

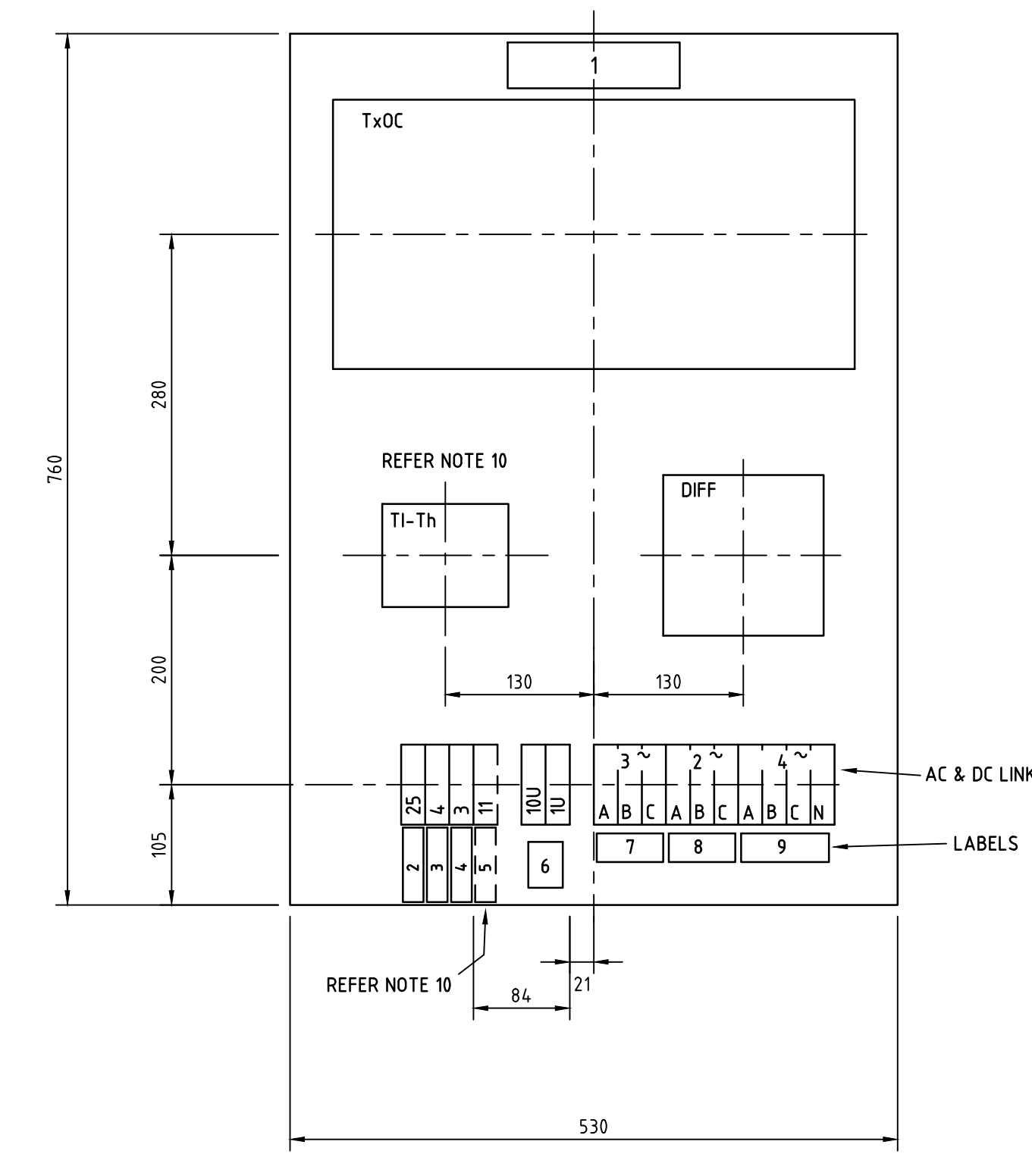
REFERENCE DRAWINGS		
RMICB SUBSTATIONS WITH E TYPE LV BOARDS CABLING DIAGRAM & SCHEDULE	A0-178231	
RMICB SUBSTATIONS WITH E TYPE LV BOARDS AC & DC SCHEMATICS	A0-178232	
DISTRIBUTION SUBSTATIONS LABELS & MOULDED LINK DETAILS	B1-178241	
DISTRIBUTION SUBSTATIONS PROTECTION RELAY DRILLING DETAILS	A2-191086	
LOOM METHOD OF PANEL WIRING	A1-52474	
WALL MOUNTED RELAY PANEL STEELWORK	A1-28632	
UTILUX H3820 RAIL MOUNTED TERMINALS	A3-118547	

LEGEND		
SYMBOL	DESCRIPTION	TYPE
DIFF	DIFFERENTIAL RELAY	K3M
TxOC	TRANSFORMER OVERCURRENT RELAY	CDG 33
Tl-Th	THERMAL TRIP INDICATOR (DRY TYPE TRANSFORMERS)	T13
○	TERMINALS TYPE UTILUX TYPE H3820 WITH UTILUX H2233 MOUNTING CHANNEL	

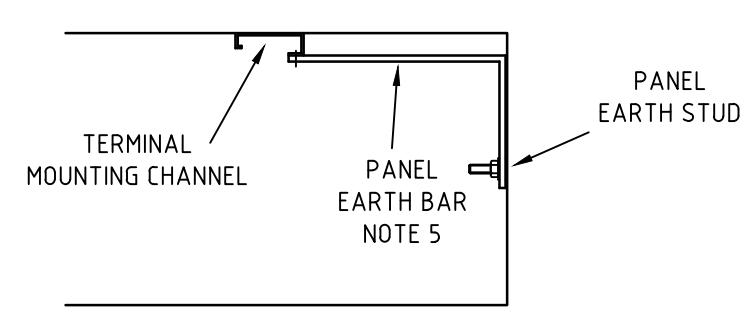
REFER NOTE 10

NOTES

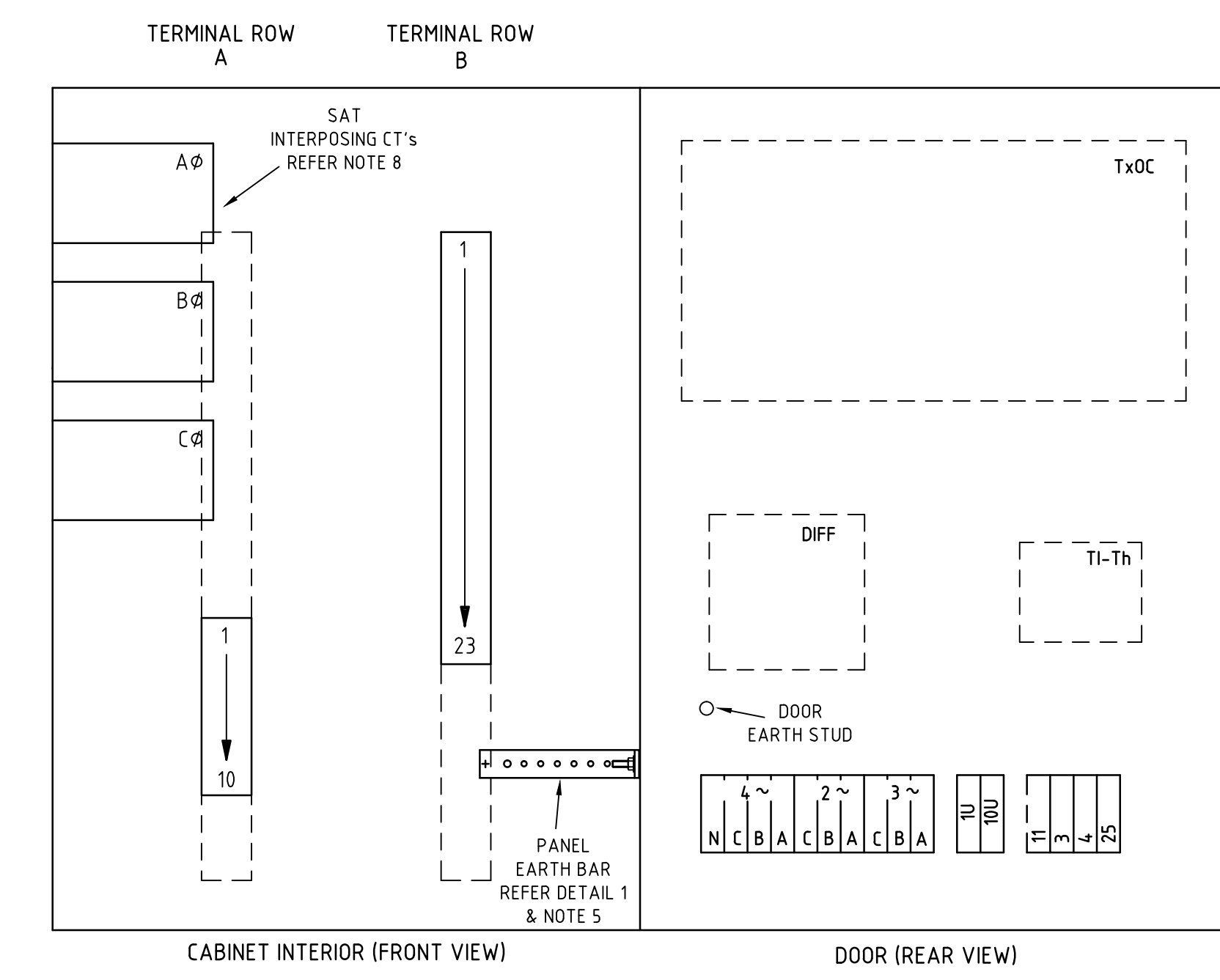
- THIS DRAWING SHOWS THE TRANSFORMER PROTECTION PANEL & WIRING TO BE USED WITH RMICB CHAMBER TYPE SUBSTATIONS AND SHOULD BE READ IN CONJUNCTION WITH NETWORK STANDARDS AND THE SUBSTATION DESIGN INFORMATION PACKAGE.
- ALL PANEL WIRING IS TO BE 7/0.67, 0.6kV V75 GRADE WITH PVC INSULATION. ALL INSULATION IS TO BE GREY COLOURED EXCEPT FOR EARTH WIRES WHICH ARE TO BE GREEN/YELLOW.
- A DOT ON A LINK (●) INDICATES BOTTOM TERMINAL.
- THE COMMON CONNECTION BETWEEN POINTS DESIGNATED BY ② ARE TO BE DETERMINED ON SITE AND SHOULD BE ACHIEVED BY THE SHORTEST POSSIBLE ROUTE. HOWEVER IN ALL CASES NO MORE THAN TWO WIRES SHOULD BE TERMINATED AT ANY LINK OR RELAY TERMINAL.
- A 25mm x 4mm HDHC COPPER EARTH BAR IS TO BE MADE AND BOLTED TO THE CABINET EARTH STUD AND THE TERMINAL ROW B MOUNTING CHANNEL AS SHOWN IN DETAIL 1. THE EARTH BAR IS TO BE DRILLED TO ACCOMMODATE INDIVIDUAL CONNECTIONS FROM THE PANEL DOOR, LINKS, RELAY CASES AND THE 6mm CABLE FROM THE SUBSTATION EARTH BAR. CONNECTIONS ARE TO BE EVENLY SPACED ALONG LENGTH OF EARTH BAR.
- EARTH CONNECTIONS DESIGNATED ∇ ARE TO BE CONNECTED INDIVIDUALLY TO THE EARTH BAR.
- FOR LOOM METHOD OF WIRING REFER TO DRAWING A1-52474.
- THE SATURATING INTERPOSING CT'S ARE TO BE MOUNTED ON THE SIDE OF THE CABINET INTERIOR IN THE POSITIONS SHOWN. THE MOUNTING IS TO BE UNDERTAKEN SUCH THAT THERE IS SUFFICIENT CLEARANCE TO RELAY TERMINALS WHEN THE DOOR IS CLOSED. TERMINAL ROW A IS TO BE POSITIONED ON THE LOWER PORTION OF THE MOUNTING CHANNEL.
- THIS WALL MOUNTED PANEL IS TO BE CONSTRUCTED IN ACCORDANCE WITH MARK 1 OF DWG A2-28630.
- WHEN A DRY TYPE TRANSFORMER IS USED, THE THERMAL RELAY (Th) AND A TRIP INDICATOR ARE TO BE CONNECTED. THE THERMAL RELAY IS LOCATED AND SUPPLIED ON THE TRANSFORMER BY THE TRANSFORMER MANUFACTURER. THE TRIP INDICATOR IS LOCATED ON THE TRANSFORMER PROTECTION PANEL AND IS SUPPLIED BY AUSGRID.
- LABELS ARE TO BE MADE AND POSITIONED AS SHOWN ON DRAWING B1-178241. DRILLING FOR RELAYS AND LINKS ARE SHOWN ON DRAWINGS B1-178241 AND A2-191086.
- THE TRANSFORMER NUMBER FOR THE RELEVANT SUBSTATION IS TO BE ENGRAVED LABEL 1 WHERE # IS SHOWN.
- WIRING SHOWN IS FOR THE STANDARD AUSGRID DY1 TRANSFORMER CONNECTED IN A DY1 ARRANGEMENT. FOR A DY1 TRANSFORMER CONNECTED IN A DY11 ARRANGEMENT, USE INSET 1.
- ON THE WIRING DIAGRAM TERMINALS ARE NOMINATED AS TERMINAL ROW-TERMINAL NUMBER, eg TB-4 MEANS THE 4th TERMINAL ON TERMINAL ROW B.



PANEL LAYOUT
REFER NOTE 9
SCALE 15



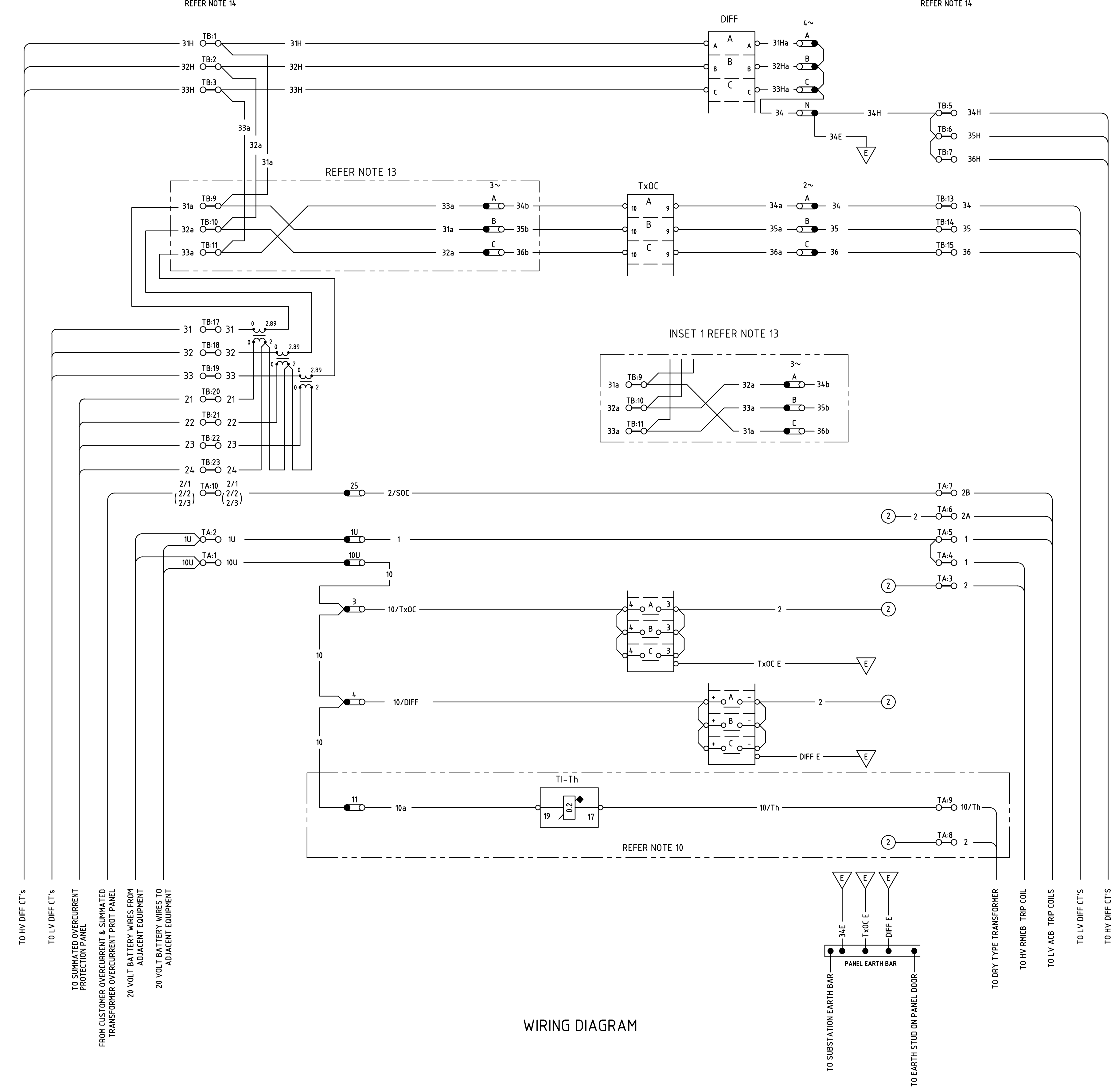
DETAIL 1
CABINET INTERIOR (PLAN VIEW)
EARTH BAR LOCATION
SCALE 15



REFER NOTE 12

LABEL DETAILS						
LABEL	LABEL SIZE	COLOUR	TEXT LINE	TEXT HEIGHT	ENGRAVING	No OFF
1	C8	GRAVOPL Y No 200 WHITE/BLACK	LINE 1 LINE 2	8 8	TRANSFORMER #	1
2	C2	TRAFOLYTE YELLOW/BLACK/YELLOW	LINE 1 LINE 2 LINE 3	2.5 2.5 2.5	CUSTOMER & SUMMATED TRANSFORMER OVERCURRENT TRIP LINK	1
3	C2	GRAVOPL Y No 200 WHITE/BLACK	LINE 1 LINE 2	2.5 2.5	DIFFERENTIAL BATTERY LINK	1
4	C2	GRAVOPL Y No 200 WHITE/BLACK	LINE 1 LINE 2	2.5 2.5	TRANSFORMER OVERCURRENT BATTERY LINK	1
5	C2	GRAVOPL Y No 200 WHITE/BLACK	LINE 1 LINE 2	2.5 2.5	THERMAL RELAY BATTERY LINK	1
6	C3	TRAFOLYTE RED/WHITE/RED	LINE 1 LINE 2 LINE 3 LINE 4	4.0 2.5 2.5 2.5	10 1 20V DC BUS MASTER BATTERY LINKS	1
7	C10	GRAVOPL Y No 259 PINE GREEN/WHITE	LINE 1 LINE 2 LINE 3 LINE 4	4.0 2.5 2.5 2.5	A B C TRANSFORMER OVERCURRENT RELAY DELTA TEST LINK	1
8	C10	GRAVOPL Y No 259 PINE GREEN/WHITE	LINE 1 LINE 2 LINE 3 LINE 4	4.0 2.5 2.5 2.5	A B C TRANSFORMER OVERCURRENT RELAY TEST LINK	1
9	C1	GRAVOPL Y No 259 PINE GREEN/WHITE	LINE 1 LINE 2 LINE 3	4.0 2.5 2.5	A B C N DIFFERENTIAL RELAY TEST LINKS	1

CABLE CONNECTIONS	TERMINALS	SATURATING INTERPOSING CT'S	DC LINKS	LOOPING	AC LINKS	TRIP INDICATOR	TRANSFORMER OVERCURRENT RELAY	DIFFERENTIAL RELAY	AC LINKS	LOOPING	TERMINALS	CABLE CONNECTIONS
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WIRING DIAGRAM

CAD DRAWING
DO NOT MANUALLY AMEND
A M E N T S
1. TERMINAL DESIGNATION UPDATED.
NOTE 14 ADDED.
REF DWGS DELETED FROM LEGEND.
REF DWG A2-191086 ADDED.
REF DWG A1-52474 ALTERED.
PWJ 10.6.08
CHECKED: DRB
APPROVED: WJB
2. CABLE CONNECTIONS TO BATTERY TERMINALS ADDED INTO PANEL.
PWJ 10.6.08
CHECKED: DRB
APPROVED: WJB
3. NEW AUSGRID BORDER & LOGO ADDED.
30-09-2013
RLA/LAA
APPROVED: TLP/ARD

NETWORK STANDARD
Ausgrid
DESIGN SERVICES
24 CAMPBELL ST SYDNEY NSW 2000

SCALE	AS SHOWN
DESIGNED	-
DRAWN	PWJ
CHECKED	PIE
APPROVED	MT
DATE	14.4.08
PRJ/TRK No.	-
PROJECT NUMBER	208/9/9/4

RMICB SUBSTATIONS WITH E TYPE LV BOARD WALL MOUNTED TRANSFORMER PROTECTION PANEL DRILLING AND WIRING

DRAWING No **187815** SHEET - AMD 3 SIZE B1