ECSC Contract Template

Use the template on the pages that follow to assist you when preparing an NEC4 Engineering and Construction Short Contract (ECSC) under the

Asset Operation, Maintenance and Response (Asset OMR) Framework

For Lot 1 Civil Engineering (Maintain and Construct)

Note to *Clients*: Please read before use.

Use the tables on the next page to record project, contract and version information.

This template has guidance notes in boxes, where relevant text needs to be added this is in [brackets]. Text prepopulated in Black should remain unaltered and is integral to effective contract management. All [brackets] and boxed guidance text should be removed before Scope is added into ECSC.

As a matter of clarity please define all abbreviated terms. They are prevalent within the Environment Agency (EA) but may detract from the clear communication of your requirements unless they are spelled out in full.

NEC4 Reminder: Items in the Contract Data (e.g. *fee percentages) should be written italics.* Defined Terms (e.g. Compensation Events) should be written with Capital Letters. Some terms may be both Capitalised and *italicised* (e.g. *Client or Consultant*) being both a Defined Term and included in the Contract Data.

The Scope is owned by the Environment Agency but can be contributed to by any project party prior to Pricing. Use the best skilled professional in a technical area. Ensure stakeholders have checked the document for pricing for areas of their interest. It is much preferable to resolve differences of opinion prior to contract commitment than after, whether that difference is within the EA, with key stakeholder or with the Contractor.

Engage with NEAS Landscape Contracts Support, Principal Designer, Senior User, End User, *Contractor*, Consultant, commercial lead, estates or ARP Eng (if relevant).

Ensure the full document including the Scope is checked by the Commercial Services Manager (IDT) before issue for Pricing.

NEC4 Engineering and Construction Short Contract

Asset Operation, Maintenance and Response Framework

Lot 1 Civil Engineering (Maintain and Construct)

A contract between	The Environment Agency	
	Horizon House	
	Deanery Road	
	Bristol	
	BS1 5AH	
And	Corserv Solutions Ltd T/A Cormac Solutions	
For	AOMR-Lot 1-ECSC_ESE - Hayle River - ENV0000336C	
	Contract Forms	
	- Contract Data	
	- The Contractor's Offer and Client's Acceptance	
	- Price List	
	- Scope	
	- Site Information	

Contract Data

The Client's Contract Data

	I	
The <i>Client</i> is	Environment Agency	
Address for communications	The Environment Agency, Horizon House, Deanery Road, Bristol, BS1 5AH	
Address for electronic communications [relevant Project		nent-agency.gov.uk nt-agency.gov.uk
Manager]		
	The Contract Administrate	or is
Name	@environn	nent-agency.gov.uk
	@environme	nt-agency.gov.uk
Address for communications	Manley House, Kestrel W	ay,
Address for electronic	@environn	nent-agency.gov.uk
communications	@environme	nt-agency.gov.uk
The works are	Reviewing the feasibility of two proposed projects (Package 1 and 2) on the River Hayle and producing all outputs as specified in this scoping document and Cormac Project Plan	
The <i>site</i> is	Package 1 - 1.4km of channel downstream of St Erth Bridge (SW 54907 3506) to the downstream extent that passes under the rail bridge (SW 54905 36087) with minor additional work to the Tidal Barrier (SW 54718 36300). Package 2 - Embankment between SW 54895 35046 - SW 54862 34212.	
The <i>starting date</i> is	16/12/2024	
The <i>completion date</i> is	10/09/2025	
The <i>delay damages</i> are	NOT USED Per week	
The <i>period</i> for reply is	2 weeks	
The period between completion of th date is	e works and the defects	N/A

The defects correction period is	4	Weeks, except that
The defects correction period for	N/A	N/A
The assessment day is	the last working day	of each month
The <i>retention</i> is	Nil	%

The United Kingdom Housing Grants, Construction and Regeneration Act (1996) does apply

The Adjudicator is: Institution of Civil Engineers

In the event that a first dispute is referred to adjudication, the referring Party at the same time applies to the Institution of Civil Engineers to appoint an *Adjudicator*. The application to the Institution includes a copy of this definition of the *Adjudicator*. The referring Party pays the administrative charge made by the Institution. The person appointed is also *Adjudicator* for later disputes.

Contract Data

The Client's Contract Data

The interest rate on late payment is	0.5	% per co	mplete week of delay.
Insert a rate only if a rate less than 0.5%	per week of d	elay has b	been agreed.
For any one event, the liability of the <i>Contractor</i> to the <i>Client</i> for loss of or damage to the <i>Client's</i> property is limited to	The Contract	Price	
The <i>Client</i> provides this insurance	None		
Insura	ance Table		
Event	Cover		Cover provided until
Loss of or damage to the <i>works</i>	Replacement	cost	The <i>Client's</i> certificate of Completion has been issued
Loss of or damage to Equipment, Plant and Materials	Replacement	cost	The <i>defects date</i> plus 2 years
The <i>Contractor's</i> liability for loss of or damage to property (except the works, Plant and Materials and Equipment) and for bodily injury to or death of a person (not an employee of the <i>Contractor</i>) arising from or in connection with the <i>Contractor's</i> Providing the Works	Minimum £5 in respect of claim without the number of	of every t limit to	
Liability for death of or bodily injury to employees of the <i>Contractor</i> arising out of and in the course of their employment in connection with this contract	The amount by the applica		
Failure of the <i>Contractor</i> to use the skill and care normally used by professionals providing works similar to the <i>works</i>	Minimum Price in res every claim limit to the n claims		6 years following Completion of the whole of the works or earlier termination
The Adjudicator nominating body is	The Institutior	n of Civ <mark>il</mark> E	ngineers
The <i>tribunal</i> is	Litigation in th	ne courts	

Contract Data

The Client's Contract Data

The *conditions of contract* are the NEC4 Engineering and Construction Short Contract June 2017 and the following additional conditions

Z 1	Sub-contracting	
Z1.1	The <i>Contractor</i> submits the name of each proposed <i>subcontractor</i> to the <i>Client</i> for acceptance. A reason for not accepting the subcontractor is that their appointment will not allow the <i>Contractor</i> to Provide the Works. The <i>Contractor</i> does not appoint a proposed <i>subcontractor</i> until the <i>Client</i> has accepted them.	
Z1.2	Payment to <i>subcontractors</i> and <i>Delivery Partners</i> will be no more than 30 days from receipt of correct invoice.	
Z2	Environment Agency as a regulatory authority	
Z2.1	The Environment Agency's position as a regulatory authority and as <i>Client</i> under the contract is separate and distinct. Actions taken in one capacity are deemed not to be taken in the other.	
Z2.2	Where statutory consents must be obtained from the Environment Agency in its capacity as a regulatory authority, the <i>Contractor</i> is responsible for obtaining these and paying fees (unless stated otherwise in the Scope). The <i>Client's</i> acceptance of a tender and the <i>Client's</i> instruction or variation of the <i>works</i> does not constitute statutory approval or consent.	
Z2.3	An action by the Environment Agency as regulatory authority is not in its capacity as <i>Client</i> and is not a compensation event.	
Z3	Confidentiality & Publicity	
Z3.1	The Contractor may publicise the works only with the Client's written agreement.	
Z4	Correctness of Site Information	
Z4.1	Site Information about the ground, subsoil, ducts, cables, pipes and structures is provided in good faith by the <i>Client</i> but is not warranted correct. The <i>Contractor</i> checks the correctness of any such Site Information they rely on for the purpose of Providing the Works.	
Z5	The Contracts (Rights of Third Parties) Act 1999	
Z5.1	For the purposes of the Contracts (Rights of Third Parties) Act 1999, nothing in this contract confers or purports to confer on a third party any benefit or any right to enforce a term of this contract.	
Z6	Design	
Z6.1	Where design is undertaken, it is the obligation of the <i>Contractor</i> to ensure the use of skill and care normally used by professionals providing similar design services.	
Z6.2	The <i>Contractor</i> designs the parts of the <i>works</i> which the Scope states they are to design.	

Z6.3	The <i>Contractor</i> submits the particulars of their design as the Scope requires to the <i>Client</i> for acceptance. A reason for not accepting the <i>Contractor's</i> design is that it does not comply with either the Scope or the applicable law.		
	The <i>Contractor</i> does not proceed with the relevant work until the <i>Client</i> has accepted this design.		
Z6.4	The <i>Contractor</i> may submit their design for acceptance in parts if the design of each part can be assessed fully.		
Z7	Change to Compensation Events		
Z7.1	Delete the text of Clause 60.1(11) and replace by:		
	The works are affected by any one of the following events		
	• War, civil war, rebellion revolution, insurrection, military or usurped power		
	• Strikes, riots and civil commotion not confined to the employees of the <i>Contractor</i> and <i>subcontractors</i>		
	Ionising radiation or radioactive contamination from nuclear fuel or nuclear waste resulting from the combustion of nuclear fuel		
	• Radioactive, toxic, explosive or other hazardous properties of an explosive nuclear device		
	Natural disaster		
	Fire and explosion		
	 Impact by aircraft or other device or thing dropped from them 		
Z8	Framework Agreement		
Z8.1	The <i>Contractor</i> shall ensure at all times during this contract it complies with all the obligations and conditions of the Framework Agreement made with the <i>Client</i> .		
Z 9	Termination		
Z9.1	Delete the text of Clause 92.3 and replace with:		
	If the <i>Contractor</i> terminates for Reason 1 or 6, the amount due on termination also includes 5% of any excess of a forecast of the amount due at Completion had there been no termination over the amount due on termination assessed as for normal payments.		
Z10	Data Protection		
Z10.1	The requirements of the Data Protection Schedule shall be incorporated into this contract		
Z11	Liabilities and Insurance		
Z11.1	Civil data protection claims and regulatory fines for breaches of Data Protection Legislation are excluded from any limit of liability stated.		
Z12	Packaging		
Z12.1	For contracts containing packages of projects the <i>Client's</i> Contract Data, Scope and Site Information particular to an individual project is contained within its Site-Specific Pack.		

Z13	Contract Administrator	
Z13.1	Under Clause 14.5, the <i>Client</i> delegates their actions defined in the contract to the <i>Contract Administrator</i> except for:	
	Client's acceptance of the Contractor's Offer to Provide the Works	
	Clause 16 Access to the <i>site</i> and provision of services	
	Clause 51 Payment	
	Clause 82 Recovery of Cost	
	Clause 83 Insurance	
	Clause 90 Termination	
	The <i>Client</i> may replace the <i>Contract Administrator</i> after they have notified the <i>Contractor</i> of the name of the replacement.	
Z110	Inflation	
Z110	At the Contract Date the total of the Prices includes sums to cover inflation until Completion.	

Contract Data

The Contractor's Contract Data

The Contractor completes this section. [Delete this guidance before issue].			
	The Contractor is		
Name	Corserv Solutions Ltd. T/A Corr	mac Solutions	
Address for communications	Western Group Centre, Radnor Cornwall. TR16 5EH	r Road Scorrier, Redruth,	
Address for electronic communications	@cormacltd.co.uk,	@cormacltd.co.uk	
The <i>fee</i> percentage is	s %		
The <i>people rates</i> are	Refer to Cormac Price Schedule		
category of person	unit rate		
The published list of Equipment is		Refer to Cormac Price Schedule 'T2 – Equipment List' tab	
The percentage for adjustment	The percentage for adjustment for Equipment is		

Sub-contractors

The Sub-contractors identified in the table below are accepted by the *Client* under Clause Z1.

	Name and address of proposed subcontractor	Nature and extent of work
1.		
	Form of Contract:	
2.		
	Form of Contract:	
3.		
	Form of Contract:	
4.		
	Form of Contract:	

Contract Data

The *Contractor's* Offer and *Client's* Acceptance

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

The offered total of the Prices is	Package 1 - £56,521.18 Package 2 – TBC pending future PMI/CE	
	Enter the total of the Prices from the Price List.	
Signed on behalf of the Contr	ractor	
Name		
Position	Contracts Manager	
Signature		
Date	23/01/2025	
The Client accepts the Contra	actor's Offer to Provide the Works	
Signed on behalf of the Client	t [signatory in accordance with FSOD requirements]	
Name		
Position	Project Executive	
Signature		
Date	23/01/2025	

Price List

This Price List is a summary using the subtotals from the detailed price breakdown, which is in turn derived from the *Contractor's* rates in the Lot 1 Pricing Workbook. The *Client* and *Contractor* agree the items, quantities, and costs for the project by applying the relevant items and rates from the Lot 1 Pricing Workbook. The *Client* enters the relevant subtotals below and removes the unused headings. Delete this guidance before issue.

This Price List is a summary using the subtotals from the detailed price breakdown, which is in turn derived from the *Contractor's* rates in the Lot 1 Pricing Workbook. The detailed price breakdown reference is:

Ref	Description	Sub total
1	Price list detailed in document – 'EA Hayle River - Package 1 Project Plan R1 NR'	£56,521.18
Refer to p.4 for Assumptions & Exclusions		
2	Price list detailed in document – '	£TBC
	The total of the Prices	£56,521.18
		+ TBC pending future PMI/CE

The method and rules used to compile the Price List are:

Civil Engineering Standard Method of Measurement 4th edition (CESMM4) as per the Framework Pricing Workbook.

When ordering products and constructing the *works*: The accuracy and sufficiency of the measured quantities is not guaranteed. The Scope and drawings shall override the measured quantities.

The accuracy of dimensions scaled from the drawings is NOT guaranteed. Immediately obtain from the *Client* (or their Contract Administrator, if appointed) any dimensions required but not given in figures on the drawings nor calculable from figures on the drawings. This includes queries relating to accuracy or the scale stated on drawings.

Scope

1. Description of the works

1.1 Project background

This scope of works is divided into two packages focusing on separate sections of the River Hayle. Both have separate funding streams and objectives. However both aim to improve the sustainability of the River Hayle, that is categorised as a Heavily Modified Water Body (HMWB).

The division of works are categorised by the St Erth road bridge. Downstream of the bridge represents the capital scheme referred to as **Package 1**. This is to focus on the creation of new embankment assets to enable decommissioning of redundant defences through managed realignment and create/ enhance habitat. The upstream section from the road bridge represents **Package 2** of this scope of works. It is commissioned and funded by the Environment Agency's Area team as a proposed Intermittent Maintenance and Recovery project. It will focus on embankment decommissioning, facilitating maintenance and access (where required) and exploring wider environmental improvement opportunities.

Both packages of work are to be completed concurrently to maximise efficiency and help develop the feasibility of both, whilst not impeding the progression of both proposals. This includes the use of site compounds, community/ stakeholder engagement, surveying and staff utilisation. The Contractor's engagement shall help to develop all aspects of the two packages, including advising the business case feasibility, options appraisal and costs estimation. It is paramount that the Supplier understands this relationship and split of work.

1.2 Description of the works

1.2.1 - Package 1

The Hayle River Flood Bank and Habitat Creation project is located to the south the village of St Erth. It focuses on the Hayle River section between St Erth road bridge (SW 54929 35341) and the tidal gate outfall (SW 54718 36299). Fluvial flood embankments extend 2.3km from the tidal flood defence barrier upstream of the B3301 Road Bridge (SW 54718 36300). The River continues to be channelised with embankments 1km upstream of the village of St Erth. (SW 54883 34183). These embankments Upstream of St Erth Bridge are not within scope for this Capital Appraisal.

Properties in St Erth are protected by a combined 6 km of raised earth linear defences running parallel along a length of the Hayle River. They are set back from the riverbank to form a two-stage channel, between which runs a maintenance track. 20 properties on Mill Lane flooded from the Upper and Lower Covert which are minor tributaries of the River Hayle in 2003.

This project is to focus on the 1.4km of channel downstream of St Erth Bridge (SW 54907 3506) to the downstream extent that passes under the rail bridge (SW 54905 36087) with minor additional work to the Tidal Barrier (SW 54718 36300) in the removal of debris catchers to improve fish passage.

The condition of defences in this location are shown in Figure 1 below. Maintenance works by the Environment Agency's Area team were completed between September '18 – April '19,

Last printed 23/01/25

successfully re-profiling the section of the Western (left hand) embankment upstream of the Mill Lane access track as well as the section upstream of the golf course on the Eastern (right hand) embankment. Both sections are marked in green in Figure 1. A previous study conducted in 2016 identified which defences should remain and formed part of the maintenance works strategically renovated.

The aim of this project is to create / improve the habitat conditions along the Hayle River downstream of St Erth Road bridge. This will be done by allowing increased inundation of the existing wetland areas with the decommissioning of existing flood defence embankments. New embankments are to be created at assigned setback locations that will form part of the realigned flood management in this lower extent of the Hayle River catchment (Figure 1).

The existing embankments are highly degraded and in places redundant. Managed realignment, combined with previous maintenance work will ensure future protection of properties at risk of flooding, whilst allowing a high value wetland habitat to develop under more natural conditions. Relinquishing maintenance duties of redundant assets will also have a long term cost benefit to the Environment Agency and help address the challenge posed by climate change and sea level rise.

Setback defences will be required on both sides of the Hayle River with both new defences needing to align with the height of the existing embankments to ensure consistent protection along the new defence line.

The left (Western) extent requires the raising and widening of an existing access track to form the new defence line as well as maintaining access over any newly constructed bund for vehicle use to property located within the flood plain. Previous works alongside the main river channel show the embankment height between 3.3 - 3.5m in height. Any new works will only be required to bring the setback defence up to 100year standard level of protection. The access track is currently constructed to a height of 3.0-3.2m.

The Right (Eastern) extent requires the construction of an entirely new embankment adjoining the existing bund. Running at a 90-degree adjacent angle, the new setback defence will extend to the high ground along Chenhalls Road. This will reconnect the existing wetlands, whilst maintaining the current level of property protection. This will also increase the flood water storage potential of the catchment by reducing the channelisation of the watercourse and increasing the holding capacity of the system. This should further reduce the chance of flood or bank overtopping.

The existing maintenance berm will still be required for the sections of the defence that are not due to be decommissioned. This ESE will need to explore the impact that withdrawal of maintenance will have on this stage of the channel and consequently the effects on the existing public right of way (PRoW). Consideration will also need to be given to the existing landowner culvert under the embankment, that is in disrepair. An options appraisal for this culvert and the impact on the embankment, PRoW, wetlands and flood risk will need to be explored.

The Contractor will be required to assess whether any on site material from sections of the existing embankments can be used in the creation of the new set back defences. This includes the approach used to win this material in any bank removal through breaching, semi removal or total removal. Consideration is also to be given to the use of borrow pits to win material and create opportunities for further habitat enhancements in creating wetland ponds.

This scope of works key objective is to determine the feasibility of the proposed works and provide clarification regarding areas of the project that are yet to be determined. These clarifications will then form the basis for the final designs and methodology for construction.

The project will then be tendered as a full Design and Build contract under the Environment Agency's AOMR framework.

The Contractor shall provide advice to the Design & Build Contractor (South West AOMR -Lot 1) to enable the appraisal outcomes to be delivered. This will also include undertaking Ground Investigation (GI) and any other required site investigation to enable to development of the design.

The Contractor shall provide technical advice including provision of GI to the Client and appointed Design and Build Supplier who will be supporting both FBC activities. This Scope is to support the feasibility and progression of the project towards the tender of the projects main Design and Build contract.



Figure 1 – Showing the project extend on the River Hayle downstream of St Erth. With embankments to be constructed, decommissioned, and retained demarcated.

Last printed 23/01/25

1.2.1 - Package 2

The Hayle River between Green Lane and St Erth was modified in the 1950s replacing a sinuous marshy channel with a deep and straight trapezoidal channel. Dredged material was used to construct raised linear banks. There is evidence that the channel may have been masonry lined in places, but this historic feature of the channel does not remain.





It is presumed that the historic design intent would have provided both a deeper channel able to store a greater volume of water during tide locking and a uniform/maintained channel which would then convey water during low tide.

Last printed 23/01/25

The current flood risk management system protects approximately 25 properties in St Erth on the left and right bank downstream of St Erth Bridge.

The EA's regular maintenance (assuming no red cards in place) since the 1950's includes:

- Cutting bankside grass and removal of in channel weeds for the whole 900m of channel.
- Intermittent maintenance to repair wash outs and erosion (every 5 to 10 years).

The Environment Agency's access for ride on plant machinery is from Green Lane Bridge. This is the only access to this section of embankments to undertake this required maintenance.

The Ride on plant tracks along the second stage of the channel are used to cut and clear the embankments and river channel of vegetation growth. However washouts now mean the berm is inaccessible to ride on plant and has been 'red carded'. A machine cut is no longer an option. This is due to the consistent degradation of the historic channel as the system attempts to 're-naturalise' itself, as well as the impact of flood events and embankment erosion.

This package of works' key objectives are as follows

- · Decommission raised defences where they are no longer required.
- · Renovating defences where they are still required.

• Provide a new maintenance access route at the downstream section adjacent to St Erth Bridge.

It should be noted that any action taken in either decommissioning or renovating defences must take into account the impact of climate change.

Furthermore the removal of any defences must not increase risk flooding to property. In particular the Tremelling Barns area may require new interventions to manage flood risk. We expect the Contractor to take this into account when conducting their options appraisal and consider the possible scenarios that could be employed, accompanied by high level costings.

All assumptions on the requirement of embankments and decommissioning opportunities will take into account the modelling and reporting conducted as part of the 'River Hayle Restoration Opportunities

- Hydraulic modelling gap analysis report &, Hayle Restoration Design Report (JBA 2023).

1.3 Contractor's deliverables

1.3.1 Package 1

- Determine the suitability and potential sources of material from proposed decommissioned embankments, for use in the construction of new embankments and raised access track. Where possible, additional materials should be won from the least environmentally sensitive areas. No material is to be won from wet woodlands.
- Appraise the most suitable location for the setback defence, taking into account the topography of the site adjacent to Chenhalls Road and opportunities to tie into the high ground. Note that any new defence must not increase flood risk to existing properties. Options must account for the amount of material required, BNG impact, access, and include landowner engagement.
- **3.** Determine the volume and quantity of material required for new embankment creation and raising of the access track from Little Mill Lane.

- **4.** Determine BNG parameters of the project, including the impact and offset required from prosed works. Identify potential sites that could be used to achieve the required 10% mandate and further 20% BNG target.
- 5. Incorporate the baseline from the environmental surveys (which are currently being undertaken) into the feasibility report and undertake any required surveys including topographic.
- 6. Confirm any habitat improvements opportunities, including fish passage improvements on the tidal gate and flap value removal that aligns with EA estimation for required Outcome Measures.
- 7. Confirm the feasibility of flap valve removal on the left hand (Western) river bank and trash bar from tidal gate. Confirm that the proposed works will align with EA estimation for required ENA funding.
- Appraise the option regarding the failing landowner culvert located at SW 54921 36027, determining whether this can be repaired, replaced, or allowed to fail. Consider the potential for a spillway feature and assess any impact on the Public Right of Way.
- **9.** Conduct any required GI investigation, including geo-archaeological / paleoenvironmental sampling.
 - a. Option development Determine the impact of reinstatement or 'Do nothing approach' of failed culvert (right bank), feeding into Business case support and submission.
 - b. Identify access requirements, physical constraints, easement requirements, required working areas, compound areas, etc.
- 10. Review the proposal options feasibility that are to form part of the tender information – is sufficient information available for the AOMR D&B supplier to price the scheme. Provide identification and advice on buildability, construction methods, SHE compliance, access requirements, etc.
- 11. Outline the requirements for asset decommissioning and any parameters that must be set. Demonstrate that embankments designated for redundancy are not required. Include any future maintenance requirements that the Client would either need to continue or create across the site.
- 12. Review of high-level programme and input into activities, durations and sequence, including seasonal challenges (earthworks in the summer months), ecological constraints, third party constraints, consents, delivery durations risk. Provide early identification of programme constraints that could prevent a scheme from starting or completing as planned.
- **13.**Contribute to a high level cost estimate against a defined scope as requested by the project team. Establish a suitable risk pot considering stage of project.
- **14.** Input to project risk register and development of risks associated with the project progression to GW3 and beyond.
- **15.** Contribute any lessons learned from the Contractor's organisation or wider experience that could be relevant to the project.
- **16.** Build on the environmental baseline gathered by Tetra Tech to meet the deliverables within section 6, 7, 8 & 9.1 of the Environment & Sustainability MTRS.
- **17.**Consider the project carbon parameters, budget and impact. Champion carbon reduction and project sustainability where possible.

1.3.2 Package 2

- 1. Appraise options for decommissioning of defences where they are surplus to requirement.
- Undertake initial design and cost appraisal to bring Below Required Condition (BRC) defences up to required condition to maintain flood risk protection to properties in St Erth where raised defences are necessary.
- **3.** Appraise route and construction of new maintenance track, providing suitable maintenance access to left bank adjacent to St Erth Road Bridge.
- **4.** Determine requirement for additional flood defence measures as a result of decommissioning of embankments, in particular focusing on the Tremelling Barns.
- **5.** Appraise options with cost estimation for any new defences, including design and construction.
- Determine whether impact of any on site works/ new defences are likely to require further ecological or archaeological assessment and/ or the need for planning permission.
- 7. Determine the potential BNG impact of works and the offset required, including the identification of on site opportunities.
- **8.** Identify any habitat improvement opportunities that could be included in any future works.
- **9.** Determine potential impact (if any) on historic landfill from any proposed works/ environmental change.

Early supplier engagement will contribute to Lot 1 and Lot 2 Delivery partner collaboration and agreement on the Verified Capital Carbon Forecast which the Client will verify at gateway 3, resulting in the ECC Carbon Target to be used to measure Carbon Performance in subsequent ECC contracts for this project.

Driving down Capital Carbon Forecast for emissions at project level is a key driver and strategic outcome for this ESE.

1.3.3 Further Enabling Works may be required, and these will be added by Project Manager's instructions as Compensation Events. Potential further Enabling Works may include, but are not limited to, the following:

- Engaging with utility companies to discuss service diversion requirements and proposed plant activities in immediate vicinity of services required to facilitate main project works.
- Consideration of the selection and advanced procurement and storage of materials where this delivers efficiencies in cost and time to the project/package.
- Enabling advanced works, where this will allow the project to proceed in accordance with the required programme.
- Undertaking diversion and/or disconnection of existing utilities/site services.
- Creating temporary access routes.
- Installing perimeter fencing and security provision where necessary.
- Additional site investigation to inform design.

1.4 Accommodation

1.4.1 The *Contractor* shall provide accommodation, services and facilities as are necessary to complete the *works*, as quantified and priced in the Framework Pricing Workbook.

1.5 Access to the Site

1.5.1 Prior to first entry to the site to undertake physical *works*, the *Contractor* shall record the condition of the site and accesses to the site through photographs and videos. These shall be submitted to the *Client* for record keeping. The *Contractor* shall leave the site and accesses to the site in as good a condition as prior to first entry.

1.6 Sharing the Site with the Client and Others

1.6.1 In the context of this contract, Others is defined as all stakeholders relevant to the scope of the contract.

1.6.2 The *Contractor* shall co-operate with Others in obtaining and providing information which they need in connection with the *works*.

1.7 Management of the Works

1.7.1 The *Client* and *Contractor* will administer the contract using the *Client's* contract management tools. This is currently FastDraft but may be transferred to similar systems from time to time.

1.7.2 The *Client* and *Contractor* shall attend the following meetings:

- Project start meeting
- Monthly progress meetings from the *starting date* to mutually agreed completion. The *Client* will confirm the date and venue of these meetings. The *Client* will chair and record these meetings.
- Monthly commercial meetings from the *starting date* to agreed completion. The *Client* will confirm the date and venue of these meetings. The *Client* will chair and record these meetings as required.
- Site walkovers as requested by the Client.
- Early Warning meetings as instructed by either Party.

1.7.3 The *Contractor* shall produce a progress report and submit this with their updated programme a minimum of 2 working days ahead of the monthly progress meeting. This report shall:

- highlight the progress achieved since the last programme submission.
- explain any deviation from the previous programme in terms of progress and/or changes to the planned activities,
- explain what actions are being implemented to mitigate any delay,
- state the expected date when the *Contractor* forecast to complete the *works* compared to the contract Completion Date,
- detail any lost days due to weather,
- summarise the latest commercial position with detail of the original Prices, the value of implemented Compensation Events, the forecast of unimplemented Compensation Events, the forecast of the Prices, and
- include site photos of progress achieved since the previous progress report.

1.8 Weather Measurements

- 1.8.1 The place where weather is to be recorded is: N/A
- 1.8.2 The weather measurements are to be supplied by: N/A

1.9 Quality Management

- 1.9.1 The Contractor shall carry out the following tests and inspections:
 - Project specific requirements as specified in the EA's MTRs. Consultation with the Client's internal specialist where necessary.
- 1.9.2 The *Client* shall carry out the following tests and inspections:
 - Project specific requirements as specified in the EA's MTRs. Consultation with the Client's internal specialist where necessary.
- 1.9.3 Until the *defects date*, the *Client* shall instruct the *Contractor* to search for a defect.
- 1.9.4 The *Client* shall notify a defect to the *Contractor* at any time before the defects date.
- 1.9.5 The Contractor shall correct a defect whether or not the Client has notified it.

1.9.6 Before completion, the *Contractor* shall correct a notified defect before the end of the defect correction period. This period begins at the later of the completion and when the defect is notified.

1.9.7 The *Client* shall issue the defects certificate at the defects date if there are no notified defects, or otherwise at the earlier of:

- The end of the last defect correction period and
- The date when all notified defects have been corrected.

1.9.8 The *Contractor* and the *Client* may each propose to the other that the scope should be changed so that a defect does not have to be corrected. If the *Contractor* and the *Client* are prepared to consider the change, the *Contractor* shall submit a quotation for reduced Prices or an earlier completion date or both to the *Client* for acceptance. If the *Client* accepts the quotation, it shall change the scope, the prices and the completion date accordingly.

1.9.9 If the *Contractor* has not corrected a notified defect within its defect correction period, the *Client* shall assess the cost of having the defect corrected by other people and the *Contractor* shall pay this amount.

1.10 Consents, Permits and Licenses

1.10.1 The *Client* shall obtain the necessary consents, permits, licenses and/or agreements from third parties for the permanent works.

1.10.2 The *Client* shall obtain the necessary consents, permits, licenses and/or agreements from third parties for the temporary work:

• Any project specific requirements shall be added in approved Compensation Events. (e.g. environmental permit, works in proximity to a listed building)

1.11 Health, Safety & Environment

Not used

1.12 Procurement of subcontractors

1.12.1 In accordance with Schedule 7 Clause 2.1.3, the *Contractor* shall use sustainability, quality and price criteria when selecting *subcontractors*. Evidence of how this was undertaken is to be retained and made available to the *Client* if required.

1.11.2 In accordance with Schedule 7 Clause 2.1.6, the *Contractor* shall ensure that supply chain opportunities are inclusive and accessible to Small and medium-sized Enterprises; Voluntary, Community and Social Enterprise organisations and under-represented groups of suppliers.

1.11.3 In accordance with Schedule 7 Clause 2.1.1, the *Contractor* shall use the Contracts Finder website to advertise any sub-contracting opportunities to encourage a diverse and inclusive supply base. Within ninety (90) calendar days of awarding a sub-contract to a sub-contractor, the Contractor shall update the notice on Contracts Finder with details of the successful *subcontractor*.

1.13 Title

Marking

1.13.1 N/A

Materials from Excavation and demolition

1.13.2 The *Contractor* shall have title to materials recovered from excavations and demolition.

1.14 Completion

1.14.1 The following criteria must be met for the works to be certified as Complete:

• All deliverables stated within section 1,3 of this document.

1.15 ACCOUNTS AND RECORDS

1.15.1 The *Contractor*'s application for payment shall be submitted on FastDraft and supported by a breakdown of the *works* for which payment is due in the format provided in the Price List, including any implemented Compensation Events.

1.15.2 Following Completion and during the establishment maintenance period, the *Contractor* shall submit applications for payment at quarterly intervals (or half-yearly if agreed with the *Project Manager*).

1.15.3 The *Contractor* shall issue invoices to the following two (2) email addresses and shall quote "Asset OMR", together with the relevant Framework Hub / Area, and PO number in the email subject line.

- <u>apinvoices-env-u@gov.sscl.com</u> and
- <u>ea invoices-pa@environment-agency.gov.uk</u>

1.16 PROGRESS MEETINGS

1.16.1 Frequency: Monthly progress meetings

1.16.2 Location: MS Teams meetings

1.16.3 Chairperson (who will also take and distribute minutes): Client Project Manager

2. Drawings

I

		1
Drawing Number	Revision	Title
Figure 1	1	Package 1 - Showing the project extend on the River Hayle downstream of St Erth. With embankments to be constructed, decommissioned, and retained demarcated.
Figure 2	1	Package 2 - Location of the Hayle River between St Erth Bridge and Green Lane. Section of embankment to be decommissioned.

3. Specifications

Title	Date or Revision	Tick if available
Asset OMR Framework Deed of Agreement and Schedules	04/03/2024	x
Minimum Technical Requirements – Standard (LIT 13258) [June 2024 - <u>MTR library]</u>	V 13	x
Minimum Technical Requirements – Environment and Sustainability (LIT 65150) [Mar 2023 - <u>MTR library]</u>	V 2	x
Exchange Information Requirements (LIT 17641) [05-Jan-2023 - <u>EIR library</u>]	V 3.0	x
SHEW CoP	V 6	x
(SHE) handbook for managing capital projects (LIT 12507)	V 2	x
Flood and Coastal Risk, Asset Management Environmental Maintenance Standards (LIT 12144)	V 2.0	x

Carbon Operating Instruction (LIT 14284)V 6XControl of Substances Hazardous to Health (COSHH) RegulationsXXConstruction Design Regulations (CDM) 2015XCode of practice for electrical safety (COPES) Electrical authorisation (LIT 13130)XAnnex 11 Code of practice for electrical safety (COPES) part 1 (LIT 13118)XAnnex 11 Code of practice for electrical safety (COPES) part 2 (LIT 13133)XLot 1 – Spec supplementary clauses – CULVERTS – CoPX			
Regulations X Construction Design Regulations (CDM) 2015 X Code of practice for electrical safety (COPES) Electrical authorisation (LIT 13130) X Annex 11 Code of practice for electrical safety (COPES) part 1 (LIT 13118) X Annex 11 Code of practice for electrical safety (COPES) part 2 (LIT 13133) X	Carbon Operating Instruction (LIT 14284)	V 6	х
Code of practice for electrical safety (COPES) ElectricalXauthorisation (LIT 13130)XAnnex 11 Code of practice for electrical safety (COPES) part 1X(LIT 13118)XAnnex 11 Code of practice for electrical safety (COPES) part 2X(LIT 13133)X			х
authorisation (LIT 13130) Annex 11 Code of practice for electrical safety (COPES) part 1 X (LIT 13118) X Annex 11 Code of practice for electrical safety (COPES) part 2 X (LIT 13133) X	Construction Design Regulations (CDM) 2015		х
(LIT 13118) Annex 11 Code of practice for electrical safety (COPES) part 2 (LIT 13133)			х
(LIT 13133)			х
Lot 1 – Spec supplementary clauses – CULVERTS – CoP X			х
	Lot 1 – Spec supplementary clauses – CULVERTS – CoP		х
Lot 1 – Spec Supplementary clauses – General X	Lot 1 – Spec Supplementary clauses – General		х
Lot 1 & Lot 3 – Supply Chain Passport Template X	Lot 1 & Lot 3 – Supply Chain Passport Template		х

4. Constraints on how the *Contractor* Provides the Works

4.1 In accordance with Clause 14.5 of the contract, all of the *Client's* actions under the contract are delegated to the Project Manager. The *Contractor* shall only act upon instructions received from the *Client's* delegate.

4.2 All communications from the Contractor to the Client shall be sent to and Adam Marsh

4.3 Protection against Damage

4.3.1 The *Contractor* shall ensure that flood embankments, access tracks, fences, hedges, structures, etc. found on *site* are not damaged by their activities. Such features are to be fully reinstated to the satisfaction of the *Client* and the landowner/occupier within the timescales detailed in the Specification.

4.3.2 Particular attention is required when working in proximity to Armaflex and Enkamat systems, which may have exposed elements above the surface. Significant damage would be caused to assets should these elements get entangled in *Contractor's* Equipment.

4.3.3 The *Contractor* shall not commence any work on the site until the *Client*, or their representative, has accepted the Construction Phase Plan, including method statements and risk assessments ahead of each project in this contract. Acceptance will be by way of a written communication from the *Client* confirming the *Contractor* may take possession of the site from the agreed starting date.

4.3.4 The *Contractor* must allow a minimum of 2 weeks to allow the Principal Designer to review construction phase plans.

4.3.5 In order to assess the extent of work, the *Contractor* shall visit each site when pricing the work. The *Contractor* shall inform the *Client* of the time and date of each site visit before going to site.

4.3.6 The *Client* has the contractual right to access the working area as shown on the drawings. The *Contractor* shall be required to determine the suitability of the access and agree any alternative routes with the landowner should the identified routes be unsuitable.

4.3.7 Details of the proposed routes must be included within the method statements. Access conditions may deteriorate following wet weather and the Contractor should assume the worst conditions when preparing his quotation.

4.3.8 Compensation will be agreed and paid by the *Client* (via its appointed land agents) to affected landowners based on the *Contractor's* programme, proposed access routes and method statements. Compensation claims incurred due to the *Contractor's* failure to comply with its programme, access routes and/or method statements will be passed on to the *Contractor*.

4.3.9 Where necessary the *Contractor* shall include for the removal and replacement of any gates, fences or hedges or any other measures necessary such as installing temporary tracks or crossings to facilitate access. The *Contractor* shall be responsible for reinstating access tracks/routes to the same conditions as encountered on arrival to the site.

4.3.10 The *Contractor* shall take all reasonable steps to avoid damage and disruption to the surrounding land, to the designated sites and associated access routes. Such land may be privately owned, commercially managed for industrial, agricultural use, or part of the local social amenities etc. Any problems with access must be reported directly to the *Client*.

4.3.11 A key, which must be returned on completion of the works, will be provided as necessary to allow access through the *Client's* gates.

4.3.12 If access to a site has deteriorated (e.g. due to heavy rainfall) making it difficult or impossible for the *Contractor* to access, the *Contractor* shall immediately contact the *Client*. The *Contractor* shall inform the *Client* of their intention to continue work at this site or submit a request to the *Client* that they may either postpone work or be permitted to start work at another site. If the *Contractor* decides to continue at the original site, this will be at his own risk.

4.3.13 Seven (7) working days' notice of commencement of works shall be given to the *Client*.

4.3.14 Two (2) working days' notice must be given to the *Client* in advance of completion of the works.

4.3.15 All accidents, near misses, dangerous occurrences and environmental incidents shall be notified to the *Client*, or their representative.

4.3.16 The *Contractor* shall be responsible for obtaining and/or registering for any necessary waste exemptions.

4.3.17 The *Client* require twenty-four (24) hour / seven (7) days per week emergency contacts from the *Contractor* including the provision of out of hour's response if required due to theft, fire, flood and vandalism. Any emergency procedures are to be carried out by a competent employee of the *Contractor*.

4.3.18 The *Contractor* shall undertake an inspection and obtain pre and post work condition photos of any access routes that are expected to be used. This shall be made available to the *Client's* Project Manager upon request.

4.3.19 No mud or other debris is to be deposited on any tarmac areas outside the site access gate, and any such material is to be removed immediately.

4.3.20 The *Contractor* shall ensure that any service diversions and protection measures required during the works have been arranged and agreed with the relevant Statutory Authority.

4.3.21 Un-scoped or additional projects may be added to the package upon acceptance of the relevant Compensation Events (CE's) and revised programmes depending on *Contractor* performance.

4.3.22 No fires may be lit on site unless expressly authorised by the Client.

4.4 Choice of Equipment

4.4.1 The *Contractor* shall choose the most appropriate plant to complete the works.

4.4.2 The *Contractor* must ensure that all plant is properly maintained.

4.4.3 All Equipment with hydraulic systems shall use biodegradable hydraulic oil.

4.4.4 All plant traversing under overhead cables shall be fitted with a Prolec or other height limiting device.

4.5 Permits

4.5.1 The *Contractor* is to obtain a Flood Risk Activity Permit from the Environment Agency where required.

5.5.2 The *Contractor* shall be responsible for obtaining the necessary Environmental Permits for Flood Risk Activities (if applicable). The *Contractor* shall ensure the permits are received a minimum of two (2) weeks prior to commencement of works. The *Contractor* shall be responsible for all costs associated with permit applications. The *Client* has, were possible, started the application process which will need to be transferred to the *Contractor* and finalised. Please be aware the Permitting process can take eight (8) weeks from receipt of payment. The need for permits is to be discussed with the *Client's* Project Manager prior to applying for permits.

4.6 Working times

- 4.6.1 The *Contractor* will be permitted to work between 7.30am and 6.00pm on weekdays (Monday to Friday). In some instances, it may be necessary for the *Contractor* to undertake weekend working. If required this will be limited to Saturday mornings and subject to advanced agreement with the *Client*.
- 4.6.2 Noise and vibrations of GI or other pre-commencement works must be limited where possible.

4.7 Site Restrictions

4.7.1 Site restrictions related to landowners, environment, access, working near water, are present.

4.7.1 Pollution, ecological and environmental impacts – follow best practice and where applicable obtain temporary licences and guidance from EA NEAS and FBG representatives.

4.7.2 Archaeological requirements - heritage work (especially field investigations) requirements and standards are defined in this Scope.

4.7.3 Occupied premises and users - will be notified pre-commencement.

4.8 General Constraints

The Contractor shall not undertake works outside of the defined project area or scope of either specified Package.

- 4.8.1 The Contractor shall not undertake works directly associated with the Hayle visioning project. The works shall take the visioning goals into account when considering site investigation and optioneering.
- 4.8.2 The Environment Agency does not own any of the land on which the works will be carried out. Access and storage of materials will need to be agreed with the landowner. Agreements are to be made with *Client's* project team, Estates, Area and Communications team.
- 4.8.3 Part of the works area is a Permissive Path which is regularly used. There is a Public Right of Way that runs parallel to the Watercourse but is set back outside of the works area in Package 2 extent. It is directly in line with the right hand embankments in the Package 1 extent.
- 4.8.4 SWW pipeline asset is present in the berm of the working area Package 2.
- 4.8.5 The presence of a Gas pipeline under the River in Package 1 area.
- 4.8.6 The Contractor must register themselves on the High Risk Site Log (HRSL) for the works period. This will allow communication between the EA and the Contractor when adverse weather is forecast.
- 4.8.7 For any proposed construction work near trees, existing vegetation shall be protected in accordance with BS5837: 2012 'Trees in Relation to design, demolition and construction'.
- 4.8.8 The site lies within the River Hayle (GB108049000380), status Moderate. This waterbody has fish migratory routes screened for Environmental Permits (European Eel).
- 4.8.9 The Contractor must ensure that pollution prevention measures are robustly considered in their working methodology. WER assessment may be required. The Contractor must consult with FBG & NEAS department.
- 4.8.10 Package 2 is considered Permitted Development under Part 13 of Schedule 2 of the Town and Country Planning (General Permitted Development) (England) Order 2015 Class D – development by the Environment Agency (<u>https://www.legislation.gov.uk/uksi/2015/596/schedule/2/part/13/made</u>).
- 4.8.11 The works are within St Erth pools Local Wildlife Site. The wood on the left hand bank which the track runs through are also a Local Wildlife Site; Treloweth Woods County Wildlife Site.
- 4.8.12 St Erth Bridge is Grade II listed (list entry number 1160923).

5. Requirements for the programme

5.1 The *Contractor* shall submit their first programme with the *Contractor's* Offer for acceptance.

- 5.2 The Contractor shall submit the programme in Adobe PDF and Microsoft Project formats.
- 5.3 The *Contractor* shall show on each programme submitted for acceptance:
- the starting date and Completion Date,
- the critical path,
- the dates when the *Contractor* forecasts to need first access to each part of the Site to undertake physical works,
- the order and timing of the operations which the *Contractor* plans to do in order to provide the *works*,
- lead in periods for materials and sub-contractors,
- the order and timing of the work of the *Client* and others required for the *Contractor* to provide the *works*,
- provisions for float, time risk allowance, mobilisation, project planning and procedures set out in the contract.

5.4 Within two (2) weeks of the *Contractor* submitting a programme for acceptance, the *Client* will notify the *Contractor* of the acceptance of the programme or the reasons for not accepting it. A reason for not accepting a programme is that:

- The Contractor's plans which it shows are not practicable
- It does not represent the Contractor's plans realistically or
- It does not comply with the Scope

5.5 If the *Client* does not notify acceptance or non-acceptance within the time allowed, the *Contractor* may notify the *Client* of that failure. If the failure continues for a further one (1) week after the *Contractor's* notification, it shall be treated as acceptance by the *Client* of the programme.

5.6 The Contractor shall show on each revised programme:

- The actual progress achieved on each operation and its effect upon the timing of the remaining work
- How the Contractor plans to deal with any delays and to correct notified Defects and
- Any other changes which the Contractor proposed to make to the Accepted Programme
- 5.7 The Contractor shall submit a revised programme to the Client for acceptance:
- Within the period for reply after the Client has instructed the Contractor to
- When the Contractor chooses to and, in any case,
- At no longer interval than stated below from the *starting date* until Completion of the whole of the *works*

From	То	Interval
Starting date	Start of establishment period	1 month
Start of establishment period	End of establishment period	3 months
Start of maintenance	Completion	Annual

5 1	,
Item	Date by which it will be provided
Site Information	Information provided in appendices
Fastdraft Access	2 week (max) from contract signing
Ecological reports (Tetra tech)	December 2024 (not received as of 11/12/2024)
JBA Modelling Report	November 2024
Geo-environmental testing	November 2024
GI	November 2024
Modelling	November 2024
Topographic Surveys	November 2024
Visioning Document - LDA 09 Submission Plain A4 P	November 2024

7. Site Information

The site

Package 1: Hayle River extent between St Erth road bridge (SW 54929 35341) and the tidal gate outfall (SW 54718 36299). Fluvial flood embankments extend 2.3km from the tidal flood defence barrier upstream of the B3301 Road Bridge (SW 54718 36300).

Package 2: Channelised river embankments 1km upstream of the village of St Erth. (SW 54883 34183).

Existing utilities and services

Drawings: Existing utility surveys and land registry search provided. Contractor can renew to ensure information is correct at time.

Soils and Ground water

Information: Limited soil sampling as part of 18/19 Maintenance work shared.

Site investigation

Report: All previous information related to site shared.

Site location plans



Figure 3 (above) - Package 1 - Red line boundary



Figure 4 - Location of the Hayle River between St Erth Bridge and Green Lane. Section of embankment to be decommissioned.

Health and safety file

Issue details:

Access to site

Access to the Site – via public highways. Agreement to be sought from relevant landowners surrounding the River Hayle.

The Client is responsible for the following: -

• Obtaining permission from the landowner to use the Site for the purposes of the works;

Last printed 23/01/25

Use of the site

Use of the Site – to undertake the required amount of site visits to collect information needed to provide the works.

Surrounding land / building uses

General: Adjacent and nearby uses are as follows:

- SWW Sewage Treat Plant
- General low grade grazing land
- Agricultural land
- National highways
- National rail network
- RSPB nature reserve
- Commercial buildings and land Penwith Pitch and Putt
- Marazion Angling club lake, access lane and temporary structures.
- Wet woodland and private dwellings
- St Erth Village, dwellings, road bridge and commercial buildings.
- St Erth Village Park
- BK Fisheries lake, access and temporary structures.
- St Albans Estate land.
 [All land and ownership defined in Land Registry searches. See provided]

Health and safety hazards

General: The nature and condition of the site/ building cannot be fully and certainly ascertained before it is opened up. However, the following hazards are or may be present: water environment, deep water, steep embankments, limited access, unstable ground, rail network, road network and traffic, unstable embankments, contaminated ground.

Information: The accuracy and sufficiency of this information is not guaranteed. Ascertain if any additional information is required to ensure the safety of all persons and the *works*.

Site staff: Draw to the attention of all personnel working on the site the nature of any possible contamination and the need to take appropriate precautionary measures.