

**National Asset Delivery
Technical Surveys and Testing**

HE601947

**Scope for M5 J20 SB Entry Slip
MP155/7 Geotech**

Technical Survey

(Ground Penetrating Radar: GPR)

TABLE OF CONTENTS

1	Purpose of the Services.....	4
1.1	Project objectives.....	4
1.2	Scope of services	4
1.3	Deliverables	4
2	Existing Information	4
3	Constraints on how the Consultant Provides the Services	5
3.1	General.....	5
3.2	Working hours & site-specific constraints	5
3.3	Health, Safety and Environment & Risk Management.....	5
4	Requirements for the programme	7
5	Services and other things provided by the Client.....	8
6	Specification for the Services.....	9

LIST OF ANNEXES

Appendix 1 Supplementary Constraints

1 PURPOSE OF THE SERVICES

1.1 Project objectives

1.1.1 The main objective of this project is to undertake a ground-penetrating radar survey (GPR) of the scheme at location stated in drawing HE601497-KIER-VPS-M5_J20_M-DR-CH-0700_01 to identify the extent of the badger sett voids.

1.1.2 The specification that applies to the services is included in Section 6

1.2 Scope of services

1.2.1 The services to be provided under this contract are:

- (1) Undertake a ground penetrating radar survey to the location specified within drawings HE601497-KIER-VPS-M5_J20_M-DR-CH-0700_01 to identify the extent of the badger sett voids.
- (2) GPR Survey of HAPMS Section 0100M5/260 – Ch. 30 – Ch. 632

1.3 Deliverables

1.3.1 The *Consultant* is required to produce the following deliverables:

- (1) GPR Survey of HAPMS Section 0100M5/260 - M5 J20 On Slip Carriageway to a minimum depth of 2m
- (2) Full Report with 2D Drawings with indicative depths shown.
- (3) GPR Survey of HAPMS Section 0100M5/260 – Ch. 30 – Ch. 632

2 EXISTING INFORMATION

2.1.1 The following existing information is provided:

- (1) Statutory Undertakers Apparatus Information
- (2) GPR Surveys Location Plan

2.1.2 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
HE601497-KIER-HGN-M5_J20_M-DE-CH-0000_01	M5 J20 Southbound Entry Slip Location Plan	C1/ 17/04/20
HE601497-KIER-VPS-M5_J20_M-DR-CH-0700_01	GPR Survey Location Plan	P1/ 20/04/20

3 CONSTRAINTS ON HOW THE CONSULTANT PROVIDES THE SERVICES

3.1 General

3.1.1 The *Consultant* Provides the Services in such manner as to minimise the risk of damage or disturbance to or destruction of third party property.

3.1.2 The *Consultant* submits information detailing how the *Consultant* will provide the Services to the *Client* prior to the *services* commencing. This information will include any lifting plans, risk assessments, method statements, the *Consultant's* staff training information and any other relevant Health and Safety requirements.

3.2 Working hours & site-specific constraints

3.2.1 The *Consultant's* working hours for site works shall be confirmed by the Employer. Night shifts are anticipated.

3.2.2 Contractor to remain within the Highways Boundaries for the duration of the works, except where agreed with both the Employer and the land owner in advance.

3.3 Health, Safety and Environment & Risk Management

Health and Safety requirements

3.3.1 In Providing the Services the *Consultant* meets the requirements of Annex 2 of the supplementary constraints relation to health and safety duties.

3.3.2 The *Consultant* shall comply with the requirements of Highways England's safety passport scheme and ensure that all of his employees, and any of his subcontractor's, are registered in accordance with the implementation of the scheme. Details on the scheme can be found here:

<http://www.highwayssafetyhub.com/safety-passport.html>

3.3.3 For details of the CDM duty holders, refer to M5 J20 SB Entry Slip MP155/7 Geotech – Pre-Construction Information Pack and Design Hazards Checklist and Risk Reduction Schedule. Scheme is not CDM Notifiable.

3.3.4 Before commencing the construction phase of the *services*, the *Consultant* confirms to the *Client* that adequate welfare facilities are in place. Where the facilities detailed in section 5 are not deemed adequate, the *Consultant* provides all necessary facilities to Provide the Services and to comply with the minimum requirements set out in HSE guidance document L153.

Environmental requirements

- 3.3.5 In Providing the Services the *Consultant* meets the requirements of Annex 2 of the supplementary constraints in relation to environmental duties.

Risk Management

- 3.3.6 The *Consultant* identifies, manages and mitigates risks in accordance with the principles of ISO31000.
- 3.3.7 The *Consultant* submits a risk register, which captures all risks associated with the delivery of the *services* including those identified by the *Client*, with his tender and maintains it for the contract period.

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DO NOT COMPLETE AT THIS STAGE

4 REQUIREMENTS FOR THE PROGRAMME

- 4.1.1 The *Consultant* submits programme to the *Client* with his tender.
- 4.1.2 The *Consultant* Provides the Services taking into account the following programme constraints:
- (i) the *starting date* and *completion date* and any post site works, reporting and review period
 - (ii) The services and other things provided by *Client* (see Section 5)
- 4.1.3 The programme should be in the form of an activity and time related bar chart, produced as a result of a critical path analysis.
- 4.1.4 The programme should preferably be provided in either a PDF or MS Excel format and cover the full contract period including post site activities. Activities should be clearly defined and named, and the programme should detail the following:
- (i) the *starting date*, *completion date* & *Contractor's* planned completion
 - (ii) review periods for any reporting requirements
 - (iii) key dates for the Employer to provide 'services and other things'
 - (iv) key dates for co-ordination with Others

5 SERVICES AND OTHER THINGS PROVIDED BY THE CLIENT

5.1.1 The following temporary traffic management is anticipated being provided by the *Employer* to allow the *Contractor* to Provide the Works:

- (1) J20 Southbound on slip Closure and a Mainline Lane 1 closure.

5.1.2 Not Used.

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6 SPECIFICATION FOR THE SERVICES

6.1.1 The *Consultant* shall Provide the Services in accordance with OfCOM's Requirements and Guidance Notes for Ground Probing Radar' (OfW 350 [Ref 10.N]), and the European GPR Association Code of Practice ETSI EG 202 730 [Ref 5.N]. As mentioned within DMRB CS 229 Revision 0 Data for pavement assessment - 5. Ground-penetrating radar (GPR)

6.1.2 The *Contractor* must provide the *works* under a quality management system which:

- (1) is certified to ISO 9001,
- (2) incorporates an environmental management system which works to the principles of ISO 14001,
- (3) includes requirements for adopting the principles of BS 11000 and
- (4) Complies with good industry practice and encourages innovation during the contract duration.

6.1.3 GPR Survey to be undertaken In line with the current DMRB standards CS 229 Revision 0 Data for pavement assessment - 5. Ground-penetrating radar (GPR).

6.1.4 Requirements relating to the output of the survey are as follows;

- 1) a text section summarising the results of the survey, assumptions used to interpret the radar data, measurement accuracy achieved, and problems encountered
- 2) a graphical display of the survey results
- 3) tabulation of the survey results
- 4) Graphs and tables should be produced to a standard format, displaying information provided in section 5.19.2 of DMRB standards CS 229 Revision 0 Data for pavement assessment.