



- NOTES:**
- THE FOLLOWING INFORMATION IS OBTAINED FROM THE PROJECT DESIGN DRAWINGS:
 - POLE LENGTH AND STRENGTH.
 - SPECIAL FOUNDATION REQUIREMENTS.
 - POLE EMBEDMENT DEPTH.
 - CONDUCTOR SIZE.
 - VARIATIONS TO STANDARD CROSSARM REQUIREMENTS.
 - STAY REQUIREMENTS.
 - DEVIATION ANGLE.
 - THE MAXIMUM LINE DEVIATION ANGLE TO BE CONSTRUCTED ON THIS ARRANGEMENT IS TO BE DETERMINED BY THE LINE DESIGNER.
 - WHEN DESIGNING UNDERBUILT CIRCUITS ON A 33kV STRUCTURE, THE POSSIBLE USE OF LIVE LINE WORKING PROCEDURES MUST BE CONSIDERED WHEN NOMINATING THE CIRCUIT SEPARATION TO ALLOW A MINIMUM CLEARANCE OF 2500mm IF REQUIRED.
 - THE LOAD AND DEVIATION ALLOWABLE ON THE EYEBOLT AND EYENUT ASSEMBLY IS TO BE DETERMINED FROM DRG: 520331.
 - LONGROD INSULATORS TO BE USED UNDER NORMAL CONDITIONS.
 - POLES SHALL BE DRILLED, SCARFED AND DRESSED ON SITE. DRILLING AND SCARFING TO BE TREATED WITH APPROVED PRESERVATIVES.
 - EYEBOLTS ARE TO BE INSTALLED TO BISECT THE ANGLE OF DEVIATION.
 - CONDUCTOR TO POLE CLEARANCE IS TO BE A MINIMUM OF 380mm.
 - ALL BOLTS PASSING THROUGH TIMBER ARE TO BE COATED WITH GRAPHITE GREASE.
 - STAYS TO BE INSTALLED SO THAT THE STAY WIRE CLEARANCE FROM THE PHASE CONDUCTORS COMPLIES WITH THE STATUTORY REQUIREMENTS.
 - THE SUSPENSION CLAMP (ITEM 30) MUST PROVIDE A FIRM CONNECTION TO THE HV TAPPING. IF REQUIRED, CONDUIT INSERTS MAY BE USED TO ACHIEVE AN EFFECTIVE CONNECTION.
 - COMPOSITE FIBRE CROSSARMS ARE TO BE USED AS THE PREFERRED OPTION UNDER NORMAL CIRCUMSTANCES TO TERMINATE THE TENSIONED CONDUCTORS.
 - A 2706mm COMPOSITE FIBRE CROSSARM IS TO BE USED AS THE DEFAULT CROSSARM FOR THE TENSIONED CONDUCTOR TERMINATIONS. A LONGER COMPOSITE FIBRE CROSSARM IS TO BE USED WHERE ADDITIONAL MID SPAN SEPARATION IS REQUIRED. A STEEL CROSSARM IS TO BE USED WHEN THE MAXIMUM LOAD OF THE ALTERNATE CROSSARMS IS EXCEEDED.
 - ONLY THE 2706mm COMPOSITE FIBRE TERMINATION CROSSARM OPTION IS SHOWN ON THIS CONSTRUCTION DRAWING. REFER TO DRGS: 262732 & 514377 FOR DRILLING PATTERN OF ALTERNATE CROSSARMS.
 - POLE STEPS SHOULD ONLY BE INSTALLED ON POLES WHERE ACCESS FOR NORMAL MAINTENANCE VEHICLES CANNOT BE MAINTAINED FOR THE LIFE OF THE POLE. IF POLE STEPS ARE INSTALLED, THEY ARE TO COMPLY WITH THE REQUIREMENTS OF NETWORK STANDARD NS128.
 - REFER TO DESIGNER SAFETY REPORT D23/277895 FOR ATYPICAL HAZARDS ASSOCIATED WITH THIS STANDARD CONSTRUCTION.

FUSE TABLE:
S&C SMD-2C BORIC ACID FUSE LINK, 34.5kV

RATING	STOCKCODE
3A	181638
5A	181639
10A	181640
15A	181641
20A	181642
25A	181643
30A	181644
40A	181645

ITEM	DESCRIPTION	DRG. No	QTY
39	STEP - POLE, SCREW-IN (SEE NOTE 15)	250144	A/R
38	NUT - M12, HEX., STAINLESS STEEL	515467	6
37	WASHER - SPRING, M12, STAINLESS STEEL	518082	6
36	WASHER - FLAT, M12, STAINLESS STEEL	518081	12
35	BOLT - M12x40mm, HEX., STAINLESS STEEL	515467	6
34	LUG - COMPRESSION, BI-METALLIC, M12 HOLE (TO SUIT CONDUCTOR)	514053	6
33	NUT - M16, NYLOC, HEX., STAINLESS STEEL (S/C: 177122)		3
32	SCREW - SET, M16x40mm, HEX., STAINLESS STEEL	515467	3
31	WASHER - FLAT, M16, STAINLESS STEEL	518081	3
30	CLAMP - LV, SUSPENSION (S/C: H113472) (SEE NOTE 11)		3
29	INSULATOR - LONGROD, 33kV, 70kN, POLYMERIC (CLEVIS/TONGUE) (S/C: 176519)		3
28	PLATE - TWISTED, 170x50x6mm, GALVANISED	151086	3
27	WASHER - CONICAL, M16, GALVANISED	518082	3
26	BOLT & NUT - M16x150mm, HEX., GALVANISED	515466	3
25	WASHER - SPRING, M16, GALVANISED	518082	12
24	WASHER - FLAT, M16, GALVANISED	518081	30
23	BOLT & NUT - M16x160mm, HEX., GALVANISED	515466	12
22	CARTRIDGE - 33kV, DROPOUT FUSE (REFER TO FUSE TABLE)		3
21	FUSECARRIER & BASE - 33kV, DROPOUT, RIGHT ANGLE STYLE, S&C TYPE SMD-2C (S/C: 181637)		3
20	BLOCK - GAIN, ALUMINIUM, 100mm (S/C: 146274)		1
19	BLOCK - GAIN, ALUMINIUM, 125mm (S/C: 146282)		1
18	WASHER - FLAT, M20, GALVANISED	518081	2
17	WASHER - CONICAL, M20, GALVANISED	518082	1
16	WASHER - SPRING, M20, GALVANISED	518082	1
15	WASHER - SQUARE, 75x75x6mm, GALVANISED (Ø22mm HOLE)	518081	4
14	BOLT & NUT - M20 HEX., GALVANISED (LENGTH TO SUIT POLE)	515466	2
13	BOLT & NUT - M12x130mm, HEX., GALVANISED	515466	4
12	CROSSARM - 2700x100x100mm, TYPE E, HARDWOOD	167283	1
11	BOLT & NUT - M12x100mm, HEX., GALVANISED	515466	1
10	WASHER - SPRING, M12, GALVANISED	518082	1
9	WASHER - FLAT, M12, GALVANISED	518081	3
8	WASHER - CONICAL, M12, GALVANISED	518082	2
7	BOLT & NUT - M12, HEX., GALVANISED (LENGTH TO SUIT POLE)	515466	1
6	BRACE - CROSSARM, ANGLE, 920mm, GALVANISED	514381	2
5	CROSSARM - 3300x125x75x4mm, RHS, GALVANISED	172529	1
4	INSULATOR - LONGROD, 33kV, POLYMERIC STRING, ARRANGEMENT -2 (SEE NOTE 5)	158754	6
3	CROSSARM - MOUNTING ARRANGEMENT -3 (COMPOSITE FIBRE OR GALVANISED STEEL CROSSARM) (SEE NOTES 12, 13 & 14)	514176	1
2	FOOTING - TIMBER POLE, ARRANGEMENT (SEE NOTE 1)	508726	1
1	POLE - TIMBER (AS REQUIRED)	513988	1

ALL DIMENSIONS IN MILLIMETRES UNLESS NOTED OTHERWISE. DO NOT SCALE.

CAD DRAWING DO NOT MANUALLY AMEND AMENDMENTS	DWN: PATRICIA RIOS CHKD: PHILLIP JONES	DATE: 22/12/2010 SECOND BRACE ADDED TO BOTTOM CROSSARM.	APPD by: GLENN FORD	DWN: GARY HUGHES CHKD: GARRY CRAIG	DATE: 21/10/2013 AUSGRID BORDER APPLIED.	APPD by: GLENN FORD	DWN: P.R. CHKD: P.J.	DATE: 15/09/2023 POLE BASE DETAILS ADDED, NOTES & MATERIAL LIST AMENDED. INSULATOR STRING & DROPOUT FUSE ARRANGEMENT AMENDED.
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DESCRIPTION	STOCK CODE
2700mm CROSSARMS FOR LV, 11kV, 22kV AND 33kV CONSTRUCTION DETAILS	514377
COMPOSITE FIBRE CROSSARMS SPECIFICATION	262732
20mm EYEBOLT & EYENUT ASSEMBLY LOADING & DEVIATION GRAPH	520331

ASSOCIATED DRAWINGS

NETWORK STANDARD
Ausgrid
145 NEWCASTLE RD WALLSEND,
NSW 2287

SCALE	1:20	STANDARD CONSTRUCTION		
DESIGNED	-	33kV THROUGH TERMINATION		
DRAWN	PETER SAUNDERS	WITH GREATER THAN 4kA		
CHECKED	P.A.S	DROPOUT FUSES		
APPROVED	R.BREMELL	4-60		
DATE	16/04/1996	SIZE	DRAWING No	A2
PROJECT NUMBER	STD		513957	SHEET
PROJTRAK NUMBER	-			1
				AMD
				7