# A10 PROJECT PARTICULARS

## 110 THE PROJECT

* Name: T-Level Projects to 2nd & 3rd Floor Tower Building to include fire protection upgrades
* Nature: Strip out and Re-fit.
* Location: City College Plymouth, Kings Rd, Plymouth. PL1 5QG.
* Length of contract: 10 weeks.

## 120 EMPLOYER (CLIENT)

* Name: City College Plymouth.
* Address: Kings Rd, Plymouth. PL1 5QG .
* Contact: Dominic Jennings Head of Estates.

- Telephone: 01752 305740

* Email: djennings@cityplym.ac.uk

## 130 PRINCIPAL CONTRACTOR (CDM)

* Name: .
* Address: .
* Contact: .
* Telephone: .
* Email: .

## 140 PERSON EMPOWERED BY THE CONTRACT TO ACT ON BEHALF OF

## THE EMPLOYER

* Title: Contract Administrator.
* Name: G Parry Consulting Ltd.
* Address: 5 Verna Place, St Budeaux Plymouth, PL5 2EJ.
* Contact: Greg Parry.

- Telephone: 07920 448045.

* Email: greg@gparryconsulting.co.uk.

## 150 PRINCIPAL DESIGNER

* Name: G Parry Consulting Ltd.
* Address: 5 Verna Place, St Budeaux Plymouth, PL5 2EJ.
* Contact: Greg Parry.

- Telephone: 07920 448045.

* Email: greg@gparryconsulting.co.uk.

## 160 QUANTITY SURVEYOR

* Name: Kirkham Board Associates.
* Address: 3 River Court, Pynes Hill, Exeter.
* Contact: Simon Kealy.

- Telephone: 07761 800 152.

* Email: simon@kirkhamboard.com.

## 200 CONSULTANTS

* Description: Structural Engineer.
* Name: BARTLETT Consulting Engineers
* Address: 54A Notte Street, Plymouth, PL1 2AG
* Contact: Graham Bartlett

- Telephone: 07519570294

# A11 TENDER AND CONTRACT DOCUMENTS

## 110 TENDER DRAWINGS

- The Stage One tender drawings are: RLB 005223-01 P01.

## 120 CONTRACT DRAWINGS

* The contract drawings: Shall be revised.
* Exceptions: All drawings shall be updated and re-issued as part of the Stage Two Tender process.

## 160 PRECONSTRUCTION INFORMATION

- Format: Preconstruction information is described in these preliminaries in Section A34. It refers to information given elsewhere in the preliminaries and other tender documents.

# A12 THE SITE/ EXISTING BUILDINGS

## 110 THE SITE

- Description: City College Plymouth, Kings Road, Plymouth, PL1 5QG.

## 120 EXISTING BUILDINGS ON

- Description: Tower Building, City College Plymouth, Kings Road, Plymouth, PL1 5QG

## 180 HEALTH AND SAFETY FILE

- Availability for inspection: an electronic copy of the Health and Safety File for both the building and the subsequent fit-out shall be provided upon request. Risk Registers for both the main build and fit-out are incorporated within the Pre-Construction Information issued as part of the Tender Documentation.

## 200 ACCESS TO THE SITE

- Description: Via the site main entrance.

## 210 PARKING

- Restrictions on parking of the Contractor’s and employees’ vehicles: Use allocated parking areas.

## 220 USE OF THE SITE

* General: Do not use the site for any purpose other than carrying out the Works.
* Limitations: No burning on site, no radios, any noisy or disruptive operations to be undertaken outside of normal working hours and by prior agreement with the Estates Office.

## 230 SURROUNDING LAND/ BUILDING USES

- General: Adjacent or nearby uses or activities are as follows:

- A teaching campus with Students and Staff

## 240 HEALTH AND SAFETY HAZARDS

- Information: The accuracy and sufficiency of this information is not guaranteed by the Employer or the Employer’s representative. Ascertain if any additional information is required to ensure the safety of all persons and the Works.

## 250 SITE VISIT

* Assessment: Ascertain the nature of the site, access thereto and all local conditions and restrictions likely to affect the execution of the Works.
* Arrangements for visit: via Contract Administrator as named.

# A13 DESCRIPTION OF THE WORKS

## 110 PREPARATORY WORK BY OTHERS

* Works: Carried out under a separate contract and completed before the start of work on site for this contract.
* Description: Removal of fixtures and fittings.
* Possible soft strip to allow for removal of asbestos depending on R&D Survey

## 120 THE WORKS

- Description: Refurbishment works to 2nd & 3rd floor of the Tower Building. To include new fire doors, flooring, partitions, ceilings, decoration and full M&E. Fire protection upgrades to Ground, 1st,4th,5th, 6th, 7th floors

## 130 WORK BY OTHERS CONCURRENT WITH THE CONTRACT

- Description:

## 140 COMPLETION WORK BY OTHERS

- Description:

 1. Installation of Lecture Theatre Seating to 2nd & 3rd floor

 2. Installation of Sliding Partition wall to 3rd floor

 3. Installation of Lapsafe unit to 3rd floor

# A30 TENDERING/ SUBLETTING/ SUPPLY

**MAIN CONTRACT TENDERING**

## 110 SCOPE

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

## 145 TENDERING PROCEDURE

- General: In accordance with the principles of Section 7 of the NJCC ‘Code of Procedure for Two Stage Selective Tendering’ 1996.

## 155 COLLATERAL WARRANTY

* The Agreement: The Contractor and Sub-Contractors with responsibility for design are to enter into a Purchaser/Tenant/Funder Collateral Warranties, copies of which, with the relevant parts completed, is included with the tender documents.
* Location: Incorporated into the conditions of contract.

## 160 EXCLUSIONS

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

## 170 ACCEPTANCE OF TENDER

* 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.
* Costs: No liability is accepted for any cost incurred in the preparation of any tender.

## 190 PERIOD OF VALIDITY

* Period: After submission or lodgement, keep tender open for consideration (unless previously withdrawn) for not less than 90 days (three calendar months).
* Date for possession/ commencement: See section A20.

## 195 CONTRACTOR'S DESIGN

* Scope: Undertake and take full responsibility for the design of the following parts of the Works:
	+ Mechanical services to include heating, hot water, mechanical ventilation systems and comfort cooling.
	+ Electrical services to include electrical distribution systems, electrical small power, data/telecoms management and electrical life safety and security installations.
* Drawings and supporting documentation: Submit with tender.

# PRICING/ SUBMISSION OF DOCUMENTS

## 210 PRELIMINARIES IN THE SPECIFICATION

- Measurement rules: Preliminaries/ General Conditions been prepared in accordance with NRM2.

## 220 PRICING OF PRELIMINARIES

- Charges: If the Contractor requires interim payments to include fixed and time related charges for specific items in the Preliminaries, those charges must be clearly shown against the items on the appended pricing schedule.

## 250 PRICED DOCUMENTS

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

## 300 QUANTITIES IN THE PRICED DOCUMENT

* Quantities: Where included in the priced document, these have been prepared in accordance with NRM2 only where and to the extent stated.
* Other items, descriptions and measurements not prepared in accordance with 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

- 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

- Submit: Two hard copies and one electronic copy.

## 440 CONTRACT SUM ANALYSIS

* Content of the Analysis: A breakdown of the Contract Sum into at least the following categories:

- .

* Form: .
* Fully priced copy: Submit with tender.

## 480 PROGRAMME

* Programme of work: Prepare a summary showing the sequence and timing of the principal parts of the Works and periods for planning and design.

Itemize any work which is excluded.

* Submit: two hard copies and one electronic.

## 490 INFORMATION RELEASE SCHEDULE

* Compatibility with programme: At the same time as submitting the proposed programme or summary, confirm that it is compatible with the Information Release Schedule.
* 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

* Method statements: Prepare, describing how and when the following is to be carried out:

- Removal/delivery of large or bulky items.

- Working during term times with a live college.

- How will you control notice care for students and staff

- How will you use out of hours provision 3pm until 10pm

* Statements: Submit at time of tender.

## 515 ALTERNATIVE TIME TENDERS

* 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.
* 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

* Scope: Include the following in the Contractor’s Proposals:
	+ Design drawings: mechanical and electrical layouts.
	+ Technical information: manufacturers literature, confirmation of design loadings.
	+ Submit: With tender.

## 530 SUBSTITUTE PRODUCTS

* 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.
* Compliance: Substitutions accepted will be subject to the verification requirements of clause A31/200.

## 540 QUALITY CONTROL RESOURCES

* Statement: Describe the organisation and resources to control the quality of the Works, including the work of subcontractors.
* QA staff: Identify in the statement the number and type of staff responsible for quality control, with details of their qualifications and duties.
* Submit: at time of tender.

## 550 HEALTH AND SAFETY INFORMATION

* Content: Describe the organisation and resources to safeguard the health and safety of operatives, including those of subcontractors, and of any person whom the Works may affect.
* Include:
	+ A copy of the contractor's health and safety policy document, including risk assessment procedures.
	+ Accident and sickness records for the past five years.
	+ Records of previous Health and Safety Executive enforcement action.
	+ Records of training and training policy.
	+ The number and type of staff responsible for health and safety on this project with details of their qualifications and duties.
* Submit: at time of tender.

## 570 OUTLINE CONSTRUCTION PHASE HEALTH AND SAFETY PLAN

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

## 590 SITE WASTE MANAGEMENT PLAN

* Person responsible for developing the Plan: The Contractor.
* Content: Include details of:
	+ Principal Contractor for the purposes of the plan.
	+ Location of the site.
	+ Description of the project.
	+ Estimated project cost.
	+ Types and quantities of waste that will be generated.
	+ Resource management options for these wastes including proposals for minimization/ reuse/ recycling.
	+ The use of appropriate and licensed waste management contractors.
	+ Record keeping procedures.
	+ Waste auditing protocols.
* Additional requirements: none.
* Submit with tender.

## 595 ENVIRONMENTAL POLICY

* Employer’s Environmental Policy:
	+ Location: See A11/180.
	+ Evidence of compliance: Submit: at time of tender.

## FREEDOM OF INFORMATION

* + 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.
	+ Determination: Submit requests received. Do not supply information to anyone other than the project participants without express written permission.
	+ Confidentiality: Maintain at all times.

# SUBLETTING/ SUPPLY

## 630 DOMESTIC SUBCONTRACTS

* + General: Comply with the Construction Industry Board ‘Code of Practice for the selection of subcontractors’.
	+ List: Provide details of all subcontractors and the work for which they will be responsible.
	+ Submit: .

## 640 'LISTED' DOMESTIC SUBCONTRACTORS

* + The work:
		- Description: .
		- Detailed in the Specification and drawings numbered .
	+ The list:
		- The above work must be carried out by one of the following: .
		- The Employer or Architect 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.
		- 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.
		- 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.
	+ Before 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.

# A31 PROVISION, CONTENT AND USE OF DOCUMENTS

**DEFINITIONS AND INTERPRETATIONS**

## 110 DEFINITIONS

- Meaning: Terms, derived terms and synonyms used in the preliminaries/ general conditions and specification are as stated therein or in the appropriate British Standard or British Standard glossary.

## 120 COMMUNICATION

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

## 130 PRODUCTS

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

## 135 SITE EQUIPMENT

* + Definition: All appliances or things of whatsoever nature required in or about the construction for completion of the Works but not materials or other things intended to form or forming part of the Permanent Works.
	+ Includes: Construction appliances, vehicles, consumables, tools, temporary works, scaffolding, cabins and other site facilities.

## 140 DRAWINGS

* + Definitions: To BSRIA BG 6 A design framework for building services.

Design activities and drawing definitions.

* + CAD data: In accordance with BS 1192.

## 145 CONTRACTOR'S CHOICE

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

## 150 CONTRACTOR'S DESIGN

- 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

- Meaning: Submit information in response to specified requirements.

## 160 TERMS USED IN SPECIFICATION

* + 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 taking out and disposing of associated pipework, wiring, ductwork or other services.
	+ Fix: Receive, unload, handle, store, protect, place and fasten in position and disposal of waste and surplus packaging including all labour, materials and site equipment for that purpose.
	+ Supply and fix: As above, but including supply or products to be fixed. All products to be supplied and fixed unless stated otherwise.
	+ Keep for reuse: Do not damage designated products or work. Clean off bedding and jointing materials. Stack neatly, adequately protect and store until required by the Employer/ Purchaser or for use in the Works as instructed.
	+ Make good: Execute local remedial work to designated work. Make secure, sound and neat. Excludes redecoration and/ or replacement.
	+ Replace: Supply and fix new products matching those removed. Execute work to match original new state of that removed.
	+ Repair: Execute remedial work to designated products. Make secure, sound and neat. Excludes redecoration and/ or replacement.
	+ Refix: Fix removed products.
	+ Ease: Adjust moving parts of designated products or work to achieve free movement and good fit in open and closed positions.
	+ 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.
	+ System: Equipment, accessories, controls, supports and ancillary items, including installation, necessary for that section of the work to function.

## 170 MANUFACTURER AND PRODUCT REFERENCE

* + Definition: When used in this combination:
		- Manufacturer: the person or legal entity under whose name or trademark the particular product, component or system is marketed.
		- Product reference: the proprietary brand name and/ or identifier by which the particular product, component or system is described.
	+ 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

* + Products: If an alternative product to that specified is proposed, obtain approval before ordering the product.
	+ Reasons: Submit reasons for the proposed substitution.
	+ Documentation: Submit relevant information, including:
		- manufacturer and product reference;
		- cost;
		- availability;
		- relevant standards;
		- performance;
		- function;
		- compatibility of accessories;
		- proposed revisions to drawings and specification;
		- compatibility with adjacent work;
		- appearance;
		- copy of warranty/ guarantee.
	+ Alterations to adjacent work: If needed, advise scope, nature and cost.
	+ Manufacturers’ guarantees: If substitution is accepted, submit before ordering products.

## 210 CROSS REFERENCES

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

## 220 REFERENCED DOCUMENTS

- Conflicts: Specification prevails over referenced documents.

## 230 EQUIVALENT PRODUCTS

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

## 240 SUBSTITUTION OF STANDARDS

* + 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.
	+ Before ordering: Submit notification of all such substitutions.
	+ 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

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

## 260 SIZES

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

# DOCUMENTS PROVIDED ON BEHALF OF EMPLOYER

## 410 ADDITIONAL COPIES OF THE DRAWINGS/ DOCUMENTS

- Additional copies: Issued .

## 440 DIMENSIONS

- Scaled dimensions: Do not rely on.

## 450 MEASURED QUANTITIES

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

## 460 THE SPECIFICATION

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

## 470 DIVERGENCE FROM THE STATUTORY REQUIREMENTS

* Divergence: Between the drawings or specification and the requirements of the Building Regulations, other Statutes, statutory undertakers and other regulatory authorities.
* Action: Inform immediately.

# DOCUMENTS PROVIDED BY CONTRACTOR/ SUBCONTRACTORS/ SUPPLIERS

## 510 CHANGES/ AMENDMENTS TO EMPLOYER'S REQUIREMENTS

* Contractor’s changes to Employer's Requirements: Support request for substitution or variation with all relevant information.
* 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 the variation has been carried out, may not be allowed.
* Submit: .

## 550 NAMED SUBCONTRACTORS: DESIGN AND PRODUCTION INFORMATION

* General: Certain Subcontractors are/ will be required to provide design/ production information during the contract as described in the Conditions of Contract, clause 3.7.
* Master programme: Make reasonable allowance, based on information in section A30, for completing design/ production information, checking, submission (including information relevant to the CDM Regulations), comment, inspection, amendment, resubmission and reinspection.
* Information from Subcontractors:
	+ Obtain in time to meet the programme and in accordance with NAM/T where applicable.
	+ Check dimensions are correct, account is taken of all related work, and construction is practicable. Note any comments on one copy of the design/ production information, then submit with the required number of additional unmarked copies. Such checking will not relieve the CA or the Subcontractors of their respective responsibilities for design, co- ordination and documentation.
* Inspection and comments: One copy will be marked and returned to Contractor. This will not relieve the Subcontractors of their responsibility for design and documentation. Ensure that any necessary amendments are made without delay and resubmit unless it is confirmed that it is not required.
* Final version of information: Distribute copies to all affected Subcontractors and others and keep one copy on site.
* Submit .

## CONTRACTOR'S DESIGN INFORMATION

* + General: Complete the design and detailing of parts of the Works as specified.
	+ Provide:
		- Production information based on the drawings, specification and other information.
		- Liaison to ensure coordination of the work with related building elements and services.
	+ Master programme: Make reasonable allowance for completing design/ production information, submission (including information relevant to the CDM Regulations), comment, inspection, amendment, resubmission and reinspection.
	+ Submit: Within one week of request.

## 610 PRODUCTION INFORMATION

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

## 620 AS BUILT DRAWINGS AND INFORMATION

* Contractor designed work: Provide drawings/ information:

- two hard and one electronic.

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

## 630 TECHNICAL LITERATURE

* Information: Keep on site for reference by all supervisory personnel:
	+ Manufacturers' current literature relating to all products to be used in the Works.
	+ Relevant British Standards.

## 640 MAINTENANCE INSTRUCTIONS AND GUARANTEES

* Components and equipment: Obtain or retain copies, register with manufacturer and hand over on or before completion of the Works.
* Information location: In the Building Manual.
* Emergency call out services: Provide telephone numbers for use after completion.

# A32 MANAGEMENT OF THE WORKS

**GENERALLY**

## 110 SUPERVISION

* General: Accept responsibility for coordination, supervision and administration of the Works, including subcontracts.
* 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.

## 118 VEHICLE SAFETY REQUIREMENTS

* Vehicle equipment: Ensure that all vehicles have the following:
	+ Audible alert to other road users to the planned movement of the vehicle when the vehicle’s indicators are in operation.
	+ Prominent signage at the rear of the vehicle to warn cyclists of the dangers of passing the vehicle on the inside.
	+ Properly adjusted class VI mirror/s or Fresnel lens to eliminate the nearside blind spot.
	+ Side under run guards.
* Driver training:
	+ Drivers must be trained on vulnerable road user safety through an approved course and hold a current valid Certificate of Competence.
	+ Drivers must have a valid driving licence and be legally able to drive the vehicle.
* Scheme membership: Submit evidence of registration with and accreditation to the Fleet Operator Recognition Scheme (FORS).

## 120 INSURANCE

- Documentary evidence: Submit details before starting work on site and/ or policies and receipts for the insurances required by the Conditions of Contract.

## 130 INSURANCE CLAIMS

* 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, the person named in clause A10/140 and the Insurers.
* Failure to notify: Indemnify the Employer against any loss, which may be caused by failure to give such notice.

## 140 CLIMATIC CONDITIONS

* Information: Record accurately and retain:
	+ Daily maximum and minimum air temperatures (including overnight).
	+ Delays due to adverse weather, including description of the weather, types of work affected and number of hours lost.

## 150 OWNERSHIP

- 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

* 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:
	+ Design, production information and proposals provided by the Contractor/ Subcontractors/ Suppliers, including inspection and checking (see section A31).
	+ Planning and mobilization by the Contractor.
	+ Earliest and latest start and finish dates for each activity and identification of all critical activities.
	+ Running in, adjustment, commissioning and testing of all engineering services and installations.
	+ Work resulting from instructions issued in regard to the expenditure of provisional sums (see section A54).
	+ 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.
* Exclusions: Where and to the extent that the programme implications for work which is not so defined are impossible to assess, the Contractor should exclude it and confirm this when submitting the programme.
* Submit: electronically.

## 230 SUBMISSION OF PROGRAMME

- 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 COMMENCEMENT OF WORK

- Notice: Before the proposed date for commencement of work on site give minimum notice of 5 working days.

## 250 MONITORING

* Progress: Record on a copy of the programme kept on site.
* 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

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

## 265 CONTRACTOR’S PROGRESS REPORT

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

## 285 PARTIAL POSSESSION BY EMPLOYER

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

## 290 NOTICE OF COMPLETION

* Requirement: Give notice of the anticipated dates of completion of the whole or parts of the Works.
* Associated works: Ensure necessary access, services and facilities are complete.
* Period of notice (minimum): 10 working days.

## 310 EXTENSIONS OF TIME

* 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.
* Details: As soon as possible, submit:
	+ Relevant particulars of the expected effects, if appropriate related to the concurrent causes.
	+ An estimate of the extent, if any, of the expected delay in the completion of the Works beyond the Date for Completion.
	+ All other relevant information required.

# CONTROL OF COST

## 410 CASH FLOW FORECAST

- 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 and based upon the programme for the Works.

## 420 REMOVAL/ REPLACEMENT OF EXISTING WORK

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

## 430 PROPOSED INSTRUCTIONS

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

## 440 MEASUREMENT

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

## 450 DAYWORK VOUCHERS

* Before commencing work: Give reasonable notice to person countersigning daywork vouchers.
* Content: Before delivery, each voucher must be:
	+ Referenced to the instruction under which the work is authorized.
	+ 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.
* Submit: within 24 hours of any dayworks.

## 460 INTERIM VALUATIONS

* Applications: Include details of amounts requested under the Contract together with all necessary supporting information.
* Submission: At least seven days before established dates.

## 470 PRODUCTS NOT INCORPORATED INTO THE WORKS

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

## 475 LISTED PRODUCTS STORED OFF SITE

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

## 480 LABOUR AND EQUIPMENT RETURNS

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

# A33 QUALITY STANDARDS/ CONTROL

**STANDARDS OF PRODUCTS AND EXECUTIONS**

## 110 INCOMPLETE DOCUMENTATION

* General: Where and to the extent that products or work are not fully documented, they are to be:
	+ Of a kind and standard appropriate to the nature and character of that part of the Works where they will be used.
	+ Suitable for the purposes stated or reasonably to be inferred from the project documents.
	+ 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

* Operatives: Appropriately skilled and experienced for the type and quality of work.
* Registration: With Construction Skills Certification Scheme.
* Evidence: Operatives must produce evidence of skills/ qualifications when requested.

## 130 QUALITY OF PRODUCTS

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

## 135 QUALITY OF EXECUTION

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

## 140 COMPLIANCE

* Compliance with proprietary specifications: Retain on site evidence that the proprietary product specified has been supplied.
* Compliance with performance specifications: Submit evidence of compliance, including test reports indicating:
	+ Properties tested.
	+ Pass/ fail criteria.
	+ Test methods and procedures.
	+ Test results.
	+ Identity of testing agency.
	+ Test dates and times.
	+ Identities of witnesses.
	+ Analysis of results.

## 150 INSPECTIONS

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

## 160 RELATED WORK

* 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:
	+ Appropriately complete.
	+ In accordance with the project documents.
	+ To a suitable standard.
	+ In a suitable condition to receive the new work.
* Preparatory work: Ensure all necessary preparatory work has been carried out.

## 170 MANUFACTURER’S RECOMMENDATIONS/ INSTRUCTIONS

* General: Comply with manufacturer's printed recommendations and instructions current on the date of the Invitation to tender.
* Changes to recommendations or instructions: Submit details.
* Ancillary products and accessories: Use those supplied or recommended by main product manufacturer.
* Agrément certified products: Comply with limitations, recommendations and requirements of relevant valid certificates.

## 180 WATER FOR THE WORKS

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

# SAMPLES/ APPROVALS

## 210 SAMPLES

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

## 220 APPROVAL OF PRODUCTS

* Submissions, samples, inspections and tests: Undertake or arrange to suit the Works programme.
* 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.
* Complying sample: Retain in good, clean condition on site. Remove when no longer required.

## 230 APPROVAL OF EXECUTION

* Submissions, samples, inspections and tests: Undertake or arrange to suit the Works programme.
* 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.
* Complying sample: Retain in good, clean condition on site. Remove when no longer required.

# ACCURACY/ SETTING OUT GENERALLY

## 320 SETTING OUT

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

## 330 APPEARANCE AND FIT

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

## 340 CRITICAL DIMENSIONS

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

## 350 LEVELS OF STRUCTURAL FLOORS

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

## 360 RECORD DRAWINGS

- 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

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

## 420 WATER REGULATIONS/ BYELAWS NOTIFICATION

* 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.
* 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

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

## 435 ELECTRICAL INSTALLATION CERTIFICATE

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

## 445 SERVICE RUNS

* General: Provide adequate space and support for services, including unobstructed routes and fixings.
* Ducts, chases and holes: Form during construction rather than cut.
* 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

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

# SUPERVISION/ INSPECTION/ DEFECTIVE WORK

## 510 SUPERVISION

* 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.
* 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.
* Submittal date: on demand.
* Replacement: Give maximum possible notice before changing person in charge or site agent.

## 520 COORDINATION OF ENGINEERING SERVICES

* 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.
* Evidence: Submit when requested CVs or other documentary evidence relating to the staff concerned.

## 530 OVERTIME WORKING

* Notice: Prior to overtime being worked, submit details of times, types and locations of work to be done.

- Minimum period of notice: 48 hours.

* 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

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

## 550 ACCESS FOR INSPECTION

- Removal: Before removing scaffolding or other facilities for access, give notice of not less than 3 working days.

## 560 TESTS AND INSPECTIONS

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

## 610 PROPOSALS FOR RECTIFICATION OF DEFECTIVE PRODUCTS/ EXECUTIONS

* Proposals: Immediately any execution 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.
* Acceptability: Such proposals may be unacceptable and contrary instructions may be issued.

## 620 MEASURES TO ESTABLISH ACCEPTABILITY

* 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:
	+ Will be at the expense of the Contractor.
	+ Will not be considered as grounds for revision to the completion date.

## 630 QUALITY CONTROL

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

# WORK AT OR AFTER COMPLETION

## 710 WORK BEFORE COMPLETION

* General: Make good all damage consequent upon the Works.

- Temporary markings, coverings and protective wrappings: Remove unless otherwise instructed.

* Cleaning: Clean the Works thoroughly inside and out, including all accessible ducts and voids. Remove all splashes, deposits, efflorescence, rubbish and surplus materials.
* Cleaning materials and methods: As recommended by manufacturers of products being cleaned, and must not damage or disfigure other materials or construction.
* COSHH dated data sheets: Obtain for all materials used for cleaning and ensure they are used only as recommended by their manufacturers.
* 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.
* 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

* General: Leave the Works secure with, where appropriate, all accesses closed and locked.
* Keys: Account for and adequately label all keys and hand over to Employer with itemized schedule, retaining duplicate schedule signed by Employer as a receipt.

## 730 MAKING GOOD DEFECTS

* Remedial work: Arrange access with the Contract Administrator.
* Rectification: Give reasonable notice for access to the various parts of the Works.
* Completion: Notify when remedial works have been completed.

# A34 SECURITY/ SAFETY/ PROTECTION

**SECURITY, HEALTH AND SAFETY**

## 110 PRECONSTRUCTION INFORMATION

* Location: Integral with the project Preliminaries, including but not restricted to the following sections:
	+ Description of project: Sections A10 and A11.
	+ Client’s consideration and management requirements: Sections A12, A13 and A36.
	+ Environmental restrictions and on-site risks: Section A12, A35 and A34.
	+ Significant design and construction hazards: Section A34.
	+ The Health and Safety File: Section A37.

## 140 CONSTRUCTION PHASE HEALTH AND SAFETY PLAN

* Submission: Present to the Employer/ Client no later than 5 days prior to commencement on site.
* 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 CDM Regulations.
* 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/ Preconstruction information.

## 150 SECURITY

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

## 160 STABILITY

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

## 170 OCCUPIED PREMISES

* Extent: Existing buildings will be occupied and/ or used during the Contract as follows: the whole of the second floor, the common parts of the building, roadways and parking surrounding other than designated parking area.
* Works: Carry out without undue inconvenience and nuisance and without danger to occupants and users.
* 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.

## 180 ACCESS CONTROL

* Controlled areas: The building.
* Control type: Fob or card.
* Authorised persons: Submit a list of the names of all persons requiring access together with any other related information reasonably required.
* Return of credentials: When requested or on completion of the work to which the controlled area relates.

## 190 OCCUPIER’S RULES AND REGULATIONS

- Compliance: Conform to the occupier's rules and regulations affecting the site.

## 210 EMPLOYER’S REPRESENTATIVES SITE VISITS

* Safety: Submit details in advance, to the Employer or the person identified in clause A10/140, of safety provisions and procedures (including those relating to materials, which may be deleterious), which will require their compliance when visiting the site.
* Protective clothing and/ or equipment: Provide and maintain on site for the Employer and the person stated in clause A10/140 and other visitors to the site.

# PROTECT AGAINST THE FOLLOWING

## 330 NOISE AND VIBRATION

* Standard: Comply with the recommendations of BS 5228-1, in particular clause 7.3, to minimize noise levels during the execution of the Works.
* Equipment: Fit compressors, percussion tools and vehicles with effective silencers of a type recommended by manufacturers of the compressors, tools or vehicles.
* Restrictions: Do not use:
	+ Percussion tools and other noisy appliances without consent during the hours of 8am to 5pm Monday to Friday.
	+ Radios or other audio equipment or permit employees to use in ways or at times that may cause nuisance.

## 340 POLLUTION

* Prevention: Protect the site, the Works and the general environment including the atmosphere, land, streams and waterways against pollution.
* Contamination: If pollution occurs inform immediately, including to the appropriate Authorities and provide relevant information.

## 350 PESTICIDES

- Use: Not permitted.

## 360 NUISANCE

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

## 371 DANGEROUS OR HAZARDOUS SUBSTANCES

* Duty: Report immediately suspected materials discovered during execution of the Works.
	+ Do not disturb.
	+ Agree methods for safe removal or remediation.

## 380 FIRE PREVENTION

* Duty: Prevent personal injury or death, and damage to the Works or other property from fire.
* 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

- Smoking on site: Not permitted.

## 400 BURNING ON SITE

- Burning on site: Not permitted.

## 410 MOISTURE

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

## 420 INFECTED TIMBER/ CONTAMINATED MATERIALS

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

## 430 WASTE

* Includes: Rubbish, debris, spoil, surplus material, containers and packaging.
* General: Minimize production. Prevent accumulations. Keep the site and Works clean and tidy.
* Handling: Collect and store in suitable containers. Remove frequently and dispose off site in a safe and competent manner:
	+ Non-hazardous material: In a manner approved by the Waste Regulation Authority.
	+ Hazardous material: As directed by the Waste Regulation Authority and in accordance with relevant regulations.
* Recyclable material: Sort and dispose at a Materials Recycling Facility approved by the Waste Regulation Authority.
* Voids and cavities in the construction: Remove rubbish, dirt and residues before closing in.
* Waste transfer documentation: Retain on site.

## 440 ELECTROMAGNETIC INTERFERENCE

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

## 450 LASER EQUIPMENT

* Construction laser equipment: Install, use and store in accordance with BS EN 60825-1 and the manufacturer's instructions.
* 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.
* Class 3A 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

- Use: Not permitted.

## 470 INVASIVE SPECIES

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

# PROTECT THE FOLLOWING

## 510 EXISTING SERVICES

* Confirmation: Notify all service authorities, statutory undertakers and/ or adjacent owners of proposed works not less than one week before commencing site operations.
* 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.
* Work adjacent to services:
	+ Comply with service authority's/ statutory undertaker's recommendations.
	+ Adequately protect, and prevent damage to services: Do not interfere with their operation without consent of service authorities/ statutory undertakers or other owners.
* Identifying services:
	+ Below ground: Use signboards, giving type and depth;
	+ Overhead: Use headroom markers.
* Damage to services: If any results from execution of the Works:
	+ Immediately give notice and notify appropriate service authority/ statutory undertaker.
	+ Make arrangements for the work to be made good without delay to the satisfaction of service authority/ statutory undertaker or other owner as appropriate.
	+ Any measures taken to deal with an emergency will not affect the extent of the Contractor's liability.
* Marker tapes or protective covers: Replace, if disturbed during site operation's to service authority's/ statutory undertakers recommendations.

## 520 ROADS AND FOOTPATHS

* Duty: Maintain roads and footpaths within and adjacent to the site and keep clear of mud and debris.
* 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

* 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.
* Protection: Before starting work submit proposals for protective measures.

## 540 RETAINED TREES/ SHRUBS/ GRASSED AREAS

* Protection: Preserve and prevent damage, except those not required.
* 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.

## 560 EXISTING FEATURES

* 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.
* Special requirements: .

## 570 EXISTING WORK

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

## 580 BUILDING INTERIORS

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

## 600 EXISTING FURNITURE, FITTINGS AND EQUIPMENT

* Protection: Prevent damage or move as necessary to enable the Works to be executed. Reinstate in original positions.
* Extent: Before work in each room starts the Employer will remove the following:

- .

## 620 ADJOINING PROPERTY

- Permission: Obtain as necessary from owners if requiring to erect scaffolding on or otherwise use adjoining property.

## 625 ADJOINING PROPERTY RESTRICTIONS

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

## 630 EXISTING STRUCTURES

* Duty: Check proposed methods of work for effects on adjacent structures inside and outside the site boundary.
* Supports: During execution of the Works:
	+ 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.
	+ Do not remove until new work is strong enough to support existing structure.
	+ Prevent overstressing of completed work when removing supports.
* Adjacent structures: Monitor and immediately report excessive movement.
* Standard: Comply with BS 5975 and BS EN 12812.

## 640 MATERIALS FOR RECYCLING/ REUSE

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

# A35 SPECIFIC LIMITATIONS ON METHOD/ SEQUENCE/ TIMING

## 110 SCOPE

- 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

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

## 170 WORKING HOURS

- Specific limitations: Noisy or otherwise disruptive operations to be undertaken outside of normal working hours (8am-5pm Monday to Friday).

## 180 COMPLETION IN SECTIONS OR IN PARTS

* 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.
* 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.

# A36 FACILITIES/ TEMPORARY WORKS/ SERVICES

**ACCOMMODATION**

## 210 ROOM FOR MEETINGS

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

## 220 SITE ACCOMMODATION

* Purpose: Site Administration and Welfare .
* Facilities: Provide and obtain approval of suitable lockable temporary accommodation and facilities as follows:
	+ Status: will be part of the Contractor's own accommodation
	+ Location: Refer to appended drawings.
	+ Floor area: 60m² approx.
	+ Sanitary facilities: sufficient for anticipated workforce.

## 230 TEMPORARY ACCOMMODATION

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

## 260 SANITARY ACCOMMODATION

- 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 SERVICES AND FACILITIES

## 410 LIGHTING

- 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

* Supply: Electricity from the Employer's mains may be used for the Works as follows:
	+ Metering: to be sub-metered and re-charged by the Employer.
	+ Point of supply: to be agreed.
	+ Available capacity: 450/240V.
	+ Frequency: 50 Hz.
	+ Phase: 3/1 .
	+ Current: Alternating.
* Continuity: The Employer will not be responsible for the consequences of failure or restriction in supply.

## 430 WATER

* Supply: The Employer's mains may be used for the Works as follows:
	+ Metering: to be sub-metered and recharged.
	+ Source: Mains.
	+ Location of supply point: tbc.
	+ Conditions/ Restrictions: .
* Continuity: The Employer will not be responsible for the consequences of failure or restriction in supply.

## 440 MOBILE TELEPHONES

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

## 470 E-MAIL AND INTERNET FACILITY

* General: As soon as practicable after the start on site provide a suitable e- mail facility on site, with a separate dedicated telephone line, for the use of the Contractor, Subcontractors and those acting on behalf of the Employer.
* Use on behalf of Employer: Allow for the cost of a reasonable number of transmissions made by those acting on behalf of the Employer.

## 520 USE OF PERMANENT HEATING SYSTEM

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

## 530 BENEFICIAL USE OF INSTALLED SYSTEMS

* 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.
* 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 recording details of the terms and conditions of use.

## 540 METER READINGS

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

## 570 PERSONAL PROTECTIVE EQUIPMENT

* General: Provide for the sole use of those acting on behalf of the Employer, in sizes to be specified:
	+ Safety helmets to BS EN 397, neither damaged nor time expired.

Number required: Four.

* + High visibility waistcoats to BS EN ISO 20471 Class 2. Number required:

\_Four.

* + Safety boots with steel insole and toecap to BS EN ISO 20345. Pairs required: Four.
	+ Disposable respirators to BS EN 149.FFP1S.
	+ Eye protection to BS EN 166.
	+ Ear protection - muffs to BS EN 352-1, plugs to BS EN 352-2.
	+ Hand protection - to BS EN 388, 407, 420 or 511 as appropriate.

# A37 OPERATION/ MAINTENANCE OF THE FINISHED WORKS

**GENERALLY**

## 115 HEALTH AND SAFETY INFORMATION

* Content: Obtain and Provide the following information: As-built drawings, test reports and certificates, manufacturers literature including maintenance requirements, residual risk register.
* Format: Two hard and two electronic copies.
* Deliver to: Contract Administrator No later than: Practical Completion of the Works.

## 120 CONTENT OF THE BUILDING MANUAL PART 1: GENERAL

* Content: Obtain and provide the following, including all relevant details not included in other parts of the manual:
* Index: list the constituent parts of the manual, together with their location in the document.
* The Works:
	+ Description of the buildings and facilities.
	+ Ownership and tenancy, where relevant.
	+ Health and Safety information - other than that specifically required by the Construction (Design and Management) Regulations.
* The Contract:
	+ Names and addresses and contact details of all significant consultants, contractors, subcontractors, suppliers and manufacturers.
	+ Overall design criteria.
	+ Environmental performance requirements.
	+ Relevant authorities, consents and approvals.
	+ Third party certification, such as those made by ‘competent’ persons in accordance with the Building Regulations.
* Operational requirements and constraints of a general nature:
	+ Maintenance contracts and contractors.
	+ Fire safety strategy for the buildings and the site. Include drawings showing emergency escape and fire appliance routes, fire resisting doors, location of emergency alarm and fire fighting systems, services, shut off valves, switches, etc.
	+ Emergency procedures and contact details in case of emergency.
	+ Other specific requirements: .
* Description and location of other key documents.
* Timescale for completion: .

## 130 CONTENT OF THE BUILDING MANUAL PART 2: BUILDING FABRIC

* Content: Obtain and Provide the following, including all relevant details not included in other parts of the manual:
* Detailed design criteria, including:
	+ Floor and roof loadings.
	+ Durability of individual components and elements.
	+ Loading restrictions.
	+ Insulation values.
	+ Fire ratings.
	+ Other relevant performance requirements.
	+ Construction of the building:
	+ A detailed description of methods and materials used.
	+ As-built drawings recording the construction, together with an index.
	+ Information and guidance concerning repair, renovation or demolition/ deconstruction.
* Periodic building maintenance guide chart.
* Inspection reports.
* Manufacturer's instructions index, including relevant COSHH data sheets and recommendations for cleaning, repair and maintenance of components.
* Fixtures, fittings and components schedule and index.
* Guarantees, warranties and maintenance agreements - obtain from manufacturers, suppliers and subcontractors.
* Test certificates and reports required in the specification or in accordance with legislation, including:
	+ Air permeability.
	+ Resistance to passage of sound.
	+ Continuity of insulation.
	+ Electricity and Gas safety.
	+ .
* Other specific requirements: .
* Timescale for completion: .

## 140 CONTENT OF THE BUILDING MANUAL PART 3: BUILDING SERVICES

* Content: Obtain and provide the following, including all relevant details not included in other parts of the manual:
* Detailed design criteria and description of the systems, including:
	+ Services capacity, loadings and restrictions
	+ Services instructions.
	+ Services log sheets.
	+ Manufacturers' instruction manuals and leaflets index.
	+ Fixtures, fittings and component schedule index.
* Detailed description of methods and materials used.
* As-built drawings for each system recording the construction, together with an index, including:
	+ Diagrammatic drawings indicating principal items of plant, equipment and fittings.
	+ Record drawings showing overall installation.
	+ Schedules of plant, equipment, valves, etc. describing location, design performance and unique identification cross referenced to the record drawings.
	+ Identification of services - a legend for colour coded services.
* Product details, including for each item of plant and equipment:
	+ Name, address and contact details of the manufacturer.
	+ Catalogue number or reference.
	+ Manufacturer's technical literature, including detailed operating and maintenance instructions.
	+ Information and guidance concerning dismantling, repair, renovation or decommissioning.
* Operation: A description of the operation of each system, including:
	+ Starting up, operation and shutting down.
	+ Control sequences.
	+ Procedures for seasonal changeover.
	+ Procedures for diagnostics, troubleshooting and faultfinding.
* Guarantees, warranties and maintenance agreements - obtain from manufacturers, suppliers and subcontractors.
* Commissioning records and test certificates list for each item of plant, equipment, valves, etc. used in the installations - including:
	+ Electrical circuit tests.
	+ Corrosion tests.
	+ Type tests.
	+ Work tests.
	+ Start and commissioning tests.
* Equipment settings: Schedules of fixed and variable equipment settings established during commissioning.
* Preventative maintenance: Recommendations for frequency and procedures to be adopted to ensure efficient operation of the systems.
* Lubrication: Schedules of all lubricated items.
* Consumables: A list of all consumable items and their source.
* Spares: A list of recommended spares to be kept in stock, being those items subject to wear and tear or deterioration and which may involve an extended delivery time when replacements are required.
* Emergency procedures for all systems, significant items of plant and equipment.
* Annual maintenance summary chart.
* Other specific requirements: .
* Timescale for completion: .

## CONTENT OF THE BUILDING MANUAL PART 4: THE HEALTH AND SAFETY FILE

* + Content: Obtain and provide the following, including all relevant details not included in other parts of the manual, including:
		- residual hazards and how they have been dealt with.
		- hazardous materials used.
		- information regarding the removal or dismantling of installed plant and equipment.
		- health and safety information about equipment provided for cleaning or maintaining the structure.
		- the nature, location and markings of significant services.
		- information and as-built drawings of the structure, its plant and equipment.
		- .
	+ Information prepared by others: Details: .
	+ Timescale for completion: .
	+ Submit to: .

## CONTENT OF THE BUILDING MANUAL PART 5: THE BUILDING USER GUIDE

* + Content: Obtain and provide the following:
		- Building services information.
		- Emergency information.
		- Energy & environmental strategy.
		- Water use.
		- Transport facilities.
		- Materials & waste policy.
		- Re-fit/ re-arrangement considerations.
		- Reporting provision.
		- Training.
		- Links & references.
	+ Other specific requirements: .
	+ Timescale for completion: .

## 160 PRESENTATION OF BUILDING MANUAL

* + Format: A4 size, plastics covered, loose leaf, four ring binders with hard covers, each indexed, divided and appropriately cover titled.
	+ 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.
	+ As-built drawings: The main sets may form annexes to the Manual.

## 190 MAINTENANCE SERVICE

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

- .

* + Terms: .
	+ Commencement: .
	+ Duration: .

## 220 TRAINING

* + 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.
	+ Level of training: .
	+ Time allowance: Include a minimum of days.

## 230 SPARE PARTS

* + 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.
	+ Content: Include in the priced schedule for:
		- Manufacturers' current prices, including packaging and delivery to site.
		- Checking receipts, marking and numbering in accordance with the schedule of spare parts.
		- Referencing to the plant and equipment list in Part 3 of the Building Manual.
		- Painting, greasing, etc. and packing to prevent deterioration during storage.
	+ Latest date for submission: .

## 250 TOOLS

* + 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.
	+ Quantity: Two complete sets.
	+ Time of submission: At completion.

# A55 DAYWORKS

## 110 LABOUR

* + Provisional sum: Include prime cost of labour incurred before the Final Completion Date: .
		- Percentage adjustment: Add to cover incidental costs, overheads and profit: %.
	+ Provisional sum: Include prime cost of labour incurred after the Final Completion Date:
		- Percentage adjustment: Add to cover incidental costs, overheads and profit: %.

## 120 PRODUCTS

- Provisional sum: Include prime cost incurred at any time during the Contract

 .

- Percentage adjustment to cover incidental costs, overheads and profit:

 %.

## 130 EQUIPMENT

* Provisional sum: Include prime cost of plant (equipment) incurred before the Final Completion Date: .
	+ Percentage adjustment to cover incidental costs, overheads and profit:

 %.

* Provisional sum: Include prime cost of plant (equipment) incurred after the Final Completion Date: .
	+ Percentage adjustment to cover incidental costs, overheads and profit

 %.

* Plant (equipment) costs: Rates set out in the Schedule of Basic Plant Charges published by the RICS current at the Date of Tender.

## 140 SPECIALIST TRADES

* Include Provisional Sums for dayworks within the province of:
	+ RICS/ Electrical Contractors' Association: Prime cost of labour: The sum of £ .
	+ Percentage adjustment to cover incidental costs, overheads and profit:

 %.

* + Prime cost of materials and goods: The sum of £ .
	+ Percentage adjustment to cover incidental costs, overheads and profit:

 %.

* + Prime cost of plant: The sum of £ .
	+ Percentage adjustment to cover incidental costs, overheads and profit:

 %.

* + RICS/ Heating and Ventilating Contractors' Association: Prime cost of labour: The sum of £
	+ Percentage adjustment to cover incidental costs, overheads and profit:

 %.

* + Prime cost of materials and goods: The sum of £ .
	+ Percentage adjustment to cover incidental costs, overheads and profit:

 %.

* + Prime cost of plant: The sum of £ .
	+ Percentage adjustment to cover incidental costs, overheads and profit:

 %.

* + RICS/ National Association of Plumbing, Heating and Mechanical Services contractors: Prime cost of labour: The sum of £ .
	+ Percentage adjustment to cover incidental costs, overheads and profit:

 %.

* + Prime cost of materials and goods: The sum of £ .
	+ Percentage adjustment to cover incidental costs, overheads and profit:

 %.

* + Prime cost of plant: The sum of £ .
	+ Percentage adjustment to cover incidental costs, overheads and profit:

 %.