

This document is executed as a deed and is delivered and takes effect at the date written at the beginning of it



**Framework:** Collaborative Delivery Framework  
**Supplier:** Ove Arup & Partners Ltd  
**Company Number:** 01312453

**Geographical Area:** North East  
**Project Name:** Hull Tidal Surge Barrier Resilliance  
**Project Number:** ENV0004275C

**Contract Type:** Professional Service Contract  
**Option:** Opt [REDACTED]

**Contract Number:** pr [REDACTED]

**Stage:** Pre\_SOC

Revision	Status	Originator	Reviewer	Da	
[REDACTED]		[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

**PROFESSIONAL SERVICE CONTRACT under the Collaborative Delivery Framework  
CONTRACT DATA**

**Project Name** Hull Tidal Surge Barrier Resilliance

**Project Number** ENV0004275C

This contract is made on [REDACTED]  
between the *Client* and the *Consultant*

- This contract is made pursuant to the Framework Agreement (the "Agreement") dated 01st day of April 2019 between the *Client* and the *Consultant* in relation to the Collaborative Delivery Framework. The entire agreement and the following Schedules are incorporated into this Contract by reference
- Schedules 1 to 22 inclusive of the Framework schedules are relied upon within this contract.
- The following documents are incorporated into this contract by reference

**Part One - Data provided by the *Client***  
**Statements given in  
all Contracts**

**1 General** The *conditions of contract* are the core clauses and the clauses for the following main Option, the Option for resolving and avoiding disputes and secondary Options of the NEC4 Professional Service Contract June 2017.

Main Option [REDACTED] Option for resolving and avoiding disputes [W2]

Secondary Options

- X2: Changes in the law
- X9: Transfer of rights
- X10: Information modelling
- X11: Termination by the *Client*
- X18: Limitation of liability
- X20: Key Performance Indicators
- Y(UK)2: The Housing Grants, Construction and Regeneration Act 1996
- Y(UK)3: The Contracts (Rights of Third Parties) Act 1999
- Z: *Additional conditions of contract*

The *service* is [REDACTED] The objective of the services is to deliver the following outputs identified by the Phase 1 reliability triage and HAZOP to improve the reliability of the barrier

The *Client* is [REDACTED]  
Address for communications [REDACTED]

Address for electronic communications [REDACTED]

The *Service Manager* is [REDACTED]  
Address for communications [REDACTED]

Address for electronic communications [REDACTED]

The Scope is in  
LIT 13261 - Psc scope Hull TSB - Stage 1 2022-08-26 Rev 1.0

The *language of the contract* is English

The *law of the contract* is  
the law of England and Wales, subject to the jurisdiction of the courts of England and Wales

The period for reply is 2 weeks

The *period for retention* is 6 years following Completion or earlier termination

The following matters will be included in the Early Warning Register  
not used

not used  
not used  
not used

Early warning meetings are to be held at intervals no longer than 2 weeks

## 2 The Consultant's main responsibilities

The *key dates* and *conditions* to be met are *key date*  
*conditions* to be met

'none set' 'none set'

'none set' 'none set'

'none set' 'none set'

The *Consultant* prepares forecasts of the total Defined Cost plus Fee and *expenses* at intervals no longer than 4 weeks

## 3 Time

The *starting date* is [REDACTED]

The *Client* provides access to the following persons, places and things  
access *access date*

Hull Tidal Surge Barrier [REDACTED]

not used not used

The *Consultant* submits revised programmes at intervals no longer than 4 weeks than

The *completion date* for the whole of the *service* is [REDACTED]

The period after the Contract Date within which the *Consultant* is to submit a first programme for acceptance is 4 weeks

## 4 Quality management

The period after the Contract Date within which the *Consultant* is to submit a quality policy statement and quality plan is 4 weeks

The period between Completion of the whole of the *service* and the *defects date* is 26 weeks

## 5 Payment

The *currency of the contract* is the £ sterling

The *assessment interval* is Monthly

The *Client* set total of the Prices is £236,686.07

The *expenses* stated by the *Client* are as stated in Schedule 9

The *interest rate* is 2.00% per annum (not less than 2) above the  
Base rate of the Bank of England

The locations for which the *Consultant* provides a charge for the cost of support people and office overhead are All UK Offices

[REDACTED]

## 6 Compensation events

These are additional compensation events

1. 'not used'

2. 'not used'
3. 'not used'
4. 'not used'
5. 'not used'

## 8 Liabilities and insurance

These are additional *Client's* liabilities

1. 'not used'
2. 'not used'
3. 'not used'

The minimum amount of cover and the periods for which the *Consultant* maintains insurance are

EVENT	MINIMUM AMOUNT OF COVER	PERIOD FOLLOWING COMPLETION OF THE WHOLE OF THE <i>SERVICE</i> OR TERMINATION
The <i>Consultant's</i> failure to use the skill and care normally used by professionals providing services similar to the <i>service</i>	<b>£5,000,000</b> in respect of each claim, without limit to the number of claims	12 years after Completion
Loss of or damage to property and liability for bodily injury to or death of a person (not an employee of the <i>Consultant</i> ) arising from or in connection with the <i>Consultant</i> Providing the <i>Service</i>	<b>£15,000,000</b> in respect of each claim, without limit to the number of claims	12 years after Completion
Death of or bodily injury to the employees of the <i>Consultant</i> arising out of and in the course of their employment in connection with the contract	<i>Legal minimum</i> in respect of each claim, without limit to the number of claims	<i>For the period required by law</i>
The <i>Consultant's</i> total liability to the <i>Client</i> for all matters arising under or in connection with the contract, other than the excluded matters is limited to	<b>£5,000,000</b>	

## Resolving and avoiding disputes

The *tribunal* is litigation in the courts

The *Adjudicator* is  
Address for communications 'to be confirmed'

Address for electronic communications ['to be confirmed'](#)

The *Adjudicator nominating body* is The Institution of Civil Engineers

## Z Clauses

### Z1 Disputes

Delete existing clause W2.1

### Z2 Prevention

The text of clause 18 Prevention is deleted.

Delete the text of clause 60.1(12) and replaced by:

The *service* is affected by any of the following events

- War, civil war, rebellion, revolution, insurrection, military or usurped power;
- Strikes, riots and civil commotion not confined to the employees of the *Consultant* and sub consultants,
- Ionising radiation or radioactive contamination from nuclear fuel or nuclear waste resulting from the combustion of nuclear fuel,
- Radioactive, toxic, explosive or other hazardous properties of an explosive nuclear device,
- Natural disaster,
- Fire and explosion,
- Impact by aircraft or other aerial device or thing dropped from them.

### Z3 Disallowed Costs

Add the following in second bullet of 11.2 (18) add:

(including compensation events with the Subcontractor, i.e. payment for work that should not have been undertaken).

Add the following additional bullets after 'and the cost of ' :

- Mistakes or delays caused by the *Consultant's* failure to follow standards in Scopes/quality plans
- Reorganisation of the *Consultant's* project team
- Additional costs or delays incurred due to *Consultant's* failure to comply with published and known guidance or document formats
- Exceeding the Scope without prior instruction that leads to abortive cost
- Re-working of documents due to inadequate QA prior to submission, i.e. grammatical, factual arithmetical or design errors
- Production or preparation of self-promotional material
- Excessive charges for project management time on a commission for secondments or full time appointments (greater than 5% of commission value)
- Any hours exceeding 8 per day unless with prior written agreement of the *Service Manager*
- Any hours for travel beyond the location of the nearest consultant office to the project unless previously agreed with the *Service Manager*
- Attendance of additional individuals to meetings/ workshops etc who have not been previously invited by the *Service Manager*
- Costs associated with the attendance at additional meetings after programmed Completion, if delay is due to *Consultant* performance
- Costs associated with rectifications that are due to *Consultant* error or omission
- Costs associated with the identification of opportunities to improve our processes and procedures for project delivery through the *Consultant's* involvement
- Was incurred due to a breach of safety requirements, or due additional work to comply with safety requirements
- Was incurred as a result of the *Client* issuing a Yellow or Red Card to prepare a Performance Improvement Plan
- Was incurred as a result of rectifying a non-compliance with the Framework Agreement and/or any call off contracts following an audit

### Z4 Share on termination

Delete existing clause 93.3 and 93.4 and replace with:

93.3 In the event of termination in respect of a contract relating to services there is no *Consultant's* share'

### Z6 The Schedule of Cost Components

The Schedule of Cost Components are as detailed in the Framework Schedule 9.

### Z7 Consultant's share

Delete existing clauses 54 and 93.3 and replace with:

54.1 The *Service Manager* assess the *Consultant's* share of the difference between the Aggregated Total of the Prices and the Aggregated Price for Service Provided to Date.

The difference is divided into increments falling within each of the *share ranges*. The limits of a share range are the Aggregated Price for Service Provided to Date divided by the Aggregated Total of the Prices, expressed as a percentage. The *Consultant's* share equals the sum of the products of the increment within each share range and the corresponding *Consultant's share percentage*.

54.2 If the Aggregated Price for Service Provided to Date is less than the Aggregated Total of the Prices, the *Consultant* is paid its share of the saving. If the Aggregated Price for Service Provided to Date is greater than the Aggregated Total of the Prices, the *Consultant* pays its share of the excess.

54.2A If, prior to Completion of the whole of the service, the Price for Service Done to Date exceeds 111% of the total of the Prices, the amount in excess of 111% of the total of the Prices is retained from the *Consultant*.

54.3 If, prior to the Completion Date, the Price for Service Provided to Date exceeds 110% of the total of the Prices, the amount in excess of 110% of the total of the Prices is retained from the *Consultant*.

54.4 The *Service Manager* makes a preliminary assessment of the *Consultant's* share at Completion of the Whole of the *service* using forecasts of the final Aggregated Price for Service Provided to Date and the final Aggregated Total of Prices. This share is included in the amount due following Completion of the whole of the *services*.

54.5 The *Service Manager* makes a final assessment of the *Consultant's* share, using the final Aggregated Price for Service Provided to Date and the final Aggregated Total of the Prices. This share is included in the final amount due.

93.3 If there is a termination except if Z4 applies, the *Service Manager* assesses the *Consultant's* share after certifying termination. The assessment uses as the Aggregated Price for Service Provided to Date the sum of

- the total of
  - the Defined Cost which the *Consultant* has paid and
  - which it is committed to pay for work done before termination

- and
- the total of
  - the Defined Cost which the *Consultant* or *Contractor* has paid and
  - which it is committed to pay

in the *partner contract* before the date the termination certificate is issued under this contract.

The assessment uses as the Aggregated Total of the Prices the sum of

- the total of
  - the lump sum price for each activity which has been completed and
  - a proportion of the lump sum price for each incomplete activity which is the proportion of the work in the activity which has been completed

and

- the total of
  - the lump sum price for each activity which has been completed and
  - a proportion of the lump sum price for each incomplete activity which is the proportion of the work in the activity which has been completed

in the partner contract before the date the termination certificate is issued under this contract.

Add:

11.2(25) The Aggregated Total of the Prices is sum of

- the total of the Prices and
- the total of the Prices in the partner contract

11.2(26) The Aggregated Price for Service Provided to Date is the sum of

- the Price for Service Provided to Date and

### Z23 Linked contracts

Issues requiring redesign or rework on this contract due to a fault or error of the *Consultant* will neither be an allowable cost under this contract or any subsequent contract, nor will it be a Compensation event under this contract or any subsequent contract under this project or programme.

### Z24 Requirement for Invoice

Add the following sentence to the end of clause 51.1:

The Party to which payment is due submits an invoice to the other Party for the amount to be paid within one week of the *Service Manager's* certificate.

Delete existing clause 51.2 and replace with:

51.2 Each certified payment is made by the later of

- one week after the paying Party receives an invoice from the other Party and
- three weeks after the assessment date, or, if a different period is stated in the Contract Data, within the period stated.

If a certified payment is late, or if a payment is late because the *Service Manager* has not issued a certificate which should be issued, interest is paid on the late payment. Interest is assessed from the date by which the late payment should have been made until the date when the late payment is made, and is included in the first assessment after the late payment is made

#### **Z25 Risks and insurance**

The *Consultant* is required to submit insurances annually as Clause Z4 of the Framework Agreement

## Secondary Options

### OPTION X2: Changes in the law

The *law of the project* is the law of England and Wales, subject to the jurisdiction of the courts of England and Wales

### OPTION X10: Information modelling

The period after the Contract Date within which the *Consultant* is to submit a first Information Execution Plan for acceptance is 2 weeks

### OPTION X18: Limitation of liability

The *Consultant's* liability to the *Client* for indirect or consequential loss is limited to £1,000,000

The *Consultant's* liability to the *Client* for Defects that are not found until after the *defects date* is limited to

£5,000,000

The *end of liability* date is [REDACTED] after the Completion of the whole of the *service*

### OPTION X20: Key Performance Indicators (not used with Option X12)

The *incentive schedule* for Key Performance Indicators is in Schedule 17

A report of performance against each Key Performance Indicator is provided at intervals of 3 months

### Y(UK)2: The Housing Grants, Construction and Regeneration Act 1996

The period for payment is 14 days after the date on which payment becomes due

### Y(UK)3: The Contracts (Rights of Third Parties Act) 1999

term *beneficiary*

not used not used

not used not used

not used not used

not used not used

## Part Two - Data provided by the *Consultant*

Completion of the data in full, according to the Options chosen, is essential to create a complete contract.

### 1 General

The *Consultant* is

Name Ove Arup & Partners Ltd

Address for communications 8 Fitzroy Street  
London  
W1T 4BQ

Address for electronic communications

[REDACTED]

The *fee percentage* is

[REDACTED]

[REDACTED]

The *key persons* are

Name (1) [REDACTED]  
Job [REDACTED]  
Responsibilities [REDACTED]  
Qualifications [REDACTED]  
Experience [REDACTED]

Name (2) [REDACTED]  
Job [REDACTED]  
Responsibilities [REDACTED]  
Qualifications [REDACTED]  
Experience [REDACTED]

Name (3) [REDACTED]  
Job [REDACTED]  
Responsibilities [REDACTED]  
Qualifications [REDACTED]  
Experience [REDACTED]

Name (4)  
Job  
Responsibilities  
Qualifications  
Experience

Name (5)  
Job  
Responsibilities  
Qualifications  
Experience

Name (6)  
Job  
Responsibilities  
Qualifications  
Experience

Name (7)  
Job  
Responsibilities  
Qualifications  
Experience

The following matters will be included in the Early Warning Register

### **3 Time**

The programme identified in the Contract Data is

### **5 Payment**

The *activity schedule* is

### **Resolving and avoiding disputes**

The *Senior Representatives* of the *Consultant* are

Name (1)  
Address for communications

Address for electronic communications

Name (2)  
Address for communications

Address for electronic communications

### **X10: Information Modelling**

The *information execution plan* identified in the Contract Data is

# Contract Execution

## Client execution

Signed Underhand by [REDACTED] for and on behalf of the Environment Agency

[REDACTED] \_\_\_\_\_  
Signature Date Role

## Consultant execution

Signed Underhand by [PRINT NAME] for and on behalf of Ove Arup & Partners Ltd

[REDACTED] \_\_\_\_\_  
[REDACTED] \_\_\_\_\_  
Signature Date Role

Environment Agency

NEC4 Professional Service Contract (PSC)

Scope

Project / contract information

Project name	Hull TSB Reliability Study
Project SOP code	ENV0004275C
Contract number	project_37188
Date	[REDACTED]

Assurance

Author	[REDACTED]	[REDACTED]
Consulted	[REDACTED]	[REDACTED]
Reviewed	[REDACTED]	[REDACTED]
Checked prior to issue	[REDACTED]	[REDACTED]

Revision History

Revision date	Summary of changes	Version number
	First issue	1.0

This Scope shall 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 *service* is to be compliant with the following version of the Minimum Technical Requirements:

Document	Document Title	Version No	Issue date
412_13_SD01	Minimum Technical Requirements	V12	Dec 2021

# 1 Overview

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## 1.1 Background

- 1.1.1 The Hull Tidal Surge Barrier (TSB) is the Agency's second largest tidal surge barrier in operation and protects the multiple homes and businesses throughout Hull from tidal flooding from the River Humber. The barrier also operates to manage fluvial flows from the River Hull and improves the resilience of upstream flood defences. The barrier is a strategic asset identified in the 2016 Humber Flood Risk Management Plan (FRMP) and the 2008 Humber Flood Risk Management Strategy (Humber Strategy).
- 1.1.2 The barrier's last major renewal and re-planting project was completed in 2010 and barrier has generally operated reliably since this project and is known to have multiple levels of redundancy. In May 2021, following a maintenance activity to the barrier brake hydraulic systems, the barrier was not operated when requested. No flooding occurred as a result of this operational incident, however due diligence is now required to confirm the barrier's ongoing resilience and reliability.
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## 1.2 Previous Studies

- 1.2.1 In undertaking the services, the *Consultant* shall take account of the previous studies detailed in the table below and produce a short technical summary explaining how best use will be made of historical data.

Report	Date	Format	Outcomes of study
OACI Incident review report	27/01/2021	Digital format -Accessed at Project Sharefile	Recommendations for further works
HTSB O&M manuals		Accessed at Project Sharefile	n/a
HAZOP report	2010	Accessed at Project Sharefile	Recommendations for further works
Hull TSB Brake Analysis (Arup)	12/10/21	Digital Accessed at Project Sharefile	Recommendations for further works
Reliability and HAZOP Study for Hull TSB	12/05/22	Digital Accessed at Project Sharefile	Recommendations for further works

- 1.2.2 The previous studies have been undertaken by or for the *Client* using reasonable skill and care and have been accepted. The *Consultant* shall review the information provided and notify the *Client* of any deficiencies in its adequacy. Following this review, and completion of any work required to rectify the deficiencies identified, the *Consultant* shall take the risk of any deficiencies in existing data quality and quantity which have not been notified to the *Client*.
- 

## 1.3 Objective

The objective of the services is to deliver the following outputs identified by the Phase 1 reliability triage and Hazard and Operability Study (HazOp) to improve the reliability of the barrier.

- 1.3.1 The following objectives shall be delivered:
- i. Civil and structural review of barrier.

- ii. Input/Output (IO) automation review.
  - iii. Review of identified sub system operations.
  - iv. Deliver condition monitoring for mechanical systems.
  - v. Lighting review.
  - vi. Security systems review.
  - vii. Chain analysis including finite element analysis and Non-Destructive Testing.
  - viii. Preparation of specification for replacement of gate penstock actuators.
  - ix. Preparation of specification for replacement of external navigation lighting.
  - x. Preparation of specification for removal of anemometer and accessway.
-

## 2 The service

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### 2.1 Outcome Specification

The *Consultant* shall deliver the *service* such that it meets the outcomes listed in this section.

- 2.1.1 The *Consultant* shall demonstrate sustainability leadership through fully considering and contributing to achieving the *Client's* environment and sustainability ambitions and targets. These are set out in the EA2025 Action Plan, e:Mission 2030 Strategy, the Defra 25 Year Environment Plan and are in line with the principles of sustainability as described by the United Nation's Sustainable Development Goals.
- 2.1.2 The *Consultant* shall design the scheme taking into account the environmental sensitivities and opportunities of the sites and involving key environmental specialists as appropriate within the *Consultant* and the *Client's* organisation.
- 2.1.3 The *Consultant* shall ensure the optioneering process fully considers and addresses sustainability including carbon reduction as strategic outcomes.
- 2.1.4 The *Consultant* shall ensure the optioneering process fully considers environmental mitigation and opportunities to further conserve and enhance as per our legal and policy obligations but to also contribute to the Environment Agency's ambitions. This includes delivery against OM4, to achieve biodiversity net gain but must also consider wider sustainability opportunities. The *Consultant* shall ensure the optioneering process avoids where possible, minimises and compensates or offsets any adverse environmental effects.
- 2.1.5 The *Consultant* shall ensure that the options and final solution take into consideration all relevant guidance and legislation and seek to minimise long-term asset/land management and maintenance costs and carbon
- 2.1.6 The options will also demonstrate that the *Consultant* has learnt from best practice and demonstrate how optimum flood risk reduction, natural processes, carbon reduction, recreation, good ecological water quality and visual amenity can be combined.
- 2.1.7 This commission must consider planning permission and all other necessary permissions/licences being obtained at detailed design stage. The outline design shall feasibly be able to obtain planning permission.

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### 2.2 Constraints

- 2.2.1 The *Consultant* will need to adhere to all safe systems of work that are in place at the Hull TSB. The *Consultant* shall arrange all access to the site through the Environment Agency Project Manager.
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## 2.3 Consultant Project Management

- 2.3.1 In managing the *service*, the *Consultant* shall follow all the requirements as set out in the Collaborative Delivery Framework schedules and the relevant content of the Minimum Technical Requirements.
- 2.3.2 In managing the *service*, the *Consultant* shall:
- Contribute monthly to the updates to the project risk register.
  - Attend monthly progress meetings and prepare record minutes within a week for the *Client* to issue.
  - Produce monthly financial updates and forecasts meeting the *Client's* project reporting timetable together with progress reports. Monthly financial updates and forecasts to meet EA deadlines provided by no later than the 10<sup>th</sup> day of each month, or otherwise agreed at the project start up meeting.
  - Attend project board meetings as required.
  - Ensure quarterly input into framework performance assessment/environmental Performance Measures.
- 2.3.3 The contract will be administered using FastDraft.
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## 2.4 Outputs and Deliverables

- 2.4.1 The *Consultant* shall produce the following key documents for this commission:
- ii. The *Consultant* shall undertake civil and structural site inspections and reporting of all structural and building elements both internally and externally. Reporting shall describe the condition of the existing facility and make recommendation for any remedial works that may be identified. The report shall also recommend a programme for any ongoing periodic surveys that the *Consultant* recommends. The survey shall include the following elements:
    - Survey area shall include all above and below ground areas of the site including the towers, bridge, counterweight chambers, basements, east and west facilities buildings.
    - Inspections shall include but not be limited to, concrete, steelwork, fenestration, glazing, paint work.
    - West / East Tower Alignment & Movement check
    - Review and inspect the gate's structural integrity and implement a re-painting strategy.
    - Structural inspection of the chambers requiring confined spaces access.
  - iii. The *Consultant* shall undertake a comprehensive check on the automation system IOs. The *Consultant* shall check and record IO addressing and log the representation of field devices on the facility SCADA system. The *Consultant* shall arrange for attendance by an approved

control system specialist who shall make changes to IO addressing during completion of the check. The *Consultant* shall report the output of the IO check and make recommendations for any additional remedial work identified.

- iv. The *Consultant* shall review the following elements of mechanical plant that have been identified through the HAZOP / FMEA process. On completion of the review the *Consultant* shall produce a short report detailing the outcome of the investigation and making any recommendations for remedial works.
  - Brake Hydraulic Pumps to be checked against design and performance requirements.
  - Review the operation of the accumulators and in particular, undertake an appraisal for implementation of pressure transducers on the nitrogen side of the accumulators.
  - Check heater settings of the Drive and Retarder Hydraulic Tanks
  - Review procedure on disabling of the retarder clutch/gearbox arrangements
  - Review operation of Latch Manifold Assembly.
  - Clarify and document the procedure in the event that both brakes fail
  - Perform calculations on the cross shaft failure to establish failure modes for the cross shaft.
  - Review 24V DC power for back-up systems and consider options for alternatives.
  - Identify mechanism for valve are operation (manual valves on main hydraulic circuit) and review alarm systems employed.
  - Check filter pressure performance. Check and update the drawing (15c is shown as a check valve on materials register & a filter on the drawing).
  - Review procedure for oil contamination checks for all hydraulic circuits (including where the reading is taken)
  - Check high oil temperature that shuts off pump systems causing prevention to start (main hydraulic circuit).
  - Review operation of alarms of main hydraulic circuit.
- v. Undertake condition monitoring and reporting for main mechanical items (cross shaft + UV joints especially) + Electronic Systems to include the use of specialist subcontractors as appropriate. Reporting shall include recommendations for any remedial works that are identified and a recommendation of future preventative monitoring programme.
- vi. Identify current, torch, luminaires for adequacy. Identify if lighting systems can be transferred to UPS system.
- vii. Undertake site security review based on EA internal security standards and make any recommendation necessary to comply with Category A requirements.

- viii. Undertake Finite Element Analysis (FEA) on chains
- ix. Undertake No-Destructive Testing (NDT) on chains.
- x. The consultant shall procure and manage their specialist subcontractor in the delivery of NDT of the barrier chains. Reporting shall make recommendations of any remedial works required and a recommendation of future preventative monitoring programme.
- xi. Preparation of a specification for the following works to the barrier:
  - Replacement of gate penstock actuators
  - Replacement of external navigation and warning lights.
  - Removal of anemometer and associated access platform.

### 3 Health and Safety

- 3.1.1 Health, Safety and Wellbeing (HSW) is the number one priority of the *Client*. The *Consultant* shall promote and adopt safe working methods and shall strive to deliver design solutions that provide optimum HSW to all.
  - 3.1.2 The *Consultant* shall follow and comply with the requirements outlined in the Safety, health environment and wellbeing (SHEW) Code of Practice (LIT 16559).
  - 3.1.3 The *Consultant* shall supply designer risk assessments, drawings and any other data required to fulfil their duties under CDM.
  - 3.1.4 The works on site included in the geotechnical section will be subject to notification to the HSE. Appraisal work to outline design shall be treated as if it was notifiable.
  - ~~3.1.5 The *Consultant* shall fulfil the Principal Designer (PD) role and discharge the duties in accordance with the requirements of regulations 8, 9, 11 and 12 of the Construction Design Management Regulations 2015.~~
  - ~~3.1.6 The PD must be a lead or active designer and can either demonstrate relevant Skills, Knowledge and Experience to undertake the role or have access to relevant support to discharge their duties.~~
  - ~~3.1.7 The PD will demonstrate their compliance with their CDM duties by preparing and updating the Pre-Construction Management Tool on a monthly basis where design elements are being delivered (or more frequently for start of construction activities) and liaising with the CSF Resident Principal Designer.~~
  - ~~3.1.8 The PD will identify and track significant risks, scrutinise the quality of treatment of risks with regards to the principals of prevention, co-ordinate other designers' mitigation and handover designs which can be constructed safely.~~
  - ~~3.1.9 The PD shall ensure there is effective liaison and coordination between phases and with the Principal Contractor.~~
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## 4 General

Not Used

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## 5 Relevant guidance

The *Consultant* shall deliver the *service* using the following guidance:

Ref	Report Name	Where used
LIT 16559	Safety, health environment and wellbeing (SHEW) Code of Practice	Throughout
183_05	Data management for FCRM projects	Mapping and modelling

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## 6 Requirements of the Programme

- 6.1.1 The *Consultant* shall provide a detailed programme in Microsoft Project format version 2016 meeting all requirements of Cl.31 of the Conditions of Contract.
- 6.1.2 The *Consultant* shall provide a baseline programme for the project start up meeting and shall update the programme monthly for progress meetings with actual and forecast progress against the baseline. The programme shall also include alignment and submission of the BIM Execution Plan (BEP) and Master Information Delivery Plan (MIDP).
- 6.1.3 The programme shall cover all the activities and deliverables in the project, and include all major project milestones from commencement to the end of the reporting, consultation and approvals stage.
- 6.1.4 The programme shall include review and consultation periods for drafts, scoping letters, statutory consultation etc.
- 6.1.5 The programme shall identify time risk allowance on the activities and float.
- 6.1.6 The following are absolute requirements for Completion to be certified:
- Clause 11.2(2) work to be done by the Completion Date
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## 7 Services and other things provided by the *Client*

- 7.1.1 Access to Environment Agency systems and resources including:
- Asite.
  - FastDraft.
  - Collaborative Delivery Community SharePoint access.

- 7.1.2 Previous studies listed in Section 1.2.1. The *Client* will provide the previous studies within two weeks of contract award.
- 

## **8 Data**

- 8.1.1 All data is provided in the previous studies identified in Section 1.2.1.
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## **9 *Client's* Advisors**

- 9.1.1 The *Client* for the Contract is represented by the Programme & Contract Management (PCM) team, primarily the EA Project Manager, acting as the *Service Manager*, and in their absence the Project Executive. Instructions may only be given by these staff.
- 9.1.2 The *Client* has a number of advisory departments. Instructions will only be deemed enacted from them when they are confirmed by an Instruction from the *Client*. These departments include Asset Performance, Partnership & Strategic Overview, NEAS, etc.
- 9.1.3 The *Client's* organisation has a regulatory function. Communications from the Environment Agency in its capacity as a regulator are not to be confused with communications as the *Client*.
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## **10 *Client* Documents the *Consultant* Contributes to**

- 10.1.1 The *Client* maintains several project documents, the *Consultant* is required to contribute to these *Client* owned documents:
- Project Risk Register.
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## Appendices

## Appendix 1 – BIM Protocol

The *Consultant* shall adhere to the Environment Agency's Employers Information Requirements (EIR) framework level minimum technical requirements.

All *Client* issued information referenced within the Information Delivery Plan (IDP) requires verifying by the *Consultant* unless it is referenced elsewhere within the Scope.

<https://www.asite.com/login-home>

The *Consultant* shall register for an Asite Account and request access to the project workspace to view the IDP.

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