

Scheme Title:HE607428 A1 NB/SB Newark to carlton on Trent

PIN:607428

Initial Risk (Gross Risk) =13

Last Updated10/03/21

Design Team:Clare Trebble

HE SPM / Asset Manager:Peter Hull

CPA:2210066

If Mitigation Successful, Residual Risk (Net Risk)6

| IDENTIFICATION |                     |  |                               |                                  |                             | INITIAL RISK |        |      | RISK MANAGEMENT      |   |             |                    | RESIDUAL RISK |        |      |               | OPEN or CLOSED |                                   |
|----------------|---------------------|--|-------------------------------|----------------------------------|-----------------------------|--------------|--------|------|----------------------|---|-------------|--------------------|---------------|--------|------|---------------|----------------|-----------------------------------|
| Risk Number    | Opportunity or Risk | Description  | Impact Description            | Risk / Opportunity Type          | When Identified             | Likelihood   | Impact | Risk | Risk Owner           | Proposed Mitigation   | Close Out   |                    | Likelihood    | Impact | Risk | Agreed Action | Status         | Date last reviewed or Date Closed |
|                |                     |  |                               |                                  |                             |              |        |      |                      |   | Target Date | Person Responsible |               |        |      |               |                |                                   |
| 1              | Risk                | Statutory Undertakers' returns become invalid due to 3 months passing between their return and the start of construction.  | Safety / Environmental Damage | Health and Safety                | Familiarisation             | 5            | 3      | 15   | CWF Lot Contractor   | Stats returns shall be reviewed at Construction Stage. Principal Contractor to request additional surveys if required.  |             | CWF or CWF PLO     | 5             | 2      | 10   | Tolerate      | Open           | 10/03/21                          |
| 2              | Risk                | Survey results delay affecting scheme progression  | Design Programme              | Design Approvals / Certification | Familiarisation             | 3            | 3      | 9    | Highways England     | HE shall request contractors to provide scheduling for their deliverables. Continue to liaise with HE Project Manager to obtain results.  |             | HE SPM             | 1             | 3      | 3    | Tolerate      | Open           | 10/03/21                          |
| 3              | Risk                | Snow/rain may not be suitable for survey works and also may not be able to pick appropriate data.  | Works Cost                    | Customer                         | Familiarisation             | 3            | 4      | 12   | CWF Lot Contractor   | Contractors shall inform Principal Contrator for suitable weather to carry out survey works. Principal Contractor shall inform all the parties in advance for cancellation of works due to inappropriate weather.   |             | CWF or CWF PLO     | 2             | 4      | 8    | Tolerate      | Closed         | 10/03/21                          |
| 4              | Risk                | Disposal of core sample  | Safety / Environmental Damage | Environmental                    | Familiarisation             | 3            | 3      | 9    | CWF Lot Contractor   | Core samples tested for tar, shall be dispose to appropriate license facility if positive.  |             | CWF or CWF PLO     | 1             | 3      | 3    | Tolerate      | Open           | 10/03/21                          |
| 5              | Opportunity         | Encountering Coal Tar in deep layers of pavement to identify potential quantity of hazardous waste to be disposed of in next resurfacing scheme  | Future Maintenance Issues     | Maintenance                      | Task Brief / VM Information | 3            | 3      | -9   | CWF Lot Contractor   | Plan and determine treatment depths in next resurfacing scheme due to impact of material containg coal tar  |             | CWF or CWF PLO     | 3             | 1      | -3   | Tolerate      | Open           | 10/03/21                          |
| 6              | Opportunity         | Traffic Management Sharing. Survey can be carried out together.  | Works Cost                    | Customer                         | Familiarisation             | 4            | 2      | -8   | CWF Lot Contractor   | Principal Contractor shall maximise the closure, if it is safe to do so.  |             | CWF or CWF PLO     | 4             | 2      | -8   | Tolerate      | Closed         | 10/03/21                          |
| 7              | Risk                | Testing for tar specified for PAH as per Adept recommendations , HE do not appear to have a policy however this may not align with current EA requirements.  | Safety / Environmental Damage | Environmental                    | Familiarisation             | 2            | 5      | 10   | Kier Design Services | Testing for tar specified for PAH as per Adept recommendations , agreement required from HE as to testing regime  |             | HE SPM             | 1             | 2      | 2    | Transfer      | Open           | 10/03/21                          |
| 8              | Risk                | TTRO Approval/Roadspace Clashes and Traffic Management drawings  | Works Programme               | Customer                         | Familiarisation             | 3            | 3      | 9    | Highways England     | HE technical survey team to programme and coordinate works to avoid roadspace clashes. Road closures and diversion route approvals to be carried out by HE technical survey team for HE network and local authority. HE Technical survey team confirmed TM drawings are already completed under another scheme. |             | HE SPM             | 3             | 2      | 6    | Transfer      | Open           | 10/03/21                          |
| 9              | Opportunity         | By testing areas shown to contain Tar by Pak marker we can accuratley establish if Tar is at hazardous levels or not . This could save considerable ammounts of materials going to Hazardous waste tips                      | Safety / Environmental Damage | Customer                         | Familiarisation             | 3            | 3      | -9   | Kier Design Services | HE need to provide testing regime required  |             | HE SPM             | 2             | 2      | -4   | Tolerate      | Open           | 10/03/21                          |
| 10             | Risk                | Potential for underlying defects   | Works Programme               | Customer                         | Familiarisation             | 2            | 3      | 6    | Highways England     | In certain areas where structural schemes have been undertaken in recent years and no defects are evident then no surveys have been proposed.   |             | HE SPM             | 2             | 4      | 8    | Transfer      | Open           | 10/03/21                          |
| 11             | Risk                | Additional Surveys. Delay to the programme if additional surveys are required following review of the initial survey results.  | Future Maintenance Issues     | Maintenance                      | Familiarisation             | 3            | 3      | 9    | Highways England     | Review to be carried at techncial review workshop during optioneering development stage with Highways England   |             | HE SPM             | 2             | 3      | 6    | Tolerate      | Open           | 10/03/21                          |
| 12             | Risk                | Deflectograph survey carried out in cold winter months which can result in inefficient or no useful data. See CS229 for temperature limits. Risk of delay in recieveing survey data and progressing sound treatment options. | Works Programme               | Maintenance                      | Familiarisation             | 3            | 4      | 12   | Highways England     | HE to manage and schedule the works programme to ensure the deflectograph survey is carried out in season to ascertain efficient and useful data.   |             | HE SPM             | 3             | 3      | 9    | Transfer      | Open           | 10/03/21                          |
| 13             | Risk                | Cores and DCP testing disrupting services buried in the ground   | Safety / Environmental Damage | External Stakeholder             | Familiarisation             | 3            | 4      | 12   | CWF Lot Contractor   | Check core and DCP locations against statutory undertakers drawings   |             | CWF or CWF PLO     | 1             | 4      | 4    | Transfer      | Open           |                                   |
| 14             | Risk                | Encountering and disposing of cores containing coal tar in deep layers of pavement   | Safety / Environmental Damage | Environmental                    | Familiarisation             | 3            | 2      | 6    | CWF Lot Contractor   | Contractor to handle and dispose of coal tar as detailed in the contract documents  |             | CWF or CWF PLO     | 2             | 1      | 2    | Tolerate      | Open           | 10/03/21                          |
| 15             | Risk                | Some cores targeting defects have had to have been deleted to avoid clash with underground stats or overhead cables  | Future Maintenance Issues     | Maintenance                      | Familiarisation             | 2            | 3      | 6    | CWF Lot Contractor   | In most cases a nearby core is targeting a similar defect so assumptions can be made as to the treatment from the simialr defect  |             | HE SPM             | 2             | 1      | 2    | Tolerate      | Open           | 10/03/21                          |

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| 16             | Risk                | STATS clash at location of footway requiring treatment stated on brief. Proposed treatment options may be affected due to lack of survey results.   | Future Maintenance Issues     | Maintenance             | Familiarisation | 4            | 4      | 16   | Highways England   | Carry out Ground Penetrating Radar (GPR) rather than cores/dcp to due clash with existing services. Full reconstruction of footway at location of overrun, assume worst case CBR and design to latest standards. |             | HE SPM             | 3             | 3      | 9    | Tolerate      | Open           | 10/03/21                          |
| 17             | Risk                | Potential for biological waste or vegetation clearance at layby requiring GPR.  | Safety / Environmental Damage | Environmental           | Familiarisation | 4            | 4      | 16   | CWF Lot Contractor | Principal Contractor to review site prior to works starting on site to minimise disruption to programme. Highlight any testing or removal requirements prior to carrying out any works.                          |             | CWF or CWF PLO     | 4             | 4      | 16   | Tolerate      | Open           | 10/03/21                          |
| 18             | Risk                | Structures survey works (pull off testing) required at River Fleet Bridge. Due to short notification of TM sharing this may not be possible.  | Future Maintenance Issues     | Maintenance             | Familiarisation | 4            | 4      | 16   | Highways England   | Information provided for the pull-off testing within the documents for River Fleet.  |             | HE SPM             | 1             | 1      | 1    | Tolerate      | Open           | 10/03/21                          |
| 19             | Risk                | Traffic Management restrictions affecting proposed survey requirements. This will have an impact on the proposed treatment options.   | Future Maintenance Issues     | Maintenance             | Familiarisation | 5            | 5      | 25   | Highways England   | HE SPM suggested applying results from similar sections of carriageway for lengths of missing survey data.   |             | HE SPM             | 3             | 3      | 9    | Tolerate      | Open           | 10/03/21                          |
| 20             | Risk                | HE Environmental Report not provided prior to the handover of the technical survey documents at stage 1. Potential for constraints/actions to delay the works starting on site. Scoping report at stage 0 highlighted flood zones, badger sightings and potential for bat roosts within the schene extents. | Works Programme               | Environmental           | Familiarisation | 5            | 5      | 25   | Highways England   | Environmental Assessment to be completed by Highways England prior to works starting on site. All actions in the report to be mitigated prior to works starting on site.   |             | HE SPM             | 3             | 3      | 9    | Tolerate      | Open           | 10/03/21                          |
| 21             | Risk                | Communication Plan & Liaison with EHO   | Works Programme               | Customer                | Familiarisation | 5            | 5      | 25   | Highways England   | HE SPM confirmed Highways England will carry out all the communication actions for the proposed scheme.  |             | HE SPM             | 3             | 3      | 9    | Tolerate      | Open           | 10/03/21                          |
| 22             | Risk                | Blocked KDU's and drainage assets within the scheme extents   | Future Maintenance Issues     | Maintenance             | Familiarisation | 5            | 5      | 25   | Highways England   | HE to carry out required drainage surveys and rectify defects accordingly. No drainage works associated with the proposed pavement scheme.   |             | HE SPM             | 3             | 3      | 9    | Tolerate      | Open           | 10/03/21                          |
| 23             | Risk                | Vegetation Clearance at location of proposed GPR in the footway   | Works Programme               | Environmental           | Pricing         | 2            | 2      | 4    | Highways England   | Contractor to assess if any vegetation clearance is required prior to carrying out GPR survey in footway and inform HE SPM and environment team.   |             | HE SPM             | 1             | 1      | 1    | Tolerate      | Open           | 10/03/21                          |
| 24             |                     |   |                               |                         |                 |              |        |      |                    |  |             |                    |               |        |      |               |                |                                   |
| 25             |                     |   |                               |                         |                 |              |        |      |                    |  |             |                    |               |        |      |               |                |                                   |
| 26             |                     |   |                               |                         |                 |              |        |      |                    |  |             |                    |               |        |      |               |                |                                   |
| 27             |                     |   |                               |                         |                 |              |        |      |                    |  |             |                    |               |        |      |               |                |                                   |
| 28             |                     |   |                               |                         |                 |              |        |      |                    |  |             |                    |               |        |      |               |                |                                   |
| 29             |                     |   |                               |                         |                 |              |        |      |                    |  |             |                    |               |        |      |               |                |                                   |
| 30             |                     |   |                               |                         |                 |              |        |      |                    |  |             |                    |               |        |      |               |                |                                   |