

SUBSTATION MINIMUM ELECTRICAL CLEARANCES

REQUIREMENTS TO BE IN ACCORDANCE WITH SSE SUBSTATION DESIGN SPECIFICATIONS DOC NO. SP-NET-SST-501

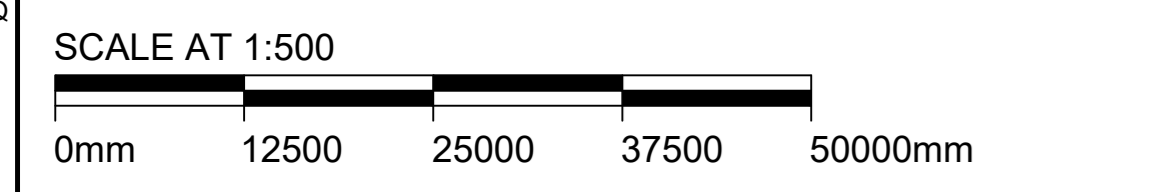
REF	CLEARANCE (mm)	NOMINAL SYSTEM VOLTAGE			
		400kV	275kV	132kV	33kV
E	PHASE TO EARTH	2800	2100	1100	500
Ph	PHASE TO PHASE	3600	2400	1400	430
S	DESIGN CLEARANCE FOR SAFETY	5500	4800	3500	2900
SD	SAFETY DISTANCE	3100	2400	1400	800
Ds	WORKING & ACCESS CLEARANCE (VERTICAL)	5200	4500	3500	2900
Dsh	WORKING & ACCESS CLEARANCE (HORIZONTAL)	4600	3900	2900	2300
IH	INSULATION HEIGHT (PEDESTRIAN ACCESS)	2400	2400	2400	2400
S+2	MEWP DESIGN CLEARANCE FOR SAFETY	7500	6800	5500	4900
-	MEWP ACCESS CORRIDOR TO DEAD CIRCUIT	3000	3000	3000	3000

- NOTES:**
- THIS DRAWING IS FOR PLANNING PURPOSES ONLY SUBJECT TO DETAILED DESIGN.
 - DIMENSION IS IN METRES UNLESS STATED OTHERWISE.
 - THE FOLLOWING FENCING REQUIREMENTS HAVE BEEN ASSUMED:
INTERNAL FENCE: 2.4m HIGH NON-ELECTRIC FENCE
EXTERNAL FENCE: 2.4m HIGH PHYSICAL MESH / PALISADE BARRIER WITH ELECTRIC PULSE FENCE.
 - REQUIREMENT FOR NOISE ENCLOSURE ON STGS AND SHUNT REACTORS SHALL BE CONFIRMED.
 - MAINTENANCE CLEARANCE CONSIDERED AS 25m RADIUS CIRCLE FROM TOWER CENTRE. CONSTRUCTION CLEARANCE CONSIDERED AS SQUARE WITH 70m SIDES CENTRED ON THE TERMINAL TOWER.

- KEY:**
- CSE - CABLE SEALING END
 - SA - SURGE ARRESTER
 - ES - EARTH SWITCH
 - PI - POST INSULATOR
 - MPI - MEDIUM LEVEL POST INSULATOR
 - HPI - HIGH LEVEL POST INSULATOR
 - CT - CURRENT TRANSFORMER
 - CVT - CAPACITIVE VOLTAGE TRANSFORMER
 - WWT - WOUND VOLTAGE TRANSFORMER
 - CB - CIRCUIT BREAKER
 - DISC+2ES - DISCONNECTOR WITH TWO EARTH SWITCH
 - PD+ES - PANTOGRAPH WITH EARTH SWITCH
 - SHR - SHUNT REACTOR
 - PRR - PORTABLE RELAY ROOM
 - SGT - SUPERGRID TRANSFORMER
 - NER - NEUTRAL EARTHING RESISTOR
 - ET - EARTHING TRANSFORMER
 - AVR - AUTOMATIC VOLTAGE REGULATOR
 - MK - MARSHALLING KIOSK
 - CCC - CENTRAL CONTROL CUBICLE
 - LC - LIGHTING COLUMN

- LEGEND:**
- PROPOSED EQUIPMENT
 - PROPOSED EQUIPMENT - SCOPE TBD
 - FIRE DAMAGE ZONE
 - PROPOSED EQUIPMENT (BY OTHERS)
 - CABLE TRENCH
 - EXCLUSION ZONE

- REFERENCE DRAWINGS:**
- ELECTRICAL LAYOUT - 162507-BMD-PL-HR-DEL-TP-0004 (SHEET 2 OF 2)
 - ELECTRICAL ELEVATIONS - 162507-BMD-PL-HR-DEL-TP-0001



Issue / Revision:	01	Drawn By:	RB
Investment No.:	N/A	Checked By:	JF
Date:	27/SEP/24	Approved By:	RC

Description / Remarks
ISSUED FOR PLANNING

Drawing Status: ISSUED FOR PLANNING

Software:	Status Code:	Scale:	Paper Size:
AUTOCAD	Not Used	1:500	A0
Drawn By:	Checked By:	Approved By:	Date:
RB	JF	RC	27/SEP/24

Contractor:

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Client: **Supplier / Subcontractor:**

Drawing Title:

**ELECTRICAL LAYOUT
(SHEET 1 OF 2)**

Project Name:

HURLIE 400kV SUBSTATION

Site Name:

HURLIE 400kV SUBSTATION

Contractor Drawing No.:

162507-BMD-PL-HR-DPL-TP-0003

Client Drawing No.: 162507-BMD-PL-HR-DPL-TP-0003

Supplier / Subcontractor Drawing No.: XXX

Sheet: 01
Next: 02
Issue / Revision: 01

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