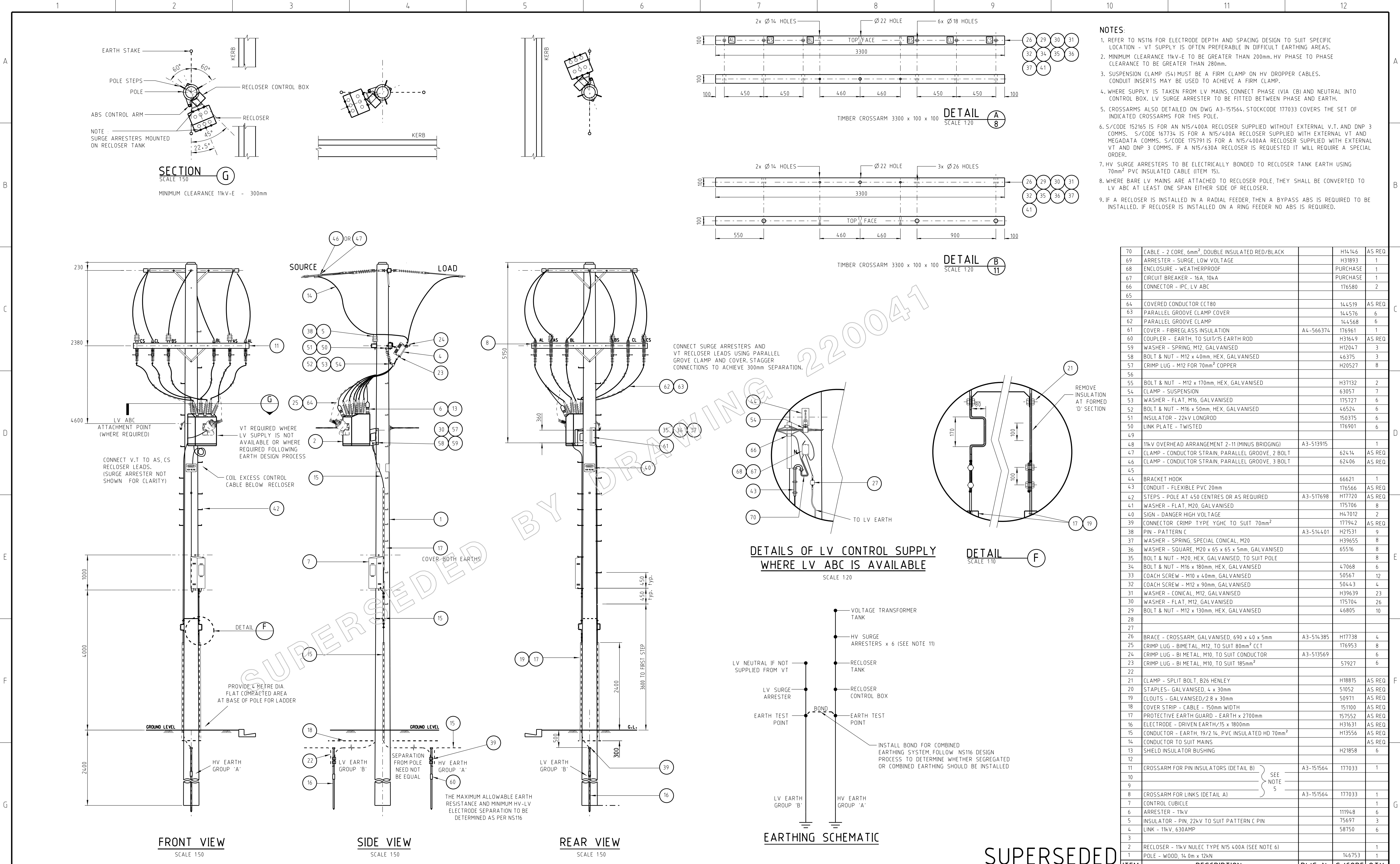




- NOTES:**
- REFER TO N5116 FOR ELECTRODE DEPTH AND SPACING DESIGN TO SUIT SPECIFIC LOCATION - VT SUPPLY IS OFTEN PREFERABLE IN DIFFICULT EARTHING AREAS.
 - MINIMUM CLEARANCE 11kV-E TO BE GREATER THAN 200mm. HV PHASE TO PHASE CLEARANCE TO BE GREATER THAN 280mm.
 - SUSPENSION CLAMP (54) MUST BE A FIRM 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 175791 IS FOR A N15/400AA 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 70mm² 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.

70	CABLE - 2 CORE, 6mm ² , DOUBLE INSULATED RED/BLACK		H14146	AS REQ
69	ARRESTER - SURGE, LOW VOLTAGE		H31893	1
68	ENCLOSURE - WEATHERPROOF			PURCHASE
67	CIRCUIT BREAKER - 16A, 10kA			PURCHASE
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	176961	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 ² 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	H17720	AS REQ
41	WASHER - FLAT, M20, GALVANISED		175706	8
40	SIGN - DANGER HIGH VOLTAGE		H47012	2
39	CONNECTOR CRIMP TYPE YGHC TO SUIT 70mm ²		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			8
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 ² CCT		176953	8
24	CRIMP LUG - BI METAL, M10, TO SUIT CONDUCTOR	A3-513569		6
23	CRIMP LUG - BI METAL, M10, TO SUIT 185mm ²		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 14, PVC INSULATED HD 70mm ²		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 12xN		146753	1

CAD DRAWING DO NOT MANUALLY AMEND	
AMENDMENTS	
0	INITIAL ISSUE
1	DWN: B.B. CHKD: W.G. DATE: 29/10/04 NOTES 11, 12 & 13 ADDED.
2	AUTHD BY: W.GRAHAM DWN: B.B. CHKD: W.G. DATE: 02/02/05 SURGE ARRESTER CONNECTION SHOWN.
3	AUTHD BY: W.GRAHAM DWN: B.B. CHKD: W.G. DATE: 13/04/05 KERB MIN. CLEARANCE AND NOTE 7 AMENDED.
4	AUTHD BY: W.GRAHAM DWN: BARBARA BARSKI CHKD: WILLIAM GRAHAM DATE: 06/11/2007 EARTHING DETAILS UPDATED. RECLOSER TYPE CHANGED FROM N2A TO N15.
5	APP'D BY: WILLIAM GRAHAM DWN: RAY DEAL CHKD: DANIEL DAFI DATE: 20/05/2011 SUPERSEDED BY 220041
6	APP'D BY: ROSS HUGHES

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
ASSOCIATED DRAWINGS	



DESIGN
165 NEWCASTLE RD WALLSEND, NSW 2287
TEL 4951 9388 FAX 4951 9389



A Business of
EnergyAustralia

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

SUPERSEDED

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

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