

CDM1 PRE-CONSTRUCTION STAGE INFORMATION

In accordance with regulation 4 of the Construction (Design & Management) Regulations 2015 The following information covering the planned works, site and environment is made available to prospective contractors to assist in the health and safety planning and management aspect of the tender process. This document will form the basis for the Construction Phase Plan and associated health and safety file that will be developed throughout the works.

POLICY OBJECTIVE STATEMENT

The *Employer* takes its obligations under environmental and health and safety legislation seriously and requires that its contractors and agents do likewise. This project will be designed and constructed as far as is reasonably practicable such that it is safe and without risk to the health or safety of the public, the people who will construct it or the subsequent users and other people affected by the completed project.

(1) Project information

Project Title	70067536 - SPATS1 997 M5 J19-20 Portbury to Clevedon Value Management
Project Reference	70067536-TST03
Designer	WSP
Employer	Highways England
Principal Designer	Highways England

(2) PLANNING AND MANAGEMENT OF THE PROJECT

(a) LOCATION OF THE PLANNED WORKS O.S Grid Reference. Road Number, River crossing etc. Nearest Settlement. Approach roads/Hazards. Post code if available	(1)Clapton Footbridge (OS Grid ref. east/north 346026/173007) (2)Clapton Road (OS Grid ref. east/north 348928/174949) (3)Naish Hill (OS Grid ref. east/north 347920/174000) (4)Wynhol Viaduct Northbound (OS Grid ref. east/north 345050/172884) (5)Wynhol Viaduct Southbound (OS Grid ref. east/north 345060/172870)
(b) CONTRACTOR DESIGN Extent of their design. Temporary works design. Specific elements design. Refer to further details included in the contract	The Contractor shall design, erect, maintain and remove any Temporary works required to undertake all Works, as described in Section 1 of the Works Information.
(c) Arrangements for ensuring cooperation between duty holders and work is coordinated	Highways England have provided the Works Information which states the duty holders in Section 2.3.3. The Principal Contractor shall liaise directly with the Employer who is both the Principal Designer and Client.

(3) Client Brief

<p>(a) NATURE & DESCRIPTION OF THE PLANNED WORKS</p> <p>Purpose of the works including main function and operational requirements of the finished project</p> <p>Main elements of the works and what they comprise</p>	<p>Undertake steel testing surveys as detailed in Section 1.2 of the Works Information. Works comprise:</p> <ol style="list-style-type: none">1) Pull-off test to the parapets and steel structural elements (Section 1.2.1);2) Paint testing for toxic elements content (Section 1.2.1);3) Paint testing to determine the composition, nature and type (Section 1.2.1);4) Ultrasonic thickness gauge test (Section 1.2.2);5) Dry film thickness test (Section 1.2.3);6) Visual survey (Section 1.2.4)
<p>(b) PROGRAMME (TIMEFRAME AND BUDGET)</p> <p>Start date. (provisional or set), Contract period, budget.</p> <p>Restrictions imposed at certain times of year.</p>	<p>Envisaged start dates and budgets are stated on the TST Front Sheet.</p>
<p>(c) CLIENT</p> <p>Main point of contact</p>	<p>Highways England</p>
<p>(d) SIGNIFICANT HAZARDS & PRECAUTIONS IDENTIFIED AT THE DESIGN STAGE</p> <p>Reference should be made to the designer's hazard identification to provide greater depth and detail and suggested precautions.</p> <p>Utilising wherever possible drawings and schedules.</p> <p>Refer contractor to specific appendices in the contract for risks at different stages of construction.</p> <p>E.g. Traffic Management. Site hoarding, pedestrian routes, underground and overhead services.</p>	<p>Significant hazards are identified in the Site Information, Section 1. Precautions are set out in the Works Information, Section 2.2. These include, but are not limited to, working near asbestos, the presence of bats and third party land access.</p> <p>Refer to the appended Designers Risk Register for further details.</p>
<p>(e) SIGNIFICANT HAZARDS & PRECAUTIONS IDENTIFIED AT THE CONSTRUCTION STAGE</p> <p>Include what steps the design team should reasonably take to ensure their designs help manage foreseeable risks during the construction phase and when maintaining, cleaning or demolishing a structure</p> <p>Compliance with Specification.</p> <p>Contamination.</p> <p>Risk associated with storage of materials.</p>	<p>The Works have been specified to manage and minimise the risk of harm in accordance with the principles of ERIC.</p> <p>The findings from the Contractor's Works will become Site Information for future construction works.</p> <p>The Contractor will maintain their risk register as per Section 2.3.6 of the Work Information.</p>
<p>(f) HIGH RISK OR COMPLEX HAZARDS (IF APPLICABLE SEE SCHEDULE 3)</p> <p>Include expected standards of health and safety, including safe working practices, and how these standards will be maintained throughout.</p>	<p>No complex or high risk hazards have been identified beyond those mentioned in Section 3d and 3e of the Pre Construction Information.</p>

(4) Existing Information Relevant to the Project

<p>(a) STRUCTURAL DRAWINGS AND SURVEYS Include any existing drawings or surveys e.g. Asbestos</p>	<p>Testing location drawings are included in the TST03 Work Information package.</p> <p>Sections 1.1, 1.2, 1.3 and 1.4 of the Site Information contain site information, record information, asbestos records and PI and 277 Reports respectively.</p> <p>Additional information is available on IAMIS.</p>
<p>(b) THE HEALTH AND SAFETY FILE Include any relevant information from an existing health and safety file.</p>	<p>Previous Health and Safety files have been produced and are available on IAMIS.</p>

T446: Design Risk Management Schedule

Project No	70067536	Project Name	M5 J19-20 Portbury to Clevedon
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Guidance Notes (see guidance notes page for more details)

Design risk management should be an integral part of the overall design development and designers should think of it in terms of considering constructability, maintainability, etc. Designers only need to document their consideration of risks in this simple risk management schedule format. There is no requirement for quantitative design risk assessments to be carried out/documentated and these should be avoided

* Risks should be considered in a logical sequence relating to the location/operational environment, constructability/installability, operability (normal/emergency), maintainability (inc routine cleaning, replacement, etc.), and alteration/decommissioning/dismantling/demolition, and should be categorised against those headings,

CIRIA guidance documents C755, C756, C686, C607, etc. provide a useful checklist and detailed guidance on the identification of risks to be considered during design and how those risks might be addressed - see detailed guidance notes for more details

§ Significant residual risks are those which are unusual, not obvious, difficult to manage, or where critical design assumptions apply. The documentation by designers of residual risks that cover well-known and understood hazards should be avoided.

Ref	Risk Category* & Phase where appropriate, e.g. location/environment, construction, operation, maintenance, alteration/demolition	Asset Key (Structure Key) commas between keys	Work Element/Location (where appropriate)	Hazard or Risk Issue Identified	Risk Management Owner	Design ERIC Action Required (e.g. hazard elimination/risk mitigation action, information to be provided to others)	Significant Temporary Works Requirements/Management Arrangements and/or any Special Erection/Installation Sequences or Requirements	Design Action Status/Final Resolution Notes (e.g. traceability of ERIC action, communication of significant residual risk, critical design criteria, etc.)	Significant Residual Risk [§]	Date Logged/ Reviewed	Raised By
1	Construction, Maintenance, Alteration/Demolition	1769, 1766, 1767, 11071, 1170	Structure	No asbestos management plan, therefore, there is potentially asbestos on the structure.	Highways England	Asbestos survey to be carried out, prior to intrusive works being carried out.	Potential asbestos removal if present, or isolating areas where asbestos is present and not working near it.	Residual Risk noted in Works Information.	Yes	29/06/2020	Liam Hennessey
2	Construction, Maintenance, Alteration/Demolition	1769, 1766, 1767, 11071, 1170	Structure	Excavation and construction around existing cabling and services/ Unknown services	Highways England	Utility returns to be reviewed and information is to be included in the design. contractors working methods are likely to mitigate risk with unknown services e.g. CAT scanning. Contractor to be supplied with C3 utility information and drawings showing approximate layout of utilities on plan. Identify all known statutory undertakers services on site prior to carrying out any excavation works. Take all necessary measures to avoid the services.		Residual Risk noted in Works Information.	Yes	29/06/2020	Liam Hennessey
3	Construction, Maintenance, Alteration/Demolition	1770,11071	Abutment access	Confined space with known bat roost.	Highways England	Likely to be mitigated effectively by contractors working methods i.e. Bat licence.		Residual Risk noted in Works Information.	Yes	29/06/2020	Liam Hennessey
4	Construction, Maintenance, Alteration/Demolition	1769, 1766, 1767, 11071, 1170	Parapets	Lead paint identified on the structure	Highways England	Ensure the contractor knows of the COSHH material. Consult environmental team.		Residual Risk noted in Works Information.	Yes	29/06/2020	Liam Hennessey
5	Construction, Maintenance, Alteration/Demolition	1770,11071	Access within structure	Confined Space access for inspection and maintenance.	Highways England	Designers aimed to minimise the need for future replacement, maintenance or inspection works to take place during design life of the highway, as well as facilitating safe access where this is not possible. If maintenance is carried out, then access to the confined space is required. To ascertain the condition, an internal inspection is required. Only confined space staff that are skilled trained and competent should enter the space.	None			29/06/2020	Liam Hennessey
6	Construction, Maintenance, Alteration/Demolition	1769, 1766, 1767, 11071, 1170	Structure and access to the structure	Working adjacent to the highway	Highways England	Designers aimed to minimise the need for future replacement, maintenance or inspection works to take place during design life of the highway, as well as facilitating safe access where this is not possible. Risks may be mitigated through segregation of users/ maintenance staff from highway. Information to be provided to others - Traffic Management arrangements to avoid work next to live traffic where possible	Traffic management measures will be required if access via third party land isn't agreed.			29/06/2020	Liam Hennessey

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7	Construction, Maintenance, Alteration/Demolition	1769, 1766, 1767, 11071, 1170	Structure	Damage to existing elements resulting in possible loss of structural integrity.	Highways England	Records have been reviewed and it appears that there is low risk of collapse.				29/06/2020	Liam Hennessey
8	Construction, Maintenance, Alteration/Demolition	1769, 1766, 1767, 11071, 1170	Access to the structure	Working at height - resulting in death or injury from falling	Highways England	SFARP design out the need for regular cleaning, maintenance and inspection that would necessitate work at height and design in safer ways of meeting a need without needing to work at height. (For example by providing access platforms.)				29/06/2020	Liam Hennessey
9	Construction, Maintenance, Alteration/Demolition	1770,11071	Structure	Contamination of nearby watercourse	Highways England	The level of risk should be reduced SFARP in the choice of design materials. Flood defence, Canal and River Trust and Environment Agency consent should be considered.				29/06/2020	Liam Hennessey
10	Construction, Maintenance, Alteration/Demolition	1769, 1766, 1767, 11071, 1170	Structure	Leptospirosis	Highways England	Contractor to ensure the following: Ensure appropriate facilities for first aid, hand washing on site. Full site induction for all persons working on site identifying the various health and safety issues, i.e. cover all open wounds and wear hand protection to cover and protect open wounds, do not eat on site, ensure familiarity with the symptoms and mechanisms for catching the disease, keep out of standing water.				29/06/2020	Liam Hennessey
11	Construction, Maintenance, Alteration/Demolition	1769, 1766, 1767, 11071, 1170	Access to the structure	Interface with the public	Highways England	Eliminate/Reduce: Where possible design out the need for regular maintenance and inspection that would require traffic management on the road or an interface with the public. This may be conducted by considering more expensive but longer lasting repairs. Information to provide: Areas where repairs are required have been provided to the contractor during ECI meetings so contractor can consider access and the interface with the public during the construction phase.				29/06/2020	Liam Hennessey
12	Construction, Maintenance, Alteration/Demolition	1769, 1766, 1767, 11071, 1170	Structure	Drawings are not marked as as-builts and were produced from various illegible documents and sources causing discrepancies that will impact cost, quality and programme of the construction. Potential undocumented substances within the structures and poor detailing.	Highways England	Ensure that any suspected inaccuracies are highlighted and possible mitigation/verification measures put into place.				29/06/2020	Liam Hennessey

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13	Construction, Maintenance, Alteration/Demolition	1769, 1766, 1767, 11071, 1170	Structure	Inhalation of fumes whilst applying protective coatings from steel preparation. This problem is exacerbated by the confined space location.	Highways England	Ensure the contractor knows of the material and manage in accordance with COSHH.				29/06/2020	Liam Hennessey
14	Construction, Maintenance, Alteration/Demolition	1770,11071	Structure	Damage to existing Post tensioned elements resulting in possible loss of structural integrity.	Highways England	Records have been reviewed and the positioning of post tensioned ducts has been considered in Works design.				29/06/2020	Liam Hennessey
15	Construction, Maintenance, Alteration/Demolition	1769, 1766, 1767, 11071, 1170	Structure	Environmental Health Officer (EHO) restricts noisy activities causing delay to the maintenance/construction programme or changes in proposed working methods. Disruption to the public and local residents.	Highways England	Contractor is to have early involvement with Local Authority EHO. Establish who will be disrupted and possibly relocated.	Contractor to employ measures to control noise levels.			29/06/2020	Liam Hennessey
16	Construction, Maintenance, Alteration/Demolition	1770,11071	Structure	Working over water	Highways England	Minimise the requirement to work directly above water or near to it. Any risk that is unavoidable due to the nature of the works is likely to be mitigated by the contractor's methodology. Drainage catchments are to be unblocked by the Contractor to minimise the risk associated with working over water.				29/06/2020	Liam Hennessey
17	Construction, Maintenance, Alteration/Demolition	11071, 1170	Abutment access	Access to the abutment and substructure - potential for personal injury to workers and damage to equipment.	Highways England	Likely to be mitigated effectively by contractors working methods				29/06/2020	Liam Hennessey
18	Construction, Maintenance, Alteration/Demolition	1769, 1766, 1767, 11071, 1170	All Sites.	Hazards are found on site which are not identified in pre-site visit risk assessments.	Consultant.	Obtain information that can be done in the desk study stage before going on site, to reduce the risk of coming across unexpected hazards. Assess the risk assessment whilst on site and add the live risks if not previously identified. Wear appropriate PPE.		No	02/07/2020	Lizzie Rees	

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