**National Asset Delivery**

**Technical Surveys and Testing**

**Works Information for *561537 – A46/A1 Western Junction Brownhills – Site Investigations***

**CONTENTS AMENDMENT SHEET**

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| **Amend. No.** | **Revision No.** | **Amendments** | **Initials** | **Date** |
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**LIST OF ANNEXES**

**Appendix 1 Supplementary Constraints**

# **Description of the works**

## Project objectives

### The principle objective of this project is to carry out technical surveys for the A46 Brownhills roundabout scheme as per attached plan 561537-KIER-VGN-A46\_RBT\_50119\_Z-DE-Z-0000 01

### The specification that applies to the works is included in Section 6

## Scope of works

### The *works* to be provided under this contract are:

|  |  |
| --- | --- |
| Category | Survey Description |
| Ground Investigation | Ground Investigation - Samples in accordance with BS 5930:2015 including but not limited to waste classification test including Waste Acceptance Criteria testing |

## Deliverables

### The Contractor is required to produce the following deliverables:

* + - * 1. the temporary traffic management arrangements provided by the Employer for the use of the Contractor to Provide the Works, including timing and duration
        2. the access equipment provided by the Employer for the use of the Contractor to Provide the Works, including timing and duration
        3. the temporary accommodation, welfare facilities, services, Plant, Materials and Equipment provided by the Employer for the use of the Contractor to Provide the Works, including timing and duration
        4. the starting date and completion date is as stated in the Contract Data
        5. the survey is to be undertaken concurrently with other surveys, so the phasing of the traffic management may be dependent on a number of other contractors.
        6. All works are to be overnight between the hours of 20:00 – 06:00, subject to traffic counts. Works to be completed under traffic management, expected to be slip road closure, ring management, and lane 1 closures.
        7. Survey results are expected to be received with two weeks of the works being completed on site.

# **Existing INFORMATION**

### The Drawings listed below apply to this contract. Refer to the site information for details of existing site conditions including ground conditions, limitation on access, position of existing structures etc.

|  |  |  |
| --- | --- | --- |
| Drawing Number | Title | Revision / Date |
| 561537-KIER-VGN-A46\_RBT\_50119\_Z-DE-Z-0000 01 | Technical Survey Plan (Soil testing, stock pile testing, Topo/GPR) | C1 |

# **Constraints on how the Contractor Provides the Works**

## General

### The *Contractor* Provides the Works in such manner as to minimise the risk of damage or disturbance to or destruction of third party property.

### The *Contractor* complies with the constraints and meets with the requirements outlined in Appendix 1.

### The *Contractor* submits information detailing how the *Contractor* will provide the Works to the *Employer* prior to the *works* commencing. This information will include any lifting plans, risk assessments, method statements, the *Contractor’s* staff training information and any other relevant Health and Safety requirements.

## Working hours & site specific constraints

### The Contractor’s working hours for site works shall be 20:00 to 06:00hrs and weekend working will be allowed.

## Health, Safety and Environment & Risk Management

### Health and Safety requirements

### In Providing the Works the *Contractor* meets the requirements of Annex 2 of the supplementary constraints relation to health and safety duties.

### Not Used

### Before commencing the construction phase of the *works*, the *Contractor* confirms to the *Employer* that adequate welfare facilities are in place. Where the facilities detailed in section 5 are not deemed adequate, the *Contractor* provides all necessary facilities to Provide the Works and to comply with the minimum requirements set out in HSE guidance document L153*.*

### Environmental requirements

### In Providing the Works the *Contractor* meets the requirements of Annex 2 of the supplementary constraints in relation to environmental duties.

### Risk Management

### The *Contractor* identifies, manages and mitigates risks in accordance with the principles of ISO31000.

### The *Contractor* submits a risk register, which captures all risks associated with the delivery of the *works* including those identified by the *Employer*, with his tender and maintains it for the contract period.

# **Requirements for the programme**

### The *Contractor* submitsprogramme to the *Employer* with his tender.

### The Contractor Provides the Works taking into account the following programme constraints:

1. the starting date will be 20/10/18 and completion date will be 05/11/18
2. The contractor is to allow for a pre start meeting on TBC, to develop the programme.
3. RAMs are to be returned TBC
4. Working hours shall be 20:00 to 06:00 hours subject to traffic counts, where traffic management is required.
5. Weekend working is to be allowed for
6. Survey results are expected to be returned within two weeks of the survey completing on site
7. Welfare facilities are to be place prior to works commencing on site
8. The principle contractor to liaise with all parties to develop a programme for the works, it is anticipated that different surveys can be carried out concurrently to minimise the length of the programme.

### The programme and be in the form of an activity and time related bar chart produced as a result of a critical path analysis.

### The programme must be provided in a PDF or MS Project or MS Excel format and cover the full contract period including post site activities. All activities should be clearly defined and named and the following shall be shown on the programme:

1. the *starting date*, *completion date* & *Contractor’s* planned completion
2. for each activity, the proposed resources (plant & labour) expected to deliver each activity should be shown on the programme
3. review periods for any reporting requirements
4. key dates for the Employer to provide ‘services and other things’
5. key dates for co-ordination with Others

### The *Contractor* updates the programme every week. The *Contractor* submits an updated programme to the *Employer* upon request.

# **Services and other things provided by the *Employer***

### The following temporary traffic management will be provided by the Employer to allow the Contractor to Provide the Works:

* + - * 1. The traffic management will be provided by another contractor on behalf of the principle contractor. The traffic management is expected to consist of night-time lane 1 closures on the A1 northbound carriageway, full closure of the A1 northbound entry/exit slip road, and ring management of the circulatory of Brownhills Roundabout. The contractor is to provide details of required traffic management to the principle contractor.
        2. Roadspace on Highways England network is to be managed by the principle contractor.

### The other things that will be provided by the Employer are as follows:

* + - * 1. Welfare facilities are to be provided by the principle contractor, needs are to be identified by the contractor and communicated with the principle contractor.

# **Specification for the works**

### The Contractor shall undertake the works in accordance with:

Proposed Ground Investigation

The investigation shall be conducted in accordance with the following standards: -

* BS EN 1997-1:2004 Eurocode 7: Geotechnical design. General rules (+A1:2013) (incorporating corrigendum February 2009). British Standards Institution.
* BS EN 1997-2:2007 Eurocode 7: Geotechnical design. Ground investigation and testing (incorporating corrigendum June 2010). British Standards Institution.
* BS 5930: 2015. Code of practice for ground investigations. British Standards Institution.
* BS EN ISO 14688-1:2018 Geotechnical investigation and testing - identification and classification of soil. Identification and description (ISO 14688-1:2017). British Standards Institution.
* BS EN ISO 14688-2:2018 Geotechnical investigation and testing - identification and classification of soil. Principles for a classification (ISO 14688-2:2017). British Standards Institution.
* BS EN ISO 14689:2018 Geotechnical investigation and testing - identification, description and classification of rock (ISO 14689:2017). British Standards Institution.

The GI should consist of: -

* 4no. hand dug pits formed to 0.5mbgl with representative soil samples taken from each pit along the proposed ditch alignment.  A single chemical sample shall be taken from each exploratory hole location and preserved for chemical testing (4no).
* 5no planning samples taken from stockpiled materials in field immediately east of A1 off slip embankment.  A single chemical sample shall be taken from 5 discrete locations on the stockpiled planning materials east of the embankment and preserved for chemical testing (5no)

Samples should each consist of a minimum of 1kg and consist of at least 2 parts; 500g in a bucket with snap-lid & 250g in a amber glass jar.  Samples should be stored in a cool box and dispatched to a laboratory for stabilisation within 24 hours.

The following laboratory testing will be required on each soil sample retrieved: -

Test for a suite including pH, sulphate, heavy metals, asbestos, speciated and banded TPH, Speciated PAH, Phenol & BTEX.   (ie Suite E from the ICE Specification for Ground Investigation plus Phenol & BTEX).  GCMS methods shall be used for the organic content.   Results are to be assessed in accordance with the UK HAZWASTE toolkit and if any are found not to be inert then WAC testing will be required to determine whether the disposal route is to non-hazardous or hazardous waste facility.

All testing should be undertaken at an mCERTS accredited laboratory.

The contractor is to provide an interpretive report with disposal recommendations based on the above testing.

All results should be supplied in \*.pdf and in MS Excel data formats.

The contractor is alerted to the following health and safety risks: -

Buried services may be present.

Uneven ground likely to be present. Care to be taken to avoid slips, trips and falls.

Ditches and water course are present and the contractor should ensure that site staff manage the physical and health risks of falling in and use good hygiene practice with respect to the threat of Weils Disease.

A method statement, programme of works, risk assessment and safety plan for the survey shall be submitted to the client before commencing work on-site.

Site Clearance

Vegetation is to be cleared to allow for accurate surveys. Survey contractors are to specify the amount of clearance they require to complete their works.

A method statement, programme of works, risk assessment and safety plan for the survey shall be submitted to the client before commencing work on-site.

Physical entry into confined space is not to be attempted without suitably trained operatives and safety equipment. Attention is drawn to HSE’s publication, Confined space – A brief guide to working safely (INDG258) [1].