

ADDITIONAL EARTHMAT FOR THE EXISTING 110/33/11 KV S/S @ TILUVALLI IN HAVERI DISTRICT.

IMPORTANT

* NOT TO SCALE

* THE NO OF CAST IRON PIPE ELECTRODES SHALL BE PROVIDED AS PER GUIDELINES)

* BEFORE EXECUTION PLEASE CAREFULLY GO THROUGH THE ENCLOSED GUIDELINES *

* ALL DIMENSIONS ARE IN METER

SALIENT DESIGN FEATURES

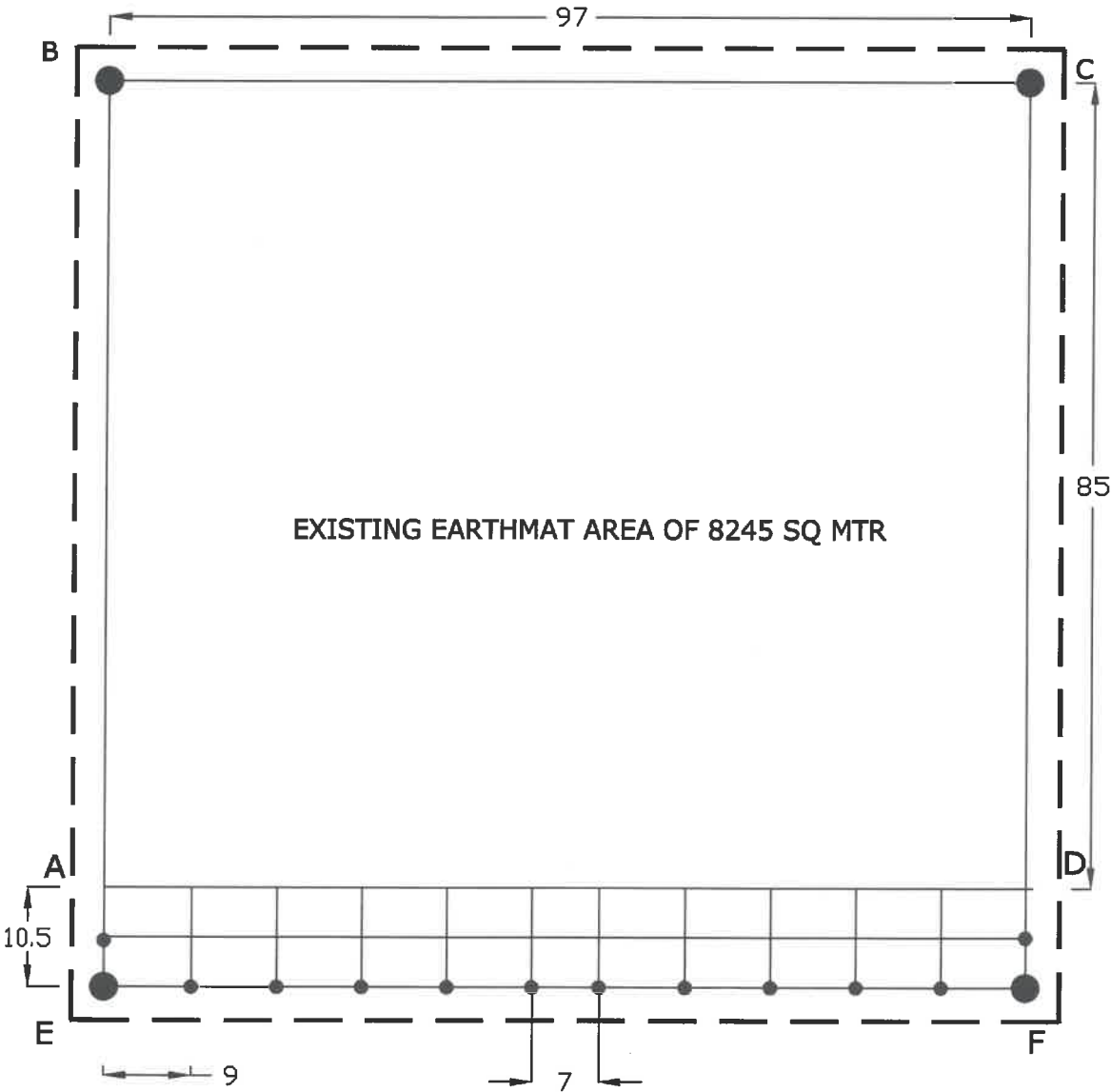
EXISTING AREA COVERED BY EARTHMAT IN SQ MTR	8245
ADDITIONAL AREA COVERED BY EARTHMAT IN SQ MTR	1018
TOTAL AREA OF EARTHMAT IN SQ MTR	9263
DEPTH OF BURIAL OF EARTHMAT IN MTR	0.9
SPACING BETWEEN MAT CONDUCTOR (M.S. FLAT) IN MTR	9
SIZE OF EARTHMAT CONDUCTOR (M.S.FLAT) IN MM	50 X 6 MM

SPREADING OF GRANITE METAL JELLY OF SIZE 20/25 MM
TO A HEIGHT OF 100 MM OVER THE EQUIPMENT BAYS ONLY

BILL OF MATERIALS (APPROXIMATE QUANTITY) FOR EARTHMAT FORMATION & FENCING.

(AS PER THE LAYOUT DRAWING NO.KPTCL/TECH/SS-110/466-R1. DATED:27.03.2024)

1.Excavation,formation,refilling	199	Cmtr.
2.Material for formation of earthmat as per specification		
a)M.S.Flat 50 X 6 MM	445	Mtr.
b)MS Round rods 25 mm dia,1.05 Mt. long	12	No.
c)G.I.Flats 50 X 6 MM for earth connection	633	Mtr.
d)Cast iron pipe electrodes of 100 mm Id,13 mm thick,2.75 mtr.long	10	No.
e)Spreading of Granite metal jelly of size 20/25 mm size to a height of 100 mm	EQUIPMENT BAYS ONLY	



NOTE:

- DESIGNED BY CONSIDERING POWER TRANSFORMER CAPACITY OF 2X20 MVA ,110/33 KV AND 1X10 MVA+1X20 MVA ,110/11 KV CLASS FOR PRESENT FAULT LEVELS.
- 'ABCD' INDICATES EXISTING EARTHMAT OF AREA 8245 SQ.MTR. WITH 50X6 MM M S FLAT WITH 9 MTR SPACING.
- 'EADFE' INDICATES ADDITIONAL EARTHMAT OF AREA 1018 SQ MTR WITH 50 X6 MM M S FLAT WITH 9 MTR SPACING.
- THE PROPOSED ADDITIONAL EARTHMAT SHALL BE CONNECTED TO EXISTING EARTHMAT BY CONTINUS WELDING DULY OBSERVING R&D GUIDELINES.
- EXISTING FENCE SHALL BE SHIFTED TO OUTER BOUNDARY BY MAINTANING MINIMUM DISTANCE OF 1.5 MTR FROM THE EARTHMAT PHERIPHERY.

- — FENCE SHALL BE AT A MINIMUM DISTANCE OF 1.5 METERS AWAY FROM THE PERIPHERY OF THE STATION EARTHMAT
- 25 MM DIA M.S. ROUND RODS OF LENGTH ONE METER TO BE DRIVEN AS SHOWN
- MINIMUM 5.5 MTRS SPACING SHALL BE MAINTAINED B/W ANY TWO C.I.PIPE ELECTRODES

R & D CENTRE, K P T C L		
DRG NO. SEE/R&D/EEE/KCO-169/24-25/F-107 (4) Dtd. 10-1-2025		
S. Anusha 10/1/2025	S. Anusha 10/1/25	S. Anusha 10/1/2025
AE E E E	E E E	S E E