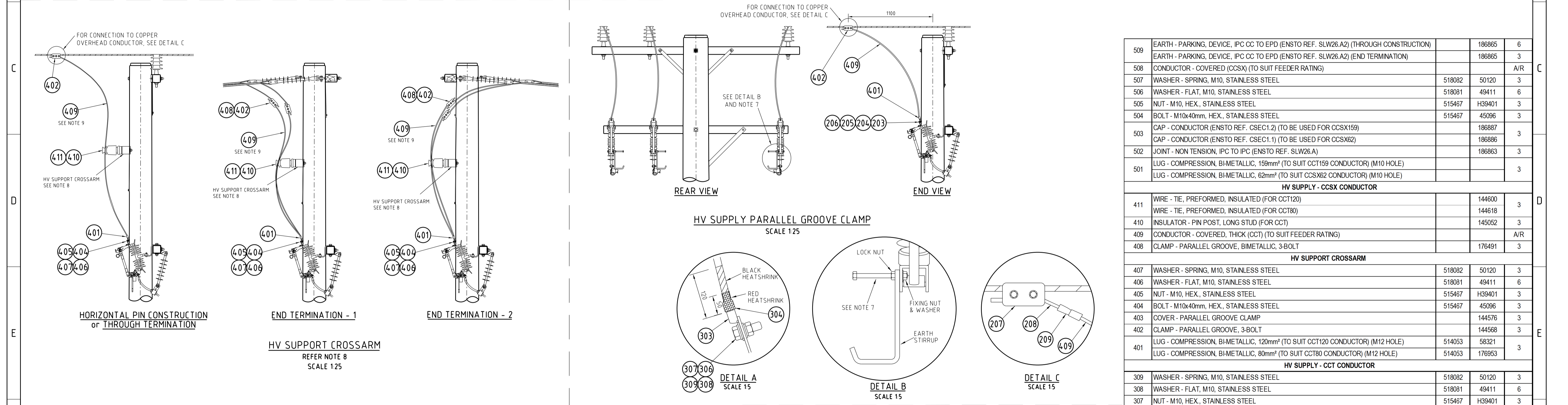
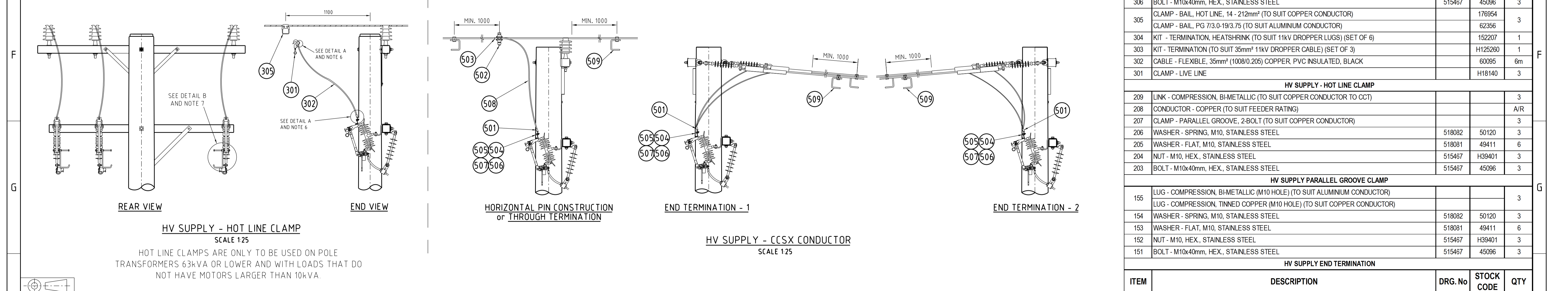


- NOTES**
- DETAILS OF 11kV ARRANGEMENTS ARE TO NS126 AND NS122
 - CCT STANDARD EARTHING POINT AND COVER TO BE INSTALLED AS DETAILED IN NS126
 - COPPER CABLE MUST BE INSTALLED BELOW ALUMINIUM MAINS
 - HOT LINE CLAMPS MAY BE INSTALLED ON END TERMINATION PROVIDED BAIL CLAMP IS CONNECTED ON MAINS AND NOT ON A PERFORMED DEADEND
 - HOT LINE CLAMPS MUST BE CHECKED FOR TIGHTNESS BY TESTING FOR MOVEMENT AFTER CLAMP IS INSTALLED
 - HEAVY DUTY 35mm² LUGS MUST BE USED ON HV FLEXIBLE CABLE TWO CRIMP OPERATIONS ARE REQUIRED FOR COMPLETE TERMINATION OF CABLE INTO LUG TUNNEL THE 130mm BOLT SUPPLIED WITH THE HVDO SERVES A DUAL PURPOSE IT IS USED TO ATTACH THE EARTH STIRRUP AND AS THE PARKING BOLT FOR THE HOT LINE CLAMP WHEN THE CLAMP IS DISCONNECTED FROM THE HV MAINS
 - A HV SUPPORT CROSSARM IS REQUIRED FOR ALL INSTALLATIONS WHERE THE DISTANCE BETWEEN HV FEEDER & HV DROP-OUT FUSE CROSSARM IS EQUAL TO OR GREATER THAN 1500mm. THE SUPPORT CROSSARM IS TO BE CONSTRUCTED AS SHOWN IRRESPECTIVE OF THE TYPE OF HV MAINS CABLE, MIDWAY BETWEEN THE HV FEEDER AND HV DROP-OUT FUSE CROSSARM
 - REFER TO DRAWING 228823 FOR HV FEEDER SUPPORT CROSSARM DETAILS.
 - CCT CABLE (SIZED TO SUIT THE FEEDER RATING) IS TO BE USED ON POLES WITH BARE & CCT CONDUCTOR REQUIRING A HV SUPPORT CROSSARM.



509	EARTH - PARKING, DEVICE, IPC CC TO EPD (ENSTO REF. SLW26.A2) (THROUGH CONSTRUCTION)	186865	6	
508	EARTH - PARKING, DEVICE, IPC CC TO EPD (ENSTO REF. SLW26.A2) (END TERMINATION)	186865	3	
507	CONDUCTOR - COVERED (CCSX) (TO SUIT FEEDER RATING)		A/R	
507	WASHER - SPRING, M10, STAINLESS STEEL	518082	50120	
506	WASHER - FLAT, M10, STAINLESS STEEL	518081	49411	
505	NUT - M10, HEX, STAINLESS STEEL	515467	H39401	
504	BOLT - M10x40mm, HEX., STAINLESS STEEL	515467	45096	
503	CAP - CONDUCTOR (ENSTO REF. CSEC1.2) (TO BE USED FOR CCSX159)		186887	
503	CAP - CONDUCTOR (ENSTO REF. CSEC1.1) (TO BE USED FOR CCSX62)		186886	
502	JOINT - NON TENSION, IPC TO IPC (ENSTO REF. SLW26.A)		186863	
501	LUG - COMPRESSION, BI-METALLIC, 159mm ² (TO SUIT CCT159 CONDUCTOR) (M10 HOLE)		3	
501	LUG - COMPRESSION, BI-METALLIC, 62mm ² (TO SUIT CCSX62 CONDUCTOR) (M10 HOLE)		3	
HV SUPPLY - CCSX CONDUCTOR				
411	WIRE - TIE, PREFORMED, INSULATED (FOR CCT120)		144600	
411	WIRE - TIE, PREFORMED, INSULATED (FOR CCT80)		144618	
410	INSULATOR - PIN POST, LONG STUD (FOR CCT)		145052	
409	CONDUCTOR - COVERED, THICK (CCT) (TO SUIT FEEDER RATING)		A/R	
408	CLAMP - PARALLEL GROOVE, BIMETALLIC, 3-BOLT		176491	
HV SUPPORT CROSSARM				
407	WASHER - SPRING, M10, STAINLESS STEEL	518082	50120	
406	WASHER - FLAT, M10, STAINLESS STEEL	518081	49411	
405	NUT - M10, HEX, STAINLESS STEEL	515467	H39401	
404	BOLT - M10x40mm, HEX., STAINLESS STEEL	515467	45096	
403	COVER - PARALLEL GROOVE CLAMP		144576	
402	CLAMP - PARALLEL GROOVE, 3-BOLT		144568	
401	LUG - COMPRESSION, BI-METALLIC, 120mm ² (TO SUIT CCT120 CONDUCTOR) (M12 HOLE)	514053	58321	
401	LUG - COMPRESSION, BI-METALLIC, 80mm ² (TO SUIT CCT80 CONDUCTOR) (M12 HOLE)	514053	176953	
HV SUPPLY - CCT CONDUCTOR				
309	WASHER - SPRING, M10, STAINLESS STEEL	518082	50120	
308	WASHER - FLAT, M10, STAINLESS STEEL	518081	49411	
307	NUT - M10, HEX, STAINLESS STEEL	515467	H39401	
306	BOLT - M10x40mm, HEX., STAINLESS STEEL	515467	45096	
305	CLAMP - BAIL, HOT LINE, 14 - 212mm ² (TO SUIT COPPER CONDUCTOR)		176954	
305	CLAMP - BAIL, PG 7/3.0-19/3.75 (TO SUIT ALUMINIUM CONDUCTOR)		62356	
304	KIT - TERMINATION, HEATSHRINK (TO SUIT 11kV DROPPER LUGS) (SET OF 6)		152207	
303	KIT - TERMINATION (TO SUIT 35mm ² 11kV DROPPER CABLE) (SET OF 3)		H125260	
302	CABLE - FLEXIBLE, 35mm ² (1008/0.205) COPPER, PVC INSULATED, BLACK		60095	
301	CLAMP - LIVE LINE		H18140	
HV SUPPLY - HOT LINE CLAMP				
209	LINK - COMPRESSION, BI-METALLIC (TO SUIT COPPER CONDUCTOR TO CCT)		3	
208	CONDUCTOR - COPPER (TO SUIT FEEDER RATING)		A/R	
207	CLAMP - PARALLEL GROOVE, 2-BOLT (TO SUIT COPPER CONDUCTOR)		3	
206	WASHER - SPRING, M10, STAINLESS STEEL	518082	50120	
205	WASHER - FLAT, M10, STAINLESS STEEL	518081	49411	
204	NUT - M10, HEX, STAINLESS STEEL	515467	H39401	
203	BOLT - M10x40mm, HEX., STAINLESS STEEL	515467	45096	
HV SUPPLY PARALLEL GROOVE CLAMP				
155	LUG - COMPRESSION, BI-METALLIC (M10 HOLE) (TO SUIT ALUMINIUM CONDUCTOR)		3	
154	WASHER - SPRING, M10, STAINLESS STEEL	518082	50120	
153	WASHER - FLAT, M10, STAINLESS STEEL	518081	49411	
152	NUT - M10, HEX, STAINLESS STEEL	515467	H39401	
151	BOLT - M10x40mm, HEX., STAINLESS STEEL	515467	45096	
HV SUPPLY END TERMINATION				
ITEM	DESCRIPTION	DRG. No	STOCK CODE	QTY



HOT LINE CLAMPS ARE ONLY TO BE USED ON POLE TRANSFORMERS 63kVA OR LOWER AND WITH LOADS THAT DO NOT HAVE MOTORS LARGER THAN 10kVA.

20110901

DO NOT MANUALLY AMEND

A. M. E. N. D. M. E. N. T. S.

1 END TERMINATION DETAILS
2 UPDATED TO DETAIL
3 DIRECTION FROM EITHER
4 DIRECTION FROM EITHER
5 DIRECTION FROM EITHER
6 DIRECTION FROM EITHER
7 DIRECTION FROM EITHER

1 CAD DRAWING
2 A. M. E. N. D. M. E. N. T. S.
3 DO NOT MANUALLY AMEND
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DATE: 15/05/2024
DATE: 15/05/2024
DATE: 15/05/2024

3 PHASE 11kV POLE MOUNTED DIST.SUB, HV, LV, ABC & COMMUNICATIONS CROSSARM DETAILS 228823
3 PHASE POLE TRANSFORMER ON TIMBER POLE GENERAL ARRANGEMENT 228821
3 PHASE POLE TRANSFORMER ON COMPOSITE POLE GENERAL ARRANGEMENT 244219

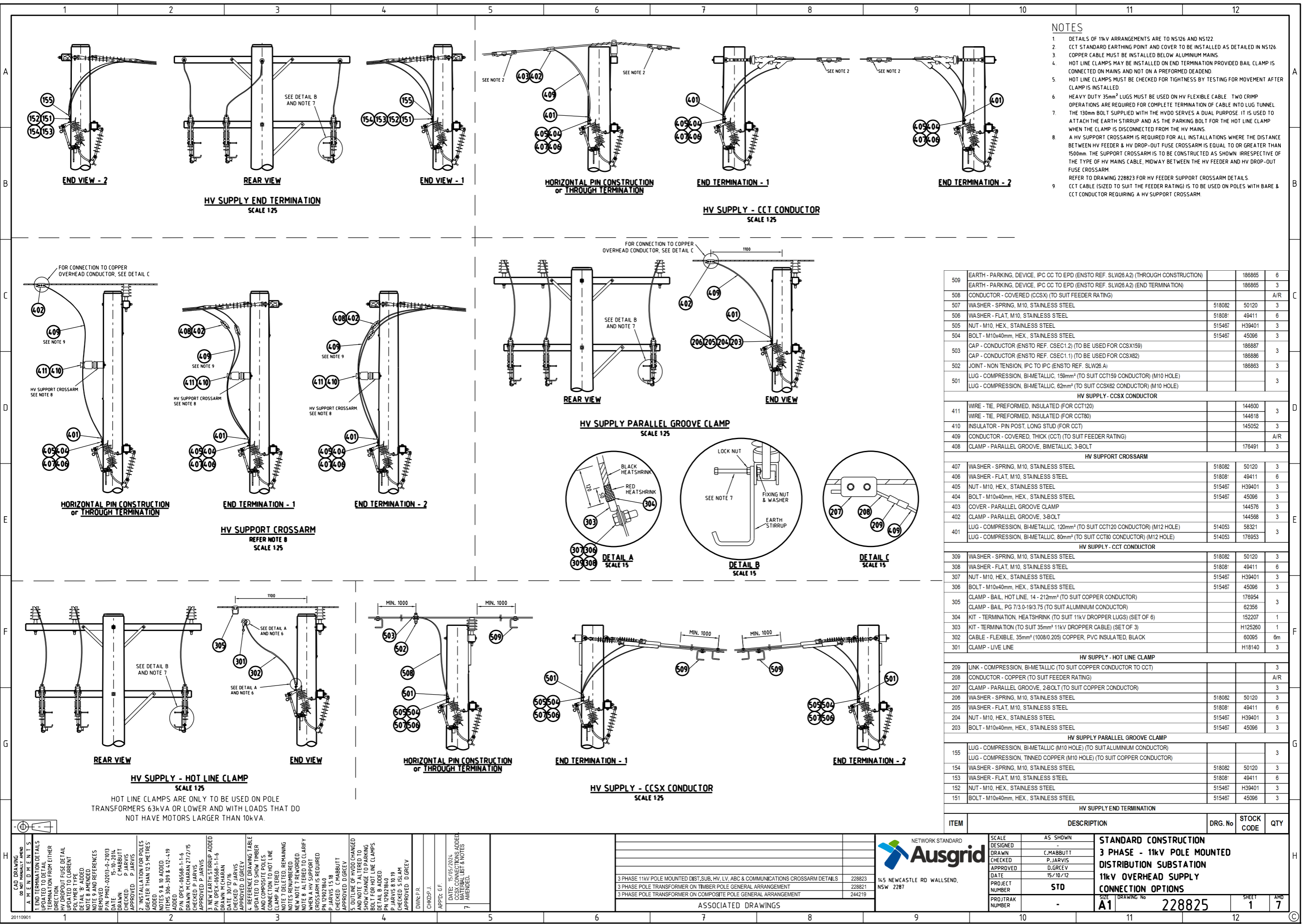
ASSOCIATED DRAWINGS

NETWORK STANDARD
Ausgrid
145 NEWCASTLE RD WALLSEND,
NSW 2287

SCALE AS SHOWN
DESIGNED -
DRAWN C.MABBUTT
CHECKED P.JARVIS
APPROVED D.GREY
DATE 15/10/12
PROJECT NUMBER STD
PROJ/TRAK NUMBER -

STANDARD CONSTRUCTION
3 PHASE - 11kV POLE MOUNTED
DISTRIBUTION SUBSTATION
11kV OVERHEAD SUPPLY
CONNECTION OPTIONS

SIZE DRAWING No
A1 228825
SHEET 1
AMD 7



- NOTES**
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 - HOT LINE CLAMPS MUST BE CHECKED FOR TIGHTNESS BY TESTING FOR MOVEMENT AFTER CLAMP IS INSTALLED
 - HEAVY DUTY 35mm² LUGS MUST BE USED ON HV FLEXIBLE CABLE TWO CRIMP OPERATIONS ARE REQUIRED FOR COMPLETE TERMINATION OF CABLE INTO LUG TUNNEL THE 130mm BOLT SUPPLIED WITH THE HVDO SERVES A DUAL PURPOSE IT IS USED TO ATTACH THE EARTH STIRRUP AND AS THE PARKING BOLT FOR THE HOT LINE CLAMP WHEN THE CLAMP IS DISCONNECTED FROM THE HV MAINS
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 - REFER TO DRAWING 228823 FOR HV FEEDER SUPPORT CROSSARM DETAILS
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509	EARTH - PARKING, DEVICE, IPC CC TO EPD (ENSTO REF. SLW26 A2) (THROUGH CONSTRUCTION)	186865	6	
	EARTH - PARKING, DEVICE, IPC CC TO EPD (ENSTO REF. SLW26 A2) (END TERMINATION)	186865	3	
508	CONDUCTOR - COVERED (CCSX) (TO SUIT FEEDER RATING)		A/R	
507	WASHER - SPRING, M10, STAINLESS STEEL	518082	50120 3	
506	WASHER - FLAT, M10, STAINLESS STEEL	518081	49411 6	
505	NUT - M10, HEX, STAINLESS STEEL	515467	H39401 3	
504	BOLT - M10x40mm, HEX, STAINLESS STEEL	515467	45096 3	
503	CAP - CONDUCTOR (ENSTO REF. CSEC1.2) (TO BE USED FOR CCSX159)		186887 3	
	CAP - CONDUCTOR (ENSTO REF. CSEC1.1) (TO BE USED FOR CCSX62)		186886 3	
502	JOINT - NON TENSION, IPC TO IPC (ENSTO REF. SLW26 A)		186863 3	
501	LUG - COMPRESSION, BI-METALLIC, 159mm ² (TO SUIT CCT159 CONDUCTOR) (M10 HOLE)		3	
	LUG - COMPRESSION, BI-METALLIC, 62mm ² (TO SUIT CCSX62 CONDUCTOR) (M10 HOLE)		3	
HV SUPPLY - CCSX CONDUCTOR				
411	WIRE - TIE, PREFORMED, INSULATED (FOR CCT120)	144600	3	
	WIRE - TIE, PREFORMED, INSULATED (FOR CCT80)	144618	3	
410	INSULATOR - PIN POST, LONG STUD (FOR CCT)	145052	3	
409	CONDUCTOR - COVERED, THICK (CCT) (TO SUIT FEEDER RATING)		A/R	
408	CLAMP - PARALLEL GROOVE, BIMETALLIC, 3-BOLT	176491	3	
HV SUPPORT CROSSARM				
407	WASHER - SPRING, M10, STAINLESS STEEL	518082	50120 3	
406	WASHER - FLAT, M10, STAINLESS STEEL	518081	49411 6	
405	NUT - M10, HEX, STAINLESS STEEL	515467	H39401 3	
404	BOLT - M10x40mm, HEX, STAINLESS STEEL	515467	45096 3	
403	COVER - PARALLEL GROOVE CLAMP		144576 3	
402	CLAMP - PARALLEL GROOVE, 3-BOLT		144568 3	
401	LUG - COMPRESSION, BI-METALLIC, 120mm ² (TO SUIT CCT120 CONDUCTOR) (M12 HOLE)	514053	58321 3	
	LUG - COMPRESSION, BI-METALLIC, 80mm ² (TO SUIT CCT80 CONDUCTOR) (M12 HOLE)	514053	176953 3	
HV SUPPLY - CCT CONDUCTOR				
309	WASHER - SPRING, M10, STAINLESS STEEL	518082	50120 3	
308	WASHER - FLAT, M10, STAINLESS STEEL	518081	49411 6	
307	NUT - M10, HEX, STAINLESS STEEL	515467	H39401 3	
306	BOLT - M10x40mm, HEX, STAINLESS STEEL	515467	45096 3	
305	CLAMP - BAIL, HOT LINE, 14 - 212mm ² (TO SUIT COPPER CONDUCTOR)		176954 3	
	CLAMP - BAIL, PG 7/3 0-19/3.75 (TO SUIT ALUMINIUM CONDUCTOR)		62356 3	
304	KIT - TERMINATION, HEATSHRINK (TO SUIT 11kV DROPPER LUGS) (SET OF 6)		152207 1	
303	KIT - TERMINATION (TO SUIT 35mm ² 11kV DROPPER CABLE) (SET OF 3)		H125260 1	
302	CABLE - FLEXIBLE, 35mm ² (1008/0.205) COPPER, PVC INSULATED, BLACK		60095 6m	
301	CLAMP - LIVE LINE		H18140 3	
HV SUPPLY - HOT LINE CLAMP				
209	LINK - COMPRESSION, BI-METALLIC (TO SUIT COPPER CONDUCTOR TO CCT)		3	
208	CONDUCTOR - COPPER (TO SUIT FEEDER RATING)		A/R	
207	CLAMP - PARALLEL GROOVE, 2-BOLT (TO SUIT COPPER CONDUCTOR)		3	
206	WASHER - SPRING, M10, STAINLESS STEEL	518082	50120 3	
205	WASHER - FLAT, M10, STAINLESS STEEL	518081	49411 6	
204	NUT - M10, HEX, STAINLESS STEEL	515467	H39401 3	
203	BOLT - M10x40mm, HEX, STAINLESS STEEL	515467	45096 3	
HV SUPPLY PARALLEL GROOVE CLAMP				
155	LUG - COMPRESSION, BI-METALLIC (M10 HOLE) (TO SUIT ALUMINIUM CONDUCTOR)		3	
	LUG - COMPRESSION, TINNED COPPER (M10 HOLE) (TO SUIT COPPER CONDUCTOR)		3	
154	WASHER - SPRING, M10, STAINLESS STEEL	518082	50120 3	
153	WASHER - FLAT, M10, STAINLESS STEEL	518081	49411 6	
152	NUT - M10, HEX, STAINLESS STEEL	515467	H39401 3	
151	BOLT - M10x40mm, HEX, STAINLESS STEEL	515467	45096 3	
HV SUPPLY END TERMINATION				
ITEM	DESCRIPTION	DRG. No	STOCK CODE	QTY

HOT LINE CLAMPS ARE ONLY TO BE USED ON POLE TRANSFORMERS 63kVA OR LOWER AND WITH LOADS THAT DO NOT HAVE MOTORS LARGER THAN 10kVA.

CAD DRAWING
DO NOT MANUALLY AMEND
A.M.E.N.D.S
1. END TERMINATION DETAILS
UPDATED TO DETAIL
TERMINATION FROM EITHER
DIRECTION
2. POLYMER TYPE
UPDATED TO CURRENT
DETAIL 'B' ADDED
NOTE 9 AND REFERENCES
REMOVED
DATE: 15-10-2014
DRAWN: C.MABBUTT
CHECKED: P.JARVIS
APPROVED: P.JARVIS
3. INSTALLATION FOR POLES
GREATER THAN 15 METRES
ADDED
NOTE 9 & 10 ADDED
ITEMS 306-309 & 472-479
ADDED
DATE: 05-06-11-1-5
DRAWN: M.CHARAN/17/27/5
CHECKED: P.JARVIS
APPROVED: P.JARVIS
3. NEW EARTH STIRRUP ADDED
DATE: 30/12/16
DRAWN: M.CHARAN
CHECKED: P.JARVIS
APPROVED: P.JARVIS
4. REFERENCE DRAWING TABLE
UPDATED TO SHOW TIMBER
CONNECTION TO POLES
CLAMP ALTERED
NOTE 7 DELETED, REMAINING
NOTES RENUMBERED
NEW NOTE 7 REWRDED
NOTE 8 - ALL REFER TO CLARIFY
WHEN A HV SUPPORT
CROSSARM IS REQUIRED
PN 19902840
P.JARVIS 15/18
C.MABBUTT
APPROVED: D.GREY
5. OUTLINE OF THEO CHANGED
TO SHOW CHANGE TO PARKING
BOLT FOR HOT LINE CLAMPS
DETAIL B ADDED
PN 19902840
P.JARVIS 8/10/19
CHECKED: S.ISLAM
APPROVED: D.GREY
D.VINE/P.R.
C.MABBUTT
APPD: G.F.
DATE: 15/05/2024
SUSAN
MABBUTT
7
AMENDED.

NO.	DESCRIPTION	DATE	BY
1	3 PHASE 11kV POLE MOUNTED DIST.SUB. HV, LV, ABC & COMMUNICATIONS CROSSARM DETAILS	228823	
2	3 PHASE POLE TRANSFORMER ON TIMBER POLE GENERAL ARRANGEMENT	228821	
3	3 PHASE POLE TRANSFORMER ON COMPOSITE POLE GENERAL ARRANGEMENT	244219	

NETWORK STANDARD
Ausgrid
145 NEWCASTLE RD WALLSEND,
NSW 2287

SCALE	AS SHOWN
DESIGNED	-
DRAWN	C.MABBUTT
CHECKED	P.JARVIS
APPROVED	D.GREY
DATE	15/10/12
PROJECT NUMBER	STD
PROJTRAK NUMBER	-

STANDARD CONSTRUCTION	3 PHASE - 11kV POLE MOUNTED DISTRIBUTION SUBSTATION	11kV OVERHEAD SUPPLY CONNECTION OPTIONS
SIZE	DRAWING No	SHEET
A1	228825	1
		7