



COLLIN COUNTY

Office of the Purchasing Agent
2300 Bloomdale Road
Suite 3160
McKinney, Texas 75071
www.collincountytx.gov

COLLIN COUNTY, TEXAS

ADDENDUM NO. THREE (3)

IFB NO. 2024-282

INVITATION FOR BID

FOR

CONSTRUCTION, EMERGENCY GENERATOR FUELING SYSTEM REPLACEMENT

DATE: JUNE 17, 2024

NOTICE TO ALL PROSPECTIVE BIDDERS:

PLEASE MAKE THE FOLLOWING CHANGES TO THE INVITATION FOR BID:

REPLACE DRAWINGS:

DELETE: EGFS 20240317
ADD REVISED: COLLIN COUNTY JUSTICE CENTER EGFS

DELETE: TRPR 20240317
ADD REVISED: TRPR 20240614

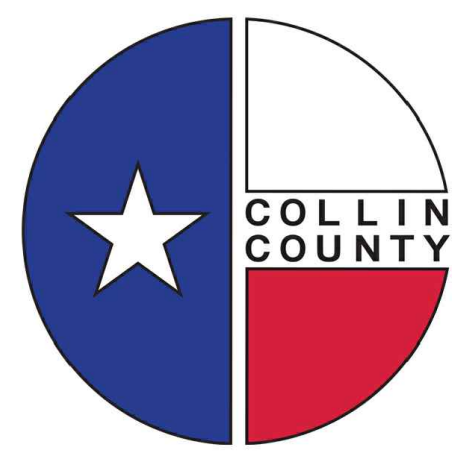
ADD: ONLINE PUBLIC QUESTION & ANSWER RECORD

ADD ATTRIBUTE: ATTRIBUTE NO. TWENTY-SIX (26) - ADDENDUM NO. THREE (3)
ACKNOWLEDGEMENT

ALL OTHER TERMS AND CONDITIONS OF THE SOLICITATION AND SPECIFICATIONS REMAIN THE SAME.

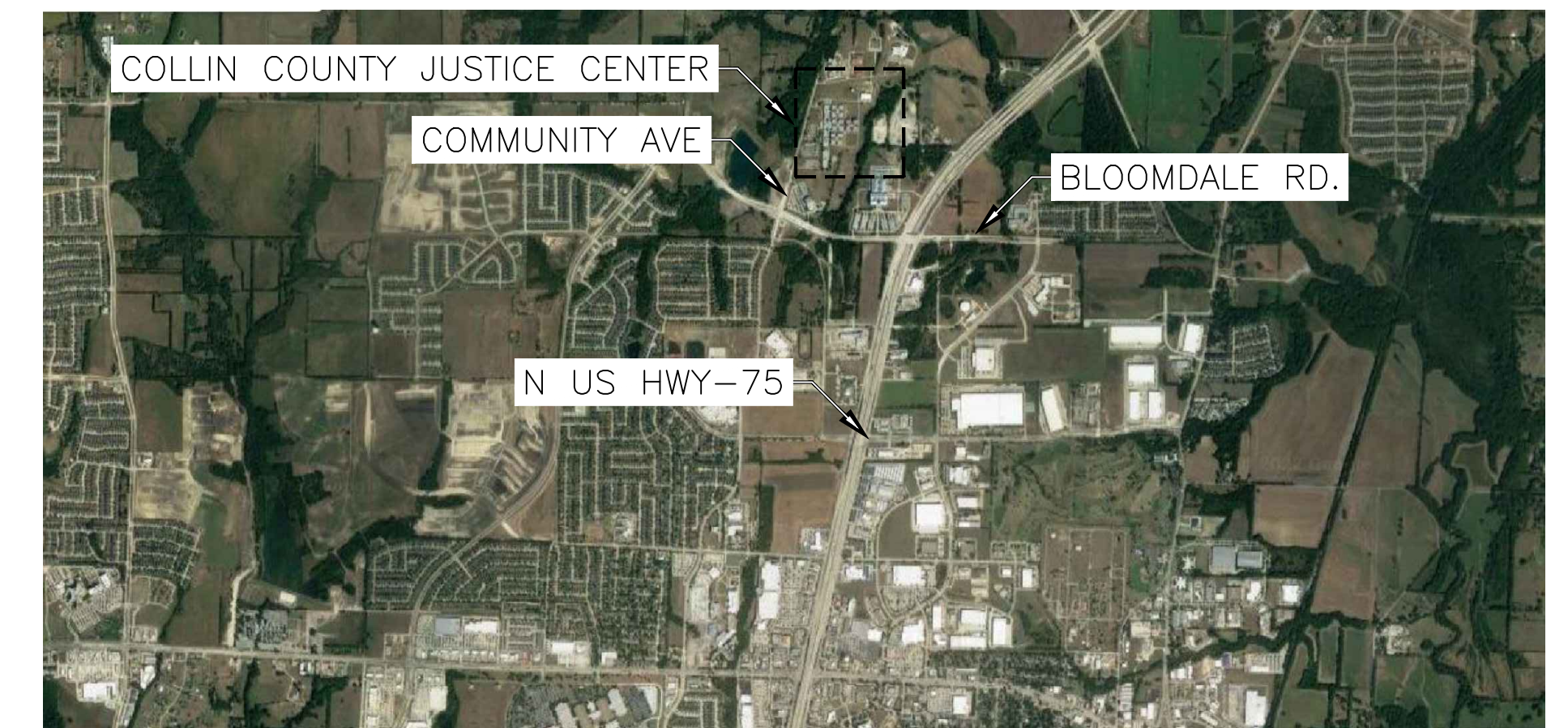
SINCERELY,
MICHELLE CHARNOSKI, NIGP-CPP, CPPB
PURCHASING AGENT

/SLH

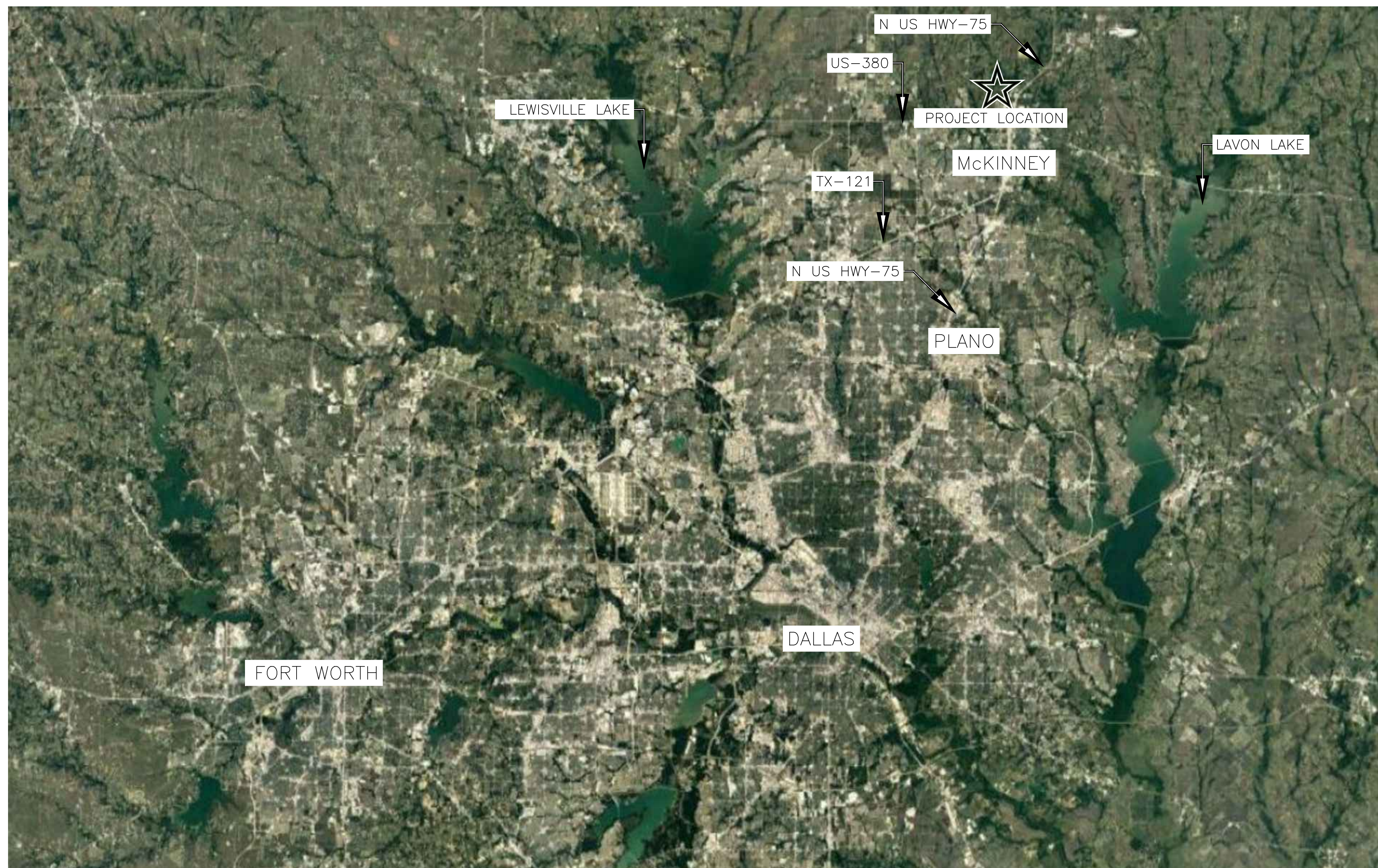


COLLIN COUNTY JUSTICE CENTER EMERGENCY GENERATOR FUELING SYSTEMS

4300 COMMUNITY AVENUE
MCKINNEY, TEXAS 75071



VICINITY MAP
1"=3000'

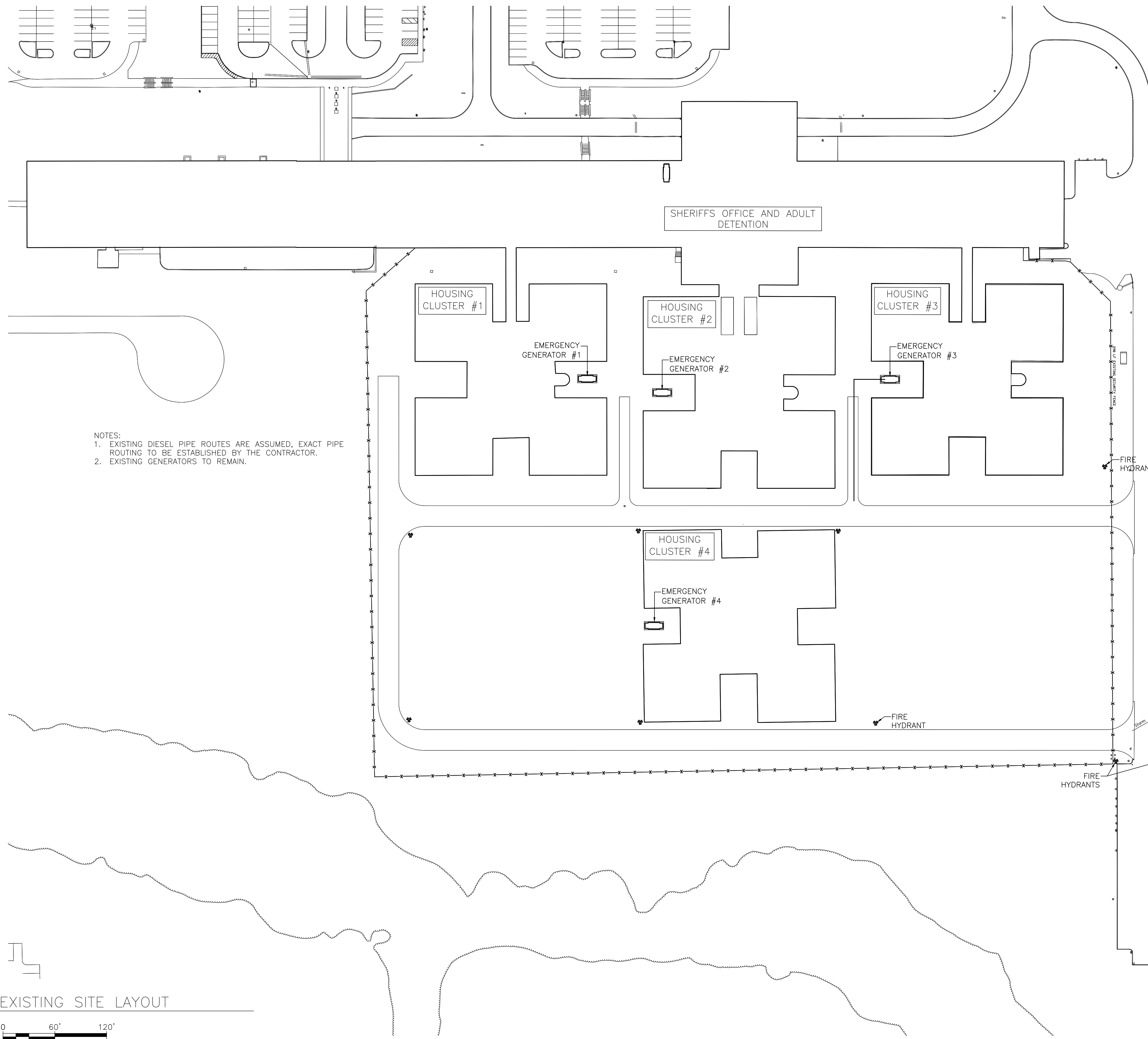
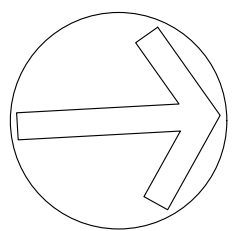


PROJECT LOCATION
NOT TO SCALE

SCHEDULE OF DRAWINGS

SHEET #	SHEET DESCRIPTION
COVER	VICINITY MAP
S-1	EXISTING SITE LAYOUT
F-1	PROPOSED SITE PLAN
F-2	HOUSING CLUSTER GENERATOR FUELING SYSTEM 1
F-3	HOUSING CLUSTER GENERATOR FUELING SYSTEM 2
F-4	CENTRAL PLANT GENERATOR FUELING SYSTEM
F-5	CONCRETE DETAILS
F-6	DETAILS
GN-1	GENERAL NOTES & SPECIFICATIONS
E0.0	LEGEND AND GENERAL NOTES- ELECTRICAL
ES1.1	SPECIFICATIONS - ELECTRICAL
ES1.2	SPECIFICATIONS - ELECTRICAL
E1.0	SITE PLAN - ELECTRICAL
E1.1	ENLARGED SITE PLAN - ELECTRICAL

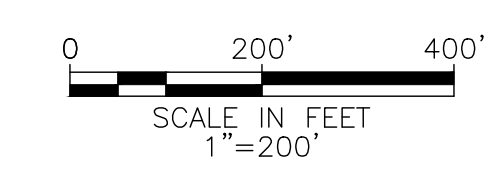
		DESIGNED BY CDS				<p>COVER PAGE</p> <p>COLLIN COUNTY JUSTICE CENTER EMERGENCY GENERATOR FUELING SYSTEMS 4300 COMMUNITY AVENUE MCKINNEY, TEXAS 75071</p>	SHEET NO. 1
		DRAWN BY DAG					OF 14 SHEETS
		CHECKED BY RNB					FILE NO. 122010
		REVIEWED BY RNB					
		DATE 1-29-2024					
NO	DATE	REVISION	BY				



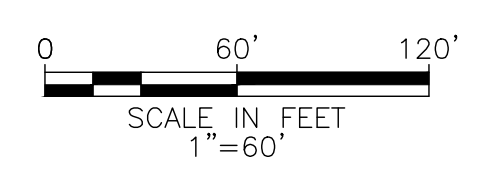
NOTES:
 1. EXISTING DIESEL PIPE ROUTES ARE ASSUMED, EXACT PIPE ROUTING TO BE ESTABLISHED BY THE CONTRACTOR.
 2. EXISTING GENERATORS TO REMAIN.



AERIAL VIEW

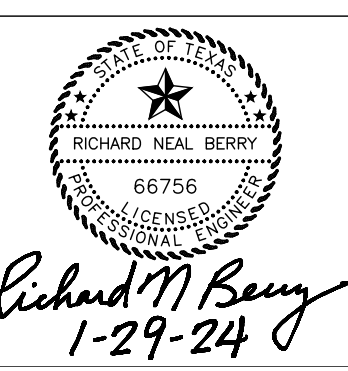


EXISTING SITE LAYOUT



S-1

DESIGNED BY	CDS		
DRAWN BY	DAG		
CHECKED BY	RNB		
REVIEWED BY	RNB		
DATE	1-29-2024		
NO	DATE	REVISION	BY

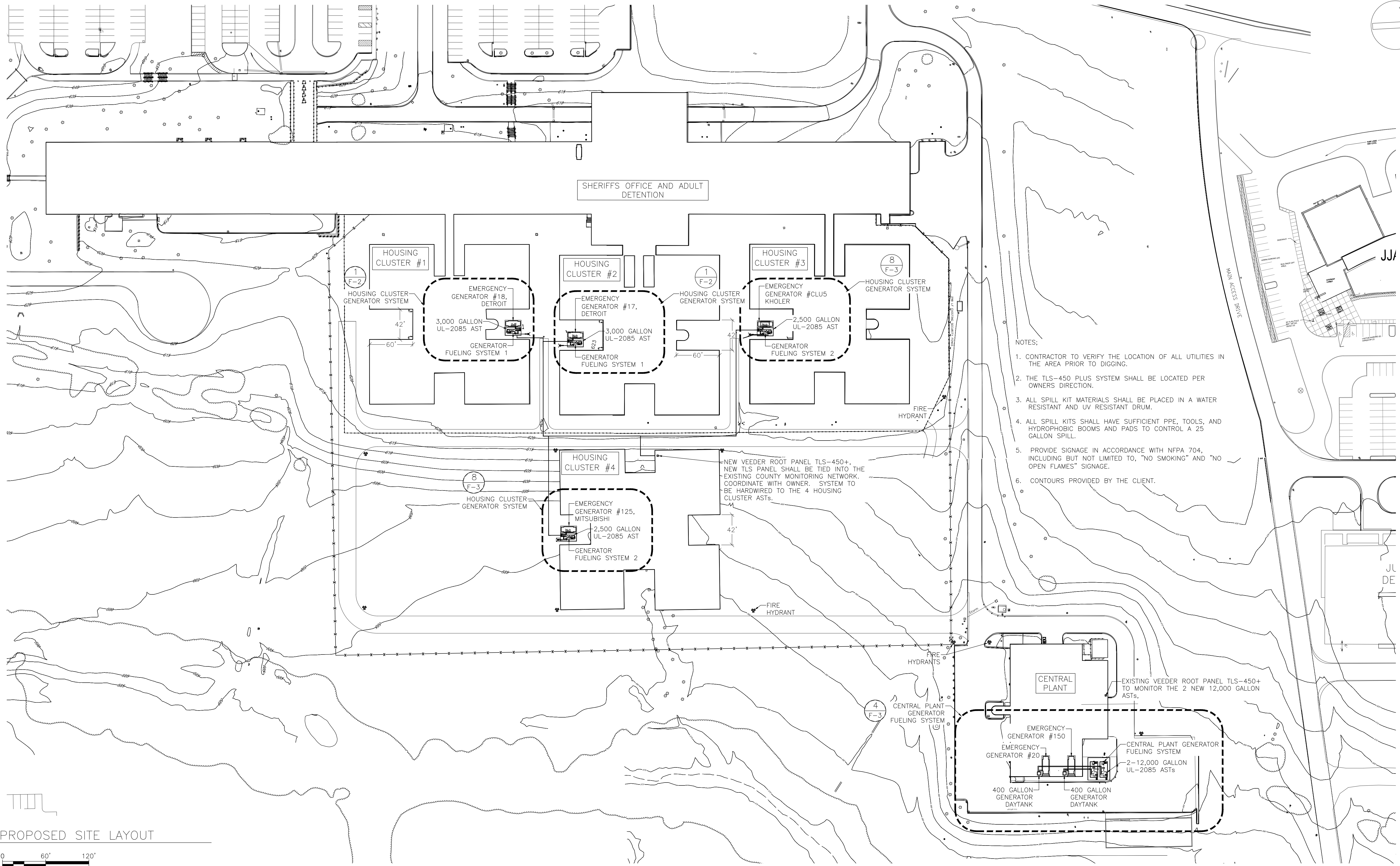
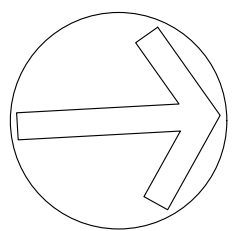


SCDS muery
 ENGINEERS | SURVEYORS
 100 NE LOOP 410, STE. 300 | SAN ANTONIO, TEXAS 78216
 (210) 581-1111 | TBPE NO. F-1733 | TBPLS NO. 100495-00

MD ENGINEERING
 Texas Registered Firm No. F-7489
 1255 West 15th Street, Suite 300
 Plano, TX 75075
 469.467.0200
 Email: mdengco@md-eng.com
 Project Number: 221449

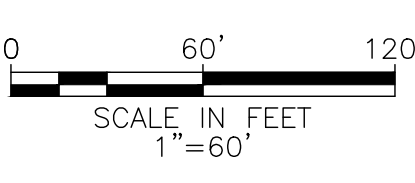
EXISTING SITE LAYOUT
 COLLIN COUNTY JUSTICE CENTER
 EMERGENCY GENERATOR FUELING SYSTEMS
 4300 COMMUNITY AVENUE
 MCKINNEY, TEXAS 75071

SHEET NO.	2
OF	14 SHEETS
FILE NO.	122010



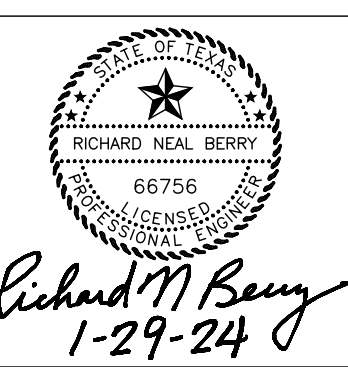
- NOTES:
1. CONTRACTOR TO VERIFY THE LOCATION OF ALL UTILITIES IN THE AREA PRIOR TO DIGGING.
 2. THE TLS-450 PLUS SYSTEM SHALL BE LOCATED PER OWNERS DIRECTION.
 3. ALL SPILL KIT MATERIALS SHALL BE PLACED IN A WATER RESISTANT AND UV RESISTANT DRUM.
 4. ALL SPILL KITS SHALL HAVE SUFFICIENT PPE, TOOLS, AND HYDROPHOBIC BOOMS AND PADS TO CONTROL A 25 GALLON SPILL.
 5. PROVIDE SIGNAGE IN ACCORDANCE WITH NFPA 704, INCLUDING BUT NOT LIMITED TO, "NO SMOKING" AND "NO OPEN FLAMES" SIGNAGE.
 6. CONTOURS PROVIDED BY THE CLIENT.

PROPOSED SITE LAYOUT



F-1

DESIGNED BY	CDS		
DRAWN BY	DAG		
CHECKED BY	RNB		
REVIEWED BY	RNB		
DATE	1-29-2024		
NO	DATE	REVISION	BY



CDS muery
ENGINEERS | SURVEYORS
100 NE LOOP 410, STE. 300 | SAN ANTONIO, TEXAS 78216
(210) 581-1111 | TBPE NO. F-1733 | TBPLS NO. 100495-00

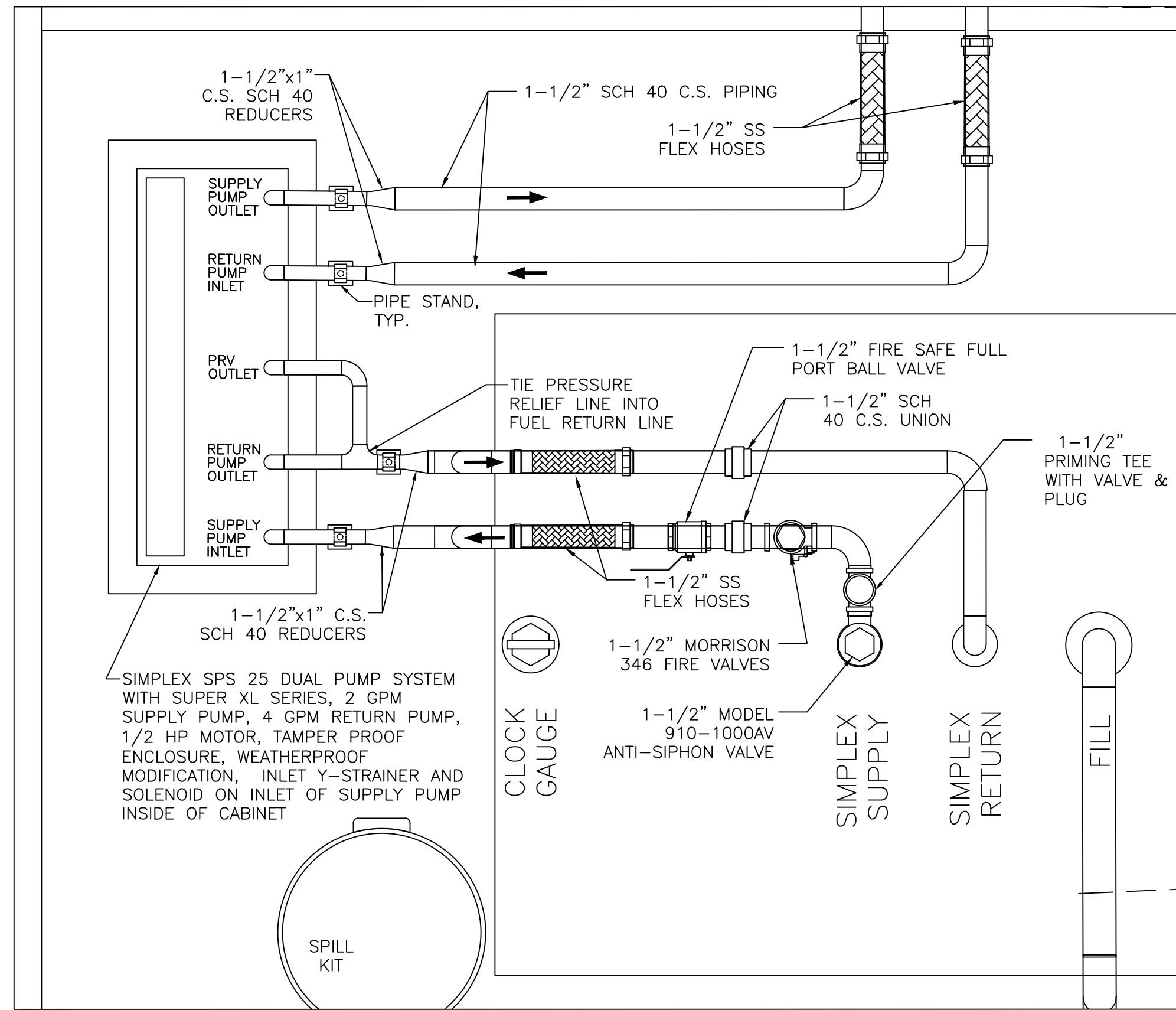
MD ENGINEERING
Texas Registered Firm No. F-7489
1255 West 15th Street, Suite 300
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469.467.0200
Email: mdengco@md-eng.com
Project Number: 221449

PROPOSED SITE LAYOUT

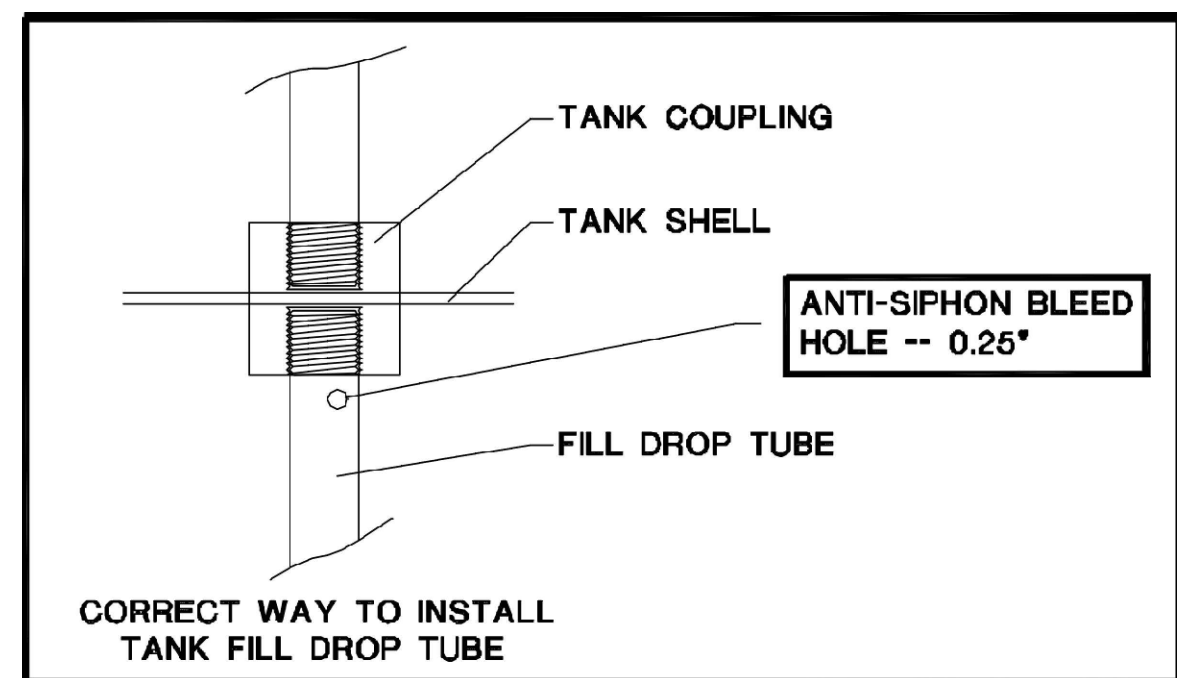
COLLIN COUNTY JUSTICE CENTER
EMERGENCY GENERATOR FUELING SYSTEMS
4300 COMMUNITY AVENUE
MCKINNEY, TEXAS 75071

SHEET NO.	3
OF	14 SHEETS
FILE NO.	122010

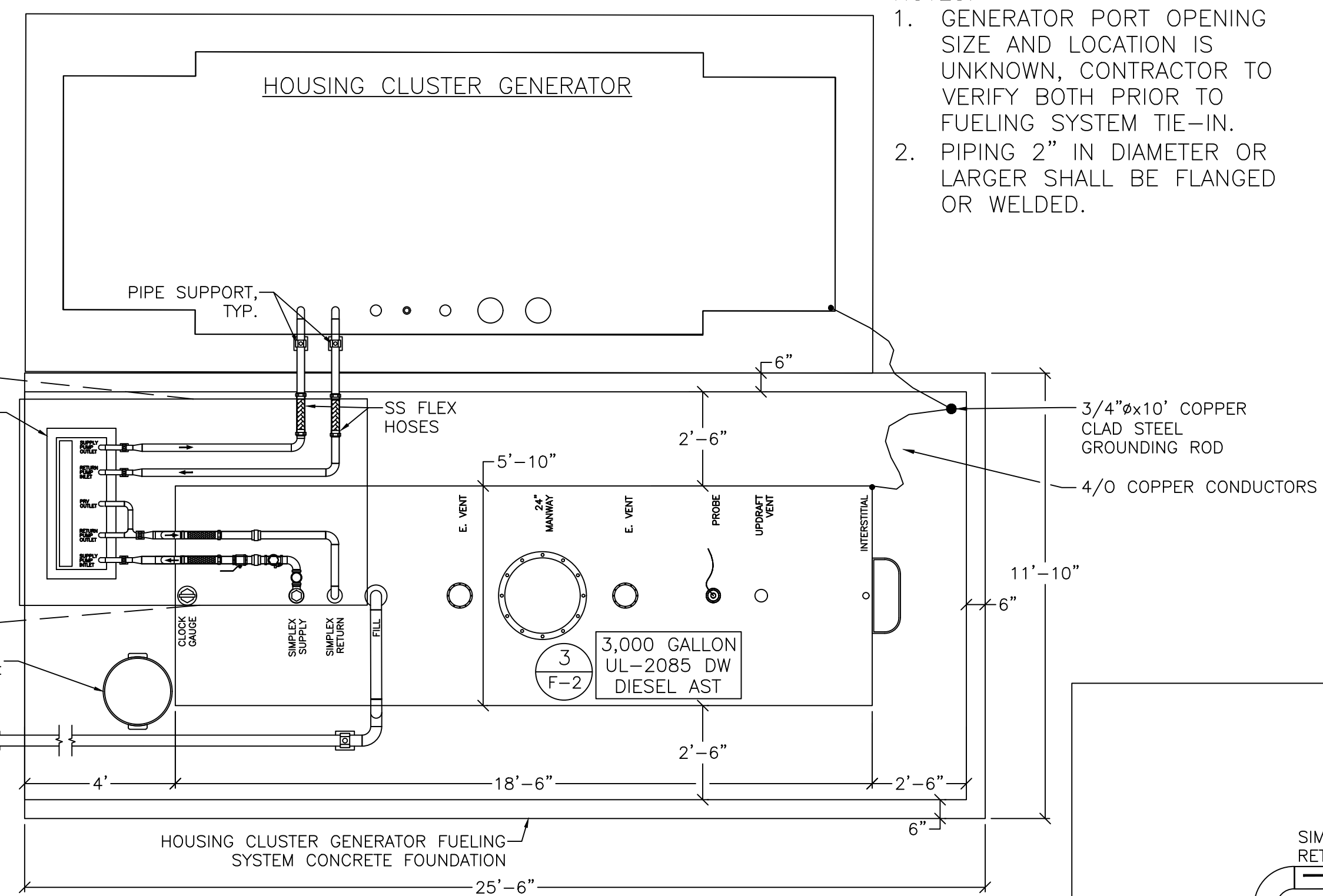
- NOTE:
1. RETURN PUMP MUST OUTPACE SUPPLY PUMP.
 2. CONTRACTOR TO PROVIDE ALL OPTIONS AND ACCESSORIES NECESSARY FOR THE SYSTEM TO PERFORM AS SPECIFIED



PIPING DETAIL NOT TO SCALE



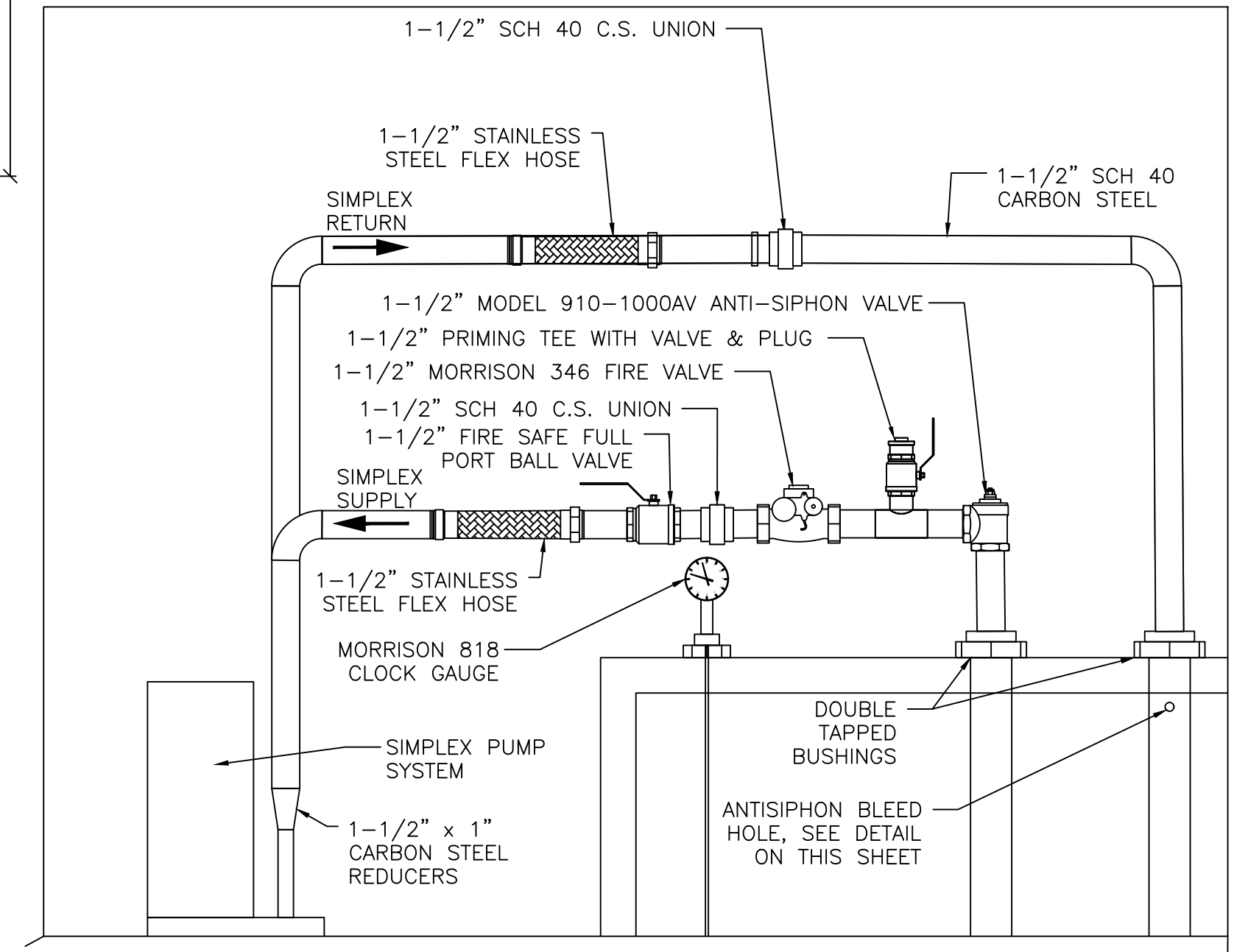
ANTI-SIPHON BLEED HOLE DETAIL NOT TO SCALE



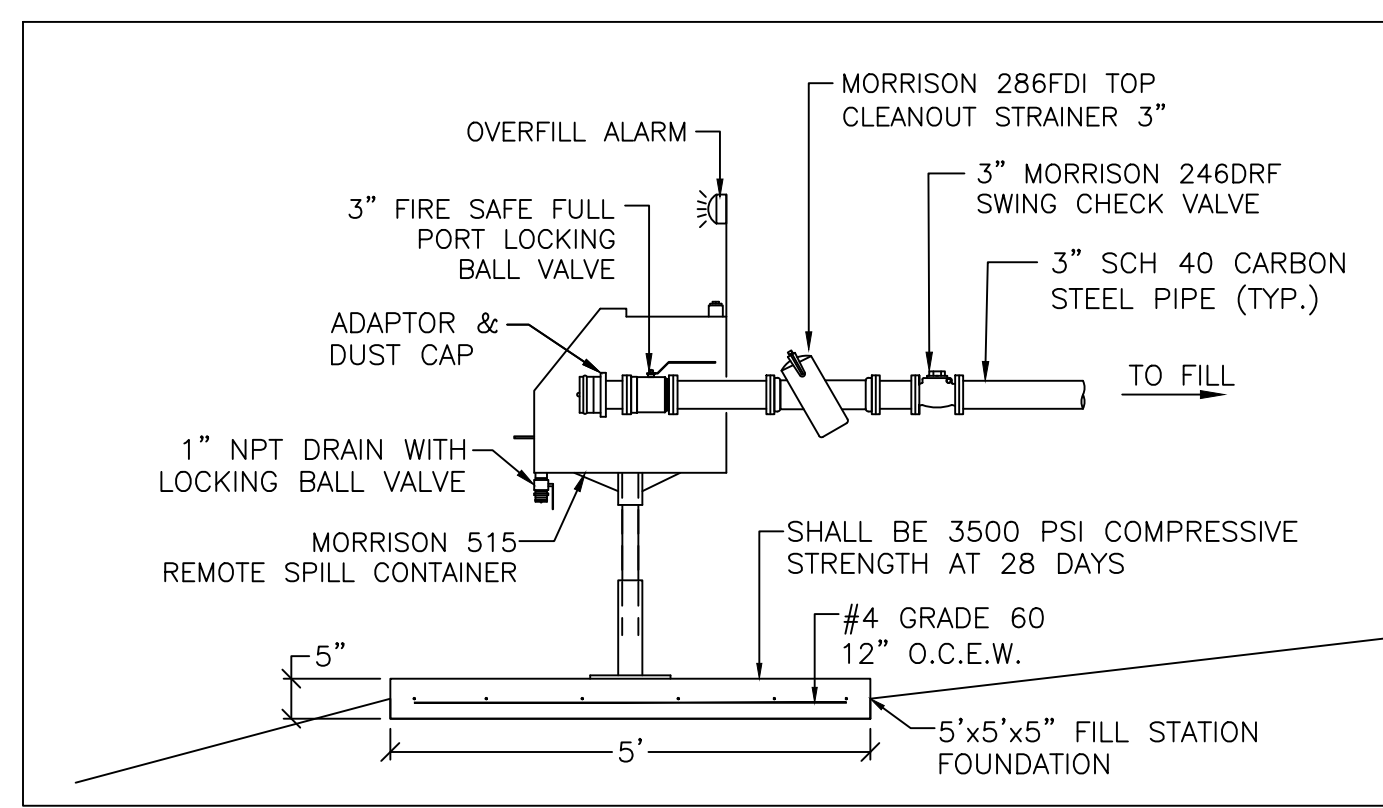
HOUSING CLUSTER GENERATOR FUELING SYSTEM SCALE IN FEET 1"=3'

- NOTES:
1. GENERATOR PORT OPENING SIZE AND LOCATION IS UNKNOWN, CONTRACTOR TO VERIFY BOTH PRIOR TO FUELING SYSTEM TIE-IN.
 2. PIPING 2" IN DIAMETER OR LARGER SHALL BE FLANGED OR WELDED.

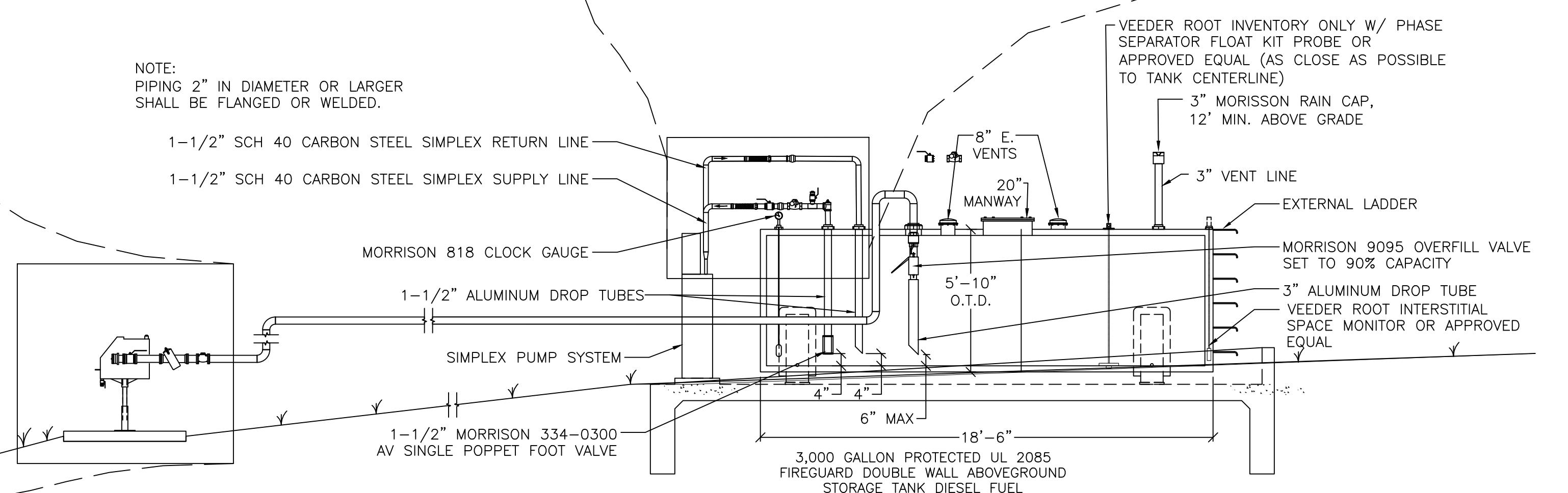
- SEQUENCE OF OPERATIONS:
1. THE BELLY TANK OF ALL HOUSING CLUSTER GENERATORS IS A DAYTANK FOR NORMAL GENERATOR OPERATION.
 2. WHEN THE SIMPLEX SENSOR IN GENERATOR BELLY TANK SENSES THAT FUEL IS LOW, THE SUPPLY PUMP ACTIVATES AND FILLS THE GENERATOR BELLY TANK FROM THE DIESEL AST UNTIL NORMAL LEVELS ARE ACHIEVED.
 3. WHEN THE SENSOR IN THE BELLY TANK SENSES THAT FUEL LEVELS ARE NORMAL, THEN THE SUPPLY PUMP SHUTS DOWN.
 4. WHEN SIMPLEX SENSOR IN BELLY TANK SENSES FUEL LEVELS ARE HIGH IN THE BELLY TANK, THE RETURN PUMP ACTIVATES AND SENDS THE EXCESS FUEL BACK TO THE DIESEL AST
 5. WHEN THE SENSOR IN THE BELLY TANK SENSES THAT FUEL LEVELS ARE NORMAL, THEN THE RETURN PUMP SHUTS DOWN.
 6. IF THE SUPPLY PUMP IS NOT DEACTIVATED WHEN BY THE NORMAL SWITCH AND THE HIGH LEVEL SWITCH IS ACTIVATED, THE RETURN PUMP WILL ACTIVATE UNTIL MALFUNCTION IS CORRECTED. IF THIS OCCURS A SIGNAL SHALL BE SENT TO THE MONITORING SYSTEM.



PIPING DETAIL NOT TO SCALE

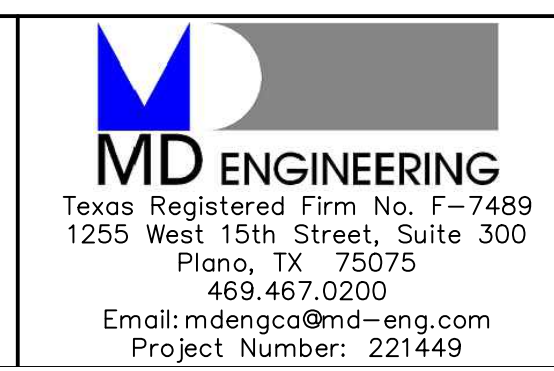
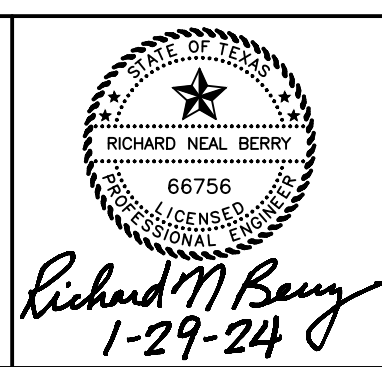


DIESEL FILL STATION NOT TO SCALE



3,000 GALLON DIESEL AST DETAIL NOT TO SCALE

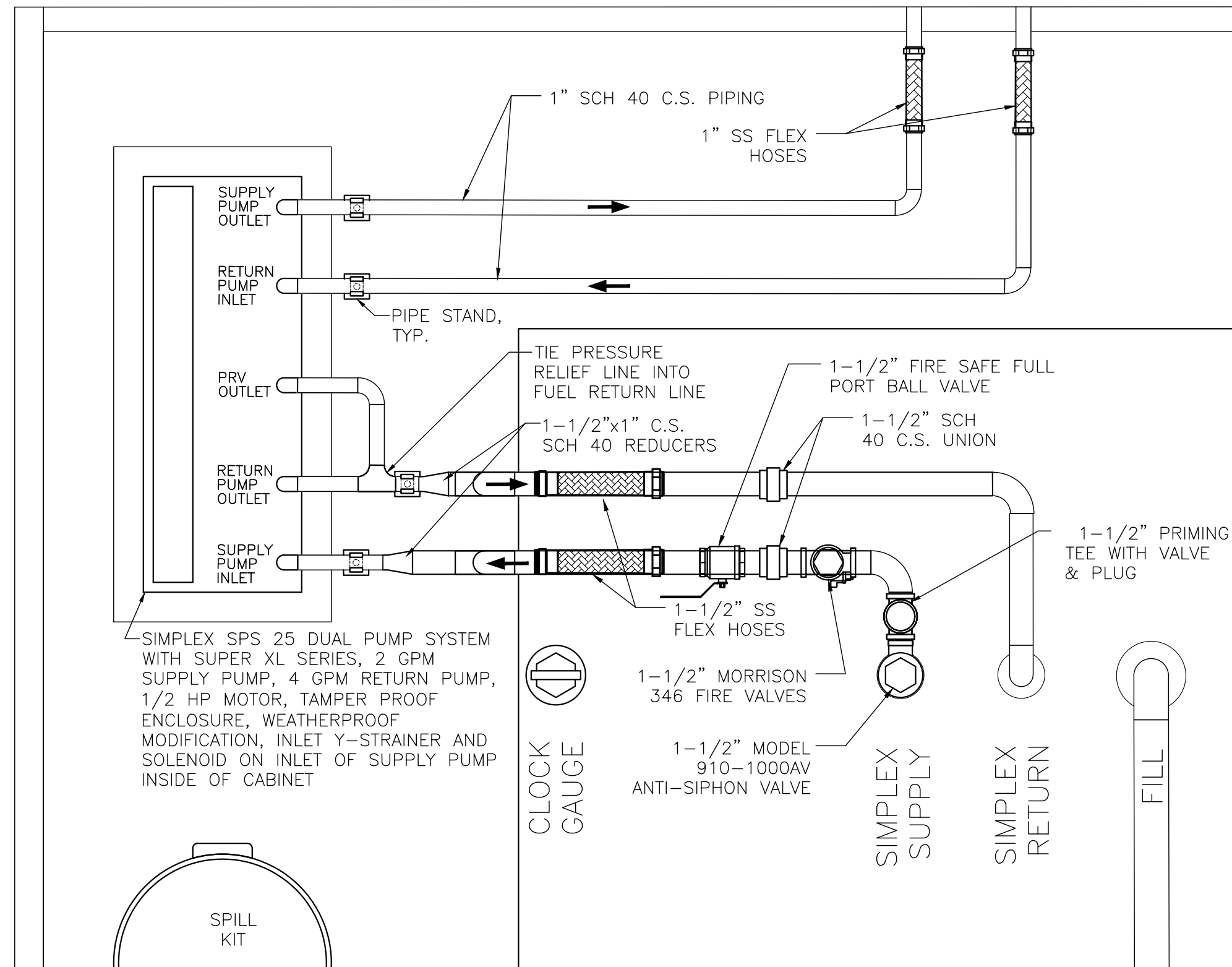
DESIGNED BY	CDS
DRAWN BY	DAG
CHECKED BY	RNB
REVIEWED BY	RNB
DATE	1-29-2024
NO	2024-6-5
DATE	REVISION
	CDsm
	BY



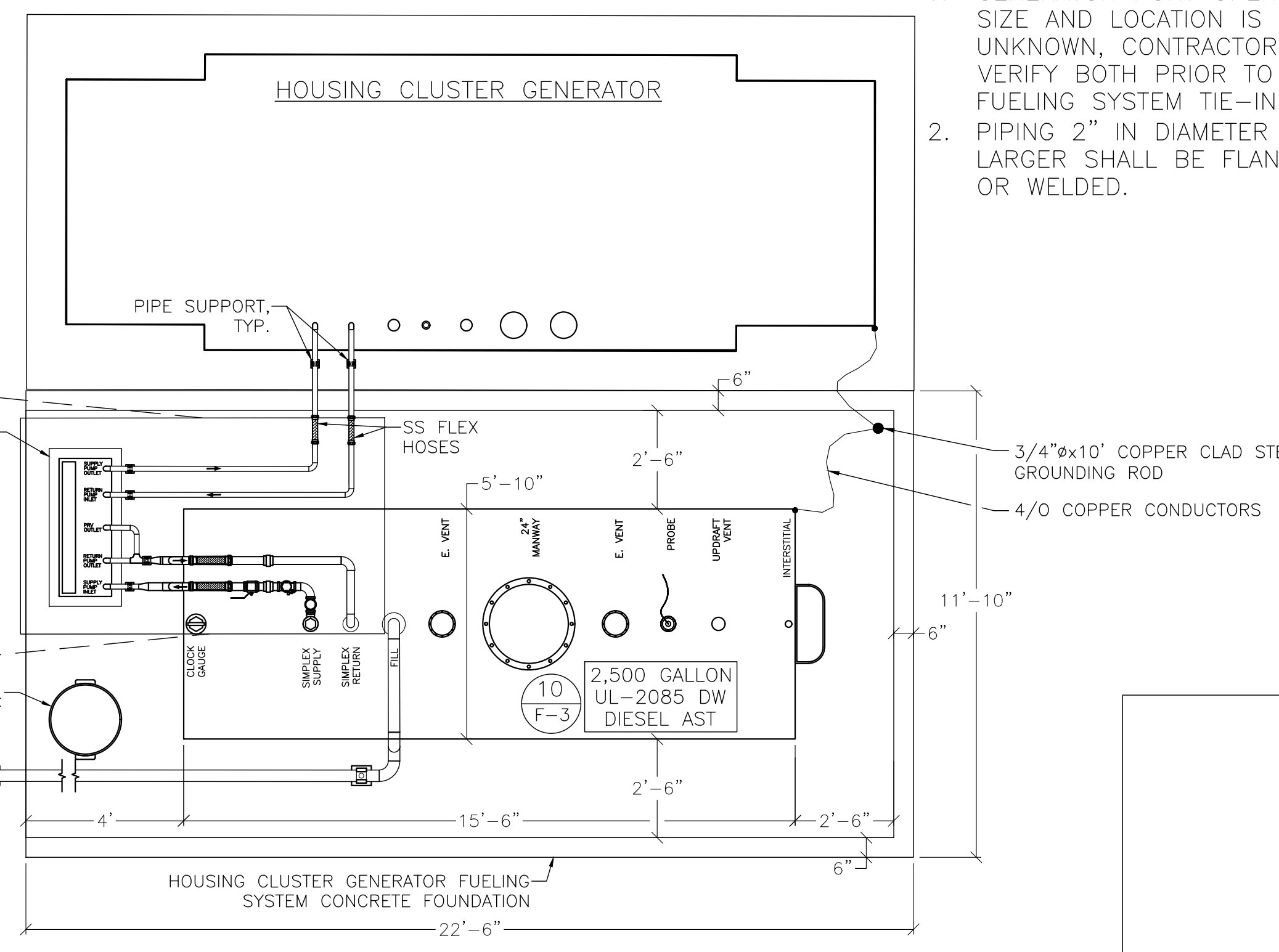
HOUSING CLUSTER GENERATOR FUELING SYSTEM 1
 COLLIN COUNTY JUSTICE CENTER
 EMERGENCY GENERATOR FUELING SYSTEMS
 4300 COMMUNITY AVENUE
 MCKINNEY, TEXAS 75071

SHEET NO.	4
OF	14 SHEETS
FILE NO.	122010

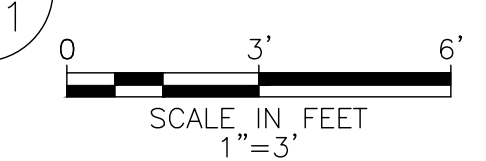
- NOTE:
1. RETURN PUMP MUST OUTPACE SUPPLY PUMP.
 2. CONTRACTOR TO PROVIDE ALL OPTIONS AND ACCESSORIES NECESSARY FOR THE SYSTEM TO PERFORM AS SPECIFIED



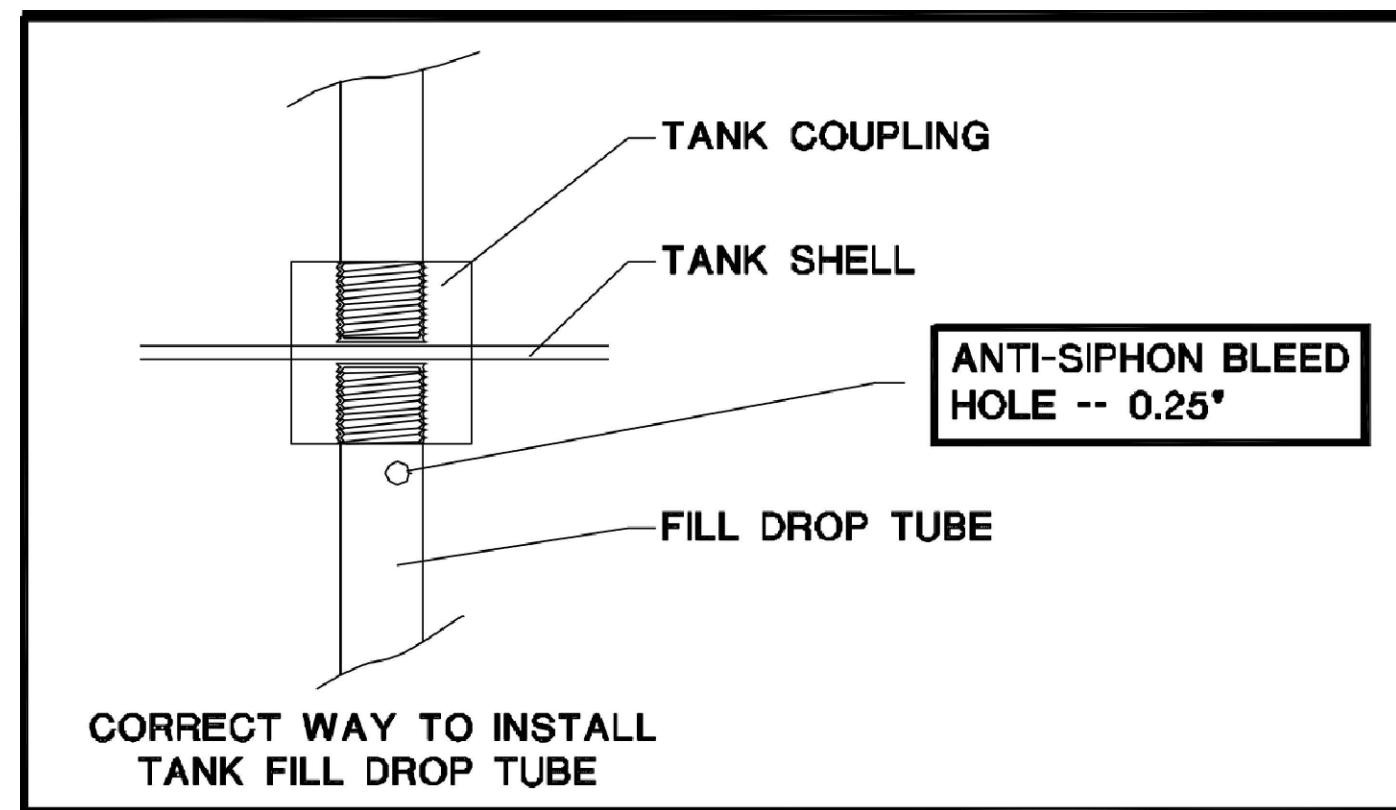
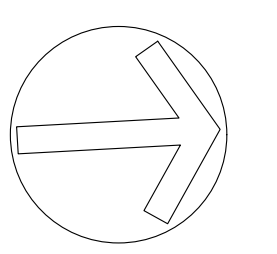
1 SIMPLEX PIPING DETAIL
NOT TO SCALE



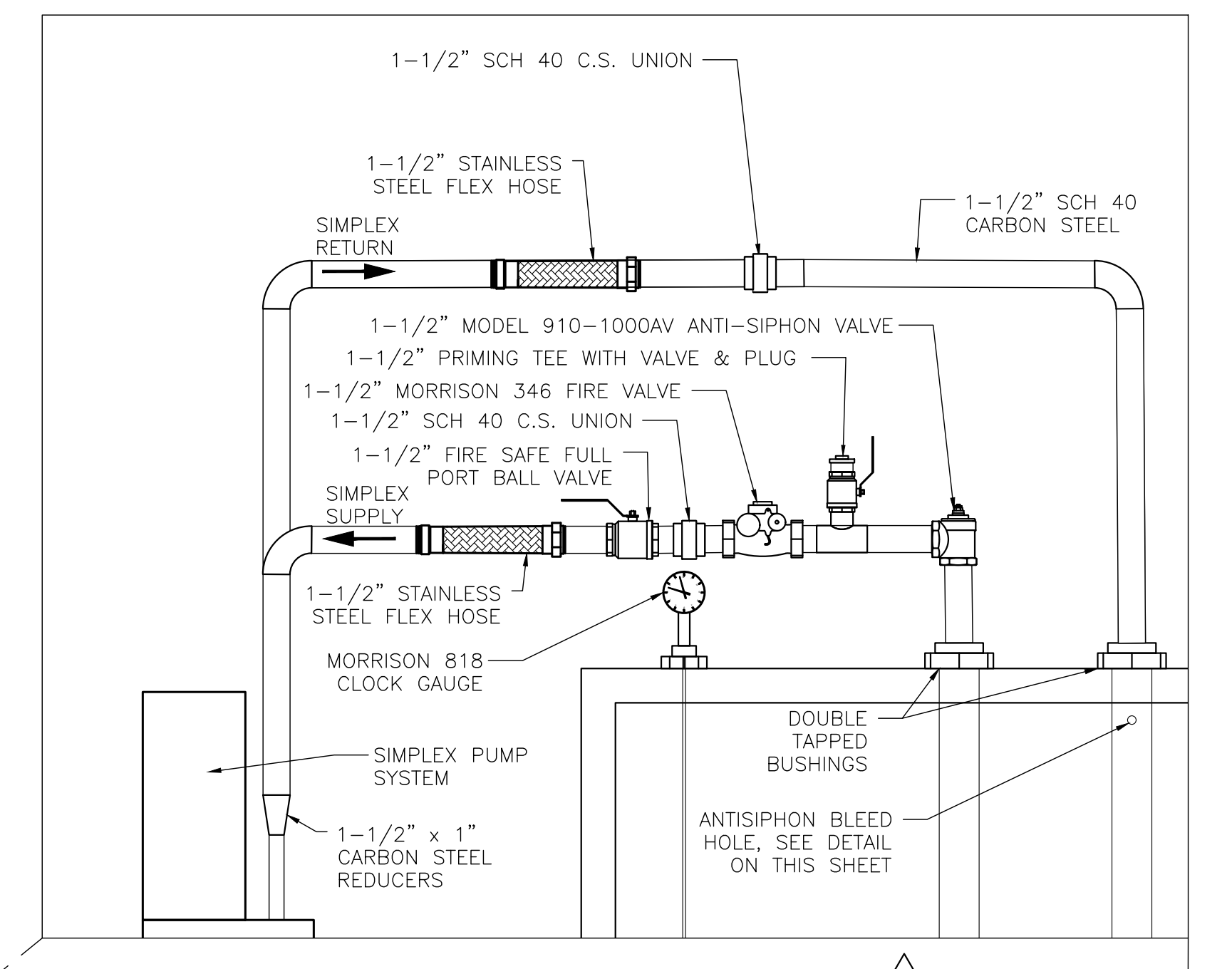
8 HOUSING CLUSTER GENERATOR FUELING SYSTEM
NOT TO SCALE



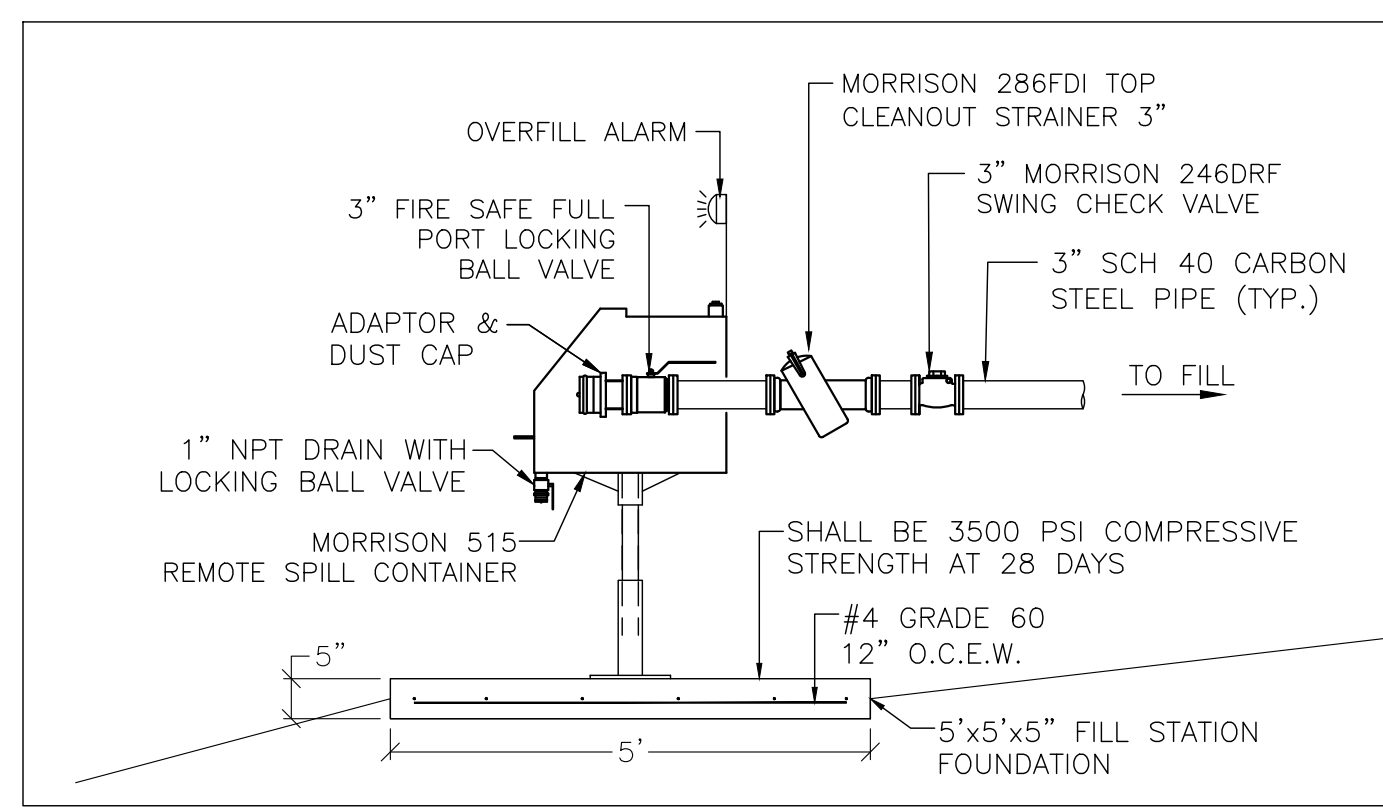
- SEQUENCE OF OPERATIONS:
1. THE BELLY TANK OF ALL HOUSING CLUSTER GENERATORS IS A DAYTANK FOR NORMAL GENERATOR OPERATION.
 2. WHEN THE SIMPLEX SENSOR IN GENERATOR BELLY TANK SENSES THAT FUEL IS LOW, THE SUPPLY PUMP ACTIVATES AND FILLS THE GENERATOR BELLY TANK FROM THE DIESEL AST UNTIL NORMAL LEVELS ARE ACHIEVED.
 3. WHEN THE SENSOR IN THE BELLY TANK SENSES THAT FUEL LEVELS ARE NORMAL, THEN THE SUPPLY PUMP SHUTS DOWN.
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 6. IF THE SUPPLY PUMP IS NOT DEACTIVATED WHEN BY THE NORMAL SWITCH AND THE HIGH LEVEL SWITCH IS ACTIVATED, THE RETURN PUMP WILL ACTIVATE UNTIL MALFUNCTION IS CORRECTED. IF THIS OCCURS A SIGNAL SHALL BE SENT TO THE MONITORING SYSTEM.



1 ANTI-SIPHON BLEED HOLE DETAIL
NOT TO SCALE

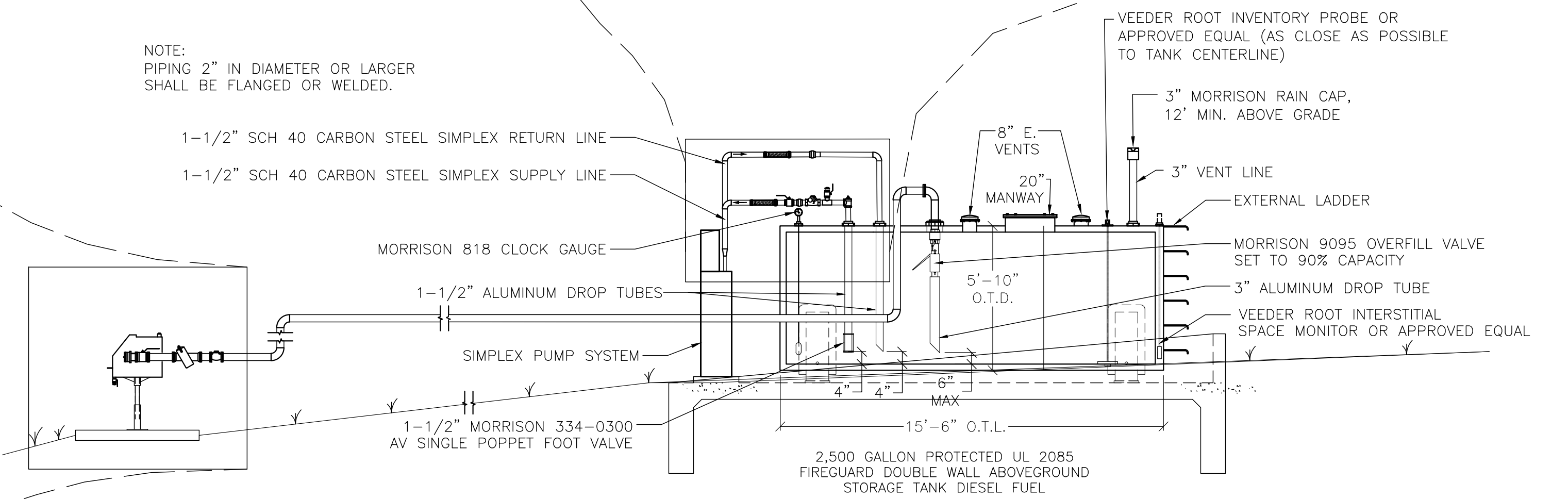


1 PIPING DETAIL
NOT TO SCALE



9 DIESEL FILL STATION
NOT TO SCALE

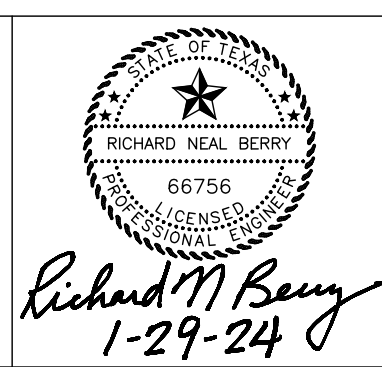
NOTE:
PIPING 2" IN DIAMETER OR LARGER SHALL BE FLANGED OR WELDED.



10 2,500 GALLON DIESEL AST DETAIL
NOT TO SCALE

NO	DATE	VALVE CHANGES, PRIMING TEE ADDED, DETAIL ADDED	CDsm BY
1	2024-6-5	VALVE CHANGES, PRIMING TEE ADDED, DETAIL ADDED	CDsm
		REVISION	BY

DESIGNED BY CDS
DRAWN BY DAG
CHECKED BY RNB
REVIEWED BY RNB
DATE 1-29-2024



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ENGINEERS | SURVEYORS
100 NE LOOP 410, STE. 300 | SAN ANTONIO, TEXAS 78216
(210) 581-1111 | TBPE NO. F-1733 | TBPLS NO. 100495-00

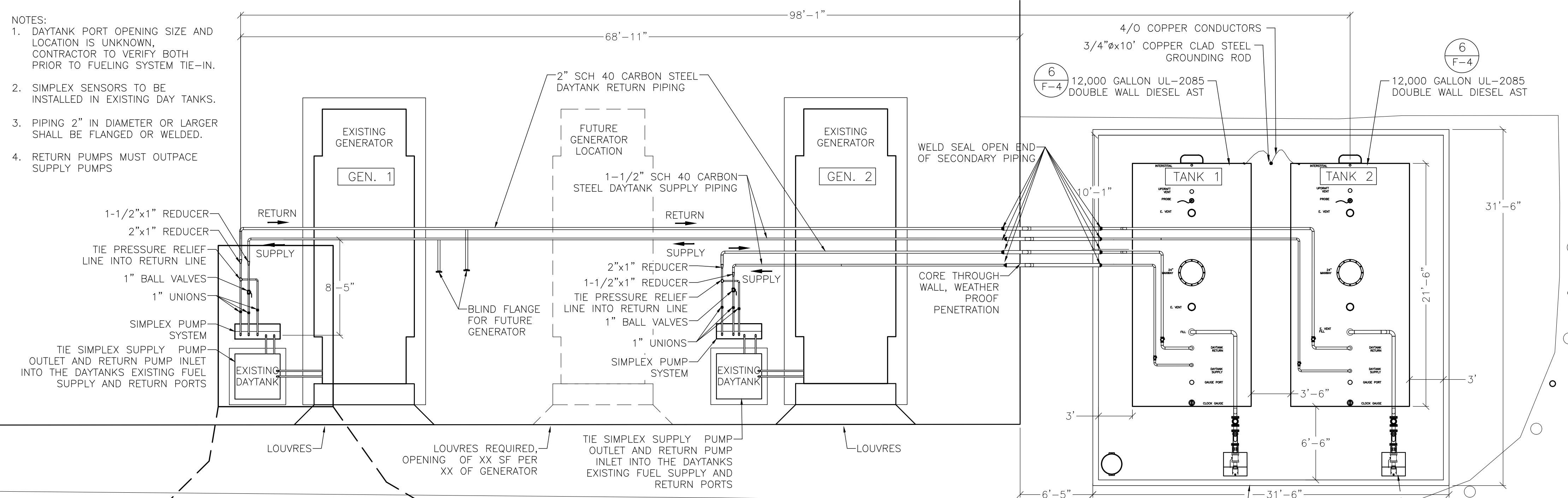
MD ENGINEERING
Texas Registered Firm No. F-7489
1255 West 15th Street, Suite 300
Plano, TX 75075
469.467.0200
Email: mdengco@md-eng.com
Project Number: 221449

HOUSING CLUSTER GENERATOR FUELING SYSTEM 2
COLLIN COUNTY JUSTICE CENTER
EMERGENCY GENERATOR FUELING SYSTEMS
4300 COMMUNITY AVENUE
MCKINNEY, TEXAS 75071

SHEET NO. 5
OF 14 SHEETS
FILE NO. 122010

NOTES:

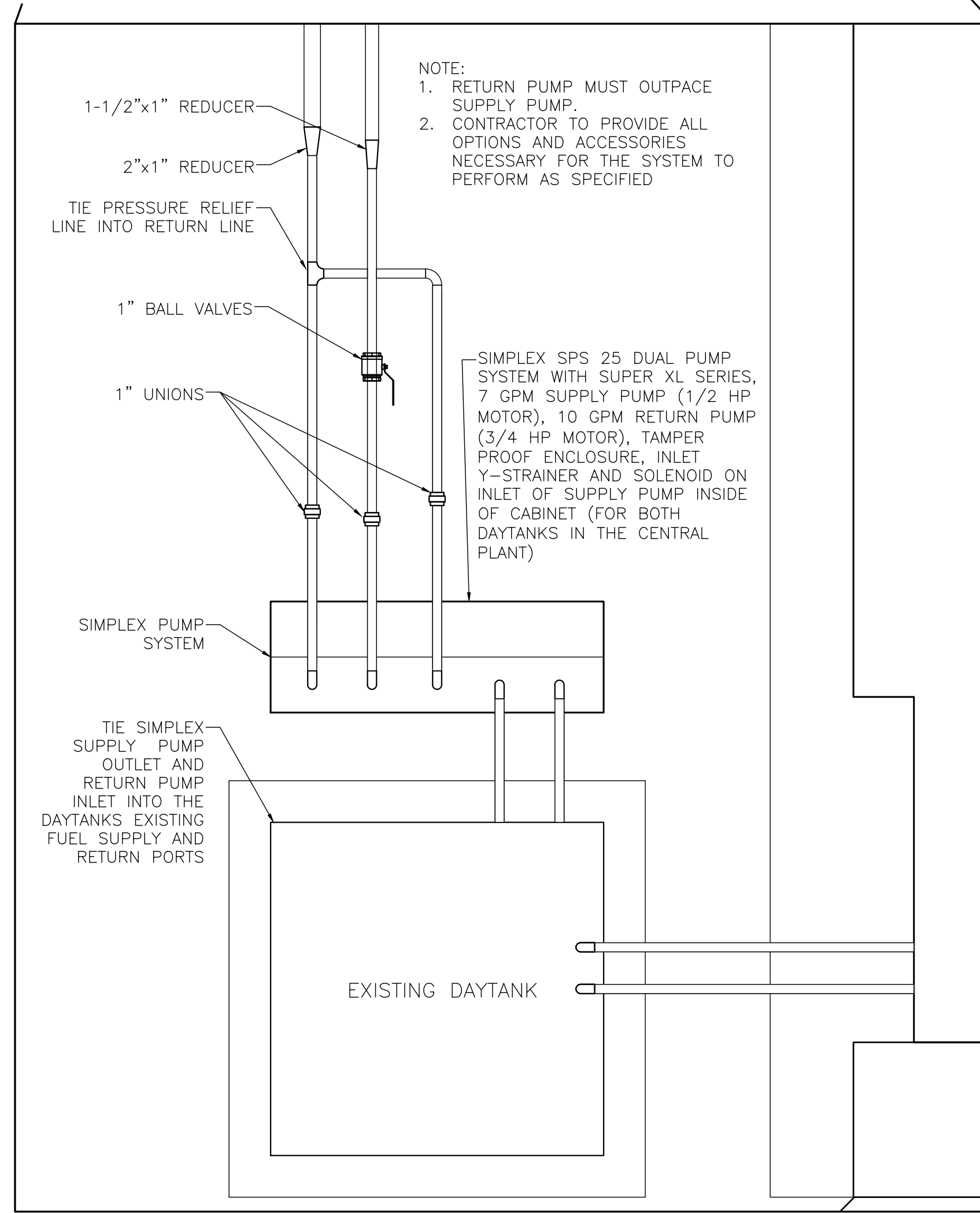
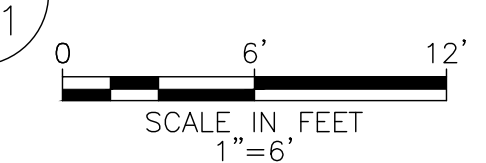
- DAYTANK PORT OPENING SIZE AND LOCATION IS UNKNOWN, CONTRACTOR TO VERIFY BOTH PRIOR TO FUELING SYSTEM TIE-IN.
- SIMPLEX SENSORS TO BE INSTALLED IN EXISTING DAY TANKS.
- PIPING 2" IN DIAMETER OR LARGER SHALL BE FLANGED OR WELDED.
- RETURN PUMPS MUST OUTPACE SUPPLY PUMPS



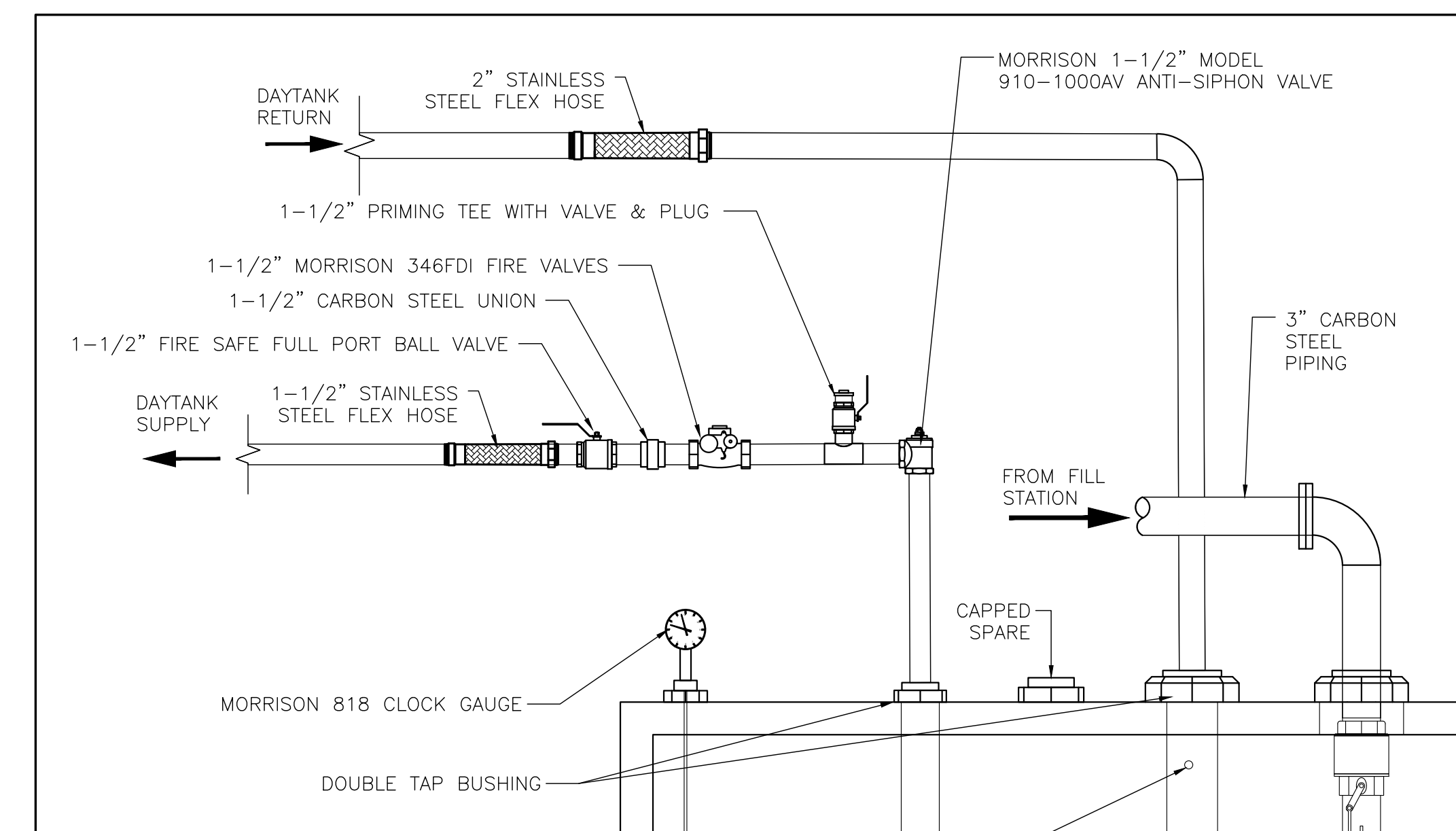
SEQUENCE OF OPERATIONS:

- THE DAYTANK ADJACENT TO EACH CENTRAL PLANT GENERATOR IS A DAYTANK FOR NORMAL GENERATOR OPERATION.
- WHEN THE SIMPLEX SENSOR IN GENERATOR DAYTANK SENSES THAT FUEL IS LOW, THE SUPPLY PUMP ACTIVATES AND FILLS THE GENERATOR DAYTANK FROM THE DIESEL AST UNTIL NORMAL LEVELS ARE ACHIEVED.
- WHEN THE SENSOR IN THE DAYTANK SENSES THAT FUEL LEVELS ARE NORMAL, THEN THE SUPPLY PUMP SHUTS DOWN.
- WHEN SIMPLEX SENSOR IN DAYTANK SENSES FUEL LEVELS ARE HIGH IN THE DAYTANK, THE RETURN PUMP ACTIVATES AND SENDS THE EXCESS FUEL BACK TO THE DIESEL AST
- WHEN THE SENSOR IN THE DAYTANK SENSES THAT FUEL LEVELS ARE NORMAL, THEN THE RETURN PUMP SHUTS DOWN.
- IF THE SUPPLY PUMP IS NOT DEACTIVATED WHEN BY THE NORMAL SWITCH AND THE HIGH LEVEL SWITCH IS ACTIVATED, THE RETURN PUMP WILL ACTIVATE UNTIL MALFUNCTION IS CORRECTED. IF THIS OCCURS A SIGNAL SHALL BE SENT TO THE MONITORING SYSTEM.

4 F-1 CENTRAL PLANT GENERATOR FUELING SYSTEM 1

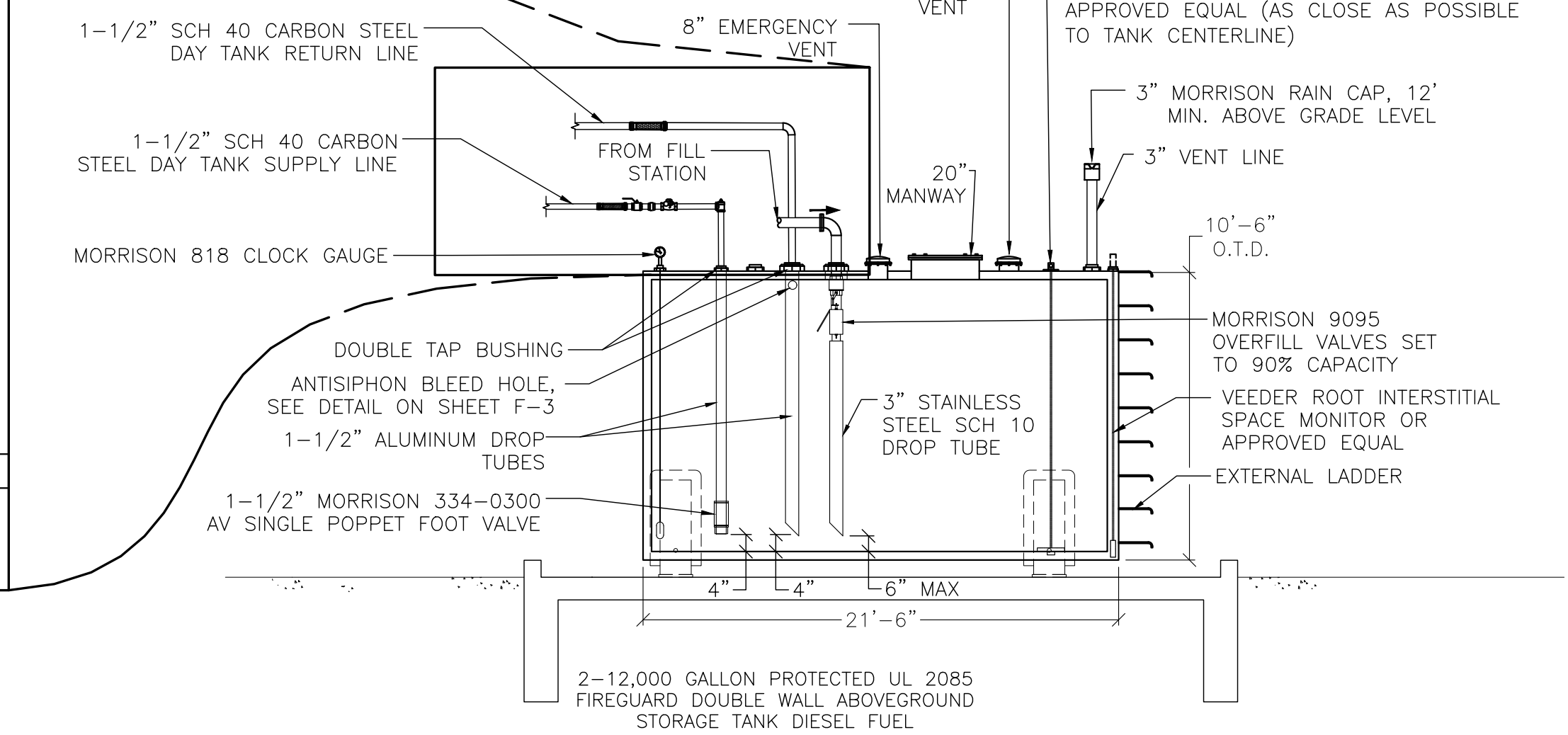


1 NOT TO SCALE SIMPLEX PIPING DETAIL

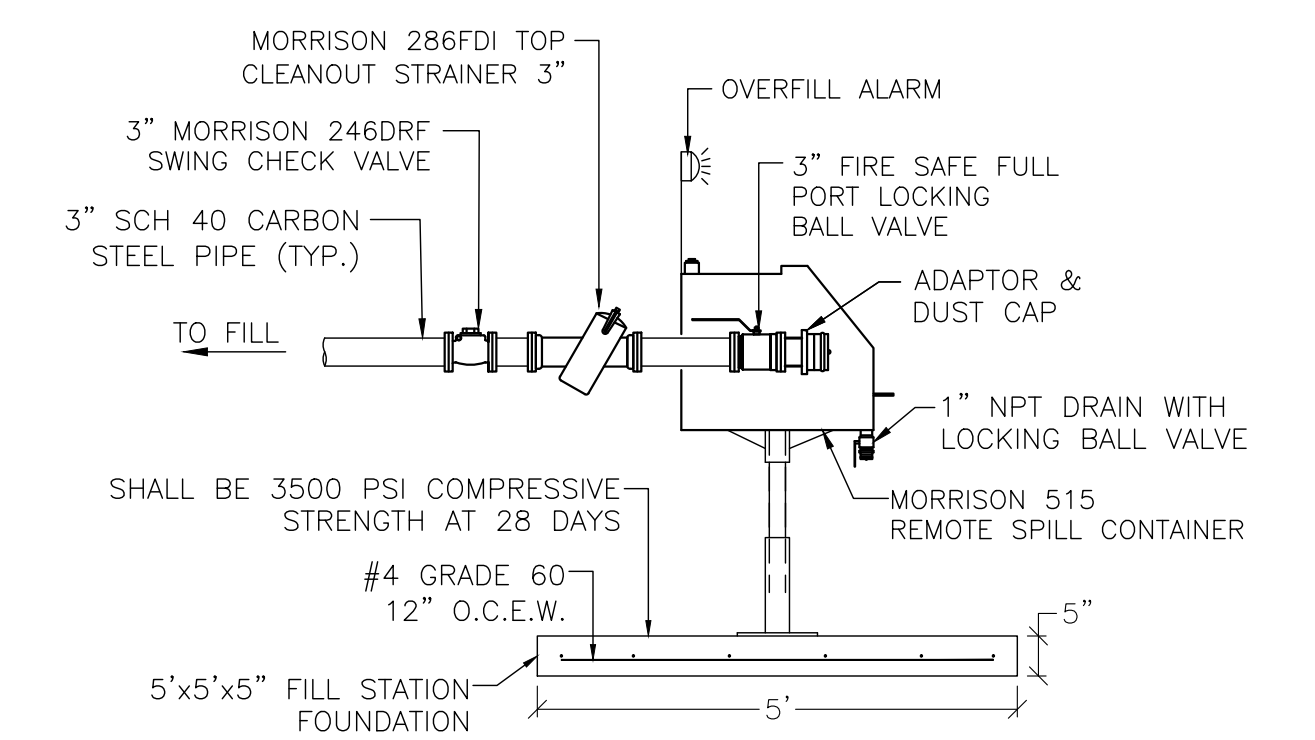


1 NOT TO SCALE PUMP PIPING DETAIL

NOTE: PIPING 2" IN DIAMETER OR LARGER SHALL BE FLANGED OR WELDED.

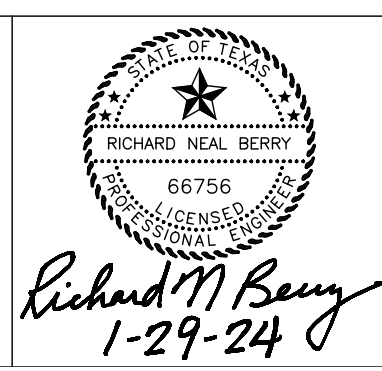


5 F-4 12,000 GALLON DIESEL AST DETAIL 1 NOT TO SCALE



5 F-4 DIESEL FILL STATION NOT TO SCALE

DESIGNED BY	CDS		
DRAWN BY	DAG		
CHECKED BY	RNB		
REVIEWED BY	RNB		
DATE	1-29-2024		
NO	DATE	VALVE CHANGES, PRIMING TEE ADDED, RETURN LINE SEPARATED REVISION	CDSm BY
1	2024-6-5		



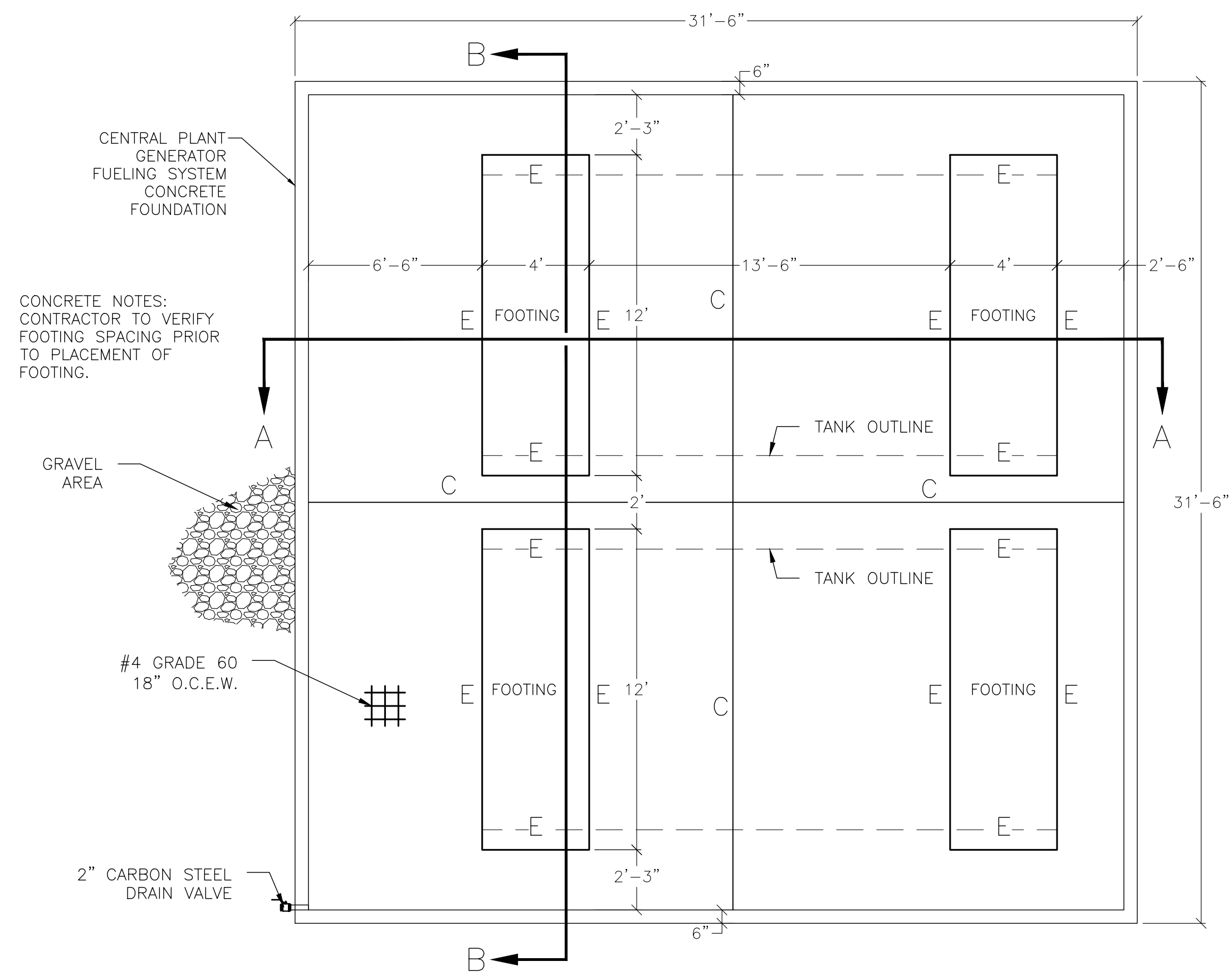
CDS muery
ENGINEERS | SURVEYORS
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Project Number: 221449

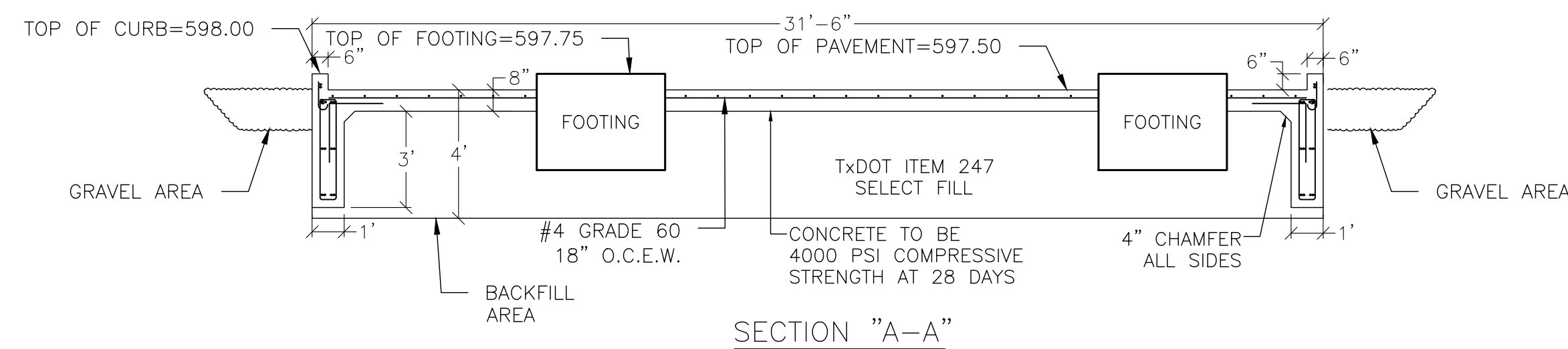
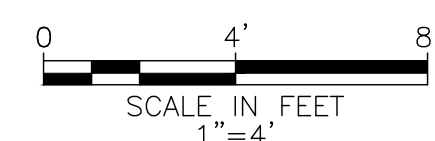
CENTRAL PLANT GENERATOR FUELING SYSTEM
COLLIN COUNTY JUSTICE CENTER
EMERGENCY GENERATOR FUELING SYSTEMS
4300 COMMUNITY AVENUE
MCKINNEY, TEXAS 75071

SHEET NO.	6
OF	14 SHEETS
FILE NO.	122010

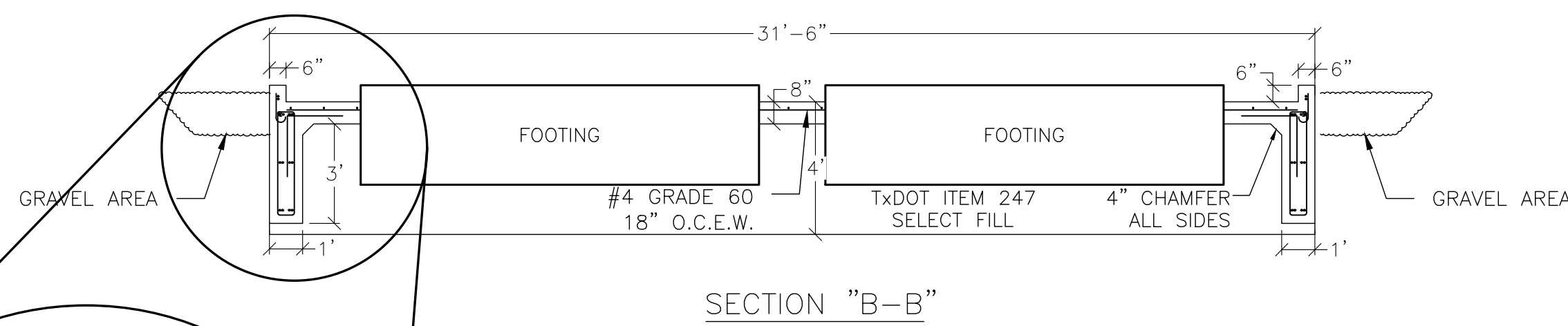
F-4



CENTRAL PLANT GENERATOR FUELING SYSTEM FOUNDATION DETAILS

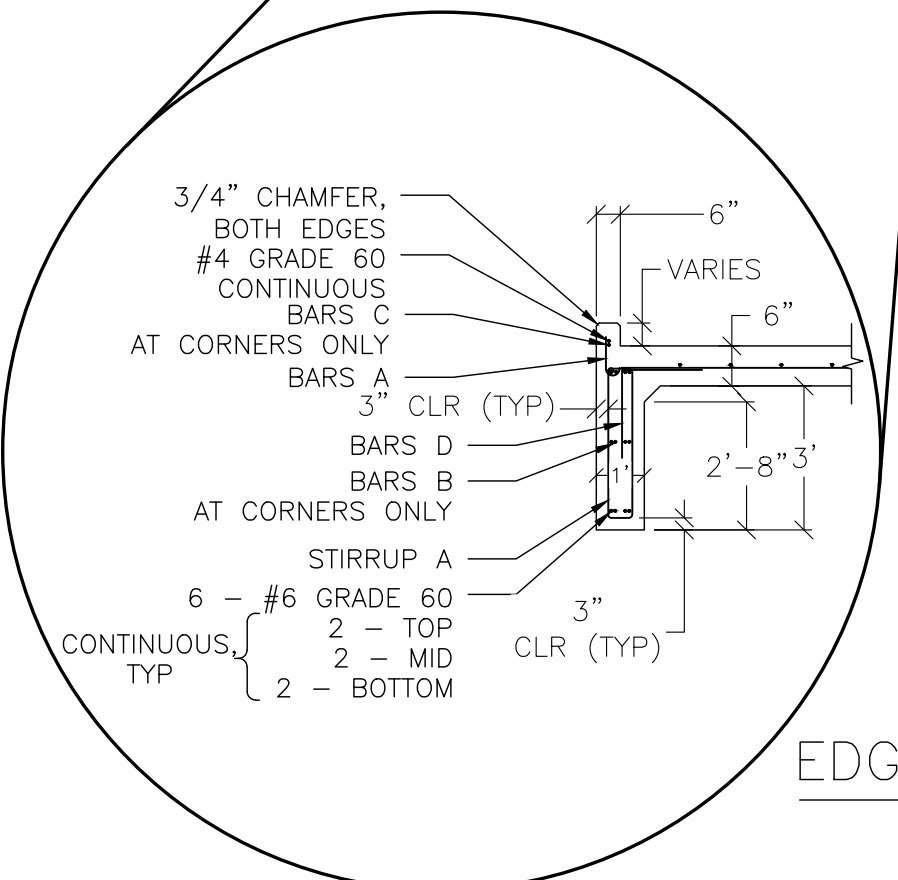


SECTION "A-A"



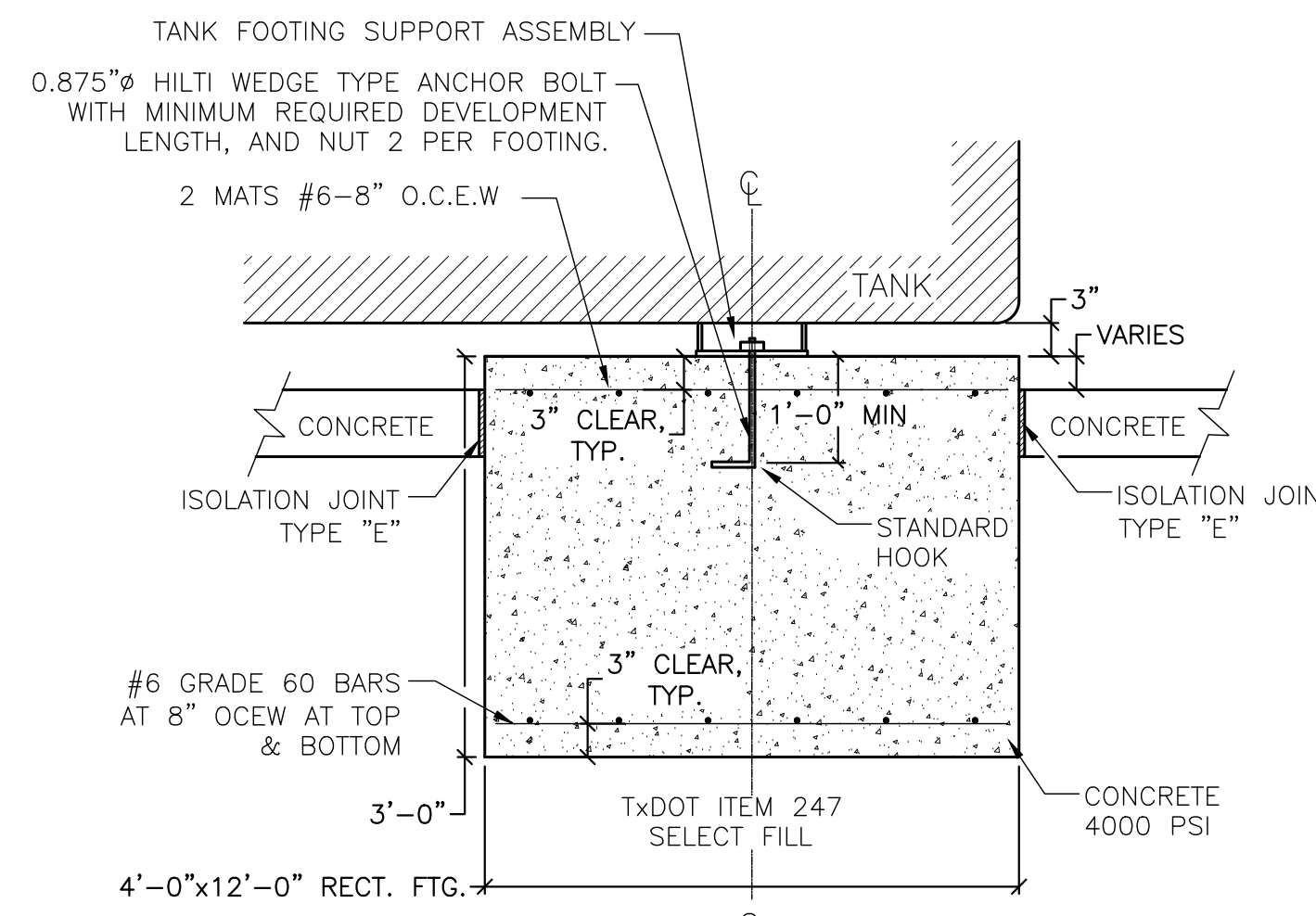
SECTION "B-B"

CENTRAL PLANT GENERATOR FUELING SYSTEM FOUNDATION SECTIONS

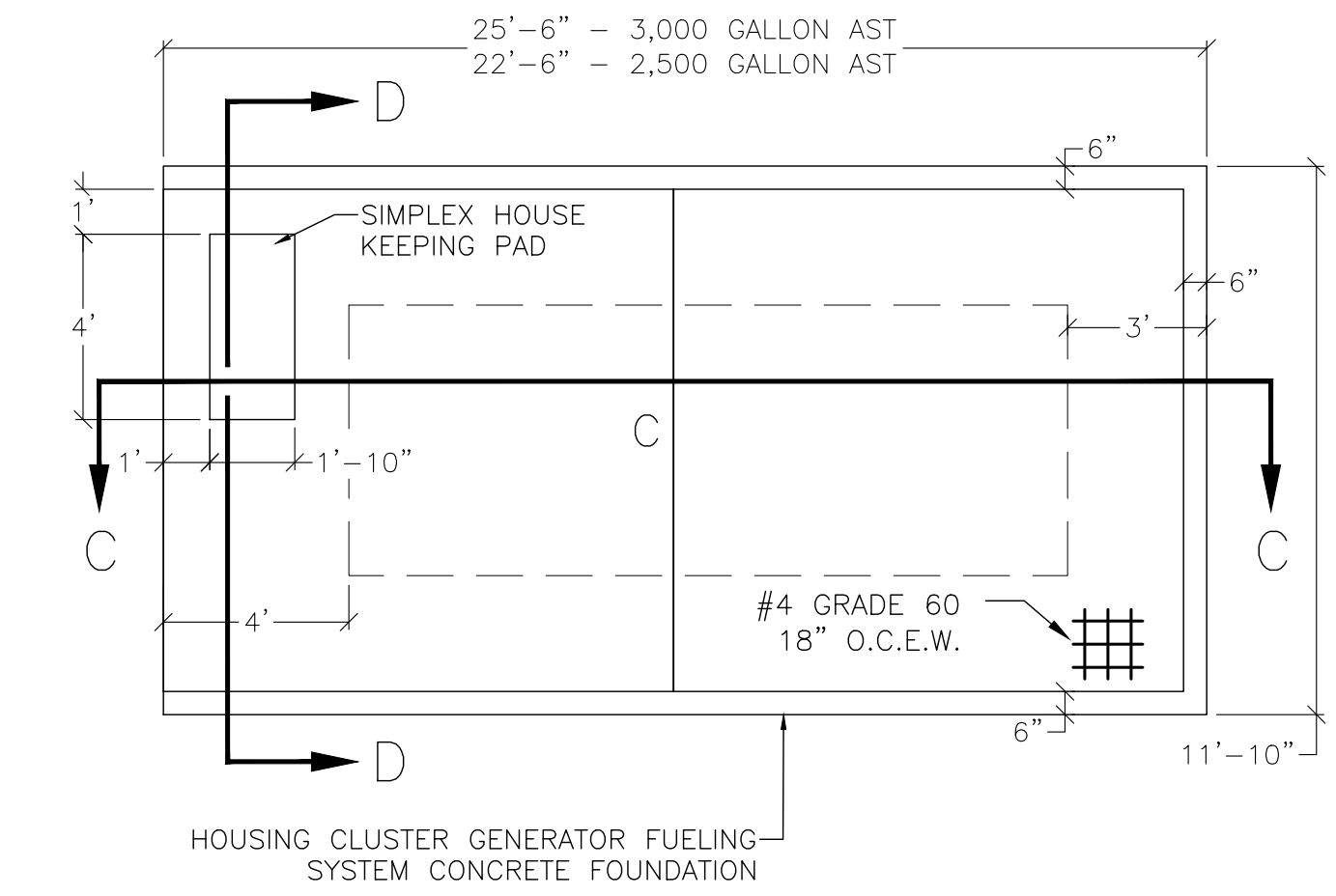


EDGE BEAM DETAIL NOT TO SCALE

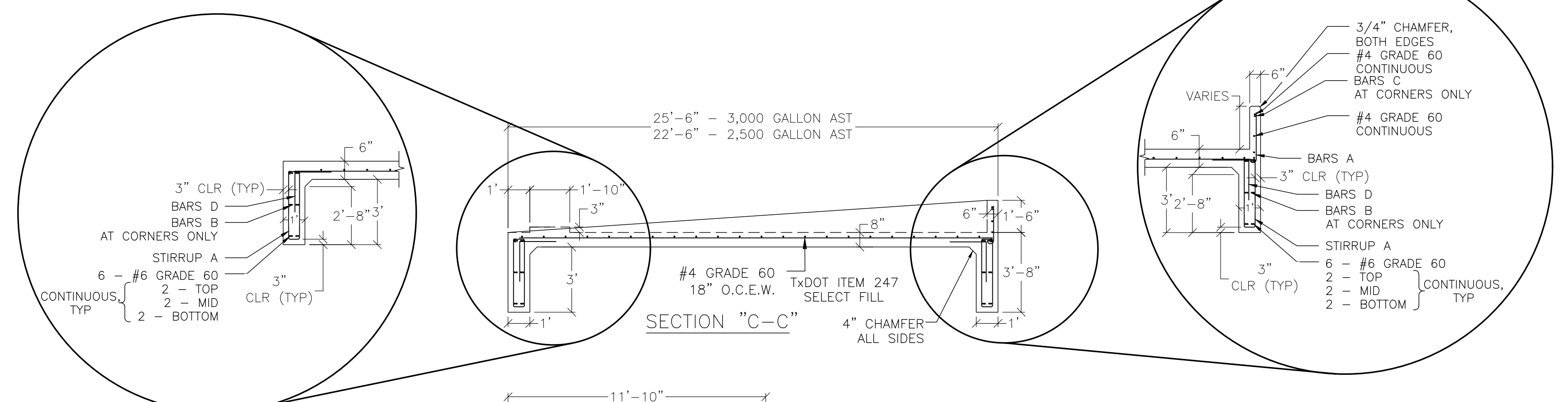
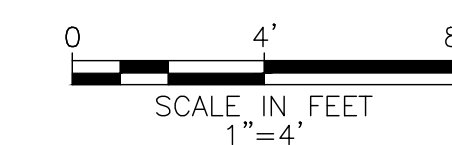
- CONCRETE NOTES:
- CONCRETE PADS FOR USE UNDER THE ASTS SHALL BE PLACED OVER SELECT FILL THAT HAVE BEEN COMPACTED TO 95% OF ASTM D-698, MOISTURE TO 0 TO +4 OF OPTIMUM.
 - SELECT FILL UNDER CONCRETE PAVING SHALL BE TxDOT ITEM 247 GRADE 1 TYPE A.



FOOTING DETAIL NOT TO SCALE

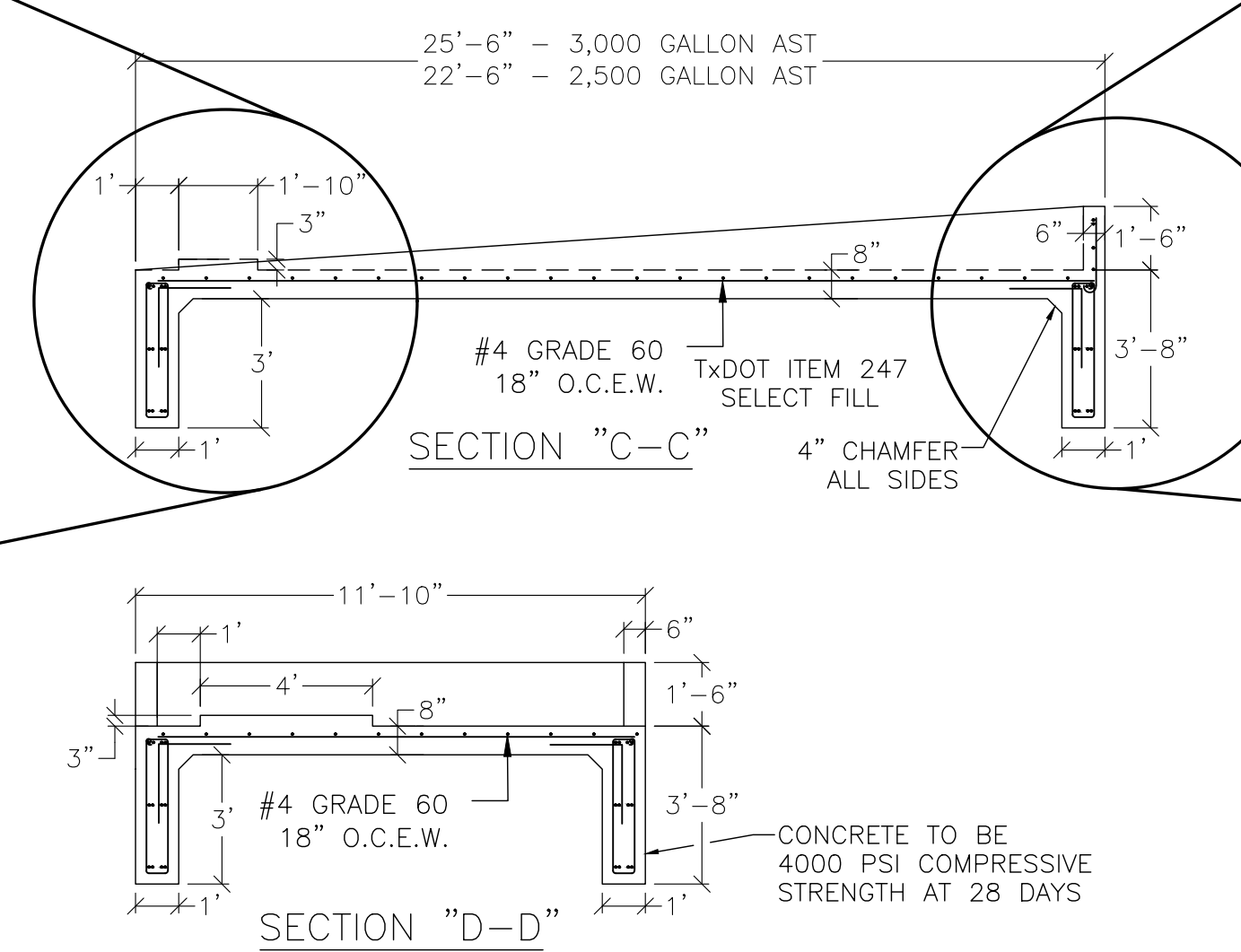


HOUSING CLUSTER GENERATOR FUELING SYSTEM FOUNDATION DETAILS



EDGE BEAM DETAIL NOT TO SCALE

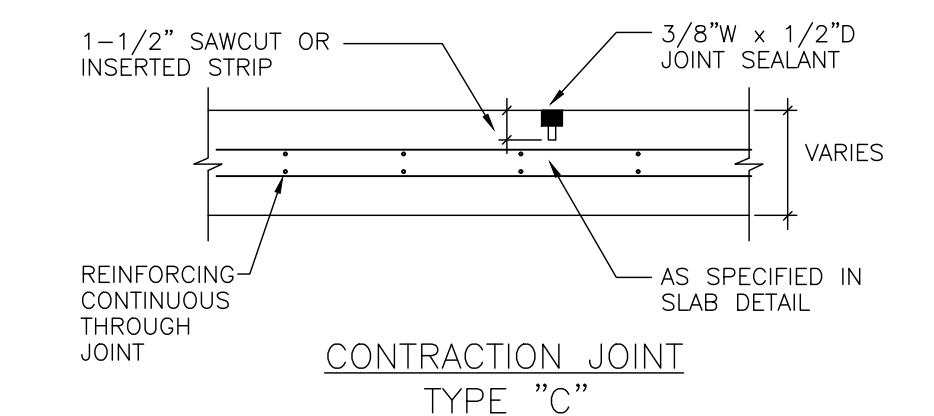
EDGE BEAM DETAIL NOT TO SCALE



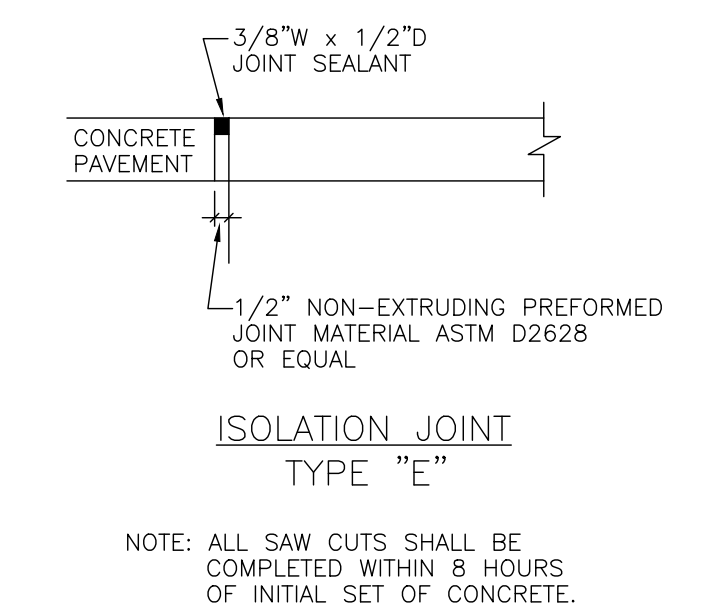
SECTION "C-C"

SECTION "D-D"

HOUSING CLUSTER GENERATOR FUELING SYSTEM FOUNDATION SECTIONS

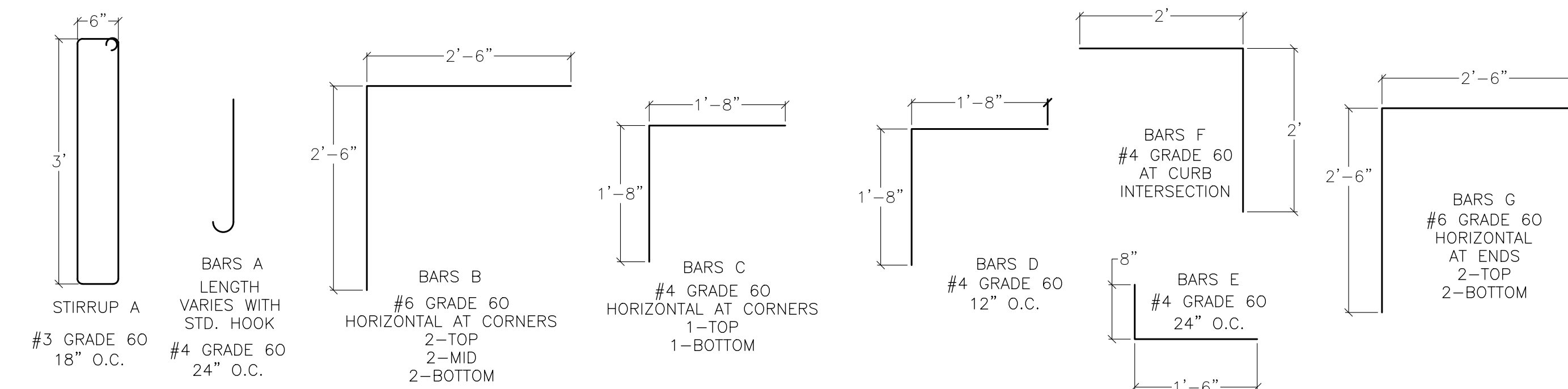


CONTRACTION JOINT TYPE "C"



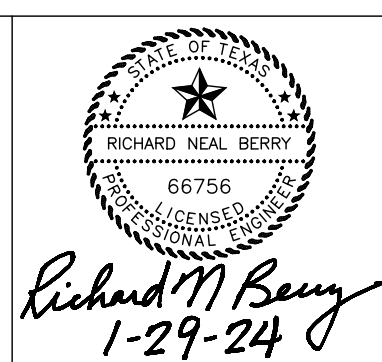
ISOLATION JOINT TYPE "E"

NOTE: ALL SAW CUTS SHALL BE COMPLETED WITHIN 8 HOURS OF INITIAL SET OF CONCRETE.



REINFORCEMENT BAR DETAILS NOT TO SCALE

DESIGNED BY	CDS		
DRAWN BY	DAG		
CHECKED BY	RNB		
REVIEWED BY	RNB		
DATE	1-29-2024		
NO	DATE	REVISION	BY



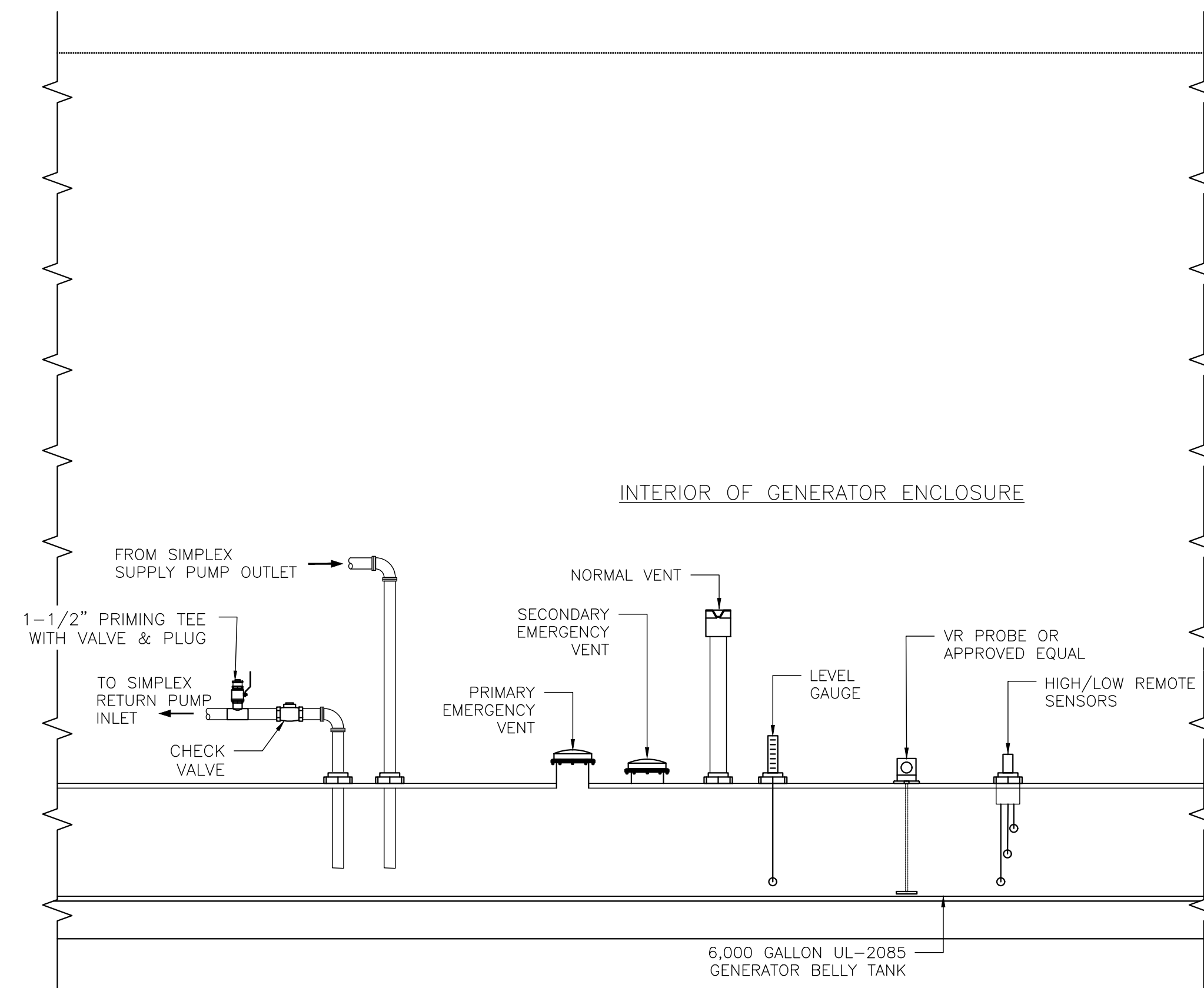
CDS muery
ENGINEERS | SURVEYORS
100 NE LOOP 410, STE. 300 | SAN ANTONIO, TEXAS 78216
(210) 581-1111 | TBPE NO. F-1733 | TBPLS NO. 100495-00

MD ENGINEERING
Texas Registered Firm No. F-7489
1255 West 15th Street, Suite 300
Plano, TX 75075
469.467.0200
Email: mdengco@md-eng.com
Project Number: 221449

CONCRETE DETAILS
COLLIN COUNTY JUSTICE CENTER
EMERGENCY GENERATOR FUELING SYSTEMS
4300 COMMUNITY AVENUE
MCKINNEY, TEXAS 75071

SHEET NO.	7
OF	14 SHEETS
FILE NO.	122010

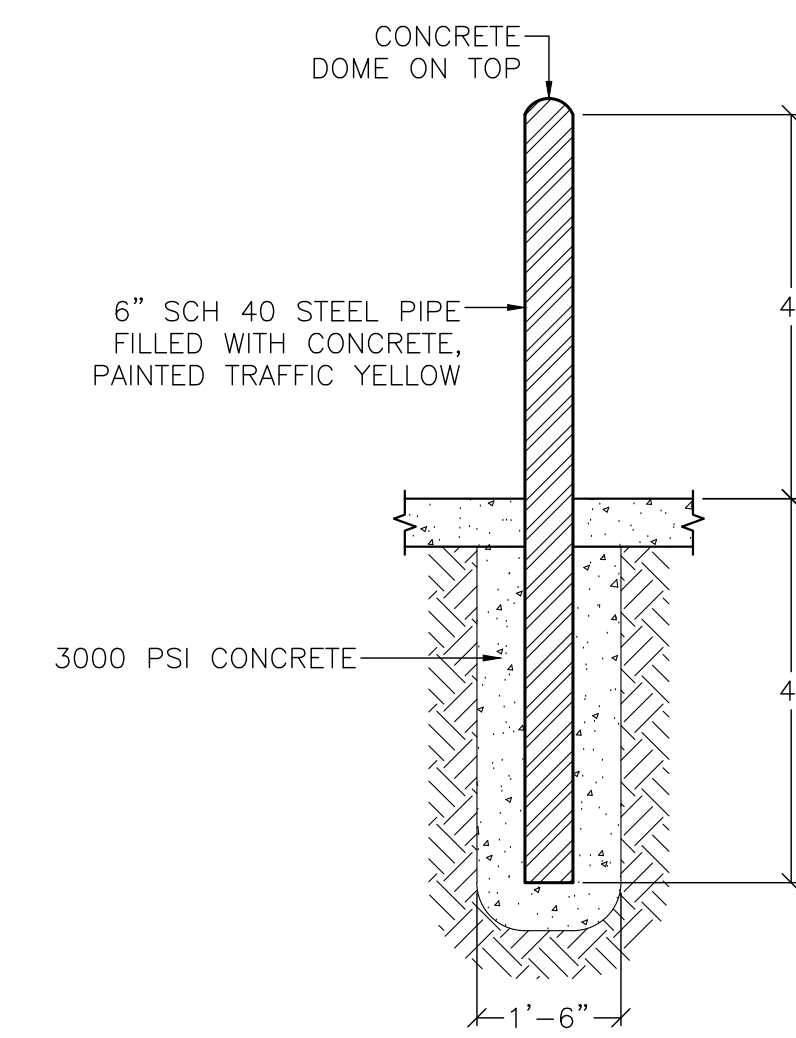
F-5



GENERATOR EQUIPMENT DETAIL

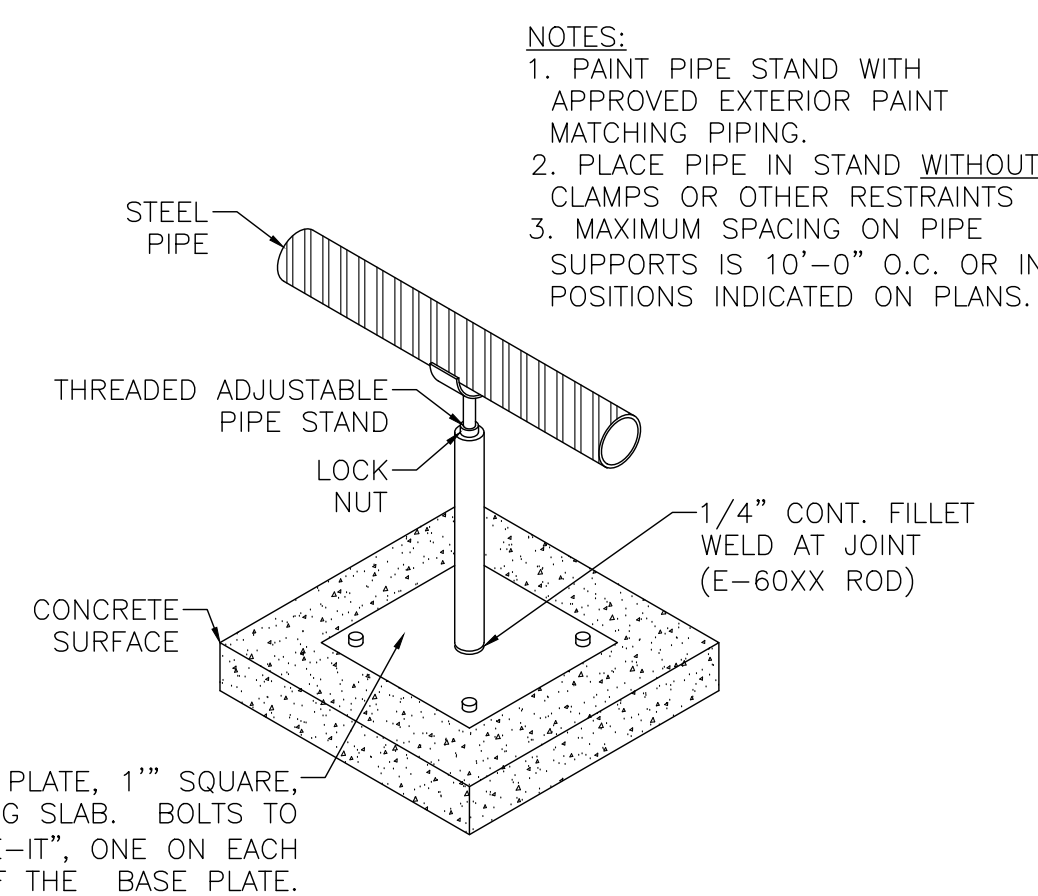
1
NOT TO SCALE

- NOTES:
1. LEVEL CONTROL FLOATSET WIRED TO PUMPSET CONTROL PANEL PROVIDED BY PUMPSET MANUFACTURER.
 2. BASE TANKS UNDER 30" WILL REQUIRE (2) 2" PORTS OR (1) 4" PORT IN THE PRIMARY TANK. IN ORDER TO ALLOW THE FLOATS TO TRAVEL ON SHALLOW TANKS THE LEVEL CONTROLS NEEDS TO BE INSTALLED IN TWO ASSEMBLIES.



PIPE BOLLARD DETAIL

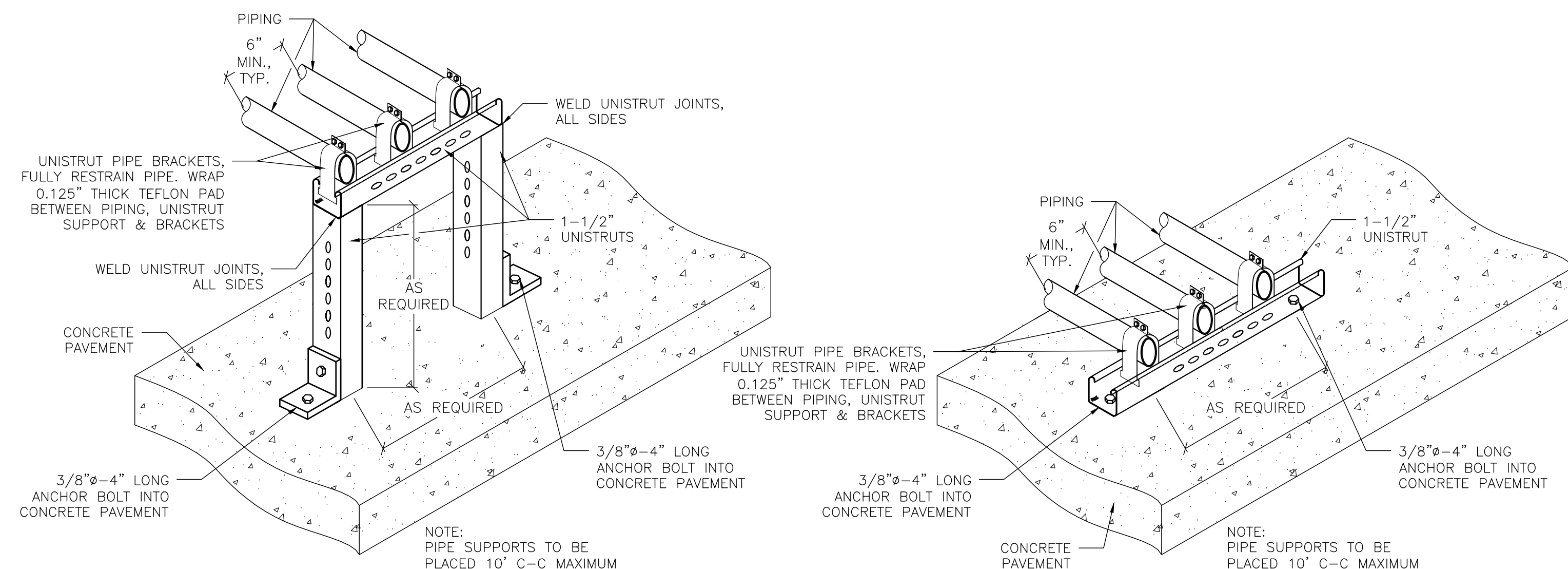
NOT TO SCALE



PIPE STAND DETAIL

NOT TO SCALE

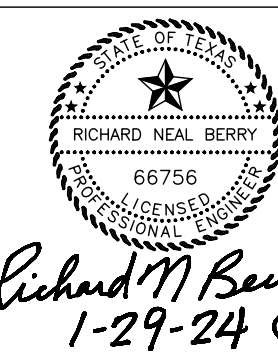
- NOTES:
1. PAINT PIPE STAND WITH APPROVED EXTERIOR PAINT MATCHING PIPING.
 2. PLACE PIPE IN STAND WITHOUT CLAMPS OR OTHER RESTRAINTS
 3. MAXIMUM SPACING ON PIPE SUPPORTS IS 10'-0" O.C. OR IN POSITIONS INDICATED ON PLANS.



PIPE SUPPORT DETAILS

NOT TO SCALE

DESIGNED BY	CDS		
DRAWN BY	DAG		
CHECKED BY	RNB		
REVIEWED BY	RNB		
DATE	1-29-2024		
NO	DATE	REVISION	BY
1	2024-6-5	VALVE CHANGES, NOTE ADDED	CDSm



SCDS muery
ENGINEERS | SURVEYORS
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(210) 581-1111 | TBPE NO. F-1733 | TBPLS NO. 100495-00

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Texas Registered Firm No. F-7489
1255 West 15th Street, Suite 300
Plano, TX 75075
469.467.0200
Email: mdengco@md-eng.com
Project Number: 221449

DETAILS
COLLIN COUNTY JUSTICE CENTER
EMERGENCY GENERATOR FUELING SYSTEMS
4300 COMMUNITY AVENUE
MCKINNEY, TEXAS 75071

F-6

SHEET NO. 8
OF 14 SHEETS
FILE NO. 122010

**COLLIN COUNTY JUSTICE CENTER
GENERATOR FUELING SYSTEM
GENERAL NOTES AND SPECIFICATIONS**

General Notes

- This project includes the installation of six above ground storage tanks (ASTs) for the storage of diesel fuel. Two of the Four of the proposed diesel tanks located adjacent to the housing clusters will be 2,500 gallons in nominal capacity, and the other two will be 3,000 gallon in capacity. The two proposed diesel ASTs adjacent to the Central Plant will both be 12,000 gallons in nominal capacity. All ASTs will be UL-2085 listed. The existing generators and day tanks will remain as is, and the piping components connecting them together will be replaced as needed with sch 40 carbon steel piping in the sizes indicated on the plan sheets.
- All electrical work will be completed in accordance with McKinney codes and regulations, NFPA 30, and the NEC.
- It shall be the Contractor's responsibility to submit the Texas Commission on Environmental Quality (TCEQ) 30-day construction notification, to notify the appropriate Fire Marshal having jurisdiction, and to obtain any and all permits for the construction of the system.
- The Contractor is solely responsible for the means and methods of construction. OSHA regulations regarding the construction activities, including but not limited to, trenches and excavations, and operations above four feet shall be strictly followed. All Site Supervisors shall be 40 hour OSHA trained.
- A site specific Health and Safety Plan shall be prepared and kept on site in case of an emergency. All personnel shall be briefed on the plan and know its location.
- The site will be kept clean of trash and debris. A Storm Water Pollution Prevention Plan (SWP3) has been developed for this site by others and its provisions shall be followed by the fuel system contractor.
- The Contractor installing the fuel systems shall be a TCEQ licensed contractor, and this Contractor shall have a TCEQ licensed on site supervisor ("A" license) on site at all times that construction activities are taking place. The licensed on site supervisor shall sign all manifests or other documentation as required for record keeping purposes. This documentation includes, but is not limited to, the TCEQ registration form, AST warranty and installation forms, and "Red Lined" drawings to be used in the development of "Record Drawings."
- Pressure testing of the new piping and other diesel system components shall be in accordance with the local Fire Marshal's requirements, or as required by PEI RP-100. In any case, pressure shall be left on all piping (both primary and secondary) until all paving has been placed over all UST system components. Any loss of pressure shall be investigated immediately.
- Upon completion of the installation of all equipment and piping, third party precision line tests shall be performed on this system. Copies of these data shall be submitted to the Engineer.
- A project manual shall be submitted to the Owner in a three ring binder that includes all maintenance, operations and warranty documents associated with this project. Additionally, any and all test data such as the precision line results shall be included.
- All new fuel tank installations shall be permitted through the Fire Marshal's Office separate from the building permit by selected contractor.
- All required permits to be obtained and paid for by the contractor.
- The contractor shall communicate with TCEQ, City of McKinney, and the Fire Marshal.

Earthwork Specifications

- All subgrade under concrete structures shall be prepared such that the PVR is less than one inch.
- All base material grades shall be prepared and finished to within 0.05 ft of the design grades.
- Maintain the specified moisture content of the select fill until placement of the concrete is complete. If the surface becomes dry and loose, it must be re-compacted to meet the minimum compaction and moisture requirements.
- Backfill shall be compacted to 95% ASTM D698, moisture at 0% to +4% of optimum.
- Backfill shall be TxDOT Item 247 Grade 1 Type A base material, see backfill detail on sheet D-1.

Concrete Specifications

- All concrete used on this project shall be normal weight concrete having a minimum compressive strength of 4000 psi at 28 days unless otherwise specified. This concrete shall be placed with a maximum slump of 4 inches. The concrete shall be wet cured through the use of burlap or blankets that are continuously kept wet, or by thoroughly and completely coating the concrete with a liquid membrane curing compound. This curing must be placed on the concrete as soon as finishing operations are complete, and damage to the surface will not occur by placing blankets or applying the curing compound.
- No air entrainment will be used in the concrete on this project.
- Forms shall be constructed to withstand the placement of the concrete, and shall be sufficiently tight as to prevent leakage of mortar during concrete placement. Forms shall remain in place at least 48 hours after concrete placement. Formed elements shall have square faces and shall be chamfered as specified on the plans.
- Contraction joints shall be saw cut in neat, straight lines as indicated on the plans, and as soon as initial set has taken place and damage to the surface will not occur.
- Expansion joints as specified shall be 3/4 inch Redwood, with a depth equal to the thickness of concrete adjacent to the joint. The top one inch of all expansion joints shall be sealed with an elastic type sealer that is resistant to gasoline and diesel. Prior to the application of the joint sealer, the joint shall be thoroughly cleaned, carefully removing all loose debris, and the surface clean and dry such that the sealant permanently adheres to the concrete.
- Steel used in the reinforcement of all concrete on this project shall be sized as indicated on the specific detail, and shall be new, Grade 60 steel. No steel shall rest directly on the soil or any base or fill material, and all shall be supported with chairs or concrete bricks. Clay bricks are not acceptable.
- Horizontal concrete surfaces shall be finished as a "Broom" finish. The edges of the new pavement shall match the existing pavement grades.

Piping Specifications

- All aboveground piping shall be schedule 40 carbon steel, unless otherwise noted. All piping where possible, shall be welded with no threaded connections.
- All stainless steel flex hoses used on this project shall be UL listed for above ground use. Flex hoses UL approved for underground use are not acceptable.
- No FRP piping shall be visible in dispenser pans or other above ground applications. Only UL approved aboveground steel flex connectors and/or steel piping shall be visible in above ground applications.
- Pressure testing meeting the requirements of the AHJ shall be performed on both the primary and secondary piping systems.
- Pressure shall remain on all piping until all pavement construction is completed in the vicinity of the piping.
- The fill connection piping shall be 3 inch in diameter with flanged and welded connections. This piping does not normally contain fuel, but threaded connections are not acceptable.
- All piping shall be thoroughly cleaned from oils, corrosion, and other debris and primed and coated with an epoxy based enamel resistant to diesel fuel. The color shall be white. The paint shall be evenly applied and no drips or runs shall be allowed. Do not paint over any product plates or labels.
- Diesel piping shall be labeled "DIESEL FUEL", with a yellow label color and black label text in the sizes indicated in the table below.

OUTSIDE DIAMETER OF PIPE OR COVERING	SIZE OF LETTERS
3/4" TO 1-1/4"	1/2"
1-1/2" TO 2"	3/4"
2-1/2" TO 6"	1-1/4"
8" TO 10"	2-1/2"
OVER 10"	3-1/2"

- Labels should be applied close to valves and adjacent to changes in direction, branches, and where pipes pass through walls or floors, and as frequently as needed along straight runs to provide clear positive identification.
- Labels shall have the following minimum information: fluid being conveyed and direction of flow.
- Pipe markers shall be either a) plastic factory fabricated, flexible, semi-rigid plastic, preformed to fit around pipe or pipe covering, with printed markings, or b) flexible, adhesive backed vinyl with printed markings.
- Pipe marking should be highly visible and in the line of vision of personnel.

AST Specifications

- The ASTs used on this project shall be UL-2085 listed. The two of the four housing cluster ASTs shall be 2,500 gallons cylindrical with a 5'-10" in diameter, the other two shall be 3,000 gallons cylindrical with a 5'-10" in diameter. The two central plant ASTs shall be 12,000 gallons cylindrical, with a 10'-6" foot diameter. The Contractor shall request a letter from the tank manufacturer proving that air testing has been successfully completed for both the inner and outer tank during the manufacturing process. This letter must be available for inspection by the Fire Marshall upon arrival of the ASTs to the site, and shall be made a part of the permanent records upon completion of the construction of the systems.
- Upon arrival at the site, the ASTs shall be carefully inspected for damage. Any damage noted shall be reported to the Engineer immediately. Damaged tanks are not acceptable for use at this facility.
- The ASTs shall be placed in the containment structure as indicated on the plans. All fittings and equipment necessary to complete the system shall be placed on the ASTs.
- The Contractor shall complete all documentation necessary to comply with the TCEQ regulations and to cause the warranty to come into force.
- A one inch diameter by 10 foot long copper clad steel ground rod shall be placed near the ASTs. A 4/0 copper conductor shall bond the three tanks and provide a common ground plane. This grounding rod shall be in place before the placement of the concrete such that the concrete is placed around the grounding rod forming a tight seal.

Equipment Specifications

- The pump systems to be used on this project shall be Simplex SPS 25 pump systems or prior approved equal for all generators, the housing cluster systems shall have Super XL Series, 2 GPM supply pumps and the central plant system shall have Super XL series, 7 GPM supply pumps. Return pumps must outpace supply pumps to prevent overflow.
- Vent shall be at minimum 12 feet above finished grade. A rain cap shall be used on the diesel tank.
- An above ground pressure rated overflow prevention valve shall be placed at the fill position. This fill limiter shall stop flow into the AST when the liquid level reaches 90 percent of the total volume.

Leak Detection Equipment

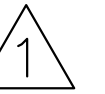
- The Leak detection for the piping and ASTs at this facility shall consist of the following equipment.
 - A Veeder Root TLS-450 Plus console or approved equal
 - Each AST shall have an interstitial sensor
 - Each AST shall have an in tank probe to monitor and report fuel levels. Due to diurnal heating, inventory reconciliation cannot be performed in ASTs.
 - Each transition sump shall have a liquid sensing sensor placed in the bottom of the sump.
 - An overflow alarm with acknowledgement switch shall be mounted on the fill connection of each fuel type. This alarm shall be used to alert the truck driver to a near full level.
- Any liquid sensed by a interstitial monitor or liquid sensor shall cause an the fuel pumps to be de-energized, and all dispensers to stop pumping. The pumps shall not be re-energized until the cause of the alarm has been identified and rectified.
- A current copy of the Veeder Root program or approved equal that allows remote sensing, monitoring and operation of the system shall be provided to the Owner, placed on the Owner's selected computer, and the program initiated.
- The system shall not interfere with the fuel management system, and shall perform all functions in conjunction with the fuel management system.

Start Up

Once all equipment has been installed, the Contractor shall perform a complete start up of all equipment. During this start up procedure, all meters shall be calibrated, and tests to ensure the proper operation of all equipment shall be performed. The Veeder Root system or approved equal shall be programmed to the specified settings, and verification of proper operation shall occur.

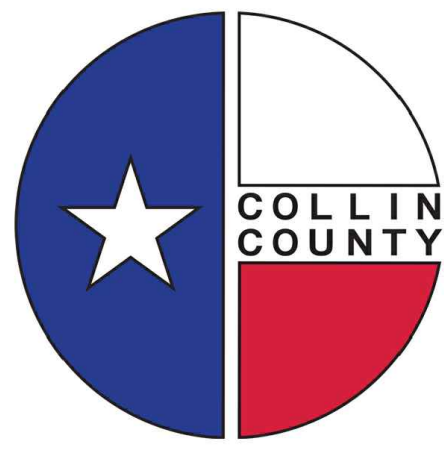
Training

Training of select Collins County Justice Center personnel in the proper operation of all equipment shall take place within 3 business days of start up. This training shall be sufficiently thorough so that CCJC personnel may use the equipment correctly and in compliance with the current tank and line monitoring regulations.

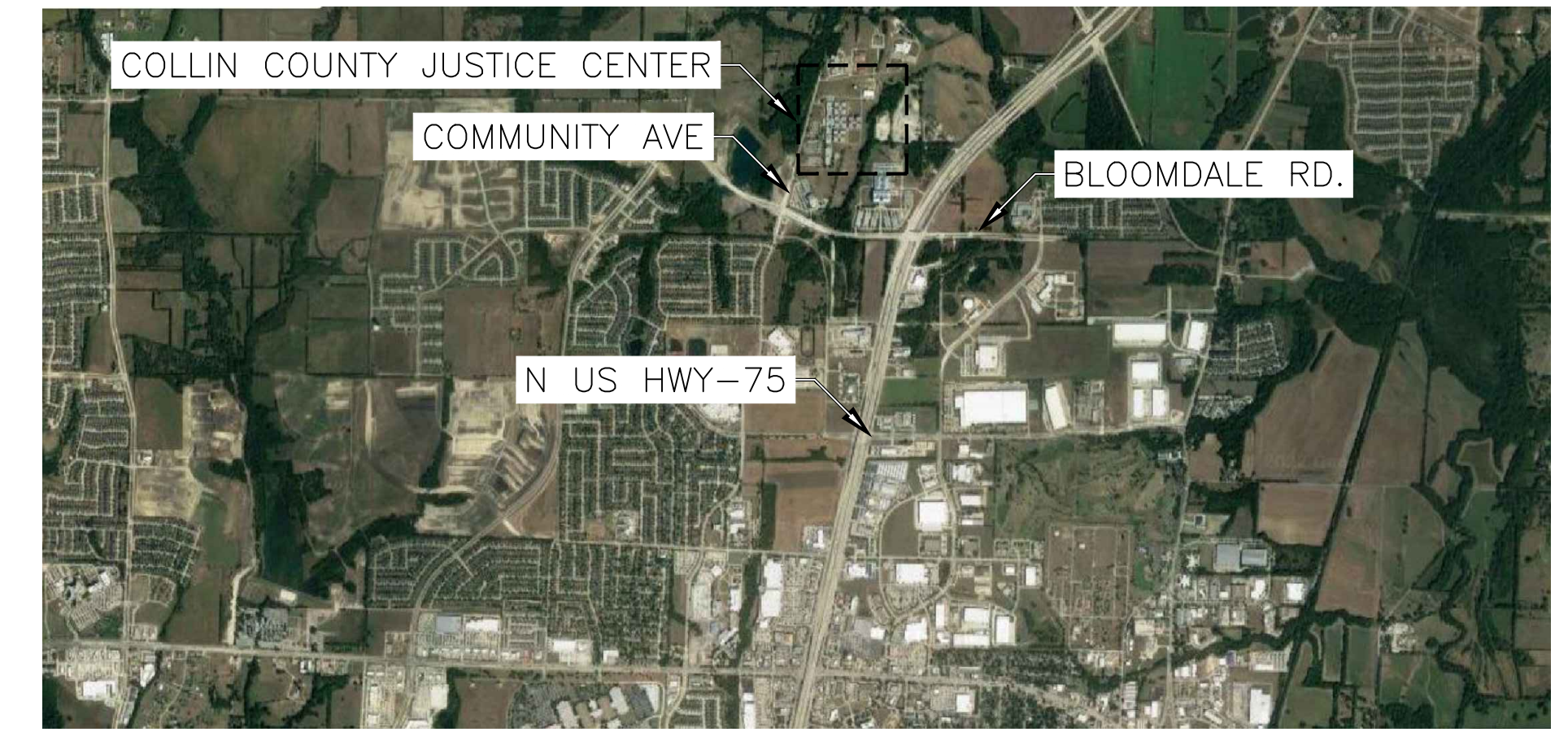


GN-1

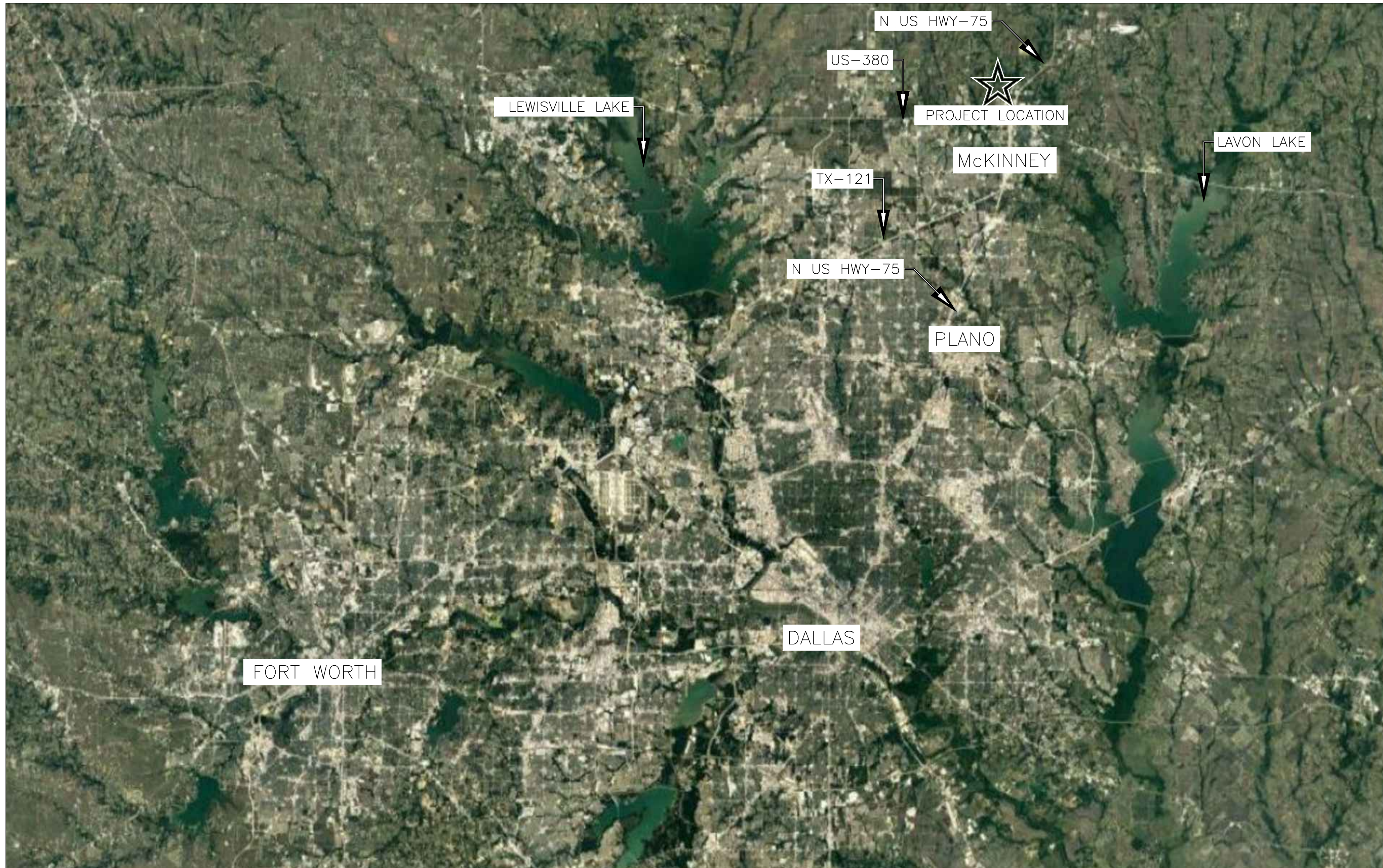
			DESIGNED BY <u>CDS</u>				GENERAL NOTES & SPECIFICATIONS		SHEET NO. 9
			DRAWN BY <u>DAG</u>				OF 14 SHEETS		
			CHECKED BY <u>RNB</u>				FILE NO. 122010		
			REVIEWED BY <u>RNB</u>						
			DATE <u>1-29-2024</u>						
1	2024-6-5	NOTE ADDED	CDSm				COLLIN COUNTY JUSTICE CENTER EMERGENCY GENERATOR FUELING SYSTEMS		
NO	DATE	REVISION	BY		100 NE LOOP 410, STE. 300 SAN ANTONIO, TEXAS 78216 (210) 581-1111 TBPE NO. F-1733 TBPLS NO. 100495-00	Texas Registered Firm No. F-7489 1255 West 15th Street, Suite 300 Plano, TX 75075 469.467.0200 Email: mdengco@md-eng.com Project Number: 221449	4300 COMMUNITY AVENUE MCKINNEY, TEXAS 75071		



COLLIN COUNTY JUSTICE CENTER
 UNDERGROUND STORAGE TANK REMOVAL &
 FUEL PIPE REMEDIATION PLAN
 4300 COMMUNITY AVENUE
 MCKINNEY, TEXAS 75071



VICINITY MAP
 1"=3000'



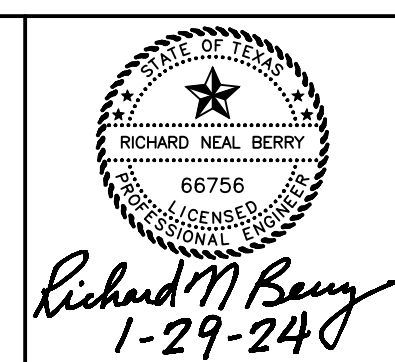
PROJECT LOCATION
 NOT TO SCALE

SCHEDULE OF DRAWINGS

SHEET #	SHEET DESCRIPTION
COVER	VICINITY MAP
S-1	EXISTING SITE LAYOUT
D-1	FUEL PIPE REMEDIATION PLAN
D-2	TANK REMOVAL PLAN
F-1	PROPOSED SITE PLAN
GN-1	GENERAL NOTES & SPECIFICATIONS

NO	DATE	REVISION	BY

DESIGNED BY	CDS
DRAWN BY	DAG
CHECKED BY	RNB
REVIEWED BY	RNB
DATE	1-29-2024

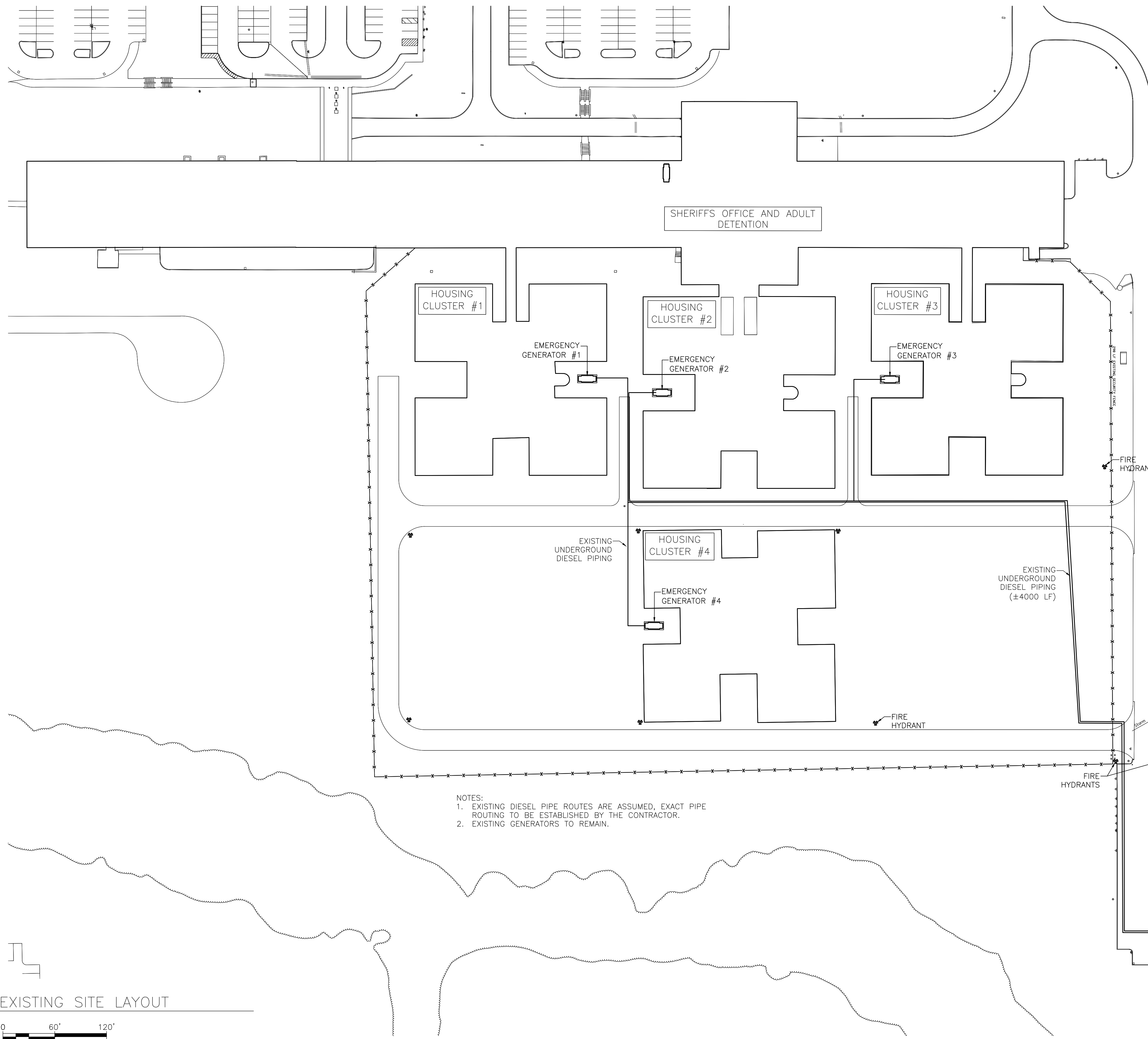
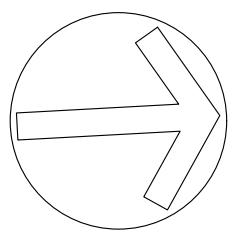


CDS muery
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 100 NE LOOP 410, STE. 300 | SAN ANTONIO, TEXAS 78216
 (210) 581-1111 | TBPE NO. F-1733 | TBPLS NO. 100495-00

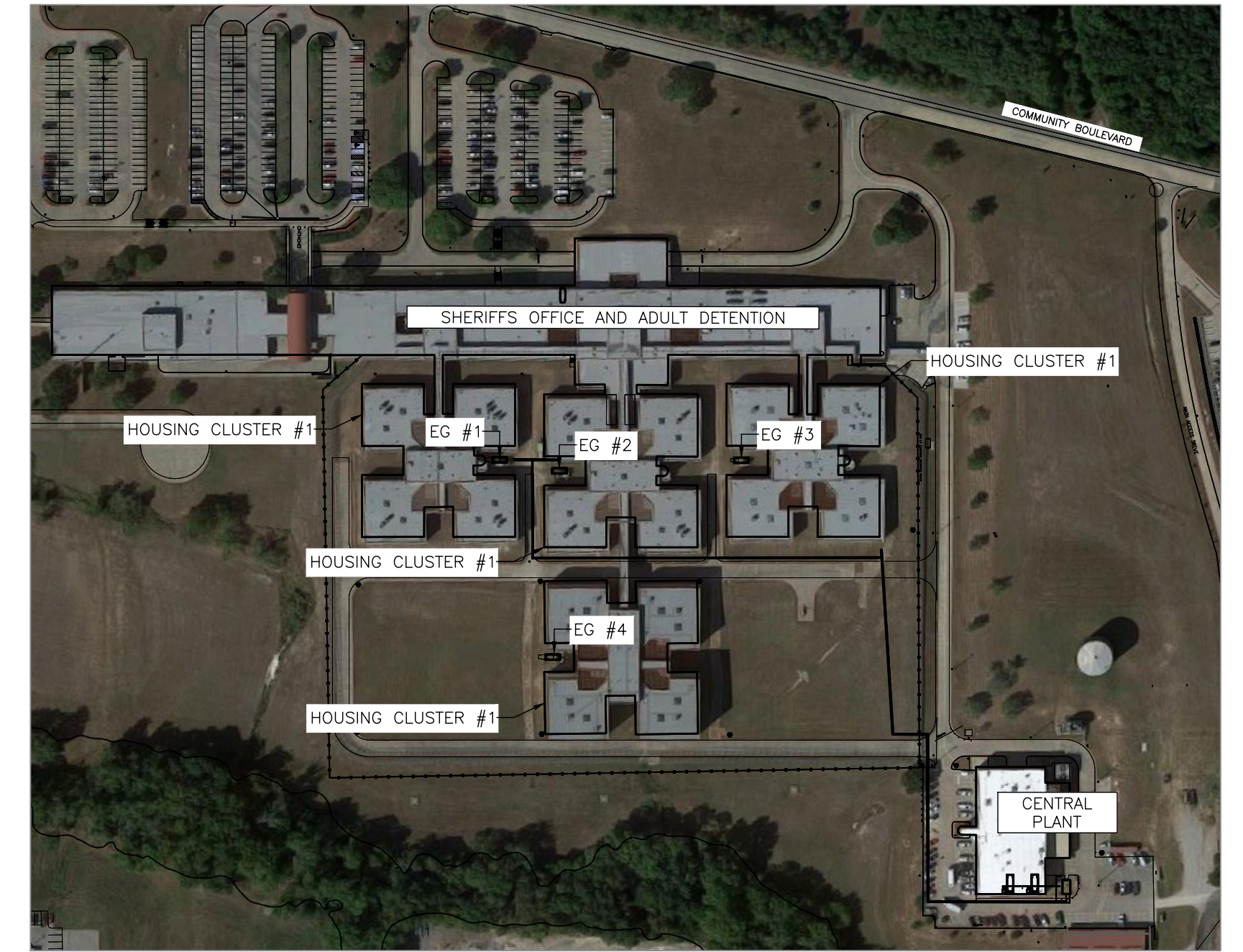
MD ENGINEERING
 Texas Registered Firm No. F-7489
 1255 West 15th Street, Suite 300
 Plano, TX 75075
 469.467.0200
 Email: mdengco@md-eng.com
 Project Number: 221449

COVER PAGE
 COLLIN COUNTY JUSTICE CENTER
 TANK REMOVAL & PIPE REMEDIATION
 4300 COMMUNITY AVENUE
 MCKINNEY, TEXAS 75071

SHEET NO.	1
OF	6 SHEETS
FILE NO.	122010



NOTES:
 1. EXISTING DIESEL PIPE ROUTES ARE ASSUMED, EXACT PIPE ROUTING TO BE ESTABLISHED BY THE CONTRACTOR.
 2. EXISTING GENERATORS TO REMAIN.



AERIAL VIEW

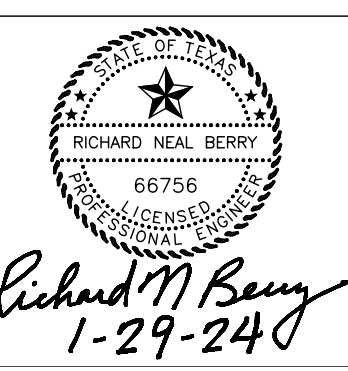
0 200' 400'
 SCALE IN FEET
 1"=200'

EXISTING SITE LAYOUT

0 60' 120'
 SCALE IN FEET
 1"=60'

S-1

DESIGNED BY	CDS		
DRAWN BY	DAG		
CHECKED BY	RNB		
REVIEWED BY	RNB		
DATE	1-29-2024		
NO	DATE	REVISION	BY



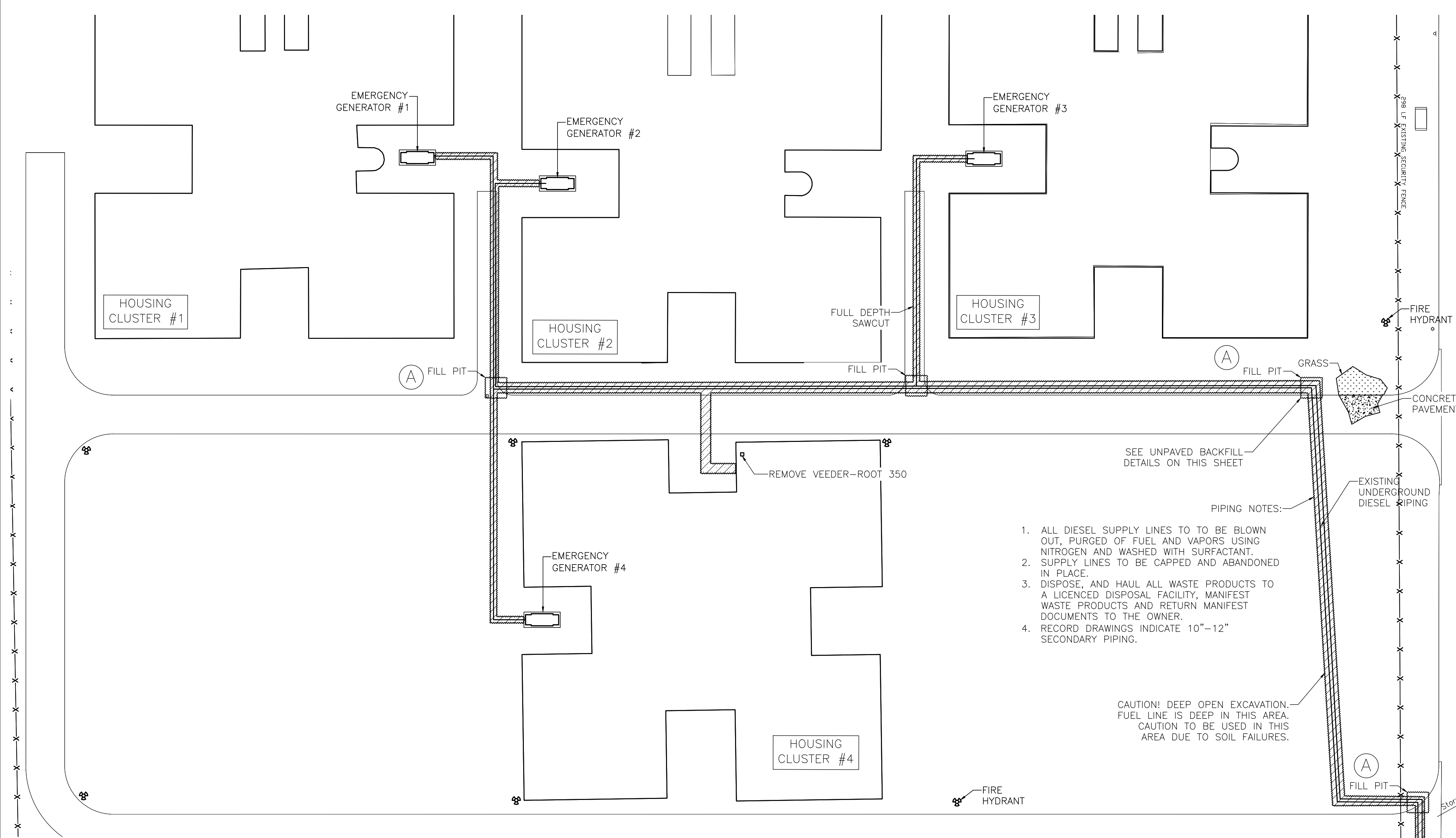
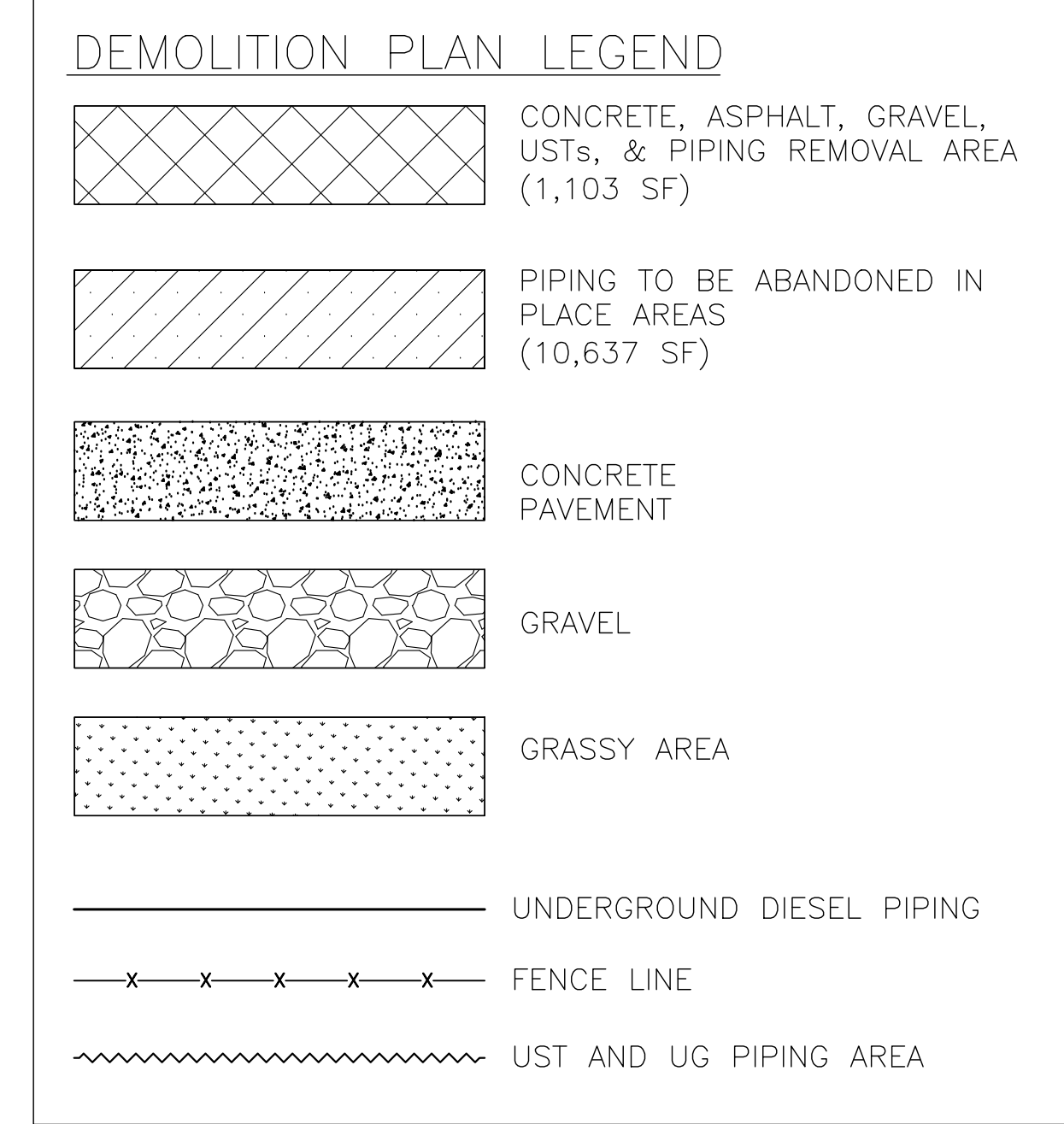
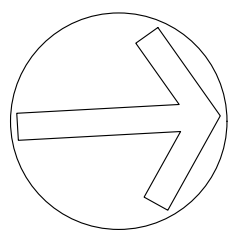
SCDS muery
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 Project Number: 221449

EXISTING SITE LAYOUT

COLLIN COUNTY JUSTICE CENTER
 TANK REMOVAL & PIPE REMEDIATION
 4300 COMMUNITY AVENUE
 MCKINNEY, TEXAS 75071

SHEET NO.	2
OF	6 SHEETS
FILE NO.	122010



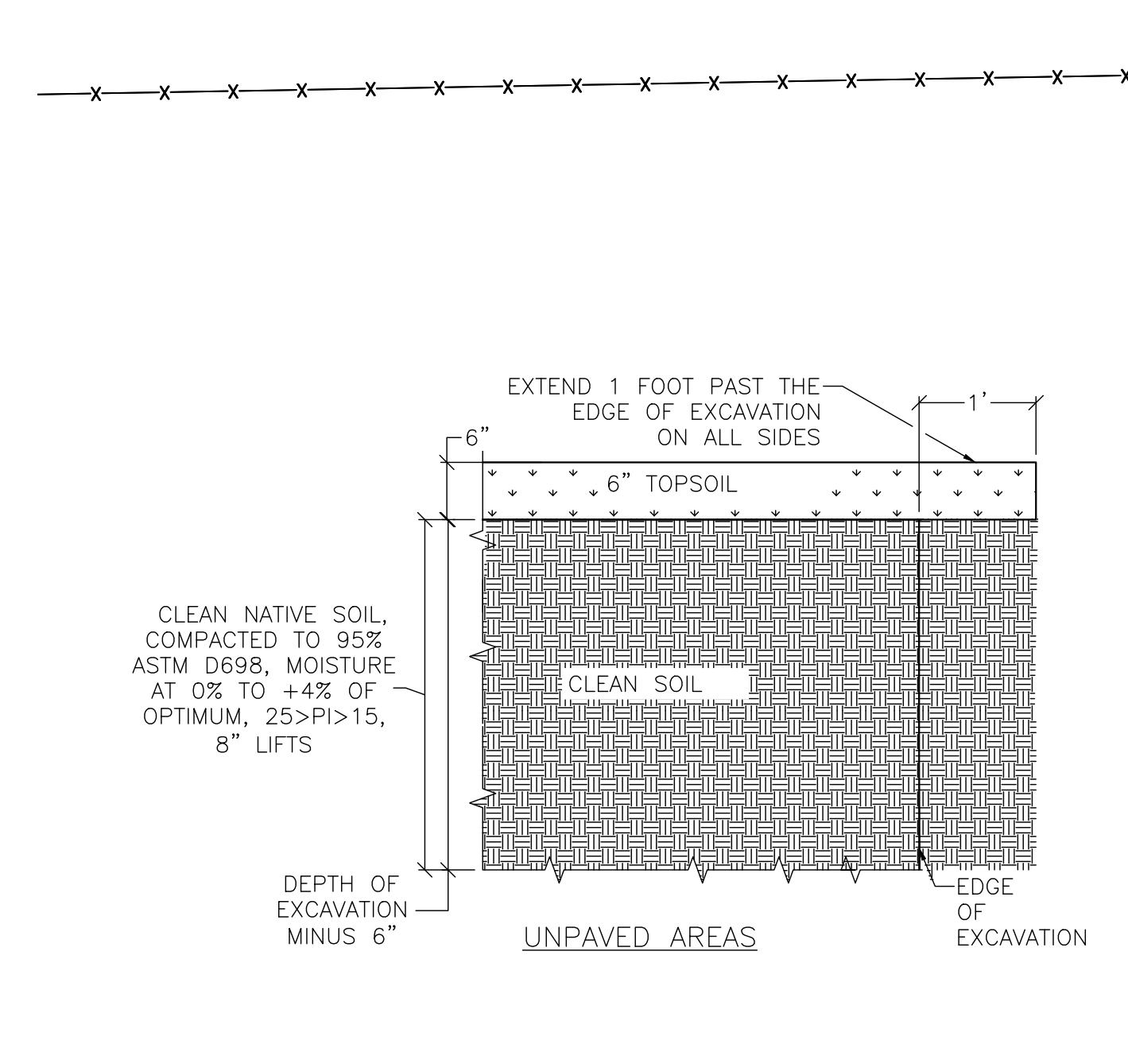
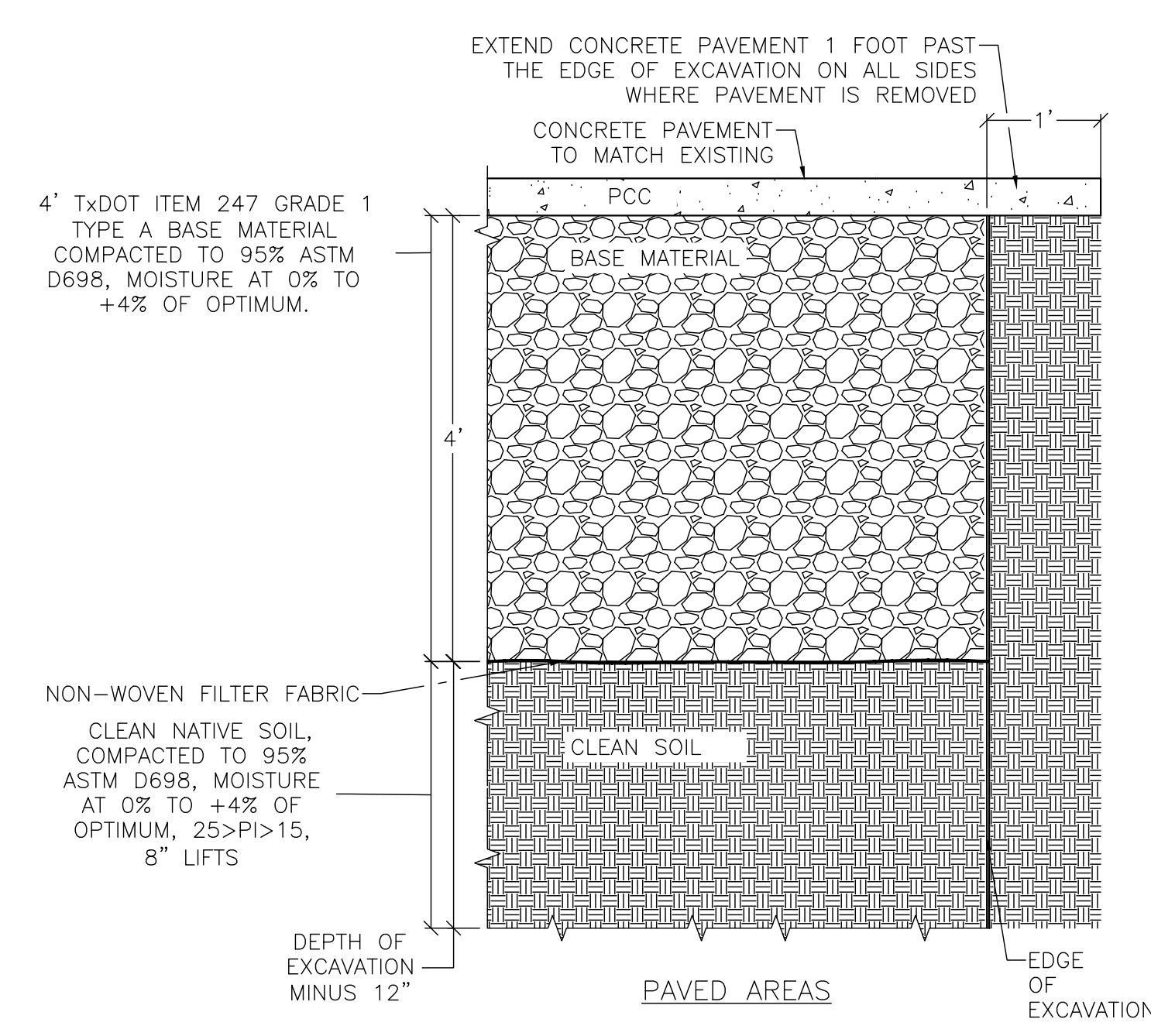
- PIPING NOTES:
- ALL DIESEL SUPPLY LINES TO BE BLOWN OUT, PURGED OF FUEL AND VAPORS USING NITROGEN AND WASHED WITH SURFACTANT.
 - SUPPLY LINES TO BE CAPPED AND ABANDONED IN PLACE.
 - DISPOSE, AND HAUL ALL WASTE PRODUCTS TO A LICENCED DISPOSAL FACILITY, MANIFEST WASTE PRODUCTS AND RETURN MANIFEST DOCUMENTS TO THE OWNER.
 - RECORD DRAWINGS INDICATE 10"-12" SECONDARY PIPING.

CAUTION! DEEP OPEN EXCAVATION. FUEL LINE IS DEEP IN THIS AREA. CAUTION TO BE USED IN THIS AREA DUE TO SOIL FAILURES.

CONTRACTOR NOTES:

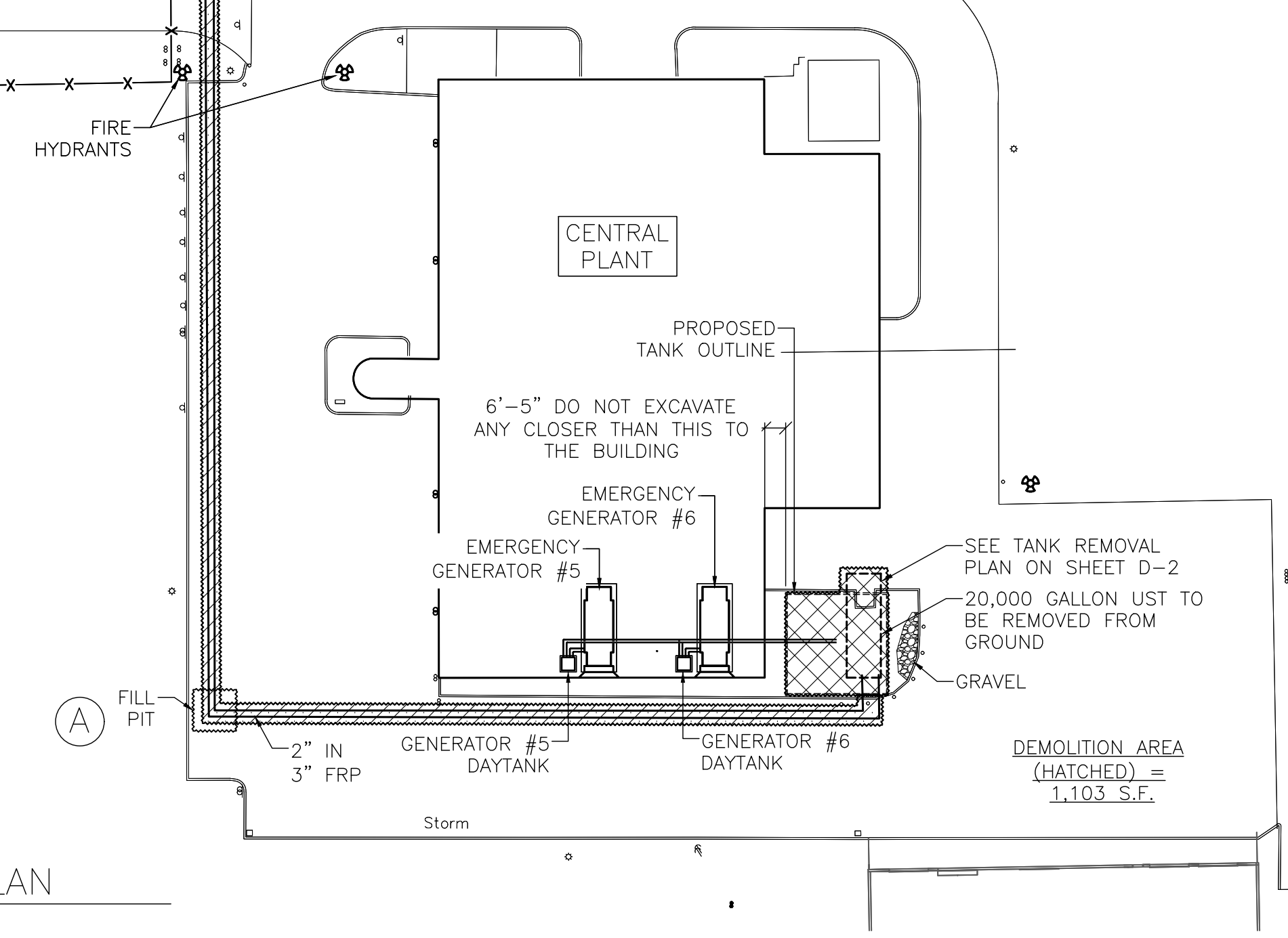
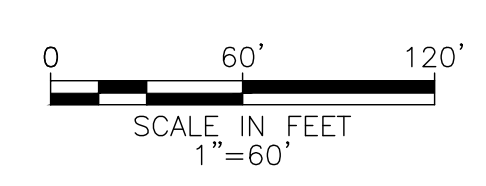
REFERENCE TCEQ RG-411

- CONTRACTOR TO VERIFY THE LOCATION OF ALL UTILITIES IN THE AREA PRIOR TO DIGGING.
- CONTRACTOR TO LOCK OUT/TAG OUT ALL ELECTRICAL TO THIS SYSTEM IN ACCORDANCE WITH 40 CFR 1926.417. THIS INCLUDES, BUT IS NOT LIMITED TO, IMPRESSED CURRENT SYSTEM, PUMP MOTOR, LIGHTS, LEAK DETECTION, AND FUEL MANAGEMENT SYSTEM.
- THE COUNTY IS RESPONSIBLE FOR THE EXCESS FUEL IN THE EXISTING UST. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF THE REMAINING FUEL AND SEDIMENT ON THE BOTTOM OF THE TANK AFTER THE COUNTY REMOVES THE EXCESS FUEL IN THE UST.
- CONTRACTOR TO HAVE TEST SAMPLES 1 FOOT BELOW EVERY 20 FEET. ALL TEST HOLES TO BE PROTECTED UNTIL FILLED BACK IN.



(A) PIPE EXCAVATION BACKFILL DETAIL NOT TO SCALE

OVERALL DEMOLITION PLAN



NO	DATE	REVISION	BY
Δ	1/27/23	CONTRACTORS FUEL NOTES, EXISTING PIPE SIZE NOTE, AND VEEDER ROOT NOTE ADDED	RNB

DESIGNED BY	CDS
DRAWN BY	DAG
CHECKED BY	RNB
REVIEWED BY	RNB
DATE	1-29-2024



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100 NE LOOP 410, STE. 300 | SAN ANTONIO, TEXAS 78216
(210) 581-1111 | TBPE NO. F-1733 | TBPLS NO. 100495-00

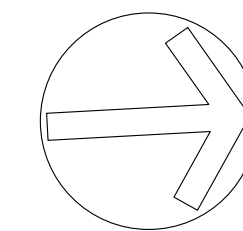
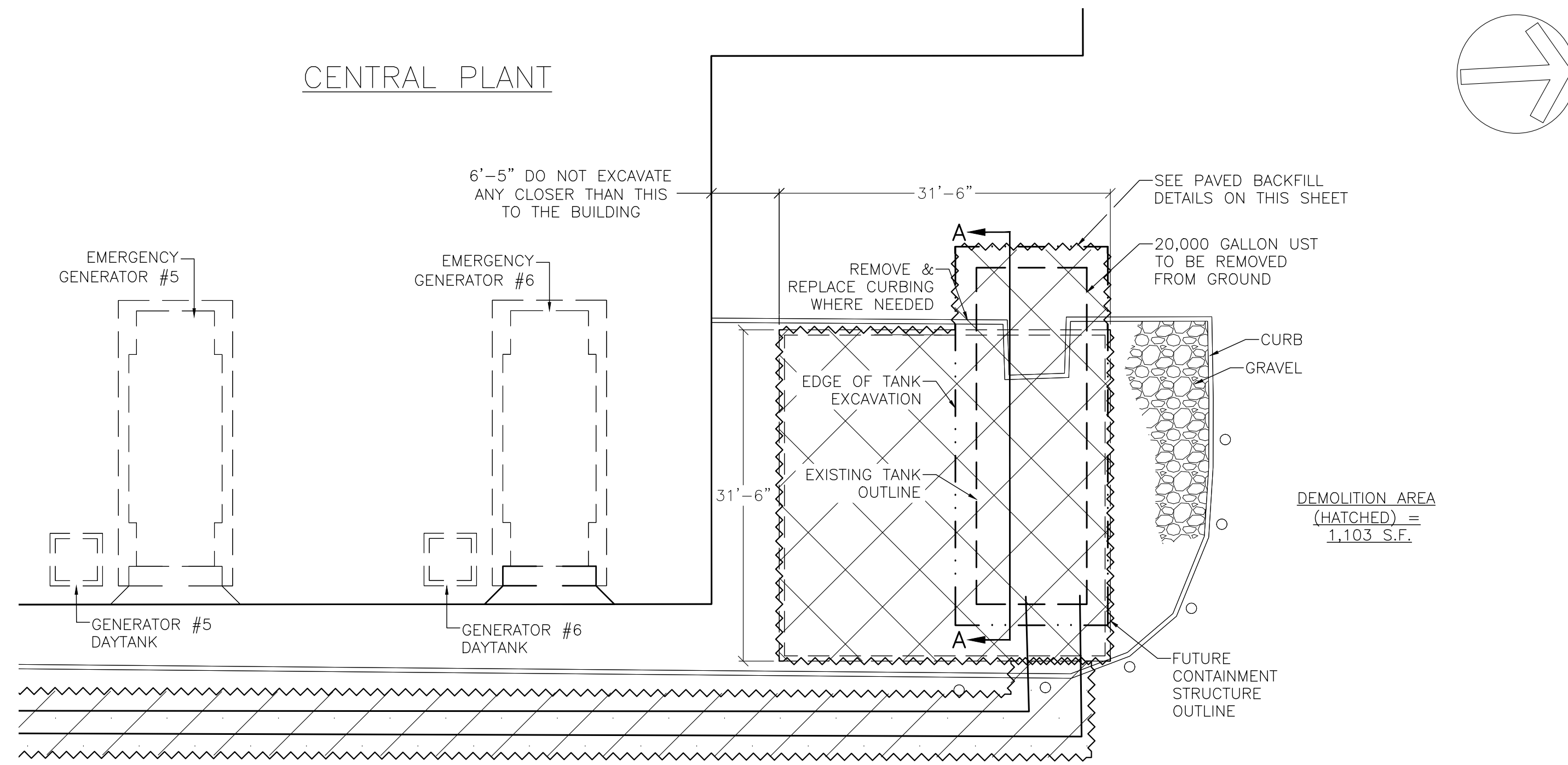
MD ENGINEERING
Texas Registered Firm No. F-7489
1255 West 15th Street, Suite 300
Plano, TX 75075
469.467.0200
Email: mdengco@md-eng.com
Project Number: 221449

FUEL PIPE REMEDIATION PLAN

COLLIN COUNTY JUSTICE CENTER
TANK REMOVAL & PIPE REMEDIATION
4300 COMMUNITY AVENUE
MCKINNEY, TEXAS 75071

SHEET NO.	3
OF	6 SHEETS
FILE NO.	122010

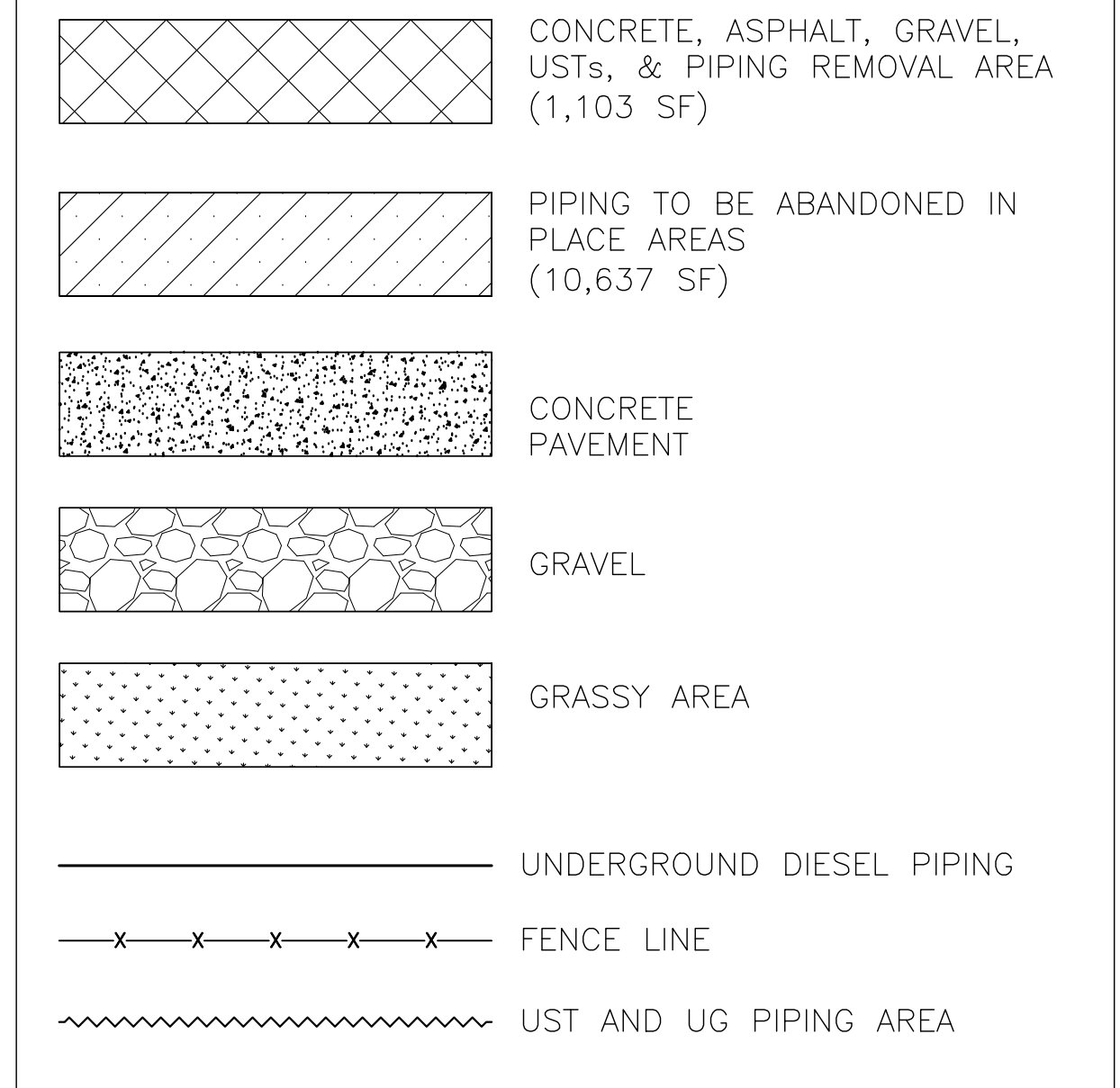
CENTRAL PLANT



CONTRACTOR NOTES:

1. CONTRACTOR TO VERIFY THE LOCATION OF ALL UTILITIES IN THE AREA PRIOR TO DIGGING.
2. CONTRACTOR TO LOCK OUT/TAG OUT ALL ELECTRICAL TO THIS SYSTEM IN ACCORDANCE WITH 40 CFR 1926.417. THIS INCLUDES, BUT IS NOT LIMITED TO, IMPRESSED CURRENT SYSTEM, PUMP MOTOR, LIGHTS, LEAK DETECTION, AND FUEL MANAGEMENT SYSTEM.
3. THE COUNTY IS RESPONSIBLE FOR THE EXCESS FUEL IN THE EXISTING UST. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF THE REMAINING FUEL AND SEDIMENT ON THE BOTTOM OF THE TANK AFTER THE COUNTY REMOVES THE EXCESS FUEL IN THE UST.
4. CONTRACTOR TO HAVE TEST SAMPLES 1 FOOT BELOW EVERY 20 FEET. ALL TEST HOLES TO BE PROTECTED UNTIL FILLED BACK IN.

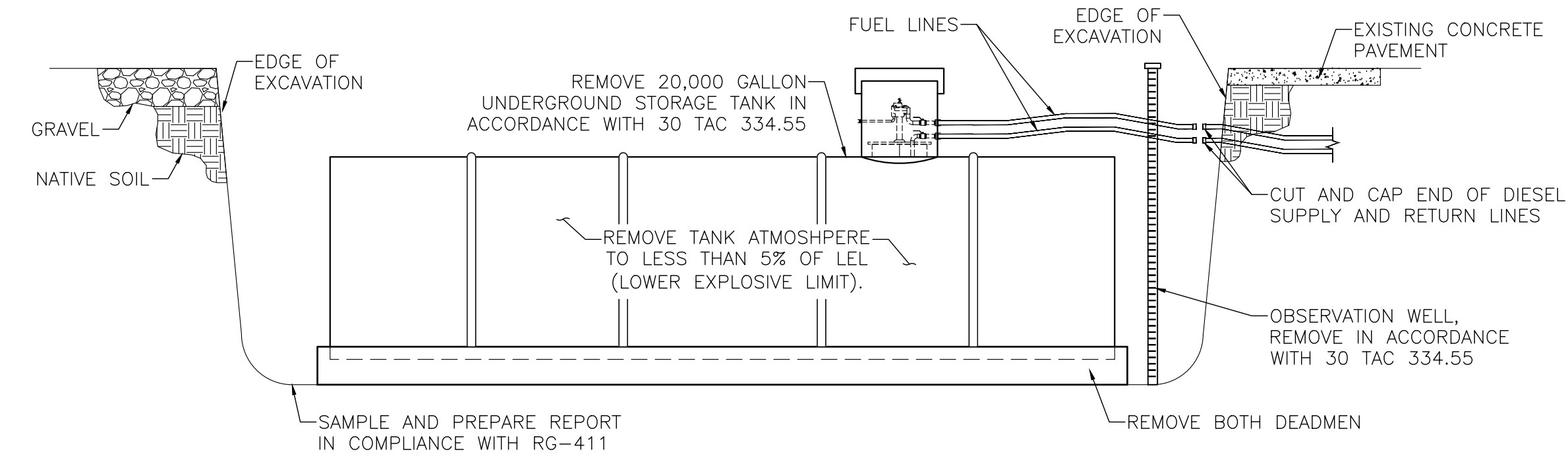
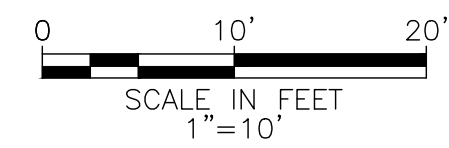
DEMOLITION PLAN LEGEND



UNDERGROUND STORAGE TANK REMOVAL NOTES

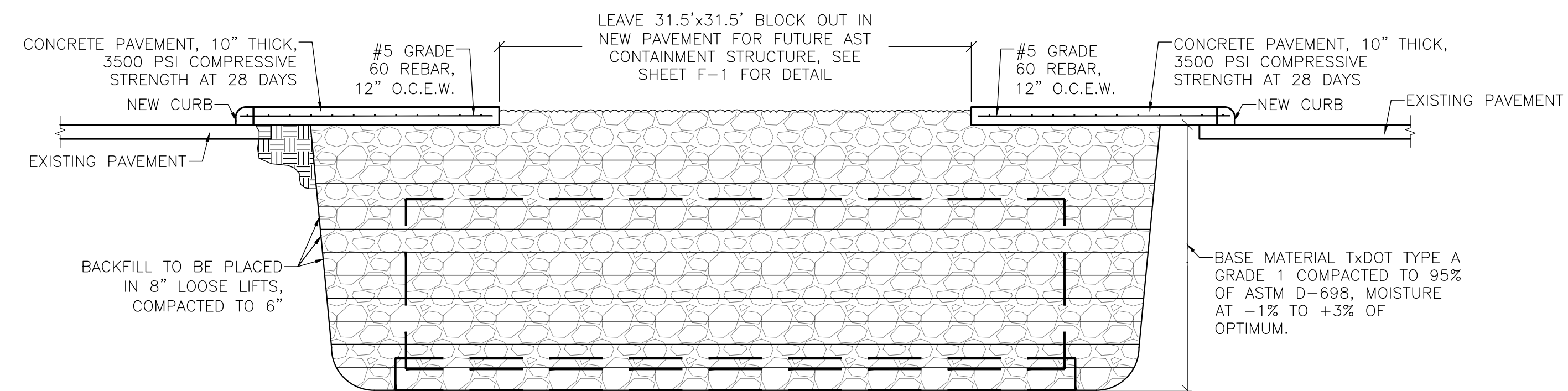
1. REMOVE UNDERGROUND STORAGE TANK, AND ALL ASSOCIATED EQUIPMENT IN ACCORDANCE WITH 30 TAC 334.55, & API RP 1604 THIRD EDITION, MARCH 1996 OR MOST CURRENT EDITION FOR CLOSURE AND REMOVAL OF UNDERGROUND PETROLEUM STORAGE TANKS.
2. EXISTING TANK INTERIOR SHALL BE AT MAX 5% LEL OF PRODUCT IN THE TANK PRIOR TO BEING REMOVED.
3. REMOVE FROM WITHIN THE TANK HOLE ALL TANK SUMPS AND COVERS, PRODUCT PIPING, FITTINGS, HOSES, FILLS, VENTS, CONCRETE & COVERS.
4. EXCAVATE AT LEAST 2' BENEATH UST. SOIL/GROUND WATER SAMPLES TO BE REMOVED AND SUBMITTED FOR ANALYSIS AND RETURNED TO OWNER.
5. REMOVE CONCRETE AND GRAVEL OVER THE UST IN ITS ENTIRETY
6. SHORE OR PROTECT THE SIDES OF THE EXCAVATION FROM FAILURE. DO NOT ENTER AN UNPROTECTED HOLE.
7. MANIFEST THE UST AND DISPOSE OF IT IN ACCORDANCE WITH STATE LAW.

TANK REMOVAL PLAN



UST REMOVAL DETAIL SECTION "A-A"

NOT TO SCALE



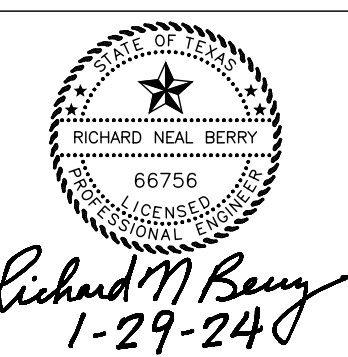
NOTE:
USE EXISTING BACKFILL FROM OLD TANK HOLE IF MATERIAL IS NOT CONTAMINATED. MAKE UP TANK VOLUME WITH CLEAN SELECT FILL.

POST UST REMOVAL BACKFILL & PAVING DETAIL

NOT TO SCALE

D-2

DESIGNED BY	CDS		
DRAWN BY	DAG		
CHECKED BY	RNB		
REVIEWED BY	RNB		
DATE	1-29-2024		
NO	DATE	REVISION	BY
Δ	1/27/23	CONTRACTORS FUEL NOTES, EXISTING PIPE SIZE NOTE, AND VEEDER ROOT NOTE ADDED	RNB



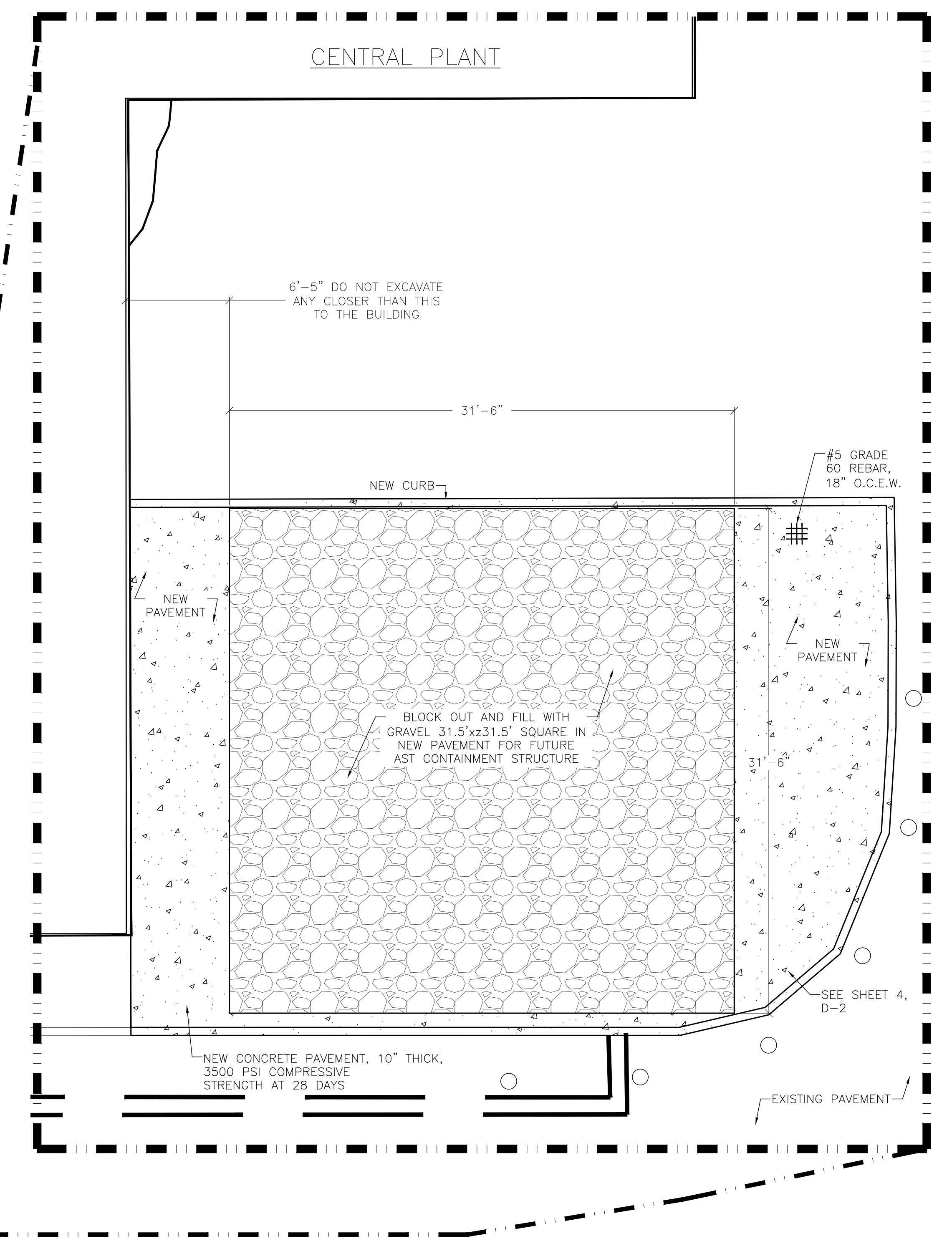
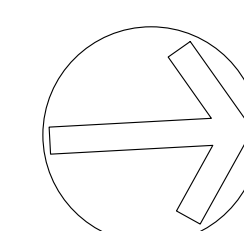
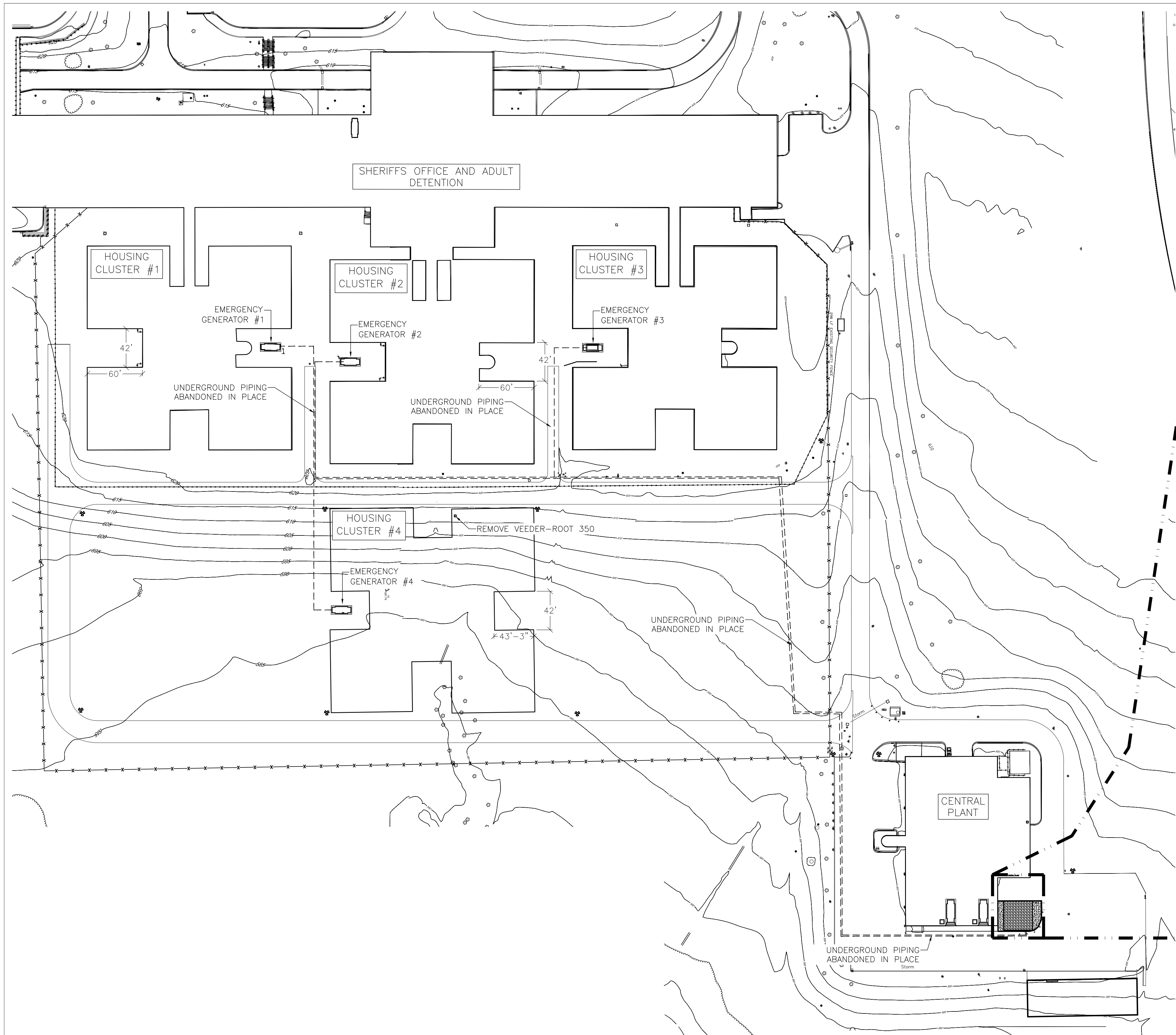
CDS muery
ENGINEERS | SURVEYORS
100 NE LOOP 410, STE. 300 | SAN ANTONIO, TEXAS 78216
(210) 581-1111 | TBPE NO. F-1733 | TBPLS NO. 100495-00

MD ENGINEERING
Texas Registered Firm No. F-7489
1255 West 15th Street, Suite 300
Plano, TX 75075
469.467.0200
Email: mdengco@md-eng.com
Project Number: 221449

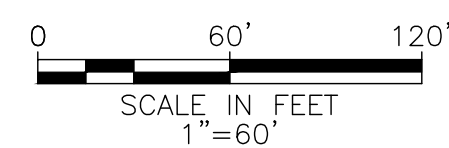
TANK REMOVAL PLAN

COLLIN COUNTY JUSTICE CENTER
TANK REMOVAL & PIPE REMEDIATION
4300 COMMUNITY AVENUE
MCKINNEY, TEXAS 75071

SHEET NO.	4
OF	6 SHEETS
FILE NO.	122010

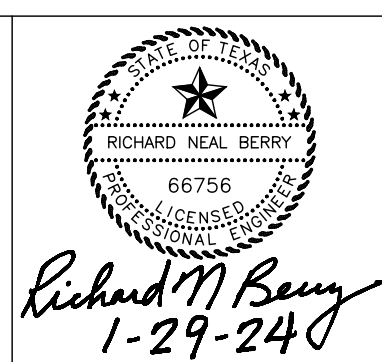


PROPOSED SITE LAYOUT



F-1

DESIGNED BY	CDS		
DRAWN BY	DAG		
CHECKED BY	RNB		
REVIEWED BY	RNB		
DATE	1-29-2024		
NO	DATE	REVISION	BY



SCDS muery
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 (210) 581-1111 | TBPE NO. F-1733 | TBPLS NO. 100495-00

MD ENGINEERING
 Texas Registered Firm No. F-7489
 1255 West 15th Street, Suite 300
 Plano, TX 75075
 469.467.0200
 Email: mdengco@md-eng.com
 Project Number: 221449

PROPOSED SITE LAYOUT

COLLIN COUNTY JUSTICE CENTER
 TANK REMOVAL & PIPE REMEDIATION
 4300 COMMUNITY AVENUE
 MCKINNEY, TEXAS 75071

SHEET NO.	5
OF	6 SHEETS
FILE NO.	122010

**COLLIN COUNTY JUSTICE CENTER
TANK REMOVAL AND PIPE REMEDIATION
GENERAL NOTES AND SPECIFICATIONS**

Underground Storage Tank Removal from Service

References

Texas Commission on Environmental Quality (TCEQ)
40 CFR §334.54 Temporary Removal from Service
40 CFR §334.55 Permanent Removal from Service

American Petroleum Institute (API)
API Recommended Practice 1604, Closure of Underground Petroleum Storage Tanks

TCEQ "B" License Holder
The person that is trained and licensed by the TCEQ in the safe removal of underground storage tanks and associated piping so that contamination of soil and ground water does not occur during the removal of these systems. This "B" license holder must be on site at all times that any removal activities are taking place.

1.0 Definitions

- 1.1 **Temporarily out of Service** - An underground storage tank (UST) that is temporarily out of service. In accordance with the TCEQ, the maximum time that a system may stay Temporarily out of Service is ten months. After the initial ten month period, and by the end of 12 months, it must be brought back into service, or Permanently Removed from Service.
- 1.2 **Permanently removed from Service** - Removal of service by (1) removal from the ground, or (2) abandonment in place in accordance with the TCEQ regulations. To "Abandon in Place" the UST, a major assessment must be completed to ensure that a release has not occurred. If a release has occurred, the UST must be removed from the ground, and contamination levels must comply with the TCEQ rules.
- 1.3 **Purging and Inerting the UST** - Before the UST may be removed from the ground, the tank interior must be safe. If the mixture of fuel and air is between approximately 1.3 and 7.1 percent, an explosion can occur. Purging is performed by placing an **educter** in the grounded tank vent, and sending air through the lines at a high velocity. The eductor will then draw a large volume of air laden with vapors into the atmosphere on the job and out of the tank interior. Inerting the system, for example is performed by placing dry ice, (1.5lbs/per 100 gallons of capacity). Below these values and the mixture will not burn as the mixture is too lean. Above these values and the mixture is too rich. Do not remove the tank(s) from the ground unless the atmosphere in the UST is less than 5% of the LEL.
- 1.4 **Stratification** - Stratification is the variance of product vapor levels taken inside the UST to be removed. Using an explosive gas meter, readings should be taken at quarter points to verify that the entire tank atmosphere is at or below or above the explosive limits.
- 1.5 **Tank Pit Sampling** - This is the process that requires the removal contractor to sample soil and groundwater from the excavation and submit it to a lab to verify that no hydrocarbons are spreading.
- 1.6 **Tank Closure** - This is the completion of the process whereby the USTs are excavated and removed, soil taken to verify that the surrounding soil is clean, backfill is placed in the former excavation material, and no further action is required.

2.0 Procedures

- 2.1 Obtain all required fire and hazardous material permits from the Collin County Fire Prevention Office as well as the City of McKinney Fire Marshal. Remove the soil from the top of the tank and piping being careful not to damage these lines. Pump the USTs as dry as possible and remove as much excess fluid material as possible, then flush and clean the tank and lines. No tank shall be removed until the interior atmosphere is less than 5 percent of the LEL of the fluid previously in the tank.
 - I. **Removal from the Ground**
Verify that the tank interior is clean and that the tank atmosphere is not within the explosive range. When this value is within the safe zone, dry ice should be added at the rate of 1.5 pounds per 100 gallons of capacity to keep the tank vapor safe, after which the contractor should remove the tank. Once on the surface, the tank shall be capped, and loaded for disposal. Do not allow the tank interior to over pressure due to dry ice sublimation. pressure shall be less than 3 psi at all times.

Where approved by the Fire Marshall, placing a FRP AST in a roll off dumpster and crushing them using the backhoe bucket is an even better method as the tank is not hauled while the atmosphere is explosive.
- 2.2 In accordance with 40 CFR §334.55, Permanent Removal from Service, The contractor shall follow up with the soil and ground water report for the tank hole. If the report indicates that the numbers are favorable, the tank hole shall be backfilled in compacted lifts up to the lines and grades in the plans. Compacted lifts shall not be greater than 8 loose inches in depth, and shall be compacted to a minimum 90 percent of ASTM D-698, at 0 to 4 percent of optimum moisture.

General Notes

1. This project includes the removal of one underground storage tank. The existing generators and day tanks will remain as is.
2. All electrical work will be completed in accordance with McKinney codes and regulations, NFPA 30, and the NEC.
3. It shall be the Contractor's responsibility to submit the Texas Commission on Environmental Quality (TCEQ) 30-day construction notification, to notify the appropriate Fire Marshal having jurisdiction, and to obtain any and all permits for the construction of the system.
4. The Contractor is solely responsible for the means and methods of construction. OSHA regulations regarding the construction activities, including but not limited to, trenches and excavations, and operations above four feet shall be strictly followed. All Site Supervisors shall be 40 hour OSHA trained.
5. A site specific Health and Safety Plan shall be prepared and kept on site in case of an emergency. All personnel shall be briefed on the plan and know its location.
6. The site will be kept clean of trash and debris. A Storm Water Pollution Prevention Plan (SWP3) has been developed for this site by others and its provisions shall be followed by the fuel system contractor.
7. The Contractor removing the fuel tank shall be a TCEQ licensed contractor, and this Contractor shall have a TCEQ licensed on site supervisor ("A" license) on site at all times that construction activities are taking place. The licensed on site supervisor shall sign all manifests or other documentation as required for record keeping purposes. This documentation includes, but is not limited to, the TCEQ registration form, AST warranty and installation forms, and "Red Lined" drawings to be used in the development of "Record Drawings."
8. Removal of underground fuel tanks shall be permitted through the Fire Marshal's office by selected contractor.
9. No hazardous waste is expected as there is no apparent source, but hydrocarbon contamination is likely to be encountered during the UST removal. If any contamination is encountered, the contractor shall haul the contaminated soil or groundwater to a licensed facility and return the weight ticket and manifest to the owner. The contractor shall provide a separate line item when bidding for the haul and disposal of hydrocarbon contaminated soils and hydrocarbon contaminated liquids. The pay unit for the disposal of hydrocarbon contaminated soils is by the ton as weighed by certified scales, and the pay unit for hydrocarbon contaminated liquids is by the gallon as measured by a certified truck discharge meter.
10. All required permits to be obtained and paid for by the contractor.
11. The contractor shall communicate with TCEQ, City of McKinney, and the Fire Marshal.

Earthwork Specifications

1. All subgrade under concrete structures shall be prepared such that the PVR is less than one inch.
2. All base material grades shall be prepared and finished to within 0.05 ft of the design grades.
3. Maintain the specified moisture content of the select fill until placement of the concrete is complete. If the surface becomes dry and loose, it must be re-compacted to meet the minimum compaction and moisture requirements.
4. Backfill shall be compacted to 95% ASTM D698, moisture at 0% to +4% of optimum.
5. Backfill shall be TxDOT Item 247 Grade 1 Type A base material, see backfill detail on sheet D-1.

Concrete Specifications

1. All concrete used on this project shall be normal weight concrete having a minimum compressive strength of 4000 psi at 28 days unless otherwise specified. This concrete shall be placed with a maximum slump of 4 inches. The concrete shall be wet cured through the use of burlap or blankets that are continuously kept wet, or by thoroughly and completely coating the concrete with a liquid membrane curing compound. This curing must be placed on the concrete as soon as finishing operations are complete, and damage to the surface will not occur by placing blankets or applying the curing compound.
2. No air entrainment will be used in the concrete on this project.
3. Forms shall be constructed to withstand the placement of the concrete, and shall be sufficiently tight as to prevent leakage of mortar during concrete placement. Forms shall remain in place at least 48 hours after concrete placement. Formed elements shall have square faces and shall be chamfered as specified on the plans.
4. Contraction joints shall be saw cut in neat, straight lines as indicated on the plans, and as soon as initial set has taken place and damage to the surface will not occur.
5. Expansion joints as specified shall be ¾ inch Redwood, with a depth equal to the thickness of concrete adjacent to the joint. The top one inch of all expansion joints shall be sealed with an elastic type sealer that is resistant to gasoline and diesel. Prior to the application of the joint sealer, the joint shall be thoroughly cleaned, carefully removing all loose debris, and the surface clean and dry such that the sealant permanently adheres to the concrete.
6. Steel used in the reinforcement of all concrete on this project shall be sized as indicated on the specific detail, and shall be new, Grade 60 steel. No steel shall rest directly on the soil or any base or fill material, and all shall be supported with chairs or concrete bricks. Clay bricks are not acceptable.
7. Horizontal concrete surfaces shall be finished as a "Broom" finish. The edges of the new pavement shall match the existing pavement grades.

GN-1

		DESIGNED BY <u>CDS</u>				<p align="center">GENERAL NOTES AND SPECIFICATIONS</p>	SHEET NO. 6
		DRAWN BY <u>DAG</u>					OF 6 SHEETS
		CHECKED BY <u>RNB</u>					FILE NO. 122010
		REVIEWED BY <u>RNB</u>					
NO	DATE	REVISION	BY	DATE	1-29-2024	<p align="center">COLLIN COUNTY JUSTICE CENTER TANK REMOVAL & PIPE REMEDIATION 4300 COMMUNITY AVENUE MCKINNEY, TEXAS 75071</p>	

Online Questions & Answers

Event Information

Number: 2024-282 Addendum 2
Title: Construction, Emergency Generator Fueling System Replacement
Type: Invitation for Bid - Construction
Issue Date: 5/14/2024
Question Deadline: 6/14/2024 05:00 PM (CT)
Response Deadline: 6/27/2024 02:00 PM (CT)
Notes: SCOPE OF WORK INCLUDES all materials, labor, equipment and services to produce or be incorporated in such construction. Contract will be a general contract for removal of one underground storage tank and fuel pipe remediation plan. The project also includes the installation of six above ground storage tanks (ASTs) for the storage of diesel fuel. Two of the four proposed diesel ASTs located adjacent to the housing clusters will be 2,500 gallons, and the other two will be 3,000 gallons. The two diesel ASTs adjacent to the Central Plant will both be 12,000 gallons. The existing generators and day tanks will remain as is, and the piping components connecting them together will be replaced as needed with schedule 40 carbon steel piping in the sizes indicated on the plan sheets.

Please log in to view bid documents.

Published Questions

Question: Can you provide an escort to show subcontractors the work inside the fence area prior to bidding?

Answer: At this time there are no additional scheduled site visits, but if there should be, a notification will be sent via eBid.

Asked: 6/13/2024 09:35 AM (CT)

Question: Can you provide as-builts showing existing utilities that could be in the path of this project?

Answer: See Addendum 2 referring to Attachment D - Utility Map.

Asked: 6/13/2024 09:14 AM (CT)

Question: What options are to be included with the Simplex pumps?

Answer: Please see to Addendum 3 for revised drawings with Simplex pump specifications.

Asked: 6/11/2024 09:40 AM (CT)

Question: Is the contractor responsible for transferring any fuel to the generators?

Answer: No, not at this time.

Asked: 6/5/2024 10:30 AM (CT)

Question: If the existing fuel is usable, how and where is it to be stored?

Answer: The contractor will not be required in this contract to test or store the existing fuel. The County will be removing most of the fuel from the existing 20,000 underground storage tank. Prior to removing the tank, the contractor will be required to remove all the sediment and remaining fuel (assumed to be less than 1500 gallons ($\pm 10\%$)). See Addendum 3 for revised drawings.

Asked: 6/5/2024 10:28 AM (CT)

Question: Are there any additional record drawings of the UST and underground fuel pipelines?

Answer: See Addendum 2 referring to Attachment D - Utility Map

Asked: 6/5/2024 10:26 AM (CT)

Question: Will the city or county be charging for permitting?

Answer: The site is inside of the city of McKinney, and McKinney will be charging for the permit.

Asked: 6/3/2024 02:12 PM (CT)

Question: Drawing 6 of 16 detail 3/F-2 and 7 of 16 detail 10/F-3 shows no 9095 Overfill valve on the return line. Drawing 8 of 16 detail 6/F-3 shows a 9095 overfill valve on the return line. Should there be a 9095 on all return lines or leave as drawn?

Answer: No valves on return lines. See Addendum 3 for revised drawings.

Asked: 6/3/2024 02:09 PM (CT)

Question: Drawings 6 of 16, detail 3/F-2 and 7 of 16 detail 10/F-3 call for Aluminum drop tubes which would be consistent with use in Diesel. Drawing 8 of 16 calls for stainless drop tubes. I would recommend those be changed to aluminum also.

Answer: Provide Aluminum drop tubes where applicable.

Asked: 6/3/2024 02:06 PM (CT)

Question: Drawing 7 of 16, Detail 10/F-3, shows a Morrison 334-0300 on the supply line of each 2.5K tank. Drawings 6 of 16 does not show this valve in the same supply line. Is there supposed to be one on each 3K tank as well?

Answer: There should be a foot valve and a priming tee on all supply lines. See Addendum 3 for revised drawings.

Asked: 6/3/2024 01:48 PM (CT)

Question: Drawing 3 of 16 Piping Notes, still has verbiage about a washout and slurry fill. From meeting, this has been changed to blowout lines with inert gas and cap all lines. Please memorialize in your addendum.

Answer: Lines are not required to be filled with slurry. Lines shall be filled with inert gas and capped.

Asked: 6/3/2024 11:40 AM (CT)

Question: Sheet 11 of 16, Equipment Specifications, Item 1 lists 3 models of Simplex pump systems, SPS-25, Super XL-11, and Super XL-39. Drawings 6 or 16 and 7 of 16 show the SPS-25 for all 4 generators systems at the housing clusters and drawing 8 of 16 calls out the Super XL-39 for the central plant. Where is the Super XL-11 supposed to be used or is that not used on the project now?

Answer: SPS 25 is the packaged pump set model, series XL pumps are pump options within. See Addendum 3 for revised drawings. (The 16 sheet plan set indicates references to the plan set from before it was broken into 2 separate plans.)

Asked: 6/3/2024 11:39 AM (CT)

Question: Is a mandatory prebid meeting sign in sheet available?

Answer: Pre-Bid sign in sheets for meetings held on 5/28/2024 and 5/30/2024, have been posted as Attachment A in Addendum No. 1.

Asked: 5/31/2024 10:10 AM (CT)
