

SWBD:		MDP-3	VOLTAGE: 480/277	3 Ø	4 W	60 HZ	AC RATING: 35,000		
		BUS: 1600A	LOCATION: BASEMENT MAIN ELECTRIC ROOM						
SECT NO.	SERVING	CIRCUIT TRIP	BREAKER		REMARKS	CONNECTED LOAD			
			POLES			AØ (kVA)	BØ (kVA)	CØ (kVA)	TOTAL KVA
1	SPD	-	-	-	160 KA, SEE NOTE 4	-	-	-	-
1	POWER METER	-	-	-	POWER LOGIC PM750	-	-	-	-
1	MCB	1200A	3	3	SEE NOTE 5	-	-	-	-
2	SPARE	400A	-	3	MCCB, TYPE LH	-	-	-	-
2	225KVA TRANSF.(PWL EOP)	400A	-	3	MCCB, TYPE LH	42.6	41.0	36.5	120.1
2	SPARE	400A	-	3	MCCB, TYPE LH	-	-	-	-
2	4 SPARE	400A	-	-	-	-	-	-	-
2	5 SPARE	400A	-	-	-	-	-	-	-
2	6 SPARE	400A	-	3	MCCB, TYPE LH	-	-	-	-
2	7 SPARE	400A	-	3	MCCB, TYPE LH	-	-	-	-
2	8 SPARE	400A	-	3	MCCB, TYPE LH	-	-	-	-
2	9 SPARE	100A	-	3	MCCB, TYPE HG	-	-	-	-
2	10 SPARE	100A	-	3	MCCB, TYPE HG	-	-	-	-
2	11 SPARE	100A	-	3	MCCB, TYPE HG	-	-	-	-
2	12 SPARE	100A	-	3	MCCB, TYPE HG	-	-	-	-
2	13 SPARE	100A	-	-	-	-	-	-	-
2	14 SPARE	100A	-	-	-	-	-	-	-
2	15 SPACE	100A	-	-	-	-	-	-	-
2	16 PT CHILLER	150A	-	3	MCCB, TYPE JG	25.9	25.9	25.9	77.7
2	17 TEMP CHILLER CONNECTION	150A	-	3	MCCB, TYPE JG	-	-	-	-
2	18 112.5KVA TRANSF.(PWL ELS)	200A	-	3	MCCB, TYPE JG	1.9	0.7	0.2	2.8
2	19 PANEL MEPA	200A	-	3	MCCB, TYPE JG	9.1	10.1	7.9	27.1
2	20 PANEL MEPA	200A	-	3	MCCB, TYPE JG	21.9	21.9	21.9	65.7
2	21 SPARE	225A	-	3	MCCB, TYPE JG	-	-	-	-
2	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-

NOTES:

1. BASIS OF DESIGN IS SQUARE D, QED-2 SWITCHBOARD, PROVIDE FRONT ACCESS ONLY ,PROVIDE SQUARE D OR OR APPROVED EQUAL.

2. PROVIDE UL SERVICE ENTRANCE RATING.

3. PROVIDE BUS EXTENSIONS ON SECTION 2 BUS.

4. SPD SHALL BE FED FROM DEDICATED 3P-30A CIRCUIT BREAKER.

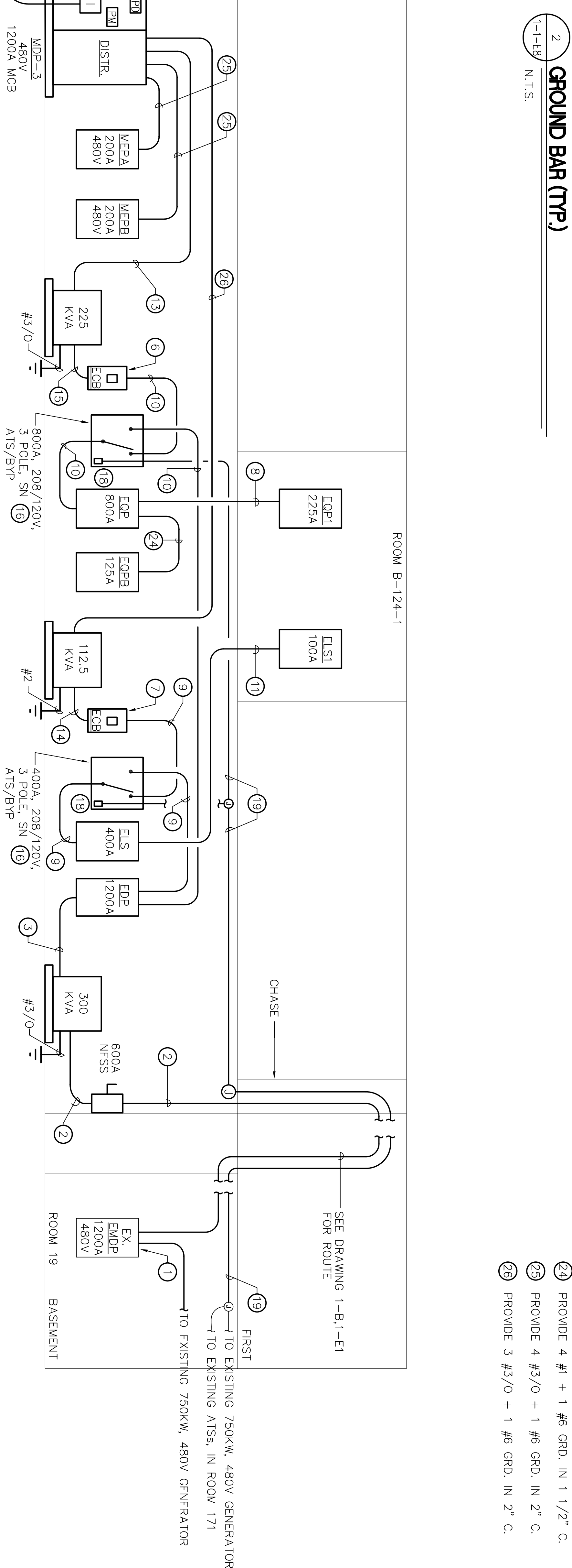
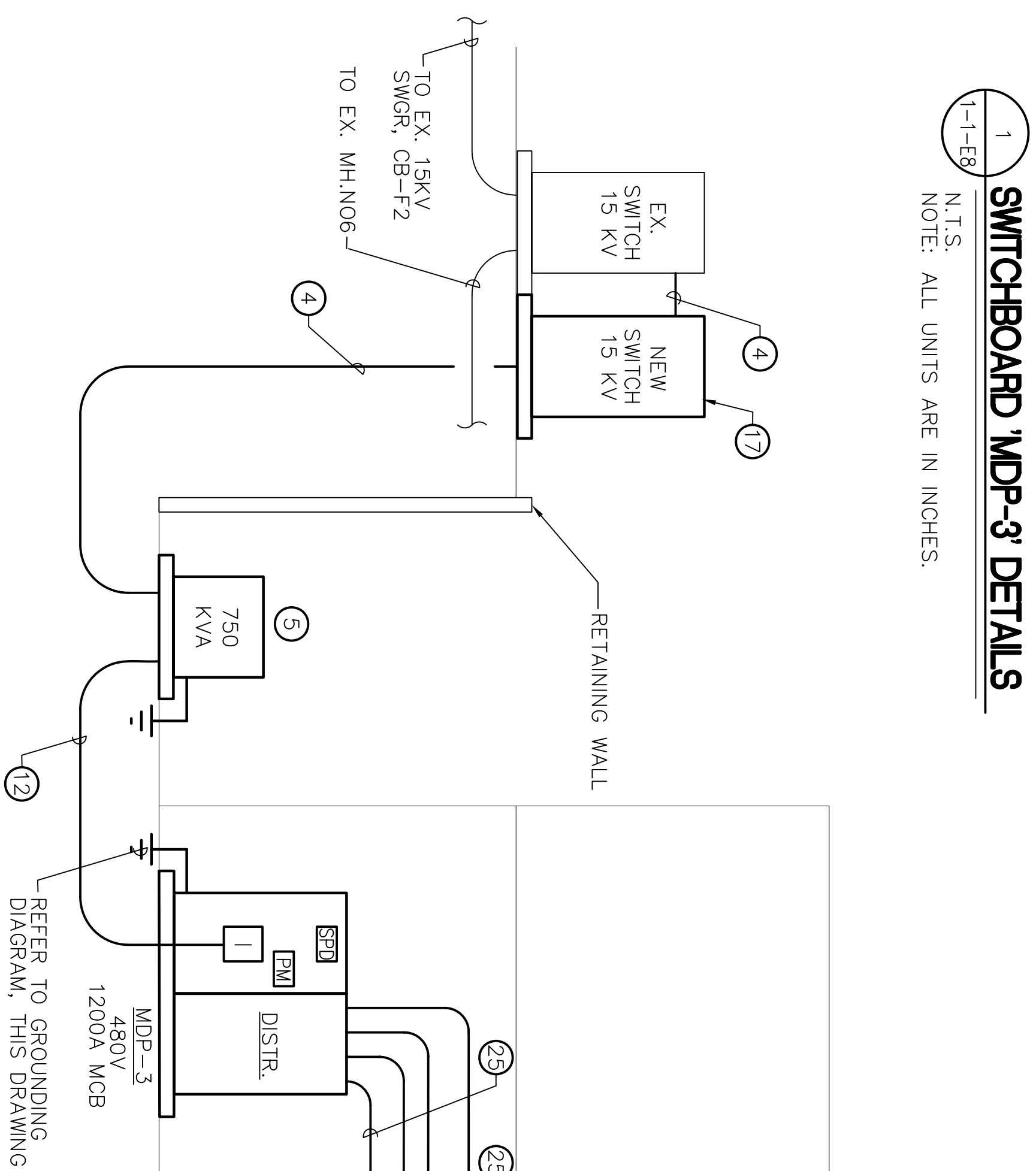
5. 1600AFC MCB, RC-FRAME, LSIG, 80% RATED WITH A 1600A SENSOR AND 1200A TRIP PLUG.

## GENERAL NOTES:

1. PROVIDE SHORT CIRCUIT CURRENT AND COORDINATION STUDY WITH ARC-FLASH ANALYSIS FOR ALL POWER DISTRIBUTION SYSTEM AND MAJOR ELECTRICAL EQUIPMENT IN THE REHAB ADDITION AS SHOWN ON THIS SHEET. STUDIES SHALL BE IN ACCORDANCE WITH SPECIFICATION 26 05 71. REFER TO DRAWING NO. 1-E2 FOR ADDITIONAL INFORMATION.

**DRAWING NOTES:**

- |    |  |
|----|--|
| 1  | PROVIDE 3 POLE, 600 A CIRCUIT BREAKER IN EXISTING SPACE. MATCH ALC OF BREAKER.   |
| 2  | PROVIDE 2 SETS OF (3-500 KOMIL + 1 #1/0 GRD IN 3 1/2" C.   |
| 3  | PROVIDE 4 SETS OF (4-350 KOMIL + 1 #3/0 GRD IN 3" C.).   |
| 4  | PROVIDE 3 #2/0, 15KV + 1 #4/0, 600V GRD. IN 4" C.)   |
| 5  | SEE TRANSFORMER PAD AND GROUNDING DETAILS. DRAWING 1-1-ES.   |
| 6  | PROVIDE 3 POLE, 800A+T ENCLOSED CIRCUIT BREAKER, 22 KALC.  |
| 7  | PROVIDE 3 POLE, 400A+T ENCLOSED CIRCUIT BREAKER, 22 KALC.  |
| 8  | PROVIDE 4 #4/0 + 1 #4 GRD IN 2 1/2" C.   |
| 9  | PROVIDE 2 SETS OF (4 #3/0 + 1 #3 GRD IN 2" C.).  |
| 10 | PROVIDE 2 SETS OF (4-600 KOMIL + 1 #1/0 GRD IN 3 1/2" C.).   |
| 11 | PROVIDE 4 #2 + 1 #6 GRD IN 1 1/4" C.   |
| 12 | PROVIDE 4 SETS OF (4-350 KOMIL + 1 #3/0 GRD) IN SECONDARY DUCTBANK. SEE DUCTBANK DETAIL.   |
| 13 | PROVIDE 2 SETS OF (3 #3/0 + 1 #3 GRD IN 2" C.).  |
| 14 | PROVIDE 2 SETS OF (4 #3/0 + 1 #2 GRD IN 2" C.).  |
| 15 | PROVIDE 2 SETS OF (4-600 KOMIL + 1 #3/0 GRD IN 3 1/2" C.).   |
| 16 | PROVIDE DIGITAL POWER METER. METER SHALL BE FACTORY INSTALLED AND BUILT INTO FRONT COVER.  |
| 17 | SEE 15KV ONE-LINE DIAGRAM AND DETAILS. DRAWING 1-1-E2.   |
| 18 | PROVIDE GENERATOR START / STOP CONTROL CIRCUITRY AS REQUIRED. PROVIDE PARALLEL START, SERIES STOP SCENARIO. PROVIDE CONDUCTIONS AS REQUIRED. COORDINATE WITH MANUFACTURER.   |
| 19 | PROVIDE 3/4" C FOR GENERATOR START / STOP CIRCUITRY. INTERCEPT EXISTING GENERATOR CONTROL CIRCUITRY PASSING THROUGH ROOM 19. TRACE EXISTING CONTROL CIRCUITRY TO ALLOW FOR APPROPRIATE INTERFACE BETWEEN NEW ATISs, AND EXISTING ATISs. CONTROL WIRING. COORDINATE WITH MANUFACTURERS AS REQUIRED. |
| 20 | PROVIDE GROUND GRID CONSISTING OF (3) 10'-0"x3/4" DIAMETER COPPER-CLAD BROWN GROUND RODS. EXTEND #3/0 BARE CONDUCTOR BETWEEN RODS, AND TO MAIN GROUND BAR WITHIN ELECTRICAL ROOM. THERMOWELD ALL BELOW GRADE CONNECTIONS.  |
| 21 | PROVIDE 1-#3/0 INSULATED COPPER GROUND WIRE IN 1 1/2" C.   |
| 22 | SEE GROUND BAR DETAIL, THIS DRAWING.   |
| 23 | PT CHILLER AND TEMP CHILLER CONNECTION ARE PART OF ADD. ALC. NO. 1 WORK. IF ADD ALC. NO. 1 IS NOT ACCEPTED, LABEL BREAKERS AS "SPARE".   |
| 24 | PROVIDE 4 #1 + 1 #6 GRD. IN 1 1/2" C.  |
| 25 | PROVIDE 4 #3/0 + 1 #6 GRD. IN 2" C.  |
| 26 | PROVIDE 3 #3/0 + 1 #6 GRD. IN 2" C.  |



## POWER RISER DIAGRAM

NOT TO SCALE

[illegible]

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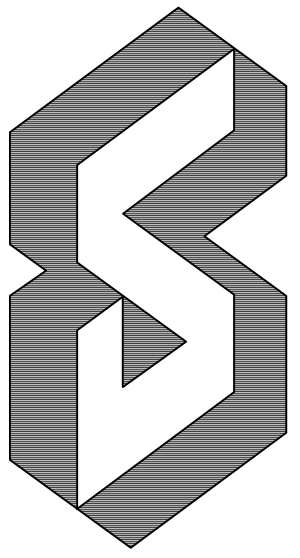
**ED**

**DERBY ENTERPRISES**

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James E. Van Zandt  
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Drawing Title  
**POWER RISER DIAGRAM  
& DETAILS**

Approved: **Division Chief**

Project Title  
MOVE AND EXPAND  
REHAB

Building Number	01	Checked	RAM	D
Location VAMC Altoona, Pennsylv				

DELLC  
JOB NO. 090407

DELLC  
JOB NO. 090407

Date	19 JULY 2010
Project No.	

DRAWING NO.  
1-1-E6  
Dwg. 59 of 71

