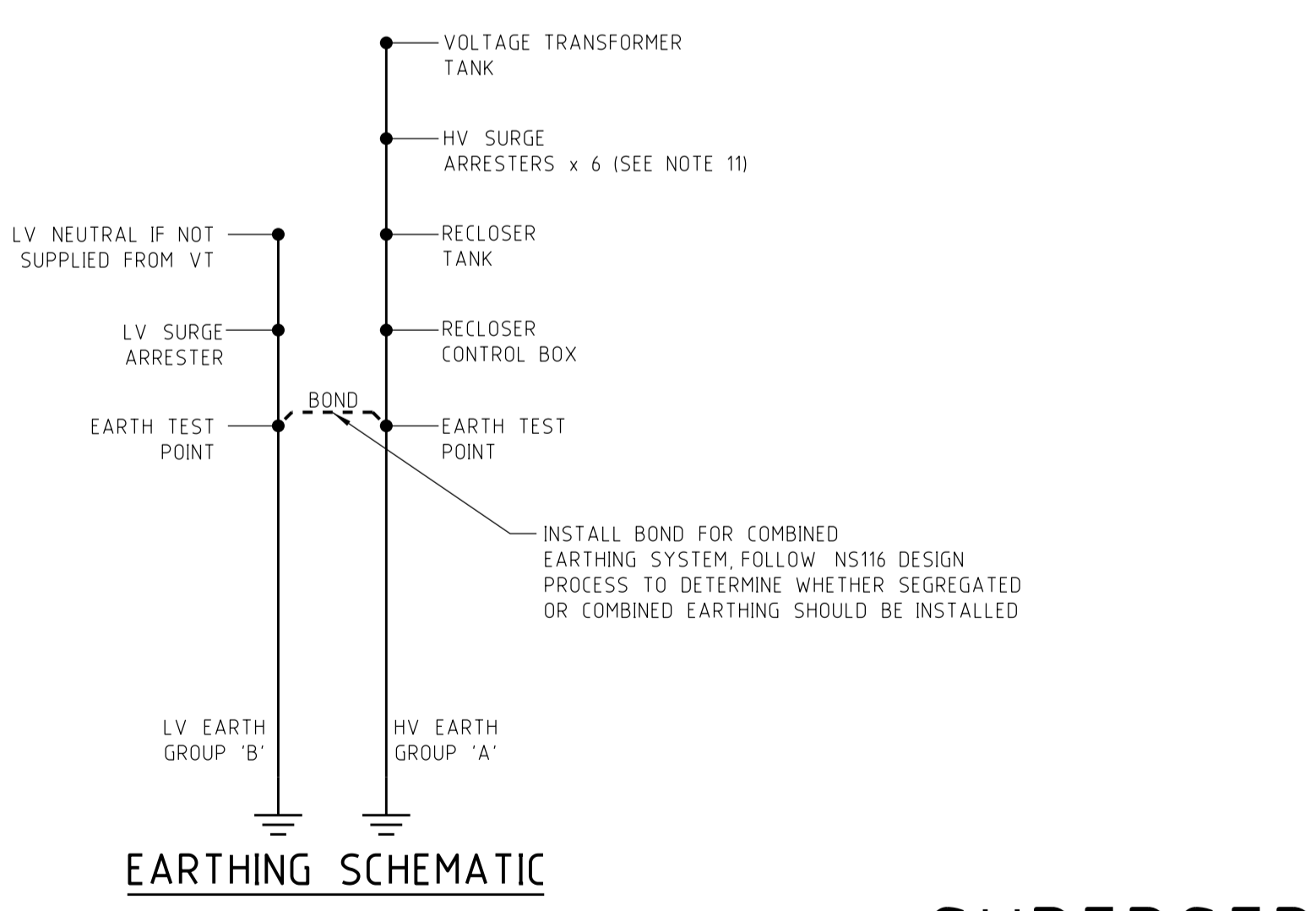
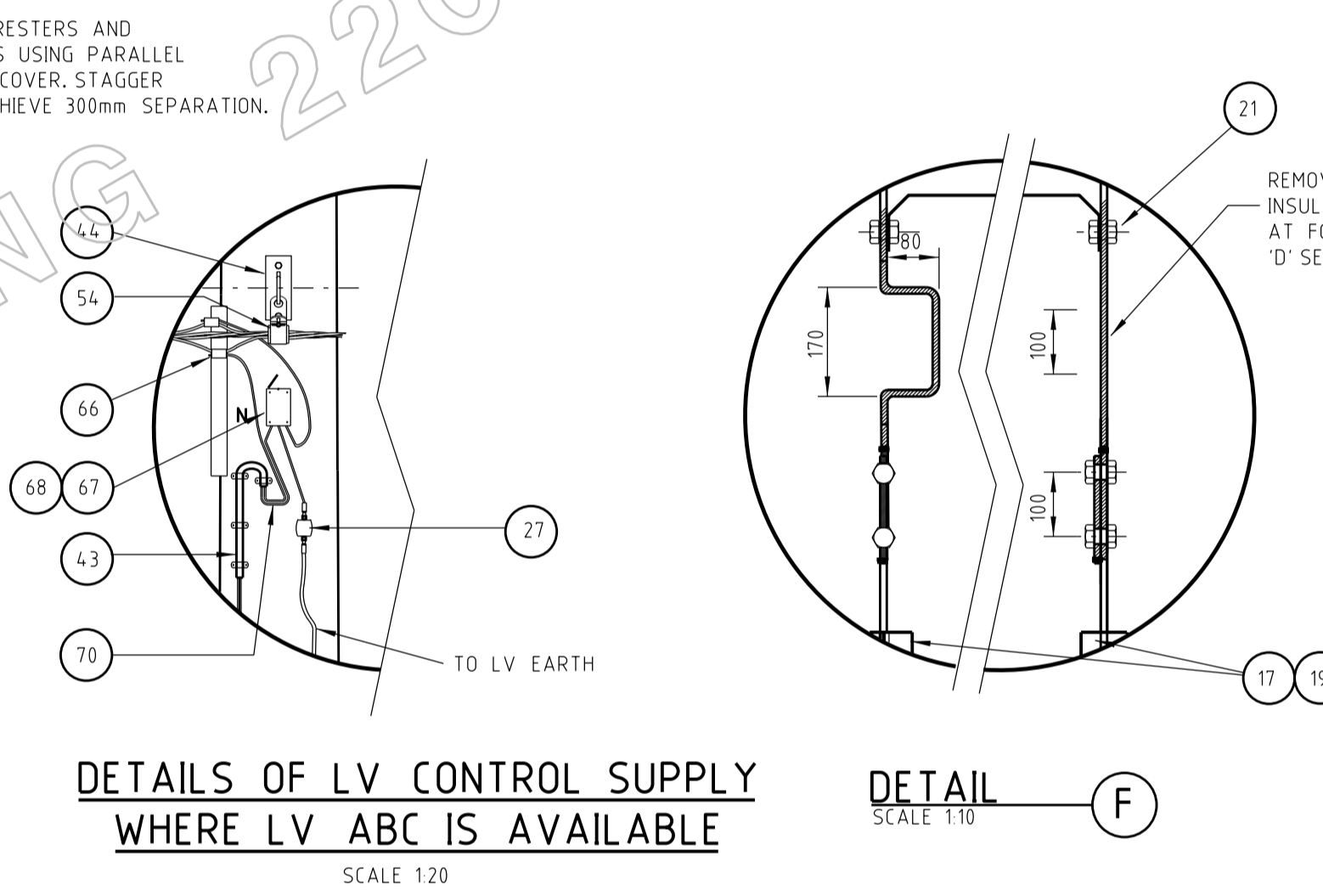
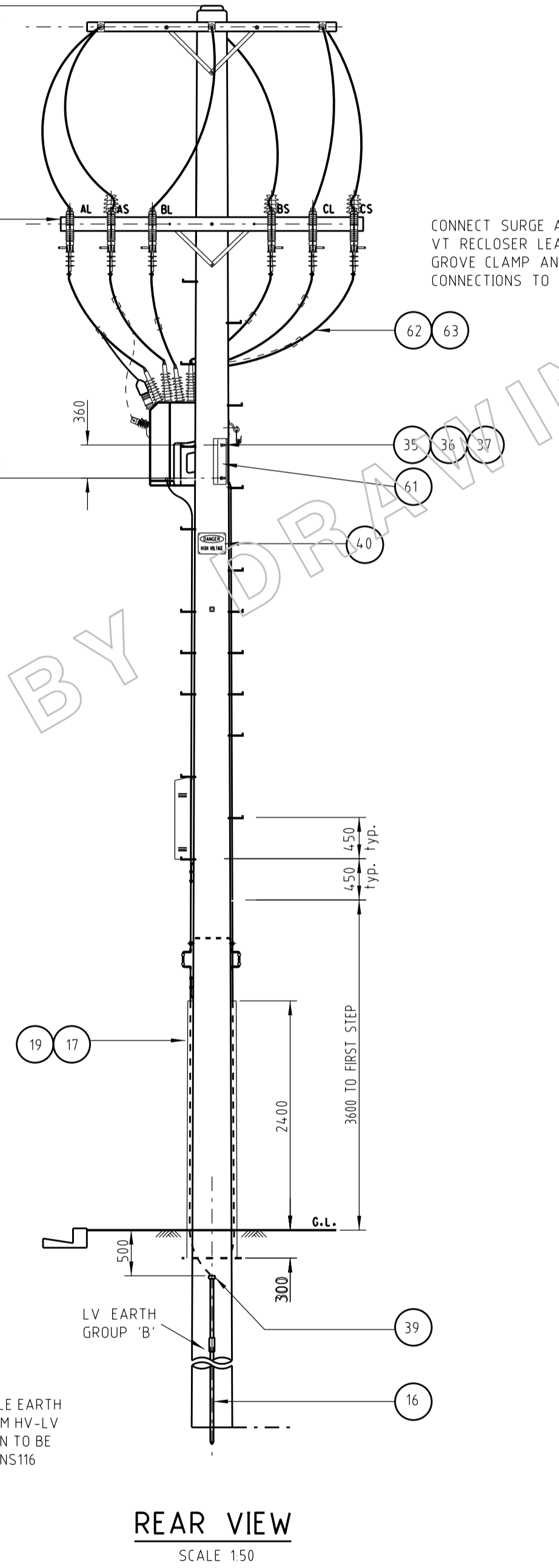
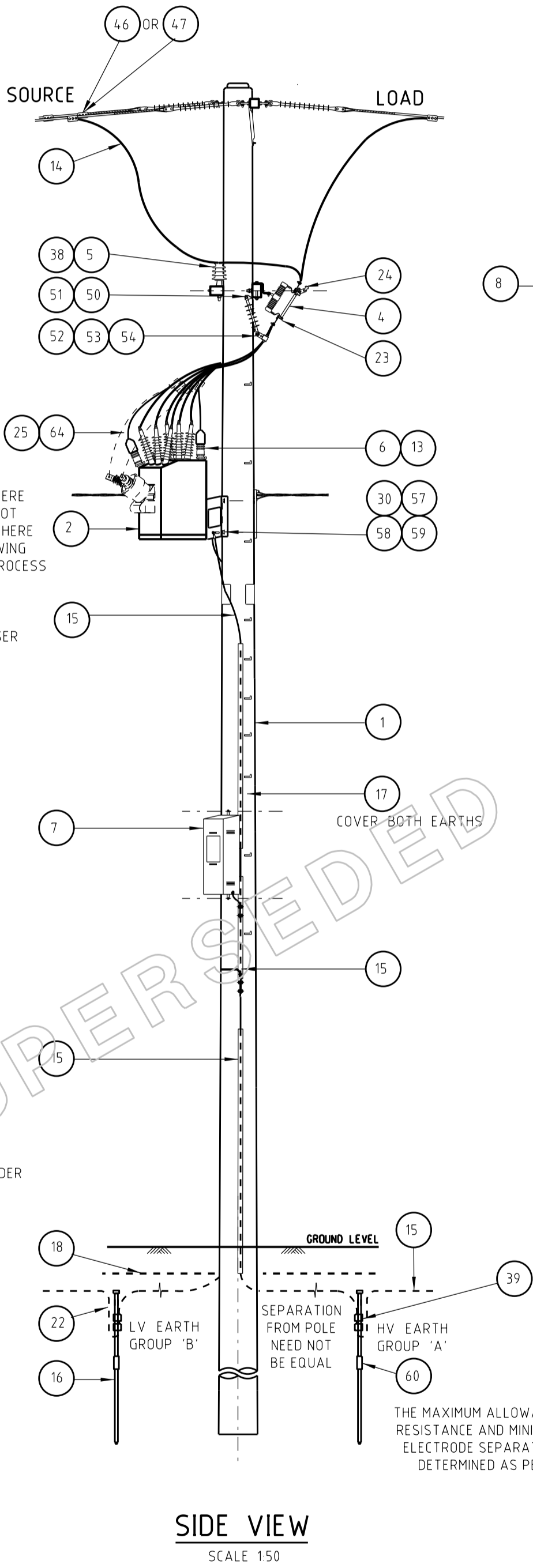
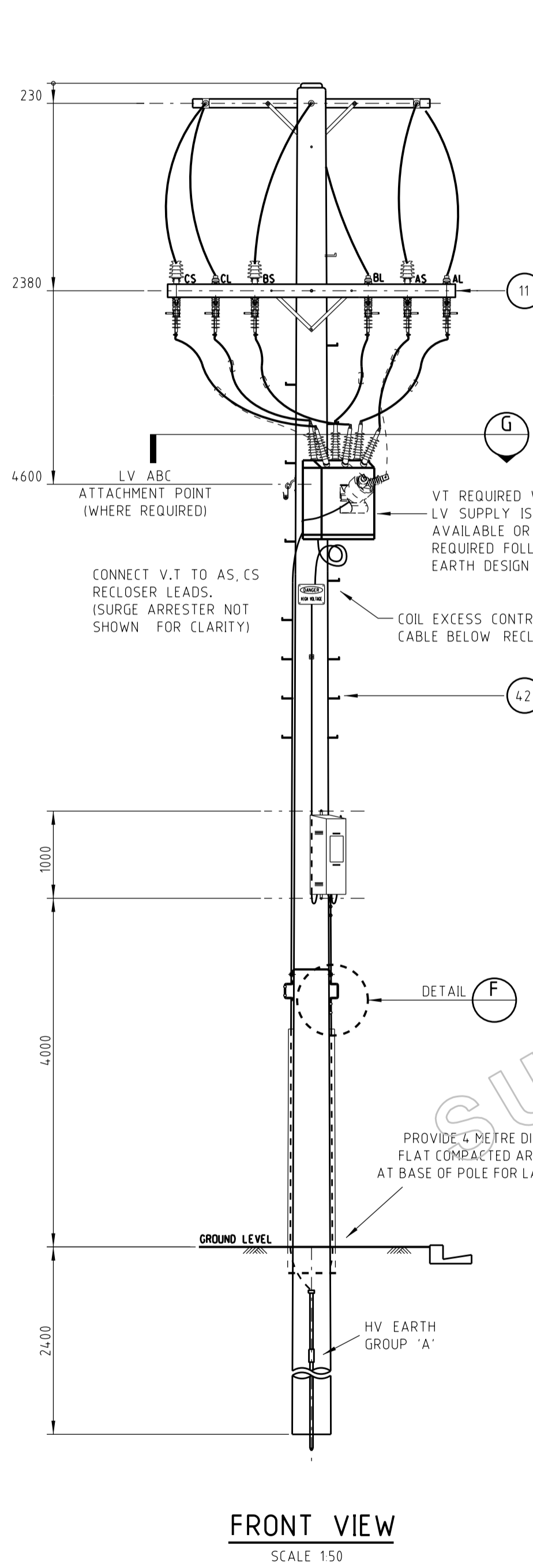


- NOTES**
- REFER TO NS116 FOR ELECTRODE DEPTH AND SPACING DESIGN TO SUIT SPECIFIC LOCATION - VT SUPPLY IS OFTEN PREFERABLE IN DIFFICULT EARTHING AREAS.
  - MINIMUM CLEARANCE 11kV-E TO BE GREATER THAN 200mm, HV PHASE TO PHASE CLEARANCE TO BE GREATER THAN 280mm.
  - SUSPENSION CLAMP (54) MUST BE A FIRM CLAMP ON HV DROPPER CABLES. CONDUIT INSERTS MAY BE USED TO ACHIEVE A FIRM CLAMP.
  - WHERE SUPPLY IS TAKEN FROM LV MAINS, CONNECT PHASE (VIA CB) AND NEUTRAL INTO CONTROL BOX. LV SURGE ARRESTER TO BE FITTED BETWEEN PHASE AND EARTH.
  - CROSSARMS ALSO DETAILED ON DWG A3-151564, STOCKCODE 177033 COVERS THE SET OF INDICATED CROSSARMS FOR THIS POLE.
  - S/CODE 152165 IS FOR AN N15/400A RECLOSER SUPPLIED WITHOUT EXTERNAL V.T. AND DNP 3 COMMS. S/CODE 167734 IS FOR A N15/400A RECLOSER SUPPLIED WITH EXTERNAL VT AND MEGADATA COMMS. S/CODE 17579115 IS FOR A N15/400A RECLOSER SUPPLIED WITH EXTERNAL VT AND DNP 3 COMMS. IF A N15/630A RECLOSER IS REQUESTED IT WILL REQUIRE A SPECIAL ORDER.
  - HV SURGE ARRESTERS TO BE ELECTRICALLY BONDED TO RECLOSER TANK EARTH USING 70mm<sup>2</sup> PVC INSULATED CABLE (ITEM 15).
  - WHERE BARE LV MAINS ARE ATTACHED TO RECLOSER POLE, THEY SHALL BE CONVERTED TO LV ABC AT LEAST ONE SPAN EITHER SIDE OF RECLOSER.
  - IF A RECLOSER IS INSTALLED IN A RADIAL FEEDER, THEN A BYPASS ABS IS REQUIRED TO BE INSTALLED. IF RECLOSER IS INSTALLED ON A RING FEEDER NO ABS IS REQUIRED.



ITEM	DESCRIPTION	DWG No	S/CODE	QTY
70	CABLE - 2 CORE, 6mm <sup>2</sup> , DOUBLE INSULATED RED/BLACK	H14146	AS REQ	
69	ARRESTER - SURGE, LOW VOLTAGE	H31893	1	
68	ENCLOSURE - WEATHERPROOF		PURCHASE	1
67	CIRCUIT BREAKER - 16A, 10kA		PURCHASE	1
66	CONNECTOR - IPC, LV ABC	176580	2	
65				
64	COVERED CONDUCTOR CCT80	144519	AS REQ	
63	PARALLEL GROOVE CLAMP COVER	144576	6	
62	PARALLEL GROOVE CLAMP	144568	6	
61	COVER - FIBREGLASS INSULATION	A4-566374	1	
60	COUPLER - EARTH, TO SUIT 15 EARTH ROD	H31649	AS REQ	
59	WASHER - SPRING, M12, GALVANISED	H12047	3	
58	BOLT & NUT - M12 x 40mm, HEX, GALVANISED	46375	3	
57	CRIMP LUG - M12 FOR 70mm <sup>2</sup> COPPER	H20527	8	
56				
55	BOLT & NUT - M12 x 170mm, HEX, GALVANISED	H37132	2	
54	CLAMP - SUSPENSION	63057	7	
53	WASHER - FLAT, M16, GALVANISED	175727	6	
52	BOLT & NUT - M16 x 50mm, HEX, GALVANISED	46524	6	
51	INSULATOR - 22kV LONGROD	150375	6	
50	LINK PLATE - TWISTED	176901	6	
49				
48	11kV OVERHEAD ARRANGEMENT 2-11 (MINUS BRIDGING)	A3-513915	1	
47	CLAMP - CONDUCTOR STRAIN, PARALLEL GROOVE, 2 BOLT	62414	AS REQ	
46	CLAMP - CONDUCTOR STRAIN, PARALLEL GROOVE, 3 BOLT	62406	AS REQ	
45				
44	BRACKET HOOK	66621	1	
43	CONDUIT - FLEXIBLE PVC 20mm	176566	AS REQ	
42	STEPS - POLE AT 450 CENTRES OR AS REQUIRED	A3-517698	AS REQ	
41	WASHER - FLAT, M20, GALVANISED	175706	8	
40	SIGN - DANGER HIGH VOLTAGE	H47012	2	
39	CONNECTOR CRIMP TYPE YGHC TO SUIT 70mm <sup>2</sup>	177942	AS REQ	
38	PIN - PATTERN C	A3-514401	H21531	9
37	WASHER - SPRING, SPECIAL CONICAL, M20	H39655	8	
36	WASHER - SQUARE, M20 x 65 x 65 x 5mm, GALVANISED	65516	8	
35	BOLT & NUT - M20, HEX, GALVANISED, TO SUIT POLE			
34	BOLT & NUT - M16 x 180mm, HEX, GALVANISED	47068	6	
33	COACH SCREW - M10 x 40mm, GALVANISED	50567	12	
32	COACH SCREW - M12 x 90mm, GALVANISED	50443	4	
31	WASHER - CONICAL, M12, GALVANISED	H39639	23	
30	WASHER - FLAT, M12, GALVANISED	175704	26	
29	BOLT & NUT - M12 x 130mm, HEX, GALVANISED	46805	10	
28				
27				
26	BRACE - CROSSARM, GALVANISED, 690 x 40 x 5mm	A3-514385	H17738	4
25	CRIMP LUG - BIMETAL, M12, TO SUIT 80mm <sup>2</sup> CCT	176953	8	
24	CRIMP LUG - BI METAL, M10, TO SUIT CONDUCTOR	A3-513569	6	
23	CRIMP LUG - BI METAL, M10, TO SUIT 185mm <sup>2</sup>	57927	6	
22				
21	CLAMP - SPLIT BOLT, B26 HENLEY	H18815	AS REQ	
20	STAPLES - GALVANISED, 4 x 30mm	51052	AS REQ	
19	CLOUTS - GALVANISED/2.8 x 30mm	50971	AS REQ	
18	COVER STRIP - CABLE - 150mm WIDTH	151100	AS REQ	
17	PROTECTIVE EARTH GUARD - EARTH x 2700mm	157552	AS REQ	
16	ELECTRODE - DRIVEN EARTH/15 x 1800mm	H31631	AS REQ	
15	CONDUCTOR - EARTH, 19/2 1/4, PVC INSULATED HD 70mm <sup>2</sup>	H13556	AS REQ	
14	CONDUCTOR TO SUIT MAINS		AS REQ	
13	SHIELD INSULATOR BUSHING	H21858	6	
12				
11	CROSSARM FOR PIN INSULATORS (DETAIL B)	A3-151564	177033	1
10				
9				
8	CROSSARM FOR LINKS (DETAIL A)	A3-151564	177033	1
7	CONTROL CUBICLE		1	
6	ARRESTER - 11kV	111948	6	
5	INSULATOR - PIN, 22kV TO SUIT PATTERN C PIN	75697	3	
4	LINK - 11kV, 630AMP	58750	6	
3				
2	RECLOSER - 11kV NULEC TYPE N15 400A (SEE NOTE 6)		1	
1	POLE - WOOD, 14.0m x 12kN	146753	1	

**CAD DRAWING**  
DO NOT MANUALLY AMEND

**AMENDMENTS**

NO	INITIAL ISSUE	DATE	BY	CHKD	W.G.
1	DWN: B.B. / DATE: 29/10/04 / NOTES 11, 12 & 13 ADDED.		W. GRAHAM	B.B.	
2	AUTHD BY: W. GRAHAM / DWN: B.B. / DATE: 02/07/05 / SURGE ARRESTER CONNECTION SHOWN.		W. GRAHAM	B.B.	
3	DWN: B.B. / DATE: 13/04/05 / KERB MIN CLEARANCE AND NOTE 7 AMENDED.		W. GRAHAM	B.B.	
4	DWN: BARBARA BARSKI / DATE: 06/11/2007 / EARTHING DETAILS UPDATED, RECLOSER TYPE CHANGED FROM NZ4 TO N15.		WILLIAM GRAHAM	BARBARA BARSKI	
5	DWN: RAY DEAL / DATE: 20/05/2011 / SUPERSEDED BY 220041		DANIEL DAFU	RAY DEAL	
	APP'D BY: WILLIAM GRAHAM / DWN: ROSS HUGHES		WILLIAM GRAHAM	ROSS HUGHES	

**ASSOCIATED DRAWINGS**

DESCRIPTION	NO
STANDARD CONSTRUCTION 11kV NU-LEC 400/630A RECLOSER WITH ABS BYPASS	A1-151078
STANDARD CONSTRUCTION 33kV NU-LEC 800A RECLOSER	A1-154102
STANDARD CONSTRUCTION 33kV NU-LEC 400/630A RECLOSER	A1-127318
STANDARD CONSTRUCTION 11kV RECLOSER CROSSARM SET	A3-151564

**EnergyAustralia**

DESIGN  
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TEL 4951 9388 FAX 4951 9389

**Energserve** A Business of EnergyAustralia

**SCALE**

SCALE	AS SHOWN
DESIGNED	W. GRAHAM
DRAWN	PATRICIA RIOS
CHECKED	W. GRAHAM
APPROVED	D. SIMPSON
DATE	07/10/04
PRJ/TRK No.	
PROJECT NUMBER	STD

**STANDARD CONSTRUCTION**  
11kV NU-LEC TYPE N15  
400A & 630A RECLOSER  
WITHOUT ABS BYPASS

DRAWING No **168025** SHEET **01** AMD **5** SIZE **A1**

**SUPERSEDED**