

# UNDERGROUND UTILITY LOCATING SERVICES

# We are specialists in underground utility detection.

Benang provides the infrastructure industry sector with high-quality utility surveys. We achieve this by bringing together the industry's best people and encouraging and facilitating their continual improvement. This approach means we can design, plan and perform construction work safely and sustainably, ensuring that the infrastructure is updated and operational for all key stakeholders.

Our services extend beyond traditional utility detection and include subsurface services to detect and map geophysical and archaeological assets including voids, geological and archaeological features and more.

Our underground utility locating services include:

- Electromagnetic underground utility detection
- Ground Penetrating Radar (GPR)
- Underground service plans and mapping
- Rod and sonde tracing
- CCTV survey reports



## **Electromagnetic Underground Utility Detection**

By utilising radio detection, electromagnetic line locators and other techniques, we can locate the following underground pipe and cable types:

- Water
- Gas
- Power
- Telecommunications
- Optic fibre
- Storm water
- Sewer
- High voltage power
- Irrigation



#### Ground Penetrating Radar (GPR)

We can locate underground pipes and cables using advanced Ground Penetrating Radar (GPR) technology. The strengths of GPR include its ability to detect both conductive and non-conductive pipe materials alike (unlike electromagnetic cable locators). GPR can be used to locate:

- Plastic-based pipe materials
- PVC
- Polyethylene
- Underground storage tanks
- Tree roots
- Buried pits and valves
- Ground disturbances
- Voids



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## **Underground Service Plans and Mapping**

We can also provide you with a range of underground service plan and underground service map solutions. These solutions can be customised to suit your project scope and budget and include:

- Fully surveyed CAD plans
- Hand drawn 'mud maps' (underground service plans)
- Digitally mark-up Google earth images
- Digitally mark-up site photos or plans

## **Rod and Sonde Tracing**

As many underground services do not contain any conductive material, traditional line locating methods are redundant. By using a conductive tracer rod, we can feed it into a range of previously untraceable underground services and locate them. This can be a useful solution for tracing the following:

- Optic fibres
- Sewers
- PVC
- Concrete
- Vitreous clay
- Storm water

A sonde is an instrument that can be attached to the end of a tracing rod for the purpose of locating the exact location of the end of the rod. This can help find breaks and blockages in pipes or conduits.



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#### **CCTV Survey Reports**

Our underground utility surveys are not pipe condition surveys, however the use of CCTV in a gravity drainage system or any accessible pipes or ducts, as an addition to the underground utility survey, can provide useful information on th e service and structural condition of pipes.

We also can also provide a CCTV condition survey while completing your underground utilities trace, providing not just a report but actual video footage of the pipe with the aid of our 360° camera. contractor, rail operators and telecommunication industries for the following:

- Network remediation work
- New pit and pole installations
- Identification of underground services such as water pipes and sewers, telecommunication cables and power cables

Unlike traditional digging methods such as hand digging, hydro vacuum excavations are much faster and more effective - taking minutes rather than hours. Hydrovac excavation services are also significantly more accurate and safe as the digging speed, depth and area can be precisely controlled.



#### **Vacuum Excavation Services**

Our hydro excavation services are commonly used in a wide variety of industries in both remote areas and metro locations. Our services are regularly utilised by local governments, construction



#### **Testing and Commissioning**

A strong, robust commissioning partner is essential to conclude the test and inspection paperwork at handover stage of the site into its operational stage. We ensure the installation is functioning as per the design specification via a comprehensive testing and inspection process.



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