



Framework:	Collaborative Delivery Framework
Supplier:	Ove Arup & Partners Ltd
Company Number:	[REDACTED]
Geographical Area:	Midlands
Project Name:	Avon Weirs & Sluices Underwater Surveys - Options Appraisal
Project Number:	ENV0000763C
Contract Type:	Professional Service Contract
Option:	Option C
Contract Number:	project_33556
Stage:	Other

Revision	Status	Originator	Reviewer	Date

PROFESSIONAL SERVICE CONTRACT under the Collaborative Delivery Framework CONTRACT DATA

Project Name Avon Weirs & Sluices Underwater Surveys - Options Appraisal

Project Number ENV0000763C

This contract is made on 22 July 2021
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
Avon_Weirs_Sluices_Survey_Scope v2 dated 5 July 2021

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

Option C

Option for resolving and
avoiding disputes

W2

Secondary Options

X2: Changes in the law

X7: Delay damages

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 Produce a report outlining the options for each of the assets based on the underwater surveys. Provide answers to technical queries during the survey period should they arise. Review the reports produced by the Surveyor under the supervision of the Contractor, and provide technical

The *Client* is Environment Agency

Address for communications

Address for electronic communications

The *Service Manager* is
Address for communications

Address for electronic communications

The *Scope* is in
Avon_Weirs_Sluices_Survey_Scope v2 dated 5 July 2021

The *partner contract* is

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

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
conditions to be met
 'none set'
 'none set'
 'none set'

key date
 '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 22 July 2021

The *Client* provides access to the following persons, places and things
 access
 EA systems and staff

access date
 22 July 2021

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

The *completion date* for the whole of the service is 12 November 2021

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 £22,519.00

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

If Option C is used

The *Consultant's share percentages* and the *share ranges* are:

	<i>share range</i>		<i>Consultant's share percentage</i>	
less than		80 %	0	%
from	80 %	to 120 %	<i>as set out in Schedule 17</i>	
greater than		120 %	<i>as set out in Schedule 17</i>	

6 Compensation events

These are additional compensation events

- Managing and mitigating the impact of Covid 19 and working in accordance with Public Health England guidance, as may vary from time to time, between 1st July 2021 and 31st August 2021
- 'not used'
- 'not used'
- 'not used'
- 'not used'

8 Liabilities and insurance

These are additional *Client's* liabilities

- 'not used'
- 'not used'
- '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>	£5,000,000 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 Service	£15,000,000 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	£5,000,000	

Resolving and avoiding disputes

The <i>tribunal</i> is litigation in the courts	
The <i>Adjudicator</i> is Address for communications	'to be confirmed' 'to be confirmed'
Address for electronic communications	'to be confirmed'
The <i>Adjudicator nominating body</i> 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 resulting 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

After c154.2 and before c154.3, insert the following additional clause:

54.2A If, prior to Completion of the whole of the works, the Price for Work Done 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.

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 X7: Delay damages

X7 only Delay damages for Completion of the whole of the *service* are £89.60 per working day

OPTION X9: Transfer of rights

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 X11: Termination by the *Client*

OPTION X18: Limitation of liability

The *Consultant's* liability to the *Client* for indirect or consequential loss is limited to £1,000,000.00

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 6 years 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

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

Part Two - Data provided by the *Consultant*

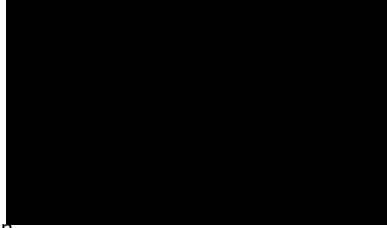
Completion of the data in full, according to the Options chosen, is essential to create a complete contract.

1 General

The *Consultant* is
Name

Ove Arup & Partners Ltd

Address for communications



Address for electronic communication

The *fee percentage* is

Option C

[Redacted]

The *key persons* are

Name (1)

[Redacted] [Redacted]

Job

Project Director

Responsibilities

Overall project performance, report approvals

Qualifications

CEng MICE

Experience

Name (2)

[Redacted]

Job

Project Manager

Responsibilities

Co-ordination of project team and with client

Qualifications

CEng MICE

Experience

7 years

Name (3)

Job

Responsibilities

Qualifications

Experience

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

Delay to underwater survey programme

Delay to receipt of survey results

Quality of survey reports

Condition of one or more assets is poor or worse requiring addition

Additional contractor queries require more than 10 hours of input

3 Time

The programme identified in the Contract Data is

5 Payment

The *activity schedule* is

CDFD-F-1.8 Avon weirs and sluices - PAS

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

To be delivered

Contract Execution

Client execution

Signed Underhand by [PRINT NAME]

for and on behalf of the Environment Agency

[REDACTED]

[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 services contract (PSC)

Scope

Project / contract information

Project name	Avon Weirs and Sluices Underwater Surveys
Project SOP reference	ENV0000763C
Contract reference	project_33556
Date	5 th July 2021
Version number	2
Authors	[REDACTED]

Revision history

Revision date	Summary of changes	Version number
	First issue	

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 services are to be compliant with the Minimum Technical Requirements.

Document	Document Title	Version No	Issue date
412_13_SD01	Minimum Technical Requirements	11	June 2021

1 Overview

This project is proposed to provide underwater surveys for the Avon Weirs & Sluices, complementing the above-water understanding of the assets, identifying any issues and risks, and providing detailed data to inform any necessary remedial investment.

The underwater surveys were specified in March 2021 and are due to be carried out in summer 2021. The results of the surveys will require analysis and options considered for each structure

1.1 Background

The Environment Agency own, or are responsible for, 26 weir and sluice structures over 40 miles of the River Avon that are primarily for navigation purposes and have a legal obligation to maintain them. Many of the assets have reached their expected design life. The last substantial programme of works on the structures occurred in the early 1990s and only minimal maintenance has been carried out on them since, leading to a gradual deterioration in their condition and an increasing risk of failure.

The 26 weir and sluice structures are as per the table below

Stratford Weir	Fladbury Sluices	Nafford Sluices
Lucy's Mill Weir	Crophorne Weir	Berwick Weir
Lucy's Mill Sluice	Wyre Weir East	Strensham Weir
Welford Weir	Wyre Weir West	Strensham Sluice
Harvington Weir	Pershore Weir	Abbey Mill Sluice
Evesham Weir	Pershore Sluices	Stanchard Pit Weir
Chadbury Mill Weir	Eckington Sluices	Stanchard Pit Sluice
Fladbury Weir	Nafford Weir	Alvestone Weirs (x 2)
Barford		

1.2 Outputs and deliverables

Objective

The objective of the works is to have a preferred option for each of the surveyed assets based on the underwater survey carried out in summer 2021.

Outcome Specification

The required outcome of this commission is for the *Consultant* to produce a report outlining the options for each of the assets based on the underwater surveys. Consideration of previous recommendations and survey results will be carried out at a later stage.

As well as reviewing the survey results, the *Consultant* is to provide answers to technical queries during the survey period should they arise. The *Consultant* shall also review the reports produced by the Surveyor under the supervision of the Contractor, and provide technical feedback and highlight any additional information that should be provided.

2 In managing the services the *Consultant* shall:

Attend 2 hr long monthly progress meetings and draft record minutes, the *Client* to issue.

Attend 1 hr long bi-weekly progress teleconferences.

Produce monthly financial updates and forecasts meeting the *Client's* project reporting timetable together with progress reports. These are to be provided by the 8th day of each month.

The *Consultant* is to make full use of the *Client's* web based project collaboration tool (Asite). Whenever practical all project and contract communications and records are to be distributed and stored using this project collaboration tool.

3 Services required

Provide responses to technical queries during the underwater survey period from the *Client*, Contractor and surveyor.

Attend site visit to each asset as required, subject to Covid restrictions. One day of site visits is allowed for in the agreed cost.

Review underwater survey results and provide comments back for the surveyor on the outputs.

Review underwater survey results for each asset and provide a summary of options for future works including do nothing, do minimum, recommended repairs and asset removal as appropriate. Include key risks and opportunities and suggestions for further works and surveys. The options must consider as a minimum the impact on the performance of the weir, residual design life, health and safety during repairs, operation and maintenance; and cost. A full options appraisal will be undertaken at a later date where necessary based on the outcomes of the underwater surveys. These will be delivered as individual projects under new contracts.

4. Specifications of standards to be used

4.1 Health and safety

Health and safety is the number one priority of the *Client*. The *Consultant* will promote and adopt safe working methods and shall strive to deliver solutions that provide optimum safety to all.

The *Client* has appointed a Principal Designer under the CDM regulations.

5 Requirements of the programme

5.1 Programme

The dates of the underwater survey are shown in Appendix 1, [REDACTED] survey programme. The *Consultant* shall be available to answer queries throughout the survey period. Completion of all reports is to be 5 weeks after receipt of the survey information. Reporting deadlines and other milestones are to be agreed with the *Client* following receipt of the survey results.

Start Date:	22 nd July 2021
Support during the surveys:	10 th – 30 th August 2021
Receipt of survey information:	22 nd September 2021
Issue of site reports for Client comment:	27 th October 2021
Work complete:	12 th November 2021

6 Services and other things provided by the *Client*

6.1 Data and information management and intellectual property rights

All of the data listed as being supplied to the *Consultant* as part of this study remains the IP of the *Client*.

6.2 Data custodianship

The data custodian for project deliverables from this commission will be the PSO team.

6.3 Licensing information

Licences for LiDAR Data, Ordnance Survey mapping, model, survey, hydrometric and historical data will be provided where necessary to the *Consultant* upon award of this commission.

6.4 Data management and metadata

The *Client* populates a metadata database called the information asset register (IAR). It is a requirement that all information produced by modelling work is appropriately tagged with metadata. The *Client* will supply an IAR spreadsheet (and any supplementary local metadata requirements if appropriate) where all relevant metadata can be recorded and handed over on project completion.

6.5 Data security

All model and survey information will be provided to the *Consultant* in an encrypted format (using WinZip 128 bit encryption) according to *Client* data security policy. It is expected that once the commission is completed, all the original data sent to the *Consultant*, which is classed as commercially sensitive, is returned in an encrypted format using WinZip 128 bit encryption.

Project deliverables such as model files, survey data or anything of a personal nature such as questionnaires or address data must also be returned in an encrypted format using WinZip 128 bit encryption.

Further details regarding security measures will be discussed at the start-up meeting for this commission

6.6 *Client's* Advisors

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 Area, NEAS, etc.

6.7 *Client* Documents the *Consultant* contributes to;

The *Client* maintains several project document, the *Consultant* is required to contribute to these *Client* owned documents;

- Project Risk Register
- Project Efficiency register

Appendices



Appendix 2 BIM Protocol – Production and Delivery Table

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

The BIM2 CDE Workspace on Asite that reflects this Scope is currently being populated and will be provided to the Consultant during the tender response period.