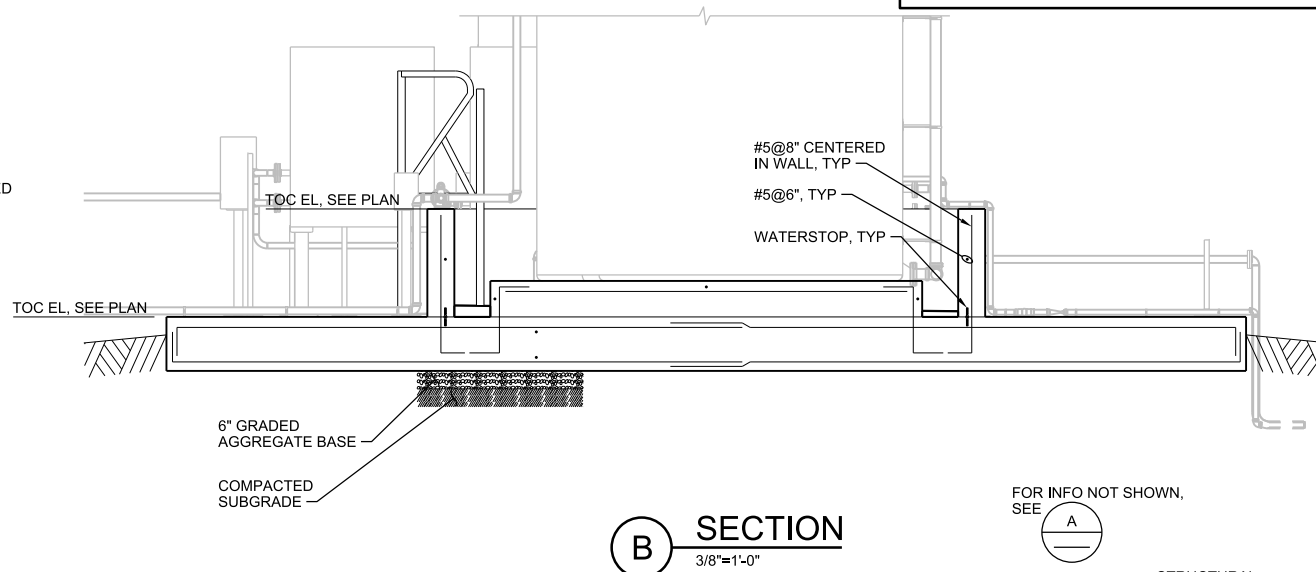
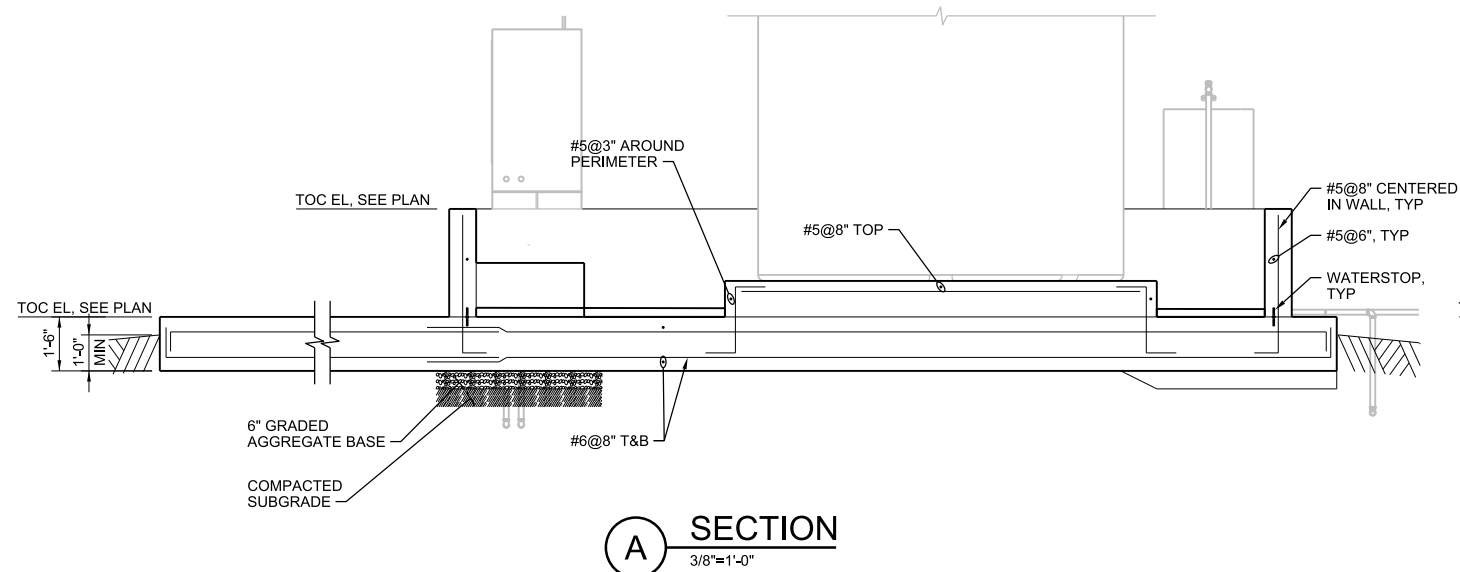


GENERAL SHEET NOTES

- FOR GENERAL STRUCTURAL NOTES, SEE 01-G-SERIES DWGS.
- FOR STANDARD DETAILS, SEE 99-S- SERIES DWGS.
- STRUCTURE SPECIFIC DESIGN CRITERIA (SERVICE LOAD VALUES, UON):
 - A. DEAD LOAD: SELF WEIGHT
 - B. FLOOR LIVE LOAD: 300 PSF
 - C. WIND - SERVICE LEVEL VALUES: AS DETERMINED BY EQUIPMENT AND TANK MANUFACTURERS
 - D. EARTHQUAKE - STRENGTH LEVEL VALUES: FOUNDATION LATERAL FORCE RESISTING SYSTEM: FLAT BOTTOM GROUND SUPPORTED TANK, REINFORCED CONCRETE, REINFORCED NON SLIDING BASE
 - R = 2.0
 - CS = XX (EFFECTIVE)
 - V = XX KIPS
 - TANK CRITERIA: AS DETERMINED BY MANUFACTURER(S)
 - E. SOIL DESIGN PARAMETERS: REQUIRED GROSS ALLOWABLE SOIL BEARING PRESSURE: 750 PSF
- ENCASE PIPES BELOW FOUNDATION ADN AREA EXTENDING AND MINIMUM 5'-0" BEYOND LIMITS OF FOUNDATION. SEE DETAIL 0330-016, 0330-017 AND 0330-018. PIPE ENCASEMENTS ARE NOT SHOWN.
- WATERSTOP SHALL BE TPER, UON.

SHEET KEYNOTES

- FERRIC CHLORIDE
TANK DESIGN WEIGHT: 3000 LBS (EMPTY)
74000 LBS (FULL)
PRIOR TO REBAR FABRICATION AND CONCRETE PLACEMENT, VERIFY WEIGHT FROM APPROVED EQUIPMENT SUBMITTAL DOES NOT EXCEED DESIGN WEIGHT LISTED. OTHERWISE, NOTIFY ENGINEER IN WRITING FOR DIRECTION.
- LIQUID OXYGEN
TANK DESIGN WEIGHT: 32000 LBS (EMPTY)
121000 LBS (FULL)
PRIOR TO REBAR FABRICATION AND CONCRETE PLACEMENT, VERIFY WEIGHT FROM APPROVED EQUIPMENT SUBMITTAL DOES NOT EXCEED DESIGN WEIGHT LISTED. OTHERWISE, NOTIFY ENGINEER IN WRITING FOR DIRECTION.
- VAPORIZER
DESIGN WEIGHT: 300 LBS (EMPTY)
1000 LBS (FULL)
PRIOR TO REBAR FABRICATION AND CONCRETE PLACEMENT, VERIFY WEIGHT FROM APPROVED EQUIPMENT SUBMITTAL DOES NOT EXCEED DESIGN WEIGHT LISTED. OTHERWISE, NOTIFY ENGINEER IN WRITING FOR DIRECTION.
- CONCRETE EQUIPMENT PAD TYPE 'G', PER DETAIL 0330-056.



FOR INFO NOT SHOWN,
SEE



STRUCTURAL

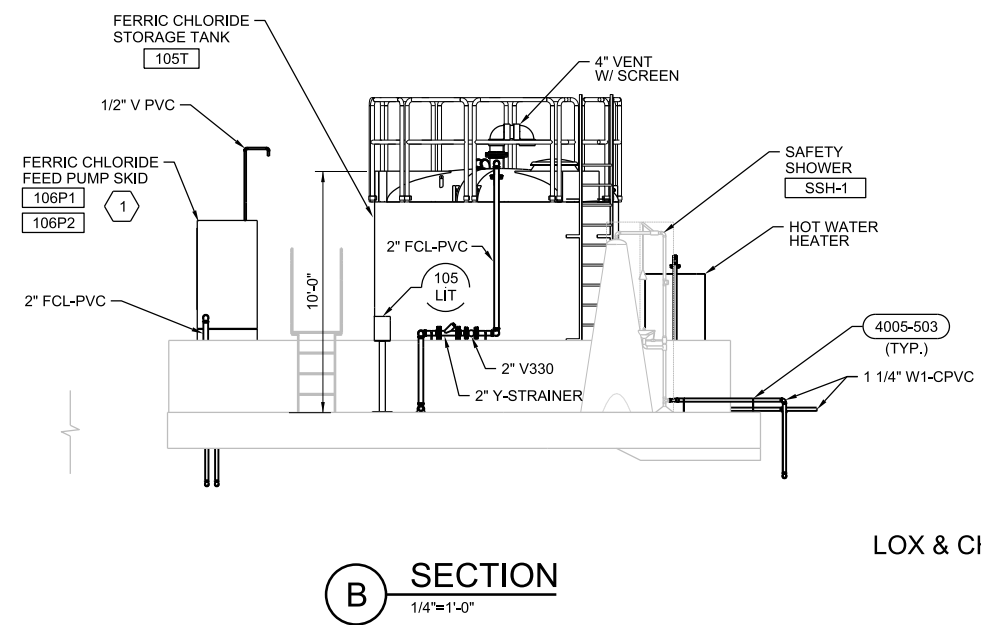
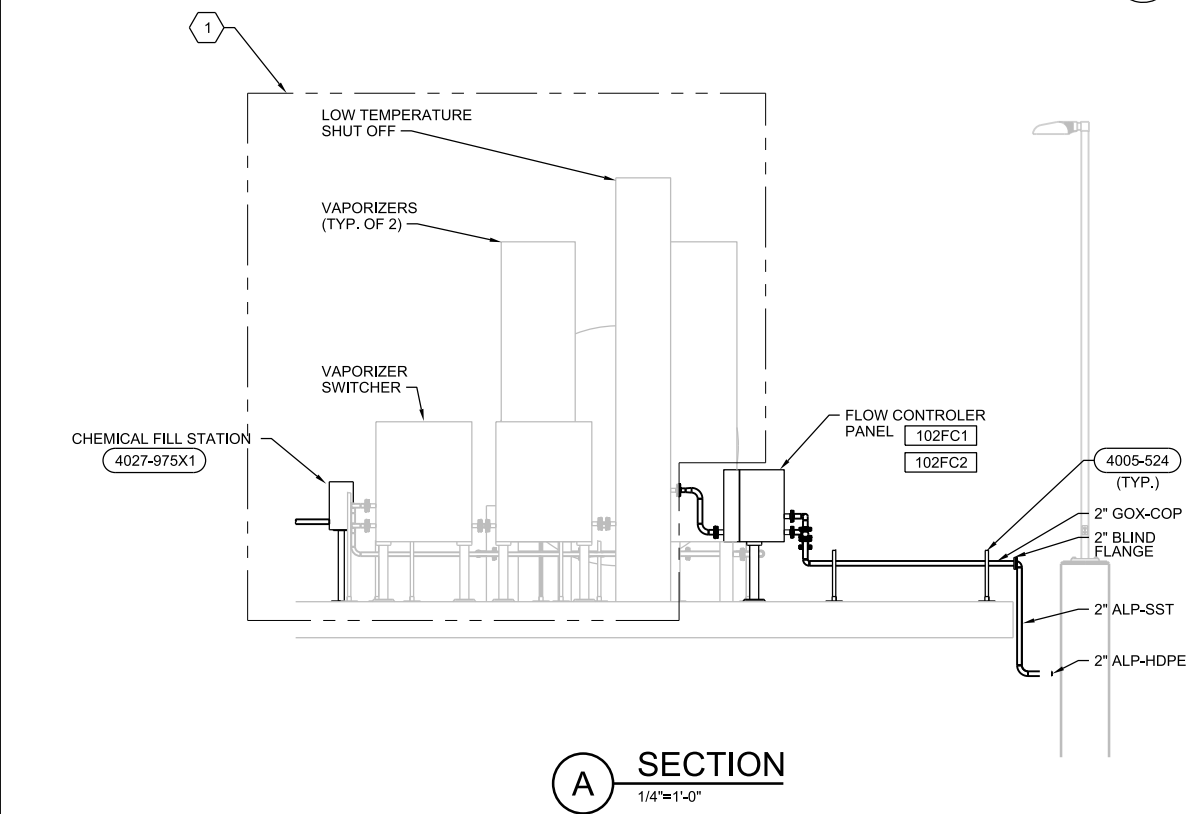
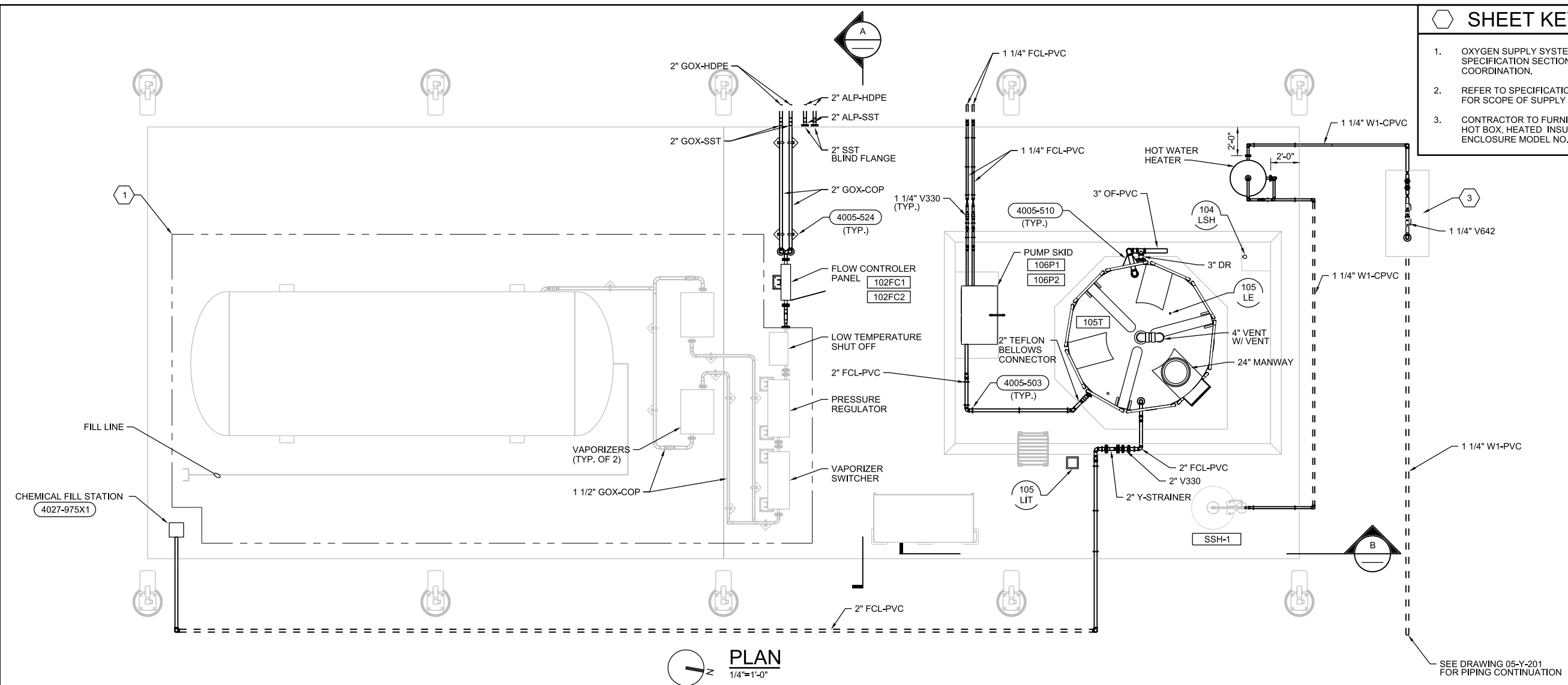
LOX AND
CHEMICAL STORAGE AND FEED
PLAN AND SECTIONS

FIGURE 2

NOT FOR CONSTRUCTION

SHEET KEYNOTE

1. OXYGEN SUPPLY SYSTEM NOT IN CONTRACT. SEE SPECIFICATION SECTION 01 31 13 FOR PROJECT COORDINATION.
2. REFER TO SPECIFICATIONS SECTION 44 42 56.16 FOR SCOPE OF SUPPLY FOR PUMP SKID.
3. CONTRACTOR TO FURNISH AND INSTALL HUBBELL HOT BOX. HEATED INSULATED FIBERGLASS ENCLOSURE MODEL NO. HF025047036.

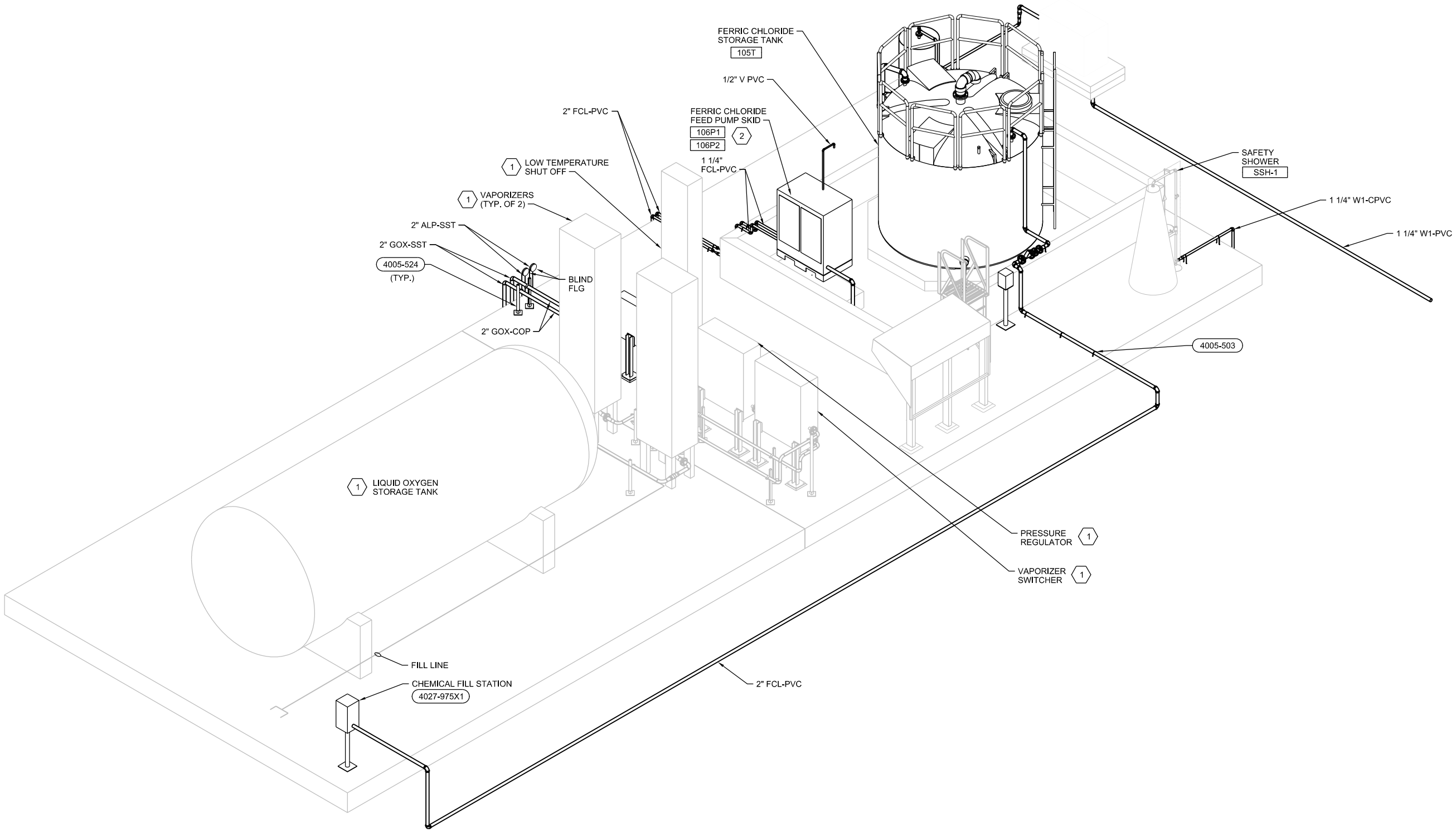


PROCESS MECHANICAL
LOX & CHEMICAL STORAGE & FEED
PLAN & SECTION
FIGURE 3

NOT FOR CONSTRUCTION

SHEET KEYNOTES

- 1 OXYGEN SUPPLY SYSTEM NOT IN CONTRACT. SEE SPECIFICATION SECTION 01 31 13 FOR PROJECT COORDINATION.
- 2. REFER TO SPECIFICATION SECTION 44 42 56.16 FOR SCOPE OF SUPPLY FOR PUMP SKID.



ISOMETRIC
NTS

PROCESS MECHANICAL
LOX & CHEMICAL STORAGE & FEED
ISOMETRIC
FIGURE 4

NOT FOR CONSTRUCTION



ELECTRICAL PANELBOARD SCHEDULE

PANEL: PNL-LOX
VOLTAGE: 120/240 VAC, 1 PHASE, 3 WIRE
BUS SIZE: 100A
MAIN SIZE: 100A
SCCR: 10K AIC

LOCATION: ELECTRICAL EQUIPMENT PEDESTAL
MOUNTING: SURFACE
FED FROM: UTILITY
MAIN TYPE: BREAKER
NOTES: SERVICE ENTRANCE LABELED

CIRCUIT TITLE	BREAKER			LOAD, VA		LOAD, VA		BREAKER			CIRCUIT TITLE
	CKT NO.	AMP	POLE	PHASE		PHASE		POLE	AMP	CKT NO.	
				A	B	A	B				
HOT WATER HEATER	1	40	2	3000		708		1	20	2	EAST LIGHTS
	3	-	-		3000		708	1	20	4	WEST LIGHTS
EAST RECEPTACLES	5	20	1	900		1000		1	20	6	HOT BOX BFP HEATER
WEST RECEPTACLES	7	20	1		1080		1200	1	20	8	TELEMETRY PANEL - RTU-100
SPARE	9	15	1	-		1200		1	20	10	FLOW CONTROL PANEL - 102FP
SPARE	11	15	1	-	-		1200	1	20	12	FERRIC TANK FILL PANEL - 105FP1
SPARE	13	15	1	-		150		1	15	14	FERRIC TANK LEVEL - 105LIT
SPARE	15	20	2	-	-		135	1	15	16	FERRIC PUMP 1 - 106P1
	17	-	-	-		135		1	15	18	FERRIC PUMP 2 - 106P2
TOTAL LOAD				3900	4080	3193	3243				

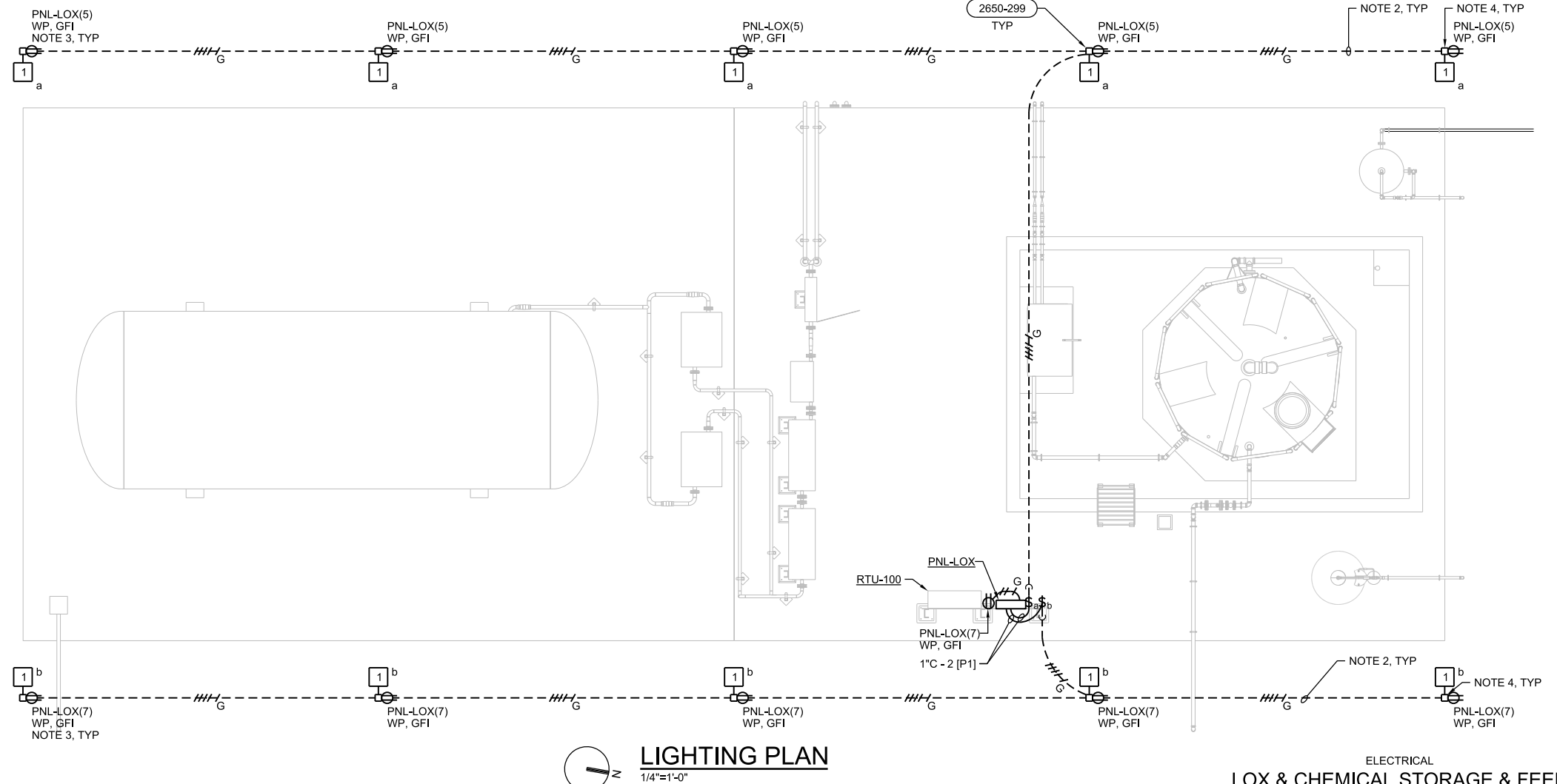
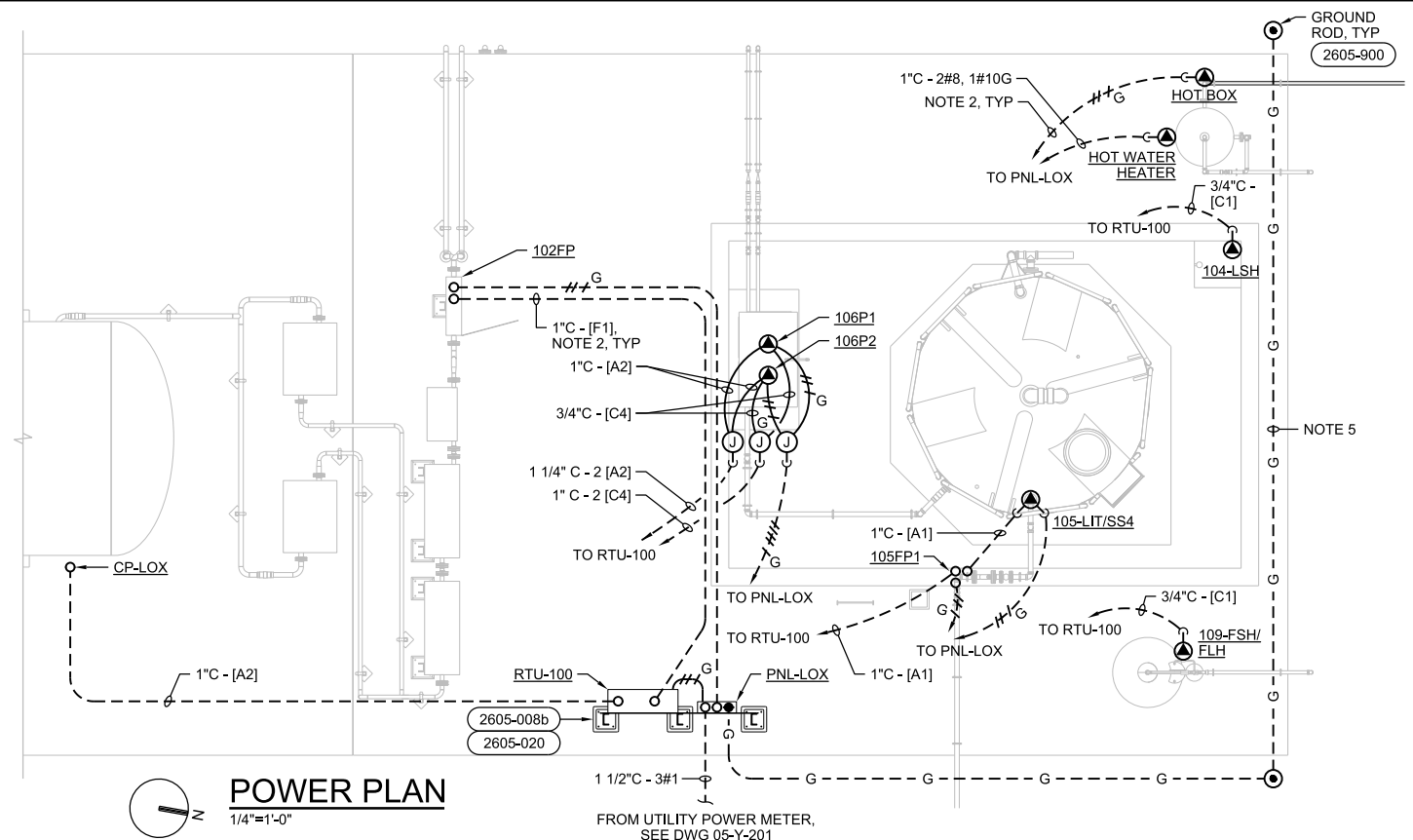
PHASE A LOAD (VA) =	7093
PHASE B LOAD (VA) =	7323
<hr/> TOTAL LOAD (VA)=	<hr/> 14416

LUMINAIRE SCHEDULE

LUMINAIRE SCHEDULE			
FIXTURE NO.	LAMP QTY	LAMP DATA	DESCRIPTION
1	10	140W, 4000K	LED - INDUSTRIAL, ENCLOSED AND GASKETED, SQUARE POLE MOUNT, SINGLE-PIECE DIE-CAST ALUMINUM HOUSING, BLACK POWDER COAT FINISH, ACRYLIC LENS, MULTI-VOLT DRIVER 120V-277V, UL LISTED FOR WET LOCATIONS.
			LITHONIA #DSX2 LED P1 TFTM MVOLT SPA DBLXD OR EQUAL

NOTES:

1. CABLE CALLOUTS:
[A1] = INSTRUMENTATION CABLE - ONE PAIR #16 AWG TWISTED, SHIELDED
[A2] = INSTRUMENTATION CABLE - TWO PAIR #16 AWG TWISTED, SHIELDED
[C1] = INSTRUMENTATION CABLE - 2#14, 1#14G
[C4] = INSTRUMENTATION CABLE - 8#14, 1#14G
[E1] = ETHERNET CABLE - 600V CAT 6
[F1] = MULTIMODE FIBEROPTIC CABLE - 6 STRAND
[P1] = POWER CABLE - 2#12, 1#12G
2. EMBED CONDUIT IN CONCRETE SLAB.
3. RECEPTACLE CIRCUITS SHALL BE UNSWITCHED.
4. MOUNT LUMINAIRE AT 20'-0" AFG. PROVIDE POLE WITH HANDHOLE SIZED TO ACCOMMODATE RECEPTACLE MOUNTING.
5. EMBED #4/0 BARE COPPER GROUND CONDUCTOR IN CONCRETE SLAB.



ELECTRICAL
LOX & CHEMICAL STORAGE & FEED
POWER AND LIGHTING PLAN
FIGURE 5

ch2m.

FILENAME: FIGURE5_691778.dgn

PLOT DATE: 4/5/2018

PLOT TIME: 2:05:50 PM

NOT FOR CONSTRUCTION