

# NEC4 Engineering and Construction

## Short Contract

FCRM Operational Framework – Central Hub

A contract between

The Environment Agency

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

And

Breheny Civil Engineering Ltd

For

Old Hall Marsh embankment repair

Contract Forms

- Contract Data
- The *Contractor's* Offer and *Client's* Acceptance
- Price List
- Scope
- Site Information

# Contract Data

## The *Client's* Contract Data

	The <i>Client</i> is	
Name	Environment Agency	
Address for communications	[REDACTED]	
Address for electronic communications	[REDACTED]	
The <i>works</i> are	Tidal embankment repairs to revetment system and clay core	
The <i>site</i> is	Old Hall Marsh, near Tollesbury, Essex	
The <i>starting date</i> is	11/04/2022	
The <i>completion date</i> is	31/03/2023	
The <i>delay damages</i> are		Per day
The <i>period</i> for reply is	2	weeks
The <i>defects date</i> is	52	weeks after Completion
The <i>defects correction period</i> is	4	weeks
The <i>assessment day</i> is	the last working day	of each month
The <i>retention</i> is	nil	%
The United Kingdom Housing Grants, Construction and Regeneration Act (1996) <b>does</b> apply		
The <i>Adjudicator</i> is :		
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 <i>Adjudicator</i> . The application to the Institution includes a copy of this definition of the <i>Adjudicator</i> . The referring Party pays the administrative charge made by the Institution. The person appointed is also <i>Adjudicator</i> for later disputes.		

# Contract Data

## The *Client's* Contract Data

The interest rate on late payment is

% per complete week of delay.

Insert a rate only if a rate less than 0.5% per week of delay has been agreed.

For any one event, the liability of the *Contractor* to the *Client* for loss of or damage to the *Client's* property is limited to £100,000.

The *Client* provides this insurance

None

### Insurance Table

Event	Cover	Cover provided until
Loss of or damage to the <i>works</i>	The replacement cost	The <i>Client's</i> certificate of Completion has been issued
Loss of or damage to Equipment, Plant and Materials	The replacement cost	The defects Certificate has been issued
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 £5,000,000 in respect of every claim without limit to the number of claims	
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 required by the applicable law	
Failure of the <i>Contractor</i> to use the skill and care normally used by professionals providing works similar to the works	Minimum £...nil.... in respect of every claim without limit to the number of claims	6 years following Completion of the whole of the works or earlier termination

The *Adjudicator nominating body* is

The Institution of Civil Engineers

The *tribunal* is

litigation in the courts

The <i>conditions of contract</i> are the NEC4 Engineering and Construction Short Contract June 2017 and the following additional conditions	
<b>Only enter details here if additional conditions are required.</b>	
Z1.0	Sub-contracting
Z1.1	The <i>Contractor</i> submits the name of each proposed subcontractor 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 subcontractor until the <i>Client</i> has accepted them.
Z1.2	Payment to subcontractors and suppliers will be no more than 30 days from receipt of invoice.
Z2.0	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 works 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.
Z3.0	Confidentiality & Publicity
Z3.1	The <i>Contractor</i> may publicise the works only with the <i>Client's</i> written agreement.
Z4.0	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.
Z5.0	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.
Z6.0	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 works 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.
Z7.0	Change to Compensation Events
Z7.1	Delete the text of Clause 60.1(11) and replace by: The <i>works</i> are affected by any one of the following events <ul style="list-style-type: none"> <li>• War, civil war, rebellion revolution, insurrection, military or usurped power</li> <li>• Strikes, riots and civil commotion not confined to the employees of the <i>Contractor</i> and sub-contractors</li> <li>• Ionising radiation or radioactive contamination from nuclear fuel or nuclear waste resulting from the combustion of nuclear fuel</li> <li>• Radioactive, toxic, explosive or other hazardous properties of an explosive nuclear device</li> <li>• Natural disaster</li> <li>• Fire and explosion</li> <li>• Impact by aircraft or other device or thing dropped from them</li> </ul>

Z8.0	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> .
Z9.0	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.
Z10.0	Data Protection
Z10.1	The requirements of the Data Protection Schedule shall be incorporated into this contract
Z11.0	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.
Z30.0	Material Price Volatility  The Client recognises the ongoing pricing uncertainty in relation to materials for the period from 1 July 2021 to 30 June 2022 the Client will mitigate this additional cost through this clause. Payment is made per assessment based upon a general average material proportion within assessments, calculated at 40%.
Z30.1	Defined terms  a) The Latest Index (L) is the latest index as issued by the Client. The L, which is at the discretion of the Client, is based upon the issued consumer price index ((CPI) based upon the 12-month rate) before the date of assessment of an amount due.  b) The Price Volatility Provision (PVP) at each date of assessment of an amount due is the total of the Material Factor as defined below multiplied by L for the index linked to it.  c) Material Factor (MF) 40% is used, based on a general average material proportion across our programme. The volatility provision is only associated with material element. No volatility provision is applicable to any other component of costs.
Z30.2	Price Volatility Provision  Through a Compensation Event the Client shall pay the PVP. PVP is calculated as:  $\text{Assessment} \times \text{MF} \times \text{L} = \text{PVP}$
Z30.3	Price Increase  Each time the amount due is assessed, an amount for price increase is added to the total of the Prices which is the change in the Price for Work Done to Date for the materials component only (and the corresponding proportion) since the last assessment of the amount due multiplied PVP for the date of the current assessment.
Z30.4	Compensation Events  The Contractor shall submit a compensation event for the PVP on a monthly basis (where applicable) capturing Defined Cost only for the PWDD increase in month. Forecasted costs should only be considered for the June 2022 period compensation event.

Assessment Date	Defined Cost?	Forecasted Cost?
31 <sup>st</sup> Jul 21	In period costs only	No
31 <sup>st</sup> Aug 21	In period costs only	No
30 <sup>th</sup> Sept 21	In period costs only	No
31 <sup>st</sup> Oct 21	In period costs only	No
30 <sup>th</sup> Nov 21	In period costs only	No
31 <sup>st</sup> Dec 21	In period costs only	No
31 <sup>st</sup> Jan 22	In period costs only	No
28 <sup>th</sup> Feb 22	In period costs only	No
31 <sup>st</sup> Mar 22	In period costs only	No
30 <sup>th</sup> Apr 22	In period costs only	No
31 <sup>st</sup> May 22	In period costs only	No
30 <sup>th</sup> Jun 22	In period costs only	Forecasted costs for remainder of contract

The Defined Cost for compensation events is assessed using

- the Defined Cost at base date levels for amounts calculated from rates stated in the Contract Data for People and Equipment and
- the Defined Cost current at the date the compensation event was notified, adjusted to the base date by 1+PVP for the last assessment of the amount due before that date, for other amounts.



# Contract Data

## The *Contractor's* Contract Data

	The <i>Contractor</i> is	
Name	Breheny Civil Engineering Ltd	
Address for communications		
Address for electronic communications		
The <i>fee</i> percentage is	8	%
The <i>people rates</i> are	As per the Lot 1 workbook	
category of person	unit	rate
The <i>published list of Equipment</i> is	As per the Lot 1 workbook	
The <i>percentage for adjustment for Equipment</i> is	8%	

# 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	£205,590.00
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	Enter the total of the Prices from the Price List.
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Signed on behalf of the *Contractor*

Name	
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Position	
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Signature	
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Date	21 April 2022
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The *Client* accepts the *Contractor's* Offer to Provide the Works

Signed on behalf of the *Client*

Name	
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Position	
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Signature	
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Date	3 <sup>rd</sup> May 2022

## Price List

Entries in the first four columns in this Price List are made either by the *Client* or the tenderer.

If the *Contractor* is to be paid an amount for the item which is not adjusted if the quantity of work in the item changes, the tenderer enters the amount in the Price Column only: the Unit, Quantity and rate columns being left blank.

If the *Contractor* is to be paid an amount for the item of work which is the rate for the work multiplied by the quantity completed, the tenderer enters the rate which is then multiplied by the expected quantity to produce the Price, which is also entered.

Item Number	Description	Unit	Quantity	Rate	Price

[illegible]

The method and rules used to compile the Price List are

Civil Engineering Standard Method of Measurement 4<sup>th</sup> edition (CESMM4) as per the Framework Price Workbook.

# Scope

## 1. Description of the *works*

Defects have developed on the tidal embankment protecting Old Hall Marsh, a large and environmentally sensitive wetland habitat in the Blackwater Estuary in Essex. The defects include scouring at the toe of the embankment, collapse of the existing Essex blocks revetment, predominantly due to the erosion of the underlying clay core. Sections of the existing revetment have also been weakened by the deterioration of the bitumen grout joints. The bitumen grout may contain asbestos and has not been tested. The total length of concrete revetments to be replaced is 128m.

The objective of this contract is to repair the defects in this embankment and bring it back into serviceable condition.



Information board at the largest damaged area and the damage behind the noticeboard.

1. The *Contractor* is to develop a works programme for delivery of repairs on site prior to winter 2022-23. Precise timings to be agreed with *Client* and landowner/RSPB.
2. The *Contractor* is to develop the provided outline design for embankment repair into 'for construction' drawings. These will be agreed between the *Contractor* and *Client* at which point the *Client* will accept design liability. We are looking to keep the embankment on its existing footprint.
3. The *Contractor* is to develop 'for construction' drawings for the access route and compound areas required to carry out the embankment repairs. These will be agreed between the *Contractor* and *Client* at which point the *Client* will accept design liability.
4. The *Contractor* is to obtain a Flood Risk Activity Permit (FRAP) for the works as designed under points 2 and 3.
5. The *Contractor* is to develop an access route to the working area suitable for the plant and vehicles required to carry out the embankment repairs. The route and methods are to be agreed with the *Client* and landowner/RSPB. Methods are to be compliant with the EA SHEW-COP.
6. The *Contractor* is to provide a secure compound area and welfare facilities for the workforce.
7. The damaged sections of revetment at locations TL9935 1126 (91 linear metres), TL9920 1118 (8 linear metres) and TL9906 1119 (29 linear metres) are to be repaired to the design agreed under point 2. The total area of revetment to be repaired is estimated at 512m<sup>2</sup>. This includes repair to the toe of the revetment if included in the design from point 2. Methods are to be compliant with the EA SHEW-COP.
8. Clay core repair is likely to require replacing 12m<sup>3</sup> of lost material.

9. The *Contractor* is to provide a unit rate for additional revetment repair works per m2 and clay core repair works per m3.
10. Repairs to the revetment and clay core are required before winter 2022-23. Precise timings to be agreed with landowner/RSPB and will be subject to permitting by Natural England.
11. The repaired sections of embankment are to be made good with topsoil and grass seed on the landward face. The crest is to be made ready for foot traffic.
12. The compound and access route is to be made good once the embankment is repaired.
13. As built drawings and the completed Health and Safety File are to be provided to the Client by 31-03-2023.

## 2. Drawings

List the drawings that apply to the contract.

Drawing Number	Revision	Title
EA6003921R-EA-00-00-SM-Z- RepairSketch	0	Hand sketch illustration of details of the concrete revetment repair process.

## 3. Specifications

List the specifications which apply to the contract.

Title	Date or Revision	Tick if publicly available
Environment Agency Blockage Management Guide (Gov.uk)	12/2019	Yes
Latest Ciria Guidance: Culvert, screen and outfall manual - New CIRIA guidance	12/2019	Yes
Civil Engineering Specification for the Water Industry	7 <sup>th</sup> Edition	Yes

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

State any constraints on the sequence and timing of work and on the methods and conduct of work including the requirements for any work by the *Client*.

Tidal working area means that revetment and clay works on the seaward face will have to be arranged around the tides.

Multiple environmental designations means that various protected species could be present and working methods and timings will have to fit around the needs of these species.

### Working times

The *Contractor* will be permitted to work between 7.30am and 6.00pm on weekdays (Monday to Friday)

## 5. Requirements for the programme

State whether a programme is required and, if it is, state what form it is to be in, what information is to be shown on it, when it is to be submitted and when it is to be updated.

State what the use of the *works* is intended to be at their Completion as defined in clause 11.2(1).

The *Contractor* submits his programme with the *Contractor's* Offer for acceptance. The *Contractor* shows on each programme which he submits for acceptance (in form of Gantt chart showing the critical path, proposed order and timing to undertake the works and proposed plant and labour resources) the following:

- (a) Period required for mobilisation/ planning & post contract award
- (b) starting date
- (c) Each of the activities listed within the Price List
- (d) Any key third party interfaces: lead in periods for materials and sub-contractors; time required to obtain consents/waste permits; stated constraints; *Contractor's* risks.
- (e) Completion date

The programme is to be updated and provided to the *Client* on a monthly basis as a minimum.

## 6. Services and other things provided by the *Client*

Describe what the *Client* will provide, such as services (including water and electricity) and “free issue” Plant and Materials and equipment.



Item	Date by which it will be provided
Grass cutting in the months leading up to the works to avoid issues with wildlife affecting access.	Starting March 2022.
Footpath diversion/closure as necessary during works.	Minimum of eight weeks notice before closure is required in the Contractors programme
Natural England assent, building permission and MMO licence (if required).	Ahead of works starting on the ground.
CDM Principal Designer to be appointed separately from this contract	At contract award
Services searches	At contract award and at three months prior to work on site.

## Site Information

Client's Pre-Construction Information – including utility search results – B21-215\_Client\_PCI\_v1.zip

Old Hall Marshes site description, background and outline design. This includes; the site plan; outline design sketch (figure 3), potential access route options map and description of the environmental designations. - Old Hall Marshes site description v2.pdf

Historic drawings from wall improvement works in the 1940's and 1950's - Drawings1940-60.zip

Historic drawings from the 1984 seawall survey - Drawings1984SeawallSurvey.zip

Initial buildability risk assessment - EA6003921R-EA-00-00-SM-Z-buildability\_risk\_matrix.pdf

Environmental Screening Checklist – EA6003921R-EA-00-00-SM-Z-EnvScreeningChecklist.pdf

Enabling works plan – shows extent of additional grass cutting to be completed by Environment Agency and the potential access routes to the work site – B21-215 Enabling Works Plan.pdf

## Proposed sub-contractors

	Name and address of proposed subcontractor	Nature and extent of work
1.	Hesselberg Hydro Ltd  Form of Contract: NEC4 Short Subcontract.	Supply and installation of LSA/OSA and LSA to voids as required.
2.	Form of Contract:	

3.	Form of Contract:	
4.	Form of Contract:	