

# **GUIDELINES FOR TELECOMMUNICATION CABLE DETECTION WORK**

## **1 Introduction**

This information serves as guidelines for a licensed Telecommunication Cable Detection Worker (TCDW) in performing telecommunication cable detection work before carrying out any earthworks by contractors within the vicinity of any telecommunication cables.

## **2 Guidelines**

The following items are to be observed by the TCDW for cable detection work:

### **2.1 Request for cable route information**

To obtain telecommunication cable route information based on the areas/scope required by the contractor from the [telecommunication system licensee\(s\)](#).

### **2.2 Use of cable detecting devices**

The use of appropriate cable detecting devices could assist in determining a telecommunication cable route. However, some cables might remain undetected under adverse site conditions. Trial holes must be carried out to ascertain the positions and depth of the cables/pipes.

### **2.3 Digging of trial holes**

Trial holes are dug to expose the telecommunication cables to ascertain the location of the determined cable routes. If the proposed construction or development is likely to damage, obstruct or hinder the operation of the existing cable or accessories, a request should be submitted to the telecommunication system licensee(s) whose cables will be affected to have the items diverted.



## 2.4 Marking of located cables route

All information with regard to the cable detection is to be properly documented and recorded in the cable detection drawing layout plan. The dug out trial hole must be inspected by the TCDW to verify the accuracy of the cable detection drawing and also to ascertain the position and depth of cables exposed.

All the detected cable routes must be prominently marked on site to alert the contractors, excavator operators and workers in the course of the earthworks. The contractors must be advised to maintain the marking of all detected cable routes until the proposed construction or development has been completed.

## 2.5 Conduct site briefing

The main purpose of a site briefing is to ensure that all personnel involved in the excavation work are aware of the presence of existing cables and accessories and the precautions to be taken to avoid damaging the cables and accessories. Such site briefing will also instill in the personnel the importance of preventing damage to cables.

The personnel who should be briefed include:

- a) Site supervisors
- b) Foremen
- c) Machine operators and guides
- d) Workers

Topics to be covered should include:

- a) Location and depth of existing cables/pipes
- b) Precautionary measures to avoid damaging of cables (e.g. Do's & Don'ts for carrying out earthworks)
- c) Contingency actions when cable is exposed or detected during the excavation work
- d) Action required when cable is damaged

## 2.6 Report of cable damage

Report immediately on any damage done via telephone to the telecommunication system licensee concerned as early report could reduce the cost of the damage. Subsequently, submit a report on damage to cable (form ROD) to the telecommunication system licensee concerned.

## 2.7 Records and cable detection sketches

The recording of information relating to telecommunication cable detection work shall contain the following.

a) Cable Route Sketch Details:

Cable route sketch of detected cables should contain sufficient information based on site measurements to indicate the position of the cables in relation to existing landmarks, like road kerb, drain, lamp pole and building etc.

b) Plan and Cross-sectional view of trial holes:

This should show the depth of the detected cables.

c) Specific Instruction

Any specific instruction that you have given to the contractor or/and any advice received from the telecommunication system licensee(s) must be recorded in writing and supported by drawing if any.

d) Acknowledgement

The above information must be communicated to the responsible person representing the contractor and duly acknowledged and signed by him. Where necessary, a copy of the record should be sent to the manager at the contractor's office.

e) Reference Title

The reference title should contain information such as date of cable detection carried out, for whom the detection work was done and nature of the project etc. The above mentioned can be contained in either one or several sheets of paper depending on the complexity and size. They should be well documented and filed for future reference.

## 2.8 Others

The licensed TCDW should remind the contractor that it is the contractor's responsibility to ensure that all reasonable precautions are taken to prevent damaging of cables such as advice to contractors on the safe suspension and protection of exposed cables. Apart from the guidelines mentioned above, the contractor should deploy an experienced site supervisor to oversee the excavation works at site.

The site supervisor should warn the excavator operator immediately to stop the excavation when any evidence showing the presence of cables is detected, e.g. cable slabs or markers, cable, cable joints. The situation should be verified before the excavation can be continued.