

Environment Agency
NEC4 engineering and construction contract (ECC)
Scope

Document category: COMPULSORY

Project / contract information

Project name	Broadway FSA Improvements
Project SOP reference	ENV0005392C
Contract reference	
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Revision history

Revision date	Summary of changes	Version number
14/04/2023	First issue	1
24/05/2023	Minor changes after review by PE	2
25/05/2023	Minor changes after review by PE	3
19/06/2023	Minor changes after review by JCE	4
05/07/2023	Minor changes after review by Commercial Services Manager	5

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

Document	Document Title	Version No	Issue date
LIT 13258	Minimum Technical Requirements	12	December 2021
LIT 17641	Exchange Information Requirements	3	January 2023



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S 100 Description of the works

S 101 Description of the works

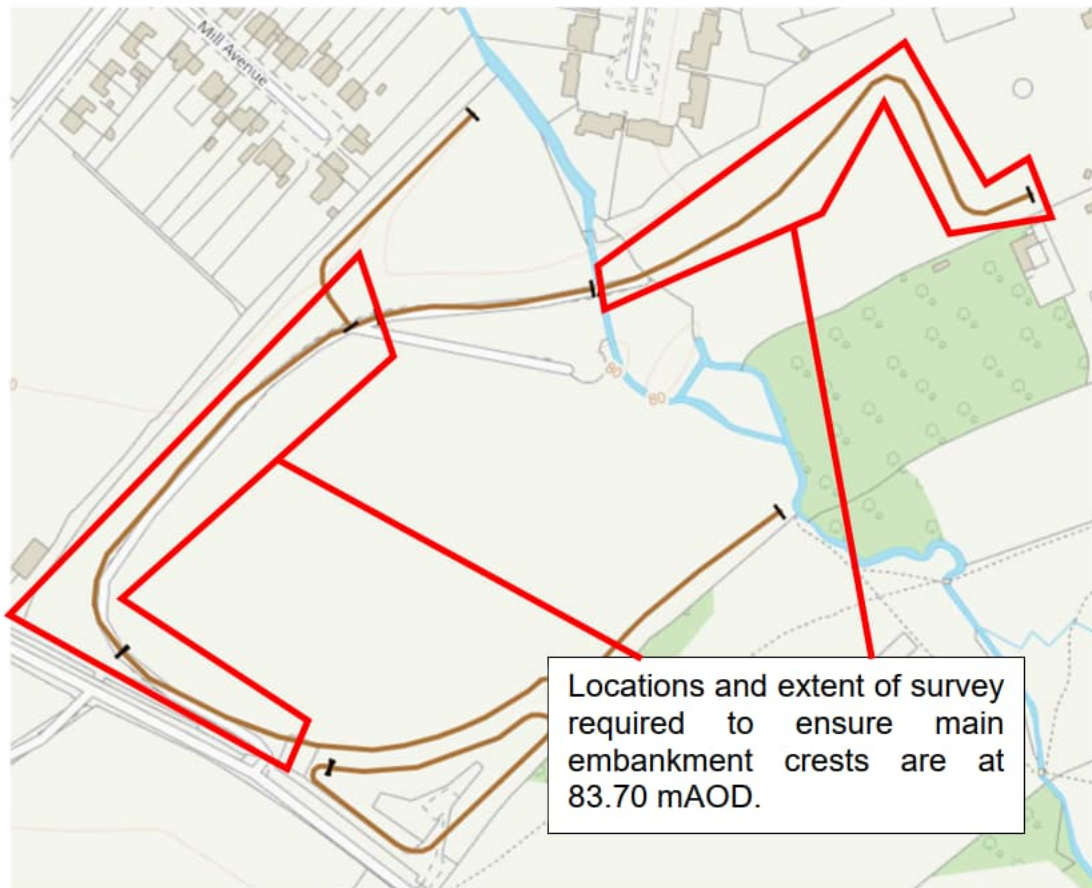
The works consist of improvements to the spillway and control structure at Broadway Flood Storage Area (FSA).

The spillway improvements comprise of:

- Exposing the junction between Armorflex and downstream crest beam over the full length of the spillway (see image below) and fill any gaps between the crest beam and the edge of the Armorflex with mass concrete.



- Surveying the entire length of the embankment (see image below) and ensuring the level is at 83.70 mAOD throughout (except for the spillway), topping up the embankment crest where required. Installation of overlapping gauge boards on the upstream face of the embankment on the left side of the spillway.



The control structure improvements comprise of:

- Installing a manually operated penstock to replace the current fixed orifice. The metal platforms covering the control structure will also be replaced on both the upstream and downstream sides of the control structure. The trash screen at the structure is also to be replaced.

- Fencing around the control structure will also be replaced to allow for improved maintenance. Location, type etc. to be agreed with the *Client*, and is likely to be a compensation event to be agreed at a future date.



S 102 Purpose of the Works/ Outcome required

Broadway FSA is a statutory reservoir under the Reservoirs Act 1975. Several issues were identified during a pre-Section 10 Inspection in 2022. These issues would be identified as 'Matters in the Interest of Safety' (MIOS) during the full Section 10 Inspection when it is undertaken in September 2023.

The primary objective is to ensure the standard of protection of Broadway FSA remains at its designed level. This will ensure the Environment Agency (EA) remains compliant with the Reservoirs Act 1975, avoiding criminal prosecution and reputational damage.

The required outcome of these works is to ensure there are no issues that would lead to MIOS under the full Section 10 Inspection.

The *Contractor* shall ensure that all works carried out are approved by the Qualified Civil Engineer (QCE), appointed under the Reservoirs Act 1975.

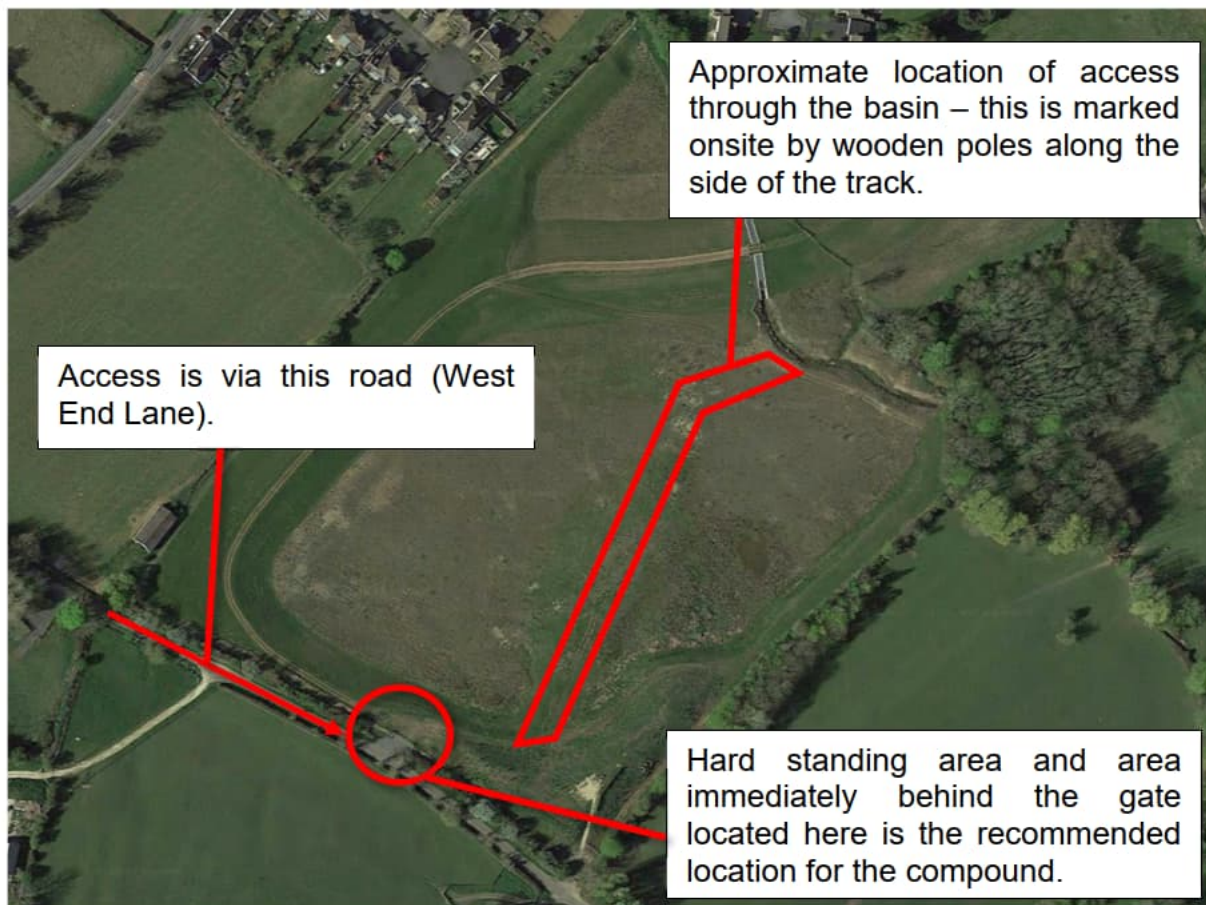
The *Contractor* shall ensure the design is compliant with the Countryside and Rights of Way (CROW) Act 2000 as the Site falls within an Area of Outstanding Natural Beauty (AONB).

S 200 General constraints on how the *Contractor* provides the works

S 201 General constraints

The constraints for the *works* are:

- The working hours for the site are 7:30am to 6:00pm on weekdays unless otherwise agreed with the *Client*.
- The *Client* shall provide maps suggesting compound and access locations as part of the tender pack. The *Contractor* may suggest other locations to the *Client* if they are preferable.



- The Site is adjacent to a footpath which is frequently used by members of the public. The *Contractor* shall take this into account before and during their work.
- The work area is near residential properties. The *Contractor* shall consider this during their works and try to keep noise and vibrations to a minimum.
- The *Contractor* shall take into account that Broadway FSA is active flood defence structure. They shall include in their documentation contingency

plans that will allow the reservoir to operate as intended, if required, during a flood incident.

- The *Contractor* shall ensure they prepare CPPs and RAMS for the *works* before any commencement on Site. They shall be submitted to the *Client* and *Principal Designer* for acceptance and not begin work until they are deemed suitable by the *Client* and *Principal Designer*

S 202 Confidentiality

The *Contractor* does not disclose information in connection with the *works* except when necessary to carry out their duties under the contract or their obligations under the contract.

The *Contractor* may publicise the services only with the *Client's* written permission.

S 203 Security and protection on the site

Site security is the responsibility of the *Contractor*, but the site must be left secure at the end of each working day.

S 204 Security and identification of people

It is the responsibility of the *Contractor* that anyone on their site is correctly vetted and identified.

S 205 Protection of existing structures and services

It is the responsibility of the *Contractor* to gather up-to-date service plans and to confirm the location of any services on Site. The *Contractor* shall take particular note of the services that run through the embankment adjacent to the control structure.

The *Contractor* shall make good (reinstate) any damage to existing structures at Broadway FSA incurred during the *works*. This includes, but is not limited to, topping up any low spots and reseeding any bare patches on all embankments, especially the crest of the embankment, where plant may have tracked over.

The *Contractor* shall not damage, modify, or otherwise, any part of the FSA that lies outside the working area, unless agreed with the *Client*.

S 206 Protection of the works

It is the responsibility of the *Contractor* to ensure the *works* are protected from vandalism, or otherwise, when there is no one in attendance on Site.

S 207 Cleanliness of the roads

The *Contractor* shall ensure the cleanliness of any road they have an impact on during the *works*.

S 208 Traffic Management

Any requirements for traffic management is the responsibility of the *Contractor*.

S 209 Condition survey

The *Contractor* shall complete a pre-start condition survey, as a minimum photographic, of the site and submit to the *Client* before work commences.

S 2010 Consideration of Others

The *Contractor* shall work with the *Client* to inform the adjacent landowner of the timing and duration of the *works* and take necessary steps to reduce the impact of their work on homeowners and other members of the public.

Part of the site is owned by others, they will need to be consulted if the works extend onto their property. This consultation is to be carried out with the *Client*.

S 2011 Control of site personnel

The *Contractor* shall follow their own internal procedures for control of personnel and works.

S 2012 Site cleanliness

The *Client* expects a high level of site cleanliness and housekeeping on all their projects and the *Contractor* shall adhere to this.

S 2013 Waste materials

The *Contractor* shall abide by and follow all relative waste legislation.

The *Contractor* shall recycle materials where possible, on Site or otherwise.

S 2014 Deleterious and hazardous materials

The *Contractor* shall not use deleterious or hazardous materials on Site unless agreed in writing with the *Client*.

S 2015 Carbon

The Environment Agency has a 2030 net zero carbon emissions target. The *Contractor* shall assist, where at all possible, the *Client* in meeting this ambition. The *Contractor* shall propose carbon saving options (such as using hybrid plant) and highlight areas where they are already saving carbon to the *Client* before work begins on site.

S 300 Contractor's design

S 301 Design responsibility

The designs have been completed by others. The *Contractor* shall use these designs to complete their work.

Any deviation from this design must be agreed with the *Client* before it is implemented.

Any temporary works that may be required during the works will be the design responsibility of the *Contractor*, or their sub-contractors.

S 302 Design submission procedures

Clause 21.2 As above

S 303 Design approval from Others

Any deviation from the provided design must also be approved by the Qualified Civil Engineer (QCE), appointed under the Reservoirs Act 1975.

S 304 Design co-ordination

If the *Contractor* decides that they wish to deviate from the provided design, they must co-ordinate with both the *Client* and the QCE.

S 305 Requirements of Others

Not used.

S 306 Access to information following Completion

The *Contractor* shall provide all produced documents, including as-built drawings, to the *Client*.

S 400 Completion

S 401 Completion definition

The following are absolute requirement for Completion to be certified, without these items the *Client* is unable to use the *works*:

- 1 hard copy and 1 digital copy of Health and Safety File information to the *Principal Designer* so that they can update the main file.
- 1 hard copy and 1 digital copy of Operating and Maintenance Manuals and one electronic version (where applicable).
- 1 hard copy and 1 digital cope of red-line drawings to allow for As Built drawings to be produced.
- QCE sign-off of the *works*; this is usually in the form of an email.

Clause 11.2(2) Work to be done by the Completion Date.

S 402 Final Clean

The *Contractor* shall leave the site in a clean and tidy condition, including sweeping any roads, footpaths or carriageways that may have been impacted during the *works*.

S 403 Security

Details of security arrangements and handover at Completion.

S 404 Correcting Defects

The *Contractor* shall liaise with the *Client* regarding access requirements for the correction of defects.

S 405 Pre-Completion arrangements

Prior to any works being offered for takeover or Completion the *Contractor* shall arrange a joint inspection with the *Supervisor, Project Manager*, and Senior User. The initial inspection shall take place a minimum of three weeks in advance of the planned takeover or *Completion*.

S 406 Take over

Not used.

S 500 Programme

S 501 Programme requirements

As a minimum, any submitted programme should include:

- The *starting date* and the Completion Date.
- The order and timing of the operations undertaken by the *Contractor* to provide the *works*.
- Provisions for float.
- Order and timing of tests, inspections, and commissioning activities.
- Information to be provided, who it is to be provided by and the date by which it is to be provided.

S 502 Methodology statement

The *Contractor* shall pass all risk assessments and method statements to the *Project Manager* for information and/or comment before the *works* commence.

S 503 Work of the *Client* and Others

The order and timing of the work of the *Client* and Others to be included in the programme and information to be provided.

S 504 Information required

A schedule of information to be provided, who it is to be provided by, and the date by which it is to be provided.

S 505 Revised programme

The *Contractor* is to provide updated programmes as per the timescales detailed within the *Contract*.

S 506 Monthly reports

- In managing the *service*, the *Contractor* shall deliver a monthly progress report in the *Client's* standard template giving progress against programme, deliverables received and expected, financial summary against programme and forecast project carbon. [Construction Monthly Report](#)
- Provide a forecast profile to be entered on to FastDraft monthly.
- Attend project board meetings as required.
- The *Contractor* shall also attend bi-weekly progress telecoms once work has started on site.

S 600 Quality management

S 601 Samples

The *Contractor* shall provide the *Client* with any results from tests or inspections as soon as they are received/quality checked.

S 700 Tests and inspections

S 701 Tests and inspections

The QCE shall inspect the spillway during construction after the mass concrete has been poured and before topsoil is put down to ensure the *works* are completed as designed. It is the responsibility of the *Contractor* to inform the *Project Manager* when this is likely to be.

S 702 Management of tests and inspections

The *Contractor* is to develop their own Inspection and Test Plan (ITP), which shall be submitted to the *Client* for consideration before works commence on site

S 703 Covering up completed work

If any works are exposed for the purposes of testing or inspection, they must be covered up (remediated) within three working days, unless otherwise agreed with the *Client*.

S 704 Supervisor's procedures for inspections and watching tests

The *Contractor* must allow the *Supervisor* to inspect areas before concrete pours commence. The *Contractor* is to give sufficient notice to facilitate this inspection.

S 800 Management of the works

S 801 Communications

For all official communications, the *Contractor* shall use the appropriate template and send them via email to the *Project Manager*, or another *Client* representative as agreed.

The Contractor shall arrange/provide:

- Progress meetings and take meeting notes
- Provide monthly progress reports
- Attend bi-weekly progress telecoms once work starts on site.

S 900 Working with the *Client* and Others

S 901 Sharing the Working Areas with the *Client* and Others

Broadway FSA is an active flood defence and will need to remain operable throughout the works. The *Client* may therefore need to make access to the site during the works and the *Contractor* should facilitate this.

S 902 Co-ordination

It is the responsibility of the *Contractor* to co-ordinate their own works, liaising with the *Client* where necessary/requested.

S 903 Authorities and utilities providers

Not applicable.

S 1000 Services and other things to be provided

S 1001 Services and other things to be provided by the *Client*

The *Client* shall provide access to the Site to the *Contractor* for the duration of the *works*.

S 1100 Health and safety

S 1101 Health and safety requirements

In addition to statutory/legal requirements, the *Contractor* shall adhere to the *Client's* Safety, Health, Environment and Wellbeing Code of Practice, particularly the requirements of working within 2 m of a watercourse.

Health and safety incidents should follow the prescribed reporting processes. The *Client* should be made aware of any incidents as soon as reasonably practical.

Smoking should only be allowed on site in designated areas and away from residential properties.

The *Contractor* shall follow all internal procedures for any other health and safety requirements not covered within this scope.

S 1200 Subcontracting

S 1210 Procurement of subcontractors

All subcontractors need to be selected using best value processes.

This requires the *Contractor* to demonstrate that they have made reasonable attempts to obtain three competitive tenders for all work in excess of £25,000.

The only exception to this is work which has been accepted (in writing) by the *Client* (hub Commercial Services Manager) for strategic suppliers or for emergency work.

S 1500 Accounts and records (Options C and E)

S 1501 Additional Records

This may include but not be limited the following:

- Timesheets and site allocation sheets,
- Equipment records,
- Forecasts of the total Defined Cost, (Forecasts are to include, but not be limited to costs to date, costs to completion including detailed breakdown of staff, sub-contract and major material items)
- Specific procurement and cost reports

The format and presentation of records to be kept are to be accepted by the *Project Manager*.

S 1502 Application for Payment / Invoice

The *Contractor* is required to provide the backup to their application for payment in the following format:

[Worksheet actual Carbon and Cost CDF Lot 2](#)

Submission of an application for payment without this format of backup sheet will **not** be recognised or treated as a compliant submission.

S 1700 *Client's* work specifications and drawings

S 1701 *Client's* work specification

Actual specification

S 1702 Drawings

As built drawings of the original scheme are available and can be provided by the *Client* upon request.

S 1703 Standards the *Contractor* will comply with

The *Contractor* should carry out their work using the following guidance.

Ref	Report Name	Where used
	EA Minimum Technical Requirements.	
	300_10 SHE handbook for managing capital projects	
	300_10_SD27 SHE Code of Practice	