



- NOTES :**
- THE FOLLOWING INFORMATION IS OBTAINED FROM THE PROJECT DESIGN DRAWINGS:
    - POLE LENGTH AND STRENGTH.
    - SPECIAL FOUNDATION REQUIREMENTS.
    - POLE EMBEDMENT DEPTH.
    - PHASE CONDUCTOR AND OVERHEAD EARTHWIRE SIZE.
    - VARIATIONS TO STANDARD CROSSARM REQUIREMENTS.
    - STAY REQUIREMENTS.
    - DEVIATION ANGLE.
    - ASSESSED EARTHING REQUIREMENTS.
  - THE MAXIMUM LINE DEVIATION ANGLE TO BE CONSTRUCTED ON THIS ARRANGEMENT IS TO BE DETERMINED BY THE LINE DESIGNER.
  - 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.
  - THE LOAD AND DEVIATION ALLOWABLE ON THE EYEBOLT AND EYENUT ASSEMBLY IS TO BE DETERMINED FROM DRG: 520331.
  - LONGROD INSULATORS TO BE USED UNDER NORMAL CONDITIONS.
  - NON-TENSION COMPRESSION SLEEVES TO BE USED WHEN REQUIRED TO JOIN CONDUCTORS.
  - CONDUCTOR TO POLE CLEARANCE IS TO BE A MINIMUM OF 380mm.
  - 'A' AND 'C' PHASE CONDUCTORS MAY BE BRIDGED UNDER THE CROSSARM PROVIDED THAT:
    - THE LINE IS SINGLE CIRCUIT OR STATUTORY CLEARANCES CAN BE MAINTAINED UNDER ALL OPERATING CONDITIONS.
    - MINIMUM CLEARANCES TO EARTH (POLE/HARDWARE) OF 380mm CAN BE MET.
    - WHEN THE CONDITIONS IN a AND b ARE NOT MET, A 33kV 33/920 AERODYNAMIC INSULATOR AND PIN ARRANGEMENTS IS TO BE INSTALLED FOR THE 'A' AND 'C' PHASE CONDUCTORS.
  - STAYS TO BE INSTALLED SO THAT THE STAY WIRE CLEARANCE FROM THE PHASE CONDUCTORS COMPLIES WITH THE STATUTORY REQUIREMENTS.
  - EYEBOLT AND EYENUT ASSEMBLIES ARE TO BE INSTALLED TO BISECT THE ANGLE OF DEVIATION.
  - THE CROSSARM BRACE ATTACHMENT POINT ON A CONCRETE POLE IS TO BE AN M12 STAINLESS STEEL EARTH FERRULE.
  - THE OHEW IS TO BE BONDED TO AN M12 STAINLESS STEEL EARTH FERRULE ON THE CONCRETE POLE.
  - WHEN INSTALLING DUAL PHASE CONDUCTORS, THE CENTRE PHASE TAPPING INSULATOR IS TO BE MOUNTED ABOVE THE CENTRE PHASE CONDUCTOR TERMINATION TO ENSURE THE PHASE TO EARTH CLEARANCES TO THE CROSSARM IS MAINTAINED.
  - ONLY THE 3000mm STEEL CROSSARM OPTION IS SHOWN ON THIS CONSTRUCTION DRAWING. REFER TO DRG: 237491 FOR DRILLING PATTERN OF ALTERNATE CROSSARM.
  - ONLY THE SINGLE PHASE CONDUCTOR WITH OPGW THROUGH TERMINATION OVERHEAD EARTHWIRE OPTION IS SHOWN ON THIS CONSTRUCTION DRAWING.
  - 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.
  - WHEN USING THE OPGW THROUGH SPLICE BOX TERMINATION ARRANGEMENT, REFER TO DRG: 565743 FOR SPLICE BOX AND COILED CABLE BRACKET MOUNTING DETAILS.
  - 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.
  - REFER TO DESIGNER SAFETY REPORT D22/294680 FOR ATYPICAL HAZARDS ASSOCIATED WITH THIS STANDARD CONSTRUCTION.

ITEM	DESCRIPTION	DRG. No	QTY
11	STEP - POLE (SEE NOTE 18)	514084	A/R
10	EARTHWIRE - TERMINATION, OVERHEAD, MOUNTING, ARRANGEMENT -2A (SEE NOTES 12, 15 & 16)	519450	1
	OPGW - TERMINATION, CONDUCTOR, MOUNTING, ARRANGEMENT -2C (SEE NOTES 12, 15, 16 & 17)	565747	
9	OPGW - TERMINATION, CONDUCTOR, MOUNTING, ARRANGEMENT -2A (SEE NOTES 12, 15 & 16)	565747	6
	JOINT - COMPRESSION, NON TENSION (TO SUIT DUAL CONDUCTORS) (SEE NOTES 6 & 15)	514053	
8	JOINT - COMPRESSION, NON TENSION (TO SUIT CONDUCTOR) (SEE NOTES 6 & 15)	514053	3
	INSULATOR - LONGROD, 33kV, DUAL CONDUCTOR, POLYMERIC STRING, ARRANGEMENT -3 (SEE NOTES 5 & 15)	250120	
7	INSULATOR - LONGROD, 33kV, POLYMERIC STRING, ARRANGEMENT -3 (SEE NOTES 5 & 15)	158754	2
	INSULATOR - LONGROD, 33kV, DUAL CONDUCTOR, POLYMERIC STRING, ARRANGEMENT -2 (SEE NOTES 5 & 15)	250120	
6	INSULATOR - LONGROD, 33kV, POLYMERIC STRING, ARRANGEMENT -2 (SEE NOTES 5 & 15)	158754	4
	INSULATOR - HORIZONTAL LINE POST, 66kV, DUAL CONDUCTOR, MOUNTING & BONDING, ARRANGEMENT -2 (SEE NOTES 13 & 15)	244699	
5	INSULATOR - HORIZONTAL LINE POST, 66kV, MOUNTING & BONDING, ARRANGEMENT -2 (SEE NOTES 13 & 15)	514161	1
4	BAND - POLE, MOUNTING & BONDING, ARRANGEMENT -2	514158	1
3	CROSSARM - MOUNTING ARRANGEMENT -3a (GALVANISED STEEL OR COMPOSITE FIBRE CROSSARM) (SEE NOTES 11 & 14)	514176	1
2	FOOTING - CONCRETE POLE, ARRANGEMENT (SEE NOTE 1)	512331	1
1	EARTHING - CONCRETE/STEEL, SINGLE POLE, BUTT, ARRANGEMENT	520209	1
1	POLE - CONCRETE (AS REQUIRED)		1

CAD DRAWING DO NOT MANUALLY AMEND AMENDMENTS

DWN: PATRICIA RIOS  
CHKD: PHIL JONES  
DATE: 04/01/2006  
STOCK CODES REMOVED. DISC INSULATORS CHANGED TO POLYMERIC LONGRODS. SHEET SIZE CHANGED.

AUTHD by: STEPHEN CONNOR  
DWN: GARY HUGHES  
CHKD: GARRY CRAIG  
DATE: 23/10/2013  
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.

OPGW CONDUCTOR SPLICE BOX & COILED CABLE BRACKET MOUNTING ARRANGEMENT 565743  
COMPOSITE FIBRE CROSSARMS SPECIFICATION 237491  
20mm EYEBOLT & EYENUT ASSEMBLY LOADING AND DEVIATION GRAPH 520331

ASSOCIATED DRAWINGS

NETWORK STANDARD  
**Ausgrid**  
145 NEWCASTLE RD WALLSEND, NSW 2287

SCALE 1:25  
DESIGNED -  
DRAWN PETER SAUNDERS  
CHECKED -  
APPROVED G.SKINNER  
DATE 03/12/1999  
PROJECT NUMBER STD  
PROJTRAK NUMBER -

STANDARD CONSTRUCTION  
33kV DELTA THROUGH TERMINATION  
CONSTRUCTION WITH  
OVERHEAD EARTHWIRE  
4-26C/E

SIZE A2  
DRAWING No 565787  
SHEET 1  
AMD 3