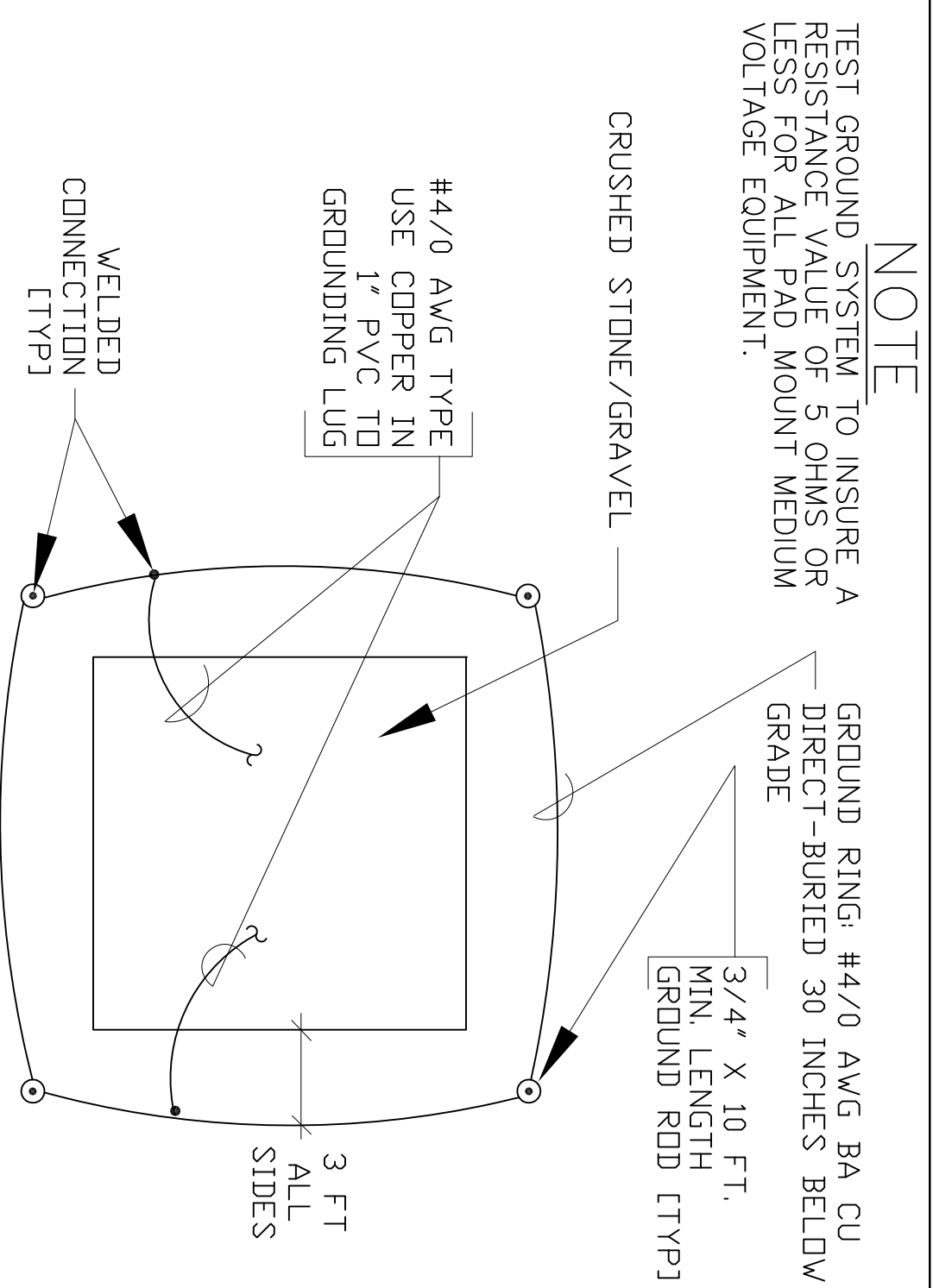
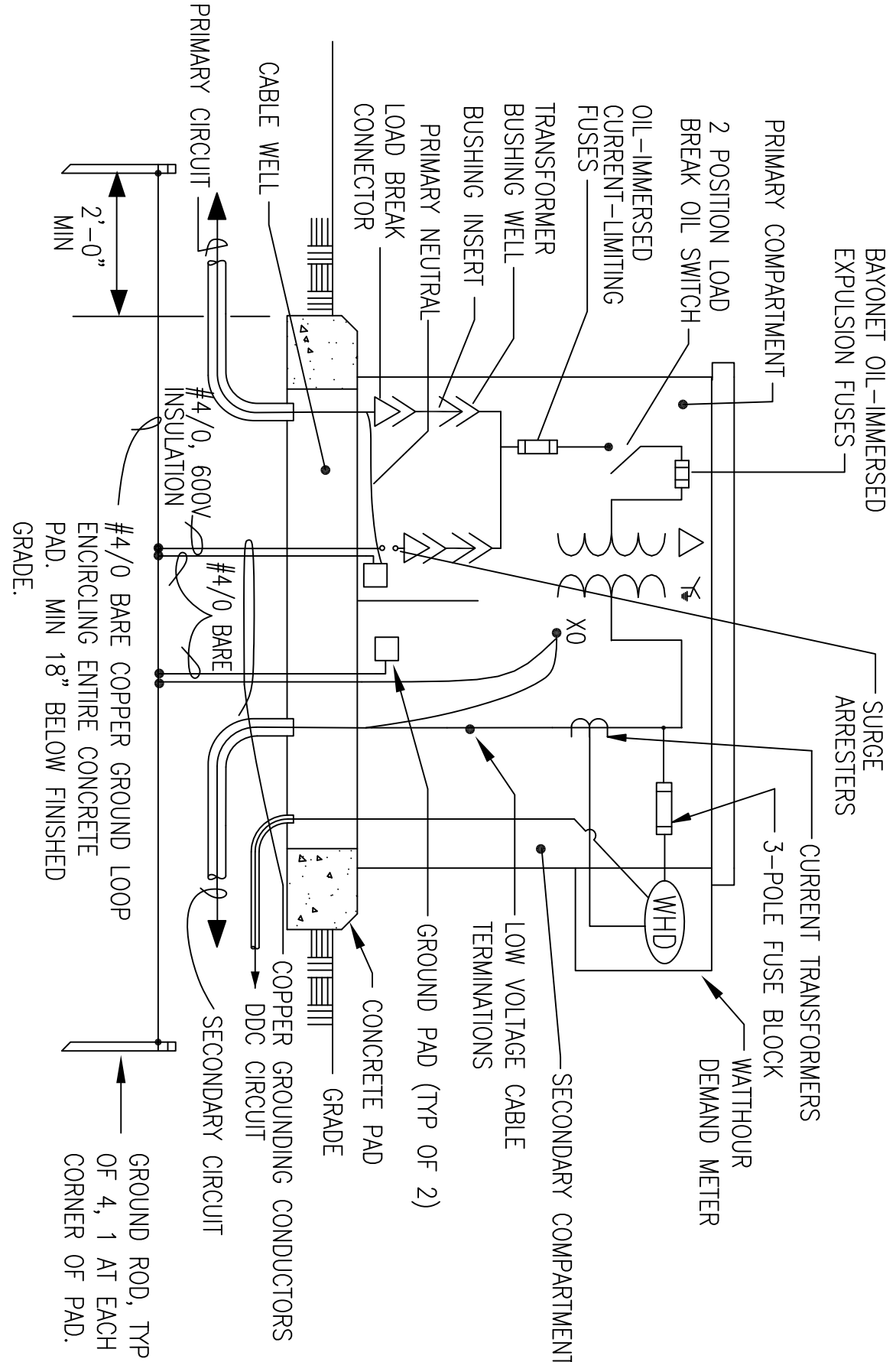


REVISONS			DATE	APPROVED
SYM				



GROUNDING PLAN FOR PAD-MOUNTED EQUIPMENT (TYPICAL)

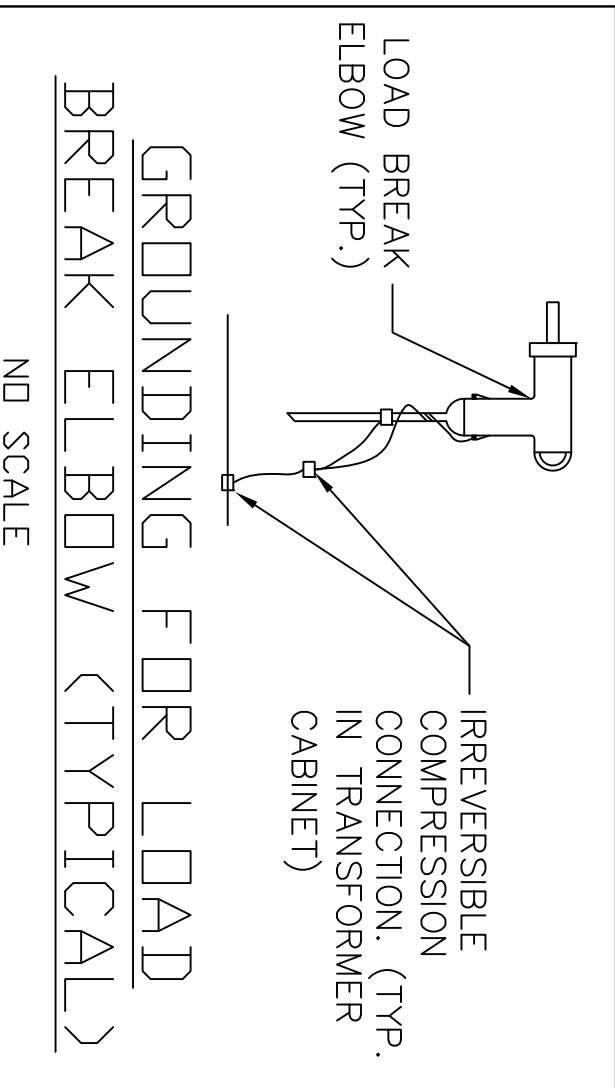
ND SCALE



PAD-MOUNTED TRANSFORMER DETAIL

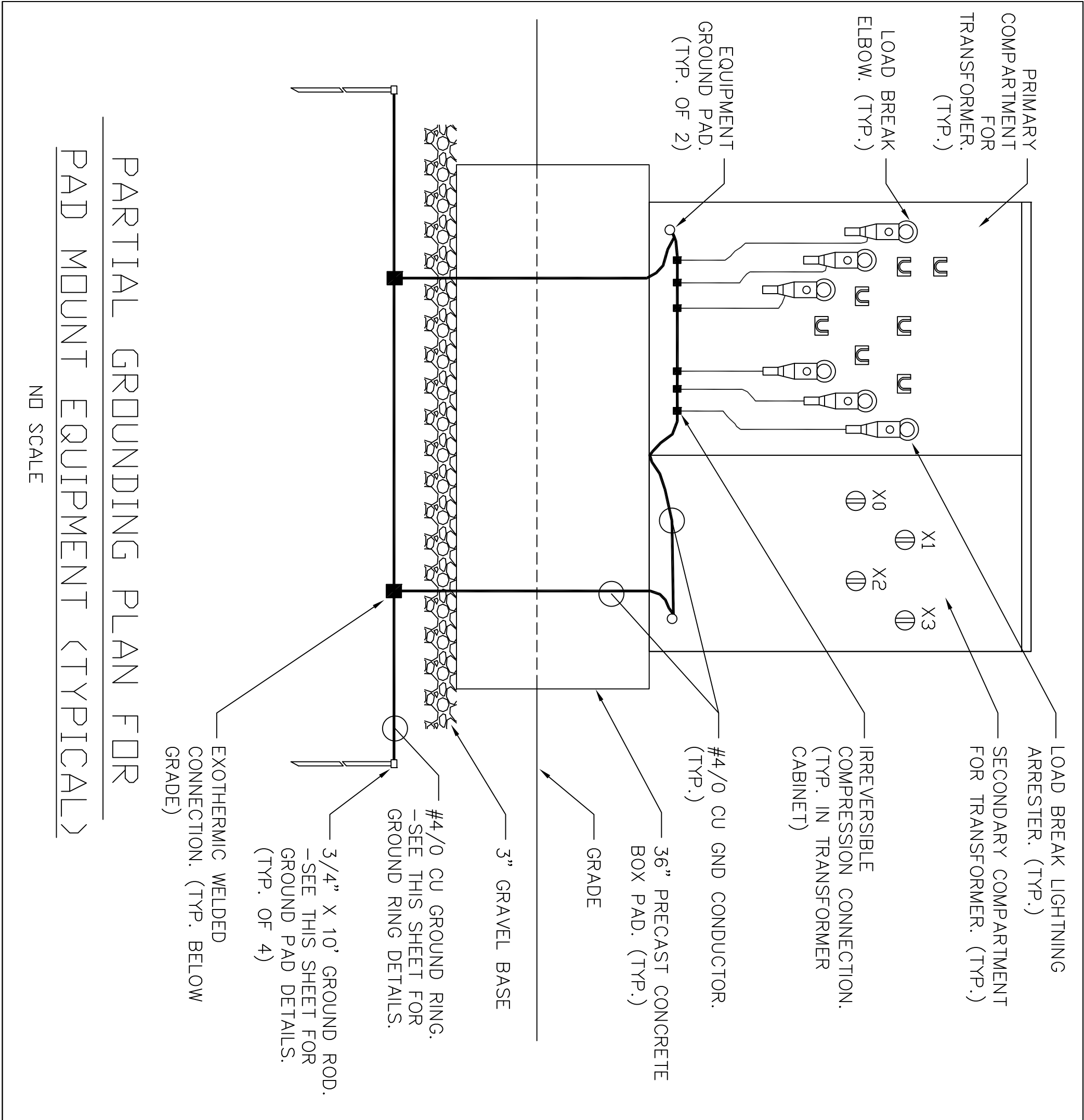
[MULTI-GROUNDED PRIMARY SYSTEM (DELTA-WYE) - WITH SURGE ARRESTERS.]

NOT TO SCALE



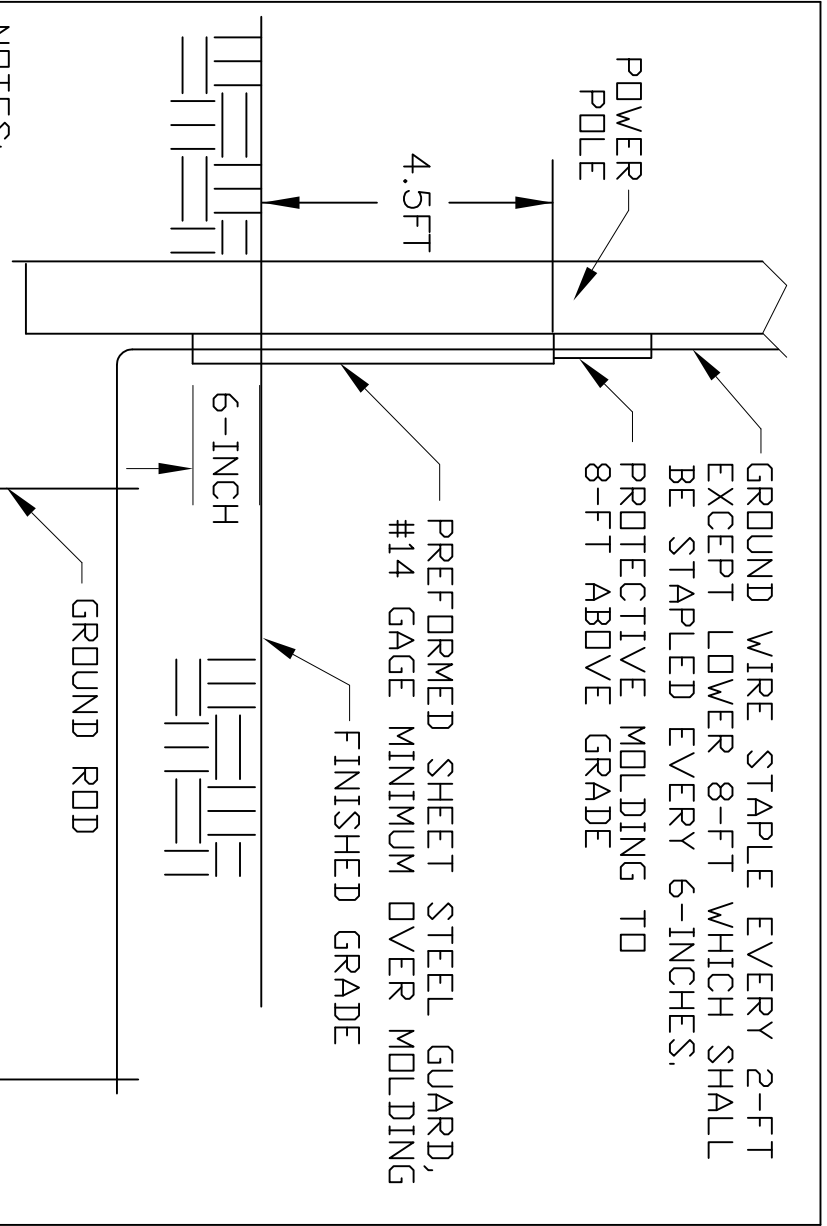
GROUNDING FOR LOAD BREAK ELBOW (TYPICAL)

ND SCALE



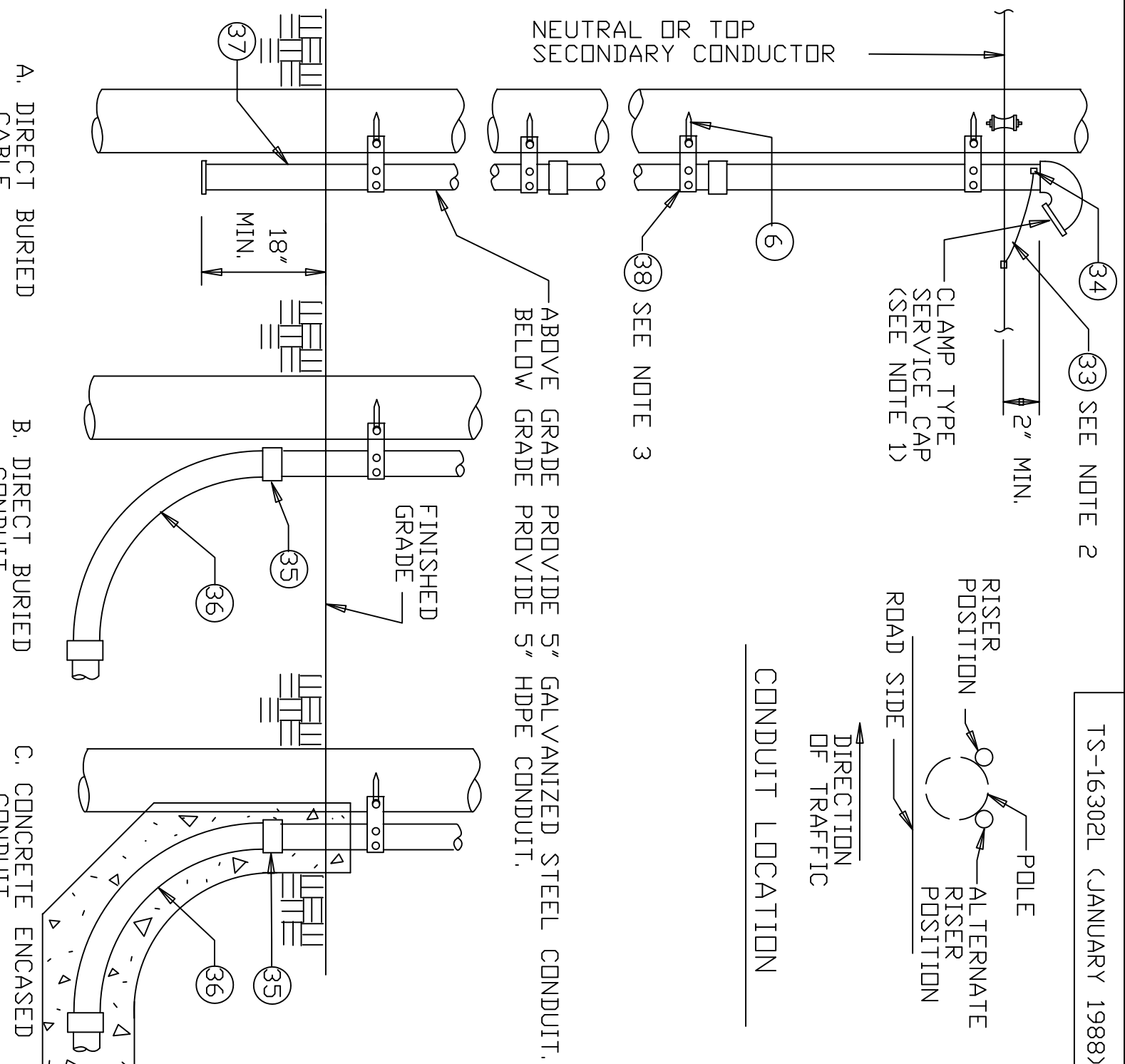
PARTIAL GROUNDING PLAN FOR PAD MOUNT EQUIPMENT (TYPICAL)

ND SCALE



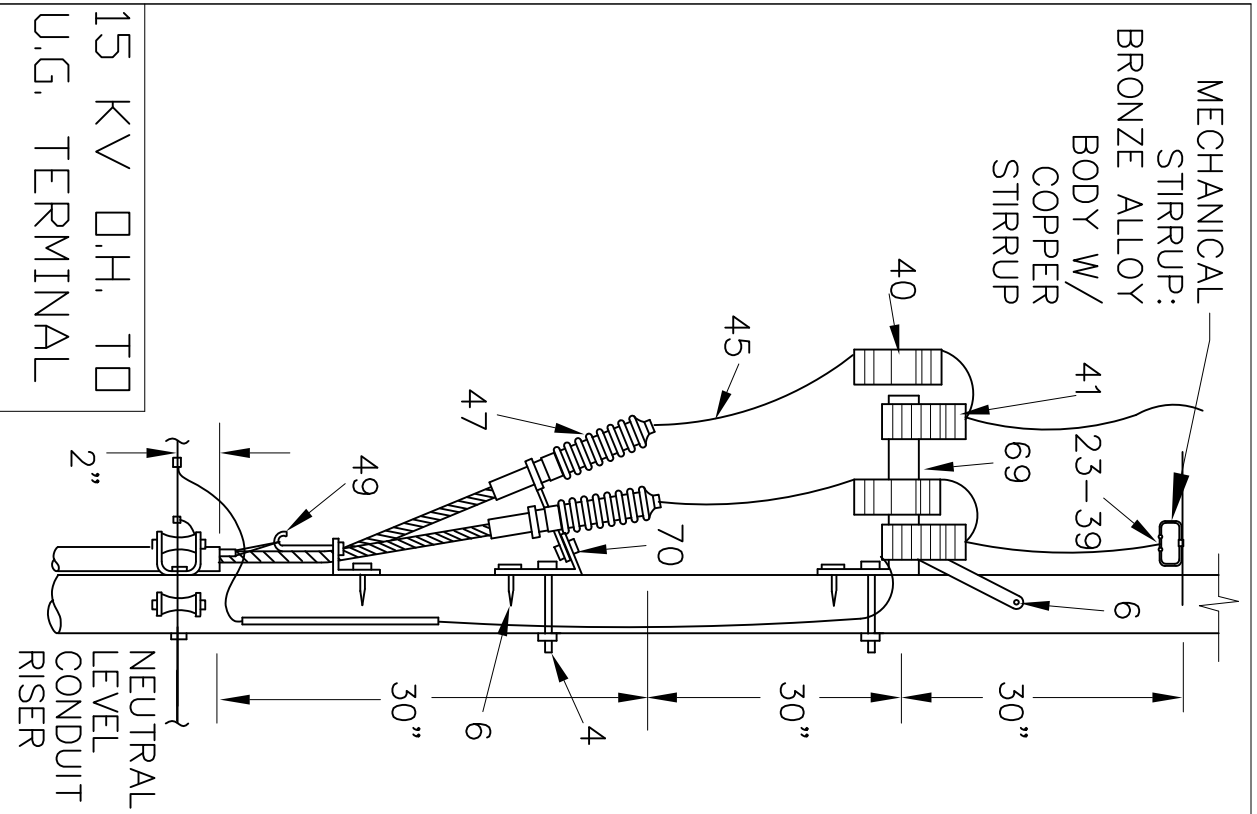
- NOTES:
1. USE ADDITIONAL GROUND RODS, WHEN REQUIRED, TO OBTAIN RESISTANCE VALUE.
 2. MAKE GROUNDING CONNECTIONS TO ALL EQUIPMENT ON POLE AS REQUIRED.

GROUND



- NOTES:
1. ON CONDUIT RISER FOR PRIMARY CIRCUITS, ELIMINATE SERVICE CAP AND PROVIDE GROUNDING TYPE INSULATING BUSHING.
 2. CONNECT TO GROUNDED NEUTRAL OR PROVIDE GROUND PER SPECIFICATIONS.
 3. SPACE STRAPS AT MAXIMUM OF 4' INTERVALS.

CONDUIT RISER (SIZE & TYPE AS INDICATED)



POLE LINE MATERIAL LIST		TS-16302L (JANUARY 1988)
1	FLAT STEEL BRACE (TWO PIECES)	
2	MACHINE BOLT, 3/8" X LENGTH NEEDED WITH WASHER, NUT AND LOCKWASHER	
3	8" WOOD CROSSARM	
4	MACHINE BOLT, 5/8" X LENGTH NEEDED WITH WASHER, NUT AND LOCKWASHER	
5	1/2" WOOD CONNECTOR	
6	ANGLE STEEL BRACE (TWO PIECES)	
7	ANGLE STEEL BRACE (ONE PIECE)	
8	MACHINE BOLT, 1/2" X LENGTH NEEDED, WITH WASHER, NUT & LOCKWASHER	
9	DEADEND BOX	
10	STEEL PIN	
11	PIN INSULATOR	
12	GRID GAIN, USED ONLY WHEN THERE IS NO POLE GAIN	
13	ANGLE STEEL BRACE (ONE PIECE)	
14	10" WOOD CROSSARM	
15	5/8" EYE BOLT	
16	5/8" EYE BOLT	
17	EXTENSION LINK	
18	BELL TYPE SUSPENSION INSULATOR WITH CONNECTING HARDWARE	
19	STEEL CLAMP	
20	STEEL ANGLE, PIN	
21	CLUSTER MOUNTING BRACKET, STEEL	
22	TRANSFORMER GROUNDING CONNECTION	
23	STIRRUP	
24	SECONDARY LEAD SUPPORT BRACKET	
25	ADAPTER PLATE, FOR CLUSTER MOUNTING	
26	CLUSTER BRACKET, FOR SPULL INSULATOR	
27	SPULL INSULATOR	
28	U BOLT CLAMP	
29	PRETIGHTENED GUY GRIP	
30	GUY HOIK	
31	GUY STRAIN INSULATOR	
32	GUY RING, SIZE AS SPECIFIED	
33	4" WOOD STRAP, FOR BRAIN GROUND WIRE	
34	GROUND CLAMP	
35	CONDUIT COUPLING	
36	CONDUIT BEND	
37	INSULATED BUSHING	
38	PERFORATED STRAPPING, 1-1/2" WIDE	
39	HOT LINE CLAMP	
40	FUSED CUTOFF, 200A	
41	SURGE ARRESTER, 10KV	
42	PULL TOP PIN (GRADE PIN) - 24 INCHES LONG	
43	PULL TOP PIN (GRADE PIN) - 24 INCHES LONG	
44	ANGLE PILE TOP PIN	
45	3/8" BRAIN WIRE-SIZE	

(c) TO MATCH OR EXCEED AMPACITY OF CONNECTING CABLE, OR AT 25% OF TRANSFORMER FULL LOAD CURRENT, BUT NOT LESS THAN

POLE LINE MATERIAL LIST

(b) CABLE, OR TRANSFORMER FULL LOAD CURRENT, BUT NOT LESS THAN 400A.

SKETCH TS-16302L-15

POLE LINE MATERIAL LIST		TS-16302L (JANUARY 1988)
46	TRI-MOUNT BRACKET	
47	TERMINATOR BRACKET	
48	MOUNTED BRACKET	
49	CABLE GRIP HANGER	
50	HOSE CLAMP	
51	STUD, 3/4" X 1-3/4"	
52	STUD, 3/4" X 1-3/4"	
53	LINE POST INSULATOR	
54	INSULATOR BRACKET	
55	ANGLE CLAMP	
56	INSULATOR, LINE POST CLAMP	
57	CROSSARM	
58	CROSSARM GAIN BRACKET	
59	CROSSARM GAIN BRACKET	
60	WEDGE CLAMP	
61	MIDSPAN SERVICE CLAMP	
62	STUD, 7"	
63	SADDLE, ANGLE	
64	SADDLE, CROSSARM	
65	FLUTING, POLE TOP	
66	CONNECTOR	
67	SUSPENSION CLAMP	
68	TIE, FIBERGLASS CABLE	
69	TIE, FIBERGLASS CABLE	
70	EQUIPMENT MOUNT, 36", 48" WIDTH	
	EQUIPMENT MOUNT, 36", 35" WIDTH	
SKETCH TS-16302L-15A		POLE LINE MATERIAL LIST

SKETCH TS-16302L-15A

DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND		MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA	
DES. W. JONES/R. WYCKOFF		HIGH VOLTAGE DETAILS	
CHK. W. JONES/R. WYCKOFF			
SUBMITTED BY: W. JONES			
DESIGN DIR.		PAD MOUNT EQUIPMENT DETAILS	
APPROVED: PWO OR ODC		SIZE CODE IDENT. NO.	
DATE 12-1-15		NAVFAC DRAWING NO.	
F 80091			
SATISFACTORY TO:		SCALE: NOTED	
DATE		SPEC.	
		SHEET OF	