

Purpose

To detail the method for conducting maintenance excavation works for BT. this involves excavating to expose apparatus to conduct repair works.

2. Responsibilities

- 2.1 The Site Supervisor shall periodically monitor the compliance to this method statement.
- 2.2 If this method cannot be adhered to, contact your supervisor for advice before proceeding.

3. References & Definitions

3.1 References

- BT Specification LN 550 - Underground Duct Laying and Associated Works
- New Roads and Street Works Act 1991
- Safety at Street Works and Road Works – A Code of Practice
- CN Drawings
- HAUC – Specification for the Reinstatement of Openings in Highways
- NJUG – Codes of Practice
- HS (G) 47 Avoiding Danger from underground services
- Reporting Positive Gas Test Results
- T8 MUS-MOPs-S-024 the Management of Confined Spaces


4. Safety considerations

4.1 Hazards

Traffic	✓	Fumes/Gas	✓	Falls of material	✓	Mobile Plant & Vehicles	✓
Buried Services	✓	Dust	✓	Demolition		Noise & Vibration	✓
Overhead Services		Deep Excavations		Collapse of Structure	✓	Lifting Operations	
Fire/Explosions		Confined Spaces	✓	Soft Ground	✓	Manual Handling	✓
Flying Particles/Objects		Lighting Levels	✓	Falls on Level		Working near Water	
Heat		Falls from Height		Infected Materials		Adverse Weather	✓

4.2 Precautions

- ASSESS THE RISK - Ensure that prior to starting work a SITE SPECIFIC RISK ASSESSMENT is conducted and recorded on to identify specific risks that may be present, if in doubt contact your site supervisor.
- ROAD WORKS GUARDING
 - To be in accordance with Chapter 8.
 - Signs and barriers to be secured with sand bags if necessary.
 - Maintain a safe route for pedestrians to by-pass by the works.
 - Guard pedestrians from vehicles when directed into carriageway.
 - Where required lights to be attached to signing and guarding.
- PLANT, VEHICLES & WORK TOOLS
 - To be kept inside the work area.
 - To be in good working order and properly maintained.
 - To have mufflers and silencers fitted where practicable.

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- Vehicles to be fitted with, and use amber rotating beacon/s.
- Plant operators to be trained and competent in the use of the plant they are using.
- Switch plant off when not in use.
- Ensure that all guards are properly secured and unauthorised persons do not use the plant/vehicle.
- Rotate operators to reduce individual exposure.
- Keep plant & vehicles away from the edge of the excavation.
- Air hoses to be maintained in good order with joints correctly coupled.
- Hose check arrestors to be fitted and used on all compressed air lines.
- Dust suppression is to be used when saw cutting or using equipment that can cause airborne dust, i.e. water.
- Fuel oil to be stored and handled safely to prevent spillage or contact with skin or clothing.
- Ensure the correct PPE is used for the type of equipment.
- Ensure fumes do not enter confined space.


- SAFE DIGGING
 - Utility safe dig prints to be available on site at all times.
 - Visual & CAT (and Genny, where required) surveys to take place.
 - All identified services to be marked on the surface.
 - Trial excavations to be used to confirm positions of services.
 - Ensure where necessary that correct trench wall supports are available and are used.
 - Excavated material shall be stored a safe distance away from the excavation to stop possible collapse into the excavation, but kept within the guarded area.
 - Mechanical excavation equipment shall not be used in 500mm of other utility services.
 - Adequate access/ingress to be maintained at all times.

- CONFINED SPACE WORKING
 - Ensure that gas-testing equipment is available, and is used when entering joint boxes or manholes.
 - Where man entry is required ensure that all involved are trained and competent in confined space working and that there is an approved safe system of work and the confined space is continually gas monitored.
 - Ensure that in confined spaces where there is no free flow of clean air, ensure there is adequate ventilation and where practicable used forced ventilation.

- SAFE LIFTING TECHNIQUES
 - When lifting materials and tools from/to the excavation or onto/off the truck ensure that items are not too heavy. Either reduce them into lighter pieces or/and seek assistance to spread the load or use suitable lift equipment. If in doubt seek advice.
 - When lifting manhole or box covers ensure that the proper lifting keys are used and that safe lifting techniques are employed. For carriageway covers lifting aids shall be used for lifting the covers wherever practicable, i.e. a suitable manhole lifter.

4.3 Personal Protective Equipment

- Ensure the following is worn at all times during the works:
- Hard hat
- Safety boots or safety wellingtons
- High visibility jacket or jerkin
- Fire Resistant Coveralls
- Ensure the following is worn as required during the works:
- Eye protection – grinding, sawing and cutting

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- Ear protection – grinding, sawing, cutting, using jackhammers.
- Dust masks – grinding, sawing, cutting or conducting activities that involve airborne dust.
- Gloves – when using power equipment or manual handling.
- Waterproofs – in wet weather.

5. Method

5.1 On Arrival on Site

- call the office to open the notice/permit prior to commencing work. Ensure you have a valid notice/permit for the area you are working in.
- Identify the area for excavation.
- Survey the works to be done, marking up the position of the other utility services.
- Erect road works guarding and signs.
- Read service prints and conduct survey with CAT and as far as practicable mark all services in the vicinity of the excavation.
- Gas tests any Jointing Chambers directly prior to entering and periodically during the works.
- If gases are found within the Jointing Chamber, no work must take place and your Supervisor informed immediately.

5.3 De-Watering


- If de-watering is required during any stage of the work, then pumps and hoses should be positioned as to avoid any inconvenience to pedestrians, road traffic or other 3rd parties.
- Before de-watering ensure that your site supervisor has agreed all discharge points.
- Samples of water should be taken prior to setting up the de-watering equipment. If the water shows any sign of contamination the water should not be discharged and the site supervisor contacted.
- Ensure silt is not drawn from the excavation and if necessary use a settlement tank.

5.4 Breaking the Surface & Excavating

- Identify the area marked by BT for excavation.
- Where practicable, for large excavations in blacktop the surface shall be cut with a suitable road saw, however for small excavations a Sthil saw can be used.
- All excavation equipment used should be suitable for the work undertaken.
- Mechanical excavating equipment should not be used near other services.
- Service damage caused by you or by a previous excavator shall be reported to your site supervisor.
- Excavated materials must be strictly controlled during all stages of the works, ensuring that it is stored at a practical and safe distance from the excavation, within the road works guarding.
- Material being collected by a grab wagon should be done in such a way as to ensure that minimum disruption is caused to pedestrians, road traffic or any other 3rd parties.
- Materials for re-use e.g. topsoil and granular materials, etc. should be kept free from contamination and where necessary protected from weather conditions.
- Where excavations are deeper than 1.2 metres or in unstable ground, appropriate trench supports shall be used.
- Ensure that all apparatus is protected from damage prior to and during the works.
- All excavated services shall be adequately supported to prevent damage occurring to them.

5.5 Locating the BT Apparatus

- Once the BT apparatus is located (generally a cable) try and identify a cable joint or damage to the cable.
- If the joint or damaged area is located expose 0.5 metre along the cable on each side, ensuring there is at least 200mm exposed around the joint.
- Once the excavation works has been completed inform the works control immediately.
- Ensure when leaving the area that the road works guarding meets the requirements of Chapter 8.

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5.6 Reporting the Completion

- Once the maintenance dig is completed ready for the BT jointer contact your supervisor/office to inform them it is ready for BT.

5.7 Housekeeping

- The roadwork's guarding and signs should be regularly checked to ensure they always meet the requirements of Chapter 8.
- All spoil, materials, vehicles and plant should be properly guarded in accordance with Chapter 8.
- The site should be kept as clean and tidy practicable during the works.
- The site should be left clean and tidy at the completion of the dig.
- Always be polite to the general public within the vicinity of the works and where necessary liaise with the local residents and other contractors present.