Site Analysis - Underground Services for Initial Design and Construction Phase

The Problem/Challenge

The identification and location of existing underground services prior to the positioning of future structures on site to minimise the need for excavations & diversions., and possible services strikes.

The Risks

Electrical services and gas supplies are potentially highly hazardous with the ability to cause death and injury if accidentally struck during the construction phase, and all excavations pose potential risks.

The Solution

Designers to clearly identify hazardous underground services (eg. gas & electricity) on the drawings and also show other services such as water, fibre optics, and drainage as damage can cause major disruption and costs.

The Benefits

The sub-scan survey costs were significantly outweighed by the benefit of avoiding delays, diversions or bridging. Site safety is enhanced and costs reduced through the elimination of earthworks.

Key Points

Take account of existing and new services when considering the design footprint on the site. Ask Clients early for adequate survey information.

Service diversions can be planned by the contractor to avoid programme delays. A competent contractor needs the right information to properly manage the risks on site.

Provide drawings early.





Underground electrical cables Subscan Survey -hazards identified with symbols





Subscan Survey - hazards identified with symbols