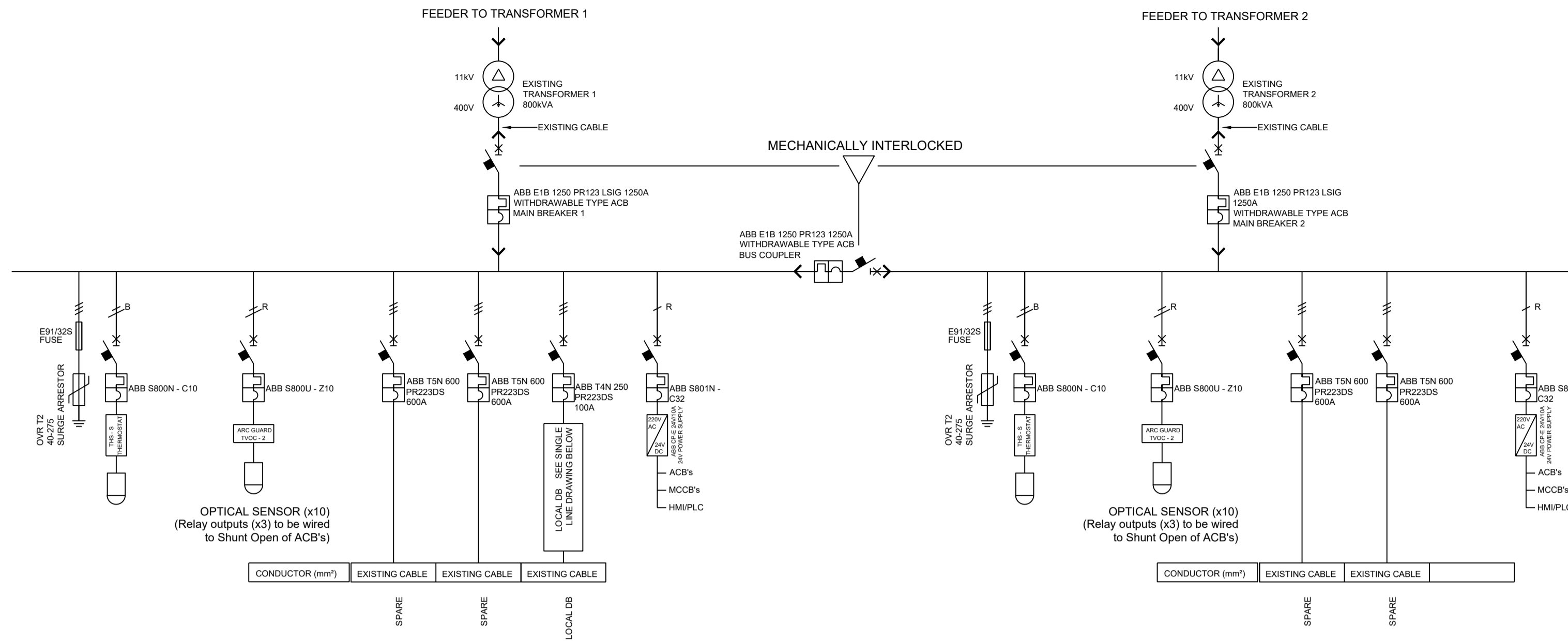


GRAIN ELEVATOR LV SINGLE LINE No2



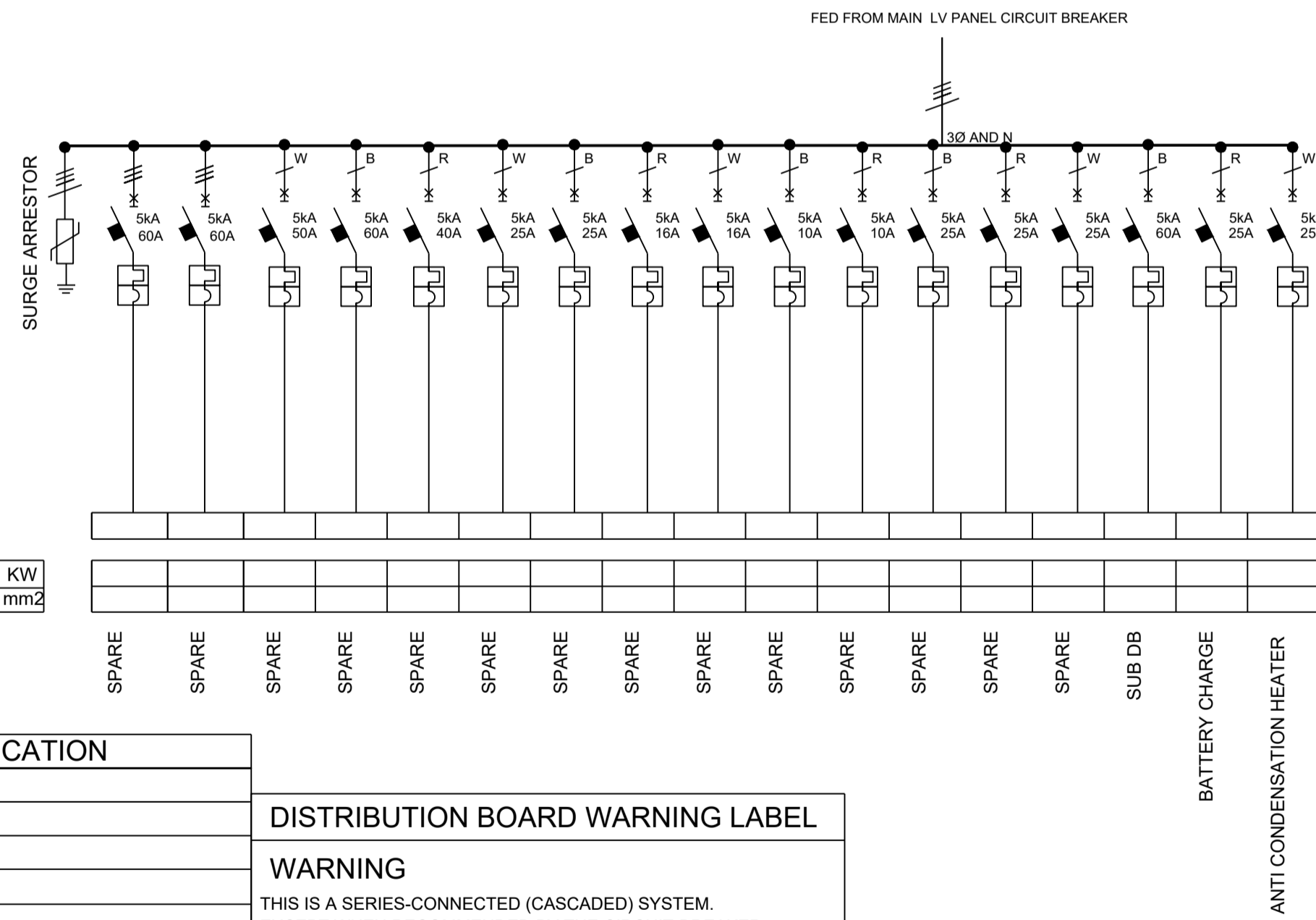
DISTRIBUTION BOARD SPECIFICATION	
SPARE WAYS	
DISTRIBUTION BOARD TYPE	FLOOR STANDING
MATERIAL	3CR12
THICKNESS OF MATERIAL	2mm
PAINT TYPE	POWDER COATED (40 MICRONS)
FRAME COLOUR	BRUNSWICK GREEN
FORM TYPE	FORM 3B
MANUFACTURER	
ACB/MCCB / MCB MAKE	ABB
HMI/PLC MAKE	UNITRONIC/EAST COAST SOLUTIONS (V1040)
PFR MAKE	ABB (CM - PVE)
TERMINALS MAKE	ABB (ZS - RANGE)

NOTES

TERMINATION: CONTRACTOR TO ENSURE THAT ALL NEW CABLE TERMINATIONS BE MADE ON SABS APPROVED TERMINAL RAILS AND SHALL BE LOCATED IN THE SAME POSITIONS AS PER EXISTING INSTALLATIONS.
NO CABLE JOINTS WILL BE PERMITTED.
MCCB'S: SHALL BE FITTED WITH FRONT LEVER MECHANISM/LOCK (FLANGE). SHALL BE FITTED WITH X3 AND X4 CONNECTORS. VM210 SHALL BE ALLOWED FOR (ONE PER FIVE MCCB'S). SHALL BE FITTED WITH AUX - E (AUXILIARIES).
POWER SUPPLY: 24V DC POWER SUPPLY SUITABLE RATED FOR ACB'S, MCCB'S AND HMI/PLC SHALL BE ALLOWED FOR TO SUPPLY WHARF PLUG SAFETY CIRCUIT

HMI/PLC: GSM MODEM FOR TRIP STATUS AND DATA ACQUISITION SHALL BE FITTED. HMI/PLC SHALL DISPLAY VOLTAGE; CURRENT; POWER(S); TRIPS AND ETC FOR EACH AND EVERY MCCB.
HEATERS: ANTI-CONDENSATION HEATERS 230V SHALL BE PROVIDED FOR ALL PANEL SECTIONS, AND BE CONTROLLED BY THS - S AS SPECIFIED.
ARC GUARD: RELAY (R1) TO OPEN MAIN BREAKER 1 DURING ARC/FLASH. RELAY (R2) TO OPEN MAIN BREAKER 2 DURING ARC/FLASH. IN ADDITION TO THE ABOVE RELAY (R1) OR RELAY (2) WILL OPEN BUS COUPLER DURING ARC/FLASH AS WELL. RELAY (R3) SHALL BE WIRED TO HMI/PLC.
AUDIBLE AND VISUAL ALARM: CONTRACTOR SHALL ALLOW FOR INSTALLATION OF AUDIBLE AND VISUAL ALARM OUTSIDE SUB STATION CONTROLLED BY THE THS - S THERMOSTATS.
LIGHT BARRIERS: CONTRACTOR SHALL ALLOW FOR LIGHT BARRIERS IN BUSBAR CHAMBER

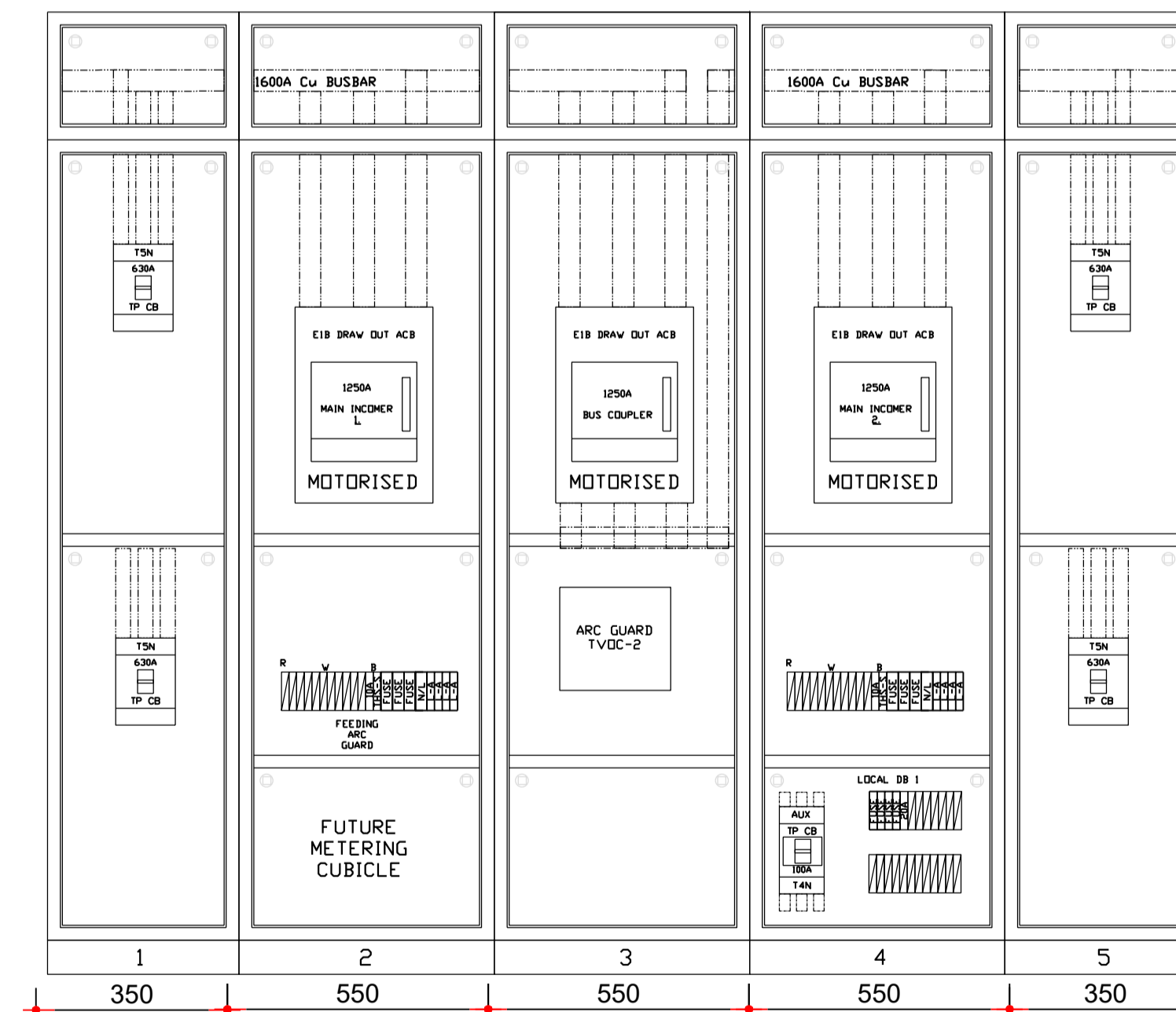
LOCAL DB



DISTRIBUTION BOARD SPECIFICATION	
SPARE WAYS	30%
DISTRIBUTION BOARD TYPE	-
MATERIAL	-
THICKNESS OF MATERIAL	-
PAINT TYPE	-
FRAME COLOUR	-
MCCB / MCB MAKE	ABB

DISTRIBUTION BOARD WARNING LABEL
WARNING
THIS IS A SERIES-CONNECTED (CASCADED) SYSTEM EXCEPT WHEN RECOMMENDED BY THE CIRCUIT-BREAKER MANUFACTURER. DO NOT REPLACE ANY CIRCUIT-BREAKER IN THE SYSTEM WITH A CIRCUIT-BREAKER THAT IS NOT OF IDENTICAL TYPE AND RATING

GRAIN ELEVATOR LV PANEL LAYOUT No2



TYPE	FLOORSTANDING
MATERIAL	3CR12 STEEL
IP RATING	140
FORM	3B
DOORS	ND
DEPTH	900mm
PANEL CATCHES	SQUARE KEY
PANEL HINGES	BUTT HINGES
DOOR CATCHES	N/A
DOOR HINGES	N/A
ACCESS	FRONT & REAR
CABLE ENTRY	BDTDM
CABLE EXIT	BDTDM
COLOUR	BRUNSWICK GREEN
FAULT LEVEL	20kV/25kA

NOTES :

- THIS DRAWING FOR EL&P ONLY.
- A CERTIFICATE OF COMPLIANCE TO BE COMPLETED BY CONTRACTOR ON COMPLETION OF WORK.
- ALL D.B.'S AND ISOLATORS TO BE CLEARLY LABELLED.

DRAWING NO. REFERENCE
REFERENCE DRAWINGS

CONTRACTOR / CONSULTANT				
TITLE	NAME	SIGN	DATE	
0A	ISSUED FOR TENDER	ZWN	KZ	SM 27-03-24
NO.	DESCRIPTION	BY	CHKD	APPD DATE
REVISIONS				
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CONTRACTOR / CONSULTANT				TRANSNET CAPITAL PROJECTS			
TITLE	NAME	SIGN	DATE	TITLE	NAME	SIGN	DATE
				DRAWN	Z.W.N		27 03 24
				CHECKED	S.M		27 03 24
				DESIGNED	Z.W.N		27 03 24
				CHECKED			
OPERATING DIVISIONS							
TITLE	NAME	SIGN	DATE				
				PrEng / PrTech Eng			
				NAME	Samukelo Magcaba	DATE	
				SIGNATURE			27 03 24
				REG. NUMBER	20190951		
				SCALE	NTS		A1

Transnet Port Terminals									
TRANSNET LTD 202 SMITH STREET DURBAN P.O. BOX 36136, DURBAN									
DURBAN									
SUBSTATION UPGRADE									
GRAIN ELEVATOR 12th FLOOR SUBSTATION No2 SINGLE LINE AND LAYOUT DRAWING									
PROJECT NUMBER	BU	FBS	DIS	TYPE	DRG. NO.	SHT.	REV.	ID	
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