



Framework:
Supplier:
Company Number:

Geographical Area:
Project Name:
Project Number:

Contract Type:
Option:

Contract Number:

Collaborative Delivery Framework
Ove Arup & Partners Ltd
01312453

North East
Stubbing Holme Road Design

Professional Service Contract
Option C

project_32530

Revision	Status		Originator		Reviewer		Date

PROFESSIONAL SERVICE CONTRACT under the Collaborative Delivery Framework
CONTRACT DATA

Project Name Stubbing Holme Road Design

Project Number [REDACTED]

- This contract is made on 07 June 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
Scope - Stubbing Holme Road - Detailed Design.pdf

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
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- 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 Production of detailed design and full business case (FBC) for Stubbing Holme Road FAS

The *Client* is Environment Agency

Address for communications Lateral
8 City Walk
Leeds
LS11 9AT

Address for electronic communications [REDACTED]

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

Address for electronic communications [REDACTED]

The *Scope* is in
Scope - Stubbing Holme Road - Design.pdf

The *partner contract* is
N/A

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
BAM will require 10 weeks' notice prior to Ground Investigation works starting in order to get the supplier on board and to have any necessary permits prepared and in place
Pre-discussed detailed design 'additional items' required – deliverables in support of planning application; detailed WFD compliance assessment; listed building consent;
Mill goit appraisal of solutions depending on output of questionnaire

	Potential input and appraisal of a solution at Stubbing Holme Road Bridge				
	Early warning meetings are to be held at intervals no longer than			2 weeks	
2 The <i>Consultant's</i> main responsibilities					
	The <i>key dates</i> and <i>conditions</i> to be met are				
	<i>conditions</i> to be met			<i>key date</i>	
	'none set'			'none set'	
	'none set'			'none set'	
	'none set'			'none set'	
	The <i>Consultant</i> prepares forecasts of the total Defined Cost plus Fee and <i>expenses</i> at intervals no longer than			4 weeks	
3 Time					
	The <i>starting date</i> is			07 June 2021	
	The <i>Client</i> provides access to the following persons, places and things				
	access			<i>access date</i>	
	Asite / Fastdraft			07 June 2021	
	The <i>Consultant</i> submits revised programmes at intervals no longer than			4 weeks	
	The <i>completion date</i> for the whole of the <i>service</i> is			18 March 2022	
	The period after the Contract Date within which the <i>Consultant</i> is to submit a first programme for acceptance is			4 weeks	
4 Quality management					
	The period after the Contract Date within which the <i>Consultant</i> is to submit a quality policy statement and quality plan is			4 weeks	
	The period between Completion of the whole of the <i>service</i> and the <i>defects date</i> is			26 weeks	
5 Payment					
	The <i>currency of the contract</i> is the £ sterling				
	The <i>assessment interval</i> is			Monthly	
	The <i>Client</i> set total of the Prices is			[REDACTED]	
	The <i>expenses</i> stated by the <i>Client</i> are as stated in Schedule 9				
	The <i>interest rate</i> is			2.00% per annum (not less than 2) above the	
	Base			rate of the Bank of England	
	The locations for which the <i>Consultant</i> provides a charge for the cost of support people and office overhead are			All UK Offices	
If Option C is used	The <i>Consultant's share percentages</i> and the <i>share ranges</i> are:				
	<i>share range</i>			<i>Consultant's share percentage</i>	
	less than	80 %	%	0	
	from	80 %	to 120 %	as set out in Schedule 17	
	greater than	120 %		as set out in Schedule 17	
6 Compensation events					
	These are additional compensation events				
	1.	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 April 2021 and 30th June 2021			
	2.	Managing and mitigating the impact of Covid 19 and working in accordance with Public			
	3.	'not used'			
	4.	'not used'			
	5.	'not used'			
8 Liabilities and insurance					
	These are additional <i>Client's</i> liabilities				
	1.	'not used'			
	2.	'not used'			
	3.	'not used'			
	The minimum amount of cover and the periods for which the <i>Consultant</i> 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>		
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		
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		
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		

Resolving and avoiding disputes

The <i>tribunal</i> is litigation in the courts	
The <i>Adjudicator</i> is	'to be confirmed'
Address for communications	'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 Aggregated 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.
54.3 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
• the Price for Service Provided to Date or the Price for Work Done to Date in the partner contract.

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 [redacted] [redacted]

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 [redacted]

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

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*

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 communications

The fee percentage is

Option C

The key persons are

Name (1)
Job
Responsibilities
Qualifications
Experience

Name (2)
Job
Responsibilities
Qualifications
Experience

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
Covid-19 Pandemic

3 Time

The programme identified in the Contract Data is

5 Payment

The *activity schedule* is
Stubbing Holme Road - Full Business Case

Resolving and avoiding disputes

The *Senior Representatives* of the *Consultant* are

Name (1) [redacted]
Address for communications

[redacted]

Address for electronic communications
[redacted]

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 under hand by

for and on behalf of the Environment Agency


Signature


Role

Consultant execution

Consultant execution

Signed under hand by

for and on behalf of

Ove Arup & Partners Ltd


Sign


Role

Environment Agency

NEC4 Professional Service Contract (PSC)

Scope

Project / contract information

Project name	Stubbing Holme Road Flood Alleviation Scheme
Project SOP code	[REDACTED]
Contract number	32530
Date	March 2021
Document BIM Reference:	[REDACTED]

Assurance

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

Revision History

Revision date	Summary of changes	Version number
07/12/2020	First issue to Arup with new NGSA template	P01
15/12/2020	Revised version incorporating Arup comments & feedback	P02
21/12/2020	Version aligns with 'data freeze' agreement of additional items	P03
12/01/2021	Guidance text removed, comments addressed. Version to be issued for pricing.	P04
26/03/2021	Final Version for issue on Bravo	C01

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 service is to be compliant with the following version of the Minimum Technical Requirements:

Document	Document Title	Version No	Issue date
LIT 13258	Minimum Technical Requirements	2.0	18/03/2020

1 Overview

1.1 Background

Hebden Bridge is an historic town located in the Calder Valley, 18km west of Bradford. The town is located in a steep-sided valley at the confluence of three flashy rivers; River Calder, Hebden Water and Colden Clough. Hebden Bridge is at risk of fluvial, canal and surface water flooding. Storm Desmond and the subsequent 2015 Boxing Day floods brought devastating flooding to the Calder Valley due to extremely high levels of rainfall in a short time period in the Hebden Water and surrounding catchments.

The Stubbing Holme Road flood cell is adjacent to Hebden Bridge on the west side of the town, immediately upstream of Stubbing Holme Road Bridge. The Stubbing Holme Road Flood Alleviation Scheme (FAS) is proposed to mitigate flood risk from fluvial, canal and surface water sources. The scheme is proposed to mitigate flood risk in the Stubbing Holme Road flood cell independently of the Hebden Bridge FAS.

The Stubbing Holme Road FAS was developed separate to the Hebden Bridge FAS, and its Outline Business Case was approved on 15/07/2019. The project was put temporarily on hold due to a funding gap but was subsequently developed from October 2019 under the new Collaborative Delivery Framework. An 'enabling works' contract with Arup identified and clarified risks moving into the detailed design stage.

1.2 Previous Studies

1.2.1 In undertaking the *service* the *Consultant* shall take account of the previous studies detailed in the table below which was gathered as part of the Hebden Bridge FAS and Stubbing Holme Road enabling works and produce a short technical summary explaining how best use will be made of historical data.

Report	Date	Format	Outcomes of study
Stubbing Holme Road Outline Business Case	15/07/2019	Digital – available on Asite under references [REDACTED]	Approved business case
[REDACTED] Planning Drawings:	August-September 2018	Digital – available on Asite with the following BIM references	Provisional outline design drawings
General Layout Sheet 1 of 2		[REDACTED]-XX-ZZ-DR-C-0001_P02	
General Layout Sheet 2 of 2		[REDACTED]-XX-ZZ-DR-C-0002_P02	
Stubbing Holme Road Long Section		[REDACTED]-XX-XX-SH-C-0003_P01	
Stubbing Holme Road Proposed Sections		[REDACTED]-XX-ZZ-DR-C-0004_P02	
Rochdale Canal Left Bank Flood Wall Sections		[REDACTED]-XX-RC-DR-C-0005_P02	
Rochdale Canal Left Bank Flood Wall Sections		[REDACTED]-XX-RC-DR-C-0006_P02	
River Calder Left Bank Properties Layout Plan and Sections		[REDACTED]-XX-LB-DR-C-0007_P02	
Stubbing Holme Road Proposed Ramp Design		[REDACTED]-XX-SH-DR-C-0008_P02	
Rochdale Canal Overflow Weir General Layout		[REDACTED]-XX-RC-DR-C-0009_P02	
Rochdale Canal Overflow Weir Longitudinal Section		[REDACTED]-XX-RC-DR-C-0010_P02	
Rochdale Canal Robertshaw Road Access Ramp Details		[REDACTED]-XX-RC-DR-C-0011_P02	
Planning Redline Boundary Sheet 1 of 2		[REDACTED]-XX-ZZ-DR-C-0013_P01	

Planning Redline Boundary Sheet 2 of 2		██████████-XX-ZZ-DR-C- 0014_P01	
Rochdale Canal Private Cottage Access Gates Sheet 1 of 2		██████████-XX-RC-DR-C- 0015_P02	
Rochdale Canal Private Cottage Access Gates Sheet 2 of 2		██████████-XX-RC-DR-C- 0016_P02	
Stubbing Square Properties Front Flood Wall and Pedestrian Footpath General Layout		██████████-XX-SH-DR-C- 0017_P01	
Rochdale Canal Flood Wall Section		██████████-XX-SH-DR-C- 0018_P02	
Rochdale Canal Left Bank Condition of Existing Wall and Proposed Works (Sheet 1 of 2)		██████████-XX-RC-DR-C- 0019_P02	
Rochdale Canal Left Bank Condition of Existing Wall and Proposed Works (Sheet 2 of 2)		██████████-XX-RC-DR-C- 0020_P02	
Hydraulic Model – Enabling works review		██████████-00-00-TN- HY-C0100_2-A2-C01-C0100- EA3-LOD3-Hydraulic Model - Enabling works Review	
Structural Scoping - Geotechnics		██████████-00-00-TN- GT-A0800_2-A2-C01-A0800- EA3-LOD3-Structural Scoping - Geotechnics	
Structural Assessment Scope – Wall A		██████████-DW-00-TN- S-B1500_2-A2-C01-B1500-EA3- LOD3- Structural Assessment Scope - Wall A	
Structural Assessment Scope – Wall B		██████████-DW-00-TN- S-B1500_3- A2-C01-B1500-EA3- LOD3- Structural Assessment Scope - Wall B	
Structural Assessment Scope – Wall C		██████████-DW-00-TN- S-B1500_4-A2-C01-B1500-EA3- LOD3- Structural Assessment Scope - Wall C	
Structural Assessment Scope – Wall D		██████████-DW-00-TN- S-B1500_5-A2-C01-B1500-EA3- LOD3- Structural Assessment Scope - Wall D	

Structural Assessment Scope – Wall E		[REDACTED]-DW-00-TN-S-B1500_6-A2-C01-B1500-EA3-LOD3- Structural Assessment Scope - Wall E	
Hydraulic model – Technical Note		[REDACTED]-00-00-TN-HY-C0100_1-A2-C01-C0100-EA3-LOD3-Hydraulic model - Technical Note	
Structural Technical Note		[REDACTED]-DW-00-TN-S-B1500_1-A2-C01-B1500-EA3-LOD3-Data Review - Structures	
Data Review - Geotechnics		[REDACTED]-00-00-TN-GT-A0800_1-A2-C01-A0800-EA3-LOD3-Data Review - Geotechnics	
Topo Data Review		[REDACTED]-00-00-TN-C-A0300_1-S3-P01-A0300-EA3-LOD3-Topo Data Review	
Mill Goit Desk Study		[REDACTED]-IZ-ZZ-TN-HY-A1200_1-A2-C01-A1200-EA3-LOD3-Mill Goit Desk Study	
Data Review - Utilities		[REDACTED]-00-00-TN-UT-A0600_1-A2-C01-A0600-EA3-LOD3-Data Review - Utilities	
Enabling Works Summary Report		[REDACTED]-00-00-TN-Z-B1500_8-A1-C01-B1500-EA3-LOD3-Enabling Works - Summary Report	
Hebden Bridge Flood Alleviation Scheme Preliminary Ecological Appraisal	10 December 2019	[REDACTED]-00-HB-RP-EN-C0300_19-S3-P01-C0300-EA4-LOD4-Preliminary Ecological Appraisal	
Hebden Bridge Flood Alleviation Scheme Bat Report Survey and Bat Survey Location Map	31 October 2019	[REDACTED]-00-HB-RP-EN-C0300_18-S3-P01-C0300-EA4-LOD4-Bat Survey Report	
Hebden Bridge Flood Alleviation Scheme Technical Note – Draft Otter Survey	28 October 2020	[REDACTED]-00-HB-TN-EN-C0305_2-S3-P01-C0305-EA4-LOD4-Otter Survey	
Hebden Bridge Flood Alleviation Scheme Preliminary Environmental Information Report, 3 November 2017 Rev B	3 November 2017	Digital PDF	
Hebden Bridge Desk Based Assessment	3 June 2020	[REDACTED]-00-HB-RP-HEC0300_21-A4-P02-C0300-EA4-LOD4-Heritage Desk Based Assessment	
OBC to FBC Risk Register	18 March 2021	[REDACTED]-00-00-RR-Z-E1400_1-S2-P02-E1400-EA3-LOD3-SHR Risk Register	

- 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* if the data is incorrect, contains anomalies, is not adequate for the purposes of detailed design or is based on inappropriate assumptions. Following this review, and completion of any work required to rectify the deficiencies identified, the *Consultant* will take the risk of any deficiencies in existing data quality and quantity which have not been notified to the *Client*.
-

1.3 Objectives

The objective of this appointment is to produce a detailed design and Full Business Case (FBC) to provide flood alleviation to the residential and commercial properties in the Stubbing Holme Road flood cell to enable the Client to secure approval from the NPAS assurance board.

The design will ensure that the cost and quality of the construction work represents value for money and is affordable by the Client and within the agreed budget (i.e. approved 50%ile budget, as detailed in the latest business case approval).

2 The service

2.1 Outcome Specification

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

- 2.1.1 The required outcome of this commission is to develop the outline design produced at appraisal stage into a detailed design such that it meets the project objectives and enables the scheme to be priced and constructed under an NEC4 Engineering and Construction Contract.
- 2.1.2 The *Consultant* shall ensure that the detailed design takes into consideration all relevant guidance and legislation and seek to minimise long-term asset/land management, maintenance costs and whole life carbon.
- 2.1.3 The design will also demonstrate that the *Consultant* has learnt from best practice and demonstrate how optimum flood risk reduction, natural processes, recreation, good ecological water quality and visual amenity can be combined.
- 2.1.4 Working with the *Client* and Early Supplier Engagement (ESE) contractor, the *Consultant* shall be responsible for ensuring the design is acceptable to the *Client* (gaining approval of Gateway 3), is designed to gain planning approval and any other associated approvals and to be acceptable to statutory and key stakeholders.
- 2.1.5 The *Consultant* shall prepare a single planning application covering the proposed construction works and shall submit these to the relevant Planning Authority for Planning Consent. The *Consultant* shall be responsible for submitting the required documents through the Planning Authority portal. The *services* exclude the payment of Planning Fees. This commission must result in planning permission being obtained, and all other necessary permissions required for construction being identified. Should the *Consultant* become aware that the Planning Authority is not expected to support the scheme, or if the *Consultant* considers the refusal of the Planning Authority was not reasonably foreseeable, the *Consultant* shall raise an early warning.
- 2.1.6 Once planning permission has been obtained, the *Consultant* shall apply for protected species licences, on behalf of the *Client*.
- 2.1.7 The *Consultant* shall seek to develop the detailed design such that the cost and quality of the scheme represents value for money and can be constructed within the approved OBC budget.
- 2.1.8 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.
- 2.1.9 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.
- 2.1.10 The *Consultant* shall ensure the design process fully considers and addresses sustainability including carbon reduction as strategic outcomes.
- 2.1.11 The *Consultant* shall develop the outline design into a detailed design that optimises the project objectives and outcomes identified in the OBC, supported by evidence that will enable the *Client* to produce a Full Business Case.

- 2.1.12 The *Consultant* shall produce a detailed design that supports the *Client* to achieve efficiency targets set for this commission and future stages of the project using the Combined Efficiency Reporting Tool (CERT).
- 2.1.13 The *Consultant* shall prepare the ECC Scope for the main works tender document. The ECC Scope shall not contradict the *Client's* standard documents. If there is a requirement to do so the *Consultant* shall justify the need and obtain the prior written agreement of the *Client*.
-

2.2 Constraints

- 2.2.1 None
-

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 The overall management of the commission shall:
- Contribute monthly to the updates to the project risk register.
 - Provide input to project efficiency CERT Form.
 - Attend progress meetings.
 - 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 10th day of each month or otherwise agreed at the project start up meeting.
 - Deliver a monthly progress report in the *Client's* standard template [REDACTED] giving progress against programme, deliverables received and expected and financial and carbon summary against programme.
 - Attend project board meetings as required.
 - Ensure quarterly input into framework performance assessment/environmental Performance Measures.
 - Ensure the *Consultant's* environmental lead provides monthly progress and risk reviews to the *Client* and attends progress meetings, as invited.
 - Maintain and show how accurate and up to date information on the whole-life cost and carbon is driving optimum solutions at all stages of design development.
 - Capture lessons learnt relevant to scheme delivery for the EA PM to include in the scheme lessons learnt log to be appended to the FBC.

2.3.3 The contract will be administered using FastDraft.

2.4 Outputs and Deliverables

2.4.1 The *Consultant* shall confirm the list of products with the *Client* and submit the product description for the *Client's* acceptance before commencing work on the product.

2.4.2 The *Consultant* shall produce the following key documents for this commission:

- Detailed Design.
- Updated Programme showing milestones to construction completion including funding and environmental constraints and opportunities. The Programme shall take account of the timeframe required for all approvals necessary for mitigation and enabling works to be carried out in advance of main construction.
- Update Carbon Optimisation Report.
- Draft text within relevant sections of the FBC.

2.4.3 The detailed design shall be sufficient for a contractor to price, set out and construct the works. The detailed design should include but not be limited to:

- i. Calculations.
- ii. Drawings (including landscape/ ecological design drawings/ planting schedules).
- iii. Environmental Assessment.
- iv. Documents necessary to enable the *Client* to form a NEC4 Engineering and Construction Contract for the construction works with the Lot 2 Delivery Partner
- v. Specifications (including any additional clauses to Environment Agency standard specifications - e.g. Environment Agency NEAS Landscape Specification template).
- vi. Design philosophy statement, giving design process, standards used, and assumptions made to the satisfaction of the *Client*. This should demonstrate compliance with the *Client's* sustainability targets.
- vii. Design report, including asset schedule, buildability statement and maintenance plan.
- viii. Designer's Risk Assessments.
- ix. Public Safety Risk Assessments.
- x. Pre-construction information.
- xi. Application for all necessary consents and permissions required at FBC stage.
- xii. Environmental Action Plan.
- xiii. Materials Management Plan.

3 Site Investigation

3.1 Topographic Survey

- 3.1.1 The *Consultant* will review previous topographic survey to identify gaps in existing data. The Consultant will use this to inform the scope of supplementary topographic survey required.
- 3.1.2 The *Consultant* shall work with NEAS to ensure that environmental and sustainability constraints within the likely scheme footprint are identified and included in the survey and to determine if efficiencies can be made by joint working.
- 3.1.3 A topographical survey is required to provide further details of the existing piles so that the alignment of new piles may be optimised relative to this. A survey is also required to supplement that previously undertaken in order to identify the location of key features on the quay so that we may clearly define working areas and accesses in the Scope. Specific requirements are:
- Preparation of a brief and procurement of the survey in accordance with the current version of the Environment Agency's National Standard Technical Specifications for Surveying Services, to enable the above.
 - Review and agree surveyors' site risk assessment.
 - Supervision and management of topographic survey company.
 - Review data / checking deliverables.
 - AD: The *Consultant* shall undertake the topographic survey necessary to be able to complete a detailed design.
- 3.1.4 The *Consultant* shall use the outputs from the topographic survey in their modelling and design.
-

3.2 Ground Investigation

- 3.2.1 The *Consultant* shall scope any additional Ground Investigation required to undertake the detailed design and agree the scope with the *Client*.
- 3.2.2 The *Consultant* shall ensure that the environmental risks and opportunities associated with the Ground Investigation, including the collection of environmental evidence to support Appraisal and Assessment, are identified and addressed.
- 3.2.3 In scoping the Ground Investigation works the *Consultant* shall include the necessary works to facilitate efficient and sustainable materials management planning and re-use within the project.
- 3.2.4 The *Consultant* shall identify any contaminated land within the area of the project and specify testing within the Ground Investigation scope such that it can be classified properly for disposal.
- 3.2.5 The *Consultant* shall clearly communicate the scope of the Ground Investigation to the Lot 2 contractor for the Lot 2 contractor to undertake.
- 3.2.6 The *Consultant* shall supervise the Ground Investigation undertaken by the Lot 2 contractor. The supervision will be subject to a Compensation Event.
- 3.2.7 The *Consultant* shall produce a summary of key interpretative decisions based on the Ground Investigation undertaken by the Lot 2 contractor.

3.3 Ecological surveys

- 3.3.1 Undertake additional surveys consistent with current guidelines, where these are essential to securing permissions or are essential to achieving good environmental design such as informing the Biodiversity Metric. Utilise project information regarding habitat condition as well as the distribution of species and the current understanding of the factors governing their distribution. Use habitat, species and survey information in a scientific and informed way to justify environmental decision making. AD: The Consultant shall assess if existing reports and survey data can be utilised, providing updates where possible.
 - 3.3.2 AD: The Consultant shall review and update the existing Preliminary Ecological Appraisal (PEA) including undertaking a habitat survey (as required). The PEA shall: identify ecological constraints and features of value; provide the necessary information to inform the development of detailed design such that impacts on features of ecological importance can be avoided or minimised; and identify any requirements for further ecological surveys and assessment, which shall be communicated to the client.
 - 3.3.3 AD: Whilst carrying out the PEA, the Consultant shall also gather the field information required to later utilise the Biodiversity Metric 2.0 in order to measure and account for biodiversity losses and gains resulting from the project.
-

3.4 Services Search

- 3.4.1 The *Consultant* shall obtain services data from utility companies and shall ensure services data is requested from relevant landowners. This shall include direct costs of obtaining data. This shall be incorporated into the design, including preparation of plans.
 - 3.4.2 The *Client* will arrange for a non-intrusive survey to detect key utilities (e.g. GPR) to inform SI and/or detailed design. The *Consultant* shall determine the extent of the survey and produce a specification for the survey in accordance with EA Guidance and Principal Designer discussion; defining type and purpose of survey including extents and available information.
 - 3.4.3 The *Consultant* shall also provide a site supervisor to manage the survey supplier.
 - 3.4.4 The outputs from this survey shall be included in the design, including revising the plans. The output shall be used to make recommendations for any further surveys required which would include intrusive investigations to inform the detailed design.
-

4 Hydrology and Hydraulics

4.1 General

- 4.1.1. The existing modelling is identified in the table in section 1.2. The extents of the modelling and assumptions made are within the model report.
 - 4.1.2. The *Consultant* shall verify the model with quality and extent checks.
 - 4.1.3. The model is to be used for updating levels with detailed design components, if the *Consultant* feels this is necessary. It is not intended for the whole range of options to be re-run, only the scheme design at the design flow(s).
 - 4.1.4. The *Consultant* shall provide the *service* in accordance with the Modelling Technical Scope, included in Appendix 2.
 - 4.1.5. Following completion of the study, this model will be handed over to the Flood Incident Management team and the model should be able to determine thresholds of flooding and trigger levels. All electronic data should be in an agreed format in line with the scheme data management plan. A copy of the plan will be provided by the *Client*.
-

5 Economics Appraisal

The economics appraisal is intended to take the outputs of the earlier work and update the economic business case for input to the scheme business case. The detail should (normally) be covered by appraisal guidance and the Multi-Coloured Manual (MCM) and by the business case template and guidance. It is anticipated that this work will be undertaken by the *Client*.

- 5.1.1 None
-

6 Environmental Assessment

Hebden Bridge is a historic market and mill town located within a steep sided valley. Much of the town is designated as a Conservation Area and its topography, building styles, use of materials and the survival of numerous historic buildings and structures lend considerably to its unique historic character. The scheme is located within the Stubbing Holme and Canal Corridor Conservation character area (no.7) which Calderdale Council identify as containing important elements of Hebden Bridge's industrial and canal heritage. The area contains a mix of commercial, residential and community uses and there are a number of listed buildings and structures in the area.

Previous studies of the area have highlighted the potential presence of protected species including Bats and Otters.

- 6.1.1 The *Consultant* shall give due consideration of the environment and sustainability risks and opportunities throughout the design evolution of the project to maximise the delivery of *Client* and project objectives.
- 6.1.2 The *Consultant* shall ensure that the project level assessment sits within the context of any previous strategic environmental assessment and additional information developed in support of the OBC through the Appraisal Stage. This commission will bring forward all relevant information and conclusions.
- 6.1.3 The *Consultant* shall be able to demonstrate how the information from the environmental assessment has been used to inform and adapt the detailed design.
- 6.1.4 Should the preferred option or the design significantly change (unless instructed to do so by the *Client*), the scope of the environmental assessment shall be adapted accordingly.
- 6.1.5 The *Consultant* shall ensure that the detailed design includes all of the necessary information to assure the delivery of all mitigation, management and monitoring measures and the delivery of wider benefits during construction.
- 6.1.6 The *Consultant* shall report the findings of the environmental assessment as required which will form an Appendix to the FBC with relevant summary details incorporated into the relevant section(s) of the FBC main text.
- 6.1.7 The *Consultant* shall be able to demonstrate how they have taken account of the *Client's* wider sustainability aspirations in the development of the detailed design and the associated benefits.
- 6.1.8 AD: The *Consultant* shall report on the CEEQUAL assessment in accordance with the hub workload plan.
- 6.1.9 AD: In support of the Full Business Case, the Consultant shall:

Undertake proportionate environmental assessment:

Provide a fit for purpose PEIR, utilising existing reports, where possible to enable the *Consultant* to seek a screening and if requested a scoping opinion from the Local Planning Authority (LPA) under the Town & Country Planning (Environmental Impact Assessment) Regulations (2017), where appropriate.

- 6.1.10 AD: Review the existing Preliminary WFD Assessment and prepare an updated proportionate WFD Assessment for the project. This should include an assessment of opportunities to deliver WFD improvements and integrated design elements and appropriate mitigation. The recommendations of the assessment will be incorporated into the detailed design of the scheme to ensure compliance with the Water Framework Directive.
- 6.1.11 AD: The Consultant shall ensure that the biodiversity losses and gains of the options are considered based on the approach set out in the Biodiversity Metric 2.0.
- 6.1.12 AD: Calculations (using the Biodiversity Metric 2.0) shall inform scheme development to demonstrate how biodiversity net gain is to be achieved, in line with the Environment Agency ambition set out in the Emission 2030 Sustainability Plan.
- 6.1.13 AD: All works should be carried out in accordance with the MTR 801_14 Environmental Sustainability, Design and Management and associated guidance documents including MTR - 801_14 SD01 Cultural Heritage and Archaeology and 801_14 SD02 Landscape and Environmental Design.

The *Consultant's* proposals shall break down costs, deliverables and tasks into the following headings:

- Environmental assessment (preparation of updated PEIR with separate costs attributed to ecological surveys and deliverables),
- Environmental input into final design development and FBC input,
- Landscape assessment and appraisal,
- Heritage assessment and appraisal, including potential requirements for further archaeological / geo-archaeological investigations,
- WFD assessment,
- CEEQUAL
- Biodiversity Net gain.

This proposal should include a schedule of the expected *Consultant* management products as well as a schedule of environmental product delivery timescales that fit the current project plan including key milestones.

The *Consultant* will be responsible for obtaining environmental permits and consents.

- All tasks and deliverables should be clearly allocated to the FBC stage.

6.1.14 AD: Cultural Heritage and Archaeology

The *Consultant* will provide a costed proposal for archaeological work for the *Client* to accept. The outcome of any proposed heritage studies, desk-based assessment and site investigation, will be to influence design and manage the opportunities and risk and so ameliorate any impact to the historic environment (buried and upstanding).

The archaeological work will be designed and undertaken to gain heritage stakeholder acceptance of the preferred option through EIA scoping consultation prior to planning. The proposed archaeological work and the timing of such will be agreed with the *Employer* and meet the standards identified in the Cultural Heritage MTR and Standards (801_14_SD01).

The *Consultant* shall:

- Provide and agree a Heritage Project with the Environment Agency.
- Liaise with the Local Planning Authority and NEAS Heritage Specialist to establish if the heritage desk-based assessment (DBA) for the Hebden Bridge scheme can be utilised for the Stubbing Holme Road scheme. If further desk-based work is required the *Consultant* shall use data in the existing DBA and update it to produce a heritage desk-based assessment (DBA) for this scheme. This work should be carried out in accordance with MTR 801_14_SD01 Cultural Heritage and Archaeology,
- Agree a programme of archaeological investigations with the *Client's* cultural heritage advisor and the relevant external stakeholder/s (e.g. the archaeological advisor to the Local Authority), and prepare appropriate heritage project designs, procure, manage and supervise the required investigations in accordance with MTR-801_14_SD01 Cultural Heritage and Archaeology.
- Undertake archaeological investigations as agreed in the programme as necessitated to inform the appraisal process and manage the opportunities and risks related to archaeological or heritage features on the detailed project planning or construction phases of the project. This should be scaled to influence the consideration of the options, and then to assess the preferred option in sufficient detail. All archaeological investigations will result in the production of an appropriate archive and a report, as agreed with the *Client*,
- Be responsible for the quality of the output in accordance with the MTR 801_14_SD01,
- Provide deliverables to the *Employer* in accordance with the MTR-801_14_SD01 and the programme agreed in the heritage project design.
- Provide costs for the mitigation identified for heritage and archaeology for submission with the FBC.

All work undertaken by the *Consultant* shall be reviewed by an appropriate cultural heritage specialist from their team who will be a full member of the ClfA or IHBC or equivalent.

6.1.15 AD: Landscape Assessment and Appraisal

The *Consultant* shall:

- In agreement with the *Client's* NEAS Landscape Architect (LA) and in accordance with the document MTR 801_14_SD02 Landscape and Environmental Design (V3) (MTR-LED):
 - Identify the Landscape and Environmental Design (LED) services to be provided to support the development and submission for approval of the FBC with reference to the Landscape Institute Scope of Service schedules and the Environment Agency's Landscape and Environmental Design Guidance (LEDG),

- Provide a product description for each of the agreed LED activities and products in accordance with section 1.6 of the MTR-LED,
- Provide a proposal which identifies the LED activities, programme and costs.

The programme for the delivery of the agreed LED activities and products will be set against the wider project programme and indicate key dates (incorporating a minimum 10 day response period where the *Client's* NEAS LA is required to review and respond).

- Be responsible for the timing of surveys, assessments and consultation with landscape stakeholders and for the quality of landscape assessment, appraisal and design products,
- Provide deliverables to the *Client* in accordance with MTR-LED and with reference to LEDG,
- Undertake landscape and environmental design activities and deliver landscape products in accordance with the project programme to allow efficient management of risks and issues.

All work undertaken by the *Consultant* shall be quality assured and approved prior to submission by their landscape architect who will be a Chartered Member of the Landscape Institute.

6.1.16 **AD: EA Standard Landscape Products**

To support the FBC, the *Consultant* will determine the need for, scope of, and where agreed delivery of the following EA standard LED products, in accordance with the MTR-LED and with reference to LEDG:

- Arboricultural survey if required,

The *Consultant* shall hold a workshop to assess access and ramp proposals for the scheme.

6.1.17 **AD: Planning Permission**

If planning permission is required, the *Consultant* will lead in obtaining permissions and environmental permits. The *Consultant* will lead in obtaining a screening and scoping opinion (under the EIA Regulations) from the local planning authority. The programme should allow a minimum of 28 days to obtain a screening opinion from the local authority. If the project requires an EIA, the *Consultant* will lead in obtaining a scoping opinion using a draft version of the PEIR to agree the scope. The programme should allow a minimum of 35 days to obtain a scoping opinion.

The *Consultant* will compile the supporting technical documentation required to obtain the screening opinion and the *Consultant* should allow reasonable time in the programme to agree the scope of the EIA with the planners.

Regarding the above, the *Consultant* shall provide the supporting information needed for any screening or scoping opinion, or EIA. It is expected that this will include the re-packaging of information and reporting already produced.

Subject to the screening opinion issued by the Local Planning Authority. The *Consultant* shall prepare a Statutory or Non Statutory Environmental Statement. The Environmental Statement should not be limited to but should include:

- A robust cumulative impact assessment of the scheme giving particular consideration to other flood risk schemes located within the Calder Valley.
- A Water Framework Directive assessment. This assessment should align with the recommendations made in the updated assessment and is informed by discussions with the Environment Agency.
- An Environmental Action Plan in accordance with MTR 801_14
- Landscape and Heritage Assessments as agreed with NEAS Officers and the Local Planning Authority.
- Landscape plans in accordance with MTR 801_14 SD02

The Consultant shall provide advice on the strategy that will be undertaken with regard to planning and permitted development.

The *Consultant* shall liaise with the Local Planning Authority to agree the documents that will be submitted as part of the planning application, listed building and conservation area consents:

6.1.18 **AD: CEEQUAL and Sustainability Targets**

The Consultant/Contractor shall complete the CEEQUAL assessment in line with the ~~provided~~ CEEQUAL scoping note based on the CEEQUAL Technical Manual requirements that will be agreed with the Consultant.

The Consultant/Contractor shall provide a qualified CEEQUAL assessor and scope the individual criteria within the assessment issues identified for agreement with the Client.

The Consultant/Contractor shall set up and undertake the assessment and evidence-gathering throughout the Services, using the CEEQUAL online tool via BREEAM Projects. The Consultant/Contractor shall ensure that all of the evidence is uploaded within 1 month of completion of the Services.

The Consultant/Contractor shall provide evidence to support the Client with scope submission to BRE as well as provide supporting information to the Client when handling verifier consultation.

The Consultant/Contractor sustainability (CEEQUAL) lead shall be an integrated member of the project team attending progress meetings, key project workshops including but not limited to options/ design and risk as required providing an update against CEEQUAL targets and championing sustainability across the project team.

The Consultant/Contractor shall provide all evidence to the Client upon request, to enable programme-level external verification.

The *Consultant* shall work towards the Environment Agency's Sustainability and Environmental Management Strategy to 2020 (e: Mission), the 25 Year Environment Plan and the principles of sustainability as described under the United Nations 17 Sustainable Development Goals.

7 Preferred Option Development – Detailed Design

- 7.1.1 The *Consultant* shall assist with pricing and buildability which will be led by the ESE contractor.
 - 7.1.2 The *Consultant* shall develop designs with the *Client* including the Field Service and Area Teams.
 - 7.1.3 The *Consultant* shall discuss with the *Client* where environmental information, landscape details, archaeological information, methodologies or on-site management deviate from that stated in the OBC environmental report or associated documents. This will enable any legal implications to be checked and for the environmental implications of the changes to be assessed.
 - 7.1.4 The *Consultant* shall discuss developments in the design with the appointed Principal Designer.
 - 7.1.5 The *Consultant* shall discuss with the *Client* how the design enables carbon reduction targets to be met.
 - 7.1.6 The *Consultant* shall facilitate design workshops, ~~attend~~ facilitate risk workshops to produce a risk register with analysis in accordance with [LIT 14847](#) Risk Guidance for Capital Flood Risk Management Projects.
-

8 Stakeholder Engagement

The *Client* will lead on consultation, but the *Consultant* may need to assist and prepare materials for use in meetings.

- 8.1.1 AD: The Consultant shall provide support to the Client in stakeholder engagement meetings. This should be assumed to be the attendance for a 2 hour long meeting on the basis of one meeting every 2 months for the duration of the appointment.
-

9 Health and Safety

- 9.1.1 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 solutions that provide optimum HSW to all.
 - 9.1.2 The *Consultant* shall follow and comply with the requirements outlined in the Safety, health environment and wellbeing (SHEW) Code of Practice (LIT 16559).
 - 9.1.3 The *Consultant* shall supply designer risk assessments, drawings and any other data required to fulfil their duties under CDM.
 - 9.1.4 The works on site included in the geotechnical section will be subject to notification to the HSE. Detailed design work shall be treated as if it was notifiable.
-

10 Business Case Submission

- 10.1.1 The *Client* shall aggregate all of the work undertaken from this commission into an update of the Outline Business Case document to create the Full Business Case.
-

11 Carbon

- 11.1.1 Carbon emissions shall be identified and assessed on a strategic whole life basis (cost and benefit) in the design and also as a specific operational target (carbon budget) of the *Client*.
- 11.1.2 The carbon budget for the project has been set to 139.12t capital carbon and 218.69t whole life carbon. The *Consultant* is required to work with the *Client* and the ESE contractor to reduce the project carbon footprint by 40%.
- 11.1.3 The *Consultant* shall demonstrate how they have met the corporate requirement for carbon reduction using the Carbon Tool, 'ERIC' and:
- Ongoing updates to the carbon calculator and use of the carbon calculator to inform design and construction methodology decisions.
 - Completion and submission of the carbon calculator and Carbon Optimisation Report at the pre-defined stages.
 - Inclusion of a whole-life carbon appraisal to ensure optimisation of lowest carbon in detailed design.
- 11.1.4 AD: The *Consultant* shall attend a low carbon workshop.
- 11.1.5 AD: The *Consultant* shall complete a retrospective OBC Carbon Calculations using the *Client's* carbon calculator
-

12 General

- 12.1.1 None
-

13 Relevant guidance

13.1.1 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
379_05	Computational Modelling to assess flood and coastal risk	Modelling
LIT 14847	Risk Guidance for Capital Flood Risk Management Projects	Detailed design
OI 120_16	Whole-life Carbon Planning Tool	Detailed design
LIT 14284	Whole Life (Construction) Carbon Planning Tool User Guide	Detailed design
	Access for All Design Guide	Detailed design
	Project Cost Tool	Costs
LIT 12982	Working with Others: A guide for staff	Consultation & Engagement
LIT 12280	Lessons Log template	FBC
LIT 55096	Integrated Assurance & Approval Strategy	Approvals

14 Requirements of the Programme

- 14.1.1 The *Consultant* shall provide a detailed programme in Microsoft Project format version 2016 meeting all requirements of clause 31 of the *conditions of contract*.
- 14.1.2 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).
- 14.1.3 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.
- 14.1.4 The programme shall include review and consultation periods for drafts, scoping letters, statutory consultation etc.
- 14.1.5 Include internal project team/board decision gateways (as a minimum) for:
- a) Gateway 3, to ensure the detailed design and costings are complete and the works can be constructed within the allowed time and budget.
- 14.1.6 The following consultation periods should be incorporated into the programme, with adequate allowance for review and revision of documents by the project team where appropriate:
- a) *Consultant* internal review (as per *Consultant's* quality review procedures) and *Client* review of all outputs before circulation to the wider project team to ensure high quality of all output.
 - b) Sufficient allowance for internal and external consultation. Statutory consultation periods at scoping & draft stages. Note local authority approvals through cabinet prior to public consultation can take a long time.
 - c) Local Authority time for planning approval.
 - d) *Client* approvals as required to include for Reservoirs Act, impoundment licence and working in watercourse approvals.
 - e) Time for pricing up of the works by the Lot 2 contractor.
 - f) Submission for approval and time allowance for the *Client's* approval process.
- 14.1.7 ~~The *Consultant* shall produce a programme such that the following milestone dates are achieved~~
- 14.1.8 The following are absolute requirements for Completion to be certified:
- All of the services have been provided and accepted by the *Client*
 - Population of the *Client's* latest version of the Project Cost and Carbon Tool, or its successor.
 - Transfer to the *Client* of BIM data including a completed stage specific CoBie file.
 - Clause 11.2(2) work to be done by the Completion Date.

- 14.1.9 A Defect is any *service* provided which is not in accordance with the scope or the law. A Defect is also any site query post completion that is a result of errors or incomplete design details.
-

15 Services and other things provided by the *Client*

- 15.1.1 Access to Environment Agency systems and resources including:

- Asite and the project Information Delivery Plan (IDP).
- FastDraft.
- Collaborative Delivery Community SharePoint access.

- 15.1.2 Letter of appointment of Principal Designer.

- 15.1.3 Site access authorisation letter(s).

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

- 15.1.5 The *Client* will provide the ESE *Contractor*. The ESE *Contractor* is [REDACTED]. Working with the *Client* and Early Supplier Engagement (ESE) contractor, the *Consultant* shall be responsible for ensuring the design is acceptable to the *Client* (approval of gateway 3), gain planning approval and other associated approvals to enable works to commence. The design shall be acceptable to statutory and key stakeholders as detailed in section 8.

- 15.1.6 The Client will provide the Principal Designer for this scheme. The Principal Designer duties will include for a review of any site based works at appraisal stage and notifying the HSE of these, as well as a review of the outline design. The Consultant shall supply designer risk assessments, drawings and any other data for Principal Designer comment and include for any work required following review.
-

16 Data

Requirements for the handling of project data are covered by the framework schedules.

- 16.1.1 None
-

17 *Client's* Advisors

- 17.1.1 The *Client* for the contract is represented by the Programme & Contract Management (PCM) team, primarily the EA Project Manager and in their absence the Project Executive. Instructions may only be given by these staff.
- 17.1.2 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 *Service Manager*. These departments include Asset Performance, Partnership & Strategic Overview, NEAS and others.
- 17.1.3 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* or the *Service Manager*.
-

18 *Client* Documents the *Consultant* Contributes to

- 18.1.1 The *Client* maintains several project documents, the *Consultant* is required to contribute to these *Client* owned documents:
- Project Risk Register.
 - Project Efficiency CERT Form.
 - Scheme Lessons Learnt Log.
 - Project Cost Tool (PCT).
 - AD: Stakeholder engagement plan and log
-

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.

Appendix 2 – Glossary of terms

AEP	Annual Exceedance Probability
ASCII	American Standards Code for Information Interchange
BEP	BIM Execution Plan
BIM	Building Information Model
CEEQUAL	Civil Engineering Environmental Quality and Assessment Scheme
CERT	Combined Efficiency Reporting Tool
CDM	Construction Design Management
CE	Compensation Event
CFMP	Catchment Flood Management Plan
CifA	Chartered Institute of Archaeologists
DAP	Drainage Area Plan
EA	Environment Agency
EAP	Environmental Action Plan
EIA	Environmental Impact Assessment
EIR	Employers Information Requirements
ESE	Early Supplier Engagement
ESRI	Environmental Systems Research Institute
EW	Early Warning
FAS	Flood Alleviation Scheme
FBC	Full Business Case
FCERM-AG	Flood and Coastal Erosion Risk Management – Appraisal Guidance
FRM	Flood Risk Management
FsoD	Financial Scheme of Delegation
G3	Gateway 3
G4	Gateway 4

GI	Ground Investigation
GIS	Geographical Information System
GPR	Ground Penetrating Radar
GVA	Gross Value Added
HRA	Habitat Regulations Assessment
HSE	Health & Safety Executive
IAR	Information Asset Register
ISIS	Integrated Systems and Information Services
IDP	Information Delivery Plan
IHBC	Institute of Historical Building Conservation
ILP	Indicative Landscape Plan
LED	Landscape and Environmental Design
LEDG	Landscape and Environmental Design Guidance
LiDAR	Light Detection and Ranging
LPRG	Large Project Review Group
LVIA	Landscape and Visual Impact Assessment
MEICA	Mechanical and Electrical, Instrumentation, Control and Automation
MIDP	Master Information Delivery Plan
MTR	Minimum Technical Requirements
NaFRA	National Flood Risk Assessment
NEAS	National Environmental Assessment and Sustainability
NFCDD	National Flood and Coastal Defence Database
NGR	National Grid Reference
NPAS	National Project Assurance Service
NYCC	North Yorkshire County Council

OBC	Outline Business Case
OMs	Outcome Measures
PAB	Project Assurance Board
PAR	Project Appraisal Report
PCCT	Project Cost and Carbon Tool
PCT	Project Cost Tool
PEIR	Preliminary Environmental Information Report
PESTLE	Political, Economic, Social, Technological, Legal and Environmental
PM	Project Manager
PRSA	Public Safety Risk Assessment
PSC	Professional Services Contract
PSO	Partnership & Strategic Overview
SHE	Safety, Health and Environment
SHEW	Safety, Health, Environmental and Wellbeing
SMP	Shoreline Management Plan
SOC	Strategic Outline Case
SoP	Standard of Protection
SSSI	Site of Special Scientific Interest
SuDS	Sustainable Drainage Systems
UXO	Unexploded Ordnance
WFD	Water Framework Directive
YW	Yorkshire Water