

Works Information

Innovate UK

OREC River Frontage Remedial Works



Innovate UK

FAIRHURST

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C O N T E N T S

1.	WORKS INFORMATION DOCUMENTS	5
2.	DESCRIPTION AND SPECIFICATION OF WORKS	5
2.1.	General Design, Contracting Arrangements and Requirements.....	5
2.2.	Description of Works.....	5
2.2.1.	Main Scope of Works.....	5
2.2.2.	Protection of the Works	6
2.2.3.	Project Duration.....	7
2.3.	Specific Requirements for parts of the works	7
2.4.	Roles and Responsibilities.....	7
2.5.	Works to be designed by the Contractor	8
3.	INSPECTION, TESTING AND COMMISSIONING OF THE WORKS	9
3.1.	Inspections, Testing and Commissioning of the Works (cl. 40.1)	9
3.2.	Materials, facilities and samples for tests and inspections to be provided by the Employer or the Contractor (cl. 40.2).....	9
3.3.	Plant and Materials to be inspected before delivery to the Working Areas (cl. 41.1).....	10
3.4.	Reasons for use of works before Completion which do not amount to take over (cl. 35.2)	10
3.5.	Post Completion assistance.....	10
4.	CONSTRAINTS UPON HOW THE CONTRACTOR PROVIDES THE WORKS	11
4.1.	Site Operations.....	11
4.2.	Working Hours.....	11
4.3.	Publicity	11
4.4.	Traffic Management.....	11
4.5.	Movement of Craft	12
4.6.	Tidal related activities	12
4.7.	Non Tidal activities	12
4.8.	Material Deliveries by haulage vehicles	12
4.9.	Key Dates / Programme requirements.....	12
4.10.	Quality Assurance	13
4.11.	Health, safety, the environment issues, hazards and requirements	15
4.11.1.	CDM Regulations	15

4.11.2. Pollution controls – air, ground and water	16
4.11.3. Archaeological Interest and Fossils	18
4.11.4. Waste materials.....	18
4.12. Project Directory	18
4.13. Progress Meetings and Reports	19
4.13.1. General.....	19
4.13.2. Progress Reports.....	19
4.13.3. Other Reports	20
4.13.4. Progress Records and Photographs	20
4.13.5. Records	21
4.14. Consultation with Third Parties	21
4.15. Working methods and requirements	22
4.15.1. Setting out, levels, lines and profiles	22
4.15.2. Site Records and Documentation	22
4.15.3. Method Statements	23
4.15.4. Site meetings and liaison	23
4.15.5. Relevant Consents	23
4.16. Permissions.....	23
4.17. Tender Bulletins.....	24

1. WORKS INFORMATION DOCUMENTS

The following documents should be read in conjunction with this Works Information document:

Document Title	Reference Number
Pre-construction Information	D/I/D/128055/008
Site Information	D/I/D/128055/014
Concrete Repair Specification	D/I/D/128055/009
Concrete Repair Drawing	128055/6001/A
Revetment Exemplar Design Drawings	FU-0032-EU to 36-EU

2. DESCRIPTION AND SPECIFICATION OF WORKS

2.1. General Design, Contracting Arrangements and Requirements

This Works Information covers the general requirements of the proposed remedial works which consists primarily of demolition and repair works to the existing river frontage structures.

The Employer has engaged Fairhurst as the Principal Designer and Project Manager of the works associated with the existing structures.

The Contractor will carry out all civil and structural works associated with the demolition and repair works to the wharf in accordance with the documents included in this Works Information. The Contractor's design will be limited to design of engineered rock armour to revetment and all access or temporary works.

The Contractor shall, without limitation, be responsible for the Contractor's design (where included in scope), supply, installation, testing and commissioning of all works including all designs, supplies and works provided by any Sub-Contractor.

The works shall include (without limitation) the items shown on the drawings and/or as set out in the following description of works.

2.2. Description of Works

2.2.1. Main Scope of Works

The following list identifies the scope of works, which shall be carried out by the Contractor at the OREC site in Blyth, Northumberland. The list below shall not be considered as exhaustive.

For the location plan and details of the structures along the OREC river frontage, refer to the Site Information. For details of the works refer to Works Information.

- Area 4
Works based on performance specification – complete removal of described elements and repair of remaining structures.
 - Removal of the open timber quay structure - approx. 40m long and 8m wide (Structure 4a)
 - Making good of remaining structures, including removal of redundant remnants (e.g. fixings, etc.) and repairs associated with the demolished timber quay
- Area 5
Works based on performance specification – complete removal of described elements and repair of remaining structures.
 - Removal of derelict steel front gate of Dock 1 – approximately 18m wide (Structure 5a)
 - Removal of derelict timber front gate of Dock 2 – approximately 16m wide (Structure 5c)
 - Removal of derelict steel front gate of Dock 3 – approximately 21m wide (Structure 5f)
 - Making good of remaining structures, including removal of redundant remnants (e.g. gate hinges, fixings, etc.) and repairs associated with the removed dock gates
- Area 7
Works based on concrete repair specification and drawings provided in Works Information, and supported by the Contractor's inspection of the quay.
 - Inspection of the quay wall to agree and mark out the locations of the repair works
 - Repairs to RC piles showing cracking, spalling and corrosion to reinforcement along approximately 170m length of the quay wall
 - Repairs to damaged infill concrete planks of wall and localised filling of voids in back fill
- Area 8
Works based on the Contractor's design to performance specification – engineered revetment to be maintenance-free for minimum 20 years and able to withstand 1 in 200 years event. Exemplar design solution is provided in Works Information.
 - Design and installation of engineered rock armour to revetment to top of bank, assuring adequate surround to the existing 9 No. sewage outfalls - approximately 115m long and 4m high revetment
- Design and provision of plant, access and temporary works as necessary

2.2.2. Protection of the Works

Any damage caused by the Contractor to existing buildings, structures, roadways, services, property and the like shall be made good by the Contractor to the reasonable satisfaction of the Project Manager.

In the event that repair works are required due to damage by the Contractor, the Contractor shall submit specifications for materials and workmanship to be used in such repair to the Project Manager for written approval prior to commencement.

2.2.3. Project Duration

The construction phase is envisaged to commence in August 2019 and to last for approximately to 15 weeks. The duration will be confirmed by the Principal Contractor submitting the works programme with this tender.

2.3. Specific Requirements for parts of the works

The Contractor shall undertake sufficient inspection of the site prior to undertaking any works in order to verify the site information which has formed the basis of the design and scope of works herein. Any departures, discrepancies, errors, omissions or the like shall be advised to the Project Manager in writing at the earliest opportunity.

The timing of the surveys shall be sufficient to allow the Contractor and Supervisor a review of the findings against the design and scope of works, prior to procurement and mobilisation for the repair works.

2.4. Roles and Responsibilities

The Contractor is responsible for the following (whether temporary or permanent works unless noted otherwise):

- The design (where included in scope), provision, installation and construction works of the elements within the scope
- Provision of safety requirements including barriers or signage, including that as required for plant and machinery
- Compliance with and provision for the Employer's 'Safety Rules for Contractors and Sub-Contractors
- Costs of testing, analyses and commissioning and equipment required
- Any permits, licences or other authorisation required for compliancy with statutory authorities (Note: MMO Marine Licence and River Works Licence to be provided by the Employer). It is the Contractor's responsibility to ensure the design of works is in accordance with the Marine Licence and Works Licence.
- All temporary works to facilitate any aspect of work on site

Specifically, during construction of the works, the Contractor will be responsible for:

- Temporary electrical supplies and all other utilities;
- Services including Contractors toilets, accommodation and the like;
- Any fencing of working areas, storage areas and surveillance;
- Traffic management required to facilitate the works;

- All fixed plant, mobile plant, equipment, materials and labour for the safe transport, off-loading, storage, installation, cleaning, maintenance, Testing and Commissioning of the works to Completion; and
- Provisions for noise, dust and lighting tests as deemed necessary in relation to the works and under the reasonable direction of the Project Manager.

2.5. Works to be designed by the Contractor

The Contractor is to be responsible for the design of the engineered revetment included within the permanent works. The Contractor is also responsible for the design of all temporary works required for their proposed method of working.

All design and construction works must comply with all applicable laws, relevant current codes of practice, legal guidance, good practice and British Standards.

The Contractor shall cooperate with the Employer, the Project Manager, the Principal Designer and Others as reasonably necessary to meet these requirements. This includes provision of all necessary information, including a Quality File, related to the works.

The existing structures indicated on the drawings are based on the survey information collected to date, and included within the Site Information. The Contractor is responsible for carrying out his own surveys for the any areas affecting the works, checking all dimensions on site and the Project Manager should be made aware of any anomalies. The Contractor is to undertake any checking required of all elements of works including (without limitation) to the dimensions and condition of the existing structure.

The Contractor shall develop and finalise the design and specification of works and the Employer shall review it.

The works shall be designed, where required, and constructed in accordance with the drawings and specifications set out or referred to herein, and in accordance with the particular requirements and specifications in this Works Information.

Generally, the works shall be designed and installed in accordance with the latest versions of British Standards (or Eurocodes as may be applicable), codes of practice, regulations, legislation and good working practices.

The Contractor is to retain full and complete responsibility for the design and specification of the contractor designed parts of the works, in accordance with the principles of a design, supply and installation contract.

Existing Services

The information shown on existing services documentation is indicative only and is included for information only. It is the Contractor's responsibility to undertake additional investigations as required, to determine the actual location of existing services and the like.

3. INSPECTION, TESTING AND COMMISSIONING OF THE WORKS

3.1. Inspections, Testing and Commissioning of the Works (cl. 40.1)

Inspection, Testing and Commissioning of the works before, during and after Completion of the works shall be carried out in accordance with this Section.

Before the works or site establishment is commenced the Contractor shall submit to the Project Manager a condition survey of the existing site. This shall include but not be limited to walkways, surfacing, roadways, kerbs, the wharf, adjacent building exteriors at ground floor level, gates, railings, surface drainage and any other existing furniture. The temporary removal of any item must be agreed with the Project Manager, and the contractor is responsible for the storage and reinstatement of any removed item. The Contractor shall provide a minimum of 48 hour notice to the Project Manager prior to undertaking any inspection.

Before and in order to achieve Completion (in part or whole of the works) or Take Over of any part of the works the following procedures shall be carried out:

- a) Appropriate testing and inspections of the construction works shall be undertaken. These shall include but not be limited to concrete cube tests, weld test etc.
- b) The Contractor shall carry out any work resulting from the above inspections and notify the Project Manager when this work has been completed.
- c) Contractor to provide a minimum of 48 hours' notice prior to undertaking any test or inspection. Contractor to allow full and unlimited access to the Supervisor during his time on Site as required.
- d) No buried or enclosed works shall be covered up until the Supervisor has given written consent to do so
- e) The Contractor shall put into place a document and quality control system which records the works tested and / or inspected. The Contractor shall submit his proposed document and quality control system to the Project Manager prior to commencement on Site

In order to achieve Completion (in part or whole) of the works and subject to notice from the Contractor, Testing and Commissioning shall be carried out. At least seven working days before commencement, the Contractor shall provide a Testing schedule to the Employer and Project Manager including details of programme activities for Performance Tests. Any testing and commissioning shall be as agreed with the Project Manager or Supervisor during the works.

3.2. Materials, facilities and samples for tests and inspections to be provided by the Employer or the Contractor (cl. 40.2)

The Employer will provide no materials, facilities or samples for tests and inspections.

The Contractor will provide all materials, facilities or samples for tests and inspections as necessary.

3.3. Plant and Materials to be inspected before delivery to the Working Areas (cl. 41.1)

The Contractor's attention is drawn to the specification of materials included on the drawings and in the works specifications provided in conjunction with this Works Information document.

3.4. Reasons for use of works before Completion which do not amount to take over (cl. 35.2)

- Use of the works for the purposes of inspection, testing and commissioning
- Access, by the Employer or any third party by permission of the Employer, including for purposes of operations, management, supervision and the like
- Inspections by the Project Manager, Supervisor, Employer or any third party by permission of the Project Manager.
- It should be accepted that the wharf and the works will be operational throughout the works, but this will not constitute Take Over or have any implications upon Completion.
- The Contractor will not have possession of the whole of the site for the duration of the works and shall allow for flexibility in their work area during the works and cooperate fully with Employer. The wharf will remain operational during the works and the Employer shall be able to take possession of part or the entire site (save for that agreed to define the boundary of the contractor's site establishment) for periods of time, prior to completion of the works, but this will not constitute Take Over or have any implications upon Completion.

3.5. Post Completion assistance

The Contractor is not expected to provide post Completion assistance.

The Contractor shall provide Certificate of Conformity and CE mark for any item comprised in the works as required by law.

4. CONSTRAINTS UPON HOW THE CONTRACTOR PROVIDES THE WORKS

4.1. Site Operations

The Contractor shall make reference to his obligation for consultation with the relevant statutory authorities when undertaking any works within the river.

The Contractor shall ensure that he is fully aware of all restrictions due to the tidal nature of the works, and all subsequent additional requirements of working in a marine environment.

The Site may be used by the Employer, for purposes including operations, management, supervision and administration.

The Contractor is to allow for flexibility in their work area during the works. The Employer shall be able to take possession of part of the site for periods of time, prior to completion of the works.

4.2. Working Hours

The Contractor is to confirm their hours of working in the tender submission. The working hours shall be approved by the Project Manager.

4.3. Publicity

The Contractor shall not release any press releases, advertising, information or any other publicity to any third party without prior approval from the Employer.

4.4. Traffic Management

The Contractor shall, where necessary, set out traffic management within the works area in accordance with Chapter Eight of the Traffic Signs Manual 2009 and the Code of Practice for Safety at Street Works and Road Works, 2011. Traffic management shall also conform to the following CFPA's site rules:

- ID430-01: Information for Facility Users; and,
- ID311-05: Traffic & Pedestrian Access Rules Whilst On the Site.

Consideration of the OREC and wider community shall be made for all deliveries by either road or sea.

The Contractor shall agree and consult with the OREC, Harbour Master and other relevant authorities on any proposed deliveries via marine and land routes. All users shall be required to follow the signs and markings installed to aid traffic management within the wider Development. Materials and / or equipment shall not be offloaded onto the Development without first consulting with the Employer.

4.5. Movement of Craft

The Contractor shall comply with the requirements of the OREC, Harbour Master and other relevant authorities, regarding the movement of any craft within the tidal area. The Contractor shall provide notice of any operations that he intends to conduct afloat.

This includes the provision, installation and maintenance during the execution of the works all necessary navigation lights, markers, anchorages, beacons and buoys in accordance with the requirements of the Port Authority, who are responsible for the tidal area.

The Master, the Officer in Charge or the second mate of each floating craft/vessel shall be fluent in English and shall satisfy the Port Authority as to his competence to navigate safely within the area of jurisdiction

4.6. Tidal related activities

The tidal related activities will include any work which is required to be carried out within the tidal zone.

4.7. Non Tidal activities

The non-tidal activities shall include but not be limited to the mobilisation and demobilisation of plant and equipment, any concrete repairs above MHWs etc.

4.8. Material Deliveries by haulage vehicles

Normal deliveries are considered non-tidal and should be affected within the hours approved by the Project Manager.

For deliveries outside these hours the contractor shall seek 7 days in advance a dispensation from the Project Manager.

4.9. Key Dates / Programme requirements

All works shall be completed in accordance with the Contract Data.

Prior to mobilisation the Contractor shall submit a programme, in accordance with the specified time periods, in the format identified in the Contract Data. It shall show level of detail appropriate to each stage of the works and all activities and restraints, each of which shall be given a short title. All movements shall be numbered and annotated with earliest and latest event dates. Links, precedents and contingency in the programme shall be clearly shown on the programme.

Key Dates (if any) for completion of certain elements of the works are included in the Contract Data.

The Completion Date for the works is stated in the Contract Data.

The milestones comprising completed activities or groups of activities for payment purposes are as agreed based upon the Contractor's submitted activity schedule

The Contractor shall no later than 10 Business Days following Contract Date submit a programme, fully in accordance with the requirements of the Contract, identifying the sequence and duration of all key activities required to complete installation, testing and commission the works. The following activities and milestones shall be clearly identified, as a minimum:

- Submission of detailed design documentation
- Placing of orders for key materials/components, fabrication and lead-in times for delivery
- Commencement of works on Site
- Duration and activities of various works including any sequencing and phasing
- Testing and Inspection
- Completion

4.10. Quality Assurance

The Contractor shall submit detailed proposals of the QA system(s) he intends to adopt for the duration of the proposed works, no later than 10 Business Days following Contract Date.

The Contractor shall procure that all aspects of the works are the subject of quality management systems.

The quality management systems referred to above shall be reflected in appropriate quality plans, the standard of which shall be consistent with BSEN ISO 9001 or 9002 (as the case may be) or any equivalent standard which is generally recognised as having replaced them (or either of them).

Without limitation to the generality of the above there shall be:

- Design Quality Plan; and
- Works Quality Plan,

Provided that the Design Quality Plan and the Works Quality Plan may be incorporated into one document.

The Contractor shall ensure that the works are carried out in full and strict compliance with the Quality Plans.

The Quality Plans shall be submitted to the Project Manager and the Contractor shall not be entitled to implement or procure the implementation of either Quality Plan unless the Contractor is entitled to proceed with such implementation pursuant to the Review Procedure which shall be deemed to apply.

The Contractor shall from time to time submit to the Project Manager in accordance with the any changes to either of the Quality Plans required for such Quality Plan to continue to comply with the requirements set out above.

If there is no objection to a change to either Quality Plan proposed pursuant to the above the Quality Plan shall be amended to incorporate such change.

If either Quality Plan refers to, relies on or incorporates any quality manual or procedure, then such quality manual or procedure or the relevant parts of it shall be submitted to the Project Manager at the time that the relevant Quality Plan or part of (or change to) a Quality Plan is submitted.

The Contractor shall maintain a quality management system which shall:

- include his procedures for production, issue, distribution and filing of method statements to ensure the effective operation of the quality systems described above
- cause an audit of the quality systems at regular intervals and the findings of such audit will be reported to the Project Manager;
- require review of all quality systems at intervals agreed with the Project Manager to ensure their continued suitability and effectiveness;
- require liaison with the Project Manager on all matters relating to quality management; and
- require production of reports and their delivery to the Employer.

The Contractor shall permit the Employer to carry out periodic audits of the quality assurance systems at approximate intervals of three months and to carry out other periodic monitoring, spot checks and auditing of the Contractor's quality assurance systems. The Contractor shall co-operate with the Employer, including providing all information and documentation which they reasonably require in connection with their rights under this paragraph.

The Contractor is to provide a statement outlining:

- His organisation and management structure, including the names of key staff, their role and responsibilities and whether they are to be based on the Site or in an office off Site. In the event that they are based offsite, he should state the approximate proportion of their time they are expected to devote to this Project and, where appropriate, how this proportion will vary during the lifetime of the Project.
- His procedures for production, issue, distribution and filing of method statements and risk assessments for key elements of the works.
- His procedures for controlling the works to ensure a level of quality in compliance with the Contract. These should include reference to, and details of, inspection and test procedures and schedules; tests to be undertaken on process plant and frequencies thereof.
- His procedures for tool box talks and other procedures for ensuring that contract requirements are communicated to sub-Contractors and others.
- His procedures for dealing with requirements of Applicable Laws.

4.11. Health, safety, the environment issues, hazards and requirements

The Contractor shall make provision for meeting the Employer's requirements as outlined in this Works Information and documents in conjunction with it, particularly the Pre-construction Information.

4.11.1. CDM Regulations

The Pre-Construction Information prepared by the Principal Designer will be provided to the Contractor during the tender period. The Pre-Construction Information includes information about Health and Safety and contains risk assessments. These risk assessments, along with others which the Contractor foresees, are to be addressed by the Contractor in his Construction Phase Health and Safety Plans. These Construction Phase Plans will be reviewed for appropriateness in accordance with the CDM Regulations.

The Project Manager or Principal Designer will issue the F10 forms to the HSE, which is a notification of a forthcoming project.

Throughout the works the Project Manager will review the Contractor's methods statements and advice on Health and Safety matters arising.

General: The Contractor is required to comply with the Construction (Design and Management) Regulations 2015 (CDM Regulations) and relevant Approved Codes of Practice (ACoP) current at the time of installation.

Health and Safety Plan: The Contractor is required to submit a Construction Health and Safety Plan in accordance with Regulation 12 of the CDM Regulations not less than 1 week prior to commencing works on the Site.

Health and Safety File: A Health and Safety File shall be prepared by the Contractor in accordance with Regulation 12 of the CDM Regulations

Principal Contractor: The role and responsibilities of Principal Contractor under the CDM Regulations shall be carried out by the Contractor.

Designer: The role and responsibilities of the designer of the works under the CDM Regulations shall be performed by the Contractor.

Principal Designer: The Principal Designer is Fairhurst

The Contractor shall ensure that at all times the work, installation and method of working by him and his sub-contractor(s) complies with the Employer's Safety Rules and Regulations (including its Essential Safety Requirements) as applicable to the works and as presented in Annex 8 to this Works Information. The Contractor shall be deemed to have received a copy of these before commencement of his works on the Site.

All permanent and temporary works shall comply with all Applicable Laws and applicable codes of practice and guidance including (without limitation) the following:

- A. Health and Safety at Work, etc. Act 1974.
- B. CDM Regulations 2015.

C. Construction Regulation Handbook – produced by the Royal Society for the Prevention of Accidents.

The Health and Safety File will be collated by the Principal Designer. All as-built drawings, relevant material data sheets and operation manuals will be compiled into the Health and Safety file.

4.11.2. Pollution controls – air, ground and water

The Contractor shall acquaint himself with, and abide by the guidelines contained within, all relevant Pollution Prevention Guidelines (PPGs) produced by the EA and other guidance relevant to the project including, but not limited to:

- PPG1 General guide to the prevention of pollution;
- PPG2 Above ground oil storage;
- PPG3 Use and design of oil separators in surface water drainage systems;
- PPG5 Works and maintenance in or near water;
- PPG6 Working at construction or demolition sites;
- PPG8 Safe storage and disposal of used oils;
- PPG18 Managing fire water and major spillages;
- PPG21 Pollution incident response planning;
- PPG22 Incident response - dealing with spills;
- PPG26 Safe storage - drums and intermediate bulk containers;
- CIRIA C584, Coastal and marine environmental site guide;
- GreenBlue, Guidance on Marine Non-Native Species, 2013;
- BS 5228-2:2009, Code of practice for noise and vibration control on construction and open sites;
- IPIECA, Alien Invasive Species and the Oil and Gas Industry, Guidance for Prevention and Management, 2010;
- JNCC, Marine Monitoring Handbook, March 2001;
- JNCC, Statutory Nature Conservation Agency Protocol for Minimising the Risk of Injury to Marine Mammals from Piling Noise, August 2010;
- The Water Environment (Oil Storage) Regulations 2006;
- Environmental Standards for Discharges to Surface Waters; and,
- WMP2, Hazardous Waste - Interpretation of the definition and classification of hazardous waste, 2013, Environment Agency.

Compliance with the requirements of this Works Information shall not relieve the Contractor of any obligations or liabilities under this Contract or under the Control of Pollution Act 1974, Environmental Protection Act 1990 and any other relevant legislation.

The Contractor shall comply with the following conditions the following:

- Noise and vibration must be kept to a minimum by methods of work that conform to the 'Code of Practice for Noise and Vibration Control on Construction and Open Sites' (See BS 5228]. At all times the best practicable means as defined in the standard must be employed to reduce noise. Only the quietest plant or machinery should be used, and all equipment should be maintained in good mechanical order and fitted with appropriate silencers, mufflers or acoustic covers. Stationary noise sources should be sited as far away as possible from the adjacent fabrication and chemical plants and adjacent land. Acoustic barriers should be constructed when noise cannot be sufficiently reduced by careful siting of noise sources. All workers onsite must be made aware of the need to keep noise and vibration to a minimum, from building works, equipment, plant and machinery, radios, music, vehicles or any other sources. The movement of vehicles to and from the site must be controlled to minimise noise and disturbance to residents.
- The Contractor shall achieve the lowest reasonably practicable noise levels by utilising items of equipment, which have been specifically designed and/or modified to reduce the noise of normal operations. All static equipment shall be so located and installed as to minimise nuisance to persons living or working in the vicinity.
- All compressors shall be 'noise reduced' models fitted with properly lined and sealed acoustic covers which shall be kept closed when the machines are in use, and all ancillary pneumatic percussive tools shall be fitted with mufflers or silencers of the type recommended by the manufacturers.
- All vehicles and mechanical equipment used for the purpose of the Works shall be fitted with effective exhaust silencers and shall be maintained in good and efficient working order so that there is no extraneous noise.
- Before works start precautions should be taken to prevent smoke on site from machinery, vehicles or combustion. Bonfires are not permitted. Petrol and diesel engines used to power equipment and plant should not emit dark smoke once the running temperature of the engine has been reached, and should be regularly checked and maintained to prevent smoke and fumes.
- Prevention measures should be taken to minimise the formation and spread of dust and dirt.
- Where applicable, dust should be controlled preferably at source by a continuous fine water spray. To ensure that this is done an adequate water supply must be provided, together with a means of disposal of waste water. Wheels and tracks of vehicles should be cleaned prior to leaving the site thereby avoiding dirt trails on adjacent access ways and roads.
- Oil, petrol, diesel oil, lubricant or paint shall only be stored within the Site within an impervious bund or enclosure capable of containing at least 110% of the total volume of materials stored therein.

The Contractor shall ensure the roads, accesses, hard standings; footpaths and the like in and around the Site and the surrounding area are kept in a clean, clear and safe condition. Specific provision should be made so as not to affect the safe operation and use of the Site.

4.11.3. Archaeological Interest and Fossils

Unless specified elsewhere in the Contract, all fossils, coins, articles of value or antiquity and structures and items of geological or archaeological interest found on the site shall be placed under the care and authority of the Employer. The Contractor shall take all reasonable steps to protect such findings.

The Contractor shall immediately notify the Supervisor of any such discovery, who shall issue instructions for dealing with it. All costs or delays associated with any such discovery shall be notified to the Supervisor, for his consideration under the Contract.

4.11.4. Waste materials

The Contractor shall implement a suitable environmental management system in accordance with the requirements of ISO 14001 and general good practice as appropriate giving due consideration to sustainable installation methods.

4.12. Project Directory

The Contractor shall prepare, within 2 weeks of the Contract Date, information for the Project Directory to be completed by Others containing the names, addresses and all the contact details including e-mail addresses and mobile telephone numbers of all key personnel of the Contractor and his sub-Contractors, as agreed with the Project Manager. The list shall be subdivided by organisation and discipline and contain a brief reference to the person's responsibility regarding the Project.

The Contractor shall issue updates to the Directory monthly or as necessary to ensure that all current team members are listed.

The Contractor shall make the Directory updates available to all those included in the Directory, either electronically or on paper as requested.

The recipients of the Directory shall include, but not be limited to:

- The Contractor and his representatives
- The Employer and his representatives
- Key sub-contractors and their representatives
- The Project Manager
- The Employer's Consultants
- The EA and its representatives
- MMO and its representatives
- Innovate UK, OREC and its representatives

- The Emergency Services

4.13. Progress Meetings and Reports

4.13.1. General

The Agenda for the meetings will be prepared by the Contractor and forwarded to the Project Manager at least 4 clear working days prior to each meeting for comment. The Contractor shall prepare the minutes of each meeting and submit them to the Project Manager for approval.

4.13.2. Progress Reports

The Contractor shall prepare and issue to the Project Manager a monthly progress report and programme in accordance with the agreed meetings schedule(s). The monthly progress report shall include the following:

- Progress report for period covered by meeting
- Work programme for next reporting period
- Actual start dates of activities commenced since the previous update and reasons for any changes from the Accepted Programme
- Actual completion dates of activities completed since the previous update and reasons for any changes from the Accepted Programme
- The anticipated time for Completion, in working days, for activities in hand
- Any change requested by the Contractor to programmed Completion and the reasons for any change
- Proposals for retrieving of any slippage to the Accepted Programme
- Design issues arising during the period
- Confirmation of scheme costs estimate and budget forecast
- Traffic Management issues
- Payment schedule
- Agreement of Compensation Events
- Confirmation of payments and progress
- Sub-contractors and Suppliers
- Quality Matters
- Health & Safety/CDM issues
- Third Party Claims
- Risk Register

The Report shall be in the following format:

- (A) an **executive summary**;
- (B) a **programme of progress** in relation to the installation programme;
- (C) a **progress report** (including, if requested by the Project Manager, mechanical and engineering services report, planning programme report and procurement status);
- (D) an up to date **risk register** (incorporating any risk identified in the Technical Report);
- (E) a progress report on any **Relevant Consents** required to be obtained according to the Installation Programme including any challenges to the validity of any such Authorisations already obtained;
- (F) **planning permission status** Contractor to review impact of works on planning approval and advise any action required where applicable;
- (G) details of all **variations** to the works proposed or confirmed;
- (H) a statement as to whether any of the following occurred in the period, together with details thereof:
 - (aa) **claims** referred to dispute resolution;
 - (bb) **disputes** arising; and
 - (cc) **extensions** of time granted;
- (I) a **health and safety report**;
- (J) information relating to any event which may cause **delay to the** Completion of the works;
- (K) a copy of each **Acceptance Certificate** issued by the Project Manager;
- (L) such **other matters** as the Project Manager may reasonably request;

Progress reports shall assist in the assessment of completion of milestones for payment for the works. To this end, the Contractor shall report progress against the items listed in the Activity Schedule.

4.13.3. Other Reports

The Contractor shall prepare any special reports requested by the Project Manager which may cover subjects such as methods and techniques used in construction/demolition of structures, concrete repair, cathodic protection etc.

4.13.4. Progress Records and Photographs

The Contractor, in conjunction with the Supervisor, shall maintain a factual record of the construction works including: a description of the progress of the works, materials and volumes etc., waste materials disposal records, QA test results, compliance tests reports, commissioning reports and testing photographs and relevant drawings. All records shall be in accordance with relevant British Standards.

The Contractor shall maintain a digital photographic record of the works which shall be provided to the Project Manager. The record shall commence before the works commence and cover the works area and the proposed routes to the works area. The record shall be taken as still photographs throughout the works. The copyright of all photographs shall be vested in the Employer. The photographs shall not be handed over to any third party or used for any promotional or advertising feature by the Principal Contractor without the Employer's approval.

Where necessary records and reporting of elements of works should be kept, collated and be made available for submission to the appropriate regulator in accordance with any conditions of the works and details of all records and associated testing in accordance with any conditions of the works.

4.13.5. Records

Copies of all takeover documents, design records and the like shall be retained by the Contractor for a period of 12 years after Completion, in a format that will enable ready reproduction of the documents at any time during that period. The Contractor's attention is drawn to the problems associated with reproduction of information stored in digital format in this regard.

The Contractor shall comply with the Employer's requirements for document numbering.

For each and every formal issue, the Contractor shall provide all drawings for the works in accordance with the following requirements:

- Except where noted otherwise, two hard copies. The original (master) set of full size digitally-based drawings, on a durable medium no larger than A1 size, suitable for reproducing copies, of the final 'as-built' Scheme Layout details, and
- Two (2) electronic copies in digital AutoCAD release 2015 format, loaded onto separate, clearly labelled CD's.

For each and every formal issue of documents, the Contractor shall provide all design documents for the works in accordance with the following requirements:

- Two electronic copies (loaded onto separate CD discs) of all design deliverables other than drawings (for example specifications, designers risk assessments, method statements and the like) shall be provided. Issue of electronic information shall include editable format, i.e. in original recognised Microsoft Office software format (Excel, Word and the like)

The format for labelling and indexing shall be submitted for approval of the Project Manager.

4.14. Consultation with Third Parties

The contractor shall participate in all necessary consultations with 3rd parties for the works.

Any correspondence with the aforementioned 3rd Parties shall be copied to the Project Manager for reference, at the time of sending.

Close consideration shall have to be given by the Contractor to his chosen method of working and to the consultation required with the Port Authority who have jurisdiction over the River.

4.15. Working methods and requirements

4.15.1. Setting out, levels, lines and profiles

The Contractor shall be responsible for all setting-out of the proposed works which shall be referenced back to the Ordnance Survey datum and the works drawings.

The Contractor shall establish permanent site survey stations as part of the control systems for the works. The site survey stations information shall be forwarded to the Project Manager. The co-ordinates (line) and level of the stations shall be checked and maintained during the works. Any discrepancy from the information provided shall be notified to the Project Manager

The co-ordinates (line) and level of the stations shall be re-checked prior to handover of the works and the datum information shall be included on the As-built drawings (with note advising accuracy of information presented).

4.15.2. Site Records and Documentation

The Contractor is required to keep on Site for reference by all supervisory personnel

- a. Manufacturers' current literature relating to all products to be used in the works.
- b. Any relevant British Standards, code of practice or the like quoted in the design information.

A photographic record is to be made by the Contractor at minimum weekly intervals during the installation period to identify progress and any problems encountered on the Site.

The photographs are to be provided in electronic format on CD. Photographs must be in colour and to a suitable standard of definition. The images should be titled and referenced.

The title should include, as a minimum, the following information:

- Location.
- Description.
- Contractor.
- Date.
- Employer Reference Number.

The CD records should be indexed with the same title information. Any electronic files shall be suitably named to allow ease of indexation and filing. The Contractor shall not use random or default file names for any electronic files.

4.15.3. Method Statements

The Contractor shall provide Method Statements setting out the proposals to organise labour and Sub-contracted labour, control the works and the Site of the works and carry out the various operations to complete the works.

Each Method Statement shall include a suitable and sufficiently complete risk assessment completed by a sufficiently competent person identifying the hazards and evaluating the extent of the risks involved. The assessment shall address the controlling and mitigation measures to be taken to safeguard the workforce, operators, members of the public and property.

The Method Statement shall also identify any vehicles, plant and lifting equipment to be used in the various operations with confirmation that current test certificates apply and that the equipment is suitable for the particular operation.

Contractors shall include in their Method Statement an outline programme of the Site works together with manning levels linked to the various operations, along with the names and brief details and experience of Site Engineers and/or Supervisors, Safety Officers and Planning Engineers.

Method statements should be submitted to the Project Manager for review.

4.15.4. Site meetings and liaison

The Supervisor will be the point of liaison for normal day to day issues such as quality assurance and monitoring progress.

Any formal correspondence should be to the Project Manager.

Site Meetings will be held every fortnight or as directed by the Project Manager. The Contractor shall ensure a Senior representative is present who has sufficient authority and responsibility to influence the Contractors Site operations to ensure successful delivery of the works.

The Contractor will be responsible for generating a set of minutes which is to be circulated for review, comment and eventual agreement prior to formal issue / adoption as formal record of meeting.

4.15.5. Relevant Consents

The Contractor is responsible for ensuring that the execution of his works complies with the conditions imposed by the applicable consents obtained by the Employer. Any amendments or other consents which may be required for the Contractor to execute the works shall be the responsibility of the Contractor and may involve close cooperation and coordination between the Contractor, the Employer, the Project Manager and others.

4.16. Permissions

The Marine Licence and River Works Licence for the works will be provided by the Employer. The Project Manager shall supply all relevant documents.

The Contractor shall obtain any additional permits, licences or other authorisation required for compliancy with statutory authorities.

The Contractor shall seek and adhere to permissions for working practices and procedures as outlined and agreed in Section 3.

4.17. Tender Bulletins

This Works Information may be amended and supplemented as set out in the tender bulletin(s) issued to the Contractor.

The Contractor shall make sufficient provision for all requirements as identified in the tender bulletin(s). If additional copies are required, the Contractor shall make formal request to the Project Manager.

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