



**RVC – Hawkshead Campus
GENERAL PRELIMINARIES
January 2018**

For

The Royal Veterinary College

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A. INTRODUCTION

1. Brief Description of the Project

The Employer, for the purposes of the Contract, is The Royal Veterinary College.

The works are as detailed within the Contract documentation and can be generally described as the construction of a new teaching and social space, new research laboratories, linked by a connection walkway and enclosing atrium. Works also comprise the formation of a new entrance area, together with the remodelling of a café space. All as described in the tender documents.

Further details of the project are as follows;

- Contract: the JCT Standard Building Contract 2016 Without Quantities.
- The works are to be procured under a single stage, lump sum contract.
- The project design team will not be novated.
- The Contractor shall allow for co-ordination, management of temporary works and traffic management during the course of construction works. This comprises maintaining access at all times.

2. Design

The Employer has engaged the following consultants to develop the design.

EMPLOYER

Name: **The Royal Veterinary College**

Address: Hawkshead Lane
North Mymms
Hatfield
Hertfordshire
AL9 7TA

Contact: Ian Humphreys
Tel: 01707 666976
Email: ihumphreys@rvc.ac.uk

ARCHITECT

Name: **Norr Consultants Ltd.**

Address: Skypark 5 Unit 1A
45 Finnieston Street
Glasgow
G3 8JN

Contact: Russell Baxter
Tel: 0141 204 6500
Email: russell.baxter@norr.com

QUANTITY SURVEYOR

Name: **Quantem Consulting**

Address: Quality House
5-9 Quality Court
Chancery Lane
London
WC2A 1HP

Contact: Nigel Powell
Tel: 020 7240 5800
Email: nigel.powell@quantem.co.uk

SERVICES ENGINEERS

Name: **AECOM**

Address: AECOM House
63-77 Victoria Street
St Albans
Hertfordshire
AL1 3ER

Contact: Alan Fox
Tel: 01727 535000
Email: alan.fox@aecom.com

STRUCTURAL ENGINEERS

Name: **Conisbee**

Address: 1-5 Offord Street
London N1 1DH

Contact: Ian Prentice
Tel: 020 7700 6666
Email: ian.prentice@conisbee.co.uk

3. **Novation**
The project design team will not be novated.

4. **Planning and Other Approvals**
A detailed planning application has been submitted.

Where applicable the Contractor shall obtain written approval for any conditions; they shall complete the design, obtain all Statutory Building Regulation approvals and all other necessary approvals including those for any changes made to the Employer's Requirements by the Contractor's Proposals; they shall provide the Employer with copies of all approval notices.

The Contractor is responsible for providing, prior to Practical Completion, a Building Control Completion Certificate. The Contractor shall be responsible for paying the inspection fee plus VAT.

Should compliance with the Building Regulations or the requirements of the Fire Officer or of any other body having jurisdiction necessitate amendment to the design or layout of the Works, the Employer's approval is to be obtained thereto before it is effective. No adjustment will be made to the Contract Sum for such compliance provided that the regulation requiring such compliance was in force or promulgated prior to the Base Date.

The Contractor shall identify all fees and costs payable in respect of the permissions and approvals required by this section in the Contract Sum Analysis.

5. **Documents and Terms Used on This Project**
The Form of Contract will be the JCT Standard Building Contract 2016 Without Quantities.

5.1 **Contract Documents**

The Contract Documents will be entitled "Contract Documents for the Hawkshead Campus, The Royal Veterinary College, Hertfordshire" and will contain both text and drawings.

Should the Contractor wish to diverge from the Contract Documents, any products of a different manufacturer to those specified must be submitted to the Contract Administrator giving reasons for each proposed substitution and will require approval prior to acceptance. Any proposed substitutions shall be deemed to form part of the Contractor's Proposals and therefore to have been checked and approved by the Contractor who will have the same liability therefore as if they had prepared them or caused them to be prepared by themselves.

Substitutions, which have not been notified at tender stage, may not be considered.

Any such alternative proposals to the Contract Documents shall be of no less a standard than is stated in or reasonably to be inferred from the Contract Documents.

5.2 **Contract Sum Analysis**

The Contract Sum Analysis is to be appended to the tender. Within one week of a request to do so and, in any event, prior to taking possession of the site, the Contractor shall furnish the Employer with a detailed and quantified Schedule of Rates in support of the Contract Sum Analysis and shall provide such further details or analyses as the Employer shall in his absolute discretion direct. Notwithstanding the quantities, descriptions and computations contained in either the Contract Sum Analysis, the Contract Sum shall be deemed fully to cover the carrying out and completion of the construction of the Works.

5.3 **Provisional Sums**

Any works that are the subject of Provisional Sums provided by the Employer will form part of the Contract Documents and such sums shall be deemed to be included in the Contract Sum. The Contractor is not permitted to use any other Provisional Sums in his tender.

Unless specifically stated to the contrary, it is assumed any item identified as a Provisional Sum which is not specifically listed on a single schedule titled 'Employer's Provisional Sums' and identified in the Contract Sum Analysis is included within the Contract Sum as a fixed lump sum.

Unless clearly stated to the contrary it is assumed that allowance for, attendance, special attendance and design fees are included within the Contract Sum Analysis for the delivery of each Provisional Sum. The Contractor is

deemed to have allowed elsewhere in the Contract Sum for all other costs arising from incorporating the design and construction of work which is the subject of such Provisional Sums.

Unless clearly stated to the contrary, all Provisional Sums will be deemed to be inclusive of all allowance for preliminaries and programme. Any adjustment/deletion of a Provisional Sum will require an adjustment to the Overheads and Profit which is included separately.

6. **Life Cycle Carbon Assessment (LCA)**

The Contractor is to ensure all LCA requirements of the project are met.

7. **Energy Performance Certificate (EPC)**

The Contractor is to allow for the completion of an EPC certificate prior to Practical Completion.

8. **Insurance**

Before starting work on site, the Contractor shall submit details and/or policies and receipts for the insurances required by the Conditions of Contract.

9. **Insurance Claims**

If any event occurs, which may give rise to any claim or proceeding in respect of loss or damage to the Works or injury or damage to persons or property arising out of the Works, the Contractor shall immediately give notice to the Employer and the Insurers.

Further to the above, the Contractor shall indemnify the Employer against any loss which may be caused by failure to give such notice.

10. **Definitions**

Definitions - The meaning of terms, derived terms and synonyms used in the preliminaries/general conditions and specification is as defined below or in the appropriate British Standard or British Standard glossary.

In Writing - When required to advise, notify, inform, instruct, agree, confirm, obtain information, obtain approval or obtain instructions do so in writing.

The Site – The site is the works area associated with this contract including the building and / or the infrastructure defined within the site boundary / title line.

Approval - (And words derived there from) means the approval in writing of the Contract Administrator unless specified otherwise.

Submit - (And words derived there from) means to the Contract Administrator unless otherwise instructed.

Products - means materials (including naturally occurring materials) and goods (including components, equipment and accessories) intended for permanent incorporation in the Works.

Cross-References to the Specification - Where a numerical cross-reference to a specification section or clause is given on drawings or in any other document the Contractor must verify its accuracy by checking the remainder of the annotation or item description against the terminology used in the referred to section or clause.

Where a numerical cross-reference is not given the relevant section(s) and clause(s) of the specification will apply, cross-reference thereto being by means of related terminology.

Where a cross-reference for a particular type of work, feature, material or product is given, relevant clause(s) elsewhere in the referred to specification section dealing with general matters, ancillary products and workmanship also apply.

The Contractor must, before proceeding, obtain clarification or instructions in relation to any discrepancy or ambiguity which may be discovered.

Referenced Documents - Where and to the extent that this specification conflicts with referenced documents, this specification prevails.

Substitution of Products - Where the substitution of a product different to that specified is permitted before ordering the product inform the Contract Administrator of the reasons for the substitution.

When requested, submit for verification documentary evidence that the alternative product is equivalent in respect of material, safety, reliability, function, compatibility with adjacent construction, availability of compatible accessories and appearance.

Submit certified English translations of any foreign language documents.

Any proposal for use of an alternative product must also include proposals for substitution of compatible accessory products and variation of details as necessary, with evidence of equivalent durability, function and appearance of the construction as a whole. If substitution is approved, and before ordering products, provide revised drawings, specification and manufacturer's guarantees.

Equivalent Products - Wherever products are specified by proprietary name and the phrase 'or' equal approved, it is required that they perform to the same standard as that specified.

Substitution of Standards - Where any product is specified to comply with a British Standard for which there is no equivalent European Standard it may be substituted by a product complying with a grade or category within a national standard of another Member State of the European Community or an international standard recognised in the UK specifying equivalent requirements and assurances in respect of material, safety, reliability, function, compatibility with adjacent construction, availability of compatible accessories, and, where relevant, appearance. In advance of ordering submit notification of all such substitutions and, when requested submit for verification documentary evidence confirming that the products comply with the specified requirements.

Any submitted foreign language documents must be accompanied by certified translations into English.

Currency of Documents - References to standards, type approval certificates, catalogues, codes of practice and the like are to the editions, revisions, versions and amendments current at the time of tender. References to BSI documents are to the versions and amendments listed in the BSI Standards Catalogue, including updates, current at [the time of tender].

Manufacturer and Reference - Where used in this combination, 'Manufacturer' means the firm under whose name the particular product is marketed and 'Reference' means the proprietary brand name and/or reference by which the particular product is identified.

Sizes - Unless otherwise stated, products are specified by their co-ordinating sizes and cross section dimensions of timber shown on drawings are nominal sizes before any required planning.

Fix Only - means all labours in unloading, handling, storing and fixing in position, including use of all plant.

Supply and Fix - Unless stated otherwise all items given in the schedule of work and/or on the drawings are to be supplied and fixed complete.

Remove - means disconnect, dismantle as necessary and remove the stated element, work or component and all associated accessories, fastenings, supports, linings and bedding materials, and dispose of unwanted materials. It does not include removing associated pipework, wiring, ductwork or other services.

Repair - means carry out local remedial work to components, features and finishes as found in the existing structure. Re-secure or re-fix as necessary and leave in a sound and neat condition. It does not include replacement of components or parts of components or redecoration.

Make Good - Means carry out local remedial work to components, features and finishes which have been disturbed by other, previous work and leave in a sound and neat condition. It does not include replacement of components or parts of components or redecoration.

The meaning of the term shall not be limited by this definition where used in connection with the defects liability

provisions of the Contract.

B. CONTRACTUAL MATTERS

1. Form of Contract

The Form of Contract will be the JCT Standard Building Contract 2016 without quantities.

The Contractor shall allow for the obligations, liabilities and services described therein.

<i>Clause etc.</i>	<i>Subject</i>	<i>Response</i>
Recitals		
First Recital	The works are as detailed within the Contract documentation and can be generally described as the construction of a new teaching and social space, new research laboratories, linked by a connection walkway and enclosing atrium. Works also comprise the formation of a new entrance area and carpark, together with the remodelling of a café space. All as described in the tender documents	
Second Recital	The Contract Drawings will be appended to the Contract	
Third Recital	Pricing document	Option B applies; Contract Sum Analysis
Fourth Recital	Construction Industry Scheme (CIS)	Employer at the Base Date is not a Contractor for the purposes of the CIS
Fifth Recital	Information Release Schedule	Not applicable
Sixth Recital	Sections	<p>Section 1 - Works to form the extension to the existing TaRC building including the internal fit out and services and weather tight envelope.</p> <p>Section 2 – All remaining internal and external areas to new build elements.</p> <p>Section 3 (a) – Internal refit works to ground floor Eclipse and reconfiguration of stair flights and toilets on ground, first and second floor level.</p> <p>Section 3 (b) – Demolition of remaining areas of the Clinical Block, permanent location of service runs and completion of carpark/courtyard and external works.</p>
Seventh Recital	Framework Agreement	Not applicable
Eighth Recital	Supplemental Provisions (SP) SP 1 - Collaborative working SP 2 - Health & safety SP 3 - Cost savings and value improvements SP 4 - Sustainable development and environmental considerations SP 5 - Performance indicators and monitoring SP 6 - Notification and negotiation of disputes	Does not apply Applies Applies Applies Applies Applies

	SP 9 - Names Specialists	Does not apply
Ninth Recital	CDP Supplement	Applies to; Architectural; SFS, cladding, screening, curtain walling systems Structural; temporary works, steel connections, precast concrete units, cold formed steel, secondary steelwork elements. Mechanical & Electrical systems; fire alarms, access controls, flues, BMS and Controls Software, valve selection, VRF systems, BWIC, lightning protection, lifts, vibration mounts, supports, CCTV systems, final phasing sequencing of the works.
Tenth Recital	Employer's Requirements	Will be appended to the Contract
Eleventh Recital	Contractor's Proposals	Will be appended to the Contract
Twelfth Recital	CDP analysis	Will be appended to the Contract
Articles		
Article 1	Contractor's obligations	Carry out the Works and CDPS elements
Article 2	Contract Sum	To be agreed
Article 3	Architect/Contract Administrator	Norr Consultants Ltd.
Article 4	Quantity Surveyor	Quantem Consulting
Article 5	Principal Designer	Fulkers Consultancy
Article 6	Principal Contractor	To be confirmed
Article 7	Adjudication	Applies
Article 8	Arbitration	Applies
Article 9	Legal proceedings	The law of England and Wales
Article 10	Amendments to the Contract	Will be appended to the Contract (see attached)
Article 11	Cap on liability	To be confirmed
Contract Particulars		
1 .1	Base Date	Date of tender return. To be agreed
1 .1	BIM Protocol	Not applicable
1 .1	Date for Completion of the Works	To be agreed

	Sections: Dates for Completion of Sections	<p><u>Section 1</u> - All works associated with the completion of section 1, 1st July 2020</p> <p><u>Section 2</u> – All works associated with the completion of section 2, 31st January 2021</p> <p><u>Section 3 (a)</u> – All works associated with the completion of section 3 (a), 14th May 2021</p> <p><u>Section 3 (b)</u> – All works associated with the completion of section 3 (b), 16 July 2021</p>
1.7	Addresses for service of notices etc. by the Parties	<p>Employer:-</p> <p>Ian Humphreys Royal Veterinary College Hawkshead Lane North Mymms Hatfield AL9 7TA</p> <p>Contractor – To be confirmed</p>
2.4	Date of Possession of the site Sections: Dates of Possession of Sections	<p>1st July 2019</p> <p>Section 1: 1st July 2019 Section 2: 1st July 2019 Section 3 (a): 3rd February 2021 Section 3 (b): 3rd February 2021</p>
2.5	Deferment of possession of the site	<p>Clause 2.5 applies</p> <p>Maximum period for deferment; Sections 1 and 2: 12 weeks Sections 3 a and b: 4 weeks</p>
2.9.1.2	Master programme	Critical Paths are required to be shown on all programmes
2.19.3	Contractor's design Portion: limit of Contractor's liability for loss of use etc.	£1.5x the Contract Sum
2.32.2	Liquidated damages (where completion by Sections applies)	<p>Section 1 - £5,000.00 per week, or pro rata part thereof</p> <p>Section 2 - £5,000.00 per week, or pro rata part thereof</p> <p>Section 3 (a) - £2,000.00 per week, or pro rata part thereof</p>

		Section 3 (b) - £2,000.00 per week, or pro rata part there of
2.37	Sections: Section Sums	Section 1: to be confirmed Section 2: to be confirmed Section 3 (a): to be confirmed Section 3 (b): to be confirmed
2.38	Rectification Periods	Section 1 – 18 months Section 2 – 18 months Section 3 (a) - 12 months Section 3 (b) – 12 months
4.3 and 4.14	Fluctuations Provision	No Fluctuations Provision applies
4.7	Advance payment	Clause 4.7 does not apply
4.8	Interim payments – Interim Valuation Dates	One month after date of possession and thereafter the same date in each month or the nearest business day in that month
4.16.4	Listed Items – uniquely identified	Does not apply
4.16.5	Listed Items – not uniquely identified	Does not apply
4.18	Contractor’s Retention Bond	Clause 4.18 does not apply
4.19.1	Retention Percentage	3 per cent
5.5	Day work	Does not apply
6.4.1	Contractor’s Public Liability insurance: injury to persons or property – the required level of cover is not less than	£10,000,000.00 for any one occurrence or series of occurrences arising out of one event
6.5.1	Insurance – liability of Employer	Insurance – Options C Applies (Joint names) £10,000,000.00 for any one occurrence or series of occurrences arising out of one event
6.7 and Schedule 3	Insurance of the Works – Insurance Options Percentage to cover professional fees Where Insurance Option C applies, paragraph C.1	Schedule 3: Insurance Option C applies 15% Applies
6.10 and Schedule 3	Terrorism Cover – details of the required cover	Pool Re cover
6.15	Contractor’s Design Portion (CDP) Professional Indemnity insurance Level of cover Cover for pollution and contamination claims Expiry of required period of Professional	£10,000,000.00 of indemnity for each claim, or series of claims arising out of one event £10,000,000 of indemnity

	Indemnity insurance	12 years
6.14	Joint Fire Code If the Joint Fire Code applies, state whether the insurer under Schedule 3, Insurance Option A, B or C (paragraph C . 2) has specified that the Works are a 'Large Project'	The Joint Fire Code applies The works are a 'Large Project'
6.20	Joint Fire Code – amendments/revisions	The cost, if any, of compliance with amendment(s) or revision(s) to the Joint Fire Code shall be borne by the Contractor
7.2	Assignment/grant by Employer of rights under clause 7.2	Clause 7.2 applies
7.3.1	Performance bond or guarantee from bank or other approved surety Initial value Period of validity	Performance bond is required 10% of Contract Sum To the Date for Completion of the Works
7.3.2	Guarantee from the Contractor's parent company	If the Contractor has a parent company this is required
7.4	Third Party Rights and Collateral Warranties	To be confirmed
8.9.2	Period of suspension	2 months
8.11.1.1 to 8.11.1.5	Period of suspension	2 months
9.2 .1	Adjudication Nominating body – where no Adjudicator is named or where the named Adjudicator is unwilling or unable to act	The Adjudicator is to be named by the President or a Vice-President or Chairman or a Vice-Chairman: The Royal Institution of Chartered Surveyors
9.4	Arbitration – appointment of Arbitrator (and of any replacement)	The Arbitrator is to be named by the President or a Vice-President or Chairman or a Vice-Chairman: The Royal Institution of Chartered Surveyors

3. **Execution**

The Contract will be executed as a Deed.

4. **Performance Bond**

Within 10 days after being given instructions by the Employer to proceed with the Works, the Contractor shall procure that a surety which is a major insurance company or clearing bank approved by the Employer enters into a Bond. The Bond shall be for an amount equal to 10% of the amount of the Contract Sum for a period of the works on site and until the end of the Rectification Period. The Contractor shall pay all fees, premiums and stamp duty in connection with the Bond.

5. **Parent Company Guarantee**

Within 10 days after being given instruction by the Employer to proceed with the Works the Contractor shall procure

that their ultimate parent company, if applicable, enter into a Parent Company Guarantee. The Contractor shall pay all fees, premiums and stamp duty payable in connection with the guarantee.

Only if the contractor is subsidiary of a larger group

6. Warranties / Third Party Rights

6.1 Subcontractor Warranties

The Contractor will be required to enter into sub-contractor warranties for all sub-contracted works with sub-contractor design portions within ten working days of Employers' request to do so.

Sub-Contractor means any sub-contractor appointed by the Building Contractor in connection with the Works and who has a material design responsibility including but not limited to:

- Steelwork.
- Curtain walling systems.
- Rain screens.
- Balustrades and handrails.
- Steel connections.
- Precast concrete.
- In-situ concrete.
- Mechanical and electrical installations.
- Fire alarms.
- Lightning protection.
- Building Management Systems (BMS).
- Lift installations.
- Man safe systems.

The level of PI insurance cover for designing Sub-Contractors shall be no less than £5,000,000.

7. Sub-Consultant Warranties

Subject to the employment of design sub-consultants, the Contractor will be required to enter a Sub-Consultant Warranty.

The level of PI cover for sub-consultants shall not be less than £5,000,000. The level of PI required from the Novated consultants is set out in the agreements appended in Section 2.3 of the Contract document.

8. Preliminaries in Interim Payments

Preliminaries will be valued for the purpose of inclusion in Interim Payments on the following basis:

- Fixed charge items will be valued as and when the charge is properly incurred.
- Time related charge items would be expressed as a percentage of works completed within the Contract Sum excluding the value of all preliminaries items and provisional sums. This percentage will be added to the value of work properly executed and referred to in the Contract excluding the value of changes. This method of valuing preliminary items is for the purposes of Interim Payments only and shall not be construed as setting a precedent for adoption in the valuation of variations.

C. PRELIMINARY MATTERS

1. Names of Parties

The names of the parties to be inserted in the Articles of Agreement are as follows.

- Employer: Royal Veterinary College.
- Contract Administrator: Norr Consultants Ltd.
- Quantity Surveyor: Quantem Consulting.
- Principle Designer: Fulkers.

2. **The Site / Existing Buildings**

2.1 **The Site**

The site is located at the Royal Veterinary College, Hawkshead Lane, Hertfordshire, AL9 7TA.

The Contractor is deemed to have established the boundaries of the site and the position of the works. No claim for want of knowledge in this respect shall be entertained.

Arrangements for a tour of the site and the adjoining properties can be made by prior appointment with the Royal Veterinary College, contact Ian Humphreys on 01707 666 976. The Contractor is deemed to have visited site, carried out any inspections necessary and made themselves thoroughly acquainted with the position and accessibility of the proposed works and conditions under which they are to be carried out.

2.2 **Existing Buildings**

The Campus contains many existing buildings and the Contractor is deemed to have made himself aware of the site and adjacent and adjoining buildings.

2.3 **Existing Adjacent Buildings to the Site**

The Contractor is to arrange and carry out the works so as to cause no interference or interruption to the use of any adjoining and adjacent buildings and units, including roads, footpaths, public utilities, trees, pavements and other means of access thereto by the Employer and adjoining owners and occupiers.

Any damage to adjoining and adjacent buildings caused by the Contractor shall be made good at his own expense.

The Contractor is to obtain all necessary permissions from Local Authorities, Police and other stake holders should any encroachment beyond the boundaries of the site on to Public Highways or footpaths of adjoining neighbours property be necessary for the execution of the works.

The Contractor is made aware of the proximity of the surrounding buildings and is to allow for all requisite co-ordination and management of any interface issues.

2.4 **Existing Mains / Services**

The Contractor shall ascertain the precise location of all services, maintain during the works, alter, and adapt as necessary to ensure the execution of the Works. Existing services information is provided though this is not warranted by the Employer and the Contractor is to verify the precise location of all services.

The Contractor is responsible for liaising with Statutory Authorities with regard to incoming services which will be undertaken in conjunction with the connection works being undertaken at the site.

The Employer is facilitating new incoming gas and electricity mains to serve the new building. The contractor must allow for final connections to the meters. The Contractor must allow to connect to the RVC existing water network and all necessary ducting and builder's work for the incoming supplies including telecoms and data networks.

The Contractor must complete the Works without disturbing retained services, including providing protection and liaising with the Statutory Authorities as necessary.

The Contractor shall uphold and protect all pipes, ducts, sewers, service mains, overhead cables, and statutory undertakers' apparatus and make good at own expense any damage caused thereto.

The Contractor will be responsible for making all necessary arrangements with the Authorities concerned for any diversion, if necessary, of existing services as required for the purposes of this Contract, all costs associated any diversions will be deemed to be included within the Contract Sum.

2.5 **Animals on site**

The Royal Veterinary College is a working veterinary facility and as such, the site may contain livestock. Under no circumstances shall the Contractor, his sub-contractors or site personnel, touch, interfere with, feed or disturb animals found on site. Disturbance extends to noisy works outside of normal operating hours, dust from the works, and glare from temporary lighting etc. Should an animal need attention or require relocating the Contractor shall refer the matter to the Contract Administrator immediately.

3. **Temporary Facilities**

3.1 **Hoarding**

The Contractor shall take all measures to ensure the security of the site and be responsible for the safety of the public.

3.2 **Temporary Buildings for the use of the Employer**

The Contractor shall keep clean and provide access to and free reasonable use of a meeting room, heated and lit, with table and chairs for 12 people. The room may be located in the Contractor's own site offices. The Contract Administrator will hold regular site meetings to review progress and other matters arising from the administration of the contract.

The Contractor is to ensure the availability of accommodation at the time of such meetings.

3.3 **Protective Clothing**

The Contractor shall provide an adequate number of the following for the use of those acting on behalf of the Employer or for those allowed access to the works:

- Safety helmets
- Protective boots or shoes;
- Reflective jackets;
- Safety gloves;
- Eye protection;
- Ear protection;
- Other PPE as necessary for the inspection of the works

All safety equipment is to meet BSI standards.

3.4 **Computers**

The Contractor shall provide computers on site suitable to receive electronic mailing from consultants.

3.5 **Utilities**

The Contractor shall allow within the Contract Sum for any temporary supplies required for carrying out the works.

Electricity

The College will provide the new building electricity supply for the development for the duration of the contract (sections 1 and 2). The College give no assurances as to the consistency of the supply during the contract period but will use best endeavours to maintain the supply. The temporary supply capacity will be limited to 250 amps three phase. The Contractor is responsible for installing any temporary sub-mains distribution sub-metering that may be required to isolate the consumption of any temporary supplies. All supplies are to be fully certified to NICIEC standards and copies of certificates should be provided to the Contract Administrator.

Water

The College will allow the temporary connection to the mains water supply. The Contractor will be responsible for making all connections, chlorination of distribution frost protection and for maintaining the supplies in accordance with WRAS guidelines. The College give no assurances as to the consistency of the supply during the contract period. However, will use best endeavours to maintain the supply

Communications

The College will allow the temporary connection to their broadband supply for up to 10 data ports. The Contractor will be responsible for making all connections. The College give no assurances as to the consistency or speed of the supply during the contract period, but will use best endeavours to maintain the supply.

The Contractor is responsible for paying all bills associated with carrying out the works. This includes, but is not limited to water, gas, electricity and communications.

3.6 **Lighting**

The contractor shall allow for the supply of all temporary lighting to the works.

3.7 **Scaffolding**

The Contractor shall allow for scaffold structures on the site required to construct the works.

3.8 **Cranes and Lifting Platforms**

The Contractor shall allow for cranes, lifting platforms, hoists and the like required to construct the works.

3.9 **Advertising**

All rights of advertising on the site are reserved by the Employer and the Contractor shall take all necessary measures to ensure that no unauthorised advertising takes place.

3.10 **Name boards**

The Contractor is to liaise with the Contract Administrator regarding a name board. The Contractor shall allow within the Contract Sum for a name board no smaller than 4' x 8'.

4. **Local Authorities and Statutory Undertakers**

The Contractor is responsible for ascertaining the precise location of services on site prior to commencing construction works.

Any existing services on the site are to be terminated or permanently diverted as required to facilitate the new installations, in conjunction with the statutory undertakers and the College. All costs for service diversions are deemed as included within the tendered price.

The Contractor shall liaise with all Local Authorities and Statutory Undertakers which have any jurisdiction with regard to the Works associated with the off-site services or with whose systems the same are or will be connected and obtain from them the location of all existing services and their requirements in relation to the Works.

The Contractor shall procure all services to and from the Works by such bodies, co-ordinate the same with each other and the remainder of the Works, provide all necessary attendance, setting out and the like. The Contractor shall be responsible for paying all fees and charges levied by the Statutory Undertakers. The Contractor shall ensure that all way leaves, easements, Building Over Agreements and the like required by the Statutory Undertakers in providing services to or adjacent to the site are executed in sufficient time so as not to affect the progress of the Works or any Sectional Completion dates. The Contractor shall be responsible for the management of the Statutory Undertakers and ensuring that their works are completed in sufficient time so as not to affect the Overall Main Contract Programme. The Contractor shall allow within the programme for accommodating all works carried out by Statutory Undertakers.

The Contractor shall undertake all tests, surveys and the like required to obtain Statutory Authorities' approvals for any temporary works.

The Contractor is deemed to have inspected the Site and be satisfied as to the accuracy of the information provided within these Contract documents.

5 **Sub-Contractors**

5.1 **Domestic Sub-Contractors**

Comply with the Construction Industry Board 'Code of Practice for the selection of subcontractors'.

5.2 **Listed Domestic Sub-Contractors**

Not applicable, none listed.

6. **Materials and Workmanship**

6.1 **Generally**

All materials, goods and workmanship shall be the best available of their respective kinds and shall be:-

- In accordance with good building practice and of no less a standard than the British Standard Specification and Codes of Practice referred to in the Employer's Requirements or, where none is specified, in accordance with the latest relevant British Standard Specifications or Codes of Practice.
- Suitable for the purposes for which they are intended.

All materials, components and equipment shall be selected with careful regard for their fitness for purpose,

appearance, long anticipated life, cost-in-use, and ease of maintenance and/or replacement or repair.

Where and to the extent that materials, goods and workmanship are stated to be subject to the consent or approval of the Employer they shall comply with all other requirements of the Contract and shall either have the written consent of the Employer or match, with the consent of the Employer, a sample expressly accepted by him as a standard for that purpose.

Where and to the extent, that any materials and workmanship necessary for completion of the Works contribute to the finished internal or external appearance of the Works the quality of materials and standards of workmanship whether specifically so described or not are to be subject to the consent of the Employer.

In all such cases and also where the quality of materials or standards of workmanship are required by the Employer's Requirements to be subject to the consent of the Employer the same shall be to the reasonable satisfaction of the Employer.

Mock-ups and samples of materials shall be provided by the Contractor to demonstrate the standards of workmanship or materials, or the co-ordination or functioning of the various elements, including such samples as are specifically referred to elsewhere in these Employer's Requirements. The Contractor shall obtain the written consent of the Employer to each such sample or mock-up before ordering such materials or commencing such work.

The degree to which the standard of workmanship in the finished work can be determined from and compared with those to be found in such samples is to be a matter for the opinion of the Employer. Such samples and mock-ups when consented to by the Employer shall be retained on site for comparison purposes and protected as necessary. Those not forming part of the finished works shall be removed on completion of the Works.

No inspection, action or statement is to be taken as consent by the Employer unless confirmed by the Employer in writing in express terms referring to the date and circumstances of inspection and the extent and purpose of the approval.

The combination or juxtaposition of any materials, components or equipment, as are necessary to form part of the proposed construction assembly of a building element, shall also fall within the scope of this clause.

6.2 Contracts for Supply of Materials

The Contractor shall ensure that all Contracts for the supply or the supply and fixing of materials or goods provide for the property in such materials or goods upon delivery to site to pass unconditionally to the Employer.

6.3 Proprietary Products

The Contractor shall handle, store, prepare and use or fix each product in accordance with its manufacturer's current printed or written recommendations/instructions. He shall inform the Contract Administrator if these conflict with any other specified requirement. Submit copies to the Contract Administrator when requested.

The Contract will be deemed to be based on the products as marketed and recommendations on their use current at a date ten days before the date for delivery of the tender.

The Contractor shall obtain confirmation from manufacturers that the products specified and recommendations on their use have not been changed since that time. Where such change has occurred, inform the Contract Administrator and do not place orders for or use the affected products without further instructions.

Where British Board of Agreement certified products are used, the Contractor shall comply with the limitations, recommendations and requirements of the relevant valid certificates.

6.4 Checking Compliance of Products

The Contractor shall check all delivery tickets, labels, identification marks and, where appropriate, the products themselves to ensure that all products comply with the project documents. Where different types of any product are specified, the Contractor shall check to ensure that the correct type is being used in each location. In particular, the Contractor shall check that:

- The sources, types, qualities, finishes and colours are correct, and match any approved samples.
- All accessories and fixings which should be supplied with the goods have been supplied.

- Sizes and dimensions are correct. Where tolerances of components are critical, measure a sufficient quantity to ensure compliance.
- The delivered quantities are correct, to ensure that shortages do not cause delays in the work.
- The products are clean, undamaged and otherwise in good condition.
- Products which have a limited shelf life are not out of date.

6.5 **Water for the Works**

The Contractor shall use only clean and uncontaminated water. If other than mains supply is proposed the Contractor shall provide evidence of suitability and test to BS standard if instructed.

6.6 **Cutting Holes, etc.**

Unless otherwise described all holes through concrete walls, floors, beams, columns and the like shall be formed with formwork when the concrete is poured. No such holes may be cut through the completed concrete members without the Contract Administrator's permission. All holes through block and brick partitions and the like shall be cut or formed before the plaster, wall tiles or other finish is applied. The extra cost of cutting holes through concrete partitions and the like after the finish has been applied will not be reimbursed unless the work is carried out on the instructions of the Contract Administrator which will only be given when he is satisfied that every endeavour has been used to comply with these conditions. Permission to cut holes which could have been formed during construction will not be deemed to be changes.

6.7 **Protection of Products**

The Contractor shall:

- Prevent over-stressing, distortion and any other type of physical damage.
- Keep clean and free from contamination. Prevent staining, chipping, scratching or other disfigurement, particularly of products exposed to view in the finished work.
- Keep dry and in a suitably low humidity atmosphere to prevent premature setting, moisture movement and similar defects. Where appropriate, store off the ground and allow free air movement around and between stored products.
- Prevent excessively high or low temperatures and rapid changes of temperature in the products.
- Protect adequately from rain, damp, frost, sun and other elements as appropriate. Ensure that products are at a suitable temperature and moisture content at time of use. If applicable ensure that sheds and covers are of ample size, in good weatherproof condition and well secured.
- Keep different types and grades of products separately and adequately identified.
- So far as possible keep products in their original wrappings, packing or containers, until immediately before they are used.
- Whenever possible retain protective wrappings after fixing and until shortly before Practical Completion.
- Ensure that protective measures are fully compatible with and not prejudicial to the products/materials.

6.8 **Suitability of Related Work and Conditions**

The Contractor shall ensure that all trades are provided with necessary details of related types of work. Before starting each new type or section of work, the Contractor shall ensure that:

- Previous, related work is appropriately complete, in accordance with the project documents, to a suitable standard and in a suitable condition to receive the new work.
- All necessary preparatory work has been carried out, including provision for services, openings, supports, fixings, damp proofing, priming and sealing.
- The environmental conditions are suitable, particularly that the building is suitably weather tight when internal components, services and finishes are installed.

6.9 **Inspection**

The Contractor shall permit and attend upon the inspection of the Works and of the manufacture and fabrication of materials both on the site and in workshops and obtain the same facility from Sub-Contractors and suppliers. The Contractor shall give 7 days' notice to the Contract Administrator of his intention to commence testing or commissioning any part of the Works.

6.10 **Testing**

The Contractor shall provide for the opening up for inspection and the carrying out of such tests as are stated elsewhere in these Employer's Requirements and also such as are, in the opinion of the Employer, reasonably necessary to demonstrate that materials and workmanship are in accordance with these Employer's Requirements.

The Contractor shall provide all necessary information; test data, reports and certificates carry out tests and arrange demonstrations, as necessary to satisfy the Employer with regard to any material component or equipment, which is proposed for incorporation in the Works.

Such tests shall be undertaken in a testing laboratory acceptable to the Employer. The Employer's decision on the acceptability or otherwise of materials based on the results of each test properly carried out shall be binding.

6.11 Notice Prior to Cover

Notice prior to cover is to be given in reasonable time (and in no case less than 24 hours) by the Contractor to the Employer and to any relevant Sub-Contractor whenever any works or materials are intended to be covered by earth, lagging, structural duct covers, walls, floors, ceilings or otherwise built in.

7. Programme

The Contractor shall submit with the tender, for comment by the Employer, a master programme for the Works, which must include details of:-

- Design, production information and proposals provided by the Contractor/Subcontractor/Suppliers, including inspection and checking.
- The dates for possession and completion referred to in the Contract.
- Earliest and latest start and finish dates for each activity and identification of all critical activities.
- The periods included to obtain statutory approvals and the like.
- The dates determined or proposed for commencement and completion of all trades, including those Sub-Contracted or to be Sub-Contracted and including the work and approvals of statutory bodies.
- Such dates as can be made available for the commencement and completion of all Contracts for works not forming part of this Contract which the Employer has placed or intends to place direct and the existence of which have been made known to the Contractor.
- The detailed co-ordination of all of the elements of the Works.
- The detailed commissioning and testing programme for all engineering services and installations.
- The dates for holidays proposed to be taken.

The programme will be a linked bar chart programme and will be plotted from the computer software intended for the project. The critical paths must be clearly shown on the linked Gantt chart.

In preparing and in updating the programme the Contractor shall take account of the periods stated in the Contract.

The Contractor shall also show on this programme each stage of both the design, where applicable, and construction of the various elements of the works so as to illustrate the latest dates by which instructions requiring changes can be accommodated in each part of the Works without affecting the completion (or any Section) thereof. Thereafter, the Contractor shall amend and revise the programme as required by the Contract and as required by the Employer. In so doing, the Contractor shall obtain from all Sub-Contractors and statutory bodies and use his best endeavours to obtain from all Contractors referred to above (including those made known to him during the course of the Contract) any updating in their progress or programme which has occurred or is likely to occur and incorporate this in the revised master programme.

The Contractor shall record progress on a copy of the programme kept on site. If any circumstances arise which may affect the progress of the Works, they shall put forward proposals or take other action as appropriate to minimise any delay and to recover any lost time.

Submission of any programme chart shall not absolve the Contractor from their responsibility to programme and progress the work properly including applying in writing for instructions as required by the Contract. The Contractor is to take such steps as are necessary at all times to ensure that the Contract is completed by the date for completion or within any extended time fixed under the Contract. Should the work become delayed, the programme is to be updated in a manner which will take account of the delays and of any extended time for completion and on approval the programme is to be reissued.

Any increased costs incurred by the Contractor by reason of overtime, substitution of materials, additional shifts, extra plant, labour and any other means adopted for accelerating the Works are to be borne by the Contractor and under no circumstances will these increased costs be considered or regarded as an extra to the Contract.

7.1 Progress Reporting

Notwithstanding the Contractor's obligations under the Contract a detailed monthly progress report is to be submitted which must include;

- A progress statement by reference to the master programme for the Works and the project's critical path status.
- Status of all individual activities that should have started as at the date of the progress report.
- A numeric plus or minus statement for each activity along with a summary statement where appropriate.
- Details of any matters materially affecting the regular progress of the Works.
- Sub-Contractors' and suppliers' progress reports.

The monthly progress report must be prepared against the master programme at all times, unless the Contract Administrator agrees otherwise.

7.2 Drawings Issue and Approvals Register

The Contractor is to issue all drawings relating to works to the Contract Administrator for information (in A3 format). This includes but is not limited to drawings produced by sub-contractors.

With regard to the Contractor's Design Portion the Contractor is to highlight on the drawings any elements that are not in accordance with the Employer's Requirements and are not to proceed without an Instruction. The Contractor is to track changes on a separate schedule.

7.3 Site Meetings

The Contract Administrator will hold regular site meetings to review progress and other matters arising from the administration of the Contract.

A principal representative of the Contractor shall attend in addition to their senior staff. Any such principal representative of the Contractor shall be a director or other such person capable of making policy decisions on behalf of the Contractor and shall attend all site meetings.

The Contractor's representatives shall attend all meetings and inform Sub-Contractors and Suppliers when their presence is required.

The Contract Administrator will chair the meetings, take, and distribute minutes.

7.4 Progress Photographs

The Contractor shall allow for progress photographs of the works adequately showing progress on a fortnightly basis. Under no circumstances shall staff, students or visitors of RVC be photographed by site personnel.

7.5 Extension of Time

When a notice of the cause of any delay or likely delay in the progress of the Works is given under the Contract, written notice must also be given of all other causes which apply concurrently.

Details: As soon as possible submit:

- Relevant particulars of the expected effects, if appropriate, related to the concurrent causes.
- An estimate of the extent, if any, of the expected delay in the completion of the Works beyond the Date for Completion of the Works.
- All other relevant information required.

8. Works Not Forming Part of This Contract

The Employer reserves the right to enter into separate contracts for work requisite to the completion of the development which may proceed concurrently with, but not as part of, this Contract. Such separate Contracts may include Tenant fit-out works.

The Contractor shall provide access for persons carrying out any such separate Contracts and for any other persons engaged to execute work not forming part of this Contract.

9. **Site Conditions**

Upon taking possession of the site the Contractor is to inspect, establish and record with the Employer the condition of the existing roads, street furniture etc., and make good all damage thereto arising from or caused by the execution of the Works to the satisfaction of the Employer. The site inspection and record of condition is to be issued to the Employer before commencement of the Works.

The Contractor is to carry out, at their own expense, whatever site and ground investigation works they consider necessary or prudent. Notwithstanding the information contained within these Employer's Requirements, it must be clearly understood that the Contractor is deemed to accept the full risk of the site and ground conditions and should make allowance for surveys, levelling and setting out on the site and of any obstructions and for the remediation or disposal of any contaminated material.

The Contractor is responsible for making any site investigations they consider necessary to ascertain the exact condition of the ground and the position of any obstructions, services or drains, to ascertain load bearing capacity of the ground, and to establish the presence of any contaminated materials. The Contractor is to include in the Contract Sum for all costs arising from the ground conditions. The Contractor is to have no claim for and shall accept the risk and consequences of ground and site conditions, contaminated materials and obstructions (if any) whether or not they are foreseeable. No assumption should be made within the Contract Sum that any anticipated works to be carried out by a third party have or will be executed prior to the Contractor's commencement on Site. The Contractor shall be deemed to have included within the Contract Sum for carrying out any necessary works, which are required to complete the development to the satisfaction of the Employer.

The Contractor is to maintain roads and footpaths within and adjacent to the site and keep clear of mud and debris. The Contractor will make good any damage, to the satisfaction of the Employer, Local Authority or other owner, caused by site traffic or otherwise consequent upon the works

10. **Obligations and Restrictions**

10.1 **Use of the Site**

The site shall not be used for any purpose other than the carrying out of the Works.

The Contractor shall give written notice to the Employer at least 48 hours before the day on which any work outside normal working hours is proposed. In an emergency it is the Contractor's primary responsibility to make arrangements to deal with the emergency and then to telephone and advise the Employer of any action. In any event the Contractor is to ensure that constant and proper supervision is provided for all work undertaken, including that undertaken by Sub-Contractors and suppliers outside normal working hours.

Working hours are standard 08:00 – 18:00 with working on Saturdays mornings 09:00 to 12:00, deliveries will be refused between the times of 8:30 – 09:00 as this leads to congestion on the main access road to the campus.

The Contractor shall inform the Contract Administrator in advance of all safety provisions and procedures (including those relating to materials which may be deleterious) which will require the compliance of the Employer or their representatives when visiting the site. Provide protective clothing and/or equipment for the Employer and his representatives as appropriate.

The Contractor shall provide all necessary facilities and attendance to ensure their safety and to enable the Employer, his consultants and any person authorised by the Employer to inspect all parts of the building at such times as they may require from the commencement of the work until Practical Completion. The rights of inspection shall also apply until the completion by the Contractor of their obligations pursuant to the Contract.

The Contractor must not use or occupy or permit the Site or any land upon which the Works are being undertaken to be used or occupied for any purpose other than the carrying out of the Works. He shall also not deposit or manufacture or permit to be deposited or manufactured on the Site or any land upon which the Works are being undertaken any materials which are not required for the carrying out of the Works.

The Contractor shall also not permit or suffer the storage of materials or the parking of vehicles in the immediate external vicinity of the boundaries of the Site by the Contractor, or any building sub-contractor other than for reasonable period's necessary for loading and unloading or as set out in the Contract Documents.

Outside normal working hours the Contractor shall ensure that the Site is closed and secured.

The Contractor is to ensure that he fully abides with all parking restrictions/regulations that apply to the roads adjacent to the site.

10.2 Site Access and Employment Security Arrangements

The Contractor shall ascertain the means of access to the site necessary for the execution of the Works and allow for all restrictions and costs that may be incurred through the requirements of any Statutory Undertaking or Police Regulations. The Contractor shall provide, maintain and alter from time to time as may be required all necessary temporary roadways, crossings, gantries, etc., for access to the site and for the works, and shall clear away when no longer required and make good all works disturbed and pay all charges.

The Contractor shall allow for co-ordination, management of temporary works and traffic management during the course of construction of the offsite infrastructure works. This comprises maintaining access at all times.

10.3 Access to Adjoining Buildings and Property

Any access required to adjoining buildings must be agreed with adjacent owners. This is not limited to internal access and the Contractor will need to gain permission for all Works required within the adjacent building demise such as erecting scaffolding.

10.4 Limitations of Working Hours and Notifications

The Contractor shall give the Contract Administrator at least 48 hours written notice of their intention to carry out work at nights, at weekends or at any other time outside normal working hours.

10.5 Confinement of Employees to Site

The Contractor shall keep all persons under his control, including those employed by Sub-Contractors, merchants and hauliers, to the site of the Works and shall keep unauthorised persons off the site.

10.6 Control of Noise

The Contractor shall not use or permit employees to use radios or other audio equipment in ways or at times which may cause nuisance.

The Contractor shall take all necessary measures to minimise noise, vibration and all other nuisance to the occupiers or users of adjoining properties in accordance with current environmental legislation.

The Contractor shall be responsible for and shall indemnify the Employer from and against any and all expenses, liabilities, losses, claims and proceedings whatsoever resulting from any breach of legislation current at the base date. The Contractor shall take all necessary precautions to prevent nuisance from smoke, dust, rubbish, vermin and other causes.

The Contractor shall be deemed to have allowed in his prices for complying with the requirements of local authorities and the Health and Safety Executive with regard to control of noise, pollution and all other statutory obligations.

The Contractor's particular attention is drawn to the rights of restrictive action which exist by virtue of the Environmental Protection Act 1990 and of Sections 60, 61 and 68 of the Control of Pollution Act 1974 and he shall comply with any statutory notices, conditions or limitations that may be imposed on him or on the Employer. The Contractor shall make all applications and obtain all such consents as are required under the said Acts.

Without prejudice to his duty to comply with the Control of Pollution Act 1974, the Contractor shall allow for complying with BS 5228 "Code of Practice for Noise Control on Construction and Demolition Sites" including the recommendations on community relations, planning and supervision.

If the Contractor shall be guilty of any offence under the said Act or British Standard, he shall himself pay all fines imposed by the court by which he has been convicted and shall not be entitled to be indemnified by the Employer in respect of any such fines.

The Contractor shall not be entitled to any extension of time for delays caused by breaches of current legislation.

10.7 Explosives

The use of explosives will not be permitted unless expressly agreed with the Employer and Contract Administrator.

10.8 Nuisances

The Contractor shall take all necessary measures to ensure that no oil, grease or deleterious, dangerous, poisonous, explosive or radioactive matter are discharged from the Site into any rivers, ditches, watercourse or services media on the Site and/or any adjoining property. The Contractor shall not permit or suffer the blockage of any such rivers, ditches, watercourses or services media by reason of anything done or omitted on the Sites or any land upon which the Works are being undertaken, and shall comply at his own expense with any requirements of the Environment Agency or any other relevant authority so far as such requirements relate to or affect the Works.

The Contractor will take full responsibility for any complaints or claims resulting from their failure to control dust on the Site in contravention of statutory or local legislation or direction.

The Contractor shall provide and remove on completion such screens, dustsheets, etc., as it considers necessary to minimise the nuisance caused by the distribution of dust

The Contractor shall not introduce or allow to spread on any part of the College's property invasive vegetation species such as Japanese Knotweed etc. Should the Contractor discover any such invasive species he shall inform the Contract Administrator immediately.

When drains are being laid, precautions shall be taken to avoid the entry of rodents, including providing temporary stoppers to pipe ends and setting manhole covers in position as the work proceeds. Pipes and cables passing through the foundation walls shall be properly built with appropriate seals and 'rocker joints' to allow of settlement.

10.9 Asbestos Containing Materials

Report immediately any suspected materials discovered during execution of the Works.

- Do not disturb the materials.
- Agree methods for safe removal or encapsulation of the materials.

10.10 Fire Prevention

Prevent personal injury or death, and damage to the Works or other property from fire. Comply with Joint Code of Practice 'Fire Prevention on Construction Sites', published by the Construction Confederation and The Fire Protection Association (The 'Joint Fire Code').

10.11 Smoking on Site

Smoking on site will not be permitted.

10.12 Burning On Site

Burning and/or fires will not be permitted on site.

10.13 Waste

The Contractor shall;

- Keep the site and Works clean and tidy.
- Remove waste (including rubbish, debris, spoil, containers and surplus material) frequently and dispose off site in a safe and competent manner.
- Dispose of non-hazardous material is to be in the manner approved by the Waste Regulation Authority. Hazardous material is to be directed by the Waste Regulation Authority and in accordance with relevant regulations.
- Remove rubbish, dirt and residues of all voids and cavities before closing in.
- Retain all waste transfer documentation on site for inspection as requested by the Contract Administrator.

10.14 Drying the Works

The Contractor shall provide all temporary equipment, fuel and attendance for drying out the Works and controlling the humidity as necessary; the use of the permanent heating installation for this purpose will not be permitted unless previously agreed by the Employer in writing.

10.15 Materials for Recycling / Reuse

Materials or products are to be sorted and any damage prevented. Materials are to be stored neatly and protected until required by the Employer or for use in the Works as instructed.

10.16 Considerate Constructors Scheme

Before starting work, the Contractor is to register the site and pay the appropriate fee:

- Address: Considerate Constructors Scheme Office, PO Box 75, Great Amwell, Ware, Hertfordshire, SG12 0YX.
- Tel. 01920 485959.
- Fax. 01920 485958.
- Free phone 0800 7831423.
- Web. www.ccscheme.org.uk
- Standard: Comply with the Scheme's Code of Considerate Practice.

11. Health & Safety and Site Waste Management Plan

The Contractor must accept the appointment as Principal Contractor for the project and assume the responsibilities for the construction phase as specified in the Regulations.

11.1 Health and Safety Information

Within 1 week of request to do so the Contractor is to provide a description of the organisation and resources to safeguard the health and safety of operatives, including those of subcontractors, and of any person whom the Works may affect. This will include but not be limited to:

- A copy of the contractor's health and safety policy document, including risk assessment procedures.
- Accident and sickness records for the past five years.
- Records of previous Health and Safety Executive enforcement action.
- Records of training and training policy.
- The number and type of staff responsible for health and safety on this project with details of their qualifications and duties.

11.2 Outline Construction Phase Health and Safety Plan

Submit the following information within one week of request to do so:

- Method statements on how risks from hazards identified in the pre-construction information and other hazards identified by the contractor will be addressed.
- Details of the management structure and responsibilities.
- Arrangements for issuing health and safety directions.
- Procedures for informing other contractors and employees of health and safety hazards.
- Selection procedures for ensuring competency of other contractors, the self-employed and designers.
- Procedures for communications between the project team, other contractors and site operatives.
- Arrangements for cooperation and coordination between contractors.
- Procedures for carrying out risk assessment and for managing and controlling the risk.
- Emergency procedures including those for fire prevention and escape.
- Arrangements for ensuring that all accidents, illness and dangerous occurrences are recorded.
- Arrangements for welfare facilities.
- Procedures for ensuring that all persons on site have received relevant health and safety information and training.
- Arrangements for consulting with and taking the views of people on site.
- Arrangements for preparing site rules and drawing them to the attention of those affected and ensuring their compliance.
- Monitoring procedures to ensure compliance with site rules, selection and management procedures, health and safety standards and statutory requirements.
- Review procedures to obtain feedback.

11.3 Construction Phase Health and Safety Plan

- Present to the Employer no later than one week of a request to do so.
- Do not start construction work until the Employer has confirmed in writing that the Construction Phase Health and Safety Plan includes the procedures and arrangements required by CDM Regulations.
- Develop the plan from and draw on the Outline Construction Phase Health and Safety Plan, and the Preconstruction Information package.

11.4 Public Safety

The Contractor shall assume responsibility for complying with statutory requirements with respect to public safety for all works in connection with this Contract.

The Contractor shall submit to the Employer for his comment, proposals for complying with these requirements.

11.5 Safety, Health and Welfare of Workpeople

Where an accident occurs on site, which is notifiable under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1985 and the Employment Act 1988, Section 24(3), a copy shall be sent to the Employer.

11.6 Site Waste Management Plan

The Contractor is responsible for developing the site waste management plan and is to include details of:

- Principal Contractor for the purposes of the regulations.
- Location of the site.
- Description of the project.
- Estimated project cost.
- Types and quantities of waste that will be generated.
- Resource management options for these wastes including proposals for minimization/reuse/recycling.
- The use of appropriate and licensed waste management contractors.
- Record keeping procedures.
- Waste auditing protocols.

12. Practical Completion

The Contractor shall be responsible for having all meters read on the date of Practical Completion and all bills accruing up until that date will be paid by the Contractor and be non-recoverable from the Employer.

The Contractor is to note that all wayleaves, applications for Statutory Services, agreement and waivers etc. shall be vested in the name of the Employer and that Practical Completion will not be certified until such documents have been properly completed and handed to the Employer.

The Contractor shall carry out a CCTV survey of all drains prior to Practical Completion and shall submit a copy of the survey plus two clear and sound video copies to the Employer. A Copy of confirmation that drains are free of defects following CCTV survey should be provided.

The Contractor shall provide the following items to the Employer prior to Practical Completion:

- Building Control Completion Certificate.
- Energy Performance Certificate.
- Air test(s).
- Notification of Means of Escape Completion or Building Occupation.
- Planning Conditions sign off package showing all conditions discharged, where applicable.
- Engineer's Closure Report closing all environmental and ground condition matters, if applicable.
- Fully co-ordinated services layout plans for site and building.
- Computation of cost of all energy used by Main Contractor up to Practical Completion since meter installations.
- Copy of confirmation that drains are free of defects following CCTV survey.
- Landscaping scheme fully approved and planted regardless of "planting season".
- Level survey of slab with external fixed Datum.
- All necessary warranties returned signed.
- Consolidated snagging prepared by the design team.
- Sign off by both the consultants and contractor's consultants that the works have been carried out in accordance with the contract documents.

The following Certificates should be provided to the Employer prior to Practical Completion:

- NICEIC electrical installation test/commissioning certificate.
- Fire alarm and emergency lighting test/commissioning certificates.
- Heating/gas commissioning certificate.

- Water chlorination certificate.
- Lightning protection/earthing certificate.
- Sprinkler test/commissioning certificate, if applicable.

The Contractor shall provide at Practical Completion suitable, safe means of access for the inspection of all above ground works including but not limited to the roof, gutters, cladding and any other high-level works both internally and externally as required by the Employer and include within the Contract Sum for all costs associated with such provision.

The Contractor is reminded of their obligations to make good any defects or omissions so noted by the Contract Administrator at Practical Completion as stated in the Contract. The making good of these defects in their entirety will be a condition precedent in the issuing of the subsequent certificate for payment.

13 **Work at or After Completion**

13.1 **Work Before Completion**

The Contractor is to make good all damage consequent upon the Works.

This will include, but not be limited to, the following:

- Temporary markings, coverings and protective wrappings: Remove unless otherwise instructed.
- Cleaning the Works thoroughly inside and out, including all accessible ducts and voids.
- Removing all splashes, deposits, efflorescence, rubbish and surplus materials.
- Cleaning materials and methods used must be as recommended by manufacturers of products being cleaned and must not damage or disfigure other materials or construction.
- COSHH dated data sheets are to be obtained for all materials used for cleaning and ensure they are used only as recommended by their manufacturers.
- Touch up in newly painted work, carefully matching colour and brushing out edges.
- Repaint badly marked areas back to suitable breaks or junctions.
- Adjust, ease and lubricate as necessary to ensure easy and efficient operation of doors, windows, drawers, ironmongery, appliances, valves and controls.

13.2 **Security at Completion**

Leave the Works secure with, where appropriate, all accesses closed and locked.

Account for and adequately label all keys and hand over to Employer with itemised schedule, retaining duplicate schedule signed by Employer as a receipt.

13.3 **Making Good Defects**

The Contractor will be required to make good defects at any time during the relevant Rectification Period.

The remedial works to the defects must be completed within the following time scales from notification of the defect:

- Electrical/electricity supply failures; gas leaks; bursts; drainage blockages; defects affecting the security of the premises; - IMMEDIATELY.
- Failures of any heating, cooling and hot water; water penetration through external envelope fabric - 24 HOURS.
- Any other defects - 5 WORKING DAYS.

In respect of defects listed as "immediate" or "24 hours", the Employer will make every reasonable attempt to contact the Contractor within ½ day, but where they are unable to notify the Contractor, the Employer reserves the right to have the work undertaken by others. Defect Notices will carry details of the urgency of the work.

Where remedial work is not carried out in the specified time without adequate explanation, the work will be undertaken by others and the cost deducted from retention monies owed to the Contractor.

Upon the expiry of the Rectification Period the Contract Administrator will inspect the works and prepare a schedule of all defects, shrinkages and faults which are still outstanding. These defects shall then be rectified within 4 weeks of the date of issue of this schedule and the Contractor should note that the Notice of Completion of Making Good will not be issued until all of the defects, shrinkages and faults identified have been made good.

The Contractor shall provide at the end of the Rectification Period, suitable, safe means of access for the inspection of

all above ground works including but not limited to the roof, gutters, cladding and any other high level works both internally and externally as required by the Employer or Employer's Agent and include within the Contract Sum for all costs associated with such provision. These facilities may also be requested should any defect need further inspection after rectification.

13.4 Highway / Sewer Adoption

Work to be adopted under the Highways Act, Section 38, or the Roads (Scotland) Act, Section 16 to 18, or the Water Industry Act, Section 104 must be:

- Completed by the Contractor to the satisfaction of the Highway/ Sewer Authorities before the certificate stating the Works are complete is issued.
- Subject to a Defects Liability/ Rectification Period of 12 months.
- Maintained during the Defects Liability/ Rectification Period, including making good of damage due to reasonable wear and tear occurring during the Period and cleaning at the end of the Period, all to the satisfaction of the Highway/ Sewer Authorities.

14. Control of Cost

14.1 Cash Flow Forecast

Before starting work on site, submit a forecast showing the gross valuation of the Works at the date of each Interim Certificate throughout the Contract period. Base on the programme for the Works.

14.2 Proposed Instructions

If a proposed instruction requests an estimate of cost, submit without delay and in any case within seven days. The costs must include:

- A detailed breakdown of the cost, including any allowance for direct loss and expense.
- Details of any additional resources required.
- Details of any adjustments to be made to the programme for the Works.
- Any other information as is reasonably necessary to fully assess the implications of issuing such an instruction.
- Inability to comply: Inform immediately if it is not possible to comply with any of the above requirements.

14.3 Measurement

Give notice before covering work required to be measured.

14.4 Day work Vouchers

Before commencing work: Give reasonable notice to person countersigning day work vouchers. Before delivery, each voucher must be:

- Referenced to the instruction under which the work is authorised.
- Signed by the Contractor's person in charge as evidence that the operatives' names, the time daily spent by each and the equipment and products employed are correct.

14.5 Interim Valuations

Include details of amounts requested under the Contract together with all necessary supporting information.

14.6 Products not incorporated into the Contract

At the time of each valuation, supply details of those products not incorporated into the Works which are subject to any reservation of title inconsistent with passing of property as required by the Contract, together with their respective values.

When requested, provide evidence of freedom of reservation of title.

14.7 Listed Products Stored Off Site

Submit reasonable proof that the property in items stored off site to be included in valuations is vested in the Contractor. Include for products purchased from a supplier:

- A copy of the contract of sale;
- A written statement from the supplier that any conditions of the sale relating to the passing of property have been fulfilled and the products are not subject to any encumbrance or charge.

Include for products purchased from a supplier by a subcontractor, manufactured, or assembled by any subcontractor:

- Copies of the subcontract with the subcontractor and a written statement from the subcontractor that any conditions relating to the passing of property have been fulfilled.

14.8 Labour and Equipment Returns

Provide for verification at the beginning of each week in respect of each of the previous seven days. Records must show:

- The number and description of craftsmen, labourers and other persons directly or indirectly employed on or in connection with the Works or Services, including those employed by subcontractors.
- The number, type and capacity of all mechanical, electrical and power-operated equipment employed in connection with the Works or Services.

D. DATA AND SAMPLES TO BE PROVIDED BY THE CONTRACTOR

1. General

The Contractor shall assume responsibility for the preparation of all design and shop drawings required under the Contract and for ascertaining the correct information for the preparation of such drawings. All drawings prepared by the Contractor are to be co-ordinated with the Contract Documents, drawings and details and shall be coded with reference to the Contractor's Design Portion.

2. Data to be Supplied With the Tender

The Contractor shall supply the information with the Contract Sum as set out in these Contract Documents.

Further to the above the Contractor's attention is drawn to the provision of detailed proposals for the following items as part of the Contractor's Design Portion;

The Contractor shall also supply three copies of such drawings, specifications and the like as are necessary fully to describe any design proposals, constructional details, (including full size details) co-ordination and integration of every element of the Works and include the specific data referred to under this heading in the various sections of the Contract Documents.

3. Data and Samples to be Submitted From Time to Time

3.1 The Contractor shall prepare and submit to the Employer six copies and one reproducible copy of all drawings, specifications, details, levels and setting out dimensions which are either:-

- reasonably necessary from time to time to explain and amplify the Contractor's Design Portion and any Changes; or
- reasonably necessary to enable the Contractor to execute the Works and any Changes; or
- on a date which will enable the Employer and Contractor to comply with the procedures set out in this item 3, Section D without delaying the progress of the Works.

3.2 The Employer shall within 14 days of date of receipt of any such drawings, specifications, details, levels and setting out dimensions submitted or re-submitted by the Contractor return one copy of the same to the Contractor together with his comments (if any) thereon or alternatively provide a written schedule of comments provided that the Employer shall not comment unreasonably or adversely on any such drawings, specifications, details, levels and setting out dimensions, which comply with the Statutory Requirements and with the standards of workmanship and materials specified therein or in the Employer's Requirements, or to be reasonably inferred there from.

3.3 If the Employer returns any drawings, specifications, details, levels and setting out dimensions in accordance with the foregoing item 3.2, together with comments, the Contractor shall immediately take account of such comments in such drawings, specifications, details, levels and setting out dimensions and shall re-submit them to the Employer for comment in accordance with the provisions of the foregoing item 3.1 and the Employer shall return them to the Contractor in accordance with the foregoing item 3.2 provided that where the Contractor is of the opinion that any such comments are likely to adversely affect the design of the works they shall not take account thereof but shall give notice of objection to the Employer and the Employer shall forthwith instruct the Contractor either to disregard or to take account of the comments to which the Contractor has objected and the Contractor shall comply with such instruction.

- 3.4 It shall be a condition precedent to the Contractor's entitlement to be paid for Work executed or materials and/or goods supplied that the same shall be executed or supplied in accordance with the drawings, specifications, details, levels and setting out dimensions returned by the Employer under the provisions of the foregoing item 3.2 and marked "returned with no comment" in accordance with the foregoing item 3.3.
- 3.5 On a date which will enable the Employer and Contractor to comply with all the foregoing provisions, the Contractor shall provide:
- Final versions of specifications.
 - Amplification of proposals made with the tender.
 - General arrangement and detailed working drawings.
 - Any necessary calculations.
- 3.6 During the course of the work the Contractor shall provide:
- Any necessary certificates to demonstrate compliance with these requirements.
 - Such samples of materials and workmanship as are necessary to enable the Employer to make a choice on finishes and colours.

E. AS BUILT DRAWINGS AND BUILDING MANUAL

1. 'As Built' Drawings

At the time of handover the Contractor shall supply drawings illustrating the Works as built together with specification notes sufficient to describe the construction.

2. The Building Manual

At the time of Practical Completion the Contractor shall supply a Health and Safety File/Building manual.

The Manual is to be a comprehensive information source and guide for owners and users of the completed Works. It should provide an overview of the main design principles and describe key components and systems to enable proper understanding, efficient and safe operation and maintenance.

The manual comprises five parts and the Contractor must obtain and provide, as a minimum, the following;

Part 1: General

- (a) Index: list the constituent parts of the manual, together with their location in the document.
- (b) The Works:
- Description of the buildings and facilities.
 - Ownership and tenancy, where relevant.
 - Health and Safety information – other than that specifically required by the Construction (Design and Management) Regulations.
- (c) The Contract:
- Names and addresses and contact details of all significant consultants, contractors, subcontractors, suppliers and manufacturers.
 - Overall design criteria.
 - Environmental performance requirements.
 - Relevant authorities, consents and approvals.
 - Third party certification, such as those made by 'competent' persons in accordance with the Building Regulations.
- (d) Operational requirements and constraints of a general nature:
- Maintenance contracts and contractors.
 - Fire safety strategy for the buildings and the site. Include drawings showing emergency escape and fire appliance routes, fire resisting doors location of emergency alarm and fire-fighting systems, services, shut off valves switches, etc.
 - Emergency procedures and contact details in case of emergency.

Part 2: Building Fabric

- Design criteria including floor loadings, insulation values and other performance requirements.
- Construction issue drawings recording details of construction, together with an index.
- Details of all materials, components and equipment including copies of manufacturer's current

literature, COSHH dated data sheets and manufacturers' recommendations for cleaning and maintenance.

- Names, addresses, telephone and fax numbers of all suppliers and manufacturers.
- Copies of all guarantees, warranties and maintenance agreements offered by subcontractors, suppliers and manufacturers.
- Copies of all test certificates and reports required in the specification.
- Information and guidance concerning repair, renovation or demolition/ deconstruction.
- Periodic building maintenance guide chart.
- Inspection reports.
- Manufacturer's instructions index, including relevant COSHH data sheets and recommendations for cleaning, repair and maintenance of components.
- Fixtures, fittings and components schedule and index.

Part 3: Building Services

- (a) Detailed design criteria and description of the systems, including:
- Services capacity, loadings and restrictions.
 - Services instructions.
 - Services log sheets.
 - Manufacturers' instruction manuals and leaflets index.
 - Fixtures, fittings and component schedule index.
- (b) Detailed description of methods and materials used.
- (c) As-built drawings for each system recording the construction, together with an index, including:
- Diagrammatic drawings indicating principal items of plant, equipment and fittings.
 - Record drawings showing overall installation.
 - Schedules of plant, equipment, valves, etc. describing location, design performance and unique identification cross referenced to the record drawings.
 - Identification of services – a legend for colour coded services.
- (d) Product details, including for each item of plant and equipment:
- Name, address and contact details of the manufacturer.
 - Catalogue number or reference.
 - Manufacturer's technical literature, including detailed operating and maintenance instructions.
 - Information and guidance concerning dismantling, repair, renovation or decommissioning.
- (e) Operation: A description of the operation of each system, including:
- Starting up, operation and shutting down.
 - Control sequences.
 - Procedures for seasonal changeover.
 - Procedures for diagnostics, troubleshooting and fault finding.
- (f) Guarantees, warranties and maintenance agreements – obtain from manufacturers, suppliers and subcontractors.
- (g) Commissioning records and test certificates list for each item of plant, equipment, valves, etc. used in the installations – including:
- Electrical circuit tests.
 - Corrosion tests.
 - Type tests.
 - Work tests.
 - Start and commissioning tests.
- (h) Equipment settings: Schedules of fixed and variable equipment settings established during commissioning.
- (i) Preventative maintenance: Recommendations for frequency and procedures to be adopted to ensure efficient operation of the systems.
- (j) Lubrication: Schedules of all lubricated items.
- (k) Consumables: A list of all consumable items and their source.
- (l) Spares: A list of recommended spares to be kept in stock, being those items subject to wear and tear or deterioration and which may involve an extended delivery time when replacements are required.
- (m) Emergency procedures for all systems, significant items of plant and equipment.
- (n) Annual maintenance summary chart.

Part 4: The Health and Safety File

- (a) Residual hazards and how they have been dealt with.
- (b) Hazardous materials used.
- (c) Information regarding the removal or dismantling of installed plant and equipment.
- (d) Health and safety information about equipment provided for cleaning or maintaining the structure.
- (e) The nature, location and markings of significant services.
- (f) Information and as-built drawings of the structure, its plant and equipment.

Part 5: The Building User Guide

- (a) Building services information.
- (b) Emergency information.
- (c) Energy & environmental strategy.
- (d) Water use.
- (e) Transport facilities.
- (f) Materials & waste policy.
- (g) Re-fit/ re-arrangement considerations.
- (h) Reporting provision.
- (i) Training.
- (j) Links & references.

The Building Manual is to be presented in a suitable format and should be hard covered and bound accordingly. Where larger than A4 selected drawings needed to illustrate or locate items mentioned in the Manual and are to be folded and accommodated in the binders so that they may be unfolded without being detached from the rings. As-built drawings may form annexes to the Manual. The final completed manual is also required to be submitted in PDF format.