Cable Laying

Handling cable drum:

- Use crane / ramp for loading & unloading
- Use centre bar for carrying
- Drum shall not be dropped
- Cable shall not be kept flat
- Do not stock drums closely

Planning for laying:

- Survey of cable route
- Mark details on 200m charts Track,Yard,Buildings,LCs,Bridges,Water bodies,Existing cable paths,Likely track crossings
- Consider 1 drum length (1 km) to cover 0.96 RKm (the margin take scare of detour, crossing etc.)
- Locate ECs rationalizing no. of joints
- Get approval of Engg. & S&T (Open line)

General precautions while laying:

- Do not drag the cable on ground
- Cable to be carried using centre bar
- Drum to be lifted with jack and rotated freely
- Measure insulation before laying
- Cable end sealing after laying
- Drum no. & km no. to be noted
- Straight line laying
- Overlap to be left for jointing
- Extra loop of 5 m near bridges/culverts/repeaters

Specific precautions while laying:

- Criteria .
  - At least 5 m away from centre of track
  - Beyond embankment
  - Close to Railway Boundary
- Normal soil - Trench depth 1 m, width 30 cm
- Rocky area – at least 30 cm depth & use of HDPE/RCC pipe & concrete protection
- Insulation test of drum before laying & jointly signed by Maintenance & Construction representatives

.METHODS OF LAYING CABLE:

a) Laying direct in the ground.b) Drawing through ducts:c) Laying solid:

d) Cable laying at road crossing:

- At road crossings cables should be laid in pipes. Pipes should be laid with a slight slope from the centre to the sides of the road to prevent collection of water.
- Trenching across roadways, for laying cable may be by manual excavation, thrust boring or tunnelling.

(e) On the long bridges:

- cables should preferably be laid in G.I. troughs.Joints should be avoided, as far as possible, in the middle of the bridge. At the end of the bridge the cable should be gradually sloped down to normal trench depth through pipes

(f) crossing a railway track:

- **I**t should be laid in iron pipes of not less than 75mm diameter at a minimum depth of 1.25 meters below rail level. The pipeline should extend on both sides of the Railway track track.