



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. PHASE CONDUCTOR AND OVERHEAD EARTHWIRE SIZE.
 - e. VARIATIONS TO STANDARD CROSSARM REQUIREMENTS.
 - f. STAY REQUIREMENTS.
 - g. DEVIATION ANGLE.
 - h. ASSESSED EARTHING REQUIREMENTS.
2. 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.
3. THE LOAD AND DEVIATION ALLOWABLE ON THE EYEBOLT IS TO BE DETERMINED FROM DRG: 520324.
4. LONGROD INSULATORS TO BE USED UNDER NORMAL CONDITIONS.
5. THE OVERHEAD EARTHWIRE DOWN LEAD IS TO BE FIXED TO THE POLE SO AS TO GIVE THE MAXIMUM CLEARANCE TO THE NEAREST PHASE CONDUCTOR.
6. POLES SHALL BE DRILLED, SCARFED AND DRESSED ON SITE. DRILLING AND SCARFING TO BE TREATED WITH APPROVED PRESERVATIVES. ALL BOLTS AND EYEBOLTS PASSING THROUGH TIMBER ARE TO BE COATED WITH GRAPHITE GREASE.
8. THE EARTHING DOWN LEAD IS TO BE FIXED TO THE POLE USING DOUBLE SIDED GALVANISED STEEL SADDLES AT INTERVALS OF NOT GREATER THAN 450mm.
9. COMPOSITE FIBRE CROSSARMS ARE TO BE USED AS THE PREFERRED OPTION UNDER NORMAL CIRCUMSTANCES.
10. A 2706mm COMPOSITE FIBRE CROSSARM IS TO BE USED AS THE DEFAULT CROSSARM. 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.
11. ONLY THE 2706mm COMPOSITE FIBRE CROSSARM OPTION IS SHOWN ON THIS CONSTRUCTION DRAWING. REFER TO DRGS: 262732 & 514377 FOR DRILLING PATTERN OF ALTERNATE CROSSARMS.
12. FOR DETAILS OF APPROVED ALTERNATE WAGNER COMPOSITE FIBRE CROSSARMS, REFER TO DRG: 265964.
13. ONLY THE SINGLE PHASE CONDUCTOR WITH OPGW SPLICE BOX TERMINATION OVERHEAD EARTHWIRE OPTION IS SHOWN ON THIS CONSTRUCTION DRAWING.
14. USE THE OPGW SPLICE BOX TERMINATION ARRANGEMENT WHEN ERECTING AN OPGW OVERHEAD EARTHWIRE. USE THE STANDARD EARTHWIRE TERMINATION ARRANGEMENT WHEN ERECTING A NON OPGW OVERHEAD EARTHWIRE.
15. 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.
16. REFER TO DESIGNER SAFETY REPORT D22/257229 FOR ATYPICAL HAZARDS ASSOCIATED WITH THIS STANDARD CONSTRUCTION.

ITEM	DESCRIPTION	DRG. No	QTY
9	STEP - POLE, SCREW-IN (SEE NOTE 15)	250144	A/R
8	OPGW - SPLICE BOX & COILED CABLE BRACKET, CONDUCTOR, MOUNTING ARRANGEMENT (USE WITH OPGW OHEW OPTION ONLY)	565743	1
7	EARTHWIRE - TERMINATION, OVERHEAD, MOUNTING, ARRANGEMENT -1B (SEE NOTES 13 & 14)	519450	1
	OPGW - TERMINATION, CONDUCTOR, MOUNTING, ARRANGEMENT -1B (SEE NOTES 13 & 14)	565747	
6	INSULATOR - LONGROD, 33kV, DUAL CONDUCTOR, POLYMERIC STRING, ARRANGEMENT -2 (SEE NOTES 4 & 13)	250120	3
	INSULATOR - LONGROD, 33kV, POLYMERIC STRING, ARRANGEMENT -2 (SEE NOTES 4 & 13)	158754	
5	EARTHWIRE - OVERHEAD, DOWN LEAD, POLE HARDWARE, MOUNTING & BONDING, ARRANGEMENT -3 (SEE NOTES 5 & 8)	514145	1
4	CROSSARM - MOUNTING ARRANGEMENT -2 (COMPOSITE FIBRE OR GALVANISED STEEL CROSSARM) (SEE NOTES 9, 10, 11 & 12)	514176	1
3	FOOTING - TIMBER POLE, ARRANGEMENT (SEE NOTE 1)	508726	1
2	EARTHING - ARRANGEMENT, TIMBER POLE STRUCTURE, TYPE SE-M5	508786	1
1	POLE - TIMBER (AS REQUIRED)	513988	1

ALL DIMENSIONS IN MILLIMETRES UNLESS NOTED OTHERWISE.

DO NOT SCALE.

F	CAD DRAWING DO NOT MANUALLY AMEND A M E N D M E N T S	1	20110901
	DWN: GARY HUGHES CHKD: GARY CRAIG DATE: 14/10/2013 AUSGRID BORDER APPLIED.		
2	APPD: GLENN FORD DWN: P.R. CHKD: P.J. APPD: G.F.	2	2
	DATE: 08/11/2022 MULTIPLE CROSSARM OPTION & FOUNDATION DETAILS ADDED. NOTES & MATERIAL LIST AMENDED. DUAL CONDUCTOR & OHEW OPTIONS ADDED.		
3	DWN: P.R. CHKD: P.J. APPD: G.F.	3	3
	DATE: 22/08/2024 COMPOSITE CROSSARMS ADDED TO MATERIAL LIST. NOTES & DIMENSIONS AMENDED. SHEET SIZE CHANGED.		

ASSOCIATED DRAWINGS	
COMPOSITE FIBRE CROSSARMS WAGNER SPECIFICATION	265964
COMPOSITE FIBRE CROSSARMS SPECIFICATION	262732
HV TERMINATION STEEL CROSSARM CONSTRUCTION DETAILS	514377
20mm EYEBOLT LOADING & DEVIATION GRAPH	520324

NETWORK STANDARD

145 NEWCASTLE RD WALLSEND,
NSW 2287

SCALE	1:25
DESIGNED	PHIL JONES
DRAWN	PATRICIA RIOS
CHECKED	PHIL JONES
APPROVED	STEPHEN CONNOR
DATE	20/12/2007
PROJECT NUMBER	STD
PROJTRAK NUMBER	-

STANDARD CONSTRUCTION 33kV TERMINATION CONSTRUCTION WITH OVERHEAD EARTHWIRE 4-10E			
SIZE	DRAWING No	SHEET	AMD
A2	174181	1	3