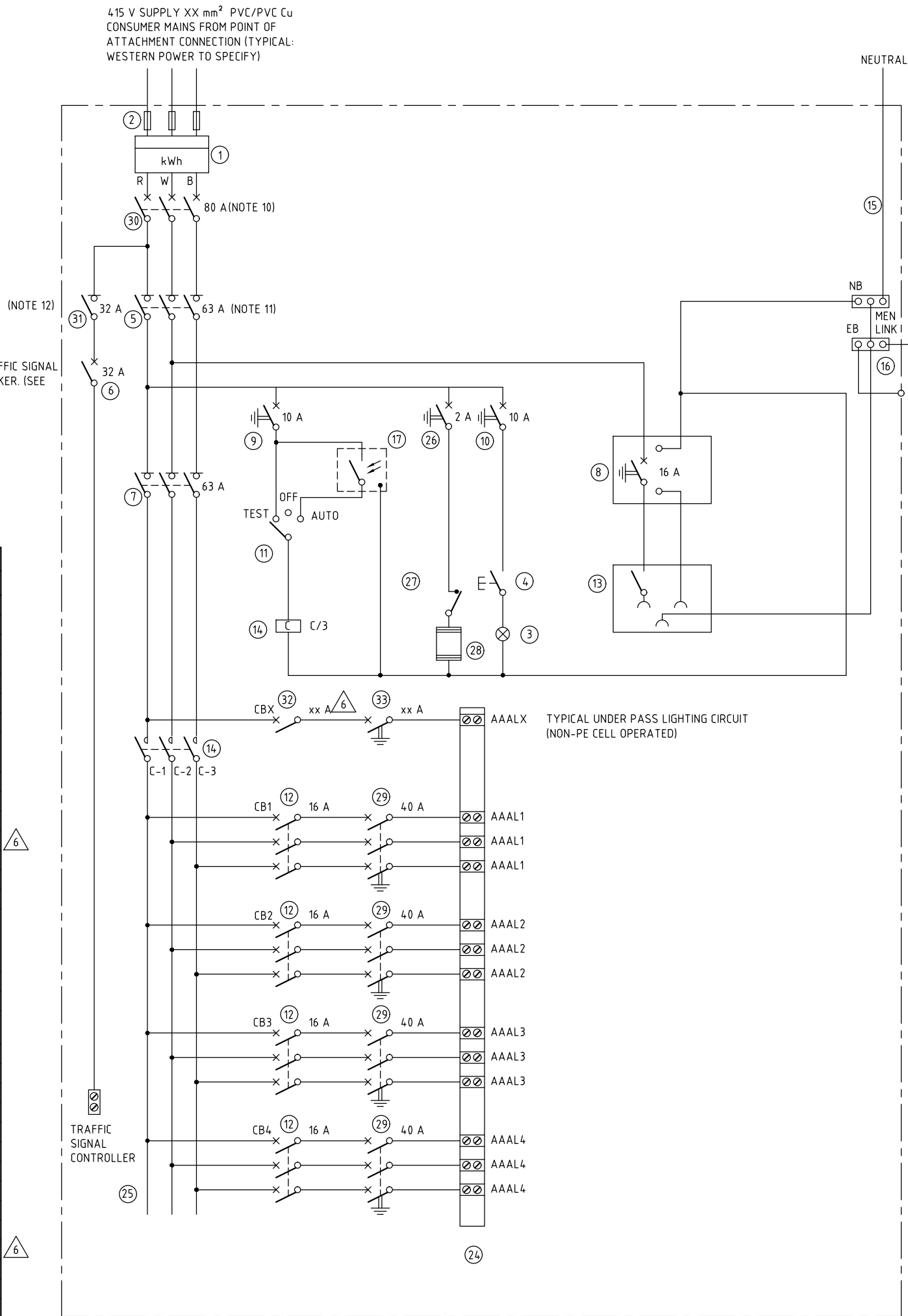


EQUIPMENT LIST			
ITEM	DESCRIPTION	SPECIFICATION	QTY
1	kWh METER R1	EMAIL METERING, AMPY5192B/EM : 3Φ 2 W 240 / 415 VAC 5-120 A	1
2	METER FUSES	ALSTOM, S71002ABWS : 500 V 100 A "gG" FUSE-LINK	3
3	CABINET LIGHT	THORN, AS450 : ARROWSLIM 15 W FLUORESCENT	1
4	DOOR UNIT SWITCH	SCHMERSAL, ZS 236-IIZ : STRAIGHT PLUNGER	1
5	MAIN SWITCH	TERASAKI, DINTMS633 : 63 A, TRIPLE POLE	1
6	TRAFFIC SIGNAL BREAKERS	TERASAKI, DIN-T10132C : 32 A, 10 kA SINGLE POLE	1
7	LIGHTING CHASSIS MAIN SWITCH	TERASAKI, DINTMS633 : 63 A, TRIPLE POLE	1
8	SSO RESIDUAL CURRENT CIRCUIT BREAKER	TERASAKI, DSRCBH 1630 : 16 A, 10 kA, 30 mA	1
9	CONTROL RCBO	SPECIFIED BY PROJECT	1
10	PANEL LIGHT RCBO	SPECIFIED BY PROJECT	1
11	CONTROL SWITCH	TERASAKI, DIN-TC0321 I-O-II : 32 A, 240 V, 'TEST-OFF-AUTO'	1
12	LIGHTING CIRCUIT BREAKERS	TERASAKI, DIN-T101316C : 16 A, 10 kA TRIPLE POLE	1
13	SSO MOUNTING BOX	CLIPSAL, 25 : 10 A TWIN SWITCHED SOCKET OUTLET CLIPSAL, 238	1
14	CONTACTOR	SPRECHER + SCHUH CA 7-60-00 : 30 kW, 77 A	1
15	NEUTRAL BAR	CLIPSAL, BP165D24 WITH CLIPSAL BP165F INSULATORS SIZED FOR CURRENT (25 mm <sup>2</sup> ) AND SUFFICIENT TERMINALS FOR ALL INDIVIDUAL INTERNAL AND EXTERNAL CIRCUITS WITH EACH CIRCUIT LABELLED, INCLUDING NON-POPULATED POLES	1
16	EARTH BAR	CLIPSAL, BP165D24	1
17	PHOTO ELECTRIC SWITCH	HPM, PE170/10 : WEATHERPROOF (SEE NOTE 5)	1
18	DOOR LOCK	LOCKWOOD, 303 DEADLOCK : COMBINED MAIN ROADS 247 E KEY & ELECTRICAL NETWORK OPERATORS NOMINATED MASTER METER KEY	2
19	LOCKING ARM	110° DOOR STAY	1
20	HANDLE	CHROME PLATED 76 mm "D" HANDLE	6
21	LOCATING PIN	CHROME PLATED 6 mm LOCATING PIN	12
22	ESCUTCHEON SCREW	CHROME PLATED CAPTIVE KNURLED HEAD SCREWS	12
23	HINGE	CHROME PLATED LARGE BLOCK TYPE	3
24	FIELD TERMINAL	SPRECHER + SCHUH V7-W16S : 16 mm <sup>2</sup>	1
25	BUSBAR	TERASAKI, ICL 183F, SPARE WAYS TO BE CAPPED	2
26	PANEL HEATER RCBO	SPECIFIED BY PROJECT	1
27	THERMOSTAT (SEE NOTE 9)	DIN RAIL MOUNT THERMOSTAT, 250 VAC N/C 6 A (RS NO: 159-2099)	1
28	PANEL HEATER	ANTICONDENSATION HEATER, 250 VAC, 40 W	1
29	ROADWAY LIGHTING RCD	CLIPSAL, 4RC440G30: 40 A, 30 mA FOUR POLE OR EQUIVALENT	1
30	MAIN CIRCUIT BREAKER	SPECIFIED BY PROJECT	1
31	TRAFFIC SIGNAL ISOLATION SWITCH	SPECIFIED BY PROJECT	1
32	UNDERPASS LIGHTING MCB	SPECIFIED AND SIZED BY PROJECT	1
33	UNDERPASS LIGHTING RCBO	SPECIFIED AND SIZED BY PROJECT	1



AMENDMENTS		
No.	DESCRIPTION	APPROVED & DATE
1.	METADATA ADDED, TITLEBLOCK UPDATED.	C. MAGRIPLIS 01/09/06
2.	DISCLAIMER ADDED	G. MAGRIPLIS 02/02/07
3.	ITEM 1 AMENDED, ITEM 29 ADDED.	B. CHAREHJOO 01/15/12
4.	SINGLE DOOR ARRANGEMENT ADDED.	B. CHAREHJOO 24/2/15
5.	UPDATED TO MEET WASIR 2021 cl 11.6.4.3 REQUIREMENTS.	S. HOWELLS 18/6/23
6.	ITEMS 18 CHANGED, ITEMS 32 AND 33 ADDED.	S. HOWELLS 8/9/23

- ### NOTES
- WESTERN POWER TO SPECIFY MAXIMUM PROSPECTIVE SHORT CIRCUIT CURRENT. DESIGNER TO CONFIRM ALL PROTECTIVE DEVICES ARE COORDINATED AND SELECTED FOR SPECIFIED MAXIMUM PROSPECTIVE SHORT CIRCUIT CURRENT.
  - EQUIPMENT LIST INDICATES PREFERRED ITEMS. ALTERNATIVE EQUIPMENT OF EQUAL OR SUPERIOR SPECIFICATION MAY BE SUBSTITUTED WHERE APPROVED BY MAIN ROADS.
  - INTERNAL CABLE TO BE 2.5 mm<sup>2</sup> PVC/PVC Cu (min). DESIGNER TO BE RESPONSIBLE FOR PANEL WIRING SIZES.
  - PHOTO ELECTRIC SWITCH TO BE MOUNTED ON SOUTH SIDE OF SWITCHBOARD WHERE POSSIBLE.
  - NEUTRALS SHOWN INDICATIVELY ONLY. EACH CIRCUIT TO BE INDIVIDUALLY WIRED DIRECTLY TO THE NEUTRAL BAR.
  - SUPPLY & INSTALLATION OF MATERIALS & EQUIPMENT SHALL COMPLY WITH SPECIFICATION 701.
  - ITEM 6 SPECIFIED FOR PSC MKIII CONTROLLER ARRANGEMENTS. SELECTION MAY BE DIFFERENT IF PTF CONTROLLER IS USED.
  - LOADS ARE TO BE BALANCED ACROSS THE PHASES. TRAFFIC SIGNAL SUPPLY IS SHOWN CONNECTED TO RED PHASE BUT MAY BE CONNECTED TO ANY PHASE IN ORDER TO ACHIEVE LOAD BALANCE.
  - THERMOSTAT TO BE SET TO ACHIEVE A PANEL MINIMUM AMBIENT TEMPERATURE OF 16° C.
  - MAIN CIRCUIT BREAKER SHALL BE COORDINATED WITH SPD AS PER WASIR 2021 cl. 11.6.4.3. MAIN CIRCUIT BREAKER SHALL HAVE WHITE TOGGLE.
  - SWITCHES TO HAVE A RED TOGGLE FOR ISOLATION PURPOSES.
  - MAIN SWITCH ADDED TO SUB-MAIN SUPPLIES.

## DISCLAIMER

THE DIMENSIONS, STANDARDS & CROSS REFERENCING REPRESENTED ON THIS DRAWING MAY NOT COMPLY WITH CURRENT REQUIREMENTS AND ARE SHOWN FOR PRESENTATION PURPOSES ONLY.

METADATA	
GROUND SURVEY STANDARD:	-
DATE OF CAPTURE:	-
MAPPING SURVEY STANDARD:	-
DATE OF CAPTURE:	-
MAIN ROADS PROJECT ZONE:	-
HEIGHT DATUM:	-

Government of  
Western  
Australia

mainroads  
WESTERN AUSTRALIA

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FILE NUMBER	67-05-3701H
DESIGNED / DRAWN	M. CHEW / C. GREENDA
VERIFIED	B. CHAREHJOO
APPROVED	W. CANNELL

**GUIDELINE DRAWING**  
**SWITCHBOARD SCHEMATIC**  
**SINGLE DOOR**

LOCAL AUTHORITY	
DRAWING NUMBER	200231-0065-6
AMENDMENT	

SCALE 1:5  
MICROFILM DATE A 1