#### **Environment Agency**

NEC4 Professional Service Contract (PSC)

#### Scope

#### Project / contract information

Project name	Upper Yeo and Wriggle Strategic Approach to Flood Risk
Project SOP code	ENV0002861C
Contract number	33201
Date	09 June 2021

#### Assurance

Author	(Project Manager), (Consultant)	Date: 18/05/2021
Consulted	(Senior User) plus (NEAS)	Date: 18/05/2021
Reviewed	(Project Executive)	Date: 18/05/2021
Checked prior to issue	(Commercial Services Manager)	Date: 09/06/2021

#### **Revision History**

Revision date	Summary of changes	Version number
16/12/2020	First issue for comment	V 1
18/05/2021	Finalised	V 2

This Scope shall be read in conjunction with the version of the Minimum Technical Requirements current at the Contract Date. In the event of conflict, this Scope shall prevail. The *service* is to be compliant with the following version of the Minimum Technical Requirements:

Document	Document Title	Version No	Issue date
412_13_SD01 (LIT 13258)	Minimum Technical Requirements	2.0	18/03/2020

## 1 Overview

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## 1.1 Background

- 1.1.1 The Upper Yeo and Wriggle catchment sits at the head of the River Yeo which drains down to the Somerset Levels through Yeovil. The study area includes the Yeo, the Wriggle, the Barwick Stream and the West Coker Stream with its downstream limit at the confluence of the Barwick Stream with the Yeo. The study area also includes the Upper Lydden (Dorset) Water Framework Directive (WFD) River Waterbody Catchment where the local MP and community have shown a specific interest in Natural Flood Management measures following recent flooding at Holnest. A location map is included in Appendix 2 showing the extents. It should also be noted that this study area spans both Dorset and Somerset, with the majority of the catchment within Dorset, but draining towards Somerset.
- 1.1.2 The catchment responds rapidly to rainfall with steep slopes and multiple overland flow paths bringing sediment from the farmland into the watercourses, contributing to the poor Water Framework Directive status of the Upper Yeo and Wriggle. The surrounding land is mainly open farmland with little tree cover at present. The numerous observed overland flow paths seem ideally suited to implementation of Natural Flood Management measures.
- 1.1.3 Given the rapid response nature of the catchment, there are a number of known locations with flood risk management issues in the catchment including Sherborne (collapsing existing ordinary watercourse culvert), Chetnole (has experienced previous household flooding including in 2019) and the Barwick Stream (flooding can block Yeovil Junction Station access). The catchment also includes Wessex Water's Sutton Bingham reservoir.
- 1.1.4 There is a 1D Flood Modeller model (some small 1D-2D Tuflow sections) completed in 2017. Given the low property numbers, it is unlikely that a standalone scheme will be possible, and that Property Flood Resilience (PFR) and Natural Flood Management (NFM) measures are more appropriate. NFM measures in particular will benefit the wider catchment as well as the immediate communities and improve the river's status under the Water Framework Directive.
- 1.1.5 There are a number of other pieces of work being undertaken in the catchment, which this project will sit alongside and complement. These include:
  - Somerset Rivers Trust ecological catchment assessments as part of the Somerset Catchment Partnership.
  - Yeovil Rivers Community Trust 2 year project from 2020 to assess the Yeo catchment for issues within the catchment which are related to WFD failures.
  - Dorset Council potential works in Sherborne to repair a collapsing culvert.
  - Somerset Council undertaking an ICM integrated flow model with Wessex Water for Yeovil to identify surface water drainage improvements.
  - Chetnole Property Flood Resilience there are a number of properties within the catchment for works to ideally be undertaken.
  - Wessex Water Catchment Nutrient Balancing to manage phosphorus within the catchment.

1.1.6 There are some small Environment Agency flood defences at Yetminster, Bradford Abbas, West Coker, North Coker and Stoford. It should also be noted however that Sherborne has a culvert collapsing on the Ordinary Watercourse which will need repairing in the immediate future.

## 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 and produce a short technical summary explaining how best use will be made of historical data.

Report	Date	Format	Outcomes of study
Yeo and Cam Modelling	2017	Digital format	
WWNP Potential Maps and GIS Files	2020	Digital format	
Flow Pathway Mapping	2020	Digital format	
Wessex Water Catchment Walkovers u/s of Sutton Bingham Reservoir	TBC	Digital format	
FBG Catchment Walkovers	TBC	Digital format	
Flood risk maps		On EA website and available as shapefile	
Flooding history		Records to be sent as appropriate	
Topographic data		Paper format	
Hydraulic model		Digitally available	
SMP/CFMP		Available online	
AIMs data		GIS format	
NaFRA Data		GIS Format	
Yeo and Cam Modelling		2017	
WWNP Potential Maps and GIS Files		2020	
Flow Pathway Mapping		2020	
Wessex Water Catchment Walkovers u/s of Sutton Bingham Reservoir		TBC	
FBG Catchment Walkovers		TBC	
Dorset Council Highway Gully Clearance Records		2015 – 2020	

1.2.2 The previous studies have been undertaken by or for the *Client* using reasonable skill and care and have been accepted. The *Consultant* shall review the information provided and notify the *Client* of any deficiencies in the previous studies which affects the *Consultant's* ability to use the previous data for this commission. Any work required to rectify deficiencies is outside this Scope.

## 1.3 Objective

- 1.3.1 The overall project objective is to develop a strategic approach for managing flood risk in the Upper Yeo, Wriggle and Upper Lydden catchment through engineered and environmental solutions that will also deliver positive environmental outcomes and improve the condition of the watercourses under the Water Framework Directive. This will include but is not limited to:
  - Undertaking a desk based assessment of the catchment (including main river, ordinary watercourse and flow path networks) in order to better understand the river network system, natural processes and flow path character.
  - Identifying flood risk management improvements (specifically including natural flood risk management options) that will reduce flood risk and improve the ecological status of the river under the Water Framework Directive. This shall include high level quantified costs for all identified options and FCRM Partnership Funding scores where appropriate.
  - An assessment of the existing benefits, and options benefits, for the collapsing culvert at Sherborne.
  - Working with parallel partners projects as appropriate to deliver multiple benefit outcomes.
- 1.3.2 For this commission, the objective is to develop a holistic knowledge base for the catchment that encompasses all previous work, identifies and agrees leading options for future appraisal and confirms the outputs required for a strategic approach to managing flood risk.

#### 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 a qualitative initial assessment to inform a strategic action plan for the Upper Yeo, Wriggle and Upper Lydden.

- 2.1.2 The outcome will include a strategic, targeted and costed action plan for the leading combination of options for the catchment with accompanying GIS Layers. The action plan will include flood risk management and natural flood management options for the catchment that are in line with Defra's 25yr Environment Plan.
- 2.1.3 The affordability of any works through FDGIA funding, shall be measured by the *Consultant* using FCRM Partnership Funding calculations.
- 2.1.4 The *Consultant* shall ensure that the options considered are compliant with all guidance and legislation and seek to minimise long-term asset/land management and maintenance costs and carbon.
- 2.1.5 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, SW Hub Sustainability Plan and are in line with the principles of sustainability as described by the United Nation's Sustainable Development Goals.
- 2.1.6 The *Consultant* shall take into account the environmental sensitivities and opportunities of the sites, documented in a qualitative options appraisal table and involve key environmental specialists as appropriate within the *Consultant* and the *Client's* organisation.
- 2.1.7 The *Consultant* shall fully consider and address sustainability including carbon reduction as strategic outcomes.
- 2.1.8 The *Consultant* shall fully consider environmental mitigation, as per the *Client's* legal and policy obligations, as well as further environmental conservation and enhancement opportunities to also contribute to the Environment Agency's ambitions. This includes delivery against OM4, to achieve biodiversity net gain but must also consider wider sustainability opportunities. The action plan developed by the *Consultant* shall avoid (where possible), minimise and if required provide recommendations to compensate or offset any adverse environmental effects.
- 2.1.9 The options will also demonstrate that the *Consultant* has learnt from best practice and demonstrate how optimum flood risk reduction, natural processes, carbon reduction, recreation, good ecological water quality and visual amenity can be combined.
- 2.1.10 The *Consultant* shall develop a series of options that shall:
  - Reduce flood risk to local communities;
  - Makes a positive contribution to the achievement of local and national BAP targets;
  - Demonstrates the successful integration of environmental design and civil engineering;
  - Maximise positive environmental outcomes

#### 2.2 Constraints

2.2.1 Himalayan Balsam is known to be present within the catchment.

## 2.3 Consultant Project Management

- 2.3.1 In managing the *service* the *Consultant* shall follow all the requirements as set out in the Collaborative Delivery Framework schedules and the relevant content of the Minimum Technical Requirements.
- 2.3.2 In managing the service the Consultant shall:
  - Contribute monthly to the updates to the project risk register.
  - Provide input to project efficiency CERT Form.
  - Attend progress meetings and prepare record minutes within a week for the Client to issue.
  - Produce monthly financial updates and forecasts meeting the Client's project reporting timetable together with progress reports. Monthly financial updates and forecasts to meet EA deadlines provided by no later than the 10<sup>th</sup> day of each month, or otherwise agreed at the project start up meeting.
  - Deliver a monthly progress report in the *Client's* standard template (<u>Link</u>) 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 (or equivalent).
  - Maintain and show how accurate and up to date information on the whole-life cost and carbon of options is driving optimum solutions at all stages of development.
  - Capture lessons learnt relevant to scheme delivery for the *Client* to include within the scheme lessons learnt log to be appended to the Strategic Approach Report in the future.
- 2.3.3 The contract will be administered using FastDraft.

## 2.4 Outputs and Deliverables

- 2.4.1 The *Consultant* shall prepare product descriptions for key outputs and deliverables that the *Consultant* shall produce as part of this commission. The *Consultant* shall agree the list of products with the *Client* and submit the product description for the *Client*'s approval before commencing work on the product.
- 2.4.2 The *Consultant* shall produce the following key documents for this commission:
  - A short technical summary explaining how best use will be made of historical data.
  - A qualitative initial assessment "summary table" of long list options (NFM options only for the Upper Lydden). The summary table shall include but not be limited to: baseline damages, potential benefits, funding sources/opportunities, environmental constraints/opportunities, sustainability and delivery risks.
  - The Consultant will not undertake targeted site visits at this stage.
  - An estimate of costs for options will be prepared by the *Client* based upon the
    information collated to date and operational experience and professional
    judgment. At this stage the focus is on the scale and timing of possible costs to
    be used by the *Client* to review the project mandate and aid planning. This
    should include solution socio environmental mitigation and enhancement costs
    and an allowance for risk, using optimism bias at +60%.
  - The study will conclude with a rounding up of all the study input into a Strategic Approach Report. The Strategic Approach Report shall contain tables, detailing the modelling, economic and long list and short list appraisal work. The document will be in the form of an Initial Appraisal (IA) and will include economics and financial information in SOC table format. The report shall include:
    - High level qualitative options appraisal table, and a leading combination of options
    - GIS layers of outputs for potential NFM opportunity areas.
    - Action plan including description, costs, potential benefits and early indicative FCRM Partnership Funding score.
    - A brief report highlighting the methodology, approach, assumptions and outcomes.

# 3 Hydrology and Hydraulics

#### 3.1 General

- 3.1.1 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.
- 3.1.2 A previous hydrological analysis was undertaken, which may be used for this study.
- 3.1.3 The following gauged data is available for use in this study.

Gauge location	NGR	Use in this study	
Gallica Bridge Gauging Station	L1944	ST 57138 10026	Level data
Chetnole	L145	ST 60254 08407	Level data
Sherborne Lake	L1415	ST 64751 16617	Level data
Pen Mill	L1212	ST 57328 16182	Level data
Sherborne	D8094	ST 63093 15416	Rain gauge
Evershot	D8601	St 57800 04300	Rain gauge
Western Bampflyde	L1708	ST 55653 11646	Rain gauge

- 3.1.4 The *Consultant* shall verify the model with quality and extent checks.
- 3.1.5 This model is to be used for the option evaluation and conceptual design stages of the study. The models have been built to determine levels and flows for events as specified. Any amendments made to the models for option assessment purposes shall ensure that levels are available both in channel and out of bank, sufficient to enable depths of flooding of property to be determined for the purposes of economic analysis to the multicoloured manual methodology.

## 4 Economics Appraisal

- 4.1.1 The Consultant shall undertake an initial economic assessment in line with FCERM Appraisal Guidance (FCERM-AG), Supplementary guidance and the HM Treasury 'Green Book'. This will include a valuation of both baseline and short-listed option economic damages using depth-damage data from the Multi-Coloured Manual (MCM). Sources of damages valued shall include direct residential and non-residential property, evacuation, emergency services, vehicles, mental health and traffic / transport damages. Where appropriate, for example where model results are not available, economic calculations will include assumptions, suitable for the SOC business case stage. Costs will be the whole life expenditure including, design, investigation, construction, operation and maintenance. Costs can be devised in the most efficient but accurate manner suitable for an Initial Assessment and strategic appraisal. Any estimating is to be undertaken by the Client, who may request support from the Consultant.
- 4.1.2 Carbon will be whole-life emissions of an asset including embodied (construction), operation, maintenance and end of life emissions. The values for the short listed options will be calculated using the Carbon Modelling Tool (OI 120\_16) to help optimise all options through all stages of design and business case development.
- 4.1.3 Risk and Optimism Bias allowances shall be calculated in accordance with Risk Guidance for Capital Flood Risk Management Projects, which is appropriate for this IA stage.
- 4.1.4 Potential benefits will make use of previous studies where appropriate and updated making use of the baseline economic calculations and clearly stated option assumptions.
- 4.1.5 The assessment shall include for sensitivity tests to look at the effects of any changes to key parameters / beneficiaries and to demonstrate the robustness of any key assumptions made.
- 4.1.6 The *Consultant* shall produce, an initial FCRM Partnership Funding Calculation for Flood and Coastal Erosion Risk Management Grant in Aid (The PF calculator). The *Consultant* shall inform the *Client* of any expected significant change in scheme choice or affordability at the earliest opportunity as the project develops.
- 4.1.7 Selection of the economic leading combination of options for the catchment will be undertaken using a benefit-cost analysis. The FCERM AG decision rule will be applied whereby the option with the highest benefit cost ratio and subsequent incremental benefit cost ratio is selected. The assessment must ensure that the leading combination of options is economically justifiable with comparison to both the do minimum and do nothing option (where appropriate).

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- 4.1.8 Reference shall be made to the baseline economic information throughout the project life-cycle to provide information on the likely affordability and scale of options that will be achievable within the catchment. The *Consultant* shall undertake a calculation of the resilience FCRM Partnership Funding score of the leading combination of options for the catchment.
- 4.1.9 The *Consultant* shall assist the *Client* in identifying potential sources of external funding.

## 5 Environmental Assessment

- 5.1.1 The *Consultant* shall confirm the expected environmental outputs for the next stage, which are to be agreed through engagement with NEAS. The activities identified shall take into account proportionality whilst supporting the achievement of the *Client*'s wider aspirations.
- 5.1.2 The *Consultant* shall give due consideration of the environment and sustainability risks and opportunities throughout the evolution of the project to maximise the delivery of *Client* and project objectives.
- 5.1.3 The *Consultant* shall ensure that the project level assessment sits within the context of any previous environmental assessment and supporting information for the area and brings forward all relevant information and conclusions.
- 5.1.4 The *Consultant* shall undertake a scoping exercise to establish and understand the baseline and the legal and policy context to identify the key environmental/sustainability risks and opportunities. This shall support the qualitative options appraisal and justify the need for any future environmental assessment activity.

# **6 Option Development**

- 6.1.1 The *Consultant* shall undertake a qualitative initial assessment of options, which will include a review of the previous work, to prepare a long list of options. The long list shall not be constrained by previous work and will be agreed with the *Client* at an options meeting, where the *Client* will invite representation from key stakeholders. The *Consultant* shall qualitatively screen and assess this long list of options for technical, environmental, sustainability, carbon and economic suitability, as considered appropriate and agreed with the *Client*.
- 6.1.2 Following this screening, the *Consultant* shall prepare a short list of viable options for the *Client*'s approval, giving reasons for including or excluding each of the long list options. On the agreement of the *Client*, the *Consultant* shall assess at a strategic level these options for technical, environmental and economic suitability, as discussed in the relevant sections of this Scope; this should arrive a leading combination of options for the catchment.

- 6.1.3 The sustainability of the short list of viable options shall be analysed using appropriately carbon costing to gauge influence of carbon costs of the leading combination of options for the catchment. The leading combination of options shall be run on the *Client's* Carbon Modelling Tool, and it shall be compliant with sustainability targets.
- 6.1.4 If tropical hardwood is required by the leading combination of options for the catchment then the *Consultant* shall prepare a tropical hardwood justification. The *Client* will obtain approval to the tropical hardwood justification for inclusion in the business case.
- 6.1.5 The priority of the leading combination of options for the catchment shall be calculated using a FCRM Partnership Funding score calculation.
- 6.1.6 Options appraisal shall include engagement with the *Client* including the Cost and Carbon Estimator, Field Services, Area FCRM and Area FBG.
- 6.1.7 The *Consultant* shall analyse and appraise the carbon footprint of options as outlined in Section 9.
- 6.1.8 The *Consultant* shall seek options that support the e:Mission 2030 sustainability targets.

# 7 Stakeholder Engagement

- 7.1.1 The *Consultant* shall support and contribute to the stakeholder engagement plan which will be developed by the *Client*, in accordance with the EA guidance "Working with Others". The *Consultant* shall ensure that the outputs from any stakeholder engagement inform the appraisal.
- 7.1.2 The *Consultant* shall provide technical support, prepare information for and attend key stakeholder steering group meetings as well as preparing information and reviewing external communications prepared by Others (e.g. quarterly newsletters).

# 8 Health and Safety

- 8.1.1 Health, Safety and Wellbeing (HSW) is the number one priority of the *Client*. The *Consultant* shall promote and adopt safe working methods and shall strive to deliver design solutions that provide optimum HSW to all.
- 8.1.2 The *Consultant* shall follow and comply with the requirements outlined in the Safety, health environment and wellbeing (SHEW) Code of Practice (<u>LIT 16559</u>).
- 8.1.3 The *Consultant* shall undertake the role of Principal Designer.
- 8.1.4 The project will follow Operating Instruction 1310.

- 8.1.5 The *Consultant* shall apply the principles of prevention in the early stages of the project.
- 8.1.6 The *Client* shall provide all existing pre-construction information within two weeks of contract award.

#### 9 Carbon

- 9.1.1 Carbon emissions of the short listed options shall be identified and assessed at a strategic level using the Carbon Modelling Tool and factored into the initial assessment appraisal.
- 9.1.2 The *Consultant* shall demonstrate how they have met the corporate requirement for carbon reduction using the Carbon Modelling Tool, 'ERIC' and: Identifying carbon differentials between alternative solution options.

#### 10 General

- 10.1.1 A CEEQUAL assessment is not included in the current Scope. It is intended to include this as additional Scope once agreed with NEAS. Once the scope is agreed the following clauses will apply:
- 10.1.2 The *Consultant* shall complete the CEEQUAL assessment in line with the provided CEEQUAL scoping note based on the CEEQUAL V6 Technical Manual requirements. For these Services, 5-10 assessment issues have been scoped in.
- 10.1.3 The *Consultant* shall provide a qualified CEEQUAL assessor and scope the individual questions within the assessment issues identified for agreement with the *Client*.
- 10.1.4 The Consultant shall set up and undertake the assessment and evidence-gathering throughout the Services, using the CEEQUAL online tool via BREEAM Projects. The Consultant shall ensure that all of the evidence is uploaded prior to completion of the Services.
- 10.1.5 The *Consultant* shall support the *Client* with scope submission to BRE as well as provide supporting information to the *Client* when handling verifier consultation.
- 10.1.6 The sustainability (CEEQUAL) lead is 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.
- 10.1.7 The *Consultant* shall provide all evidence to the *Client* upon request, to enable programme-level external verification.
- 10.1.8 The *Consultant* shall have completed the CEEQUAL process including provision of all evidence onto the CEEQUAL online tool prior to contract completion.

# 11 Relevant guidance

The Consultant shall deliver the service using the following guidance:

Ref	Report Name	Where used
LIT 16559	Safety, health environment and wellbeing (SHEW) Code of Practice	Throughout
183_05	Data management for FCRM projects	Mapping and modelling
379_05	Computational Modelling to assess flood and coastal risk	Modelling
LIT 14847	Risk Guidance for Capital Flood Risk Management Projects	Option development
OI 120_16	Whole-life Carbon Planning Tool	Option development
LIT 14284	Whole Life (Construction) Carbon Planning Tool User Guide	Option development
	Access for All Design Guide	Option development
	Project Cost Tool	Costs
LIT 12982	Working with Others: A guide for staff	Consultation & Engagement
672_15_SD03	Business case template – 5 case Model	Business Case
LIT 4909	Flood and Coastal Erosion Risk Management appraisal guidance (FCERM-AG)	Business Case
	Flood and Coastal Erosion Risk Management: A Manual for Economic Appraisal (the 'Multi Coloured Manual')	Business Case
OI 1334_16	Benefits management Framework	Business Case
Gov.uk	Partnership Funding Calculator Guidance	Business Case
LIT 15030	The Investment Journey	Business Case
LIT 55124	Write a Business Case	Business Case
LIT 14953	FCRM Efficiency Reporting – capital and Revenue	Business Case
LIT 12280	Lessons Log template	Business Case
LIT 55096	Integrated Assurance & Approval Strategy	Approvals

# 12 Requirements of the Programme

12.1.1 The *Consultant* shall provide a detailed programme in Microsoft Project format version 2016 meeting all requirements of Cl.31 of the Conditions of Contract. The *Consultant* shall give the *Client* a minimum 10 working day review period of the draft outputs.

- 12.1.2 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).
- 12.1.3 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.
- 12.1.4 The programme shall include review and consultation periods for draft documents, stakeholder engagement etc.
- 12.1.5 The following are absolute requirements for Completion to be certified:
  - Population of the Client's latest version of the Project Cost and Carbon Tool, or its successor
  - Transfer to the Client of BIM data

## 13 Services and other things provided by the Client

- 13.1.1 Access to Environment Agency systems and resources including:
  - Asite.
  - FastDraft.
  - Collaborative Delivery Community SharePoint access.
- 13.1.2 Previous studies listed in Section 1.2.1. The *Client* will provide the previous studies within two weeks of contract award.

#### 14 Data

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

- 14.1.1 All of the data listed as being supplied to the Consultant as part of this study remains the IP of the *Client*.
- 14.1.2 The data custodian for project deliverables from this commission will be the PSO team.
- 14.1.3 Licences for LiDAR Data, Ordnance Survey mapping, model, survey, hydrometric and historical data will be provided to the *Consultant* upon award of this commission.
- 14.1.4 The *Client* populates a metadata database called the information asset register (IAR). It is a requirement that all information produced by modelling work is appropriately tagged with metadata. The *Client* will supply an IAR spreadsheet (and any supplementary local metadata requirements if appropriate) where all relevant metadata can be recorded and handed over on project completion.
- 14.1.5 All model and survey information will be provided to the *Consultant* in an encrypted format (using WinZip 128 bit encryption) according to *Client* data security policy. Once the commission is completed, all the original data sent to the *Consultant*, which is classed as commercially sensitive, is returned in an encrypted format using WinZip 128 bit encryption.
- 14.1.6 Project deliverables such as model files, survey data or anything of a personal nature such as questionnaires or address data must also be returned in an encrypted format using WinZip 128 bit encryption.
- 14.1.7 Further details regarding security measures will be discussed at the start-up meeting for this commission

## 15 Client's Advisors

- 15.1.1 The *Client* for the Contract is represented by the Programme & Contract Management (PCM) team, primarily the EA Project Manager, acting as the *Service Manager*, and in their absence the Project Executive. Instructions may only be given by these staff.
- 15.1.2 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, Partnerships & Strategic Overview, NEAS, etc.
- 15.1.3 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*.

#### 16 Client Documents the Consultant Contributes to

- 16.1.1 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.
- Cost and Carbon Tool (CCT).

## **Appendices**

# Appendix 1 – BIM Protocol

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

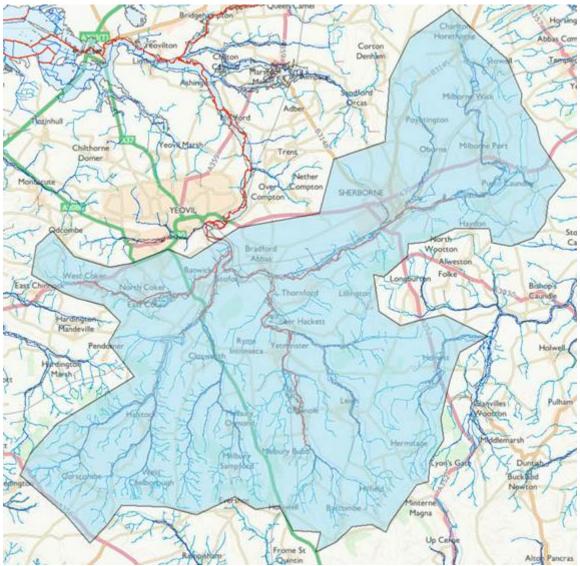
All *Client* issued information referenced within the Information Delivery Plan (IDP) requires verifying by the *Consultant* unless it is referenced elsewhere within the Scope.

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.

www.Pow.bim4.info

# **Appendix 2 – Location Map**



Main rivers are shown in red, with the detailed river network shown in blue. Overland flow paths are not shown on this map.

# **Appendix 3: Photo's and stage graphs from Chetnole in 2019**



Photos from Deep Ford Lane and Mill Lane in Chetnole, November 2019



## **Chetnole Gauge Snapshots from 2019/20:**

