

A

B

C

D

E

F

A

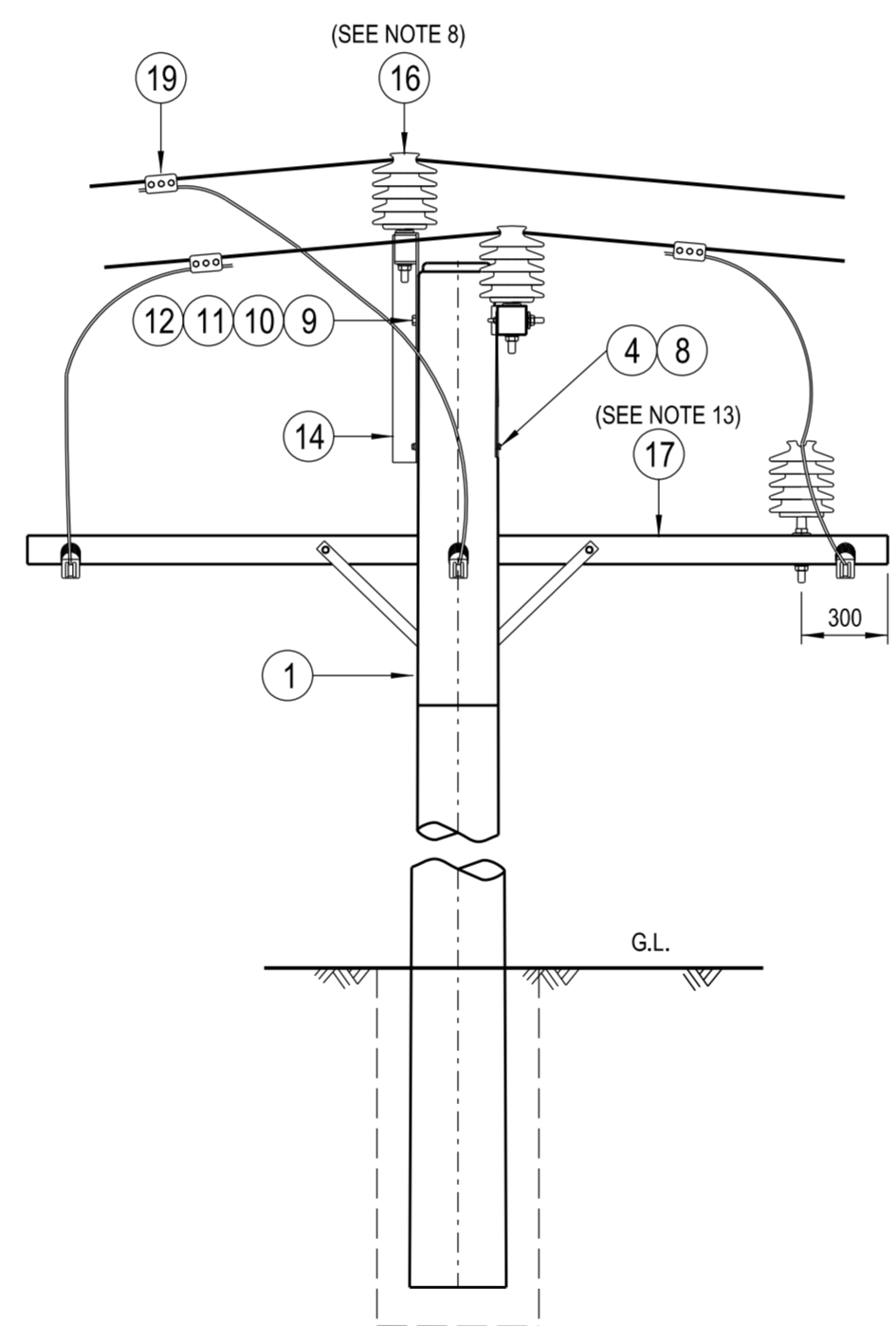
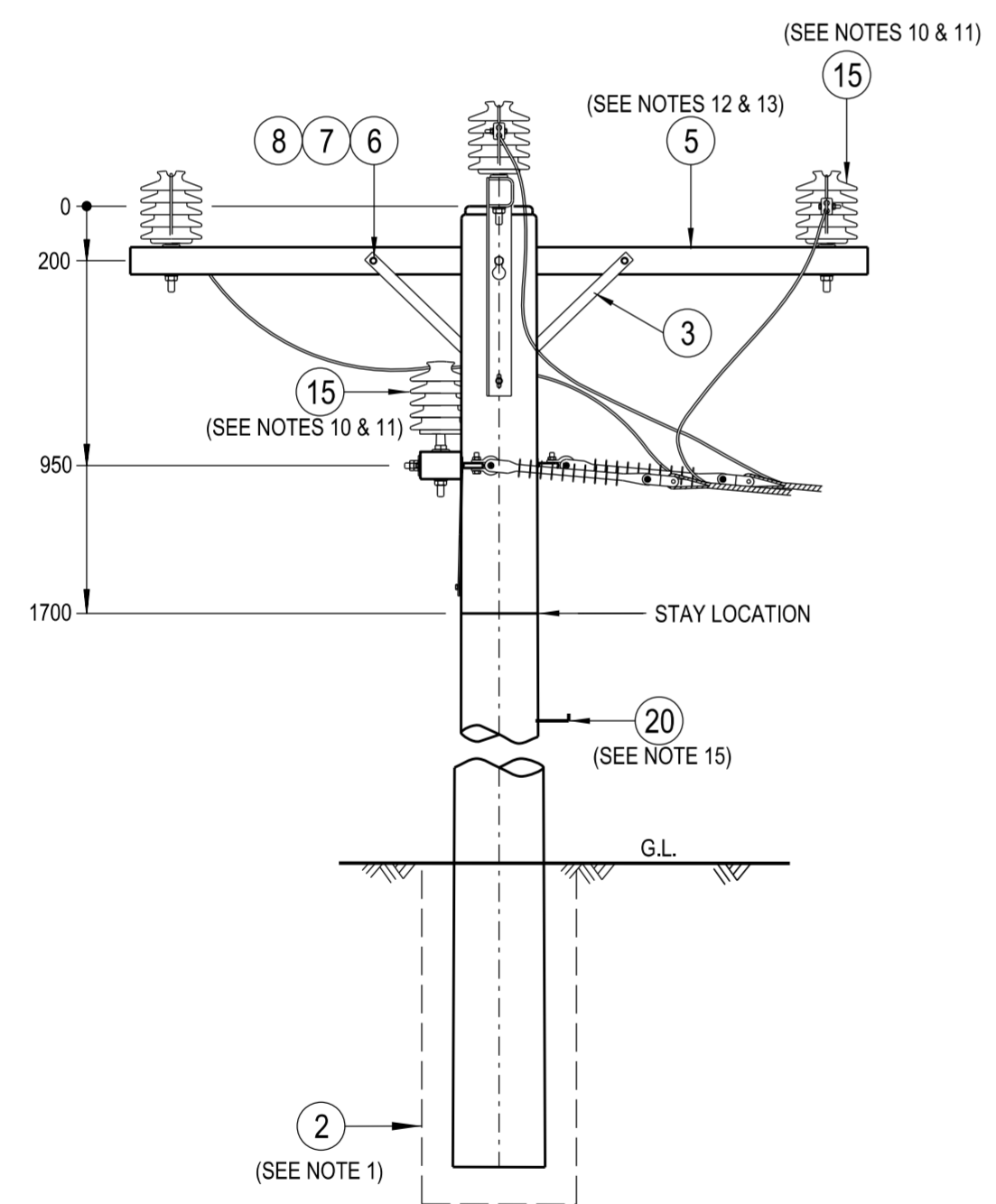
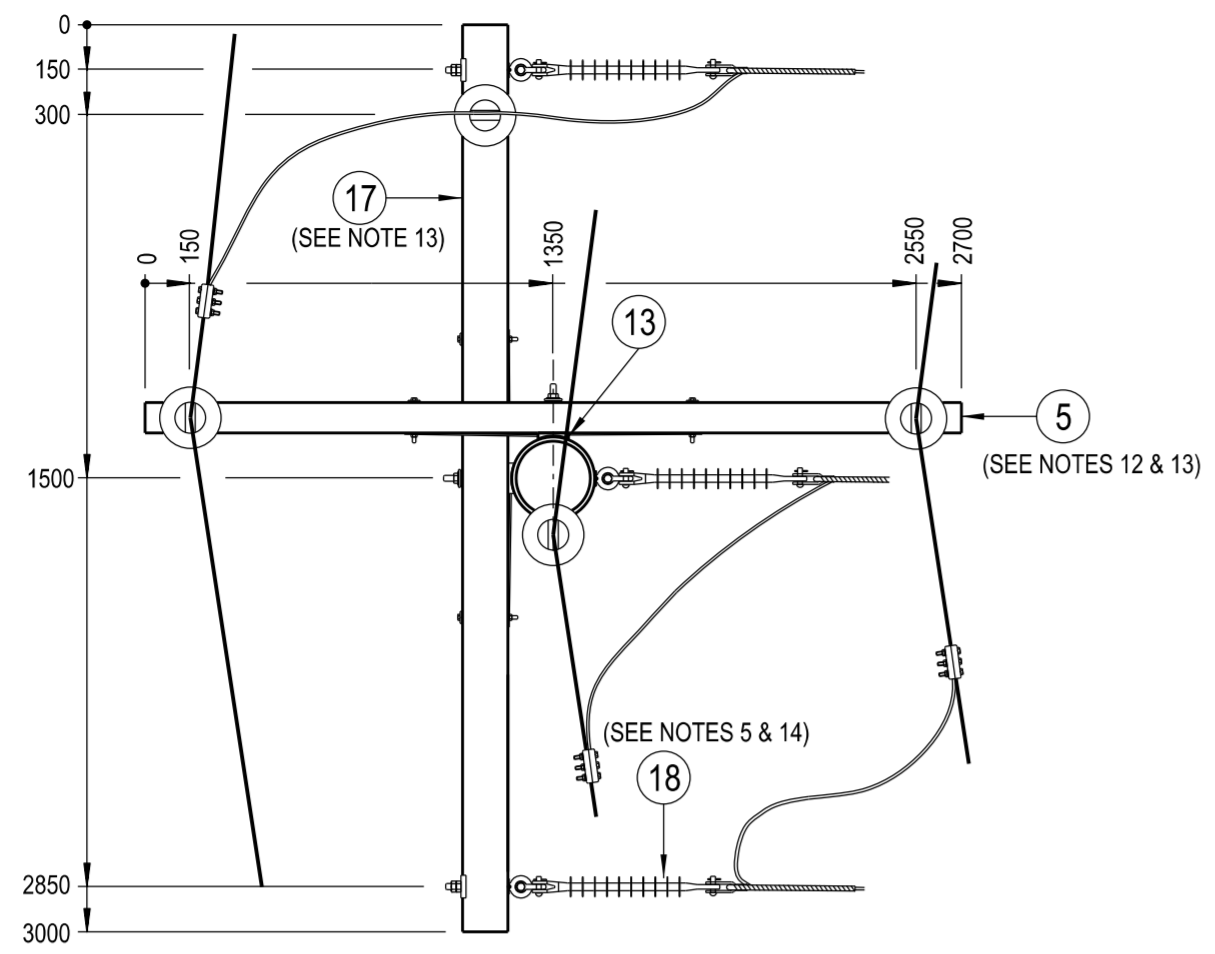
B

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F



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. VARIATIONS TO STANDARDR CROSSARM REQUIREMENTS.
 - f. STAY REQUIREMENTS.
 - g. DEVIATION ANGLE.
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. POLES SHALL BE DRILLED, SCARFED AND DRESSED ON SITE. DRILLING AND SCARFING TO BE TREATED WITH APPROVED PRESERVATIVES.
7. ALL BOLTS AND EYEBOLTS PASSING THROUGH TIMBER ARE TO BE COATED WITH GRAPHITE GREASE.
8. 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.
9. CONDUCTOR TO POLE CLEARANCE IS TO BE A MINIMUM OF 380mm.
10. INSTALL A 33/920 PIN INSULATOR ARRANGEMENT TO HOLD THE CONDUCTOR TAPPING TO INCREASE THE CONDUCTOR CLEARANCE TO THE STEEL CROSSARM AND REDUCE THE RISK OF A FLASHOVER DUE TO PERCHED BIRDS.
11. USE THE 33/920 AERODYNAMIC PIN INSULATOR ARRANGEMENT WHERE THE CONSTRUCTION IS LOCATED WITHIN 1km OF THE COAST OR IN A VERY HIGH POLLUTION AREA.
12. A 2700mm INTERMEDIATE CROSSARM IS TO BE USED AS THE DEFUT CROSSARM. A 3030mm COMPOSITE FIBRE CROSSARM IS TO BE USED WHEN THE MAXIMUM LOAD OF A TIMBER CROSSARM IS EXCEEDED OR ADDITIONAL MID SPAN CONDUCTOR SEPARATION IS REQUIRED.
13. ONLY THE 2700mm TIMBER INTERMEDIATE CROSSARM AND 3000mm STEEL TERMINATION CROSSARM OPTIONS ARE SHOWN ON THIS CONSTRUCTION DRAWING. REFER TO DRG: 237491 FOR DRILLING PATTERN OF ALTERNATE CROSSARMS.
14. ONLY THE SINGLE PHASE CONDUCTOR TERMINATION OPTION IS SHOWN ON THIS CONSTRUCTION DRAWING.
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 D22/270379 FOR ATYPICAL HAZARDS ASSOCIATED WITH THIS STANDARD CONSTRUCTION.

ITEM	DESCRIPTION	DRG. No	QTY
20	STEP - POLE, SCREW-IN (SEE NOTE 15)	250144	A/R
19	CLAMP - PARALLEL GROOVE, 3 BOLT (TO SUIT DUAL CONDUCTORS)	514099	6
	CLAMP - PARALLEL GROOVE, 3 BOLT (TO SUIT SINGLE CONDUCTOR)	514099	3
18	INSULATOR - LONGROD, 33kV, DUAL CONDUCTOR, POLYMERIC STRING, ARRANGEMENT -2 (SEE NOTES 5 & 14)	250120	3
	INSULATOR - LONGROD, 33kV, POLYMERIC STRING, ARRANGEMENT -2 (SEE NOTES 5 & 14)	158754	
17	CROSSARM - MOUNTING ARRANGEMENT 2 (GALVANISED STEEL OR COMPOSITE FIBRE CROSSARM) (SEE NOTE 13)	514176	1
16	TIE - CONDUCTOR, HIGH VOLTAGE, SUPPORT ARRANGEMENT (SEE NOTE 8)	514038	5m
15	INSULATOR - 33kV, AERODYNAMIC, (33/920) AND PIN ARRANGEMENT (SEE NOTES 10 & 11)	514006	4
	INSULATOR - 33kV, AERODYNAMIC, (33/710) AND PIN ARRANGEMENT (SEE NOTES 10 & 11)	513998	
14	BRACKET - POLE TOP, GALVANISED	514380	1
13	BLOCK - GAIN, ALUMINIUM, 100mm (S/C: 146274)		1
12	WASHER - FLAT, M20, GALVANISED	518081	1
11	WASHER - CONICAL, M20, GALVANISED	518082	1
10	WASHER - SQUARE, 75x75x6mm, GALVANISED (Ø22mm HOLE)	518081	1
9	BOLT & NUT - M20, HEX., GALVANISED (LENGTH TO SUIT POLE)	515466	1
8	WASHER - CONICAL, M12, GALVANISED	518082	3
7	WASHER - FLAT, M12 GALVANISED	518081	3
6	BOLT & NUT - M12x150mm, HEX., GALVANISED	515466	2
5	CROSSARM - 3030x100x100mm, ITEM 2, COMPOSITE FIBRE (SEE NOTES 12 & 13)	237491	1
	CROSSARM - 2700x100x100mm, TYPE B, HARDWOOD (SEE NOTES 12 & 13)	514373	
4	BOLT & NUT - M12, HEX., GALVANISED (LENGTH TO SUIT POLE)	515466	1
3	BRACE - CROSSARM, FLAT, 690mm, GALVANISED	514385	2
2	FOOTING - TIMBER POLE, ARRANGEMENT (SEE NOTE 1)	508726	1
1	POLE - TIMBER (AS REQUIRED)	513988	1

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

CAD DRAWING DO NOT MANUALLY AMEND AMENDMENTS	DWN: PATRICIA RIOS	CHKD: PHIL JONES	DATE: 28/12/2005	DRAWING NUMBER UPDATED STOCK CODES REMOVED. NOTES AMENDED. BONDING REMOVED.	AUTHD by: STEPHEN CONNOR	DWN: GARY HUGHES	CHKD: GARRY CRAIG	DATE: 21/10/2013	AUSGRID BORDER APPLIED.	APPD by: GLENN FORD	DWN: P.R.	CHKD: P.J.	APPD: G.F.	DATE: 08/11/2022	NOTES & MATERIAL LIST AMENDED. INSULATOR STRING ARRANGEMENT AMENDED. FOUNDATION DETAILS ADDED.
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ASSOCIATED DRAWINGS	
COMPOSITE FIBRE CROSSARMS SPECIFICATION	237491
HV CONDUCTOR TIE SUPPORT ARRANGEMENTS	514038
20mm EYEBOLT LOADING AND DEVIATION GRAPH	520324

NETWORK STANDARD

145 NEWCASTLE RD WALLSEND, NSW 2287

SCALE	1:25	STANDARD CONSTRUCTION			
DESIGNED	-	33kV TEE OFF			
DRAWN	PETER SAUNDERS	CONSTRUCTION			
CHECKED	P.A.S	4-14			
APPROVED	R.BREMPELL	SIZE	DRAWING No	SHEET	AMD
DATE	28/03/1996	A2	513932	1	7
PROJECT NUMBER	STD				
PROJTRAK NUMBER	-				