NEC4 Engineering and Construction

Short Contract

FCRM Operational Framework – South East Hub

A contract between	**The Environment Agency** **Horizon House** **Deanery Road** **Bristol** **BS1 5AH**
And	**Land & Water Services Ltd**
For	**Hampstead Sluice Replacement - Construction**
	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 *Client* is	
Name	Environment Agency	
Address for communications	Guildbourne House Chatsworth Road Worthing West Sussex BN11 1LD	
Address for electronic communications	[redacted]	
The *works* are	To replace Hampstead Sluice with a reinforced concrete wall and install bird and bat boxes.	
The *site* is	Hampstead Sluice, ME18 6HH NGR - TQ 68725, 50297	
The *starting date* is	28th November 2022. Note: River Medway Navigation waterway will not be dewatered until 31st January 2023.	
The *completion date* is	17th May 2023. Note: Physical works within the watercourse should be completed by 31st March 2023.	
The *delay damages* are	£268.75	Per day
The *period* for reply is	2	weeks
The *defects date* is	52	weeks after Completion
The *defects correction period* is	4	weeks
The *assessment day* is	the last working day	of each month

The *retention* is	nil	%

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

The *Adjudicator* 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 *Adjudicator*. The application to the Institution includes a copy of this definition of the *Adjudicator*. The referring Party pays the administrative charge made by the Institution. The person appointed is also *Adjudicator* for later disputes.

Contract Data

The *Client's* Contract Data

The interest rate on late payment is		% 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	£100,000.00
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 *Contractor* 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 *Contractor* to use the skill and care normally used by professionals providing works similar to the works	Minimum £nil in respect of every claim without limit to the number of claims	6 years following Completion of the whole of the works or earlier termination

The *Adjudicator nominating body* is	The Institution of Civil Engineers
The *tribunal* is	litigation in the courts
The *conditions of contract* 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 *Contractor* submits the name of each proposed subcontractor to the *Client* for acceptance. A reason for not accepting the subcontractor is that their appointment will not allow the *Contractor* to Provide the Works. The *Contractor* does not appoint a proposed subcontractor until the *Client* 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 *Client* 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 *Contractor* is responsible for obtaining these and paying fees (unless stated otherwise in the Scope). The *Client's* acceptance of a tender and the *Client's* 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 *Client* and is not a compensation event.
Z3.0	Confidentiality & Publicity
Z3.1	The *Contractor* may publicise the works only with the *Client's* 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 *Client* but is not warranted correct. The *Contractor* 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 *Contractor* to ensure the use of skill and care normally used by professionals providing similar design services.
Z6.2	The *Contractor* designs the parts of the works which the Scope states they are to design.
Z6.3	The *Contractor* submits the particulars of their design as the Scope requires to the *Client* for acceptance. A reason for not accepting the *Contractor's* design is that it does not comply with either the Scope or the applicable law. The *Contractor* does not proceed with the relevant work until the *Client* has accepted this design.
Z6.4	The *Contractor* may submit their design for acceptance in parts if the design of each part can be assessed fully.
Z7.0	Change to Compensation Events
Z7.1	Delete the text of Clause 60.1(11) and replace by: The *works* are affected by any one of the following events • War, civil war, rebellion revolution, insurrection, military or usurped power • Strikes, riots and civil commotion not confined to the employees of the *Contractor* 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

<table>
<tr><td></td><td>• Natural disaster
• Fire and explosion
• Impact by aircraft or other device or thing dropped from them</td></tr>
<tr><td>Z8.0</td><td>Framework Agreement</td></tr>
<tr><td>Z8.1</td><td>The Contractor shall ensure at all times during this contract it complies with all the obligations and conditions of the Framework Agreement made with the Client.</td></tr>
<tr><td>Z9.0</td><td>Termination</td></tr>
<tr><td>Z9.1</td><td>Delete the text of Clause 92.3 and replace with:

If the Contractor 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.</td></tr>
<tr><td>Z10.0</td><td>Data Protection</td></tr>
<tr><td>Z10.1</td><td>The requirements of the Data Protection Schedule shall be incorporated into this contract</td></tr>
<tr><td>Z11.0</td><td>Liabilities and Insurance</td></tr>
<tr><td>Z11.1</td><td>Civil data protection claims and regulatory fines for breaches of Data Protection Legislation are excluded from any limit of liability stated.</td></tr>
<tr><td>Z30.0</td><td>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%.</td></tr>
<tr><td>Z30.1</td><td>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.</td></tr>
<tr><td>Z30.2</td><td>Price Volatility Provision

Through a Compensation Event the Client shall pay the PVP. PVP is calculated as:

Assessment x MF x L = PVP</td></tr>
<tr><td>Z30.3</td><td>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.</td></tr>
<tr><td>Z30.4</td><td>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.

<table>
<tr><th>Assessment Date</th><th>Defined Cost?</th><th>Forecasted Cost?</th></tr>
<tr><td>31st Jul 22</td><td>In period costs only</td><td>No</td></tr>
<tr><td>31st Aug 22</td><td>In period costs only</td><td>No</td></tr>
<tr><td>30th Sept 22</td><td>In period costs only</td><td>No</td></tr>
<tr><td>31st Oct 22</td><td>In period costs only</td><td>No</td></tr>
<tr><td>30th Nov 22</td><td>In period costs only</td><td>No</td></tr>
</table>
</td></tr>
</table>

31st Dec 22	In period costs only	No
31st Jan 23	In period costs only	No
28th Feb 23	In period costs only	No
31st Mar 23	In period costs only	No
30th Apr 23	In period costs only	No
31st May 23	In period costs only	No
30th Jun 23	In period costs only	Forecasted costs for remainder of contract

The Defined Cost for compensation events is assessed using:

- the Defined Cost at base date levels for amounts calculated from rates stated in the Contract Data for People and Equipment and

- the Defined Cost current at the date the compensation event was notified, adjusted to the base date by 1+PVP for the last assessment of the amount due before that date, for other amounts.

Contract Data

The *Contractor's* Contract Data

	The *Contractor* is	
Name	Land & Water Services Ltd	
Address for communications	Weston Yard, Albury, Guildford, Surrey, GU5 9AF	
Address for electronic communications	[redacted]	
The *fee* percentage is	As framework	%
The *people rates* are	As framework	
category of person	unit	rate
The *published list of Equipment* is		As framework
The *percentage for adjustment for Equipment* is		As framework

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	£94,510.49
	Enter the total of the Prices from the Price List.
Signed on behalf of the *Contractor*	
Name	[redacted]
Position	[redacted]
Signature	[redacted]
Date	4.11.22
The *Client* accepts the *Contractor's* Offer to Provide the Works	
Signed on behalf of the *Client*	
Name	[redacted]
Position	Senior Commercial Officer
Signature	[redacted]
Date	28th November 2022

Price List

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

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

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

Note: The *Contractor* must satisfy themselves that they have priced for the whole of the scope for the project. It will be assumed that this is the case whether or not the item appears on the Price List. If the *Contractor* is of the view that items do not appear on the Price List they are able to add them below.

Item Number	Description	Unit	Quantity	Rate	Price
Pre-construction activities					
1	Preliminaries and supervision	Sum			[redacted]
2	Preparation of a detailed Construction Phase Plan (CPP) in accordance with the *Client*'s SHEW Code of Practice and any other information critical to be produced and accepted by the *Client* before commencement on site. Includes the production of a Waste Management Plan and Risk Assessment Method Statement documentation. Includes maintenance and adherence to the Environmental Action Plan (EAP).	Sum			[redacted]
3	Temporary Traffic Regulation Order application update (with *Contractor*'s details) and payment of related fees	Sum			[redacted]
4	Precondition photographic survey of working areas and access routes	Sum			[redacted]
Subtotal of the Prices –Pre-construction activities				[redacted]	
Construction					
5	Mobilisation and establishment of works	Sum			[redacted]
6	Installation and management of road closure and temporary diversion route, including stakeholder communication and engagement				[redacted]
7	Installation of temporary works to access culvert outlet. Removal of section of fencing to allow access to outlet (channel) side of culvert.	Sum			[redacted]
8	Cleaning and scabbling of existing penstock chamber surface and wingwalls.	Sum			[redacted]
9	Construction of reinforced concrete wall within penstock chamber	Sum			[redacted]

10	Installation of Salix (or equivalent) matting, subsoil and top soil.	Sum			[redacted]
11	Installation of bat / bird boxes	Sum			[redacted]
12	Removal of road closure and temporary diversion	Sum			[redacted]
13	Site demobilisation and reinstatement. All surplus wastes generated by the *works* to be disposed of off-site in accordance with the current Waste Management Regulations.	Sum			[redacted]
14	Provision of information to the Principal Designer to compile the Health and Safety File (including information on materials used and maintenance) and information to Designer to prepare 'as-built' drawings.	Sum			[redacted]
15	Completion of the *Client*'s Carbon Calculator (for the 'as built' project within a month of project completion as built).	Sum			[redacted]
Subtotal of the Prices – Construction					[redacted]
The total of the Prices					£94,510.49

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

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.

Background:

Hampstead sluice (TQ 68725, 50297) is a disused penstock, forming part of the River Medway Navigation (RMN) and located 35-40m upstream of Yalding Lock in Kent. It connects the waterway with the Hampstead marina through a culvert under Hampstead Lane and a channel. The sluice is closed at all times and cannot be operated. It is a failing asset (condition is 5) and poses a risk to the navigation and to life. Its complete failure could cause navigation levels to drop and potentially flood the Hampstead marina. See photos within SI100 Site Information folder.

Following appraisal, the asset has been found to be redundant. The project is therefore to decommission the sluice to better manage the water levels for navigation.

The *Contractor* shall remove the existing penstock and construct a reinforced concrete retaining wall within the penstock chamber. In the event that any reinforcement is exposed by the *works*, this shall be suitably treated by the *Contractor* against exposure and corrosion: the Designer will provide a materials specification and the *Contractor* shall propose materials for acceptance.
The design will effectively change the asset functionality into a fixed crested weir (passive asset).

Additionally, the *Contractor* shall install bat and bird boxes in the nearby trees.

The *site* is outlined in red on the Hazards Constraints & Environmental Plan shown in the Scope drawings.

Project objectives:

- Develop an economically, technically, and environmentally viable scheme to manage water levels in a more efficient manner and fulfil the Environment Agency's legal obligation to preserve the River Medway Navigation (RMN) at Hampstead sluice.
- Improve site safety for RMN users and operators at Hampstead sluice reducing the risk of asset failure and contributing to improving public safety on Navigation sites.
- Contribute to reduced asset maintenance costs for Hampstead penstock and sluice seeking a sustainable and low maintenance lifelong solution.
- Enhance the natural, historic and built environment including the improvement of fish and eel passage where possible.
- Align the project with the Environment Agency's ambition to be a net zero carbon organisation by 2030.

Outcome specification

The *works* are to be compliant with the latest version (v12) of the Minimum Technical Requirements (LIT 13258).

The *Contractor* shall submit a road closure application to the highways authority, Kent County Council (KCC). The *Contractor* shall sign as the Operator and pay for a Temporary Traffic Regulation Order (TTRO) required for the *works*. The *Contractor* shall submit the TTRO application to the KCC Street Works Team within one week of contract award along with details of:

- The *Contractor*'s minimum public liability insurance cover of £5 Million; and
- streetworks accreditation for at least one operator and one supervisor.

Should the issuance of the TTRO be delayed by Kent County Council such that it impacts on the dates on the *Contractor*'s accepted programme, where a road closure is required to undertake an element of the works, this will be a notifiable Compensation Event.

Should the Contractor fail to submit the TTRO within 1 week of contract award as stated in the Scope, then each additional day or part of a day beyond the period of 1 week after contract award will not be a notifiable Compensation Event. Should the TTRO require resubmission due to a fault of the *Contractor*, any additional delay or impact on the *works* caused by the resubmission of the TTRO, will not be a notifiable Compensation Event.

The *Contractor* shall include any temporary works required to undertake the ***Contractor's*** method of working as deemed necessary to meet the *works* Scope.

The *Contractor* must also produce and submit a Site Waste Management Plan (SWMP) to the *Client*. A draft SWMP has been produced by the *Client* at design stage.

The *Contractor* must plan the *works* to mitigate environmental impacts and must maintain and adhere to the Environmental Action Plan (EAP). See current version of the EAP in Appendix S400.

The *Contractor* is to provide prices for all preliminary activities and supervision including welfare, site accommodation etc.

A detailed photographic record of access routes and all working areas must be carried out by the *Contractor* and provided to the *Client* for approval prior to *works* commencing on site.

The *Contractor* is to allow for the cost associated with waste not suitable for reuse within the permanent works; this must be disposed of off-site in accordance with the site specific Site Waste Management Plan (SWMP) and in accordance with the current Waste Management Regulations.

The *Contractor* shall be responsible for decommissioning and responsibly disposing of elements/parts of the existing structure that are not required.

- All documentation shall comply with CDM 2015 regulations, and the ***Client's*** Safety, Health, Environment and Wellbeing Code of Practice.
- The *Contractor* is required to liaise with the *Client*'s CDM Principal Designer.

Upon *works* completion, a suitably developed Health and Safety File (which would update the existing one for Hampstead Lock, see SI600 SHEW Information) must be issued by the *Contractor* to the Principal Designer along with sufficient information for the Designer (JBA) to produce the 'as built' drawings showing any changes from the original approved design.

A start-up meeting set up by the *Client* shall be held prior to commencement of the *works* and shall be attended by the *Contractor*, *Client,* CDM Principal Designer and Designer. Weekly progress teleconferences shall be attended by the *Contractor* and the *Client*.

The *Contractor* will be provided, on contract award, with a Carbon Modelling Tool for the project and must then complete an 'as built' Carbon Calculator for the project within one month of completion of the *works*.

For the purposes of this contract, flooding is considered to be weather and is included within Clause 60.1(9)

The Information Delivery Plan (IDP) is a schedule of how the *Client* expects data to be shared between the *Client* and the supplier(s) working on the project as part of Building Information Modelling (BIM). The *Contractor* must ensure that this protocol is adhered to. It reflects the information that is already held for each project and the information that the *Client* expects to receive from the *Contractor*. The *Contractor* shall produce a project specific BIM Execution Plan (BEP) to complement the Employer's Information Requirements (EIR).

The IDP is hosted at Asite and is accessible by the *Client* as well as the *Contractor*. A copy of the proposed IDP for comment is found in Appendix S400.

2. Drawings

List the drawings that apply to the contract.

Drawing Number	Revision	Title
ENV0002792C-JBA-00-00-DR-C-1100	C01	General Arrangement
ENV0002792C-JBA-00-00-DR-Z-1030	C01	Hazards & Constraints Plan
ENV0002792C-JBA-00-00-DR-C-2000	C01	Reinforced Concrete Wall Details
ENV0002792C-JBA-00-00-SC-C-2000	C01	Reinforced Concrete Wall Schedule

See Appendix S200 for documents

3. Specifications

List the specifications which apply to the contract.

Title	Date or Revision	Tick if publicly available
Safety, Health, Environment and Wellbeing Code of Practice (SHEW CoP)	V4 June 2022	Yes
LIT 13258 - Minimum Technical Requirements	V12 December 2021	No
LIT 17641 - Employer Information Requirements-1	V2.4	No
Civil Engineer Specification for Water Industry	V7	No

See Appendix S300 for documents

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

The *Contractor* shall not seek to gain access to any of the *sites* without confirmation from the *Client*, or their representative, that all necessary notice has been served to the appropriate landowners and / or tenants. The *Client's* Estates team will identify landowners and carry out landowner negotiations.
The *Contractor* shall not commence any work on the *site* until the *Client*, or their representative, has accepted the method statements and risk assessments related to this Contract.
The *Contractor* must prepare a detailed Construction Phase Plan (CPP) in accordance with the SHEW Code of Practice and any other information critical to be produced and accepted by the *Client* before commencement on site. Note: A suitably developed Construction Phase Plan must be issued for approval not less than 10 days prior to planned mobilisation. Please refer to the Pre-Construction Information (PCI) within the Site Information for further clarification of requirements.
Hampstead Lane is a busy commuter route. A full or partial road closure at Hampstead Lane is likely to be needed, with signed diversion routes to allow a safe working area around the sluice extents. Road access is to be provided for pedestrians, cyclists and where possible for non-commercial vehicles (e.g. cars and vans) outside of working hours and where the works undertaken within the working area allow it in an efficient manner. Advance warning signs and a one-way traffic operation system will need to be deployed as agreed with the overseeing highway organisation (KCC Street Works Team) and Yalding Parish Council. The diversion route will be implemented as per traffic management plan AMBER-DWG-0233- Hampstead Lane, Yalding, Maidstone, Kent England, ME18 6H (See SI300 Public Information within Site Information).
The Environmental Action Plan (EAP), see Appendix S400, identifies environmental constraints on how to deliver the *works*.
The RMN riverbed has been confirmed to be polluted. No dredging operations are allowed in this section of the RMN to prevent the disturbance of pollutants which could enter the watercourse downstream of Hampstead Lock. Non polluted silts have been deposited on the riverbed over the years, creating a layer of unknown thickness that covers a heavily polluted silt layer. The *Contractor* shall not disturb the riverbed to deliver the *works* as this could release highly polluted silts. Works cannot be delivered from the dewatered channel and use of the riverbed as part of the working area is forbidden. The use of equipment which could disturb the polluted silts in the riverbed (e.g. heavy plant) must be avoided. Disturbance could cause polluted silts to be washed down once the RMN is watered again. However, access by foot and the use of equipment with a low risk of silt disturbance is acceptable. No testing has been carried out on the silt within the culvert. The penstock has been closed (and has not been operated) for years which has kept the silts on the RMN side. Water has overtopped the penstock during flood events when water levels are higher than usual, however it is unlikely that any contaminated silt from the river bed has been washed away, or that it has overtopped the penstock and settled in the penstock chamber, culvert or concrete channel. Most of the debris and silt in the penstock chamber, culvert or concrete channel come from the surrounding banks. Installation of river erosion protection is acceptable provided that there is minor disturbance to the riverbed.
The *Contractor* shall submit to the *Client* full details of all measures they shall be implementing to protect adjacent structures and shall obtain the *Client's* acceptance in writing before starting work in these areas. The interface with the Hampstead Lane bridge structure shall be kept to a minimum for the removal of the sluice/penstock elements. In particular, lifting operations shall be carried out avoiding damage to the bridge and ancillary elements (e.g. safety barriers). In the event of any damage being caused to the bridge structure by the delivery of the *works*, the *Contractor* shall notify the *Client* within 24 hours of the damage occurring or being discovered.
Public Safety Risk Assessments (PSRAs) are included within the Site Information (SI600). Prior to completion, the *Client*'s PSRA Assessor must confirm that the *works* comply with the accepted design.
The *Client's* Estates team has identified third party landowners and will carry out landowner negotiations. The *Contractor* shall liaise with Others including landowners and tenants for the co-ordination of the *works* and access to the Working Areas. The *Contractor* shall be responsible for covering access agreements with the adjacent 3rd party, Hampstead Marine. The bird / bat boxes shall be fitted to a height no less than 4m. The location, specification and number of bat boxes can be found in 'ENV0002792C-JBA-00-00-TN-EN-0102-S3-P01-C0200-EA3-LOD3-Bat_Box_Installation' within S400.
The *Contractor* shall make all necessary arrangements to ensure that there is no impact to the navigation operations in the marina during the construction phase. The *Contractor* is to liaise with Hampstead Marine (Yalding) Ltd if the *works* will temporarily impact upon access to the marina.

The *Contractor* shall dispose of waste materials away from site without any contamination of waterways or surrounding land. Disposal shall be in accordance with the Site Waste Management Plan and carried out by a licenced waste disposal contractor.

The *Contractor* shall be responsible for the condition and cleanliness of the adjacent road when removing old material and pouring concrete.

Works will be delivered during the wet season and, even though the RMN will be dewatered between Anchor Sluice (TQ 69020 49793) and Hampstead Lock (TQ 68687 50323), flood events will still remain as a project risk due to the surrounding water network. Adverse weather may impact upon start dates and the duration of the *works*, and high water levels may cause flooding which may cause damage to temporary works.

The *Client* may require the RMN to be watered to alleviate flooding in the River Medway. The *Client* will provide the *Contractor* with a minimum of 24 hours' notice if this is the case. Water levels in the Medway at Hampstead Lock ranged from 7.6 to 10.0 mAOD between 01/04/2020 and 31/03/2021. The log of water levels at Hampstead Lock is in the Site Information (SI200).

Anti-social behaviour at Hampstead Lock has been repeatedly reported including damage to Environment Agency property. The *Contractor* shall consider security, the risk of unauthorised access, and the prevention of theft of material, plant and equipment from the working area. The site shall be locked out of working hours.

Hampstead Lane culvert is considered a confined space and human access should be avoided.

If required, access to the open channel can be undertaken either via boat from the Hampstead marina or via land from Hampstead lockside by temporarily removing fencing and using a ladder. Land access will require prior removal of dense vegetation. Nesting bird season is to be avoided where possible for the removal of vegetation.

The channel has been found in poor condition according to the latest inspection report. See Site Information (Appendix SI200).

All temporary works arrangements will be the sole responsibility of the *Contractor* and must be priced in the tender submission. The *Contractor* is to carry out design checks as required of all temporary works used.

A Flood Risk Application Permit (FRAP) will be applied for by the *Client* as soon as the final RAMS have been submitted by the *Contractor* therefore this activity shall be prioritised. The construction contract shall not be awarded to the *Contractor* until the *Client* is certain that the *works* will not increase flood risk in the area.

The draft FRAP includes the construction methodology proposed by the Early Supplier Engagement (ESE) contractor within the buildability statement (see Site Information- SI600) which includes bank erosion protection works.

The existing steel penstock has not been checked for the purpose of the installation of temporary works. The penstock has been inspected (see inspection reports included in Site Information- SI200).

The penstock was found to be in fair condition. One small perforation through the ferrous framework was observed in the latest inspection (10th and 11th of June 2021. See Red7 report within Site Information- SI200), however the penstock couldn't be inspected close to the channel bed.

The *Contractor* shall decide on the penstock suitability and potential repairs if required before construction of the reinforced concrete wall. The *Contractor* shall consult with the *Client* with respect to the temporary works required before proceeding with the *works*.

The wing walls were found to be in fair condition. However, the below localised damages were observed (See Red7 report within Site Information- SI200):

- Localised erosion damage was observed at the cresting height of the closed gates on both the eastern and western pier/return walls (approximately two 350x350 mm areas). The *Contractor* shall break out defective concrete and repair with Renderoc HB45 or similar.
- Corrosion staining (350mm x 350mm area) situated on the north-western pier/return wall directly behind the sluice gate (possible pop-out defect and/or previous repair patch). The *Contractor* shall break out defective concrete, investigate the cause of the corrosion and the condition of the rebar in the structure. Depending on what is found and the nature of the repair, either a hand applied material such as Renderoc HB45 or similar (as mentioned above) or aleternatively shutter and pour repair using Renderoc LA or similar.
- Seepage observed through a crack approximately 500mm long with spalled perimeter less than 30mm wide at the interface between the structure's concrete pier/return walls and that of the masonry stone block road bridge and associated culvert. The *Contractor* shall break out defective concrete and repair with Renderoc HB45 or similar.

The *Contractor* shall submit to the *Client* a specification of the repair materials for approval before undertaking the works.

The Hampstead Sluice project requires additional funding to deliver the works. A Business Case Update Report (BCUR) will be submitted on the 13th October 2022 to request for additional funds. The construction contract shall be partially awarded to the *Contractor* until the *Client* is certain that there is sufficient funding to deliver the *works.* Funding for full award is expected to be confirmed by 1st December 2022.

The initial partial award includes pre-construction activities required before mobilisation to site. The intention is to not delay the *works* until funding is secured. Pre-construction activities are indicated within the Price List. Once the funding is confirmed, the *Client* shall instruct the *Contractor* to deliver the remaining activities to deliver the *works*.

Working times

The *Contractor* will be permitted to work between 7.30am and 6.00pm on weekdays (Monday to Friday). No work will be permitted outside of these hours without the prior written acceptance of the *Client*.

Work can be permitted during weekends if there is a recognised cost and time efficiency in delivering the *works*.

See Appendix S400 for documents

5. Requirements for the programme

The *Contractor* must submit a programme with the Contractor's Offer for acceptance. The *Contractor* must show on each programme submitted for acceptance (in form of a Gantt chart showing the critical path, proposed order and timing to undertake the *works* and proposed equipment and labour resources) the following:

a) Period required for mobilisation/planning
b) Contract starting date
c) Construction starting date
d) Each of the activities listed within the Price List
e) Any key third party interfaces such as lead in periods for materials and sub-contractors and time required to obtain consents / waste permits
f) Completion date

Following contract award, a programme is to be submitted every 4 weeks for acceptance by the *Client*

- Time is a key programme constraint on this Contract. Works are to be delivered out of the navigation season (which runs from 1st April to 31st October each year).

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

Item	**Date by which it will be provided**
The adjacent watercourse, (River Medway Navigation), will be dewatered by the local Environment Agency field team prior to the construction works commencing. Dewatering the navigational channel will offer a financial saving by allowing the *works* to be completed by land-based plant and safer controlled access to existing assets and working area.	EA to reduce water levels from 31st January to 31st March 2023 to undertake maintenance programme of works
Pre-construction ecological surveys	As required by EAP
Desk based services search	No more than 3 months before *works* start
Flood Risk Application Permit (FRAP) approval following receipt of RAMS documentation from *Contractor*.	Approval estimated 23/01/23

Vegetation removal from the sluice bank to undertake *works*	Beginning January 2023 (before bird nesting season)
Funding confirmation and instruction to deliver construction activities	Estimated 01/12/2022

7. Site Information

General Site Information

The preliminary Pre Construction Information is enclosed in the invitation to tender pack within the Site Information package. It contains relevant site information and information on suggested areas where the *Contractor* may provide a site compound. It should be noted that any such suggestions do not constitute scope or represent an instruction.

The PCI document shall be updated before construction by the *Client* and may require the *Contractor's* input.

Further information on the current condition of Hampstead sluice, culvert and channel is provided in the 'Hampstead, Yalding & Anchor marine Complex – River Medway Underwater Inspection Report' (produced by Red7 in June 2021). Please especially note the poor condition of the penstock and channel.

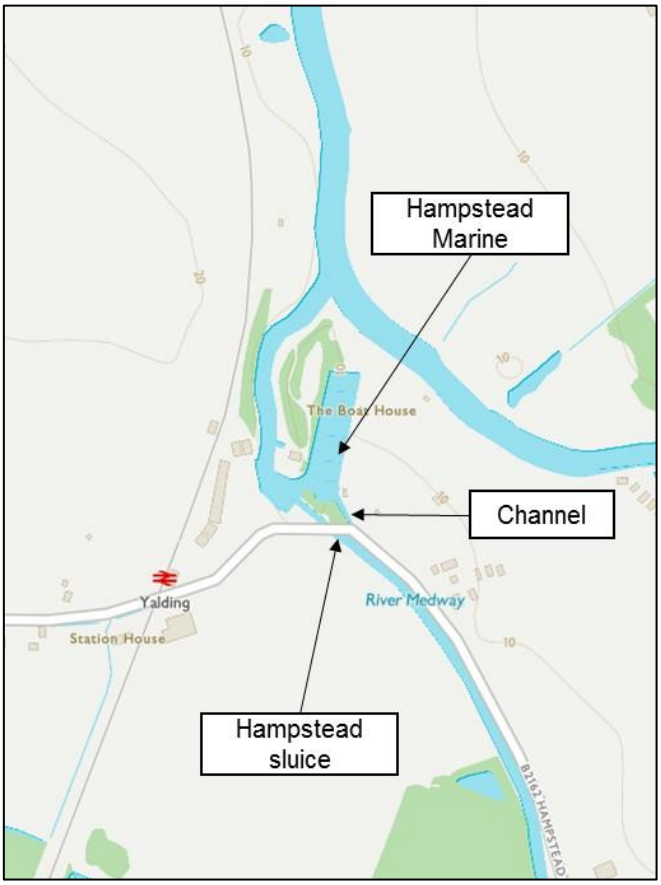
Project risks identified at outline design stage are provided for information

The buildability statement produced by the ESE contractor (Jackson Civil Engineering Ltd) explains the planned methodology to deliver the works.

The following information is contained in the Site Information pack:

- SI100 Site location
  - Land ownership plan
  - Photos
- SI200 Reports and surveys
  - Topographic survey of Hampstead lock and channel
  - Bathymetry survey
  - Options development report
  - Hampstead lock and sluice inspection (2019)
  - KCC Hampstead sluice culvert inspection (2011)
  - KCC Hampstead sluice culvert inspection (2017)
  - KCC Hampstead sluice culvert drawing
  - Hampstead lock and sluice inspection (1997)
  - Hampstead, Yalding & Anchor marine Complex – River Medway Underwater Inspection Report (2021)
  - Baseline Environmental Assessment
  - Bat Box Installation note
  - Hamstead Water Max daily water levels
- SI 300 Public Information
  - DRAFT TTRO application and Map Drawing
- SI400 Services information
- SI600 SHEW Information
  - Hampstead Lock H&S file
  - ENV0002792C-JBA-00-00-DR-Z-0001-UXO Map
  - ENV0002792C-JBA-00-00-DR-Z-1030- Hazards Constraints Environment map
  - ENV0002792C-JBA-00-00-FN-EN-0101-Low Risk File Note
  - ENV0002792C-JBA-00-00-PL-Z-0100-Site Waste Management Plan
  - ENV0002792C-JBA-00-00-RA-EN-0101-A4-C02-C0100-EA3-LOD3-Environmental_Risk_Assessment
  - ENV0002792C-JBA-00-00-RA-Z-0002-Public Safety Risk Assessment
  - ENV0002792C-JBA-00-00-RR-Z-0001- Designer Risk Register
  - ENV0002792C-JBA-00-00-RR-Z-0002- RAG_List
  - Hampstead sluice - Buildability statement
  - Hampstead Sluice Pontoon Proposal
  - Pre-construction Information
  - Hampstead sluice risk register

Hampstead Sluice location plan:



Proposed sub-contractors (to be completed by tenderers)

	Name and address of proposed subcontractor	Nature and extent of work
1.	MLP Traffic Ltd, Tormohun House, Barton Hill Road, Torquay, Devon, TQ2 8JJ Form of Contract: NEC4 Short	Traffic Management Contractor
2.	Form of Contract:	
3.	Form of Contract:	
4.	Form of Contract:	