

## Annexure C

### List of Drawings.

| S.No | Description of drawing    | Drawing Number      |
|------|---------------------------|---------------------|
| 1    | Cable trench work         | DRM/EL/TPJ/40-2016. |
| 2    | Octagonal Pole foundation | DRM/EL/TPJ-37-2018  |
| 3    | Earthing Arrangement      | EL/P/TYPE/1022      |

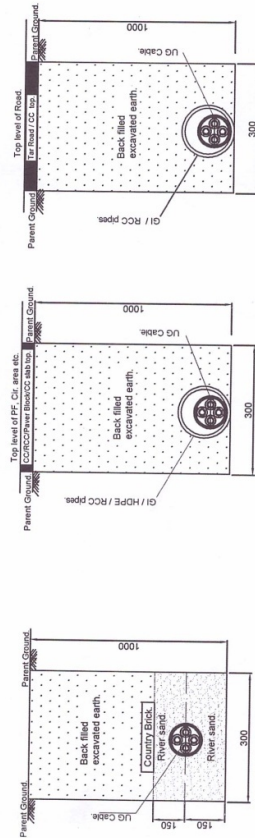
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**Note:** All the above drawings are included in the tender document.

## 1.0. Cable trench work

### Note:

1. All dimensions are in mm unless stated otherwise.
2. For installations of power cable up to and including 33 kV refer IS No:1255.
3. Use river sand and brick (or pipes) for laying of cable in trenches in normal grounds. If pipe are used for cable protection, river sand and bricks are not required.
4. Use GI / HDPE / RCC pipes for laying of cables in trenches in circulating area, passenger and goods etc. provided with CC or RCC paving or CC slabs or paver blocks.
5. Use GI / RCC pipes for laying of cables in trenches across road with tar / CC top.
6. If more number of cables are to be laid in trenches in locations other than underneath the track, the width of the trench shall be increased to suit actual requirement yet maintaining the depth as shown in the drawing.
- 7.a. Use GI / C pipes of suitable dia. for laying of cables in trenches across Railway track when the work is done by open trench method. Trench work underneath track should be cut open in between two sleepers and not directly below it.
- 7.b. For laying of cable underneath track through less method by providing side boring, use MS pipe of suitable dia.
- 7.c. For laying of cable underneath track through less method by providing side boring, use MS pipe of suitable dia.
8. Depth of trench should be as shown in the drawing and below parent earth. This shall be 1.0 m in below parent earth in normal ground, 1.2 m in below parent earth in circulating area etc. The depth shall be 1.20 m below the formation level in case of road crossing.
9. Pipes to be used for laying of cables in trenches shall conform to the following IS Numbers: a) Cast iron pipe conforming to IS No:1536, (b) RCC pipe conforming to IS No:458 (c) GI and MS pipes conforming IS:1239 and (d) HDPE pipe conforming to IS No:4884, all latest.
10. This drawing supersedes this office earlier drawings bearing number DRMEL/TP/J09-2016 and DRMEL/TP/J09-2016.
11. Underneath track, trench less side boring method is to be preferred.
12. Excavation of cable trench in normal ground means excavation in all types of soils including hard rock mix to the original level of the road.
13. Provision of cable trench is inclusive of clearing of obstructions / vegetation / bushes etc in its route.
14. Cable trenches should be excavated only strictly in the route as approved by the Engineer-in-Charge.

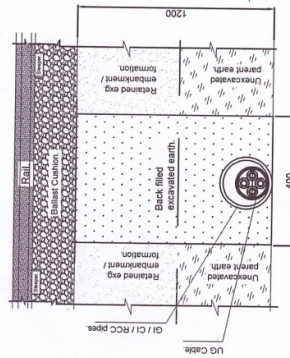


Cable trench in normal ground.

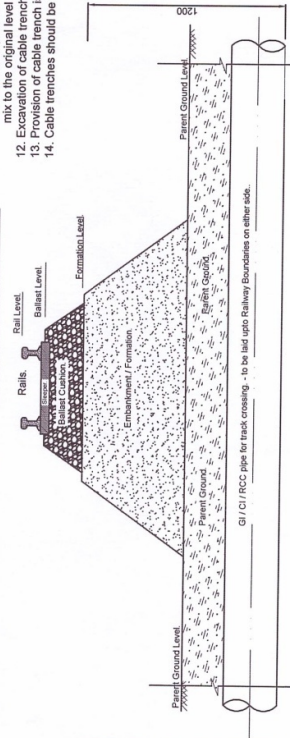
Cable trench in Passenger & Goods Platforms / Circulating area etc.

Cable trench in Road.

Cable trenches across normal ground platforms and road etc.



Sectional View of trench.



Sectional View of formation & track.

Cable trench across Railway Track.

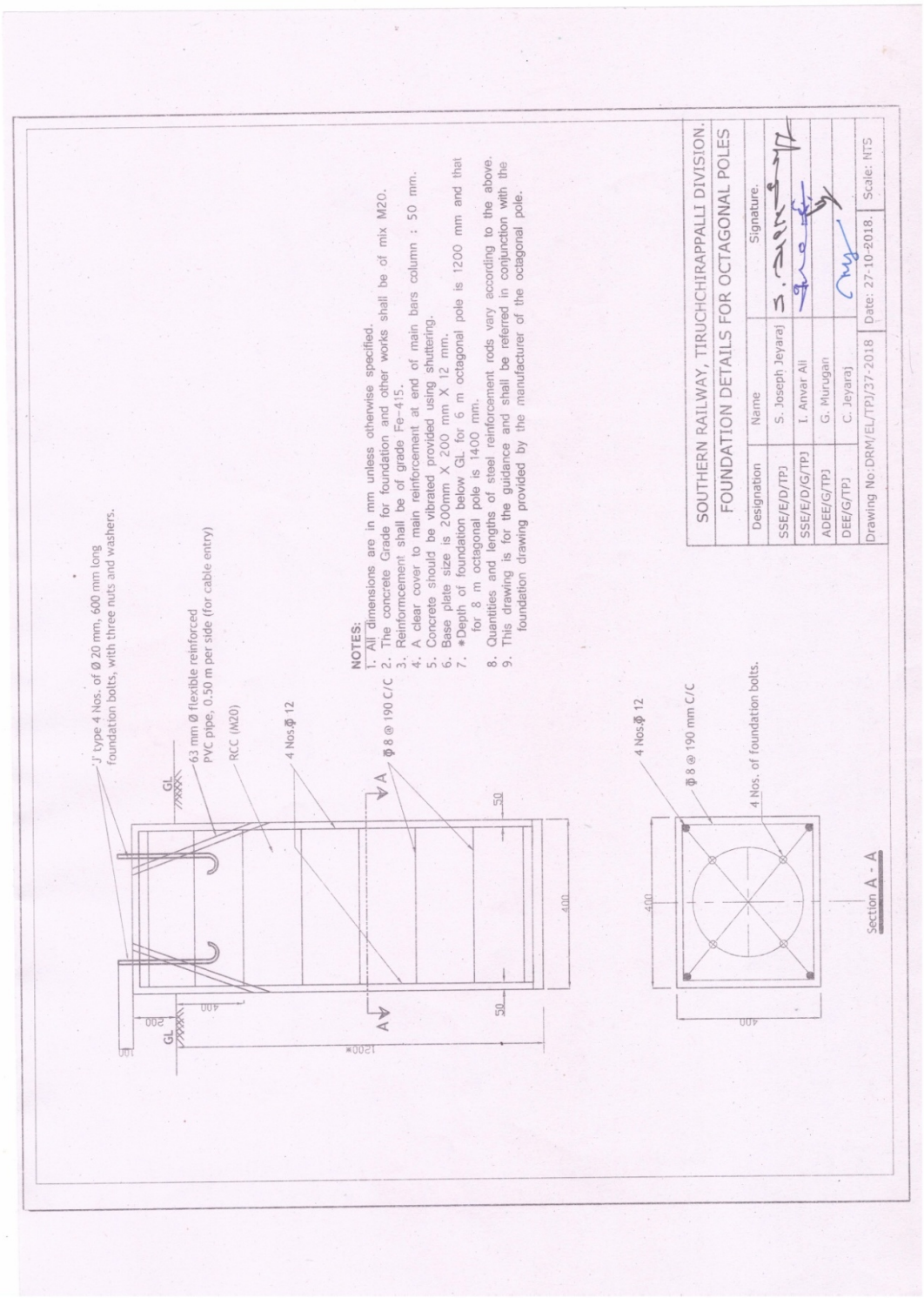
| SOUTHERN RAILWAY - TRICHUR/APPALI DIVISION   |             |                   |  |
|--|-------------|-------------------|--|
| Details of cable trenches to be provided in normal grounds, Platforms, circulating areas, tar road and underneath track etc. |             |                   |  |
| No.  | Name        | Signature         |  |
| 1  | SS/EDG/TP/J | S. Gurusamy       |  |
| 2  | SS/EDG/TP/J | S. Ramakrishnan   |  |
| 3  | SS/EDG/TP/J | D. Ranganathan    |  |
| 4  | SS/EDG/TP/J | S. Joseph Jeyaraj |  |
| 5  | SS/EDG/TP/J | Aruna AL          |  |
| 6  | SS/EDG/TP/J | Srinivas Nataraj  |  |
| 7  | SS/EDG/TP/J | C. Jeyaraj        |  |
| 8  | SS/EDG/TP/J | C. Jeyaraj        |  |

Drawing No: DRMEL/TP/J40-2016

DATE: 30/08/2016

SCALE: ITS

2.0. Foundation for Octagonal pole





### 3.0. EARTHING ARRANGEMENT.

