CONVERSION OF A FORMER BRITISH RED CROSS HALL INTO A BUSINESS HUB CONTAINING OFFICE SPACES FOR RENT MEETING ROOMS SHOWERS KITCHEN & TOILETS.

AT

BRADBOURNE VALE ROAD SEVENOAKS KENT TN13 3QG.

FOR

SEVENOAKS TOWN COUNCIL.

SPECIFICATION

The Project Generally

Description of the Works

Contract Conditions & Preliminaries

Materials and Workmanship

Appendix.
1 List of Tender / Contract (Architects/S.Engs) drawings.
2 Rubberbond Fleeceback EPDM roof covering info
3 Celotex calcs sheets 1 to 7
4 Details of the shower enclosures and sanitaryware.
5 Electrical symbols key for the electrical layouts
6 Details of the Thorlux LED light fittings.
7 Details of the 10 Bicycle Bikedocksolutions and cycle stands.

Tender/Contract Sum Analysis.
(To be filled in fully and included in the tender return).

FEB 2019

Project number 92.

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A10 THE PROJECT GENERALLY

110 The Project Name: Business Hub. Bradbourne Vale Road. TN13 3QG
Nature: Conversion of a former british red cross hall into a business hub consisting of office space for renting meeting rooms, showers, kitchen, eating area, and toilets.
Location: Bradbourne Vale Road. TN13 3QG

120 EMPLOYER (CLIENT):
Sevenoaks Town Council.
Bradbourne Vale Road. Sevenoaks Kent

130 THE PRINCIPAL CONTRACTOR: The Contractor

140 ARCHITECT (hereinafter referred to as "CA" or Contract Administrator):
Glenn Ball R.I.B.A.
6 Castle Drive
Kemsing
Sevenoaks
Kent. TN15 6RL

160 STRUCTURAL ENGINEER
CTP Consulting Engineers
Suffolk House 154 High Street
Sevenoaks Kent TN13 1XE

200 S.A.P. ASSESSOR
Wessex
5 Swallow Cliff Gardens .

A11 TENDER AND CONTRACT DOCUMENTS

110 TENDER DRAWINGS are
As listed in Appendix.

120 CONTRACT DRAWINGS will be the same as the tender drawings.

A12 THE SITE/EXISTING BUILDINGS

110 THE SITE:
The site comprises of an existing building that shares the site with the Sevenoaks Town Council building on Bradbourne Vale Road.
For a site location plan see the drawing Appendix.

115 EXISTING BUILDING:
The existing building covered by this contract is the former Red Cross building.

120 EXISTING BUILDINGS ON/ADJACENT TO THE SITE
The hall will be vacant during the construction period.

121 TEMPORARY STORAGE
Will not be required.

130 DEMOLITION
Demolition not required. Apart from forming new openings and the removal of a clear plastic corrugated canopy to one end of the building.

140 EXISTING MAINS/SERVICES

Existing underground drainage is shown on the existing 1:200 site plan. The drainage shown on this layout is from a 1970 planning drawing. The area where the chambers are behind the building is currently under soil/leaf mulch that has built up over the years. The contractor shall take such steps as are necessary to identify the routes of all services before work commences.
There is no gas supply near the site, only water and electricity are currently supplied to the building.

160 SOILS AND GROUND WATER INFORMATION

The sub-soil is unknown at this stage, however the banks to the rear of the site would indicate that it is sand as the excavations from a Fox den would indicate.

200 ACCESS TO THE SITE

Access to the site is via a parking area around the Town council site.

210 PARKING

Parking of the Contractors and employees vehicles at the site will be limited to the existing parking provision. Liaise with STC to establish space available during construction.

220 USE OF THE SITE

Do not use the site for any purposes other than carrying out the works.

230 SURROUNDING LAND

The Employer owns the land to the front and to the rear of the building. This area can only be used with express permission from the Employer.

240 RISKS TO HEALTH AND SAFETY

The nature and condition of the site/building cannot be fully and certainly ascertained before it is opened up. However the following risks are or may be present:
Small possibility that there could be asbestos in the plasterwork.
The accuracy and sufficiency of this information is not guaranteed by the Employer or the C.A. and the Contractor must ascertain for himself any information he may require to ensure the safety of all persons and the works.

250 SITE VISIT:

Before tendering: Ascertain the nature of the site, access thereto and all local conditions and restrictions likely to affect the execution of the works. Site visits to be made through Glenn Ball with the Employer at times that is mutually convenient.

A13 DESCRIPTION OF THE WORK

120 THE WORK

Demolition and removal of the existing clear plastic corrugated canopy and structure to the far end of the building.
Removal of soil and leaf mulch behind the building to expose to drainage chambers.
Grade the bank for the full length of the building and provide a simple post and plank retaining structure to contain any further build up of soil/mulch.
Carry out structural remedial works in strict accordance with CTP drawings and method statement for the works, to two beam ends and posts which are currently being supported by Acrow props to make safe.
After carefully removing the "framed"ceiling panels for reuse, this area of flat roof to be stripped and the timbers retained. This roof to be built up again to provide the correct falls to the outlets.
The entire roof (pitched & flat) is to be stripped and fully insulated and a new roof covering applied, all as the details.
The external envelope to be adapted to provide new doors and frames let into the existing window frames retained.
The formation of decking, ramps, planters to the end of the building.
The supply and fit of a cycle stand.
The improvements to the car parking areas to illuminate ponding by providing new gulley's at the low points and new runs back to the existing pipe work. Taking out any areas that have sunk badly.
All windows to be overhauled and any panes broken replaced.
All windows and new to be fully rubbed down and primed/undercoated/and finished in white gloss.
All new external hardwood doors to be clear finished.
Remove all sanitary ware and make new connections to the existing drainage system for the new toilets showers sinks etc in the existing concrete floor slab.
Drain cold water storage tank, build new partition between meeting rooms and move tank directly above the partition on bearers.
Supply a new insulated floor throughout, complete with floor ducts/wiring etc.
Construct new openings and internal partitions throughout as drawings.
Rewire the building including night storage heaters.
Supply and fit the sanitary ware/preformed shower enclosures and kitchen complete plumb in and test.
Supply and fix the new doors and frames and side screens complete with ironmongery and fittings.
Supply and fix all the light fittings/sockets/instant showers etc, and commission/test.
Decorate throughout. Carpeting office areas. Vinyl flooring to toilets and kitchen.
Replace the cladding to the vertical fascia to the flat roof area.
Provide external lighting where shown.
Fully test and commission the building include all services.

Provide a building manual for the completed project.

A20 Form of contract

A20 THE CONTRACT

361 The Contract: JCT Minor Works Building Contract with Contractors Design 2005 Revision 2 2009.

First Recital
The Work comprises: The conversion of a former British red cross hall into a business hub complete with office areas, meeting rooms, toilets, showers, and a kitchen.

Second Recital
The works include the design and construction of:
1) The design of the work, to extend the existing electric heating system.
2) The design of the work, to extend the electrical system.

Third Recital
Contract drawings: These are numbered and listed in Appendix
Contract Documents: Contract specification, Tender/ Contract sum Analysis.

Fourth Recital
The fourth recital will be deleted.

THE ARTICLES

Article 3
Architect: See clause A10/140
The words Contract Administrator will be deleted.

Article 4 and 5
CDM COORDINATOR / PRINCIPAL CONTRACTOR:
Principle contractor : See Clause A10/130.

CONTRACT PARTICULARS

Fifth Recital and Schedule 2
Base Date: Ten days before return of tender date.

Fifth Recital and clause 4.2
CONSTRUCTION INDUSTRY SCHEME (CIS)
Employer at base date (is) a "contractor" for the purposes of the CIS.

Sixth Recital
2015 CDM REGULATIONS
The project "is not" notify able.

Seventh Recital
FRAMEWORK AGREEMENT
Framework agreement: Does not apply.
Details: Not applicable.

Article 7
ARBITRATION
Article 7 and Schedule 1 : Apply.

Clause 1.1
CDM PLANNING PERIOD
Does not apply.

Clause 2.3
COMMENCEMENT AND COMPLETION
Date of commencement of the Works: No later than 12 weeks from date of receipt of tenders.
Date of Completion: No later than 15 weeks from the date of commencement.

Clause 2.9
LIQUIDATED DAMAGES
At the rate of £1500 per month.

Clause 2.11
RECTIFICATION PERIOD
Period: 12 Months from the date of practical completion.

Clause 4.3
PERCENTAGE OF THE TOTAL VALUE OF THE WORK ETC
Percentage: 95%.

Clause 4.4
PERCENTAGE OF THE TOTAL AMOUNT TO BE PAID TO THE CONTRACTOR
Percentage: 97.5%

Clause 4.8.1
SUPPLY OF DOCUMENTATION FOR COMPUTATION OF AMOUNT TO BE FINALLY CERTIFIED.
Period: 3 months from the date of practical completion.

Clause 4.11 and Schedule 2
CONTRIBUTIONS, LEVY AND TAX CHANGES.
Schedule 2 (Fluctuations Option) applies.
Percentage addition : 10%
Clause 5.3.2
CONTRACTORS INSURANCE-INJURY TO PERSONS OR PROPERTY
Insurance cover (for any one occurrence or series of occurrences arising out of one event) .£2,000,000 (£2 Million).

Clauses 5.4A, 5.4B, and 5.4C
INSURANCE OF THE WORKS ETC- ALTERNATIVE PROVISIONS
Clause 5.4B applies.
Delete clause 5.4A.
(NB. 5.4B = "Existing structures insurance by Employer in Joint Names", taken out by the Employer).

Clause 5.4A.1 and 5.4B 1.2
PERCENTAGE TO COVER PROFESSIONAL FEES
Addition: 15 per cent.

Clause 7.2
ADJUDICATION
The Ajudicator is: Royal Institute of British Architects.

Schedule 1 Paragraph 2.1
ARBITRATION
Appointor of Arbitrator (and of any replacement): President or a Vice President of the Royal Institute of British Architects.

THE CONDITIONS

SECTION 1: DEFINITIONS AND INTERPRETATIONS

1.4 RECKONING PERIOD OF DAYS
Add: A public holiday shall also include 22nd December to 1st January Inclusive.

1.7 APPLICABLE LAW
Amendments: None.
SECTION 2: CARRYING OUT THE WORKS
SECTION 3: CONTROL OF THE WORKS
SECTION 4: PAYMENT
SECTION 5: INJURY, DAMAGE AND INSURANCE
SECTION 6: TERMINATION
SECTION 7: SETTLEMENT OF DISPUTES
EXECUTION:
The Contract: Will be executed " underhand".

CONTRACT GUARANTEE BOND: not required.

A30 TENDERING/SUBLETTING/SUPPLY

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 the Code of Procedure for Single Stage Selective Tendering 1996.

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 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
Tenders must remain open for consideration (unless previously withdrawn) for not less than 12 weeks from the date fixed for the submission or lodgement of tenders.
Information on the date for possession/commencement is given in section A20.

191 CONFIDENTIALITY:
All tenderers and other recipients of the documents (whether or not they submit a a tender) shall treat all details of the documents as private and confidential.

192 TENDERERS RESPONSIBILTY
Tenderers shall visit the site of the works and obtain for themselves, on their own Responsibility, all information that may be necessary for making a tender and Entering into a contract and must examine the Contract documents and inspect and consider the site and its surroundings.
Any neglect or failure on the part of the tenderer to obtain reliable information at the site or elsewhere on any other matters affecting the execution, completion and maintenance of the works of this Contract shall not relieve the Contractor from any risks or liabilities or from the responsibility of completing and handing over the works.

PRICING/SUBMISSION OF DOCUMENTS

210 PRELIMINARIES IN THE SPECIFICATION: Measurement rules: Preliminaries/ Conditions have been prepared in accordance with SMM7.

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.

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 completion and proper execution of the works.

320 PRICING OF CONTRACT SUM ANALYSIS: Alterations and qualifications to the Specification must not be made without the written consent of the CA.
Tenders containing unauthorised alterations or qualifications may be rejected.
Costs relating to items in the specification which are not priced will be deemed to have been included elsewhere in the tender.

330 THE PRICED TENDER/CONTRACT SUM ANALYSIS: Must be completed in full with all items priced (not just the collections) and submitted with the tender for the tender to be considered and accepted.

480 PROGRAMME: The Contractors proposed programme as specified in Section A32 or a summary thereof showing the sequence and timing of the principal parts of the works, period for planning and design and itemising any work which is excluded must be submitted with the 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.

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 Standards or British Standard glossary.

120 COMMUNICATION:
Definition: Includes advice, 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.

145 CONTRACTORS CHOICE
Meaning: Selection delegated to the contractor, but liability to remain with the specifier.

150 CONTRACTORS 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 THE 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 pipe work, wiring, ductwork or other services.
Fix: Recieve, unload, handle, store, protect, place and fasten in position and disposal of waste and surplus packing including all labour, materials and site equipment for the purpose.
Supply and fix: As above, but including supply of 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.

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 acceptable, 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 omissions: Wherever products are specified by propriety name the phrase " or equivalent" is to be deemed included.

250 CURRENCY OF DOCUMENTS

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 DRAWINGS/DOCUMENTS

Copies: Two copies of each contract drawing and contract document will be issued free of charge (not counting any certified copies).
Additional copies: Issued on request and charged to the contractor.

440 DIMENSIONS
Do not scale from the drawings if possible use figured dimensions in preference.

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/SUBCONTRACTOR/SUPPLIERS

600 CONTRACTORS 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, comment, inspection, amendment, resubmission and re-inspection.
Information required: Schematic drawings of the extended heating system including alterations to the existing system.
Submit: Within one week of request.

620 AS BUILT DRAWINGS AND INFORMATION
Contractors designed work: Provide drawings / information.
Submit: At least two weeks before date of completion.

630 TECHNICAL LITERATURE
Information: Keep on site for reference by all supervisory personnel.
- Manufacturer's current literature relating to all products to be used in the Works.
- Relevant British, EN or ISO 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.
Extent of cover: State cover provided.

650 ENERGY RATING CALCULATION
Calculation documentation:
- Number of copies: Three
- Deliver to: Energy Performance Certificate Assessor and also lodge in the Building Manual.

A32 MANAGEMENT OF THE WORKS

GENERALLY

110 SUPERVISION
Accept responsibility for co-ordination, supervision and administration of the Works, including all subcontracts. 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 Works.

120 INSURANCE
Documentary evidence: Submit details before starting work on site and/or polices and Receipts for the insurances required by the Conditions of the Contract.

125 PROFESSIONAL INDEMNITY INSURANCE
Provide and maintain insurance in respect of Contractor Designed Works.
- Level of cover: relates to claims or series of claims arising out of one event or is the aggregate amount for any one period of insurance.
- Period of insurance required: One year.

Amount of indemnity required: £ To be confirmed.
Limit of cover for pollution/contamination claims (if none is stated, the required level of cover shall be the full amount of the indemnity cover stated): To be confirmed.
Expiry of required period of CDP Professional Indemnity insurance: Six years.
Documentary evidence: Submit details before starting work on site and/or polices and receipts for the insurances required.

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 temperature (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: Immediately when requested and before starting work on site submit in an approved form a master programme for the Works, which must include details of:
- Planning and mobilisation by the Contractor.
- Subcontractors work.
- 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.

Submit two copies.

231 SUBMISSION OF PROGRAMMES
Will not relieve the Contractor of his responsibility to advise the CA of the need for further drawings or details or instructions in accordance with Clause 1.7.2 of the Conditions of Contract.

240 COMMENCEMENT OF WORK
Inform the CA at least 5 working days before the proposed date for commencement of work on site.

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 the 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: Monthly. 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). The CA.

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): Three weeks, CA to be informed.

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
As soon as possible and before starting work on site submit it the CA 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 with CA 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.

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

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 PRODUCTS STORED OFF SITE
Evidence of Title: Submit reasonable proof that the property in items stored off site to be included in valuations is vested in the Contractor.
Include for products purchased from a supplier:
- A copy of the contract of sale.
- A written statement from the supplier that any conditions of the sale relating to the passing of property have been fulfilled and the products are not subject to any encumbrance or charge.

Include for products purchased from a supplier by a subcon-tractor 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.

A33 QUALITY STANDARDS/CONTROL

STANDARDS OF PRODUCTION 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 qualitity 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 Skill Certification Scheme.
Evidence: Operatives must produce evidence of skills/qualifications when requested.

130 QUALITY OF PRODUCTS
Generally: New. (Proposed 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: Without defects, 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 propriety 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 method 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 approved unless confirmed in writing referring to:

- Date of inspection.
- Part of the work inspected.
- Respects or characteristics which are approved.
- 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.

Agrement 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 proved.
- Tested to BS EN 1008 if instructed.

SAMPLES/APPROVALS

210 SAMPLES
Products or execution: 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
Submission, 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 for 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 method and equipment to be used in setting out of 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
Tolerance 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 BS5606, 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: +/- 10mm.
- Floors to receive dry board/panel construction with little or no tolerance on thickness: +/-10mm.
- Floors to receive mastic asphalt flooring/underlay's directly: +/-10mm.
- Floors to receive mastic flooring/underlay's laid on mastic asphalt levelling coat(s): +/- 15mm.
- Floors to receive fully bonded screeds/topping/beds: +/- 15mm.
- Floors to receive unbounded or floating screeds/beds: +/- 20mm.

380 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 Statutory Authority.

420 WATER REGULATIONS/BYELAWS NOTIFICATION

Requirements: Notify Water Undertakers 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 installations and/or work carried out to an existing installation.
- The Contractor's that the installation complies with the relevant Water Regulation or Byelaws.
- The name and signature of the individual responsibility 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.

440 GAS, OIL AND SOLID FUEL APPLIANCE INSTALLATIONS CERTIFICATE

Before the completion date stated in the contract: Submit a certificate stating:

- The address of the premises
- A brief description of the new installation and/or work carried out to an existing installation.
- Any special recommendations or instructions for the safe use and operation of appliances and flues.
- The Contractor's name and address.
- A statement that the installation complies with the appropriate safety, installation and use regulations.
- The name, qualification and signature of the competent person responsible for checking compliance.
- The date on which the installation was checked.

Certificate location: 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 fixings 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 Regulation Notice: Copy to be lodged in the Building Manual.

SUPERVISION/INSPECTION/DEFECTIVE WORK

525 ACCESS

Extent: Provide at all reasonable times access to the Works and to other places of the Contractor or subcontractor where work is being prepared for the Contract.

Designate: Architect.

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: One day.

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.

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 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.

570 AIR PERMEABILITY

Not required for this project.

Method: Pressure test in accordance with the ATTMA publication: TS 1 : Measuring Air Permeability of Building envelopes.

Requirement: Air leakage not to exceed..... m3/(h.m2) at an internal at external pressure difference of.....Pascal's.

Results: Submit To the C.A.

Copy: To be lodged in the Building Manual.

580 CONTINUITY OF THERMAL INSULATION

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

- The address of the premises.
- The contractor's name and address
- The name, qualification and signature of the competent person responsible for checking compliance.
- The date on which the installation was checked.

Submit: Before completion of the Works.

Copy: To be lodged in the Building Manual.

590 RESISTANCE TO PASSAGE OF SOUND
Method: Specified constructions.
Compliance: Submit notifications.
- Copies: Incorporate in the Building Manual.

595 ENERGY PERFORMANCE CERTIFICATE
Not required for this project.
Assessment: Undertaken by a member of an approved accreditation scheme. Submit details of scheme name and evidence of qualifications when requested.
- Building Type: Dwelling.
- Method: Standard Assessment Procedure (SAP) for dwellings.

Format:
- Certificate: To be incorporated in the Building Manual.
- Report: To CA.

Submit: Before the date for completion stated in the contract.

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.

WORK AT OR AFTER COMPLETION

710 WORK BEFORE COMPLETION
General: Make good all damage consequent upon the Works.
- Temporary markings, covering 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 itemised schedule, retaining duplicate schedule signed by Employer as a receipt.

730 MAKING GOOD DEFECTS
Remedial work: Arrange access with the Architect.
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.
- Clients 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.

120 EXECUTION HAZARDS
Common hazards: Not listed. Control by good management and site practice
Significant hazards: None present.

130 PRODUCT HAZARDS
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.
Common hazards: Not listed. Control by good management and site practice.

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.
Special requirements: Ensure any valuable materials or easily portable equipment stored on site is kept dry and locked away overnight.

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
The building will not be occupied during the works.
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 paid to the Contractor, provided that such overtime is authorized in advance.

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 CONTROL
Standard: Comply with the recommendations of BS 5228-1, in particular clause 7.3, to minimize noise levels during the execution of the Works.

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: Only where specified or approved, and then only suitable products listed on www.pesticides.gov.uk.
Restrictions: Work near water, drainage or land drains must comply with the "Guidelines for the use of herbicides on weeds in or near watercourses and lakes".
Containers: Comply with manufacturer's disposal recommendations. Remove from site immediately empty or no longer required.
Competence: Operatives must hold a BASIS Certificate of competence, or work under supervision of a Certificate holder.

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.

370 ASBESTOS CONTAINING MATERIALS
Duty: Report immediately any suspected materials discovered during execution of the Works.
- Do not disturb
- Agree methods for safe removal or encapsulation.

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

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 the Construction Confederation 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 materials 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 particles, toxins and other micro organisms are within acceptable levels.

430 WASTE

Includes: Rubbish, debris, spoil, containers and surplus material.

Minimize: Keep the site and Works clean and tidy.

Remove: Frequently and dispose off site in a safe 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.

Voids and cavities in the construction: Remove rubbish, dirt and residues before closing in.

Waste transfer documentation: Retain on site.

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 mains/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 services 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 operations, to service authority's/statutory undertakers recommendations.

520 ROADS AND FOOTPATHS

Duty: Maintain roads and footpaths within an 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.

570 EXISTING WORK

Protection: Prevent damage to existing work, structure and 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,

600 EXISTING FURNITURE, FITTINGS AND EQUIPMENT
Protection: Prevent damage or move as necessary to enable the Work to be executed, cover and protect as necessary and reinstate in original positions.

625 ADJOINING PROPERTY RESTRICTIONS
Precautions:
- Prevent trespass of workpeople and take precautions
  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 method 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 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 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 SPECFIC LIMITATIONS ON METHOD/SEQUENCE/TIMING

130 METHOD/SEQUENCE OF WORK
Specific Limitations: Include the following in the programme:
- The sequence of work in this section are supplementary to limitations described or implicit in information given in other sections or on the drawings.

170 WORKING HOURS
Specific limitations: 8.00am to 17.30pm. Monday to Friday unless otherwise agreed with the C.A. and the client.
Weekend working may be permitted with 5 days prior notice to the C.A.

A36 FACILITIES/TEMPORARY WORKS/SERVICES GENERALLY

110 SPOIL HEAPS, TEMPORARY WORKS AND SERVICES
Location: Give notice of intended sitting.
Maintenance: Alter, adapt and move as necessary. Remove when no longer required and make good.

ACCOMMODATION

230 TEMPORARY ACCOMMODATION
Accommodation made available by the Employer: The following may be used for the duration of the Contract without charge provided that:
- It is used solely for the purposes of carrying out the Works.
- The use to which it is put does not involve undue risk of damage.
- Any temporary adaptations are approved by or on behalf of Employer before being carried out.
- It is vacated on completion of the Works or determination of the Contract.
- When vacated, its condition is at least equivalent to its condition at the start of the Contract.

The accommodation/land: The use of the site, and possibly one downstairs room for use as an office. This is to be confirmed by the Employer.

230 TEMPORARY ACCOMMODATION
Proposals for temporary accommodation and storage for the Works: Materials may be stored within the building.

230 TEMPORARY ACCOMMODATION
Facilities: Sanitary accommodation will be provided for the duration of the Contract as follows:
- Contractor to provide a chemical toilet, position to be determined

340 NAME BOARDS
Name boards/advertisements: Not permitted, without consent.

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: Metered by the Contractor and charged to the Contractor.

Continuity: The Employer will not be held 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: Metered by the Contractor and charged to the Contractor.

Continuity: The Employer will not be held responsible for the consequences of failure or restriction in supply.

440 TELEPHONES
Direct communications: As soon as practicable after the Date of Possession provide the Contractor's person in charge with a mobile telephone.

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.

540 METER READINGS

Charges for services 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.

550 THERMOMETERS

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

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: For likely work force numbers.
- High visibility waistcoats to BS EN 471 Class 2.
  Number required: For likely work force numbers.
- Safety boots with steel insole and toecap to BS EN ISO 20345
  Pairs required: For likely work force numbers.
- 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

110 THE BUILDING MANUAL

Responsibility: The Contractor is to assemble.

Content : Obtain and Provide comprehensive information for owners and users of the completed Works. Include an overview of the main design principles and describe key components and systems within the finished Works, so affording a complete understanding of the Works, including all buildings and their systems to enable efficient and safe operation and maintenance.

155 CONTENTS OF THE BUILDING MANUAL

General: Details of the property, the parties, fire safety strategy, operational requirements and constraints of a general nature.

Building fabric: Design criteria, maintenance details, product details, and environmental and trafficking conditions.

Building Services: Description and operation of systems, diagrammatic drawings, record drawings, identification of services, product details, equipment settings, maintenance schedules, consumable items, spares and emergency procedures.

Documentation: Guarantees, warranties, maintenance agreements, test certificates and reports.

160 PRESENTATION OF BUILDING MANUAL

Format: A4 size, plastic 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.

MATERIALS AND WORKMANSHIP

C20 DEMOLISHING STRUCTURES

05 SURVEY

Scope: Before starting demolition work, examine available information, and carry out a survey of:

- The structure to be demolished and the surrounding area.

Report and method statements: Submit, describing:

- Form, condition and detail of the structure or structures, the site and the surrounding area.

  Extent:
- Form and location of materials identified for reuse or recycling, and proposed methods for removal and temporary storage.
- Type, location and condition of adjoining or surrounding premises that might be adversely affected by removal of the structure or structures or by noise, vibration and / or dust generated during demolition.
- The identification and location of services above and below ground.

10 EXTENT OF DEMOLITION

General: Subject to retention requirements specified elsewhere, demolish structures down to underside of footings.

35 LIVE FOUL AND SURFACE WATER DRAINS

General: Protect drains and fittings still in use. Keep free of debris and ensure normal flow during demolition.

Damage: Make good damage arising from demolition work. Leave clean and in working order at completion of demolition work.

50 WORKMANSHIP

Standard: Demolish structures in accordance with BS 6187.

Operatives: Appropriately skilled and experienced for the type of work. Holding, or in training to obtain, relevant CITB Certificates of Competence.

Site staff responsible for supervision and control of work: Experienced in the assessment of risks involved and methods of demolition to be used.

65 STRUCTURES TO BE RETAINED

Extent: Areas around openings to be formed.

Parts which are to be kept in place: Protect.

Interface between retained structures and demolition: Cut away and strip out with care to minimize making good.

70 PARTLY DECONSTRUCTED / DEMOLISHED STRUCTURES

General: Leave partly in a stable condition, with adequate temporary support at each stage to prevent risk of uncontrolled collapse. Make secure outside working hours.

Access: Prevent access by unauthorized persons.

71 DANGEROUS OPENINGS

General: Provide guarding at all times, including outside of working hours. Illuminate during hours of darkness.

Access: Prevent access by unauthorized persons.

76 ASBESTOS-CONTAINING MATERIALS-UNKNOWN OCCURENCES

Discovery: Give notice immediately of suspected asbestos-containing materials when discovered during demolition work. Avoid disturbing such materials.

Removal: Submit statutory risk assessment and details of proposed methods for safe removal.

78 UNFORESEEN HAZARDS
Discovery: Give notice immediately when hazards, such as unrecorded voids, tanks, chemicals, are discovered during demolition.
Removal: Submit details of proposed methods for filling, removal, etc.

85 SITE CONDITION AT COMPLETION
Debris: Clear away and leave the site tidy on completion.

90 CONTRACTOR'S PROPERTY
Components and materials arising from demolition work(except for hardcore) : Property of the Contractor except where otherwise provided.
Action: Remove from site as work proceeds where not to be reused or recycled for site use.

91 EMPLOYER'S PROPERTY
Components and materials to remain the property of the Employer: Description: Hardcore Brick, stone and concrete rubble or other hard material arising from demolition work may be reused as hardcore subject to compliance with section D20.

95 RECYCLED MATERIALS
Materials arising from demolition work: Can be recycled or reused elsewhere in the project, subject to compliance with the appropriate specification and in accordance with any site waste management plan.

C52 FUNGUS / BEETLE ERADICATION

26 FUNGAL ATTACK
Dry rot:
- Fruiting bodies: Spray with fungicide. Remove carefully and clean affected surfaces.
- Infected materials to be removed: Cut out until sound timber is reached.

Wet rot:
- Decayed timber to be removed: Cut out until sound timber is reached.

Infected / decayed material to be retained: Obtain instructions.

30 BEETLE INFESTATION
Infected timber: Cut, scrape and trim back to sound timber.
Remove debris immediately and dispose safely.

37 TIMBER PRESERVATIVES / MASONRY FUNGICIDES GENERALLY
Products: Registered by the Health and Safety Executive (HSE) and listed on the website under non-agricultural pesticides.
Application: In accordance with statutory conditions of approval given on product labels and manufacturers' recommendations.

42 TIMBER PRESERVATIVE TREATMENT
Preservative type: Contractors choice.
Tint: Required. Where wood not visible. Clear elsewhere.
Treatment method: To suit type, scale and location of fungal / beetle attack.
As manufacturer's recommendations.

D20 EXCAVATING AND FILLING

For the construction of the ramp, planter base, and decking pads.

10 PREPARATORY WORK
Following removal of the conservatory and the foundations.
Clear site of rubbish and vegetation..
Arisings: Remove from site.

20 STRIPPING TOPSOIL
General: Excavate from areas where there will be re-grading or construction work.
- Depth of removal: 300mm.

23 EXCAVATION AND BACKFILLING
Prior to commencing excavation: Excavate trial pits adjacent to existing foundations to determine extent and formation levels.
- Allow for inspection of trial pits
- Allow time for amendment of details if required.
  Time period: One week.

Requirement: Where excavations are close: complete all work including backfilling to the lower excavation before the higher excavation is made.

25 INSPECTING FORMATIONS
Notice: Make advance arrangements for inspection of formations.

28 STEPS IN FOUNDATION FORMATIONS
No steps in the foundations

30 OBSTRUCTIONS
Recorded foundations, beds, drains, etc: Break out and seal off drain ends, Remove contaminated earth.
Unrecorded foundations, beds, basements, filling, tanks, service pipes, drains, etc: Give notice.

35 EXCESS EXCAVATIONS
Excavation taken wider than required: Backfill as clause 60.
Excavation taken deeper than required: Backfill with well graded granular material or lean mix concrete.

40 SURPLUS EXCAVATED MATERIAL
Topsoil: Spread and level on site.
Remaining material: Remove from site.

50 HAZARDOUS, AGGRESSIVE OR UNSTABLE MATERIALS
Generally: Do not import or use fill materials which would, either in themselves or in combination with other material or ground water, give rise to a health hazard, damage to building structures or instability in the filling.

53 WATER
General: Keep excavations free from water until foundations and below ground constructions are completed.

55 PLACING FILL GENERALLY
Excavations and areas to be filled: Free from loose soil, rubbish and standing water.
Freezing conditions: Do not use frozen materials or materials containing ice. Do not place fill on frozen surfaces.
Fill against structures, membranes or buried services: Place and compact in a sequence and manner which will ensure stability and avoid damage.

60 BACKFILLING AROUND FOUNDATIONS

Under oversite concrete and pavings: Hardcore.

Under grassed or landscaped areas: Material excavated from the trench, laid and compacted in 300mm layers.

62 FROST SUSCEPTIBILITY

General: Except as allowed below, fill must be non frost-susceptible as defined in Highways Agency 'Specification for highway works' clause 801.17.

Frost-susceptibility fill: Use only within the external walls of buildings below spaces that will be heated. Protect from frost during construction.

65 HARDCORE

Fill: Granular material, free from harmful matter and excessive dust or clay, well graded, all pieces less than 75mm in any direction, and in any one layer only one of the following:

- Crushed hard rock or quarry waste.
- Crushed concrete, brick or tile, free from plaster.
- Gravel or hoggin.

Filling: Spread and level both backfilling and general filling in layers not exceeding150mm. Thoroughly compact each layer.

67 VENTILATED HARDCORE LAYER

Fill: Clean granular material, well graded, passing a 75mm BS sieve but retained on a 20mm BS sieve, and in any one layer only one of the following:

- Crushed hard rock.
- Crushed concrete, crushed brick or tile, free from plaster.
- Gravel.

Filling: Spread and level in 150mm maximum layers.

Thoroughly compact each layer, whilst maintaining enough voids to allow sufficient venting.

75 BLINDING TO HARDCORE

Surfaces to receive sheet overlays or concrete: Blind with:

- Concrete where shown on drawings: or
- Sand, fine gravel, or other approved fine material applied to provide a closed smooth surface.

Permissible deviation on surface level: +0- 25mm.

E10 MIXING / CASTING / CURING IN SITU CONCRETE

For the construction of the ramp.

15 SPECIFICATION
Concrete generally: To BS 8500-2
Exchange of information: Provide concrete producer with information required by BS 8500-1, clause 4 and 5.

20 DESIGNATED CONCRETE
Designation: GEN 1
Reinforced concrete: RC25/30 (to be confirmed by the S.E.)
Fibres: Not required
Aggregates:
- Size (maximum): 20mm.
- Additional aggregate requirements: Rounded course aggregate.

Special requirements for cement / combinations: None.
Consistence class: Contractors choice
Chloride class: GEN 3 Cl 1.0
Admixtures:None.

45 PROPERTIES OF FRESH CONCRETE
Adjustments to suit construction process: Determine with concrete producer. Maintain conformity to the specification.

50 PREMATURE WATER LOSS
Requirement: Prevent water loss from concrete laid on absorbent substrates.
- Underlay: Polyethylene sheet 250 micrometres thick.
- Installation: Lap edges 150mm.

60 PLACING AND COMPACTING
Surfaces to receive concrete: Clean, with no debris, tying wire clippings, fastenings or free water.
Timing: Place as soon as practicable after mixing and while sufficiently plastic for full compaction.
Temperature limitations for concrete: 30 degrees C (maximum) and 5 degrees C (minimum). Do not place against frozen or frost covered surfaces.
Compaction: Fully compact to full depth to remove entrapped air especially around reinforcement, cast-in accessories, into corners of formwork and at joints. Continue until air bubbles cease to appear on the top surface.
- Methods of compaction: To suit consistence class and use of concrete.

70 CURING AND PROTECTING
Evaporation from surfaces of concrete: Prevent throughout curing period.
- Surfaces covered by formwork: Retain formwork in position and, where necessary to satisfy curing period, cover surfaces immediately after striking.
- Top surfaces: Cover immediately after placing and compacting. Replace cover immediately after any finishing operations.

Curing periods:
- Surfaces which in the finished building will be exposed to the elements, and wearing surfaces of floors and pavements: 10 days (minimum).
- Other structural concrete surfaces: 5 days (minimum).

Protection: Protect concrete from shock, indentation and physical damage.

E20 FORMWORK FOR IN SITU CONCRETE

30 BOARD SUBSTRUCTURE FORMWORK
General: Lay tightly butted and fully supported on firm, even substrate. Restrain against movement during concrete placement. Seal joints to prevent penetration of concrete.
Collapsible boards with cellular cardboard cores: Keep dry. Seal joints in polyethylene underlay/ overlay sheets and reseal cut polyethylene bags.

70 FORMWORK
General: Accurately and robustly constructed to produce finished concrete to the required dimensions.
Formed surfaces: Free from twist and bow with intersections, lines and angles square, plumb and true.
Joints between forms and completed work: Prevent loss of grout and formation of steps.
Holes and chases: Form with inserts or box out as required.

F10 BRICK / BLOCK WALLING

For the construction of the planter, and the short section of new dwarf wall shown on plan 96/D-05

04 Single brick thick wall planter constructed using Staffordshire blue engineering bricks These bricks are to be the non-perforated type.
Planter to be 665mm wide. (215+10+215+10+215mm make up)
800mm high off a simple 600mm wide x 200mm deep concrete slab, 75mm below the tarmac level.
Planter to be cement rendered internally, using two coats 19mm in total.
Planter to have 100mm layer of pea shingle in the base before top soil is added.
Five number 25mm plastic waste pipe drains to be provided to discharge above the tarmac level on the side of the planter away from the building.
Joint in the brickwork to be flush and a black mortar to be used.
To be read with Preliminaries/ General conditions.

05 FACING BRICKWORK ABOVE GROUND
Bricks: To BS EN 771-1.
- Manufacturer and reference: To be advised by Contractor.
- Recycled content: None permitted.
- Special shapes: None envisaged at present.
- Durability designation: F2 Freeze / thaw resistance
- S2 Active soluble salts content. (old FL)
-

Mortar: As section Z 21.
- Standard: Not applicable.
- Mix: 1:1:6 cement:lime:sand, 4N/mm2 (mortar class 4).Mortar colour black.
- Bond: Stretcher.

Joints: Flush

45 ENGINEERING BRICKWORK BELOW GROUND LEVEL & MANHOLES (if required)

Bricks: To BS EN 771-1

- Manufacturer: Contractors choice
- Type: HD
- Mean compressive strength: 125N/mm2
- Water absorption: BS EN 772-7 4.5
- Freeze/ Thaw category: F2
- Active soluble salts content category: S2

Mortar: As section Z21

- Standard: Not applicable as site made mortar.
- Mix: 1 : 0.25 : 3 cement: lime: sand, 12N/mm2 (mortar class 12)

Bond: Half lap stretcher. English to manholes.

51 BASIC WORKMANSHIP

Bond where not specified: Half lap stretcher.

Mortar joints: Fill all vertical joints. Lay bricks solid and cellular blocks on a full bed.

Locations for equal levelling of cavity wall leaves:

- Every third tie course for double triangle/ butterfly ties.
- Courses in which lintels are to be bedded.

Lift height (maximum) for walling using cement gauged or hydraulic lime mortar: 1.2m above any other part of work at any time.

Daily lift height (maximum) for walling using cement gauged or hydraulic lime mortar: 1.5m for any one leaf.

55 FACEWORK

Commencement of facework: Not less than 150mm below finished level of adjoining ground or external works level.

Brick / block selection: Do not use units with damaged faces or arrises.

Cut masonry units: Where cut faces or edges are exposed cut with table masonry saw.

Coursing brickwork and concrete blockwork: Evenly spaced using gauge rods. To produce satisfactory junctions and joints with built-in elements and components.

G12 ISOLATED STRUCTURAL METAL

For the steelwork to be used in the new structural posts.

10 STEEL SECTIONS AND PLATE

See structural engineers details/drawings.

Section properties and dimensions: To BS 4-1, BS EN 10055, BS EN 10056 or BS EN 10210, as appropriate.

- Steel: To BS EN 10025-2 or BS EN 10210-1, as appropriate.
  Grade: S 275.
- Surface condition: Free from heavy pitting and rust, burrs, sharp edges and flame cutting dross.

Cuts and holes: Accurate and neat.

Welding: Metal arc method to BS EN 1011-2.

- Welded joints: Fully fused, with mechanical properties not less than those of the parent metal.
- Site welding: Obtain approval.

20 SHOP PRIMING

Preparation: To BS EN ISO 12944-4. Remove fins, burrs, sharp edges and weld spatter, clean out crevices.

- Surface finish: Manually cleaned to BS EN ISO 8501-1, grade St 2.
- Prepared surfaces: Keep in a dry atmosphere and apply first coating without delay.

Priming:

- Primer: One coat zinc phosphate modified alkyd, minimum dry film thickness 40 micrometres.
- Application: To BS EN ISO 12944-7.

35 BOLT ASSEMBLIES

Designation: Black bolte to BS 4190, grade 4.6

- Size: As engineers details.

Nuts and washers: Material grade and finish to suit bolts.
Coatings applied by manufacturer: Galvanised.

40 INSTALLATION

Accuracy: Members positioned true to line and level using, if necessary, steel packs of sufficient area to allow full transfer of loads to bearing surfaces.
Fixings: Use washers under bolt heads and nuts.
Tapered washers: Provide under bolt heads and nuts bearing on sloping surfaces. Match taper to slope angle and align correctly.

G20 CARPENTRY / TIMBER FRAMING / FIRST FIXING

02 TIMBER PROCUREMENT

Timber (including timber for wood based products): Obtained from well managed forests / plantations in accordance with:

- The laws governing forest management in the producer country or countries.
- International agreements such as the Convention on International Trade in Endangered Species of wild fauna and flora (CITIES).

Documentation: Provide either:

- Documentary evidence (which has been or can be independently verified) regarding the provenance of all timber supplied, or
- Evidence that suppliers have adopted and are implementing a formal environmental purchasing policy for timber and wood based products.

05 STRUCTURAL SOFTWOOD

Grading standard: To BS 4978, BS EN 14081-1, or other national equivalent and so marked.

- Timber of a target thickness less than 100mm and not specified for wet exposure: Graded at an average moisture content not exceeding 20% with no reading being in excess of 24% and clearly marked as "DRY" or "KD" (kiln dried).
- Timber graded undried (green) and specified for installation at higher moisture contents: Clearly marked as "WET" or "GRN".

Strength class to BS EN 338: C 24 or otherwise stated on SE drawings.
Treatment: Organic solvent impregnation to NBS section Z12 and Wood Protection Association Commodity Specification C8, service life: 40 years.

10 UNGRADED SOFTWOOD FOR INTERNAL NON-STRUCTURAL USE:

Quality of timber: Free from decay, insect attack (except pinhole borers) and with no knots wider than half the width of the section.
Surface finish: Sawn generally, regularised.
Treatment: See note to clause 5.

15 PLYWOOD FOR FASCIAS AND SOFFIT BOARDS

Standard: To an approved national standard.
Thickness: 19mm
Appearance class to BS EN 635: Class I/II
Bond quality to BS EN 314-2: Class 3 for exterior conditions
Finish: Sanded.
Treatment: See note to clause 5

30 SELECTION AND USE OF TIMBER

Timber members damaged, crushed or split beyond the limits permitted by their grading: Do not use.

32 NOTCHES, HOLES AND JOINTS IN TIMBER

Notches and holes: position in relation to knots or other defects such that the strength of members will not be reduced.
Scaf joints, finger joints and splice plates: Do not use without approval.

34 PROCESSING TREATED TIMBER

Cutting and machining: Carry out as much as possible before treatment.
Extensively processed timber: Retreat timber sawn lengthways, thicknessed, planed, ploughed, etc.
Surface exposed by minor cutting / drilling: Treat with two flood coats of a solution recommended by main treatment solution manufacturer.

35 MOISTURE CONTENT

Moisture content of wood and wood based products at time of installation: Not more than:

- Covered in generally unheated spaces: 24%
- Covered in generally heated spaces: 20%
- Internal in continuously heated spaces: 20%

43 BOLTED JOINTS

Bolt spacing (minimum): To BS 5268-2, table 81.
Holes for bolts: Located accurately and drilled to diameters as close as practical to the nominal bolt diameter and not more than 2mm larger.
Washers: Placed under bolt heads and nuts that would otherwise bear directly on timber. Use spring washers in locations which will be hidden or inaccessible.
Bolt tightening: So that washers just bite the surface of the timber. Ensure that at least one complete thread protrudes from the nut.

- Checking: At agreed regular intervals. Tighten as necessary.

45 FRAMING ANCHORS

Manufacturer: Catnic or similar approved.

- Product reference: Contractors choice.

Material / finish: Galvanized or sherardized.
Fasteners: Galvanized or sherardized square twist nails.

- Size: Not less than size recommended by anchor manufacturer.

Fixing: Secure using not less than the number of nails recommended by anchor manufacturer.

50 ADDITIONAL SUPPORTS

Provision: Position and fix additional studs, noggins and / or battens to support edges of sheet materials, and wall / floor / ceiling mounted appliances, fixtures, etc. Shown on drawings.
Materials properties: Timber to be of adequate size and have the same treatment as adjacent timber supports.

J42 SINGLE LAYER EPDM SHEET ROOF COVERING.

To the 10 degree pitched roof and the flat roof areas.
See detail drawing 96/A-02 Pitched roof areas.
See detail drawing 96/A-03 Flat roof areas.

10 WARM DECK ROOF COVERING.

Substrate: 19mm WBP plywood.
- Preparation: Not required as new work.

Roof covering system: Rubberbond fleeceback single ply
Manufacturer: Rubberbond.
- Product reference: Fleeceback EDPM
- Protection layer: Fleece layer.
- Air and vapour control layer: Breather membrane to Rubberbond approval.
- Insulation: Celotex XR4000 as the detail.
- Edges: As the detail.
- Thickness: 120 mm
- Seperating layer: To Rubberbond approval.
- Waterproofing layer: EPDM.

K10 PLASTERBOARD DRY LINING / PARTITIONS / CEILINGS

15 LINING ON TIMBER TO ALL PARTITIONS.

Substrate: Partitions, studs @ 400mm centres.
Ceilings, ceiling rafters where making good.
Linings: One layer 12.5mm plasterboard.
Fixings: Screws at 300mm centres to partitions
Screws at 230mm centres to ceilings.
Finishing: Skim coat plaster.
- Primer / Sealer: For emulsion paint.
- Accessories: Angle bead, edge bead where necessary, stops recommended by board manufacturer.

65 DRY LINING GENERALLY

General: Use fixing, jointing, sealing and finishing materials, components and installation methods recommended by board manufacturer.
Plasterboards: To BS EN 520.
Cutting plasterboards: Neatly and accurately without damaging core or tearing paper facing. Minimize cut edges.
Two layer boarding: Stagger joints between layers.
Finishing: Neatly to give flush, smooth, flat surfaces free from bowing and abrupt changes of level.

67 SKIM COAT PLASTER FINISH

Plaster type: Thistle board finish. British Gypsum.
- Thickness: 2-3mm.

Joints: Fill and tape except where coincident with metal beads.
Finish: Tight, matt, smooth surface with no hollows, abrupt changes of level or trowel marks.

69 INSTALLING BEADS / STOPS

Cutting: Neatly using mitres at return angles.
Fixing: Securely using longest possible lengths, plumb, square and true to line and level, ensuring full contact of wings with substrate.
Finishing: After joint compounds / plaster have been applied, remove surplus material while still wet from surfaces of beads exposed to view.

70 ADDITIONAL SUPPORTS
Framing: Accurately position and securely fix to give full support to:
- Partition heads running parallel with, but offset from main structural supports.
- Fixtures, fittings and services.
- Board edges and lining perimeters.

85 MINERAL WOOL INSULATION
Fitting insulation: Closely butted joints and no gaps. Prevent slumping.
Electrical cables overlaid by insulation: Size accordingly.

87 SEALING GAPS AND AIR PATHS
Sealing: Apply sealant to perimeter abutments and around openings as a continuous bead with no air gaps.
- Gaps between floor and underside of plasterboard: After sealing, fill with joint compound.

K11 RIGID SHEET FLOORING

30 PARTICLEBOARD FLOORING
Substrate: 50mm Celotex GA4000 insulation.
Additional supports: As clause 67
Flooring: Particleboard to BS EN 312, Type P5.
- Thickness: 18mm
- Edges: Tongued and grooved all edges.
- Recycled content: 70% (minimum) to BS EN ISO 14021
- Setting out: Long edges running across joists. End joints central over joists and staggered.
- Fixing to joists:
  Fasteners: 50mm x 8 gauge wood screws into pilot holes.

Joint adhesive: PVA to BS EN 204, class D3.
Expansion provision: 10mm clear expansion gap around floor perimeter of floor area and any upstands.

Note Insulation and flooring to be laid "after all the full height partitions are in place..
Toilet and shower areas together with the kitchen and dining space to have moisture grade 18mm particle boards.

L10 WINDOWS.

15 WOOD WINDOWS.
All windows to be fully overhauled and fully decorated.
Any window members that are found to be rotten or decayed are to be replaced with new members machined to match.
Window W1. This window to be removed from the opening and modified to accommodate door D3 and frame.

L20 DOORS.

10 TIMBER PROCUREMENT
Timber (including timber for wood-based products): Obtained from well managed forests and/ or plantations in accordance with:
- The laws governing forest management in the producer country or countries>
- International agreement such as the Convention on International Trade in Endangered Species of wild fauna and flora (CITES).

Documentation: Provide either:
- Documentary evidence (which has been or can be independently verified) regarding the provenance of all timber supplied.
- Evidence that suppliers have adopted and are implementing a formal environmental purchasing policy for timber and wood based products.

25 GLAZED EUROPEAN OAK EXTERNAL DOORS & SCREENS AS D-06
D1 Pair of doors made to suit existing door frame/opening.
D2 Single door made to suit reduced door frame/opening.
D3 Single door made to suit new door frame/opening.
S1 Double screen formed into the existing softwood frame.
S2 Split single panel screen formed in the remaining opening of D2
Door construction sizes: 300x44mm lower rails 120x44mm stiles 120x44mm top rail.
Screen member sizes: 300x44mm lower rails 120x44mm top rail. 100x68mm mullions
Finish as delivered: Clear finish including the hardwood glazing beads held with turned flush brass cups and brass semi raised brass screws on the inside of the door.
Glazing details: Double glazed to FENZA standard with low "
E" glass to provide minimum "U" value of 1.2W/m2K).
Ironmongery: All ironmongery to be as schedule to follow.

26 INTERNAL HALF HOUR ASH VENEERED DOORS. HARDWOOD LIPPED.
D4 to D7 826 x 2040 x 44mm doors and frames to fit new 910mm openings.

27 INTERNAL HALF HOUR FLUSH DOORS FOR PAINTING.
Complete with kickplates both sides 400mm high in SAA and overhead closers.
D8 926 x 2040 x 44 mm door to fit a 1010mm opening for the disabled WC.Kickplate.
D14 to D19 826 x 2040 x 44 mm doors and frames to fit 910mm openings.

28 INTERNAL SOFTWOOD GLAZED DOORS & SCREENS
D20 926 x 2040 x 44 mm double glazed door similar to D2 in design.
Screen S8 formed into the original opening, doubled glazed.

D9 to D14 826 x 2040 x 44mm Softwood double glazed doors (similar to D2).to fit into screens S3,S4,S5,S6,S7. Overall screen/door opening 2100mm Wide 2100mm high Double glazed screens with central vertical mullions.

D21 & D22 These pairs of doors are existing doors to be reused, following overhaul and decoration.

65 PRIMING/SEALING
Wood surfaces inaccessible after installation: Prime or seal as specified before fixing components.

66 WOOD DOOR FRAMES
Materials: Generally to BS EN 942.
- Species: As clause 29
- Appearance class: As clause 29

Assembly, Adhesive, Joinery workmanship, Preservative treatment, Moisture content, Finish on delivery, All as clause 29
Fixing:
- Spacing of fixings (frames not predrilled): Maximum 150mm from end of each jamb, adjacent to each hanging point and at 600mm maximum centres.

80 SEALANT JOINTS
Sealant:
- Manufacturer: Tremco
  Product reference: Mono
- Colour: To suit location.
- Application: As section Z22 to prepared joints Triangular fillets finished to a flat or slightly convex profile.

85 FIXING IRONMONGERY GENERALLY
Fasteners: Supplied by ironmongery manufacturer.
- Finish/ Corrosion resistance: To match ironmongery.

Holes for components: No larger than required for satisfactory fit/ operation.
Adjacent surfaces: Undamaged.
Moving parts: Adjust, lubricated and functioning correctly at completion.

L40 GENERAL GLAZING

10 WORKMANSHIP GENERALLY
Glazing:
- Generally: To BS 6262
- Integrity: Wind and watertight under all conditions. Make full allowance for deflections and other movements.

Glass:
- Standards: Generally to BS 952 and to the relevant parts of:
  BS EN 572 for basic soda lime silicate glass.
  BS EN 1096 for coated glass.
  BS EN 12150 for thermally toughened soda lime silicate glass.
  BS EN ISO 12543 for laminated glass.
- Quality: Free from scratches, bubbles and other defects.
- Dimensional tolerances: Panes/ sheet to be accurately sized.

Material compatibility: Glass/ plastic, surround materials, sealers primers and paint/ clear finishes to be compatible.
Comply with glazing/ sealant manufacturers' recommendations.

30 PREPARATION
Surrounds, rebates, grooves and beads: Clean and prepare before installing glazing.

ALL GLAZING TO MEET PART N. (A.D. Building Regs) DIAGRAMS 1 & 2.
THIS SHOWS WHERE TO USE THE CORRECT GLASS.

M20 PLASTER/RENDERED/ROUGHCAST COATINGS
To be read with Preliminaries/ General conditions.

50 GYPSUM PLASTER SKIM COAT ON PLASTERBOARD
Plasterboard manufacturer: British Gypsum.
- Product reference: Gyproc Wallboard.

Plaster: Board finish plaster to BS EN 13279-1, class B
- Manufacturer: British Gypsum.
  Product reference: Thistle Board Finish.
- Thickness: 5mm applied in 2 coat(s).
- Finish: Smooth.

60 CEMENT FOR MORTARS
Cement: To BS EN 197-1 and CE marked.
- Types: Portland cement, CEM I.
  Portland slag cement, CEM II
  Portland fly ash cement, CEM II
- Strength class: 32.5, 42.5, 52.5.

Sulfate resisting cement: To BS 4027 and Kitemarked.
Masonry cement: To BS EN 998-1 and Kitemarked.
- Class: MC 12.5 (with air entraining agent).

62 ADMIXTURES FOR CEMENT GAUGED MORTARS
Air entraining (plasticizing) admixtures: To BS EN 934-2 and compatible with other mortar constituents.
Other admixtures: Calcium chloride and admixtures containing calcium chloride.

65 MIXING

Render mortars (site-made):

- Batching: By volume using gauge boxes or buckets.
- Mix proportions: Based on damp sand. Adjust for dry sand.

Mixes: Of uniform consistence and free from lumps.

67 COLD WEATHER

Internal work: Take precautions to prevent damage to internal coatings when air temperature is below 3 degree C.

External work: Avoid when air temperature is at or below 5 degrees C and falling or below 3 Degrees C and rising.

71 SUITABILITY OF SUBSTRATES

General: Suitable to receive coatings. Sound, free from contamination and loose areas.

80 PLASTERBOARD BACKINGS

Additional framing supports:

- Fixtures, fittings and services outlets: Accurately position to suit fasteners.
- Board edges and perimeters: To suit type and performance of board.

Joints:

- Joint widths (maximum): 3mm
- End joints: Stagger between rows.
- Two layers boarding: Stagger joints between layers.

Joint reinforcement tape: Apply to joints and angles except where coincident with metal beads.

82 BEADS/STOPS

Location: External angles and stop ends.

Materials:

- External render: Stainless steel.
- Internal plaster/ render: Galvanised steel.

Fixing: Secure and true to line and level.

- Beads/ stops to external render: Fix mechanically.

87 APPLICATION OF COATINGS

General: Apply coatings firmly and achieve good adhesion.

Appearance of finished surfaces: Even and consistent. Free from rippling, hollows, ridges, cracks and crazing.

- Accuracy: Finish to a true plane with walls and reveals plumb and square.

Drying out: Prevent excessively rapid or localized drying out.

Keying undercoats: Cross scratch plaster coatings and comb render coatings. Do not penetrate undercoat.

93 CURING AND DRYING OF RENDER COATINGS

Curing: Keep each coat damp by covering with polyethylene sheet and/ or spraying with water.

- Curing period (minimum): 3 to 4 days

Drying: Allow each coat to dry thoroughly, with shrinkage substantially complete before applying next coat.

99 RENDER FINAL COAT – PLAIN FLOATED FINISH

Finish: Even, open texture free from laitance.

M40 STONE/CONCRETE/QUARRY/CERAMIC TILING/MOSAIC

05 TILING TO WALLS.
Behind the vanity unit to Male & Female toilet.
2 No courses of tiles (900mm in length).

Dish washing area.
2No courses to sides and back behind the base unit.

Meeting room wet area on Grid line 3.
2No courses to sides and back behind the base unit.

Disabled WC. All walls to be firstly lined with Weddi boarding for tiling.
Tile on all walls with tiles to be confirmed, up to 1600mm above FFL.

Kitchen area.
2No courses behind the base units on three sides, up to underside of the cill.
Tiles: Ceramic Glazed wall tiles.
- Manufacturer/ Supplier: TBC
- Product reference: TBC
- Colour: TBC
- Size: 150 x 150 mm. Except the disabled WC.

Background/ Base: Plastered walls and plastered studwork.
- Preparation: Ensure all plaster is sound.

Bedding:
- Adhesive: Adhesive bed – notched trowel method, as clause 50

Joint width: As spacer lugs.
Grout: To BS EN 13888 CG2WA (with reduced water absorption and high abrasion resistance. Accessories: TBC.

25 NEW PLASTER
Plaster primer: Apply if recommended by adhesive manufacturer.

30 FIXING GENERALLY
Colour/ shade: Avoid unintended variations within tiles for use in each area/ room.
- Variegated tiles: Mix thoroughly.

Adhesive: Compatible with background/ base.
Cut tiles: Neat and accurate.
Fixing: Provide adhesion over entire background/ base and tile backs.
Final appearance: Before bedding material sets, make adjustments necessary to give true, regular appearance to tiles and joints.
Deviation of surface: Measure from underside of a 2m straightedge with 3mm thick feet placed anywhere on surface. The straightedge should not be obstructed by the tiles/ mosaics and no gap should be greater than 6mm, ie. A tolerance of +or- 3mm.
Surplus bedding material: Clean from joints and face of tiles/ mosaics.

35 SETTING OUT
Joints: True to line, continuous and without steps.
- Joints on walls: Horizontal, vertical and aligned round corners.
- Joints in floors: Parallel to main axis of space or specified features.

Cut tiles: Minimise number, maximise size and locate unobtrusively.
Joints in adjoining floors and walls: Align.
Joints in adjoining floors and skirtings: Align.

50 ADHESIVE BED – NOTCHED TROWEL METHOD TO WALLS
Application: By 3mm floated coat of adhesive to dry background. Comb surface.
Tiling: Press tiles firmly onto float coat.

60 ADHESIVE BED – NOTCHED TROWEL AND BUTTERING METHOD TO FLOORS
Application: Floated coat of adhesive to dry base comb surface.
Tiling: Apply coat of adhesive to back of dry tiles. Fill any profiles. Press tiles firmly onto float coat.
Finished adhesive thickness: Within range allowed by manufacturer.

70 GROUTING
Sequence: Grout when bed/ adhesive has set sufficient to prevent disturbance of tiles.
Joints: 6mm deep (or depth of tiles if less). Free from dust and debris.
Grouting: Fill joints completely, tool o profile, clean off surface. Leave free from blemishes.
Polishing: When grout is hard, polish tiling with dry cloth.

M50 RUBBER/PLASTIC/CORK/LINO/CARPET TILING/SHEETING

20 SHEETING: VINYL NON-SLIP FLOORING
To the toilets/showers/kitchen areas.
Base: Moisture resistant particle board.
- Preparation: Clean floor of all matter.

Fabricated underlay: As manufacturer's recommendations.
Flooring roll: Homogeneous PVC to BS EN 649.
- Manufacturer: Altro
- Product reference: Non slip safety flooring.
- Width: Floor to be laid with welded joints colour of weld to be as the floor colour.
- Thickness: 3mm.
- Colour/ pattern: TBD

Adhesive (and primer if recommended by manufacturer):
- As Amtico recommendations.

Seam welding: For coves and 100mm skirting's only.

25 CARPETING THETFORD CORD OR SIMILAR APPROVED: TO ALL OTHER AREAS.
Base: Partical boarding
- Preparation: Grippers to the perimeter, and a good underlay.
- Carpet underlay: To BS 5808 and BS EN 14499. Rubber crumb class GC/U.
- Manufacturer: TBD
- Recycled content: 90% (minimum) to BS EN 14021

Carpet: Thetford cord or similar approved.
- Manufacturer: TBD
- Product Ref, Colour/ pattern, Recycled content, Width,: TBD

66 COMMENCEMENT
Do not lay materials until building is weathertight, wet trades have finished their work, the building is well dried out, all paintwork is finished and dry, conflicting overhead work completed, and floor service outlets, duct covers and other fixtures around which the materials are to be cut have been fixed. Inform CA not less than 48 hours before commencing laying.

85 WASTE
Spare covering material: Retain suitable material for patching.
On completion submit pieces for selection. Hand over selected pieces to Employer.

M60 PAINTING/CLEAR FINISHING

10 EMULSION PAINT TO NEW & MADE GOOD CEILINGS
Manufacturer: Dulux.
- Product reference: Matt.

Surfaces: Internal new & repaired plaster.
- Preparation: As clause 30 & 32.

Initial coats: Seal plaster as manufacturers recommendations.
- Number of coats: 1 mist coat vinyl matt emulsion

Finishing coats:
- Number of coats: 2 full coats vinyl matt emulsion.

12 GLOSS PAINT TO ALL NEW & MADE GOOD WOODWORK
Manufacturer: Dulux
- Product reference: TBC

Surfaces: Internal & External. New & made good.
- Preparation: Previously painted surfaces. Rub down & fill defective areas. New wood surfaces. Sand smooth, and apply knotting sealer.

Initial coats: A suitable wood primer, as Dulux rec.
- Number of coats: As Dulux rec.

Undercoats:
- Number of undercoats: 1 coat.

Finishing coats:
- Number of coats: 2 Full coats

14 EMULSION PAINT TO NEW & MADE GOOD WALLS
Manufacturer: Dulux.
- Product reference: Eggshell

Surfaces: Internal new & repaired plaster.
- Preparation: As clause 30 & 32.

Initial coats: Seal plaster as manufacturers recommendations.
- Number of coats: 1 mist coat eggshell emulsion

Finishing coats:
- Number of coats: 2 full coats eggshell emulsion.

18 SPECIAL COATING TO TIMBER: NEW INTERNAL DOORS.
Manufacturer: Dulux
Product reference: TBC to match the existing internal doors.
Surfaces:
- Preparation: Sand smooth, with flour paper.

Initial, Undercoat, and final coat: All as Dulux recommendations.

30 PREPARATION GENERALLY
Standard: In accordance with BS 6150.
Risk assessment and method statement for hazardous materials: Prepare for operations, disposal of waste, containment and reoccupation, and obtain approval before commencing work.
Preparation materials: Types recommended by their manufacturers and the coating manufacturer for the situation and surfaces being prepared.
Substrates: Sufficiently dry in depth to suit coating.
Efflorescence salts, dirt, grease, and oil: Remove.
Surface irregularities: Provide smooth finish.
Organic growths and infected coatings:
- Remove with assistance of biocidal solution.
- Apply residual effect biocidal solution to inhibit regrowth.

Joints, cracks, holes and other depressions: Fill with stoppers/ fillers.Provide smooth finish.
Dust, particles and residues from preparation: Remove and dispose of safely.Doors, opening windows and other moving parts:
- Ease, if necessary, before coating.
- Prime resulting bare areas.

32 PREVIOUSLY COATED SURFACES GENERALLY

Preparation: In accordance with BS 6150, clause 11.5.
Contaminated or hazardous surfaces: Give notice of:
- Coatings suspected of containing lead.
- Substrates suspected of containing asbestos or other hazardous materials.
- Significant rot, corrosion or other degradation of substrates.

Risk assessment and method statement for hazardous materials: Prepare for operations, disposal of waste, containment and reoccupation, and obtain approval before commencing work.
Removing coatings: Do not damage substrate and adjacent surfaces or adversely affect subsequent coatings.
Loose, flaking or otherwise defective areas: Carefully remove to a firm edge.
Alkali affected coatings: Completely remove.
Retained coatings:
- Thoroughly clean.
- Gloss coated surfaces: Provide key.

Partly removed coatings: Apply additional preparatory coats.
Completely stripped surfaces: Prepare as for uncoated surfaces.

37 WOOD PREPARATION

General: Provide smooth, even finish with lightly rounded arrises.
Degraded or weathered surface wood: Take back surface to provide suitable substrate.
Degraded substrate wood: Repair with sound material of same species.
Heads of fasteners: Countersink sufficient to hold stoppers/ fillers.
Resinous areas and knots: Apply two coats of knotting.
Defective primer: Take back to bare wood and reprime.

39 STEEL PREPARATION

Corrosion and loose scale: Take back to bare metal.
Residual rust: Treat with a proprietary removal solution.
Bare metal: Apply primer as soon as possible.

41 MASONRY AND RENDERING PREPARATION

Loose and flaking material: Remove

43 PLASTER PREPARATION

Nibs, trowel marks and plaster splashes: Scrape off.
Overtrowelled 'polished' areas: Provide suitable key.

55 EXISTING GUTTERS

Dirt and debris: Remove from inside of gutters.
Defective joints: Clean and seal with suitable jointing material.
Suspected hazardous materials: Submit method statement.

61 COATING GENERALLY

Application: In accordance with BS 6150, clause 9.
Conditions: Maintain suitable temperature, humidity and air quality.
Surfaces: Clean and dry at time of application.
Thinning and intermixing: Not permitted unless recommended by manufacturer.
Priming coats: Apply as soon as possible on same day as preparation is completed.
Finish:
- Even, smooth and of uniform colour.
- Free from brush marks, sags, runs and other defects.
- Cut in neatly.

Doors, opening windows and other moving parts: Ease before every paint coat.

N10 GENERAL FIXTURES FURNISHINGS EQUIPMENT

70 BLINDS: To all windows on the South, East and North elevations.
Manufacturer: Luxaflex. UK. Sales@luxaflex-shutters.co.uk 0161 442 9500
Product reference: Vertical blinds.
Dimensions: To drop from the underside of the head, to 10mm above the cill.
Material: TBD
Finish colour: TBD
Operation: Pull cord/beaded chain at the end of each run.

71 AWNING OVER THE DECKING AREA.
Manufacturer: Luxaflex. UK. Sales@luxaflex-shutters.co.uk 0161 442 9500
Product reference: Armony.
Dimensions: 3.6m projection from wall, 8.5m in width.
Material: White Acrylic.

72 BICYCLE ENCLOSURE
See Appendix sheet.
Manufacturer: Bike dock solutions. www.bikedocksolutions.com
Type: 10 Bicycle enclosure with a clear curved top,back and sides.
Size: 4000mm long 2100mm high 2100mm wide.
Provide a 100mm deep concrete base 200mm wider than the structure.

73 5 No STEEL TUBULAR STANDS
See Appendix sheet.
Manufacturer: Bike dock solutions. www.bikedocksolutions.com
Type: Single Sheffeld Stand. Galvanised finish.
Size: 750mm high 750mm wide (to the centrelines 50mm dia tube.
Fixing: Bolted to the concrete slab

74 NEW MAT TO FIT INTO REDUCED MATWELL
Manufacturer: Nu-way mats.
Type: to be confirmed, suitable for wheel chair access.

N11 KITCHEN FITTINGS, FURNISHINGS AND EQUIPMENT.

MEETING ROOM 2.
Manufacturer: Howdens.
Base Units: White 600mm deep base units.
1 No 600mm wide three drawers
2No 500mm wide full height doors.
Charcoal colour melamine faced chipboard 600 mm deep bull nose front edge worktop over scribed to wall on three sides.
Sink: Stainless Steel inset sink and drainer. Right hand bowl. One tap hole. Including bottle trap/overflow/plug etc
Manufacturer: Leisure.
Tap: Bristan. Ceramic valve mixer.
Wall Units: White 300mm deep, 715mm high.
1 No 600mm wide. Full height cupboard space, 2No adjustable shelves.
2 No 500mm wide. Full height cupboard space. 2No adjustable shelves.

DISH WASHING. Near meeting room 2
Charcoal colour melamine faced chipboard 600mm deep bull nose front edge worktop scribed to wall on three sides, supported on 38 x 50mm softwood bearers screwed to the walls.
Small inset stainless steel bowl 300mm wide. Tap mounted on worktop.
Including bottle trap/overflow/plug etc
Manufacturer: Leisure.
Tap: Bristan. Ceramic valve mixer.
Bosch 600mm wide dishwasher under the worktop.
Wall Units: White 300mm deep, 715 mm high
Manufacturer: Howdens.
1 No 500mm wide. Full height cupboard space 2No adjustable shelves.
1 No 400mm wide. Full height cupboard space 2No adjustable shelves.
KITCHEN
Base units: White 600mm deep base units.
Manufacturer:Howdens
2No 400mm wide three drawers. (each side of kitchen)
3No 500mm wide full height doors 2no adjustable shelves.
1No 600mm wide three drawers.
6No end panels
Sink: Stainless Steel inset sink and drainer. Left hand bowl. One tap hole.
Including bottle trap/overflow/plug etc
Manufacturer: Leisure.
Tap: Bristan. Ceramic valve mixer.
Charcoal colour melamine faced chipboard 600mm deep bull nose front edge worktop scribed to wall on three sides.
Wall Units: White 300mm deep, 715mm high.
Manufacturer: Howdens.
2No 1000mm wide. Full height doors 2no adjustable shelves.
Bosch 600mm wide tall floor standing fridge freezer.
Bosch 600mm wide tall floor standing fridge.

TEA ROOM.
Base Units : white 1000mm sink unit base unit.
Manufacturer: Howdens
Drawer under the draining board side.
Charcoal colour melamine faced chipboard 600mm deep bull nose front edge worktop scribed to wall on three sides.
Sink: Stainless Steel inset sink and drainer. Right hand bowl. One tap hole.
Including bottle trap/overflow/plug etc
Manufacturer: Leisure.
Tap: Bristan. Ceramic valve mixer.
Bosch floor standing fridge under worktop.

N13 SANITARY APPLIANCES AND FITTINGS

See Appendix for an illustration of the sanitary ware below.

10 4No WC PAN AND FLUSHING ARRANGEMENTS TO THE MALE & FEMALE.
See Appendix for a full data sheet on this Ideal Standard fitting.
Standard: Vitreous china to BS3402. WC pan to BS EN 34
Type: Profile 21 Close Coupled WC Pan
Pan: Profile 21 WC pan close coupled with horizontal outlet. Ref S3092
Cistern:Profile 21 close coupled cistern 4/2.6 litre dual flush push. Ref S3094
Seat: Profile 21 seat and cover, slow close. Ref S4102
Pan Connector: Panekta outlet Connector, finned pattern to convert horizontal outlet WCs to S or turned P trap. Ref S4300
Colour:- Pan, Cistern, Seat. White (01).
Conventional wall mounted toilet roll holder to each cubical. By Ideal Standard.

30 2No WASH BASIN, ONE EACH IN MALE & FEMALE WCs
See Appendix for full data sheet on this Ideal Standard fitting.
Type: Tempo Wall Hung 800mm Vanity Unit with 2 drawers.
Basin unit: Tempo 815 x 450mm Vanity furniture washbasin, with overflow one taphole. Ref E0669
Taps: Tempo single lever basin mixer. Chrome plated. Ref:- B0763
Vanity Unit: Tempo wall hung 800mm vanity unit with 2 drawers. Ref E3242
Wastes: Ideal standard to suite the basin. For a pop up waste. TBC
Trap: E3199 1 1/4in plastic bottle trap 75mm seal.
Colour- Vanity unit. White (01)
Accessories: Waterproof sealant: Silicone based to BS 5889, Type B anti fungicide.

31 2 No SHOWER CUBICLE
See Appendix for data sheet on this Taplanes Showering Solutions product.
Taplanes Limited. North Yorkshire. admin@taplanes.co.uk 01423 771645
Type: Omega shower cubicle.
Size: 770 x 770 x 2200mm (h)
Colour: White.
Shower cubicles supplied from Taplanes with all traps/fittings and 8.5Kw electric instantaneous shower to complete by Triton.

32 TOILET CUBICLES PARTITIONS AND DOORS.
By Vanesta washrooms. Colour/Type TBC.

33 DISABLED WC.
See Appendix for full data sheet on this Ideal Standard fitting.
Doc M Contour 21+Close Coupled Pack right hand corner pack, WC pan,water saving delayed fill cistern with spatula lever, grab rails, hinged support rail with toilet roll holder, seat no cover with retaining buffers, copper tails on TMV3 mixer tap.
Colours: Dark blue handrails, sanitary ware white (AC).

34 HAND DRYERS
3 No Dyson blade hand dryers. 1 No Male, 1 No Female, 1 Disabled.

35 SOAP DISPENSERS.
3 No Franke stainless steel dispensers. Located as above.

36 PAPER TOWEL DISPENSERS.
3 No Franke stainless steel dispensers. Located as above.

76 TILED BACKGROUNDS
Ensure that:Tiling is complete before fixing appliances.
- Fixings do not overstress tiles.

P10 SUNDRY INSULATION/ PROOFING WORK

15 INSULATION FITTED ABOVE THE ROOF BOARDING
See drawing No 96/A-03, & 96/A-02.
Manufacturer: Celotex
- Product reference XR 4000

Material: Rigid (PIR) foam.
Thickness: 120mm
Installation requirements:
- Joints: Butted, no gaps

16 INSULATION FITTED TO WALLS
See drawing No 96/A-01,02.
Manufacturer: Celotex
- Product reference 60mm Celotex GA4000 between studs.
- Product reference 15mm Celotex PL4000 over studs.

17 INSULATION TO FLOORS.
See drawing No 96/A-01
Manufacturer: Celotex
- Product reference 50mm Celotex GA4000

40 INSULATION FITTED BETWEEN STUDS TO NEW OFFICE PARTITONS
Manufacturer: Crown.
- Product reference: Acoustic Roll.
Thickness: TBC (to give 45 dB sound reduction).
Installation requirements:
- Joints: Butted, no gaps.
- Fasteners: Used to prevent slumping.

P20 UNFRAMED ISOLATED TRIMS/ SKIRTING/ SUNDRY ITEMS.

10 SOFTWOOD SKIRTINGS TO NEW PARTITIONS..
Quality of wood and fixing: To BS 1186-3
- Species: Suitable softwoods from Appendix B
- Class: 1 : Timber for high quality trim.
Moisture content at time of fixings: 12 – 19 degrees C : 9 – 13%.
Preservative treatment: Water based microemulsion, as section Z12 or WPA Commodity Specification C5; Desired service life 30 (or 60) years.
Profile:To match sections from the existing building.
- Finished size: To match the existing where possible.
Finish as delivered: Primed ready for undercoat.
Fixing: Plugged and screwed at 450mm centres. Skirtings.

80 INSTALLATION GENERALLY
Joinery workmanship: As section Z10
Metal workmanship: As section Z11
Methods of fixing and fasteners: As section Z20
Straight runs: To be in one piece, or in long lengths with as few joints as possible.
Running joints: Location and method of forming to be agreed where not detailed.
Joints at angles: Mitred unless shown otherwise.
Position and level: To be agreed where not detailed.

81 NEW WINDOW CILLS AND WINDOW LININGS IN GENERAL.
See drawings 96/A-01 & 2.
25 x 150mm Softwood cill boards/head/and side reveals.
Bull nose front edge painted white.

P21 IRONMONGERY

02 QUANTITIES AND LOCATIONS
Quantites and locations of ironmongery are to be established from new doors numbered on the floor plans.
Fixing: As sections L10 and L20

08 DOOR HINGES TO ALL NEW DOORS D1 to D20
Manufacturer: To be supplied by Locksecure or another approved supplier.
- Product reference: To be established.

Type: Washered butt hinge.
Size: 102x76mm
Material/ finish: Satin stainless steel.
Hinge grade: BS EN 1935. Minimum grade 12.
Other requirements: 3No per leaf.

28 DOOR LATCHES TO DOORS D4,5,6,7,8,9,10,11,12,13,14,17,18,19,20,23.
Standard: To BS EN 12209
Manufacturer: Yale.
Type: Good quality, fully sprung,
Backset: To suit door style sections.
Material/ finish: Stainless steel face plates
Latch spring strength: Select to prevent unsprung lever handles drooping.

36 PRIVACY INDICATOR BOLT TO D8,18,19.
Manufacturer: TBD
Type: TBD
Material/ finish: Satin Anodised Aluminium.
To door D8 must be DDA compliant.
Emergency release facility: Required.

38 LEVER HANDLES TO DOORS D4,5,6,7,8,9,10,11,12,13,14,17,18,19,20,23
Standard: To BS EN 1906.
Manufacturer: TBD
Style: To match the existing lever handles.
Size: To match the existing.
Material/ finish: To match the existing
Mounting: Screw fixed plates with fixed spindle.

39 EUROPROFILE MORTICE LOCK CASE
EUROPROFILE CYLINDER LENGTH FOR THE DOOR THICKNESS.
THUMBTURN ON INSIDE COMPLETE WITH ESCUTCHEONS.
THUMBTURN DESIGN MUST BE DDA COMPLIANT
EACH LOCK TO HAVE UNIQUE KEYS AND ALSO A MASTER KEY.
TO DOORS D1,2,3,4,5,6,7,9,10,11,12,13,14,17,20,21,22.

50 DOOR STOPS TO DOORS D4,5,6,7,8,9,10,11,12,13,14,17,18,19,20,23.
Manufacturer: TBD
Type: Solid Rubber cylinder, with a stainless steel shoe.

51 KICKPLATES 400mm HIGH BOTH SIDES OF DOOR TO D8,15,16,18,19,23.
Manufacturer: TBD
Aluminium SAA finish screwed to door with countersunk chrome plated raised screws

52 FLUSH SHOOT BOLTS TO HOLD THE L/H LEAF OF DOORS D1 ,21,22,
ON THE MEETING EDGE TO HOLD ONE LEAF CLOSED.
Finish: Satin stainless steel.
Supply mortice keeps top and bottom.
Shoot bolt only to be used at night times.

53 SURFACE MOUNTED KEY PAD ENTRY LOCK. TO DOORS D21 D22
This must be simply overridden as you are leaving the building.

54 VERTICAL PUSH PLATES TO DOORS. D1,8,15,16,18,19,21,22.
Finish: SAA
Approx: 100 x 300mm.

55 VERTICAL DEE HANDLE TO DOORS. D1,8,15,16.
Finish: SAA
Approx 19mm bar. 300mm long.

56 AUTOMATIC DDA COMPLIANT MAIN DOOR OPENER
AND CONTROLS PUSH PADS SENSORS ETC. D1.
Manufacturer: TBD

57 PUSH PAD FIRE EXIT DOOR RELEASE ESPANGOLETE. D2, 3.
Finish: Grey painted steel construction.
To be housed in purposed made steel keeps let into frame/cills top and bottom.

58 OVERHEAD DOOR CLOSERS TO DOORS D2,3,7,8,14,15,16,23.
Manufacturer: Brition.
Type: 2000 Series with backcheck speed control & latch action.
Finish: Silver.

85 VENTILATORS TO DOORS D2,3.
Manufacturer: Ryton or similar approved.
Type: Aluminium white finished.
Feature: To provide a degree of ventilation (controllable) in mm2.

P31 HOLES/CHASES/COVERS/SUPPORTS FOR SERVICES

10 HOLES, RECESSES AND CHASES IN MASONRY.
Location: To maintain integrity of strength, stability and sound resistance of construction.
Sizes: Minimum needed to accommodate services.
- Holes (maximum): 300 x 300mm.

Walls of hollow or cellular blocks: Do not chase.
Walls of other materials:
- Vertical chases: No deeper than one third of a single leaf thickness, excluding finishes.
- Horizontal or raking chases: No longer than 1m. No deeper than one sixth of the single leaf thickness, excluding finishes.

Chases and recesses: Do not set back to back. Offset by a clear distance at least equal to the wall thickness.
Cutting: Do not cut until mortar is fully set. Cut carefully and neatly. Avoid spalling, cracking and other damage to surrounding structure.

20 NOTCHES AND HOLES IN STRUCTURAL TIMBER.
General: Avoid if possible.
Sizes: Minimum needed to accommodate services.
Position: Do not locate near knots or other defects.
Notches and holes in same joist: Minimum 100mm apart horizontally.
Notches in joists: Locate at top. From by sawing down to a drilled hole.
- Depth (maximum): 0.125 x joist depth.
- Distance from supports: Between 0.07 and 0.25 x span.

Holes in joists: Locate on neutral axis.
- Diameter (maximum): 0.25 x joist depth.
- Centres (minimum): 3 x diameter of largest hole.
- Distance from supports: Between 0.25 and 0.4 of span.

30 PIPE SLEEVES
Material: Match pipeline.
Sleeves: Extend through full thickness of wall or floor.
Position accurately.
- Clearance around service (maximum): 20mm or diameter of service, whichever is the lesser.
- Installation: Bed solid.

Q 40 WOODEN POST AND RAIL RETAINING FENCING

Constructed to the rear of the building to form a low retaining barrier.
Height: 700mm.
Wood: Railway sleepers on edge. 2.4m length
Treatment: Sleepers as they come already treated.
Maximum centres between posts. TBD maximum 1.2m
Posts: 100mm round wood posts driven into the bank first, Sleepers go behind.
Post settings: concrete, if necessary.
NB This bank is believed to be sand.

R10 RAINWATER PIPEWORK/ GUTTERS

16 PVC-U GUTTERS TO THE BUILDING.
Standard: To BS EN 607 and BS EN 1462 Kitemark cerfified.
Manufacturer: Marley Extrusions, Lenham, Maidstone.
- Product reference: 112 x 60mm Flowline rectilinear.

Recycled content: BS EN ISO 14021
Profile: Flowline
Colour: Black
Accessories: Fittings needed to complete the work.
Fixing: As recommended by Marley.

35 PVC-U PIPEWORK
Standard: To BS EN 12200-1, Kitemark certified.
Manufacturer: As clause 16 above.
Nominal sizes: 68mm round section.
Colour: Black
Fixing: Black PVC-U clips plugged and screwed to brickwork at 1800mm centres.

50 INSTALLATION GENERALLY
Discharge of rainwater: Complete, and without leakage or noise nuisance.
Components: Obtain from same manufacturer for each type of pipework and guttering.
Allowance for thermal and building movement: Provide and maintain clearance as fixing and jointing proceeds.
Fixings and fasteners: As section Z20

60 GUTTERS LAID TO FALL
Setting out: To line and even gradient to prevent ponding or backfall. Position high points of gutter as close as practical to the roof and low points not more than 50mm below the roof.
Joints: Watertight.
Roofing underlay: Dressed into gutter.

70 PIPEWORK
Fixing: Securely, plumb and/ or true with additional supports as necessary to support pipe collars, particularly at changes in direction.
Cut ends of pipes and gutters: Clean and square with burrs and swarf removed.

R11 ABOVE GROUND FOUL DRAINAGE SYSTEM

11 PLASTIC BRANCH PIPEWORK
Materials and standards: ABS to BS 5255, or BS EN 1455-1, Kitemark certified.
Manufacturer: Terrain or similar approved.
Colour: White.
Accessories: As necessary.
Jointing: Optional.
Fixing: Plastic clips, colour to match pipes, at 500mm centres.
Accessories: Access fittings, and necessary components to complete.

21 PVC-U SOIL/ VENT PIPEWORK AND WC BRANCHES.
Standard: To BS EN 1329-1, Kitemark certified.
Manufacturer: Terrain or similar approved.
Colour: Black.
Jointing: Solvent welding.
Fixing: Straps, steel fixed to brickwork.
Accessories: Vent cowls, drain connectors.

45 AIR ADMITTANCE VALVES
Standard: To BS EN 12380 or Agrement certified.
Manufacturer: Terrain or similar approved.
Position: Vertical.

50 INSTALLATION GENERALLY
Standards: To BS EN 12056-1, BS EN 12056-2(including National Annexes NA-NG) and BS EN 12056-5.
Drainage from appliances: Quick, quiet and complete, without blockage, crossflow, backfall, leakage, odours, noise nuisance or risk to health.
Components: From same manufacturer for each type of pipework.
Access: Provide access fittings in convenient locations to permit cleaning and testing of pipework.
Thermal and building movement : Provide and maintain clearance as fixing and jointing proceeds.
Fixings: Allow the pipe to slide.
- Finish: Plated, sherardized, galvanized or other nonferrous.
- Compatibility: Suitable for the purpose, material being fixed and substrate.

60 PIPEWORK
Fixing: Securely plumb and/ or true to line. Fix lengths of discharge stack pipes at or just below socket collar or coupling.
- Additional supports: Provide as necessary at junctions and changes in direction.

Cut ends of pipes: Clean and square with burrs and swarf removed.

70 PIPEWORK TEST
Preparation: Temporarily seal open ends of pipework using plugs.
Testing: Connect a 'U' tube water gauge and pump air into pipework until gauge registers 38mm.
Required performance: Allow a period for temperature stabilisation, after which the pressure of 38mm is to be maintained without loss for at least 3 minutes.

R12 BELOW GROUND DRAINAGE SYSTEMS

In the unlikely event that new underground drainage works are necessary carry out the work in accordance with this section.

02 EXISTING DRAINS

Setting out: Before starting work, check levels and positions of existing drains, inspection chambers and manholes against drawings. Report discrepancies.

04 IN SITU CONCRETE FOR USE IN DRAINAGE BELOW GROUND

Standard: To BS 8500-2
Concrete: Mix GEN 1 or Standardized prescribed, ST2.

14 PLASTIC PIPELINES FOR DRAINAGE GENERALLY

Pipes, bends and junctions: PVC-U to BS EN 1401-1
- Manufacturer: Terrain or similar approved.

Recycled content; 10% (mimimum) to BS EN ISO 14021
Sizes: DN 110
Type of subsoil: To be established. Bedding used will be in accordance
With the type of subsoil encountered, to the approved document in the regs.
Bedding class: P
Warning marker tape: 150mm width. Red, with wire detection aid.

19 EXCAVATING PIPE TRENCHES

Trench from bottom up to 300mm above crown of pipe: With vertical sides.
- Width: As small as practicable but not less than external diameter of pipe plus 300mm.

Type of subsoil: Where the type of subsoil at the level of the crown of the pipe differs from that stated form that stated for the type of pipeline, give notice.
Timing: Excavate to formation immediately before laying beds or pipes.
Mud, rock projections, boulders and hard spots: Remove.
Replace with bedding material, well consolidated.
Local soft spots: Harden by tampring in bedding material.

21 BEDDING AND JOINTING

Laying pipes: To true line and regular gradient on even bed for full length of barrel with sockets (if any) facing up the gradient.
Jointing: Lubricate. Leave gaps at ends of spigots to allow for movement.

23 CLASS D NATURAL BED

Trench bottom: Hand trim to accurate levels, levelling up any overdig with compacted spoil.
Pipes: Cut holes for couplings and sockets and lay pipes resting uniformly on their barrels, adjust to line and gradient. Do not use hard packings under pipes.
Backfilling: After initial testing, backfill to 150mm above crown of pipe with a protective cushion of selected fill, free from vegetable matter, rubbish and frozen soil and material retained on a 40mm sieve. Thoroughly hand compact in 100mm layers.

25 CLASS F GRANULAR BEDDING

Granular material: To Bs EN 12620, size 4/10 or give details of a suitable material.
Bedding: Compacted granular material.
- Thickness: 50mm for sleeve jointed pipework.

Laying pipes: Scoop out locally at couplings and sockets and lay pipes digging slightly into bed and resting uniformly on their barrels. Adjust to line and gradient.
Backfilling: After initial testing, backfill to 150mm above crown of pipe with a protective cushion of selected fill, free from vegetable matter, rubbish and frozen soil and material retained on a 40mm sieve. Thoroughly hand compact in 100mm layers.

27 CLASS P FULL DEPTH GRANULAR SUPPORT

Granular material: To BS EN 12620, size 4/10 or give details of a suitable proprietary material.

Bedding: Granular material, compacted to a thickness of 100mm (minimum). Scoop out locally at couplings and sockets and lay pipes digging slightly into bed and resting uniformly on their barrels. Adjust to line and gradient.

Granular support: After initial testing, lay and compact by hand more granular material uniformly to 100mm above crown of pipe.

44 BENDS AT BASE OF SOIL STACKS

Bends: 90 degree nominal rest bend with a minimum radius of 200mm to centreline of the pipe.

Height of invert of horizontal drain at base of stack below centreline of lowest branch pipe (minimum): 450mm.

Stabilizing bends: Bed in concrete without impairing flexibility of couplings.

58 INSTALLATION OF FITTINGS

Appearance: Square with and tightly jointed to adjacent construction as appropriate.

Bedding and surround of fittings, traps, etc: Concrete, 150mm thick.

Permissible deviation in level of gullies: +0 to -10mm.

61 BRICK MANHOLES AND INSPECTION CHAMBERS

Bases: Plain in situ concrete, 150mm thick.

Brickwork: As section F10

- Frogs: Facing upwards.

Channels, branches and benching: Conventional as clause 69

Cover slab: Concrete.

- Thickness: 100mm insitu
- Openings: To suit required access covers.
- Reinforcement: 10mm Ribbed bars.

Access covers and frames: As clause 79

67 GRANULAR FILL SOAKAWAY

Not required for this project, as rainwater to go to existing provision.

New 1m3 soakaway to be carried at least 3m from building.

This is a building control requirement. See letter dated 13th June 2014.

If following tests on the existing soakaways, it is found that they cannot take the volume of the new extended roof a new soakaway will need to be installed.

Geotextile membrane:

Vertical inspection and distribution pipes:

- Size: DN 110
- Material: Plastic
- Perforations: Full depth of granular fill, unperforated above.

Inspection covers: As clause 79

Granular material: Clean broken bricks, crushed rock or gravel, size range 150mm to 50mm.

Construction: Line bottom and sides of pit with geotextile membrane. Insert vertical inspection and distributor pipes and horizontal distributor pipes if required. Fill up to invert level of inlet pipe with granular material. Cover top with geotextile membrane before connecting inlet pipe to inspection and distribution pipe.Backfill with as – dug material.

69 CONVENTIONAL CHANNELS, BRANCHES AND BENCHING

Main channel: Clay channel bedded solid in 1:3 cement:sand mortar, branches connected to main at half channel level, so that discharge flows smoothly in direction of main flow.

Benching: Concrete rising vertically from main channel to a height not lower than soffit of outlet pipe, then sloping upwards at 10% to walls. Within 3 hours float with coat of 1:3 cement:sand mortar and finish smooth with steel trowel.

79 CAST IRON ACCESS COVERS AND SEATING

Covers: Grey iron or ductile iron to BS EN 124.

Manufacturer: Saint – Gobain

Types: Medium duty. Double air sealed for internal use..

Seating:

- Brickwork: As section F10

Bedding and haunching to frame: Solid, in 1:3 cement: sand mortar, square with joints in surrounding finishes. Cut back top of haunching to 30mm below top of cover.

84 TESTING AND INSPECTION GENERALLY

Obstructions and debris: Remove. Check that the installation is clear before testing.

85 INITIAL TESTING OF PIPELINES

Before testing:

- Cement mortar jointing: Leave 24 h
- Solvent welded pipelines: Leave 1 h

Timing: Prior to inspection by LA.

Method: Block open ends of pipelines to be tested and pressurise. Air test short lengths to BS EN 1610.

88 FINAL TESTING OF DRAINS

Before testing:

- Cement mortar jointing: Leave 24 h
- Solvent welded pipelines: Leave 1 h

Standard: In accordance with Approved Document H1, Paragraph 2.61

Method: Block open ends of pipelines to be tested and pressurised.

89 WATER TESTING OF MANHOLES AND INSPECTION CHAMBERS

Timing: Before backfilling

Standard:

- Exfiltration: To BS EN 1610, water testing (method W).
- Infiltration: No identifiable flow of water penetrating the chamber.

91 BACKFILLING TO PIPELINES GENERALLY

Backfilling from top of surround or protective cushion: Material excavated from trench, compacted in 300mm layers. Do not use heavy compactors before there is 600mm of material over pipes.

97 CLEANING

General: Flush out the whole installation and remove silt and debris immediately before handing over.

S90 HOT AND COLD WATER SUPPLY SYSTEMS

PERFORMANCE SPECIFICATION.

GENERALLY
This part of the specification covers the design, supply, delivery, erection, putting into operation, testing and commissioning of Hot/ Cold Water/ Services as an extension to the existing system.
This part of the document forms a section of the overall Specification and it is the Contractors full responsibility to make sure he has fully considered all the information, prior to submitting any tender offer.

DESCRIPTION OF THE INSTALLATION
The works shall comprise the design, supply, delivery, erection, installation, testing and commissioning of the pipe services associated for Hot and Cold Water services as follows:-

WATER: HOT & COLD TO:-
3No Washbasins, 5No W.C, 4No sinks.
Contractor to establish that the present system can be extended.
Installation: The existing coldwater tank is to be reused if in sound condition located over the new partition wall.
Hot water to basins and sinks: New instantaneous water heaters to be provided near the basins/sinks gravity fed off storage tank.
Standard: To BS 6700 or BS EN 806-2 and in accordance with HSE publication 'The control of legionella bacteria in water systems. Approved code of practice and guidance'.
All work to be carried out by qualified plumbers.
Proposals: Submit drawings (showing equipment positions and pipeline routes), technical information, calculations and manufacturer's literature.

Allow for all control gear, timers etc. To operate the revised/extended system.

ROOM TEMPERATURES
Design the system for the following room temperatures at -2 degrees C ambient.
All rooms 20 degrees C.

BUILDERS WORK
Main Contractor to allow for all builders work in connection with the above.

GENERAL TECHNICAL REQUIREMENTS

24 PIPELINE SIZES
Sizing: Calculate sizes to meet simultaneous demand for the building in accordance with BS 6700 Appendix D. Submit proposals.
- Water velocity (maximum): 1.3 m/s for hot water and 2.0 m/s for cold water.

25 DRAW OFF REQUIREMENTS
Washbasin: (pillar or mixer taps)
- Discharge rate (design): 0.15 L/s

WC cisterns (to fill in 2 minutes):
- Discharge rate (design): 0.13 L/s

These flow rates should be available to each outlet when only that outlet is open.

30 DEZINCIFICATION
Fittings, pipelines, equipment located below ground or in concealed or inaccessible locations: Resistant to dezincification, eg gunmetal.

50 COPPER PIPELINES FOR GENERAL USE
Standard: To BS EN 1057, Kitemark certified.
Temper: Half hard R250.
Finish: Painted to match wall finish.
Wall thickness (nominal):
- OD 6,8,10 and 12mm 0.6mm
- OD 15mm: 0.7mm
- OD 22 and 28mm: 0.9mm
- OD 35 and 42mm: 1.2mm

Jointing:
- Plain: integral lead free solder ring capillary fittings to BS EN 1254-1, Kitemark certified.

Connections to appliances and equipment: Select from :
- Compression fittings: To BS EN 1254-2, Kitemark certified.
- Fittings with threaded ends: To BS EN 1254-4

Supports: One piece copper spacer clips. Plastic spacers, single screw fixing.

54 WARNING/ OVERFLOW PIPES TO CISTERNS
Material: PVC-U black.
Jointing: Solvent welded.
Minimum OD: Greater than inlet pipe OD and at least 22mm.

55 INSULATION TO PIPELINES
Material: Preformed polyethylene foam.
Function: Protection from freezing.
Thermal conductivity: 0.034 W/m K
Emissivity: 0.05 E
Thickness (minimum): To BS 5422 tables 19 and 20 and in accordance with 'TIMSA' guidance for achieving compliance with Part L of the Building Regulations', table 6.1.1
Fire performance: Class 1 spread of flame when tested to BS 476-7.

60 VALVES GENERALLY
Types: Approved for the purpose by local water supply undertaker and of appropriate pressure and/ or temperature ratings.
Control of valves: Fit with handwheels for isolation and lockshields for isolation and regulation of circuits or equipment.

62 DRAINING TAPS
Standard: Copper ally to BS 2879, Type 1, hose connection pattern, Kitemark certified.

64 GATE VALVES
Standard: To BS 5154, Series B Kitemark certified or BS EN 12288.

65 STOP VALVES AND DRAW-OFF TAPS, ABOVE GROUND.
Standard: Copper alloy to BS 1010-2, Kitemark certified.

67 THERMOSTATIC RADIATOR VALVES
Manufacturer: Danfoss or equal approved.

EXECUTION

70 INSTALLATION GENERALLY
Installation: To BS 6700 and BS EN 806-4
Performance: Free from leaks and the audible effects of expansion, vibration and water hammer.
Fixing of equipment, components and accessories: Fix securely, parallel or perpendicular to the structure of the building.
Preparation: Immediately before installing tanks and cisterns on a floor or platform, clear the surface completely of debris and projections.
Corrosion resistance: In locations where moisture is present or may occur, provide corrosion resistant fittings/ fixings and avoid contact between dissimilar metals by use of suitable washers, gaskets, etc.

80 PIPELINES FIXING
Fixing: Secure and neat.
Joints, bends and offsets: Minimize.
Pipeline support: Prevent strain, e.g. from the operation of taps or valves.
Drains and vents: Fix pipelines to falls. Fit draining taps at low points and vents at high points.
Thermal expansion and contraction: Allow for thermal movement of pipelines. Isolate from structure. Prevent noise or abrasion of pipelines caused by movement. Sleeve pipelines passing through walls, floors or other building elements.
Dirt, insects or rodents: Prevent ingress.

COMPLETION

90 FLUSHING AND FILLING
Standard: To BS 6700 and BS EN 806-4

91 SYSTEM DISINFECTION
Disinfection: To BS 6700 and BS EN 806-4

92 TESTING
Standard: To BS 6700 and BS EN 806-4
- Notice (minimum): 3 days

Preparation: Secure and clean pipework and equipment. Fit cistern and tank covers
Leak testing: Start boiler and run the system until all parts are at normal operating temperatures and then allow to cool to cold condition for a period of 3 hours.
Pressure testing: At both hot and cold conditions joints, fittings and components must be free from leaks and signs of physical distress when tested for at least 1 h as follows:
- Systems fed directly from the mains, and systems downstream of a booster pump: Apply a test pressure equal to 1.5 times the maximum press to which the installation or relevant part is designed to be subjected in operation.
- Systems fed from storage: Apply a test pressure equal to the pressure produced when the storage cistern is filled to its normal maximum operating level.
- Inaccessible or buried pipelines: Carry out hydraulic pressure test to twice the working pressure.

93 COMMISSIONING
Standard: To BS 6700 and BS EN 806-4
Equipment: Check and adjust operation of equipment, controls and safety devices.
Outlets: Check operation of outlets for satisfactory rate of flow and temperature.

94 TESTING SERVICE PIPELINES
Test method: Disconnect from the mains, fill with potable water, exclude air, and apply at least twice the working pressure for 1 h.
Test criterion: No leakage.

95 DOCUMENTATION
Manufacturer's operating an maintenance instructions:
Submit for equipment and controls.
System operating and maintenance instructions: Submit for the system as a whole giving optimum settings for controls.
Record drawings: Submit drawings showing the location of circuits and operating controls.

96 OPERATING TOOLS
Tools: Supply tools for operation, maintenance and cleaning purposes.
Valve keys: Supply keys for valves and vents.

97 Labels
Valve labels: Provide labels on isolating and regulating valves on primary circuits, stating their function.

V90 ELECTRICAL SYSTEMS

PERFORMANCE SPECIFICATION

GENERALLY
This part of the specification covers the design, supply, delivery, erection, putting into operation, testing and commissioning of the extended complete electrical installation.

This part of the document forms a section of the overall specification and it is the Contractors full responsibility to make sure he has fully considered all the information, prior to any tender offer.

DECRIPTION OF THE INSTALLATION

THE INSTALLATION
Shall comprise the design, supply, delivery, erection, installation, testing and commissioning of the electrical services as follows:

Installation: Provide a new c.c.u. if the existing unit does not have sufficient space for any new circuits. Run cabling from c.c.u. out to serve the new extension. This will include the following :-

NB. Electrical layouts for the lighting/power/heating are indicated on drawings D-03,4.

- Small power system
- New/extended electric economy 7 heating system.
- Lighting system
- External lighting
- Extract fans: 6No Male, Male shower, Female, Female shower, Disabled, kitchen.
- Bonding and other ancillary work.
- Smoke alarm system, with battery backup. For the new work.

BUILDERS WORK
Main contractor to allow for all builders work in connection with the above.

ARRANGEMENT OF CIRCUITS
Divide the installation into separate controlled circuits as necessary to ensure compliance with the IEE Wiring Regulations.

DISTRIBUTION
Conceal all cables in roof spaces, ducts, ceiling voids & covered in walls
Run cables in roof spaces, ducts etc. Where possible otherwise in surface conduit system.

TECHNICAL REQUIREMENTS GENERALLY

20 GENERAL DESIGN
Standards: To BS 7671 and the requirements of the electricity distributor.
Design: Complete the design and detailing of the electrical installation.
Design information: Submit calculations, manufacturer's literature and drawings showing equipment positions and routes.

PRODUCTS

30 PRODUCTS GENERALLY
Standard: To BS 7671.
CE Marking: Required.

32 DISTRIBUTION BOARD AND CONSUMER UNITS
Reuse existing equipment, if suitable and enough spare ways.
Standards: To BS EN 60439-3 and ASTA certified.
Manufacturer: MK or similar approved.
Number of ways: Determine.
- Spare capacity: 5 spare ways.

35 CONDUIT
Standard: To BS EN 61386-1
Type: Suitable for location and use.

36 CABLE TRUNKING AND DUCTING
Standards: BS EN 50085-1
Type: Suitable for location and use.

37 STEEL CONDUIT AND FITTINGS
Standards: To BS 4568-1 or BS EN 61386-1 and BS EN 61386-21.

39 CABLES
Standard: To BS 7671.
Approval: British Approvals Services for Cables (BASEC) certified.

41 ELECTRICAL ACCESSORIES
Standard: To BS 5733
- Switches: To BS EN 60669-1

Manufacturer: MK.
- Product reference: Logic range.

Finish: White.
Mounting: Recessed boxes.

45 LUMINAIRES
Standards: To BS EN 60598-1 and BS EN 55015
- Approval: Luminaires to comply with the Lighting Association 'Code of Practice for the Safety of Luminaires Scheme'.

Manufacturer: Thorlux
Type: Jubliee XL
Mounting: Surface mounted
Lamps: LED
Size: 1200mm 31W LED code JUB 16952
Size: 1500mm 43W LED code JUB 16699
NB These are shown to scale on both the plans.

66 CABLE ROUTES

Cables generally: Conceal wherever possible.

- Concealed cable runs to wall switches and outlets: Align vertically with the accessory.

Exposed cable runs: Submit proposals.

- Orientation: Straight, vertical and/ or horizontal and parallel to walls.

Distance from other services running parallel: 150mm minimum.

- Heating pipes: Position cables below.

68 INSTALLING ELECTRICAL ACCESSORIES AND EQUIPMENT

Location: Throughout the new extension.
Arrangement: Coordinate with other wall or ceiling mounted equipment.
Positioning: Accurately and square to vertical and horizontal axes.
Alignment: Align adjacent accessories on the same vertical or horizontal axis.Mounting: Recessed.
Mounting heights: Finished floor level to underside of equipment or accessory): Socket outlets 450mm. Light switches 1250mm.

74 LABELLING

Identification and notices:

- Standards: To BS 5499-5 and BS 5378-2
- Equipment: As necessary.

Distribution boards and consumer units: Card circuit chart within a reusable clear plastic cover. Fit to the inside of each unit. Include typed information identifying the outgoing circuit references, their device rating, cable type, size, circuit location and details. Label each outgoing way corresponding to the circuit chart.
Sub-main cables: Label at both ends, with proprietary cable marker sleeves.

78 FINAL FIX

Accessory faceplates, luminaires and other equipment: Fit after completion of building painting.

80 CLEANING

Electrical equipment: Clean immediately before handover.
Equipment not supplied but installed under the electrical works: Clean immediately before handover.

COMPLETION

95 INSPECTION AND TESTING GENERALLY

Standard: To BS 7671.
Notice before commencing tests (minimum): 24 hours.
Labels and signs: Fix securely before system is tested.
Inspection and completion certificates: Submit.
Number of copies: 3 No

99 MAINTENANCE

Servicing and maintenance: Undertake.

- Duration: TBD.

Z10 PURPOSE MADE JOINERY

10 SEATING TO THE SHOWER ROOMS
Slated 38x19mm softwood seating shown on plan, to be supported on a 25 x25mm softwood framing all prepared softwood sanded smooth and clear finish yacht vanish two coats.
Subject to full details in due course.

11 30 No Lockable post boxes to the Foyer. A4 size letter openings.
5 No Rows high and 6 No rows wide.
Note. These can be constructed in plywood and carefully spray painted, or these can be sourced from a "Locker" manufacturer, in metal.
Detail to follow.

12 ALL FITTED SEATING, TABLES, DESKS & CHAIRS, STOOLS.
These are to be supplied by the client under a separate process.

13 EXTERNAL EATING AREA.
See drawing 96/D-05, 96/D-06
The contractor is to provide raised decking and steps as shown.

20 CROSS SECTION DIMENSIONS OF TIMBER
General: Dimensions on drawings are finished sizes.
Maximum permitted deviations from finished sizes:
- Softwood sections: To BS EN 1313-1
- Hardwood sections: To BS EN 1313-2

30 PRESERVATIVE TREATED WOOD
Cutting and machining: Completed as far as possible before treatment.
Extensively processed timber: Retreat timber sawn lengthways, thicknessed, planed, ploughed, etc.
Surfaces exposed by minor cutting and/ or drilling: Treat as recommended by main treatment solution manufacturer.

40 MOISTURE CONTENT
Wood and wood based products: Maintained within range specified for the component during manufacture and storage.

50 FINISHING
Surfaces: Smooth, even and suitable to receive finishes.
- Arrises: Ease unless shown otherwise on drawings.

51 CONSTRUCTION
Generally: Both constructions will be from 19mm MDF on a softwood frame
That will be hidden from view.
The constructions will be painted to give a good high class finish.
Colours: TBD.

Z21 MORTARS

10 MORTAR MIXES

Specification: Proportions and additional requirements for mortar materials are specified elsewhere.

20 SAND FOR SITE MADE CEMENT GAUGED MASONRY MORTARS

Standard: To BS EN 13139.

Grading: 0/2 (FP or MP).

- Fines content where the proportion of sand is specified as a range(e.g. 1:1: 5-6):
- Lower proportion of sand: Use category 3 fines.
- Higher proportion of sand: Use category 2 fines.

Sand for facework mortar: Maintain consistent colour and texture. Obtain from one source.

25 SAND FOR LIME: SAND MASONRY MORTARS

Type: Sharp, well graded.

- Quality, sampling and testing: To BS EN 13139
- Grading/ Source: As specified elsewhere.

30 READY-MIXED LIME;SAND FOR CEMENT GAUGED MASONRY MORTARS

Standard: To BS EN 998-2

Lime: Nonhydraulic to BS EN 459-1

- Type: CL 90S

Pigments for coloured mortars: To BS EN 12878.

40 CEMENTS FOR MORTARS

Cement: To BS EN 197-1 and CE marked.

- Types: Portland cement, CEM I
  Portland limestone cement, CEM II/A-LL
  Portland slag cement, CEM II/B-S
  Portland fly ash cement, CEM II/B-V
- Strength class: 32.5, 42.5, or 52.5.

White cement: To BS EN 197-1 and CE marked.

- Type: Portland cement, CEM I
- Strength class: 52.5

Sulfate resisting Portland cement:

- Types: To BS 4027 and Kitemarked.
- To BS EN 197-1 fly ash cement, CEM II/B-V and CE marked.
- Strength class: 32.5, 42.5 or 52.5

Masonry cement: To BS EN 413-1 and CE marked.

- Class: MC 12.5

50 ADMIXTURES FOR SITE MADE MORTARS

Air entraining (plasticizing) admixtures: To BS EN 934-3 and compatible with other mortar constituents.

Other admixtures: Calcium chloride, ethylene glycol and any admixture containing calcium chloride.

60 MAKING MORTARS GENERALLY

Batching: By volume. Use clean and accurate gauge boxes or buckets

Mix proportions: Based on dry sand. Allow for bulking of damp sand.

Mixing: Mix materials thoroughly to uniform consistency, free from lumps.

- Mortars containing air entrained admixtures: Mix mechanically. Do not overmix.

Contamination: Prevent intermixing with other materials.

70 MAKING HYDRAULIC LIME: SAND MORTARS

Mixing hydrated hydraulic lime: sand: Follow the lime manufacturer's recommendations for each stage of the mix.

- Water quantity: Only sufficient to produce a workable mix.

Z22 SEALANTS

PRODUCTS

31 JOINTS
Primer, backing strip, bond breaker: Types recommended by sealant manufacturer.

EXECUTION

61 SUITABILITY OF JOINTS
Presealing checks:
- Joint dimensions: Within limits specified for the sealant.
- Substrate quality: Surfaces regular, undamaged and stable.

Joints not fit to receive sealant.: Submit proposals for rectification.

62 PREPARING JOINTS
Surfaces to which sealant must adhere:
- Remove temporary coatings, tapes, loosely adhering material, dust, oil, grease, surface water and contaminants that may affect bond.
- Clean using materials and methods recommended by sealant manufacturer.

Vulnerable surfaces adjacent to joints: Mask to prevent staining or smearing with primer or sealant.
Backing strip and/ or bond breaker installation: Insert into joint to correct depth, without stretching or twisting, leaving no gaps.
Protection: Keep joints clean and protect from damage until sealant is applied.

63 APPLYING SEALANTS
Substrate: Dry (unless recommended otherwise) and unaffected by frost, ice or snow.
Environmental conditions: Do not dry or raise temperature of joints by heating.
Sealant application: Fill joints completely and neatly, ensuring firm adhesion to substrates.
Sealant profiles:
- Butt and lap joints: Slightly concave.
- Fillet joints: Flat or slightly convex

Protection: Protect finished joints from contamination or damage until sealant has cured.