Dawdon SSO Build Contract

Scope

PROJECT TITLE: Dawdon SSO

Cost Centre: 3110
Project Code: EV00499
Account Code: 40102
Capex Code: 401

DATE: March 2022 CA Project Manager: Pete Bingham

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S 100 Description of the works

S 105 Project Objectives

The scheme's current short sea outfall is not performing as required, due to installation failings that have allowed pipe work rotation and partial obstruction of the discharge valves.

The objective of this project is to restore discharge rates for both outfalls combined to their designed flow of 150l/s through correcting these installation failings.

S 110 Description of the Works

This project is for the replacement of the existing discharge arrangement and comprises the following principal operations:

- Removal of the existing damaged short sea outfall discharge pipe work and protective structure.
- Retrieval for re use, inspection and refurbishment or replacement as needed of the four discharge valves.
- Procurement, construction and installation of a new discharge arrangement on each short sea outfall pipe including marker buoy and protective sleeve as per the *Client* design.
- Provide video evidence of installation meeting design detail.
- Assistance in discharge flow testing.
- Disposal of any waste plant and material.

Construction

- The *Contractor* constructs the works identified within the *Client* design.
- The Contractor disposes of all removed equipment unless stated otherwise. The Contractor
 confirms any requirements for retention of equipment with the Project Manager prior to
 disposing of any equipment. The Project Manager notifies the Contractor of any restrictions
 on the disposal of equipment.
- The Contractor jets both outfalls prior to testing and handover
- The Contractor undertakes the role of Principal Contractor under CDM.
- The Contractor promotes best waste management practices and assessment of sustainability during construction, operation and decommissioning stages.
- The Contractor provides the Health and Safety File/O&M Manual
- The Contractor provides sustainability assessments is there a CA standard for this?

S 200 General constraints on how the Contractor Provides the

Works

S 205 General constraints

The Coal Authority compound at Noses Point, will continue to be used by the *Client's* operational contractor, Severn Trent Services (STS). Their operational works must not be impacted by the construction of the new scheme, except as noted below. The *Contractor* may with prior agreement use this compound or the Dawdon MWTS site for welfare and storage as required. The security of any stored plant and equipment would remain with the *Contractor*.

Access permission/approval should be sought two weeks in advance from the *Project Manager* and works requiring a shutdown of one or both discharge lines should be planned ahead with the STS operators and the *Project Manager*.

Both outfalls cannot be shut down for more than two consecutive days and a single outfall cannot be shut down for more than 4 consecutive days. A recovery period equal to the length of any shutdown must be allowed before any further shutdowns.

The *Contractor* (who will also be the Principal Contractor under CDM) manages the relationship with STS. Further details are provided in S900 Working with the *Client* and Others.

Existing Site Constraints

- The access road to the Coal Authority compound and the public car park at Noses Point is long and narrow. Efforts should be made to minimise large plant or excessive vehicle numbers attending site at one time as this would impact the public.
- Access to the work area and plant or equipment storage are not permitted through or on the beach
- The scheme is currently operational and Severn Trent Services (STS) (the *Client's* term operations contractor) will need to continue to operate the plant uninhibited (excluding planned and approved shutdowns) throughout the contract.
- It has been confirmed that the project qualifies for a self-service marine licence and this is in process of being obtained by the *Client*

Working hours

08:00 – 18:00 Monday to Friday unless with prior agreement from the *Project Manager*.

The *Contractor* does not undertake weekend or Bank Holiday working without prior agreement from the *Project Manager*. Given the location of the work any H&S implications of working in reduced lighting must be considered over the normal working hours.

Interfaces between the works and existing operations

The *Contractor* liaises directly with STS on any proposed shut down. At least two weeks prior to any proposed shut down, the *Contractor* submits details of the time and duration together with evidence of liaison with STS in respect of the shutdown, to the *Project Manager* for acceptance. The *Project Manager* does not unreasonably withhold acceptance of the proposals.

In developing the plan for removing the existing and installing the new plant the *Contractor* shall seek to minimise shutdown number and duration. Consideration and mitigation must be considered for how the existing plant can be returned to service during any issue with the new plant or urgent process need from the Coal Authority. If this is not possible a suitable mitigation plan must be in place and ready to deploy if needed. This plan must be developed between the *Contractor*, STS and the *Project Manager* and be agreed prior to commencement of construction.

S 215 Security

The current Noses Point compound and the Dawdon MWTS site are not staffed 24 hours a day. Should the *Contractor* use the site or compound at Noses Point for any storage, security arrangements for this remain their responsibility.

S 245 Condition Survey

If *Contractor* uses the CA site/facilities, the *Contractor* shall carry out a condition survey of these and the access road and agree the condition with the *Project Manager* prior to them being used.

S 250 Considerations of Others

The site is adjacent to a popular beach for walkers. The *Contractor* gives reasonable consideration at all times to the public using these facilities and displays a public information notice, approved by the *Client*, one week prior to the commencement of construction. The location(s) are to be agreed with the *Project Manager*.

S 260 Control of works

It has been confirmed that the project qualifies for a self-service marine licence and this is in process of being obtained by the *Client*.

S 270 Waste materials

The *Contractor* will minimise waste by reducing, reusing and recycling materials as far as practicable and in line with current good practice.

The *Contractor* is to provide the *Project Manager* with records on the types and quantities of waste materials that are reused and recycled.

All waste arising from the *works* that cannot be recycled shall be removed from *Site* and taken to an appropriately licensed waste facility. Copies of any waste transfer notes shall be provided to the *Project Manager*.

S 300 Contractor's Design

S 400 Completion

S 405 Completion definition

Completion is when all construction Works have been completed as per the Scope and *Client's* Requirements. Completion includes handover and video evidence that construction is completed as per the design.

This includes:

- Temporary works to enable access to the site removed
- Site clearance
- Procurement, Construction and installation of the new Short Sea Outfall arrangement as per the *Clients* design or latest agreed design.
- Commissioning of the new discharge arrangement including the provision of handover documents and information.
- Decommissioning of the existing plant and removal of the equipment.
- Removal of any welfare facilities used during the works.
- Restoration of the site compound area and access road to a condition equivalent to the pre-construction condition, or otherwise agreed with the *Client*.
- Provision of as-built information and the health and safety file
- Provision of the sustainability assessments

S 410 Commissioning procedure

The *Client* provides plant parameters for the commissioning of 75l/s per discharge line. The *Contractor* must demonstrate evidence the installation is as per the *Client* design or latest approved design. The *Client* with *Contractor* assistance will then test discharge through each line and both lines together, this process and results are to be documented. If discharge meets design performance of 75l/s per discharge line then the site can progress to handover. If not then investigation into the cause and any possible defect will be carried out by the *Contractor*. The results of the investigation will be reported to the *Client* who will decide on the actions to be taken.

S 415 Handover

The *Contractor* is to arrange for a pre-handover meeting to be held two weeks before the planned Handover meeting. Two weeks' notice is to be given to attendees of this meeting who should include the Project Manager (Pete Bingham), Operations Manager (Andrew Hargreaves) and STS Manager Andy Craggs).

The following are required to be issued 2 weeks prior to the pre-handover meeting for review and signing of the handover certificate:

Draft Health and Safety File.

- Video evidence installation is as per design.
- Discharge test sheets.
- Equipment and keys, provided to the Operator.

Final Operation and Maintenance Manual and Health and Safety File are to be issued via Aconex, or agreed collaboration system, within 28 days of Completion. Handover cannot be completed until the H&S file, as built evidence and discharge test sheets have been completed.

S 420 Final Clean

The *Contractor* removes all waste from site before handover is complete. The *Contractor* should reinstate the site compound area and access road to a condition equivalent to the preconstruction condition, or condition otherwise agreed with the *Client*.

S 425 Security

The *Contractor* secures the site and any compound used when leaving during the works and passes any keys, or details of any codes to locks, to the *Client* at Handover. Keys to be provided by the *Contractor* include keys for:

Gates/access

S 430 Correcting Defects

The *Contractor* notifies the *Project Manager* prior to the proposed access to the site to correct any defects. The *Project Manager* liaises with STS and the *Client* to arrange access, and confirms approval of the access date and any restrictions to accessing the site to the *Contractor* prior to the proposed access date.

Unless the access to correct a defect is required in an emergency situation, where there is an immediate risk of danger to the public or significant damage to the *works* or the environment, the *Contractor* provides no less than one week prior notice of a proposed access date.

S435 Pre-Completion arrangements

S 500 Programme

S 505 Programme requirements

The *Contractor* provides a programme which clearly identifies the following specific dates and periods

- Dates by which approvals or information is required from the *Client* and Others including a review and a re-review period;
- Procurement lead in, and procurement decision dates;
- Inspections and testing generally;

- Commissioning, including lead in dates and times when both the existing and new plant will be down;
- Completion;
- Design periods including allowance for approvals;
- Submission of H&SF / O&M Manual for review incl a review periods and a re-review period;
- Identify the critical path for the delivery of the services and activities; and
- Dates of meetings which the *Project Manager*, *Client* or Others are required to attend

The *Contractor* highlights any constraints or required downtime to the scheme in the submitted programme.

- The programme is to include a Gantt chart. All elements of the programme are to be submitted in electronic copies. The electronic copies are in:
 - The software in which the programme was prepared; and
 - Adobe acrobat format (.pdf).
- The *Contractor* ensures that the electronic copy in the software in which the programme was prepared is to be capable of being read by MS Project 2013.

S 515 Work of the *Client* or Others

The *Contractor* clearly identifies on the programme any dates for works to be completed by the *Client* or Others.

S 525 Revised programme

The *Contractor* shall provide a summary of changes with each revised programme providing an explanation of the changes, mitigation undertaken to retrieve slippages, and impact on following activities.

S 600 Quality assurance

S 605 Quality Management System

The *Contractor* submits details of its quality management systems to the *Client* for inspection and approval. The *Contractor* complies with its quality management systems at all times and allows the *Client* or *Project Manager* access to inspect and audit records to demonstrate compliance.

S 615 Samples - state the materials and samples required including any procedures for submission and acceptance. Eg cube test

S 700 Tests and inspections

S 705 tests and Inspections

The *Contractor* confirms, identifies and informs the *Client* two weeks prior to any tests and inspections that are required in order to complete the *works*. This may include (but not be limited to):

- Concrete cube testing.
- The system on installation is to be proven on full discharge flows through both lines separately and if Dawdon MWTS can facilitate it, combined.
- Commissioning testing and inspection requirements.

The *Contractor* notifies in advance the following parties of the dates of tests and inspection to allow attendance.

- the Client
- the Project Manager
- the Supervisor
- STS Operations Manager

The *Contractor* arranges for their Contract Manager to attend.

S 715 Management of tests and inspections and provision of samples

The *Contractor* is responsible for the management of tests and inspections. The *Contractor* submits a test and inspection management plan to the *Project Manager* for approval two weeks prior to the first test or inspection. The management plan includes details of the arrangements for each test or inspection, the required attendees at the test or inspection, and the outputs and records to be provided following the inspection.

S 800 Management of the works

S 805 Project Team - Others

The *Client* provides a list of the project team to be invited to meetings and copied in on correspondence.

Appoint an external PM and Supervisor

S 810 Communications

Aconex

All contractual communication should be through the Coal Authority contract management system Aconex for which access and training can be provided.

S 815 Management procedures

Meetings

A post award Pre-start meeting (to be held within 7 days of award) either via video conference or at the Dawdon MWTS site.

During construction stage, the *Contractor* arranges for site meetings to be held on site or remotely as agreed with the Project Manager at weekly intervals. The *Contractor* also arranges for a pre-start meeting prior to the physical works commencing.

As a minimum, the following require invites to the meetings:

- Project Manager
- Supervisor
- the Client's Project Manager
- Contractor Project Manager
- Contractor's Site Agent
- Others as appropriate

Handover formal meetings

- Pre-handover meeting two weeks prior to handover. Meeting to be held on-site.
- Handover meeting upon addressing all snags identified at the pre-handover meeting.
 Meeting to be held on site.

Reports

The *Contractor* provides the *Project Manager* with an update report at weekly intervals in advance of the planned construction meetings. The report includes position statements on the following topics:

- Health, Safety and Environmental issues, incidents or observations.
- Planned and actual progress, including an update to the project programme
- The risk register and Early Warnings
- Financial summary to include: progress against activities in BoQ, status of Compensation Events
- Subcontractor issues, performance and status
- Photos (progress, inspection etc.)

S 820 Application for Payment

The *Contractor* is to provide an expenditure forecast with the initial programme and an updated forecast with each programme revision. This should be in Microsoft Excel detailing compensation events and any other changes to the planned works spend profile or total cost.

An application for payment must be submitted by the *Contractor* monthly on Aconex including a detailed breakdown of all costs in a Microsoft Excel format. This will be reviewed and approved or assessed by the *Project Manager* before payment.

Accruals and Invoice Information are to be provided by the Contractor.

The Contractor shall:

- submit *via* email (<u>financedepartment@coal.gov.uk</u>) either an accrual or invoice value for this project by the close of business of working day minus five; whereby working day one is the first working day of the calendar month.
- The Coal Authority will write to the *Contractor* with the reporting requirements for the end of financial year. The Coal Authority is content for the appointed *Contractor* to target +/-10% between the accrual and invoice values.
- provide invoices that clearly detail:
 - o breakdown of hours spent by each member of staff
 - cost of materials and labour
 - cost of items completed from the scope
 - Contract reference, cost centre, site reference, account code and capex code
 - Project title, including the site name
 - o The Client's (Coal Authority Project Manager)
 - o PO number Starting with CAP (TBC)

Please submit a DRAFT invoice via the contract collaborative tool to the *Project Manager* for Approval prior to submission to the finance department.

Information to be shown on invoices

- Timesheets
- Expenses
- Records and Accounts

Audit Rights

The *Client* reserves the right to audit, or to nominate a reputable accounting firm to audit the *Contractor*'s records relating to amounts claimed under this contract during its term up to the defects date.

S 900 Working with the *Client* and Others

S 905 Sharing the Working Areas with Others

STS and Coal Authority representatives will visit the Site periodically to check on the scheme and operation of the MWTW or SSO. They will also be involved in checks during commissioning and at handover. The *Contractor* does not prevent access to the site by STS or Coal Authority representatives, and takes all steps reasonable to allow them to undertake their responsibilities. The *Contractor* notifies STS operatives of any site specific procedures or access restrictions in advance of any access required by STS.

Coal Authority representatives may supervise elements of the work from the barge and the *Contractor* will assist them in doing so providing access and suitable welfare.

S 915 Co-ordination

The *Contractor* allows for regular stakeholder meetings throughout the construction phase should they be required. Stakeholders include STS and the *Client*'s operations team. These meetings are separate to the progress meetings and may be on site or over Zoom/Microsoft Teams as agreed.

S 1000 Services and other things to be provided

S 1010 Services and other things to be provided by the *Client*

Access to the existing site

Water and electricity can be provided for the *Contractor* from existing supplies. The *Contractor* is responsible for connecting to these supplies and making good any connections at completion.

Existing Health and Safety and Operations and Maintenance Manuals for the Dawdon MWTW.

S 1100 Health and safety

S 1105 Health and safety requirements

The Pre-Construction Information required under the CDM Regulations 2015 has been provided by the *Client*. The *Client* is undertaking the role of Principal Designer under CDM.

Document No.	Description
EV00499_PCI_Construction Works	Pre-Construction Information -Dawdon

The *Contractor* will be Principal Contractor during the construction stage and manages the site induction of *Others* during that stage.

A Construction Management Plan or Construction Phase Plan is required to be approved by the *Client* at least 2 weeks prior to works commencing on site and two weeks should be allowed for review of this. Works will not be permitted to start on site until TCA approval is provided.

The *Contractor* shall liaise with the *Client* SHE team and take health and safety risks into account during site works, construction, operation and commissioning.

S1110 Method Statements

The *Contractor* shall make available to the *Project Manager* all risk assessments and method statements, appropriate to the *works* on or before, 14 days from contract award. Following this date, then upon request.

S 1120 Health and safety file

The *Contractor* completes and issues the health and safety file / handover information including asbuilt evidence, site diary, monitoring and testing results, CDM/health and safety data and any communications with key stakeholders (e.g. local residents) within 4 weeks of completing the *works*.

2 hard copies are to be provided along with a digital copy uploaded onto Aconex.

S 1200 Subcontracting

S 1210 Acceptance Procedures

If the *Contractor* proposes to use a Subcontractor for any part of Providing the *Works*, the reasoning and previous experience of the Subcontractor shall be submitted to the *Project Manager* for acceptance prior to any proposed Subcontractor undertaking any of the works.

The *Contractor* will ensure that processes for training and managing subcontractors in a fair and equitable manner are included in the reasoning for using a proposed subcontractor.

S 1300 Title

N/A

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

N/A

S 1500 Accounts and records (Options C, D, E and F)

N/A

S 1600 Ultimate holding company guarantee (Option X4)

N/A

S 1700 Undertakings to the *Client* or Others (Option X8)

N/A

S 1800 Transfer of rights (Option X9)

N/A

S 1900 Information modelling (Option X10)

N/A

S 2000 Performance bond (Option X13)

N/A

S 2100 Advanced payment to the *Contractor* (Option X14)

N/A

S 2200 The Contractor's design (Option X15)

N/A

S 2300 Retention (Option X16) (not used with Option F)

N/A

S 2400 Low performance damages (Option X17)

N/A

S 2500 Early Contractor involvement (Option X22) (used only with Options C and E only)

N/A

S 2600 Project Bank Account (Option Y(UK)1)

N/A

S 2700 Client's work specifications and drawings

2705 *Client's* work specification

70082997-WSP-SP-CM-02_REV00-MARINE WORKS SPECS

2710 Drawings

70082997-WSP-DR-CM-GA01_00 - Marker Buoy layout and elevation

70082997-WSP-DR-CM-LP01_00 - Diffuser rehabilitation layout option A