



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. THE MAXIMUM LINE DEVIATION ANGLE TO BE CONSTRUCTED ON THIS ARRANGEMENT IS TO BE DETERMINED BY THE LINE DESIGNER.
3. 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.
4. THE LOAD AND DEVIATION ALLOWABLE ON THE EYEBOLT IS TO BE DETERMINED FROM DRG: 520324.
5. LONGROD INSULATORS TO BE USED UNDER NORMAL CONDITIONS.
6. NON-TENSION COMPRESSION JOINTS TO BE USED WHEN REQUIRED TO JOIN CONDUCTORS.
7. USE THE ANGLE TYPE CONDUCTOR TIE ARRANGEMENT AS SHOWN ON DRG: 514038.
8. CONDUCTOR TO POLE CLEARANCE IS TO BE A MINIMUM OF 380mm.
9. INSTALL A 33/920 PIN INSULATOR ARRANGEMENT TO HOLD THE CONDUCTOR TAPPING TO INCREASE THE CONDUCTOR CLEARANCE TO THE CROSSARM AND REDUCE THE RISK OF A FLASHOVER DUE TO PERCHED BIRDS.
10. STAYS TO BE INSTALLED SO THAT THE STAY WIRE CLEARANCE FROM THE PHASE CONDUCTORS COMPLIES WITH THE STATUTORY REQUIREMENTS.
11. EYEBOLTS ARE TO BE INSTALLED IN THE DIRECTION OF THE OVERHEAD CONDUCTORS.
12. THE CROSSARM BRACE ATTACHMENT POINT ON A CONCRETE POLE IS TO BE AN M12 STAINLESS STEEL EARTH FERRULE.
13. THE OHEW IS TO BE BONDED TO AN M12 STAINLESS STEEL EARTH FERRULE ON THE CONCRETE POLE.
14. COMPOSITE FIBRE CROSSARMS ARE TO BE USED AS THE PREFERRED OPTION UNDER NORMAL CIRCUMSTANCES.
15. 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.
16. ONLY THE 2706mm COMPOSITE FIBRE CROSSARM OPTION IS SHOWN ON THIS CONSTRUCTION DRAWING. REFER TO DRGS: 262732 & 514377 FOR DRILLING PATTERN OF ALTERNATE CROSSARMS.
17. FOR DETAILS OF APPROVED ALTERNATE WAGNER COMPOSITE FIBRE CROSSARMS, REFER TO DRG: 265964.
18. ONLY THE SINGLE PHASE CONDUCTOR WITH OPGW THROUGH TERMINATION OVERHEAD EARTHWIRE OPTION IS SHOWN ON THIS CONSTRUCTION DRAWING.
19. USE THE OPGW THROUGH TERMINATION ARRANGEMENT WHEN ERECTING AN UNBROKEN OPGW OVERHEAD EARTHWIRE. USE THE OPGW THROUGH SPLICE BOX TERMINATION ARRANGEMENT WHEN BREAKING AN OPGW OVERHEAD EARTHWIRE. USE THE STANDARD EARTHWIRE TERMINATION ARRANGEMENT WHEN ERECTING A NON OPGW OVERHEAD EARTHWIRE.
20. WHEN USING THE OPGW THROUGH SPLICE BOX TERMINATION ARRANGEMENT, REFER TO DRG: 565743 FOR SPLICE BOX AND COILED CABLE BRACKET MOUNTING DETAILS.
21. 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.
22. REFER TO DESIGNER SAFETY REPORT D22/297263 FOR ATYPICAL HAZARDS ASSOCIATED WITH THIS STANDARD CONSTRUCTION.

ITEM	DESCRIPTION	DRG. No	QTY
16	STEP - POLE (SEE NOTE 21)	514084	A/R
15	EARTHWIRE - TERMINATION, OVERHEAD, MOUNTING, ARRANGEMENT -2A (SEE NOTES 18 & 19)	519450	1
	OPGW - TERMINATION, CONDUCTOR, MOUNTING, ARRANGEMENT -2C (SEE NOTES 18, 19 & 20)	565747	
14	OPGW - TERMINATION, CONDUCTOR, MOUNTING, ARRANGEMENT -2A (SEE NOTES 18 & 19)	565747	6
	JOINT - COMPRESSION, NON TENSION (TO SUIT DUAL CONDUCTORS) (SEE NOTES 6 & 8)	514053	
13	JOINT - COMPRESSION, NON TENSION (TO SUIT CONDUCTOR) (SEE NOTES 6 & 8)	514053	3
	TIE - CONDUCTOR, HIGH VOLTAGE, SUPPORT ARRANGEMENT (SEE NOTE 7)	514038	
12	INSULATOR - 33kV, AERODYNAMIC, (33/920) AND PIN ARRANGEMENT (SEE NOTE 9)	514006	2
	INSULATOR - LONGROD, 33kV, DUAL CONDUCTOR, POLYMERIC STRING, ARRANGEMENT -3 (SEE NOTES 5 & 8)	250120	
11	INSULATOR - LONGROD, 33kV, POLYMERIC STRING, ARRANGEMENT -3 (SEE NOTES 5 & 8)	158754	2
	INSULATOR - LONGROD, 33kV, DUAL CONDUCTOR, POLYMERIC STRING, ARRANGEMENT -2 (SEE NOTES 5 & 8)	250120	
10	INSULATOR - LONGROD, 33kV, POLYMERIC STRING, ARRANGEMENT -2 (SEE NOTES 5 & 8)	158754	4
	INSULATOR - LONGROD, 33kV, POLYMERIC STRING, ARRANGEMENT -2 (SEE NOTES 5 & 8)	158754	
9	BAND - POLE, MOUNTING & BONDING, ARRANGEMENT -2	514158	1
8	WASHER - SQUARE, 75x75x6mm, GALVANISED (Ø22mm HOLE)	518081	4
7	WASHER - SPRING, M20, GALVANISED	518082	4
6	WASHER - LIP, M24, GALVANISED	518081	4
5	EYEBOLT - M20x200mm, GALVANISED (SEE NOTE 4)	513653	4
4	CROSSARM - MOUNTING ARRANGEMENT -1a (COMPOSITE FIBRE OR GALVANISED STEEL CROSSARM) (SEE NOTES 14, 15, 16 & 17)	514176	2
3	FOOTING - CONCRETE POLE, ARRANGEMENT (SEE NOTE 1)	512331	1
2	EARTHING - CONCRETE/STEEL, SINGLE POLE, BUTT, ARRANGEMENT	520209	1
1	POLE - CONCRETE (AS REQUIRED)		1

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

CAD DRAWING DO NOT MANUALLY AMEND AMENDMENTS DWN: GARY HUGHES CHKD: GARY CRAIG DATE: 14/10/2013 AUSGRID BORDER APPLIED. APPD BY: GLENN FORD DWN: P.R. CHKD: P.J. APPD: G.F. DATE: 08/11/2022 MULTIPLE CROSSARM OPTION & FOUNDATION DETAILS ADDED. NOTES & MATERIAL LIST AMENDED. DUAL CONDUCTOR & OHEW OPTIONS ADDED. DWN: P.R. CHKD: P.J. APPD: G.F. DATE: 23/07/2024 COMPOSITE CROSSARMS ADDED TO MATERIAL LIST. NOTES & DIMENSIONS AMENDED. SHEET SIZE CHANGED.	COMPOSITE FIBRE CROSSARMS WAGNER SPECIFICATION HV TERMINATION STEEL CROSSARM CONSTRUCTION DETAILS OPGW CONDUCTOR SPLICE BOX & COILED CABLE BRACKET MOUNTING ARRANGEMENT COMPOSITE FIBRE CROSSARMS SPECIFICATION HV CONDUCTOR TIE SUPPORT ARRANGEMENTS 20mm EYEBOLT LOADING AND DEVIATION GRAPH	265964 514377 565743 262732 514038 520324	NETWORK STANDARD 145 NEWCASTLE RD WALLSEND, NSW 2287	SCALE DESIGNED DRAWN CHECKED APPROVED DATE PROJECT NUMBER PROJTRAK NUMBER	1:25 P.JONES P.RIOS P.JONES STEPHEN CONNOR 20/12/2007 STD -	STANDARD CONSTRUCTION 33kV LARGE DELTA CORNER POLE TERMINATION CONSTRUCTION WITH OVERHEAD EARTHWIRE 4-31C/E	SIZE DRAWING No SHEET AMD	A2 174426 1 3
	ASSOCIATED DRAWINGS							