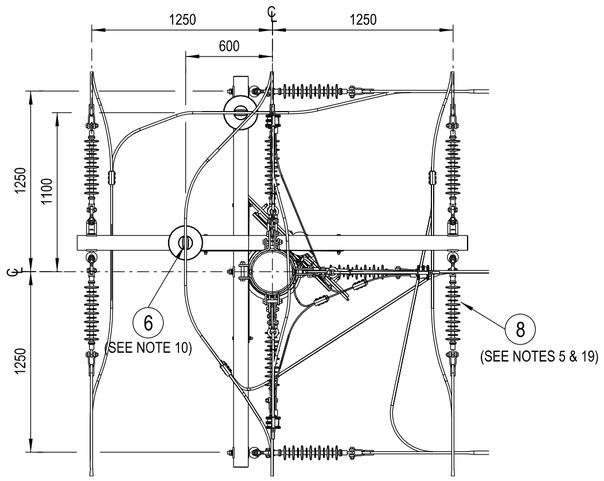

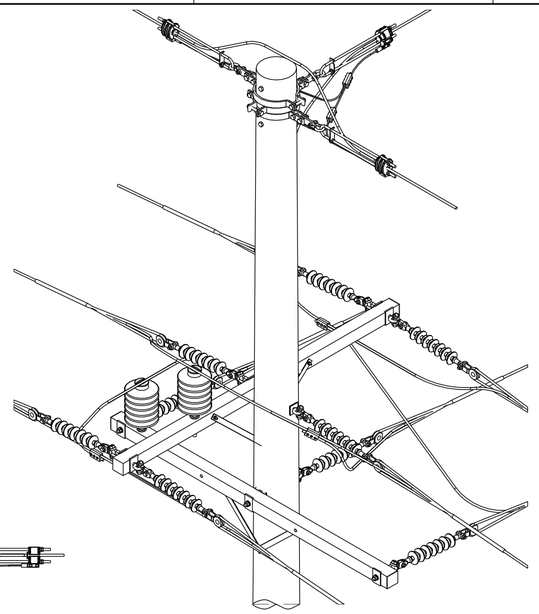

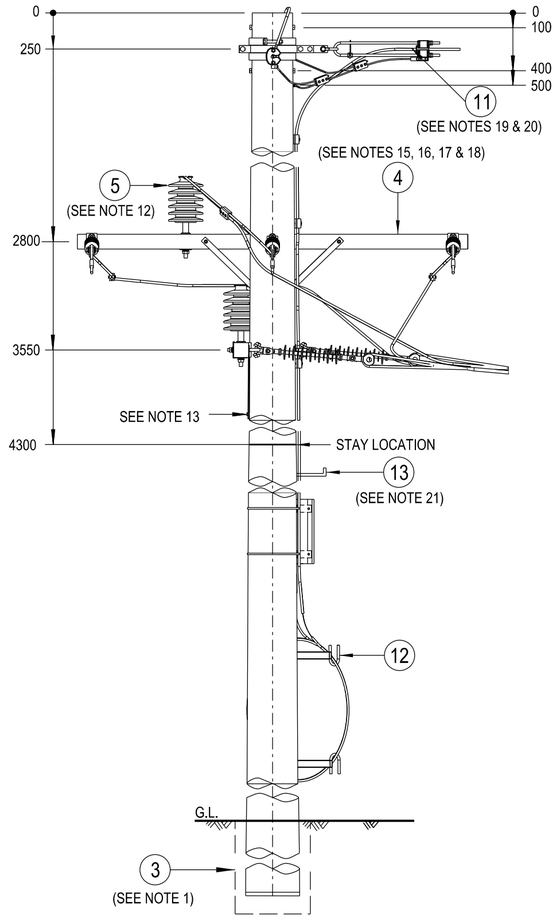

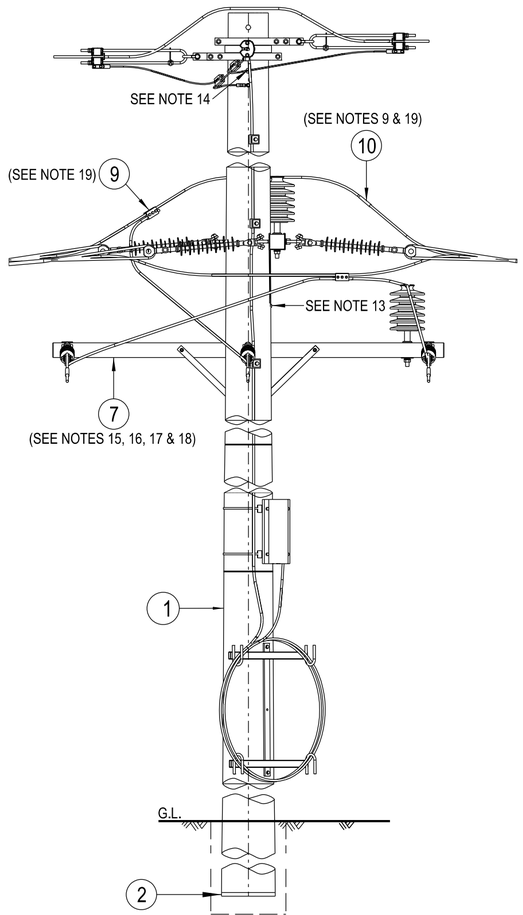

NOTES :

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 STANDADRD 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. THE LOAD AND DEVIATION ALLOWABLE ON THE EYEBOLT AND EYENUT ASSEMBLY IS TO BE DETERMINED FROM DRG: 520331.
7. STAYS TO BE INSTALLED SO THAT THE STAY WIRE CLEARANCE FROM THE PHASE CONDUCTORS COMPLIES WITH THE STATUTORY REQUIREMENTS.
8. EYEBOLTS ARE TO BE INSTALLED IN THE DIRECTION OF THE OVERHEAD CONDUCTORS
9. NON TENSION COMPRESSION JOINTS TO BE USED WHEN REQUIRED TO JOIN THROUGH CONDUCTORS.
10. USE THE ANGLE TYPE CONDUCTOR TIE ARRANGEMENT AS SHOWN ON DRG: 514038.
11. CONDUCTOR TO POLE CLEARANCE IS TO BE A MINIMUM OF 380mm.
12. 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.
13. THE CROSSARM BRACE ATTACHMENT POINT ON A CONCRETE POLE IS TO BE AN M12 STAINLESS STEEL EARTH FERRULE.
14. THE OHEW IS TO BE BONDED TO AN M12 STAINLESS STEEL EARTH FERRULE ON THE CONCRETE POLE.
15. COMPOSITE FIBRE CROSSARMS ARE TO BE USED AS THE PREFERED OPTION UNDER NORMAL CIRCUMSTANCES.
16. 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.
17. ONLY THE 2706mm COMPOSITE FIBRE CROSSARM OPTION IS SHOWN ON THIS CONSTRUCTION DRAWING. REFER TO DRGS: 262732 & 514377 FOR DRILLING PATTERN OF ALTERNATE CROSSARMS.
18. FOR DETAILS OF APPROVED ALTERNATE WAGNER COMPOSITE FIBRE CROSSARMS, REFER TO DRG: 265964.
19. ONLY THE SINGLE PHASE CONDUCTOR WITH OPGW THROUGH TERMINATION AND OPGW TEE OFF TERMINATION OVERHEAD EARTHWIRE OPTION IS SHOWN ON THIS CONSTRUCTION DRAWING.
20. USE THE OPGW THROUGH TEE OFF TERMINATION ARRANGEMENT WHEN ERECTING AN UNBROKEN AND A BROKEN OPGW OVERHEAD EARTHWIRE. USE THE OPGW TEE OFF SPLICE BOX TERMINATION ARRANGEMENT WHEN BREAKING ALL OPGW OVERHEAD EARTHWIRES. USE THE STANDARD EARTHWIRE TEE OFF TERMINATION ARRANGEMENT WHEN ERECTING A NON OPGW OVERHEAD EARTHWIRE.
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 D22/272990 FOR ATYPICAL HAZARDS ASSOCIATED WITH THIS STANDARD CONSTRUCTION.

ITEM	DESCRIPTION	DRG. No	QTY
13	STEP - POLE (SEE NOTE 21)	514084	A/R
12	OPGW - SPLICE BOX & COILED CABLE BRACKET, CONDUCTOR, MOUNTING ARRANGEMENT (USE WITH OPGW OHEW OPTIONS ONLY)	565743	1
11	EARTHWIRE - TERMINATION, TEE OFF, OVERHEAD, MOUNTING, ARRANGEMENT -2 (SEE NOTES 19 & 20)	514147	1
	OPGW - TERMINATION, TEE OFF, CONDUCTOR, MOUNTING, ARRANGEMENT -2B (SEE NOTES 19 & 20)	251960	
	OPGW - TERMINATION, TEE OFF, CONDUCTOR, MOUNTING, ARRANGEMENT -2A (SEE NOTES 19 & 20)	251960	
10	JOINT - COMPRESSION, NON TENSION (TO SUIT DUAL CONDUCTORS) (SEE NOTES 9 & 19)	514053	6
	JOINT - COMPRESSION, NON TENSION (TO SUIT CONDUCTOR) (SEE NOTES 9 & 19)	514053	3
9	CLAMP - PARALLEL GROOVE, 3 BOLT (TO SUIT DUAL CONDUCTORS) (SEE NOTE 19)	514099	6
	CLAMP - PARALLEL GROOVE, 3 BOLT (TO SUIT SINGLE CONDUCTOR) (SEE NOTE 19)	514099	3
8	INSULATOR - LONGROD, 33kV, DUAL CONDUCTOR, POLYMERIC STRING, ARRANGEMENT -2 (SEE NOTES 5 & 19)	250120	9
	INSULATOR - LONGROD, 33kV, POLYMERIC STRING, ARRANGEMENT -2 (SEE NOTES 5 & 19)	158754	
7	CROSSARM - MOUNTING ARRANGEMENT -2a (COMPOSITE FIBRE OR GALVANISED STEEL CROSSARM) (SEE NOTES 15, 16, 17 & 18)	514176	1
6	TIE - CONDUCTOR, HIGH VOLTAGE, SUPPORT ARRANGEMENT (SEE NOTE 10)	514038	2m
5	INSULATOR - 33kV, AERODYNAMIC, (33/920) AND PIN ARRANGEMENT (SEE NOTE 12)	514006	2
4	CROSSARM - MOUNTING ARRANGEMENT -3a (COMPOSITE FIBRE OR GALVANISED STEEL CROSSARM) (SEE NOTES 15, 16, 17 & 18)	514176	1
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

1	DWN: GARY HUGHES CHKED: GARRY CRAIG DATE: 14/10/2013 AUSGRID BORDER APPLIED.	APP'D by: GLENN FORD	
2	DWN: P.R. CHKD: P.J. APP'D: 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. APP'D: G.F.	
3	DATE: 23/07/2024 COMPOSITE CROSSARMS ADDED TO MATERIAL LIST. NOTES & DIMENSIONS AMENDED. SHEET SIZE CHANGED.		

ASSOCIATED DRAWINGS

COMPOSITE FIBRE CROSSARMS WAGNER SPECIFICATION	265964
HV TERMINATION STEEL CROSSARM CONSTRUCTION DETAILS	514377
COMPOSITE FIBRE CROSSARMS SPECIFICATION	262732
HV CONDUCTOR TIE SUPPORT ARRANGEMENTS	514038
20mm EYEBOLT & EYENUT ASSEMBLY LOADING AND DEVIATION GRAPH	520331
20mm EYEBOLT LOADING AND DEVIATION GRAPH	520324

NETWORK STANDARD

Ausgrid

145 NEWCASTLE RD WALLSEND, NSW 2287

SCALE	1:30
DESIGNED	-
DRAWN	P.RIOS
CHECKED	PHIL JONES
APPROVED	STEPHEN CONNOR
DATE	20/12/2007
PROJECT NUMBER	STD
PROJTRAK NUMBER	-

STANDARD CONSTRUCTION 33kV THROUGH TERMINATION TEE OFF CONSTRUCTION WITH OVERHEAD EARTHWIRE 4-17C/E

SIZE	DRAWING No	SHEET	AMD
A2	174244	1	3

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