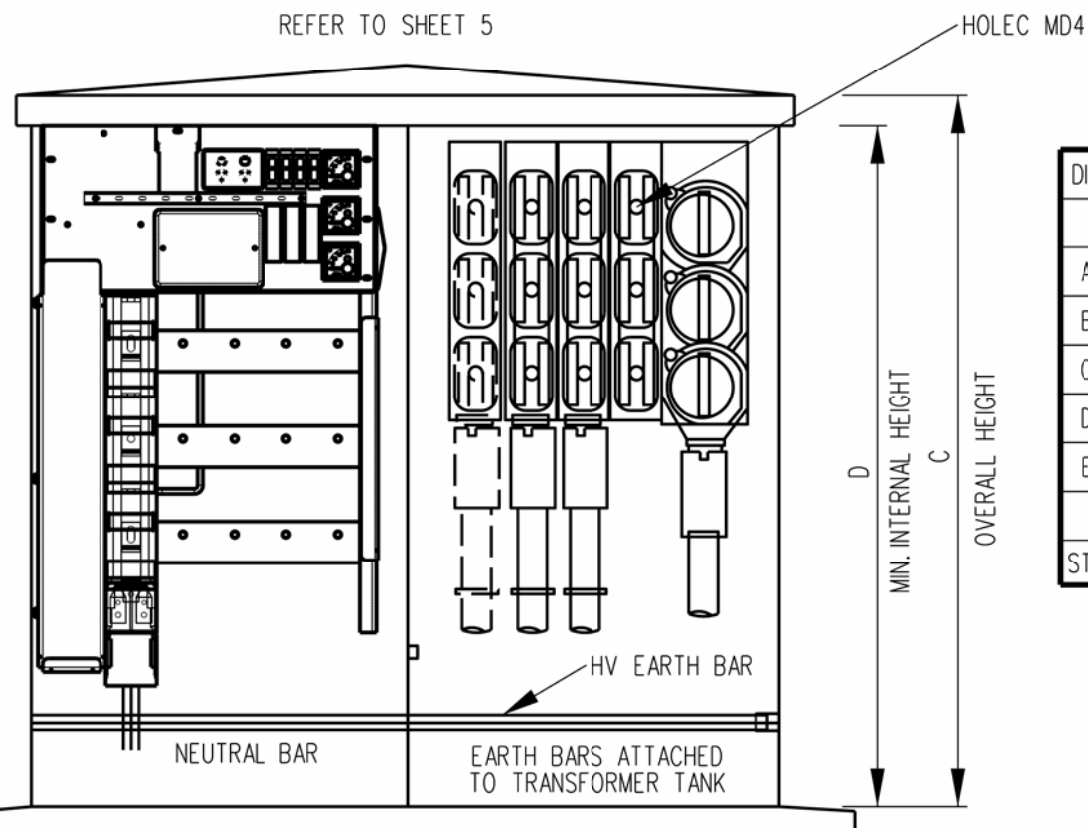
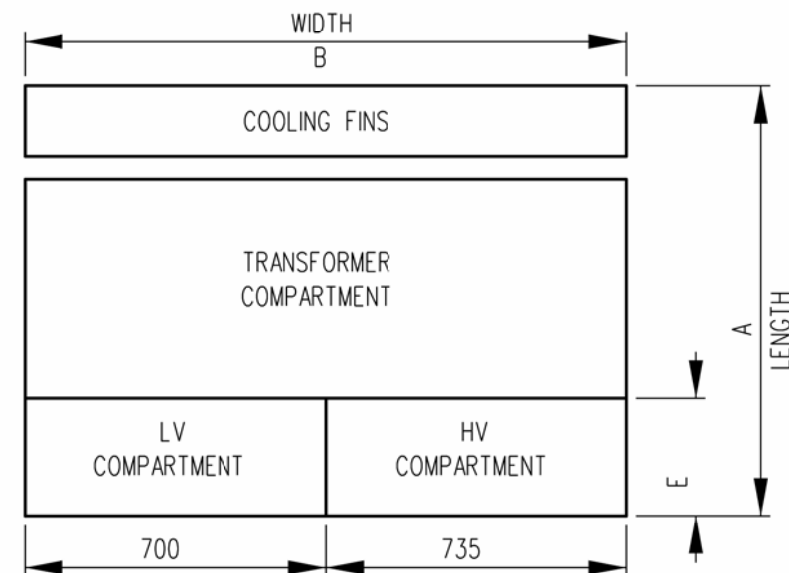


REFER TO SHEET 5



DIM	TRANSFORMER (kVA)			
	300	500	750	1000
A	1773	1773	1935	1935
B	1437	1437	1437	1437
C	1536	1536	1536	1536
D	1465	1465	1465	1465
E	851	851	851	851
Kg	695	955	1407	1710
STOCK CODE	172809	172817	172825	402107



DISCONNECTOR WITH COPPER LINKS
 300kVA - 1000A
 500kVA - 1000A
 750kVA - 2000A (1000Ax2)

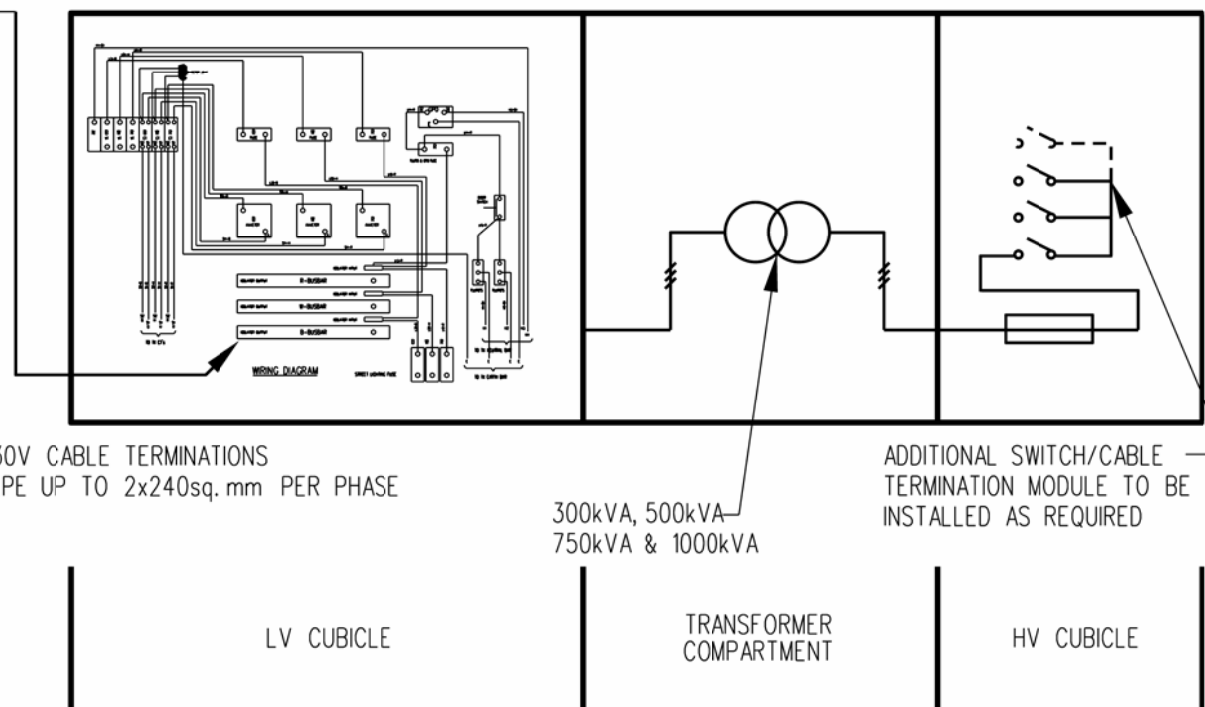
STOCK CODE: 402359

NOTE:

1. COMPRESSION LUGS ARE TO BE USED FOR ALL CABLE CONNECTIONS FOR XLPE AND OTHER ALUMINIUM CONDUCTORS. CABLE LUGS WITH FINAL COMPRESSION OVER INSULATION TO EXCLUDE MOISTURE ARE ESSENTIAL.
2. 22kV UNITS HAVE NO INTERNAL H.V. SWITCHGEAR. CABLE TERMINATION DIRECT ON TO BUSHING, VIA 630 AMP DEAD BREAK ELBOWS 22kV RMU WITH CIRCUIT BREAKER TEE OFF SHALL BE INSTALLED NEXT TO SUBSTATION.
3. LIFTING LUGS TO BE DETACHABLE.
4. THIS DWG. TO BE READ IN CONJUNCTION WITH THE PWC SPECIFICATIONS STS 001.
5. EACH CABLE ENTERING/LEAVING SUBSTATION IS TO HAVE A DESTINATION TAG (SEE S2-1-8-25).
6. CABLES IN HV AND LV COMPARTMENT TO BE HEAT SHRINK COLORED TO MATCH PHASE AND CONNECTED TO SWITCHGEAR WITH R.W.B. FROM REAR OF CABINET TO FRONT.
7. UNLESS SPECIFIED PACKAGE SUBSTATIONS SHALL BE SUPPLIED WITH LV PANEL EXCLUDING SERVICES STRIPPLE FUSE UNITS.
8. 11kV 1000kVA SUBSTATIONS SHALL HAVE NO INTERNAL HV SWITCHGEAR FITTED. CABLES SHALL BE TERMINATED DIRECT ON TO THE BUSHINGS VIA 630A DEAD BREAK ELBOWS. SUBSTATION HV PROTECTION TO BE OBTAINED FROM THE CIRCUIT BREAKER TEE-OFF OF AN RMU INSTALLED NEXT TO THE SUBSTATION.

WEBER OR JEAN MULLER STRIPPLE FUSE UNIT FOR: 1000 or 630A.

REFER TO SHEET 6



430V CABLE TERMINATIONS
 XLPE UP TO 2x240sq. mm PER PHASE

300kVA, 500kVA
 750kVA & 1000kVA

ADDITIONAL SWITCH/CABLE TERMINATION MODULE TO BE INSTALLED AS REQUIRED

LV CUBICLE

TRANSFORMER COMPARTMENT

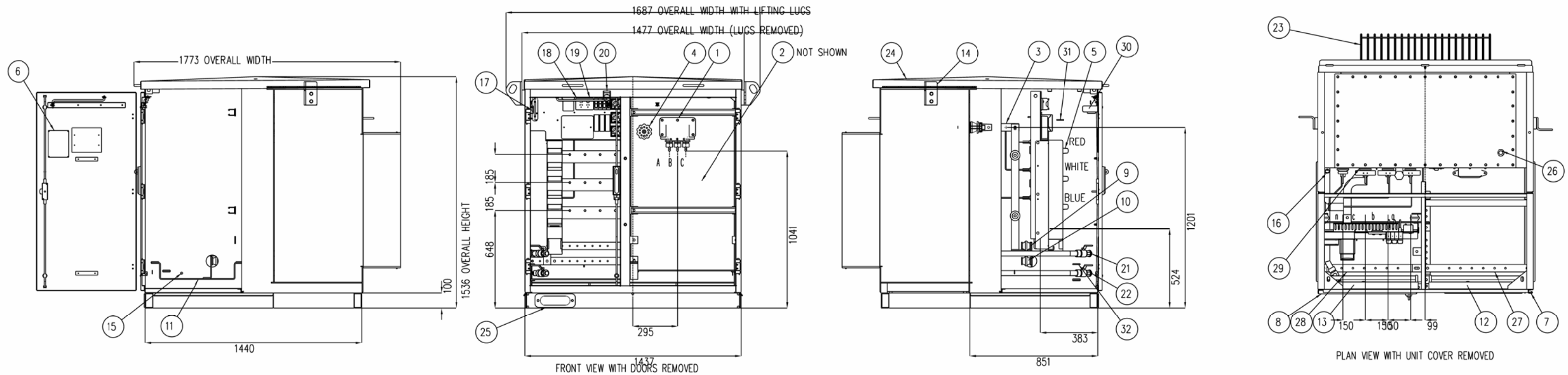
HV CUBICLE

NO	DESCRIPTION	DRN	DATE	CKD	APPD
24	NOTE 8 CHANGED, NOTE 9 REMOVED	C.W.M.	MAR'10	B.C.	S.C.
23	FIXED TEXT ALIGNMENT	C.W.M.	MAR'10	B.C.	S.C.
22	NOTE 9 ADDED	C.W.M.	DEC'09	B.C.	S.C.
21	NOTE 2 CHANGED	J.C.	NOV'08	B.C.	S.C.
20	TABLE DIMENSIONS ADDED	J.C.	MAY'08	B.C.	S.C.
19	NOTE 8 ADDED	J.C.	APR'08	B.C.	S.C.
18	WEIGHT ADDED	J.C.	MAR'08	B.C.	S.C.
17	SHEETS 2-5 ADDED	J.C.	SEP '07	B.C.	S.C.
16	NOTE 7 AMENDED	K.I.	SEP '06	R.S.	S.C.



DES	R.C.	POWER STANDARD DRAWING	
DRN	K.I.	SUBSTATIONS PACKAGE	
CKD	C.C.	GENERAL ARRANGEMENT 1 OF 5	
APPD	...	A3	DRAWING NUMBER S02-1-7-01_1
SCALE	N.T.S.		
ISSUED	DEC 04	DRAFTING STANDARD TO A.S.1100 CAD PRODUCT - DO NOT AMEND MANUALLY	
ALL DIM.	IN mm		





WILSON TRANSFORMERS		10 AS 2374.1.2																																											
OFF CIRCUIT TAPSELECTOR DE-ENERGISE BEFORE CHANGING TAPS		WTC SERIAL NUMBER																																											
7007		7007																																											
kVA	300	Insul. liquid Oil	MINERAL																																										
Phase	3	Temp. rise OI/Wdg	55/60																																										
Frequency	50	Total mass	2460																																										
Volts (no load)	HV 11000	Untanking mass	695																																										
Amps	LV 433	Liquid volume	830																																										
Amps	HV 15.7	Pressure min/max (kPo abs)	50/130																																										
Vector group	Dyn1	Year of manufacture																																											
Insulation level	L-95AC28/AC10	Impedance	%																																										
Cooling type	ONAN																																												
<table border="1"> <tr> <th>ACROSS</th> <th>HV</th> <th>POS</th> <th>%</th> <th>CONN</th> <th>LV</th> <th>ACROSS</th> </tr> <tr> <td>AB BB CB</td> <td>11275</td> <td>1</td> <td>102.5</td> <td>5-4</td> <td>433</td> <td>a2 b2 c2</td> </tr> <tr> <td>AB</td> <td>11000</td> <td>2</td> <td>100.0</td> <td>4-6</td> <td></td> <td></td> </tr> <tr> <td>A B</td> <td>10725</td> <td>3</td> <td>97.5</td> <td>6-3</td> <td></td> <td></td> </tr> <tr> <td>Z B</td> <td>10450</td> <td>4</td> <td>95.0</td> <td>3-7</td> <td></td> <td></td> </tr> <tr> <td>CB C BB</td> <td>10175</td> <td>5</td> <td>92.5</td> <td>7-2</td> <td></td> <td></td> </tr> </table>				ACROSS	HV	POS	%	CONN	LV	ACROSS	AB BB CB	11275	1	102.5	5-4	433	a2 b2 c2	AB	11000	2	100.0	4-6			A B	10725	3	97.5	6-3			Z B	10450	4	95.0	3-7			CB C BB	10175	5	92.5	7-2		
ACROSS	HV	POS	%	CONN	LV	ACROSS																																							
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Z B	10450	4	95.0	3-7																																									
CB C BB	10175	5	92.5	7-2																																									
PROPERTY OF POWER & WATER CORPORATION																																													
This is a Sealed Transformer																																													
721-7007-01																																													

DESCRIPTION LIST

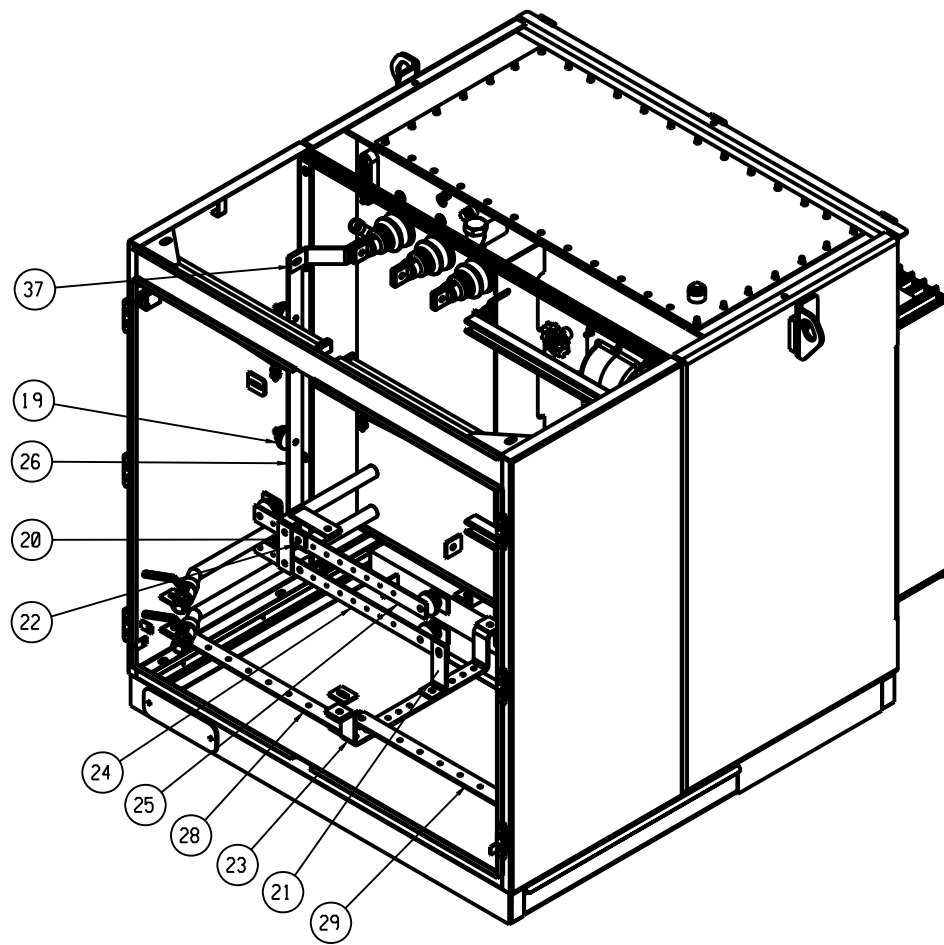
- HV EPOXY TERMINAL BLOCK SIMILAR TO REYROLLE TYPE CRP13B/CJS
- HAZEMEYER TYPE MD4 OR KRONE TYPE 10 SWITCHGEAR SUPPLIED & FITTED BY CUSTOMER (2 x UNISTRUT SUPPORTS FITTED)
- LV BUSHING ZEP 2/3/3m HOLE IN PALM *14
- OFF CIRCUIT TAPSELECTOR 5 POSITION WITH LOCKING FACILITIES
- LV SWITCHGEAR 1000A GENERATOR STRIP, 3 x MDI'S, TEST BLOCK, DOUBLE GPO, 3 x 63A FUSE BASE'S FOR FUTURE STREET LIGHTING, PROVISION FOR FITTING 4 x 630A FUSE STRIPS, (REFER 816-7349-01 FOR FLUORECENT LIGHTING AND SWITCHGEAR CIRCUIT & WIRING DETAILS) CONNECTING SWITCHGEAR BUS WORK TO HAVE BOTH ENDS FITTED WITH COLOURED HEATSHRINK TO ID. PHASE
- RATING AND DIAGRAM PLATE, OWNERSHIP PLATE AND PROVIION FOR MOUNTING PAWA NUMBER PLATE STREET LIGHTING PANEL ON INSIDE OF LV DOOR OR ON LV SWITCHGEAR
- HV DOOR INTER-LOCKED WITH LV DOOR WITH OVERCENTRE LATCH, PROVISION FOR PAD LOCKING SEALING RUBBER 3 x CONSEALED HINGES AND DOOR STAY
- LV DOOR WITH SWING HANDLE (3 POINT LOCKING) WITH PROVISION FOR PAD LOCKING, SEALING RUBBER, 3 x CONSEALED HINGES AND DOOR STAY
- INSULATED NEUTRAL BAR 50 x 6.3 TINNED COPPER COMPLETE WITH TEN (10) TAPPED HOLES M10 & REMOVABLE LINK TO EARTH BAR
- INSULATED LV EARTH BAR 50 x 6.3 TINNED COPPER
- HV EARTH BAR 50 x 6.3 TINNED COPPER COMPLETE WITH NINE (9) HOLES *11 & REMOVABLE LINK TO LV EARTH BAR
- HV COMPARTMENT FLUORECENT LIGHT 20W
- LV COMPARTMENT FLUORECENT LIGHT 20W
- REMOVABLE LIFTING LUGS SLOT 40x60
- LIFTING LUGS STORAGE HOLE *14 IN DIVIDING PANEL
- THERMOMETER POCKET
- FLUSH TYPE OIL GAUGE MARKED AT 15°C (BACKGROUND ON WALL OF TANK PAINTED WHITE BEHIND PERPEX)
- PRESSURE RELIEF VALVE
- SEALING PLUG
- FILLER CAP *40 NOM.
- FILTER BALL VALVE *25 NOM.
- DRAIN BALL VALVE *25 NOM.
- COOLING FINS
- CUBIC COVER WITH M10 TAPPED BOSSES FOR LIFTING AND HANDLES TO AID REMOVAL OF COVER
- BASE FRAME 100 x 50 CHANNEL GALVANISED WITH GENERATOR CABLE ACCESS POINT (COVER PLATE BOLT ON)
- SOCKET *25 NOM. (WTC USE ONLY)
- HV EARTH BAR
- LV EARTH BAR
- CT.s 500/5A FOR MDI'S (MOUNTED ON LV BUSHING)
- LIGHT SWITCH BRACKET
- E-MAIL ANTENNA MOUNTING LUG (CENTRE PANEL)
- 2 x LUGS (FOR MOUNTING AUX. NEUTRAL BAR IF REQUIRED)

*SERIAL NUMBER, YEAR OF MANUFACTURE AND IMPENANCE (4.00% NOM.) STAMPED AFTER TEST

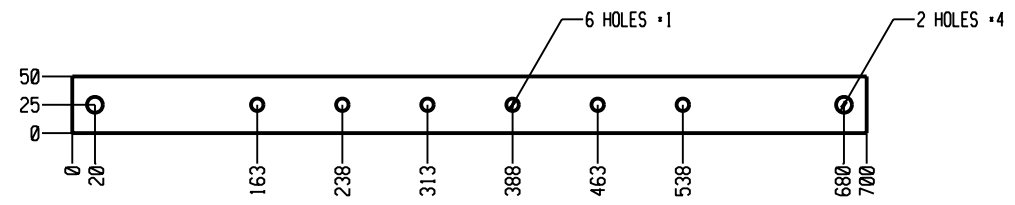
18	NOTE 7 AMENDED	C.M.	AUG '10	B.C.	S.C.
17	SHEETS 2-5 ADDED	J.C.	SEP '07	B.C.	B.C.
NO	DESCRIPTION	DRN	DATE	CKD	APPD
AMENDMENTS					



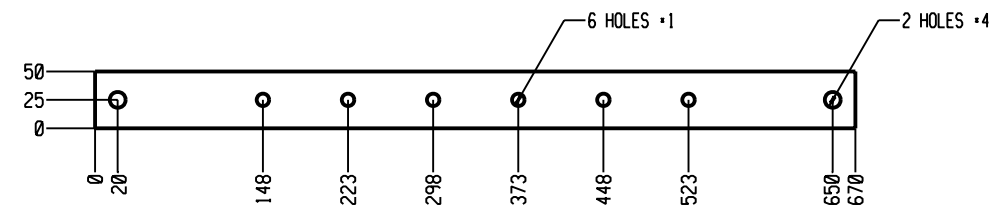
DES	R.C.	POWER STANDARD DRAWING			
DRN	K.I.	SUBSTATIONS PACKAGE			
CKD	C.C.	GENERAL ARRANGEMENT 2 OF 5			
APPD	...				
SCALE	N.T.S.				
ISSUED	DEC 04	A3	DRAWING NUMBER	S02-1-7-01_2	
ALL DIM.	IN mm				
DRAFTING STANDARD TO A.S.1100		CAD PRODUCT - DO NOT AMEND MANUALLY			AMD T



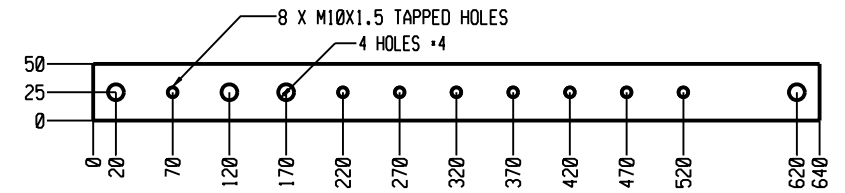
EARTHING LAYOUT DETAIL



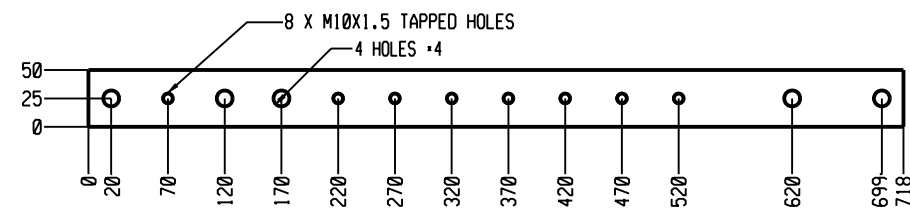
HV EARTH BAR DETAIL (ITEM 29)
50 X 6.3 COPPER TINNED BAR



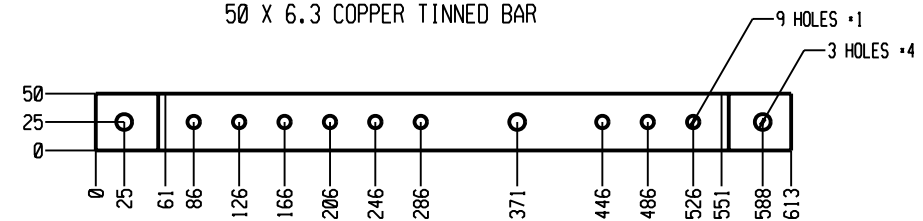
LV EARTH BAR DETAIL (ITEM 28)
50 X 6.3 COPPER TINNED BAR



LV EARTH BAR DETAIL (ITEM 25)
50 X 6.3 COPPER TINNED BAR



LV EARTH BAR DETAIL (ITEM 24)
50 X 6.3 COPPER TINNED BAR

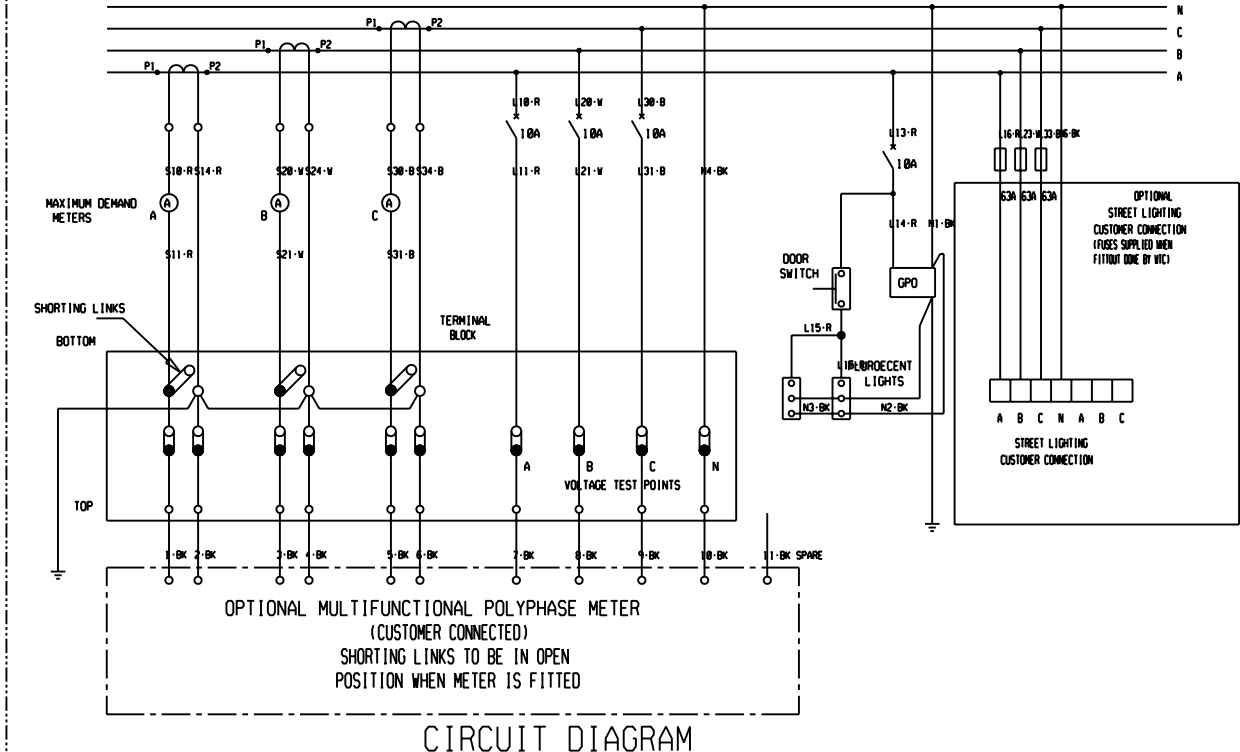
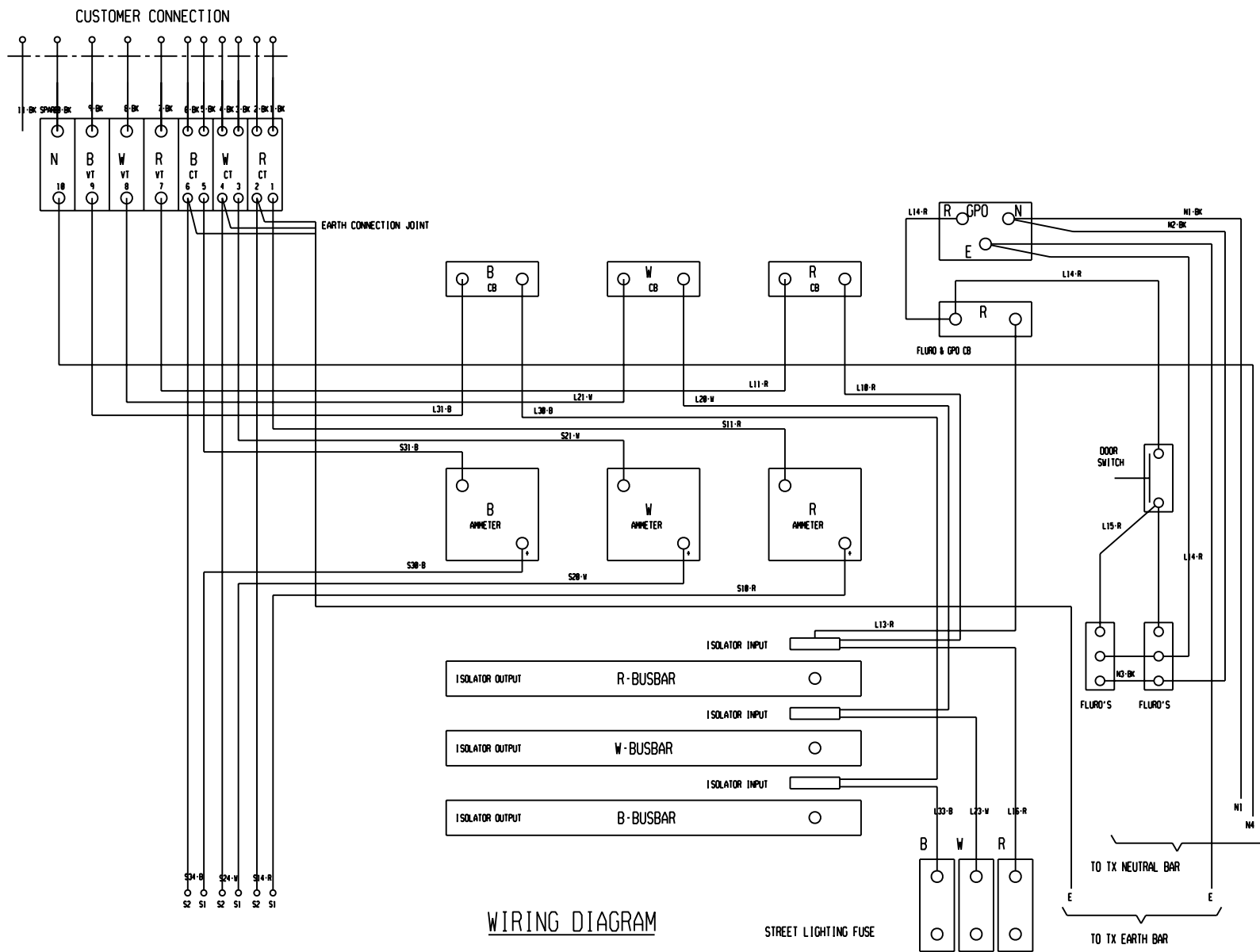


LV EARTH BAR DETAIL (ITEM 23)
50 X 6.3 COPPER TINNED BAR

17	SHEETS 2-5 ADDED	J.C.	SEP '07	B.C.	B.C.
16	NOTE 7 AMENDED	K.I.	SEP '06	R.S.	S.C.
15	UPDATE INDICATOR PANEL	K.I.	SEP '06	R.S.	S.C.
14	UPDATE TRANSFORMER GA	K.I.	JUL '06	B.C.	B.C.
13	ADD NOTES 6 & 7, STOCK CODE ADDED.	K.I.	MAR '05	C.C.	C.C.
12	INSERT NEW TRANSFORMER TABLE ADDED NEW DISCONNECTOR NOTES	K.I.	DEC 04	R.C.	...
11	750kVA & 1000kVA TRANSFORMER DATA ADDED	R.C.	SEPT 04	A.S.	C.F.
10	TITLE & DRAWING NUMBER CHANGED		MAY 88		R.P.P.
9	REDRAWN		SEPT 85		R.P.P.
NO	DESCRIPTION	DRN	DATE	CKD	APPD
AMENDMENTS					



DES	R.C.	POWER STANDARD DRAWING		
DRN	K.I.	SUBSTATIONS		
CKD	C.C.	PACKAGE		
APPD	...	GENERAL ARRANGEMENT 3 OF 5		
SCALE	N.T.S.	A3	DRAWING NUMBER	S02-1-7-01
ISSUED	DEC 04			
ALL DIM.	IN mm	CAD PRODUCT - DO NOT AMEND MANUALLY		
DRAFTING STANDARD TO A.S.1100		AMDT		



NOTES:

CT1-CT3 TRANSFORMERS CURRENT METERING

WIRE NUMBER
 H70-R R - RED BK - BLACK
 W - WHITE BN - BROWN
 B - BLUE GY - GREY

TOP
 BOTTOM TEST BOX SLIDE LINKS

NOTE
 ALL FUSES CONNECTED FROM LV SWITCHBOARD AND WIRED USING 7/1.04MM Ø.6/1KV
 ALL OTHER WIRING 7/0.67MM Ø.6/1KV
 NEUTRAL & EARTH CONNECTIONS MADE TO FRONT NEUTRAL BAR

NO	DESCRIPTION	DRN	DATE	CKD	APPD
17	SHEETS 2-5 ADDED	J.C.	SEP '07	B.C.	B.C.
16	NOTE 7 AMENDED	K.I.	SEP '06	R.S.	S.C.
15	UPDATE INDICATOR PANEL	K.I.	SEP '06	R.S.	S.C.
14	UPDATE TRANSFORMER GA	K.I.	JUL '06	B.C.	B.C.
13	ADD NOTES 6 & 7, STOCK CODE ADDED.	K.I.	MAR '05	C.C.	C.C.
12	INSERT NEW TRANSFORMER TABLE ADDED NEW DISCONNECTOR NOTES	K.I.	DEC 04	R.C.	...
11	750kVA & 1000kVA TRANSFORMER DATA ADDED	R.C.	SEPT 04	A.S.	C.F.
10	TITLE & DRAWING NUMBER CHANGED		MAY 88		R.P.P.
9	REDRAWN		SEPT 85		R.P.P.



DES	R.C.	POWER STANDARD DRAWING	
DRN	K.I.	SUBSTATIONS	
CKD	C.C.	PACKAGE	
APPD	...	GENERAL ARRANGEMENT 5 OF 5	
SCALE	N.T.S.	A3	DRAWING NUMBER S02-1-7-01
ISSUED	DEC 04		
ALL DIM.	IN mm		
DRAFTING STANDARD TO A.S.1100		CAD PRODUCT - DO NOT AMEND MANUALLY	