

# Approved Competent Person 13 Steps for Underground Cable Detection (2018 Edition)



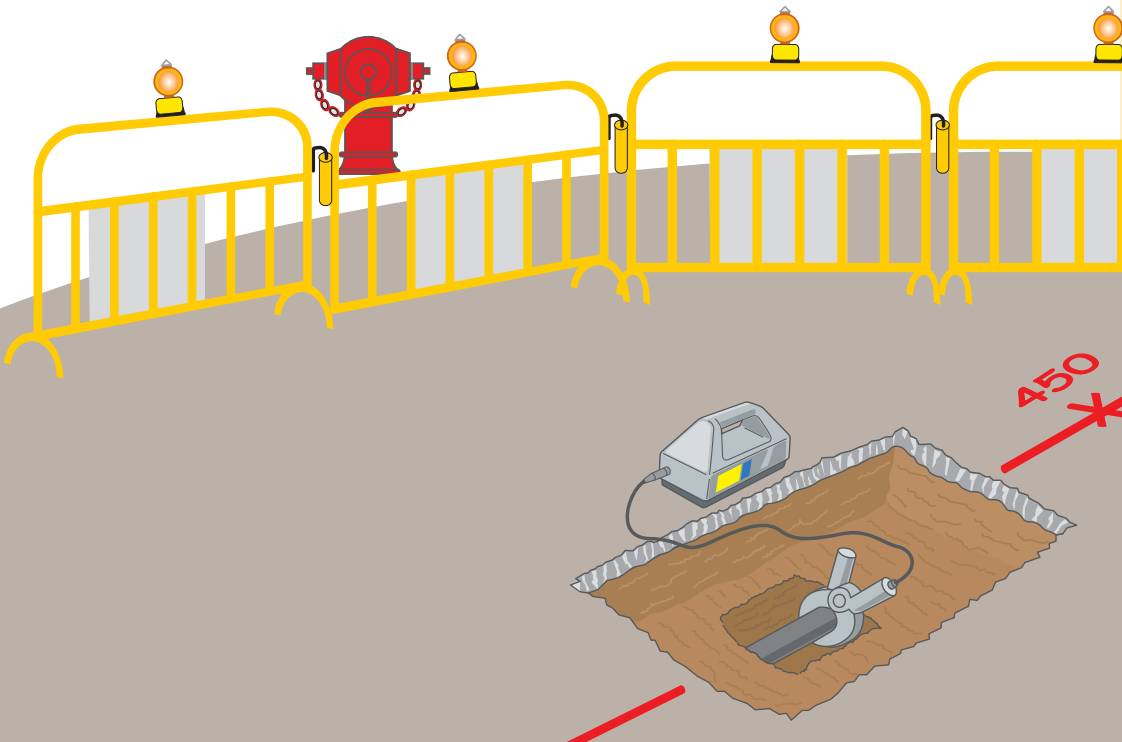
# Introduction

The Electricity Supply Lines (Protection) Regulation requires that a competent person shall undertake cable detection to ascertain the existence, alignment and depth of underground electricity cables before excavation.

Underground cable detection is a specialised job. The competent person must be approved by the Director of Electrical and Mechanical Services and shall carry out the cable detection according to the steps as stipulated in the Code of Practice on Working near Electricity Supply Lines.

The competent person shall pay attention to the following items:

1. Shall not delegate his duty of cable detection work to another person;
2. May carry out cable detection work with the assistance of other persons, but such persons shall be directly supervised by that competent person;
3. Shall carry out cable detection work in a manner without causing damage to the underground electricity cables;
4. If there is any difficulty in detecting the underground cables, assistance from the electricity supplier must be sought;
5. Shall provide a “Competent Person Written Report” to the responsible person of the work site and give a site briefing to the site personnel after completion of detection work.

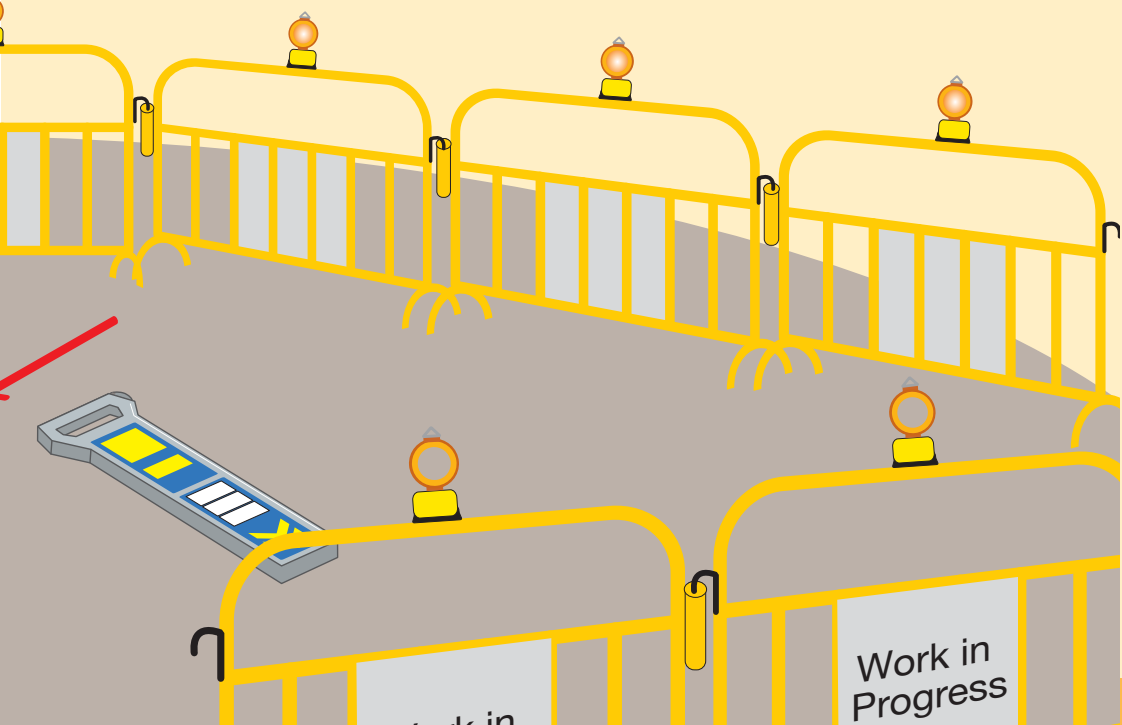


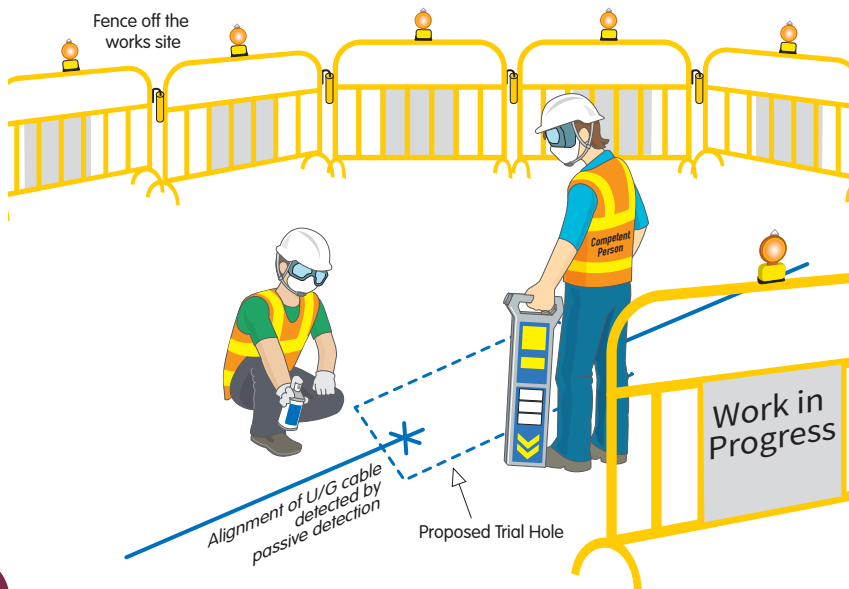
# 13 Steps for Underground Cable Detection



1

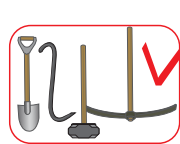
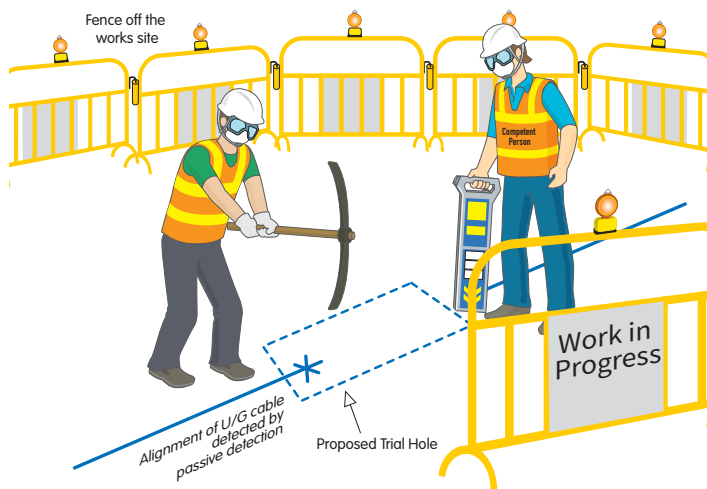
Obtain drawings of works site and electricity supplier's cable plans.





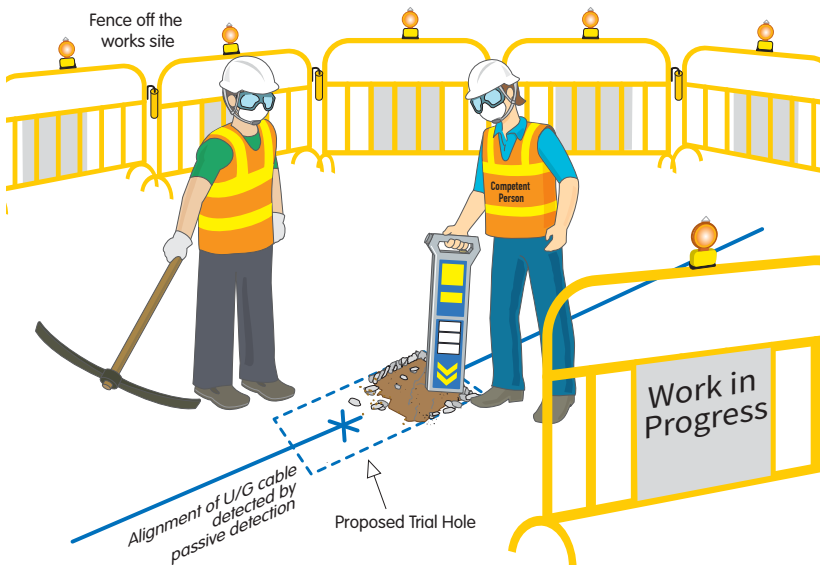
2

Carry out passive cable detection and propose trial hole locations.



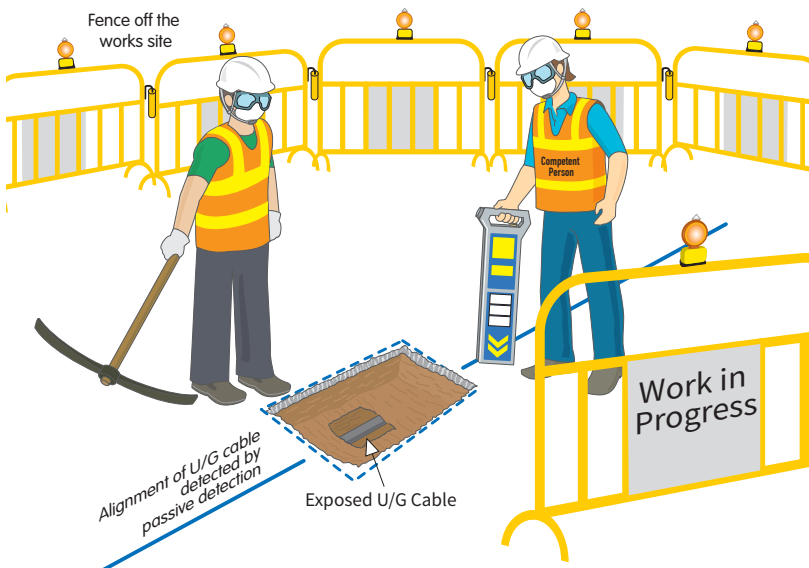
3

Supervise the excavation of trial holes in order to expose all target underground electricity cables.



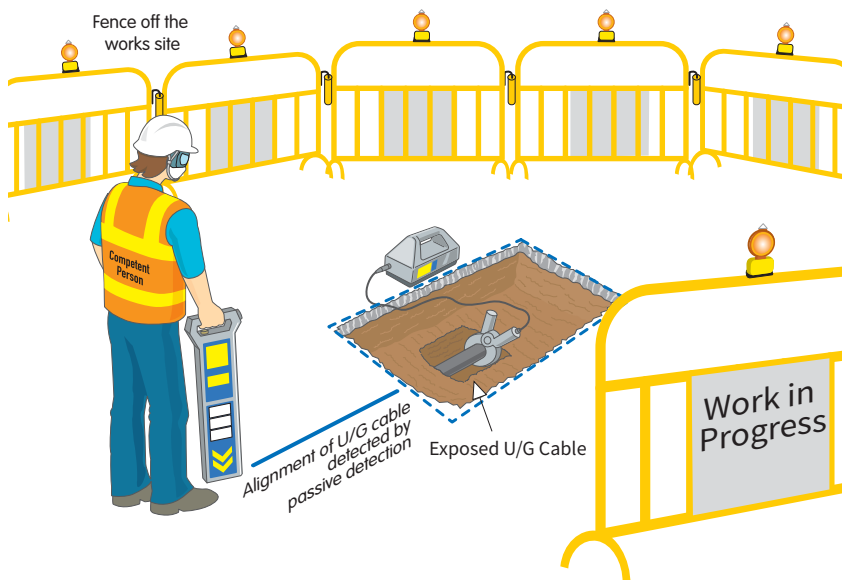
4

The competent person should repeatedly use a cable detection device and frequently update the working personnel as to the most accurate cable location.



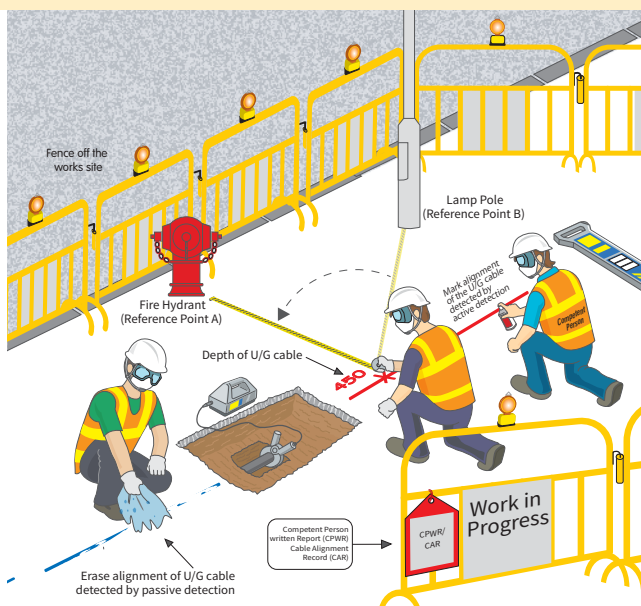
5

Trial hole excavation completed and the target cable is exposed.



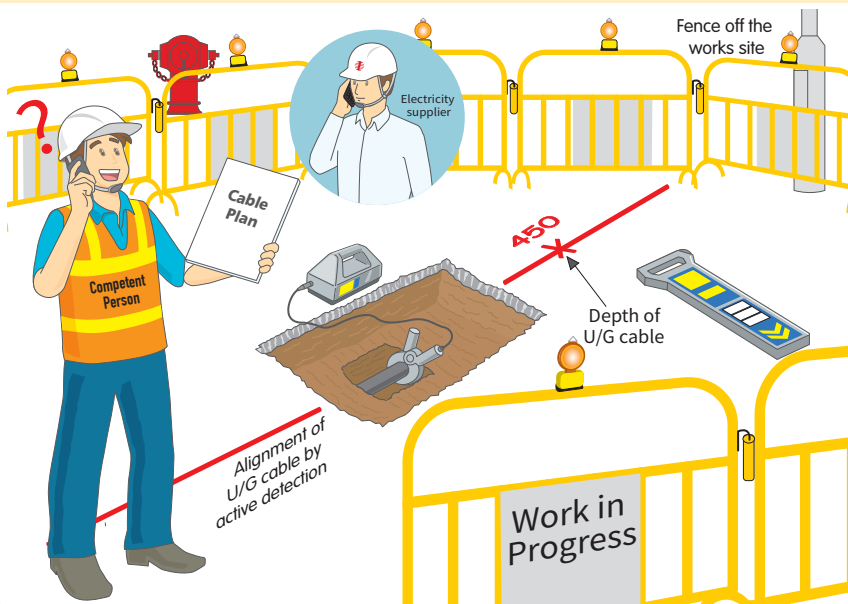
6

Place a signal clamp around the cable and carry out toroidal active cable detection in order to ascertain the alignment and depth of the unexposed underground electricity cables.



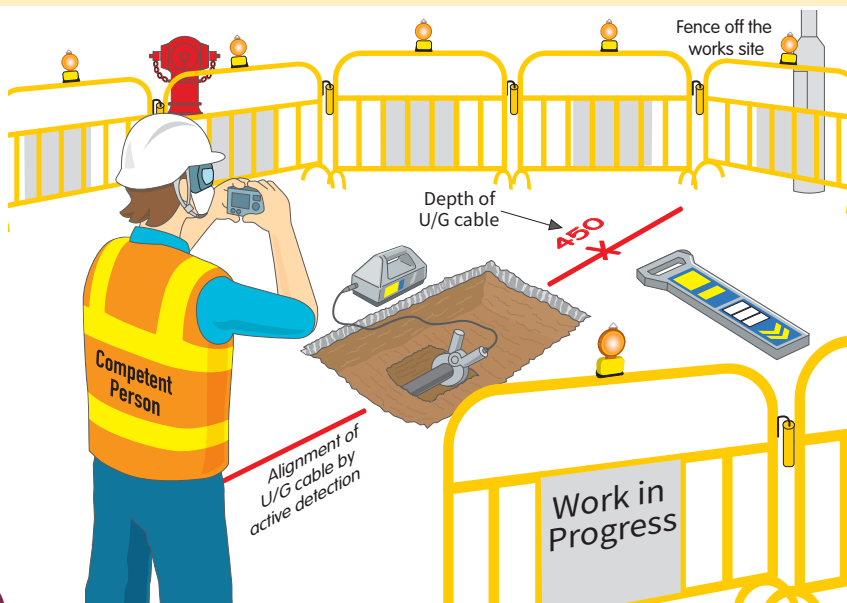
7

Mark the alignment and depth of underground electricity cables on the ground.



8

The competent person shall repeat the cable detection and/or contact electricity supplier when they find discrepancies between the cable detection results and the electricity supplier's cable plans.



9

Take photos to record the cable detection process.

Competent Person

Working party



10

Provide a "Competent Person Written Report" to the working party.

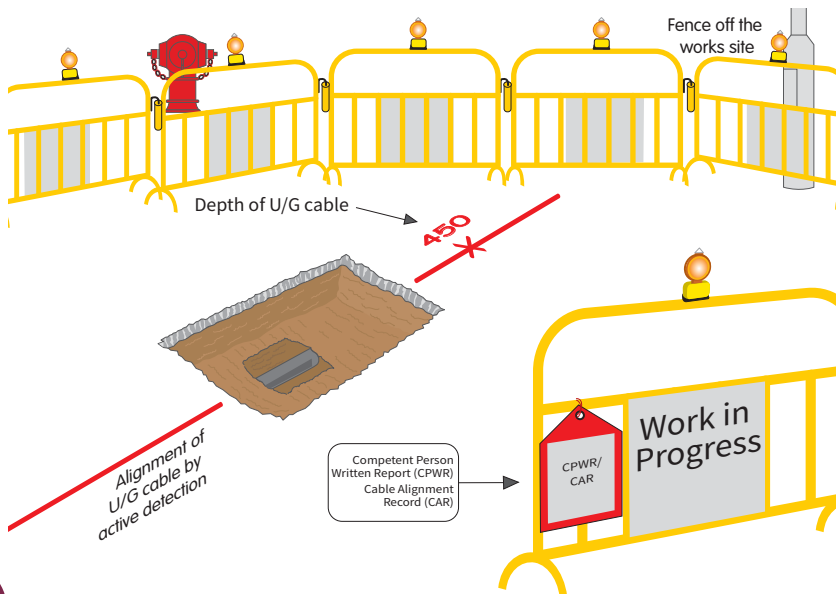
## Site Briefing



11

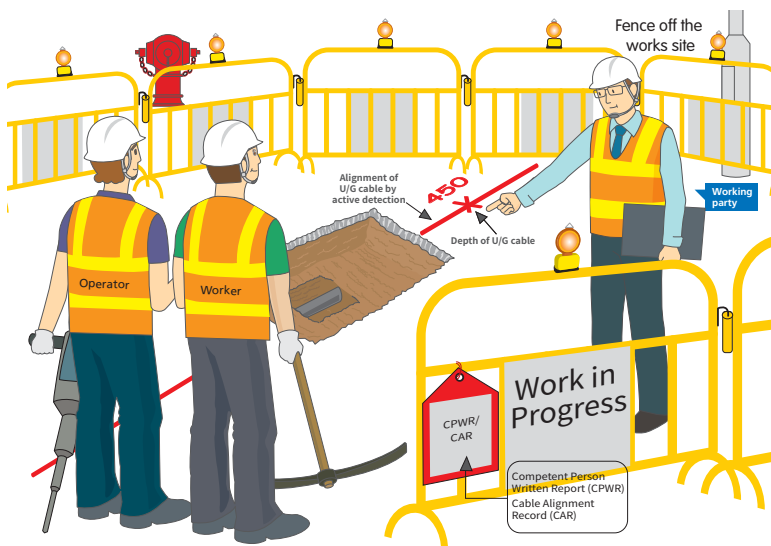
Conduct site briefing to site personnel to explain the contents of the Report and the safety precautions.





12

Working party shall keep the Competent Person Written Report or Cable Alignment Record available on the construction site for the Director's inspection. The report/record should be posted on the barrier or railing on the site.



13

Working party shall ensure the markings (both alignment and depth) identified by the CP are available at site before the commencement of works.

## Penalties

A competent person failing to perform cable detection work to the reasonably expected standard may have his/her approval as a competent person suspended for a period up to 12 months.

Note: This is NOT a legal document and is prepared for general information only.