
PRELIMINARIES AND GENERAL CONDITIONS

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A. General matters

1. Brief Description of the Project

The Employer for the purposes of the contract is the Satellite Applications Catapult Limited (SAC), Electron Building, Fermi Avenue, Harwell, Oxfordshire, OX11 0QR

The site is located at the Harwell Science and Innovation Campus; with the specific site area within the existing Zephyr Building as denoted on the Location Plan included within the SAC Request for Proposal – Annex 1.

The Employer requires the CAT B fit out of an existing unit within the Zephyr Building in which the end user, the Disruptive Innovation for Space Centre (DISC), will continue to support industrial and academic teams in undertaking innovative research and development projects. The fit out will commence upon completion of the mezzanine level installation (to be undertaken via separate Contract).

The completed space will be subdivided into various functions including workshops, testing laboratories, PPE changing facilities; along with provision of office space allowing for collaborative/ interactive/ confidential workspace.

The scope of works for the services installations includes but is not limited to:

- facilitating works for installation of Client equipment and machinery (final installation to be by Client)
- provision of workshop / warehouse space
- provision of welfare facilities; inclusive of toilets, showers and kitchen areas
- LV distribution equipment, busbars and switchgear
- lighting installations and controls
- small power installations
- provision of main plant
- preparation of spaces for further fit-out works required in the future

Further details of the project are as follows:

The contract is to be executed under the JCT Design and Build Contract 2016, incorporating a Schedule of Contract Amendments as included within the SAC Request for Proposal Annex 8.

The Architect has developed the design to Tender Stage / RIBA Stage 3 and will not be novated to the Contractor by the Employer.

The Structural Engineer has developed the design to Tender Stage/ RIBA Stage 3 and will not be novated to the Contractor by the Employer.

The Civil Engineer has developed the design to Tender Stage/ RIBA Stage 3 and will not be novated to the Contractor by the Employer.

The Building Services Engineer has developed the design to Tender Stage / RIBA Stage 3 and will not be novated to the Contractor by the Employer.

The Contractor must examine all tender documentation to verify its consistency, and completeness. Any conflict, divergences, discrepancies and inadequacies contained within the tender documents must be identified by the Contractor and brought to the attention of the Employer's Agent for resolution and instruction immediately, before the tender is submitted. Any cost or programme implication incurred by the Contractor in failure to comply with this instruction will not be reimbursed by the Employer.

2. Design

The Employer has engaged the following consultant team:

Employer's Agent:

The Manufacturing Technology Centre Limited
Ansty Park
Coventry
CV7 9JU

Architect:

The Fairhursts Design Group Limited
55 King Street
Manchester
M2 4LQ

Project Manager:

The Manufacturing Technology Centre Limited
Ansty Park
Coventry
CV7 9JU

Structural Engineer:

Waterman Group PLC
5th Floor
1 Cornwall Street
Birmingham
B3 2DX

Civil Engineer:

Waterman Group
5th Floor
1 Cornwall Street
Birmingham
B3 2DX

Services Consultant:

Cundall Johnston & Partners LLP
4th Floor
Cathedral Court
15 Colmore Row
Birmingham

B3 2BH

Quantity Surveyor:

Quantem Consulting LLP
First Floor
Lancaster House
67 Newhall Street
Birmingham
B3 1NQ

Principal Designer (Pre-Contract)

Quantem Consulting LLP
Third Floor
Quality House
Chancery Lane
London
WC2A 1HP

To be transferred to the Principal Contractor upon appointment

3. Novation

All consultants will be employed directly by the Satellite Applications Catapult Limited, therefore Novation will not be required on the project.

The Contractor should include for taking the design from the level of detail contained in the tender documents through to completion and handover.

The Contractor shall allow for auditing the existing design and shall afford the Employer a warranty for this design.

4. Planning and other approvals

The project has existing planning consent and the Contractor's attention is drawn to Appendix C of these Employer's Requirements. The Contractor is deemed to have included for and will comply with all documentation and conditions outlined within Appendix C of these Employer's Requirements (Planning Decision Notice). It is acknowledged that if further planning input is required, the Contractor shall be responsible for obtaining planning permission and verifying approval with the Town Planners.

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 by him in respect of the permissions and approvals required by this section in the Contract Sum Analysis.

Building Regulation approvals and all other necessary approvals including those for any changes made to the Employer's Requirements by the Contractor's Proposals; he shall provide the Employer with copies of all approval notices and he shall pay all fees in connection therewith. The Contractor is to liaise with the Employer's Agent to seek approval prior to final submissions.

As part of this Contract, the Contractor is to include all fees associated with obtaining Building Control Approval. The Contractor is responsible for providing, prior to Practical Completion, a Building Control Completion Certificate.

Building Control Inspector Contact Details

Name: South Oxfordshire and the Vale of White House District Councils
Address: 135 Eastern Avenue, Milton Park, Milton, OX14 4SB
Contact: Walter Capek
Email: Walter.Capek@southandvale.gov.uk

Planning Enquiries

Name: Vale of White Horse District Council
Address: 135 Eastern Avenue, Milton Park, Milton, OX14 4SB
Contact: Nathaniel Bamsey@
Email: Nathaniel.Bamsey@southandvale.gov.uk
Tel: 01235 422600

5. Alternative Tenders

The Contractor is required to compile his tender on the basis of the stated programme but is also invited to provide an alternative tender on the basis of a shorter and/or more economic construction programme.

The following is a schedule of tenders required (see Form of Tender);

Alternative Tender No. 1 - Fixed price tender on stated programme.

Alternative Tender No. 2 - Fixed price tender on Contractor's programme.

6 Contractor's Alternative Proposals

The layout of Project DISC II, with respect to roads, buildings, parking and landscaping is shown within the Drawings and Specifications within these Employer's Requirements.

In order for the Contractor's tender return to be considered by the Employer, the Contractor must price the fully compliant scheme in accordance with the design information included within these Employer's Requirements.

Providing the Contractor has priced the fully compliant scheme, the Contractor is invited to submit to the Employer alternative design proposals.

Alternative design proposals will be considered which provide time and / or cost benefits.

Should the Contractor choose to submit alternative proposals alongside the compliant scheme he must provide the following to represent his proposals. He shall provide drawings (artist impressions, plans, elevation views etc.), material specifications and all other documents necessary to communicate the proposals with respect to the Works as a whole. The Contractor's submissions shall be of sufficient adequacy and clarity to allow the Employer to consider the proposals to be taken forward for detailed design and construction. The Contractor must provide a full cost breakdown to support his alternative proposal(s), this cost breakdown should be in sufficient detail to allow the Employer to financially assess the individual elements of the Contractor's alternative proposal in isolation from one another (i.e. in a Contract Sum Analysis). Should the Contractor's alternative proposal be selected by the Employer the Contractor, within 7 days of request will be required to provide a detailed and comprehensive Bill of Quantities to support his submitted Contract Sum Analysis fully priced and monied out to agree with the total of his tender. The request shall not constitute or imply acceptance of the tender to substantiate the price submitted alongside the alternative proposals.

The Employer is in no way obliged to select one of the Contractor's alternative proposals over the fully compliant scheme. Furthermore, the Employer reserves the right to select certain elements of the Contractor's alternatives to be incorporated into the compliant scheme should he deem these elements present value for money. When submitting alternative designs the Contractor's proposals for the layout of the Works shall ensure that the Employer's Requirements are met ensuring all Levels of Service and Performance Standards set by the Employer are satisfied.

7. Tender sum

The Contractor is required to submit a lump sum fixed price tender for the full Works as required by this Tender Document. The tender sum shall include for commencement of construction works in November 2018. No additional cost for tender price inflation will be paid by the Employer beyond the date of tender submission.

A pricing document has been provided within the SAC Request for Proposal document- Annex 5 in order to assist the Contractor with preparation of the tender sum. The Contractor is fully responsible for submission of the tender sum and submission of the pricing document. The Contractor is responsible for ensuring the pricing document submitted within the tender is fully inclusive of all Works required by this Tender Document. No additional cost for items of Works not included within the tender sum will be paid by the Employer.

The Contractor is required to provide a full breakdown of preliminary costs separating fixed charge items and time related charge items.

The Contractor is required to provide a full schedule of labour rates for all trades associated with the construction of this project.

The Contractor is deemed to have included preliminaries and attendance for the management of any variation which may be instructed by the Employer's Agent during the course of the Works. When valuing variations no costs will be accepted for main contractor preliminaries and attendance.

Please refer to the form of tender within the SAC Request for Proposal document which details the procedure and tender validity period.

8. Documents and terms used on this project

The Form of Contract will be the JCT Design and Build Contract 2016 Edition; incorporating a Schedule of Contract Amendments as included within Annex 8 of the SAC Request for Proposal.

The Tender Drawings and Specifications are included within Annex 1 of the SAC Request for Proposal.

In this Form of Contract the Employer states the requirements in a document titled "Employer's Requirements" and the Contractor is required to respond to these Employer's Requirements with a further document titled the "Contractor's Proposals". The format of the Contract Sum is contained within SAC Request for Proposal document- Annex 5 titled "Contract Sum Analysis"; the Contractor must return this completed document including all items of Works deemed necessary to complete the scope of work required by this Tender Document; along with the SAC Request for Proposal.

9. Employer's Requirements

The Employer's Requirements are contained in this document titled "Project DISC II Employer's Requirements, August 2018 for Satellite Applications Catapult Limited" and the SAC issued Request for Proposal document – reference RFQ-FY19-07; which contains both text and drawings.

Certain drawings, specifications and other documents have been prepared by consultants employed by the Employer prior to the date of this tender. These are set out within the appendices of these Employer's Requirements. It is intended that these drawings specifications and documents be included in the Contractor's Proposals as described in Article 4 of the JCT Design and Build contract.

Tenderers are required to check and satisfy themselves as to the adequacy and completeness of the information contained within the appendices of these Employer's Requirements and to confirm that they are happy that it be included in the Contractor's Proposals. If any tenderer has any comments or queries or if he believes that it is appropriate to make any alterations to the drawings specifications and documents contained within the appendices of these Employer's Requirements, he is required to do so with his tender.

Wherever in these Employer's Requirements reference is made to the Particular Specification such provisions shall not form part of the Employer's Requirements but shall be regarded only as an indication to tenderers of the Employer's preferences. Where the Contractor adopts such preferences or modifications thereto these 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 he had prepared them, or caused them to be prepared himself. Tenders are to be based on the Employer's Requirements and Particular Specification so that bids can be compared on an equal basis.

Tenderers will be permitted to submit with their tender alternatives to the Particular Specifications, together with the effect upon their tender amounts, provided only that they have submitted a tender which wholly incorporates the Particular Specifications.

Any such alternative proposals to the Particular Specification shall be of no less a standard than is stated in or reasonably to be inferred from the relevant Particular Specifications and the remainder of the tender documents.

10. Contractor's Proposals

The Contractor's Proposals shall be deemed to have incorporated all provisions of these Employer's Requirements and shall incorporate such further specification or general matters and drawings as are necessary fully to describe the works and the standards to which the same shall be designed and constructed. Where the Contractor has, in the Contractor's Proposals, either proposed alternatives to the Employer's Requirements or incorporated further provisions, such alternatives and further provisions shall be to no less a standard of design, workmanship and materials than is contained within the Employer's Requirements or could be reasonably inferred and the Contractor shall inform the Employer of these changes. Any discrepancy between the Employer's Requirements and the Contractor's Proposals shall be resolved as laid down in the Conditions of Contract.

11. Contract Sum Analysis

The Contract Sum Analysis is to be appended to the Contractor's Proposals in the format set out in SAC Request for Proposal document- Annex 5. 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 comprehensive Bill of Quantities 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 both the design and construction of the Works.

12. Provisional Sums

No Provisional Sums are anticipated. The Contractor is to provide a fixed price for the works.

13. Performance Bond

The Contractor shall, forthwith upon entering into this Contract, deliver to the Employer a performance bond, in the form set out within Section 1.4 of these Employer's Requirements, duly executed as a deed by the Contractor and its surety. 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 in the form set out in SAC Request for Proposal document- Annex 8. The Bond shall be for an amount equal to 10% of the amount of the Contract Sum. The Contractor shall pay all fees, premiums and stamp duty in connection with the Bond.

14. Parent Company Guarantee

The Contractor shall, forthwith upon entering into this Contract, deliver to the Employer a parent company guarantee, in the form set out within SAC Request for Proposal document- Annex 8, duly executed as a deed by the Contractor and its ultimate parent company together with a certified copy of a minute of the board of such parent company in the form set out in SAC Request for Proposal document- Annex 8 approving the execution of such parent company guarantee.

15. Warranties

The Contractor will be required to enter into collateral warranties within 10 working days of the Employer's request to do so in the forms set out within SAC Request for Proposal document- Annex 8.

16. Sub-Contractor Warranties

The Contractor will be required to secure sub-contractor warranties in the form as set out in SAC Request for Proposal document- Annex 8.

The Contractor will be required to secure sub-contractor warranties as follows:

- Structure including steelwork
- Any remedial works to existing slab
- Mechanical services
- Electrical services
- Electronic security provisions
- Any other sub contracts having significant value and / or having significant design element

Collateral warranties are required to be provided prior to the Sub Contractor completing their works on site.

The Contractor will be required to enter into Sub-Contractor warranties within 10 working days of the Employer's request to do so.

The level of PI cover for Sub-Contractors shall not be less than £5,000,000 (Five Million Pounds) for any one occurrence.

17. Sub-Consultant Warranties

The Contractor will be required to enter into Sub-Consultant warranties within 15 working days of the Employer's request to do so in the form set out within SAC Request for Proposal document- Annex 8.

- Sub-Consultant warranties will be required from any designing or professionally advising Sub-Consultant.

The level of PI cover for Sub-Consultants shall not be less than £5,000,000 (Five Million Pounds) for any one occurrence.

18. Independent Roofing and Cladding Inspector

Not applicable.

19. Insurance

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

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.

20. SAC Permits to Work

Not Applicable.

21. Satellite Applications Requirements/Policies

The Contractor shall make all due allowances within his tender for complying with the SAC policy statements included within Appendix K – Satellite Applications Requirements/Policies of these Employer’s Requirements.

B. Contractual Matters

1. Form of contract

The Form of Contract will be the JCT Design and Build Contract 2016, incorporating a Schedule of Contract Amendments as recorded in SAC Request for Proposal document- Annex 8. These documents form part of the Employer’s Requirements.

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

2. Contract Particulars

Recitals

The Employer wishes to have the design and construction of the following work carried out: the CAT B fit out of a unit within the existing Zephyr Building at: Harwell Science and Innovation Campus, Didcot, Oxfordshire OX11 0RL.

The Articles

Article 3: Employer’s Agent	Manufacturing Technology Centre Limited
Article 5: Principal Designer	The Contractor (TBC)
Article 6: Principal Contractor	The Contractor (TBC)
Article 8 and clauses 9.3 to 9.8 Arbitration	Does not apply

Part 1 General

Clause etc.	Subject	
Fourth Recital and clause 4.5	Construction Industry Scheme (CIS)	Employer at the Base Date is a 'contractor' is not a 'contractor' for the purposes of the CIS
Fifth Recital	Description of Sections (if any) (If not shown or described in the Employer's Requirements, state the reference numbers and dates or other identifiers of documents in which they are shown.)	N/A _____ _____ _____ _____
Sixth Recital	Framework Agreement (if applicable) (State date, title and parties.)	N/A _____ _____
Seventh Recital and Part 1 of Schedule 2	Supplemental Provisions – Part 1 (Where neither entry against an item below is deleted, the relevant paragraph <u>does not</u> apply.)	
	Site Manager	Paragraph 1 applies/ does not apply
	Named Sub-Contractors	Paragraph 2 applies /does not apply
	Bills of Quantities	Paragraph 3 applies /does not apply
	Valuation of Changes - Contractor's estimates	Paragraph 4 applies /does not apply
	Loss and expense – Contractor's estimates	Paragraph 5 applies /does not apply
Seventh Recital and Part 2 of Schedule 2	Supplemental Provisions – Part 2 (Where neither entry against an item below is deleted, the relevant paragraph applies.)	
	Acceleration Quotation	Paragraph 6 applies/ does not apply
	Collaborative working	Paragraph 7 applies/ does not apply
	Health and safety	Paragraph 8 applies/ does not apply
	Cost savings and value improvements	Paragraph 9

		applies/ does not apply
	Sustainable development and environmental considerations	Paragraph 10 applies/ does not apply
	Performance Indicators and monitoring	Paragraph 11 applies /does not apply
	Notification and negotiation of disputes	Paragraph 12 applies/ does not apply
	Where Supplemental Provision 10 applies, the respective nominees of the Parties are	Employer's nominee Mr Aidan McGuire _____ _____ Contractor's nominee _____ TBC _____ _____ or such replacement as each Party may notify to the other from time to time
Article 4	Employer's Requirements <i>(State reference numbers and dates or other identifiers of the relevant documents.)</i>	Document titled, "Project DISC II Employer's Requirements, August 2018 for Satellite Applications Catapult Limited"
Article 4	Contractor's Proposals <i>(State reference numbers and dates or other identifiers of the relevant documents.)</i>	_____ TBC _____ _____ _____ _____
Article 4	Contract Sum Analysis <i>(State reference numbers and dates or other identifiers of the relevant documents.)</i>	Document titled "Contract Sum Analysis which can be found in Annex 5 of the Request for Proposal".
Article 8	Arbitration <i>(If neither entry is deleted, Article 8 and clauses 9.3 to 9. 8 do not apply. If disputes and differences are to be determined by arbitration</i>	Article 8 and clauses 9.3 to 9. 8 (Arbitration) apply /do not apply

and not by legal proceedings, it must be stated that Article 8 and clauses 9.3 to 9. 8 apply.)

1.1	Base Date	10 days prior to the date for return of tenders
1.1	BIM Protocol (where applicable) <i>(State title, edition, date or other identifiers of the relevant documents)</i>	_____ _____ _____
1.1	Date for Completion of the Works <i>(where completion by Sections does not apply)</i>	4 th February 2019
	Sections: Dates for Completion of Sections	N/A
1.7	Addresses for service of notices by the Parties <i>(If none is stated, the address in each case, subject to clause 1-7-3, shall be that shown at the commencement of the Agreement.)</i>	Employer: Aidan McGuire, Head of Legal, Satellite Applications Catapult Limited, Electron Building, Fermi Avenue, Harwell, OX11 0QR (Phone Number) 012355 67999 Contractor TBC (Phone Number) TBC
2.3	Date of Possession of the site <i>(where possession by Sections does not apply)</i>	23 rd November 2018
	Sections: Dates of Possession of Sections	N/A
2.4	Deferment of possession of the site <i>(where possession by Sections does not apply)</i>	Clause 2.4 applies/ does not apply Maximum period of deferment (if less than 6 weeks) is _____
	Sections: deferment of possession of Sections	Clause 2.4 applies/ does not apply Maximum period of deferment (if less than 6 weeks) is _____

		Section _____ : _____
		Section _____ : _____
		Section _____ : _____
2.17.3	Limit of Contractor's liability for loss of use etc. (if any)	<u>£5,000,000.00</u>
2.29.2	Liquidated damages (where completion by Sections does not apply)	At the rate of £10,000.00 per week or part thereof
	Sections: rate of liquidated damages for each Section	N/A
2.34	Sections: Section Sums	N/A
2.35	Rectification Period (where completion by Sections does not apply) (If no other period is stated, the period is 6 months.)	12 months from the date of Practical Completion of the Works
	Sections: Rectification Periods (If no other period is stated, the period is 6 months.)	N/A
4.2, 4.12 and 4.13	Fluctuations Provisions (Unless another option or entry is selected, JCT Fluctuations Option A applies)	* JCT Fluctuations Option A applies/ * JCT Fluctuations Option B applies/ * JCT Fluctuations Option C applies/ * no Fluctuations Provision applies/ * the following Fluctuations Provision applies _____ _____
4.6	Advance payment (Not applicable where the Employer is a Local or Public Authority)	Clause 4.6 applies/does not apply If applicable: the advance payment will be £ _____/ _____ _____ per cent of the Contract Sum and will be paid to the Contractor on _____ _____ it will be reimbursed to the Employer in the following amount(s) and at the following time(s) _____ _____ _____ _____

4.6	<p>Advance Payment Bond <i>(Not applicable where the Employer is a Local or Public Authority)</i> <i>(Where an advance payment is to be made, an advance payment bond is required unless stated that it is not required.)</i></p>	<p>An advance payment bond is/is not required</p>
4.7.1	<p>Method of payment – alternatives <i>(If no Alternative is selected, Alternative B applies.)</i></p> <p>Alternative A: Stage Payments</p> <p>Stages (insert brief description)</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	<p>* by stages in accordance with Alternative A (clause 4.12)/ * periodically in accordance with Alternative B (clause 4.13)</p> <p>The stages referred to in clause 4.8.2 are * set out in the following document:</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>*as follows</p> <p>Cumulative value</p> <p>£ _____</p> <p>£ _____</p> <p>£ _____</p> <p>£ _____</p> <p>£ _____</p>
4.7.2	<p>Interim Payments – Interim Valuation Dates <i>(The dates apply for each Alternative; if no date is stated, the first Interim Valuation Date is one month after the Date of Possession.)</i></p>	<p>The first Interim Valuation Date is: <u>TBA</u></p> <p>and thereafter the same date in each month or the nearest Business Day in that month</p>
4.15.4	<p>Listed Items – uniquely identified <i>(Delete the entry if no bond is required.)</i></p>	<p>* For uniquely identified Listed Items a bond in respect of payment for such items is required for</p> <p>N/A</p>
4.15.5	<p>Listed Items – not uniquely identified <i>(Delete the entry if clause 4.15.5 does not apply.)</i></p>	<p>* For Listed Items that are not uniquely identified a bond in respect of payment for such items is required for</p> <p>N/A</p>

4.17	Contractor's Retention Bond <i>(Not applicable where the Employer is a Local or Public Authority and, in other cases, not applicable unless stated to apply, with relevant particulars below)</i>	Clause 4.17 applies /does not apply If clause 4.17 applies , the maximum aggregate sum for the purpose of clause 2 of the bond is £ _____ _____ For the purpose of clause 6.3 of the bond, the expiry date shall be _____ _____
4.18.1	Retention Percentage <i>(The percentage is 3 per cent unless a different rate is stated; if no retention is required, insert 'Nil' or '0'.)</i>	<u>5</u> per cent
5.5	Daywork	The Percentage Additions to each section of the prime cost or, if they apply in respect of labour, the All-Inclusive Rates, are set out in the following document N/A _____
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 for any one occurrence or series of occurrences arising out of one event
6.5.1	Insurance – liability of Employer	Minimum amount of indemnity for any one occurrence or series of occurrences arising out of one event £10,000,000
6.7 and Schedule 3	Insurance of the Works – Insurance Options	Schedule 3: Insurance Option A applies/ Insurance Option B applies/ Insurance Option C applies
	Percentage to cover professional fees	<u>15</u> per cent

(If no other percentage is stated, it shall be 15 percent.)

Where Insurance Option C applies, paragraph C-1
(Unless otherwise stated, paragraph C-1 applies. If it is not to apply, state the reference number and date or other identifier of the replacement documents)

- Applies /
- Is replaced by the provisions of the following document (s)

(the 'C-1 Replacement Schedule')

6.7 and Schedule 3 Insurance Option A (paragraph A.3)	Annual renewal date of insurance <i>(as supplied by the Contractor)</i>	TBA
6.10 and Schedule 3	Terrorism Cover –details of the required cover <i>(Unless otherwise stated, Pool Re Cover is required.)</i>	Pool Re Cover
6.15	Professional Indemnity insurance Level of cover <i>(If an alternative is not selected the amount shall be the aggregate amount for any one period of insurance. A period of insurance for these purposes shall be one year unless otherwise stated.)</i> <i>(If no amount is stated, insurance under clause 6.15 shall not be required.)</i>	Amount of indemnity required * relates to claims or series of claims arising out of one event/ * is the aggregate amount for any one period of insurance and is £10,000,000
	Cover for pollution and contamination claims <i>(If no amount is stated, such cover shall not be required; unless otherwise stated, the required limit of indemnity is an annual aggregate amount.)</i>	* is required, with a sub-limit of indemnity of £2,000,000 / Is not required
	Expiry of required period of Professional Indemnity insurance is <i>(If no period is selected, the expiry date shall be 6 years from the date of practical completion of the Works.)</i>	* 6 years/ * 12 years/ _____ years (not exceeding 12 years)
6.17	Joint Fire Code If the Joint Fire Code applies, state whether the	The Joint Fire Code applies/ does not apply Yes/No

insurer under Schedule 3, Insurance Option A, B or C (paragraph C.2) has specified that the Works are a 'Large Project':

6.20	Joint Fire Code – amendments/revisions <i>(The cost shall be borne by the Contractor unless otherwise stated.)</i>	The cost, if any, of compliance with amendment(s) or revision(s) to the Joint Fire Code shall be borne by the Employer /the Contractor
7.2	Assignment/grant by Employer of rights under clause 7.2 <i>(If neither entry is deleted, clause 7.2 applies.)</i>	Clause 7.2 * applies/ does not apply
	Sections: rights under clause 7.2 <i>(If clause 7.2 applies, amend the entry if rights under that clause are to apply to certain Sections only.)</i>	N/A
7.3.1	Performance bond or guarantee from bank or other approved surety <i>(If this entry is not completed or the required form is not specified, a performance bond or guarantee is not required.)</i>	* Is required/ is not required
	The required form of the bond or guarantee is set out in	Refer to the Schedule of Amendments, contained within SAC Request For Proposal – Annex 8
	Initial value	_____ 10 _____ per cent of the Contract Sum
	Period of validity – if not specified in the required form, the expiry date of the performance bond or guarantee is to be <i>(If no entry is selected, the date shall be the date of practical completion of the Works.)</i>	* the date of practical completion of the Works/ * 2 weeks after the date of expiry of the Rectification Period for the Works/ * the date for issue of the Notice of Completion of Making Good for the Works
7.3.2	Guarantee from the Contractor's parent company	Is required / Is not required
7.4	Third Party Rights and Collateral Warranties – details of the requirements for the grant by the Contractor and sub-contractors of P&T Rights, Funder Rights and/or (in the case of subcontractors) Employer Rights in respect of the Works, either as third party rights or by collateral warranties ('Rights Particulars') are set out in the following document <i>(State reference number and date or other identifier of the relevant document.)</i>	Refer to the Schedule of Amendments, contained within SAC Request For Proposal – Annex 8
8.9.2	Period of suspension <i>(If none is stated, the period is 2 months.)</i>	2 Months

8.11.1.1 to 8.11.1.6	<p>Period of suspension <i>(If none is stated, the period is 2 months.)</i></p>	2 Months
9.2.1	<p>Adjudication</p> <p>Nominating body – where no Adjudicator is named or where the named Adjudicator is unwilling or unable to act (whenever that is established) <i>(Where an Adjudicator is not named and a nominating body has not been selected, the nominating body shall be one of the bodies listed opposite selected by the Party requiring the reference to adjudication.)</i></p>	<p>The Adjudicator is _____</p> <p>* Royal Institute of British Architects * The Royal Institution of Chartered Surveyors * constructionadjudicators.com * Association of Independent Construction Adjudicators * * Chartered Institute of Arbitrators</p>
9.4.1	<p>Arbitration - appointor of Arbitrator (and of any replacement) <i>(If no appointor is selected, the appointor shall be the President or a Vice-President of the Royal Institute of British Architects.)</i></p>	N/A

3. Execution

The Contract will be executed as a deed

4. Performance Bond / Parent Company Guarantee

Performance Bond

The Contractor shall, forthwith upon entering into this Contract, deliver to the Employer a performance bond, in the form set out within SAC Request for Proposal document- Annex 8, duly executed as a deed by the Contractor and its surety.

Parent Company Guarantee

The Contractor shall, forthwith upon entering into this Contract, deliver to the Employer a parent company guarantee, in the form set out within SAC Request for Proposal document- Annex 8, duly executed as a deed by the Contractor and its ultimate parent company together with a certified copy of a minute of the board of such parent company in the form set out within SAC Request for Proposal document- Annex 8, approving the execution of such parent company guarantee

5. 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 will 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 Contract clause 4.7 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: Satellite Applications Catapult Limited

Employer's Agent: Manufacturing Technology Centre (Catapult) Ltd

CDM Co-Ordinator: The Contractor (TBC)

Principal Contractor: (TBC)

2. The Site, existing buildings and surroundings

The Site

The site is located within the existing Zephyr Building at Harwell Science and Innovation Campus, Didcot, Oxfordshire, OX11 0RL. The surrounding buildings form part of the wider campus, which is home to various organisations, institutions and business shaping scientific breakthroughs and technological innovation. These other companies adjacent to the site are not linked to SAC and shall be operational for the duration of the Contract.

The boundaries of the site are as indicated on the Site Plan – drawing number 7604-FDG-ZZ-XX-DR-A-11105-P02; contained within SAC Request for Proposal – Annex 1.

Access to the site: Please refer to Pre Construction Information in Appendix F and design information contained within the SAC Request for Proposal document- Annex 1.

Attention is drawn to the following services existing on the site.

- Refer to SAC Request for Proposal document- Annex 1 for the Design Information and details of the proposed fit out; along with Appendix D of the Employer's Requirements for the existing site information.

During the tender period, the Contractor is advised to visit the site to ascertain the nature of the site, access thereto and all local conditions and restrictions likely to affect the execution of the works. The site may be visited by appointment. Refer to the SAC Request for Proposal document for further information on how to request to attend the proposed site visit.

The Contractor shall be deemed to have visited the site, to have undertaken any required trial holes, to have taken into consideration all local and existing conditions and to have become thoroughly acquainted with the position and accessibility of the proposed works and the conditions under which they will have to be carried out.

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 on

pavement 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 allow for in his programme and contract sum analysis for undertaking condition surveys of adjacent buildings and provide a report to the Employer.

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 or adjoining neighbour's property be necessary for the execution of the works.

Consideration to the occupants in the neighbouring buildings is to be given and working hours of the local borough council adhered to. Any sensitive works to the party wall will be at the Contractor's risk, including weekend or out of hours working to overcome any disputes.

The Contractor will be required to put whatever safeguards in place as necessary to achieve this, which as a minimum, should include the following:

Carry out the works so as to cause minimum interference, interruption or disturbance to the use or 'quiet enjoyment' of the adjoining properties, including roads, footpaths and any other access thereto by the adjoining owners and occupiers and conform to all instructions or directions given by the Employer's Agent on these matters.

Implement a 'Good Neighbour Policy' to promote good relations, communicate with local residents and to process and action on feedback / complaints from any of the above. The 'Good Neighbour Policy' shall include monthly newsletters and meetings with local residents.

Liaise on a regular basis with all adjoining owners / occupiers and promptly attend to all queries or concerns raised. Report all matters or issues relating to the above to the Employer's Agent.

Give at least 30 days notice to adjoining owners and the Employer's Agent for any road closures or movement of heavy loads liable to cause traffic congestion and any other planned abnormal occurrence likely to cause disturbance to persons in the vicinity of the works.

Existing Mains / Services

The Contractor shall ascertain the precise location of all services (both publicly and privately owned) running adjacent to the site maintain during the works and alter and adapt as necessary to ensure the execution of the Works. Surveys and investigation report included within the Tender Document are indicative and have been provided to the Contractor for information only. The Contractor is responsible for existing services.

The Contractor must complete the Works without disturbing retained services, including providing protection and liaising with the Statutory Authorities as necessary. 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 with the diversions will be deemed to be included within the Contract Sum.

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.

Notwithstanding any information which the Employer may make available regarding the position of existing services etc., it shall be the responsibility of the Contractor to satisfy themselves as to the accurate locations and conditions of any and all such services both on and off site.

The Contractor shall make all necessary arrangements with the Authorities concerned for the diversion, if necessary, of any existing services as required for the purposes of this Contract.

The Contractor is responsible for the location and discovery of all existing mains and services. All works required to meet the requirements of this Tender Document are the responsibility of the Contractor and all costs associated to these works shall be paid for by the Contractor.

Access to the Site

The Contractor is to visit the site and ascertain for himself any particular restrictions in access / deliveries to the site.

Site access is to be agreed with the Employer and his agent.

The Contractor should note that the roads and pavements surrounding the site are in constant use by the general public and other users/residents within the wider Harwell Campus. As such, the Contractor shall take all necessary precautions for the safe passage of all persons using these routes. Provide all necessary temporary measures to keep all access/egress routes and the like free from materials and debris at all times. Existing roads should also be maintained and kept clean at all times. The Contractor shall provide regular cleaning services to ensure existing roads are maintained and kept clean to the satisfaction of the Employer's Agent.

Any road closures, traffic management, etc. are to be agreed direct with the Client and the Local Council and all associated costs borne by the Contractor.

Vehicle parking may be available within the site boundary. The Contractor is deemed to have included within the tender for all vehicle parking requirements in order to fully execute the works as required by this Tender Document. No parking of Contractors vehicles will be permitted on the roads within the wider Harwell Campus estate.

The Contractor shall allow for co-ordination, management of temporary works and traffic management during the course of construction.

The Contractors is deemed to have included for a banksman or barriers during operating hours. Harwell Campus has existing security provisions for residents on the estate, however this will not alleviate the Contractor of their obligation to ensure that the site, Works, products, materials, and plant are left safe in non-operational hours.

Surround land/building uses

Use of adjacent buildings and roads must not be interrupted at any time. The Contractor shall provide appropriate levels of protection to any surfaces to be maintained and will be responsible for making good any damage to any surfaces at completion at their own cost.

Sectional Completion

Not Applicable

Adjacent Works by Other Contractors

The Contractor shall liaise closely with any other Contractors undertaking work adjacent/near to the site to ensure there is no conflict between them, and in particular their use of and access to their respective sites. The Contractor should make reference to the Pre construction Information, contained within Appendix F of the Employer's Requirements for works adjacent being undertaken by other contractors.

Existing Trees and Shrubs

Existing trees and shrubs within the site boundary are to be retained and protected unless identified by the Employer for removal.

Materials Excavated from the Site

Any sand and gravel discovered on the site during excavation shall be the property of the Employer and shall not be removed from the site without the prior approval of the Employer. Such materials shall not be used in the Works except under the express instructions of the Employer, in which case the quantity used shall be measured and valued and such value deducted from the monies due or which may become due to the Contractor. Excavation shall not be made or enlarged for the recovery of such material.

3. Temporary Facilities

Hoarding

The Contractor shall take all measures to ensure the security of the site and be responsible for the safety of the public. The Contractor shall erect hoarding/fencing and take all measures necessary to ensure the security of the site and be responsible for the safety of the public. Pay particular attention to the need to provide safety for blind and disabled persons. Good quality hoarding/fencing shall be provided by the Contractor to the satisfaction of the Employer's Agent.

A security fence will be provided by the contractor to the perimeter of the works area for the duration of the works.

Scaffolding

The Contractor shall design, supply and install scaffolding as required facilitate the full execution of the Works. The Contractor shall be fully responsible for maintaining scaffolding throughout the course of the Works and removal upon completion. The Contractor shall provide all necessary test reports and certificates associated to scaffolding to the Employer's Agent prior to use of the scaffold.

The Contractor shall allow for all adaptations and modifications required to scaffolding as required to facilitate the Works. The Contractor shall allow within his tender for supplying and installing temporary signage as required by the Employer's Agent.

Temporary Buildings for the use of the Employer

The Contractor shall provide access to and free reasonable use of a meeting room, heated and lit, with table and chairs for a minimum of 12 people. The facilities shall be provided on site and may be part of the Contractor's own site offices. The Employer's Agent 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.

The Contractor shall provide reasonably unrestricted access to and free reasonable use of the internet

(via wifi) and phone for those acting on behalf of the Employer, which may be located in the Contractor's own site offices. In addition to this, the Contractor must also provide a desk, and chair that can be used.

Temporary Accommodation

Proposals for temporary accommodation and storage for the Works: Submit two weeks prior to starting on site.

Details to be included: Type of accommodation and storage, its siting and the programme for site installation and removal.

Telephone

The Contractor shall provide reasonably unrestricted access to and free reasonable use of a telephone for those acting on behalf of the Employer, which may be located in the Contractor's own site offices. The Contractor is to allow for the costs of all calls.

Photocopier

The Contractor shall provide reasonably unrestricted access to and free reasonable use of an on-site photocopier, which may be located in the Contractor's own site offices, together with a free reasonable supply of photocopying paper.

Protective Clothing

The Contractor shall provide an adequate number of the following for the use of those acting on behalf of the Employer:

- safety helmets to BS5240:Part 1, neither damaged nor time expired;
- donkey jackets or equivalent waterproof coats; to BS EN ISO 20471 Class 2
- pairs of safety footwear with steel insole and toecap to BS EN ISO 20345
- pairs of weather proof leggings.
- Safety gloves;
- Eye protection; to BS EN 166
- Ear protection;
- Hand protection - to BS EN 388, 407, 420 or 511 as appropriate
- Other PPE as necessary for the inspection of the works.

All safety equipment is to meet BSI standards.

Computers

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

Utilities and Temporary Power

The Contractor shall allow within the tender sum for any temporary supplies and connections) including power, water, drainage and foul) required for carrying out the works.

The Contractor is responsible for installing any temporary sub-metering that may be required to isolate

the consumption of any temporary supplies.

Electricity

Electricity supply from the Employer's mains may be used for the Works subject to the following conditions:

1. The installation to be used must have been tested and commissioned and deemed to be safe.
2. All associated labour and supervision costs and the cost of making good any damage to the EA's satisfaction, shall be at the Contractor's expense.
3. Provide and install temporary transformers and other equipment for any required conversion and distributing about the works.

Water

From the Employer's mains may be used for the Works (avoidable waste excepted) subject to the following conditions:

1. The installation to be used must have been tested and commissioned and deemed to be safe.
2. All associated labour and supervision costs and the cost of making good any damage to the EA's satisfaction, shall be at the Contractors expense.
3. Provide and install all temporary pipe-work and other equipment for distributing water about the works.

If the water supply is or is likely to be restricted by emergency legislation, inform the EA without delay and ascertain the availability and additional cost of water from alternative sources.

Drainage

The Contractor's drainage set up is to be standalone, assume no connections are available to existing installations for drainage.

Restriction of Publicity

Do not give any information concerning the Works for the publication in the press on radio, television or elsewhere, without the written approval of the EA.

Do not take or cause to have taken any photographs of the works without the permission of the Employer. If such permission is given supply to the EA and Employer, free of charge, duplicate copies of all photographs taken by and print on the reverse side of such photographs the date of exposure, the section of the works shown, any reference number and the place and address where the negative is kept.

Do not use any photographs whether those specified herein or not, for advertisement nor approve any publication in connection with the works without the written agreement of the Employer.

The copyright of all photographs shall be vested in the Employer and the negatives (digital originals) shall be delivered to the Employer within one month of completion.

Restrictions on Advertising

Advertisements will not be permitted to be erected within or around the site by the Contractor or by any Sub-Contractor including tower cranes.

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

The Contractor should note that they may be required to erect an advertising enclosure to their scaffolding provided will be able to sustain such additional loads.

Name Board

The Contractor shall obtain approval and provide a suitable temporary name board and display the title of the project, the name of Employer and his consultants including Local Council and if the Contractor wishes, the name of the Contractor and his consultants. The Contractor shall remove the name board on completion.

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. 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 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 tender documents.

5. Crane/hoist/plant

The Contractor shall provide, maintain on, move around the site and subsequently remove on completion all mechanical plant and vehicles necessary for the proper execution of the Works.

Where the use of a crane, hoist or similar equipment is contemplated, the Contractor shall if required obtain the right to the use of land or air space from adjoining owners and other interested parties in the vicinity of the proposed Work and shall hold the Employer indemnified against any claims or proceedings arising from the use of such equipment for any reason whatsoever, including the cost of any over sailing rights and all consequential loss or delay.

6. Party Wall Notices and Awards

The Contractor must comply with all conditions required by Party Wall Notices and Awards where applicable. The Contractor is deemed to have included within his tender all costs and activities within the programme associated with Party Wall Notices and Awards.

7. Rights to light

The Contractor is deemed to have included within his tender all costs and activities within the programme associated with Rights to Light.

8. Sub-Contractors

Domestic Sub-Contractors

Comply with the Construction Industry Board 'Code of Practice for the selection of Sub-Contractors'.

9. Materials and Workmanship

Definitions and Interpretations

In the event of a conflict between the terms of the Preliminaries and General Conditions and the JCT (as amended), the terms of the JCT (as amended) shall take precedence.

The meaning of terms, derived terms and synonyms used in these tender documents are as defined below or in the appropriate British Standard or British Standard glossary.

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

Approval (and words derived there from) means the approval in writing of the Employer or Employer's Agent unless specified otherwise.

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

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, notify the Contractor's Consultants and Employer's Agent of all such substitutions and, when requested, submit for verification documentary evidence confirming that the products comply with the specified requirements. Submit certified English translations of foreign language documents.

References to BSI Documents are to the versions and amendments listed in the BSI Standards Catalogue current at the Base Date.

Unless otherwise stated products are specified by their co-ordinating sizes.

Where **Manufacturer and Reference** is used in this combination:

'**Manufacturer**' means the firm under whose name the particular product is marketed.

'**Reference**' means the proprietary brand name and/or reference by which the particular product is identified.

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 Pricing Schedules and/or on the drawings are to be supplied and fixed complete.

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 and Contractor's Proposals, 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 or Contractor's Proposals 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.

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 Contractor.

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 Contractor's Consultants and Employer's Agent if these conflict with any other specified requirement. Submit copies to the Contractor's Consultants and Employer's Agent when requested.

The tender 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 Contractor's Consultants and Employer's Agent 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.

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.

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.

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 Contractor's Consultants' or Employer's Agents 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 Employer's Agent 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.

Any holes or apertures required through any steelwork members are not to be completed without the Contractor's Consultants' or Employer's Agents prior permission/review.

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, packings 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.

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.

Inspection

The Contractor shall permit and attend upon the inspection of the Works and of the manufacture and

fabrication of materials therefore both on the site and in workshops and obtain the same facility from Sub-Contractor's and suppliers. The Contractor shall give 7 days notice to the Employer of his intention to commence testing or commissioning any part of the Works.

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 and the Contractor's Proposals, or such further data as has been endorsed in accordance with clause 3.12 of the Conditions of Contract.

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.

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.

10. 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 / Sub-Contractor / Suppliers, including inspection and checking.
- The dates for possession and completion referred to in the Contract Conditions.
- 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.
- Take into consideration CDM Regulations.
- All matters relating to Party Wall and Boundary Awards.
- The detailed co-ordination of all of the elements of the Works.

Work resulting from instructions issued in regard to the expenditure of provisional sums.

The Contractor shall note that the Employer has made no arrangements in respect to over sailing agreements. Should the Contractor adopt the use of a Tower crane for the execution of the Works, the Contractor is deemed to have included within his tender all costs and activities within the programme associated with over sailing.

Mock-up dates and Samples.

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 bar chart.

In preparing and in updating the programme the Contractor shall take account of the periods stated in the Conditions of 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 (of any Section) thereof. Thereafter, the Contractor shall amend and revise the programme as required by the Conditions of Contract and as required by the Employer. In so doing, the Contractor shall obtain from all Sub-Contractor's and statutory bodies and use his best endeavours to obtain from all Contractor's referred to in the 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 Conditions of Contract and 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.

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-Contractor's' and suppliers' progress reports.
- Information Release Schedule
- Monthly Risk Register
- Package procurement report

The monthly progress report must be prepared against the master programme at all times, unless the Employer's Agent agrees otherwise.

The monthly progress report must be issued to the Employer's Agent, a minimum of 24 hours prior to the scheduled meeting.

Drawings Issue and Approvals Register

The Contractor is to issue all drawings relating to works to the Employer's Agent for approval (in A3 and electronic Autocad and DWG format) and allow 7 days for a response. This includes but is not limited to drawings produced by any novated designer and also designing Sub-Contractor's.

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.

Site Meetings

The Employer's Agent 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 Employer's Agent will chair the meetings and take and distribute minutes, which shall be circulated by email.

Progress Photographs

The Contractor shall agree sufficient points (minimum 20 Nr locations) around the Works from which weekly progress photographs are to be taken. The progress photographs should clearly depict all elevations, external works and internal floors and core areas; along with any additional locations required. The monthly progress photographs shall be provided to the Employer in the monthly Contractor's Progress Report and should clearly indicate the date on which the photographs were taken.

Prior to Practical Completion of the Works the Employer may request a story board or collage of monthly progress photographs to be compiled by the Contractor and provided to the Employer on a suitably mounted board or frame. The cost of which is to be borne by the Contractor.

Employers Agent's Meetings.

The Employer will require the Contractor to agree a schedule of dates for client meetings to be held on site on a monthly basis. At the Employer's discretion the Contractor shall arrange additional meetings as required.

The monthly client meetings shall be chaired and minuted by the Employer's Agent.

A draft monthly Contractor's Progress Report shall be completed by the Contractor and issued to the Employer's Agent 2 days prior to the meeting for information. The report shall use a standard contents to be agreed prior to the first meeting.

The Employer specifically requires the Contractor to provide a site meeting room suitable and adequately sized for the monthly Client Meeting. In addition, the Contractor shall allow the Employer and any representative use of the Contractor's facilities on site as appropriate.

Training of Employer's Staff.

Before completion, explain and demonstrate to the Employer's maintenance staff the purpose, function and operation of the installations including all items and procedures listed in the Building Manual. Allow a minimum of 5 days for training.

Tools

Refer to MEP preliminaries, Materials and workmanship specifications; along with Appendix J of the Employer's Requirements for further information pertaining to the maintenance requirements of all services plant and equipment installed as part of the Works.

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 conditions of 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.
- All other relevant information required.

11. 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 contracts will be advised as and when they are entered into.

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.

12. 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 tender 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

Contractor's tender 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 in the tender 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.

The Contractor is to carry out, at their own expense, schedule of conditions for the existing buildings. In addition to this the Contractor is to produce environmental plans, demolition logistics plan and scaffold plan for approval by the Employer's Agent.

13. Car Parking

The Contractor is to ensure that all car parking (for Contractors staff, operatives, Sub Contractors etc) is to be contained within the Contractors site compound. The Contractors and / or any one employed by the Contractor to undertake the works will not be permitted to park cars, vans, construction vehicles etc in any of the Employer's car parks and parking will not be permitted on any of the roads within the Harwell Campus estate.

14. Obligations and Restrictions

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 24 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.

The Contractor shall inform the Employer's Agent 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 Contractor's Proposals.

Outside normal working hours the Contractor shall ensure that the Site is closed and secured. The Employer is not responsible for any damage or theft that occurs within the Contractor's compound. The existing site wide security provisions are for the Employer only. The Contractor should not rely on the Employer maintaining a 24 hour security surveillance for the duration of the Works.

The Contractor is to provide within their tender return a drawing showing the proposed location of the site welfare this is to include a reserved area dedicated for parking.

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

Site Access

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 should allow for co-ordination, management of temporary works and traffic management during the course of construction of the access.

Limitations of Working Hours

The Contractor shall give the Employer's Agent at least 24 hours written notice of their intention to carry out work at nights, at weekends or at any other time outside normal working hours. This notice is to also be forwarded onto Alex Pope – Construction Manager (SAC) to facilitate this.

Confinement of Employees to Site

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

Control of Noise and Vibration

The Contractor shall observe the South Oxfordshire and Vale of White Horse District Council rules of noisy working on all occasions.

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 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.

Explosives

The use of explosives will not be permitted.

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

All reasonable precautions shall be taken to avoid infestation of the Works by invasive species such as mice etc.

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.

Asbestos Containing Materials / Control of Hazardous Substances

The Contractor shall comply with the requirements of the Control of Substance Hazardous to Health Regulations (issued under the Health and Safety at Work, etc Act) the Environmental Protection Act 1990 and all other Statutory Requirements relating to the control of hazardous substances and the like.

In addition to complying with the above, the Contractor shall give advance notice in writing to the Employer's Agent warning him of any "substance hazardous to health", provide them with a copy of the "assessment of health risks" as defined in the Regulations, specify the hazardous substances, their location and the dates when they could be encountered before Practical Completion by any employees or representatives of the Employer. The Contractor shall provide a similar notice to the Employer (with a copy to the Employer's Agent) about any hazardous substances to be used in work carried out after Practical Completion of any part of the Works.

Copies of all notices given under this clause shall be provided by the Contractor to all Consultants involved in this project.

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').

Smoking on Site

Smoking on site will not be permitted

Burning On Site

Burning and/or fires will not be permitted onsite

Maintenance of Adjoining Buildings, Roads, Footpaths, etc.

The Contractor shall be responsible, and include in his Tender for the upholding of the adjoining buildings, roads and footpaths, etc. together with the mains and services there under from the moment he takes possession of the site. The Contractor shall hold the Employer indemnified against all and every claim which may be brought against him for loss and/or damage of any description which may be caused to the adjoining building and adjacent roads and footpaths with the mains and services there under by reason of the carrying out of the works or by reason of insufficiency of shoring and strutting.

The Contractor shall be responsible for carrying out his own condition survey of the surrounding roads and footpaths and for agreeing it with the Employer prior to commencement of the works.

The Contractor shall ensure that all gutters, down pipes, roofs, etc., on adjoining buildings are kept clean and free from blockage and that periodic cleaning of dust and debris on adjoining buildings is carried out as required or upon reasonable request.

Access to Adjoining Buildings and Property

The Contractor shall so arrange and carry out the Works so as to cause no interference or interruption to the use of the adjoining buildings or services nor of the roads, footpaths and other means of access to these buildings and services.

Protection of Streams, Waterways, Drains and Sewers and the Like

The Contractor shall take all precautions to ensure the protection of all streams and waterways against pollution caused by carrying out the Works and shall carry out any necessary diversions to the satisfaction of the Employer and all relevant statutory authorities so as not to reduce the capacity of the streams or waterways.

Existing sewers and drains displaced or blocked during the course of the Works shall be immediately reinstated in working order including any necessary diversions to the satisfaction of the Employer and all relevant statutory authorities.

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 safeguard public road users from site traffic including supervising all site related plant and goods vehicles entering and exiting site and/or when carrying out manoeuvres.

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

The Contractor's attention is drawn to the public footpaths adjacent and around the site; along with the proximity of other users/tenants currently residing within the Zephyr Building.

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.

Control of Hazardous Substances

The Contractor shall comply with the requirements of the Control of Substances Hazardous to Health Regulations (issued under the Health and Safety at Work, etc Act), the Environmental Protection Act 1990 and all other Statutory Requirements relating to the control of hazardous substances and the like.

In addition to complying with the above, the Contractor shall give advance notice in writing to the Employer's Agent warning him of any "substance hazardous to health", provide him with a copy of the "assessment of health risks" as defined in the Regulations, specify the hazardous substances, their location and the dates when they could be encountered before Practical Completion by any employees or representatives of the Employer. The Contractor shall provide a similar notice to the Employer (with a copy to the Employer's Agent) about any hazardous substances to be used in work carried out after Practical Completion of any part of the Works.

Copies of all notices given under this clause shall be provided by the Contractor to all Consultants involved in this project.

Maintenance of Public and Private Roads

Damage to any highways caused by vehicles used in connection with works shall be made good at the expense of the Contractor. The Contractor shall indemnify the Employer against any liability, loss, claim or proceedings whatsoever arising under any statute or at common law in respect of any such damage. No materials shall be stored on the highway.

For the purpose of this clause the term "Highway" shall be deemed to include any road, footpath or bridleway on or off the site, used by the public, together with any verges, gullies, sewers, street lighting, public utility services or tree planting associated therewith.

Removal of Rubbish and Cleaning the Works

The Contractor shall remove all rubbish and debris (including the protective casings and coverings) from the whole of the site from time to time during the execution of and at the completion of the Works to a tip provided by the Contractor.

The Contractor shall clean the buildings inside and out, remove stains and touch up decorations and leave the whole of the Works to the satisfaction of the Employer on completion. The Contractor is to ensure that the adjacent works to the site are left dust free and any machinery or plant is thoroughly cleaned.

The Contractor shall clean out and flush all sewers, drains, manholes and gullies within the site area and connections to the main sewers on completion of the Works.

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.

Considerate Constructors Scheme

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

- Web. www.ccscheme.org.uk
- Standard: Comply with the Scheme's Code of Considerate Practice.
- Minimum compliance level: 36

Insurance Claims

The Contractor shall give notice in writing to the Employer 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 indemnify the Employer against any loss which may be caused by failure to give such notice.

CDM Regulations 2015

The Contractor must accept the appointment as Principal Designer in addition to their role as Principal Contractor for the project and assume the responsibilities for the construction phase as specified in the Regulations.

15. Health and Safety and Site Waste Management Plan

A pre-construction information package is included under Appendix F of these Employer's Requirements.

The Contractor must accept the appointment as Principal Designer in addition to their role as Principal Contractor for the project and assume the responsibilities for the construction phase as specified in the Regulations.

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 Sub-Contractor's, 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.
- 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 Contractor's and employees of health and safety hazards.
- Selection procedures for ensuring competency of other Contractor's, the self-employed and designers.
- Procedures for communications between the project team, other Contractor's and site operatives.
- Arrangements for cooperation and coordination between Contractor's.
- 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.

Construction Phase Health and Safety Plan

Present to the Employer/ Client 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 Pre-construction information Package.

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.

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.

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 minimisation / reuse / recycling.
- The use of appropriate and licensed waste management Contractor's.

- Record keeping procedures.
- Waste auditing protocols.

16. Changes to Employer's Requirements

The Contractor will not vary, amend, add to or alter the Works as described within the Employer's Requirements without first obtaining the prior written approval of the Employer. In seeking the written approval of the Employer, the Contractor shall provide to the Employer adequate details of the proposed variation, amendment, addition or alteration including relevant performance and qualitative criteria in relation to any materials and highlighting and detailing on any relevant drawing the nature of the proposed variation, amendment, addition or alteration. The Contractor shall also confirm any implications for the Contract Sum, the Contract Programme.

In addition where any proposal relates to performance or design the Contractor shall obtain a written statement from the appropriate Consultant confirming the suitability of any proposal.

The Contractor shall follow the change control procedures set out below:

(i) Change Request Form (CRF)

The purpose of the CRF is to provide a vehicle for the approval of any design change by the Employer. In order that sufficient time is allocated for the approval of the change, a minimum of 5 working days has been allocated for Pricing and Agreeing the Cost of a change and for the approval by the Employer.

Change Request Forms shall be issued to the Contractor's QS for costing and agreement of cost with the Client's Quantity Surveyor as outlined. The Contractor shall provide appropriate supporting information, measures, quotes etc to allow the Employer's Agent to review and agree costs. It should be noted that a Change Order Request is not an instruction and the work shall only be instructed when an Employer's Agent Instruction (EAI) is issued.

17. Cash Flow Forecast

As soon as possible and before starting work on site submit to the Employer a forecast showing the gross valuation of the Works at the date of each Interim Payment throughout the Contract period, based upon the programme for the Works.

18 Archaeology

Archaeological Contractor

The Employer may employ an Archaeological Contractor who may be present on site throughout the works. The Archaeological Contractor will have a watching brief over all works which occur below ground level and will be responsible for the archaeological excavation where ground disturbance may reveal archaeological deposits. The Contractor is to provide all relevant attendances (plant, labour and materials) as required by the Archaeological Contractor.

No engineering works below ground level shall occur without the Archaeological Contractor in attendance unless written notification is given to the contrary.

Watching Brief

A "Watching Brief" is defined as:

"Usually not all of the archaeological resources found as a result of Desk Study, Evaluation and Archaeological Excavation. Other remains are typically found during engineering site development works and in unexpected areas. Here the Archaeological Contractor is provided with time and facilities to watch and intervene in the engineering works to recover the anticipated and chance discovered resource in a controlled and professional manner, (i.e. the use of standard and Inst. of Field Archaeologist's approved archaeological excavating and recording processes). The archaeological watching team will typically be 1 to 4 people who aim to expediently carry out their work and to minimise the disruptive effects and incur or cause no cost penalties resulting from the delay of the engineering works. The watching team shall be members of the excavating team, so that their site experience and relationship to the site engineering team(s) can be used to maximum advantage."

19. Practical Completion

The Principal Contractor shall supply a detailed programme 4 weeks prior to the anticipated date of Completion clearly showing dates for the client's representatives to inspect the works.

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 commencement on site 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 Employer's design team shall make periodic inspections of the works during the construction period and will issue reports to the contractor detailing any concerns or defective work.

The Principal Contractor will take corrective action to remedy any defects identified by the Employer's design team but will not take any action which is contrary to or changes the Employer's Requirements without taking written instruction from the Employer's Agent first.

Prior to areas being offered to the client's representatives for inspection, the Contractor will have carried out their own inspections and correction of defects and will be able to demonstrate this to the Employer's Agent.

The Principal Contractor will implement a smooth transitional handover and the contractor shall allow for all necessary costs within his preliminaries.

It is the Contractor's Responsibility to carry out all quality monitoring, inspections and snagging during the works and prior to completion. The inspection(s) carried out by the Employer, his Employer's Agent and the Employer's design team during the works does not in any way relieve the contractor's obligations and responsibility for workmanship or the quality of the works.

The contractor shall be responsible for snagging and de-snagging the works prior to offering the works to the Employer for final inspection. The Contractor is expected to have zero/minimal very minor defects at completion.

It is expected that the contractor shall carry out snagging and de-snagging throughout the project to facilitate the provision of high standards of quality and to minimise remedial works throughout the snagging process.

The contractor shall ensure that any and all Section Agreements and Bonds are completed and in place and shall provide written confirmation from Local Authority or Statutory Body that works are suitable for adoption.

Provide the schedule for maintenance, along with the information contained within the mechanical and electrical services information within the SAC Request for Proposal – Annex 1; comprising the following:-

(a) Specification of materials, equipment, fittings, colours, etc, references and the manufacturer's names and addresses.

(b) Maintenance and operating instruction and guarantees provided by the manufacturers, suppliers and the like.

(d) A detailed schedule of maintenance which shall be undertaken by the contractor during the first 12 months following completion as required within the Preliminaries.

(e) A detailed schedule of routine maintenance required to plant and equipment which must be carried out by the Employer in following the Contractor's maintenance period.

Prior to the granting of Practical Completion, the contractor will ensure the agreed aftercare and support is in place to enable the University to occupy the building.

Please note a copy of the draft Practical Completion Handover Checklist is included in Appendix H of the Employer's Requirements

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 or Employer's Agent and include within the tender 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 Employer's Agent at Practical Completion as stated in Contract Conditions. The making good of these defects in their entirety will be a condition precedent in the issuing of the subsequent certificate for payment.

20. Work at or After Completion

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.

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 itemized schedule, retaining duplicate schedule signed by Employer as a receipt.

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 Employer's Agent 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 tender for all costs associated with such provision. These facilities may also be requested should any defect need further inspection after rectification.

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.

Work for adoption 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.

Site Visits After Practical Completion

The Contractor shall give at least 5 working days notice to the Employer when the Contractor intends to visit the Site after the issue of Practical Completion.

The Contractor shall give at least 5 working days notice to the Employer should it be necessary to take any services/drains out of commission and shall advise all parties immediately such services/drains are again in commission.

Access to the Site shall not be unreasonably withheld. However, the Contractor should allow for arranging the programming of all making good items to suit the requirements of the Employer's Agent and/or

Occupier. It should be noted that under certain circumstances it may be necessary for the Contractor to carry out works outside normal working hours and any costs associated with the same are to be borne by the Contractor.

Maintenance Agreements

The Contractor is to allow for identifying all items of plant and equipment which will be subject to a maintenance agreement. The Contractor is to obtain a quotation for all maintenance agreements required. These are to be issued to the Employer prior to Practical Completion.

The Contractor's attention is drawn to the information within the SAC Request for Proposal – Annex 1, which contains further details pertaining to the maintenance requirements of mechanical and electrical equipment installed as part of the Works.

24 Hour Emergency Numbers

The Contractor is to provide the Employer with at least three points of contact for use in the event of an Emergency during the currency of the Contract.

Control of Cost

Proposed Instructions

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

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

Measurement

Give notice before covering work required to be measured.

Daywork Vouchers

Dayworks will not be permitted.

Interim Valuations

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

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 Conditions of Contract, together with their respective values.

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

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 Sub-Contractor or manufactured or assembled by any Sub-Contractor:

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

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 Sub-Contractor's.
- 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 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 Employer's Requirements, drawings and details and shall be coded with reference to the Employer's Requirements.

2. Data to be Supplied with the Tenders

The Contractor shall supply the information with the tender as set out in these Employer's Requirements.

The Contractor shall supply, as part of the Contractor's Proposals, three copies of such drawings, specifications and the like as are necessary fully to describe the 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 these Employer's Requirements.

The Contractor shall also supply a detailed design programme/information release schedule.

3. Data and Samples to be submitted from time to time in Accordance with the Conditions of Contract

The Contractor shall prepare and submit to the Employer 2Nr hardcopies and one reproducible (electronic) 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 Employer's Requirements, Contractor's Proposals 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 the Employer's Requirements without delaying the progress of the Works.

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 and Contractor's Proposals, or to be reasonably inferred there from.

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.

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.

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 drawings
- Any necessary calculations
- Detailed working drawings

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

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. All As Built drawings are required to be provided in AutoCad format.

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

Index: list the constituent parts of the manual, together with their location in the document.

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.

The Contract:

- Names and addresses and contact details of all significant consultants, Contractor's, Sub-Contractor's, 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.

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

Detailed design criteria, including:

- Floor and roof loadings.
- Durability of individual components and elements.
- Loading restrictions.
- Insulation values.
- Fire ratings.
- Other relevant performance requirements.

Construction of the building:

- A detailed description of methods and materials used.
- As-built drawings recording the construction, together with an index.
- Information and guidance concerning repair, renovation or demolition/ deconstruction.

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- Floor and roof loadings.
- Durability of individual components and elements.
- Loading restrictions.
- Insulation values.
- Fire ratings.
- Other relevant performance requirements.

Construction of the building:

- A detailed description of methods and materials used.

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- As-built drawings recording the construction, together with an index.
- 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.
- Guarantees, warranties and maintenance agreements – obtain from manufacturers, suppliers and Sub-Contractor's

Test certificates and reports required in the specification or in accordance with legislation, including:

- Air permeability.
- Resistance to passage of sound.
- Continuity of insulation.
- Electricity and Gas safety.

Part 3: Building Services

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.
- Detailed description of methods and materials used.

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.

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.

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.
- Guarantees, warranties and maintenance agreements – obtain from manufacturers, suppliers and Sub-Contractor's.

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.
- Equipment settings: Schedules of fixed and variable equipment settings established during commissioning.
 - Preventative maintenance: Recommendations for frequency and procedures to be adopted to ensure efficient operation of the systems.

- Lubrication: Schedules of all lubricated items.
- Consumables: A list of all consumable items and their source.
- 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. The Contractor's attention is drawn to Appendix J of these Employer's Requirements, which contains a list of spare materials that are to be provided at Practical Completion for the occupier's later use.
- Emergency procedures for all systems, significant items of plant and equipment.
- Annual maintenance summary chart.

Part 4: The Health and Safety File

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

Part 5: The Building User Guide

- Building services information.
- Emergency information.
- Energy & environmental strategy.
- Water use.
- Transport facilities.
- Materials & waste policy.
- Re-fit/ re-arrangement considerations.
- Reporting provision.
- Training.
- Links & references.

The Building Manual is to be presented in a suitable format and should be hard covered and bound accordingly; with 2Nr provided in hardcopy format. 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.

In addition to the usual handover and Practical Completion documents, the Manual should include all certificates, manuals, maintenance strategies, Asset schedule and PPM schedules, and manufacturers' literature.

Additionally, the above is also to be submitted electronically; as a single searchable pdf document, duplicating the hard copy (ring binders) along with all documents included.

Annexed to this will be the Revit model, in its as-built state with all layers / sheets from all disciplines contained within.

Further to this, a separate electronic document is required for issue to the Client for their records; comprising of the as-built drawings in PDF and DWG file formats, with the full drawing register reflective of the entire drawing set.