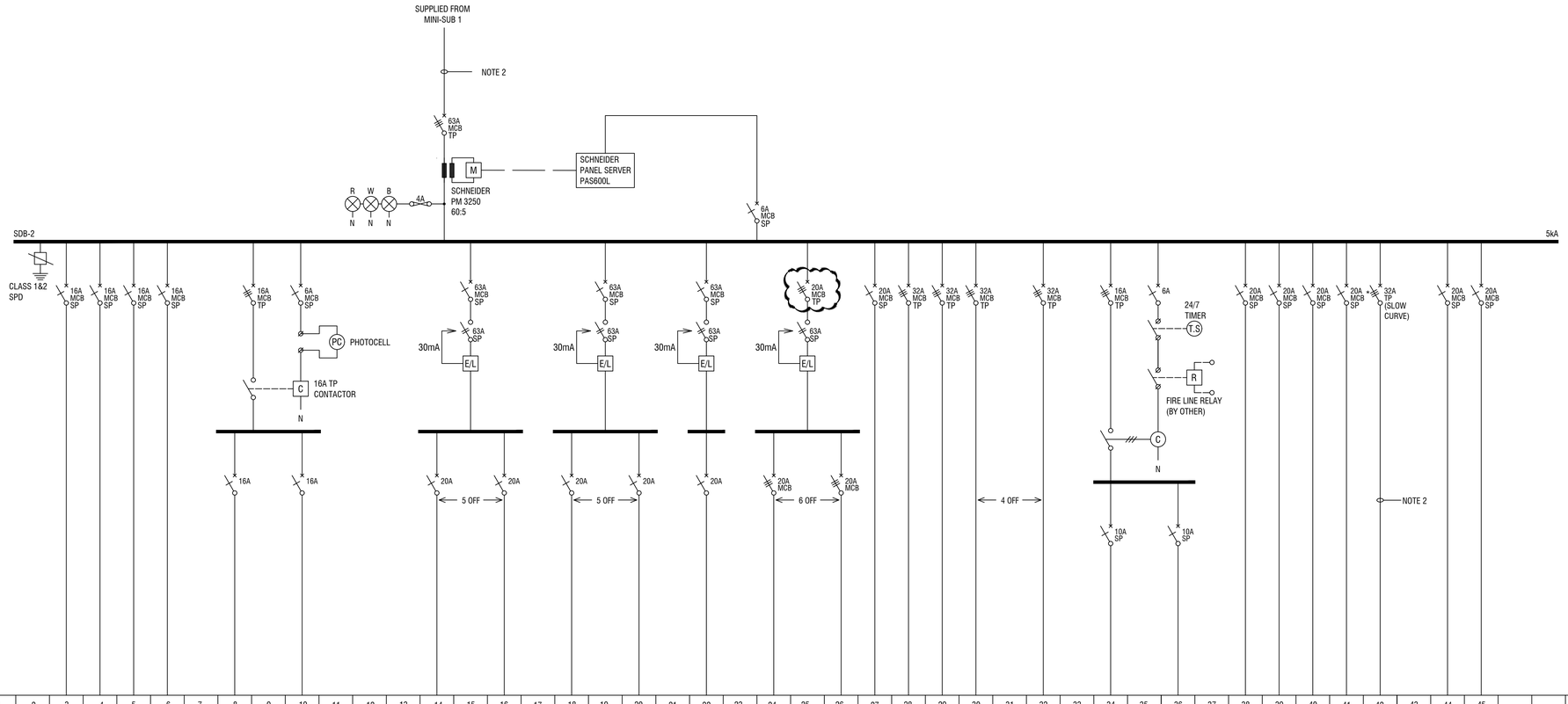
DISTRIBUTION BOARD CONSTRUCTION & ELECTRICAL SPECIFICATION

RECESSED		WEATHER PROOF		MATERIAL THICKNESS		MATERIAL TYPE		FINISH		CABLE ENTRY		SEPARATED DIVISIONS		COLOUR- MAIN	WHITE	WIDTH (max)	2000	BUSBAR RATING -A	63A	FRONT ACCESS	●
HALF-RECESSED		DUST PROOF		1.2mm		ELECTRO GALVANISED	●	ETCH PRIME		TOP		NORMAL SECTION		COLOUR- NORMAL	-	HEIGHT (max)	1800	FAULT LEVEL -kA	5kA	REAR ACCESS	
SURFACE		HINGED PANELS	●	1.6mm	●	3CR12		BRUSHED		BOTTOM	●	EMERGENCY SECTION	●	COLOUR- EMERGENCY	RED	DEPTH (max)	600	NEUTRAL (full)	●	SUPPLY: SINGLE CORE	
FLOOR STANDING	●	SMOKED GLASS DOORS		2.0mm		304 SS		EPOXY COATED	●	GLAND PLATE		UPS SECTION 1		COLOUR- UPS1	-	EQUIPMENT	ABB SCHNEIDER	EARTH BAR	●	SUPPLY: CABLE	●
DOOR (PER SECTION)		C/W NEOPRENE GASKETS				318 SS		STRUCTURED	●	BACK		UPS SECTION 2		COLOUR- UPS2	-	FUTURE EXPANSION	30%	EARTH STUD	●	SUPPLY: BUSBAR	

FOR TENDER

NOTES

1. KEY INTERLOCKED
2. REFER TO DRAWING SMFN-CAI-EE-DR005_00 FOR CABLE SCHEDULE



CIRCUIT NUMBER	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
INSTALLATION METHOD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CIRCUIT LOAD (kVA)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
No OFF CONDUCTORS/SIZE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EARTH SIZE mm 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

CIRCUITS

No	DESCRIPTION
1	-
2	-
3	L1(LIGHTS)
4	L2(LIGHTS)
5	L3(LIGHTS)
6	L4(24HR SUPPLY FOR BATTERY LIGHTS)
7	-
8	L5(EXTERNAL LIGHTS)
9	L6(EXTERNAL LIGHTS)
10	-
11	-
12	-
13	-
14	P1(PLUGS)
15	TO
16	P5(PLUGS)
17	-
18	P6(PLUGS)
19	TO
20	P10(PLUGS)
21	-
22	HWC1
23	-
24	WS1(3PH SOCKET OUTLET)
25	TO
26	WS6(3PH SOCKET OUTLET)
27	RS1
28	GENERATOR 1 AUX. SUPPLY
29	GENERATOR 2 AUX. SUPPLY
30	BULK DIESEL TANK 1(CONTROL PANELS)
31	-
32	BULK DIESEL TANK 4(CONTROL PANELS)
33	-
34	FA1(FAN)
35	-
36	FA2(FAN)
37	-
38	BTU1 (TRANSFORMER ROOM)
39	AC1(1.2kW)
40	AC2(1.2kW)
41	AC3(1.2kW)
42	ISO1(DOMESTIC WATER PUMP)
43	-
44	ISO2(FIRE PANEL)
45	ISO3(ZENER BARRIER)

A1

- REVISIONS -

REV	DATE	DESCRIPTION	SIGN
TD	2024-12-11	ISSUED FOR TENDER	R.M
TD1	2025-02-10	REVISED AS PER COMMENTS	R.M

- LEGEND -

- TRANSFORMER
- G GENERATOR
- SS SELECTOR SWITCH
- A AMMETER
- V VOLTMETER
- INDICATOR LIGHT
- FUSE
- METER + CURRENT TRANSFORMERS (REQUIRES FUSES)
- M DIRECT ONLINE METER
- SURGE ARRESTOR
- xxA TYPE SINGLE PHASE CIRCUIT BREAKER
- xxA TYPE SINGLE PHASE CIRCUIT BREAKER (D-CURVE)
- xxA TYPE DP DOUBLE POLE CIRCUIT BREAKER
- xxA TYPE DP DOUBLE POLE CIRCUIT BREAKER (D-CURVE)
- xxA TYPE THREE PHASE CIRCUIT BREAKER
- xxA TYPE THREE PHASE CIRCUIT BREAKER (D-CURVE)
- xxA ISO. SP SINGLE PHASE ISOLATOR
- xxA ISO. DOUBLE POLE ISOLATOR
- xxA ISO. TP THREE PHASE ISOLATOR
- 30mA 63A ISO. E/L ISOLATOR EARTH LEAKAGE
- 30mA 63A MCB DP E/L EARTH LEAKAGE WITH OVERLOAD PROTECTION
- xxA C CONTACTOR
- R RELAY
- NORMALLY OPEN CONTACT
- NORMALLY CLOSED CONTACT
- PUSH BUTTON
- T THERMOSTAT
- T.S 24hr / 7DAY PROGRAMMABLE TIMER

CESA

CLAASSEN AURET (PTY) LTD.
CONSULTING ENGINEERS

8 HANDEL ROAD
ORMONDE
2091
TEL: 011 496 3101

1 HAWSTON ROAD
MILNERTON
7441
TEL: 021 555 0940

FOR TENDER

- PROJECT -

SANSA

SOUTH AFRICAN NATIONAL SPACE AGENCY

APPROVED:	F.L	CREATED:	2025-02-07
CHECKED:	F.L	PLOT DATE:	2023-04-18
DESIGNED:	F.L	SCALE:	NTS
DRAWN:	S.P	FILE:	C:\USERS\SHAUL\AASSEN AURET INC\24 DRAWINGS - DOCUMENTS\07700 SANSA\ELECTRICAL\ELSD\SMFN-CAI-EE-DR-005_04-SDB-2 SINGLE LINE DIAGRAM.DWG

- DRAWING DESCRIPTION -

SDB-2
SINGLE LINE DIAGRAM

- DRAWING NUMBER -

PROJECT #	COMPANY	DISCIPLINE & TYPE	SUB DISCIPLINE & NUMBER	REV
SMFN	CAI	EE	DR-005_04	TD1