

ADDENDUM NO. 1
WATER SYSTEM IMPROVEMENTS
CONTRACT 17-01
RENFRO DRIVE WATER BOOSTER STATION AND
WATER LINE EXTENSIONS
CONTRACT 17-02
250,000 GALLON PEDESPHERE ELEVATED
WATER STORAGE TANK AND FOUNDATION
MADISONVILLE, KENTUCKY
WAUFORD PROJECT NO. 2057

Date of Addendum: Thursday, February 15, 2018
Bid Opening: Tuesday, February 20, 2018, 2:00 P.M. Local Time

1. Detailed Specifications, Section 1, General Scope and Special Provisions – Contracts 17-01 and 17-02, Paragraph 2. Execution and Coordination of the Work, Page DS 1-1:

Revise this paragraph to read as follows:

“2. Execution and Coordination of the Work

It is intended that the work required by these Contracts be accomplished so as to cause the minimum interference with the normal operation of the existing utilities of the City of Madisonville. Connections to existing facilities shall be carefully coordinated with the Owner and Engineer.

Although every effort will be made to cause the minimum amount of interference with the Contractor’s work, the interest of the Owner in regard to existing facilities must take precedence over the construction work; therefore, the right is reserved by the Owner to put any facilities that may be shut down for construction work back into service when an emergency arises.

The Contractor for Contract 17-01 is responsible for performing miscellaneous work on the elevated tank to be constructed as part of Contract 17-02. The Owner intends to issue a delayed work order for Contract 17-02 to accommodate shop fabrication which will likely result in the work on Contract 17-01 being complete before the work on Contract 17-02 is complete. The

Contractor for Contract 17-01 shall re-mobilize at no additional cost to perform the work at the elevated tank.”

2. Detailed Specifications, Section 4. Water Line and Appurtenances - Contracts 17-01 and 17-02, Paragraph 29. Butterfly Valves and Boxes, Page DS 4-20:

Add the following paragraph to this section:

“29. Butterfly Valves and Boxes

Valves 16-inch in diameter shall be butterfly valves. Butterfly valves for pipe line service shall be suitable for 200 psi working pressure, shall be designed for underground service and shall meet the requirements of AWWA Standard C506 as modified hereinafter. Butterfly valves shall be Dezurik or approved equal. Valves may be either of the “short” or “long” laying length type where this meets service conditions.

Butterfly valves shall be furnished with mechanical joint end connections unless flanged connections are requested by the Contractor. The end connections shall be suitable for connections to cast or ductile iron pipe. “Slip-on” joints will not be allowed.

Valve operators shall consist of a geared 2-inch square nut and shall conform to the latest revision of AWWA Standard C504 and shall be designed to hold the valve in any intermediate position between fully open and fully closed without creeping or fluttering. The gear box shall be fully sealed and grease packed. Valve operators shall be capable of resisting without damage an input of at least 300 foot pounds. Valves shall open by turning counter-clockwise. The valve shall be supplied with a THREE (3) PIECE cast iron valve box and a drop cover marked “Water”.”

3. Detailed Specifications, Section 6. 250,000 Gallon Pedosphere Elevated Water Storage Tank and Foundation - Contract 17-02, Paragraph 16. Painting (Coating), Subparagraph d. Interior Coating System, Page DS 6-9:

Revise the first sentence of the paragraph to read as follows:

“The interior water-holding compartment **and interior dry compartments** coating system shall comply with the AWWA D102 Inside Coating System No. 5 (ICS-5) and shall consist of the following components and meet the following specific requirements:”

4. Detailed Specifications, Section 6. 250,000 Gallon Pedosphere Elevated Water Storage Tank and Foundation - Contract 17-02, Paragraph 20, Chain Link Fencing, Page DS 6-15:

Add the following paragraph to this section.

“20. Chain Link Fencing

Chain link fencing for the tank site shall be as specified in Section 5. Paragraph 11. Chain Link Fencing.”

5. Plans, Sheets 10 and 11:

Revise as shown on the attached Plan Sheets.

6. Plans, Sheet 13:

Revise as shown on the attached 8 ½” x 11” sheets.

7. Plans, Sheet 10A:

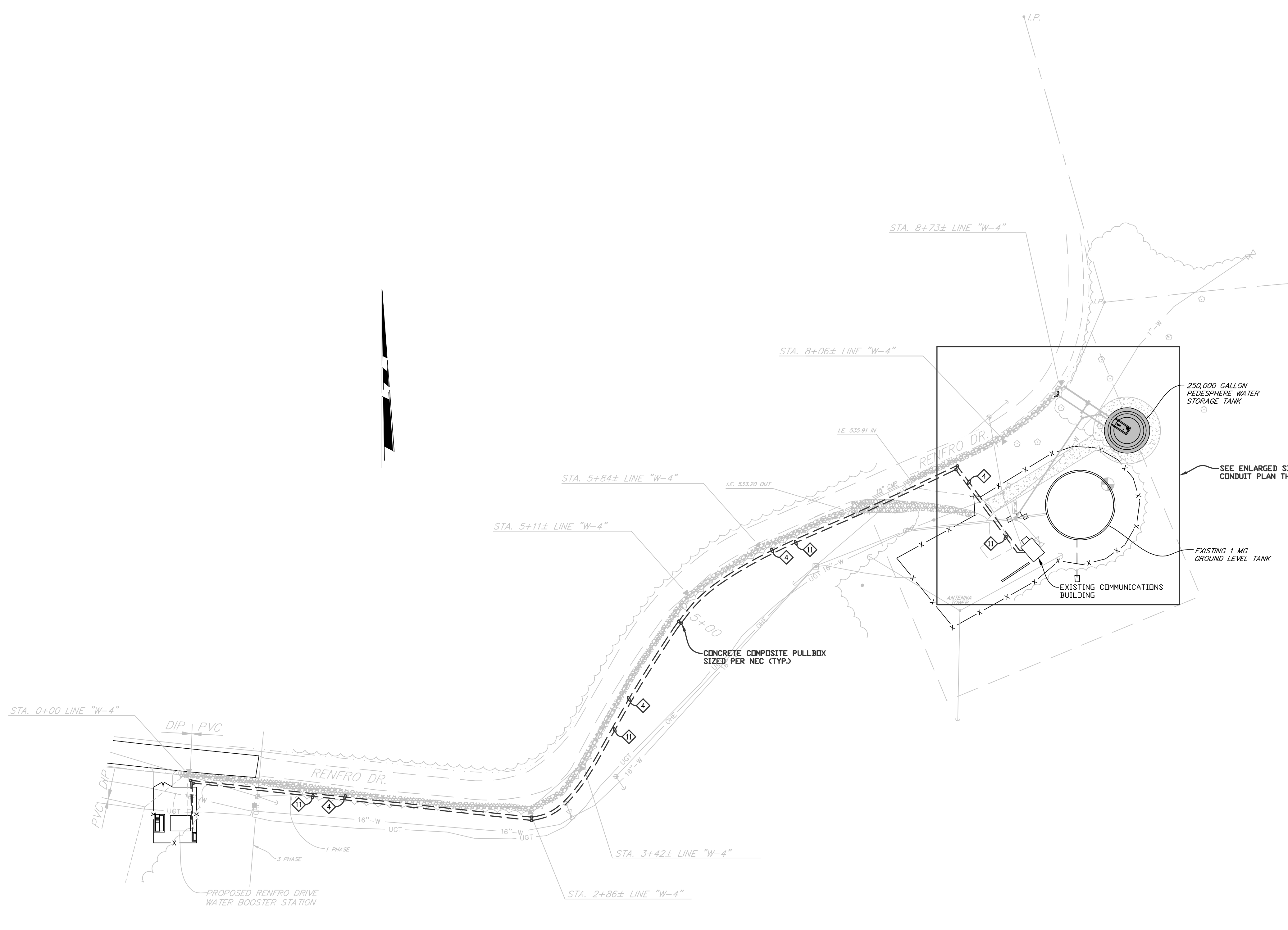
Add attached Sheet 10A.

J. R. WAUFORD & COMPANY,
CONSULTING ENGINEERS, INC.

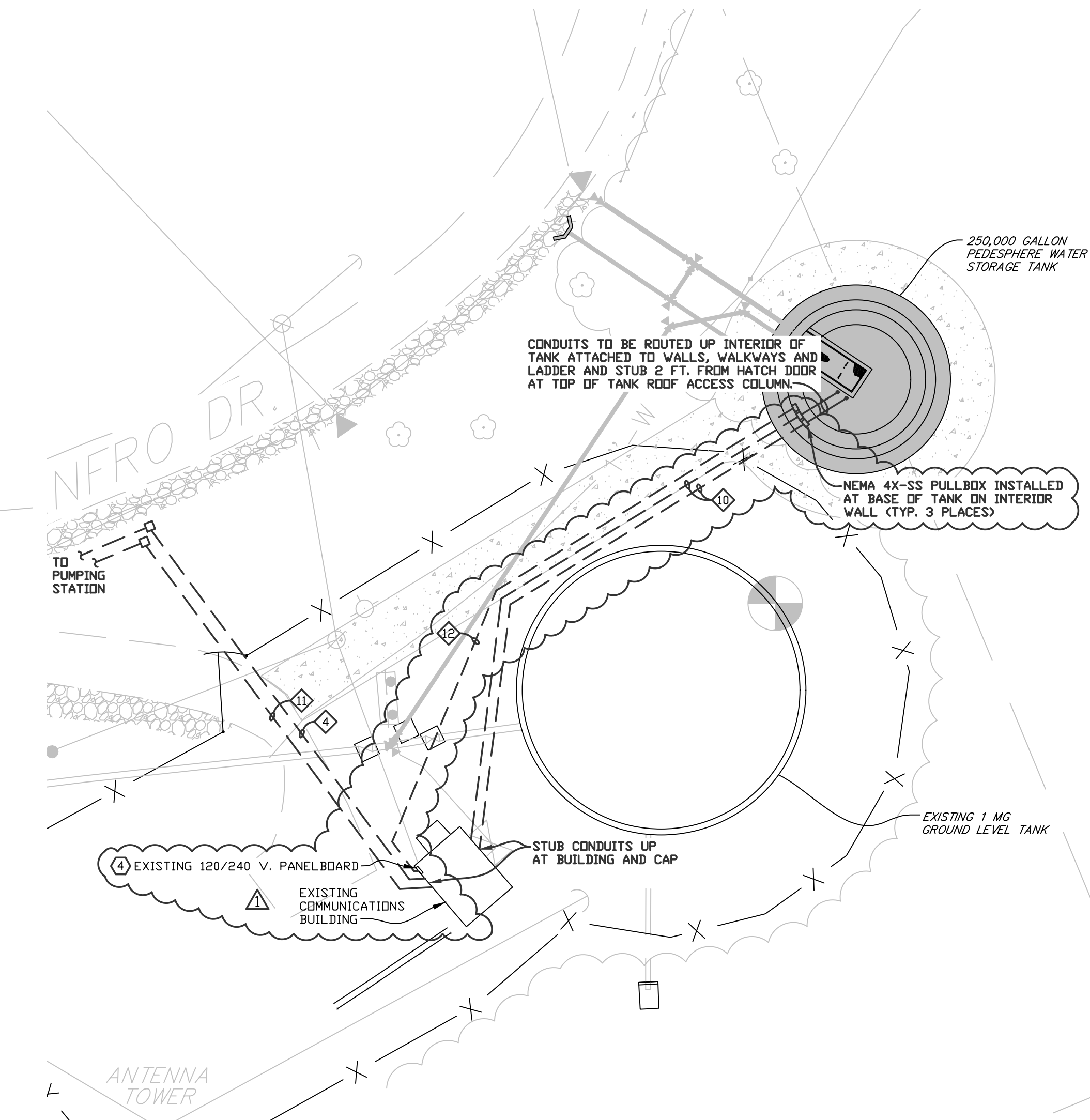


J. Gregory Davenport, P.E.
Kentucky License No. 22752

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SITE ELECTRICAL CONDUIT PLAN
SCALE: 1" = 50'

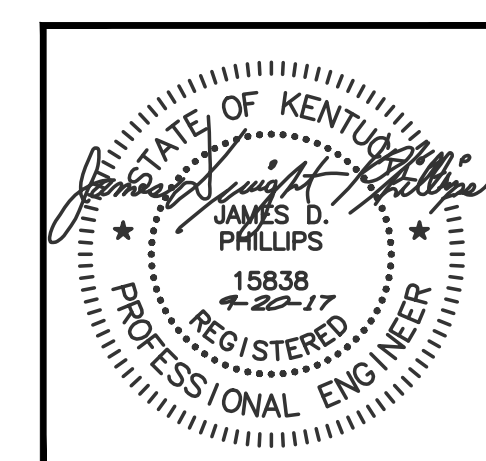


ENLARGED SITE ELECTRICAL CONDUIT PLAN
SCALE: 1" = 20'

NOTES:

- ① THE CONTRACTOR SHALL REFER TO THE CIVIL, STRUCTURAL, AND PIPING PLANS FOR ALL DIMENSIONS, SECTIONS, DETAILS, ELEVATIONS, VOLTAGE REQUIREMENTS AND PHYSICAL SIZE OF ALL EQUIPMENT FURNISHED BY OTHER TRADES. COORDINATE AND ADJUST ALL ELECTRICAL INSTALLATIONS ACCORDINGLY.
- ② ALL CONDUIT ROUTING SHOWN IS DIAGRAMMATIC. THE CONTRACTOR SHALL COORDINATE ALL OF THE RACEWAY INSTALLATIONS WITH OTHER TRADES TO AVOID INTERFERENCES WITH STRUCTURES AND PIPING.
- ③ THE CONTRACTOR IS TO CONFIRM ALL SERVICE ENTRANCE INSTALLATIONS WITH THE LOCAL POWER COMPANY AND COMPLY WITH ALL NECESSARY REQUIREMENTS.
- ④ FURNISH AND INSTALL 3 EA. - 20 A, 1 POLE, 120 V. CKT. BREAKERS FOR TANK LIGHTING CIRCUITS.

SHEET 10 OF 14		WATER SYSTEM IMPROVEMENTS CONTRACT 17-01 RENFRO DRIVE WATER BOOSTER STATION AND WATER LINE EXTENSIONS	
REVISIONS		SITE ELECTRICAL CONDUIT PLAN AND ENLARGEMENT	
2-15-18 ADDENDUM NO. 1		FOR MADISONVILLE, KENTUCKY	
PROJECT NUMBER 2057		SCALE AS SHOWN	DESIGNED MLK
DATE SEPT. 2017		DRAWN TWR	CHECKED JDP
17048SHT10R1		WAUFORD <small>J. R. Wauford & Company, Consulting Engineers, Inc. Nashville, Tennessee (615) 883-3243 www.jrwauford.com</small>	



PHILLIPS
ENGINEERING, INC.
ELECTRICAL DESIGN
P.O. BOX 585
617 S. FIRST ST.
UNION CITY, TN 38261
(731) 885-9532

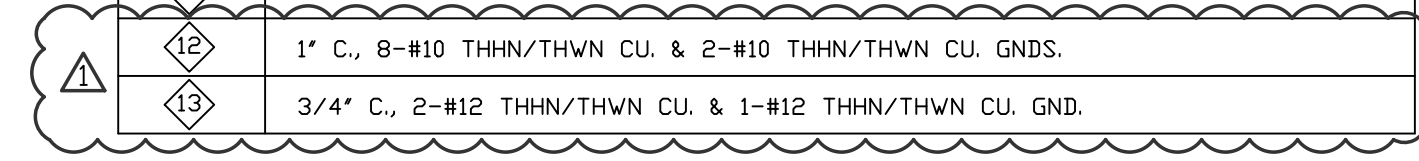
TYPE: SERVICE: 277/480 V., 3 PH., 4 W.		PANEL "A"		BUS AMPACITY: 200 A.					
POLES: 3				MAINS: M.L.D.					
LOCATION: EQUIPMENT STAND		* UNLESS OTHERWISE NOTED, SIZE CONDUITS PER NEC. BASE ON TYPE THHN.		NEUTRAL: FULL					
☒ SURFACE ☐ FLUSH				SHORT CIRCUIT RATING: 22,000 @					
				☐ NEMA 1 ☒ NEMA 3R					
CKT. KVA	CB TRIP	CONDUIT	WIRE	LOAD NAME	LOAD NAME	WIRE	CONDUIT	CB TRIP	CKT. KVA
ΦA	ΦB	ΦC							
21.0	—	200/3	2 1/2"	#3/0	PUMPING STATION CONTROL PANEL	1	2	MINI POWER CENTER "MPC"	—
—	21.0	—	—	#3/0	PUMPING STATION CONTROL PANEL	3	4	MINI POWER CENTER "MPC"	—
—	—	21.0	—	#3/0	PUMPING STATION CONTROL PANEL	5	6	SPARE	—
—	—	—	—	—	SPACE	7	8	SPACE	—
—	—	—	—	—	SPACE	9	10	SPACE	—
—	—	—	—	—	SPACE	11	12	SPACE	—
—	—	—	—	—	SPACE	13	14	SPACE	—
—	—	—	—	—	SPACE	15	16	SURGE PROTECTION DEVICE	—
—	—	—	—	—	SPACE	17	18	SURGE PROTECTION DEVICE	—
—	—	—	—	—	SPACE	19	20	SURGE PROTECTION DEVICE	—
21.0	21.0	21.0	TOTAL CONNECTED KVA: 76.1			—	—	—	6.8 6.3

NOTE: (1) PROVIDE CIRCUIT BREAKER LOCKING MECHANISMS AS REQUIRED.

TYPE: SERVICE: 120/240 V., 1 PH., 3 W.		PANEL "MPC"		BUS AMPACITY: 100 A.					
POLES: 2				MAINS: 70 A.					
LOCATION: MINI POWER CENTER		* UNLESS OTHERWISE NOTED, SIZE CONDUITS PER NEC. BASE ON TYPE THHN.		NEUTRAL: FULL					
☒ SURFACE ☐ FLUSH				SHORT CIRCUIT RATING: 10,000					
				☐ NEMA 1 ☒ NEMA 3R					
CKT. KVA	CB TRIP	CONDUIT	WIRE	LOAD NAME	LOAD NAME	WIRE	CONDUIT	CB TRIP	CKT. KVA
ΦA	ΦB	ΦC							
1.5	—	30/2	1"	#10	GENERATOR HEATER	1	2	GENERATOR BATTERY CHARGER	—
—	1.5	—	—	#10	GENERATOR HEATER	3	4	SPARE	—
4.8	—	50/2	1 1/4"	#6	RV RECPT.	5	6	SPARE	—
—	4.8	—	—	#6	RV RECPT.	7	8	SPARE	—
—	—	—	—	—	SPACE	9	10	SPACE	—
—	—	—	—	—	SPACE	11	12	SPACE	—
6.3	6.3	TOTAL CONNECTED KVA: 13.1			—	—	—	—	0.5

NOTE: (1) PROVIDE CIRCUIT BREAKER LOCKING MECHANISMS AS REQUIRED.

DESIG.	DESCRIPTION
①	2 1/2" C., 4-#3/0 THHN/THWN CU.
②	2 1/2" C., 4-#3/0 THHN/THWN CU. & 1-#4 THHN/THWN CU. GND.
③	2 1/2" C., 3-#3/0 THHN/THWN CU. & 1-#6 THHN/THWN CU. GND.
④	2" C., (EMPTY WITH PULLWIRE)
⑤	3/4" C., 2-#8 THHN/THWN CU. & 1-#10 THHN/THWN CU. GND.
⑥	1 1/4" C., 3-#6 THHN/THWN CU. & 1-#10 THHN/THWN CU. GND.
⑦	NOT USED
⑧	1" C., 4-#10 THHN/THWN CU. & 2-#10 THHN/THWN CU. GND.
⑨	1" C., 6-#12 THHN/THWN CU., 2 EA. - 2/C-#16 AWG TWISTED PAIR, SHIELDED CABLES & 1-#12 THHN/THWN CU. GND.
⑩	1" C., (EMPTY WITH PULLWIRE)
⑪	2 1/2" C., (EMPTY WITH PULLWIRE)
⑫	1" C., 8-#10 THHN/THWN CU. & 2-#10 THHN/THWN CU. GND.
⑬	3/4" C., 2-#12 THHN/THWN CU. & 1-#12 THHN/THWN CU. GND.

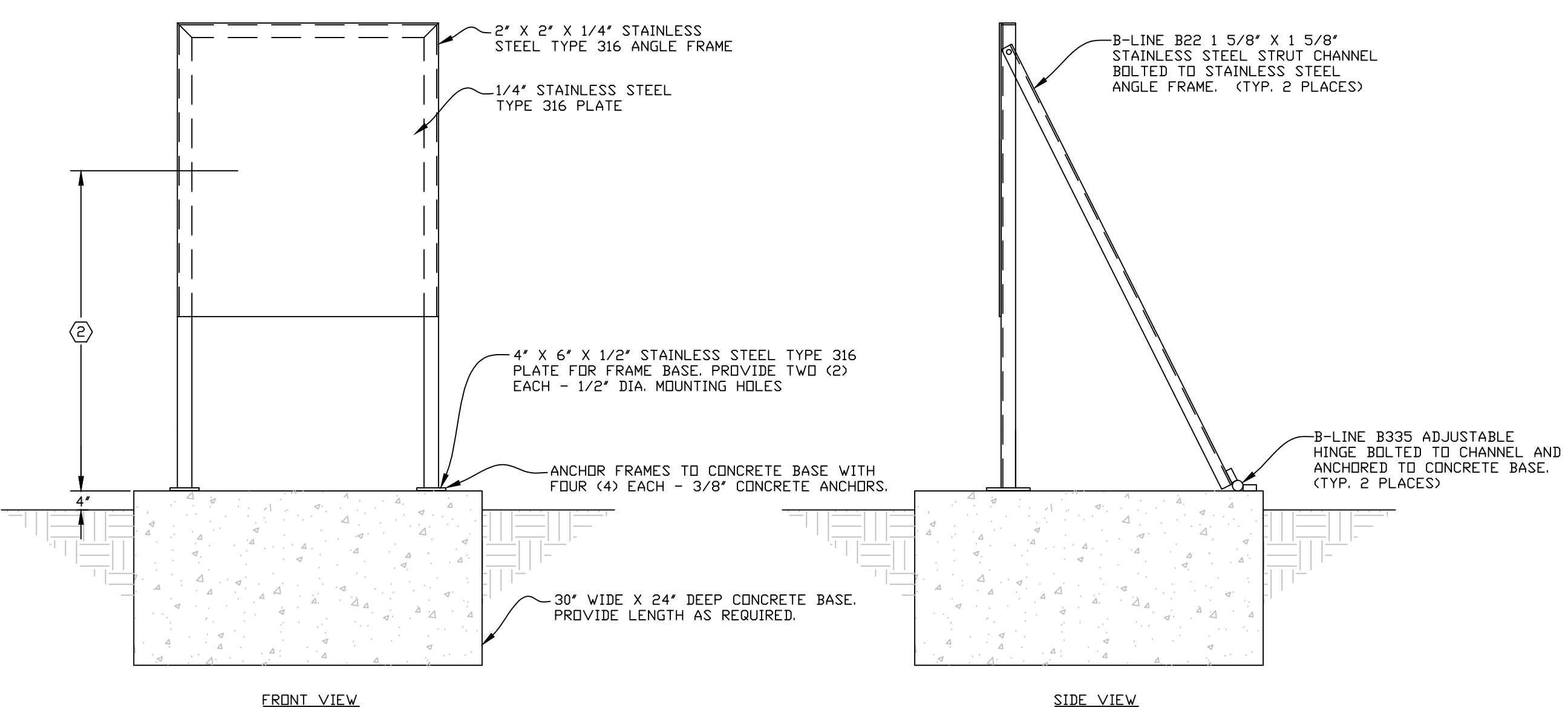


SYMBOL	DESCRIPTION
(Symbol)	CONDUIT CONCEALED IN WALL OR CEILING
(Symbol)	CONDUIT CONCEALED IN FLOOR SLAB OR UNDERGROUND
(Symbol)	CONDUIT EXPOSED ON WALL OR CEILING
(Symbol)	FLEXIBLE CONDUIT
(Symbol)	WEATHERPROOF CABLE
(Symbol)	JUNCTION BOX
(Symbol)	SINGLE POLE SWITCH, 20 AMP, MTD. HT. PER SPECS.
(Symbol)	SWITCH - 3 WAY, 20 AMP, MTD. HT. PER SPECS.
(Symbol)	DOUBLE POLE, SINGLE THROW SWITCH, 20 AMP, MTD. HT. PER SPECS.
(Symbol)	MANUAL MOTOR SWITCH W/ THERMAL PROTECTION
(Symbol)	PHOTOELECTRIC CELL
(Symbol)	DUPLEX RECEPTACLE - MTD. HT. PER SPECS.
(Symbol)	DOUBLE DUPLEX RECEPTACLE - MTD. HT. PER SPECS.
(Symbol)	WEATHERPROOF DUPLEX RECEPTACLE
(Symbol)	DUPLEX RECEPTACLE, GROUND FAULT INTERRUPTER TYPE
(Symbol)	DUPLEX RECEPTACLE, MTD. ABOVE COUNTER
(Symbol)	DOUBLE DUPLEX RECEPTACLE, MTD. ABOVE COUNTER
(Symbol)	230 VOLT RECEPTACLE
(Symbol)	DUPLEX RECEPTACLE - ISOLATED GROUND
(Symbol)	FLOOR RECEPTACLE
(Symbol)	FLOOR TYPE TELEPHONE OUTLET
(Symbol)	FLOOR TYPE TELEPHONE - COMPUTER/DATA OUTLET
(Symbol)	TELEPHONE OUTLET - MTD. HT. & CONDUIT SIZE PER SPECS.
(Symbol)	TELEPHONE OUTLET - MTD. ABOVE COUNTER, COND. SIZE PER SPECS.
(Symbol)	TELEPHONE OUTLET - WALL MOUNTED, CONDUIT SIZE PER SPECS.
(Symbol)	TELEVISION SYSTEM ANTENNA OUTLET, 3/4" C. TO ACCESSIBLE CEILING SPACE
(Symbol)	TELEVISION ANTENNA JACK
(Symbol)	COMPUTER TERMINAL OUTLET, 3/4" C. TO ACCESSIBLE CEILING SPACE
(Symbol)	SURFACE MOUNTED FIXTURE W/ IDENTIFICATION, INCAND., PL FLUOR., OR H.I.D.
(Symbol)	WALL BRACKET FIXTURE, INCANDESCENT OR PL FLUOR.
(Symbol)	RECESSED FIXTURE, INCANDESCENT, PL TYPE FLUOR., OR H.I.D.
(Symbol)	FLUORESCENT FIXTURE, SURFACE OR RECESSED, 2X2, 1X4, 2X4
(Symbol)	FLUORESCENT FIXTURE, OPEN TUBE STRIP, SURFACE MTD.
(Symbol)	DISCONNECT SWITCH, FUSIBLE, 30 AMP / 3 POLE
(Symbol)	DISCONNECT SWITCH, NON-FUSIBLE, 30 AMP / 3 POLE
(Symbol)	DISCONNECT SWITCH, NON-FUSIBLE, RAIN-TIGHT, 30 AMP / 3 POLE
(Symbol)	EXHAUST FAN
(Symbol)	DISTRIBUTION PANEL
(Symbol)	EMERGENCY LIGHT
(Symbol)	EMERGENCY LIGHT / EXIT LIGHT COMBINATION
(Symbol)	EXIT LIGHT
(Symbol)	OUTSIDE LIGHTING FIXTURE, POLE TYPE
(Symbol)	MOTOR CONTROLLER OR STARTER
(Symbol)	COMBINATION STARTER AND DISCONNECT
(Symbol)	MOTOR W/ APPROXIMATE HORSEPOWER
(Symbol)	LIGHTING PANEL BOARD
(Symbol)	WOOD POLE
(Symbol)	DESIGNATES NOTE NUMBER
(Symbol)	DUCT SMOKE DETECTOR

DIESEL ENGINE--GENERATOR SET SCHEDULE	
CONTINUOUS STANDBY RATING:	125 KW AT 0.80 PF, 150 KVA.
VOLTAGE & FREQUENCY:	277/480 VOLT, 3 PH., 4 WIRE, 60 HERTZ.
VOLTAGE REGULATION:	±0.5%
FREQUENCY VARIATION:	±0.25%
SKID MOUNTED FUEL TANK & SIZE:	DOUBLE WALL, 48 HOUR FULL LOAD CAPACITY, SUB BASE, WITH LEAK DETECTOR
FUEL GRADE & TYPE:	NO. 2 DIESEL
ENGINE COOLING:	UNIT MOUNTED RADIATOR, HIGH AMBIENT -- 122 DEGREES F.(50C.)
ENGINE DISPLACEMENT & DESIGN:	272 C.I., 4 CYCLE, 4 CYLINDER, DIESEL
MANUFACTURER:	CUMMINS OR CATERPILLAR W/ WEATHERPROOF SOUND ATTENUATED ENCLOSURE AND ACCESS PLATFORM

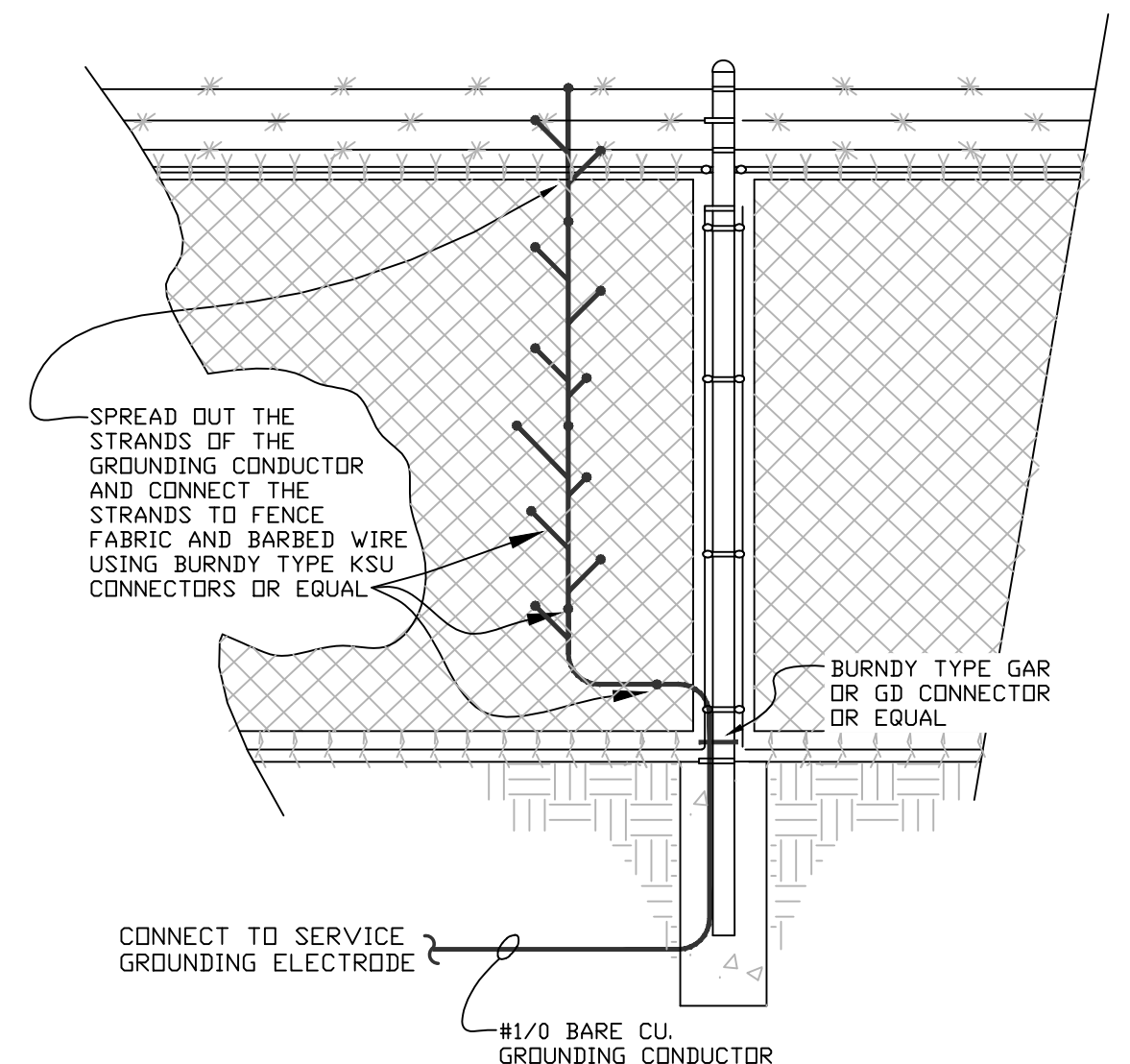
NOTE: 1. SEE DETAILED SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS AND ACCESSORIES.
2. PROVIDE 1 EA. - 200 A., 3 P., CIRCUIT BREAKER

LIGHTING FIXTURE SCHEDULE				
TYPE	DESCRIPTION & SPECIFICATIONS	LAMPS		SUGGESTED MANUFACTURER & CATALOG NO.
		NO.	TYPE	
A	LED VAPORTITE LIGHTING FIXTURE, WALL MOUNT, CAST ALUMINUM HOUSING, W/GLOBE & GUARD, 120 VOLT A.C.	15	WATTS 600 LUMENS 4000K LED (INCLUDED)	LITHONIA LIGHTING CAT. NO. DLV7M OR EQUAL
B	LED WALLPACK LIGHTING FIXTURE, DIE CAST ALUMINUM HOUSING, GASKETED GLASS REFRACTOR, DARK BRONZE FINISH, W/PHOTOCELL CONTROL, 120 VOLT A.C.	47	WATTS 4675 LUMENS 5000K LED (INCLUDED)	LITHONIA LIGHTING CAT. NO. DSXWLED-20C-700-50K-T3M-120-BBW-PE OR EQUAL
EMX	COMBINATION EXIT LIGHT/EMERGENCY LIGHT, FULLY AUTOMATIC, LED LAMPS, UNIVERSAL MOUNT, SINGLE FACED, RED LENS, WHITE HOUSING, 120 VOLT A.C.	2	2 WATT LED (INCLUDED)	ISOLITE LIGHTING CAT. NO. RLC-LED-R-WH OR EQUAL



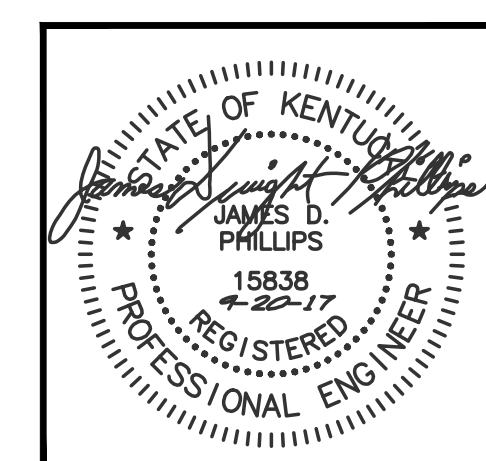
STAND DETAIL
Scale: NONE

- NOTE:
- ① ALL FASTENERS USED TO SECURE ELECTRICAL DEVICES TO FRAMES AND ANCHOR BOLTS SHALL BE 316 STAINLESS.
 - ② PANELBOARD SHALL BE MOUNTED 4'-0" MINIMUM TO CENTERLINE OF PANELBOARD.



FENCE GROUNDING DETAIL
Scale: NONE

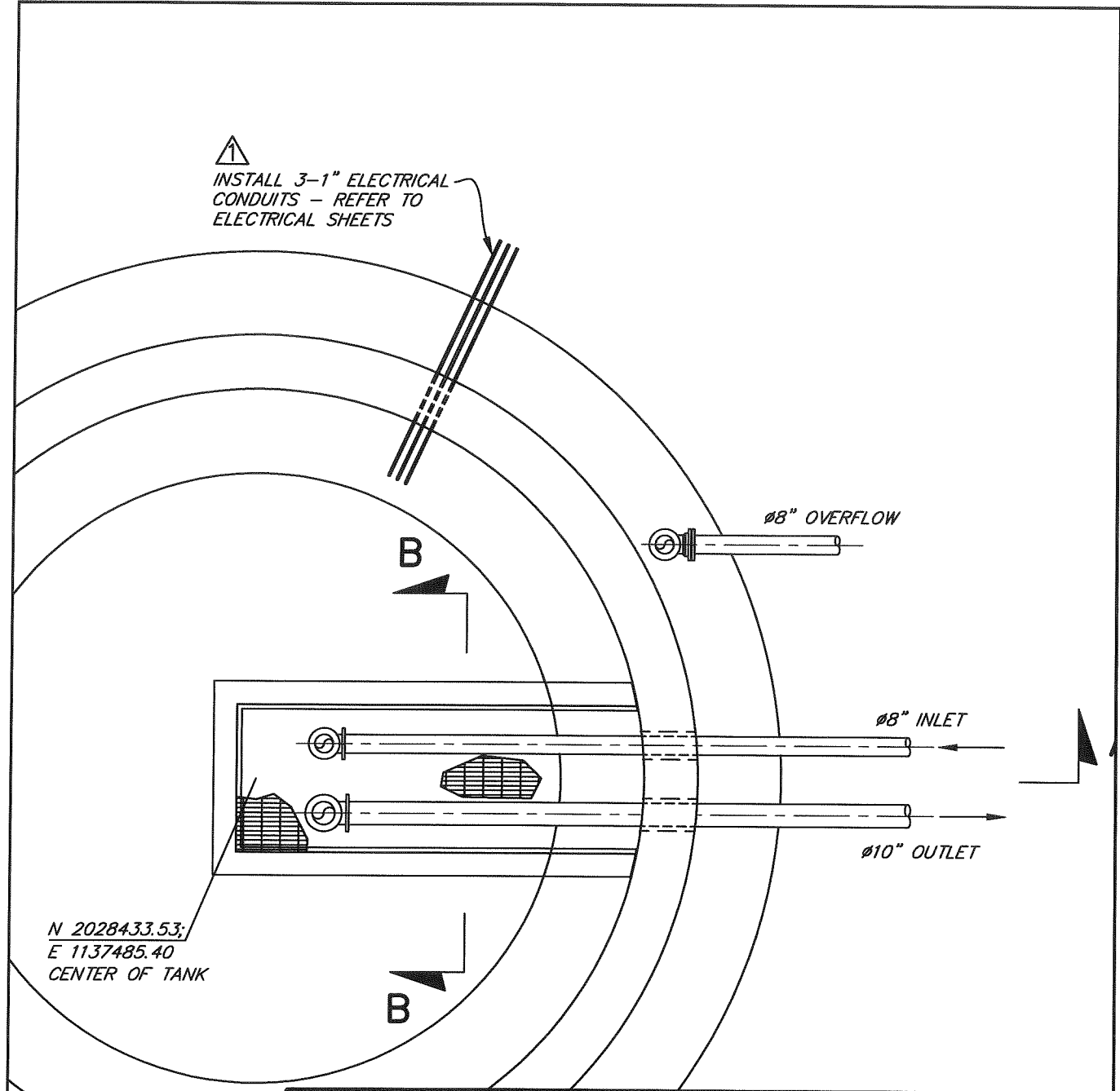
- NOTES:
- ① FENCE GROUNDING CONDUCTOR MUST BE RIGID UP FENCE AT POST LOCATION ONLY.
 - ② WEAVE GROUNDING CONDUCTORS IN FENCE BEFORE ATTACHING CONNECTORS.





PHILLIPS ENGINEERING, INC.
ELECTRICAL DESIGN
P.O. BOX 585
617 S. FIRST ST.
UNION CITY, TN 38261
(731) 885-9532

SHEET 11 OF 14	WATER SYSTEM IMPROVEMENTS CONTRACT 17-01 RENFOR DRIVE WATER BOOSTER STATION AND WATER LINE EXTENSIONS	
REVISIONS	ELECTRICAL SCHEDULES, DETAILS AND LEGEND	
2-15-18 ADDENDUM NO. 1	FOR MADISONVILLE, KENTUCKY	
PROJECT NUMBER 2057	SCALE AS SHOWN	DESIGNED MLK DRAWN TWR CHECKED JDP
DATE SEPT. 2017	WAUFORD J. R. Wauford & Company, Consulting Engineers, Inc. Nashville, Tennessee (615) 883-3243 www.jrwauford.com	

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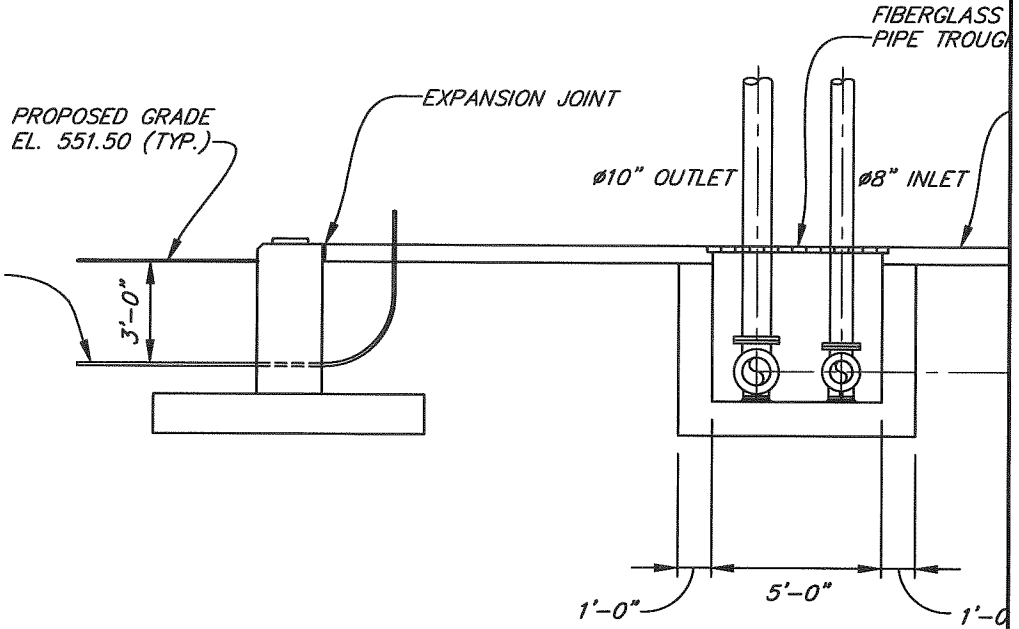


N 2028433.53;
E 1137485.40
CENTER OF TANK

SHEET 13 OF 14		WATER SYSTEM IMPROVEMENTS	
REVISIONS		CONTRACT 17-02	
 ADDENDUM NO. 1 2/15/2018 WCB		250,000 GALLON PEDESHERE WATER STORAGE TANK AND FOUNDATION	
		RENFRO DRIVE PEDESHERE	
		WATER STORAGE TANK DETAILS	
		FOR	
		MADISONVILLE, KENTUCKY	
SCALE	AS SHOWN	 J. R. Wauford & Company, Consulting Engineers, Inc. Nashville, Tennessee (615)883-3243 www.jrwauford.com	DESIGNED DGT
PROJECT NUMBER	DATE		DRAWN WCB
2057	AUG, 2017		CHECKED SCL




INSTALL 3-1" ELECTRICAL
CONDUITS - REFER TO
ELECTRICAL SHEETS



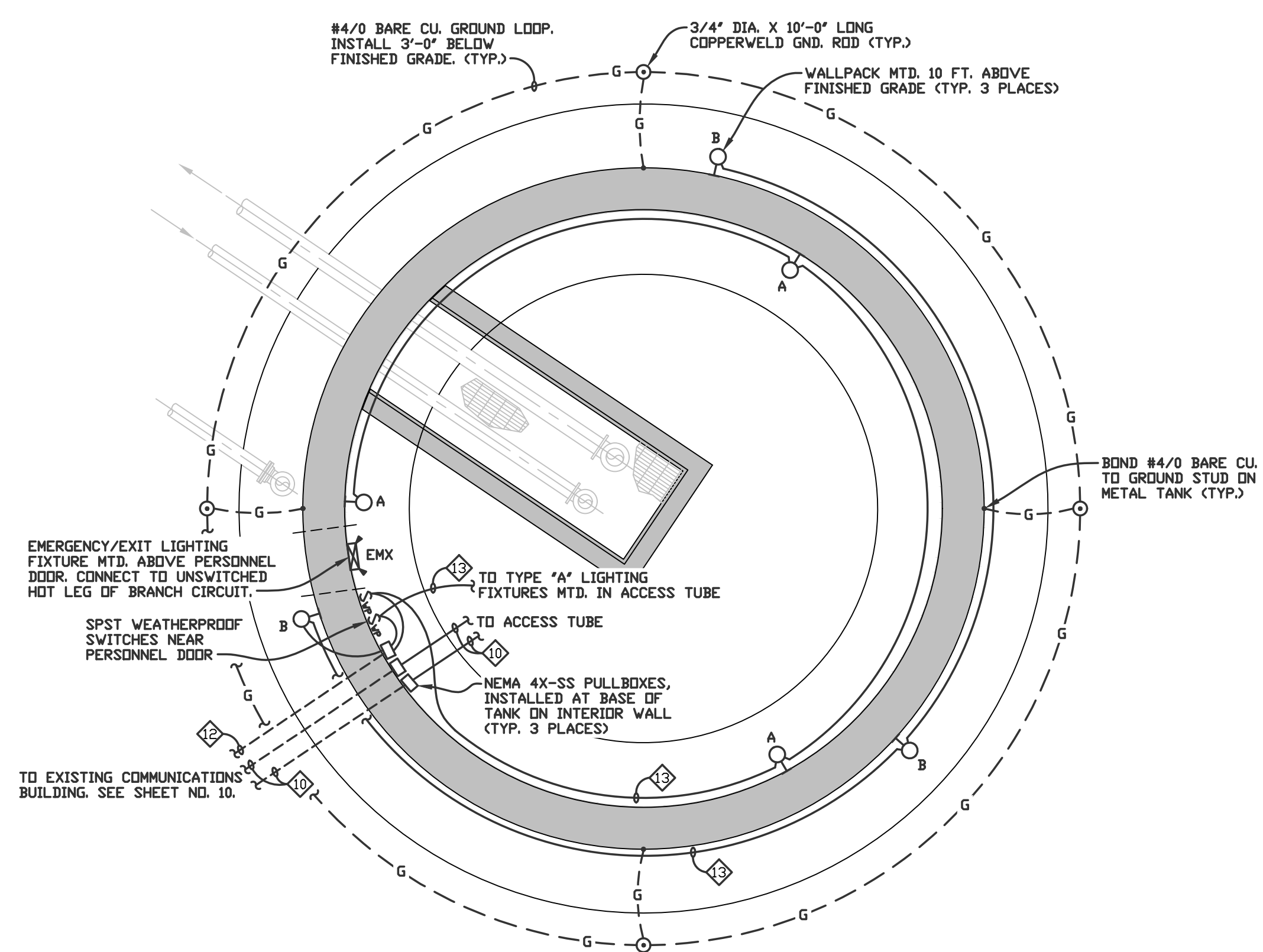
SECTION B-B

WATER STORAGE TANK FOR

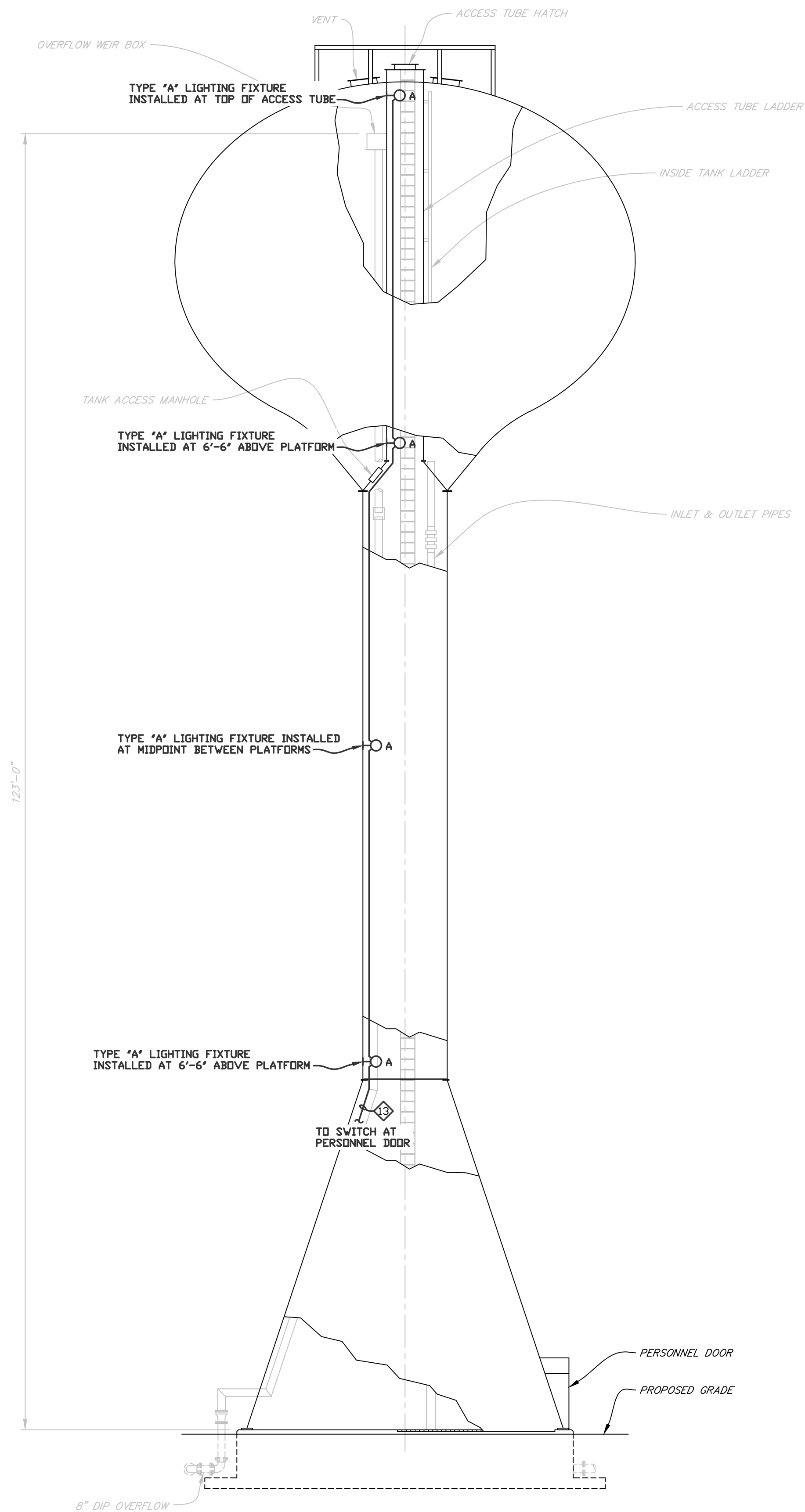
SCALE: 3/16" = 1'-0"

SHEET 13 OF 14		WATER SYSTEM IMPROVEMENTS	
REVISIONS		CONTRACT 17-02	
 ADDENDUM NO. 1 2/15/2018 WCB		250,000 GALLON PEDESHERE WATER STORAGE TANK AND FOUNDATION	
		RENFRO DRIVE PEDESHERE	
		WATER STORAGE TANK DETAILS	
		FOR	
		MADISONVILLE, KENTUCKY	
		SCALE	DESIGNED
		AS SHOWN	DGT
PROJECT NUMBER		DATE	DRAWN
2057		AUG, 2017	WCB
			CHECKED
			SCL
		WAUFORD J. R. Wauford & Company, Consulting Engineers, Inc. Nashville, Tennessee (615)883-3243 www.jrwauford.com	

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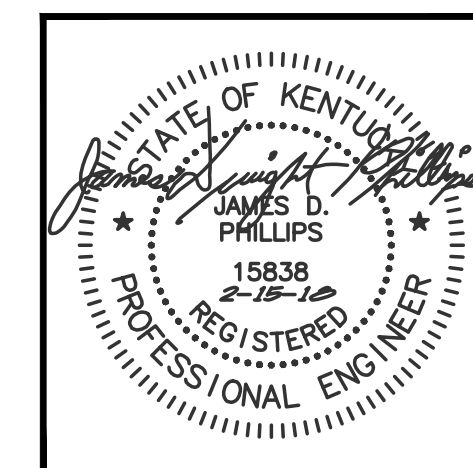


WATER STORAGE TANK ELECTRICAL LAYOUT
SCALE: 3/16" = 1'-0"



WATER STORAGE TANK ACCESS TUBE LIGHTING
SCALE: 1/8" = 1'-0"

- NOTES:**
- THE CONTRACTOR SHALL REFER TO THE CIVIL, STRUCTURAL AND PIPING PLANS FOR ALL DIMENSIONS, SECTIONS, DETAILS, ELEVATIONS, VOLTAGE REQUIREMENTS AND PHYSICAL SIZE OF ALL EQUIPMENT FURNISHED BY OTHER TRADES. COORDINATE AND ADJUST ALL ELECTRICAL INSTALLATIONS ACCORDINGLY.
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PHILLIPS ENGINEERING, INC.
ELECTRICAL DESIGN
P.O. BOX 585
617 S. FIRST ST.
UNION CITY, TN 38261
(731) 885-9532

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SHEET 10A OF 14		WATER SYSTEM IMPROVEMENTS CONTRACT 17-01 RENFOUR DRIVE WATER BOOSTER STATION AND WATER LINE EXTENSIONS	
REVISIONS		FOR	
2-15-18 ADDENDUM NO. 1		MADISONVILLE, KENTUCKY	
SCALE	AS SHOWN	DATE	DESIGNED MLK
PROJECT NUMBER	2057	SEPT. 2017	DRAWN TWR
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		WAUFORD J. R. Wauford & Company, Consulting Engineers, Inc. Nashville, Tennessee (615) 883-3243 www.jrwauford.com	