

NEC4 engineering and construction contract (ECC) Scope

Project / contract information

Project name	Kenwick Road Culvert
SOP reference	
Contract reference	
Date	7 th December 2021
Version number	3
Author	

Revision history

Revision date	Summary of changes	Version number
25/11/21	Construction Issue Scope	1
6/12/21	Minor Updates	2
7/12/21	Minor Updates	3

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 prevails. The works are 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	Version 9	29/08/18



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S 100 Description of the works

S 101 Summary of the works

1. The *works* are to repair the Kenwick Road Culvert structure in LNA region, in accordance with the Scope and specification document produced by Arup (attached in Appendix 3).
2. Return the site to the target condition as described in the specification document.

S 101 Purpose/Objective of the Works

The objective for Kenwick road culvert is to return the site to target condition in accordance with the Client's T98 inspection guide, by repairing the defects identified in the structural inspection in Appendix 3.

S 102 Description of the works

Background

The Kenwick Road Culvert is a part of a Stewton Beck watercourse. The length of culvert carries the Stewton Beck beneath The White Horse Inn garden and carpark areas, Kenwick Road (carriageway and pavement), Albany Road junction with Kenwick Road and Florence White Avenue junction with Kenwick Road. There are seven intermediate manholes along the route of the culvert.



Length 3 (brick arch culvert) appears to be the oldest section of the culvert as this runs beneath Kenwick Road. CCTV and structural inspection has been carried out in the past and are available in Appendix.

The inspections identified that Length 3 is in a poor condition. The culvert is damaged at numerous places, especially where services have been broken through, causing sections of missing bricks and contributing to debris in the culvert. It was also identified that unsuitable repairs had been carried out using shuttering plywood. A hole in the soffit was noted near MH3, as well as spalling, missing bricks and mortar loss. Repairs were made, using plywood or plastic board, but these are unsuitable. The bricks around the repairs were found very loose.

The inspection from the inlet to MH4 has identified that Length 1, 2 and 4 were in fair to good condition. In Length 2, it was noted that a service pipe entering/exiting the culvert has resulted in exposed reinforcement and deterioration of grout.

Based on these inspections, a number of specific defects and recommendations for repairs works has been produced. This is summarised in Table 1 below. For further details regarding the structural inspection, defects and recommended repair works, refer to Structural Inspection and CCTV reports (Kenwick Road Culvert Inspection 2021, Kenwick Road CCTV Report S60 v1.0 2017) in Appendix 3

The *works* are to repair the damages as recommended in the specification document provided in Appendix 3. The summary of the *works* is described in the table below, with full specification given in Appendix 3.

Defect	Section of Culvert	Description	Summary of <i>works</i> and outcomes required (methodology to be determined by <i>Contractor</i>)
Defect 1	Length 2 – Reinforced concrete box culvert	Broken area on both sides of culvert where service enters/exits, exposed corroded reinforcement, grout around pipe partially failed	<ul style="list-style-type: none"> ▪ Scabble, clean and treat reinforcement to return it to a suitable condition for structural reinforcement. ▪ Repair damaged concrete on both sides of the culvert. ▪ Replace failed grout around the pipe.
Defect 2	Length 3 – Brick arch culvert	Hole in soffit, unsuitable repair using plastic board	<ul style="list-style-type: none"> ▪ Remove unsuitable repair and replace with new brick masonry ▪ Missing bricks to be replaced, carry out re-grouting around incoming services
Defect 3	Length 3 – Brick arch culvert	Service crossing causing damage to bricks	<ul style="list-style-type: none"> ▪ Failed mortar joints to be raked out and repaired, missing bricks to be replaced with new brick masonry, re-grouting around incoming services ▪ Damaged brick to be removed and replaced with new brick masonry
Defect 4	Length 3 – Brick arch culvert	Service crossing causing damage to bricks, unsuitable repair using plywood Loose or missing bricks	<ul style="list-style-type: none"> ▪ Unsuitable repair removed and replaced with new brick masonry

			<ul style="list-style-type: none"> ▪ Missing bricks to be replaced, re-grouting around incoming services
Defect 5	Length 3 – Brick arch culvert	Spalling, missing bricks, mortar loss at several location throughout Length 3	<ul style="list-style-type: none"> ▪ Failed mortar joints to be raked out and repaired, missing bricks to be replaced with new brick masonry ▪ Damaged brick to be removed and replaced with new brick masonry
Defect 6	Any length	Redundant services	<ul style="list-style-type: none"> ▪ Communicate with utility providers to ID and agree redundant services ▪ Remove redundant services and make good entry and exit holes

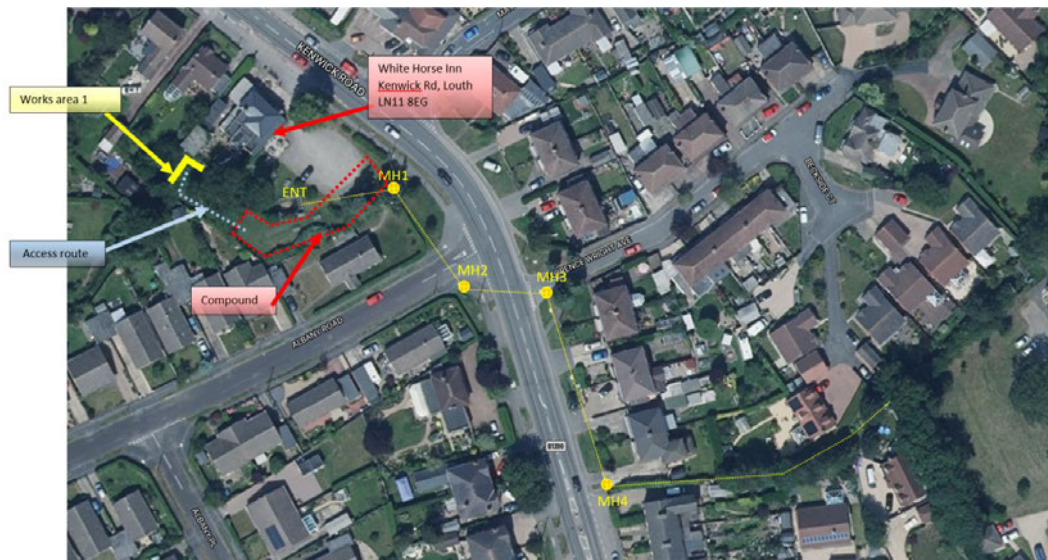
1. The *Contractor* constructs the *works* in accordance with the latest version of *Client's* code of practice, title Safety Health Environment Wellbeing Code of Practice, (SHEW COP) dated May 2018.
2. The *Contractor* will arrange the road closure and obtain all necessary permits required to deliver the *works*.
3. The *Contractor* undertakes the *works* using methods that result in positive environmental outcomes and demonstrate mitigation has been considered and applied as necessary.

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

S 201 General constraints

1. Use of the site

The *works* will be carried out in the Culvert (underground structure) that lies away from most private properties. The *boundaries of the site* are the extents of Culvert shown in the Picture 1 below.



Picture 1

Prior to the possession of the *site*, the *Client* supplies the *Contractor* with the known names and addresses of relevant neighbours affected by the *works* to liaise with and letter drop to.

The *Contractor* informs the *Client* of the required possession date one month prior to the possession of the site. The *Client* issues statutory Notices of Entry for all private land within the Site at least 7 days before the possession dates. Additional Working Areas required by the Contractor outside of the Site are arranged and provided by the *Contractor*.

A site compound area has been proposed for use by the *Contractor*. The proposed site compound is located on the green behind the White Horse Inn car park. See Picture 1

The *Client* negotiates welfare compound with the owner of White Horse Inn.

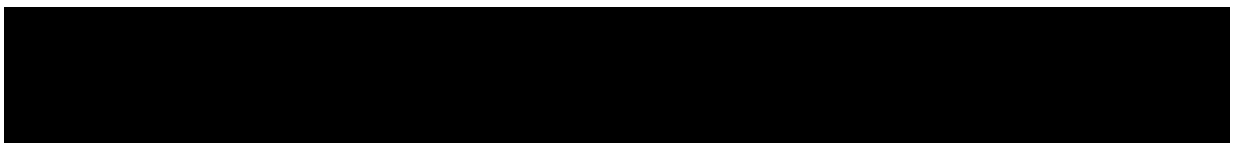
The *Contractor* confines their construction operations to the *working area*.

The *Contractor* manages the public right of access footpath along Kenwick road.

The *Contractor* keeps all affected owners and occupiers informed of the effect of the *works* on their land as required by the *Project Manager*.

The *Contractor* keeps records of the dates of their first entry onto and departure from all property and lands of each owner and occupier (including public highways, footpaths and thoroughfares) together with the dates of the erection and removal of all temporary fencing.

2. Access to the Site



No other access is used or constructed without the *Project Manager's* written acceptance.
The *Contractor* does not enter or use the Site for any purpose not connected with the *works*.

3. **Possession of the Site**

Shortly before first entry, the *Contractor* undertakes 'Pre-start condition surveys' of all highways, property and land as agreed with the *Project Manager* (including trees, boundaries, crops and any other features which may be affected by the work) within the Boundaries of the site and of the access route(s).

The Pre-start condition surveys shall consist of digital photographs with an inventory, and a pdf location map of the photos. Copies of the survey shall be made and provided to the following:

- a) *Client* (electronic format);
- b) *Project Manager* (electronic format);

The *Contractor* undertakes similar 'Post-completion condition surveys' when the *works* are complete and on dates agreed with the *Supervisor*. Copies of the 'Post-completion condition surveys' are distributed in the same format and to the same recipients as the Pre-start condition surveys.

The *Contractor* undertakes the condition surveys in conjunction with the *Project Manager*.

The *Contractor* gives at least 5 working days' notice to the *Project Manager* and *Supervisor* prior to any condition survey.

4. **Interfaces with *Client* operations**

The Site contains a *Client* operational site, Kenwick Road weed screen. The *Contractor* must allow access to the weed screen for the *Client's* Field Operations Team throughout the *works*.

5. ***Client* specified policies and procedures**

The *Contractor* adheres to the *Client* policies and procedures as set out in the *Client's* documents:

- SHEW COP; and
- Minimum Technical Requirements.

The *Contractor* adheres to the specific policies and procedures for working in the Culvert:

- Expected to contain Emergency rescue Plan/Permit to Work/Full BA and rescue kit at dispense for working inside the Confined space.

6. [REDACTED]

It is important that *Contractors* communicate with local residents, businesses and councils well in advance of the start of a project and maintain that communication while the *works* continue

The *Contractor* ensures adequate physical barriers, screening and signage around the *works* to prevent access into the *works* by general public.

The [REDACTED]

7. Third Party Complaints and Claims

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

The *Contractor* and *Project Manager* notify each other without delay of all complaints, claims or warnings of intended claims which they may receive.

The *Contractor* deals promptly with any complaints, claims, damage or injury by or to owners, operators or occupiers.

The *Contractor* keeps the *Project Manager* informed as to the progress made towards settlement of claims.

8. Project Site Accommodation

The *Contractor*, *Project Manager* and *Supervisor* share Site accommodation, offices and facilities. The *Contractor* provides accommodation and services as described in the Minimum Technical Requirements. The accommodation is to be sited to the acceptance of the *Project Manager*.

9. Deliveries

The *Contractor* plans deliveries to be within working hours. If the *Contractor* requires deliveries outside of working hours they will seek acceptance by the *Project Manager* prior to the delivery.

10. Working hours

The *Contractor* working hours are noted in the *Client's* Minimum Technical Requirements. The *Contractor* agrees the working hours with the *Client* and Lincolnshire County Council prior to the start of the *works*.

The *Contractor* does not undertake night work during the *works*, unless acceptance is given by the *Project Manager*. If the *Contractor* requires night working, they must appoint an ecologist to assess the impact of that activity on bats, see Environment Action Plan and Bat survey reports for further details.

11. Parking

The *Contractor* arrange for their own parking for the *works* within the site compound or at agreed location.

12. Site tidiness and branding

The *Contractor* keeps the working area, Site offices, Site yards and parking areas tidy and promptly removes rubbish, waste and surplus. Materials, Plant and Equipment are positioned, stored and stacked in a safe and orderly manner. The Site outside the

working area, Site offices and Site yards is kept free of construction debris and suitable for use by the public. Materials contaminated by oil and spillages or otherwise polluted due to the *Contractor's* activities shall be immediately removed and disposed of according to the statutory regulations.

13. Storage of plant and materials

All materials are carefully and properly stored in accordance with the suppliers' or manufacturers' instructions and directions.

Any materials that are damaged, or that have deterioration for any reasons whatsoever, are not incorporated in the *works*, are removed from the Site forthwith and are replaced with materials that comply with the Scope.

The *Contractor* does not make use of public highways, thoroughfares or footpaths for depositing and storing Plant and Materials but provides the proper storage and protection of all Plant and Materials on the Site at locations accepted by the *Project Manager*. All such provisions shall be removed at Completion and any disturbance made good and returned to original condition.

The *Contractor* maintains a detailed record of all materials received on the Site and in his stores and working areas. The *Contractor* makes the records available to the *Project Manager* and *Supervisor* at such times as the latter may require.

14. Noise and vibrations

Noise and vibration levels are limited to those noted under the *Client's* Minimum Technical Requirements.

It is understood that noise and vibration is inevitable with the *works* and appropriate monitoring should be undertaken prior to commencement and during the *works*.

The *Contractor's* monitoring shall include:

- a) Baseline building conditions surveys;
- b) Baseline monitoring – to establish the current situation against which to review any measurements;
- c) Task monitoring – during activities to record the levels of noise and vibration for comparison and use in any possible discussions with adjacent land owners.

15. Pollution, ecological and environmental impacts

The *Contractor* produces, maintains and adheres to an Environment Management Plan for the *works* and provides this to the *Project Manager* and *Supervisor*.

The *Contractor* maintains, adheres to and updates the Environment Action Plan throughout the duration of the *works*.

16. Waterways level Information

The *Contractor* can access waterways level information for the Stewton Beck watercourse from the *Client* or appoint a person to monitor the flow.

17. Interference with any access to property, apparatus or service

Before interfering with any access to property, apparatus or service, the *Contractor* identifies its access requirements. The *Contractor* notifies the *Project Manager* and the relevant owners and occupiers in writing 14 days in advance of any such interference and confirms to the *Project Manager* if alternative arrangements have been agreed.

The *Contractor* takes into particular account the access and service requirements of those with special needs.

18. Licences and Consents

The *Client* provides the following consents, the *Contractor* must adhere to the conditions

- a) Notice of Entry.

The *Contractor* confirms their requirement for land access and provides an accompanying marked up drawing at least one month prior to the access being required.

The *Contractor* provides the following consents, the *Contractor* secures the consent and discharges any conditions associated with these consents:

- a) Environmental Permit – Temporary works;
- b) Ecological survey to be carried out (e.g. presence of bats in Culvert)
- c) Road closure;
- d) Public Right of Way Diversion (PRoW 121).

19. Use (or non –use) of explosives

Explosives are not to be used on the Site.

S 202 Confidentiality

- 1. 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.
- 2. The *Contractor* may publicise the services only with the *Client's* written permission.

S 203 Security and protection on the site

- 1. The *Contractor* protects the Site, the *works*, products, materials, and any existing structures affected by the works from damage and theft.
- 2. The *Contractor* shall keep the public fully informed of the *works* and of the dangers present on *Site*.
- 3. The *Contractor* is responsible for the security of the Working Areas, Site offices, Site yard and any other facilities deemed necessary by the *Contractor*.

S 204 Protection of existing structures and services

- 1. The *Contractor* protects the existing Culverts and manholes.

2. The *Contractor* takes reasonable measures to avoid damage to existing roads, property and other works caused by their operations. The *Contractor* is responsible for any damage to existing roads, properties and other works caused by their operations. Prior to work commencing on Site the *Contractor* provides, for acceptance by the *Supervisor*, a photographic record of the condition of the existing roads and any other existing works which may be affected by their operations. On Completion of the *works*, the *Contractor* returns the roads and any other affected existing works to a condition not inferior to that pertaining at the *access date*.
3. The *Contractor* carries out their own utility undertakers searches protects buried services that are affected by the *works*.
4. The *Contractor* liaises with all relevant Statutory Undertakers, the Highway Authority and other owners of apparatus before commencing any excavations and satisfies himself as to the exact position of existing apparatus which may affect or be affected by the construction of the *works*. The *Contractor* complies with all specific requirements from these third parties.
5. Where any portion of the *works* is close to, across or under any existing apparatus of Statutory Undertakers, the Highways Authority, the Terminal Companies or other parties, the *Contractor* obtains all necessary licences and consents and temporarily supports and works around, under or adjacent to all apparatus in a manner designed to avoid damage, leakage or danger and to ensure uninterrupted operation.
6. Should any leakages or damage to existing services, highways or apparatus be discovered, the *Contractor* immediately notifies the Statutory Undertaker, Highways Authority or owner concerned, as appropriate, and the *Project Manager*. The *Contractor* affords every facility for the repair or replacement of the apparatus affected unless otherwise specified.
7. Before mechanically excavating close to services, the *Contractor* undertakes full preliminary investigations by means of electromagnetic and other locating devices and hand-dug trial holes to locate the existing services. The *Contractor* notifies the *Project Manager* of the results of these investigations without delay.
8. If require, the *Contractor* procures and manages the diversions for the *works*.
9. The *Contractor* notifies the *Project Manager* in advance of any diversion or removal of apparatus, which the *Contractor* requires for their own convenience or because of their proposed methods of working. The *Contractor* arranges (including obtaining any necessary permissions, notices, licences or consents) and undertakes any such additional diversion or removal of apparatus but complies with any requirements of the *Project Manager*.
10. The *Contractor* provides a record drawing of services and apparatus encountered, highlights the differences from the information provided by the Statutory Undertaker and Highway Authority and issues this to the *Project Manager*.

S 205 Protection of the works

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

S 206 Cleanliness of the roads

1. The *Contractor* agrees the standard of road cleanliness they are to maintain with Lincoln County Council and informs the *Project Manager* and *Client* of any agreement.

S 207 Traffic Management

1. The *Contractor* produces and enacts a traffic management plan for the *works*.
2. The *Contractor* is responsible for traffic safety and management, including obtaining road closure, opening or traffic signals consents and nominates one of their Site staff to be responsible for all related activities.
3. The *Contractor* provides the *Project Manager* with an up-to-date list of 'Supervisors' and 'Operatives' who have achieved accreditation in the relevant activities in the New Roads and Street Works Act 1991 or The Street Works (Northern Ireland) Order 1995.

S 208 Control of site personnel

1. The *Contractor* staff act in accordance with the *Client's* SHEW Code of Practice.

S 209 Site cleanliness

1. The *Contractor* undertakes the *works* in accordance with the *Client's* SHEW Code of Practice.

S 2010 Waste materials

1. The *Contractor* undertakes the *works* in accordance with the *Client's* SHEW Code of Practice and the Minimum Technical Requirements (CL 1.41).

S 2011 Deleterious and hazardous materials

N/A

S 2012 Environmental Restrictions

1. The *Contractor* undertakes the *works* in accordance with the *Client's* SHEW Code of Practice.
2. The *Contractor* undertakes the *works* in accordance with the *Client's* NEAS environmental requirements.
3. The key restrictions for the *Contractor* to manage are highlighted below:
 - a. Site has potential to inhabited bats, see the bat survey reports for further details. Pre-construction checks are required before demolition of structures and trees;
 - b. *Contractor* to undertake a pre-construction ecological walkover for protected species, in particular, bats and etc., by a qualified ecologist;
 - c. *Contractor* to implement CIRIA Water Pollution Guidelines to prevent accidental release of pollution into the waterways;
 - d. *Contractor* to maintain a Site Waste Management Plan.

S 2013 Archaeological Requirements

N/A

S 300 *Contractor's design*

S 301 *Design responsibility*

1. The *Client* engaged Arup to undertake the design/ specification of Kenwick road Culvert repairs. The *Contractor* is responsible for the design of temporary works if required. The temporary works design shall comply with the current British standards.

S 400 Completion

S 401 Completion definition

1. The following are absolute requirements for Completion to be certified, without these items the *Client* is unable to use the *works*. The *Contractor* is to provide the following prior to Completion:
 - a. Provide all information to the *Client* and Principal Designer to enable their compiling of the Health and Safety File, including:
 - i. Full set of Completion records, which are in accordance with the *Contractor's* quality management system and accepted by the *Supervisor*;
 - ii. A full set of "As Built" Surveys signed off and agreed with the *Supervisor*;
 - iii. 1 hard copy of Operating and Maintenance Manuals and one electronic version;
 - iv. Digital copies of photographs of all stages of the *works* (titled and dated);
 - b. Completed Environmental Action Plan including environmental auditing/reporting;
 - c. Issue of Testing Report to the *Project Manager*;
 - d. Completion of all testing, training and the works handover meetings with the *Client*;
 - e. Completion of the Site acceptance tests;
 - f. Handover of all keys to any security padlocks supplied as part of the permanent works;
 - g. Population of the *Client's* latest version of the Project Cost Tool, or its successor;
 - h. Transfer to the *Client* databases of BIM data;

S 402 Sectional Completion definition

1. N/A.

S 403 Training

N/A

S 404 Final Clean

1. The *Contractor* cleans the completed *works* and removes all equipment not required for incorporation into the permanent works including; temporary structures and access, materials, Site accommodation, construction debris, signage, protection, plant, machinery and tools.

S 405 Security

1. The *Contractor* liaises with the *Project Manager* to remove locks, access restrictions, password protection etc. and replace with the security arrangements to be agreed with the *Project Manager* prior to the Completion Date.

S 406 Correcting Defects

1. Access for the correction of any Defect after Completion shall be arranged by the *Client*.

S 407 Pre-Completion arrangements

1. Prior to any *works* being offered for take-over or Completion the *Contractor* arranges a joint inspection with the *Supervisor, Project Manager and 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 Date.

S 408 **Take over**
1. N/A

S 500 Programme

S 501 Programme requirements

1. The programme complies with the requirements of NEC ECC Clause 31.2 and includes alignment and submission of the BEP and Master Information Delivery Plan (MIDP).
2. The programme shall be supplied in pdf and native format in accordance with the *Client's* BIM standards.

S 502 Programme arrangement

1. Not used.

S 503 Methodology statements

1. The expected issue date of all method statements should be provided to the *Project Manager* and *Supervisor*. All method statements are issued at least two weeks prior to their use on site for comment and acceptance.

S 504 Work of the *Client* and Others

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

S 505 Information required

1. Not used.

S 506 Revised programme

1. The *Contractor* submits a full explanation of any changes in sequencing and duration of the work activities from the previous accepted programme when they submit a new programme.
2. The *Contractor* provides a monthly update on the progress against the accepted programme. The monthly update shall be provided on or before the 8th day of each month to assist the *Client* with their reporting.

S 600 Quality management

S 601 Samples

1. N/A.

S 602 Quality Statement

1. The *Contractor's* Quality Control Manager is to certify that activities have been carried out in accordance with the contract.

S 603 Quality management system

1. The *Contractor* is to operate a Quality Management System complying with BS EN ISO 9002.

S 604 BIM requirements

1. The *Contractor* assigns a member of their project team as their BIM Information Manager for the project.
2. The *Contractor* follows the *Client's* BIM standards and Employer's Information Requirements.

S 700 Tests and inspections

S 701 Tests and inspections

1. Testing and inspection of Materials and *works* is undertaken by the *Contractor* in accordance with the Scope, specifications and the *Client's* Minimum Technical Requirements.
2. The *Contractor* produces a test report showing the test undertaken and the result, provides this to the *Project Manager* at least 2 weeks prior to the Completion date.

S 702 Management of tests and inspections

1. The *Contractor* is responsible for the testing and inspection of the *works*.

S 703 Covering up completed work

1. The *Contractor* is responsible for the protection of the *works* until the Completion Date.

S 704 Supervisor's procedures for inspections and watching tests

1. The *Supervisor* can watch and observe all tests undertaken by the *Contractor*.

S 800 Management of the works

S 801 Project team – Others

- a. N/A

S 802 Communications

1. The scope of the *works* is discussed at a pre-start meeting arranged by the *Project Manager*.
2. Fortnightly progress meetings are held and chaired by the *Project Manager* who provides an agenda and minutes the meeting.
3. Weekly progress reports are prepared in pdf version by the *Contractor* and are provided to the *Project Manager* for distribution to the project team by the 8th day of each month. The progress report shall include those details listed in the Minimum Technical Requirements CI 1.25.
4. Contractual communication is undertaken via the FastDraft platform that the *Client* provides access to. The templates for use in Contract Communication are provided on FastDraft.
5. Communications to and from the *Contractor* are defined by the *Project Manager*, and storage of project files shall be administered through SharePoint common data environment, which the *Client* provides access to.
6. The *Contractor*, *Project Manager* and *Supervisor* shall attend a fortnightly issues meeting, chaired by the *Project Manager*.
7. The *Contractor* shall provide a summary 2 week look ahead programme which shall be updated and issued on a weekly basis to the *Project Manager* and *Supervisor*.

S 900 Working with the *Client* and Others

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

1. N/A

S 902 Co-operation

1. The *Contractor* understands the importance of and assists the *Client* to establish and maintain good public relations during the course of the contract and thereafter. Public relations activities by the *Client* include keeping the general public informed; publicising the project and the work of the *Client* in general; liaising with local residents, businesses and landowners, and dealing with complaints. The *Contractor* informs the *Client* immediately of any complaint, incident or accident.
2. The *Contractor* notifies the *Project Manager* of all press or media enquiries and refers them to the *Client*.
3. The *works* are undertaken in accordance with Clause 1.27.10 (Noise Control and Working Hours) of the Minimum Technical Requirements.
4. The *Contractor* cooperates with the Lincoln County Council, who maintains the Kenwick Road.
5. The *Contractor* is required to co-operate with Others in obtaining and providing information which they need in connection with the *works*.

S 903 Co-ordination

1. The *Contractor* project manager is responsible for communication with the *Client*, *Project Manager* and *Supervisor*.
2. The *Contractor* coordinates with the Principal Designer throughout the *works* in line with their duties under the CDM Regulations.

S 904 Authorities and utilities providers

1. No service diversion is envisaged at this stage, however if required the *Contractor* is responsible for the utilities and service diversions.
2. The *Contractor* complies with HSE Guidance Notes, Statutory Undertakers and private company requirements when working in the vicinity of their apparatus.
3. The *Contractor* is responsible for coordinating and procuring diversions with Statutory Undertakers.

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*

1. The *Contractor* provides items listed in Clause 1.1 of the *Client*'s Minimum Technical Requirements.
2. The *Contractor* provides details of its business continuity arrangements for data and systems, which are appropriate to their integrity, availability and confidentiality. The *Contractor* defines how the business continuity plans are to be maintained and tested.

S 1100 Health and safety

S 1101 Health and safety requirements

1. The *Contractor* shall be aware of the latest version of the *Client's* (Environment Agency's) 'Safety, Health, Environment & Well Being Code of Practice' and fully comply with its requirements.

S 1102 Method statements

1. Method statements and risk assessments shall be submitted to the *Principal Designer* and *Supervisor* for comment at least 4 weeks before the activity is programmed to commence unless agreed otherwise with the *Project Manager*.
2. The *Contractor* updates and addresses the comments on the Method statements and risk assessments, and resubmits the updated document for acceptance before starting the activity. It is expected that Method statements and risk assessments are required for the following activities as a minimum:
 - a. Site set up;
 - b. Interface with:
 - i. *Client*;
 - ii. Lincoln County Council;
 - iii. Public;
 - c. Road Closure;
 - d. Footpath diversion;
 - e. Repair works, including Shot Crete;
 - f. Confined Space works;
 - g. Concrete works;
 - h. Lifting plans;
 - i. Over Pumping;
 - j. reinstatement; and
 - k. Other method statements as listed in the Environmental Management Plan.

S 1103 Legal requirements

1. The Construction (Design and Management) Regulations 2015 (the CDM Regulations) apply to the *works*.
2. The CDM Principal Designer is: Brian Smith.
3. The *Contractor* copies to the *Project Manager* all correspondence with the CDM Principal Designer.

S 1104 Inspections

1. The *Contractor* makes all health and safety records available to the *Project Manager* for inspection if required.

S 1105 Emergency Plans and Access

1. The *Contractor* produces an emergency plan for the scheme and incorporates the *Client's* emergency procedures for the works in confined space.

S 1200 Subcontracting

S 1201 Restrictions or requirements for subcontracting

1. The *Contractor* submits their proposed procurement procedure to the *Project Manager* for acceptance. It is anticipated that all contracts will be back to back with the main contract. Where this is not the case, then acceptance will be required prior to entering into that contract. The procedure will not be accepted if it:
 - a. does not follow best practice principles;
 - b. conflicts with the need to ensure transparency in the disbursement of public funds; or
 - c. does not meet other requirements stated in this contract, such as the SHEW Code of Practice.

S 1202 Acceptance procedures

The *Contractor* shall send through a list of proposed subcontractors to the *Project Manager* for acceptance prior to the contract start date and updates as required.

S 1300 Title

S 1301 Marking

No specific requirements.

S 1302 Materials from Excavation and demolition

1. N/A

S 1400 **Acceptance or procurement procedure (Option C)**
Not Used

S 1500 Accounts and records (Options C and E)

S 1501 Additional Records

1. The format and presentation of records are reviewed and accepted by the *Project Manager*.
2. The contract will be managed through FastDraft and all contract communication will be undertaken through this portal.
3. The following additional records are to be kept by the *Contractor*:
 - a. Timesheets and site allocation sheets, which should be submitted with monthly applications.
 - b. Equipment records.
 - c. Forecasts of the total Defined Cost.
 - d. Specific procurement and cost reports.
4. In addition to the photographs taken during the 'Pre-start condition surveys', the *Contractor* takes regular photographs of the *works* as it progresses and as further required by the *Project Manager* and/or *Supervisor*:
 - a. The photographs are taken by a competent photographer using a digital camera;
 - b. All photographs are date stamped, georeferenced and filed electronically in a chronological and identifiable manner;
 - c. The photographs are submitted in electronic format to the *Project Manager* and *Client* on a fortnightly basis and uploaded on to the *Client's* SharePoint tool. All photographs should be zipped up and labelled as the Year, Week (1,2,3 etc), Day;
 - d. Upon completion, the *Contractor* is to ensure that all photographs have been passed to the *Project Manager*. They become the property of the *Client*. The *Contractor* ensures that no use is made of the photographs without the written acceptance of the *Client*.
5. The *Contractor* supports the requirements of the *Client* in providing video / DVD material to help support communications. This material shall cover all operations required to deliver the works to support the project team in raising awareness of the project activities.
6. The *Contractor* may incorporate the use of drones for monitoring and progress reporting purposes. Drones that are used must be operated by licensed operators. Any footage taken will be provided copyright free, in an agreed format, to the *Client* for their use in public communication, free of charge.

S 1600 Parent Company Guarantee (Option X4)

As per the framework.

S 1700 *Client's work specifications and drawings*

S 1701 *Client's work specification*

1. The specification for the *works* is provided in the document: [SP3-01C SID Kenwick Road ENV0002875C](#). Appendix 3
2. In the case of this specification contradicting CESWI7 or the Minimum Technical Requirements, this specification shall prevail.
3. If the *Contractor* is in any doubt as to whether a matter should be raised with the *Project Manager* or the *Supervisor*, they shall ask the *Project Manager* for clarification.

S 1702 *Drawings*

1. N/A

S 1703 *Standards the Contractor complies with*

1. The *Contractor* carries out their work using the following guidance, however this does not preclude them from undertaking the *works* in accordance with current legislation.

Ref	Report Name	Where used
300_10	300_10 SHE handbook for managing capital projects	Construction works
300_10_SD27	300_10_SD27 SHEW Code of Practice	Construction works
	Project Cost Tool	Costs
	Sustainability Measures Form	Project Records
	Timber Policy Documents	Construction works
PB13897	Environmental Permit Core Guidance for the Environmental Permitting regulation 2010	Construction works

Appendix 1 BIM Protocol – Information Production and Delivery Table

1. The *Contractor* adheres to the *Client's* BIM standards and Employers Information Requirements (EIR).
2. The *Contractor* produces a BIM Execution Plan (BEP) for the project and submits it to the *Client* for acceptance prior to the Start Date.
3. All *Client* issued information referenced within the Information Delivery Plan (IDP) remains within the Site Information unless it is referenced elsewhere within the *Scope*. The *Client* provides its IDP on the following site: www.Pow.bim4.info

Appendix 2 BIM Protocol – Employers Information Requirements

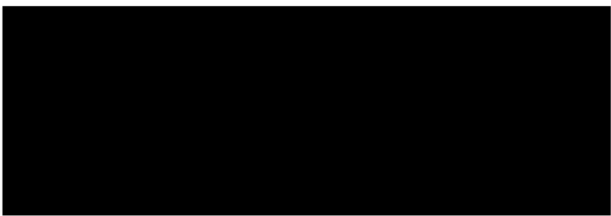
Appendix 3 Scope Document List

The document that form part of the Scope is;

- Scope & Specification - [SP3-01C SID Kenwick Road ENV0002875C](#)

The documents that describe the current state of site (Site Information) are:

- CCTV Survey - [Kenwick Road CCTV Report S60 v1.0 2017](#).
- Inspection Report - [Kenwick Road Culvert Inspection 2021](#)



Framework:

Supplier:

Company Number:

Geographical Area:

Project Name:

Project Number:

Contract Type:

Option:

Contract Number:

Stage:

Collaborative Delivery Framework

Midlands

Kenwick Road Construction

Engineering Construction Contract

Option C

Construction

Revision	Status		Originator		Reviewer		Date

ENGINEERING AND CONSTRUCTION CONTRACT under the Collaborative Delivery Framework
CONTRACT DATA

Project NameKenwick Road Construction

Project Number[REDACTED]

This contract is made on 18 January 2022
between the *Client* and the *Contractor*

- This contract is made pursuant to the Framework Agreement (the “Agreement”) dated 01st day of April 2019 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 21 inclusive of the Framework schedules are relied upon within this contract.
- The following documents are incorporated into this contract by reference
Kenwick Road CDF Scope v3, dated 7.12.21.

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 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*
- 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

Culvert repairs to Kenwick Road culvert

The *Client* is

Address for communications

Address for electronic communications

The *Project Manager* is

Address for communications

Address for electronic communications

The *Supervisor* is

Address for communications		
Address for electronic communications		
The Scope is in Kenwick Road CDF Scope v3, dated 7.12.21		
The Site Information is in Contained within Appendix 3 - SP3-01C SID Kenwick Road ENV0002875C, including CCTV Survey and Inspection Report.		
The <i>boundaries of the site</i> are Location plan Kenwick Road v2.doc		
The <i>language of the contract</i> is English		
The <i>law of the contract</i> is <i>the law of England and Wales, subject to the jurisdiction of the courts of England and Wales</i>		
The period for reply is		2 weeks
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 Contractor's main responsibilities		
The <i>key dates</i> and <i>conditions</i> to be met are <i>condition</i> to be met		<i>key date</i>
'none set'		'none set'
'none set'		'none set'
'none set'		'none set'
The <i>Contractor</i> prepares forecasts of the total Defined Cost for the whole of the <i>works</i> at intervals no longer than		4 weeks
3 Time		
The <i>starting date</i> is		13.12.21
The <i>access dates</i> are part of the Site		date
Notice of Entry to White Horse Inn public house		10.01.22
The <i>Contractor</i> submits revised programmes at intervals no longer than		4 weeks
The <i>Completion Date</i> for the whole of the <i>works</i> is		31.06.22
The <i>Client</i> is not willing to take over the <i>works</i> before the Completion Date		
The period after the Contract Date within which the <i>Contractor</i> is to submit a first programme for acceptance is		4 weeks
4 Quality management		
The period after the Contract Date within which the <i>Contractor</i> is to submit a quality plan is		4 weeks
The period between Completion of the whole of the <i>works</i> and the <i>defects date</i> is		52 weeks
The <i>defect correction period</i> is		2 weeks
<ul style="list-style-type: none"> The <i>defect correction period</i> for safety issues The <i>defect correction period</i> for 		except that is 24 Hours is

5 Payment

The *currency of the contract* is the £ sterling

The *assessment interval* is Monthly

The *Client* set total of the Prices is

The *interest rate* is Base

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

	<i>share range</i>		<i>Contractor's share percentage</i>
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 Raithby Met Office Station

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 9am hours GMT

and these measurements:

- water levels in culvert
-
-
-
-

The *weather measurements* are supplied by The Met Office

The *weather data* are the records of past weather measurement for each calendar month which were recorded at Raithby Met Office Station and which are available from The 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

- The water level in the culvert exceeds 30.6m AOD
- 'not used'
- 'not used'
- 'not used'
- 'not used'

8 Liabilities and insurance

These are additional *Client's* liabilities

- 'not used'
- 'not used'
- '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

£15,000,000

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 <i>tribunal</i> is litigation in the courts	
The <i>Senior Representatives</i> of the <i>Client</i> are	
Address for communications	
Address for electronic communications	
Name	
Address for communications	
Address for electronic communications	
The <i>Adjudicator</i> is	
Address for communications	
Address for electronic communications	'to be confirmed'
The <i>Adjudicator nominating body</i> 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.

Z 2B: Water levels: Contractor's risk

Clause 60.1 (12) second bullet point is amended to: "are not weather conditions or floods and"

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 *Contractor*."

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, not exceeding the forecast provided under clause 20.4 and accepted by the *Client*."

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. Payment to subcontractors will be 28 days from the assessment date.
If the *Contractor* does not achieve payments within these time scales then the *Client* reserves the right to delay payments to the *Contractor* in respect of subcontracted work, services and supplies.
Failure to pay subcontractors and suppliers within contracted times scales will also adversely affect the *Contractor's* opportunities to work on framework contracts.

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 2022 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 2022 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 2022 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	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.

Secondary Options

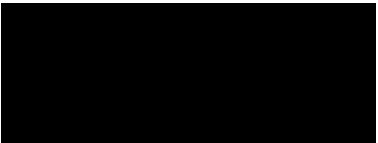
OPTION X2: Changes in the law

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



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 £5,000,000

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

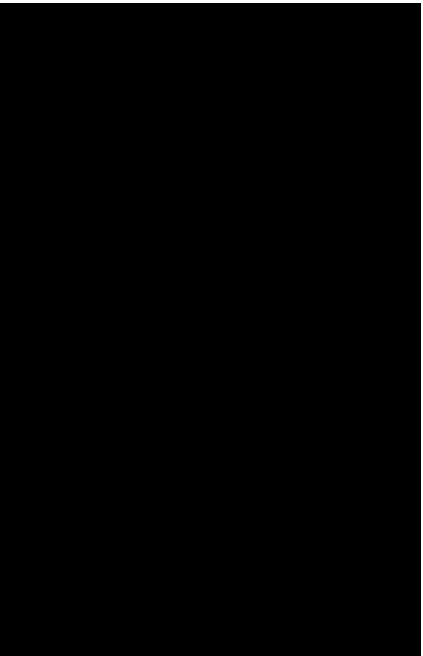
The *Contractor's* liability to the *Client* for indirect or consequential loss is limited to

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

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

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

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

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

Address for electronic communications

The fee percentage is

The working areas are

The key persons are

Name (1)
Job
Responsibilities
Qualifications
Experience

The key persons are

Name (2)
Job
Responsibilities
Qualifications
Experience

The key persons are

Name (3)
Job
Responsibilities
Qualifications
Experience

The key persons are

Name (4)
Job
Responsibilities
Qualifications
Experience

The following matters will be included in the Early Warning Register
COVID 19

2 The Contractor's main responsibilities

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

3 Time

The programme identified in the Contract Data is

5 Payment

The *activity schedule* is

Resolving and avoiding disputes

The *Senior Representatives* of the *Contractor* are

Name (1)
Address

Address

Name (2)
Address

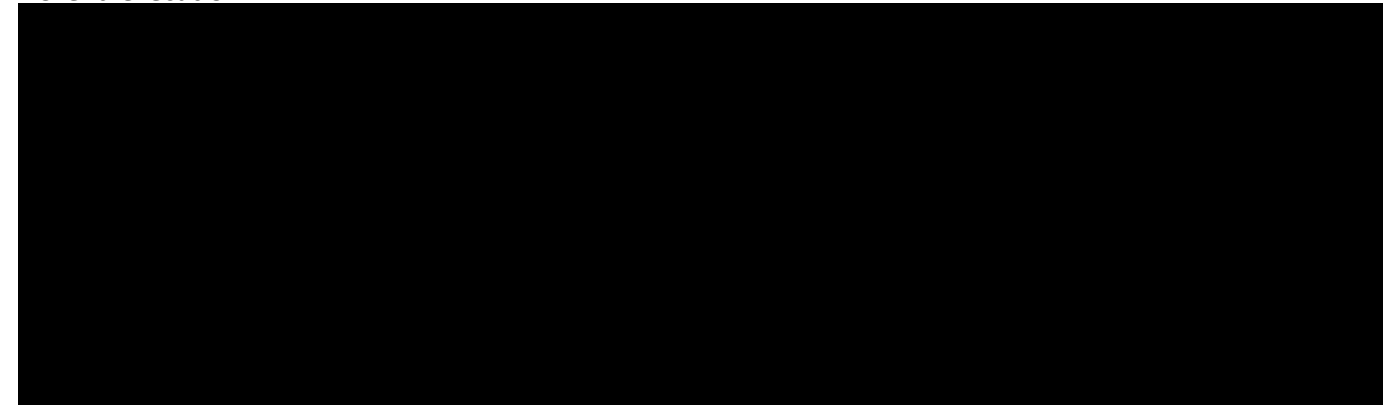
Address

X10: Information Modelling

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

Contract Execution

Client execution



Contractor execution

