



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 NS128.
- 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: 520324.
- 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.
- 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 DEADENDS. 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 2406mm COMPOSITE FIBRE CROSSARM IS TO BE USED AS THE DEFAULT 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 CROSSARMS IS EXCEEDED.
- ONLY THE 2406mm COMPOSITE FIBRE CROSSARM OPTION IS SHOWN ON THIS CONSTRUCTION DRAWING. REFER TO DRGS: 262732, 514373, 15232 & 514377 FOR DRILLING PATTERN OF ALTERNATE CROSSARMS.
- THE 690mm CROSSARM BRACES ARE TO BE USED ON A 2706mm, 2700mm, 3006mm & 3000mm 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.
- FOR DETAILS OF APPROVED ALTERNATE WAGNER COMPOSITE FIBRE CROSSARMS, REFER TO DRG: 265964.
- WHEN SPECIFYING WAGNER COMPOSITE FIBRE CROSSARMS, A REVIEW OF ALL THE HARDWARE ATTACHED TO THE CROSSARM WILL BE REQUIRED.
- REFER TO DESIGNER SAFETY REPORT D24/82373 FOR ATYPICAL HAZARDS ASSOCIATED WITH THIS STANDARD CONSTRUCTION.

ITEM	DESCRIPTION	DRG. No	STOCK CODE	QTY
24	STEP - POLE, SCREW-IN (SEE NOTE 3)	250144	185198	A/R
23	EARTH - PARKING, DEVICE, IPC CC TO EPD (ENSTO REF. SLW26 A2) (SEE NOTE 17)		186865	3
22	CAP - CONDUCTOR (ENSTO REF. CSEC1.2) (TO BE USED FOR CCSX159)		186887	3
	CAP - CONDUCTOR (ENSTO REF. CSEC1.1) (TO BE USED FOR CCSX25 & CCSX62)		186886	
21	COVER - TERMINATION (ENSTO REF. SP67.3) (TO BE USED FOR CCSX159) (SET OF 3) (SEE NOTE 12)		186871	1
	COVER - TERMINATION (ENSTO REF. SP63.3) (TO BE USED FOR CCSX62) (SET OF 3) (SEE NOTE 12)		186872	
20	CLAMP - TERMINATION, WEDGE (ENSTO REF. SO256 2S) (TO BE USED FOR CCSX159)		186867	3
	CLAMP - TERMINATION, WEDGE (ENSTO REF. SO255 2S) (TO BE USED FOR CCSX62)		186868	
	DEADEND - COMPRESSION (ENSTO REF. CDE 25) (INCLUDES COLD SHRINK COVER) (TO BE USED FOR CCSX25)		186870	
19	SHACKLE - BOW, 70kN, REF. 70/S, A.S. 1154.2		30890	3
18	INSULATOR - LONGROD, 11/22kV, POLYMERIC, 70kN (CLEVIS/TONGUE) (SEE NOTE 7)		150375	3
17	TONGUE - 'Y' CLEVIS, 70kN, A.S. 1154.2		187140	3
16	BLOCK - GAIN, ALUMINIUM, 100mm		146274	1
15	WASHER - FLAT, M20, GALVANISED (USE WITH 2400mm & 2700mm CROSSARMS)	518081	177986	2
14	WASHER - FLAT, M20, GALVANISED	518081	177986	1
13	WASHER - LIP, M24, GALVANISED	518081	176912	2
12	EYEBOLT - M20x200mm, GALVANISED (SEE NOTE 6)	513653	H37881	2
11	WASHER - CONICAL, M20, GALVANISED (USE WITH HARDWOOD CROSSARMS)	518082	H39655	2
10	WASHER - SPRING, M20, GALVANISED (USE WITH COMPOSITE FIBRE & STEEL CROSSARMS)	518082	175569	1
9	WASHER - CONICAL, M20, GALVANISED	518082	H39655	1
8	WASHER - SQUARE, 75x75x6mm, GALVANISED (Ø22mm HOLE)	518081	H39231	4
7	EYEBOLT - M20, GALVANISED (LENGTH TO SUIT POLE) (SEE NOTE 6)	513653		1
6	WASHER - CONICAL, M12, GALVANISED (USE WITH 2700mm CROSSARM)	518082	H39639	2
	WASHER - CONICAL, M12, GALVANISED (USE WITH 2400mm CROSSARM)	518082	H39639	1
	WASHER - SPRING, M12, GALVANISED (USE WITH 2706mm, 3006mm & 3000mm CROSSARMS)	518082	H12047	2
	WASHER - SPRING, M12, GALVANISED (USE WITH 2406mm CROSSARM)	518082	H12047	1
5	WASHER - FLAT, M12, GALVANISED (USE WITH 2706mm, 2700mm, 3006mm & 3000mm CROSSARMS)	518081	177982	4
	WASHER - FLAT, M12, GALVANISED (USE WITH 2406mm & 2400mm CROSSARMS)	518081	177982	2
	BOLT & NUT - M12x180mm, HEX., GALVANISED (USE WITH 2700mm & 3000mm CROSSARMS)	515466	46888	2
4	BOLT & NUT - M12x150mm, HEX., GALVANISED (USE WITH 2400mm CROSSARM)	515466	46847	1
	BOLT & NUT - M12x130mm, HEX., GALVANISED (USE WITH 2706mm & 3006mm CROSSARMS)	515466	46805	2
	BOLT & NUT - M12x130mm, HEX., GALVANISED (USE WITH 2406mm CROSSARM)	515466	46805	1
3	CROSSARM - 3000x150x100x5mm, RHS, GALVANISED (SEE NOTES 13, 14, 15, 18 & 19)	514377	H23787	1
	CROSSARM - 2700x150x100mm, TYPE C, HARDWOOD (SEE NOTES 13, 14, 15, 18 & 19)	514373	H23907	
	CROSSARM - 2400x125x100mm, TYPE H2, HARDWOOD (SEE NOTES 13, 14, 15, 18 & 19)	15232	71910	
	CROSSARM - 3006x102x102mm, TYPE 13, COMPOSITE FIBRE (SEE NOTES 13, 14, 15, 18 & 19)	262732	186783	
	CROSSARM - 2706x102x102mm, TYPE 12, COMPOSITE FIBRE (SEE NOTES 13, 14, 15, 18 & 19)	262732	186782	
2	CROSSARM - 2406x102x102mm, TYPE 11, COMPOSITE FIBRE (SEE NOTES 13, 14, 15, 18 & 19)	262732	186781	1
1	SCREW - COACH, M12 x 100mm, GALVANISED		H40484	1
2	BRACE - CROSSARM, ANGLE, TYPE H, 740mm, GALVANISED (SEE NOTE 16)	46	99119	1
1	BRACE - CROSSARM, FLAT, 690mm, GALVANISED (SEE NOTE 16)	514385	H17738	2
1	POLE - TIMBER (AS REQUIRED)			1

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

NO.	DATE	DESCRIPTION
1	09/05/2024	DATE: 09/05/2024 ITEM 23 ADDED. MATERIAL LIST & NOTES AMENDED.
2	25/09/2024	DATE: 25/09/2024 WAGNER CROSSARM OPTION REMOVED FROM MATERIAL LIST. NOTE ADDED.
3	26/09/2024	DATE: 26/09/2024 MATERIAL LIST AMENDED.

NO.	DESCRIPTION	ITEM NO.
1	COMPOSITE FIBRE CROSSARMS WAGNER SPECIFICATION	265964
2	11kV CCSX CONDUCTOR SURGE ARRESTER ARRANGEMENTS	265905
3	2700mm CROSSARMS FOR LV, 11kV, 22kV AND 33kV CONSTRUCTION DETAILS	514373
4	COMPOSITE FIBRE CROSSARMS SPECIFICATION	262732
5	HV TERMINATION STEEL CROSSARM CONSTRUCTION DETAILS	514377
6	WOODEN CROSSARMS FOR 11kV LINES	15232
7	20mm EYEBOLT LOADING & DEVIATION GRAPH	520324

NETWORK STANDARD

 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
PROJ/TRAK NUMBER	-

STANDARD CONSTRUCTION	
11kV TERMINATION CONSTRUCTION	
2-10CCSX	
SIZE	A2
DRAWING No	265889
SHEET	1
AMD	3