Environment Agency

NEC4 Professional Service Contract (PSC)

SOC-OBC JBA Scope

Project / contract information

Project name	Pevensey Gates
Project SOP code	ENV0002149C
Contract number	32872
Date	11 th October 2021

Assurance

Author	Tom Alderton Project Manager	Date: 11/10/21
Consulted	Dan Sargent Senior User	Date: 15/06/21
Reviewed	Gosia Miler Project Executive	Date: 08/10/21
Checked prior to issue	Rebecca Minter Commercial Lead	Date: 08/10/21
Checked prior to issue	Andrew Hunter Commercial Services Manager	Date: 16/06/21
Consulted	Jonathan Mycock NEAS	Date: 15/06/21

Revision History

Revision date	Summary of changes	Version number
20/04/2021	First issue – PM Draft	1.0
04/05/2021	Second issue – incorporating comments from NEAS and Commercial Lead	2.0
20/05/2021	Third Issue – Incorporated JBA comments and agreements from the scope meeting on the 20 th May 2021	3.0
09/06/2021	Fourth Issue – Updated for internal comments	4.0
11/06/2021	Fifth Issue – Hydrology scope now included. Environmental section edited.	5.0
24/06/2021	Sixth Issue – following pricing strategy meeting. Template shared to check all "AD:" were noted. A few were missing and have been updated. Survey specification updated to V5.	6.0
12/08/21	Seventh Issue – to capture changes associated with the staged approach to the site investigations.	7.0
04/10/21	Eighth Issue – removing hydrology and hydraulics (section 4).	8.0

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

Document	Document Title	Version No	Issue date
LIT 13258	Minimum Technical Requirements	11	4 th May 2021

1 Overview

1.1 Background

Pevensey Gates is a project that, alongside four similar schemes in the Pevensey Levels, will ensure adherence over the next 25 years to a Water Level Management Plan (WLMP) that is critical for the functionality of 3603ha of Site of Special Scientific Interest (SSSI) and internationally designated wetland - the Pevensey Levels (SSSI), Ramsar site and Special Area of Conservation (SAC).

Pevensey Gates consist of 3 bottom opening cast iron gates attached to a Grade II listed road bridge in Pevensey Town (see Fig 1) that maintain SSSI water levels upstream for approximately 3 miles. The gates are in a poor state of repair and are susceptible to operational failure due to debris frequently becoming trapped in the bottom of the gates.

Due to the operational failure of the gates they are not consistently controlling and maintaining water levels stated by the WLMP, and therefore the gates are currently not compliant with the WLMP.

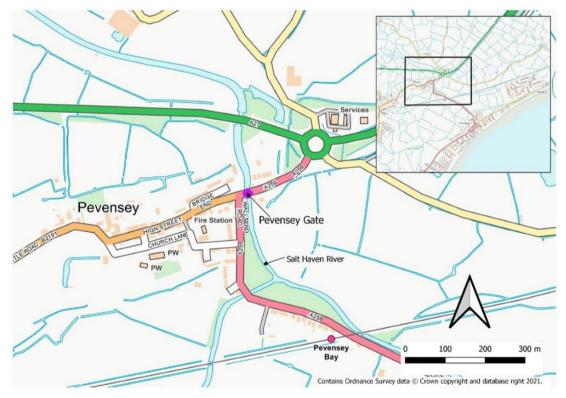


Fig 1 – Pevensey Gates

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
WLMP 2006	December 2006	Digital format (enclosed)	Identified the required water Ievels for Pevensey SSSI and the actions required to bring it into Favourable/ Unfavourable Recovering status
WLMP Review 2014	October 2014	Digital format (enclosed)	Assessed the 2006 plan implementation, developed an operating manual to help future organisations manage water levels and produced a technical assessment for the future management of the SSSI. Included an assessment of the impact of switching off the pumps
The hydraulic assessment of tidal outfall	2003	Digital format (PDF)	Part of an early condition assessment report, this paper calculated the maximum flows that could be discharged via the coastal outfalls
Modelling aspart of the WLMP	17 September 2014	Included as part of the WLMP (appendix D)	Assessment of the impact of turning off the pumps on the Pevensey Levels SSSI
Pevensey Gates SOC and supporting appendices.	May 2021	Digital format (PDF)	
Environmental Baseline Report and opportunities and constraints plan	April2021	Digital format (PDF)	High-level desk-based study providing an assessment of baseline environmental features (including landscape, heritage, ecology, fisheries) associated with the site.
EDC statement and plan	April 2021	Digital format (PDF)	Identified the overall high-level environmental design principles and aspirations that should guide the development of the project.
Historical drawings of gates and bridge	ТВС	Digital format (PDF)	To be provided by Senior User

1.2.2 The previous studies have been undertaken by or for the *Client* using reasonable skill and care and have been accepted. The *Consultant* shall review the information provided and notify the *Client* of any deficiencies in its adequacy. The *Consultant* shall complete a gap analysis of the existing data and present it to the client so that the strategy to obtain any further required information can be agreed. Following this review, and completion of any work required to rectify the deficiencies identified, the *Consultant* shall take the risk of any deficiencies in the existing data quality and quantity which have not been notified to the *Client*.

1.3 Objective

The project objectives of the Pevensey Gates scheme are listed in this section.

- 1.3.1 Provide reliable water level control of the Pevensey Gates catchment allowing improved compliance with the WLMP for a benefit period of 25 years.
- 1.3.2 Pevensey Gates will contribute to achieving 'favourable' condition of affected SSSI units (currently 'unfavourable recovering' as listed on Natural England's Designated Sites System (DSS)), meeting conservation objectives set for the national and international designations.
- 1.3.3 Identify and deliver where appropriate opportunities for wider benefits for people and wildlife. Implement agreed, achievable options for the wider environmental improvement of the condition of the SSSI within the vicinity of the Pevensey Gates. The *Consultant* shall seek to deliver a minimum 20% Biodiversity Net Gain. The *Consultant* shall identify opportunities to deliver 20% Biodiversity Net Gain and highlight at the earliest opportunity whether 20% Biodiversity Net Gain will be unachievable.
- 1.3.4 Protect and provide opportunities to enhance the existing heritage assets.
- 1.3.5 Contribute towards meeting the *Client's* historic legal Public Service Agreement (PSA) target for 95% of SSSIs to be in Favourable (F) or Unfavourable-Recovering (UF-R) condition.
- 1.3.6 Meet the eel and fish passage requirements of the Eels (England and Wales) Regulations 2009 for Pevensey Gates.
- 1.3.7 Allow finer control over water levels at Pevensey Gates which will contribute to the objectives of the WLMP being met across the Wallers Haven Catchment during high and low water conditions.
- 1.3.8 Build in reasonable mitigation for the life of the Pevensey Gates structure (to be incorporated now or in the future) against potential changes in water resources such as those listed below. Mitigation can be built into the structure itself but can also include a reasonable level of mitigation from within the catchment:
 - Future changes in flows due to climate change (based on latest guidance in UKCP18)
 - Any predicted future changes in water requirements from landowners, stakeholders and Natural England that can be established beyond the current usage.

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 AD: The overall objective of this commission is to appraise a range of options, including those shortlisted within the Strategic Outline Case (SOC). This will result in the delivery of an Outline Business Case (OBC) that achieves National Project Assurance Service (NPAS) approval. The *Consultant* will be responsible for the delivery of the Strategic Case, Economic Case and Financial Case within the OBC.
- 2.1.2 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 and 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.
- 2.1.3 The *Consultant* shall design the scheme considering the environmental sensitivities and opportunities of the site and involving key environmental specialists as appropriate within the *Consultant's* and the *Client's* organisations.
- 2.1.4 The *Consultant* shall ensure the optioneering process fully considers and addresses sustainability including carbon reduction as strategic outcomes. The Environment Agency business case template further requires separate option appraisals of sustainability benefits and whole-life carbon to compare with the economic appraisal and promotes a preference for the most sustainable option.
- 2.1.5 The *Consultant* shall ensure the optioneering process fully considers environmental mitigation and opportunities to further conserve and enhance as per the Environment Agency's legal and policy obligations but to also contribute to the Environment Agency's ambitions. This includes delivery against OM4, to achieve AD: 20% Biodiversity Net Gain objectives and biodiversity net gain but must also consider wider sustainability AD: objectives opportunities. The *Consultant* shall ensure the optioneering process avoids where possible and minimises and compensates or offsets any adverse environmental effects AD: adverse environmental effects. The *Consultant* shall identify any adverse environmental effects at the earliest opportunity and provide advice on offsetting or compensating.
- 2.1.6 The *Consultant* shall produce an outline design which seeks to provide the optimum economic, technical, social and environmental/sustainability/carbon outcomes, supported by evidence that will enable the *Client* to produce an Outline Business Case.
- 2.1.7 The *Consultant* shall produce an appraisal report and outline design that enables the *Client* to achieve efficiency targets set for this commission (defined in the framework) and future stages of the project using the Combined Efficiency Reporting Tool (CERT).
- 2.1.8 The *Consultant* shall ensure that the options and final solution take into consideration all relevant guidance and legislation and seek to minimise long-term asset/land management and maintenance costs and carbon.

- 2.1.9 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 This commission must consider planning permission and all other necessary permissions/licences being obtained at detailed design stage. The outline design shall feasibly be able to obtain planning permission.
- 2.1.11 The *Consultant* shall demonstrate that consideration has been given to a long list of potential options, **AD: that they have** identified an appropriate shortlist, appraised these to identify a preferred option and developed this option, its impacts, planning and Environmental Impact Assessment (EIA) requirements scoped to a level that it can be priced. The *Consultant* shall develop a series of options to meet the above objectives.
- 2.1.12 The *Consultant* shall assume that the options shortlisted in the OBC will be aligned with the strategy identified in the SOC. However, the *Consultant* shall not assume that the preferred option will necessarily be the same as that identified at the SOC stage.
- 2.1.13 The *Consultant* shall compile the supporting technical documentation required for the *Client* to obtain a screening opinion from the local planning authority.
- 2.1.14 AD: The Consultant shall apply for consents and permissions from relevant statutory stakeholders required to complete the site investigations and the OBC.

2.2 Constraints

The Consultant shall consider the following constraints in delivering the services:

- 2.2.1 AD: All deliverables and products will show evidence of a quality control system. The quality of all deliverables shall be of a standard acceptable to the Project Board and NPAS. The *Consultant* shall define and present detailed quality processes for this commission. General quality tolerances shall consist of:
 - All first draft deliverables shall be free from significant error and be consistent with other documents and avoid repetition.
 - All first draft products shall tell a logical story with a clear audit trail of consultation and decision making processes, supported by robust evidence, which can be easily transferred and interpreted by future users.
 - All first draft deliverables shall be grammatically correct and clearly presented with consistent formatting.
 - All first draft deliverables shall satisfy the relevant latest guidance and legislative requirements.
 - All first draft deliverables shall conform to the latest and necessary guidance and meet the template requirements, unless otherwise agreed with the *Client* in advance of submission.
 - Products shall be suitable for the audience and written using 'plain English'.

- 2.2.2 AD: Due to the environmental designations and sensitivities of Pevensey Levels and the surrounding area, the project is likely to require a series of licences and consents all of which will need broad consultation. The processes themselves will take time and the licences and consents may contain onerous conditions concerning development and construction phasing.
- 2.2.3 AD: The *Consultant* shall ensure that the options considered are compliant with all relevant guidance and legislation, especially in relation to the protected sites' habitats and species.
- 2.2.4 AD: Access for construction and ground / site investigations is difficult and highly constrained and there is uncertainty about the embankment material and the ability to support heavy plant. Early contractor input will be key in assessing the buildability/ viability of any options.
- 2.2.5 AD: No access to private property is to be made by the *Consultant* without written *Client* approval and/or formal issue and serving of Notice of Entry.
- 2.2.6 AD: The *Consultant* shall ensure that invasive species are not introduced or spread if found to be present on site.
- 2.2.7 AD: The *Consultant* shall review the method statement provided by the *Client's* Early Supplier Engagement (ESE) contractor and provide advice on whether the temporary works will maintain water management to meet the requirements of the Water Level Management Plan and the Flood Risk Activity Permit.
- 2.2.8 AD: Any outcomes of a Habitat Regulations Assessment or other environmental restrictions due to work being undertaken in a protected site will need to be followed at all stages of the project.

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:

• AD: Follow the table of timescales for outputs as shown below:

Table 1: Table of timescales for *outputs*

Activity / Output	Required notice or response period
Review of documents by NEAS and other <i>Client</i> consultees	15 working days
Site visits, Stakeholder consultation invitation	10 working days
Expenditure forecast	1 st Friday or nearest working day of the month

Progress report	1 st Friday or nearest working day of the month
Programme	1 st Friday or nearest working day of the month
Efficiency register	End of the 2 nd month of the quarter or nearest working day
Prepare and issue reports and information before meetings /workshops/ Circulate minutes from meetings	5 working days

- AD: Conduct day-to-day management of project delivery. The Client and Consultant shall adopt a suitable project management approach (such as Prince2 or equivalent), utilising standard Client tools and templates where necessary or practicable.
- AD: Maintain weekly verbal contact with the Service Manager.
- Contribute monthly to the updates to the project risk register.
- Provide input to project efficiency CERT Form.
- Attend AD: weekly 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 *Client* deadlines provided by no later than the 10th day of each month, or as 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 quarterly project board meetings as required (assumed as 1 for OBC).
- 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 of options is driving optimum solutions at all stages of design development.
- Capture lessons learnt relevant to scheme delivery for the *Client's* Project Manager to include in the scheme lessons learnt log to be appended to the OBC.

- 2.3.3 The contract will be administered using FastDraft.
- 2.3.4 AD: Lead required workshops at key gateways/ milestones/ decision points and attend interactive programming and planning workshops led by the *Client's* Early Supplier Engagement (ESE) *contractor* to allow the project team to understand the risks/ dependencies within the programme and how tasks are related and risks are managed. This will result in aligning project team members' objectives, resources and mitigation of constraints. Assumed number of workshops to attend is 6, including the following;
 - 2 risk workshops
 - Longlisting workshop
 - Preferred option workshop
 - Heritage and consents workshop
 - Interactive planning and programming workshop (led by ESE contractor)
 - Stage 2 investigation scoping/planning workshop

2.4 Outputs and Deliverables

- 2.4.1 The *Consultant* shall provide input to product descriptions for key outputs and deliverables that the *Consultant* shall produce during the appraisal stage. They 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. **AD:** The *Consultant* shall make sure that the submission dates and the appropriate period of reply for *Client* acceptance are clearly shown on the programme.
- 2.4.2 The *Consultant* shall produce the following key documents for this commission:
 - Modelling report.
 - Economics report.
 - Options appraisal report.
 - Documentation of the environmental process and considerations including risks and opportunities AD: as outlined in the MTR 801 14 (e.g. Scoping Report).
 - Outline Design(s).
 - Carbon Optimisation Report.
 - Programme showing milestones to construction completion for the preferred option 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.
- 2.4.3 AD: The *Consultant* shall deliver the strategic, economic and financial cases of an OBC for the scheme.
- 2.4.4 AD: The *Consultant* shall produce a deliverables tracker, including information on approval of documents.
- 2.4.5 AD: The Consultant shall produce a document register of incoming and historical data, in a format to be agreed with the *Client* that they will be able to use and maintain beyond the project.

3 Site Investigation

3.1 Introduction

- 3.1.1 Site investigations for the project will be undertaken in two stages.
 - Stage 1 non-intrusive investigations
 - Stage 2 intrusive investigations

3.2 Stage 1 – Non-intrusive investigations

Structural Investigations

- 3.2.1 AD: The *Client*'s Early Supplier Engagement (ESE) contractor shall be used to undertake non-intrusive structural investigations and the structural investigation scope is already in development by the *Consultant* as part of their Option E Pre-SOC commission.
- 3.2.2 AD: The *Consultant*, prior to undertaking any appraisal of options relating to the refurbishment or replacement of the existing structure(s) or structural elements, will provide a report that shall:
 - Summarise the findings of the non-intrusive site investigations undertaken by the *Client*'s Early Supplier Engagement (ESE) contractor or Consultant. The format will be agreed with the *Client*;
 - Determine structural integrity of the existing structure and establish its current residual life;
 - Identify what works would be required to extend the residual life to at least 25 years for gates that would meet the project objectives, supported with summary costs and buildability considerations;
 - Undertake a visual assessment of the other components (e.g. mechanical, electrical, gates, gantries) to inform the appraisal and the detailed design of any potential new gate option;
 - Specify the surveys required to inform the decommissioning of the existing structure and the detailed design and appraisal of a new structure; and
 - Identify any necessary hydraulic and topographic surveys or modelling data inputs, from immediately around the Pevensey Gates structure, that would be beneficial to obtain during the structural investigation.
- 3.2.3 AD: Where works (as defined in NEC4 ECC) are required to provide the information necessary in delivering these requirements, the *Client*'s Early Supplier Engagement (ESE) *Contractor* shall be used. The *Consultant* shall provide the *Client* with an NEC4 Engineering and Construction Contract Scope for any such required works, in consultation with the *Client*'s ESE Contractor. The ECC scope shall include:
 - undertake non-intrusive structural investigations
 - Any requirements for ground investigations to enable the structural investigations to be undertaken (e.g. for the crane pad)

- A requirement to undertake an early assessment of the condition of the stop logs and the necessary works required to allow them to be safely used (see condition survey)
- A requirement for the ESE contractor to obtain a Flood Risk Activity Permit (FRAP). The FRAP will need to demonstrate that any temporary works will maintain the ability to continue water management;
- A requirement to undertake any other consents that would normally be obtained by the ESE contractor;

A requirement that the ESE contractor shall obtain the hydraulic and topographic survey or modelling data inputs specified in 3.1.1.(v), referencing the National Standard Technical Specifications for Survey Services 4.01 guidance.

Topographic/Bathymetric Survey

- 3.2.4 AD: The Consultant shall undertake the topographic and bathymetric surveys.
- 3.2.5 The Consultant will review previous topographic survey **AD: data (see section 1.2)** to identify gaps in existing data. The Consultant will use this to inform the scope of supplementary topographic survey required.
- 3.2.6 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 AD: and opportunities can be made by joint working with other projects or initiatives in the area.
- 3.2.7 AD: The *Consultant* shall ensure topographic survey data includes sufficient provision for collection of tree survey data as detailed in BS 5837 (2012) Trees in relation to design, demolition, and construction.
- 3.2.8 AD: The *Consultant* shall undertake the additional topographic survey necessary, including any additional hydraulic modelling, to be able to assess the shortlist of options and complete an outline design. 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 (4.01), to enable the above.
 - Review and agree surveyors' site risk assessment.
 - Supervision and management of topographic survey company.
 - Review data / checking deliverables
- 3.2.9 The *Consultant* shall use the outputs from the topographic survey in their modelling and option appraisal.

3.3 Services Search

- 3.3.1 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 appraisal, including preparation of plans.
- 3.3.2 The *Client* will arrange for a non-intrusive survey to detect key utilities (e.g. GPR etc.) to inform SI and or options appraisal. The *Consultant* shall determine the extent of the survey and produce a specification for the survey in accordance with Environment Agency Guidance and Principal Designer discussion; defining type and purpose of survey including extents and available information.
- 3.3.3 The Consultant shall also provide a site supervisor to manage the survey supplier.
- 3.3.4 The *Consultant* shall review the services search completed as part of their Option E SOC commission and recommend any further services searches required.
- 3.3.5 The outputs from this survey shall be included in the appraisal, including revising the plans.

3.4 Tree Survey

- 3.4.1 Not Used the scope is already in *Consultant's* Option E SOC commission.
- 3.4.2 AD: The *Consultant* shall provide a Tree Survey and Tree Constraints Plan to BS 5837 (2012) Trees in relation to design, demolition and construction. The timing and extent of tree survey required will be agreed with the *Client*. The agreed extent of tree survey will inform the extent of the area to be covered by the topographic survey.

3.5 Stage 2 – Intrusive Investigations

3.5.1 AD: Stage 2 investigations shall only be undertaken following agreement of the preferred option and will be notified through a Service Manager's Instruction and the associated compensation event raised. The extent of the investigations is likely to comprise, but is not limited to, structural and ground investigations.

Structural Investigation

- 3.5.2 AD: The *Client*'s Early Supplier Engagement (ESE) contractor shall be used to undertake structural investigation and the structural investigation scope is already in development by the *Consultant* as part of their Option E Pre-SOC commission.
- 3.5.3 The *Consultant* shall ensure that the ESE structural investigation scope is updated if any new information is identified throughout the appraisal.
- 3.5.4 AD: in the event of intrusive surveys being required, the *Consultant* shall:
 - Obtain any necessary approvals and requirements (including from Natural England) that need to be in place for the site investigations that are not the responsibility of the *Client*'s ESE contractor.

- The *Consultant* may be instructed to undertake the role of ECC Supervisor for the structural investigation and any other specified necessary work undertaken by the *Client's* ESE contractor. A compensation event will be raised accordingly.
- Include the outputs from the structural survey in the appraisal.
- 3.5.5 The Consultant shall provide a summary of the findings of the intrusive site investigations undertaken by the *Client*'s Early Supplier Engagement (ESE) contractor. The format will be agreed with the *Client*;
 - Determine structural integrity of the existing structure and establish its current residual life;
 - Identify what works would be required to extend the residual life to at least 25 years for gates that would meet the project objectives, supported with summary costs and buildability considerations;
 - Undertake an assessment of the other components (e.g. mechanical, electrical, gates, gantries) to inform the appraisal and the detailed design of any potential new gate option
 - Specify the surveys required to inform the decommissioning of the existing structure and the detailed design and appraisal of a new structure; and
 - Identify any necessary hydraulic and topographic surveys or modelling data inputs, from immediately around the Pevensey Gates structure, that would be beneficial to obtain during the structural investigation.

Ground Investigation

- 3.5.6 AD: The *Client*'s Early Supplier Engagement (ESE) contractor shall be used to undertake ground investigations and the scope is already in development by the *Consultant* as part of their Option E Pre-SOC commission.
- 3.5.7 The Consultant shall scope the ground investigation required to be able to undertake an options appraisal and detailed design and shall agree the scope with the *Client*.
- 3.5.8 The Consultant shall work with the NEAS project lead to:
 - 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.
 - Determine if efficiencies and opportunities can be made by joint working with other projects and initiatives in the area.
 - AD: Identify any consents and assessments required for the GI works.

- 3.5.9 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.
- 3.5.10 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.
- 3.5.11 The *Consultant* shall clearly communicate the scope of the ground investigation to the *Client*'s Lot 2 contractor for the Lot 2 contractor to undertake **AD**: through completing, in a format to be agreed with the *Client*, an NEC4 Engineering and Construction Contract scope for the ECC Project Manager to issue as an instruction to change the scope.
- 3.5.12 The *Consultant* shall produce a summary of key interpretative decisions for the ground investigation undertaken by the Lot 2 contractor AD: obtaining ESE contractor advice and input into their estimated costs.
- 3.5.13 AD: The *Consultant* shall demonstrate how historical data and the results of previous reports and surveys have been considered when identifying and undertaking any necessary ground investigations.
- 3.5.14 AD: It is intended that the *Consultant* will be instructed to undertake the role of ECC Supervisor for the ground investigation and any other specified necessary work undertaken by the *Client's* ESE contractor. A compensation event will be raised accordingly.
- 3.5.15 The *Consultant* shall include the outputs from the ground investigations in the appraisal.

4 Hydrology and Hydraulics

4.1 General

- 4.1.1 AD: To aid the initial appraisal process a review of the hydraulic capacity of Pevensey Gates and all the upstream and downstream bridges and culverts will need to be undertaken. This will determine what the limiting factor for flow is at the current time. Any changes to Pevensey Gates will need to be assessed to ensure that discharge rates are not compromised, resulting in increased flooding occurring.
- 4.1.2 AD: Due to the nature of the catchment, regular tide-locking and particularly considering the effects of climate change (increased flows and reduced discharge duration due to sea level rise) it may be necessary to develop a hydraulic model to assess the effects of changing this structure. If this is required, a model is to be developed to give results for level and flow that is appropriate for the option appraisal and design stages of the study. The *Consultant* will provide a product description describing the methodology for agreement with the *Client*.
- 4.1.3 AD: Following completion of the study, any model produced will be handed over to the *Client*. All electronic data should be in an agreed format in line with the Information Delivery Plan. A copy of the plan will be provided by the *Client*.

4.2 Hydrology

- 4.2.1 AD: The Water Level Management Plan (WLMP) for Pevensey Levels SSSI produced in 2006 and reviewed in 2014 contains reference to a number of studies that were used to produce the outcome recommendations for the management of the water levels in Pevensey Levels SSSI, including at Pevensey Gates.
- 4.2.2 AD: Rainfall and water level data will be available from locations relevant to the Pe vensey Gates. The Consultant shall complete a gap analysis, as part of the product description, on all existing models and data obtained during the data gathering exercise.
- 4.2.3 AD: The Consultant shall undertake appropriate hydrological analysis using appropriate methods selected by the Consultant and agreed by the Client for the Pevensey Haven and Langney Haven Catchment. Appropriate hydrological analysis will establish a range of inflows for events including climate change. The Client will confirm whether the modelling and hydrology from the current Eastbourne flood mapping model, being delivered for East Sussex county council, can be made available. If this can be made available, the Consultant shall consider whether this can be used to inform the assessment.
- 4.2.4 AD: When considering the discharge capacity from options for Pevensey Gates, the Consultant shall take into account the impact of the discharge; future potential changes due to downstream structures and future upstream needs within the life of the proposed structure
- 4.2.5 AD: Hydrometric data is available for use within the Client's WISKI database. The Consultant shall engage the Client to identify relevant data for use within the appraisal, this is likely to include but not limited to the following sites:

Gauge location	Station Number	NGR	Use in this study
PEVENSEY BRIDGE RL	371303001	TQ6491904999	

PEVENSEY BRIDGE RL DS	371303001	TQ6491904999	
FENCE BRIDGE GATE RL	371303002	TQ6491504731	
FENCE BRIDGE GATE RL DS	371303002	TQ6491504731	
PEVENSEY TBR	310125	TQ6614204341	Rainfall data
Eastbourne TL			
LANGNEY RL	371401001	TQ6310601965	

4.3 Hydraulic model

- 4.3.1 AD: All modelling (including building, calibration and design runs) shall be in accordance with operational instruction 379_05 - Computational Modelling to assess flood and coastal risk.
- 4.3.2 AD: The following shall also apply for any model that the Consultant develops as a result of 3.2.1:

Model building

4.3.3 AD: When setting up the model, the Consultant shall supply the Client a geo-referenced schematic showing how individual parts of the modelling structure are connected.

Model proving

- 4.3.4 AD: The Consultant shall identify, and gain agreement from the Client of, the suitable proving for the model, which will be defined in the product description.
- 4.3.5 AD: Within the product description, the Consultant shall detail the method for evidencing that the model and its predictions are appropriate to inform the intended purpose. The Consultant shall make use of telemetry data in this model proving process where it is agreed that this provides benefit.
- 4.3.6 AD: The Consultant shall gain agreement from the Client of model proving at an appropriate stage, as agreed in the product description, in the options testing process.
- 4.3.7 AD: The Consultant should provide a graphical and/or tabular comparison of the model simulation results against appropriate observed data (e.g. long section or hydrographs, fit to spatial data) with a qualitative and quantitative assessment of goodness of fit. Any adjustment made to the model parameters as a result of the proving should be made clear to the Client and the implications and limitation of these adjustments stated.
- 4.3.8 AD: On completion of proving, the Client should be given a statement of key model parameters and/ or assumptions used for the simulations and explanation of any difference to the proving or verification values to the values used for design runs.

Existing case/design runs

- 4.3.9 AD: As outlined in section 3.2.1 the Consultant is to evaluate any changes to the existing flood risk brought about by proposed changes to the structure.
- 4.3.10 AD: The Consultant shall determine and implement appropriate design runs required for the model.

4.4 Model deliverables

- 4.4.1 AD: In producing a model, the Consultant shall provide a technical note and all supplementary data (models etc.) in electronic format at the end of the project on a project archive CD. The Deliver all flood extent output data in MapEdit compatible and ESRI format. 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.
- 4.4.2 AD: The technical note shall;
 - describe the method used for hydraulic modelling;
 - the technical note shall provide high level description of the derivation of the run parameters (e.g. roughness, hydraulic coefficients, weir coefficients, etc) used within both the hydrological assessment and the hydraulic model;
 - provide exception reporting (describe what non-standard things have been done to build or run or post process the model). Describe any other criteria used to improve the final results (such as the filling of islands in a flood extent map or inclusion of boundaries to flow in risk mapping or manual editing of the final results).
 - describe what, where and when the model is sensitive to as highlighted by the sensitivity analysis to give an idea of the robustness of the model;
 - provide a list of the final design runs, together with where the result files can be found. Ensure that this list acknowledges where specific model runs have been combined to achieve the final products;
 - provide a summary of results. These should be selected to represent the purpose of the report. For a report with a final mapping product it may be flood extent maps. For bank level studies it may be long sections for different flow scenarios. For coastal overtopping it may be hydrographs or inundation maps;
 - provide a summary (tabular or screen capture of relevant simulation window) to show the run-time convergence / stability / mass balance. Include a statement about why these are acceptable. State the minimum and maximum computational time-steps under which the model runs stably and with acceptable convergence for all the key simulations required for the study.

5 Economics Appraisal

- 5.1.1 AD: The *Consultant* shall undertake a cost effectiveness analysis (CEA) approach to establish the lowest cost method of fulfilling the obligations, rather than a full cost benefit analysis (CBA).
- 5.1.2 The *Consultant* shall undertake an economic appraisal in line with FCERM Appraisal Guidance (FCERM-AG), Supplementary guidance and the HM Treasury 'Green Book'. This will include a valuation of all the key benefits, both economic and environmental, carbon assessment and whole life costs to produce a cost-effective analysis that will be used to determine the selection of a preferred option.
- 5.1.3 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 and Early Supplier Engagement (ESE) input is required. The *Client* will provide support and costs where possible to complete this estimate. AD: however, *Client* and ESE contractor input is required. A 'Project Estimate Pricing Strategy Meeting' will be required to agree the most appropriate method for costing and the deliverables required.
- 5.1.4 Carbon calculations will be based on whole-life emissions of an asset including embodied (construction), operation, maintenance, and end of life emissions. The values will be calculated from the carbon tool (OI 120_16) to help optimise all options through all stages of design and business case development.
- 5.1.5 Risk and Optimism Bias allowances shall be calculated in accordance with Risk Guidance for Capital Flood Risk Management Projects. The *Consultant* shall attend 2 risk workshops facilitated by the *Consultant* to deliver the Scope.
- 5.1.6 Selection of the preferred option shall be undertaken in accordance with the FCERM-AG decision rules including consideration of the most sustainable and lowest carbon options following the Environment Agency business case template and guidance.
- 5.1.7 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.
- 5.1.8 The *Consultant* shall produce, and maintain through the project, the FCRM Partnership Funding Calculator for Flood and Coastal Erosion Risk Management Grant in Aid (the PF calculator). The PF calculator shall be updated at the request of the *Client* or when evidence obtained during the project suggests a significant change is likely. The *Consultant* shall inform the *Client* of any expected significant change in scheme choice or affordability at the earliest opportunity as the project develops.
- 5.1.9 The Consultant shall AD: support the Client in identifying suitable sources of external funding.

Economic, Sustainability and Carbon Appraisal Deliverables

- 5.1.10 The *Consultant* shall provide the results of this section of the study in a cost effectiveness analysis report which shall feed into the economics appendix of the OBC. This will provide a clear view of the process in order that the economic lead for the review team can review the process. As a minimum this will include, but not be limited to:
 - Overview of methodology adopted.
 - Parameters quantified and standards used (e.g. Multi-Coloured Manual).
 - Parameters considered and not used together with reasons.
 - Key receptors/ major beneficiaries.
 - Wider benefits.
 - Assumptions made.
 - How the decision rules have been applied.
 - What sensitivity tests have been applied and why.
 - Treatment of climate change, carbon reduction and sustainability benefits.
 - FCERM-AG spreadsheets and PF calculator.

6 Environmental Assessment

- 6.1.1 The *Consultant* shall confirm in the activity schedule the expected environmental outputs agreed through engagement with NEAS. The activities identified shall take into account proportionality whilst supporting the achievement of the *Client*'s wider aspirations.
- 6.1.2 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.
- 6.1.3 The *Consultant* shall ensure that the project level assessment sits within the context of any previous strategic environmental assessment and supporting information for the area and brings forward all relevant information and conclusions.
- 6.1.4 The *Consultant* shall establish and understand the baseline and the legal and policy context to identify the key environmental/sustainability risks and opportunities. This shall support the options appraisal and justify the need for any future environmental assessment activity.
- 6.1.5 The *Consultant* shall report the findings of the scoping exercise as required which will form an Appendix to the OBC with relevant summary details incorporated into the relevant section(s) of the OBC main text.
- 6.1.6 AD: The Consultant shall set up and undertake the CEEQUAL assessment and evidencegathering throughout the services, using the CEEQUAL online tool via BREEAM Projects in line with the provided scoping note based on CEEQUAL V6 Technical Manual Requirements. For these Services, 5 assessment issues have been scoped in. The *Consultant* shall ensure that all of the evidence is uploaded prior to completion of the services.
- 6.1.7 AD: The Consultant shall provide a qualified CEEQUAL assessor and scope the individual questions within the assessment issues identified for agreement with the *Client*,
- 6.1.8 AD: The Consultant shall provide information to the Client when handling verifier comments and consultation.
- 6.1.9 AD: The Sustainability Lead is an integrated member of the project team attending monthly progress meetings, key project workshops including but not limited to options/design and risk, and championing sustainability across the project team. If the CEEQUAL Lead does not also lead on sustainability for the project, they should also be considered integrated members of the project team liaising regularly with the Sustainability Lead and project team. The CEEQUAL Lead will lead a CEEQUAL workshop as early as possible in scheme development to build understanding of CEEQUAL requirements and expectations within the project team. The CEEQUAL lead will carry out the CEEQUAL assessment and provide updates against CEEQUAL targets.
- 6.1.10 AD: The Consultant shall report on the CEEQUAL assessment in accordance with the hub workload plan.
- 6.1.11 AD: The Consultant shall provide a qualified CEEQUAL assessor and scope the individual criteria within the assessment issues identified for agreement with the Client.
- 6.1.12 AD: The *Consultant* sustainability (CEEQUAL) lead shall be an integrated member of the project team attending progress meetings, key project workshops including but not limited to options and risk as required providing an update against CEEQUAL targets and championing sustainability across the project team.

- 6.1.13 AD: The *Consultant* shall undertake a Biodiversity Net Gain (BNG) assessment of the existing baseline using the Defra Metric 2.0 calculator. The *Consultant* shall undertake additional calculations for each of the short-list options and produce a BNG Assessment Report. If required, the *Consultant* will repeat the baseline calculation towards the end of OBC to reflect potential changes in habitat. The *Consultant* shall look for opportunities to promote 20% Biodiversity Net Gain as part of the option development process.
- 6.1.14 AD: All deliverables shall be undertaken in line with the current Minimum Technical Requirements including those for Environmental sustainability, Cultural heritage and archaeology, and Landscape and Environmental Design (see Section 13 in Minimum Technical Requirements).
- 6.1.15 AD: Environment Appraisal deliverables as agreed with the *Client* with the support of NEAS include:
 - A consenting strategy, identifying all consents required for the Services to ensure key dates are accurately reflected in the programme and key dependencies identified to the *Client*.
 - Water Framework Directive (WFD) assessment appropriate to the project stage.
 - Preliminary Environmental Information Report (PEIR) (Document Ref 163_06_SD06), as set out in the relevant MTR's, which shall include all required information needed to allow OBC approval, including (not limited to):
 - Environmental Site Appraisal Plan
 - Preliminary Ecological Assessment Report (PEAR);
 - Habitat survey including recommendations for net gain and appropriate net gain baseline surveys as recommended in Natural England's Biodiversity Matrices V2;
 - The identification of any required protected habitat/species surveys, to include liaison with internal and external stakeholders where required.
 - Identification and description of likely effects on landscape character, views and visual amenity
- 6.1.16 AD: The Consultant will provide a landscape design and assessment services to support options appraisal and development of the outline design to OBC in accordance with the current version of MTR for Landscape and Environmental design. As a minimum this will include:
 - Site walkover survey
 - Environmental Site Appraisal Plan
 - Baseline Landscape and Visual Appraisal
 - input into options appraisal process and preparation of PEIR report
 - review and update as appropriate EDC statement and plan

- Indicative Landscape Plan (costed), co-ordinating input from other environmental specialists
- draft procurement and management objectives for reinstatement, mitigation, and enhancement proposals.
- 6.1.17 AD: The Consultant will undertake an initial/high level Natural Capital Assessment scoping exercise to allow the *Client* to assess, where a natural capital approach/assessment could add value to the options appraisal e.g. to explore habitat creation opportunities presented by the options. The *Consultant* shall review the Star Inn Natural Capital scoping report and inform the *Client* whether it can be applied to Pevensey Gates to avoid repeating the exercise.
- 6.1.18 AD: Equalities Assessment as per Equality Analysis Guidance Document LT13513 informed by an access assessment.
- 6.1.19 AD: The *Consultant* shall organise and attend a site visit with the *Client* and Lot 2 contractor within four weeks of contract award to further understand the project's environmental constraints, opportunities and risks.
- 6.1.20 AD: The Consultant shall provide a PEIR report, including or having appended the following:
 - Updated heritage baseline and preliminary statement of significance
 - A detailed built heritage assessment of the Listed bridge including a detailed building history
- 6.1.21 AD: The Consultant shall assist the Client with engaging the Local Planning Authority (LPA) Conservation Officer, Historic England (HE) and the LPA archaeology advisor. This will include preparing briefing material for these stakeholders.
- 6.1.22 AD: The *Client* will seek the following approvals, supported by the information in the PEIR and other relevant documents provided by the *Consultant*:
 - Screening report / Scoping opinion on the preferred option from the Local Planning Authority
 - Natural England (NE) comfort letter.
 - Preliminary WFD assessment sign off.

7 Option Development

- 7.1.1 The *Consultant* shall undertake an options appraisal, 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 area FCRM, the ESE contractor's representative, NEAS, MEICA, Field Services and the Principal Designer. The *Consultant* shall screen and assess this long list of options for technical, environmental, sustainability, carbon and economic suitability, as considered appropriate.
- 7.1.2 AD: The Consultant shall provide an increased level of MEICA technical resource to meet the increased MEICA and heritage requirements for the project. This resource will also actively engage with the *Client*'s heritage specialist and with the pricing of the options with potential gate suppliers, through the *Client*'s ESE contractor.
- 7.1.3 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. The most sustainable option shall be included in the short list. On the agreement of the *Client*, the *Consultant* shall assess in detail these options for technical, environmental and economic suitability, as discussed in the relevant sections of this brief, utilising the evidence and data collated as part of this commission.
- 7.1.4 Options appraisal shall include engagement with the ESE contractor on pricing, buildability and maintainability and the *Client* including Field Services and Area FCRM.
- 7.1.5 The *Consultant* shall analyse and appraise the carbon footprint of options as outlined in Section 11.
- 7.1.6 The *Consultant* shall seek options that support the e:Mission 2030 sustainability targets.
- 7.1.7 The *Consultant* shall use these outputs to select a preferred option. The *Consultant* shall facilitate design workshops and facilitate risk workshops to produce a risk register with analysis in accordance with <u>LIT 14847</u> Risk Guidance for Capital Flood Risk Management Projects.
- 7.1.8 The *Consultant* shall develop the business case for the preferred option and the outline design including provision of specification, drawings and documentation required for OBC-FBC Early Supplier Engagement.
- 7.1.9 The *Client* shall draft the scope for the next stage of the project (OBC-FBC) and the *Consultant* shall support the *Client* to produce the scope.

8 Stakeholder Engagement

- 8.1.1 AD: The *Client* shall lead on consultation, but in consultation with the *Client*, the *Consultant* shall assist and prepare materials for use in meetings and will manage the relationships to gain approvals from statutory consultees.
- 8.1.2 The *Consultant* shall prepare, update and maintain a stakeholder engagement plan for inclusion in the OBC in accordance with the Environment Agency guidance "Working with Others" including agreement of key stakeholders with discussion with the *Client*. The *Consultant* shall ensure that the results from the stakeholder engagement informs the appraisal.
- 8.1.3 The *Consultant* shall circulate the updated communications record at progress meetings.
- 8.1.4 The *Consultant* shall provide technical support, prepare information for, and attend 2 key stakeholder meetings.
- 8.1.5 The *Client* will arrange and advertise 2 no. public meetings. The *Consultant* shall provide technical support, prepare information for input into the consultation documents and prepare site plans and typical outline design drawings for public display. Attendance at these meetings shall include the *Consultant* project manager, environmental lead and 2 other technical specialists.
- 8.1.6 The *Consultant* shall provide technical support and attend 2 no. meetings with key external organisations/individuals impacting upon the option selection process.
- 8.1.7 The *Consultant* shall consider the following and document how they are addressed on this contract:
 - Public diversity in engagement and perception of the project team.
 - Accessibility.
 - How inclusive environments are created for the project team.

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 design 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 (<u>LIT 16559</u>).
- 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. Appraisal work to outline design shall be treated as if it was notifiable.
- 9.1.5 AD: The *Consultant* shall fulfil the Principal Designer (PD) role and discharge the duties in accordance with the requirements of regulations 8, 9, 11 and 12 of the Construction Design Management Regulations 2015.
- 9.1.6 AD: The PD must be a lead or active designer who can either demonstrate relevant Skills, Knowledge and Experience to undertake the role or who has access to relevant support to discharge their duties.
- 9.1.7 AD: The PD will demonstrate their compliance with their CDM duties by preparing and updating the Pre-Construction Management Tool on a monthly basis (or more frequently for start of construction activities) and liaising with the Client Support Framework Resident Principal Designer.
- 9.1.8 AD: The PD will identify and track significant risks, scrutinise the quality of treatment of risks with regard to the principals of prevention, co-ordinate other designers' mitigation and handover designs which can be constructed safely.
- 9.1.9 AD: The PD shall ensure there is effective liaison and coordination between phases with the Principal Contractor.

10 Business Case Submission

- 10.1.1 The *Consultant* shall aggregate all of the work undertaken from this commission into a business case document the Outline Business Case. The format of this document and guidance on the contents is detailed in Write a Business Case LIT 55124 (Link) and the Business Case templates.
- 10.1.2 The *Consultant* shall support in dealing with responses to queries during the approval process and any resubmission required.
- 10.1.3 The OBC delivery is to be in accordance with the *Client's* submission programme for the National Project Assurance Service (NPAS) or the Large Projects Review Group (LPRG) for projects costing over £10m. The *Client* shall be kept up to date of progress and submission dates in order that the delivery of this to the review team can be programmed and a place booked at the appropriate review meeting.
- 10.1.4 This section of the study shall conclude with the final approval of OBC using latest Environment Agency guidance including all appendices and FSoD approval following submission to NPAS or LPRG.
- 10.1.5 AD: The *Consultant* shall be responsible for the delivery of the Strategic Case, Economic Case and Financial Case within the OBC. Prior to commencing these cases, the *Consultant* shall agree the key messages and structure of the cases with the *Client* The *Consultant* shall also support the *Client* in the production of Commercial Case and Management Cases as required.

11 Carbon

- 11.1.1 Carbon emissions shall be identified and assessed on a strategic whole life basis (cost and benefit) in the economic appraisal of options 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 417. 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 via:
 - Identifying carbon differentials between alternative solution options at appraisal stage.
 - 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 at the pre-defined stages.
 - Inclusion of a whole-life carbon appraisal to ensure optimisation of lowest carbon in shortlisted and preferred options in OBC.

12 Relevant 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
Gov.uk	Appraisal Guidance Manual	OBC
672_15_SD03	Business case template – 5 case Model	OBC
672_15_SD02	Short Form Business case template	OBC
LIT 4909	Flood and Coastal Erosion Risk Management appraisal guidance (FCERM-AG)	OBC
	Flood and Coastal Erosion Risk Management: A Manual for Economic Appraisal (the 'Multi Coloured Manual')	OBC
OI 1334_16	Benefits management Framework	OBC
Gov.uk	Partnership Funding Calculator Guidance	OBC
LIT 15030	The Investment Journey	OBC
LIT 55124	Write a Business Case	OBC
LIT 14953	FCRM Efficiency Reporting – capital and Revenue	OBC
LIT 12280	Lessons Log template	OBC
LIT 55096	Integrated Assurance & Approval Strategy	Approvals
5.01	National Standard Technical Specifications for Survey Services	OBC
LIT13513	Equality Analysis Guidance Document	Option development
MTR 801_14	Environmental sustainability, design, and management, including supplementary	OBC

The Consultant shall deliver the service using the following guidance:

Ref	Report Name	Where used
	documents SD01 Cultural heritage and archaeology standards, and SD02 Landscape and Environmental Design.	
801_14 SD 02	Landscape and Environmental Design	Landscape and environmental.

13 Requirements of the Programme

- 13.1.1 The *Consultant* shall provide a detailed programme in Microsoft Project version 2016 meeting all requirements of CI.31 of the Conditions of Contract.
- 13.1.2 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).
- 13.1.3 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. The programme shall include indicative timescales for delivery of the stage 2 site investigations.
- 13.1.4 The programme shall include review and consultation periods for drafts, scoping letters, statutory consultation etc.
- 13.1.5 The programme shall identify time risk allowance on the activities and float.
- 13.1.6 The *Consultant* shall produce a Programme such that the following milestone dates are achieved:

Date	Event
March 2022	Decision gateway for Stage 2 intrusive site investigations
30th May 2022	Submission of OBC to NPAS (based on the Site Investigation results being issued on the 25 th Jan 22)

- 13.1.7 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
 - Adherence to clause 11.2(2) work to be done by the Completion Date

14 Services and other things provided by the Client

14.1.1 Access to Environment Agency systems and resources including:

- Asite.
- FastDraft.
- Collaborative Delivery Community SharePoint access.
- 14.1.2 Letter of Appointment of Principal Designer.
- 14.1.3 Site access authorisation letter(s).
- 14.1.4 Previous studies listed in Section 1.2.1. The *Client* will provide the previous studies within two weeks of contract award.

15 Data

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

16 Client's Advisors

- 16.1.1 The *Client* for the Contract is represented by the Programme & Contract Management (PCM) team, primarily the *Client*'s Project Manager, acting as the Service Manager, and in their absence the Project Executive. Instructions may only be given by these staff.
- 16.1.2 The *Client* has a number of advisory departments. Instructions will only be deemed enacted from them when they are confirmed by an Instruction from the *Client*. These departments include Asset Performance, Partnership & Strategic Overview and NEAS.
- 16.1.3 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*.

17 Client Documents the Consultant Contributes to

- 17.1.1 The *Client* maintains several project documents to which the *Consultant* is required to contribute:
 - Project Risk Register.
 - Project Efficiency CERT Form.
 - Scheme Lessons Learnt Log.
 - Cost and Carbon Tool (CCT).
 - CEEQUAL Assessment.

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.