



REFERENCE DRAWINGS	
CITY BASEMENT, SURFACE & ELEVATED SUBSTATIONS WITH E TYPE LV BOARD CABLING DIAGRAM	A0-178233
CITY SUBSTATIONS WITH E TYPE LV BOARD CABLING SCHEDULE	A1-178235
CITY SUBSTATIONS WITH E TYPE LV BOARD CONTROL, PROTECTION & SIGNAL SCHEMATIC	A0-178236
CITY SUBSTATIONS WALL MOUNTED TRANSFORMER PROTECTION PANEL DRILLING	A1-115247
CITY SUBSTATIONS WALL MOUNTED TRANSFORMER PROTECTION PANEL WIRING & CABLING	B1-115148
CITY & SUBURBAN DISTRIBUTION SUBSTATIONS WALL MOUNTED CUSTOMER OVERCURRENT PROTECTION PANEL DRILLING, WIRING & CABLING	A1-118558
CITY & SUBURBAN DISTRIBUTION SUBSTATIONS WALL MOUNTED SUMMATED OVERCURRENT PROTECTION PANEL DRILLING, WIRING & CABLING	A1-118559
DISTRIBUTION SUBSTATIONS LABEL & MOULDED LINK DETAILS	B1-178241
E TYPE LV BOARD WITH MERLIN GERIN MASTERPAC TP AIR CIRCUIT BREAKERS EXTERNAL CONNECTIONS	A2-178237
E TYPE LV BOARD SUMMATED MDI CONNECTIONS DIAGRAM	A1-178238
PILOT MARSHALLING BOX CONNECTIONS	A3-115839
PILOT ISOLATION BOX CONNECTIONS	A1-116004
SIGNAL DISCONNECTION BOX CONNECTIONS	A1-113432
CITY SUBSTATIONS WITH SUBSTATION FAN CONTROL SERVICE BOARD	A2-121951
INDOOR TRANSFORMERS MOUNTING DETAILS OF CT'S AND EARTH BAR	A1-162655
BATTERY TEST BOX	A2-22212

- NOTES**
- THIS DRAWING SHOWS THE CONTROL, PROTECTION AND SIGNALING CABLING WHICH IS TO BE USED IN CITY CONTROL POINT AND UPPER LEVEL CHAMBER SUBSTATIONS WHICH HAVE E TYPE LV BOARDS. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH NETWORK STANDARDS AND THE SUBSTATION INFORMATION PACKAGE.
  - THE HV SWITCHES CAN EITHER BE 3 WAY ISOLATING & EARTHING SWITCHES OR ISOLATING & EARTHING SWITCHES. CABLING CONNECTIONS FOR EACH TYPE ARE SHOWN IN INSET 1.
  - THE HV DIFF CT'S ARE MOUNTED ON EACH TRANSFORMER.
  - THE LV DIFF CT'S AND CUSTOMER SUPPLY CT'S ARE LOCATED IN THEIR RESPECTIVE LV SWITCHBOARD PANEL.
  - CUSTOMER SUPPLY CONSISTS OF AN AIR CIRCUIT BREAKER CONTROLLED CABLE OR BUSBAR SUPPLY OF 2000 OR 3000 AMPS. THE OVERCURRENT CT'S ARE INSTALLED IN THE RESPECTIVE CUSTOMER SUPPLY PANEL.
  - A SEPARATE PROTECTION PANEL FOR EACH CUSTOMER SUPPLY IS NORMALLY INSTALLED. THE DUAL VERSION OF THE CUSTOMER SUPPLY PROTECTION PANEL CAN ONLY BE USED WHEN THERE IS INSUFFICIENT WALL SPACE IN THE SUBSTATION TO ACCOMMODATE SEPARATE PANELS.
  - CABLE 11A IS TO BE SIZED TO MEET VOLTAGE DROP REQUIREMENTS OUTLINED IN AS3000.
  - REPLACE THE HV SWITCH, TRANSFORMER AND TRANSFORMER AIR CIRCUIT BREAKER NUMBER WHERE A B C IS SHOWN WITH D E F, G H J OR K L M etc AS REQUIRED FOR EACH LOCATION.
  - FEEDER PILOT CONNECTIONS IN THE CONTROL POINT SHOWN ARE TO BE INSTALLED WHEN TWO UPPER LEVEL SUBSTATIONS ARE CONNECTED TO THE SAME 11kV FEEDER GROUP.
  - INTERNAL CONNECTIONS TO THE SCADA INSTALLATION SHOWN IN THE DOTTED BOX AND THE CONNECTIONS TO THE SIGNAL DISCONNECTION BOX ARE TO BE ADVISED FOR EACH SUBSTATION LOCATION.
  - A WATER LEVEL SWITCH IS ONLY REQUIRED IN BASEMENT CONTROL POINTS.

20110714  
 00 DRAWING NO.  
 A.M.E.D. E.L.T.S.  
 1. CABLE TA BULLETIN, INSTALLATION, SHOWN.  
 2. FIBRE OPTIC CABLE LAYOUT BY HV DIFF CT INFORMATION CORRECTED.  
 3. NOTES & 11A ADDED.  
 4. P.H. 20-201-02-7001 CHECKED. P. TURBIN APPROVED. P. TURBIN

**CONSTRUCTION**

NETWORK STANDARD	SCALE	AS SHOWN
<b>Ausgrid</b>	DESIGNED	
DRAWN	CHECKED	APPROVED
P. JARVIS	P. EASTON	P. EASTON
DATE	23/07/01	
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PROJECT TRACK NUMBER		

CITY CONTROL POINT & UPPER LEVEL DISTRIBUTION SUBSTATIONS WITH E TYPE LV BOARD CABLING DIAGRAM	
SHEET NUMBER	1
DRAWING NO.	178234
SHEET	1
AND	1