

BILLS OF QUANTITIES

COMMUNITY ROOTS,
PORTHTOWAN

April 2024

Contents

General Summary

Bill 01 – Preliminaries

Bill 02 – Preambles

Bill 03 – Provisional Sums

Bill 04 – Proposed Building

Bill 05 – Site Works

Bill 06 – Drainage

General Summary

COMMUNITY ROOTS

PORTHTOWAN

GENERAL SUMMARY

PROPOSED MULTI-PURPOSE HALL,
COMMUNITY ROOTS, PORTHTOWAN
AT
MOUNT PLEASANT ECO PARK
FOR
COMMUNITY ROOTS CORNWALL CIC
GENERAL SUMMARY

BILL 01 - PRELIMINARIES PAGE 1/61
BILL 02 - PREAMBLES PAGE 2/7
BILL 03 – PROVISIONAL SUMS PAGE 3/3
BILL 04 - WORKS TO EXISTING HOUSE PAGE 4/34
BILL 05 - EXTENSION PAGE 5/39
BILL 06 - POOL PAGE 6/45

TOTAL TENDER CARRIED TO FORM OF TENDER £

Signed:..... On Behalf
of:.....

Name (Print):.....
Date:.....

Address:.....
.....

Witnessed by:
Signed:.....
Occupation:.....

Name (Print):..... Date:.....

Address:.....
.....

Bill 01 - Preliminaries

WWA Surveyors

Community Roots Porthtowan Tender Preliminaries

CRP Tender Prelims

11-04-2024

Contents

A10 Project particulars	0
A11 Tender and contract documents	3
A12 The site/ existing buildings.....	4
A13 Description of the work	6
A20 JCT intermediate building contract with contractor's design (ICD)	7
A30 Tendering/ subletting/ supply	13
A31 Provision, content and use of documents	18
A32 Management of the works.....	23
A33 Quality standards/ control	28
A34 Security/ safety/ protection.....	36
A35 Specific limitations on method/ sequence/ timing	42
A36 Facilities/ temporary work/ services	43
A37 Operation/ maintenance of the finished works.....	46
A40 Contractor's general cost items: management and staff	51
A41 Contractor's general cost items: site accommodation	52
A42 Contractor's general cost items: services and facilities	53
A43 Contractor's general cost items: mechanical plant	54
A44 Contractor's general cost items: temporary works.....	55
A50 Work/ products by/ on behalf of the employer	56
A53 Work by statutory authorities/ undertakers	57
A54 Provisional work/ items	58

A10

Project particulars

Clauses

110 The Project

1. Name: Community Roots, Porthtowan
2. Nature: Multi-purpose building
3. Location: Mount Pleasant Eco Park, Porthtowan, Cornwall
4. Timescale for construction work: 26 weeks (commencing 15th July 2024)

120 Employer (Client)

1. Name: Community Roots Cornwall CIC
2. Address: Field of Dreams, Porthtowan, Cornwall, TR4 8FN
3. Contact: Antonia Pickup
4. Telephone: N/A
5. Email: info@communityroots.uk

130 Principal Contractor (CDM)

1. Name: The Main Contractor
2. Address: TBC
3. Contact: TBC
4. Telephone: TBC
5. Email: TBC

132 Principal Contractor (SWMP)

1. Name: The Main Contractor
2. Address: TBC
3. Contact: TBC
4. Telephone: TBC
5. Email: TBC

140 Architect/ Contract Administrator

1. Name: KASTARCHITECTS
2. Address: 8 Lemon Street, Truro, Cornwall, TR1 2PN
3. Contact: Jess Fairlie
4. Telephone: 01872 241111
5. Email: jess@kastarchitects.com

150 Principal Designer

1. Name: KASTARCHITECTS
2. Address: 8 Lemon Street, Truro, Cornwall, TR1 2PN
3. Contact: Jess Fairlie
4. Telephone: 01872 241111
5. Email: jess@kastarchitects.com

160 Quantity Surveyor

1. Name: WWA
2. Address: Compass House, Truro Business Park, Threemilestone, Truro, Cornwall, TR4 9LD
3. Contact: Liam Austin
4. Telephone: 01872 272906
5. Email: liamaustin@wwa.uk.com

170 Structural Engineer

1. Name: MPA
2. Address: Parade House, The Parade, Liskeard, Cornwall, PL14 6AH
3. Contact: Daniel Nicklas
4. Telephone: 01579 345777
5. Email: Daniel@mperryassociates.com

175 Mechanical Engineer

1. Name: Go Green Engineering
2. Address: 1 Oxford Street, Exeter EX2 9AG
3. Contact: Will Slatcher
4. Telephone: 01392 209964
5. Email: info@gogreenengineering.co.uk

178 Electrical Engineer

1. Name: Go Green Engineering
2. Address: 1 Oxford Street, Exeter EX2 9AG
3. Contact: Will Slatcher
4. Telephone: 01392 209964
5. Email: info@gogreenengineering.co.uk

180 Landscape Architect

1. Name: None appointed
2. Address: N/A
3. Contact: N/A
4. Telephone: N/A
5. Email: N/A

190 Clerk of Works

1. Name: None appointed
2. Address: N/A
3. Contact: N/A
4. Telephone: N/A
5. Email: N/A

195 BIM Information Manager

1. Name: None appointed
2. Address: N/A

3. Contact: N/A
4. Telephone: N/A
5. Email: N/A

198 Fire engineer

1. Name: None appointed
2. Address: N/A
3. Contact: N/A
4. Telephone: N/A
5. Email: N/A

200 Consultants

1. Description: No other appointed
2. Name: N/A
3. Contact: N/A
4. Address: N/A
5. Telephone: N/A
6. Email: N/A

Ω End of Section

A11

Tender and contract documents

Clauses

110 Tender Drawings

1. The tender drawings are: AS Listed within the Bills of Quantities

120 Contract drawings

1. The contract drawings: The same as the tender drawings.

130 Quantities drawings

1. The drawings from which the Bills of Quantities were prepared are the tender drawings.

160 Pre-construction information

1. **Format:** The pre-construction information is described in these Preliminaries in section A34. It refers to information given elsewhere in the Preliminaries, specification, drawings and associated documents.

180 Other documents

1. **Inspection:** Drawings and other documents relating to the Contract but not included in the tender documents may be seen by appointment during normal office hours at the office of the Architect

220 The BIM Information Requirements (EIR)

1. **Comprise:** Not applicable

Ω End of Section

A12

The site/ existing buildings

Clauses

110 The site

1. **Description:** The site of the proposed works is at Community Roots, Porthtowan, adjacent to the Mount Pleasant Eco Park. The site is accessed by a separate entrance of the metalled road. See Kast Drwg 2311 4 0001.

120 Existing buildings on/ adjacent to the site

1. **Description:** The existing Community Roots buildings, polytunnels and growing gardens are adjacent to the site of the proposed works. These will be in continued use for the duration of the proposed works. See Kast Drwg 2311 4 0002.

140 Existing utilities and services

1. **Information:** Included in the tender documents.

160 Soils and ground water

1. **Information:** Included in the tender documents.

170 Site investigation

1. **Report:** Included in the tender documents.

180 Health and safety file

1. **Availability for inspection:** No existing Health and Safety File is available for the site.

200 Access to the site

1. **Description:** Access to and from the site will be via the existing metalled road off Chapel Hill, Porthtowan.
2. **Limitations:** The Contractor is to familiarise themselves with any Highways, Local Authority or local Council requirements surrounding the site and associated accesses and strictly adhere to them.
3. The Principal Contractor is to put measures in place to ensure that site traffic is suitable for the road network in the area and also provide clear signage to ensure that traffic is directed to the site. The access to the site is restricted and deliveries and traffic movements will need to be carefully planned.
4. **Access for inspections:** Provide access at reasonable times for both on-site and off-site work.

210 Parking

1. **Restrictions on parking of the Contractor's and employees' vehicles:** Parking will be restricted to the site, as Kast Drwg 2311 4 0002. Parking within this area will need to be agreed with the Employer, due to the growing operations being in continuous use.
2. Should the Contractor require off-site parking and/or storage compound arrangements, they are to make separate arrangements and pay for all costs in connection therewith.

220 Use of the site

1. **General:** Do not use the site for any purpose other than carrying out the Works.
2. **Limitations:** As above.

230 Surrounding land/ building uses

1. **General:** Adjacent or nearby uses or activities are as follows:
 - 1.1. Residential/commercial/tourism. As well as the growing activities at Community Roots, the Contractor must make themselves will aware of the function and activities of Mount Pleasant Eco Park.

240 Health and safety hazards

1. **General:** The nature and condition of the site/ building cannot be fully and certainly ascertained before it is opened up. However, the following hazards are or may be present:
 - 1.1. To be reviewed on site prior to commencement of the works. Refer to the Pre-construction Information for further details.
2. **Information:** The accuracy and sufficiency of this information is not guaranteed. Ascertain if any additional information is required to ensure the safety of all persons and the works.
3. **Site staff:** Draw to the attention of all personnel working on the site the nature of any possible contamination and the need to take appropriate precautionary measures.

250 Site visit

1. **Assessment:** Ascertain the nature of the site, access thereto and all local conditions and restrictions likely to affect the execution of the Works.
2. **Arrangements for visit:** Contact Liam Austin (01872 272906) giving 48 hours notice.

Ω End of Section

A13

Description of the work

Clauses

110 Preparatory work by others

1. Details: None
2. Timescale: N/A

120 The works

1. **Description:** Construction of a multi-purpose hall, complete with kitchen area, office, plant room and Changing Places facility to support the existing community led market garden. There is an external covered pergola and decking. Associated site works and underground drainage.

130 Work by others concurrent with the Contract

1. **Description:** None.

140 Completion work by others

1. **Description:** None.

Ω End of Section

A20

JCT intermediate building contract with contractor's design (ICD)

Clauses

Intermediate building contract with contractor's design (ICD)

- The Contract: JCT Intermediate Building Contract with Contractor's Design 2016 Edition.
- Requirement: Allow for the obligations, liabilities and services described.

The recitals

First - The Works

- Comprise: As Clause A13/120.

Second - Contractor's designed portion

- The Works include the design and construction of
 - Foundation Jackpads
 - Engineered timber joists
 - Timber frame
 - Mechanical and Electrical Installations

Third - Contract drawings

- The Contract Drawings: As listed in clause A11/120.

Fourth - Other documents supplied by the Employer

- Comprise: None.
- Delete: 'the Work Schedules'.

Fifth A - Pricing by the Contractor

- Option A will apply: Option B will be deleted.
- Priced document: Within Option A the following words will be deleted:
 - 'Work Schedules'.
- Priced Activity Schedule: The words 'and has provided the Employer with a priced schedule of activities annexed to this Contract (the Activity Schedule)' be deleted.

Ninth - Information release schedule

- The Ninth Recital will be deleted.

Eleventh - Division of the works into sections

- The Eleventh Recital will be deleted.

Articles

3 - Architect/ Contract Administrator

- Architect/ Contract Administrator: See clause A10/140.

4 - Quantity Surveyor

- Quantity Surveyor: See clause A10/160.

5 - Principal Designer

- Principal designer: See clause A10/150.

5 - Principal Designer

- Article 5 will be deleted.

6 - Principal Contractor

- Principal contractor: See clause A10/130.

6 - Principal Contractor

- Article 6 will be deleted.

9 - Legal proceedings

- Amendments: None.

Contract Particulars

Fourth Recital - Employer's Requirements

- Comprise: The tender documents.

Sixth Recital - Contractor's Proposals/ CDP Analysis

- Comprise: TO BE COMPLETED BY CONTRACTOR
- Specific Requirements:

Eighth Recital and Clause 4.6 - Construction industry scheme

- Employer at Base Date is not a Contractor for the purposes of the CIS.

Tenth Recital - CDM Regulations

- The project is notifiable.

Eleventh Recital - Description of Sections

- Description of Sections
 - Does not apply

Twelfth Recital - Framework Agreement

- Framework agreement: Does not apply

Thirteenth Recital and Schedule 5 - Supplemental provisions

- Collaborative working: Supplemental Provision 1 applies
- Health and safety: Supplemental Provision 2 applies
- Cost savings and value improvements: Supplemental Provision 3 applies
- Sustainable development and environmental considerations: Supplemental Provision 4 applies
- Performance indicators and monitoring: Supplemental Provision 5 does not apply

- Notification and negotiation of disputes: Supplemental Provision 6 applies
- Where Supplemental Provision 6 applies, the respective nominees of the parties are
 - Employer's nominee: TBC
 - Contractor's nominee: TO BE COMPLETED BY CONTRACTOR. Or such replacement as each party may notify to the other from time to time.

Article 8 - Arbitration

- Article 8 and clauses 9.3 to 9.8 (arbitration) apply

Clause 1.1 - Base Date

- Base Date: The date entered shall be 10 days prior to receipt of tenders.

Clause 1.1 - BIM Protocol

- BIM Protocol (where applicable): Does not apply.

Clause 1.1 - Date for completion of the Works

- Date for completion of the Works (where completion by sections does not apply): 18th January 2025.

Clause 1.1 - Dates for completion of Sections

- Dates for completion of sections Does not apply.

Clause 1.7 - Addresses for service of notices

- Employer: Antonia Pickup
 - Address: Field of Dreams, Porthtowan, Cornwall, TR4 8FN
 - Fax number: Not applicable
- Contractor
 - Address: TO BE COMPLETED BY CONTRACTOR
 - Fax Number: TO BE COMPLETED BY CONTRACTOR

Clause 2.4 - Date of possession of the site

- Date of Possession of the site: 15th July 2024.

Clause 2.4 - Date of possession of the site

- Dates of possession of sections Does not apply.

Clause 2.5 - Deferment of possession of the site

- Clause 2.5 applies.
- Where clause 2.5 applies, maximum period of deferment (if less than six weeks) is 6 weeks.

Clause 2.5 - Deferment of possession of sections

- Clause 2.5 Does not apply.

Clause 2.23.2 - Liquidated Damages

- Damages: At the rate of £1,200 per week or part thereof.

Clause 2.29 - Section Sums

- Section sums Does not apply.

Clause 2.30 - Rectification period

- Period: 12 months from the date of practical completion of the Works.

Clause 2.34.3 - Contractor's designed portion

- Limit of Contractor's liability for loss of use: Unlimited.

Clause 4.3 and 4.9 - Fluctuations Provision

- Fluctuations provision: No Fluctuations Provision applies.

Clause 4.7 - Advance payment and advance payment bond

- Advance payment: Clause 4.7 does not apply.

Clause 4.8.1 - Interim payments - Interim Valuation Dates

- The first Interim Valuation Date is: 4 weeks after the date of possession, and thereafter the same date in each month or the nearest Business Day in that month.

Clause 4.9.1 - Interim payments - percentage of value

- Not achieved practical completion: Where the works, or those works in a section, have not achieved practical completion, the percentage of total value in respect of the works that have not achieved practical completion is 95%.
- Completed works: Where the works, or those works in a section, have achieved practical completion, the percentage in respect of the completed works is 97.5.

Clause 4.10.4 - Listed items - uniquely identified

- The Contract Particulars item for clause 4.10.4 will be deleted.

4.10.5 - Listed items - not uniquely identified

- Listed items: The Contract Particulars entry for Clause 4.10.5 will be deleted.

Clause 6.4.1 - Contractor's Public Liability Insurance: Injury to persons or property

- Insurance cover for any one occurrence or series of occurrences arising out of one event: £5,000,000

Clause 6.5.1 - Insurance - liability of Employer

- Insurance may be required.
- Minimum amount of indemnity for any one occurrence or series of occurrences arising out of one event: £5,000,000

Clause 6.7 and Schedule 1 - Works Insurance - insurance options

- Schedule 1: Insurance option A applies.
- Percentage to cover professional fees: 15 per cent.
- If option A applies, annual renewal date (as supplied by the Contractor): TO BE COMPLETED BY CONTRACTOR

Clause 6.10 and Schedule 1 - Terrorism cover

- Details of the required cover
 - Pool Re

Clause 6.15 - Joint Fire Code

- The Joint Fire Code: Does not apply.

Clause 6.19 - Contractor's Design Portion - Professional Indemnity Insurance

- Level of cover: Amount of indemnity required: £2,000,000
- Cover for pollution and contamination claims: £1,000,000
- Expiry of required period of CDP Professional Indemnity Insurance: 12 years.

Clause 7.2.1 - Performance bond or guarantee

- Bond or guarantee from bank or other approved surety: Does not apply.

Clause 7.2.2 - Guarantee from the Contractor's parent company

- Guarantee: Does not apply.

Clause 7.3 - Collateral warranties

- Details: As set out in the following documents: To be standard JCT forms.

Clause 8.9.2 - Period of suspension (termination by Contractor)

- Period of suspension: 2 months.

Clauses 8.11.1.1 to 8.11.1.5 - Period of suspension (termination by either Party)

- Period of suspension: 2 months.

Clause 9.2.1 - Adjudication

- The Adjudicator is:
- Nominating body - where no Adjudicator is named or where the named Adjudicator is unwilling or unable to act (whenever that is established): The Royal Institution of Chartered Surveyors.

Clause 9.4.1 - Arbitration

- Appointor of Arbitrator (and of any replacement): President or a Vice President of the The Royal Institution of Chartered Surveyors.

The conditions

Amendments

- None.

Section 1: Definitions and Interpretation

1.5 - Reckoning periods of days

- Amendments: None.

1.12 - Applicable law

- Amendments: None.

Section 2: Carrying out the Works

Amendments

- None.

Section 3: Control of the Works

3.7 - Named subcontractors

- General: Does not apply.

Section 4: Payment

Amendments

- None.

Section 5: Variations

Amendments

- None.

Section 6: Injury, Damage and Insurance

Amendments

- None.

Section 7: Assignment and Collateral Warranties

Amendments

- None.

Section 8: Termination

Amendments

- None.

Section 9: Settlement of Disputes

Amendments

- None.

Execution

Execution

- The contract: Will be executed as a Deed.

Ω End of Section

A30

Tendering/ subletting/ supply

Main contract tendering

110 Scope

1. **General:** These conditions are supplementary to those stated in the Invitation to Tender and on the form of tender.

145 Tendering procedure

1. **General:** In accordance with the principles of: the JCT Tendering 2017 Practice Note.
2. **Arithmetical errors:** Alternative 2 is to apply. Should the tender be identified to contain mathematical errors, the tenderer will be given the opportunity to correct his tender. Tenders will be reviewed following correction and the best value or lowest tender considered.

160 Exclusions

1. **Inability to tender:** Immediately inform if any parts of the work as defined in the tender documents cannot be tendered.
2. **Relevant parts of the work:** Define those parts, stating reasons for the inability to tender.

170 Acceptance of tender

1. **Acceptance:** No guarantee is offered that any tender will be recommended for acceptance or be accepted, or that reasons for non acceptance will be given.
2. **Costs:** No liability is accepted for any cost incurred in the preparation of any tender.

190 Period of validity

1. **Period:** After submission or lodgement, keep tender open for consideration (unless previously withdrawn) for not less than 12 weeks.
2. **Date for possession/ commencement:** See section A20.

Pricing/ submission of documents

220 Pricing of preliminaries

1. **Abbreviations:** The following have been used:
2. F = Fixed charge item.
 - 2.1. TR = Time related charge item.

250 Priced documents

1. **Alterations:** Do not alter or qualify the priced documents without written consent. Tenders containing unauthorised alterations or qualifications may be rejected.
2. **Measurements:** Where not stated, ascertain from the drawings.
3. **Deemed included:** Costs relating to items, which are not priced, will be deemed to have been included elsewhere in the tender.

300 Quantities in the priced document

1. **Quantities:** Where included in the priced document, these have **NOT** been prepared in accordance with SMM7/ NRM2. Works must be priced taking account of the information given elsewhere in the tender documents, including for all associated and ancillary work shown or clearly apparent as being necessary for the complete and proper execution of the work.

2. **Other items, descriptions and measurements not prepared in accordance with SMM7/ NRM2:** Must be priced taking account of the information given elsewhere in the tender documents, including for all associated and ancillary work shown or clearly apparent as being necessary for the complete and proper execution of the work.

310 Tender

1. **General:** Tenders must include for all work shown or described in the tender documents as a whole or clearly apparent as being necessary for the complete and proper execution of the Works.

360 Priced activity schedule

1. **Submit:** With Tender.

480 Programme

1. **Programme of work:** Prepare a summary showing the sequence and timing of the principal parts of the Works and periods for planning and design. Itemise any work which is excluded.
2. **Submit:** With Tender.

490 Information release schedule

1. **Compatibility with programme:** At the same time as submitting the proposed programme or summary, confirm that it is compatible with the Information Release Schedule.
2. **Alternative proposals:** If any part of the programme is not compatible with the Schedule submit alternative proposals and reasons for varying the times for release of information.

500 Tender stage method statements

1. **Method statements:** Prepare, describing how and when the following is to be carried out:
 - 1.1. Details of timber frame manufacture and installation.

515 Alternative time tenders

1. **General:** In addition to and at the same time as tendering based upon the date or period specified in section A20, an alternative tender based upon a different date for completion or period may be submitted.
2. **Date for completion:** If any such tender is accepted the date for completion inserted in the Contract will be the date stated in the alternative tender or determined from the period stated in the alternative tender.

520 Design documents

1. **Scope:** Include the following in the Contractor's Proposals:
 - 1.1. **Design drawings:** See Second Recital for details.
2. **Submit:** With tender.

530 Substitute products

1. **Details:** If products of different manufacture to those specified are proposed, submit details with the tender giving reasons for each proposed substitution. Substitutions, which have not been notified at tender stage, may not be considered.
2. **Compliance:** Substitutions accepted will be subject to the verification requirements of clause A31/200.

540 Quality control resources

1. **Statement:** Describe the organisation and resources to control the quality of the Works, including the work of subcontractors.

2. **QA staff:** Identify in the statement the number and type of staff responsible for quality control, with details of their qualifications and duties.
3. **Submit:** With Tender.

550 Health and safety information

1. **Content:** Describe the organization and resources to safeguard the health and safety of operatives, including those of subcontractors, and of any person whom the Works may affect.
2. **Include**
 - 2.1. A copy of the health and safety policy document, including risk assessment procedures.
 - 2.2. Accident and sickness records for the past five years.
 - 2.3. Records of previous Health and Safety Executive enforcement action.
 - 2.4. Records of training and training policy.
 - 2.5. The number and type of staff responsible for health and safety on this project with details of their qualifications and duties.
3. **Submit:** With Tender.

570 Outline construction phase health and safety plan

1. **Content:** Submit the following information within one week of request:
 - 1.1. Method statements on how risks from hazards identified in the pre-construction information and other hazards identified by the contractor will be addressed.
 - 1.2. Details of the management structure and responsibilities.
 - 1.3. Arrangements for issuing health and safety directions.
 - 1.4. Procedures for informing other contractors and employees of health and safety hazards.
 - 1.5. Selection procedures for ensuring competency of other contractors, the self-employed and designers.
 - 1.6. Procedures for communications between the project team, other contractors and site operatives.
 - 1.7. Arrangements for cooperation and coordination between contractors.
 - 1.8. Procedures for carrying out risk assessment and for managing and controlling the risk.
 - 1.9. Emergency procedures including those for fire prevention and escape.
 - 1.10. Arrangements for ensuring that all accidents, illness and dangerous occurrences are recorded.
 - 1.11. Arrangements for welfare facilities.
 - 1.12. Procedures for ensuring that all persons on site have received relevant health and safety information and training.
 - 1.13. Arrangements for consulting with and taking the views of people on site.
 - 1.14. Arrangements for preparing site rules and drawing them to the attention of those affected and ensuring their compliance.
 - 1.15. Monitoring procedures to ensure compliance with site rules, selection and management procedures, health and safety standards and statutory requirements.
 - 1.16. Review procedures to obtain feedback.

590 Site Waste Management Plan

1. **Details:** To be submitted with Tender.

595 Environmental policy

1. **Environmental Policy:** The Contractor shall have an environmental policy which ensures that in its operations, including the purchase of material goods and services, the Contractor maintains a

proactive approach designed to minimise harm to the environment, and the Contractor will evidence this to the Employer.

2. **Submit:** With Tender.

599 Freedom of Information Act

1. **Records:** Retain, make available for inspection and supply on request information reasonably required to allow response to requests made under the provisions of the Freedom of Information Act.
2. **Determination:** Submit requests received. Do not supply information to anyone other than the project participants without express written permission.
3. **Confidentiality:** Maintain at all times.

Subletting/ supply

630 Domestic subcontracts

1. **General:** Comply with the Construction Industry Board 'Code of Practice for the selection of subcontractors'.
2. **Details:** Provide details of all subcontractors and the work for which they will be responsible.
3. **Submit:** Prior to commencement on site.

635 Supply chain agreements

1. **General:** All consultants, subcontractors and suppliers possibly involved in the tasks listed must agree to the principles of collaborative working.
2. **Agreements in place:**
3. **Proposed agreements:** Provide details of all subcontractors/ suppliers who will be entering into framework agreements to undertake the tasks listed.
4. **Submittal date:** Prior to commencement on site.

645 'Listed' domestic subcontractors

1. **General:** Contract Documents provide that certain work must be carried out by a person of the Contractor's choice selected from a list of not less than three persons given therein.
2. **The selected person:** Will become a subcontractor as provided for in the Contract Condition for Subletting.
3. **Additions to lists**
 - 3.1. The Employer or Employer's representative may, but only with the consent of the Contractor which shall not be unreasonably withheld, add additional person(s) to the list at any time prior to the execution of a binding subcontract agreement.
 - 3.2. The Contractor may, but only with consent, which will not be unreasonably withheld, add additional persons to the list and must, if requested, submit (in an approved form) evidence of the suitability of such additional person(s). Wherever possible, submissions for addition of person(s) must be made, and consent obtained, before return of the tender. When any submission for addition of person(s) is made with the tender the consequences, if any, to the tender price compared to the use of the listed persons are to be made clear or the tender will be treated as qualified.
4. **Shortage of names:** If at any time prior to execution of a binding subcontract agreement less than three persons named in the list (including any persons added as provided above) are able and willing to carry out the relevant work, give notice without delay. The Employer will then forthwith add the names of other persons as provided above so that the list comprises not less than three such persons, or confirm that no names will be added. If the Employer fails to do either within one week of the Contractor's notification the Contractor, who may subcontract in accordance with the Contract, must carry out the work.

5. **Agreement:** Before the start of work to which the list relates enter into a binding subcontract agreement and confirm that this has been done, giving the name of the selected subcontractor.

Ω End of Section

A31

Provision, content and use of documents

Definitions and interpretations

110 Definitions

1. **Meaning:** Terms, derived terms and synonyms used in the preliminaries/ general conditions and specification are as stated here or in the appropriate referenced document.

120 Communication

1. **Definition:** Includes advise, inform, submit, give notice, instruct, agree, confirm, seek, provide or obtain information, consent or instructions, or make arrangements.
2. **Format:** In writing to the person named in clause A10/140 unless specified otherwise.
3. **Response:** Do not proceed until response has been received.

130 Products

1. **Definition:** Materials, both manufactured and naturally occurring, and goods, including components, equipment and accessories, intended for the permanent incorporation in the Works.
2. **Includes:** Goods, plant, materials, site materials and things for incorporation into the Works.

135 Site equipment

1. **Definition:** Apparatus, appliances, machinery, vehicles or things of whatsoever nature required in or about the construction for the execution and completion of the Works but not materials or other things intended to form or forming part of the Permanent Works.
2. **Includes:** Construction appliances, vehicles, consumables, tools, temporary works, scaffolding, cabins and other site facilities.
3. **Excludes:** Products and equipment or anything intended to form or forming part of the permanent works.

140 Drawings

1. **Definitions:** To BSRIA BG 6, 'A design framework for building services: Design activities and drawing definitions'.
2. **CAD data:** In accordance with ISO 19650.

145 Contractor's choice

1. **Meaning:** Selection delegated to the Contractor, but liability to remain with the specifier.

150 Contractor's Design

1. **Meaning:** Design to be carried out or completed by the Contractor and supported by appropriate contractual arrangements, to correspond with specified requirements.

155 Submit proposals

1. **Meaning:** Submit information in response to specified requirements.

160 Terms used in specification

1. **Remove:** Disconnect, dismantle as necessary and take out the designated products or work and associated accessories, fixings, supports, linings and bedding materials. Dispose of unwanted materials. Excludes removal and disposal of associated pipework, wiring, ductwork or other services.

2. **Remediate:** Action or measures taken to lessen, clean up, remove or mitigate the existence of hazardous materials; in accordance with standards, or requirements as may be set out by statutes, rules, regulations or specification.
3. **Fix:** Receive, unload, handle, store, protect, place and fasten in position; dispose of waste and surplus packaging. To include all labour, materials and site equipment for that purpose.
4. **Supply and fix:** As above, but including supply of products, components or systems to be fixed, together with everything necessary for their fixing. All products, components or systems are to be supplied and fixed unless stated otherwise.
5. **Keep for reuse:** Do not damage designated products or work. Clean off bedding and jointing materials. Stack neatly, protect adequately and store until required by the employer/ purchaser, or until required for use in the works as instructed.
6. **Keep for recycling:** As 'keep for reuse', but relates to a naturally occurring material rather than a manufactured product.
7. **Make good:** Execute local remedial work to designated work. Make secure, sound and neat. Excludes redecoration and/ or replacement.
8. **Replace:** Supply and fix new products matching those removed. Execute work to match original new state of that removed.
9. **Repair:** Execute remedial work to restore something to its original working state. Make secure, sound and neat. Excludes redecoration and/ or replacement.
10. **Refix:** Fix removed products.
11. **Ease:** Adjust moving parts of designated products, or work to achieve free movement and good fit in open and closed positions.
12. **Match existing:** Provide products and work of the same appearance and features as the original, excluding ageing and weathering. Make joints between existing and new work as inconspicuous as possible.
13. **System:** Equipment, accessories, controls, supports and ancillary items (including installation) necessary for that section of the work to function.

170 Manufacturer and product reference

1. **Definition:** When used in this combination:
 - 1.1. **Manufacturer:** the person or legal entity under whose name or trademark the particular product, component or system is marketed
 - 1.2. **Product reference:** the proprietary brand name and/ or identifier by which the particular product, component or system is described.
2. **Currency:** References are to the particular product as specified in the manufacturer's technical literature current on the date of the invitation to tender.

200 Substitution of products

1. **Products:** If an alternative product to that specified is proposed, obtain approval before ordering the product.
2. **Reasons:** Submit reasons for the proposed substitution.
3. **Documentation:** Submit relevant information, including:
 - 3.1. manufacturer and product reference;
 - 3.2. cost;
 - 3.3. availability;
 - 3.4. relevant standards;
 - 3.5. performance;
 - 3.6. function;
 - 3.7. compatibility of accessories;
 - 3.8. proposed revisions to drawings and specification;

- 3.9. compatibility with adjacent work;
- 3.10. appearance;
- 3.11. copy of warranty/ guarantee.
- 4. Alterations to adjacent work: If needed, advise scope, nature and cost.
- 5. Manufacturers' guarantees: If substitution is accepted, submit before ordering products.

210 Cross references

- 1. **Accuracy:** Check remainder of the annotation or item description against the terminology used in the section or clause referred to.
- 2. **Related terminology:** Where a numerical cross reference is not given, the relevant sections and clauses of the specification will apply.
- 3. **Relevant clauses:** Clauses in the referred to specification section dealing with general matters, ancillary products and execution also apply.
- 4. **Discrepancy or ambiguity:** Before proceeding, obtain clarification or instructions.

220 Referenced documents

- 1. **Conflicts:** Specification prevails over referenced documents.

230 Equivalent products

- 1. **Inadvertent omission:** Wherever products are specified by proprietary name the phrase 'or equivalent' is to be deemed included.

240 Substitution of standards

- 1. **Specification to British Standard or European Standard:** Substitution may be proposed 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.
- 2. **Before ordering:** Submit notification of all such substitutions.
- 3. **Documentary evidence:** Submit for verification when requested as detailed in clause A31/200. Any submitted foreign language documents must be accompanied by certified translations into English.

250 Currency of documents and information

- 1. **Currency:** References to published documents are to the editions, including amendments and revisions, current on the date of the Invitation to Tender.

260 Sizes

- 1. **General dimensions:** Products are specified by their co-ordinating sizes.
- 2. **Timber:** Cross section dimensions shown on drawings are:
 - 2.1. Target sizes as defined in BS EN 336 for structural softwood and hardwood sections.
 - 2.2. Finished sizes for non-structural softwood or hardwood sawn and further processed sections.

Documents provided on behalf of Employer

410 Additional copies of drawings/ documents

- 1. **Additional copies:** Issued free of charge.

440 Dimensions

- 1. **Scaled dimensions:** Do not rely on.

450 Measured quantities

1. **Ordering products and constructing the Works:** The accuracy and sufficiency of the measured quantities is not guaranteed.
2. **Precedence:** The specification and drawings shall override the measured quantities.

460 The specification

1. **Coordination:** All sections must be read in conjunction with Main Contract Preliminaries/ General conditions.

Documents provided by contractor/ subcontractors/ suppliers

510 Design and production information

1. **Master programme:** Make reasonable allowance for completing design/ production information, submission (including information relevant to the CDM Regulations), comment, inspection, amendment, resubmission and reinspection.
2. **Design/ production information:** Submit two copies, one could be returned with comments and this will be deemed to be a direction, notice or instruction under the Contract. Ensure that any necessary amendments are made without delay and resubmit unless it is confirmed that it is not required.
3. **Contractor's changes to Employer's Requirements:** Support request for substitution or variation with all relevant information.
4. **Employer's amendments to Employer's Requirements:** If considered to involve a variation, which has not already been acknowledged as a variation, notify without delay (maximum period 7 days), and do not proceed until instructed. Claims for extra cost, if made after it has been carried out, may not be allowed.
5. **Final version of design/ production information:** Submit When requested.

600 Contractor's Design information

1. **General:** Complete the design and detailing of parts of the Works as specified.
2. **Provide**
 - 2.1. Production information based on the drawings, specification and other information.
 - 2.2. Liaison to ensure coordination of the work with related building elements and services.
3. **Master programme:** Make reasonable allowance for completing design/ production information, submission (including information relevant to the CDM Regulations), comment, inspection, amendment, resubmission and reinspection.
4. **Information required:**
 - 4.1. **Format:** DWG and PDF.
 - 4.2. **Number of copies:** One (electronic).
5. **Submit:** Within one week of request.

610 Production information

1. **Contractor/ Domestic subcontractor provide:**
2. **Submit**
 - 2.1. For comment and make any necessary amendments.
 - 2.2. Sufficient copies of final version for distribution to all affected parties.

620 As-built drawings and information

1. **Contractor designed work:** Provide drawings/ information:
 - 1.1. As set out in Section A37.

2. **Submit:** At least two weeks before date for completion.

630 Technical literature

1. **Information:** Keep on site for reference by all supervisory personnel:
 - 1.1. Manufacturers' current literature relating to all products to be used in the Works.
 - 1.2. Relevant British, EN or ISO Standards.

640 Maintenance instructions and guarantees

1. **Components and equipment:** Obtain or retain copies, register with manufacturer and hand over on or before completion of the Works.
2. **Information location:** In Building Manual.
3. **Emergency call out services:** Provide telephone numbers for use after completion. Extent of cover: 24 hours a day, 7 days a week.

650 Energy rating calculation

1. **Calculation documentation**
 - 1.1. **Number of copies:** Two.
 - 1.2. **Deliver to:** Energy Performance Certificate Assessor and also lodge in the Building Manual.

Document/ data interchange

850 Electronic data interchange (EDI)

1. **Data:** Types and classes of communication: Electronic communications via e-mail are acceptable, however all notices required to be made under the Contract, in the event of a request for an extension of time, or for disruption, or for costs claimed by the Contractor for either, must be made in writing only, and be strictly in accordance with the Conditions of Contract.

Ω End of Section

A32 Management of the works

Generally

110 Supervision

1. **General:** Accept responsibility for coordination, supervision and administration of the Works, including subcontracts.
2. **Coordination:** Arrange and monitor a programme with each subcontractor, supplier, local authority and statutory undertaker, and obtain and supply information as necessary for coordination of the work.

115 Considerate Constructors Scheme

1. **Registration:** Before starting work, register the site and pay the appropriate fee.
2. **Contact**
 - 2.1. **Address:** Considerate Constructors Scheme Office, PO Box 75, Great Amwell, Ware, Hertfordshire, SG12 0YX.
 - 2.2. **Tel:** 01920 485959.
 - 2.3. **Fax:** 01920 485958.
 - 2.4. **Free phone:** 0800 7831423.
 - 2.5. **Web:** www.ccscheme.org.uk.
 - 2.6. **E mail:** enquiries@ccscheme.org.uk.
3. **Standard:** Comply with the scheme's Code of Considerate Practice.
 - 3.1. **Minimum compliance level:**

117 Constructing Better Health scheme

1. **Membership:** Register and submit evidence of registration.
2. **Contact**
 - 2.1. **Constructing Better Health, B&CE Building, Manor Royal, Crawley, West Sussex RH10 9QP.**
 - 2.2. **Tel:** 0845 873 7726
 - 2.3. **Email:** info@cbhscheme.co.uk
 - 2.4. **Website:** www.cbhscheme.co.uk

118 Vehicle safety requirements

1. **Vehicle equipment:** Ensure that all vehicles have the following:
 - 1.1. **Audible alert** to other road users to the planned movement of the vehicle when the vehicle's indicators are in operation.
 - 1.2. **Prominent signage** at the rear of the vehicle to warn cyclists of the dangers of passing the vehicle on the inside.
 - 1.3. **Properly adjusted class VI mirror/s** or Fresnel lens to eliminate the near side blind spot.
 - 1.4. **Side under run guards.**
2. **Driver training**
 - 2.1. **Drivers must be trained** on vulnerable road user safety through an approved course and hold a current valid Certificate of Competence.
 - 2.2. **Drivers must have a valid driving licence** and be legally able to drive the vehicle.

3. **Scheme membership:** Submit evidence of registration with and accreditation to the Fleet Operator Recognition Scheme (FORS)
4. **Submittal date:** Within four weeks of tender acceptance.

120 Insurance

1. **Documentary evidence:** Before starting work on site submit details, and/ or policies and receipts for the insurances required by the Conditions of Contract.

130 Insurance claims

1. **Notice:** 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, immediately give notice to the employer/ client, the person administering the Contract on their behalf and the Insurers.
2. **Failure to notify:** Indemnify the employer/ client against any loss, which may be caused by failure to give such notice.

140 Climatic conditions

1. **Information:** Record accurately and retain:
 - 1.1. Daily maximum and minimum air temperatures (including overnight).
 - 1.2. Delays due to adverse weather, including description of the weather, types of work affected and number of hours lost.
 - 1.3. Use all reasonable and suitable building aids and methods to prevent or minimise delays during adverse weather conditions.

150 Ownership

1. **Alteration/ clearance work:** Materials arising become the property of the Contractor except where otherwise stated. Remove from site as work proceeds.

Programme/ progress

210 Programme

1. **Master programme:** When requested and before starting work on site, submit in an approved form a master programme for the works, which must include details of:
 - 1.1. Design, production information and proposals provided by the contractor/ subcontractors/ suppliers, including inspection and checking (see section A31).
 - 1.2. Planning and mobilisation by the contractor.
 - 1.3. Earliest and latest start and finish dates for each activity and identification of all critical activities.
 - 1.4. Running in, adjustment, commissioning and testing of all engineering services and installations
 - 1.5. Work resulting from instructions issued in regard to the expenditure of provisional sums (see section A54)
 - 1.6. Work by or on behalf of the employer and concurrent with the contract (see section A50). The nature and scope of which, the relationship with preceding and following work and any relevant limitations are suitably defined in the contract documents.
2. **Exclusions:** Where and to the extent that the programme implications for work which is not so defined are impossible to assess, exclude it and confirm this when submitting the programme.
3. **Submit:** With Tender.

230 Submission of programme

1. **Further information:** Submission of the programme will not relieve the Contractor of the responsibility to advise of the need for further drawings or details or instructions in accordance with the Contract.

240 Notice of commencement of work

1. **Part of the work:** All works.
2. **Notice period (minimum):** Two weeks.

250 Monitoring

1. **Progress:** Record on a copy of the programme kept on site.
2. **Avoiding delays:** If any circumstances arise which may affect the progress of the Works submit proposals or take other action as appropriate to minimize any delay and to recover any lost time.

260 Site meetings

1. **General:** Site meetings will be held to review progress and other matters arising from administration of the Contract.
2. **Frequency:** Monthly.
3. **Location:** Site.
4. **Accommodation:** Ensure availability at the time of such meetings.
5. **Attendees:** Attend meetings and inform subcontractors and suppliers when their presence is required.
6. **Chairperson (who will also take and distribute minutes):** Contract Administrator.

265 Contractor's progress report

1. **General:** Submit a progress report at least three days before the site meeting.
2. **Content:** Notwithstanding the Contractor's obligations under the Contract the report must include:
 - 2.1. A progress statement by reference to the master programme for the Works.
 - 2.2. Details of any matters materially affecting the regular progress of the Works.
 - 2.3. Subcontractors' and suppliers' progress reports.
 - 2.4. Any requirements for further drawings or details or instructions to fulfil any obligations under the Conditions of Contract.

270 Contractor's site meetings

1. **General:** Hold meetings with appropriate subcontractors and suppliers shortly before main site meetings to facilitate accurate reporting of progress.

280 Photographs

1. **Number of locations:** To be agreed with the Contract Administrator.
2. **Frequency of intervals:** Weekly.
3. **Image format:** JPEG.
4. **Number of images from each location:** To be agreed with the Contract Administrator.
5. **Other requirements:** To record the progress of the Works, including a narrative and location of each photograph.

285 Partial possession by Employer

1. **Clause 2.25 of Conditions of Contract:** Ensure all necessary access, services and other associated facilities are also complete.

290 Notice of completion

1. **Requirement:** Give notice of the anticipated dates of completion of the whole or parts of the Works.
2. **Associated works:** Ensure necessary access, services and facilities are complete.
3. **Period of notice (minimum):** Four weeks.

310 Extensions of time

1. **Notice:** When a notice of the cause of any delay or likely delay in the progress of the works is given under the contract, written notice must also be given of all other causes which apply concurrently.
2. **Details:** As soon as possible submit:
 - 2.1. Relevant particulars of the expected effects, if appropriate, related to the concurrent causes.
 - 2.2. An estimate of the extent, if any, of the expected delay in the completion of the Works beyond the date for completion.
 - 2.3. All other relevant information required.

Control of cost

410 Cash flow forecast

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

420 Removal/ replacement of existing work

1. **Extent and location:** Agree before commencement.
2. **Execution:** Carry out in ways that minimise the extent of work.

430 Proposed instructions

1. **Estimates:** If a proposed instruction requests an estimate of cost, submit without delay, and in any case within seven days.
2. **Include**
 - 2.1. A detailed breakdown of the cost, including any allowance for direct loss and expense.
 - 2.2. Details of any additional resources required.
 - 2.3. Details of any adjustments to be made to the programme for the Works.
 - 2.4. Any other information as is reasonably necessary to fully assess the implications of issuing such an instruction.
3. **Inability to comply:** Inform immediately if it is not possible to comply with any of the above requirements.

440 Measurement

1. **Covered work:** Give notice before covering work required to be measured.

450 Daywork vouchers

1. **Before commencing work:** Give reasonable notice to person countersigning daywork vouchers.
2. **Content:** Before delivery each voucher must be:
 - 2.1. Referenced to the instruction under which the work is authorised.
 - 2.2. Signed by the Contractor's person in charge as evidence that the operatives' names, the time daily spent by each and the equipment and products employed are correct.
3. **Submit:** By the end of the week in which the work has been executed.

470 Products not incorporated into the Works

1. **Ownership:** 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.
2. **Evidence:** When requested, provide evidence of freedom of reservation of title.

475 Listed products stored off site

1. **Evidence of Title:** Submit reasonable proof that the property in 'listed items' is vested in the Contractor.
2. **Include for products purchased from a supplier**
 - 2.1. A copy of the contract of sale and 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.
3. **Include for products purchased from a supplier by a subcontractor or manufactured or assembled by any subcontractor**
 - 3.1. Copies of the subcontract with the subcontractor and a written statement from the subcontractor that any conditions relating to the passing of property have been fulfilled.

480 Labour and equipment returns

1. **Records:** Provide for verification at the beginning of each week in respect of each of the previous seven days.
2. **Records must show**
 - 2.1. The number and description of craftsmen, labourers and other persons directly or indirectly employed on or in connection with the Works or Services, including those employed by subcontractors.
 - 2.2. The number, type and capacity of all mechanical, electrical and power-operated equipment employed in connection with the Works or Services

Ω End of Section

A33

Quality standards/ control

Standards of products and executions

110 Incomplete documentation

1. **General:** Where and to the extent that products or work are not fully documented, they are to be:
 - 1.1. Of a kind and standard appropriate to the nature and character of that part of the Works where they will be used.
 - 1.2. Suitable for the purposes stated or reasonably to be inferred from the project documents.
2. **Contract documents:** Omissions or errors in description and/ or quantity shall not vitiate the Contract nor release the Contractor from any obligations or liabilities under the Contract.

120 Workmanship skills

1. **Operatives:** Appropriately skilled and experienced for the type and quality of work.
2. **Registration:** With Construction Skills Certification Scheme.
3. **Verification:** When requested, operatives must produce evidence of skills/ qualifications.

130 Quality of products

1. **Generally:** New. (Proposals for recycled products will be considered).
2. **Supply of each product:** From the same source or manufacturer.
3. **Whole quantity of each product required to complete the Works:** Consistent kind, size, quality and overall appearance.
4. **Tolerances:** Where critical, measure a sufficient quantity to determine compliance.
5. **Deterioration:** Prevent. Order in suitable quantities to a programme and use in appropriate sequence.

135 Quality of execution

1. **Generally:** Fix, apply, install or lay products securely, accurately, plumb, neatly and in alignment.
2. **Colour batching:** Do not use different colour batches where they can be seen together.
3. **Dimensions:** Check on-site dimensions.
4. **Finished work:** Not defective, e.g. not damaged, disfigured, dirty, faulty, or out of tolerance.
5. **Location and fixing of products:** Adjust joints open to view so they are even and regular.

140 Evidence of Compliance

1. **Proprietary products:** Retain on site evidence that the proprietary product specified has been supplied.
2. **Performance specification:** Submit evidence of compliance, including test reports indicating:
 - 2.1. Properties tested.
 - 2.2. Pass/ fail criteria.
 - 2.3. Test methods and procedures.
 - 2.4. Test results.
 - 2.5. Identity of testing agency.
 - 2.6. Test dates and times.
 - 2.7. Identities of witnesses.
 - 2.8. Analysis of results.

150 Inspections

1. **Products and executions:** Inspection or any other action must not be taken as approval unless confirmed in writing referring to:
 - 1.1. Date of inspection.
 - 1.2. Part of the work inspected.
 - 1.3. Respects or characteristics which are approved.
 - 1.4. Extent and purpose of the approval.
 - 1.5. Any associated conditions.

160 Related work

1. **Details:** Provide all trades with necessary details of related types of work. Before starting each new type or section of work ensure previous related work is:
 - 1.1. Appropriately complete.
 - 1.2. In accordance with the project documents.
 - 1.3. To a suitable standard.
 - 1.4. In a suitable condition to receive the new work.
2. **Preparatory work:** Ensure all necessary preparatory work has been carried out.

170 Manufacturer's recommendations/ instructions

1. **General:** Comply with manufacturer's printed recommendations and instructions current on the date of the Invitation to tender.
2. **Exceptions:** Submit details of changes to recommendations or instructions.
3. **Execution:** Use ancillary products and accessories supplied or recommended by main product manufacturer.
4. **Products:** Comply with limitations, recommendations and requirements of relevant valid certificates.

180 Water for the works

1. **Mains supply:** Clean and uncontaminated.
2. **Other:** Do not use until:
 - 2.1. Evidence of suitability is provided.
 - 2.2. Tested to BS EN 1008 if instructed.

Samples/ approvals

210 Samples

1. **Products or executions:** Comply with all other specification requirements and in respect of the stated or implied characteristics either:
 - 1.1. To an express approval.
 - 1.2. To match a sample expressly approved as a standard for the purpose.

220 Approval of products

1. **Submissions, samples, inspections and tests:** Undertake or arrange to suit the Works programme.
2. **Approval:** Relates to a sample of the product and not to the product as used in the Works. Do not confirm orders or use the product until approval of the sample has been obtained.
3. **Complying sample:** Retain in good, clean condition on site. Remove when no longer required.

230 Approval of execution

1. Submissions, samples, inspections and tests: Undertake or arrange to suit the Works programme.
2. Approval: Relates to the stated characteristics of the sample. (If approval of the finished work as a whole is required this is specified separately). Do not conceal, or proceed with affected work until compliance with requirements is confirmed.
3. Complying sample: Retain in good, clean condition on site. Remove when no longer required.

Accuracy/ setting out generally

320 Setting out

1. General: Submit details of methods and equipment to be used in setting out the Works.
2. Levels and dimensions: Check and record the results on a copy of drawings. Notify discrepancies and obtain instructions before proceeding.
3. Inform: When complete and before commencing construction.

330 Appearance and fit

1. Tolerances and dimensions: If likely to be critical to execution or difficult to achieve, as early as possible either:
 - 1.1. Submit proposals; or
 - 1.2. Arrange for inspection of appearance of relevant aspects of partially finished work.
2. General tolerances (maximum): To BS 5606, tables 1 and 2.

340 Critical dimensions

1. Critical dimensions: Set out and construct the Works to ensure compliance with the tolerances stated.
2. Location: Detailed on drawings

350 Levels of structural floors

1. Maximum tolerances for designed levels to be
 - 1.1. Floors to be self-finished, and floors to receive sheet or tile finishes directly bedded in adhesive: +/- 10 mm.
 - 1.2. Floors to receive dry board/ panel construction with little or no tolerance on thickness: +/- 10 mm.
 - 1.3. Floors to receive mastic asphalt flooring/ underlays directly: +/- 10 mm.
 - 1.4. Floors to receive mastic asphalt flooring/ underlays laid on mastic asphalt levelling coat(s): +/- 15 mm.
 - 1.5. Floors to receive fully bonded screeds/ toppings/ beds: +/- 15 mm.
 - 1.6. Floors to receive unbonded or floating screeds/ beds: +/- 20 mm.

360 Record drawings

1. Site setting out drawing: Record details of all grid lines, setting-out stations, benchmarks and profiles. Retain on site throughout the Contract and hand over on completion.

Services generally

410 Services regulations

1. New or existing services: Comply with the Byelaws or Regulations of the relevant Statutory Authority.

420 Water regulations/ byelaws notification

1. **Requirements:** Notify Water Undertaker of any work carried out to (or which affects) new or existing services and submit any required plans, diagrams and details.
2. **Consent:** Allow adequate time to receive Undertaker's consent before starting work. Inform immediately if consent is withheld or is granted subject to significant conditions.

430 Water regulations/ byelaws contractor's certificate

1. **On completion of the work:** Submit (copy where also required to the Water Undertaker) a certificate including:
 - 1.1. The address of the premises.
 - 1.2. A brief description of the new installation and/ or work carried out to an existing installation.
 - 1.3. The Contractor's name and address.
 - 1.4. A statement that the installation complies with the relevant Water Regulations or Byelaws.
 - 1.5. The name and signature of the individual responsible for checking compliance.
 - 1.6. The date on which the installation was checked.

435 Electrical installation certificate

1. **Submit:** When relevant electrical work is completed.
2. **Original certificate:** To be lodged in the Building Manual.

440 Gas, oil and solid fuel appliance installation certificate

1. **Before the completion date stated in the Contract:** Submit a certificate stating:
 - 1.1. The address of the premises.
 - 1.2. A brief description of the new installation and/ or work carried out to an existing installation.
 - 1.3. Any special recommendations or instructions for the safe use and operation of appliances and flues.
 - 1.4. The Contractor's name and address.
 - 1.5. A statement that the installation complies with the appropriate safety, installation and use regulations.
 - 1.6. The name, qualification and signature of the competent person responsible for checking compliance.
 - 1.7. The date on which the installation was checked.
2. **Certificate location:**

445 Service runs

1. **General:** Provide adequate space and support for services, including unobstructed routes and fixings.
2. **Ducts, chases and holes:** Form during construction rather than cut.
3. **Coordination with other works:** Submit details of locations, types/ methods of fixing of services to fabric and identification of runs and fittings.

450 Mechanical and electrical services

1. **Final tests and commissioning:** Carry out so that services are in full working order at completion of the Works.
2. **Building Regulations notice:** Copy to be lodged in the Building Manual.

Supervision/ inspection/ defective work

510 Supervision

1. **General:** In addition to the constant management and supervision of the Works provided by the Contractor's person in charge, all significant types of work must be under the close control of competent trade supervisors to ensure maintenance of satisfactory quality and progress.
2. **Evidence:** Submit, including details of the person proposed, their relevant skills training and knowledge; practical experience; qualifications; membership or registration with professional bodies; employment history, work related assessments and management structure.
3. **Submittal date:**
4. **Replacement:** Give maximum possible notice before changing person in charge or site agent.

520 Coordination of engineering services

1. **Suitability:** Site organisation staff must include one or more persons with appropriate knowledge and experience of mechanical and electrical engineering services to ensure compatibility between engineering and the Works generally.
2. **Evidence:** Submit when requested CVs or other documentary evidence relating to the staff concerned.

530 Overtime working

1. **Notice:** Prior to overtime being worked, submit details of times, types and locations of work to be done.
 - 1.1. **Minimum period of notice:**
2. **Concealed work:** If executed during overtime for which notice has not been given, it may be required to be opened up for inspection and reinstated at the Contractor's expense.

540 Defects in existing work

1. **Undocumented defects:** When discovered, immediately give notice. Do not proceed with affected related work until response has been received.
2. **Documented remedial work:** Do not execute work which may:
 - 2.1. Hinder access to defective products or work; or
 - 2.2. Be rendered abortive by remedial work.

550 Access for inspection

1. **Removal:** Before removing scaffolding or other facilities for access, give notice of not less than One week.

560 Tests and inspections

1. **Timing:** Agree and record dates and times of tests and inspections to enable all affected parties to be represented.
2. **Confirmation:** One working day prior to each such test or inspection. If sample or test is not ready, agree a new date and time.
3. **Records:** Submit a copy of test certificates and retain copies on site.

570 Air permeability

1. **Testing organization:** UKAS accredited and registered with the Air Tightness Testing and Measurement Association (ATTMA) or the Independent Air Tightness Testing Scheme (iATS).
2. **Method**
 - 2.1. Pressure test in accordance with ATTMA Publication TS: 1 Measuring Air Permeability of Building Envelopes.

3. Standard

3.1. Design airtightness value (maximum): $3\text{m}^3/\dots\dots\dots \text{m}^2/(\text{h.m}^2)$.

4. Results

4.1. Content: Include test results and all supporting data.

4.2. Copies: Required for building control inspection and inclusion in building manual.

4.3. Electronic deposit: Through the ATTMA lodgement database

4.4. Additional copies: Provide on request.

580 Continuity of thermal insulation

1. Record and report: Confirm that work to new, renovated or upgraded thermal elements has been carried out to conform to specification. Include:

1.1. The address of the premises.

1.2. The Contractor's name and address.

1.3. The name, qualification and signature of the competent person responsible for checking compliance.

1.4. The date on which the installation was checked.

2. Submit: Before completion of the Works.

3. Copy: To be lodged in the building manual.

590 Resistance to passage of sound

1. Method: Specified construction.

2. Compliance:

2.1. Copies: Incorporate in the Building Manual.

595 Energy performance certificate

1. Assessment: Undertaken by a member of an approved accreditation scheme. Submit details of scheme name and evidence of qualifications when requested.

1.1. Building Type: Non-dwelling.

1.2. Method: SBEM.

2. Format

2.1. Certificate: To be incorporated in the Building Manual.

3. Submit: With the building manual at handover.

610 Proposals for rectification of defective products/ executions

1. Proposals: Immediately any work or product is known, or appears, to be not in accordance with the Contract, submit proposals for opening up, inspection, testing, making good, adjustment of the Contract Sum, or removal and re-execution.

2. Acceptability: Such proposals may be unacceptable and contrary instructions may be issued.

620 Measures to establish acceptability

1. General: Wherever inspection or testing shows that the work, materials or goods are not in accordance with the contract and measures (e.g. testing, opening up, experimental making good) are taken to help in establishing whether or not the work is acceptable, such measures:

1.1. Will be at the expense of the Contractor.

1.2. Will not be considered as grounds for revision of the completion date.

630 Quality control

1. **Procedures:** Establish and maintain to ensure that the Works, including the work of subcontractors, comply with specified requirements.
2. **Records:** Maintain full records, keep copies on site for inspection, and submit copies on request.
3. **Content of records**
 - 3.1. Identification of the element, item, batch or lot including location in the Works.
 - 3.2. Nature and dates of inspections, tests and approvals.
 - 3.3. Nature and extent of nonconforming work found.
 - 3.4. Details of corrective action.

Work at or after completion

710 Work before completion

1. **General:** Make good all damage consequent upon the Works.
2. **Temporary markings, coverings and protective wrappings:** Remove unless otherwise instructed.
3. **Cleaning:** Clean the Works thoroughly inside and out, including all accessible ducts and voids. Remove all splashes, deposits, efflorescence, rubbish and surplus materials.
4. **Cleaning materials and methods:** As recommended by manufacturers of products being cleaned, and must not damage or disfigure other materials or construction.
5. **COSHH dated data sheets:** Obtain for all materials used for cleaning and ensure they are used only as recommended by their manufacturers.
6. **Minor faults:** Touch up in newly painted work, carefully matching colour and brushing out edges. Repaint badly marked areas back to suitable breaks or junctions.
7. **Moving parts of new work:** Adjust, ease and lubricate as necessary to ensure easy and efficient operation, including doors, windows, drawers, ironmongery, appliances, valves and controls.

720 Security at completion

1. **General:** Leave the Works secure with, where appropriate, all accesses closed and locked.
2. **Keys:** Account for and adequately label all keys, and hand over together with an itemised schedule, retaining duplicate schedule signed as a receipt.

730 Making good defects

1. **Remedial work:** Make arrangements with the Employer's Agent and give reasonable notice of the precise dates for access to the various parts of the works for the purpose of making good defects. Inform the Employer's Agent when remedial works to the various parts of the works are completed.
2. During the Defects Liability Period, the Employer's Agent will advise the Contractor of defects that have occurred. Such defects shall be categorised by the Employer's Agent and dealt with by the Contractor as described hereafter.
3. In the event that the Employer, at his sole discretion, considers a defect life threatening, or extremely significant, on-site staff, or others employed by the Employer, may remedy or temporarily make good such defects, without first informing the Contractor.
4. Such actions by the Employer shall neither absolve the Contractor of his responsibility to maintain the works, nor shall the Contractor be entitled to recover any costs that he may incur as a result of later providing the permanent remedy to the defect in accordance with the following categories. In addition, the Employer may recover the cost of the temporary remedy from the Contractor.
 - 4.1. **Category A – Urgent**
 - 4.1.1. The Contractor shall attend the site within 12 hours and remedy the defect within 24 hours or the receipt of notice from the Employer's Agent.
 - 4.2. **Category B – Essential**

- 4.2.1. The Contractor shall attend the site within 3 days and remedy the defect within 7 days of the receipt of the notice from the Employer's Agent.

4.3. **Category C – Non urgent**

- 4.3.1. The Contractor shall attend the site and make good the defects within the Defects Liability Period.

- 5. If the Contractor is unable to obtain parts or materials within the time dictated by the Categories described above, he must take the following action:

- 5.1. Inform the Employer's Agent of the non-availability of the parts of materials and submit in writing proposals for a temporary repair, and request approval.
- 5.2. On receipt of the approval carry out the temporary repair at no cost to the Employer.
- 5.3. Agree with the Employer's Agent a date when the final making good shall be completed.

Ω End of Section

A34 Security/ safety/ protection

Security, health and safety

110 Pre-construction information

1. **Location:** Integral with the project Preliminaries, including but not restricted to the following sections:
 - 1.1. **Description of project:** Sections A10 and A11.
 - 1.2. **Client's consideration and management requirements:** Sections A12, A13 and A36.
 - 1.3. **Environmental restrictions and on-site risks:** Section A12, A35 and A34.
 - 1.4. **Significant design and construction hazards:** Section A34.
 - 1.5. **The health and safety file:** Section A37.

120 Execution hazards

1. **Common hazards:** Not listed. Control by good management and site practice.

130 Product hazards

1. **Hazardous substances:** Site personnel levels must not exceed occupational exposure standards and maximum exposure limits stated in the current version of HSE document EH40: 'Workplace Exposure Limits'.
2. **Common hazards:** Not listed. Control by good management and site practice.

140 Construction phase health and safety plan

1. **Submission:** Present to the employer/ client no later than Two weeks prior to commencement on site.
2. **Confirmation:** 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 the CDM Regulations.
3. **Content:** Develop the plan from, and draw on, the outline construction phase health and safety plan, clause A30/570, and the pre-tender health and safety plan/ pre-construction information.

150 Security

1. **Protection:** Safeguard the site, the Works, products, materials, and any existing buildings affected by the Works from damage and theft.
2. **Access:** Take all reasonable precautions to prevent unauthorized access to the site, the Works and adjoining property.

160 Stability

1. **Responsibility:** Maintain the stability and structural integrity of the works and adjacent structures during the contract.
2. **Design loads:** Obtain details, support as necessary and prevent overloading.

170 Occupied premises

1. **Extent:** Existing buildings will be occupied and/ or used during the contract as follows: See Section A12.
2. **Works:** Carry out without undue inconvenience and nuisance and without danger to occupants and users.

3. **Overtime:** If compliance with this clause requires certain operations to be carried out during overtime, and such overtime is not required for any other reason, the extra cost will be allowed, provided that such overtime is authorized in advance.

210 Safety provisions for site visits

1. **Safety:** Submit details in advance of safety provisions and procedures (including those relating to materials, which may be deleterious), which will require their compliance when visiting the site.
2. **Protective clothing and/ or equipment:** Provide and maintain on site for visitors to the-site.

Protect against the following

310 Explosives

1. **Use:** Not permitted.

320 Noise consent by local authority

1. **Consent:** Granted by the local authority under Part III of the Control of Pollution Act relating to the works providing the following conditions are met:
 - 1.1. Providing the Contractor has fully complied with the requirements of the local authority and discharged any Conditions imposed.

330 Noise and vibration

1. **Standard:** Comply with the recommendations of BS 5228-1, in particular clause 7.3, to minimize noise levels during the execution of the Works.
2. **Noise levels from the Works:** Maximum level: 65 dB(A) when measured from 30 metres.
3. **Equipment:** Fit compressors, percussion tools and vehicles with effective silencers of a type recommended by manufacturers of the compressors, tools or vehicles.
4. **Restrictions:** Do not use:
 - 4.1. Percussion tools and other noisy appliances without consent during the hours of 17:00 – 08:00 Monday to Friday, or at all on Saturdays and Sundays.
 - 4.2. Radios or other audio equipment or permit employees to use in ways or at times that may cause nuisance.

340 Pollution

1. **Prevention:** Protect the site, the works and the general environment (including the atmosphere, land, streams and waterways) against pollution.
2. **Contamination:** If pollution occurs, report immediately, including to the appropriate authorities, and provide relevant information.

350 Pesticides

1. **Use:** Not permitted.

360 Nuisance

1. **Duty:** Prevent nuisance from smoke, dust, rubbish, vermin and other causes.
2. **Surface water:** Prevent hazardous build-up on-site, in excavations and to surrounding areas and roads.

370 Asbestos containing materials

1. **Duty:** Report immediately any suspected materials discovered during execution of the works.
 - 1.1. Do not disturb.
 - 1.2. Agree methods for safe removal or encapsulation.

371 Dangerous or hazardous substances

1. **Duty:** Report immediately suspected materials discovered during execution of the works.
 - 1.1. Do not disturb.
 - 1.2. Agree methods for safe removal or remediation.

375 Antiquities

1. **Duty:** Report immediately any fossils, antiquities and other objects of interest or value discovered during execution of the works.
2. **Preservation:** Keep objects in the exact position and condition in which they were found.

380 Fire prevention

1. **Duty:** Prevent personal injury or death, and damage to the Works or other property from fire.
2. **Standard:** Comply with Joint Code of Practice 'Fire Prevention on Construction Sites', published by Construction Industry Publications and The Fire Protection Association (The 'Joint Fire Code').

390 Smoking on-site

1. **Smoking on-site:** Not permitted.

400 Burning on-site

1. **Burning on-site:** Not permitted.

410 Moisture

1. **Wetness or dampness:** Prevent, where this may cause damage to the Works.
2. **Drying out:** Control humidity and the application of heat to prevent:
 - 2.1. Blistering and failure of adhesion.
 - 2.2. Damage due to trapped moisture.
 - 2.3. Excessive movement.

420 Infected timber/ Contaminated materials

1. **Removal:** Where instructed to remove material affected by fungal/ insect attack from the building, minimize the risk of infecting other parts of the building.
2. **Testing:** carry out and keep records of appropriate tests to demonstrate that hazards presented by concentrations of airborne particles, toxins and other microorganisms are within acceptable levels.

430 Waste

1. **Waste:** Includes rubbish, debris, spoil, containers and packaging, and surplus material requiring disposal.
2. **Requirement:** Minimise production and prevent accumulation of waste. Keep the site and works clean and tidy. Clean out voids and cavities in the construction before closing.
3. **Disposal:** Collect and store in suitable containers. Remove from site and dispose of in a safe and competent manner, as approved and directed by the waste regulation authority.
4. **Recyclable material:** Sort and dispose of at a materials recycling facility approved by the waste regulation authority.
5. **Documentation:** Retain on-site.

440 Electromagnetic interference

1. **Duty:** Prevent excessive electromagnetic disturbance to apparatus outside the site.

450 Laser equipment

1. **Construction laser equipment:** Install, use and store in accordance with BS EN 60825-1 and the manufacturer's instructions.
2. **Class 1 or Class 2 laser equipment:** Ensure laser beam is not set at eye level and is terminated at the end of its useful path.
3. **Class 3R and Class 3B laser equipment:** Do not use without approval and subject to submission of a method statement on its safe use.

460 Powder actuated fixing systems

1. **Use:** Not permitted.

470 Invasive species

1. **General:** Prevent the spread of species (e.g. plants or animals) that may adversely affect the site or works economically, environmentally or ecologically.
2. **Special precautions:**
3. **Duty:** Report immediately any suspected invasive species discovered during execution of the works.
 - 3.1. Do not disturb.
 - 3.2. Agree methods for safe eradication or removal.

Protect the following

510 Existing services

1. **Confirmation:** Notify all service authorities, statutory undertakers and/ or adjacent owners of proposed works not less than one week before commencing site operations.
2. **Identification:** Before starting work, check and mark positions of utilities/ services. Where positions are not shown on drawings obtain relevant details from service authorities, statutory undertakers or other owners.
3. **Work adjacent to services**
 - 3.1. Comply with service authority's/ statutory undertaker's recommendations.
 - 3.2. **Adequately protect, and prevent damage to services:** Do not interfere with their operation without consent of service authorities/ statutory undertakers or other owners.
4. **Identifying services**
 - 4.1. **Below ground:** Use signboards, giving type and depth;
 - 4.2. **Overhead:** Use headroom markers.
5. **Damage to services:** If any results from execution of the Works:
 - 5.1. Immediately give notice and notify appropriate service authority/ statutory undertaker.
 - 5.2. Make arrangements for the work to be made good without delay to the satisfaction of service authority/ statutory undertaker or other owner as appropriate.
 - 5.3. Any measures taken to deal with an emergency will not affect the extent of the Contractor's liability.
6. **Marker tapes or protective covers:** Replace, if disturbed during site operations, to service authority's/ statutory undertakers recommendations.

520 Roads and footpaths

1. **Duty:** Maintain roads and footpaths within and adjacent to the site and keep clear of mud and debris.
2. **Damage caused by site traffic or otherwise consequent upon the Works:** Make good to the satisfaction of the Employer, Local Authority or other owner.

530 Existing topsoil/ subsoil

1. **Duty:** Prevent over compaction of existing topsoil and subsoil in those areas which may be damaged by construction traffic, parking of vehicles, temporary site accommodation or storage of materials and which will require reinstatement prior to completion of the Works.
2. **Protection:** Before starting work submit proposals for protective measures.

540 Retained trees/ shrubs/ grassed areas

1. **Protection:** Preserve and prevent damage, except those not required.
2. **Replacement:** Mature trees and shrubs if uprooted, destroyed, or damaged beyond reasonable chance of survival in their original shape, as a consequence of the Contractor's negligence, must be replaced with those of a similar type and age at the Contractor's expense.

550 Retained trees

1. **Protected area:** Unless agreed otherwise, do not:
 - 1.1. Dump spoil or rubbish, excavate or disturb topsoil, park vehicles or plant, store materials or place temporary accommodation within the root protection area.
 - 1.2. Sever roots exceeding 25 mm in diameter. If unintentionally severed, give notice and seek advice.
 - 1.3. Change level of ground within an area 3 m beyond branch spread.

555 Wildlife species and habitats

1. **General:** Safeguard the following: Existing surrounding market garden and environs.
2. **Protected habitats and species:** Upon discovery immediately advise. Do not proceed until instruction is received.
3. **Education:** Ensure that employees and visitors to the site receive suitable instruction and awareness training.

560 Existing features

1. **Protection:** Prevent damage to existing buildings, fences, gates, walls, roads, paved areas and other site features, which are to remain in position during execution of the Works.

570 Existing work

1. **Protection:** Prevent damage to existing work, structures or other property during the course of the work.
2. **Removal:** Minimum amount necessary.
3. **Replacement work:** To match existing.

580 Building interiors

1. **Protection:** Prevent damage from exposure to the environment, including weather, flora, fauna, and other causes of material degradation during the course of the work.

625 Adjoining property restrictions

1. **Precautions**
 - 1.1. Prevent trespass of workpeople and take precautions to prevent damage to adjoining property.
 - 1.2. Pay all charges.
 - 1.3. Remove and make good on completion or when directed.
2. **Damage:** Bear cost of repairing damage arising from execution of the Works.

630 Existing structures

1. **Duty:** Check proposed methods of work for effects on adjacent structures inside and outside the site boundary.
2. **Supports:** During execution of the Works:
 - 2.1. Provide and maintain all incidental shoring, strutting, needling and other supports as may be necessary to preserve stability of existing structures on the site or adjoining that may be endangered or affected by the Works.
 - 2.2. Do not remove until new work is strong enough to support existing structure.
 - 2.3. Prevent overstressing of completed work when removing supports.
3. **Adjacent structures:** Monitor and immediately report excessive movement.
4. **Standard:** Comply with BS 5975 and BS EN 12812.

640 Materials for recycling/ reuse

1. **Duty:** Sort and prevent damage to stated products or materials, clean off bedding and jointing materials and other contaminants.
2. **Storage:** Stack neatly and protect until required by the Employer or for use in the Works as instructed.

Ω End of Section

A35

Specific limitations on method/ sequence/ timing

Clauses

110 Scope

1. **General:** The limitations described in this section are supplementary to limitations described or implicit in information given in other sections or on the drawings.

140 Scaffolding

1. **Scaffolding:** Make available to subcontractors and others at all times.

170 Working Hours

1. **Specific limitations:** 08:00 – 17:00 Monday to Friday. Saturday working by agreement with the Employer.

180 Completion in sections or in parts

1. **General:** Where the Employer is to take possession of any Section or part of the Works and such Section or part will, after its practical completion, depend for its adequate functioning on work located elsewhere on the site: Complete such other work in time to permit such possession to take place.
2. **Remainder of the Works:** During execution, ensure that completed Sections or parts of the Works have continuous and adequate provision of services, fire precautions, means of escape and safe access.

Ω End of Section

A36 Facilities/ temporary work/ services

Generally

110 Spoil heaps, temporary works and services

1. **Location:** Give notice and details of intended siting.
2. **Maintenance:** Alter, adapt and move as necessary. Remove when no longer required and make good.

Accommodation

210 Room for meetings

1. **Facilities:** Provide suitable temporary accommodation for site meetings, adequately heated and lit. The room may be part of the Contractor's own site offices.
2. **Furniture and Equipment:** Provide table and chairs for six people.

220 Site Accommodation

1. **Purpose:**
2. **Facilities:** Provide and obtain approval of suitable lockable temporary accommodation and facilities as follows:
 - 2.1. **Status:** To be part of the contractor's own accommodation

230 Temporary accommodation

1. **Proposals for temporary accommodation and storage for the Works:** Submit two weeks prior to starting on site.
2. **Details to be included:** Type of accommodation and storage, its siting and the programme for site installation and removal.

260 Sanitary accommodation

1. **Requirement:** Provide sanitary accommodation for the Employer/ Purchaser, and other members of the consultant team, either separate or shared with the Contractor's supervisory staff. Maintain in clean condition and provide all consumables.

Temporary works

310 Roads

1. **Permanent roads, hard standings and footpaths on the site:** The following may be used, subject to clause A34/520:
 - 1.1. **Details:** Existing site parking area, after agreement of exact area with the Employer.
 - 1.2. **Restrictions on use:** The car park will also be used by Community Roots volunteers.
 - 1.3. **Protective or remedial measures:** Reinstate to original condition on completion of the works.

330 Temporary protection to existing trees/ vegetation

1. **Temporary protection:** Provide before starting work
2. **Protective barriers and any other relevant physical protection measures:** To BS 5837.
3. **Areas of structural landscaping to be protected from construction operations:**
4. **Integrity of protection:** Maintain for the duration of the Works. Remove on completion of the works and make good disturbed area.

340 Name boards/ advertisements

1. **General:** Obtain approval, including statutory consents, and provide a temporary name board displaying:
 - 1.1. Title of project:
 - 1.2. Name of Employer:
 - 1.3. Names of Consultants:
 - 1.4. Names of Contractor and Subcontractors:
 - 1.5. Special requirements:

Services and facilities

410 Lighting

1. **Finishing work and inspection:** Provide temporary lighting, the intensity and direction of which closely resembles that delivered by the permanent installation.

420 Lighting and power

1. **Supply:** Provide all necessary temporary lighting and power required for the execution of the Works, including temporary connections; power may be obtained from the existing supply for the duration of the Contract, subject to the installation of suitable sub-metering; the electricity used for the works will be charged to the Contractor at cost. The adequacy of the supply is not guaranteed to be sufficient to support the Works and the Contractor shall allow for all costs in this respect. The Contractor is to allow for making all temporary connections, distribution about the site in accordance with CP 1017, alterations and adaptations as necessary and clearing away on completion and making good.

430 Water

1. **Supply:** Provide fresh water for the work. Water may be obtained from the existing school supply, for the duration of the Contract, subject to the installation of suitable sub-metering; the used water for the works will be charged to the Contractor at cost. The Contractor is to allow for making all temporary connections, providing hoses, storage tanks, etc., alterations and adaptations as necessary and clearing away on completion and making good.

440 Mobile telephones

1. **Direct communication:** As soon as practicable after the start on site:
 - 1.1. provide the Contractor's person in charge with a mobile telephone.
 - 1.2. pay all charges reasonably incurred.

470 E-mail and internet facility

1. **General:** As soon as practicable after the start on site provide a suitable e-mail facility on site for the use of the Contractor, Subcontractors and other members of the project team.

520 Use of permanent heating system

1. **Permanent heating installation:** May be used for drying out the Works/ services and controlling temperature and humidity levels.
2. **Installation:** If used:
 - 2.1. Take responsibility for operation, maintenance and remedial work.
 - 2.2. Arrange supervision by and indemnification of the appropriate Subcontractors.
 - 2.3. Pay costs arising.

530 Beneficial use of installed systems

1. Permanent systems: Unless specific permission is given by the Employer and installer, do not use for any purpose other than running in, testing and commissioning.
2. Other uses: If permission is given for any other use of a system before the Works are accepted as complete, it must be subject to a separate written agreement between the parties and in accordance with the recommended procedures given in NJCC Guidance Note 10.

540 Meter readings

1. Charges for service supplies: Where to be apportioned ensure that:
 - 1.1. Meter readings are taken by relevant authority at possession and/ or completion as appropriate.
 - 1.2. Copies of readings are supplied to interested parties.

550 Thermometers

1. General: Provide on site and maintain in accurate condition a maximum and minimum thermometer for measuring atmospheric shade temperature, in an approved location.

570 Personal protective equipment

1. General: Provide for the sole use of other members of the project team, in sizes to be specified:
 - 1.1. Safety helmets to BS EN 397, neither damaged nor time-expired. Number required: 4.
 - 1.2. High-visibility waistcoats to BS EN ISO 20471 Class 2. Number required: 4.
 - 1.3. Safety boots with steel insole and toecap to BS EN ISO 20345. Pairs required: 4, in various sizes to be agreed with the Employer.
 - 1.4. Disposable respirators to BS EN 149.FFP1S.
 - 1.5. Eye protection to BS EN ISO 16321-1 and BS EN ISO 16321-3.
 - 1.6. Ear protection - muffs to BS EN 352-1, plugs to BS EN 352-2
 - 1.7. Hand protection - to BS EN 388, 407, 420 or 511, as appropriate.

Ω End of Section

A37

Operation/ maintenance of the finished works

Generally

110 The building manual

1. **Purpose:** 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.
2. **Scope**
 - 2.1. **Part 1: General:** content as clause 120.
 - 2.2. **Part 2: Fabric:** content as clause 130.
 - 2.3. **Part 3: Services:** content as clause 140.
 - 2.4. **Part 4: The Health and Safety File:** content as clause 150.
 - 2.5. **Part 5: Building User Guide:** content as clause 151.
3. **Responsibility:** The building manual is to be produced by the Contractor and must be complete no later than two weeks prior to the Date for Completion.
4. **Information provided by others:** Details: N/A.
5. **Compilation**
 - 5.1. Prepare all information for contractor designed or performance specified work including as-built drawings.
 - 5.2. Obtain or prepare all other information to be included in the manual.
6. **Reviewing the manual:** Submit a complete draft. Amend in the light of any comments and resubmit. Do not proceed with production of the final copies until authorized.
7. **Final copies of the manual**
 - 7.1. **Number of copies:** Two.
 - 7.2. **Format:** A4 size, plastics covered, loose leaf, four ring binders with hard covers, each indexed, divided and appropriately cover titled.
 - 7.3. **Latest date for submission:** Two weeks before the date for completion stated in the contract.
8. **As-built drawings and schedules**
 - 8.1. **Number of copies:** Two.
 - 8.2. **Format:** Paper folded to A4 size and two CD's.

115 The Health and Safety File

1. **Responsibility:** Contractor.
2. **Content:** To meet legislative requirements.
3. **Format:** A4 size, plastics covered, loose leaf, four ring binders with hard covers, each indexed, divided and appropriately cover titled.
3. **Delivery to:** Contract Administrator for approval at least one week prior to the Date for Completion.

120 Content of the building manual part 1: General

1. **Content:** Obtain and Provide the following, including all relevant details not included in other parts of the manual:
2. **Index:** list the constituent parts of the manual, together with their location in the document.
3. **The Works**
 - 3.1. Description of the buildings and facilities.

- 3.2. Ownership and tenancy, where relevant
- 3.3. Health and Safety information – other than that specifically required by the Construction (Design and Management) Regulations.
4. **The Contract**
 - 4.1. Names and addresses and contact details of all significant consultants, contractors, subcontractors, suppliers and manufacturers.
 - 4.2. Overall design criteria.
 - 4.3. Environmental performance requirements
 - 4.4. Relevant authorities, consents and approvals.
 - 4.5. Third party certification, such as those made by “competent” persons in accordance with the Building Regulations
5. **Operational requirements and constraints of a general nature**
 - 5.1. Maintenance contracts and contractors.
 - 5.2. 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.
 - 5.3. Emergency procedures and contact details in case of emergency.
6. Description and location of other key documents.
7. **Timescale for completion:** Two weeks before the Date for Completion.

130 Content of the building manual part 2: Building fabric

1. **Content:** Obtain and Provide the following, including all relevant details not included in other parts of the manual:
2. **Detailed design criteria, including**
 - 2.1. Floor and roof loadings.
 - 2.2. Durability of individual components and elements.
 - 2.3. Loading restrictions.
 - 2.4. Insulation values.
 - 2.5. Fire ratings.
 - 2.6. Other relevant performance requirements.
3. **Construction of the building**
 - 3.1. A detailed description of methods and materials used.
 - 3.2. As-built drawings recording the construction, together with an index.
 - 3.3. Information and guidance concerning repair, renovation or demolition/ deconstruction.
4. Periodic building maintenance guide chart.
5. Inspection reports.
6. Manufacturer’s instructions index, including relevant COSHH data sheets and recommendations for cleaning, repair and maintenance of components.
7. Fixtures, fittings and components schedule and index.
8. Guarantees, warranties and maintenance agreements – obtain from manufacturers, suppliers and subcontractors.
9. **Test certificates and reports required in the specification or in accordance with legislation, including**
 - 9.1. Air permeability.
 - 9.2. Resistance to passage of sound.
 - 9.3. Continuity of insulation.
 - 9.4. Electricity and Gas safety.

10. **Timescale for completion:** Two weeks before the Date for Completion.

140 Content of the building manual part 3: Building services

1. **Content:** Obtain and Provide the following, including all relevant details not included in other parts of the manual:
2. **Detailed design criteria and description of the systems, including**
 - 2.1. Services capacity, loadings and restrictions
 - 2.2. Services instructions.
 - 2.3. Services log sheets.
 - 2.4. Manufacturers' instruction manuals and leaflets index.
 - 2.5. Fixtures, fittings and component schedule index.
3. Detailed description of methods and materials used.
4. **As-built drawings for each system recording the construction, together with an index, including**
 - 4.1. Diagrammatic drawings indicating principal items of plant, equipment and fittings
 - 4.2. Record drawings showing overall installation
 - 4.3. Schedules of plant, equipment, valves, etc. describing location, design performance and unique identification cross referenced to the record drawings.
 - 4.4. Identification of services – a legend for colour coded services.
5. **Product details, including for each item of plant and equipment**
 - 5.1. Name, address and contact details of the manufacturer.
 - 5.2. Catalogue number or reference
 - 5.3. Manufacturer's technical literature, including detailed operating and maintenance instructions.
 - 5.4. Information and guidance concerning dismantling, repair, renovation or decommissioning.
6. **Operation:** A description of the operation of each system, including:
 - 6.1. Starting up, operation and shutting down
 - 6.2. Control sequences
 - 6.3. Procedures for seasonal changeover
 - 6.4. Procedures for diagnostics, troubleshooting and faultfinding.
7. Guarantees, warranties and maintenance agreements – obtain from manufacturers, suppliers and subcontractors.
8. **Commissioning records and test certificates list for each item of plant, equipment, valves, etc. used in the installations – including**
 - 8.1. Electrical circuit tests.
 - 8.2. Corrosion tests.
 - 8.3. Type tests.
 - 8.4. Work tests.
 - 8.5. Start and commissioning tests.
9. **Equipment settings:** Schedules of fixed and variable equipment settings established during commissioning.
10. **Preventative maintenance:** Recommendations for frequency and procedures to be adopted to ensure efficient operation of the systems
11. **Lubrication:** Schedules of all lubricated items
12. **Consumables:** A list of all consumable items and their source.
13. **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.

14. Emergency procedures for all systems, significant items of plant and equipment.
15. Annual maintenance summary chart.
16. **Timescale for completion:** Two weeks before the Date for Completion.

150 Content of the building manual part 4: the Health and Safety File

1. **Content:** obtain and provide the following, including all relevant details not included in other parts of the manual, including:
 - 1.1. residual hazards and how they have been dealt with
 - 1.2. hazardous materials used
 - 1.3. information regarding the removal or dismantling of installed plant and equipment
 - 1.4. health and safety information about equipment provided for cleaning or maintaining the structure;
 - 1.5. the nature, location and markings of significant services,
 - 1.6. information and as-built drawings of the structure, its plant and equipment
2. Information prepared by others.
3. **Timescale for completion:** Two weeks before the Date for Completion.
4. **Submit to:** Contract Administrator.

151 Content of the building manual part 5: the building user guide

1. **Content:** Obtain and provide the following:
 - 1.1. Building services information.
 - 1.2. Emergency information.
 - 1.3. Energy & environmental strategy.
 - 1.4. Water use.
 - 1.5. Transport facilities.
 - 1.6. Materials & waste policy.
 - 1.7. Re-fit/ re-arrangement considerations.
 - 1.8. Reporting provision.
 - 1.9. Training.
 - 1.10. Links & references.
2. **Other specific requirements.**
3. **Timescale for completion:** Two weeks before the Date for Completion.

160 Presentation of building manual

1. **Format:** A4 size, plastics covered, loose leaf, four ring binders with hard covers, each indexed, divided and appropriately cover titled.
2. **Selected drawings needed to illustrate or locate items mentioned in the Manual:** Where larger than A4, to be folded and accommodated in the binders so that they may be unfolded without being detached from the rings.
3. **As-built drawings:** The main sets may form annexes to the Manual.

190 Maintenance service

1. **Scope:** Provide a comprehensive maintenance service for items of plant and equipment. Include all planned preventative maintenance, as set out within the maintenance schedule, and replacement of all consumable items.

220 Training

1. **Objective:** Before Completion, explain and demonstrate to designated maintenance staff the purpose, function and operation of the installations including items and procedures listed in the Building Manual.
2. **Time allowance:** Include a minimum of two days.

230 Spare parts

1. **General:** Before Completion submit a priced schedule of spare parts that the Contractor recommends should be obtained and kept in stock for maintenance of the services installations.
2. **Content:** Include in the priced schedule for:
 - 2.1. Manufacturers' current prices, including packaging and delivery to site.
 - 2.2. Checking receipts, marking and numbering in accordance with the schedule of spare parts.
 - 2.3. Referencing to the plant and equipment list in Part 3 of the Building Manual.
 - 2.4. Painting, greasing, etc. and packing to prevent deterioration during storage.
3. **Latest date for submission:**

250 Tools

1. **General:** Provide tools and portable indicating instruments for the operation and maintenance of all services plant and equipment (except any installed under Named Subcontracts) together with suitable means of identifying, storing and securing.
2. **Quantity:** Two complete sets.
3. **Time of submission:** At completion.

Ω End of Section

A40

Contractor's general cost items: management and staff

Clauses

110 Management and staff

The Contractor is to allow for all salary and wage costs of management and staff required and encompassing the following:

1. National Insurance Contributions.
2. Pensions.
3. Annual and public holidays.
4. Travelling time, expenses, fares and transport.
5. Subsistence and lodging allowances.
6. Guaranteed time.
7. Incentive and bonus payments and operations of such schemes, non-productive time and all costs of overtime working.
8. Sick pay.
9. Guaranteed minimum bonus.
10. Severance pay and obligations under the Redundancy Payments Act.
11. Training board levies.
12. Any other disbursements arising from the employment of labour.
13. Cost significant items:

Ω End of Section

A41

Contractor's general cost items: site accommodation

Clauses

110 Site accommodation

1. Details: Site accommodation required or made/ not made available by the Employer: See section A36.
2. Cost significant items:

Ω End of Section

A42

Contractor's general cost items: services and facilities

Clauses

110 Services and facilities

1. Details: Services or facilities required or made/ not made available by the Employer: See section A36.
2. Cost significant items:

Ω End of Section

A43

Contractor's general cost items: mechanical plant

Clauses

110 Mechanical plant

1. Cost significant items:

Ω End of Section

A44

Contractor's general cost items: temporary works

Clauses

110 Temporary works

1. Details: Temporary works required or made/ not made available by the Employer: See section A36.
2. Cost significant items:

Ω End of Section

A50

Work/ products by/ on behalf of the employer

Clauses

110 Work by/ on behalf of Employer

1. Title: Not applicable

120 Products provided by/ on behalf of employer

1. **General:** Details of such products are given in the work sections, for fixing as part of the contract. Use for no other purpose than the Works.
2. **Handling:** Accept delivery, check against receipts and take into appropriate storage.
3. **Surplus products:** Keep safe and obtain instructions.

Ω End of Section

A53

Work by statutory authorities/ undertakers

Clauses

110 Work by Local Authority

1. Item: Not applicable.

120 Work by statutory undertakers

1. Item: Not applicable.

Ω End of Section

A54 Provisional work/ items

Clauses

110 Provisional sums for defined work, for use with SMM7/ NRM2

1. Item: See Bill 3 – Provisional Sums.
2. Description of work:
3. Provisional Sums: Include
4. Allow for general attendance.

Ω End of Section



Specification created using NBS Chorus

Bill 02 - Preambles

PREAMBLES

GENERALLY

The Preambles are applicable to the whole of the works included in these Bills of Quantities irrespective of the section in which the measured item appears. The Contractor will be deemed to have allowed for all costs and charges in conforming to these Preambles in their rates for the appropriate measured items. Where exclusions or qualifications are detailed below the Contractor is to make their own assessment/take their own particulars, and make due allowance accordingly. No claims on the grounds of lack of knowledge in this respect will be entertained.

The Contractor's attention is drawn to the fact that the quantities are based on information available at time of production. They are not based on the SMM/NRM, but are essentially 'builders quantities'. They have been produced in order to give tendering Contractor's a reasonable assessment of the anticipated works. Contractors are to include for all necessary works on tender information which may not be explicit within the Bills of Approximate Quantities.

Information Provided and Supplementary Information requirements has not been referred to in the Bills of Quantities, but is deemed to be included within the design information, drawings and Specifications supplied. Should the Contractor deem the information provided to be deficient or insufficient in this regard, they must advise the Architect/Contract Administrator, in writing, of the deficiencies or insufficiencies, prior to submitting their tender. Failure to do so will evidence their acceptance that the information provided is completely adequate and no subsequent claims in connection therewith will be entertained."

Where a numerical cross-reference to a specification section or clause is given in the Bills of Quantities, drawings or in any other document, the Contractor must verify its accuracy by checking the remainder of the annotation or item description against the terminology used in the referred to section or clause. Where a numerical cross-reference is not given the relevant section(s) and clause(s) of the specification will apply, cross-reference thereto being by means of related terminology. Where a cross-reference for a particular type of work, feature, material or product is given, relevant clause(s) elsewhere in the referred to specification dealing with general matters, ancillary products and workmanship also apply. The Contractor must, before proceeding, obtain clarification or instructions in relation to any discrepancy or ambiguity, which may be discovered. The Contractor shall allow for all associated costs arising from the information contained within the tender documentation, whether specific or inferred.

Billing units of measurement have been abbreviated as follows: -

m for linear metres

m² for square metres

m³ for cubic metres

Nr/nr for number

Kg for kilograms

t for tonnes

ITEM/Itm for items

hr for hours

pr for pair

% for percentage

Definition of terms and general rules are as follows: -

Sizes expressed as ... to..., or ... - ... are to be read as exceeding ... but not exceeding...

Twice/three times etc., are expressed in the descriptions as x 2; x 3; etc.

Sizes in descriptions where in millimetres are entered without a unit symbol.

Headings are not carried forward from page to page in the Bills but are deemed to apply to all items at a lower level until replaced by a heading at the same level.

Generally the method of fixing has not been described. Rates included in the Bills are deemed to include for all necessary fixing methods, including drilling and countersinking backgrounds and pelleting, if required.

Notwithstanding the above, “Tek” screwing to steelwork and metalwork, together with bolting of any material and any other specialist fixings have been identified separately and are deemed to include drilling of the background and countersinking if required.

Generally the nature of bases and fixing backgrounds has generally not been identified. The rates are deemed to include for fixing to any base/background. The exception to this is for directly applied finishes, where the base/background information has been provided.

The radii of curved work has not been stated, the item simply referred to as “curved”. The rates inserted against such items are deemed to include any radii required.

All timber sizes given in these Bills of Quantities are finished sizes.

Fixing only – where the term fixing only occurs it is deemed to include for taking delivery, handling, loading and unloading, storing, protecting, transporting to the site of work, hoisting, lowering and assembling and fixing complete and sending back returnable packings.

Where reference to proprietary products is made the item is deemed to include assembly, installation and completion all in accordance with Manufacturer’s instructions.

Where products are hereafter referred to by brand or trade names, the manufacturer’s recommendations for using or fixing the products shall be deemed to be included within the descriptions and the rates shall be deemed to allow for complying with those recommendations. Where appropriate the contractor shall make use of any technical advisory services approved by the manufacturer.

Where British and/or European Standards are specified they shall be those current at the date of tender.

PROVISIONAL SUMS

If and when these sums are expended they will be expended at rates in accordance with those in the Bills of Quantities or as quasi prime cost sums for specialist work.

Where Provisional Sums are classed as ‘Defined’ the Contractor will have made all due allowances in programming, planning and pricing Preliminaries.

C: DEMOLITION/ALTERATION/RENOVATION

A brief description only is given of the demolitions and alteration items and the Contractor will be expected to visit the site and ascertain for themselves the exact size and nature of each item.

The Contractor shall design, provide, maintain, alter and adapt any temporary supporting structures and works necessary so that at all times they are of adequate strength and durability and in accordance with the latest edition of the appropriate British Standard Codes of Practice.

The rates for demolition works are to include for any barrowing and basketing out necessary, removing all arisings from site to a licensed tip, unless material is specifically stated as to be stored for re-use, and for making good in all trades and for matching the surrounding and adjacent work in every respect.

Where materials/goods are stated to be “stored for re-use” the Employer will provide adequate secure, dry storage. The Contractor is to assume this storage will be no further than 500 m from the site of the works.

Existing materials specifically required to be re-used in the work are described as “stored for re-use” and other like phrases. These descriptions are deemed to be inclusive of taking down or removing with care to a specified location on site, loading, moving, storing, protecting; cleaning, selecting and sorting as may be necessary to enable them to be suitable for re-fixing in the work and for removal from site of damaged or broken items. Re-fixing is measured elsewhere, unless specifically stated otherwise.

The words ‘demolishing’ and ‘removing’ are deemed to include for any cutting out or taking apart as may be necessary, for the getting out of the items described, for drawing all screws, nails, bolts, hooks, clips and other fastenings and making good all work disturbed.

The term ‘making good’, means making good all aspects of work revealed by the relevant demolition item, to match the surrounding work, and also includes extending any finishing’s applied to the structure, e.g. plaster, tiles and the like, unless such finishings are specified elsewhere as to be ultimately removed or subsequently covered as part of the work. The term does not include painting and decorating, unless specifically stated otherwise, which is measured separately in accordance with the appropriate rules.

Forming openings shall be deemed to include either cutting any skirting, dado rail, etc., square, either side of the opening and leaving a fair joint at the junctions with the new openings, or extending and returning any skirting, dado rail etc. into the reveals of the newly formed opening, as required.

Filling, cutting and adaptation of openings within structures in the existing buildings have been described only in sufficient detail to identify the item on drawings and on site by referring to specific unit numbers, locations and floor levels. The Contractor must visit the site to acquaint themselves with the precise nature of and concept by which the referenced work is to be undertaken. Descriptions do not therefore make reference to means of bonding, wedging, pinning, jointing or pointing, cutting out or squaring and facing up of reveals or quoins, or curved cutting to heads but all rates are deemed to be inclusive of the cost of execution to meet the requirements of the Specification and drawings.

Removal of roof coverings is deemed to include associated flashings, valleys and layboards, hips and ridges.

Items of taking down walls, partitions, etc. shall include for removing and clearing away all associated finishes, any skirtings, bearers, rails and small joinery items unless specifically measured separately.

Where windows, doors, hatches, etc., are to be removed and subsequently their openings require alterations, the alterations thereto have been measured separately and not included with the items of taking out, unless specifically stated otherwise.

Removal of single or double doors, frames and their associated fanlights or sidelights, screens, hatches and the like is deemed to be inclusive of all glazing, architraves, trims, beads and fixings.

Removal of floor finishings, coverings and the like is deemed to be inclusive of costs for removing associated carpet strips, gripper rods, soft underlay and adhesives as necessary to provide an acceptable sub floor base to receive its new finish.

Removal of wall finishings is deemed to include plaster and all surface facings thereof such as glazed tiling, wallpaper, sheet materials and any associated battens, skirtings or the like attached thereto.

Removal of plastered ceilings is deemed to include plaster, plasterboard and lath and plaster ceilings, including all associated finishes, cornices, mouldings and the like.

Removal of pinboards, shelves, cupboards, fittings and the like is deemed inclusive of removal of associated brackets, bearers, fixings and the like.

Removal of all sanitary fittings is deemed to be inclusive of removal of all taps and fittings, support brackets and fixings, grab rails, handrails and associated towel rails, dispensers and toilet roll holders.

The description “capping or cutting back and sealing off all services” and any related description, is deemed to include draining down as necessary, cutting out all lengths of visible pipework and associated valves, clips and the like to below floor level or to face of existing wall and capping with proprietary screwed brass compression or welded pvc cap fittings.

D: GROUNDWORK

Ground water levels have not been detailed and therefore excavating below ground water level and earthwork support thereto has not been separately measured. The Contractor must make their own assessment of these levels.

Live overhead or underground services are not identified. It is the Contractor’s responsibility to ascertain the nature and location of all such services and make all necessary allowances accordingly.

In addition to the above, the Contractor must also ascertain the nature and location of all redundant services, drains, manholes, etc. and make allowance within their rates for breaking up and removing, as these items have not been separately measured. The allowance must include any costs associated with disconnection if applicable.

Excavating in any material: The rates for all excavation work shall include for digging in any material other than rock, or other defined material identified in these Bills of Quantities. Grubbing up roots and removing impediments that may be met, shall be carried out without extra charge. The Contractor is to allow within their rates for carrying out all excavations by hand or machine.

Where “extra over” items for breaking out hard surfacing etc. have been included, no item has been measured for cutting to line, however this is deemed to be included within the rates inserted.

Excavating next to and around existing services etc. has not been measured, whether live or otherwise. The Contractor must ascertain for themselves the location and nature of all services, drains etc., on or in the vicinity of the site, and include for protection thereof during all site operations. This shall include for liaising with statutory bodies and complying with their requirements in every respect

Earthwork support has not been measured, this being deemed to be included within the rate for excavation.

E: IN SITU CONCRETE/LARGE PRECAST CONCRETE

All reinforced concrete requires to be vibrated; this has not been measured but is deemed to be included.

Concrete for trench fill foundations etc., (excavation simply defined as trenches) have not been measured as isolated foundations, irrespective of their dimension or location.

If following power floating/trowelling, the concrete slab is unsuitable, or not suitably level to apply finishes direct, the application of levelling screed, or other suitable rectification methods required, will be at the Contractors sole expense.

F: MASONRY

Forming mortices in brickwork/blockwork for anchor bolts etc. has not been measured but is deemed to be included.

Bonding of dense concrete blockwork to thermal blockwork has not been measured but is deemed to be included.

Sealing of damp proof courses to adjacent damp proof membranes has not been measured but is deemed to be included.

Additional wall ties required at the perimeter of openings through cavity walls etc., have not been measured. Rates for forming cavities are deemed to include for all additional ties required.

G: STRUCTURAL/CARCASSING METAL/TIMBER

Surface preparation, priming and treatments are deemed to include touching up areas of damaged works on the site after erection, whether components are to be subsequently decorated or not.

Holes in structural steel for connections of timber plates/supports or other trades have not been measured but are deemed to be included.

The term “treated”, where used in respect to timber, is deemed to include for all types of preservative treatment, including double vacuum, as appropriate, in accordance with the Specification and Drawings. Differing types of preservative treatment have not been separately identified.

Stopped labours have not been measured but are deemed to be included.

H: CLADDING/COVERING

Abutments to slate roofing have not been separately measured but are deemed to be included.

with respect to slate roofing ridges, hips, vertical angles and valleys (including proprietary tile coverings etc.) are regarded as boundaries and therefore all necessary cutting, bedding and pointing, angles and intersections have not been measured but are deemed to be included.

J: WATERPROOFING

Abutments have not been measured but are deemed to be included.

Bonded sealed collars to damp proof membranes where pipes/ducts pass through have not been measured but are deemed to be included.

K: LININGS/SHEATHING/DRY PARTITIONING

Sealants/acoustic sealants/intumescent sealants at lining junctions and abutments with other finishes have not been measured but are deemed included in the measured rates.

Abutments have not been measured but are deemed to be included.

M: SURFACE FINISHES

Finishes have generally been measured to the full extent of the surface they are to cover, and no deductions have been made for openings. The Contractor must allow in their rates for all narrow widths, beads and the like. Where openings are full height, however, openings have been deducted.

Movement joints in screeds generally, formed joints in wearing screeds and crack inducing grooves in levelling screeds have not been measured but are deemed to be included.

The nature of the base has not been separately identified where coatings are applied to the underside or sides of concrete or steel lintels, but the measurement of same has been included within the general measure for the main background.

Work obstructed by services have not been identified but is deemed to be included.

The method of fixing the materials to the structure has not been stated, but is deemed to be included.

The paint colour schemes will be in various colours and the extent of quantities is not to be taken as indicating the quantity of any particular colour required. The Contractor's prices are to allow for large and small quantities of materials to be used.

The Contractor's rates for decoration are to include for touching up primer after erection of pre-primed components.

The term “emulsion paint” shall include for silk, vinyl silk, matt, vinyl matt, satin or eggshell finishes.

The term “gloss paint” shall include for all oil based finishing paints including satin, gloss, matt and eggshell finishes.

The following preparation works have not been separately identified within the measured items but are deemed to be included. The Contractor shall make due allowance for conforming to this requirement and shall include all costs in connection therewith within their measured rates:-

- a) New iron and steelwork: The surface is to be thoroughly wire brushed to remove all dirt, rust and scale and all oil and grease is to be removed with white spirit. The primer is to follow the cleaning immediately.
- b) New metal surfaces other than iron and steelwork: The surface is to be thoroughly washed down with white spirit to remove all oil and grease and shall then, with the exception of galvanised and sheradised surfaces, be treated with a suitable etching primer prior to the application of the appropriate metal primer.
- c) Previously painted metal/steel surfaces: The surface is to be thoroughly washed down with a solution of soap powder or paint cleaner and warm water, well rubbed down with coarse abrasive paper and wire brushed to remove rust, scale, loose paint and rough projections, with oil and grease removed by white spirit.
- d) Existing plastic coated metal surfaces: The surface is to be thoroughly washed down using proprietary water-soluble emulsifying chemicals to remove all salts, oil and grease. Rinse with a sweet water wash and allow to dry. Hand prepare to B.S. 7079: Part A1, grade St2 to leave a clean, unpolished surface.
- e) New or bare concrete and fair faced brick or blockwork: The surface is to be brushed down to remove loose dust and wire brushed if necessary to remove all laitence.
- f) New or previously coated stonework; thoroughly clean down the surface to remove all dirt, grease, etc. Carefully remove cement and mortar deposits. Remove efflorescence and underbound slurry by brushing or rubbing with a dry cloth followed by wiping with a damp cloth. Brush the surface to remove any loose aggregate. Remove any vegetable growths by washing with a fungicidal wash.
- g) New or bare plasterwork: The surface is to be brushed down to remove loose dust and washed using a minimum of clean water. Holes and cracks are to be cut back with edges undercut, wetted and repaired with approved plaster as specified. All plaster surfaces are to be properly dried out and mature before applying paint.
- h) Existing plastered/rendered walls: The surface is to be thoroughly washed down with a solution of soap powder or paint cleaner and warm water, well rubbed down wet with pumice to a smooth surface and rinsed clean with water. Posters and stickers on walls will be removed and any residues will be cleaned off. All loose paint, rough projections etc. shall be scraped off or rubbed down. All places bared shall be treated and cracks and crazes shall be repaired and the surface brought forward flush with the surrounding work.
- i) New woodwork: The surface is to be rubbed down to a smooth surface and dusted off. All knots and resinous portions are to be coated with two coats of shellac knotting or cut out and stopped in if necessary. All joints, holes, cracks and the like shall be stopped after priming.
- j) Previously painted wood surfaces: The surface is to be thoroughly washed down with a solution of soap powder or paint cleaner and warm water, well rubbed down wet with pumice to a smooth surface and rinsed clean with water. All loose paint, rough projections etc. shall be scraped off or rubbed down and all internal angles and quirks cleared out. All places bared shall be treated and all joints, cracks and holes shall be stopped as specified for new woodwork and the surface brought forward flush with the surrounding work.
- k) Previously undercoated slate flooring: The surface is to be thoroughly washed down with a solution of soap powder and warm water and rinsed clean with warm water.
- l) Defective previously painted surfaces: the surface is to be thoroughly burnt off, well rubbed down wet with pumice to a smooth surface and rinsed clean with water. All loose paint, rough projections etc. shall be scraped off or rubbed down and all internal angles and quirks cleared out. All places bared shall be treated and all joints, cracks and holes shall be stopped as specified for new woodwork and the surface brought forward flush with the surrounding work.

Works to irregular surfaces have not been identified separately. Rates for painting are deemed to include for painting any surface, whether regular or irregular.

The term “stripping” or “removing” shall be deemed to include chemical stripping or burning-off as necessary.

The rates for redecoration works are to allow for drawing all nails, hooks, plugs and the like and making good and for stopping all holes and cracks with an approved filler flush with adjacent surfaces.

Bill 03 – Provisional Sums

		Qty	Unit	Rate	£	p
	PROVISIONAL SUMS					
	INCLUDE THE FOLLOWING DEFINED PROVISIONAL SUMS					
	<u>Works generally</u>					
A	timber perimeter skirt and sleepers		Item		2,000	00
B	supply of ironmongery to internal doors		Item		250	00
C	supply and fix roller blinds to windows		Item		1,200	00
D	supply and fix hatch to Office/Kitchen		Item		500	00
E	supply and fix roof access door/hatch		Item		400	00
F	supply and fix Changing Places sanitaryware, hoist and fittings		Item		20,000	00
G	supply and fix Kitchen fittings and equipment		Item		20,000	00
H	supply and fix stainless steel modular shelving in Store Room		Item		1,500	00
J	constructing recycling Store		Item		1,500	00
K	extending terrace on North Elevation		Item		750	00
L	bird/bat/bee boxes		Item		300	00
CARRIED TO COLLECTION £						

						Qty	Unit	Rate	£	p
<div>Collection From</div> <div>3/1</div> <div>9 - PROVISIONAL SUMS Carried to Summary</div>										

						Qty	Unit	Rate	£	p
<div>Collection From</div> <div>9 - PROVISIONAL SUMS</div> <div>BILL 03 - PROVISIONAL SUMS AND DAYWORK Carried to Summary</div>										

Bill 04 – Proposed building

		Qty	Unit	Rate	£	p
	SUBSTRUCTURE					
	GROUND FLOOR CONSTRUCTION					
	<u>Excavation</u>					
A	topsoil	81	m³			
B	reduce levels	191	m³			
C	deposit topsoil on site; not exceeding 100 m distant; compacting	81	m³			
D	deposit excavated material on site; not exceeding 100 m distant; compacting	191	m³			
E	level and compact surfaces of excavations	269	m²			
F	grading surfaces of excavations to slope; compacting	102	m²			
	<u>Imported hardcore; compacting in 150 thick layers</u>					
G	filling to make up levels	40	m³			
H	levelling and compacting surfaces of hardcore	269	m²			
	<u>Terram Geotextile permeable membrane</u>					
J	laid on hardcore; weighting down	269	m²			
	<u>Contractor Designed Jackpad system; 360 x 360 x 80 recycled plastic Jackpad 400 support block; 450 x 450 x 50 recycled plastic incremental packers; painted steel adjuster; as MPA Drwgs 23291/010/C02 & /030/C02</u>					
K	setting in position on hardcore; adjusting to required height; connecting to joists; proof tested 60kN - SWL 48kN	52	Nr			
	<u>Treated sawn softwood; Grade C24</u>					
L	47 x 200; floor joists	197	m			
M	2 Nr. 75 x 225; floor joists	78	m			
	<u>Contractor Designed engineered timber JJI joists</u>					
N	300 deep	197	m			
	<u>Glulam beams; laminated timber beams; Glulam Ltd.</u>					
P	140 x 270; ref. GL30h	93	m			
	<u>Lewis metal deck; Reppel Ltd; fixing in accordance with manufacturer's instructions</u>					
Q	16 profile height; floors; over 300 wide	112	m²			
CARRIED TO COLLECTION £						

		Qty	Unit	Rate	£	p
	<u>Wrought softwood deck boards; 140 wide boards, with 10 gaps; fixing with passivated deck screws</u>					
A	28 thick; floors; over 300 wide	64	m²			
	<u>Galvanised steel accessories</u>					
B	joist hangers; single; nail over; 47 x 200	197	Nr			
C	joist hangers; single; nail over; 47 x 300	58	Nr			
D	joist hangers; single; nail over; 150 x 225	4	Nr			
E	joist hangers; single; nail over; 150 x 275	1	Nr			
F	equal angles; 150 x 150 x 10	64	Nr			
G	M12 x 230 long Grade 4.6 bolts, nuts x 1, 50 x 50 washers x 1	100	Nr			
H	M12 x 240 long Grade 4.6 bolts, nuts x 1, 50 x 50 washers x 1	78	Nr			
	<u>Panelvent sheathing board; Panel Agency Ltd.</u>					
J	12 thick; horizontal; to soffits	131	m²			
K	12 thick; vertical; to walls	20	m²			
	<u>Blown insulation; Warmcel; PYC Group</u>					
L	300 thick; between rafters	151	m²			
	<u>Sundries</u>					
M	rodent mesh	151	m²			
CARRIED TO COLLECTION £						

1.1 - SUBSTRUCTURE Carried to Summary

		Qty	Unit	Rate	£	p
A	SUPERSTRUCTRE					
	FRAME					
	<u>Contractor Designed timber frame; including external walls, forming openings, lintels, Glulam beams, roof structure, plywood sheathing, internal walls, posts; straps, clips and hangers; as Kast Drwgs 2311/4/0101/B, /0102/B, /0103/B, /0201/C, /0202/C, /0203/C, /0204/C, /0301/A, /0302/A, /0303/A, /0304/A and Specification and MPA Drwgs 23291/020/C01 & /030/C02</u>					
A	complete timber frame		Item			
B	ring beam at base of walls; 45 x 300 LVL top and bottom plates; 3 Nr. 50 x 200 treated sawn softwood C24 blockings	47	m			
CARRIED TO COLLECTION £						

						Qty	Unit	Rate	£	p
		Collection From 3/7 2.1 - FRAME Carried to Summary								

		Qty	Unit	Rate	£	p
	SUPERSTRUCTRE					
	UPPER FLOORS					
	<u>Treated sawn softwood; Grade C24</u>					
A	47 x 200; floor joists	35	m			
B	47 x 200; wall bearer; fixing with coach screws	7	m			
	<u>OSB; BS EN 300: 2006; fixing with screws</u>					
C	18 thick; to floors; over 300 wide	13	m ²			
	<u>Galvanised steel accessories</u>					
D	joist hangers; single; nail over; 47 x 200	20	Nr			
CARRIED TO COLLECTION £						

						Qty	Unit	Rate	£	p
	<div>Collection From</div> <div>3/9</div> <div>2.2 - UPPER FLOORS Carried to Summary</div>									

		Qty	Unit	Rate	£	p
	SUPERSTRUCTRE					
	ROOF					
	<u>Corrugated powder coated steel roof sheeting; Cladco, colour</u> <u>Goosewing Grey; 25 x 25 treated sawn softwood battens fixed</u> <u>through insulation (measured separately) with Heco-Topix 316</u> <u>stainless steel screws, Ampack Ampatop Aero breather</u> <u>membrane; 25 x 50 treated sawn softwood counter battens fixed</u> <u>with galvanised ring shank nails; fixing in accordance with</u> <u>manufacturer's instructions</u>					
A	35 degree pitch; to timber	174	m²			
B	eaves filler and trim	35	m			
C	verge flashing; Plastisol PVC	20	m			
D	ridge flashing; Plastisol PVC ventilated dry ridge system	17	m			
	<u>Polycarbonate roof sheeting; Clear Amber Corrapol Stormproof</u> <u>High Profile; fixing with Corrapol stainless steel screws and</u> <u>washers</u>					
E	5 degree pitch; to timber	65	m²			
F	eaves filler and trim	33	m			
G	verge flashing	5	m			
H	ridge flashing	7	m			
J	top wall flashing	29	m			
	<u>Treated sawn softwood; Grade C16</u>					
K	38 x 89 battens; at 400 centres	134	m²			
	<u>Treated sawn softwood; Grade C24</u>					
L	50 x 150; wall plate; fixing to timber with coach screws at 400 centres	29	m			
M	63 x 150; flat roof joists	126	m			
N	3 Nr. 50 x 200; post; M12 bolts at 400 centres, nuts x 1, washers x 2	24	m			
P	3 Nr. 75 x 300; eaves beam; M12 bolts at 400 centres, nuts x 1, washers x 2	33	m			
	<u>British Larch; fixing with stainless steel ring shank nails</u>					
Q	20 x 65 fascia	68	m			
CARRIED TO COLLECTION £						

		Qty	Unit	Rate	£	p
A	<u>Air tight sheathing; Smartly Propassiv; Medite; fixing with stainless steel screws; taping joints with Tescon Vana tape</u> 12.5 thick; sloping ceilings; over 300 wide	134	m²			
B	<u>Galvanised steel accessories</u> joist hangers; single; nail over; 63 x 150	110	Nr			
C	concealed post base; Simpson CPT88Z; bolting to timber post and timber base	11	Nr			
D	<u>Wood-fibre insulated sheathing; Pavatex Isolair tongued and grooved boards; fixing through timber battens</u> 60 thick; to timber	134	m²			
E	<u>Blown insulation; Warmcel; PYC Group</u> 300 thick; between rafters	174	m²			
F	<u>Compacfoam thermal break; Compac Ltd</u> 50 x 150; between timbers	29	m			
G	<u>Lindab Majestic galvanised steel rainwater pipes and fittings; fixing in accordance with manufacturer's instructions</u> 100 diameter	20	m			
H	Extra over; connections to gutter	8	Nr			
J	Extra over; shoe	8	Nr			
K	Extra over; bend	8	Nr			
L	<u>Lindab Majestic galvanised steel gutters and fittings; fixing in accordance with manufacturer's instructions</u> 150 diameter; half round	68	m			
M	Extra over; stop ends	6	Nr			
N	Extra over; running outlet	8	Nr			
P	Extra over; angles	2	Nr			
CARRIED TO COLLECTION £						

2.3 - ROOF Carried to Summary

		Qty	Unit	Rate	£	p
SUPERSTRUCTRE						
EXTERNAL WALLS						
<u>Treated sawn softwood; Grade C16; painted black</u>						
A	45 x 45 counter battens; at 600 centres; fixing with 316 Grade stainless steel screws	118	m ²			
B	45 x 45 battens; at 600 centres; fixing through wood-fibre insulation with Heco-Topix 316 Grade stainless steel screws	118	m ²			
<u>Timber cladding; British Larch; 20 x 65 square edge, with 10 mm gaps between boards; random lengths; fixing with stainless steel ring shank nails</u>						
C	over 300 wide; vertical; to timber	119	m ²			
D	not exceeding 300 wide; vertical; to timber	50	m			
<u>Aluminium cladding accessories; powder coated black</u>						
E	drip flashing; at top of cladding	54	m			
F	drip flashing; at heads of openings	22	m			
<u>Stainless steel cladding accessories</u>						
G	insect mesh; at base of cladding	42	m			
<u>Wood-fibre insulated sheathing; Pavatex Isolair tongued and grooved boards; fixing through timber battens</u>						
H	60 thick; to timber	118	m ²			
<u>Blown insulation; Warmcel; PYC Group</u>						
J	300 thick; between studs	113	m ²			
<u>Breather membrane; Amatop RF black, UV durable; fixing with stainless steel large head nails</u>						
K	vertical; to timber	128	m ²			
<u>Sundries; rodent mesh</u>						
L	vertical; to timber	128	m ²			
<u>Fire retardant; HR Prof; Fire Retardent UK Ltd; to achieve Euro Class 0 spread of flame; external</u>						
M	timber walls; open jointed; over 300 girth	28	m ²			
CARRIED TO COLLECTION £						

		Qty	Unit	Rate	£	p
	<div>Collection From</div> <div>3/14</div> <div>2.5 - EXTERNAL WALLS Carried to Summary</div>					

		Qty	Unit	Rate	£	p
	SUPERSTRUCTRE					
	WINDOWS AND EXTERNAL DOORS					
	<u>Exterior grade plywood; WBP bonded; BS EN 314-2: 1993; fixing with screws</u>					
A	window board; 22 x 260	11	m			
B	window packers; 18 x 260	12	m			
	<u>Treated wrought softwood</u>					
C	window board; 22 x 260	11	m			
	<u>Pro Clima Extoseal cavity tray; turning up 150 at ends and 50 down at front</u>					
D	375 girth; to suit 800 structural opening	1	Nr			
E	375 girth; to suit 1175 structural opening	2	Nr			
F	375 girth; to suit 1775 structural opening	5	Nr			
G	375 girth; to suit 1925 structural opening	1	Nr			
H	375 girth; to suit 5200 structural opening	1	Nr			
	<u>Tescon Vanna airtightness tape; silicone road and bed</u>					
J	sealing between Propassiv board and window/door; around openings	50	m			
	<u>Composite windows; polyester powder coated Aluminium/timber; Rationel Auraplus; triple glazed; extended cills; as Kast Drwg 2311-4-3201/A</u>					
K	to suit 800 x 1200 structural opening; side hung	1	Nr			
L	to suit 1775 x 1200 structural opening; top hung	5	Nr			
	<u>Composite doors and frames; polyester powder coated Aluminium/timber; Rationel Auraplus; triple glazed; extended thresholds; as Kast Drwg 2311-4-3201/A</u>					
M	to suit 1175 x 2100 structural opening; side hung; solid door (no glazing)	1	Nr			
N	to suit 1175 x 2100 structural opening; side hung; 2XG door	1	Nr			
P	to suit 1925 x 2108 structural opening; side hung; fully glazed, with fixed sidelight	1	Nr			
Q	to suit 5200 x 2100 structural opening; sliding doors; fully glazed, sliding doors x 2, fixed sidelights x 2	1	Nr			
CARRIED TO COLLECTION £						

		Qty	Unit	Rate	£	p
A	<u>One coat varnish; carried out on site before fixing members</u> window boards; not exceeding 300 girth	11	m			
B	<u>One coat wood knot and resin blocking varnish; three coats varnish</u> <u>full gloss finish</u> window boards; not exceeding 300 girth	11	m			
CARRIED TO COLLECTION £						

Qty	Unit	Rate	£	p
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		Qty	Unit	Rate	£	p
	SUPERSTRUCTRE					
	INTERNAL WALLS AND PARTITIONS					
	<u>Blown insulation; Warmcel; PYC Group</u>					
A	300 thick; between studs	25	m²			
	<u>Insulation; Rockwool acoustic mineral wool; butt joints</u>					
B	50 thick; between studs	58	m²			
CARRIED TO COLLECTION £						

		Qty	Unit	Rate	£	p
	Collection From 3/19 2.7 - INTERNAL WALLS AND PARTITIONS Carried to Summary					

		Qty	Unit	Rate	£	p
	SUPERSTRUCTRE					
	INTERNAL DOORS					
	<u>Flush doors; plywood faced with hardwood lippings; solid core</u>					
A	900 x 2040 x 44 thick	1	Nr			
B	1000 x 2040 x 44 thick	1	Nr			
	<u>Wrought softwood</u>					
C	32 x 125 lining	10	m			
D	15 x 25 stops	10	m			
E	25 x 75 architrave; chamfered	21	m			
	<u>Fix only ironmongery</u>					
F	butt hinges; 100 mm	6	Nr			
G	pair of lever latch handles	1	Nr			
H	pair of lever lock handles	1	Nr			
J	bathroom knob turn	1	Nr			
K	mortice latch	1	Nr			
L	mortice lock; 3 lever	1	Nr			
M	door stop	1	Nr			
	<u>One coat varnish; carried out on site before fixing members</u>					
N	linings; not exceeding 300 girth	10	m			
	<u>Three coats varnish full gloss finish</u>					
P	flush doors; over 300 girth	8	m ²			
	<u>One coat wood knot and resin blocking varnish; three coats varnish full gloss finish</u>					
Q	linings; over 300 girth	4	m ²			
CARRIED TO COLLECTION £						

		Qty	Unit	Rate	£	p
	<div>Collection From</div> <div>3/21</div> <div>2.8 - INTERNAL DOORS Carried to Summary</div>					

		Qty	Unit	Rate	£	p
	INTERNAL FINISHES					
	WALL FINSHES					
	<u>Treated sawn softwood</u>					
A	25 x 50; battens; at 400 centres	103	m ²			
B	25 x 50; battens; at 400 centres; not exceeding 300 wide	50	m			
	<u>Air tight sheathing; Smartly Propassiv; Medite; fixing with stainless steel screws; taping joints with Tescon Vana tape</u>					
C	12.5 thick; walls; over 300 wide	103	m ²			
D	12.5 thick; walls; 260 wide	50	m			
	<u>Fire retardent OSB; Medite Smartply; fixing with screws</u>					
E	12 thick; to walls; over 300 wide	237	m ²			
F	12 thick; to walls; 260 wide	50	m			
	<u>Altro Whiterock; fixing with adhesive; sealed joints</u>					
G	2.5 thick; to walls; over 300 wide	32	m ²			
CARRIED TO COLLECTION £						

						Qty	Unit	Rate	£	p
		Collection From 3/23 3.1 - WALL FINISHES Carried to Summary								

		Qty	Unit	Rate	£	p
	INTERNAL FINISHES					
	FLOOR SCREEDS					
	<u>Liquid Proprietary self smoothing levelling screed with incorporated underfloor heating system (underfloor heating measured elsewhere); Gyvlon Screed Thermio+</u>					
A	50 - 66 thick; to profiled metal deck; over 300 wide; horizontal	112	m ²			
	FLOOR FINISHES					
	<u>Sheet Marmoluem; Forbo Marmoleum; fixing with Forbo recommended adhesive; welded seams; all in accordance with manufacturer's instructions</u>					
B	2 thick; over 300 wide; horizontal	92	m ²			
C	2 thick; 150 high; skirtings; cove former, ref. QCF35, capping trim, ref. QT200	13	m			
D	Extra over; ends	2	Nr			
E	Extra over; internal preformed angles	4	Nr			
	<u>Coir matting; fixing with adhesive</u>					
F	17 thick; over 300 wide; horizontal	13	m ²			
CARRIED TO COLLECTION £						

		Qty	Unit	Rate	£	p
	<div>Collection From</div> <div>3/25</div> <div>3.2 - FLOOR FINISHES Carried to Summary</div>					

		Qty	Unit	Rate	£	p
	INTERNAL FINISHES					
	CEILING FINISHES					
	<u>Plasterboard; fixing with screws; joints scrimmed and filled with plaster</u>					
A	12.5 thick; ceilings; to timber; over 300 wide	13	m²			
	<u>Heradesign acoustic panel; 1200 x 600 cement-bonded wood wool panels; 2.0mm wood wool fine finish; fixing with manufacturer's approved screws; Knauf Ceiling Solutions</u>					
B	25 thick; ceilings; to timber; over 300 wide	134	m²			
	<u>Board finish plaster; steel trowelled finish</u>					
C	5 thick; ceilings; to plasterboard; over 300 wide	13	m²			
	<u>Emulsion paint; mist coat and two full coats</u>					
D	plaster ceilings; over 300 girth	13	m²			
CARRIED TO COLLECTION £						

		Qty	Unit	Rate	£	p
	<div>Collection From</div> <div>3/27</div> <div>3.3 - CEILING FINISHES Carried to Summary</div>					

		Qty	Unit	Rate	£	p
A	FITTINGS, FURNISHINGS AND EQUIPMENT					
	GENERAL FITTINGS, FURNISHINGS AND EQUIPMENT					
	<u>General Fittings</u>					
	700 x 800 folding timber/Aluminium loft ladder, complete with handrail	1	Nr			
CARRIED TO COLLECTION £						

						Qty	Unit	Rate	£	p
<div>Collection From</div> <div>3/29</div> <div>4.1 - FITTINGS, FURNISHING AND EQUIPMENT Carried to Summary</div>										

		Qty	Unit	Rate	£	p
	SERVICES					
	PLUMBING AND MECHANICAL INSTALLATIONS					
	<u>Contractor to allow here for the installation of all plumbing and mechanical installations</u>					
A	above ground drainage		Item			
B	hot and cold water installations		Item			
C	underfloor heating		Item			
D	pipework, controls and valves		Item			
E	MVHR		Item			
F	fittings and equipment		Item			
G	thermal insulation		Item			
H	testing and commissioning		Item			
J	record drawings, manuals and Client training		Item			
K	system maintenance during Defects Liability Period		Item			
L	all other items required		Item			
	ELECTRICAL INSTALLATIONS					
	<u>Contractor to allow here for the installation of all electrical installations</u>					
M	mains distribution		Item			
N	structured wiring installation		Item			
P	mechanical services wiring installation		Item			
Q	small power		Item			
R	lighting layout and fittings		Item			
S	electric vehicle charging point		Item			
T	external lighting		Item			
U	solar PV and battery storage		Item			
V	testing and commissioning		Item			
W	record drawings, manuals and Client training		Item			
X	system maintenance during Defects Liability Period		Item			
Y	all other items required		Item			
CARRIED TO COLLECTION £						

		Qty	Unit	Rate	£	p
	BUILDERS WORK IN CONNECTION					
	<u>Allow for all builders work, including but not limited to, casings, ducts, chases, holes, sleeves, mortices, fireproofing and the like</u>					
A	plumbing and mechanical installations		Item			
B	electrical installations		Item			
CARRIED TO COLLECTION £						

Qty	Unit	Rate	£	p
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		Qty	Unit	Rate	£	p
	Collection From					
	1.1 - SUBSTRUCTURE					
	2.1 - FRAME					
	2.2 - UPPER FLOORS					
	2.3 - ROOF					
	2.5 - EXTERNAL WALLS					
	2.6 - WINDOWS AND EXTERNAL DOORS					
	2.7 - INTERNAL WALLS AND PARTITIONS					
	2.8 - INTERNAL DOORS					
	3.1 - WALL FINISHES					
	3.2 - FLOOR FINISHES					
	3.3 - CEILING FINISHES					
	4.1 - FITTINGS, FURNISHING AND EQUIPMENT					
	5 - SERVICES					
	BILL 04 - PROPOSED BUILDING Carried to Summary					

Bill 05 – Site Works

		Qty	Unit	Rate	£	p
	EXTERNAL WORKS					
	SITE PREPARATION WORKS					
	<u>Preparatory Groundworks</u>					
A	site clearance, including relocating earth mound		Item			
B	excavate to reduce levels	60	m³			
C	deposit excavated material on site; not exceeding 100 m distant; compacting	60	m³			
D	level and compact surfaces of excavations	240	m²			
	<u>Imported hardcore; compacting in 150 thick layers</u>					
E	filling to make up levels	36	m³			
F	levelling and compacting surfaces of hardcore	240	m²			
	<u>Terram Geotextile permeable membrane</u>					
G	laid on hardcore	180	m²			
CARRIED TO COLLECTION £						

						Qty	Unit	Rate	£	p
<div>Collection From</div> <div>3/35</div> <div>8.1 - SITE PREPARATION WORKS Carried to Summary</div>										

		Qty	Unit	Rate	£	p
A	ROADS, PATHS AND PAVINGS self-binding compacted gravel; Contec; silver grey, 6mm to dust; rolling	180	m ²			
CARRIED TO COLLECTION £						

						Qty	Unit	Rate	£	p
	<div>Collection From</div> <div>3/37</div> <div>8.2 - ROADS, PATHS, PAVINGS AND SURFACINGS Carried to Summary</div>									

Qty	Unit	Rate	£	p
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Bill 06 - Drainage

		Qty	Unit	Rate	£	p
	EXTERNAL WORKS					
	SURFACE WATER DRAINAGE					
	<u>Excavating drainage trenches; for pipes not exceeding 100 diameter; earthwork support; compacting excavations; filling above 400 thick beds and coverings with selected excavated material; disposing of surplus excavated material on site</u>					
A	average 500 deep	6	m			
B	average 750 deep	25	m			
C	average 1000 deep	4	m			
	<u>Excavating drainage trenches; for pipes not exceeding 100 diameter; earthwork support; compacting excavations; filling above 400 thick beds and coverings with imported hardcore; disposing of surplus excavated material on site</u>					
D	average 750 deep	17	m			
E	average 1000 deep	13	m			
F	average 1250 deep	7	m			
	<u>Granular material; 10 mm pea gravel</u>					
G	400 x 400 bed and surround; to 100 diameter pipe	72	m			
	<u>uPVC pipes and fittings; ring seal joints</u>					
H	100 diameter	72	m			
J	Extra; bends	22	Nr			
K	Extra; connection to PPIC	16	Nr			
L	Extra; connection to rainwater harvesting tank	2	Nr			
	<u>uPVC accessories; bedding and surrounding in minimum 150 thick concrete, Grade ST4</u>					
M	trapped rainwater gully, complete with grating; 100 diameter outlet	4	Nr			
	SURFACE WATER MANHOLES					
	<u>Polypropylene inspection chambers; excavating; earthwork support; compacting excavations; 150 thick Grade ST4 concrete bed and collar; surrounding chambers with 150 thick granular material; disposing of surplus excavated material off site; cutting chambers to required height</u>					
N	475 diameter; maximum 600 deep	2	Nr			
CARRIED TO COLLECTION £						

		Qty	Unit	Rate	£	p
A	475 diameter; 600 - 1000 deep	3	Nr			
B	475 diameter, with silt trap; 1000 deep	1	Nr			
	<u>Cast iron accessories; bedding and jointing in cement/sand (1:3) mortar</u>					
C	475 diameter manhole cover and frame; light duty	3	Nr			
D	475 diameter manhole cover and frame; medium duty	3	Nr			
	SURFACE WATER SOAKAWAYS					
	<u>Modular infiltration units; excavating; earthwork support; compacting excavations; 150 thick granular bed and surround; disposing of surplus excavated material off site; modular units; geotextile membrane lining</u>					
E	2000 x 2000 x 1200 deep; overall excavation 2190 deep	1	Nr			
	SURFACE WATER RAINWATER HARVESTING TANK					
	<u>Preformed tank; Graf Platin XL; earthwork support; compacting excavations; bed and surround; disposing of surplus excavated material off site; all installed in accordance with manufacturers instructions</u>					
F	10,000 litre; overall excavation 2760 to base	1	Nr			
	FOUL WATER DRAINAGE					
	<u>Excavating drainage trenches; for pipes not exceeding 100 diameter; earthwork support; compacting excavations; filling above 400 thick beds and coverings with selected excavated material; disposing of surplus excavated material on site</u>					
G	average 750 deep	19	m			
	<u>Excavating drainage trenches; for pipes not exceeding 100 diameter; earthwork support; compacting excavations; filling above 400 thick beds and coverings with imported hardcore; disposing of surplus excavated material on site</u>					
H	average 1000 deep	12	m			
J	average 1250 deep	1	m			
K	average 2000 deep	6	m			
	<u>Granular material; 10 mm pea gravel</u>					
L	400 x 400 bed and surround; to 100 diameter pipe	37	m			
CARRIED TO COLLECTION £						

		Qty	Unit	Rate	£	p
	<u>uPVC pipes and fittings; ring seal joints</u>					
A	100 diameter	37	m			
B	Extra; bends	11	Nr			
C	Extra; connection to PPIC	6	Nr			
D	Extra; connection to septic tank	2	Nr			
	<u>uPVC accessories; bedding and surrounding in minimum 150 thick concrete, Grade ST4</u>					
E	soil pipe connection; 100 diameter; rest bend; vertical pipe; adaptor	2	Nr			
	FOUL WATER MANHOLES					
	<u>Polypropylene inspection chambers; excavating; earthwork support; compacting excavations; 150 thick Grade ST4 concrete bed and collar; surrounding chambers with 150 thick granular material; disposing of surplus excavated material off site; cutting chambers to required height</u>					
F	475 diameter; 600 - 1000 deep	2	Nr			
G	475 diameter; 1250 deep	2	Nr			
	<u>Cast iron accessories; bedding and jointing in cement/sand (1:3) mortar</u>					
H	475 diameter manhole cover and frame; medium duty	4	Nr			
	SEPTIC TANK					
	<u>Septic tank; Clearwater shallow dig; earthwork support; compacting excavations; bed and surround; disposing of surplus excavated material off site; all installed in accordance with manufacturers instructions</u>					
J	3,000 litre; overall excavation 1700 to base	1	Nr			
	FOUL DRAINAGE FIELD					
	<u>Excavating drainage field; for pipes not exceeding 100 diameter; earthwork support; compacting excavations; filling above 1150 thick beds and coverings with imported hardcore; disposing of surplus excavated material on site</u>					
K	900 wide x 2050 deep; geotextile membrane; 700 thick medium/coarse sand bed; 450 thick 20 - 50 clean stone bed and surround to 100 diameter pipe; geotextile membrane	50	m			
CARRIED TO COLLECTION £						

		Qty	Unit	Rate	£	p
A	END OF WORK CLASSIFIED IN GROUPS					
	<u>Testing drainage runs and manholes</u>					
	as the work proceeds		Item			
B	on completion by water		Item			
CARRIED TO COLLECTION £						

Collection From

3/40

3/41

3/42

3/43

8.6 - EXTERNAL DRAINAGE Carried to Summary

		Qty	Unit	Rate	£	p
	<div>Collection From</div> <div>8.6 - EXTERNAL DRAINAGE</div> <div>BILL 06 - DRAINAGE Carried to Summary</div>					

APPENDIX A – Tender Drawings