Environment Agency
NEC4 engineering and construction contract (ECC)
Scope

Project / contract information

Project name	Horseshoe Corner Sluice Flap Valves
Project 1B1S reference	ENV0002636C
Contract reference	33545
Date	02 12 2022
Version number	A3-C07
Author	[redacted]

Revision history

Revision date	Summary of changes	Version number
16 Sep 2021	Minor updates to address *Contractor* queries	A3-C04
17 Sep 2021	Updates to document references	A3-C05
26 Jan 2022	Minor updates in line with *Contractor* pre contract queries	A3-C06
02 December 2022	Minor updates in line with revised CST	A3 C07

This Scope should be read in conjunction with the version of the Minimum Technical Requirements current at the Contract Date. In the event of conflict, this Scope shall prevail. The *works* are to be compliant with the following version of the Minimum Technical Requirements:

Document	Document Title	Version No	Issue date

LIT 13258	Minimum Technical Requirements	11	5 May 2021

Contents List

S 100 Description of the *works*

S 101 Description of the *works*

The *works* regard all activities planned to be undertaken in the replacement of the flap valves and associated works at the Horseshoe Corner Sluice The *works* include:

- Access to the site including construction equipment including crane
- Setup and isolation of the site including provision of first aid and welfare facilities.
- Removal and subsequent reinstatement of part of the sluice's outfall chamber overhead platform and walkway
- Design of flap valves, winches (as stated in S301
- Removal of the existing flap valves and winches.
- Installation of the new flap valves and winches.
- Carrying out of required remedial or make-good works. They are to be agreed on site with the *Supervisor* who will consult with the *Project Manager* and Principal Designer for instruction under the Contract
- Strengthening works to the blockwork wall in the sluice's outlet chamber
- Demobilisation, including waste management and site reinstatement.

The drawings and supplementary specifications describing the *works* are included in S 1701 and S 1702

The baseline setting out information is on the general arrangement drawing ENV0002636C JAC ZZ 00-DR-C-0005. The *Contractor* will establish these lines on site and confirm the position with the *Supervisor* before commencement of any construction works The *Contractor* shall check the provision of any level reference points shown on the drawings and confirm the position and level with the *Supervisor* before use for setting out the *works.* The *Contractor* shall inform the *Project Manager* when all setting out reference points have been agreed, checked and confirmed.

S 102 Purpose of the *works*/ Outcome required

The sluice consists of two chambers, with the downstream chamber (outfall) equipped with 2 no tidal flap valves, covering a pair of identical concrete box culverts. The upstream chamber (outlet) contains a further set of flap valves and isolation penstocks. The upstream chamber also contains a concrete blockwork dividing wall.

The existing downstream chamber flap valves fail to prevent backflow upstream: it has been observed that they do not adequately seal, leaking excessive water during rising tides from the River Thames into the Gores Brook.

A site inspection, including topographic survey and intrusive materials testing by BAM was carried out in February 2020, followed by a technical report produced by Jacobs

This project seeks to carry out the replacement of the existing defective outfall flap valves (two number) at Horseshoe Corner Tidal Sluice on the Gores Brook where it discharges to the River Thames, in the London Borough of Barking and Dagenham. The product should resolve all leakage issues arising from the existing flap valves and supporting headwall. The downstream outfall chamber flaps are to be replaced to prevent no significant volume of water from the River Thames travelling through the Horseshoe Corner Sluice, upstream into Gores Brook

It is expected the product should meet all *Client* MEICA standards and specifications for flap valves and meets the requirements of the end users (Environment Agency Hertfordshire and North London Asset Performance and Field Teams) who are responsible for maintaining the flaps and outfall The replacement of both flap valves will help to protect properties and businesses near the Gores Brook where it discharges into River Thames from breach of the tidal defences

S 200 General constraints on how the *Contractor* provides the *works*

S 201 General constraints

Access to the Horseshoe Sluice compound gates is through the adjacent Cemex Dagenham depot off Halyard Street, Choats Road, Dagenham and requires prior notification to the Cemex site manager. The *Contractor* shall liaise with the *Project Manager* to confirm access with the Cemex site manager via the *Client*'s Estates team (Who will also provide Notice of Intended Entry to CEMEX before the *Contractor* can gain entry) The *Contractor* shall ensure that confirmation is obtained before attempting any access. Pedestrian access through the Cemex depot is not allowed. The *Contractor* shall sign in with Cemex prior to traversing the Cemex site. Notification is required for both vehicles and personnel

Access from the Horseshoe Sluice compound gates to the outfall chamber is only available using stairs affixed to the tidal flood wall No vehicular access over the tidal flood wall to the outfall is available. The use of a crane is required. The crane landing will require to be cleared and secured during mobilisation and prior to the crane arriving on site. Only one site position is suitable for the crane to be located (and was evaluated for loading services etc during the 2020 detailed asset inspection)

Parking on site is limited. The number of vehicles and location of parking will need to be coordinated between the *Contractor* and the *Client* and Cemex site managers.

The *Contractor* manages his operations so as not to prevent the *Client* from operating the adjacent Horseshoe pumping station

The *Contractor* shall obtain any relevant Public Right of Way (PRoW) temporary closures prior to commencing the works and provide notices of temporary closures on site.

Materials that are hazardous or toxic to the environment are to be avoided, due to risk of contamination All sealants, lubricants and mortars used must be checked by the *Contractor* for safe use in a watercourse, prior to application

The *Contractor* shall undertake the *works* in accordance with the relevant environmental documents contained within S 1704.

Works will be carried out in a confined space and the appropriate safety measures must be applied, including utilising only personnel that is trained to a satisfactory level and on site rescue team and notification of the local emergency services.

Oil, solvents, and fuel stored on site for the crane, generators and other tools, equipment and machinery must be stored in a safe location with measures in place for the prevention and control of spills

All containers of hazardous materials must be labelled as per the COSHH regulations and stored appropriately.

The site is in tidal environment. Works should take into consideration tidal cycling for works carried out in the sluice chambers The *Contractor* maintains communications with the Thames Barrier for planned/emergency closures and monitor the weather for rain or storms as these events can affect water levels at the site.

The removal and installation of the flap valves should aim to be carried out with minimal damage and changes to the existing concrete structures Any damage is repaired by the *Contractor*

S 202 Confidentiality

The *Contractor* does not disclose information in connection with the *works* except when necessary to carry out their duties under the contract or their obligations under the contract

The *Contractor* may publicise the services only with the *Client's* written permission.

S 203 Security and protection on the site

Vehicle access to the site requires prior notification and agreement to the Cemex site manager. Initial notice of entry will shall be undertaken by the *Client'*s Estates team Subsequent notification will be by the *Contractor*.

The area around the outfall will require to be isolated for the duration of the *works* and the *Contractor* ensures that public access along the tidal flood wall, to the site, is restricted.

The site will require temporary fencing and constant monitoring for safekeeping of the equipment and materials, as well as preventing unauthorised access to the site

S 204 Security and identification of people

All personnel must be appropriately trained and experienced for the task at hand and the *Contractor* is to provide evidence if required by the *Project Manager*.

S 205 Protection of existing structures and services

The existing sluice must be protected during the *works*. Any damage to the structure during the *works* including the removal of the flaps and winches must be remediated. Proposals should be submitted by the *Contractor* for acceptance by the *Project Manager*.

The flood wall section adjacent to the site should not be damaged, breached or used for load bearing during the *works*.

S 206 Protection of the *works*

The *Contractor* protects the *works*, Equipment, Plant and Materials, liable to damage either by the weather or by the method used for carrying out the *works*

The *Contractor* shall be responsible for the repair of any damage occurring as a result of their actions to the satisfaction of the *Supervisor*.

The winches are equipped with a shroud for protection against weather elements and vandalism, as described in the design specifications ENV0002636C-JAC-ZZ-00-TN-ME-0001-A3-C07-Horseshoe Corner Sluice Flap Valve & Winch Specifications

S 207 Cleanliness of the roads

The access path for the crane shall be cleaned of obstacles and deposits of aggregate or other materials stored on the Cemex depot.

The *Contractor* allows for a road sweeper to clean public roads leading to Cemex site on completion

S 208 Traffic management

The area around the outfall will require to be isolated for the duration of the *works* and the *Contractor* ensures that public access along the tidal flood wall, to the site, is restricted. The *Contractor* erects suitable notices on the site fencing

Vehicle movement through the Cemex depot to be coordinated with the Cemex site manager. Cemex Site Manager is to be confirmed with the *Client*

Vehicle movement through the *Client* compound to be coordinated with the *Client* field team manager ([redacted]).

S 209 Condition survey

The *Contractor* is to undertake a pre entry condition survey of the working area and access route and a post *works* condition survey in conjunction with the *Supervisor* The *Contractor* is to identify any deterioration as a result of the *works* and make proposals for the *Project Manager* acceptance to reinstate the site and access route to a condition not less than that which existed prior to the *Contractor*'s entry.

S 2010 Consideration of Others

The *Contractor* is to collaborate with others along the access route(s) and not interfere with their access.

S 2011 Control of site personnel

The *Contractor* shall plan for the control of people working and visiting the Site Attention should be given to areas where access is restricted and/or specific permits to work are required.

All personnel engaged in the *works* must have the appropriate licences and permits, including:

- CSCS card for all personnel working at or visiting the work site. To be provided upon request (card detailing date obtained and expiration date).
- Confined space training (medium risk) for personnel accessing and carrying out work in the sluice chambers. To be provided upon request (certificate detailing level, date obtained and expiration date)
- Confined space entry permit (to be provided by the *Contractor* prior to any works)
- Hot works permit (to be provided by the *Contractor* prior to any works)

The *Contractor* shall maintain a visitors book and keep records of inductions etc. A system shall be provided to ensure all visitors, particularly repeat visitors not needing further induction, are aware of ongoing activities on Site and any resulting hazards on a day by day basis.

S 2012 Site cleanliness

The *Contractor* shall maintain the Site in a clean, safe and tidy condition, clear of debris Welfare facilities shall be regularly cleaned, and rubbish removed from the Site Materials, Plant and Equipment are positioned, stored and stacked in a safe and orderly manner.

Footpaths and pedestrian ways should be maintained and kept clear to reduce the risk of slips, trips and falls

Flammable items and waste should be kept in safe location to minimise risk of fires

The *Contractor* is to undertake a litter pick of the working area prior to completion.

S 2013 Waste materials

The *Contractor* prepares a Site Waste Management Plan (SWMP) in the *Client*'s standard format prior to commencement of the *works* The *Contractor* updates this until Completion and makes it available for the *Project Manager's* inspection on request The *Contractor* completes the accompanying Site Waste Management Plan data sheets monthly and includes them in the *Contractor*'s monthly reports.

Four weeks before the first access date, the *Contractor* completes and signs the declaration in the 'project details' section of the SWMP template. The *Contractor* then uses the 'planning' section of the SWMP template to forecast waste generation on the contract and identify waste management options following the waste hierarchy approach (reduce > reuse > recycle > disposal). The *Contractor* also agrees waste management targets for the contract.

Waste Duty of Care information and permits are identified and obtained by the *Contractor.* In addition, the *Contractor* completes the 'carrier and tip details' section of the SWMP The *Contractor* undertakes training and ensures that employees and Subcontractors are aware of the SWMP and co-operate with it. Details of wastes generated and reused on the *works* and wastes removed from the Site are kept by the *Contractor* and used to update the 'actuals' section of the SWMP.

On Completion of the physical works on Site, the *Contractor* signs the declaration in the 'sign-off' section of the SWMP and submits the completed SWMP to the *Project Manager*

No hazardous material waste are expected to be generated during the *works*.

All non-hazardous waste generated during works should be stored safely, until transferred to licenced facilities for disposal, based on waste type.

Any soil included in waste must be inspected to ensure it is not contaminated prior to disposal

The removed flap valves and winches should be transferred to a facility licenced with recycling and disposal of metals.

S 2014 Deleterious and hazardous materials

All substances potentially harmful to human health shall be stored in a locked store in accordance with manufacturer's storage recommendations

The *Contractor* shall provide a list of substances forming part of the *works* which are covered by the COSHH Regulations to the *Project Manager.* For each substance listed a detailed product sheet must be submitted to the *Project Manager* at the design stage

No materials hazardous to the environment are allowed to be used near or over water and the risk of water contamination must be controlled for the duration of the *works*

S 2015 Site branding

The *Contractor* provides, maintains and removes upon Completion site branding for a low profile site as detailed in the *Client's* Capital Project Site branding guide, referenced LIT14200

The *Contractor* erects and maintains, for the duration of the Contract, a signboard at the main site compound, to be agreed by the *Project Manager*.

The sign boards are maintained in good condition throughout the period of the Contract and removed by the *Contractor* on Completion of the Contract Where necessary, planning consent and/or all necessary permissions, approvals and consents for their establishment are obtained by the *Contractor.*

S 300 *Contractor's* design

S 301 Design responsibility

As well as the design of the *Contractor*'s temporary works the *Contractor* is responsible for the design of the new flap valves and winches, including the preparation of Operation & Maintenance documents, compliance with the *Client's* pre-construction management tool (PCMT) and Safety, Health, Environment and Wellbeing Code of Practice (SHEW CoP)

Demonstrate application of principles of prevention in relation to Health and Safety implications of the design for construction, operation, maintenance and use of the completed structures including:

- Preparation of Designer's Risk Assessments,
- Identifying significant SHE information on all drawings,
- Producing buildability statements for each design element,
- Applying the Environment Agency's Designer RAG List

Provision of information requested by the CDM Principal Designer including assessment of competence

Inviting the CDM Principal Designer to attend all internal design reviews. These are at monthly intervals or more frequently as appropriate.

An updated pre-construction Carbon Calculator based on the final detailed design.

S 302 Design submission procedures

Submission for approval should include as a minimum:

- Calculations demonstrating suitability of designed items.
- Drawings of general arrangement and details of designed items.
- Specifications of *Contractor*'s proposals.
- List of all designed items and their parts (including any items requiring maintenance/replacement less than 30years).
- Factory test procedure that demonstrates suitability of items.
- Installation method statement.
- Designer's risk assessments
- Buildability Statements
- Any additional technical specifications to support the detailed design.

A design package is only considered as being complete when accompanied by a signed check certificate and accompanied by all documents / calculations / drawings necessary to enable a design review to take place. Only complete design package submissions are reviewed.

The *Contractor* submits the design for acceptance by the *Project Manager* The *Contractor* allows minimum 3 weeks for receipt of comments from the submission date of the design submission incorporating all the documentation required of S302.

S 303 Design approval from Others

Not used.

S 304 *Client's* requirements

The *Contractor* shall design the *works* in accordance with the *Client's* Minimum Technical Requirements LIT13258 and the requirements identified within the Scope.

The design for the flap valves and winches must meet the specifications set in ENV0002636C-JAC-ZZ 00-TN ME-0001 A3 C07 Horseshoe Corner Sluice Flap Valve & Winch Specifications

The design of the new flap valves must take into consideration the site geometry and the recommended installation process; The new flaps are to be lowered via crane and through the chamber's overhead platform.

The *Contractor* shall ensure that the design is fully documented and that record drawings, operating and maintenance (O&M) information and all other documentation is provided during or on Completion of the *works* as is most appropriate

The *Contractor* shall produce an O&M manual covering all elements of the works under the Contract. The O&M manual will be in the same format as, and containing an equivalent level of detail to, the existing O&M manual (to be provided by the *Client* for the whole site and shall be suitable to be included as an appendix to the existing site O&M manual

Each design submission is issued to the *Project Manager* and copied to the Principal Designer for acceptance. The *Project Manager* will not accept any permanent works or temporary works design packages until the Principal Designer is satisfied that the requirements of the CDM Regulations 2015 and the *Client's* Safety, Health, Environment and Wellbeing Code of practice (SHEW CoP) 2018 have been complied with Design submissions are accompanied by evidence that design risks have been considered and that the design complies with the requirements of CDM Regulations 2015.

Any residual risks identified must have an associated construction / maintenance / operation solution. Residual risks are shown on SHE boxes on all relevant drawings as set out in the *Client's* Operational Instruction 300 10 SD11: 'Safety, health and environmental (SHE) information to be included on construction and 'as-built' drawings'. The *Contractor* also complies with the *Client's* document "Constructing a Better Environment: Safety, Health, Environment and Wellbeing Code of Practice (SHEW CoP)"

All designs are prepared and reviewed in accordance with *Client's* Operational Instruction 300_10_SD14: 'Designers' safety, health and environmental Red Amber Green list' (13 Aug 2015).

The factory testing procedure should be submitted for review and acceptance by the *Project Manager*.

S 305 Design co-ordination

The *Contractor* is responsible for coordinating design carried out by selected sub contractors, including but not limited to the flap valve & winch designer, tidal gate dampener supplier and other MEICA sub-contractors utilised under this contract.

S 306 Requirements of Others

The *Contractor* requests access to the site from the Site owner (*Client*) and access route (Cemex) at least 2 weeks prior to accessing the site

The *Contractor* undertakes the works in accordance with the submitted Flood Risk Activity Permit (FRAP) including any conditions stipulated therein (TBA).

The *Contractor* undertakes the *works* in accordance with the submitted Port of London Works License including any conditions stipulated therein (TBA)

S 307 Copyright/licence

In addition to Clause 22.1 of the ECC Conditions of Contract the *Client* may use and copy the *Contractor's* design for the following purposes, in addition to those connected with the *works:*

- Use of standard details for other *Client* projects
- Use of documents as exemplar examples to inform other *Client* projects

S 308 Access to information following Completion

The *Client* requires access to the *Contractor's* design information up to the final Defects Certificate of the *works* is issued and requires the retention of any information after Completion for a period of 8 years.

S 309 Site investigations

Not used

S 400 Completion

S 401 Completion definition

The following are absolute requirement for Completion to be certified, without these items the *Client* is unable to use the *works*:

- Provide all information to the Principal Designer, to allow the Principal Designer to compile the Health and Safety File including
- 2 hard copies of Operating and Maintenance Manuals and one electronic version.
- 2 hard copies of As Built drawings and one electronic version.
- Population of the *Client's* latest version of the Project Cost and Carbon Tool, or its successor
- Transfer to the *Client* databases of BIM data.
- Delivery of the Final Carbon Report.

Clause 11.2(2) Work to be done by the Completion Date.

S 402 Sectional Completion definition

Not used.

S 403 Training

The *Contractor* provides training of the *Client's* site users (1 day) on the proper and safe method of operating the new flaps and winches Training must be carried out at completion of the installation process, prior to handover.

In addition to providing the O&M manuals, the *Contractor* must inform the *Client*'s site users of the maintenance requirements of the new items

S 404 Final clean

In addition to waste management during and after works are carried out, the *Contractor* is responsible for:

- Removal of temporary structures such as scaffolding, damming, sandbags, welfare facilities, fencing, pedestrian barriers and signage
- Removal of temporary access means, such as ground anchors and ropes.
- Removal of any unused materials and fuel, including hazardous materials.
- Removal of discarded packaging.
- Removal of all machinery and tools
- Final sweep of access road
- Final litter pick or working areas.

S 405 Security

It is not expected that any works will be carried out to enhance the site's security, such as security fence, CCTV or alarm installation. The exception is the shrouds for the flap winches and reinstatement of the outfall decking.

The existing security systems though should not be compromised as a result of the *works*.

The site should be inspected jointly by the *Contractor* and the *Supervisor,* and handover to be carried out once the *Project Manager* is satisfied

S 406 Correcting Defects

The same access procedures required for the main *works* are to be followed for any corrective works

S 407 Pre-Completion arrangements

Prior to any works being offered for take over or Completion the *Contractor* shall arrange a joint inspection with the *Supervisor, Project Manager and Client*. The initial inspection shall take place a minimum of three weeks in advance of the planned take over or Completion

S 408 Take over

The *Client* shall take over the site, following completion of work and demobilisation of the *Contractor* from site.

S 500 Programme

S 501 Programme requirements

The programme complies with the requirements of Clause 31.2 and includes alignment and submission of the BEP and Master Information Delivery Plan (MIDP)

S 502 Programme arrangement

The programme should include sections for each stage of the *works* and milestones Including:

- Design (tasks to be carried out by *Contractor* and sub-Contractors)
- CDM requirements
- Mobilisation & site preparation (task to be carried out for enabling works)
- Start of site *works*
- Testing of the *works*
- Completion of the w*orks*
- Demobilisation
- Training, closeout and handover
- Period of defects correction

S 503 Methodology statement

The *Contractor* shall provide risk assessments and method statements in line with the *Contractor*'s responsibilities under the CDM regs and SHEW CoP

S 504 Work of the Client and Others

The order and timing of the work of the *Client* and Others to be included in the programme and information to be provided.

S 505 Information required

A schedule detailing all the tasks required for the delivery of the proposed works should be provided. The schedule should have clearly defined critical path and extend to asset handover and closeout

S 506 Revised programme

Changes to the programme will be accepted only if the *Client* was notified in advance of the risk of change and has agreed to the change.

S 600 Quality management

S 601 Samples

Not used.

S 602 Quality Statement

See below.

S 603 Quality management system

The *Contractor* provides a Quality Management plan, detailing the quality assurance procedures in place for all tasks In addition to the procedure, the people responsible and stage at which their input is required, should be stated in the plan.

S 604 BIM requirements

The *Contractor* shall comply with the *Client's* Building Information Management (BIM) requirements. The *Client's* requirements are provided in document 516 15 "*Client's* Information Requirements" This document should be read in conjunction with the project level *Client's* Information Delivery Plan (IDP).

Within 4 weeks of contract award, the *Contractor* is to prepare and submit to the *Project Manager* for acceptance a BIM Execution Plan detailing how they propose to comply with BIM and the *Client's* requirements.

S 700 Tests and inspections

S 701 Tests and inspections

All testing for the new flap valves and winches will follow the provisions set in ENV0002636C-JAC ZZ 00 TN-ME 0001 A3-C07 Horseshoe Corner Sluice Flap Valve & Winch Specifications.

S 702 Management of tests and inspections

A schedule with the proposed timescale and approach for all testing activities to be provided.

S 703 Covering up completed work

The *Contractor* provides a minimum notice of 7 days to the *Supervisor* prior to covering any works.

S 704 *Supervisor's* procedures for inspections and watching tests

All testing for the new flap valves and winches will follow the provisions set ENV0002636C-JAC ZZ 00 TN-ME 0001 A3-C07 Horseshoe Corner Sluice Flap Valve & Winch Specifications.

S 705 Sustainability Targets

The *works* shall comply with the *Client's* Minimum Technical Requirements for sustainability 801_14.

The *Contractor* shall take a proactive approach aiming to lower the carbon footprint of the *works* by proposing changes to the *Project Manager* involving lower carbon footprint solutions when opportunities are identified.
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S 800 Management of the *works*

S 801 Project team Others

The *works* shall be delivered in accordance with this contract and the Parties identified within the Contract Data will have the responsibilities assigned to them by the contract.

For information the following other Parties (in addition to those identified in the contract) are involved in the overall management of the project:

a) **Project Board** this comprises senior members of the *Client's* staff including the Project Sponsor, Project Executive, Senior User, Senior technical staff and a Senior Supplier representative The Project Board provide oversight and direction to the overall project

b) ***Client's*** **Project Delivery Team** – including the *Client's* Project Manager, Senior User representative and *Client's* technical staff responsible for the delivery of the project.

c) **Principal Designer** appointed under the CDM Regulations. Duties are as defined in the CDM regulations and the *Clients* Health, Safety, Environment and Welfare Code of Practice.

d) **Cost Manager** responsible for managing the cost aspects of the project on behalf of the *Client*.

e) **Independent Technical Advisor (ITA)** this organisation will support the project by providing independent technical advice to the *Client*. Jacobs is to provide a technical role to the *Client* for review of the flap valve design

S 802 Communications

Due to the short duration of site work there will be weekly progress meetings between the *Contractor, Project Manager* and *Client* during the site works in addition to a start up meeting and two design meetings Meeting minutes to be prepared by the *Project Manager* shared following each meeting

Phone communications to be held where and as required

All-important electronic communications, including email and data transfers to be stored and managed as per the NGSA framework EIR.

S 803 Monthly progress reporting

Monthly progress reports shall be provided in an agreed format In addition to reporting on progress of activities on the programme and description of risks, early Warnings and Compensation events the *Contractor* will include financial and carbon updates and forecasts to meet *Client* deadlines

S 900 Working with the *Client* and Others

S 901 Sharing the Working Areas with the *Client* and Others

Parking on site is limited The number of vehicles and location of parking will need to be coordinated between the *Contractor* and the Environment Agency and Cemex site managers.

The *Contractor* manages his operations so as not to prevent the *Client* from operating the adjacent Horseshoe pumping station. The *Contractor* allow the *Client's* personnel and vehicles access 24hrs a day to the pump station and sluice structure for operation and maintenance

S 902 Co-operation

The *Contractor* co-operates with the affected landowners and tenants and obtains the necessary permits from them in accordance with their site safety procedures prior to commencing any work on their land

S 903 Co-ordination

The *Contractor* is to liaise with the affected landowners and tenants for the co-ordination of the *works* and access on the Site.

The *Contractor* is to liaise with the Port of London Authority for the co-ordination of the *works* and navigation (i e conditions of the works license)

S 904 Authorities and utilities providers

Not used

S 905 Diversity and working with the *Client,* Others and the public

Not used

S 906 Environment Agency as regulatory authority

The Environment Agency's position as a regulatory authority, and as *Client* under the contract, are separate and distinct. Actions taken in one capacity are deemed not to be taken in the other.

Where statutory consents must be obtained from the Environment Agency in its capacity as a regulatory authority

The *Client's* acceptance of a tender and the *Project Manager's* instructing or varying work does not constitute statutory approval or consent.

An action by the Environment Agency as regulatory authority is not in its capacity as *Client* and is not a compensation event

S 1000 Services and other things to be provided

S 1001 Services and other things for the use of the *Client, Project Manager* or Others to be provided by the *Contractor*

The *Contractor* must provide and maintain the following services for the duration of the *works*:

- Welfare and first aid facilities
- Access to site compound offices
- 2 car parking spaces
- Lunch/tea making facilities
- Harness for confined space entry by confined space trained *Supervisor*

S 1002 Services and other things to be provided by the *Client*

Not Used

S 1100 Health and safety

S 1101 Health and safety requirements

As required by engineering construction contract Clause 27 4 details of any additional health and safety requirements for the project:

- Procedures and policies as outlined in the Environment Agency “Safety, Health, Environment, and Wellbeing (SHEW CoP)" document shall be applied throughout the Contract The *Contractor* shall familiarise itself with this document and act in accordance with it.
- The *Contractor* shall provide first aid facilities; materials and personnel trained in first aid, for the benefit of his own people, those of his Sub-contractors and the site staff of the *Project Manager*, *Supervisor* and *Client*
- The Construction (Design and Management) Regulations 2015 (the CDM Regulations) apply to the *works*. The ‘CDM Principal Designer’ is:

  Jacobs UK Ltd / represented by [redacted]

  [redacted]
- The *Contractor* is the ‘Principal Contractor’ under the CDM Regulations.
- The CDM Pre-construction Information does not form part of the Contract.
- The *Contractor* copies to the *Project Manager* all correspondence with the CDM Principal Designer
- The *Contractor* provides a draft of the health and safety file for review by the Principal Designer within one month of completion of site works on a template issued by the Principal Designer

S 1102 Method statements

The *Contractor* is required to submit method statements and risk assessments to the *Supervisor* for acceptance.

S 1103 Legal requirements

The *Contractor* is the Principal Contractor under the CDM (2015) regulations.

S 1104 Inspections

Requirement for review and inspection of *Contractor’s* health and safety procedures by the *Project Manager*:

- None noted in addition to the SHEW code of practice

S 1200 Subcontracting

S 1201 Restrictions or requirements for subcontracting

As part of the sub-contact tendering process the *Contractor* is to ensure a schedule of rates is devised and populated for use in the assessment of quotations in the event of unforeseen circumstances. This includes, but is not limited to rates for the following:

- People
- Equipment
- Lifting equipment
- Fee percentage

The exact format is to be agreed with the *Project Manager* prior to the acceptance of the proposed Sub contractor and the award of any Sub-contract.

S 1202 Acceptance procedures

Nothing noted in addition to engineering construction contract subclause 26 3

S 1300 Title

S 1301 Marking

If required by the *Project Manager* stored Plant and Materials shall be titled (vested) in the name of the 'The Environment Agency' and Title Certificates provided for all the Plant stored. The format and wording of the title certificate shall require approval by the *Project Manager* prior to vesting taking place The titling (vesting) shall include for insurance of the Plant against loss and damage. It is not guaranteed that the *Client* will vest Plant and Materials in connection with the *works*

The store shall be secure, dry and undercover with all the Plant and Materials protected from the elements. Sufficient heating shall be provided to keep the Plant and Materials free from deterioration and condensation It shall be located by the *Contractor* and shall be part of his tender submission

Titled Plant and Materials shall be placed in a sectioned off part of the store with each item having securely attached to it a sign which reads "property of The Environment Agency". A copy of the Title Certificate shall also be attached to the sign

S 1302 Materials from excavation and demolition

The risk to undiscovered archaeological finds is managed by the *Contractor* at the construction stage If an obstruction is encountered during the *works*, work is halted in accordance with ECC clause 73.1 and the *Client* contacted for advice

The *Contractor* deals with the following items of known value or of historical or other interest (other than the above), as follows:

- None

The *Contractor* has title to the following materials from excavation and demolition:

- None

Any payment received by the *Contractor* for disposal of scrap metals associated with the *works* is to be applied as a credit to costs on this contract by the *Contractor.* This includes, but is not limited to scrap metal value associated with the flap valves

S 1400 Acceptance or procurement procedure (Options C and E)

S 1401 Acceptance procedures

The *Contractor* sets up a procedure for vesting of items not yet delivered to the Working Areas in the *Client* prior to payment being made for such undelivered items

S 1500 Accounts and records (Options C and E)

S 1501 Accounts and records to be kept by the *Contractor* [ECC clause 52.2]

In addition to those stated in ECC clause 52.2, the *Contractor* keeps the following accounts and records:

a) Details of payments to third parties relating to compensation payments or payments for use of land and facilities in conjunction with this contract whether or not these form part of the Defined Cost.

b) Material record sheets

The following records are to be made available to the *Project Manager* with all Applications for Payment, but not limited to:

a) Staff timesheets
b) Labour signed timesheets
c) Plant weekly returns
d) Material received sheets
e) Delivery records
f) Sub-contractor applications detailing when payments are due / paid
g) Daily Diary sheets as completed by the site management.

S 1502 Cost forecasts

The *Contractor* prepares forecasts of the total Defined Cost plus Fee for the whole of the *works* in consultation with the *Project Manager* and submits them to the *Project Manager* for acceptance.

Forecasts are prepared every month from the starting date until Completion of the whole of the *works.*

An explanation of the changes made since the previous forecast is submitted with each.

S 1600 Parent Company Guarantee (Option X4)

Not required.

S 1700 *Client's* work specifications and drawings

S 1701 *Client's* work specification

ENV0002636C-JAC-ZZ-00-TN-ME-0001-A3-C07-Horseshoe Corner Sluice Flap Valve & Winch Specifications

S 1702 Drawings

ENV0002636C-JAC-ZZ-00-DR-C-0005-A4-C02 Access plan and general arrangement
ENV0002636C-JAC-ZZ-00-DR-Z-0001-S4-P02 Outfall Chamber Decking Arrangement
ENV0002636C-JAC-ZZ-00-DR-Z-0002-S4-P02 Outfall Chamber Support Beam Arrangement
ENV0002636C-JAC-ZZ-00-DR-Z-0003-S4-P03.01 Outfall Chamber Access Platform Walkway
ENV0002636C-JAC-ZZ-00-DR-Z-0004-S4-P02 Outlet Chamber Blockwork Wall Support
ENV0002636C-JAC-ZZ-00-DR-C-0007-A3-C02-Existing_utilities_plan

S 1703 Standards the *Contractor* will comply with

The *Contractor* should carry out their work using the following guidance.

Ref	Report Name	Where used
	Project Cost and Carbon Tool	Costs and Carbon
	Sustainability Measures Form	Reporting
	Timber Policy Documents	Construction
	300_10 SHE handbook for managing capital projects	Design and Construction
	300_10_SD27 SHE Code of Practice	Design and Construction

S 1704 Environmental documents the *Contractor* will comply with

The *Contractor* carries out the *works* in accordance with:

Environmental Action Plan (EAP) - ENV0002636C-JAC-ZZ-00-PL-EN-0003-S2-P02-Horseshoe_EAP - NEAS review updated

Preliminary Environmental Impact Report (PEIR) - ENV0002636C-JAC-ZZ-00-RP-EN-0002-S2-P02-PEIR - NEAS review updated

Ecological Walkover Summary - ENV0002636C-JAC-ZZ-00-RP-EN-0001-S4-P02-Ecological_walkover_summary - NEAS review updated

Flap_options_for_eel_passability - ENV0002636C-JAC-ZZ-00-TN-ME-0002-A3-C03-Flap_options_for_eel_passability

Appendix 1 BIM Protocol – Information Production and Delivery Table

All *Client* issued information referenced within the Information Delivery Plan remains within the *Site Information* unless it is referenced elsewhere within the *Scope*

www.Pow.bim4.info

You need google chrome for this link to work. Once the table is completed it should be printed for issue in the tender document, so that the correct baseline position can be seen by suppliers.

Appendix 2 BIM Protocol – Employers Information Requirements

LIT17641	Employers Information Requirements	Revision 2.5