REVISED EARTHMAT FOR THE PROPOSED 66/11 KV SUB-STATION @ GUDDENAHALLI (KODAGIHALLI), ALUR TALUK, HASSAN 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 KPTCL, R&D GUIDELINES *

* ALL DIMENSIONS ARE IN METER

SALIENT DESIGN FEATURES

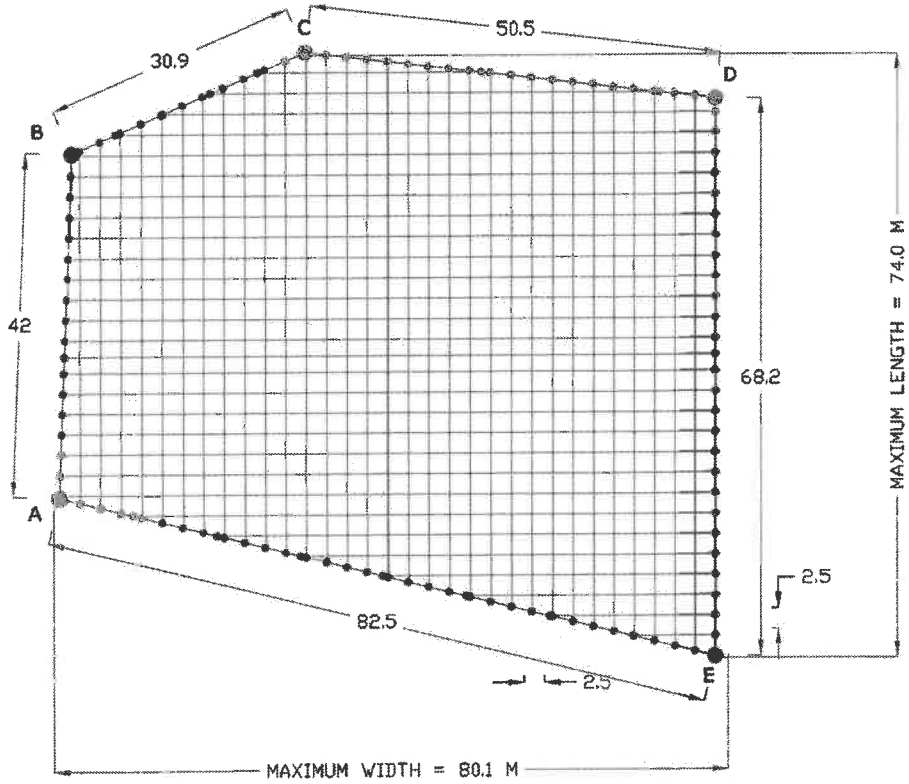
AREA COVERED BY EARTHMAT IN SQ MTR	4765
DEPTH OF BURIAL OF EARTHMAT IN MTR	0.9
SPACING BETWEEN MAT CONDUCTOR (M.S. FLAT) IN MTR	2.5
SIZE OF EARTHMAT CONDUCTOR (M.S.FLAT) IN MM	75 X 12 MM

SPREADING OF GRANITE METAL JELLY OF SIZE 20/25 MM TO A HEIGHT OF 100 MM OVER THE ENTIRE EARTH MAT AREA.

BILL OF MATERIALS (APPROXIMATE QUANTITY) FOR EARTHMAT FORMATION

(AS PER THE LAYOUT DRAWING NO.KPTCL/TECH/SS-66/1147-A/R1 DTD:22.1.2026)

1.Excavation,formation,refilling	1860	Cmtr.
2.Material for formation of earthmat as per specification		
a)M.S.Flat 75 X 12 MM	4175	Mtr.
b)MS Round rods 40 mm dia,1.075 Mt. long	122	No.
c)G.I.Flats 75 X 12 MM for earth connection	1602	Mtr.
d)Cast iron pipe electrodes of 100 mm Id,13 mm thick,2.75 mtr.long	46	No.
e)Spreading of Granite metal jelly of size 20/25 mm size to a height of 100 mm	477	Cmtr.



NOTE:

1) Earthmat is designed for Breaker STC of 40 kA.
2) Compound wall has been proposed in the approved layout drawing.Hence earthmat is designed upto compound wall.
3) Proposed Earthmat shall be executed duly observing Standard R&D guidelines.

THIS EARTHMAT DRAWING SUPERSEDES ALL OTHER EARTHMAT DRAWINGS FURNISHED EARLIER FOR SUBJECT STATION.

- ABCDEA - COMPOUND WALL WITH A MINIMUM HEIGHT OF 7 FEET FROM FGL.
- 40 MM DIA M.S. ROUND RODS OF LENGTH ONE METER TO BE DRIVEN AS SHOWN
- MINIMUM 5.5 MTR SPACING SHALL BE MAINTAINED BETWEEN ANY TWO C.I.PIPE ELECTRODES.

R & D CENTRE, K P T C L		
DRG NO. SEE/R&D/EEE/KCO-116/F139(18)/2025-26/R1 Dtd. 9-2-2026		
AEEE	EEE	SEE