

**National Asset Delivery
Technical Surveys and Testing**

**Works Information for
570135 M5 J19-20 Portbury to Clevedon
Asbestos survey**

CONTENTS AMENDMENT SHEET

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1 DESCRIPTION OF THE WORKS

1.1 Project objectives

- 1.1.1 The principal objective of the is to undertake the Value Management process on 9 structures. The following specification provides Works Information for the Asbestos Survey, Trial Pitting and Tar Bound Material analysis for the M5 Portbury to Clevedon structures and traffic management extents, as listed below:

Structure Number	Structure Name	Structure Key	Easting	Northing
M5/147.00	Clapton Road	1766	348930	174950
M5/148.40	Naish Hill	1767	347920	174000
M5/149.60/Q	Clapton Court Culvert	15553	346820	173450
M5/149.90/R	Median Retaining Wall No1	1953	346020	173000
M5/150.60	Clapton Footbridge	1769	346020	173000
M5/151.30B	Wynhol Viaduct Northbound	11071	345070	172890
M5/151.30/A	Wynhol Viaduct Southbound	1770	345060	172870
M5/152.00/R	Median Retaining Wall No2	1957	344390	172550
M5/152.20/R	Wynhol S/bound Retaining Wall Lower	11072	344530	172580

Table 1 - Structures for TST08 Surveys

Traffic Management proposed crossover locations are as follows:

- Crossover point 1 – M5 146.10 (300m length centred around this Marker Post)
- Crossover point 2 – M5 149.25 (300m length centred around this Marker Post)
- Crossover point 3 – M5 157.05 (300m length centred around this Marker Post)

The general motorway extent (highways) between Marker Posts 145.60 and 157.60 shall also be surveyed.

Crossover locations and the motorway extent are to be surveyed in accordance with the Google Earth file provided (Trial Pit Locations) and the Trial Pit Schedule, included in the tender documents.

1.2 Scope of works

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

(1) Full asbestos refurbishment survey

- Survey to the nine structures and crossover locations, to determine the presence of asbestos. The survey extent is defined by **all components** on IAMIS (copies of information provided as part of this Tender Pack), including the removal of cover plates to facilitate access to elements and entry to the full extent of confined spaces. Survey work must be undertaken in accordance with GG105. Where access to areas for survey as part of this survey pack is not deemed practicable, such areas shall be brought to the attention of Highways England as part of the Contractor's tender proposal – these areas may include **deep** buried structural foundations;
- Identify any asbestos containing materials (ACM) that could be disturbed during any refurbishment or demolition works;
- Where ACM has been identified, the location or item should be located and logged;
- The condition of the asbestos should be assessed and categorised on the Asbestos Register within reports to be produced as part of this survey work;

(2) Trial pits

- Trial pitting should be carried out to the locations included in the Trial Pit Schedule file and the Google Earth file, included in this work package;
- Findings should identify and confirm where possible the location of any services and construction details;
- The total depth of surfacing and fill should be recorded for each trial pit;
- Colour photographs and sketches should be provided for each trial pit location. The dimensions of the exposure and the type and colour of the material uncovered, should be included in a data log. Detailed information of each trial pit location (dimensioned from an identified point (joint centreline, kerb, parapet etc) should also be included in the data log. Trial pit records and logs shall be sufficiently located and detailed such that information from site records can be transferred onto detailed construction drawings during the proposed scheme detailed design phase;

- Each trial pit should be reinstated with as-dug material for soft digs – every effort shall be made to segregate top soil and sub soil ensuring that any trial pit is backfilled top soil on sub soil. Road pavement should be reinstated with a Highways England approved surfacing repair/reinstatement system. Where waterproofing is exposed, it should be replaced with a Highways England approved system. Verge surfacing is to be reinstated with a cold-lay pre-batch material (Instarmac or similar approved).

Note that whilst a number of trial pits have been identified at specific locations to determine construction detail and uncover some currently buried materials for survey and analysis this may not identify the full extent of trial pitting required for a robust asbestos survey in accordance with Section 1.2.1. It will be down to the discretion of the asbestos surveyor to ensure that sufficient trial pits and locations of exploratory investigation are completed to provide a representative survey and sampling of materials.

(3) Coal tar analysis and PAH

- There is limited information available across the assets forming part of this works package related to tar bound or PAH contaminated material. Appropriate and representative material samples from each trial pit dug through pavement material shall be PAK spray tested for the possible presence of TAR. Where TAR is found to be likely present, these samples shall be subject to further laboratory analysis and subject to further PAH analysis to identify other contaminants and concentrations. Note that prior to PAH analysis, Highways England shall be provided with a schedule of PAK positive results and will confirm the number of samples to be subjected to PAH analysis.

1.3 Deliverables

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

Asbestos refurbishment survey

- (1) This commission is for a full refurbishment survey of the sites. Any areas that are not accessed should be assumed as to be containing asbestos. Specific reasons for not accessing areas are to be communicated to the *Employer* for acceptance.

Asbestos Action Plan

- (2) The *Contractor* should provide up to date AAP reports with accompanying refurbishment survey reports to accompany these.

Reporting shall be in accordance with the requirements of GG105. All AAPs should state the location, presence and extent of any ACM. Where areas could not be accessed or inspected, this should be included in the report. A separate and standalone AAP shall be provided for each structure asset and a single AAP provided for the sections of Highway that the 3 crossover locations are within. This will total the production of 10 AAPs in total (9 structure assets, 1 highways asset). Existing AAPs and asbestos information is provided as part of this Tender Pack – refer to Site Information documentation.

Trial pits

- (3) The *Contractor* should provide a report containing a concise log of each trial pit location. Colour photographs should be included and the dimensions of the all trial pit should be recorded with a sketch identifying the diameter, depth, type, colour and material of each item uncovered.

Coal Tar and PAH analysis reports

- (4) The *Contractor* should provide a report containing factual test results including site testing and laboratory analysis. A single report covering all coal tar testing and PAH analysis shall be provided. A short descriptor shall be provided within the report identifying the exact location of each pavement sample tested or analysed. This shall include the name of the structure or crossover from where the sample was taken together with the identifying Marker Post and a further dimensioned locator. The report shall be readable as a standalone report without reference to the above mentioned asbestos reports.

2 EXISTING INFORMATION

2.1.1 The following existing information is included in the Site Information package:

- TST GIS maps;
- Record drawings
- Statutory returns;
- Land ownership plans;
- Asbestos records;
- Inspection reports.

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3 CONSTRAINTS ON HOW THE CONTRACTOR PROVIDES THE WORKS

3.1 General

- 3.1.1 The *Contractor* Provides the works in such manner as to minimise the risk of damage or disturbance to or destruction of third party property.
- 3.1.2 The *Contractor* complies with the constraints and meets with the requirements outlined in Appendix 1.
- 3.1.3 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.

3.2 Working hours & site-specific constraints

- 3.2.1 Any required lane closures (other than hardshoulder closures) shall be deemed as taking place during night-time hours. Other works shall be deemed to take place during daylight hours.
- 3.2.2 The *Employer* is to provide all traffic management and this will be based on night-time lane closures. Full road closure will not be allowed under this contract.
- 3.2.3 The Traffic management is to be off peak lane closures. Night-time working windows shall be assumed as Monday to Friday between the hours of 22:00hrs and 05:00 hrs (but will be subject to actual traffic conditions).
- 3.2.4 Bats have been recorded roosting in the Wynhol southbound and northbound viaducts. These include the Lesser Horseshoe Bat (*Rhinolophus Hipposideros*). This is a major colony with upwards of 100 bats observed. It is anticipated that *works* will adopt a precautionary approach, be restricted to avoid maternal and hibernating seasons and specific working hours with the following constraints:
 - (1) All bat access points will be retained, and works are limited to temporary disturbance only.
 - (2) Refer to the Site Information for other bat mitigation measures that are typically required on this site.

Following receipt of the initial programme and once the successful Tenderer has been notified, a review of working and shift proposals will be made in light of the above noted presence of bats and associated constraints. This will be one in collaboration with the Highways England Environment Team and/or Natural England. Depending on the outcome of these discussions, it

may be necessary for Highways England to impose an agreed methodology for access and works in/or around the Wynhol Viaduct structures. This may result in the Contractor having to alter/revise the originally proposed programme.

- 3.2.5 Surfacing has not been tested for coal tar and polycyclic aromatic hydrocarbons. The *Contractor* should take appropriate measures to manage the risk of harm to workers.
- 3.2.6 It should be assumed that asbestos is present for all intrusive works.
- 3.2.7 Asbestos Survey work shall be undertaken by a competent contractor that is UKAS accredited. Asbestos surveyors shall be accredited to ISO17020 and the analyst to ISO17025.

3.3 Health, Safety and Environment & Risk Management

Health and Safety requirements

- 3.3.1 In Providing the *works* the *Contractor* meets the requirements of Annex 2 of the supplementary constraints in relation to health and safety duties.
- 3.3.2 The *Contractor* shall comply with the requirements of Highways England's safety passport scheme and ensure that all of its 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 the pre-construction information which can be found in the CDM1 Pre-Construction Stage Information TST08.
- 3.3.4 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

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

Risk Management

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

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

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4 REQUIREMENTS FOR THE PROGRAMME

- 4.1.1 The *Contractor* submits programme to the *Employer* with their tender.
- 4.1.2 The *Contractor* Provides the Works 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 *Employer* (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 titled and the programme should detail the following:
- (i) dates and times associated with the project, including the *starting date*, *completion date* & *Contractor's* planned completion, and any other dates or times that will specifically impact the delivery of the project
 - (ii) activities associated with delivering the project.
- 4.1.5 The *Contractor* submits an updated programme to the *Employer* upon request.

5 SERVICES AND OTHER THINGS PROVIDED BY THE *EMPLOYER*

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

- (1) Phased lane closures at night only. Full details will be finalised during mobilisation with the successful contractor.

5.1.2 Other things that will be provided by the Employer are as follows:

- (2) Welfare facilities (to be provided by the Principal Contractor).

5.1.3 Things that will be provided by the *Contractor* are as follows:

- (3) Specialist access equipment / machinery, plant and materials required to achieve and complete all aspects of the required deliverables.

6 SPECIFICATION FOR THE WORKS

6.1.1 The *Contractor* shall undertake the asbestos survey works in accordance with the following:

- (1) Asbestos Management GG 105.
- (2) Control of Asbestos Regulations 2012. Approved Code of Practice and Guidance L143.
- (3) A comprehensive guide to managing asbestos in premises HSG227.
- (4) Asbestos: The analysts' guide for sampling, analysis and clearance procedures HSG248.
- (5) Asbestos: The licensed contractors' guide HSG247.
- (6) A short guide to managing asbestos in premises INDG223.
- (7) Asbestos: The survey guide HSG264.

6.1.2 The *Contractor* shall undertake the trial pit works in accordance with the following:

- (1) Avoiding danger from underground services HSG47.