

# National Asset Delivery Technical Surveys and Testing

Works Information for M5 Blackbrook Interchange North and South Deck Refurbishment – Asbestos Testing

# **CONTENTS AMENDMENT SHEET**

Amend. No.	Revision No.	Amendments	Initials	Date	
0	0	Original version issued with tender	ET	27/01/21	
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#### 1 DESCRIPTION OF THE WORKS

# 1.1 Project objectives

1.1.1 The principle objective of this project is to complete a desktop review of the existing asbestos information available and to conduct further site investigation at location shown on drawing HE603426-KIER-VGN-M5\_BR\_1856-SK-CB-0101 & HE603426-KIER-VGN-M5\_BR\_1857-SK-CB-0101, and any additional potential areas identified as part of the desktop review in order to establish if there are any ACMs present that may be affected by the proposed deck refurbishment scheme. Note, any addition testing identified during the desktop study should be agreed with the Highways England project manager prior to the works commencing.

1.1.2

- (1) Testing should include:
  - i. Any drainage assets within the area shown on drawing HE603426-KIER-VGN-M5\_BR\_1856-SK-CB-0101 & HE603426-KIER-VGN-M5\_BR\_1857-SK-CB-0101
  - ii. Polysulphide sealant longitudinal expansion joint in the Central reserve
  - iii. Any additional areas identified during the desktop study that could be affected by the proposed deck refurbishment works.
- 1.1.3 The specification that applies to the *works* is included in Section 6

# 1.2 Scope of works

- 1.2.1 The *works* to be provided under this contract are:
  - (1) Complete a desktop study of the existing asbestos information to identify any additional areas that may require testing other than those highlighted on drawing HE603426-KIER-VGN-M5\_BR\_1856-SK-CB-0101 & HE603426-KIER-VGN-M5\_BR\_1857-SK-CB-0101 and in paragraph 1.1.1 (1) i to iii.. The Asbestos survey Contractor shall seek approval from Highways England Project Manager regarding the cost of these additional testing in advance of the works.
  - (2) Complete a targeted asbestos survey on site. Testing to include detailed areas on drawing HE603426-KIER-VGN-M5\_BR\_1856-SK-CB-0101 & HE603426-KIER-VGN-M5\_BR\_1857-SK-CB-0101 and any additional areas highlighted from the desktop study and as agreed with HE PM.
  - (3) Report back results/findings of the Asbestos testing carried out.
  - (4) Currently there is TM in place on the hard shoulders with 3 'narrow' lanes running in each direction as part of the M5 Queue detection scheme. If survey works happen whilst this TM is in place, the survey

contractors may need to coordinate with the Principal Contractor for the scheme.

#### Note:

- The on and off slips for Junction 25 are located either side of the structures and may need to be closed during the surveys. Full details will be finalised during mobilisation.
- ii. Some of the drainage outfalls on the local authority network which will require TM to facilitate the survey works. The *Employer* will discuss with contractors and then liaise with the local authority.

# **Deliverables**

- 1.2.2 The *Contractor* is required to produce the following deliverables:
  - A copy of the completed desktop study report with additional testing requirements highlighted.
  - (2) A copy of the targeted asbestos survey report including photos, the locations of where samples were taken from and test results.

## 2 EXISTING INFORMATION

## 2.1.1 **Existing STATS**

Motorway Communication cables located in the Southbound carriageway verge

Note, the successful survey contractor should consult with the Principal Contractor of the technology scheme during mobilisation to determine if any new services have been installed as part of the works but not noted on the STATS returns yet.

See drawing HE603426-KIER-SBR-M5\_BR\_1856-DR-CB-010003 & HE603426-KIER-SBR-M5\_BR\_1857-DR-CB-01003 for more information on the existing STATS

The STATS return for the centre reservation duct does not show the presence of any cable. However, care should be taken if any excavation works are carried out in the centre reservation and the contractor should operate a permit to dig.

# 2.1.2 **Existing Drainage**

Known drainage assets have been\_identified on drawing 010003HE603426-KIER-VGN-M5\_BR\_1856-SK-CB-0101 & HE603426-KIER-VGN-M5\_BR\_1857-SK-CB-0101. This information available has been identified from HADDMS. It should be noted that this information has not been confirmed by previous surveys and therefore may be subject to inaccuracies. The purpose of this survey is to identify the existing drainage network and its condition, within the works boundary identified on the aforementioned drawing.

Evidence suggests that the existing drainage was meant to be surveyed for asbestos previously. However, this survey could not be undertaken because the drainage assets were blocked. It has been requested that these are cleared as part of the CCTV survey. Contractor to liaise with other contractors to establish the most suitable time for the asbestos survey works to be carried out.

Note, some of the drainage outfalls onto the roundabout under the structure so traffic management will be required to access chambers/manholes etc.

## 2.1.3 Asbestos

The initial AAP's for Blackbrook Interchange North and South were completed in March 2010. There were further Asbestos Management surveys completed

in October 2016 on the centre reservations on both structures, then additional testing was completed on the remainder of the structures in July 2018.

Identified ACMS include a bitumen coating at the back of the bearing shelf which tested positive as an ACM.

Presumed ACM's include a number of drainage features on both the North and South structure that were excluded from the survey as they were blocked.

# Tar

PAK testing has been carried out previously on Blackbrook Interchange North, North bound carriageway. Additional testing is proposed as part of the trial holes TST works information pack.

#### 2.1.4 The Drawings listed below apply to this contract

# Blackbrook North

Drawing Number	Title			
2000-2001 Maintenance scheme				
BW5024/TED/1669/804	MAJOR RENEWAL AND CRAACK AND SEAT SCHEME: BLACKBROOK INTERCHANGE BRIDGES – GENERAL ARRANGEMENT			
Original As-builts				
405/204/B01/2/A	GENERAL ARRANGEMENT			
405/204/B01/4/B	ABUTMENT DETAILS			
405/204/B01/5/A	ABUTMENT REINFORCEMENT 1			
405/204/B01/6/A	ABUTMENT REINFORCEMENT 2			
405/204/B01/7/B	COLUM DETAILS AND REINFORCEMENT			
405/204/B01/8/A	DECK LAYOUT			
405/204/B01/9/B	DECK REINFORCEMENT			
405/204/B01/10/B	DRAINAGE DETAILS			
405/204/B01/11/a	PAVING DETAILS			
Blackbrook South				

# **Blackbrook South**

Drawing Number	Title
2000-2001 Maintenance	scheme_
BW5024/TED/1669/804	MAJOR RENEWAL AND CRAACK AND SEAT SCHEM: BLACKBROOK INTERCHANGE BRIDGES – GENERAL ARRANGEMENT
Original As-builts	
405/204/B02/2/A	GENERAL ARRANGEMENT
405/204/B02/4/B	ABUTMENT DETAILS
405/204/B02/5/A	ABUTMENT REINFORCEMENT 1
405/204/B02/6/B	ABUTMENT REINFORCEMENT 2
405/204/B02/7/B	COLUM DETAILS AND REINFORCEMENT
405/204/B02/8/A	DECK LAYOUT
405/204/B02/9/B	DECK REINFORCEMENT
405/204/B02/10/B	DRAINAGE DETAILS
405/204/B02/11/A	PAVING DETAILS

# **Scheme Drawings**

Drawing Number	Title	REV
HE603426-KIER-SBR-M5_BR_1856-	Blackbrook Interchange North –	C1
DR-CB-010001	Location Plan	
HE603426-KIER-SBR-M5_BR_1856-	Blackbrook Interchange North –	C1
DR-CB-010003	Statutory Undertakers Plant	
	Blackbrook Interchange North –	C1
HE603426-KIER-VGN-M5_BR_1856-	CCTV Drainage Survey,	
SK-CB-0101	Asbestos Testing, Trial holes and	
	Soil Contamination	
HE603426-KIER-SBR-M5_BR_1857-	Blackbrook Interchange South –	C1
DR-CB-010001	Location Plan	
HE603426-KIER-SBR-M5_BR_1857-	Blackbrook Interchange South –	C1
DR-CB-010003	Statutory Undertakers Plant	
	Blackbrook Interchange South –	C1
HE603426-KIER-VGN-M5_BR_1857-	CCTV Drainage Survey,	
SK-CB-0101	Asbestos Testing, Trial holes and	
	Soil Contamination	

# 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 The *Contractor's* working hours for site works are anticipated to be 21:00-05:00, working under a series of lane closures with a temporary speed limit of 50mph. The anticipated working hours are dependent on the carriageway traffic counts.

# 3.2.2 Work Constraints

- (1) Blackbrook Interchange North and South carries the M5 over J25 at Taunton. The local authority manages the roundabout under the structure. As such, the local authority should be made aware of the proposed works before starting on site.
- (2) Some of the proposed manholes/chambers that are to be inspected are located on the roundabout below the structures. As such, additional TM arrangements may be required to access these outfalls for the survey.

- (3) Previous surveys have identified that the existing drainage on both the north and south structures are blocked and will need to be fully cleared before a survey can take place. This has been proposed as part of the CCTV drainage survey works information pack. Care should be taken to ensure the drainage assets are not damaged by the clearance works.
- (4) On and off slips for Junction 25 are in close proximity to the worksite and may require closing. Details will be finalised during mobilisation.

# 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 When implemented, the *Contractor* 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.
- 3.3.3 For details of the CDM duty holders, refer to the pre-construction information which is included as part of the TST package.
- 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.
  - (1) The area has been cleared of vegetation for the queue detection scheme works however, vegetation within the footprint of the surveys has the potential to support dormice and nesting birds (depending on the time of year the survey works are carried out). The *Employer* will advise on possible restrictions/constraints once a date is confirmed and clearance levels have been specified.

#### 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 his tender and maintains it for the contract period.

The contractor should refer to the Pre-construction information and Design Hazard Checklist and Risk Reduction Schedule provided as part of the TST package.

#### 4 REQUIREMENTS FOR THE PROGRAMME

- 4.1.1 The *Contractor* submits programme to the *Employer* with his 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 named and the programme should detail the following:
  - Adjacent site activities
  - When information will be provided back to the Employer
  - (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 updates the programme every week. The Contractor submits an updated programme to the Employer upon request.

## 5 SERVICES AND OTHER THINGS PROVIDED BY THE EMPLOYER

- 5.1.1 The following temporary traffic management will be provided by the *Employer* to allow the *Contractor* to Provide the Works:
  - (1) A series of lane closures with a temporary speed limit of 50mph If works are being completed in the Hard shoulder/Lane 1 then Lane 2 should also be closed with Lane 3 open to traffic. If works are being completed in Lane 3 and the Central Reservation then Lane 2 should also be closed with traffic running in lane 1. A lane 3 closure should also be provided on the opposite carriageway when works are being completed in the Centre reservation.
  - (2) (2) Traffic management requirements will be finalised during mobilisation with the successful contractor.
- 5.1.2 The other things that will be provided by the *Employer* are as follows:
  - (1) Welfare facilities will be provided by the principle contractor.

## 6 SPECIFICATION FOR THE WORKS

- 6.1.1 The *Contractor* shall undertake the works in accordance with the guidance set out by the HSE within HSG264, CAR Regulation 8, GG 105 and all other relevant standards.
- 6.1.2 All reports and survey findings should be provided in a PDF format on completion of the works. Sampling and lab testing reports should also be provided.

