

GEORGE HOTEL – WATER SUPPLY PROTECTION

DOCUMENT NUMBER: OF-01-11-002

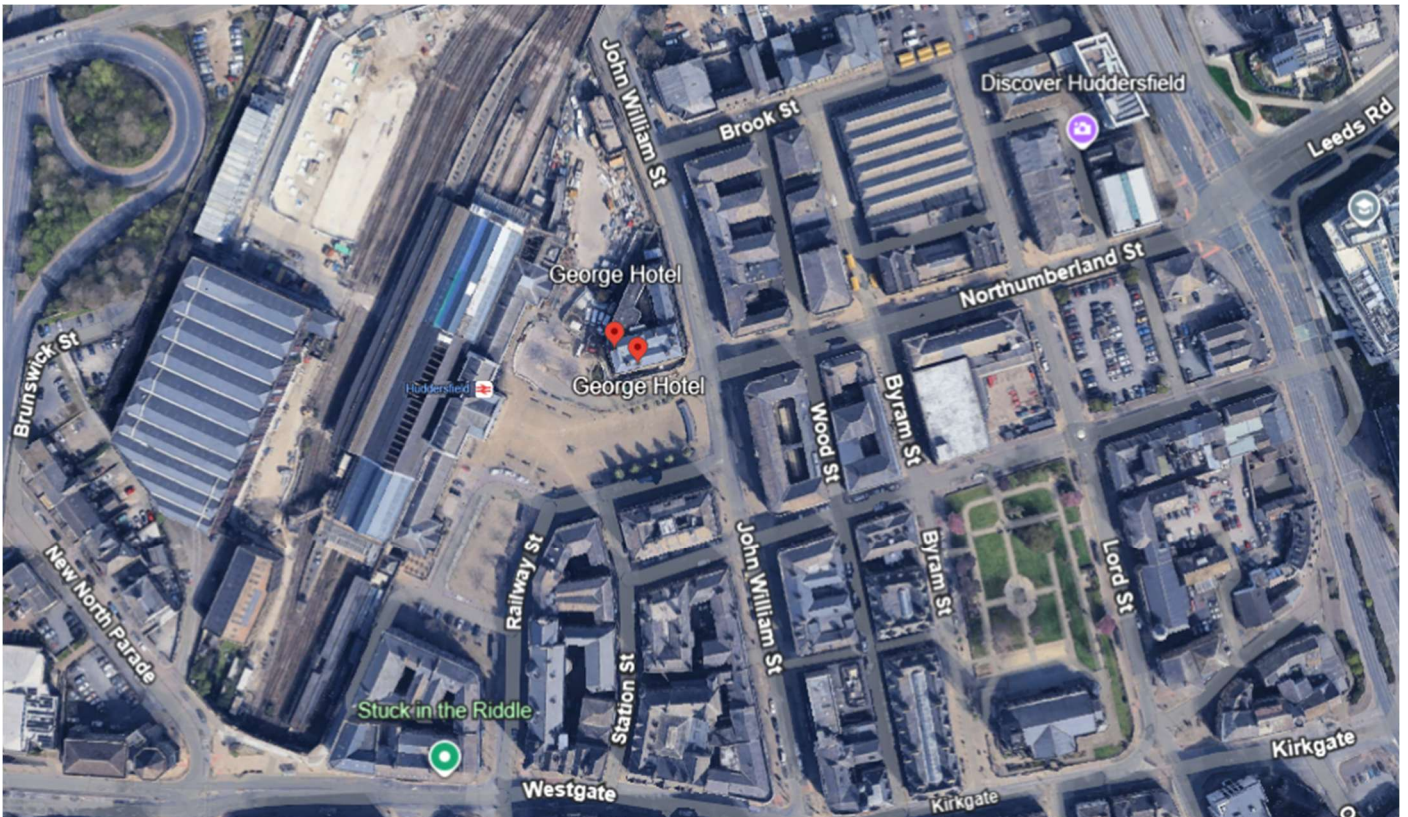
VERSION: 03

APPROVED BY: CAB

APPROVAL DATE: NOVEMBER 2023

SITE LOCATION

Location Plan:

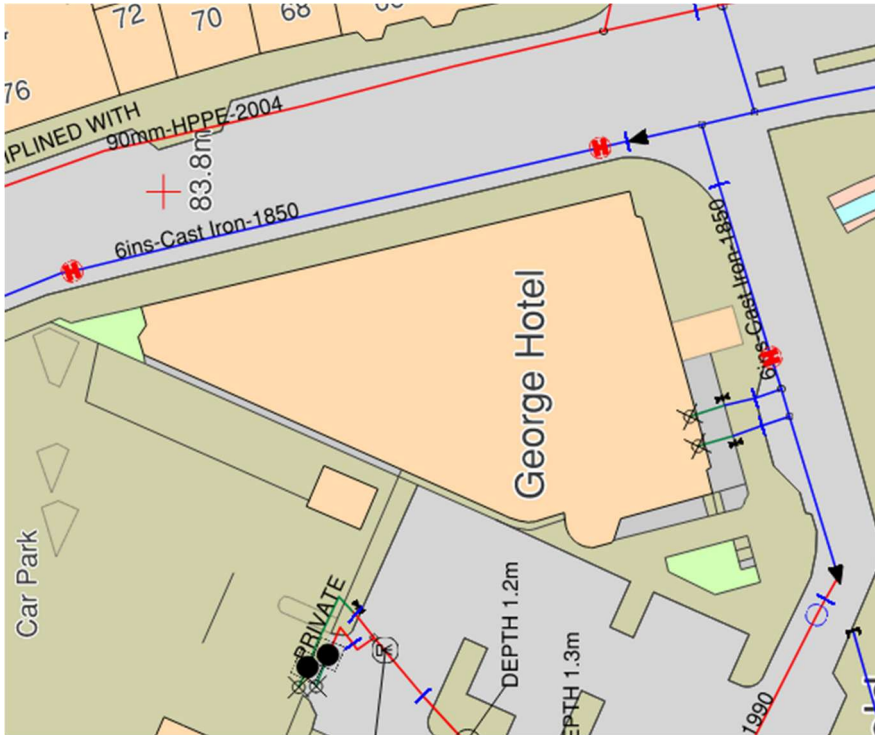


UTILITIES SEARCHES

Extracts below are taken from searches from Yorkshire Water map reference SE1416NW

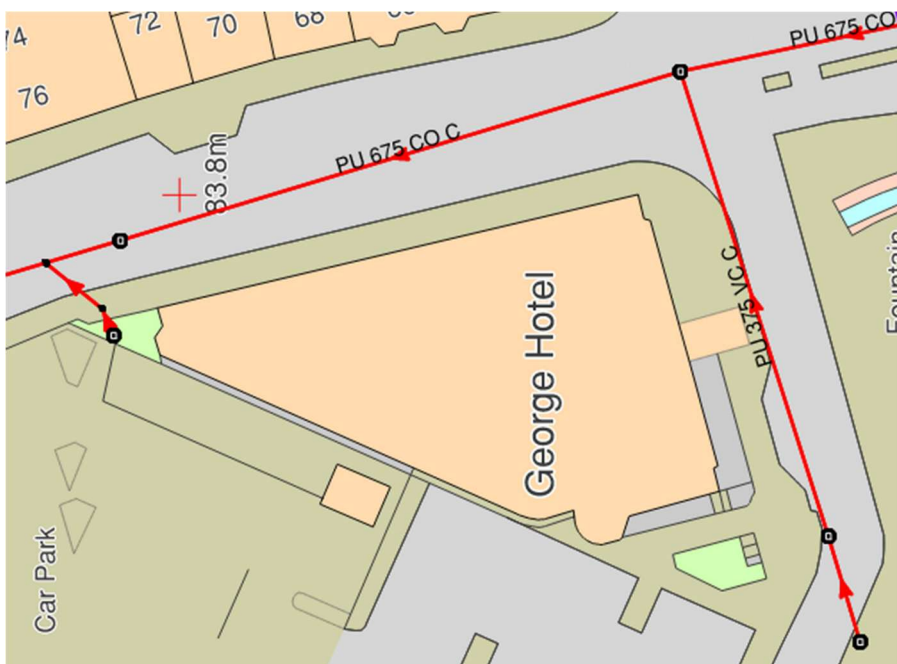
Public Clean Water Network

There are no water mains running through the site development. Existing Mains enter the front of the building which is to be retained.



Public Waste Water Network

The manhole located on site is a Yorkshire Water asset and will require relocation. Discussion surrounding it's relocation and section 185 are in progress with Yorkshire Water.



UNDERGROUND SERVICES

Site Operations

Utility Records and mapping of services will be referenced when planning works that require breaking the ground. Where services are present on the site, trial holes will be undertaken to determine the true position and depth of the known services.

Prior to undertaking any operation that requires breaking the ground the below procedure will be followed.

If any unforeseen services are encountered works must stop and the investigation undertaken by GMI site management to assess the next course of action maintaining that safe condition of the service takes priority.

- Determine the type and condition of the service
- Determine if the service obstructs planned works
- Liase with service provider
- Determine appropriate support or protection measures consulting the services provider if required.

GMI Procedure

5. Underground Services

Accurate identification of underground services

The accurate and effective use of Cable Avoidance Tools (CAT scanners) is a vital part of ensuring excavations are carried out in a safe and controlled manner. As such it is important that those carrying out cable / service avoidance scanning have the relevant skills knowledge and experience to use them to their full potential in all the available modes, thus ensuring the best chance of identifying and accurately locating any underground services that may be present. GMI require those intending to carry out CAT scan work and those that oversee it, to have completed a one-day training course covering the full functionality of gCAT4+ equipment, such as the one day Unit 1 (LA) Location and Avoidance module from the NRSWA course, or the one day unit 1 of the Energy and Utility Skill Register training course – Locate Utility Services (Cat & Genny Cable Avoidance).

Consideration must be given to Underground Services when there is the intent to excavate below/or breach/penetrate ground level. Service strikes occur when works are not planned properly. Striking a service can be highly dangerous, cause inconvenience, be costly and cause delays to the works. It is important that the Construction Phase Health and Safety Plan details the risks associated with Underground Services and how these will be controlled on the project. Specific responsibilities connected to Underground Services are:

The GMI Project Lead must:

- Assess the requirement for a Utilities Mapping Survey considering the information available and the likelihood of encountering uncharted services and organise where appropriate.
- Provide details in the Construction Phase Health and Safety Plan of the survey specification for creating a Master Services Drawing
- Approve Permits where machine work is to be carried out within an exclusion zone (providing consent has been granted by the owner) or where steel pins are to be used

The GMI Service Avoidance Coordinator must:

- Overlay the Utility Mapping Survey with the service records provided and identify conflicts
- Create a Master Services Drawing using all of the information available and display clearly
- Determine the appropriate exclusion zones using industry guidance, standards and information from the Statutory Utility Providers
- Ensure trial holes are completed where conflicts are apparent and amend the Master Services Drawing
- Continuously update the Master Services Drawing and distribute to the GMI Site Managers and Supply Chain Supervisors weekly or when there is a significant change
- Maintain a Service Avoidance Training Register to record who has received the relevant Training and who can produce, brief and receive permits
- Maintain a Permit to Break Ground Folder to record permits
- Ensure the CATs and Gennys have valid and in date calibration certificates, ensure those using the equipment have the necessary training and experience
- Work with supply chain to determine the size and quantity/frequency of trial holes in new work areas to identify the line and level of existing and potential unknown services and utilities
- Approve Permits when satisfied with the content, controls and ground investigation – ensure required signatures are obtained
- Ensure service and utility investigations, carried out under Permit, are conclusive and confirm line, level and extent of services in the work area
- Update Trial Hole Log records and Master Service Drawing with findings
- Ensure Permits are completed and cancelled and Trial Hole Logs and surveys are recorded
- Contact Statutory Utility Providers if a cable is found to be in poor condition or damaged
- Contact Statutory Utility Providers when unknown services are found to determine ownership and, if required, disconnection or removal
- Update the applicable Master Services Drawing when unknown services are found
- Download the GPS contents of the CAT and Genny each week for the applicable Avoidance of Underground and Overhead Services Inspection
- Record and hold calibration certificates for the CAT and Genny in the project filing structure

Utility Surveyor/Engineer must:

- Scan the work area using the CAT and Genny. The area should be scanned in Power, Radio and Genny mode. Sweep the entire area in parallel and perpendicular lines
- Ensure all known services are marked on the ground using spray paint or other forms of identification (flags / pegs etc)
- Where unknown services are picked up, mark the required area for trial holes
- Mark where trial holes must be carried out in new work areas to confirm the line and level of all services in the area
- Record the findings of trial holes on a Trial Holes Log and survey the line of the services
- Ensure Permits to Break Ground contain photographs of the marked up area and clear sketches that show the following:
 - The extent of the site covered by the permit so that it is clear where the work gang may excavate under the control of the permit. This must include reference to clear site features or setting out control so the work gangs can easily identify their location
 - Details of all the utilities and services in the area – including redundant
 - Details of the exclusion zones and how they are marked.
 - The interrelationship between the work being delivered and the utilities or services identified in the Permit
 - Attach copies of trial hole records or isolation certs to Permits
 - Include task specific provisions required – such as fireproof overalls, rescanning requirements or watching brief attendance

GMI Site Manager must:

- Brief the Permit Holder and operatives at the works location when the Utility Surveyor / Engineer is unable to do so
- Ensure that the identified underground utility marks remain visible on the ground and request the assistance of the Service and Utility Surveyor should it be required to reinstate such markings
- Monitor the progression of dig and ensure exclusion zones are adhered to
- Ensure the correct equipment and supporting documentation is at the site location
- Select the correct type and size of machine to use where services and exclusion zones are present
- Complete a Trial Hole Log and survey the services within the excavated area to issue to the GMI service Avoidance Coordinator for updating the Master Services and Utilities Drawing
- Cancel the permit following the expiry date and file in the Permit to Break Ground Folder
- Ensure that there is a G CAT 4+ and Genny 4 at the location of work for all of the tasks under their control

Supply Chain Supervisor

- Brief new gang members on the permit and ensure that they sign to confirm their understanding
- Ensure the correct hand-digging techniques are implemented by operatives and that they are wearing the correct PPE specified in the RAMS
- Re-scan the ground every 300mm when working within an exclusion zone
- Control the machine and ensure that exclusion zones are visible and adhered to
- Provide workers with fireproof overalls and insulated tools for hand digging
- Return permits to the GMI Site Manager once expired