

## **B7 – Ground Investigation**

### **Scenario**

#### **1. Background**

The Ground Investigation framework will be required for ground investigations within all modes of transport within TfL, including London Underground (LU), Surface Transport, Docklands Light Railway, Tramlink, London Overground and others.

A large proportion of the ground investigations will be required to be carried out on cuttings and embankments within the LU network, and possibly other modes outlined above, although this framework is intended to be used for other Major Projects within TfL.

To that extent, the scenario provided below is related to a station upgrade project that will capture some of the typical aspects of the ground investigations that will typically be required in the future. It is intended to capture most of the ground investigation techniques and methodologies.

Scenario:

TfL are proposing to carry out ground investigation in relation to the capacity upgrade of Holborn Station, including remodelling of the local road layout.

The station is located in a congested urban environment, with exploratory holes located above ground (on public roads) and below ground within the basement of the existing station.

#### **2. Requirement**

A Ground Investigation specification has been produced following the UK Specification for Ground Investigation (Second Edition).

The ground investigation is to be undertaken in accordance with the relevant British Standards or equivalent European Standards, in particular BS EN 1997-2, BS EN ISO 22475-1, BS EN ISO 22475-2, BS EN ISO 22475-3, BS 1377, BS 5930:2015 and BS10175, or other recognised standards or Codes of Practice current on the date of the works.

The Contractor shall undertake the role of Principal Contractor, in accordance with the requirements of the Management of Health and Safety at Work Regulations 1999 and the Construction (Design and Management) Regulations 2015.

The Contractor's Contract Management and Superintending staff shall be responsible for the works being carried out in accordance with the Contract and Specification for Ground Investigation.

Professional Attendance shall be provided by the Contractor, in the form of the provision of technical staff as necessary to fulfil the technical, logistical and quality requirements of the works.

### **3. Deliverables**

1. Cable Percussive Boring (Standard and Modular)
2. Rotary Drilling (All Methods)
3. Cone Penetration Testing (All Types)
4. Dynamic Sampling (Hand Held, Modular, Tracked)
5. Dynamic Probing (All Types)
6. Hand Dug and Machine Dug Trial Pitting and Trenching
7. Foundation Inspection Pitting
8. Concrete Coring
9. Geophysical Surveys
10. Utility Surveys to PAS 128
11. In-situ (Field) Testing (CBR, Plate Load Bearing, Self-Boring Pressuremeter)
12. Soil and Rock Logging
13. Site Supervision
14. Instrumentation and Monitoring (Groundwater, Gas, Ground Movement)
15. Materials Testing
16. UXO Surveys and Supervision
17. UKAS/MCERTS Accredited Geotechnical/Environmental Soil, Rock and Aggregate Testing
18. Topographical Surveys
19. Ground Investigation Report (Factual)
20. Provision of AGS Data

### **4. Response**

In no more than 2000 words contained in a maximum of 8 sides of A4, describe your company's capability to provide Ground Investigation services for the deliverables described above.

To demonstrate your competence, please describe the process and activities you would undertake in support of the above project scenario (pictures, diagrams etc. may be included in the sides of A4 limit):

Your response should consider, but not be limited to, the following:

- Proposed resources of key personnel giving evidence of appropriate skills, knowledge and experience. Please ensure this reflects a realistic

project team that you would expect to put in place for a project of this scale.

- Outline of access and safety arrangements that would need to be put in place to allow the ground investigation work to be undertaken.

*Note:*

*Bidders must not cite examples of previous completed works within their response as this formed the basis of the SSQ evaluation and as such references to completed case studies will not be subject to evaluation.*

*Bidders are encouraged to structure their submission by clearly setting out their response against each of the competencies via specific headings for each competency; the headings will not be included in the word count limitations.*