE SHALL BE GROUTED SOLID.
- VERTICAL CELLS TO BE FILLED SHALL HAVE VERTICAL ALIGNMENT SUFFICIENT TO MAINTAIN A CLEAR UNOBSTRUCTED CONTINUOUS VERTICAL CELL NOT LESS THAN 2" X 3" IN PLAN DIMENSIONS.
- FOUNDATION DOWELS WITH STANDARD HOOKS SHALL EXTEND INTO THE FOUNDATION 4" FROM THE BOTTOM OF THE FOUNDATION OR 9" MIN. WHICHEVER IS GREATER, UNLESS NOTED OTHERWISE. LAPS OR SPLICES OF REINFORCING STEEL IN MASONRY SHALL BE 2'-0" OR 48 BAR DIAMETERS IN LENGTH, WHICHEVER IS GREATER. FOUNDATION DOWELS SHALL MATCH THE SIZE AND SPACING OF THE VERT WALL REINFORCING.
- CONTINUOUS KNOCK OUT BOND BEAMS SHALL BE PROVIDED AT THE FIRST COURSE ABOVE FINISHED FLOOR OR GRADE, AT THE TOP OF ALL CMU WALLS AND INTERMEDIATELY AT 4'-0" OC. MAX. BOND BEAMS SHALL BE REINFORCED WITH (2)-05 CONT. AND GROUTED SOLID. CORNER BARS SHALL BE PROVIDED AT ALL CORNERS AND WALL INTERSECTIONS.
- VERTICAL WALL REINFORCING SHALL EXTEND CONTINUOUSLY FROM THE TOP OF FOUNDATION TO EMBED AT LEAST 6" INTO THE TOP OF WALL BOND BEAM.
- ADDITIONAL VERTICAL WALL REINFORCING SHALL BE PROVIDED AS FOLLOWS. BAR SIZES SHALL MATCH THE TYPICAL WALL REINFORCING USED IN THE WALL AND SHALL EXTEND FROM FOUNDATION TO TOP OF WALL.
  - AS SHOWN ON DRAWINGS.
  - AT CORNER INTERSECTIONS OF WALLS.
  - AT "T" INTERSECTIONS OF WALLS.
  - AT END OF WALLS.
  - AT BOTH SIDES OF OPENINGS 3'-0" OR GREATER CIN HEIGHT OR WIDTH).

**ZBA APPROVED**  
 4/21/21 Date  
 [Signature] By



DATE	
REVISION	
MARK	

PROJECT LAYOUT AND GENERAL NOTES

LAKEVIEW WATERWORKS DISTRICT SHREVEPORT, LA

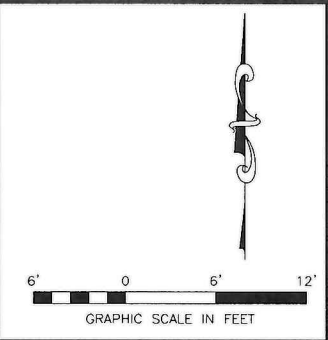
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 DESIGNED BY: JBF  
 LATEST REVISION: 12/23/2018  
 KSA JOB NO.: LKW.001

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**JOHN B. FRENCH**  
 REG. No. 24185  
 REGISTERED PROFESSIONAL ENGINEER

12/05/18  
 SEAL: LOUISIANA LIC. NO. EF-476  
 SHEET NO. **C2**

21-2-BAP



MARK	REVISION	DATE

**PROJECT CLEARING**

**LAKEVIEW WATERWORKS DISTRICT SHREVEPORT, LA**

DRAWN BY:	CJM
DESIGNED BY:	JBF
LATEST REVISION:	09/2018
KSA JOB NO.:	LKV.001

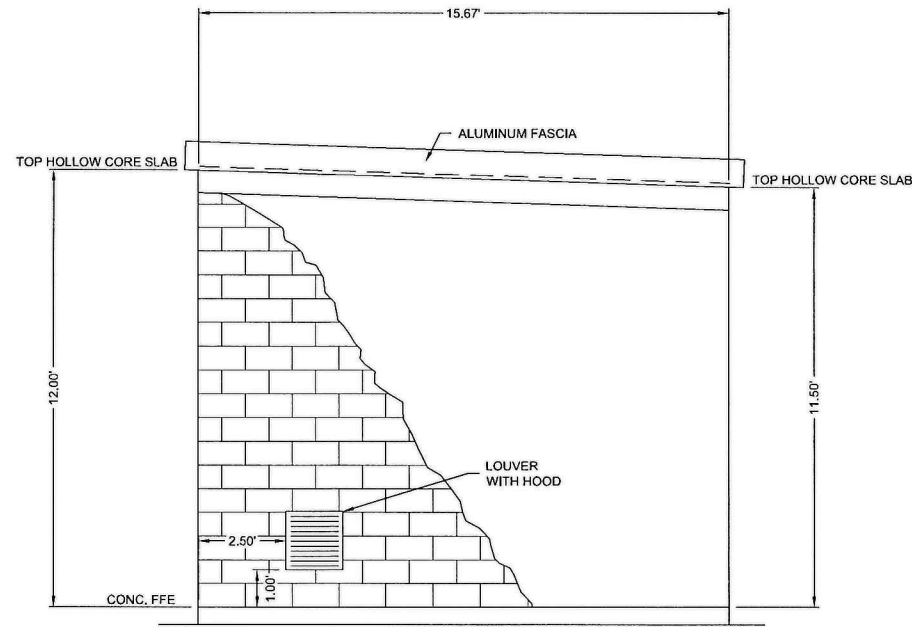
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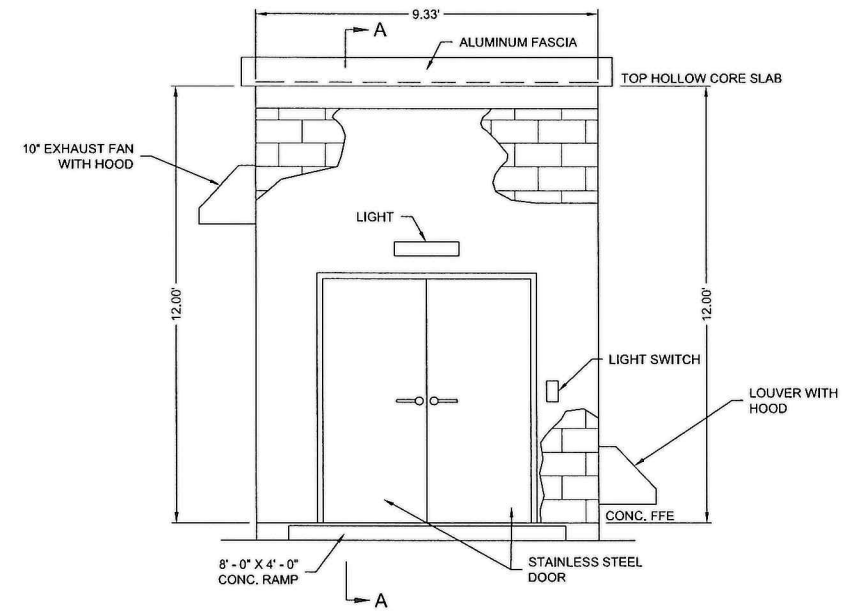
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 LOUISIANA LIC. NO. EF-476

SHEET NO. **C3**

21-2-BAP

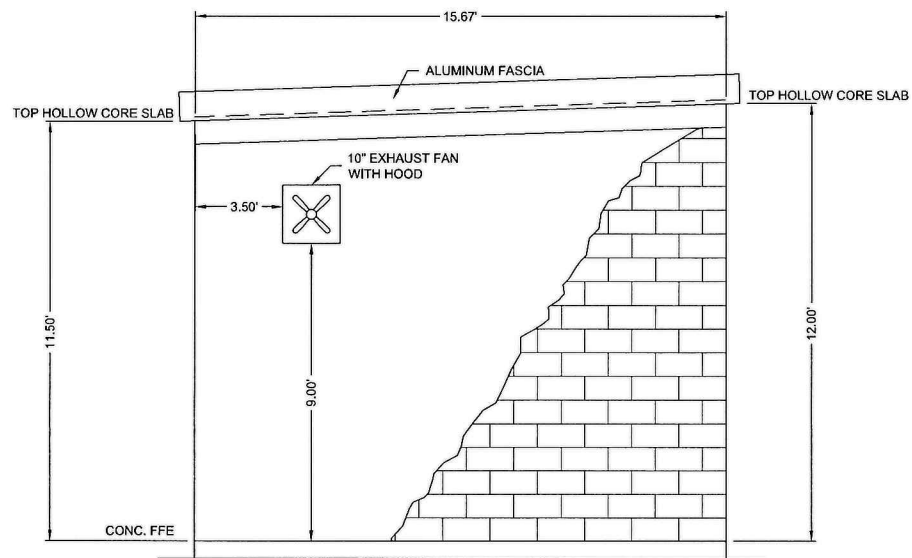


**NORTH ELEVATION**  
NTS

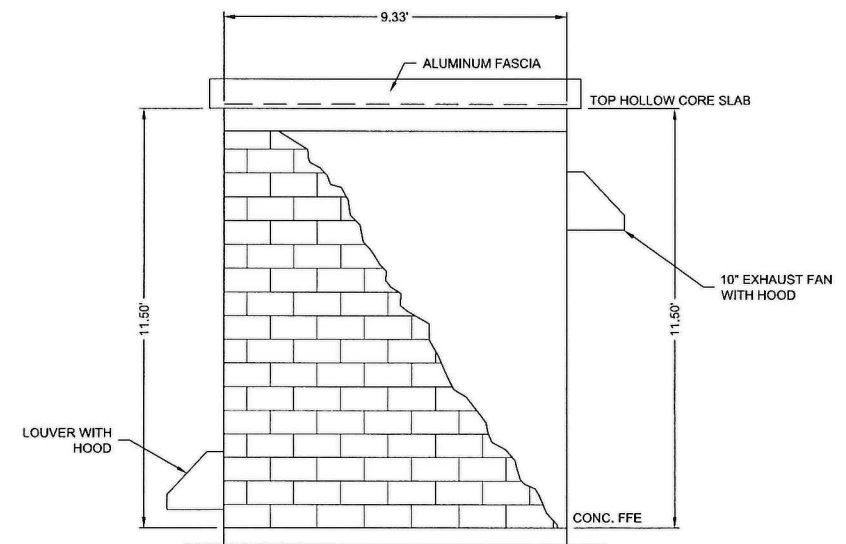


**EAST ELEVATION**  
NTS

- NOTES:
1. SEE SHEET C6 FOR WALL SECTIONS.
  2. CONC. FFE TO BE 0.5' ABOVE EXISTING GROUND AT HIGHEST LOCATION.
  3. SEE ADDITION DETAILS HEREIN.



**SOUTH ELEVATION**  
NTS



**WEST ELEVATION**  
NTS

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4/21/21 Date By

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**BUILDING ELEVATION**

**LAKEVIEW WATERWORKS DISTRICT SHREVEPORT, LA**

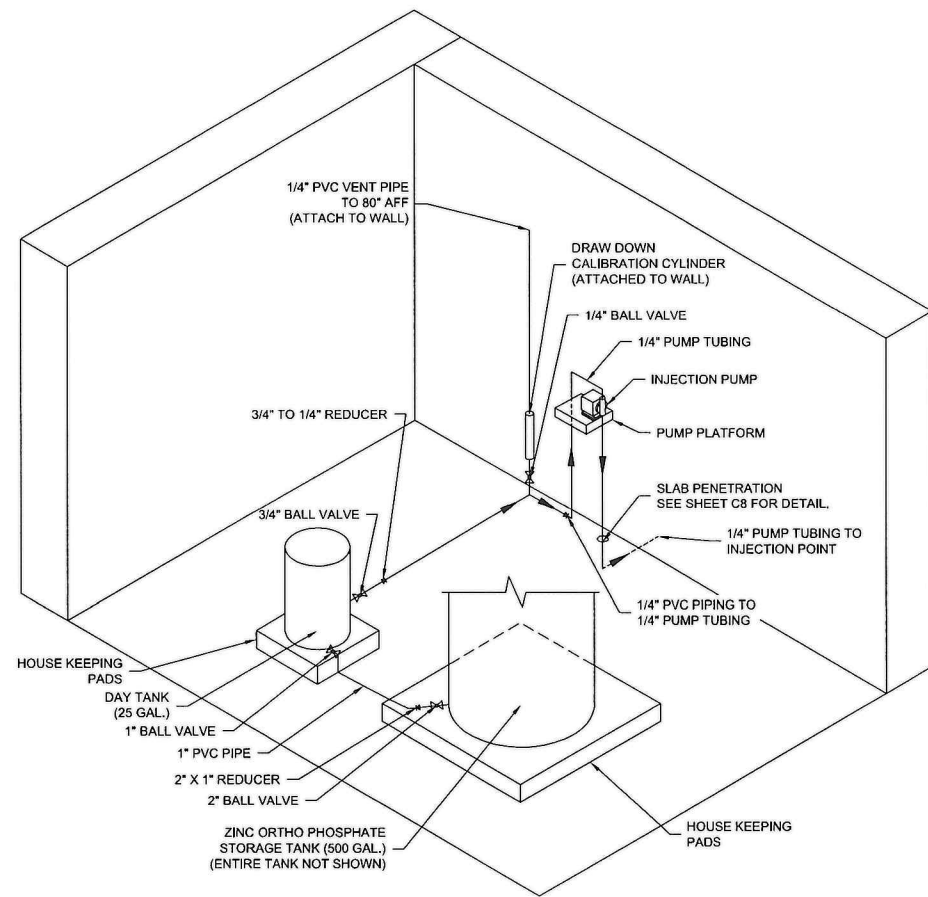
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SHEET NO.

**C4**

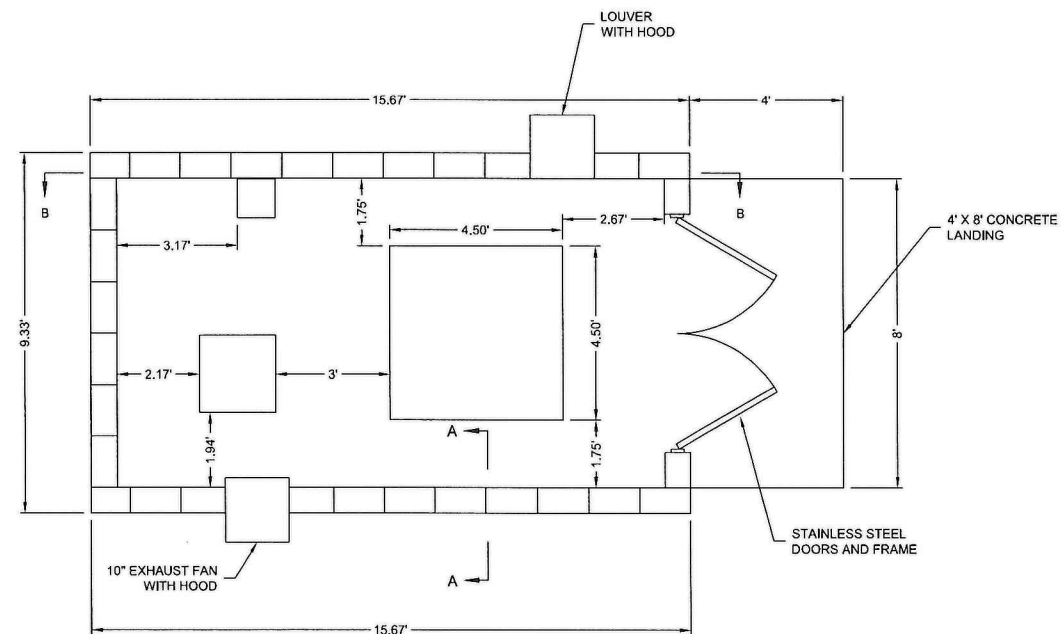
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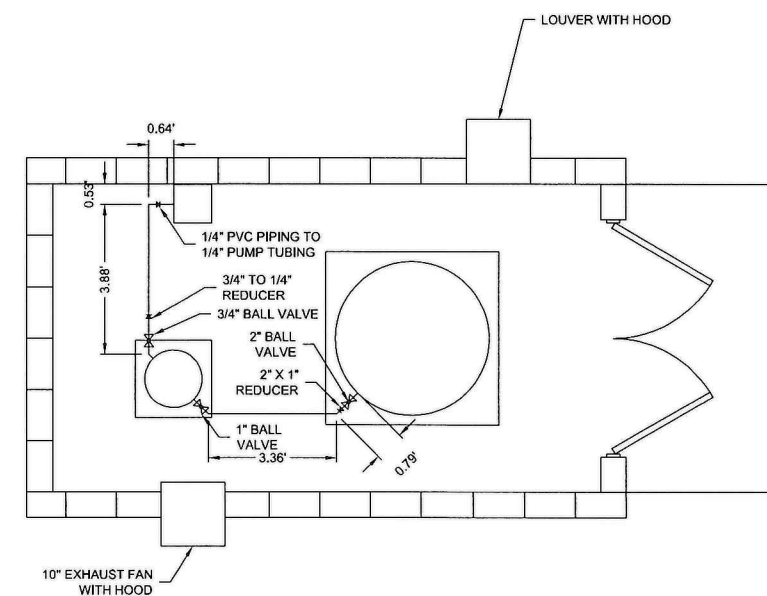
**ISOMETRIC PIPING PLAN**  
NTS

**NOTES:**

- THE FOLLOWING EQUIPMENT SHALL BE SUPPLIED BY THE OWNER:
  - 500 GALLON STORAGE TANK WITH FILL LINE, SCREENED VENT, BULKHEAD WITH 2" VALVE
  - CORPORATION STOP AND NOZZLE ASSEMBLY
  - 25 GALLON DAY TANK
  - INJECTION PUMP
  - DRAW DOWN CALIBRATION CYLINDER



**DIMENSIONED FLOOR PLAN**  
NTS



**DIMENSIONED PIPING PLAN**  
NTS

**ZBA APPROVED**  
4/21/21  
Date By

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**BUILDING AND PIPING PLANS**

**LAKEVIEW WATERWORKS DISTRICT SHREVEPORT, LA**

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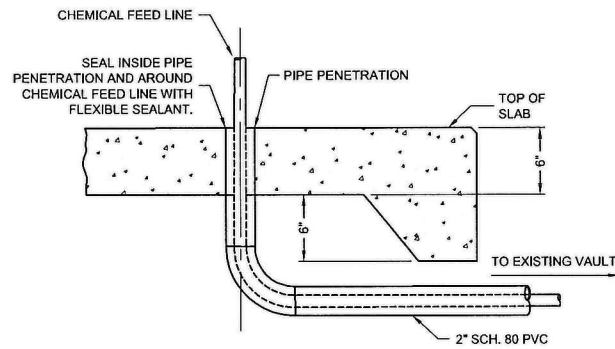
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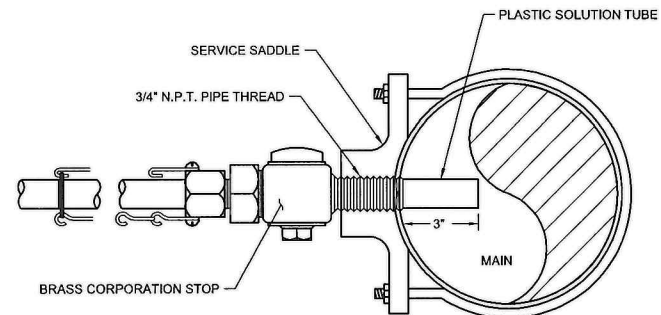
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SHEET NO.

**C5**

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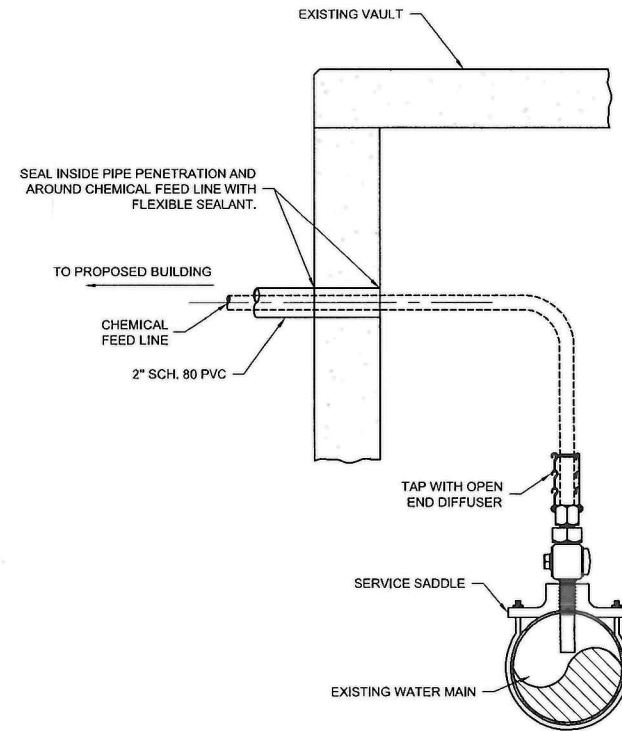


**1** PIPE PENETRATION DETAIL  
N.T.S.

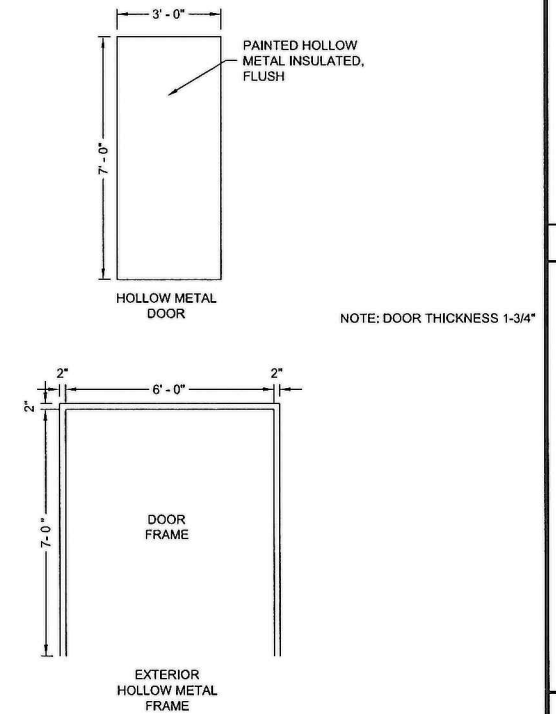


- NOTE:**
- CORPORATION STOP TO BE SIZED TO ALLOW WITHDRAWAL OF SOLUTION TUBE FROM MAIN.
  - DIFFUSER TUBING TO THE EXTENT SHOWN IN THIS DETAIL TO BE HOUSED IN METAL BOX OR SIMILAR ENCLOSURE.
  - CORPORATION STOP ASSEMBLY TO BE SUPPLIED BY THE OWNER.

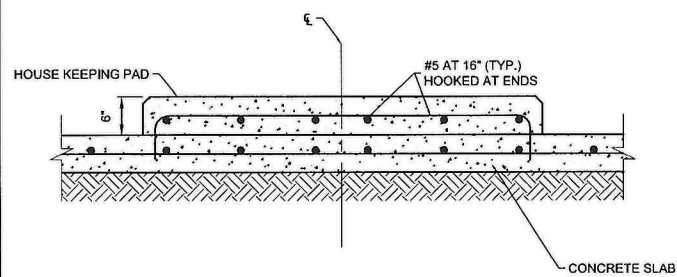
**2** CORPORATION STOP AND NOZZLE ASSEMBLY DETAIL  
N.T.S.



**3** CHEMICAL PIPE VAULT PENETRATION  
N.T.S.

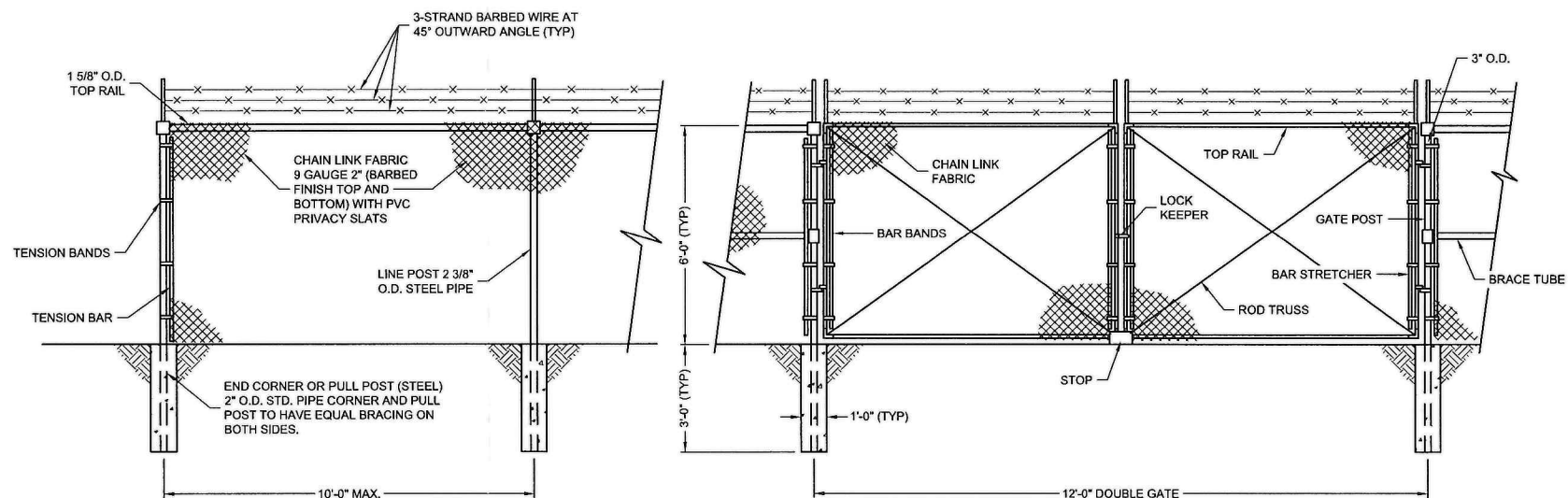


**4** DOOR AND FRAME SCHEDULE  
N.T.S.



- NOTE:**
- FOR DIMENSIONS, SEE FLOOR PLAN

**6** HOUSE KEEPING PAD DETAIL  
N.T.S.



**7** SECURITY FENCE DETAIL  
N.T.S.

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**MISC DETAILS I**

**LAKEVIEW WATERWORKS DISTRICT SHREVEPORT, LA**

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SHEET NO.

**C8**

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