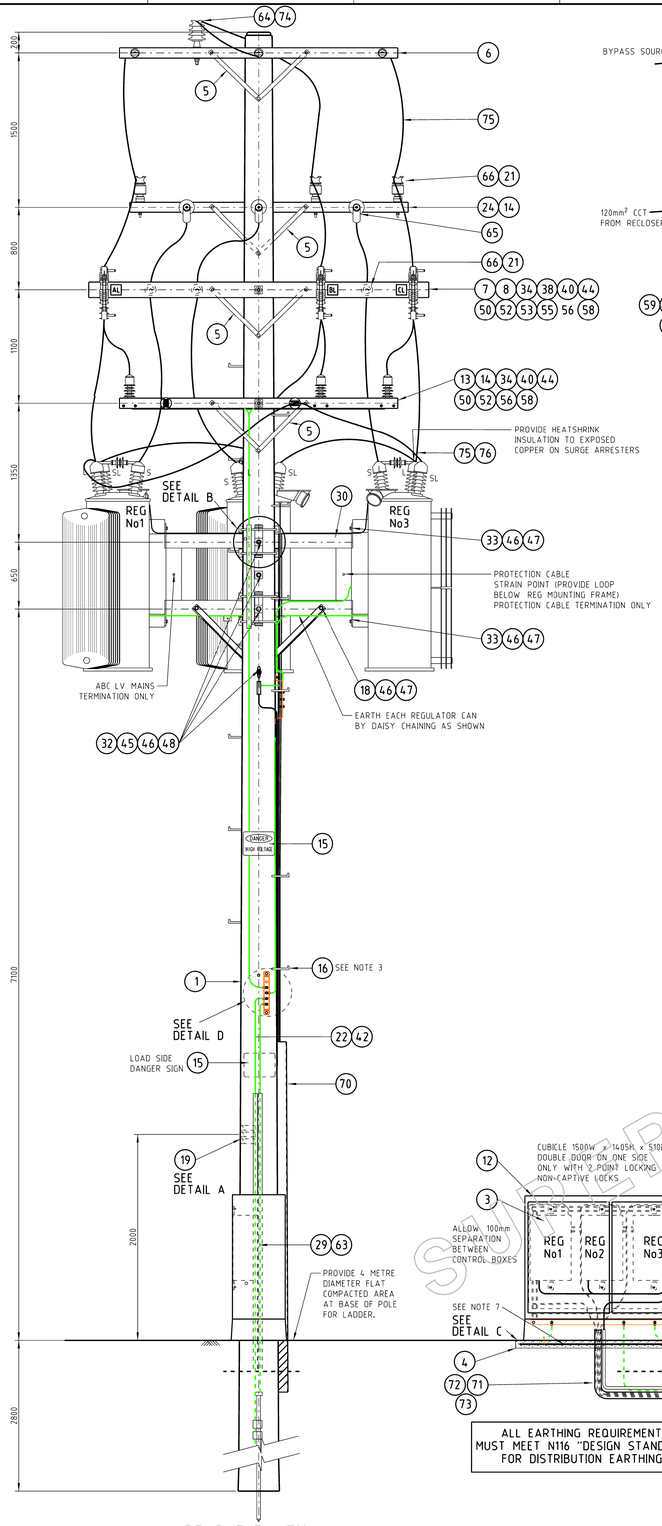
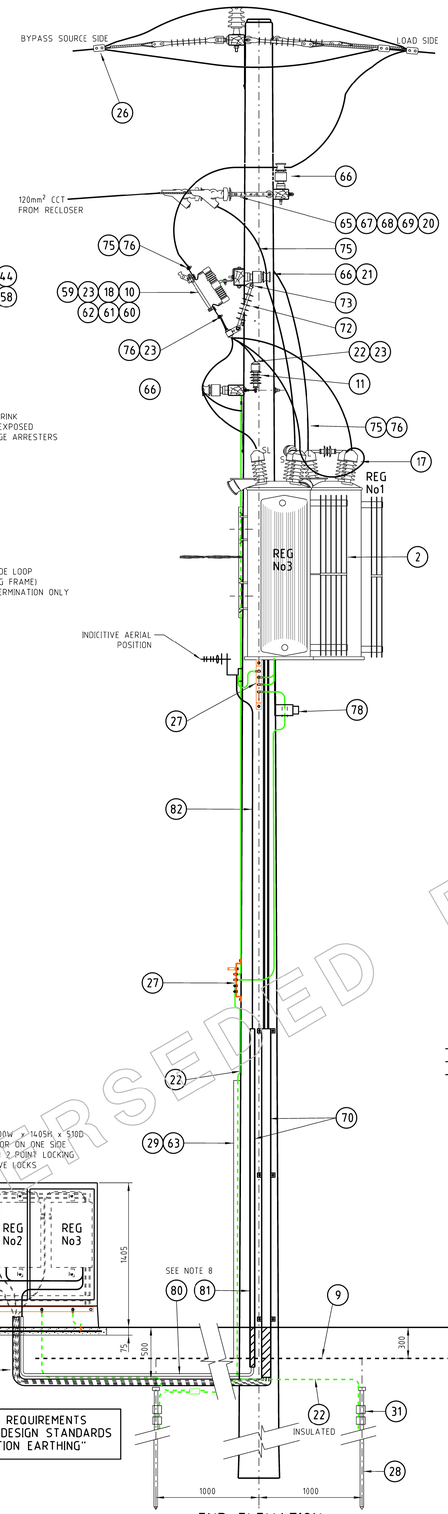


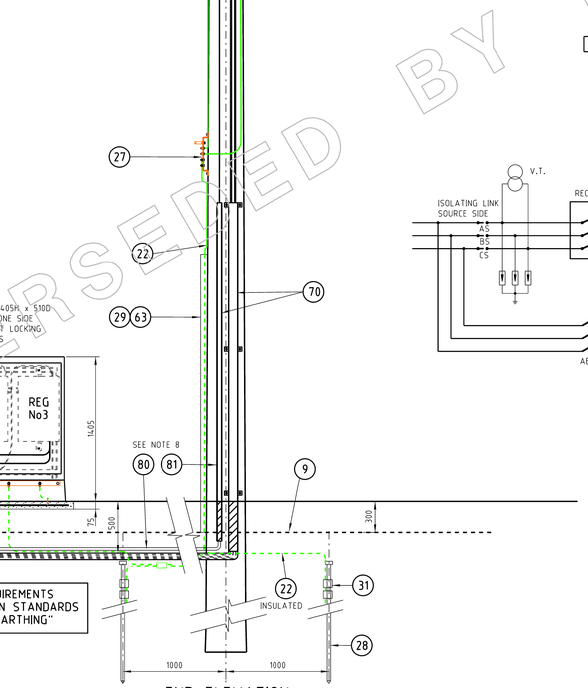
REAR ELEVATION

SCALE 1:25

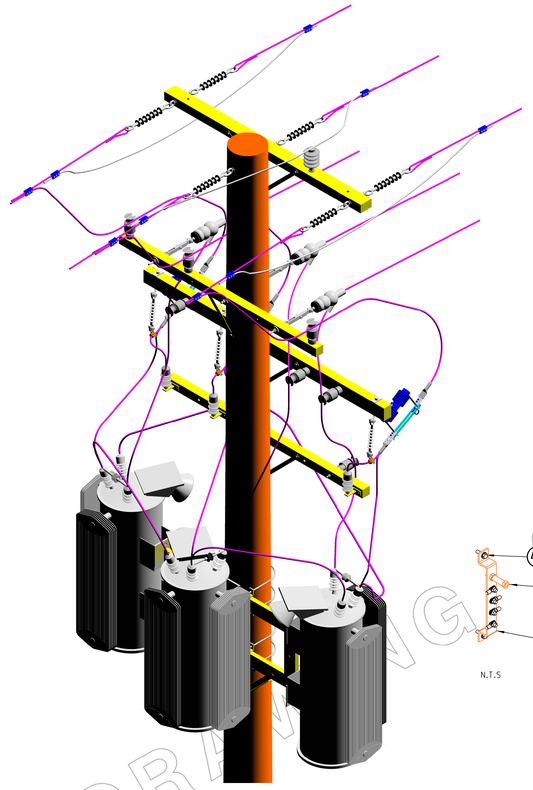


END ELEVATION

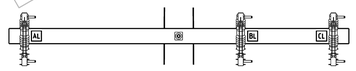
SCALE 1:25



ALL EARTHING REQUIREMENTS MUST MEET N116 "DESIGN STANDARDS FOR DISTRIBUTION EARTHING"

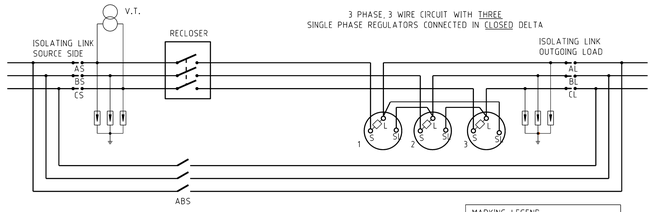


ISOMETRIC VIEW



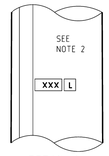
PHASE/LINK MARKERS

(SEE NOTE 4)



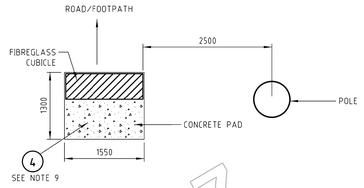
MARKING LEGEND

AS, BS, CS- SOURCE SIDE
AL, BL, CL- LOAD SIDE
ABS - AIRBREAK SWITCH BYPASS



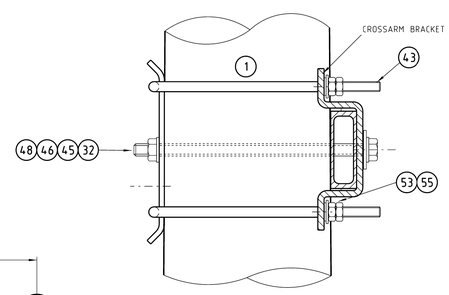
DETAIL A

SCALE 1:10



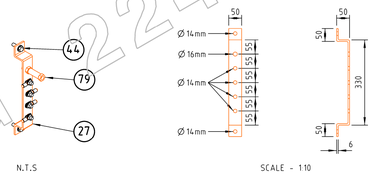
DETAIL C

SCALE 1:50



DETAIL B

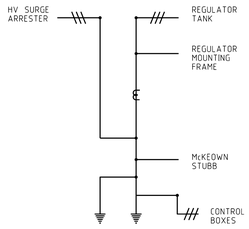
SCALE 1:5



N.T.S

DETAIL D

SCALE - 1:10



EARTHING SCHEMATIC

NOTES

1. CONNECTIONS BETWEEN 11kV LINK UNITS & THE VOLTAGE REGULATORS ARE MADE USING 7/4.75 120mm² CCT CABLE.
2. LOAD LINK NUMBER TO BE INSTALLED ON POLE 2000mm ABOVE GROUND LINE AS SHOWN IN DETAIL A. POLE NUMBER TO BE INSTALLED BETWEEN 2400mm AND 3000mm ABOVE GROUND LINE. (SEE NS148).
3. FIRST POLE STEP TO BE FITTED NO LESS THAN 3600mm FROM GROUND LEVEL AND REMAINING STEPS TO BE STAGGERED ABOVE AT 450mm CENTRES ON ALTERNATE SIDES OF POLE. HOLES TO BE 50-100mm OFF CENTRE, DEPENDING ON THE SIZE OF THE POLE.
4. PHASE LINK MARKERS TO BE INSTALLED ADJACENT TO EACH LINK AS SHOWN.
5. ALL STEELWORK TO BE SECURELY BONDED TO EARTH USING 70mm² BLACK PVC INSULATED CABLE.
6. FOR CROSSARM DRILLING DETAIL SEE DRAWING 183394.
7. REGULATOR CONTROL CUBICLE TO BE POSITIONED EITHER IN THE FOOTPATH ALLOCATED AREA OR IN THE LINE EASEMENT NO CLOSER THAN 2500 FROM THE POLE. A 1550 x 1300 CONCRETE PAD IS REQUIRED FOR THE CONTROL CUBICLE.
8. DRAW WIRE TO BE INSTALLED INSIDE CONDUIT FOR FUTURE COMMS COAXIAL CABLE.
9. CONSTRUCT CONCRETE FOOTING FOR FIBREGLASS CABINET AS PER CONSTRUCTION DRAWING 191227

ITEM	DESCRIPTION	DRG. No	REV	STOCK CODE	QTY
82	COMMUNICATIONS COAXIAL CABLE (TO BE INSTALLED BY COMMS SECTION)				
81	25mm² Ø GREY CONDUIT (ABOVE GROUND)			78063	
80	25mm² Ø HD ORANGE CONDUIT (BELOW GROUND)			78014	
79	EARTH STUBB McKEOWN	820088	3	H108415	1
78	CURRENT TRANSFORMER - OUTDOOR GRAME LEAKAGE CT				1
77	PARALLEL GROOVE CLAMP COVER			144576	3
76	LUG BI-METAL COMPRESSION 7/4.75			176472	9
75	CABLE CCT 120 7/4.75 120mm² AL			147421	A/R
74	INSULATOR 22kV PIN			H21531	1
73	CABLE 10 CORE 1/1.3mm			59899	A/R
72	CONDUIT SWEEP BEND 63mm			PURCHASE	2
71	CONDUIT 63mm ORANGE			PURCHASE	1
70	CABLE COVER TO SUIT			PURCHASE	2
69	LINK - SAG, 70KN (PLP PART No CTSLEW-070-1)			PURCHASE	3
68	COVER - STRAIN CLAMP			144543	3
67	CLAMP - CONDUCTOR STRAIN, FOR CCT120			144527	3
66	INSULATOR, PIN, POST, LONG STUD			145052	8
65	INSULATOR - STRAIN ROD			144550	3
64	INSULATOR 22kV PIN PATTERN C			75697	1
63	CLOUT - GALVANISED Ø2.3 x 40			50963	A/R
62	WASHER - M10 x 21mm x 1.2mm, STAINLESS STEEL			49411	30
61	WASHER - M10, SPRING, STAINLESS STEEL			50120	15
60	NUT - M10, HEX, STAINLESS STEEL			H39401	15
59	BOLT - M10 x 40, HEX, STAINLESS STEEL			45096	15
58	WASHER - M12, CONICAL, GALVANISED			H39639	14
57	WASHER - M12, SPRING, GALVANISED			H12047	26
56	WASHER - M12, FLAT, GALVANISED			177982	20
55	WASHER - M16, CONICAL, GALVANISED			H39647	19
54					
53	WASHER - M16, FLAT, GALVANISED			177984	30
52	WASHER - M20, CONICAL, GALVANISED			H39655	9
51	WASHER - M20, SPRING, GALVANISED			175569	2
50	WASHER - M20, 50mm SQUARE, GALVANISED			H39265	8
49	WASHER - M20, 75mm SQUARE, GALVANISED			H39231	12
48	WASHER - M24, CONICAL, GALVANISED			H39663	4
47	WASHER - M24, SPRING, GALVANISED			ORDER	4
46	WASHER - M24, FLAT, GALVANISED			177981	8
45	WASHER - M24, 50mm SQUARE, GALVANISED			H39273	4
44	COACH SCREW - M12 x 100, GALVANISED			H40484	3
43	U BOLT - M16, SIZE 3, GALVANISED			H36932	4
42	STAPLES - GALVANISED 3.15mm x 25mm			175601	A/R
41	BOLT & NUT - M12 x 50, HEX, GALVANISED			46391	24
40	BOLT & NUT - M12 x 140, HEX, GALVANISED			46821	16
39	BOLT & NUT - M12 x 260, HEX, GALVANISED			H37637	4
38	BOLT & NUT - M16 x 200, HEX, GALVANISED			83725	3
37	BOLT & NUT - M16 x 40, HEX, GALVANISED			175674	8
36	BOLT & NUT - M20 x 50, HEX, GALVANISED			46573	2
35	BOLT & NUT - M20 x 260, HEX, GALVANISED			47126	4
34	BOLT & NUT - M20 TO SUIT POLE, HEX, GALVANISED	515465	8	SECT.11	5
33	BOLT & NUT - M24 x 65, HEX, GALVANISED			ORDER	6
32	BOLT & NUT - M24 x 500, HEX, GALVANISED	515465	8	H11538	2
31	CONNECTOR - 'P', CRIMP, BURNDY, EARTH			H31699	A/R
30	POLE MOUNTED REGULATOR MANUFACTURED STEELWORK	181618	2		1
29	PROTECTOR COVER EARTH GRID 2700mm BLACK			157552	2
28	ROD - GROUND EARTH 1800 x 15mm COPPERCLAD			H31631	min3
27	EARTH BAR - 50.8mm TINNED HD COPPER (SEE DETAIL C)			179661	1
26	CLAMP - 3 BOLT PARALLEL GROOVE - ALUMINIUM			144568	3
25	PARALLEL GROOVE CLAMP 3 BOLT BI-METAL 35mm² - 185mm² AL/CU			176491	A/R
24	CROSSARM 2700 x 150 x 100	183394	5	H23761	1
23	LUG - 70mm², COMPRESSION M12 HOLE			74831	26
22	CABLE - Cu EARTH 70mm² 19/2.14 PVC INSULATED			60111	A/R
21	WIRE - TIE, PREFORMED, INSULATED FOR CCT120			144600	3
20	EYEBOLT - M20 x 200mm GALVANISED			H37881	3
19	LINK SYSTEM NUMBERS				A/R
18	BOLT & NUT M24 x 90 HEX GALVANISED			PURCHASE	2
17	COVER - CONNECTOR INSULATING SHROUD			116715	9
16	STEP - POLE 16mm DRIVE IN	517698	4	H17720	A/R
15	SIGN - "DANGER HIGH VOLTAGE"	503117	4	H47012	2
14	BRACKET - MOUNTING - 130mm GAIN BLOCK			146274	2
13	CROSSARM 2700 x 150 x 100	183394	5	H23761	1
12	CUBICLE - FIBREGLASS PART No.F11061EA (FULTON INDUSTRIES AUST.)			PURCHASE	1
11	LIGHTNING ARRESTER UNIT - 11kV			111948	3
10	ISOLATING LINK - SINGLE PHASE, 12kV, 630A			58750	3
9	COVER - PROTECTOR UNDERGROUND CABLE 150mm			151084	A/R
8	BRACKET - MOUNTING - 150mm GAIN BLOCK			146290	1
7	CROSSARM - 3300 x 150 x 100 HARDWOOD	183394	5	H23020	1
6	11kV THROUGH TERMINATION 2-11	513915	17	SEE DWG	1
5	BRACE - CROSSARM, 690 x 40 x 5mm FLAT BAR	514385	5	H17738	8
4	FIBREGLASS CABINET CONCRETE FOOTING	191227	0		1
3	REGULATOR CONTROL CUBICLE				3
2	REGULATOR UNIT - SINGLE PHASE 100A OR 200A				3
1	POLE - 15.5m TPI, 12kN, CONCRETED 2.8m IN GROUND			152868	1

STANDARD CONSTRUCTION POLE TOP REGULATOR GROUND MOUNTED FIBREGLASS CABINET CONCRETE FOOTING DETAILS	191227
REGULATOR CROSSARM DRILLING DETAIL	183394
NU-LEC RECLOSER CONTROLLING POLE REGULATOR - CONSTRUCTION DETAIL	185171
POLE MOUNTED REGULATOR - GENERAL ARRANGEMENT	182685

ASSOCIATED DRAWINGS

CAD DRAWING
DO NOT MANUALLY AMEND

AMENDMENTS

0	INITIAL ISSUE	DWN: NATALIE SINGLETON	CHKED: PETER STOREY
1	DATE 11/04/2008 — PHASING CORRECTED, CUBICLE NOTE AMENDED, POLE HEIGHT CHANGED FROM 14.0m TO 15.5m	APP'D by ROSS HUGHES	
2	DATE 05/09/2008 — COMMUNICATIONS CABLE DETAILS ADDED	DWN: NATALIE SINGLETON	CHKED: PETER STOREY
3	DATE 10/11/2008 — ITEM 4 POLE CAP REPLACED WITH FIBREGLASS CABINET CONCRETE FOOTING, STOCK CODES UPDATED	APP'D by PETER STOREY	DWN: NATALIE SINGLETON; CHKED: STEPHEN LILLISS
4	DATE 20/05/2011 — SUPERSEDED BY 224227	APP'D by STEPHEN LILLISS	DWN: RAY DEAL; CHKED: DANIEL DARO
		APP'D by ROSS HUGHES	

SUPERSEDED

EnergyAustralia

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

Enerserve — A Business of EnergyAustralia

SCALE	1:25
DESIGNED	WILLIAM GRAHAM
DRAWN	NATALIE SINGLETON
CHECKED	PETER STOREY
APPROVED	ROSS HUGHES
DATE	07/01/08
PRJTRK No.	
PROJECT NUMBER	STD

STANDARD CONSTRUCTION 3 UNIT 11kV POLE MOUNTED REGULATOR WITH GROUND MOUNTED CONTROLLER CONSTRUCTION DETAIL

DRAWING No 185175 | SHEET 01 | AMD 4 | SIZE B1

SUPERSEDED BY DRAWING 224227