



- NOTES:**
- THE FOLLOWING INFORMATION IS OBTAINED FROM THE PROJECT DESIGN DRAWINGS:
 - POLE LENGTH AND STRENGTH.
 - SPECIAL FOUNDATION REQUIREMENTS.
 - POLE EMBEDMENT DEPTH.
 - CONDUCTOR SIZE.
 - CROSSARM SIZE AND BRACE REQUIREMENTS.
 - STAY REQUIREMENTS.
 - DEVIATION ANGLE.
 - THE MAXIMUM LINE DEVIATION ANGLE TO BE CONSTRUCTED ON THIS ARRANGEMENT IS TO BE DETERMINED BY THE LINE DESIGNER.
 - POLE STEPS ARE TO BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF NS126.
 - IN AREAS WHERE THE 11kV NETWORK CANNOT BE WORKED ON USING LIVE LINE TECHNIQUES, UNDERBUILT CIRCUITS SHALL BE INSTALLED WITH A MINIMUM CLEARANCE OF 1200mm. IN AREAS WHERE THE 11kV NETWORK CAN BE WORKED ON USING LIVE LINE TECHNIQUES, UNDERBUILT CIRCUITS SHALL BE INSTALLED WITH A MINIMUM CLEARANCE OF 2500mm.
 - ALL BOLTS AND INSULATOR PINS PASSING THROUGH TIMBER ARE TO BE COATED WITH GRAPHITE GREASE.
 - THE LOAD AND DEVIATION ALLOWABLE ON THE EYEBOLT IS TO BE DETERMINED FROM DRG: 265905.
 - LONGROD INSULATORS ARE TO BE USED UNDER NORMAL CONDITIONS.
 - POLES SHALL BE DRILLED, SCARFED AND DRESSED ON SITE. DRILLING AND SCARFING TO BE TREATED WITH APPROVED PRESERVATIVES.
 - TO MAINTAIN THE INTEGRITY OF A COVERED SYSTEM, IT IS ESSENTIAL THAT ALL STRIPPED AND PUNCTURED INSULATION IS CONTAINED WITHIN THE APPROPRIATE INSULATING COVER.
 - CCSX CONDUCTOR INSULATION SHALL ONLY BE REMOVED BY THE USE OF AN APPROVED CONDUCTOR STRIPPING TOOL.
 - IPCS ARE TO BE USED TO JOIN CONDUCTORS.
 - SURGE ARRESTERS ARE TO BE INSTALLED ON AN OVERHEAD CCSX CONDUCTOR SYSTEM IN ACCORDANCE WITH THE REQUIREMENTS OF NS126. IF A SURGE ARRESTER IS TO BE INSTALLED ON THIS CONSTRUCTION, IT IS TO BE INSTALLED AS PER THE RELEVANT COVERED CONDUCTOR ARRANGEMENT SPECIFIED IN DRG: 265905.
 - COVERS TO BE INSTALLED OVER ALL TERMINATION WEDGE CLAMPS/COMPRESSION DEVICES. COVER SHOWN REMOVED ON ONE PHASE TO SHOW DETAIL OF TERMINATION MATERIAL.
 - COMPOSITE FIBRE CROSSARMS ARE TO BE USED AS THE PREFERRED OPTION UNDER NORMAL CIRCUMSTANCES.
 - A 2106mm COMPOSITE FIBRE CROSSARM IS TO BE USED AS THE DEFAULT INTERMEDIATE CROSSARM. A LONGER CROSSARM MAY BE CONSIDERED TO OVERCOME DESIGN AND SITE REQUIREMENTS.
 - ONLY THE 2106mm COMPOSITE FIBRE INTERMEDIATE CROSSARM OPTION IS SHOWN ON THIS CONSTRUCTION DRAWING. REFER TO DRGS 262732, 514374 & 15232 FOR DRILLING PATTERN OF ALTERNATE CROSSARMS.
 - A 2406mm COMPOSITE FIBRE CROSSARM IS TO BE USED AS THE DEFAULT TERMINATION CROSSARM. AN ALTERNATE CROSSARM MAY BE CONSIDERED TO OVERCOME DESIGN AND SITE REQUIREMENTS. A STEEL CROSSARM IS TO BE USED WHEN THE MAXIMUM LOAD OF THE ALTERNATE CROSSARM IS EXCEEDED.
 - ONLY THE 2406mm COMPOSITE FIBRE TERMINATION CROSSARM OPTION IS SHOWN ON THIS CONSTRUCTION DRAWING. REFER TO DRGS: 262732, 514373, 15232, 514377 & 237491 FOR DRILLING PATTERN OF ALTERNATE CROSSARMS.
 - THE 690mm CROSSARM BRACES ARE TO BE USED ON A 2106mm, 2100mm, 2706mm, 2700mm, 3006mm, 3000mm, 2750mm & 3070mm CROSSARM.
 - THE 740mm CROSSARM BRACE IS TO BE USED ON A 2406mm & 2400mm CROSSARM.
 - A CCSX EARTHING POINT IS TO BE INSTALLED WHERE REQUIRED FOR OPERATIONAL PURPOSES OR AT LOCATIONS SPECIFIED IN NS126. TWO SETS OF EARTHING POINTS ARE REQUIRED ON THIS CONSTRUCTION. ONE SET OF EARTHING POINTS CAN BE INSTALLED AT EITHER OF THE ALTERNATE LOCATIONS INDICATED ON THE THROUGH CONDUCTORS AND ONE SET CAN BE INSTALLED ON THE TEE CONDUCTORS.
 - REFER TO DESIGNER SAFETY REPORT D2482972 FOR ATYPICAL HAZARDS ASSOCIATED WITH THIS STANDARD CONSTRUCTION.

ITEM	DESCRIPTION	DRG. No	STOCK CODE	QTY
37	STEP - POLE, SCREW-IN (SEE NOTE 3)	250144	185198	A/R
36	EARTH - PARKING, DEVICE, IPC CC TO EPD (ENSTO REF. SLW26 A2) (SEE NOTE 20)		186865	3
35	JOINT - NON TENSION, IPC TO IPC (ENSTO REF. SLW26 A) (SEE NOTE 11)		186863	3
34	CAP - CONDUCTOR (ENSTO REF. CSECI 2) (TO BE USED FOR CCSX25)		186887	3
33	COVER - TERMINATION (ENSTO REF. SP67.3) (TO BE USED FOR CCSX159) (SET OF 3) (SEE NOTE 13)		186871	1
32	CLAMP - TERMINATION, WEDGE (ENSTO REF. S0256.2S) (TO BE USED FOR CCSX159)		186867	3
31	SHACKLE - BOW, 70kN, REF. 70'S, A.S. 1154.2		30890	3
30	INSULATOR - LONGROD, 112kV, POLYMERIC, 70kN (CLEVIS/TONGUE) (SEE NOTE 7)		150375	3
29	TONGUE - 'Y' CLEVIS, 70kN, A.S. 1154.2 (PLP PART No. CTY-070-1)		186874	3
28	WIRE - TIE, PREFORMED, INSULATED, FOR CCSX159 (SET OF 6) (ENSTO REF. S0216.52)		186875	2
27	INSULATOR - 112kV AERODYNAMIC, (22-450) & PIN ARRANGEMENT	513997		4
26	BRACKET - POLE TOP, GALVANISED	514380	H17314	1
25	BLOCK - GAIN, ALUMINIUM, 125mm (USE WITH 2750mm & 3070mm TERMINATION CROSSARMS)		146282	1
24	BLOCK - GAIN, ALUMINIUM, 100mm (USE WITH 2406mm, 2706mm, 3006mm, 2400mm & 3000mm TERMINATION CROSSARMS)		146274	1
23	WASHER - FLAT, M20, GALVANISED (USE WITH 2400mm & 2700mm TERMINATION CROSSARMS)	518081	177986	2
22	WASHER - SQUARE, 75x75x6mm, GALVANISED (Ø22mm HOLE) (USE WITH 2750mm & 3070mm TERMINATION CROSSARMS)	518081	H39231	2
21	WASHER - LP, M24, GALVANISED (USE WITH 2406mm, 2706mm, 3006mm, 2400mm & 3000mm TERMINATION CROSSARMS)	518081	176912	2
20	EYEBOLT - M20x200mm, GALVANISED (SEE NOTE 6)	513653	H37881	2
19	WASHER - CONICAL, M20, GALVANISED (USE WITH 2400mm & 2700mm TERMINATION CROSSARMS)	518082	H39655	2
18	WASHER - SPRING, M12, GALVANISED (USE WITH 2406mm, 2706mm, 3006mm, 3000mm, 2750mm & 3070mm TERMINATION CROSSARMS)	518082	175569	1
17	WASHER - CONICAL, M12, GALVANISED (USE WITH 2700mm TERMINATION CROSSARM)	518082	H39639	1
16	WASHER - SPRING, M12, GALVANISED (USE WITH 2706mm, 3006mm, 3000mm, 2750mm & 3070mm TERMINATION CROSSARMS)	518082	H12047	2
15	WASHER - FLAT, M12, GALVANISED (USE WITH 2706mm, 2700mm, 3006mm, 3000mm, 2750mm & 3070mm TERMINATION CROSSARMS)	518081	177982	4
14	BOLT & NUT - M12x150mm, HEX., GALVANISED (USE WITH 2750mm & 3070mm TERMINATION CROSSARMS)	515466	46847	2
13	BOLT & NUT - M12x180mm, HEX., GALVANISED (USE WITH 2700mm & 3000mm TERMINATION CROSSARMS)	515466	46888	2
12	BOLT & NUT - M12x150mm, HEX., GALVANISED (USE WITH 2400mm TERMINATION CROSSARM)	515466	46847	1
11	BOLT & NUT - M12x130mm, HEX., GALVANISED (USE WITH 2706mm & 3006mm TERMINATION CROSSARMS)	515466	46805	2
10	BOLT & NUT - M12x130mm, HEX., GALVANISED (USE WITH 2406mm TERMINATION CROSSARM)	515466	46805	1
9	CROSSARM - 2750x125x125mm, ITEM 1, COMPOSITE FIBRE (SEE NOTES 14, 17 & 18)	237491	183935	1
8	CROSSARM - 3000x150x100.5mm, RHS, GALVANISED (SEE NOTES 14, 17 & 18)	237491	183933	1
7	CROSSARM - 2700x150x100mm, TYPE C, HARDWOOD (SEE NOTES 14, 17 & 18)	514377	H23787	1
6	CROSSARM - 2400x125x100mm, TYPE H2, HARDWOOD (SEE NOTES 14, 17 & 18)	514373	H23907	1
5	CROSSARM - 3006x102x102mm, TYPE 13, COMPOSITE FIBRE (SEE NOTES 14, 17 & 18)	15232	71910	1
4	CROSSARM - 2706x102x102mm, TYPE 12, COMPOSITE FIBRE (SEE NOTES 14, 17 & 18)	262732	186783	1
3	CROSSARM - 2406x102x102mm, TYPE 11, COMPOSITE FIBRE (SEE NOTES 14, 17 & 18)	262732	186782	1
2	BRACE - CROSSARM, ANGLE, TYPE H, 740mm, GALVANISED (SEE NOTE 19)	46	99119	1
1	POLE - TIMBER (AS REQUIRED)	513888		1

CAD DRAWING DO NOT MANUALLY AMEND A M E N D M E N T S DWN: P.R. CHKD: P.J. APPD: G.F. DATE: 09/05/2024 ITEM 36 ADDED. MATERIAL LIST & NOTES AMENDED.		COMPOSITE FIBRE CROSSARM MECHANICAL LOAD REQUIREMENTS		237491
		2100mm CROSSARMS FOR LV, 11kV & 33kV CONSTRUCTION DETAILS		514374
		2700mm CROSSARMS FOR LV, 11kV, 22kV & 33kV CONSTRUCTION DETAILS		514373
		COMPOSITE FIBRE CROSSARMS SPECIFICATION		262732
		HV TERMINATION STEEL CROSSARM CONSTRUCTION DETAILS		514377
		WOODEN CROSSARMS FOR 11kV LINES		15232
		11kV CCSX CONDUCTOR SURGE ARRESTER ARRANGEMENTS		265905
		20mm EYEBOLT LOADING & DEVIATION GRAPH		520324

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

NETWORK STANDARD
Ausgrid
145 NEWCASTLE RD WALLSEND,
NSW 2287

SCALE	1:20
DESIGNED	J.BROOKS
DRAWN	P.RIOS
CHECKED	P.JONES
APPROVED	G.FORD
DATE	28/03/2024
PROJECT NUMBER	STD
PROJTRAK NUMBER	-

STANDARD CONSTRUCTION 11kV TEE-OFF CONSTRUCTION 2-14CCSX			
SIZE	DRAWING No	SHEET	AMD
A2	265892	1	1