

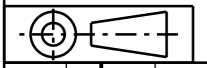
NOTES :

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 NS126.
4. ALTERNATE THE CENTRE PHASE INSULATOR ON EITHER SIDE OF THE POLE ALONG THE LINE.
5. IN AREAS WHERE THE 11kV NETWORK CANNOT BE WORKED ON USING LIVE LINE TECHNIQUES, UNDERBUILT CIRCUITS SHALL BE INSTALLED WITH A MINIMUM CLEARANCE OF 1200mm. IN AREAS WHERE THE 11kV NETWORK CAN BE WORKED ON USING LIVE LINE TECHNIQUES, UNDERBUILT CIRCUITS SHALL BE INSTALLED WITH A MINIMUM CLEARANCE OF 2500mm.
6. THIS CONSTRUCTION IS TO BE USED WHEN UNDERBUILDING ANOTHER CIRCUIT OR FOR UNDERCROSSING OTHER CONDUCTORS.
7. ALL BOLTS AND INSULATOR PINS PASSING THROUGH TIMBER ARE TO BE COATED WITH GRAPHITE GREASE.
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. A 2700mm CROSSARM IS TO BE USED AS THE DEFAULT CROSSARM. FOR NARROW FEEDER ALIGNMENTS, A 2400mm CROSSARM MAY BE CONSIDERED TO OVERCOME DESIGN AND SITE CONSTRAINTS. A 3300mm CROSSARM IS TO BE USED WHERE ADDITIONAL MID SPAN SEPARATION IS REQUIRED OR ADDITIONAL CENTRE PHASE CLEARANCE IS REQUIRED FROM A LARGE DIAMETER POLE. A 3030mm COMPOSITE FIBRE CROSSARM IS TO BE USED WHEN THE MAXIMUM LOAD OF A TIMBER CROSSARM IS EXCEEDED.
11. ONLY THE 2700mm CROSSARM OPTION IS SHOWN ON THIS CONSTRUCTION DRAWING. REFER TO DRGS : 15232, 514375 & 237491 FOR DRILLING PATTERN OF ALTERNATE CROSSARMS.
12. THE 690mm CROSSARM BRACES ARE TO BE USED ON A 2700mm & 3030mm CROSSARM. THE 740mm CROSSARM BRACE IS TO BE USED ON A 2400mm CROSSARM. THE 920mm CROSSARM BRACES ARE TO BE USED ON A 3300mm CROSSARM.

15	STEP - POLE, SCREW-IN (SEE NOTE 3)	250144	185198	A/R
14	TIE - CONDUCTOR, HIGH VOLTAGE, SUPPORT ARRANGEMENT (SEE NOTE 9)	514038		4m
13	INSULATOR - 11/22kV AERODYNAMIC, (22/450) & PIN ARRANGEMENT	513997		3
12	BLOCK - GAIN, ALUMINIUM, 100mm		146274	1
11	WASHER - FLAT, M20, GALVANISED	518081	177986	1
10	WASHER - CONICAL, M20, GALVANISED	518082	H39655	1
9	WASHER - SQUARE, 75x75x6mm, GALVANISED (Ø22mm HOLE)	518081	H39231	2
8	BOLT & NUT - M20, HEX., GALVANISED (LENGTH TO SUIT POLE)	515466		1
7	WASHER - SPRING, M12, GALVANISED (USE WITH 3030mm CROSSARM)	518082	H12047	2
	WASHER - CONICAL, M12, GALVANISED (USE WITH 2400mm CROSSARM)	518082	H39639	1
	WASHER - CONICAL, M12, GALVANISED (USE WITH 2700mm & 3300mm CROSSARMS)	518082	H39639	2
6	WASHER - FLAT, M12, GALVANISED (USE WITH 2400mm CROSSARM)	518081	177982	1
	WASHER - FLAT, M12, GALVANISED (USE WITH 2700mm, 3030mm & 3300mm CROSSARMS)	518081	177982	2
5	BOLT & NUT - M12x180mm, HEX., GALVANISED (USE WITH 3300mm CROSSARM)	515466	46888	2
	BOLT & NUT - M12x130mm, HEX., GALVANISED (USE WITH 2400mm CROSSARM)	515466	46805	1
	BOLT & NUT - M12x130mm, HEX., GALVANISED (USE WITH 2700mm & 3030mm CROSSARMS)	515466	46805	2
4	CROSSARM - 3030x100x100mm, ITEM 2, COMPOSITE FIBRE (SEE NOTES 10 & 11)	237491	183934	
	CROSSARM - 3300x150x100mm, TYPE S, HARDWOOD (SEE NOTES 10 & 11)	514375	H23020	1
	CROSSARM - 2400x100x100mm, TYPE H1, HARDWOOD (SEE NOTES 10 & 11)	15232	71928	
	CROSSARM - 2700x100x100mm, TYPE B, HARDWOOD (SEE NOTES 10 & 11)	514373	H23884	
3	SCREW - COACH, M12x100mm, GALVANISED		H40484	1
2	BRACE - CROSSARM, ANGLE, 920mm, GALVANISED (SEE NOTE 12)	514381	H17283	2
	BRACE - CROSSARM, ANGLE, TYPE H, 740mm, GALVANISED (SEE NOTE 12)	46	99119	1
	BRACE - CROSSARM, FLAT, 690mm, GALVANISED (SEE NOTE 12)	514385	H17738	2
1	POLE - TIMBER (AS REQUIRED)	513988		1

ITEM	DESCRIPTION	DRG. No	STOCK CODE	QTY
SCALE 1:20		STANDARD CONSTRUCTION		
DESIGNED -		11kV HORIZONTAL PIN CONSTRUCTION		
DRAWN - P.S		2-1		
CHECKED -				
APPROVED - I.NICHOLS				
DATE 13/05/93				
PROJECT NUMBER STD				
PROJTRAK NUMBER -	SIZE A3	DRAWING No 513909	SHEET 01	AMD 16

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



CAD DRAWING DO NOT MANUALLY AMEND	APP'D by: STEPHEN CONNOR
A M E N D M E N T S	
DWN: PATRICIA RIOS	
CHKD: PHIL JONES	
DATE: 03/09/2007	
NOTE 5 AMENDED.	
APP'D by: GLENN FORD	
DWN: PATRICIA RIOS	
CHKD: PHILLIP JONES	
DATE: 16/08/2019	
M20 FLAT WASHER ADDED. NOTES & MATERIAL LIST AMENDED.	

NETWORK STANDARD

145 NEWCASTLE RD WALLSEND,
NSW 2287