**Excavation:**

Soil is to be excavated manually to cut trench along the pipe route to expose and remove by cutting the existing 16” diameter pipe as shown in the attached drawings, (Attachment -2). Trench size: Length = 1600 m (approx.), Width = 2000 mm (approx.), Depth as shown in the drawing (approximately from 1.5 M to 2.0 M). There are live electrical and instrument cables, optical fiber cable, telephone cable, CUFL’s water line, KAFCO’s other 4” drinking water line running parallel to this line very closely. So during work,

**Refilling:**

After excavation, Back filling will be done with the excavated soil first in the already cut trench after pipe lying. Back filling to be compacted using frog hammer, 10 Kg / 20 Kg dormouse, plate vibrator and water spray at each 150 mm layer of soil. Final finish of the surface must be convex and wetted by water. Additional sands required for back filling to make the surface convex is to be arranged by the contractor. Final compaction will be by vibrating hammer compactor and roller compactor.

**Checklist:**

1. The trenching will be measured carefully.

2. While compaction layer by layer of 10 inch refilling and compaction will executed.

3. Hand (plate) compactor machine must be used.

4. Proper compaction and level must be maintained.