

**Toolbox Talk Details**

Title	D11 - Underground services
Reason	Every year, many people are injured, and some are killed due to contact with underground services. It is vital that any excavation work, no matter how shallow, is properly planned.
Outline	This talk covers gas, water mains, sewers, electricity and colour coding for underground services

**General precautions**

1. Before digging, check plans provided by the electricity, gas and other utility providers.
2. Before digging, use a cable-locating device that is in good working order. Ensure you are trained to use it.
3. Assume all cables are live, unless your supervisor tells you they are dead.
4. Hand-dig trial holes to expose cables and look for marker tape or tiles above the cables. Continue using the cable locator to establish exact locations.
5. Do not assume that a buried cable will run in a straight line between two known points.
6. When exposed, protect the cable from damage and support it.
7. If a cable is accidentally damaged, keep everyone clear until the owner has been told and inspected it.
8. During back-filling, ensure marker tapes or tiles are replaced.
9. Have emergency contact numbers for all the utilities to hand to enable quick communication if underground services are damaged.

**Gas**

1. Dig carefully by hand to establish the location of pipes and mark the route of all known pipes.
2. Remember gas is flammable and explosive.
3. At the slightest hint of gas escape, leave the area and do not smoke. Call the gas company and emergency services. The National Grid gas emergency services number is 0800 111 999.
4. Modern, smaller diameter house mains are often plastic. Do not confuse them with electric cables.
5. Follow the gas company specifications for back-filling.

**Water mains**

1. Trace the line of the main by trial pits and mark the route of all known pipes.
2. Burst pipes can fill an excavation quickly. If pipes become damaged, call the water company.
3. Remember, water at high pressure can be dangerous.

## Sewers

1. There is a severe health risk if a foul sewer is fractured – leave the excavation and report it.
2. Wear personal protective equipment (PPE) due to the risk of contamination from sewage. Wash your hands before eating or smoking.
3. If you break a stormwater sewer and rain is falling, vacate the excavation as it may flood.

## Sewers

1. Most cables are in trenches 450 mm to 1 m deep, but cables can be found at shallower depths and some high voltage cables may be deeper.
2. A cable can only be positively identified when it has been safely exposed.
3. If an unexpected cable is identified, contact the regional distribution network or other relevant body, such as the Highways Agency or National Grid.

Revision Date	Assessed By	Signature
January 2021	Michael Reddan	