nec 4

[redacted]

Framework: Collaborative Delivery Framework
Supplier: [redacted]
Company Number: [redacted]

Geographical Area: Midlands
Contract Name: Nunn Mills Health and Safety
Project Number: [redacted]

Contract Type: Engineering Construction Contract
Option: Option C

Contract Number: [redacted]

Stage: Construction

Revision	Status		Originator		Reviewer		Date

ENGINEERING AND CONSTRUCTION CONTRACT under the Collaborative Delivery Framework
CONTRACT DATA

Project Name Nunn Mills Health and Safety

Project Number ENV0004974C

This contract is made on 17 August 2023
between the *Client* and the *Contractor*

- This contract is made pursuant to the Framework Agreement (the "Agreement") dated 01st day of April 2019 and Framework Agreement Extension dated and signed 1st April 2023 between the *Client* and the *Contractor* in relation to the Collaborative Delivery Framework. The entire agreement and the following Schedules are incorporated into this Contract by reference

- Schedules 1 to 23 inclusive of the Framework schedules are relied upon within this contract.

- The following documents are incorporated into this contract by reference
  ECC Scope - Nunn Mills v6 FINAL 30.03.23

Part One - Data provided by the *Client*

Statements given in all Contracts

1 General

The *conditions of contract* are the core clauses and the clauses for the following main Option, the Option for resolving and avoiding disputes and the secondary Options of the NEC4 Engineering and Construction Contract June 2017.

Main Option	Option C	Option for resolving and avoiding disputes	W2

Secondary Options

X2: Changes in the law

X7: Delay damages

X9: Transfer of rights

X10: Information modelling

X11: Termination by the *Client*

X15: *Contractor's* design

X18 Limitation of Liability

X20: Key Performance Indicators

Y(UK)2: The Housing Grants, Construction and Regeneration Act 1996

Y(UK)3: The Contracts (Rights of Third Parties) Act 1999

Z: *Additional conditions of contract*

The *works* are

Health & Safety improvement works required to improve the safety of the asset and reduce the risk of injury or death to the Client's area teams and the public.

The *Client* is

[redacted]

Address for communications

Address for electronic communications

The *Project Manager* is

Address for communications

[redacted]

Address for electronic communications

The *Supervisor* is

Address for communications

Address for electronic communications

The Scope is in
ECC Scope - Nunn Mills v6 FINAL 30.03.23

The Site Information is in
Nunn Mills - Site Info 27.06.23

The *boundaries of the site* are
Nunn Mills - Site Boundary

The *language of the contract* is English

The *law of the contract* is
the law *of England and Wales, subject to the jurisdiction of the courts of England and Wales*

The period for reply is 2 weeks

The following matters will be included in the Early Warning Register
Condition of the road bridges unknown - condition assessment needs to be carried out.

No topographical survey or ground investigations carried out for base of staircase.

Early warning meetings are to be held at intervals no longer than 2 weeks

2 The *Contractor's* main responsibilities

The *key dates* and *conditions* to be met are *condition* to be met	*key date*
'none set'	'none set'
'none set'	'none set'
'none set'	'none set'

The *Contractor* prepares forecasts of the total Defined Cost for the whole of the *works* at intervals no longer than 4 weeks

3 Time

The *starting date* is 31 July 2023

The *access dates* are part of the Site	date
Nunn Mills Sluice	14 August 2023

The *Contractor* submits revised programmes at intervals no longer than 4 weeks

The *Completion Date* for the whole of the *works* is 25 April 2024

The *Client* is not willing to take over the *works* before the Completion Date

The period after the Contract Date within which the *Contractor* is to submit a first programme for acceptance is 4 weeks

4 Quality management

The period after the Contract Date within which the *Contractor* is to submit a quality plan is 4 weeks

The period between Completion of the whole of the *works* and the *defects date* is 52 weeks

The *defect correction period* is 2 weeks except that
- The *defect correction period* for is
- The *defect correction period* for is

5 Payment

The *currency of the contract* is the £ sterling

The *assessment interval* is Monthly

The *Client* set total of the Prices is [redacted]

The *interest rate* is 2.00% per annum (not less than 2) above the Base rate of the Bank of England

The *Contractor's share percentages* and the *share ranges* are

share range					*Contractor's share percentage*
less than		**80** %			**0** %
from	**80** %	to	**120** %		as set out in Schedule 17
greater than		**120** %			as set out in Schedule 17

6 Compensation events

The place where weather is to be recorded is Northampton Weather Station (52.2401, -0.9011)

The *weather measurements* to be recorder for each calendar month are
- the cumulative rainfall (mm)
- the number of days with rainfall more than 5mm
- the number of days with minimum air temperature less than 0 degrees Celsius
- the number of days with snow lying at 09:00:00 hours GMT

and these measurements:

1.
2.
3.
4.
5.

The *weather measurements* are supplied by Met Office
The *weather data* are the records of past weather measurement for each calendar month which were recorded at ampton Weather Station (52.2401, -0. and which are available from Met Office

Assumed values for the ten year weather return *weather data* for each *weather measurement* for each calendar month are

Jan	Jul
Feb	Aug
Mar	Sep
Apr	Oct
May	Nov
Jun	Dec

These are additional compensation events

1. Carbon Methodology - Adherence to and compliance with the Carbon Methodology dated 08 June 2023
2. A Strong Stream notification is issued on the river that delays works detailed on the Accepted Programme

3. Works to operate the gates on a sluice and/or removal of dam boards and Equipment from the lock during high flows following a formal notification from the regulatory authority

4. Wind speeds over 10m/s as recorded on site during the works.

5. 'not used'

8 Liabilities and insurance

These are additional *Client's* liabilities

1 'not used'

2 'not used'

3 'not used'

The minimum amount of cover for insurance against loss of or damage to property (except the *works*, Plant and Materials and Equipment) and liability for bodily injury to or death of a person (not an employee of the *Contractor)* arising from or in connection with the *Contractor* Providing the Works for any one event is

[redacted]

The minimum amount of cover for insurance against death of or bodily injury to employees of the *Contractor* arising out of and in the course of their employment in connection with the contract for any one event is

not less than the amount required by law

The insurance against loss of or damage to the *works,* Plant and Materials is to include cover for Plant and Materials provided by the *Client* for an amount of

Resolving and avoiding disputes

The *tribunal* is litigation in the courts

The *Senior Representatives* of the *Client* are [redacted]

Address for communications

Address for electronic communications

Name

Address for communications

Address for electronic communications

The *Adjudicator* is 'to be confirmed'

Address for communications 'to be confirmed'

Address for electronic communications 'to be confirmed'

The *Adjudicator nominating body* is The Institution of Civil Engineers

Z Clauses

Z1 Correctness of Site Information and other documents

Z1.1 Site Information about the ground, subsoil, ducts, cables, pipes and structures is provided in good faith by the *Client*, but is not warranted correct. Clause 60.3 does not apply to such Site Information and the *Contractor* is responsible for checking the correctness of any such Site Information they rely on for the purpose of pricing for or providing the *works*.
Z1 2 Information regarding construction methods or processes referred to in pre contract health and safety plans are provided in good faith by the *Client* but are not warranted correct (except for the purpose of promoting high standards of health and safety) and the *Contractor* is responsible for checking the correctness of any such information they rely on for the purpose of pricing for, or providing the *works*.

Z 2A: Risk transfer: Physical conditions within the Site

Clause 60.1 (12) is deleted from this contract.

Z3 Prevention: No change to prices

Delete first sentence of clause 62.2 and replace with:
"Quotations for compensation events except for the compensation event described in 60.1(19) comprise proposed changes to the Prices and any delay to the Completion Date and Key Dates assessed by the *Contractor*. Quotations for the compensation event described in 60.1(19) comprise any delay to the Completion Date and Key Dates assessed by the *Contracto*r.
Delete 'The' At start of clause 63.1 and replace with:
"For the compensation event described in 60.1(19) the Prices are not changed. For other compensation events the..."

Z 4 The Schedule of Cost Components

The Schedule of Cost Components is as detailed in the Framework Schedule 9.

Z 6 Payment for Work

Delete existing clause 11.2 (31) and replace with:
"11.2 (31) The Price for Work Done to Date is the total Defined Cost which the *Project Manager* forecasts will have been paid by the *Contractor* before the next assessment date plus the Fee. In all instances and circumstances the Price for Work Done to Date shall not exceed the forecast for the same as provided under clause 20.4."

Z7 *Contractor's* share

After cl54.2 and before cl54.3, insert the following additional clause:
54.2A If, prior to Completion of the whole of the works, the Price for Work Done to Date exceeds 111% of the total of the Prices, the amount in excess of 111% of the total of the Prices is retained from the Contractor.

Z10 Payments to subcontractors, sub consultants and

Subcontractors
The *Contractor* will use the NEC4 contract on all subcontracts for works unless another alternative and appropriate form is proposed and agreed in accordance with clause 26.3. Payment to subcontractors will be 28 days from the assessment date.
If the *Contractor* does not achieve payments within these timescales then the Client reserves the right to delay payments to the Contractor in respect of subcontracted work, services or goods.
Failure to pay subcontractors and suppliers within contracted times scales will also adversely affect the *Contractor's* opportunities to work on framework contracts.

Z11Y(UK) 3 The Contracts (Rights of Third Parties) Act

Z11.1 The *Contractor* warrants all design complies with the contract whether undertaken by the *Contractor* or by sub-contractors.
Z11.2 All contracts for design employed by the *Contractor* must include:
• Y(UK)3 The Contracts Rights of Third Parties) Act 1999
• A requirement for the *Contractor's* sub-contractor to hold Professional indemnity insurance to the same level as the cover specified for the *Contractor* in this Call-off contract
• A clause to give the *Client* [redacted] the right to enforce the provisions of the Contracts (Right of Third Parties) Act 1999,
• A clause to ensure that neither the *Contractor* nor their sub-contractor can alter the provisions of their sub-contract without the consent of the *Client*
• A clause to ensure that the *Client's* rights against the sub-contractor under this agreement shall be subject to the same conditions, limitations and exclusions as apply to the *Contractor's* rights against the design consultant under this agreement
• A clause to state that except as provided in clause Z11.1, the agreement does not create any right enforceable by any person who is not a party to it (Other Party) under the Contracts (Rights of Third Parties) Act 1999, but the clause does not affect any right or remedy of any other party which exists or is available apart from that Act.

Z16 Disallowed Costs

Add the following bullets to clause 11.2 (26) Disallowed costs
• was incurred due to a breach of safety requirements, or due to additional work to comply with safety requirements.
• was incurred as a result of the client issuing a Yellow or Red Card to prepare a Performance Improvement Plan.
• was incurred as a result of rectifying a non-compliance with the Framework Agreement and/or any call off contracts following an audit.

Z21 Requirement for Invoice

Add the following sentence to the end of clause 51.1:
The Party to which payment is due submits an invoice to the other Party for the amount to be paid within one week of the *Project Manager's* certificate.
Delete existing clause 51.2:
51.2 Each certified payment is made by the later of
• one week after the paying Party receives an invoice from the other Party and
• three weeks after the assessment date, or, if a different period is stated in the Contract Data, within the period stated.
If a certified payment is late, or if a payment is late because the *Project Manager* has not issued a certificate which should be issued, interest is paid on the late payment. Interest is assessed from the date by which the late payment should have been made until the date when the late payment is made, and is included in the first assessment after the late payment is made

Z22 Resolving Disputes

Delete W2.1

Z23 Risks and insurance

Replace clause 84.1 with the following
Insurance certificates are to be submitted to the Client on an annual basis.

Z30 Material Price Volatility

The *Client* recognises the ongoing pricing uncertainty in relation to materials for the period from 1 July 2021 to 30 June 2023 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:
Assessment x MF x L = PVP

If an index is changed after it has been used in calculating a PVP, the calculation is not changed and remains based upon the rate issued by the *Client*. The PVP calculated at the last assessment before 30 June 2023 is used for calculating the price increase after that date.

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 2023 period compensation event.

Assessment Date	Defined Cost?	Forecasted Cost?
31 July 2021	In period costs only	No
31 August 2021	In period costs only	No
30 September 2021	In period costs only	No
31 October 2021	In period costs only	No
30 November 2021	In period costs only	No
31 December 2021	In period costs only	No
31 January 2022	In period costs only	No
28 February 2022	In period costs only	No
31 March 2022	In period costs only	No
30 April 2022	In period costs only	No
31 May 2022	In period costs only	No
30 June 2022	In period costs only	No
31 July 2022	In period costs only	No
31 August 2022	In period costs only	No
30 September 2022	In period costs only	No
31 October 2022	In period costs only	No
30 November 2022	In period costs only	No
31 December 2022	In period costs only	No
31 January 2023	In period costs only	No
28 February 2023	In period costs only	No
31 March 2023	In period costs only	No
30 April 2023	In period costs only	No
31 May 2023	In period costs only	No
30 June 2023	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.

Z31 ECC – Price Adjustment for Inflation
The *Client* recognises the ongoing pricing uncertainty with regards to inflation. The *Client* will mitigate this uncertainty through this clause.

Z31.1 Defined terms:

a) The index is Office for National Statistics (ONS) CPI (UK, 2015=100).
b) The Base Date Index (B) is the latest available index published by ONS prior to the Contract Date.
c) The Latest Index (L) is the latest available index published by ONS before the date of assessment of an amount due.
d) The Price Adjustment Factor (PAF) at each date of assessment of an amount due is 0.9((L-B)/B).

Z31.2 Application rules.

The provisions of this clause [Z31] shall apply provided that:

a) The Price for Work Done to Date is less than or equal to the total of the Prices
and
b) Inflation remains positive i.e. L is greater than B.

Z31.3 Price Adjustment Factor.

If an index is changed after it has been used in calculating a PAF, the calculation is not changed. The PAF calculated at the last assessment date before the Completion Date for the whole of the *works* is used for calculating an amount for price adjustment after that date.

Z31.4 Price adjustment Options A and B.
NOT USED

Z31.5 Price adjustment Options C and D.

Each time the amount due is assessed, an amount for price adjustment is added to the total of the Prices which is the change in the Price for Work Done to Date since the last assessment of the amount due multiplied by (PAF/(1+PAF)).

Z31.6 Compensation events.
NOT USED

Z111 ECC - Fee adjustment for non compliance with Scope
Delete existing 11.2 (10) and replace with the following clause

The Fee is the amount calculated by applying the *fee percentage* to the Defined Cost excluding the cost of Sub-contractors that have not complied with procurement by best value processes as defined in the Scope. 80% of the *fee percentage* is applied to the amount of the Defined Cost for Sub-contractors that have not complied with procurement by best value processes as defined in the Scope.

Z120 ECC – Carbon reduction

Ref. (Clause No.)	Clause words
11 2 Definitions	Add as Clause 11.2(36) (36) The Performance Table states the targets the *Contractor* is to achieve in Providing the Works and sets out the adjustment to payment if a measured performance is higher, the same or lower than its target. The Performance Table is the *performance table* unless later changed in accordance with the contract.
15.1 Early Warnings	In Clause 15.1 add as a new bullet between the second and third bullet: "• result in a target in the Performance Table not being met,"
Performance Measurements	
57	Add as Clause 57:
57.1	'From the *starting date* until the Completion Date, the *Contractor* reports to the *Project Manager* its performance against the targets in the Performance Table. Reports are provided at the intervals stated in the Performance Table.
57 2	If the *Contractor's* performance against a target in the Performance Table is not achieving or is forecast not to achieve the performance target stated, it submits to the *Project Manager* for acceptance its proposals for improving performance. A reason for not accepting the proposals is that they will not provide the improvement in performance needed to achieve the target in the Performance Table.
57 3	At the dates stated in the Performance Table, • if the relevant performance does not meet the target stated in the Performance Table, the *Contractor* pays the amount stated in the Performance Table, • if the relevant performance exceeds or meets the target stated in the Performance Table, the *Contractor* is paid the amount stated in the Performance Table.
57.4	Information in the Performance Table is not Scope.
X18	X18.5 add as a new bullet after the fourth bullet: • low performance damages if the Performance Table applies

The *performance table* is ECC-carbon-performance-table.xlsx

the Performance Table for this contract type [form, Partner, Stage] as set out in the Carbon Methodology dated 08 June 2023

Secondary Options

OPTION X2: Changes in the law

The *law of the project* is the law of England and Wales, subject to the jurisdiction of the courts of England and Wales

OPTION X7: Delay damages

X7 only Delay damages for Completion of the whole of the *works* are [redacted] per day

OPTION X10: Information modelling

The period after the Contract Date within which the *Contractor* is to submit a first Information Execution Plan for acceptance is 2 weeks

The minimum amount of insurance cover for claims made against the *Contractor* arising out of its failure to use skill and care normally used by professional providing information similar to the Project Information is, in respect of each claim

[redacted]

The period following Completion of the whole of the *works* or earlier termination for which the *Contractor* maintains insurance for claims made against it arising out of its failure to use the skill and care is

6 years

OPTION X15: The *Contractor's* design

The *period for retention* following Completion of the whole of the *works* or earlier termination is 6 Years

The minimum amount of insurance cover for claims made against the *Contractor* arising out of its failure to use skill and care normally used by professionals designing works similar to the *works* is, in respect of each claim

[redacted]

The period following Completion of the whole of the *works* or earlier termination for which the *Contractor* maintains insurance for claims made against it arising out of its failure to use the skill and care is

6 Years

OPTION X18: Limitation of liability

The *Contractor's* liability to the *Client* for indirect or consequential loss is limited to

[redacted]

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

[redacted]

The *Contractor's* liability for Defects due to its design which are not listed on the Defects Certificate is limited to

[redacted]

The *Contractor's* total liability to the *Client* for all matters arising under or in connection with the contract, other than excluded matters, is limited to

[redacted]

The *end of liability date is* 6 years after the Completion of the whole of the *works*

OPTION X20: Key Performance Indicators (not used with Option X12)

The *incentive schedule* for Key Performance Indicators is in Schedule 17.

A report of performance against each Key Performance Indicator is provided at intervals of 3 months.

Y(UK2): The Housing Grants, Construction and Regeneration Act 1996

The period for payment is	14 days	after the date on which payment becomes due	

Y(UK3): The Contracts (Rights of Third Parties Act) 1999

term	*beneficiary*
Not Used	Not Used

Part Two - Data provided by the *Contractor*

Completion of the data in full, according to the Options chosen, is essential to create a complete contract.

1 General

The *Contractor* is
Name

Address for communications

[redacted]

Address for electronic communications

The *fee percentage* is

Option C | 9.50%

The *working areas* are

The site as detailed in the site boundary drawing and the Co

The *key persons* are

Name (1)
Job
Responsibilities
Qualifications
Experience

[redacted]

The *key persons* are

Name (2)
Job
Responsibilities
Qualifications
Experience

[redacted]

The *key persons* are

Name (3)
Job
Responsibilities
Qualifications
Experience

[redacted]

The *key persons* are

Name (4)
Job
Responsibilities
Qualifications
Experience

The following matters will be included in the Early Warning Register

2 The Contractor's main responsibilities

The Scope provided by the *Contractor* for its design is in

N/A

3 Time

The programme identified in the Contract Data is

Nunn Mills 31 July Start.pdf

5 Payment

The *activity schedule* is
Nunn Mills Activity Schedule-20230725

Resolving and avoiding disputes

The *Senior Representatives* of the *Contractor* are

Name (1) [redacted]
Address for communications
[redacted]

[redacted]
Address for electronic communications
[redacted]

Name (2) [redacted]
Address for communications
[redacted]

Address for electronic communications
[redacted]

X10: Information Modelling

The *information execution plan* identified in the Contract Data is

Contract Execution

Client **execution**

Signed Underhand by [**PRINT NAME**]

[redacted]

17/08/2023

ate

for and on behalf of the [redacted]

Project Team Manager

Role

Contractor **execution**

Signed Underhand by [**PRINT NAME**]

[redacted]

for and on behalf of [redacted]

Company Secretary

Role

ECC Scope Template

NEC4 engineering and construction contract (ECC)

412_13_SD03

[redacted]

NEC4 engineering and construction contract (ECC) Scope

Project / contract information

Project name	Nunn Mills Health & Safety
Project SOP reference	[redacted]
Contract reference	
Date	30/03/2023
Version number	6
Author	[redacted]

Revision history

Revision date	Summary of changes	Version number
01/08/2022	First issue	1
26/09/2022	Updated following DGC review	2
19/10/2022	Further updates following DGC review	3
02/12/2022	Updates follow Commercial Services Manager review	4
06/01/2023	Final version	5
30/03/2023	New template/framework extension updates	6

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:

[redacted]

Document	Document Title	Version No	Issue date
LIT 13258	Minimum Technical Requirements	12	December 2021 MTR library
LIT 17641	Exchange Information Requirements	3	February 2023 EIR library

[redacted]

Contents List

Description of the *works*

S 101 Description of the *works*

Nunn Mills Sluice is a flood defence barrier and level / flow control asset for the River Nene. It consists of 3 no. automatically operated vertical gates with associated upstream and downstream channels. The sluice works in conjunction with Redhouse Weir which is located on a diversionary watercourse to the northwest.

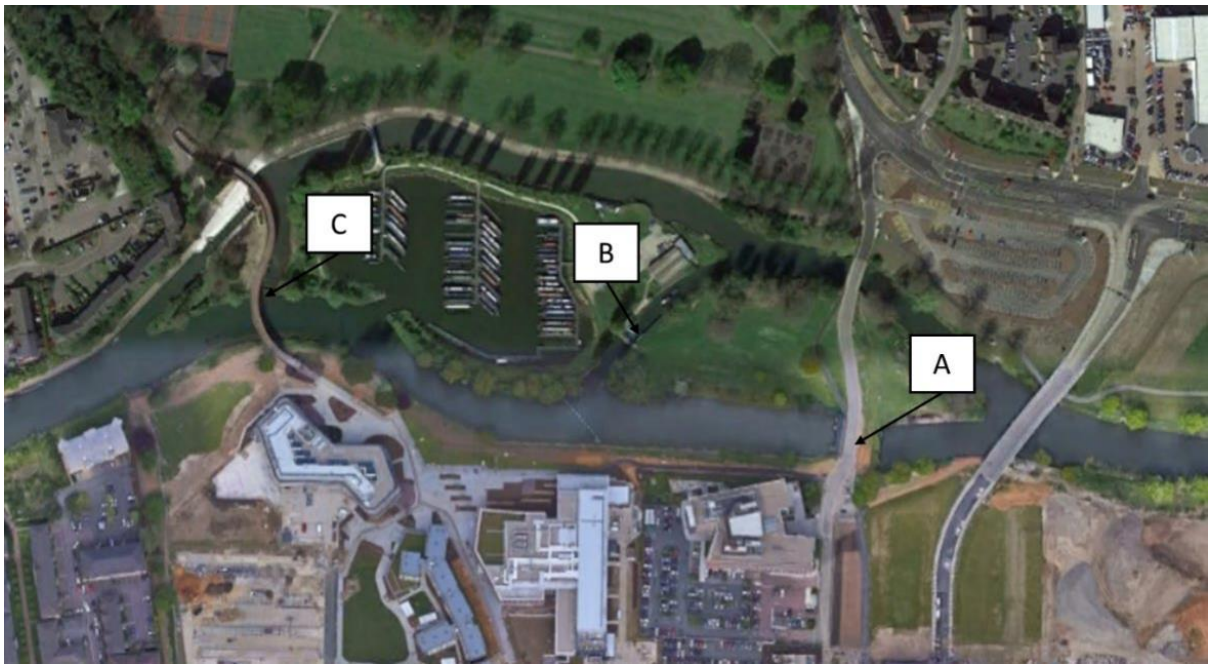

Figure 1: Site and Weir Locations - A: Nunn Mills Sluice Gates, B: Redhouse Sluice, C: Calvesholme Weir (Image taken from Google Earth August 2020).

Redhouse Weir and Nunn Mills Sluice operate automatically, with the former being the first to react. If river levels continue to rise and Redhouse Weir tilting gate has opened by 50%, the two outer doors of Nunn Mills operate, followed by the centre gate. All gates are also capable of being manually operated.

Inspection of the Nunn Mills gates and maintenance activities are mainly carried out on a narrow, high level gantry located on top of the super structure. The upstream channels for each of the Nunn Mills gates contain pre-cast slots designed to accommodate stop logs so that the channels can be drained for complete access to the gates.

The sluice gates are directly adjacent to the Nunn Mills Road bridge with University Drive bridge approximately 90m downstream of this point. The site contingency plan states that cranes should access the site via the University Drive bridge (crossing from north to south) due to the weak nature of the Nunn Mills road bridge.

Operator access to the Nunn Mills superstructure is via a padlocked gate located on the southern side of the river. The electrical kiosk is located on the opposite side of the bridge, adjacent to the upstream left gate.

In 2013 an asset report written by Atkins indicated health and safety concerns regarding the current arrangement of the gates (exposed lifting chains and a narrow high-level gantry accessible only by ladder). This report will be provided to the *Contractor* by the *Client*.

Following a site visit carried out on Friday 19th February 2021 with Arup, Kenneth Grubb Associate Ltd (KGAL) Engineers and the *Client*, a Scope of *works* was put forward for the required maintenance *works*. This proposed Scope completed by Arup, encompassing Health & Safety dated the 4th April 2022 was discussed with [redacted] and [redacted] at a site visit carried out on Wednesday 18th May 2022, the Scope as follows has been developed by [redacted]. This contract is a design and build contract.

Photo 1 – Nunn Mills Sluice

Scope of *works*.

The following Scope was identified by [redacted] through Early Supplier Engagement (ESE) as being required to mitigate the health and safety risks on the Nunn Mills sluice asset. The *Contractor* shall produce a design which they can deliver under this design and build contract.

1. Widening of low-level access walkway and provision of open mesh walkway panels where they are currently missing. Widening of walkway would require realignment of bridge handrailing
    - Remove existing walkway decking panels on all 3 walkways

Photo 2 – Existing walkway

Photo 3 - Ducts

- Remove by unbolting, decking support frames from all 3 walkways
- Remove upstream walkway hand railing from all 3 walkways. RHS of photo 2.
- Retain cantilever supports (welded channel) to continue supporting the 3 underslung plastic ducts. Photo 3.
- Retain the Avon/University hand railing. LHS photo 2.
- Please refer to Sketch C0005/CSS/001 Rev 1 showing as built walkway sections.
- Design, fabricate and install 3 in number new walkway sections as shown indicatively in Sketch C0005/SCC/001 Rev 2.
- Design, fabricate and install new access walkway on the upstream side of the middle gate to allow debris clearance of the middle gate to be carried out. Please refer to Sketch C0005/SCC/002 Rev 1.
- Remove the existing vertical ladder that gives access to the structure high level walkways and make good the walkway hand railing at high level entrance.

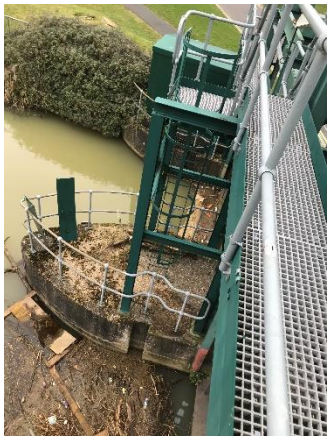

Photo 4 – Vertical access ladder

Photo 5 – Middle sluice light position

2. Installation of new lighting on gantry.
    - Supply and install 3 in number flood lights, one in each channel, mounted from the high-level walkways. Please refer to red line drawing 1446/40/11. Photo 5 shows a view for middle sluice.

3. Installation of a set of stairs to reach the high-level gantry.

- Design, fabricate and install a new access staircase to access the existing high-level walkways on the structure as shown indicatively on red lined drawing 14460/40/11. Please see photo 6 and 7.

Photo 6 – High level walkway

Photo 7 – Control building

4. Implementation of security measures to prevent members of the public from reaching the gate superstructure including fencing around the kiosk and higher fences in between the gates and the footbridge. Installation of Health & Safety signage as required.
    - Supply and install a new security fence complete with access gate that can be padlocked as shown indicatively on red lined drawing 14460/40/11 and photo 7.
    - Fencing to be galvanized triple point palisade to match the opposing end.
5. Installation of guards around the lifting chains
    - Supply and install 6 in number guard plates fitted to the new walkway handrail in front of each gate chain that is large enough to stop a member of the public from being able to lean over the Avon/University fence and touch the chains.

Photo 8 – Chain guard

Photo 9 – Legend plate

6. Emergency stop button legend plates to be replace
    - Replace legend plates
7. Assess whether emergency stop bottoms should be installed on the high-level gantry
    - The *Client* will carry out a risk assessment (RA).
    - If the RA results in emergency stop button system being required on the high-level gantry, it is to be part of a compensation event (CE).

S 102 Purpose of the *Works*/ Outcome required

Nunn Mills sluice is currently a concern for the *Client* with regards to the Health and Safety of the asset for the *Client's* area teams; operating and maintaining the structure but also the public. Health & Safety works will be undertaken in order to make the asset safer and significantly reduce the risk of injury or death to the *Client's* area teams and the public.

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

S 201 General constraints

- Working hours for the *Contractor* providing the *works* shall be in accordance with this framework.
- Before planning site visits or inspections; the *Contractor* must contact the *Client Project Manager* and relevant field team to best plan inspections around water levels.
- Prior to undertaking a principal inspection, the inspector/engineer must review all of the available structure records to familiarise themselves with the characteristics of the structure; any hazards, the condition at the time of the last inspection; any worsening defects over time; and any significant maintenance/modifications since the last inspection.
- The *Contractor* shall support the *Client* to arrange access to the Site. The *Contractor* shall provide four weeks' notice ahead of starting the *works* to allow Notice of Entry to be issued. The *Contractor* shall provide a detailed plan for issue with the Notice of Entry.
- The *Contractor* shall consult the local authority and highway authority for any constraints on how the works are to be provided.
- An Environmental Action Plan (EAP) will be produced by The Lot 1 Consultant. The *Contractor* shall deliver the works in line with the environmental action plan (EAP). Any specific measures included in the EAP which are deviations from practice will be dealt with as a compensation event.

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 *works* only with the *Client's* written permission.

S 203 Security and protection on the site

The *Contractor* is responsible for the security of the Site and of vehicles and pedestrians entering and leaving the Site.

The Site is easily accessible by the public, CCTV is recommended and all additional care needs to be taken as the sluice is on the edge of a university campus

S 204 Security and identification of people

The level of security and procedures for identification of personnel on Site is to be determine by the *Contractor*

S 205 Protection of existing structures and services

The whole of the Site is to be handed over to the *Contractor*.

The *Contractor* takes care to avoid disturbance and damage to existing features and assets, including the existing flood defences, outfalls, roads, footpaths, habitats, private property, street furniture, services, signage and embankments.

The *Contractor* is responsible for undertaking utility searches as part of the design process and verifying the service locations ahead of conducting the *works*. Refer to the Site Information for any existing knowledge on services and assets.

S 206 Protection of the *works*

The *Contractor* applies for a Flood Risk Activity Permit (Environmental Permit) and operates within the received permits conditions.

The *Contractor* registers with the *Client's* Flood Incident Management team before commencing *works* on Site and gives them telephone numbers where Flood Warnings can be sent.

The *Contractor* shall take all reasonable care to protect the *works* from damage, including weather and flood related conditions.

S 207 Cleanliness of the roads

N/A

S 208 Traffic Management

A footpath closure may be required, it will be the responsibility of the *Contractor* to apply for any associated permits or applications.

The *Contractor* shall liaise with the Local Planning Authority and Highways Authority if any traffic management is required.

S 209 Condition survey

The *Contracto*r is required to complete a condition survey of the area surrounding the site shall be completed prior to starting and at completion. The condition survey reports shall include photographs and the reports will be uploaded onto the BIM Archive.

The *Contractor* is required to reinstate all Working Areas in line with the pre-condition survey or alternative agreement.

The survey record should be stored in the BIM archive.

S 2010 Consideration of Others

All public relations activities shall be led by the *Client* with the *Contractor's* support.

The *Contractor* shall execute the works in a manner such that disruption to local residents, landowners and the general public is kept to a minimum.

S 2011 Control of site personnel

N/A

S 2012 Site cleanliness

The Site is next to the University of Northampton and a public footpath. The *Contractor* is expected to keep the site clean.

Materials, Plant and Equipment are positioned, stored and stacked in a safe and orderly manner.

The *Contractor* applies best practice regarding materials handling, waste minimisation and waste recycling on-site.

The *Contractor* prepares a Site Waste Management Plan (SWMP) in the *Client's* standard format prior to commencement of the works.

S 2013 Waste materials

N/A

S 2014 Deleterious and hazardous materials

N/A

S 2015 Carbon

A completed project must aim to minimise carbon emissions by:

1. Agreeing to a target (forecast) of emissions from construction that is set out in a verified carbon assessment with business case approval.
2. Exploiting the most likely opportunities for further reductions to the agreed forecast during construction.
3. Reporting the outturn of actual emissions against the agreed forecast and further reductions in a verified 'as built' update to the carbon assessment at project completion.

The project should be looking at how to minimise actual carbon emissions against the agreed forecast throughout the construction stage working with their suppliers on lower carbon products and services that meet the project scope and deliverables. A monthly report must be provided via FastDraft (using the carbon form – see application for payment section) providing:

1. actual emissions to date,
2. (latest) outturn forecast (based on actuals and remaining emissions to outturn) and
3. (Latest) outturn budget / target (set to the verified forecast)

The FastDraft carbon form may be supported by details of actual emissions to date against an agreed breakdown of asset/service/product lines taken from the verified carbon assessment.

This will inform the EA of progress in reducing carbon during construction in the form of a variance between a latest outturn forecast (reported on FastDraft) and verified forecast. The EA may require the project to set out actions to mitigate significant variances or where there is a significant change in scope to provide 'updated' versions of the carbon assessment, carbon budget and carbon appendix that will reset the construction stage outturn forecast and outturn budget.

Projects at completion must provide via Asite an 'as built' carbon appendix supported by an updated carbon assessment with outturn actual emissions reported against a previously verified forecast. The 'as built' carbon appendix and updated assessment must be verified by an EA appointed carbon specialist before completion of the project is approved. The verification process requires project team engagement with the verifier and may result in actions to:

1. update the carbon appendix and supporting carbon assessment and budget (i.e. ERIC).
2. set out the reasons for outturn actuals emissions being above/below the verified forecast

The verified outturn actuals and forecast from this process will be required for the performance measure set out in this contract as well as for an EA process of carbon budget authorisation managed by EA Project Sponsor.

S 300 Contractor's design

The *Contractor* shall design:

- A low level access walkway and walkway panels where ones are currently missing.
- A new lighting gantry.
- A new access staircase to provide access to the existing high-level walkways.
- Security measures to prevent members of the public from reaching the gate superstructure.

This is a design and build contract.

S 301 Design responsibility

Clause 21.1 As above

S 302 Design submission procedures

Clause 21.2 As above

S 303 Design approval from Others

Clause 27.1

The Asset Performance Senior User is to review and agree the design ahead of any *works* being carried out.

S 304 *Client's* requirements

Comply with all Mechanical, Electrical, Instrumentation, Control and Automation (MEICA) standards – LIT 13219.

The *Contractor's* design shall comply with but not be limited to the following limitations and criteria current at the contract date:

- Relevant specifications, including the [redacted] suite of MTR's
- Safety, Health, Environment and Wellbeing Code of Practice (SHEW CoP)
- Design standard and codes of practice
- Environmental standards
- Sustainability requirements
- Collection of permanent works design criteria for BIM archive
- The Corporate Requirement for carbon reduction and specific requirement to meet the EA NZC target for 2030 defined by a project 'carbon budget calculation' that are produced by the Consultant for acceptance by the Client.

S 305 Design co-ordination

In developing the design, as a minimum the *Contractor* shall consult with:

- [redacted] [redacted] FCERM teams (Operational Field Team, Lower Aire Asset Performance team, Senior User, PCM and NEAS/FBG);
- Legal and Estates team;
- Principal Designer;
- Lot 1 Consultant [redacted]

S 306 Requirements of Others

Not applicable.

S 307 Copyright/licence

Clause 22.1

S 308 Access to information following Completion

The *Contractor* shall ensure that all information is provided to the *Client* ahead of Completion.

S 309 Site investigations

The *Contractor* obtains soils information as necessary for the design of the *works.* The *Contractor* specifies, procures, manages and undertakes site investigations to inform the detailed design of the *works* and to manage their risk of unforeseen ground conditions during construction. The *Contractor* undertakes laboratory testing of samples, and longer term monitoring of site conditions as required. This supplements the information provided in the Site Information.

The *Contractor* liaises with all historic environment stakeholders as required to ensure that the heritage and archaeological risks are identified and appropriately managed. The *Contractor* obtains all necessary consents and approvals.

The *Contractor* provides the *Project Manager* with the final Factual Report of the investigation in digital format.

The *Contractor* reviews and analyses the data within the Factual Report and prepares an Interpretative Report to support their detailed design. The *Contractor* provides the *Project Manager* with the final Interpretative Report in digital format.

The *Contractor* informs the *Project Manager* of the proposed works a minimum two weeks before the investigation is undertaken and complies with the access to the Site conditions.

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 of Health and Safety File and one electronic version in PDF format
- 1 hard copy of Operating and Maintenance Manuals and one electronic version.
- 1 hard copy of As Built drawings and 2 electronic versions in CAD and PDF.
- Population of the *Client's* latest version of the Project Cost Tool, or its successor
- Transfer to the *Client* databases of BIM data
- Delivery of the Final Carbon Appendix

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

S 402 Sectional Completion definition

Not applicable.

S 403 Training

Provide training in the operation and maintenance of any operational system installed, including security lighting.

S 404 Final Clean

All debris, unused materials and temporary works are to be cleared and dismantled from Site to allow the Site to return to its natural state.

Ensure that the installation has grease and dirt removed.

S 405 Security

Following final inspection of the *works,* the project will be handed over to the *Client.* There are no security requirements once the project is handed over to the *Client.*

S 406 Correcting Defects

Procedures for access for the correction of any Defects and process for liaison with the *Project Manager* and *Client*.

S 407 Pre-Completion arrangements

Prior to any works being offered for take over or Completion the *Contractor* shall arrange a joint inspection with the *Supervisor, Project Manager, Client* (scheme *Project Manager*) and senior user. The initial inspection shall take place a minimum of three weeks in advance of the planned take over or *Completion*.

S 408 Take over

N/A

S 500 Programme

S 501 Programme requirements

The programme complies with the requirements of Clause 31.2 and includes alignment and submission of the BIM Execution Plan (BEP) and Master Information Delivery Plan (MIDP).

S 502 Programme arrangement

The programme shall be submitted on FastDraft as well as submitted to the *Client* in its native format (Microsoft project).

S 503 Methodology statement

Methodology statements to be submitted to the named principal designer for review and comment.

The *Contractor* shall allow for the period for reply for review of method statements prior to work commencing.

S 504 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 505 Information required

Clause 31.2

S 506 Revised programme

In addition to the requirements of Clause 32 of the condition of contract, the *Contractor* shall provide a brief explanation of changes to each programme activity, sufficient to enable the *Project Manager* and *Client* to understand the cause and impact of change.

The *Contractor* will hold monthly programme review meetings with the *Project Manager* and ensure the relevant members of the design and construction team are present when required.

S 507 S507 Monthly reports

In managing the *works* the *Contractor* shall:

- Contribute monthly to the updates to the project risk register.
- Provide input to project efficiency CERT Form.
- Produce monthly financial updates and forecasts meeting the *Client's* project reporting timetable together with progress reports. Monthly financial updates and forecasts to meet *Client's* deadlines provided by no later than the date agreed at the project start up meeting.
- 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.

- Commission capital forecast profile to be entered on FastDraft monthly & project forecast outturn carbon profile to be entered onto FastDraft monthly. The Contractor is required to provide a monthly forecast on FastDraft for both carbon and cost in accordance with Framework Heads Up (FHU) 224 Commercial Clarification 54 and FHU 256 Commercial Clarification 57.
- Attend project board meetings as required.
- Ensure quarterly input into framework performance assessment/environmental Performance Measures.
- Maintain and show how accurate and up to date information on the whole-life cost and carbon of options is driving optimum solutions at all stages of design development.
- Capture lessons learnt relevant to scheme delivery for the *Client's Project Manager*.

S 600 Quality management

S 601 Samples

N/A

S 602 Quality Statement

Contractor is to provide reliability data for all installed equipment.

S 603 Quality management system

N/A

S 604 BIM requirements

The BIM Information Manager is the *Client* Project Manager.

Deliverables shall be submitted via the *Client's* Common Data Environment for acceptance.

A 3D model is not required for these *works.* If this decision changes, it will be dealt with through the compensation event process. Drawings and reports will be required to the meet the *Client's* BIM requirements.

S 700 Tests and inspections

S 701 Tests and inspections

To be carried out with *Client* Asset Performance Team and MEICA team in accordance with MEICA standards – LIT 13219.

The *Contractor*, *Supervisor* and Others undertake the tests and inspections as detailed in the Client's Minimum Technical Requirements or as agreed with the *Project Manager.*

S 702 Management of tests and inspections

Tests and inspections to be carried out once all works are complete.

The *Client* Asset Performance and MEICA teams are to be given 10 days notice of when the tests and inspections are to be carried out.

S 703 Covering up completed work

Works to be covered once tests have been completed.

S 704 *Supervisor's* procedures for inspections and watching tests

Supervisor to agree with *Contractor*, the dates and times for carrying out inspections.

S 800 Management of the *works*

S 801 Project team – Others

The *Client's* project team will include:

- Asset Performance Senior User
- Partnership and Strategic Overview Senior User
- Project Manager
- Project Executive
- Site Supervisor
- ECC Project Manager

S 802 Communications

The *Contractor* shall document all forms of communication with third parties.

The *Contractor* shall attend monthly progress meetings that are chaired by the *Client* who produces the agenda. The minutes are to be prepared by the *Contractor*. The *Contractor* shall provide the programme, and any risks or issue to the *Client* 1 day in advance of the progress meeting.

The *Contractor* shall attend weekly catch ups with the *Client* on the weeks where a progress meeting is not held.

The *Contractor* shall upload all files to be shared with other parties to Asite, the *Client's* collaboration tool.

The *Contractor*, *Project Manager* and *Supervisor* shall use the *Client's* contractual collaborative working tool, Fast Draft.

All communication shall be through the *Project Manager.*

S 900 Working with the *Client* and Others

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

The *Contractor* is responsible for the Working Areas and is required to co-operate with the *Client* and Others in sharing the Working Areas when required.

S 902 Co-operation

The *Contractor* will be expected to cooperate with the *Client* Area Operations and University of Northampton Estates office.

The *Contractor* cooperates with the Principal Designer.

S 903 Co-ordination

The *Contractor* will liaise with the *Project Manager.*

S 904 Authorities and utilities providers

The *Contractor* shall identify, programme and coordinate work to be carried out by authorities and utility providers within the Working Area.

The *Contractor* shall be responsible for arranging and managing all of the works by utility providers.

S 905 Diversity and working with the *Client,* Others and the public

The *Contractor* shall engage with Others to create a diverse and inclusive environment throughout the duration of the project.

S 1000 Services and other things to be provided

S 1001 Services and other things for the use of the *Client, Project Manager* or Others to be provided by the *Contractor*

Clause 25.2

No additional services to be provided.

S 1002 Services and other things to be provided by the *Client*

As above.

S 1100 Health and safety

S 1101 Health and safety requirements

The *Contractor* shall comply with:

- All current Health and Safety legislation
- *Client's* Minimum Technical Requirements
- All policies and procedures as set out in the *Client's* 'Safety, Health, Environment and Wellbeing Code of Practice' (SHEW COP) current at the contract date
- *Contractor's* own Safe Systems of Work

The *Contractor* notifies the *Project Manager* immediately following any damage or injury arising out of the execution of the *works* or on Site.

S 1102 Method statements

RAMS are to be submitted to the *Supervisor* and Principal Designer for review and comment.

The *Contractor* undertakes the works in accordance with the reviewed method statements. Review of any method statement does not relieve the *Contractor* of their contractual and health and safety responsibilities.

S 1103 Legal requirements

Contractor to adhere to Health and Safety at Work act, 1974 and the Client's SHEW COP.

The Construction (Design and Management) Regulations 2015 apply.

The Client Duties under the CDM Regulations 2015 shall be undertaken by the *Client*.

The Contractor and Principal Contractor duties under the CDM Regulations 2015 shall be undertaken by the *Contractor*.

The Designer duties under the CDM Regulations 2015 shall be undertaken by the *Contractor*.

The Principal Designer Duties under the CDM Regulations 2015 shall be undertaken by TBC. The Contractor shall copy the Project Manager in all their correspondence with the Principal Designer.

S 1104 Inspections

The *Project Manager* may require to inspect the *Contractor's* Health and Safety documentation at any time and should be made available by the *Contractor.*

S 1200 Subcontracting

S 1201 Restrictions or requirements for subcontracting

Sub-contractors 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 hub Commercial Services Manager for strategy suppliers or for emergency work.

The Contractor shall use the NEC4 contract on all subcontracts for works. Where appropriate, the provisions of clause 26.3 would apply for the acceptance of non NEC4 contracts.

S 1202 Acceptance procedures

Clauses 26.3 and 11.2(25)

S 1300 Title

S 1301 Marking

None required

S 1302 Materials from Excavation and demolition

The *Client* does not wish to salvage any material.

S 1400 Acceptance or procurement procedure (Options C and E)

No additional conditions

S 1500 Accounts and records (Options C and E)

S 1501 Additional Records

Clause 52.2 (Options C and E)

Additional records to be kept by the *Contractor*:

- 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)

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.

A monthly report must be provided via FastDraft (using the carbon form) providing:

1. actual emissions to date,
2. (latest) outturn forecast (based on actuals and remaining emissions to outturn) and
3. (Latest) outturn budget / target (set to the verified forecast)

The FastDraft carbon form may be supported by details of actual emissions to date against an agreed breakdown of asset/service/product lines taken from the verified carbon assessment.

This will inform the EA of progress in reducing carbon during construction in the form of a variance between a latest outturn forecast (reported on FastDraft) and verified forecast.

S 1600 Parent Company Guarantee (Option X4)

N/A

S 1700 Client's work specifications and drawings

S 1701 *Client's* work specification

Refer to Minimum Technical Requirements.

S 1702 Drawings

The *Contractor* is to provide a document register to the *Client* in Excel format uploaded to ASite.

S 1703 Standards the *Contractor* will comply with

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

Ref	Report Name	Where used
	Project Cost Tool	Costs
	Sustainability Measures Form	Design & Delivery
LIT_13395	Timber Policy Documents	Design & Delivery
300_100	SHE handbook for managing capital projects	Design & Delivery
LIT_16559	SHEW Code of Practice	Design & Delivery
LIT_13219	Mechanical, Electrical, Instrumentation, Control and Automation (MEICA) standards	Design & Delivery
	Access for all design guide	Design

Appendix 1 BIM Protocol – Information Production and Delivery Table

The *Contractor* shall adhere to the [redacted] Employers Information Requirements (EIR) framework level minimum technical requirements.

All *Client* issued information referenced within the Information Delivery Plan (IDP) requires verifying by the *Contractor* unless it is referenced elsewhere within the Scope.

https://www.asite.com/login-home

The *Contractor* shall register for an Asite Account and request access to the project workspace to view the IDP and update to create the MIDP.