



Professional Service Contract

Contract Data Forms

June 2017

(with amendments January 2023)

Template version history

Contract Execution

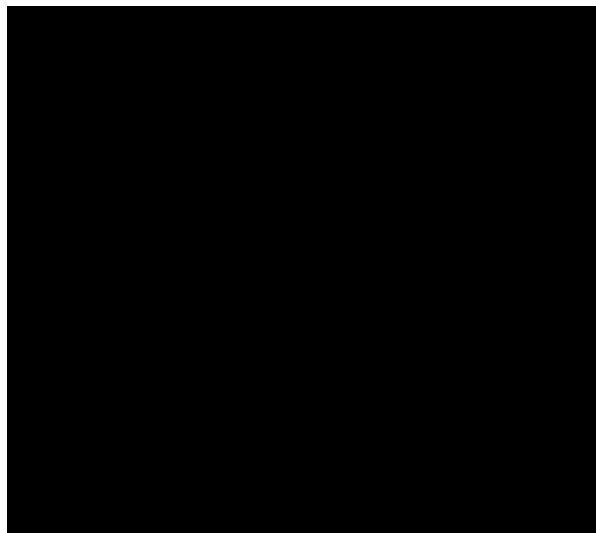
This agreement is made between the *Client*, the *Consultant* and the Named Suppliers.

Terms in this agreement have the meanings given to them in the contract between the Environment Agency and for Hull Humber Frontages: As Built Model (the *service*).

The *Consultant* offers to Provide the Services in accordance with these conditions of contract for an amount to be determined in accordance with these conditions of contract.

The *Consultant* was appointed to the 2024 Mapping and Modelling Framework and executed the framework agreement

Executed under hand



Contract Data

PART ONE – DATA PROVIDED BY THE CLIENT

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

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 (with amendments January 2019)

Main Option Option for resolving and avoiding disputes

Secondary Options

X2 Changes in the Law
X10 Information Modelling
X11 Termination by the Client
X18 Limitation of Liability
Y(UK)2, The Housing Grants Construction and Regeneration Act 1996

additional conditions of contract
Z1, Disputes
Z2, Prevention
Z3, Disallowable Costs
Z4, Share on Termination
Z6 Schedule of Cost Components
Z24 Requirements for Invoice
Z125 Limitation of Liability

The service is

Updates to the *Clients* existing Hydraulic modelling of part of the river Humber's North Bank catchment, specifically incorporating 3 recently constructed products and including MapEdit and Flood Warning update deliverables.

The *Client* is

Name	Environment Agency
Address for communications	Horizon House Deanery Road Bristol BS1 5AH
Address for electronic communications	

The *Service Manager* is

Name

Address for communications

Address for electronic communications

The Scope is in

NEC4 PSC Scope - Hull Humber Frontages
As Built Modelling V2, Rev 2, Dated
12/12/2024

The <i>language of the contract</i> is	<input type="text" value="English"/>		
The <i>law of the contract</i> is the law of	<input type="text" value="England and Wales, subject to the jurisdiction of the courts of England and Wales"/>		
The <i>period for reply</i> is	<input type="text" value="2 weeks"/>	except that	
• The <i>period for reply</i> for	<input type="text" value="n/a"/>	is	<input type="text" value="n/a"/>
• The <i>period for reply</i> for	<input type="text" value="n/a"/>	is	<input type="text" value="n/a"/>

The *period for retention* is year(s) 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 The *Consultant's* main responsibilities

If the *Client* has identified work which is set to meet a stated *condition* by a *key date*

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

	<i>condition</i> to be met	<i>key date</i>
(1)	<input type="text" value="Not used"/>	<input type="text"/>
(2)	<input type="text" value="Not used"/>	<input type="text"/>
(3)	<input type="text" value="Not used"/>	<input type="text"/>

If Option A is used

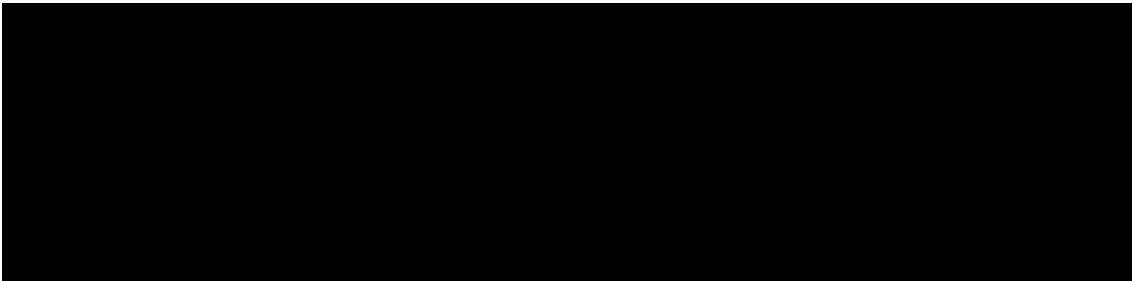
The *Consultant* prepares forecasts of the total *expenses* at intervals no longer than

If Option C or E is used

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

3 Time

The *starting date* is



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

4 weeks

If the *Client* has decided the *completion date* for the whole of the *service*

The *completion date* for the whole of the *service* is



If no programme is identified in part two of the Contract Data

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, if not previously provided by the *Consultant*

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

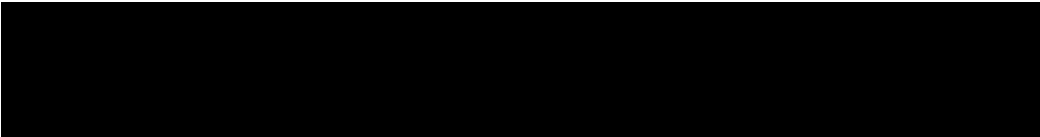
Monthly

If the *Client* states any *expenses*

The *expenses* stated by the *Client* are

item

amount



If the period in which payments are made is not three weeks and Y(UK)2 is not used

The period within which payments are made is

1 Month

~~If Option C or E is used and the *Client* states any locations~~

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

N/A

If Option C is used

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

If Option C or E is used

The *exchange rates* are those published in

Financial Times

on

a monthly occurrence

(date)

6 Compensation events

If there are additional

These are additional compensation events

None

8 Liabilities and insurance

If there are additional *Client's* liabilities

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

The *Consultant* provides these additional insurances

(1) Insurance against

Minimum amount of cover is

The deductibles are

n/a

(2) Insurance against	n/a
Minimum amount of cover is	n/a
The deductibles are	n/a
(3) Insurance against	n/a
Minimum amount of cover is	n/a
The deductibles are	n/a
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	
<div><div></div></div>	

Resolving and avoiding disputes

The *tribunal* is

Litigation in the courts

If the *tribunal* is arbitration

The *arbitration procedure* is

to be confirmed

The place where arbitration
is to be held is

to be confirmed

The person or organisation who will choose an arbitrator if the Parties cannot agree a choice or if the *arbitration procedure* does not state who selects an arbitrator is

to be confirmed

The *Senior Representatives* of the *Client* are

Name (1)

[REDACTED]

Address for communications

[REDACTED]
[REDACTED]
[REDACTED]

Address for electronic communications

[REDACTED]

Name (2)

[REDACTED]

Address for communications

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

Address for electronic communications

[REDACTED]

The *Adjudicator* is

Name

to be confirmed

Address for communications

to be confirmed

Address for electronic communications

to be confirmed

The *Adjudicator nominating body* is

Institution of Civil Engineers

X2: Changes in the law

If Option X2 is used The *law of the project* is

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

X5: Sectional Completion

If Option X5 is used The *completion date* for each section of the *service* is

<i>section</i>	<i>description</i>	<i>completion date</i>
(1)	<div>Not used</div>	<div></div>
(2)	<div></div>	<div></div>
(3)	<div></div>	<div></div>
(4)	<div></div>	<div></div>

X7: Delay damages

If Option X7 is used without Option X5 Delay damages for Completion of the whole of the *service* are

Not used

 per day

If Option X7 is used with Option X5 Delay damages for each *section* of the *service* are

<i>section</i>	<i>description</i>	<i>amount per day</i>
(1)	<div>Not used</div>	<div></div>
(2)	<div></div>	<div></div>
(3)	<div></div>	<div></div>
(4)	<div></div>	<div></div>

The delay damages for the remainder of the *service* are

X8: Undertakings to Others

If Option X8 is used The *undertakings to Others* are provided to

Not Used

X10: Information modelling

If Option X10 is used

If no *information execution plan* is identified in part two of the Contract Data The period after the Contract Date within which the *Consultant* is to submit a first Information Execution Plan for acceptance is

4 weeks

X11: Termination by the Client

X13: Performance bond

If Option X13 is used The amount of the performance bond is

N/A

X18: Limitation of liability

If Option X18 is used

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

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

The *end of liability date* is

6

 years after the Completion of the whole of the *service*

Y(UK)1: Project Bank Account

Charges made and interest paid by the *project bank* The *Consultant* **is not** to pay any charges made and to be paid any interest paid by the *project bank*

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

If Option Y(UK)2 is used and the final date for payment is not fourteen days after the date on which payment becomes due The period for payment is days after the date on which payment becomes due

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

If Option Y(UK)3 is used	term	<i>beneficiary</i>
	<input type="text"/>	<input type="text"/>
	<input type="text"/>	<input type="text"/>
	<input type="text"/>	<input type="text"/>

If Y(UK)3 is used with Y(UK)1 the following entry is added to the table for Y(UK)3	term	<i>beneficiary</i>
	<input type="text" value="The provisions of Options Y(UK)1"/>	<input type="text" value="Named Suppliers"/>

Z: Additional conditions of contract

If Option Z is used

The *additional conditions of contract* are

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 replace with:

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 Option C

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

(including compensation events with the sub contractor, 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:

92.3 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

Amend Clause 11.2 (17)

Defined Cost is the cost of the components in the Short Schedule of Cost Components as amended in the Framework Schedule 2 less Disallowed Cost.

Add clause 11.2 (19)

The People Rates are the *people rates* unless later changed in accordance with the contract.

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* Assessment.

Delete existing clause 51.2 and replace with:

51.2 Each certified payment is made within one week after the paying Party receives an invoice from the other Party and

If a certified payment is late, 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

Z125 Limitation of Liability

Under clause 87.1

after the fourth bullet point

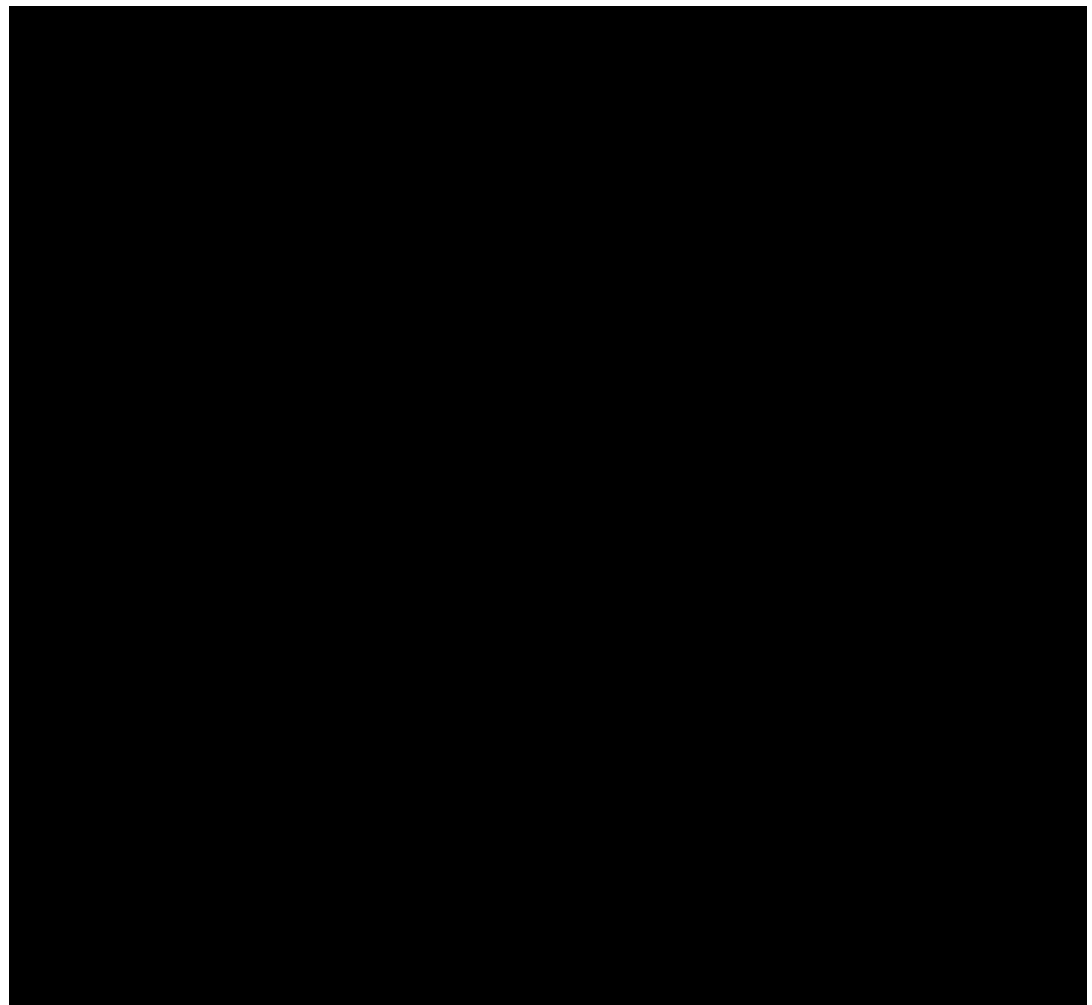
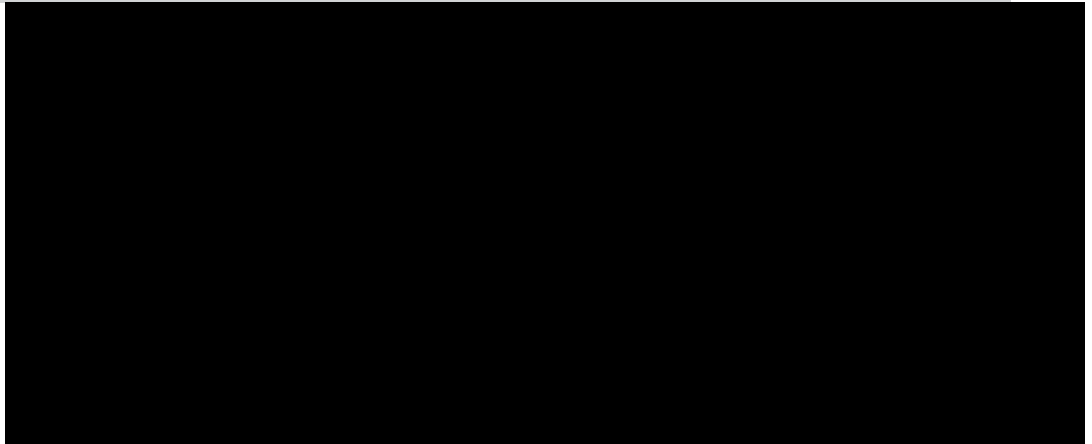
insert the additional bullet points:

- loss of or damage to the *Client's* property, to the sum that the *Consultant* is required to insure under the contract in respect of such loss or damage,
- death of or bodily injury to employees of the *Consultant* arising out of and in the course of their employment in connection with the contract, to the sum that the *Consultant* is required to insure under the contract in respect of such death or bodily injury.

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



2 The *Consultant's* main responsibilities

If the *Consultant* is to
provide Scope

T

5 Payment

X10: Information modelling

If Option X10 is used

If an *information execution plan* is to be identified in the Contract Data

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

Y(UK)1: Project Bank Account

If Option Y(UK)1 is used

The *project bank* is

named suppliers are

Data for the Short Schedule of Cost Components

The *people rates* are

2024_MMF | NEC4 Professional Services Contract (PSC) | Scope | M & M Project

Template: LIT 72659

Published: 16/04/2024

Audience: Environment Agency

Environment Agency

NEC4 Professional Services Contract (PSC)

Scope for M&M Projects

This template is a constituent part of a PSC for services let by the Environment Agency. It is a contract document, following the NEC4 format, for use as part of individual Call-off Contracts for projects let under the 2024 Mapping and Modelling Framework. Templates and further guidance (including a Framework User Guide) are available through the [Framework SharePoint site](#).

Template Change Log

Revision date	Summary of changes	Version number
Aug 2023	Framework Tender issue	0.1
April 2024	Final updates from Task & Finish Group prior to issue	1.0

Table of Contents

Scope for M&M Projects.....	1
Template Change Log.....	1
Table of Contents	2
Project & Contract Information:	3
Assurance:	3
Scope revision history	4
Documents Included in Scope by Reference	4
Scope.....	5
S 100 Purpose of the <i>Service</i>	5
S 105 <i>Client</i> Objectives	5
S 110 Background	5
S 200 Description of the <i>service</i>	7
S 205 Outcome Specification	7
S 210 Constraints	8
S 215 <i>Consultant</i> Project Management	8
S 220 Outputs and Deliverables	10
S 300 Existing Information	11
S 305 Topographic Survey	11
S 400 Specification and standards.....	11
S 405 Hydrology and Hydraulics	11
S 410 General	12
S 500 Constraints on how the <i>Consultant</i> provides the <i>Service</i>	12
S 505 Health and Safety	12
S 510 General	12
S 600 Information and other things provided by <i>Client</i> and Others	13
S 605 Relevant Guidance	13
S 610 Services and other things provided by the <i>Client</i>	16
S 700 Timing, programme and Completion.....	16
S 705 Programme requirements.....	16

S 725 Information required (data).....	18
S 735 Completion definition.....	18
S 800 Other requirements of the <i>conditions of contract</i>	18
S 805 <i>Consultants</i> application for payment / invoicing.....	18
S 810 <i>Client's</i> advisors	19
S 815 <i>Client</i> documents the <i>Consultant</i> contributes to	19
Appendix 1 – BIM Protocol.....	19
Appendix 2 – Modelling Technical Scope.....	20
Appendix 3 – Flood Warning Scope	20

Project & Contract Information:

Project name	Hull and Humber Frontages – as built model update
Project code - SOP reference	2020/21-001058
Contract reference number	██████████

Assurance:

Role	Role & Name	Date
Author	Service Manager Luke Edwards	09/02/2024
Consulted / Co-author	Senior User Ashley Tasker	06/09/2024
Reviewed	Project Executive Steven Garcia-Vazquez	09/09/2024
Checked prior to issue	Commercial Services Manager Connor Penman	28/11/2024
Consulted (if required)	Senior User Paul Coales	09/09/2024

Scope revision history

Revision date	Summary of changes	Version number
13/01/2025	Correction to dates required for client review of deliverables.	4
18/12/2024	Replacement of LIT 13258 with LIT 56326 and link to Gov.uk. Minor edit to table headings to address issue in which black text was on a black background.	3
12/12/2024	Scope and appendix updated following clarifications.	2
28/11/2024	PSC scope revised based on comments from CSM	1.1
20/06/2024	First Issue	1.0

Documents Included in Scope by Reference

This Scope shall be read in conjunction with the documents detailed in the table below current at the Contract Date. In the event of conflict, this Scope shall prevail. The service is to be compliant with the following :

Document	Document Title	Version Number	Issue date
LIT 56326 & River modelling: technical standards and assessment - GOV.UK	Fluvial Modelling Standards	V4	18/07/2022
LIT 18686 Available here: SharePoint	NEC4 Minimum Technical Requirements for Modelling	7	01/02/2023

Document	Document Title	Version Number	Issue date
LIT 17641	Exchange Information Requirements	3.0	20/12/2022
LIT 16559	SHEW CoP	6.0	12/12/2023 SHEW CoP
LIT 14284	Carbon Operating Instruction	6.0	15/08/2023
LIT 18749	National standard technical specifications for surveying services	5.01	01/03/2023

Scope

S 100 Purpose of the Service

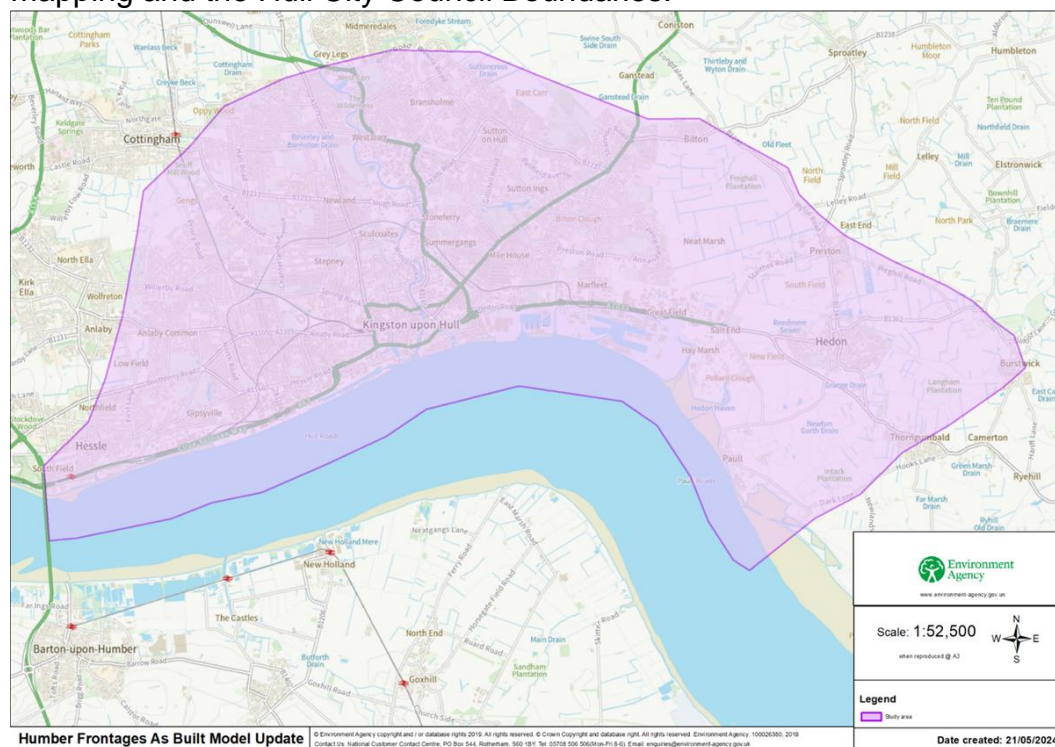
S 105 Client Objectives

1. Update and improve our understanding of flood risk within the Humber estuary catchment
2. Update our flood risk mapping products, fulfil our KPI requirements for outputs to be delivered and uploaded to MapEdit and improve our Flood Warning service alerts and triggers.
3. Provide essential information for our Asset Performance Team on the standard of protection of defences in the study area and the number of properties protected, allowing them to make informed decisions about the continued maintenance of these assets. Examples of the type of maintenance carried in this study area are, repairs of outfalls, toe repairs where scour had eroded the base of a flood wall and any substantial repairs to any linear assets that are in poor condition.

S 110 Background

1. The Humber Estuary catchment is predominantly urbanised and covers the main urban areas of the East Riding of Yorkshire. The main watercourse within the study area is the Humber estuary, comprised of the river Humber which carries the combined flows of the river Ouse and the river Trent eastwards and is

influenced tidally by levels in the North Sea. As such, the catchment is at risk from both fluvial and tidal flooding. Following the construction of the Humber: Hull Frontage Flood Defence Improvements project, updated modelling is required to incorporate as built surveys of the new flood defences in order to allow the project to progress to the final gateway. The project area is expanded to incorporate two LLFA schemes that have been completed in the area recently in both Hessle and Paull. The project aim is to update and improve our understanding of flood risk within the Humber estuary catchment with these defences in situ. The study area is below. Please note the extent is tied to the banks of the Humber. The “depth” of the area into the flood plain is for reference only and originates from existing mapping and the Hull City Council Boundaries.



- Existing modelling in the region is outdated, and does not take into account various developments that have occurred in the area. This includes multiple FCRM schemes – both EA and RMA lead – and other changes to the area as a result of private development that are reflected in the most recent LiDAR. Low spots near the tidal barrier have also been noted that are to be included to inform operation of the barrier. More recent modelling in the area has been completed to reflect climate change as part of the Humber Strategy, however this modelling did not include any 2d updates to the flood plain or EA products. This modelling project aims to include these developments and update the fluvial and tidal modelling for Hull and its surroundings.

S 200 Description of the *service*

S 205 Outcome Specification

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

1. The *Consultant* shall ensure that the final solution/model takes into consideration all relevant guidance and legislation.
2. The model will also demonstrate that the *Consultant* has learnt from best practice and take into account optimum flood risk reduction, natural processes, carbon reduction, recreation, and good ecological water quality as appropriate.
3. This commission must consider all necessary permissions/licences required and enable them to be obtained. (ie FRA, etc).
4. The *Consultant* shall compile the supporting technical documentation required for the *Client* to approve/accept the model and associated outputs.
5. The *Consultant* shall collate all available data and identify any missing data. The *Consultant* shall collate this evidence and agree the study area and study boundaries with the *Client*
6. The *Consultant* shall be responsible for ensuring the design/model is acceptable to the *Client*.
7. The *Consultant* shall provide the *services* specified in the Modelling Technical Scope created in the Quick Scope Writer included in Appendix 2.
8. The *Consultant* shall provide the *service* in accordance with the Minimum Technical Requirements for Modelling and the Modelling Technical Scope, included in Appendix 2.
9. The *Consultant* shall provide the *services* specified in the Flood Warning Scope included in Appendix 3.

S 210 Constraints

1. The *Consultant* shall attend at a project start-up meeting and progress meetings throughout the duration of the project. Any key decisions agreed with the *Service Manager* must be documented by the *Consultant* and promptly issued to the *Service Manager*. The *Consultant* shall take minutes, with actions identified (responsible party, date required), which shall be provided within 1 working week of meeting date for review by the *Service Manager*.
2. Monthly project progress reports to be provided to the *Service Manager*, including: a financial update and forecast; an updated programme; and a summary of work completed in month, an overview of upcoming stages and milestones, and key issues and risks. These must be provided by the 10th of every month unless stated otherwise by the *Service Manager*.
3. The *Consultant* shall complete a monthly risk register review, including an update (including *Consultant's* risk budget) and implementation of resulting actions.

S 215 *Consultant* Project Management

1. In managing the *service* the *Consultant* shall follow all the requirements as set out in the 2024 Mapping and Modelling Framework schedules and the relevant content of the Minimum Technical Requirements for Modelling.
2. In managing the *service* the *Consultant* shall:
 - provide a list of data requirements necessary to enable *service* delivery. This list shall be provided to the *Client* at the project start-up meetings, if not before, and shall be updated at weekly intervals thereafter.
 - provide input into the *Client's* risk register at each monthly progress meeting, by reporting new risks, and progress made on risk mitigation.
 - Provide input to project efficiency CERT Form.
 - Arrange (monthly) progress meetings and prepare record minutes within a week for the *Client* to issue.
 - Provide fortnightly project progress updates via teams meeting and/or email throughout the project to the *Client*. Any key decisions agreed with the *Client* must be documented by the *Consultant* and promptly issued to the *Client*.
 - Deliver a monthly progress report in the *Client's* standard template ([LIT 12295](#)) giving progress against programme, deliverables received and expected through IDP and MIDP, financial summary against programme and forecast project carbon.

- Provide a monthly FastDraft Cost Forecast
 - Shall, when carbon reporting requirements for the framework have been agreed, provide a monthly FastDraft Carbon Forecast
 - Attend project board meetings as required.
 - Ensure quarterly input into framework satisfaction surveys.
 - Capture lessons learnt relevant to project delivery for the *Service Manager* to include in the project lessons learnt log.
3. The *Consultant* shall provide evidence of costs with all Applications for Payment on *Client's* cost template which shall include
- Project details
 - MMF Actual Costs
 - MMF Expenses
 - MMF *Sub-contractor*
- Submission of an Application for Payment without use of *Client's* cost template shall be treated as non-compliant submission.
4. The contract will be administered using the *Client's* contract management system (FastDraft).
5. Procurement of *sub-contractors*
- *Sub-contractors* shall be selected using best value processes.
 - This requires the *Consultant* to demonstrate that they have made reasonable attempts to obtain three competitive tenders for all work in excess of £25,000.
 - Best practice is for *Consultant* to invite tenders on their sub-contracts through [Contract Finder on gov.uk](https://www.contractfinder.gov.uk)
 - The only exception to this is work which has been accepted (in writing) by the hub *Commercial Services Manager* for strategic suppliers or for emergency work.
6. The *Consultant* is responsible for any new data requirements and third-party data they procure.
7. The *Consultant* is responsible for obtaining any third party data considered necessary and ensuring it is correctly licensed for use.

S 220 Outputs and Deliverables

1. Unless an alternative has been submitted and accepted by the *Client* the *Consultant* shall complete a data review for the whole project to analyse the completeness, accuracy, content and size of previous studies and data and identifies any risks or issues associated with these within 2 weeks of the Project Start-up Meeting.
 2. The *Consultant* shall produce an initial data review report to identify any major concerns within 3 weeks of the Project Start-up Meeting and utilising MS Teams or equivalent shall discuss the content of the report with the *Client* to allow appropriate action to be taken.
 3. Record action to be taken in the Contract Management System (>Records>*Consultant* meetings)
 4. The *Consultant* shall produce the following key documents for this commission
 - Hydraulic Model Review
 - Hydrological Method Statement
 - Modelling Methodology Statement
 - Modelling report.
 - Hydrology report and calculation
 - Model Calibration and Validation report
 - Design simulations and results.
 - Updated/new flood warning area.
 - Updated/new RES FW threshold(s)
 - Programme showing milestones to project completion *Client* notification and review periods. 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.
 - MapEdits outputs (GeoCobie data).
 - Master Information Delivery Plan (MIDP).
 5. The *Consultant* shall follow the Technical Scope for this contract which is defined in the Modelling Technical Scope (output from the Quick Scope Writer as included in Appendix 2)
-

S 300 Existing Information

S 305 Topographic Survey

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.
 2. Should survey be required, the *Consultant* shall discuss this with the *Client*. Upon agreement, the *Consultant* shall complete the following clauses:
 3. The *Consultant* shall provide the topographical survey services specified in the Modelling Technical Scope created in the Quick Scope Writer included in Appendix 2 in accordance with LIT 18749 National Standard Contract and Specification for Surveying Services
 4. The *Consultant* shall specify the survey scope in accordance with the *Client's* standard survey specification LIT 18749 [National standard technical specifications for surveying services](#).
 5. The *Consultant* shall:
 - Prepare a brief and procure 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.
 - Supervise and manage the topographic survey company.
 - Review data / check deliverables.
 6. The *Consultant* shall use the outputs from the topographic survey in their modelling.
-

S 400 Specification and standards

S 405 Hydrology and Hydraulics

1. The *Consultant* shall include existing models listed in the Modelling Technical Scope (Appendix 2).

2. This *Client* shall provide a completed Modelling Technical Scope using the latest version of the EA Quick Scope Writer which covers all modelling elements of any study. This is provided as Appendix 2.
3. Clause 4.2 of the Quick Scope Writer should not be used to avoid duplication of S 305 Topographic survey of this Scope.

S 410 General

1. The *Consultant* shall carry out Hydrology and Hydraulics as defined in the Modelling Technical Scope (output from Quick Scope Writer in Appendix 2)
 2. The existing modelling is identified in the Modelling Technical Scope (Appendix 2). The extents of the modelling and assumptions made are within the model report.
 3. The *Consultant* shall verify the existing model with quality and extent checks.
-

S 500 Constraints on how the *Consultant* provides the Service

S 505 Health and Safety

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.
2. The *Consultant* shall follow and comply with the requirements outlined in [LIT 61559 Safety, Health Environment and Wellbeing Code of Practice \(SHEW CoP\)](#)
3. The *Consultant* shall produce a risk assessment to support a site visit as detailed in section 4.1 of Appendix 2. The *Client* shall support these site visits to provide necessary technical knowledge and access to land where necessary.

S 510 General

1. The *Consultant* shall allow a minimum of 20 working days in the programme for the *Client* to review draft deliverables and provide the *Client* with a minimum of 2 weeks' notice before the review submission.

2. The *Consultant* shall allow a minimum of 25 working days for the initial data collection by the *Client* following the data review request by the *Consultant*.
-

S 600 Information and other things provided by *Client* and Others

S 605 Relevant Guidance

1. The *Consultant* shall follow the 'documents included in the Scope by reference' in order to Provide the *service*.
2. Any *Client* or Other's guidance that the *Consultant* needs in order to provide the *service* shall be listed below. The *Client* will make all of these guides available to the *Consultant* via [Evidence and Risk: Minimal Technical Requirements for Modelling \(sharepoint.com\)](#) or alternative means when necessary.

Ref	Report Name	Where used
183_05	Data management for FCRM projects	Mapping and modelling
LIT 582 Available here: Sharepoint	Probable Maximum Flood Calculation spreadsheet	Mapping and modelling
LIT 58487	MapEdit Quality Control Process	Mapping
LIT 58488	MapEdit Quality Control Tool guidance	Mapping
LIT11327 (included for awareness - this has been superseded by LIT 56326)	Computational Modelling to assess flood and coastal risk	Modelling
LIT 14710 Available here: Sharepoint	Using local data to reduce uncertainty in flood frequency analysis	Modelling
Available online here: gov.uk	Using Modelling for flood risk assessments	Modelling

Ref	Report Name	Where used
ISO 9001:2015 Available online here: iso.org	Quality Management system Requirements	Modelling
LIT 56326 Available here: SharePoint	Fluvial Modelling Standards	Fluvial Modelling
LIT 56342 Available here: SharePoint	Fluvial Model Assessment Tool	Fluvial Modelling
LIT 56327 Available here: SharePoint	Fluvial Model Assessment Tool Guidance	Fluvial Modelling
LIT 56380 Available here: SharePoint	Real Time Model Development Guidance	Forecasting
LIT 11468	Operational Instruction 55_07 Threshold Setting in Flood Incident Management	Flood Incident Management
LIT 15640	Operational Instruction 381_03 Defining Flood Alert and Flood Warning Areas	Flood Incident Management
SC060064/TR6 (gov.uk)	Coastal flood boundary conditions for the UK	Coastal modelling
LIT 18751	MDSF2 System ready data	Coastal modelling
LIT 56413	Breach of Defences Guidance	Coastal modelling
LIT56563 Available here: SharePoint	Open Coastal Hydraulic Modelling Assessment	Coastal modelling
LIT 65995 Available here: SharePoint	Open Coast Model Assessment Tool	Coastal modelling
LIT 56561 Available here: SharePoint	Coastal Standards Technical Report	Coastal modelling
LIT 56562 Available here: SharePoint	Estuary Hydraulic Modelling Assessment	Coastal and Fluvial modelling
LIT 65994 Available here: SharePoint	Estuary Model Assessment Tool	Coastal and Fluvial modelling

Ref	Report Name	Where used
LIT 56527 Available here: SharePoint	Estuary Standards Technical Report	Coastal and Fluvial modelling
R&D Manual W6_06	Extension of Rating Curves at Gauging Stations, Best Practice Guidance Manual	Hydrology
Research Project FRS 18087	Development of interim national guidance on non-stationary fluvial flood frequency estimation	Hydrology
LIT 11832 Available here: SharePoint	Flood Estimation Guidelines	Hydrology
LIT 65087	Flood Estimation Report Template	Hydrology
LIT 65088	Flood Estimation Report Template Notes (January 2023)	Hydrology
LIT 14089	Technical Guidance 466_15 High flow rating curve development using hydraulic models	Hydrology
LIT 66039 Available here: Sharepoint	Flood Estimation Calculation Review Template (May 2023)	Hydrology
Available online here: gov.uk	Flood and Coastal Risk projects, schemes and strategies: climate change allowances	Standards
SC120014	Accounting for residual uncertainty: updating the freeboard guide	Standards
LIT 11059	Environment Agency Policy: Flood Zones	Standards
Available online here: gov.uk	Joint Probability methods	Standards
LIT 17132 Available here: SharePoint	Submitting locally produced information for updates to the Risk of Flooding from Surface water	Surface Water modelling
LIT 14953	FCRM Efficiency Reporting – capital and Revenue	Project Management
LIT 12280	Lessons Log template	Project Management
LIT 55096	Integrated Assurance & Approval Strategy	Approvals
LIT 72263 Available here: Sharepoint	Reservoir Modelling Scope	Reservoirs

Ref	Report Name	Where used
LIT 56607 Available here: Sharepoint	Reservoir Flood mapping specification	Reservoirs

S 610 Services and other things provided by the *Client*

1. Access to Environment Agency systems and resources including:
 - Asite or specify other *Client* Common Data Environment.
 - Contract management system (FastDraft).
 - Collaborative Delivery Community SharePoint access.
 2. The *Client* will arrange and attend meetings with landowners and site visits with the *Consultant* in attendance.
 3. Site access authorisation letter(s) to carry out surveys and site visits.
 4. Previous studies listed in the Modelling Technical Scope (formed by Quick Scope writer, in Appendix 2). The *Client* will provide the previous studies within 25 working days.
 5. Available survey within the study area shall be provided by the *Client* within 25 working days.
 6. Any other data owned by the *Client* which is requested by the *Consultant* will be provided along with a data licence.
-

S 700 Timing, programme and Completion

S 705 Programme requirements

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.
2. The *Consultant* shall provide a baseline programme for the project start up meeting and shall update the programme according to the timeframe specified in the contract data for progress meetings with actual and forecast progress against the baseline. The programme shall also include alignment and submission of the

Buildings Information Management Execution Plan (BEP) and Master Information Delivery Plan (MIDP).

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.
4. The programme shall include, but not be limited to
 - Start Up Meeting
 - Data Request and review
 - Methodologies Review & Sign Off
 - Technical/Risk Review workshop
 - Hydrological assessment and hydrometric review
 - Hydrology and Draft Hydrology Review Report & Review
 - Interim Reviews as necessary
 - Model Calibration Review (where applicable)
 - Baseline Model Review
 - Draft Model Report & Deliverables Review
 - Final Model Report & Deliverables Review
 - Handover
 - Project Closure
5. The programme shall identify time risk allowance on the activities and float. A minimum of 20 working days for review by the *Client* shall be included where relevant
6. The programme shall include critical path activities and all the activities to be undertaken by the *Consultant* and other members of the project team. Activities requiring *Client* input shall be clearly identified.
7. The *Consultant* shall allow 25 working days for the initial data collection by the *Client*
8. The *Consultant* will allow a minimum of 15 working days for the *Client* review of deliverables. Review periods for large or complex models shall be agreed with the *Client*. Should more than one model update be ready for review at the same time then additional review time shall be agreed with the *Client*.
9. The *Consultant* will provide at least 10 working days' notice of submission for the *Client* review of deliverables.

S 725 Information required (data)

1. The *Consultant* shall handle, manage data in accordance with the framework schedules and Exchange Information Requirements (EIR).
2. All of the data listed as being supplied by the *Client* to the *Consultant* as part of these studies remains the IP of the *Client*.
3. All data provided by the *Client* for use in the Project shall be returned alongside the final deliverables as part of the/ handover procedure.

S 735 Completion definition

1. The final deliverables and reporting must be approved by the *Client* prior to Contract Completion. Multiple review periods may be required if *Client* comments are not addressed to the satisfaction of the *Client*.
2. The following are absolute requirements for Completion to be certified:
 - Transfer to the *Client* of BIM data (appendix 1)
 - PSC Clause 11.2(2) work to be done by the Completion Date

S 800 Other requirements of the *conditions of contract*

S 805 *Consultants* application for payment / invoicing

1. After *Service Manager's* issue of Payment Certificate in the contract management system (FastDraft), the *Consultant* shall issue draft invoice EA-Invoices-PA@environment-agency.gov.uk for assurance.
2. The *Consultant* shall use the following naming convention in their email subject "Draft invoice – Hub name – PO1234567890 – Invoice123456"
3. On confirmation of assurance the *Consultant* shall issue invoice to SSCL at apinvoices-env-u@gov.sscl.com

S 810 *Client's* advisors

1. The *Client* for the Contract is represented by the EA *Project Manager*, acting as the *Service Manager*, and in their absence, the *Project Executive*. Instructions may only be given by these staff.
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* through the *Client's* Contract Management System (FastDraft). These departments include Partnership & Strategic Overview, Data and Evidence, Evidence and Risk, Flood Resilience, Asset Performance, Partnership & Strategic Overview, NEAS, etc.
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*.

S 815 *Client* documents the *Consultant* contributes to

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.
 - Project Lessons Learnt Log.
 - Cost and Carbon Tool (CCT).

Appendix 1 – BIM Protocol

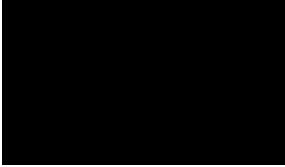
The *Consultant* shall adhere to the Environment Agency's Exchange Information Requirements (EIR) framework level minimum technical requirements.

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 – Modelling Technical Scope



Appendix 3 – Flood Warning Scope

