



NOTES :

1. THE FOLLOWING INFORMATION IS OBTAINED FROM THE PROJECT DESIGN DRAWINGS:
 - a. POLE LENGTH AND STRENGTH.
 - b. SPECIAL FOUNDATION REQUIREMENTS.
 - c. POLE EMBEDMENT DEPTH.
 - d. CONDUCTOR SIZE.
 - e. CROSSARM SIZE AND BRACE REQUIREMENTS.
 - f. STAY REQUIREMENTS.
 - g. DEVIATION ANGLE.
 - h. ASSESSED EARTHING REQUIREMENTS.
2. THE MAXIMUM LINE DEVIATION ANGLE TO BE CONSTRUCTED ON THIS ARRANGEMENT IS TO BE DETERMINED BY THE LINE DESIGNER.
3. POLE STEPS ARE TO BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF NS128.
4. IN AREAS WHERE THE 22kV NETWORK CANNOT BE WORKED ON USING LIVE LINE TECHNIQUES, UNDERBUILT CIRCUITS SHALL BE INSTALLED WITH A MINIMUM CLEARANCE OF 1200mm. IN AREAS WHERE THE 22kV NETWORK CAN BE WORKED ON USING LIVE LINE TECHNIQUES, UNDERBUILT CIRCUITS SHALL BE INSTALLED WITH A MINIMUM CLEARANCE OF 2500mm.
5. ALL BOLTS AND INSULATOR PINS PASSING THROUGH TIMBER ARE TO BE COATED WITH GRAPHITE GREASE.
6. THE LOAD AND DEVIATION ALLOWABLE ON THE EYEBOLT IS TO BE DETERMINED FROM DRG: 520324.
7. LONGROD INSULATORS ARE TO BE USED UNDER NORMAL CONDITIONS.
8. POLES SHALL BE DRILLED, SCARFED AND DRESSED ON SITE. DRILLING AND SCARFING TO BE TREATED WITH APPROVED PRESERVATIVES.
9. IF THE CONDUCTOR DEVIATES AT THE INSULATOR, USE THE ANGLE TYPE CONDUCTOR TIE ARRANGEMENT, OTHERWISE USE THE INTERMEDIATE TYPE CONDUCTOR TIE ARRANGEMENT AS SHOWN ON DRG: 514038.
10. THE RATING OF THE FUSE ELEMENT IS TO BE SELECTED TO COMPLY WITH THE REQUIREMENTS OF TECHNICAL GUIDE T0024.
11. A 2700mm CROSSARM IS TO BE USED AS THE DEFAULT TERMINATION CROSSARM. FOR NARROW FEEDER ALIGNMENTS, A 2400mm TERMINATION CROSSARM MAY BE CONSIDERED TO OVERCOME DESIGN AND SITE CONSTRAINTS. A 3000mm STEEL TERMINATION CROSSARM IS TO BE USED WHEN THE MAXIMUM LOAD OF A TIMBER CROSSARM IS EXCEEDED.
12. ONLY THE 2700mm TERMINATION CROSSARM OPTION IS SHOWN ON THIS CONSTRUCTION DRAWING. REFER TO DRGS: 15232 & 514377 FOR DRILLING PATTERN OF ALTERNATE CROSSARMS.
13. THE 690mm CROSSARM BRACES ARE TO BE USED ON THE 2100mm CROSSARM. THE 920mm CROSSARM BRACE IS TO BE USED ON A 2700mm & 3000mm CROSSARM. THE 740mm CROSSARM BRACE IS TO BE USED ON A 2400mm CROSSARM.
14. REFER TO DESIGNER SAFETY REPORT D2177975 FOR ATYPICAL HAZARDS ASSOCIATED WITH THIS STANDARD CONSTRUCTION.

ITEM	DESCRIPTION	DRG. No	STOCK CODE	QTY
35	STEP - POLE, SCREW-IN (SEE NOTE 3)	250144	185198	A/R
34	CLAMP - PARALLEL GROOVE, 3-BOLT (TO SUIT CONDUCTOR)	514099		3
33	LUG - COMPRESSION (TO SUIT CONDUCTOR)	514053		6
32	FUSE - 24kV, LINK, BORIC ACID, S&C SMU-20 (SEE NOTE 10)			3
31	LINK - ISOLATING, 12/24kV, OUTDOOR, SINGLE INSULATOR		58750	3
	FUSEBASE - 24kV, DROPOUT, S&C SMD-20, 170kV BIL		181441	
30	WASHER - FLAT, M16, GALVANISED	518081	177984	3
29	WASHER - CONICAL, M16, GALVANISED	518082	H39647	3
28	WASHER - SQUARE, 50x50x6mm, GALVANISED (Ø18mm HOLE)	518081	H39257	3
27	BOLT & NUT - M16x140mm, HEX., GALVANISED	515466	H37506	3
26	INSULATOR - 11/22kV LONGROD, STRING ARRANGEMENT AR-2 (SEE NOTE 7)	565715		3
25	TIE - CONDUCTOR, HIGH VOLTAGE, SUPPORT ARRANGEMENT (SEE NOTE 9)	514038		5m
24	INSULATOR - 11/22kV AERODYNAMIC, (22/450) AND PIN ARRANGEMENT	513997		4
23	BRACKET - POLE TOP, GALVANISED	514380	H17314	1
22	BLOCK - GAIN, ALUMINIUM, 100mm		146274	2
21	WASHER - FLAT, M20, GALVANISED (USE WITH 2400mm & 2700mm TERMINATION CROSSARMS)	518081	177986	2
20	WASHER - FLAT, M20, GALVANISED	518081	177986	2
19	WASHER - LIP, M24, GALVANISED	518081	176912	2
18	WASHER - SPRING, M20, GALVANISED (USE WITH 3000mm TERMINATION CROSSARM)	518082	175569	2
	WASHER - CONICAL, M20, GALVANISED (USE WITH 2400mm & 2700mm TERMINATION CROSSARMS)	518082	H39655	
17	EYEBOLT - M20x200mm, GALVANISED (SEE NOTE 6)	513653	H37881	2
16	EYEBOLT - M20, GALVANISED (LENGTH TO SUIT POLE) (SEE NOTE 6)	513653		1
15	WASHER - SPRING, M12, GALVANISED (USE WITH 3000mm TERMINATION CROSSARM)	518082	H12047	1
	WASHER - CONICAL, M12, GALVANISED (USE WITH 2400mm & 2700mm TERMINATION CROSSARMS)	518082	H39639	
14	BOLT & NUT - M12x150mm, HEX., GALVANISED (USE WITH 2400mm TERMINATION CROSSARM)	515466	46847	1
	BOLT & NUT - M12x180mm, HEX., GALVANISED (USE WITH 2700mm & 3000mm TERMINATION CROSSARMS)	515466	46888	
13	CROSSARM - 3000x150x100x5mm, RHS, GALVANISED (SEE NOTES 11 & 12)	514377	H23787	1
	CROSSARM - 2400x125x100mm, TYPE H2, HARDWOOD (SEE NOTES 11 & 12)	15232	71910	
	CROSSARM - 2700x150x100mm, TYPE C, HARDWOOD (SEE NOTES 11 & 12)	514373	H23907	
12	SCREW - COACH, M12x100mm, GALVANISED		H40484	1
11	BRACE - CROSSARM, ANGLE, TYPE H, 740mm, GALVANISED (SEE NOTE 13)	46	99119	1
	BRACE - CROSSARM, ANGLE, 920mm, GALVANISED (SEE NOTE 13)	514381	H17283	
10	WASHER - CONICAL, M20, GALVANISED	518082	H39655	2
9	WASHER - SQUARE, 75x75x6mm, GALVANISED (Ø22mm HOLE)	518081	H39231	5
8	BOLT & NUT - M20, HEX., GALVANISED (LENGTH TO SUIT POLE)	515466		1
7	WASHER - CONICAL, M12, GALVANISED	518082	H39639	3
6	WASHER - FLAT, M12, GALVANISED	518081	177982	6
5	BOLT & NUT - M12x130mm, HEX., GALVANISED	515466	46805	2
4	CROSSARM - 2100x100x100mm, TYPE C, HARDWOOD	514374	H23834	1
3	BOLT & NUT - M12, HEX., GALVANISED (LENGTH TO SUIT POLE)	515466		1
2	BRACE - CROSSARM, FLAT, 690mm, GALVANISED (SEE NOTE 13)	514385	H17738	2
1	POLE - TIMBER (AS REQUIRED)	513988		1

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

DESCRIPTION	DRG. No
HV TERMINATION STEEL CROSSARM CONSTRUCTION DETAILS	514377
WOODEN CROSSARMS FOR 11kV LINES	15232
HV CONDUCTOR TIE SUPPORT ARRANGEMENTS	514038
20mm EYEBOLT LOADING & DEVIATION GRAPH	520324
ASSOCIATED DRAWINGS	

NETWORK STANDARD
Ausgrid

145 NEWCASTLE RD WALLSEND,
NSW 2287

SCALE	1:20	STANDARD CONSTRUCTION					
DESIGNED	P.JONES	22kV TEE-OFF CONSTRUCTION					
DRAWN	P.RIOS	WITH DROPOUT FUSES					
CHECKED	C.ROSKELL	OR ISOLATING LINKS					
APPROVED	G.FORD	3-61					
DATE	31/03/2021						
PROJECT NUMBER	STD						
PROJ/TRAK NUMBER	-						
SIZE	A2	DRAWING No	255644	SHEET	01	AMD	0