

**IMPORTANT**

\* THE NO. OF CAST IRON PIPE ELECTRODES SHALL BE PROVIDED AS PER GUIDELINES (ITEM 2, 4, 5 & 12 OF GUIDELINES)

\* NOT TO SCALE

\* BEFORE EXECUTION PLEASE CAREFULLY GO THROUGH THE ENCLOSED GUIDELINES \*

= ALL DIMENSIONS ARE IN METER

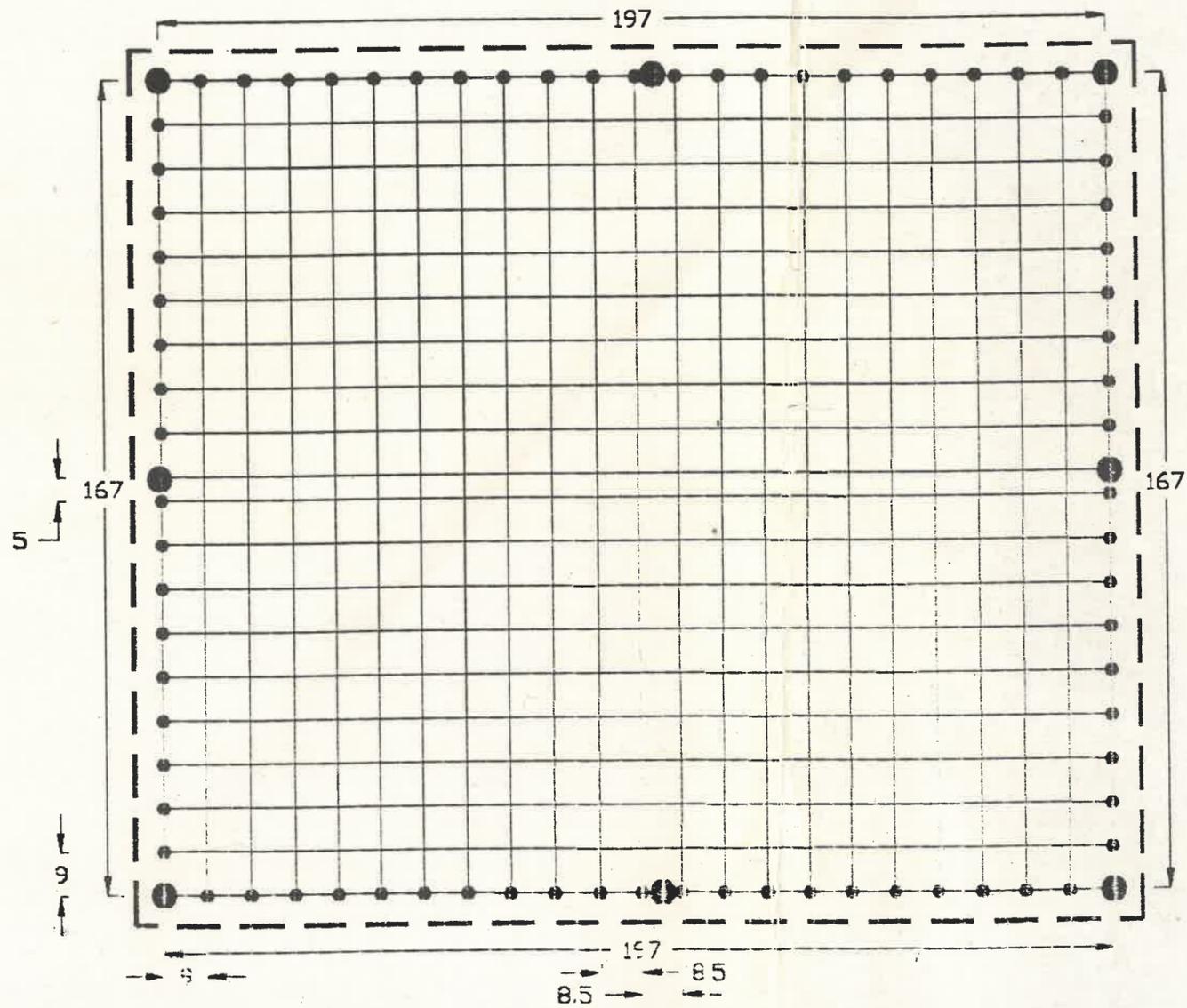
**SALIENT DESIGN FEATURES**

- AREA COVERED BY EARTHMAT IN SQ MTR 32899 *23*
- 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 ENTIRE EARTH MAT AREA.**

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

(AS PER THE LAYOUT DRAWING NO. KPTCL/TECH/SS-220/KRP-1,2,3/21-3-2005)

- 1. Excavation, formation, refilling 3923 Cmtr.
- 2. Material for formation of earthmat as per specification
  - a) M.S. Flat 50 X 6 MM 8305 Mtr.
  - b) MS Round rods 25 mm dia, 1.05 Mt. long 80 No.
  - c) G.I. Flats 50 X 6 MM for earth connection (2\*60/1\*100MVA) 7300/6920 Mtr.
  - d) Cast Iron pipe electrodes of 100 mm Id, 13 mm thick, 2.75 mtr. long (2\*60/1\*100 MVA) 84/80 No.
  - e) Spreading of Granite metal jelly of size 20/25 mm size to a height of 100 mm 3290 Cmtr.



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
- ADDITIONAL C.I. PIPE ELECTRODES PROPOSED (REF ENCLOSED SKETCH)

R & D CENTRE, K P T C L  
 DRC NO. SEE/R&D/F145 (5) Dtd. 27-4-2005

*Chagan* *Shahid* *Shahid*

SEE SEE SEE

*o/c*

# REVISED EARTHMAT FOR THE PROPOSED 220/132-66/11 KV STATION @ MADDUR(SOMANAHALLI) S/S,MANDYA DISTRICT.

## IMPORTANT

- \* 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

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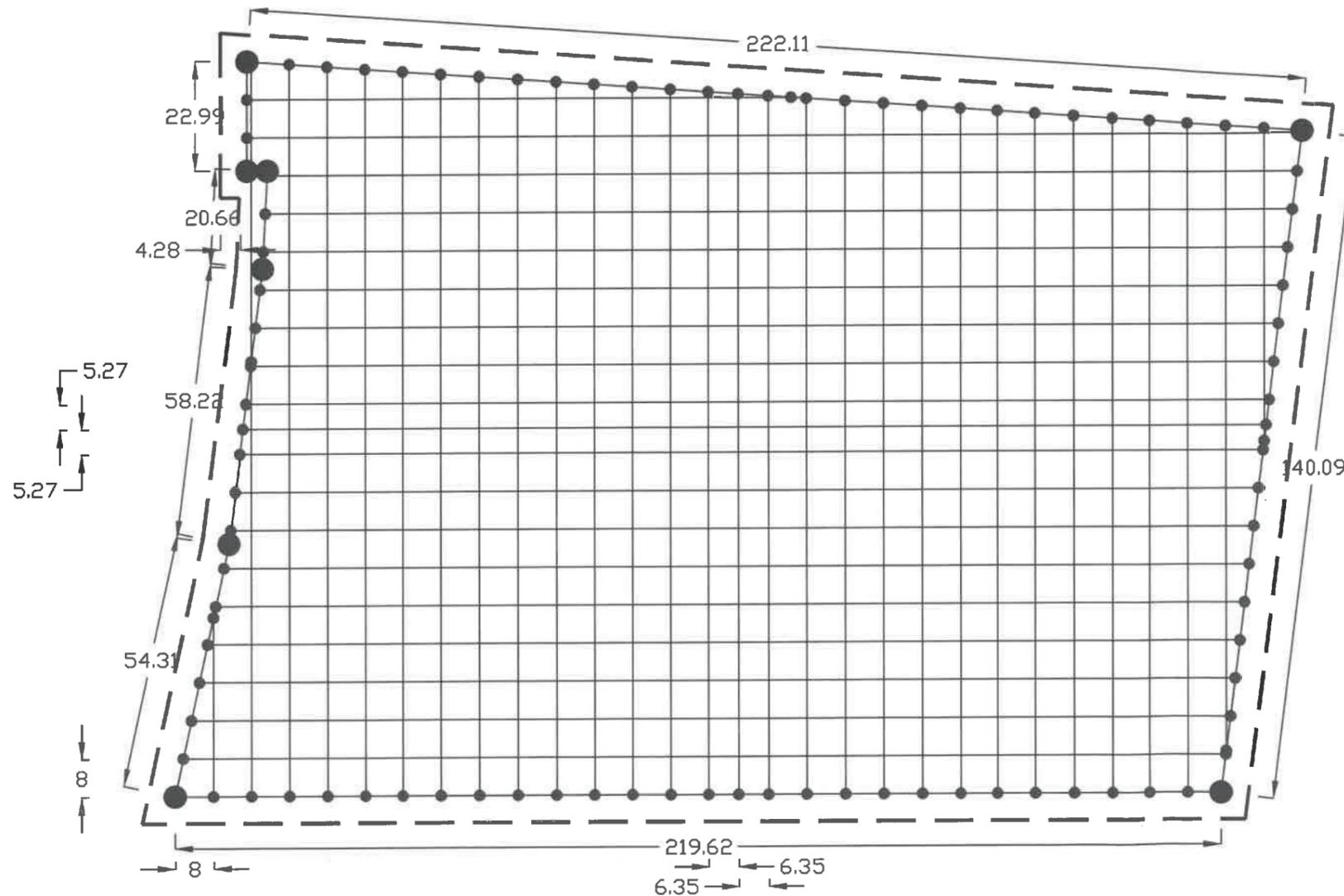
### BILL OF MATERIALS (APPROXIMATE QUANTITY) FOR EARTHMAT FORMATION & FENCING. ( AS PER THE LAYOUT DRAWING NO.NIL )

### SALIENT DESIGN FEATURES

AREA COVERED BY EARTHMAT IN SQ MTR	31780
DEPTH OF BURIAL OF EARTHMAT IN MTR	0.9
SPACING BETWEEN MAT CONDUCTOR (M.S. FLAT) IN MTR	8
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.**

1.Excavation,formation,refilling	4285	Cmtr.
2.Material for formation of earthmat as per specification		
a)M.S.Flat 75 X 12 MM	9617	Mtr.
b)MS Round rods 40 mm dia,1.075 Mt. long	98	No.
c)G.I.Flats 75 X 12 MM for earth connection	11807	Mtr.
d)Cast iron pipe electrodes of 100 mm Id,13 mm thick,2.75 mtr.long	126	No.
e)Spreading of Granite metal jelly of size 20/25 mm size to a height of 100 mm	3178	Cmtr.



**NOTE:**

1. EARTHMAT DESIGNED FOR BREAKER CAPACITY OF 50KA WITH 0.75 GRID FACTOR.
2. PROPOSED EARTHMAT SHALL BE EXECUTED DULY OBSERVING R&D GUIDELINES.

This Drawing supercedes the earlier design issued by this office vide No.SEE/R&D/EEE/KCO-116/F-146(12). DATED:06.07.2021

- — FENCE SHALL BE AT A MINIMUM DISTANCE OF 1.5 METERS AWAY FROM THE PERIPHERY OF THE STATION EARTHMAT
- 40 MM DIA M.S. ROUND RODS OF LENGTH ONE METER TO BE DRIVEN AS SHOWN
- ADDITIONAL C.I.PIPE ELECTRODES PROPOSED (REF.ENCLOSED SKETCH)

<b>R &amp; D CENTRE, K P T C L</b>		
DRG NO. SEE/R&D/EEE/KCO-169/F-146(12)/2024-25. Dtd:27.08.2024		
<i>S. Anusha</i> 27/8/2024	<i>S. Anusha</i> 27/8/24	<i>S. Anusha</i> 27.8.2024
<b>AEEE</b>	<b>EEE</b>	<b>SEE</b>