



Framework:

Supplier:

Company Number:

Geographical Area:

Project Name:

Project Number:

Contract Type:

Option:

Contract Number:

Stage:

Collaborative Delivery Framework

Midlands

EA Lower Risk Debris Screens Programme Midlands Area (A)

ENV0003385C

Professional Service Contract

Option C

project_36181

SOC_to_OBC

Revision	Status		Originator		Reviewer		Date

PROFESSIONAL SERVICE CONTRACT under the Collaborative Delivery Framework
CONTRACT DATA

Project NameEA Lower Risk Debris Screens Programme Midlands Area (Appraisal - INA) CDF Lot 1

Project NumberENV0003385C

This contract is made on
between the *Client* and the *Consultant*

- This contract is made pursuant to the Framework Agreement (the "Agreement") dated 01st day of April 2019 between the *Client* and the *Consultant* in relation to the Collaborative Delivery Framework. The entire agreement and the following Schedules are incorporated into this Contract by reference
- Schedules 1 to 22 inclusive of the Framework schedules are relied upon within this contract.
- The following documents are incorporated into this contract by reference
Midlands Lower Risk Debris Screen Scope for Inspection INA and Outline Design v4.doc

Part One - Data provided by the *Client*
Statements given in
all Contracts

1 GeneralThe *conditions of contract* are the core clauses and the clauses for the following main Option, the Option for resolving and avoiding disputes and secondary Options of the NEC4 Professional Service Contract June 2017.

Main Option	Option C	Option for resolving and avoiding disputes	W2
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Secondary Options

- X2: Changes in the law
- X7: Delay damages
- X9: Transfer of rights
- X10: Information modelling
- X11: Termination by the *Client*
- X18: Limitation of liability
- X20: Key Performance Indicators
- Y(UK)1: Project Bank Account
- 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 *service* isTo carry out Inspection and Initial need for Assessment of Low Risk Debris Screen - Midland Area

The *Client* is

Address for communications

Address for electronic communications

The *Service Manager* is
Address for communications

Address for electronic communications

The Scope is in
Midlands Lower Risk Debris Screen Scope for Inspection INA and Outline Design v4.doc

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 is2 weeks

The *period for retention* is6 yearsfollowing Completion or earlier termination

The following matters will be included in the Early Warning Register

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

2 weeks

2 The *Consultant's* main responsibilities

The *key dates* and *conditions* to be met are

conditions to be met

'none set'

'none set'

'none set'

key date

'none set'

'none set'

'none set'

The *Consultant* prepares forecasts of the total Defined Cost plus Fee and *expenses* at intervals no longer than

4 weeks

3 Time

The *starting date* is

01 July 2022

The *Client* provides access to the following persons, places and things

access

access date

The *Consultant* submits revised programmes at intervals no longer than

4 weeks

The *completion date* for the whole of the *service* is

01 March 2023

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

4 weeks

4 Quality management

The period after the Contract Date within which the *Consultant* is to submit a quality policy statement and quality plan is

4 weeks

The period between Completion of the whole of the *service* and the *defects date* is

26 weeks

5 Payment

The *currency of the contract* is the £ sterling

The *assessment interval* is

Monthly

The *Client* set total of the Prices is

The *expenses* stated by the *Client* are as stated in Schedule 9

The *interest rate* is

2.00%

per annum (not less than 2) above the

Base

rate of the

Bank of England

The locations for which the *Consultant* provides a charge for the cost of support people and office overhead are

All UK Offices

If Option C is used

The *Consultant's share percentages* and the *share ranges* are:

share range

less than

from

greater than

80 %

to

120 %

80 %

to

120 %

Consultant's share percentage

0

as set out in Schedule 17

as set out in Schedule 17

%

6 Compensation events

These are additional compensation events

1.

'not used'
2.

'not used'
3.

'not used'
4.

'not used'
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 and the periods for which the *Consultant* maintains insurance are

EVENT	MINIMUM AMOUNT OF COVER	PERIOD FOLLOWING COMPLETION OF THE WHOLE OF THE <i>SERVICE</i> OR TERMINATION
The <i>Consultant's</i> failure to use the skill and care normally used by professionals providing services similar to the <i>service</i>	██████████ in respect of each claim, without limit to the number of claims	6 years after Completion
Loss of or damage to property and liability for bodily injury to or death of a person (not an employee of the <i>Consultant</i>) arising from or in connection with the <i>Consultant</i> Providing the Service	██████████ in respect of each claim, without limit to the number of claims	6 years after Completion
Death of or bodily injury to the employees of the <i>Consultant</i> arising out of and in the course of their employment in connection with the contract	<i>Legal minimum</i> in respect of each claim, without limit to the number of claims	<i>For the period required by law</i>
The <i>Consultant's</i> total liability to the <i>Client</i> for all matters arising under or in connection with the contract, other than the excluded matters is limited to	██████████	

Resolving and avoiding disputes

The <i>tribunal</i> is litigation in the courts		
The <i>Adjudicator</i> is		'to be confirmed'
Address for communications		'to be confirmed'
Address for electronic communications		'to be confirmed'
The <i>Adjudicator nominating body</i> is		The Institution of Civil Engineers

Z Clauses

Z1 Disputes

Delete existing clause W2.1

Z2 Prevention

The text of clause 18 Prevention is deleted.
Delete the text of clause 60.1(12) and replaced by:
The *service* is affected by any 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 *Consultant* and sub consultants,
- Ionising radiation or radioactive contamination from nuclear fuel or nuclear waste resulting from the combustion of nuclear fuel,
- Radioactive, toxic, explosive or other hazardous properties of an explosive nuclear device,
- Natural disaster,
- Fire and explosion,
- Impact by aircraft or other aerial device or thing dropped from them.

Z3 Disallowed Costs

Add the following in second bullet of 11.2 (18) add:
(including compensation events with the Subcontractor, i.e. payment for work that should not have been undertaken).
Add the following additional bullets after 'and the cost of ' :
• Mistakes or delays caused by the *Consultant's* failure to follow standards in Scopes/quality plans
• Reorganisation of the *Consultant's* project team
• Additional costs or delays incurred due to *Consultant's* failure to comply with published and known guidance or document formats
• Exceeding the Scope without prior instruction that leads to abortive cost
• Re-working of documents due to inadequate QA prior to submission, i.e. grammatical, factual arithmetical or design errors
• Production or preparation of self-promotional material
• Excessive charges for project management time on a commission for secondments or full time appointments (greater than 5% of commission value)
• Any hours exceeding 8 per day unless with prior written agreement of the *Service Manager*
• Any hours for travel beyond the location of the nearest consultant office to the project unless previously agreed with the *Service Manager*
• Attendance of additional individuals to meetings/ workshops etc who have not been previously invited by the *Service Manager*
• Costs associated with the attendance at additional meetings after programmed Completion, if delay is due to *Consultant* performance
• Costs associated with rectifications that are due to *Consultant* error or omission
• Costs associated with the identification of opportunities to improve our processes and procedures for project delivery through the *Consultant's* involvement
• Was incurred due to a breach of safety requirements, or due 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 resulting of rectifying a non-compliance with the Framework Agreement and/or any call off contracts following an audit

Z4 Share on termination

Delete existing clause 93.3 and 93.4 and replace with:
93.3 In the event of termination in respect of a contract relating to services there is no *Consultant's* share'

Z6 The Schedule of Cost Components

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

Z7 Consultant's share

After cl54.2 and before cl54.3, insert the following additional clause:
54.2A If, prior to the Completion Date, the Price for Service Provided to Date exceeds 112% of the total of the Prices, the amount in excess of 112% of the total of the Prices is retained from the Consultant.

Z23 Linked contracts

Issues requiring redesign or rework on this contract due to a fault or error of the *Consultant* will neither be an allowable cost under this contract or any subsequent contract, nor will it be a Compensation event under this contract or any subsequent contract under this project or programme.

Z24 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 *Service Manager's* certificate.
Delete existing clause 51.2 and replace with:
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 *Service 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

Z25 Risks and insurance

The *Consultant* is required to submit insurances annually as Clause Z4 of the Framework Agreement

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 *service* are [redacted] per day

OPTION X10: Information modelling

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

OPTION X18: Limitation of liability

The *Consultant's* liability to the *Client* for indirect or consequential loss is limited to [redacted]

The *Consultant's* liability to the *Client* for Defects that are not found until after the *defects date* is limited to [redacted]

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

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(UK)1:Project Bank Account

The *Consultant* is to pay any bank charges made and to be paid any interest paid by the *project bank*

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

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

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

term beneficiary

term *beneficiary*

The provisions
of Y(UK)1

Part Two - Data provided by the Consultant

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

1 General

The *Consultant* is

Name

Address for communications

Address for electronic communications

The *fee percentage* is

Option C

14.00%

The *key persons* are

Name (1)

Job

Responsibilities

Qualifications

Experience

Project Director

FIMechE, MCIWEM, MIAM, Ceng

31 years

Name (2)

Job

Responsibilities

Qualifications

Experience

Project Manager

BSc (Hons), MAPM, CIWM

20 years

Name (3)

Job

Responsibilities

Qualifications

Experience

Name (4)

Job

Responsibilities

Qualifications

Experience

Name (5)

Job

Responsibilities

Qualifications

Experience

Name (6)

Job

Responsibilities

Qualifications

Experience

Name (7)

Job

Responsibilities

Qualifications
Experience

The following matters will be included in the Early Warning Register
CON-Warning-00005 Development of Weedscreen Digital Tool Del:

3 Time

The programme identified in the Contract Data is
Low Risk Screens Programme P05a.mpp

5 Payment

The *activity schedule* is
EA Low Risk Screens Resource Proposal V3.xlsx

Resolving and avoiding disputes

The *Senior Representatives* of the *Consultant* are

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

Name (2)
Address for communications

Address for electronic communications

X10: Information Modelling

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

Y(UK)1: Project Bank Account

The *project bank* is
[redacted]

named suppliers 



Contract Execution

Client execution

Signed Underhand by [PRINT NAME]

for and on behalf of the [REDACTED] [REDACTED]

[REDACTED]

30/06/2022

Senior Officer

Signature

Date

Role

Consultant execution

Signed Underhand by [PRINT NAME]

for and on behalf of [REDACTED]

[REDACTED]

23/06/2022

Director

Signature

Date

Role

NEC4 professional service contract (PSC)

Scope

Project / contract Information

Project name	EA Lower Risk Debris Screen Programme Midlands Area Inspection, Initial Needs Assessment and Outline Design
Project SOP reference	
Contract reference	
Date	10 Feb 2022
Version number	V004
Author	

Revision history

Revision date	Summary of changes	Version number
	Initial Draft for PE	1
	Initial Draft for consultant comments	2
	Initial Draft, DgC comment	3
14/06/2022	DgC comments - added f) under 1.5	4

This Scope should be read in conjunction with the version of the Minimum Technical 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:

Document	Document Title	Version No	Issue date
412_13_SD01	Minimum Technical Requirements	11	30/12/2021
	CIRIA Culvert, Screen and Outfall Manual, C786F, 2019,	1	2019

Details of the service

1. Description of the work:

1.1 Background

Following an asset failure, the *Client* recognised the need to review its national stock of debris and security screens for compliance with the design guidance that was current at the time of their construction.

- a) This National Review collected data for 2,549 screens and found that:
 - Group 1: Around 40% were designed in line with guidance
 - Group 2: Around 30% are non-compliant with guidance
 - Group 3: For around 30% compliance or non-compliance is unclear
- b) Focussing on groups 2 and 3, around 90 screens were categorised as higher risk screens (with greater than 50 properties at risk of flooding in the event of a blockage) and around 1,150 screens were categorised as lower risk screens (typically, though not exclusively with less than 50 properties at risk).
- c) In the Midlands Region, the *Client* has identified **300 lower risk debris** and security screens across the 3 areas. The *service* to be provided is to undertake the inspections, initial assessments and if instructed the outline design for 279 No. screens requiring either removal, replacement or modification.
- d) Assessments and any instructed outline designs are to be made using the CIRIA - Culvert, screen and outfall manual, C786F, 2019.

1.2 Overall project objective

The overall objective is to make the necessary improvements to the *Client's* debris and security screens such that they are:

- a) Legally compliant in respect of flood risk and public safety
- b) Safe and efficient to operate and maintain
- c) Low in whole-life financial and carbon cost

1.3 Objectives for the contract

The objectives of this contract are:

- a) To establish the degree of compliance of each screen with guidance relevant at the time of construction.
- b) Provide a map plotting screen locations and details to aid in subsequent works delivery packages.
- c) To determine compliance of each culvert (in terms of requirements for a screen) with the requirements of the CIRIA Culvert, Screen and Outfall Manual, C786F, 2019, completing the Initial Needs Assessment as per Appendix C.
- d) To confirm the ongoing need (or otherwise) for any screens on the culvert, within the requirements of the CIRIA Culvert, Screen and Outfall Manual, C786F, 2019, completing the Initial Needs Assessment as per Appendix C.
- e) To recommend from the options; remove, replace, modify, or no works (where the screen is deemed to be within (or better than) the parameters of CIRIA Culvert, Screen and Outfall Manual, C786F, 2019.
- f) To provide an initial recommendation of the work to be done at each culvert and provide an estimate of the associated construction and design costs. Completing the summary spreadsheet at Appendix D (following the instructions for completion on the instructions tab and as a minimum completing all mandatory inputs as detailed in tab 0. Cover Page.
- g) To provide a definitive list of the screens requiring improvement work and thereby form the basis of the subsequent outline design phase, and, subject to later addition to the *service*.

- h) If so instructed; as a compensation event, undertake outline design for screens identified for: removal, replacement or modification.

1.4 Tasks

The *Consultant* shall undertake the following tasks:

Data Gathering & Inspection

- a) Review the available information provided by the *Client* and identify where additional information is required to Provide the Service.
- b) Map the culverts onto a GIS location plan with screen details.
- c) Request *Client* representation at each site visit from the *Client's* Field and or Asset Management Team and, where not possible hold an initial phone call to gain local knowledge on how each screen operates and performs.
- d) Request any *Client*-held missing information from the *Service Manager* who seeks to obtain the information from EA personnel and management systems.
- e) Where it is not possible to obtain the necessary information, the *Consultant* shall use knowledge and experience to make rational assumptions about the missing information. Such assumptions are discussed and agreed with the *Service Manager* and documented by the *Consultant*.
- f) Undertake a site inspection of each culvert to inform the Initial Needs Assessment (INA) and initial work recommendation. Site access will be arranged by the *Client*, where difficulties arise, the *Consultant* must inform the *Client* in a timely manner to avoid delay to programme.

Initial Assessment

- a) Using the relevant procedures of CIRIA C786F (Appendix A2 for security screens; Appendix A3 for debris screens) the *Consultant* shall complete an Initial Needs Assessment (INA) to determine whether each screen is required.
- b) Determine, as far as is possible, whether each screen is compliant with the guidance that was current at the time of its construction. In addition, the *Consultant* shall determine whether each screen is compliant with CIRIA C786F guidance and current EA Good Practice Items (available on 'EA Debris screens programme' Sharepoint site, access available on request [EA Debris Screens Programme - Home \(sharepoint.com\)](#)). Where available, the information regarding each culvert will be provided by the *Client*, where the information is not available it is assumed that the *Consultant* will provide an assessment against CIRIA C786F guidance.
- c) Prepare an Initial Needs Assessment (see Appendix C for an example of what is required) for each culvert recommending the components of work needed to achieve compliance with CIRIA C786F for screening. Where the recommendation is to replace or modify an existing arrangement the *Consultant* shall propose the key features of new works including: configuration; minimum effective screen area (in m²); dimensions; bar spacing; etc., and describe any necessary modifications to supporting structures and other asset elements. The recommendations are based on the Initial Needs Assessment review and site inspection and exclude intrusive site investigations, detailed modelling or other hydraulic assessments. Taking into consideration the upstream and downstream assets and water course.
- d) For those screens not requiring any further work due to their compliance with (or better than) CIRIA C786F, the Initial Needs Assessment shall contain the rational analysis that supports the conclusion and be sufficient to allow the decision to be accepted by the *Client's* Design Authority (where the Design Authority will be appointed by the *Client* to provide independent external assurance).
- e) Complete the Summary Spreadsheet compiling all screens as detailed in Appendix D, as a minimum the mandatory fields as detailed in the spreadsheet (tab 0. Cover Page), following the process flow chart on tab marked Instructions.

- f) Compile a master list of screens required to be taken to outline design, to include:
 - Primary categories shall be: Remove, Modify, Replace, No Works.
 - Catchment area and location.
 - Sub categorise into simple or complex construction.
 - Comment on: Screen size, works to existing structure, water level monitoring, visual monitoring and telemetry requirements, H&S improvements, public and operator safety, buildability, and access complexity; as per the INA template.
 - Additionally, provide an initial assessment of potential further investigations and environmental assessment.
- g) Produce for each screen broad, high-level construction and design cost estimates including but not exclusively, requirements for temporary works, hydrology and telemetry requirements, access and welfare. Some costs (e.g., EA staff; Early Contractor Involvement (ECI); land; etc) are excluded and will be added by the *Client*. The costing model is included in Appendix D (tabs B. Design Costs and C. Works Costs). This is achieved by populating tab 7. Costing, within Appendix D.

1.5 Deliverables

The deliverables from the *Consultant* shall be:

- a) Location Map with a culverts and screen details (Aims ID, Screen Name, Area and Catchment Area, NGR and Postcode).
- b) The Initial Needs Assessments summarising the assessments described above and providing detail for the most likely preferred recommendation (remove/replace/modify/no works). The format and content of the reports shall be as the example provided in Appendix C or otherwise as agreed in writing with the *Client* at the start of the *Service*. The *Consultant* assumes one round of *Client* review of drafts and reissue of the reports as final deliverables.
- c) Complete the Summary Spreadsheet (Appendix D) providing key information for all the screens. The *Consultant* assumes one round of *Client* review of drafts and reissue of the spreadsheet as a final deliverable.
- d) A list of those debris and security screens that are to be taken into Outline Design.
- e) Completion of the Data Gathering Questionnaire for each screen as detailed in Appendix E.
- f) Small Projects Digital Mobilisation related task will be carried as per as per CEN Quote 14 - Small Project Development PSC Projec_32531_██████

1.6 Further Work

Subject to the findings of the INA, the *Consultant* may receive further instruction to:

- a) Prepare a high-level programme for the efficient completion of all improvement works using parameters and constraints provided by the *Client*.
- b) Enter updated data to the EA AIMS OM Asset management system.
- c) Undertake the Outline Design (see section 1.7 below).

1.7 Outline Design

Subject to being further instructed, the *Consultant* may be instructed to proceed with Outline Design of removal, modification, or replacement of some or all the screens based on the information detailed in the Initial Needs Assessments.

If so, the *Consultant* shall undertake the following tasks to suit the nature of the *services*:

- a) Undertake any further site visits necessary to adequately inform the preparation of the outline design.

- b) Specify, procure and manage detailed topographic survey of the existing screen/s, culvert, and areas necessary for the purposes of the outline design.
- c) Specify and supervise any ground investigations (to be procured and managed by the *Client*) necessary for the preparation of outline designs and produce interpretative reports, (Ground Investigation Contractor will produce Factual Report(s)).
- d) Undertake an expanded desktop preliminary environmental study to identify environmental constraints and opportunities, mitigation requirements and potential enhancements. Environmental surveys may also be included, depending on the likely lag between surveys and the start of the works.
- e) Following completion of serial D above, complete the required ecological surveys and produce associated reports, including protected species e.g., water vole, bats. A bat survey, undertaken by a suitably qualified person, will be undertaken to confirm the presence of bats within the surrounding area and the culvert area affect by ground investigation and construction activities.
- f) Determine the likely need for planning permission or listed building consent for each site and identify at what stage this will be secured/required, outline or detailed design stage
- g) Confirm the method of cleaning (manual, mechanical or automatic) in consultation with the *Client's* operational staff.
- h) Specify the required screen size (net effective area in square metres) and design envelope, from minimum size for CIRIA C786F compliance up to target size.
- i) Specify the required centre-to-centre bar spacing, bar length and inclination to the horizontal.
- j) Specify the required top level of the screen and number of stages.
- k) Identify other features needed for satisfactory functional (hydraulic) performance (e.g. lifetable sections, by-pass, and upstream primary screen).
- l) Identify other features needed for satisfactory operational performance (e.g. access, security or boundary fencing, signage, lighting, working platforms, fall or edge protection, harness attachments, debris storage, hard invert, water level or visual monitoring, lighting).
- m) Identify opportunities to improve operational efficiency or achieve whole-life financial or carbon cost savings within the constraints of CIRIA C786F.
- n) Undertake a hydraulic performance check in line with CIRIA C786F and confirm that the screen will not increase flood risk under a credible operating condition (with both permanent and temporary blockage). A hydraulic performance check spreadsheet is available on the 'EA Debris screens programme' SharePoint site, access available on request.
- o) To secure the acceptance of the *Client's* Design Authority, prepare a short technical note that demonstrates compliance with CIRIA C786F and, where compliance is not reasonably practicable, justifies any departures, assesses the risks associated with those departures and identifies mitigation measures.
- p) Prepare sufficient outline drawings, calculations and supporting documents to demonstrate constructability and geometrical fit into the space available, including but not limited to site location, general arrangement, a longitudinal section and typical cross-section.
- q) Prepare health and safety information; a designer's risk assessment, including design assumptions, known hazards, public safety considerations/assessment and any required improvements, a baseline PSRA for each site, temporary works and a single pre-construction information (PCI) for each site.
- r) Review the high-level INA capital cost estimate and update as appropriate.
- s) Prepare a high-level capital and operational carbon estimate.
- t) Submit and present the draft design to the *Client* for comment and amend to meet *Client* requirements (allowing up to two rounds of comments).
- u) Following acceptance / sign off of the proposed screen and supporting technical note by the *Client's* Design Authority, prepare final outline design drawings for the screen(s) containing sufficient detail to permit the pricing of the detailed design and building by the tendering supplier.

- v) Prepare tender documentation for design and build tenderers, to include performance specification, outline drawings, technical note covering design philosophy and buildability, relevant health and safety information and draft contract following the *Client's* standard template.
- w) For each screen, and in the context of the proposed work, the *Consultant* shall conduct an initial appraisal of the Water Framework Directive (WFD) data available for the site, assessing environmental constraints and opportunities and provide a high-level description of the work needed to respectively mitigate or realise these. The outcomes shall be entered into the Summary Spreadsheet, Appendix D.
- x) Consider viable alternatives to screening at each culvert (ie culvert, flood storage area or pumping station) and provide an initial summary description of the likely consequences of changing the existing arrangements, in respect of inspection/maintenance needs, operability, operator and public safety.
- y) The *Consultant* will identify the presence, record the location and notify the *Client* of Invasive Non-Native Species (INNS).
- z) For each screen undertake an environmental screening to allow completion of sheet 6A of Appendix D (Environmental).
- aa) Completion of Appendix F providing a Carbon Assessment for each screen instructed for outline design.
- bb) Identify any potential third party constraints, requirements that could impact on detailed design and the construction stage.
- cc) Specify, procure and manage detailed site utility surveys necessary for the purposes of the outline design.

1.8 Deliverables from Outline Design

The deliverables from the *Consultant* for outline design at each site shall be:

- a) Outline compliant design for each screen (CIRIA C786F).
- b) Topographic survey.
- c) Ground investigation Interpretative and Factual Reports.
- d) Preliminary environmental and WFD appraisal.
- e) Hydraulic performance check.
- f) Technical notes for Client's Design Authority.
- g) Outline Design Drawings, calculations and supporting documents.
- h) Designers risk assessment.
- i) Health and safety information (known hazards, public safety considerations/assessment, PSRA for each site, temporary works and a single pre-construction information (PCI) pack.
- j) Confirm method of cleaning.
- k) High-level capital and operational carbon estimate.
- l) Tender documentation.
- m) Indication for the requirement of planning at each site.
- n) Environmental screening.
- o) Utility Survey.
- p) Carbon assessment.

2. Existing drawings, site information or reports already available

In undertaking the *service* the *Consultant* takes account of the information listed below:

Table 2.1 Existing relevant information

	File Name	Date	Author	Format
SCREEN SPREADSHEET DETAILS TO BE REFERENCED			Sean Smithson	Excel

3. Specifications, standards and templates to be used

- CIRIA - Culvert, screen and outfall manual, C786F, 2019.
- Minimum Technical Requirements (412_13_SD01, Dec 2021).
- Environment Agency's SHEW Code of Practice (May 2018).
- EA Screen Good Practice Items (available on 'EA Debris screens programme' Sharepoint site, access available on request).
- Appendix C: Initial Needs Assessment (Example).
- Appendix D: Summary Spreadsheet.
- Appendix E: Data Gathering Questionnaire.
- Appendix F: Carbon Assessment.
- Appendix G: Midlands Lower Risk screens data spreadsheet.

4. Constraints on how the Consultant Provides the Service

- Health and safety is the number one priority of the *Client*. The *Consultant* shall promote and adopt safe working methods and shall strive to deliver solutions that provide optimum safety to all.
 - All *services* are to be undertaken in accordance with the *Client's* SHEW Code of Practice (May 2018).
 - In addition to normal safety requirements, the *Consultant* shall take appropriate measures, following Public Health England Guidance, to protect the public, the *Consultant's* and *Client's* staff from COVID-19.
 - The *Service Manager* shall provide the *Consultant* with details of known hostile sites or known contamination risk.
- The *Consultant* shall make use of existing information and avoid any unnecessary duplication during the delivery of this *Service*.
- The Initial Needs Assessment (INA) is for the culvert on which the screen lies, an assessment of the site and not just the existing screen. Where reference is made in this Scope to 'screen' it is strictly each culvert, flood storage area or pumping station which is assessed. This may involve assessment of the need for more than one screen (e.g. there may be a need for an outlet screen or separate screen on a by-pass), confirming how many screens and where they are located.
- The Initial Needs Assessment (INA) specifically excludes the following:
 - Hydraulic Modelling (The INA utilises hand calculations as detailed in the CIRIA C786F guidance)
 - Intrusive site investigations
 - Internal survey of culverts
- The *Client* will share information with the *Consultant* through the agree methods including Sharepoint and ASite. Where information is not available the *Consultant* should inform the *Client*.

5. Requirements of the programme

- a) The *Consultant* shall provide a programme that is compatible with Microsoft Project Professional 2016.
- b) The *Consultant* shall revise the programme monthly in advance of the progress meetings.
- c) The *Consultant* shall allow 2 weeks for the *Client* to comment on each of the draft Initial Needs Assessments and the completed Summary Spreadsheet (Appendix D).

6. Meetings, Site Visits and Reporting

- a) The *Consultant* shall attend the following meetings:
 - A project start-up meeting with other key project team members including the *Client's* Design Authority and *Client's* Area Senior User Representatives. This will be arranged by the *Service Manager*. The *Service Manager* shall set the agenda, record and issue minutes of the Project Start-up Meeting.
 - Up to 3 meetings with the *Client's* Ops/AP staff to discuss each culvert prior to the site inspection and completion of the INA but after the receipt from the *Client* of the Data Gathering Questionnaire. The meetings should be held on Teams where photographs, maps and drawings can be shared. This will be arranged by the *Service Manager*.
 - Site inspections. These will be arranged by the *Consultant* in consultation with the *Client's* Ops, Asset Performance and the *Client's* Field Teams. It is assumed that each visit will be completed by 2 No. Consultant staff (with the *Client's* Ops, Asset Performance and Field Teams as appropriate) and that 5 No. sites will be visited in a single day.
 - Up to 3 meetings with *Client's* Ops/AP/Design Authority once the Initial Needs Assessments are completed. This will be arranged by the *Consultant*.
 - Monthly progress meetings. This will be arranged by the *Consultant*. The *Consultant* shall set the agenda, record and issue minutes of the key decisions and actions arising from the progress meetings. Minutes are issued within one week of the meeting being held. Early Warning meetings – held immediately after the progress meetings or as and when an issue occurs.
- b) Meetings other than those requiring or incorporating a site visit are virtual, using Microsoft Teams.
- c) The *Service Manager* shall set the agenda, record and issue minutes of the Project Start-up Meeting.
- d) The *Consultant* shall maintain weekly verbal contact with the *Service Manager* such that the *Client* is fully informed of progress and issues;
- e) The *Consultant* shall co-operate with the *Service Manager* in their role of BIM Information Manager
- f) The *Consultant* shall produce a monthly progress report as required by the *Client*.
- g) The *Consultant* shall produce a financial report and chair an update meeting no later than the last Thursday of each month of each month. This will include a breakdown of all expenditure to date and forecast future expenditure. In addition, this will identify and provide an estimated valuation of all outstanding compensation events and an estimated value to completion.

7. Completion

- a) The following are absolute requirements for Completion to be certified; the *Consultant* shall:
 - Transfer to the *Client* of BIM data as detailed in the Information Requirement (IR) and BIM Execution Plan (BEP).

8. Data and Information Management

- a) Data and information management and intellectual property rights
 - All of the data listed as being supplied to the *Consultant* as part of this study remains the IP of the *Client*.
- b) Data custodianship
 - The data custodian for project deliverables from this commission will be the *Client's* relevant Area PSO team.
- c) Licensing information
 - Licences for LiDAR Data, Ordnance Survey mapping, model, survey, hydrometric and historical data will be provided to the *Consultant* upon award of this commission.
- d) Data management and metadata
 - The *Client* populates a metadata database called the Information Asset Register (IAR). It is a requirement that all information produced by modelling work is appropriately tagged with metadata. The *Client* will supply an IAR spreadsheet (and any supplementary local metadata requirements if appropriate) where any relevant metadata can be recorded and handed over on project completion.
- e) Data security
 - All model and survey information will be provided to the *Consultant* in an encrypted format (using WinZip 128 bit encryption) according to *Client* data security policy. It is expected that once the commission is completed, all the original data sent to the *Consultant*, which is classed as commercially sensitive, is returned in an encrypted format using WinZip 128 bit encryption.
 - Project deliverables such as model files, survey data or anything of a personal nature such as questionnaires or address data must also be returned in an encrypted format using WinZip 128 bit encryption.
- f) *Client's* Advisors
 - The *Client* has a number of advisory departments. Instructions will only be deemed enacted from them when they are confirmed by an Instruction from the *Service Manager*.
- g) Continuous improvement
 - The *Client* hosts the 'EA Debris screens programme' Sharepoint site with the aim of sharing good practice between framework consultants and driving continuous improvement. The *Client* will provide access to the *Consultant* on request. The *Consultant* may use the good practice notes and tools during the performance of the *Services*. The *Consultant* will share knowledge and experience of good practice and provide feedback on existing good practice materials.

Appendices

Appendix A BIM Protocol – Production and Delivery Table

The *Consultant* shall adhere to the *Client's* Information Requirements (IR) framework level minimum technical requirements.

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

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

The *Consultant* shall register for an Asite Account and request access to the project workspace to view the IDP.

Appendix B – Example Initial Report JBA (National Example)

Appendix C – Example Initial Report Atkins (Example)

Appendix D – Summary Spreadsheet

Appendix E – Data Gathering Questionnaire

Appendix F – Carbon Assessment

Appendix G – Midlands Lower Risk Debris Screen Area Data