Area 9

Maintenance and Response Contract

Construction (Design and Management) Regulations 2015

Pre-Construction Information

Project : AREA 9 MAINTENANCE AND RESPONSE CONTRACT

Client :	Highways England The Cube 199 Wharfside Street
	Birmingham B1 1RN
Document :	Pre-Construction Information

Document Revision Record

Rev No.	Date	Details of Revisions	Approved
0	0	Tender Issue	AJP

CONTENTS

1 Description of the Project

- 1.1 Project title
- 1.2 Location
- 1.3 Timescale for the Works and Mobilisation
- 1.4 Nature of the project
- 1.5 Project Participants
- 1.6 Health and Safety Executive
- 1.7 Workplace (Health Safety and Welfare Regulations) 1992
- 1.8 Health and Safety File
- 1.9 As built drawings
- 1.10 Design Drawings
- 1.11 HSE Notification
- 1.12 A&E Hospitals
- 1.13 Relevant Fire Authorities
- 1.14 Relevant Police Authorities

2 Client's Considerations and Management Requirements

- 2.1 Structure and Organisation
- 2.2 Safety Goals for the Project and arrangements for monitoring/review
- 2.3 Permits and Authorisation Requirements
- 2.4 Emergency Procedures
- 2.5 RIDDOR and AIRSweb
- 2.6 Site Rules and Other Restrictions on Contractors, Suppliers and Others
- 2.7 Activities on or Adjacent to the Area
- 2.8 Arrangements for liaison between parties
- 2.9 Security requirements
- 2.10 Welfare Provision
- 2.11 Compound & Storage Constraints

3 Environmental Restrictions and Existing On-Site Risks

- 3.1 Safety Hazards
- 3.2 Health Hazards

4 Significant Design and Construction Hazards

- 4.1 Design Assumptions and Control Measures
- 4.2 Materials Requiring Particular Precautions
- 4.3 Traffic
- 4.4 Additional Considerations

5 The Construction Phase Plan

5.1 The Construction Phase Plan

6 The Health and Safety File

6.1 Client's Requirements

1 DESCRIPTION OF THE PROJECT

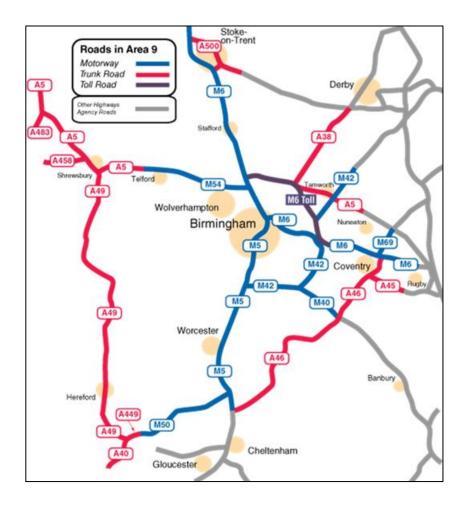
1.1 Project Title

Maintenance and Response Contract, Highways England Area 9.

1.2 Location

The existing road network comprises 2, 3 and 4 lane Motorways (including elevated sections) with hard shoulders and dual and single carriageway Trunk Roads of varying characteristics including sections of managed motorway. The Network also incorporates smart motorways, All Lane Running sections, junctions, interchanges, slip roads, a tunnel, link roads and highway structures, all as listed in the Network Information.

The boundaries of Area 9 and the motorways and trunk roads for which the *Client* is responsible are shown on the drawings in Sections 1.1.1 and Section 1.1.2 of the Network Information. The Area map is provided below:



A number of Highways England maintenance depots are included as part of Area 9 as detailed in Section 1.16 of the Network Information, and listed below:

- Bury Court
- Doxey
- Hilton Park
- Keele
- Longbridge
- Lydiate Ash
- Perry Barr
- Stafford Park
- Strensham
- Warndon
- Ansty
- Bescot
- Coleshill

1.3 Timescale for the project and mobilisation period

The *starting date* is as detailed in the Contract Data Part 1

The *access date* is as detailed in the Contract Data Part 1

The service period is 8 years

1.4 Nature of Project

The successful Tenderer will be appointed as the Maintenance and Response Principal Contractor and will be known under the contract as the *Contractor*.

The nature of the services required to be undertaken by the Principal Contractor are defined in the Area 9 Maintenance and Response Scope. This includes the operation and maintenance of Area 9 comprising incident response, cyclic and reactive maintenance, minor improvements and severe weather services.

Mobilisation period (time allowed between appointment and instruction to commence site works)

1.5 Key Duty Holders

The Client:Highways England (as per Contract Data Part 1)The Principal Designer
(Pre M&R contract award):Highways England (as per Contract Data Part 1), or
Others as appointed by Highways England

Principal Contractor (Pre M&R access date):

Principal Contractor (Post access date for works undertaken by the *Contractor* only): The Contractor (as per Contract Data Part 2)

Principal Contractor
(for works undertaken
by others):The Contractor may be instructed to act as PC for
work undertaken by others

1.6 Health and Safety Executive:

19 Ridgeway 9 Quinton Business Park Quinton Birmingham B32 1AL

1.7 Workplace (Health Safety and Welfare Regulations) 1992

The Principal Contractor's services may include depot improvement or renewal schemes. The Principal Contractor must note that a depot constitutes a workplace under the Workplace (Health, Safety and Welfare) Regulations 1992.

When depots are used as welfare facilities for Workers, then welfare must be provided as per CDM Regulation 2015 (CDM2015) schedule 2.

1.8 Health and Safety File

The Area 9 Health and Safety File is held by the current Progressive Asset Delivery

(PAD), Further details may be provided upon request to Highways England.

The H&S File consists of multiple H&S Files for schemes undertaken on the Affected Property in addition to asset maintenance records.

The Principal Designer shall develop the Health and Safety File throughout the life of the Project (see Section 6). The *Contractor* shall provide all the information necessary to support development of the Health and Safety File.

1.9 As Built Drawings

As built drawings are held by the current PAD, **Further** details may be provided upon request to Highways England.

1.10 **Design Drawings**

Information on current and planned renewal and improvement schemes are provided within the Network Information. As-built drawings, drawings for current schemes and drawings for current schemes for Area 9 are held by the current PAD, **EVALUATE:** Further details may be provided upon request to Highways England.

1.11 Site Surveys and Investigations Commissioned for the Project

Site surveys and investigations have been commissioned throughout previous Area 9 Projects, including specialist asbestos, drainage CCTV, structural condition, asset condition, ecological surveys and geotechnical surveys. Further details may be provided upon request to Highways England.

1.12 HSE Notification

This project is notifiable in accordance with the Construction (Design and Management) Regulations 2015. After appointment, the *Client*, is to complete the Form F10 and submit to the HSE. The *Client* may ask someone else to notify on their behalf.

If the work constituting construction as defined under CDM2015 Regulation 2 undertaken as an individual scheme is expected to require notification under CDM2015 Regulation 6, the Principal Contractor must notify the *Client* as soon as they are aware. The *Client* will notify the relevant enforcing authority in accordance with the Construction (Design and Management) Regulations 2015.

1.13 Nearest Accident and Emergency Hospitals

The following hospitals in close proximity to Area 9 possess Accident and Emergency departments (www.nhs.uk):

City Hospital	Heartlands Hospital
Dudley Road	Bordesley Green East
Birmingham	Birmingham
West Midlands	West Midlands
B18 7QH	B9 5SS
Queen Elizabeth Hospital Birmingham	Sandwell General Hospital
Mindelsohn Way	Lyndon
Edgbaston	West Bromwich
Birmingham	West Midlands
B15 2WB	B71 4HJ
Good Hope Hospital	Solihull Hospital
Rectory Road	Lode Lane
Sutton Coldfield	Solihull
West Midlands	West Midlands
B75 7RR	B91 2JL
Manor Hospital Moat Road Walsall WS2 9PS	Russells Hall Hospital Pensnett Road Dudley West Midlands DY1 2HQ
New Cross Hospital	George Eliot Hospital - Acute
Wolverhampton Road	Services
Heath Town	College Street
Wolverhampton	Nuneaton
West Midlands	Warwickshire
WV10 0QP	CV10 7DJ
Warwick Hospital	University Hospital (Coventry)
Lakin Road	Clifford Bridge Road
Warwick	Coventry
Warwickshire	West Midlands
CV34 5BW	CV2 2DX
Stafford Hospital	Queen's Hospital, Burton Upon Trent
Weston Road	Belvedere Road
Stafford	Burton -on- Trent
Staffordshire	Staffordshire
ST16 3SA	DE13 0RB

Royal Shrewsbury Hospital Mytton Oak Road Shrewsbury Shropshire SY3 8XQ	The Princess Royal Hospital Apley Castle Grainger Drive Telford Shropshire TF1 6TF
Leicester Royal Infirmary Leicester Royal Infirmary Infirmary Square Leicester Leicestershire LE1 5WW	Northampton General Hospital (Acute) Cliftonville Cliftonville Northampton Northamptonshire NN1 5BD
Horton General Hospital Oxford Road Banbury Oxfordshire OX16 9AL	The County Hospital, Wye Valley NHS Trust The County Hospital Union Walk Hereford Herefordshire HR1 2ER
Gloucestershire Royal Hospital Great Western Road Gloucester Gloucestershire GL1 3NN	Worcestershire Royal Hospital Charles Hastings Way Worcester Worcestershire WR5 1DD
Cheltenham General Hospital Sandford Road Cheltenham Gloucestershire GL53 7AN	Alexandra Hospital Woodrow Drive Redditch Worcestershire B98 7UB
John Radcliffe Hospital Headley Way Headington Oxford Oxfordshire OX3 9DU	

1.14 Relevant Fire Authorities

(www.cfoa.org.uk)

Derbyshire Fire & Rescue Service	Gloucestershire Fire & Rescue Service
DFRS headquarters	Fire Service HQ
The Old Hall	Waterwells Drive
Burton Road	Quedgeley
Littleover	Gloucester
Derby	GL2 2AX
DE23 6EH	

Leicestershire Fire and Rescue	Hereford & Worcester Fire and
Service	Rescue Service Headquarters
Leicester Road	2 Kings Court,
Ansty Frith	Charles Hastings Way,
Leicester	Worcester.
LE3 8HD	WR5 1JR
Shropshire Fire and Rescue Service	Staffordshire Fire and Rescue Service
Brigade Headquarters	Headquarters
St Michael's Street	Pirehill
Shrewsbury	Stone
Shropshire	Staffordshire
SY1 2HJ	ST15 0BS
Warwickshire Fire and Rescue	West Midlands Fire Service
Service	Headquarters
Service Headquarters	Public Relations Team
Warwick Street	99 Vauxhall Road
Leamington Spa	Birmingham
CV32 5LH	B7 4HW
Northamptonshire Fire and Rescue Service Fire Service Headquarters Moulton Way Northampton NN3 6XJ	

1.15 Relevant Police Authorities

(www.Police.uk)

Central Motorway Police Group Thornbridge Avenue Perry Barr Birmingham B42 2AG	West Mercia Police PO Box 55 Worcester WR3 8SP
Staffordshire Police Headquarters PO Box 3167 Stafford ST16 9JZ	West Midlands Police Headquarters Lloyd House Colmore Circus Birmingham B4 6NQ

Gwent Police Headquarters Croesyceiliog Cwmbrân NP44 2XJ	Leicestershire Police Force Headquarters St Johns Enderby Leicester LE19 2BX
Derbyshire Police Derbyshire Constabulary Butterley Hall Ripley DE5 3RS	Warwickshire Police Traffic Ops 1-4 Birmingham Road Coleshill Birmingham B46 1DJ
Dyfed-Powys Police Police Headquarters PO BOX 99 Llangunnor Carmarthen SA31 2PF	

2 CLIENTS CONSIDERATIONS AND MANAGEMENT REQUIREMENTS

2.1 Structure and Organisation

The Principal Contractor shall include an organogram for H&S in any Construction Phase Plan(s) to show the intended management structure and organisation (including liaison).

2.2 Safety Goals for the Project and Arrangements for Monitoring and Review

2.2.1 Safety Goals:

The *Client's* Key Objective for a 'Safe and Serviceable Network is set out in the Scope.

2.2.2 <u>Arrangements for Monitoring and Review:</u>

The Principal Contractor's performance will be measured in accordance with the Scope and the Collaborative Performance Framework Manual. This will be based on evidence produced by the Principal Contractor. Areas of poor performance will be highlighted for corrective action.

2.3 **Permits and Authorisation Requirements**

Any person working on the Motorway network (excluding those working within established traffic management) must be part of a valid health and safety scheme. This can be obtained by undertaking a Highways England H&S briefing/Induction and must have a valid Motorway Pass issued by the *Client*. The Principal Contractor shall operate a procedure for the identification of its own and sub-contract personnel requiring such a passport and liaise with the *Client* regarding issue. The procedure is to include for annual renewal and surrender when appropriate.

The Principal Contractor shall arrange for and obtain the required authorisation from the appropriate organisation(s) before commencing work under any of the following circumstances (this list is not exhaustive):

- Works under the control of another Principal Contractor;
- Works in the vicinity of overhead and underground services;
- Works with live electrical systems;
- Works on or adjacent to railway lines and waterways;
- Works requiring the imposition of temporary traffic orders;
- Scheduled road works;
- Works that require the diversion of traffic on to local authority highways;
- Works that require temporary closure of local authority highways, bridleways or footpaths;
- Noisy operations;
- Works with the potential for causing pollution;
- Works causing other environmental impacts;
- Works requiring the storage, movement and disposal of waste;
- Works requiring planning consent.

The works will require certain hazardous operations to be carried out for which the Principal Contractor must operate a permit to work system, including:

- works likely to produce dust or vapour clouds;
- hot works, (including welding, pipe jointing, thermic lance and stud attachment);
- high pressure water jetting;
- concrete saw cutting;
- demolition / dismantling;
- installation, alteration and removal of traffic management systems;
- working adjacent to, or connection to live services;
- working with asbestos;
- repetitive manual handling;
- working at height:
- working within confined spaces;
- lifting operations;
- excavations.

2.4 **Emergency Procedures**

The Principal Contractor shall incorporate emergency procedures into the Construction Phase Plan for review by the Principal Designer. The procedures shall include the immediate actions to be taken in the case of an emergency whether that be on a particular site or during any maintenance activities, whether from fire, explosion or other dangerous incident, or from an individual accident. The Principal Contractor is required to coordinate with the *Clients* Traffic Officer Service, other Principal Contractors, Regional Operations Centre, the Police and the Emergency Services.

Details of the A&E hospitals, relevant Fire Authorities and relevant Police Authorities are in sections 1.13 to 1.15 of this Pre-Construction Information.

Depot locations are provided in the Network Information, in addition to Pollution Control Devices locations within HADDMS data.

2.5 **RIDDOR**

Details of any accidents (RIDDOR and general public road users within or on the approaches to the traffic management extents) shall be immediately reported to the *Client's* Health & Safety Manager.

Details of any potentially significant major "Near Misses" shall also be reported within 24 hours. Details shall be provided of any corrective action that has been and/or shall be taken.

The *Contractor* must report all events in accordance with GG 128 – Requirements for reporting incidents, events and undesirable circumstances: health, safety, wellbeing, structural and environmental.

2.6 Site Rules and Other Restrictions on Contractors, Suppliers and Others

The Principal Contractor shall incorporate a list of rules into the Construction Phase Plan(s) which shall apply to offices, depots, works vehicles and site works as appropriate. Site rules should include the following:

- Correct PPE to be worn at all times;
- No alcohol or illegal drugs;
- No smoking;
- Explosives are not be used;
- Procedures for site visitors;
- No unauthorised persons shall enter the site;
- Procedures for reversing vehicles. Vehicles to reverse under the control of a Banks Person;
- Construction traffic shall comply with the requirements in Chapter 8 Part 2 of the Traffic Signs Manual;
- Parking in designated areas only;
- Vehicles must comply with site speed limit

The Principal Contractor's attention is drawn to the following documents and legislation relevant to this project (the list is not exhaustive):

- Environment Agency Pollution Prevention Guidelines for Works and Maintenance In or Near Water (PPG5);
- Avoiding danger from underground services, (HSG 47);
- Avoidance of danger from overhead electrical lines, (GS6);
- Safe use of vehicles on construction sites (HSG 144);
- Backs for the future; safe manual handling in construction (HSG149);
- The Control of Substances Hazardous to Health Regulations 2002 (COSHH);
- Traffic Signs Manual Chapter 8.

2.7 Activities on or Adjacent to the Area

Due to the nature of the Project it is not possible to list all the potential constraints on the work to be carried out during the Project. The Principal Contractor will notify the *Client* of any works it intends to carry out on or adjacent to Area 9, as per the notice period specified in the contract. The *Client* should investigate potential clashes with other activities on or adjacent to Area 9 on a day to day basis to ensure work activities in that area remain safe for both workers and the general public.

2.8 Arrangement for Liaison between Parties

The *Client* and Principal Contractor will hold regular meetings and develop systems to facilitate good communications between the parties, as per the Scope and any additional requirement instructed by the *Client*.

2.8.1 <u>Unforeseen Occurrences</u>

The Principal Contractor shall inform the *Client* upon the occurrence of an event, which creates either a serious health or safety hazard:

- to the health and safety of people;
- to the safe operation of any area of the live network and adjacent premises;
- that could result in major changes to the Project and/or to resources required to complete the work.

2.8.2 Change to the Notification Form F10

The Principal Contractor shall inform the Client of any changes to the following so that additional notification may be submitted to the HSE:

- significantly changed programme details;
- duration of Project;
- scope of the works undertaken under the Project;
- duty holders.

2.9 Security Requirements

The Construction Phase Plan(s) shall include details of the proposed security standards to be implemented across the differing work elements included within the Project.

All sites and working areas shall be left and kept in a safe condition outside working hours. All equipment shall be left secure and immobilised outside working hours.

The Principal Contractor shall consider that acts of trespass, vandalism and attempted theft can be expected across Area 9 and that these factors should be considered when formulating security measures.

2.9.1 General Public

The Principal Contractor shall ensure that all necessary precautions are in place to protect the general public from coming into contact with any harm from the construction and maintenance activities associated with the Project.

2.10 Welfare Provision

Welfare facilities exist within each of the *Client's* maintenance depots.

The Principal Contractor shall include details of the proposed welfare facilities to be provided for cyclic maintenance activities in the Area Construction Phase Plan. For discrete schemes, details of the proposed welfare facilities shall be provided in the Scheme Specific Construction Phase Plan(s). As a minimum, welfare facilities should be as outlined in Schedule 2 of the CDM Regulations 2015.

2.11 Compound & Storage Constraints

Temporary services may or may not be available. The Principal Contractor shall, for each discrete notifiable scheme, include details in the Scheme Specific Construction Phase Plan of the proposed temporary site compound and storage facilities.

The *Client* may provide permanent office and storage space as set out in the Scope and Network Information.

3 ENVIRONMENTAL RESTRICTIONS AND EXISTING ON-SITE RISKS

3.1 Safety Hazards

3.1.1 Boundaries and Access (Including Temporary Access)

The access and egress for each individual work site will be via signed access/egress points in accordance with the requirements of Traffic Signs Manual Chapter 8 and associated Codes of Practice etc. Provision and maintenance of access/egress points will be the responsibility of the Principal Contractor.

Parts of the network operate as Smart Motorways and ALR. The *Contractor* shall develop safe working methods for routine and emergency maintenance as well as for individual schemes on these parts of the Affected Property. The *Contractor* coordinates access with the ROC.

3.1.2 Existing and Adjacent Land Uses

The works will be performed at a variety of locations across Area 9. The present adjacent land use of Area 9 is varied but consists of a selection of urban and rural environments with housing, commercial, industrial, agricultural and development areas. A number of rivers cross or run adjacent to Area 9.

A number of railway lines cross or run adjacent to Area 9 and the Principal Contractor shall ensure that full consultation with Network Rail, or relevant rail operator, takes place before working in the vicinity of any railway line or associated overhead electrical equipment. There are three railway level crossings on the Area 9 Network of which only one is currently operational at A49 Onibury between Craven Arms and Ludlow (managed by Network Rail).

3.1.3 Existing Storage of Hazardous Materials

Hazardous materials are stored on work sites and in depots. These include common construction materials such as cement and concrete, plus fuels, adhesives, paints, solvents and cleaning products. A register of hazardous materials for which COSHH assessments have been carried out is maintained.

There is a risk of hazardous material being illegally dumped in the Affected Property at any time.

Information on Hazardous waste management included within the premises manuals provided within the Network Information. Requirements for waste management including licencing are detailed in Annex 14.

3.1.4 Location of Existing Services

Underground and overhead services may exist within and adjacent to the proposed working sites.

The *Client* shall search and liaise with the appropriate bodies in locating the services prior to commencing any work. The Principal Contractor shall confirm the presence of services on site and take the appropriate measures before commencing any work.

All live and redundant services within and adjacent to the works area shall be located, marked and protected.

Where overhead power lines cross the work areas, the Principal Contractor is advised to conduct a detailed examination of the site(s) to plan the access, manoeuvring and working of construction vehicles, plant and equipment, prior to work commencing on site.

3.1.5 Ground Conditions

The ground conditions across Area 9 vary widely in nature. Details of these conditions are available in the **mattern** database; summary data is available in the Network Information section 1.6.

3.1.6 Existing Structures - Stability or Fragile Materials

The Principal Contractor should be aware that existing structures across Area 9 will be affected by the works and will require due consideration with regards to their inherent structural stability during any construction or routine maintenance works. The *Clients* Structures database has details of the structures within Area 9; extracts from this database are included in the Network Information section 1.14. These structures may have associated shoring, strutting and other temporary support systems necessary to protect the existing structures.

Fragile materials exist on some structures (particularly depot and salt barn roofs). The Principal Contractor is made aware that a full risk assessment and H&S management plan is needed before attempting to gain access to or applying loads to potentially fragile materials.

Special consideration should be given to old assets within the Area 9 and the risks associated with maintaining and operating them.

Refer to the severe weather plan for details of high risk locations.

Low Bridges with Height Restrictions

Details of low bridges with height restrictions are contained in Network Information section 1.14 and the *Clients* Structures database.

Narrow/Constraint Verges on bridges - maintenance workers

Details of narrow and constraint verges on bridges are contained in Network Information section 1.14 and the *Clients* Structures database.

Steep Embankments

Details of steep embankments are contained in Network Information section 1.6.

Unprotected Edges/Substandard Parapet Heights

Details unprotected edges and substandard parapet heights are contained in Network Information section 1.14 and the *Clients* Structures database.

Tunnel Maintenance and Operation

Information regarding the maintenance and operational requirements for Meir tunnel are provided in the Network Information. Consideration should be given to the risk associated with carrying out maintenance operations within or in proximity of the tunnel.

3.1.7 <u>Electrical Information</u>

Information is contained in the Energy Procurement Strategy database and inventory which are located in Sections 1.13 and 2 of the Network Information respectively.

3.1.8 <u>Fuel pipelines</u>

Fuel pipelines are classed as Critical National Infrastructure Assets (CNI). The Principal Contractor shall contact the SE Emergency Planner during the mobilisation period to receive a briefing on CNI assets to ensure that method statements and risk assessments cover the requirements for working above, below, and in the vicinity of the assets, as appropriate. The Principal Contractor shall ensure the security of the asset information.

3.2 Health Hazards

3.2.1 Asbestos, Including Results of Surveys

Asbestos is present in Area 9. Details of known asbestos locations are provided in the Area Asbestos Management Plans.

3.2.2 Contaminated Land

Contamination information is stored in **Example**. Access can be provided upon request.

3.2.3 <u>Tar</u>

There is tar on certain routes within Area 9 network. Details of where it was located and remains in-situ are contained in Health and Safety Files for the relevant schemes.

3.2.4 Leptospirosis (Weil's Disease) and Other Water Borne Diseases

The Principal Contractor shall take appropriate measures (including employee training) to ensure that the risk of site personnel contracting water borne diseases such as Leptospirosis is minimised and controlled.

3.2.5 <u>Hazardous Materials Associated with Existing Structures</u>

Details regarding asbestos in structures are provided within the asbestos management plan, the as-built information and the inspection records.

3.2.6 <u>Health Risks arising from Client's Activities - Dust, Noise and Vibration</u>

Works may be carried out on or adjacent to Area 9 by other contractors. The *Client* and Principal Contractor shall coordinate their respective operations to ensure that the effects of dust, noise and vibration do not adversely affect the other party.

3.2.7 Fire Hazards

Fuel storage facilities exist in the *Clients* maintenance depots. Further details are provided in the Network Information and Severe Weather Plan.

3.2.8 Injurious Weed

Information regarding known injurious weed is provided in the Network Information section 1.7.

3.2.9 Flood risks

There are several flood risk locations within Area 9, as detailed in the Network Information. The Principal Contractor should manage risks and residual risks to avoid hazards at such locations.

Refer to data and the Severe Weather Plan for high risk locations.

4. SIGNIFICANT DESIGN AND CONSTRUCTION HAZARDS

4.1 **Design Assumptions and Control Measures**

Some designs have been prepared for renewal and improvement schemes for Area 9. The Principal Contractor is not required to undertake design as part of the Project.

The *Client* will provide the Principal Contractor with the following at the start of the Contract:

- access to the existing Area 9 Health and Safety File;
- access to all relevant inventory and information systems, as defined in the Scope.

4.2 Materials Requiring Particular Precautions

Particular care shall be taken whilst handling heavy/ large/ fragile pieces of debris/ precast elements/ structural elements. The Principal Contractor shall use mechanical handling where practicable.

Where the use of materials hazardous to health cannot be avoided the Principal Contractor shall ensure that a full COSHH assessment is carried out as relating not only to the workforce but also to members of the public. Suitable control measures shall be introduced to ensure that exposure levels are properly controlled.

Certain materials may cause damage to adjacent property or passing vehicles if they are not properly contained. The Principal Contractor shall ensure that adequate precautions are introduced to avoid such damage.

4.3 Traffic

All Temporary Traffic Management shall be in accordance with Chapter 8 of the Traffic Signs Manual.

Particular care and attention shall be paid to traffic safety when placing, altering and removing the traffic management arrangements. Attention shall be paid to traffic safety and management measures and interface with users within the Construction Phase Plan.

4.4 Additional Considerations

4.4.1 <u>Health Hazards</u>

The Principal Contractor shall stipulate procedures in the Construction Phase Plan to identify the characteristics of the materials specified or chosen for incorporation and shall ensure these characteristics are clearly understood by those required to handle, store, work with and dispose of such material.

Similarly, controls shall be stipulated and exercised to protect other persons at the site or members of the public from accidental contact with any hazardous material.

4.4.2 <u>Working at Night / Within the Hours of Darkness</u>

Working at night can introduce certain hazards including:

- poor visibility leading to slips, trips and falls;
- tiredness;
- dazzling due to traffic headlights;
- poor visibility for reversing vehicles.

The Principal Contractor shall identify all suitable measures to mitigate against the above hazards including any lighting requirements.

4.4.3 Manual Handling Operations

The Principal Contractor shall ensure that operatives are fully trained in manual handling procedures and wherever possible, provide mechanical handling aids to avoid such operations.

4.4.4 <u>Personal Protective Equipment (PPE)</u>

High visibility warning clothing complying with paragraph 6.3 of Chapter 8 Part 2 of the Traffic Signs Manual shall be worn at all times by all personnel whilst working on or adjacent to the trunk road and motorway network.

The Principal Contractor shall comply with the Personal Protective Equipment at Work Regulations 1992 in all other matters. The use of such equipment will be governed by the site rules (see Paragraph 2.6 of this document).

4.4.5 <u>Confined Spaces</u>

The Principal Contractor shall ensure operatives working in confined spaces are fully trained in accordance with the Confined Space Regulations 1997. Working methods shall wherever practicable seek to avoid the need for working in confined spaces.

4.4.6 <u>Temporary Works</u>

The Principal Contractor shall ensure that all temporary works are suitable for the intended use. The Principal Contractor shall pay particular attention to the installation and removal of temporary works.

4.4.7 Work at Height

The Principal Contractor shall wherever practicable employ working methods to avoid the need to work at height. Where working at height is required a protection system suitable for the type of works undertaken shall be used.

5. THE CONSTRUCTION PHASE PLAN

5.1 Construction Phase Plan

The Principal Contractor shall prepare the Area Construction Phase Plan relating to cyclic maintenance works as required by the Construction (Design and Management) Regulations 2015. This Plan shall be submitted to the *Client*, no later than five working days prior to the start of the construction phase, so that the *Client* may be advised as to its adequacy in accordance with Construction (Design and Management) Regulations 2015.

The recommended minimum content for the Construction Phase Plan is set out in the Construction (Design and Management) Regulations 2015.

6. THE HEALTH AND SAFETY FILE

6.1 *Clients* Requirements

The Principal Contractor shall provide all relevant information to the Principal Designer for inclusion in the Area 9 Health and Safety File.