

NEC4 Engineering and Construction

Short Contract

FCRM Operational Framework – South West Hub

A contract between

The Environment Agency

Horizon House

Deanery Road

Bristol

BS1 5AH

And

For

Cerne Abbas Reservoir Spillway Replacement

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	Rivers House, Sunrise Business Park, Higher Shaftesbury Road, Blandford Forum, DT11 8ST	
Address for electronic communications	<div></div>	
The <i>works</i> are	<p>In accordance with the design drawings and specification listed in the Scope –</p> <p>Removal of existing spillway erosion protection gabion baskets and mattresses. Construction of a new replacement spillway consisting of stepped gabion baskets and mattresses. Break out existing reservoir spillway concrete cill and replace with new reinforced concrete cill.</p> <p>Install reinforced pre-grown turfmat (Salix P550) on the existing embankment crest and downstream slope. Raise the wider section of embankment at the interface with the spillway by ~300mm.</p> <p>The <i>Client</i> has a responsibility to ensure that the above works must be completed by the MIOS deadline of 31st December 2021.</p> <p>Removal of existing inlet and outlet channel stone gabion baskets and gabion mattresses. Replace with new gabion baskets and mattresses.</p>	
The <i>site</i> is	Cerne Abbas Flood Detention Reservoir, Kettle Bridge Lane, Duck Street, Cerne Abbas, DT2 7GY (Nearest Postcode)	
The <i>starting date</i> is	1 June 2021	
The <i>completion date</i> is	1 November 2021	
The <i>delay damages</i> are	£400	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) does 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	0.5	% 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 works	The replacement cost	The Client's 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 Contractor's 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 Contractor) arising from or in connection with the Contractor's 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 £2,000,000 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 <i>Adjudicator nominating body</i> is		The Institution of Civil Engineers	
The <i>tribunal</i> 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			
Only enter details here if additional conditions are required.			
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	<p>Delete the text of Clause 60.1(11) and replace by:</p> <p>The <i>works</i> are affected by any one of the following events</p> <ul style="list-style-type: none"> • 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 sub-contractors • 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
Z7.2	<p>Additional Compensation Event COVID-19</p> <p>Managing and mitigating the impact of Covid 19 and working in accordance with Public Health England guidance, as may vary from time to time, until 30 June 2021.</p>
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	<p>Delete the text of Clause 92.3 and replace with:</p> <p>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.</p>
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.
Z12	Flooding
Z12.1	<p>Amend the text of Clause 60.1 with the addition of 60.1 (13):</p> <p>The <i>Contractor</i> is prevented by flooding from carrying out all the work on the <i>site</i> for periods of time, each at least one full working day, which are in total more than one seventh of the total number of days between the <i>starting date</i> and the Completion Date. In assessing this event, only the working days which exceed this limit and on which work is prevented by no other cause are taken into account.</p> <p>Flooding is defined for the <i>site</i> as: 121.6mAOD as recorded by the reservoir telemetry outstation situated on the reservoir inlet structure, which monitors upstream levels. This is top of bank level with flow out of channel. At this level the reservoir will start to impound.</p>

Contract Data

The *Contractor's* Contract Data

	The <i>Contractor</i> is	
Name	Amalgamated Construction Limited (AmcoGiffen)	
Address for communications	Whaley Road, Barugh, Barnsley, South Yorkshire, S75 1HT	
Address for electronic communications	estimating@amcogiffen.co.uk	
The <i>fee</i> percentage is	As per the Framework Agreement	%
The <i>people rates</i> are	As per the Framework Agreement	
category of person	unit	rate
The <i>published list of Equipment</i> is		As per the Framework Agreement
The <i>percentage for adjustment for Equipment</i> is		As per the Framework Agreement

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 **£397,525.00**

Enter the total of the Prices from the Price List.

Signed on behalf of the *Contractor*

Name

Position

Managing Director

Signature

Date

21.05.21

The *Client* accepts the *Contractor's* Offer to Provide the Works

Signed on behalf of the *Client*

Name

Position

Senior Commercial Officer

Signature

Date

28/5/2021

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
1	Produce CPP and co-operation with Principal Designer and Reservoir QCE. Provide RAMS information.	Sum	N/A		£4762.98
2	Submit FRAP application and obtain FRAP for all temporary and permanent works.	Sum	N/A		£4330.61
3	Mobilisation and site-set up. To include information boards describing the nature of the works being undertaken and expected duration.	Sum	N/A		£57409.00
4	Maintain site set up for duration of works.	Sum	N/A		£11020.21
5	Construct and maintain temporary access route to working area for duration of works.	Sum	N/A		£9412.05
6	Provide and erect barriers to close section of Kettle Bridge Lane Car Park for site compound and maintain for duration of works.	Sum	N/A		£3647.41
7	Erect and maintain temporary fencing to ensure security to the reservoir site is no less than existing, for the duration of the works.	Sum	N/A		£3647.41
8	Removal of existing spillway erosion protection gabion baskets / mattresses and dispose off site in accordance with waste legislation	Sum	N/A		£74395.36
9	Construction of a new replacement spillway consisting of stepped gabion baskets and mattresses as per drawings	Sum	N/A		£85907.86
10	Break out existing reservoir spillway concrete cill and replace with new reinforced concrete cill as per drawings	Sum	N/A		£6511.60
11	Remove and backfill the 2 inspection chambers along the dam crest. (Telemetry cabling will be relocated by EA M&E contractor)	Sum	N/A		£2601.3
12	Prepare embankment crest (formalising level and width where required) ahead of installation of reinforced turfmat.		N/A		£18213.63
13	Procure and manage the delivery of reinforced pre-grown turfmat (Salix P550) for use on embankment crest and downstream slope.	Sum	N/A		378.81
14	Strip existing topsoil and install reinforced pre-grown turfmat (Salix P550) on the existing embankment crest and downstream slope (existing embankment ~70m in length).	Sum	N/A		42688.88

15	Tend to pre-grown turfmat until suitably established and approved by the Reservoir QCE, including daily watering as required.	Sum	N/A		£5782.91
16	Raise the wider section of embankment at the interface with the spillway by ~300mm	Sum	N/A		£8092.08
17	Remove existing inlet and outlet channel stone gabion baskets and gabion mattresses (dispose off site in accordance with waste legislation). Replace with new gabion baskets and mattresses as per drawings. To include de-watering of works area.	Sum	N/A		£31484.05
18	Remove temporary access route and make good prior to practical completion.	Sum	N/A		7195.27
19	Demobilise site set up, reinstate reservoir boundary fencing and tidy-up.	Sum	N/A		14045.82
20	Produce as-constructed drawings to be appended to the new Health and Safety File (Atkins to produce).	Sum	N/A		£5998.05
The total of the Prices					£397525.00

The method and rules used to compile the Price List are

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

Scope

The Scope should be a complete and precise statement of the *Client's* requirements. If it is incomplete or imprecise there is a risk that the *Contractor* will interpret it differently from the *Client's* intention.

1. Description of the works

Give a detailed description of what the *Contractor* is required to do and of any work the *Contractor* is to design.

Overview

The Cerne Abbas reservoir is a flood storage reservoir constructed on behalf of West Dorset District Council and subsequently adopted by the Environment Agency. The flood storage area is formed by an earth embankment running east to west across the River Cerne immediately upstream of the village. The river passes through the embankment in a concrete culvert that runs through the base of the spillway with flows throttled by a hydraulically actuated penstock gate at the inlet structure. The spillway is formed of gabions with a broad crest passing over the embankment, near the left (east) abutment. The Reservoir is designated as 'High Risk' under the Reservoirs Act 1975.

An inspection of the reservoir was carried out by the Inspecting Engineer (IE) on 5th January 2017, under Section 10(2) of the Reservoirs Act 1975. Further to this a 'Section 10 report' dated June 2017 was issued. The following recommendations were made as 'Measures in the Interests of Safety' (MIOS):

- i. The spillway stepped gabion basket erosion protection should be replaced.
- ii. A flood study specifically focussed on the 1 in 10,000 year flood and the Probable Maximum Flood is carried out for Cerne Abbas FDR to confirm the adequacy of the overflow capacity. Any required works arising from this study shall be implemented.

The studies relating to these recommendations must be completed by the end of June 2019 and the required works must be completed by the end of December 2021.

The flood study modelling element was completed in June 2019. This has revealed that the spillway capacity must be increased to accommodate the increased estimate of the 1 in 10,000 and Probable Maximum Flood (PMF) flows.

Atkins have used this data to review the reservoir design & capacity, and specify improvements to the spillway and embankment design, to ensure that the Safety Check Flood and PMF Flows can be safely contained or passed by the structure without significant damage being caused, or risk of failure.

Objective

The objective of this work is to construct a replacement reservoir spillway and associated works in accordance with the design & specification documentation and drawings produced by Atkins. This must be completed by the MIOS deadline of 31 December 2021.

Outcome Specification

The *Contractor* shall:

- 1) Assume the role of Principal Contractor as defined in the CDM Regs 2015.
- 2) Prepare a suitable Construction Phase Plan (CPP) addressing all risks identified by the designer and detailed in the Pre-Construction Information (PCI) provided, which is to be submitted to the Principal Designer and Reservoir QCE for acceptance as early as practical but at least a minimum of 10 working days prior to the planned start of any construction phase.
- 3) Plan, manage and co-ordinate work during the construction phase taking account of the information contained in the PCI provided and any other relevant information provided.
- 4) Undertake all coordination, temporary works design and construction tasks in relation to the *works* and in relation to maintaining a functional and operational flood storage reservoir for the duration of the *works*, incorporating plant access as necessary.
- 5) Undertake all actions required in the Buildability Statement and Emergency Plan produced by the designer to ensure flood risk has been reduced to as low as reasonably practicable during construction.
- 6) Escalate technical design queries through to the *Client* and Design Team. Any departure from the approved design or specification must be reviewed by the *Client* who will consult with the Reservoir 'Qualified Civil Engineer' (QCE) as necessary.
- 7) Provide an updated programme on the first Monday of every month to go along with regular progress meetings
- 8) Minimise the amount of storage, equipment, and materials on site in order to avoid obstruction and health and safety issues, and reduce vulnerability to vandalism by intruders.
- 9) Liaise with the Principal Designer in undertaking their CDM duties.
- 10) Obtain all necessary consents to undertake the *works*, including a FRAP for all temporary and permanent works.
- 11) Undertake all actions required in the Environment Action Plan.
- 12) Secure the site compound from public access for the duration of the *works*.
- 13) Provide Information Board(s) to inform the Public / Car Park users of the nature of the works being undertaken and expected duration / completion date.
- 14) Provide their own welfare and power for the *site*.
- 15) Maintain security, no less than existing, for the *site* for the duration of the works.
- 16) Verify the location of existing services.
- 17) Repair any damage caused to the Kettle Bridge Lane Car Park by undertaking the *works*, to the satisfaction of Cerne Valley Parish Council.
- 18) Notify the Flood Incident Duty Officer (FIDO) in the event the reservoir standard of protection is compromised at this *site*. FIDO contact details to be provided by the *Client* prior to works starting.
- 19) Notify the *Client* of any damage caused to any existing structure during the Construction Phase. This is due to the potential implications on reservoir safety.
- 20) Provide as constructed details to be appended to a new Health and Safety File.
- 21) Agree with the *Client* a communication / liaison process to comply with the mutual QA procedures.

Note: Principal Contractor to be aware that asbestos material had been found on the ground in an isolated area near the Eastern boundary of the reservoir site (left bank of the spillway). It consisted of small sections of roofing material and downpipe that had fallen onto the reservoir site from an adjacent farm building. The presence of the material has been identified on the Hazards Plan drawing and in SHE Boxes. An asbestos survey has been completed and a specialist contractor removed this material on 23rd March 2021. The Principal Contractor shall visually check that no residual asbestos material is in the working area prior to commencing works on the left bank of the spillway.

2. Drawings

List the drawings that apply to the contract.

Drawing Number	Revision	Title
ENV0001275C-ATK-DE-2XX-DR-C-000001	C02	Hazard and Location Plan
ENV0001275C-ATK-DE-2XX-DR-C-000002	C02	Existing Utility Plan
ENV0001275C-ATK-DE-2XX-DR-C-000003	C02	Existing Dam Construction
ENV0001275C-ATK-DE-2XX-DR-C-000004	C02	Proposed Embankment Raising
ENV0001275C-ATK-SP-2XX-DR-C-000005	C04	Proposed Inlet Channel Replacement
ENV0001275C-ATK-SP-2XX-DR-C-000006	C04	Proposed Spillway Replacement
ENV0001275C-ATK-SP-2XX-DR-C-000007	C03	Proposed Outlet Channel Replacement
ENV0001275C-ATK-SP-2XX-DR-C-000100	C02	Proposed Works Setting Out Schedule Sheet 1 of 2
ENV0001275C-ATK-SP-2XX-DR-C-000101	C02	Proposed Works Setting Out Schedule Sheet 2 of 2
ENV0001275C-ATK-SP-2XX-DR-S-000001	C03	Spillway – RC Cill Details – Sheet 1 of 2
ENV0001275C-ATK-SP-2XX-DR-S-000002	C03	Spillway – RC Cill Details – Sheet 2 of 2

3. Specifications

List the specifications which apply to the contract.

Title	Date or Revision	Tick if publicly available
Cerne Abbas Reservoir Civil Works Specification ENV0001275C-ATK-ZZ-3XX-SP-C-000001	Rev 1.3 20/05/2021	No
Environment Agency Blockage Management Guide (Gov.uk)	12/2019	yes
Latest Ciria Guidance: Culvert, screen and outfall manual - New CIRIA guidance	12/2019	yes
Framework Deed of Agreement Section 6 – Lot 1 Specification	V1, Sept 2017	No
SHEW Code of Practice 677_15	V3, May 2018	No
Minimum Technical Requirements 412_13_SD01	03/2020	No

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*.

The *Contractor* shall not commence work on the *site* until the Principal Designer and QCE has deemed the Construction Phase Plan suitable for works to commence.

The *Contractor* shall not commence work on the *site* until the *Client* has accepted the *Contractor's* risk assessments and method statements for the *site*. Method statements will be required for each of the main elements of the *works* including control of river flows during construction, replacement of gabions in inlet and outlet channels, replacement of the gabion spillway, raising of the embankment crest and stripping of grass cover on the embankment crest and downstream face and replacement with pre-turfed reinforced grass.

The *works* are to be completed by 31 December 2021 to comply with the statutory MIOS under the Reservoirs Act

The *Contractor* shall prioritise and complete first those elements of the project that directly relate to the MIOS deadline

The *Contractor* shall give a minimum of 3 weeks' notice to the *Client* to acquire access to the *site* and to any private property.

The *Contractor* shall not commence work on activities until a Flood Risk Activity Permit has been obtained in relation to those activities.

The *Contractor* shall agree temporary works arrangements with the *Client* and QCE. To include control of river flows during construction.

The *Contractor* shall escalate technical design queries through to the *Client* and Design Team. Any departure from the approved design or specification must be reviewed by the *Client* who will consult with the Reservoir QCE as necessary.

The *Contractor* shall maintain a functional and operational flood storage reservoir for the duration of the *works*

The *Contractor* shall comply with all requirements in the Environment Action Plan. This includes no in channel river works between 1 Nov to 30 Apr.

The *Contractor* shall ensure that part of the Kettle Bridge Car Park is still accessible to the general public for the duration of the works and limit the size of the site compound to that which is necessary.

The *Contractor* shall ensure that the pre-grown turfmat is suitably established on the embankment and its condition approved by the Reservoir QCE, including daily watering as required.

The *Contractor* to undertake re-fuelling of plant away from the watercourse within the Kettle Bridge Car Park site compound.

An Emergency Plan will be produced to mitigate flood risk during the construction phase which is to be approved by the Reservoir QCE. The *Contractor* shall help develop this plan with input from the QCE, *Client* and *Principal Designer*.

Working times

The *Contractor* is *only* 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 their programme with the *Contractor's Offer* for acceptance. The *Contractor* shows on each programme submitted 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 monthly and provided to the *Client*

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.

[illegible]

Site Information

Ground Investigation Drillers Logs 2021

Asbestos Refurbishment/Demolition Survey 2021

Topographic Surveys (2020)

- Drawing No. 1007215 – A0 Cerne Abbas Topo Survey & Buried Services Sheet 1 of 2
- Drawing No. 1007216 – A0 Cerne Abbas Topo Survey & Buried Services Sheet 2 of 2
- Drawing No. 1007233 – A3 Topographic Survey & Services

As-built drawings (1985)

- AC1 Layout Plan
- AC2B General Details Sheet 1
- AC3A General Details Sheet 2
- AC4 Inlet Channel Details
- AC5A Screen Chamber Details Sheet 1
- AC6A Screen Chamber Details Sheet 2
- AC7A Screen Chamber Metalwork Details
- AC8 Outlet Chamber Details

O&M Manual

Proposed sub-contractors

	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:	