



SPECIFICATION FOR THE WORKS

with Pre-Ambles and Preliminaries

PROJECT:	New porch/lobby
SITE:	The Parkhouse Centre Ergue-Gaberic Way Bude Cornwall EX23 8LD
CLIENT:	Bude and Stratton Town Council
REFERENCE:	19004
DATE:	February 2020 – <i>Tender Issue T1</i>

The Bazeley Partnership Ltd Chartered Architects
Efford Farm Business Park
Vicarage Road
BUDE
Cornwall
EX23 8LT
T : 01288 355557 E : bude@bazeley-architects.co.uk

CONTENTS

Project particulars	3
List of drawings pertaining to the works	5
Employer's intentions	6
SECTION 1: Preliminaries	7
SECTION 2: Preambles	17
SECTION 3: Schedule of provisional sums	25
SECTION 4: Specification of works	26

PROJECT PARTICULARS

Client :	Bude and Stratton Town Council
Architect & Principal Designer	The Bazeley Partnership, Efford Farm Business Park, Vicarage Road, BUDE, Cornwall. EX23 8LT Contact: Mark Roberts (project architect) & Martin Back T: 01288 355557 martinb@bazeley-architects.co.uk markr@bazeley-architects.co.uk cdmpd@bazeley-architects.co.uk
Structural Engineer	n/a
Mechanical + Electrical Engineer	n/a
Main Contractor:	To be confirmed
Principal Contractor:	To be confirmed
Local Authority:	Cornwall Council - Building Control Pydar House, Pydar Street Truro TR1 1XU Tel: 01872 224792
HSE Office:	North Quay House, Sutton Harbour, Plymouth, Devon, PL4 0RA
Description of Works:	Demolition of existing single-storey porch and replacement with new single-storey porch/lobby
Programme	To be proposed by contractor - as soon as possible, preferably with all work completed by 1 st September Works affecting Room 2/3 must be completed by 1 st September regardless
Existing Structure/s	Single-storey porch attached to main building
Access	Existing vehicular and pedestrian access
Electricity	Existing supply on site for works
Water	Existing supply on site for works
Welfare facilities / WC	Contractor to make own necessary provisions as appropriate

LIST OF DRAWINGS, DOCUMENTS AND DETAILS PERTAINING TO THE WORK

These construction notes are to be read with following drawings:

Architect's Drawings and Information

(by The Bazeley Partnership Architects)

19004 GA001 Survey of existing and demolition

19004 GA101 Proposed floor plans

19004 GA301 Proposed Elevations and Sections

19004 GA401 Proposed details

CDM2015 Pre-Construction Information

(by The Bazeley Partnership Architects)

EMPLOYER'S INTENTIONS

The project is to demolish and replace the existing small porch of the Parkhouse Centre and build a new, larger porch/lobby by infilling between the two existing side wings.

The main wall of the new porch/lobby will be a low-level masonry wall with glazed screen above and automatically operated, glazed sliding doors. The new walls are to be built in masonry cavity wall construction, with painted render as shown. A Catnic heavy duty steel lintel will support wall and roof above the glazed screen and doors.

Foundations are to be a strip concrete foundation and the new floor will be formed in a 100mm deep insulated concrete slab with screed, and a barrier carpet internal finish.

The proposed roof will be an insulated single ply membrane flat roof laid to falls with tapered insulation on a ply deck and metal web joist structure.

External works include connecting relocated surface water drainage to the existing drainage system and resurfacing and regrading an area of the existing car park to create a gently sloping surface up to a level access threshold at the entrance door.

The new lobby is to be unheated but will have lighting and power supply. The contractor should allow for connecting to the existing electrical systems of the hall, and should carry out a site visit to inform their tender price accordingly.

Surface water drainage is to be connected to the existing surface water drainage system.

The contractor will be responsible for disconnecting and isolating all services prior to commencement of construction.

SECTION 1

PRELIMINARIES

CONTRACTOR TO VISIT THE SITE AND BUILDING

The Contractor is responsible for determining the conditions and constraints of the building and site and is deemed to have visited and inspected the existing building and surroundings, before submitting his tender, in order to ascertain all matters affecting the execution of the works.

WORKMANSHIP AND MATERIALS

The whole of the works shall be carried out in accordance with the approved drawings and will accord with good building practice, using materials of the best quality and having regard to their use, all to the reasonable satisfaction of the Architect and Employer. All goods and materials shall be in accordance with latest and revised British Standards.

SITE DIMENSIONS AND LEVELS

The Contractor will be responsible for checking on-site dimensions, setting out points and levels etc., prior to proceeding with the work. Any discrepancies found should be reported to the Employer and Architect in the first instance.

PLANT

The Contractor shall provide for all mechanical and non-mechanical plant, tools, vehicles, scaffolding, ladders, trestles, lifting tackle, moulds, profiles, and apparatus etc., necessary for the proper and efficient execution and completion of the works. The Contractor shall remove all above from the site on completion.

SCAFFOLDING

Scaffolding required to properly and safely execute the works will be designed and constructed and properly maintained throughout its use on site by competent, trained personnel. It will be erected and maintained to conform to the National Association of Scaffolding Contractors Code of Practice and Guidance Note SG4:15 Preventing Falls in Scaffolding Operations.

Protective end caps will be fitted to all scaffold pole ends within 100mm of any building face or adjacent to any area where people have access.

All requisite licenses, permissions and rights shall be properly obtained by the Contractor or other person responsible before erecting the scaffold and all safety procedures, notices and instructions posted and issued prior to the execution of the

work.

REMOVALS

The Employer will be responsible for removing all loose items, fixtures and fittings etc. worthy of retention from the relevant parts of the spaces to which the works affect. Any items externally that may interfere with or would likely be damaged during the course of the works will be removed by the Employer. Pavers and any other materials that the Employer wishes to salvage must be cleared by the Employer or by arrangement with the Contractor.

The Employer will remove all items of furniture, fixtures and fittings worthy of retention in order to allow the Contractor to carry out the works. Any items remaining will be included as part of the demolition works.

The Employer will temporarily disconnect/make safe and/or remove all services necessary in order to carry out the works etc., or temporarily relocate services for use during construction where necessary. If required a new temporary fuse board and distribution will be set up by the Contractor for use during the works. All temporary works will comply with Western Power Distribution (WPD) requirements.

The contractor will remove all debris and waste materials from site during the works, leaving the site clear and safe upon completion of the works.

DEMOLITION

The contractor will be responsible for examining the existing toilet block building and taking all necessary precautions in order to maintain the structural stability and integrity of the building during its demolition, including shoring and scaffolding. The contractor must examine all parts of the building to be demolished and ascertain any difficulty or limitation to normal working procedures. The contractor will allow for all necessary propping and temporary support required to ensure structural stability and safety throughout all phases of the work.

The employer will temporarily disconnect / make safe / or remove all services necessary in order to carry out the works etc. Including diverting services as necessary to ensure the continual operation for the café and associated buildings.

If, during the course of demolition, dangerous substances in the structure of finishing which affect safety, are discovered, including positions and dimensions of any pipework, cables or points of structural significance, or are of concern in any way, the Contractor shall notify the Architect immediately.

NOTE: Asbestos Demolition Survey pending

LIGHTING AND POWER FOR THE WORKS

Electricity and water already exist on the site. The Contractor should make any necessary checks with the area service companies to ensure that supplies are safe to use and that no temporary alteration or safety measures are required before their use. The contractor shall either utilise the existing electric connection for the building or make contact with Western Power Distribution and set up a temporary supply for the works.

WORKMEN TO BE KEPT WITHIN BOUNDS

The Contractor shall be responsible for keeping all persons under his control, including all those employed by Sub-Contractors and all authorised persons, within bounds, and will be liable for all damage to adjoining premises and property, grass and other vegetation, and to hedges and fences and gates etc., by workers, lorries, or from any other cause whatsoever.

DAMAGE TO ADJOINING BUILDINGS

Should any loss, damage or injury occur to adjoining buildings, roads, drains and services to surrounding buildings from carrying out the works, the Contractor shall make good the same at his own cost. The Contractor will hold general and/or specific risks insurance for the work and materials.

INCLEMENT WEATHER

During inclement weather the Contractor shall suspend all works which may be adversely affected for such time as the Employer may direct, and effectively cover up and protect from damage by weather the works then in course of construction, together with all unfixed materials on the site.

SAMPLES OF MATERIALS

The Contractor shall submit on request samples of any materials if called upon to do so by the Employer and materials used will be at least equal to the approved sample.

Samples / mockups will be required of the following building elements prior to manufacture / ordering:

- Slate coping
- Any fittings chosen by the Contractor

Note: Samples of other items may also be requested.

BY-LAWS REGULATIONS, FEES AND NOTICES

The Contractor shall observe all by-laws, regulations and instructions etc. of all authorities and bodies and shall be responsible for giving the notices required at the proper times.

The Contractor shall also pay any fees due in connection with the works or plant etc.

The Contractor may, where deemed necessary or prudent, inform the area Police and Fire Brigade of the nature of the works.

CARE OF THE WORK

The care of the whole of the works and all appertaining thereto, including all work executed by Sub-Contractors under the contract, together with all risks or damage arising from the weather, carelessness of workmen or any other cause, shall rest with the main Contractor from the date of commencement to the completion and handing over of the work to the Employer.

RUBBISH

The Contractor shall clear away all rubbish and waste materials that may accumulate from time to time, during the progress of the works, and on completion ensure that the site is cleared of all building rubbish and is left clean and tidy.

PROTECTION, SECURITY AND CONTROL OF THE SITE

The Contractor is to provide all necessary barricades, fences, hoardings and the like as is necessary for the protection of working personnel, occupants, visitors, the public and any adjoining properties, and to illuminate, maintain and alter them from time to time as may be necessary throughout the progress of the works.

The Contractor must reasonably secure the site against unauthorised entry and not unwittingly facilitate access to the site or via adjoining property.

PROTECTION OF PERSONS AND PROPERTY

The Contractor shall provide for the efficient protection of the public, the Employer's officers and representatives, servants and property and all other persons occupying or using the premises, during the progress of the works, as required to be done under this contract.

The Contractor shall take all precautions to eliminate as far as possible the danger to the public and other persons arising from the entry and exit of site vehicles and other machinery, to and from the site.

The Contractor shall provide industrial safety helmets complying with BS EN 397:2012+A1:2012, and all other PPE to all those working on the site. All legal and obligatory safety precautions, notices, and requirements in accordance with the HSE will be observed.

HEALTH AND SAFETY

All Contractors and Sub-Contractors and others engaged in the execution of the work will comply with and carry out all duties imposed upon them, as applicable by current Health and Safety Legislation. This includes: -

- Health and Safety at Work Act 1974
- Management of Health Safety and Welfare Regulations 1992
- Construction [Health, Safety and Welfare] Regulations 1996
- The Construction (Design and Management) Regulations 2015

This is not a definitive list of H&S Legislation and all Contractors should satisfy themselves as to the full extent of their duty and compliance.

The Contractor should make an appropriate assessment of the welfare provisions that may be required for the works with due regard to the nature of the works and allow accordingly.

All Contractors and sub-contractors employed on the works are deemed to be aware of their responsibilities and duties under the CDM Regulations and shall co-operate with the Principal Contractor to enable him to fulfil his own duties. The tender price shall include for everything necessary to fully discharge the Contractors' duties under the Regulations, including provision of information required for the Health and Safety File. The successful tendering contractor will perform the role of 'principle contractor' as defined by the regulations, and fulfill all duties attributed to this role.

Construction Phase Plan

The Contractor shall prepare a brief Construction Phase Plan in accordance with the Construction (Design and Management) Regulations 2015.

Accredited Details

The use of the Energy Saving Trust 'Accredited Details' in conjunction with the Architect's working drawings and details will be required. The details are indicative guidance illustrating the good practice for the design and construction of interfaces only in respect to ensuring thermal performance and air barrier continuity.

Quality Assurance

The Contractor shall prepare a project-specific Construction Quality Plan to ensure the satisfactory quality of the works. The Quality Plan shall conform to the aims of BS EN ISO 9000, but shall be tailored to suit the type and size of contract.

The Contractor shall submit his Quality Plan proposals in writing to the Employer before commencing work. The proposals shall be adequate to ensure that the works

are constructed to consistently good quality within the requirements of the specification.

The Contractor shall maintain on site records of supervision, inspection and test activities, as well as actions taken in the event of default.

The Employer's representatives, or visiting Architect will carry out spot inspections at their discretion, but it is the Contractor's duty to supervise and ensure the quality of the works throughout, irrespective of whether such inspections are made or not.

The Employer's representatives may specifically inspect a particular part of the works, but only after that part of the works has been certified by the Contractor that the particular stage of the work to be inspected is complete, in accordance with the Quality Plan.

The operation of the Quality Plan shall in no way detract from the Employer's representative's right of access for inspection and/or rejection of the quality of any part or element of the works within the terms of the contract.

PROTECT THE WORK

The Contractor shall protect the whole of the work from damage from the weather. The Contractor shall not permit anything to be done that is calculated to injure the stability of the works or buildings and no cutting through walls or floors shall be done, other than as indicated on the drawings or as described herein, without the sanction of the Architect or Structural Engineer. The Contractor will be held responsible for all damage arising through carelessness or inadvertence in this respect. Any work damaged or soiled by weather, traffic or other causes due to inadequate temporary protection shall be taken down and re executed or otherwise made good by and at the cost of the Contractor.

EMPLOYEES & SUPERVISION OF THE WORKS

The Contractor is to keep a fit and competent person in charge of the works and instructions given to him shall be deemed to have been issued to the Contractor. This person shall be responsible for the day-to-day running of the site, supervision of the works, ensuring quality and competency of workmanship and Health and Safety matters.

MANAGEMENT OF THE WORKS

The Contractor shall allow for attending monthly progress meetings to be chaired and minuted by the Architect/Contract Administrator and shall provide a formal written Contractor's report that outlines, as a minimum, progress against contract programme, labour on site, placement of subcontracts, any items that are hindering or have

potential to hinder progress, any information requirements, and any Health and Safety related incidents.

The Contractor shall also provide a monthly valuation of the works for review by the Architect. The Architect shall then determine the value of works to be certified for payment in accordance with the contract.

CHECKING OF SCHEDULES, DRAWINGS AND DETAILS

The Contractor shall ascertain from the drawings or otherwise all holes, recesses, plugs, chases etc., which may be required in time to form these as works proceed. No extra payment will be allowed for cutting or forming such holes, recesses or plugs subsequently. It is noted that the small power works may be varied from the design intent shown on the Mechanical + Electrical Engineer's drawings and therefore variation to this will result in the 'Builder's Works in Connection' being varied accordingly. The Contractor should provide a quotation for the value of any such variation once the scope of electrical works is identified.

SUB-CONTRACTORS

No part of the work shall be sub-let to any other persons unless permission is granted by the Employer or Architect. The Employer shall have the power to obtain estimates and to select firms to carry out the work covered by Provisional Sums. The Contractor shall enter into contract with the various Sub-Contractors, making such conditions as those under which the Contractor has contracted and shall impose no conditions more drastic; such conditions are to fix a time for completion which shall be reasonable for the carrying out of the work and the Contractor shall be bound in this respect by the penalty clause contained in his contract and shall impose a penalty upon the sub contractor proportionate to the damages for which the Contractor is liable.

The Contractor shall be required to ascertain from all the Sub-Contractors all particulars relating to their works in regard to positions in which chases, holes, mortises and similar items will be required before the works is put into hand and this shall be deemed to be included for, as part of the Contractor's attendance. No claim will be considered for the extra cost of cutting away work already built in consequence of any neglect on the part of the Contractor to ascertain these particulars before hand.

FORM OF CONTRACT

The general conditions of contract are those as set out in the latest published standard Joints Contracts Tribunal Intermediate Building Contract 2016, whether such contract is signed or not. By tendering, the Contractor is deemed to have read the contract and agreed to carry out the works in accordance with these conditions. The contract shall not be varied except by written agreement with the Architect or Employer.

CONTRACT DOCUMENTS

The contract documents will comprise the Form of Contract, Drawings and Details, Construction Notes, Specifications, etc., as listed in this document on page 4.

EMPLOYMENT, COST AND TAX

The Contractor shall allow for all costs incurred in the employment of staff and labour for the execution of the works. The Contractor shall be required to produce all necessary certificates under the Finance Act at the time of any demand for payment made to the Employer.

PROGRAMME OF WORKS

The Contractor will be required to prepare and issue a Programme of Works at least 7 days prior to commencement on site for agreement with the Architect and to complete the works by the contract completion date. This programme should be in a format that shows critical path analysis and include time allowance for completion of all provisional sum items.

PRIME COST AMOUNTS AND PROVISIONAL AMOUNTS

The Contractor shall add, unless otherwise described, to all prime cost sums for the profit that may be required, for taking delivery, handling, storing, fixing and returning empties, carriage paid, also for packing and carriage to site if so required. This will also apply to any items ordered by the employer and delivered to the site.

The Contractor shall attend upon the nominated and Sub-Contractors executing the works for which prime cost or provisional sums are included in the contract and shall supply them with labour and tackle for unloading their materials and allow them use of storage etc. of their materials.

CONTINGENCY

The Contractor will include in his Tender the contingency sum to be expended as directed or deducted in part or whole if not required as directed by the Architect. This amount is listed in the Schedule of Provisional Sums.

CONTRACT TERMS

Form of contract:	JCT Minor Works Building Contract 2016
Date for Commencement:	to be advised by the Contractor
Date for Completion:	to be advised by the Contractor
Damages for Non completion:	£500 per week
Defects liability period:	6 months

The Contractor shall make good at his own expense, defects due to faulty workmanship or materials occurring and becoming evident within 6 months of Practical Completion.

Payments based upon works completed and materials on site less 5% retention will be made at monthly intervals or as may be agreed otherwise and made within 14 days of the presentation of the certificate / invoice.

Retention from practical completion to making good defects less 2½%

Penultimate Payment:

Payment to the Contractor of 97½% of the total certified amount will be made to the Contractor under the contract.

Final Payment:

The Contractor shall supply within 3 months from the date of practical completion all documentation reasonably required for the computation of the amount to be paid under the final certificate

Insurance:

The Contractor shall be responsible for indemnifying the Employer and himself against claims due to injury or death or any damage to property and will be required unless otherwise agreed, to provide evidence of such insurance.

The Contractor shall insure against injury or damage to property in accordance with the contract, not to be less than 1 million pounds sterling. The Contractor shall hold an 'all risks' policy providing cover to a minimum value of £1,000,000.

Adjudication:

Prior to any involvement of the named 'Adjudicator' a 'Written Notice of Intention' to refer the dispute to adjudication shall be sent by the Referring Party to the Other Party. The Notice shall set all information required.

None of the drawings or contract documents or any other detail or matter provided by the Architect will be used by any other person or company in part or in full, of any agreement between the Employer, Contractor, Sub-Contractor, or reproduced, copied or traced, unless the permission of the Architect has been granted.

Addition/Omission of Contract Clauses:

- P. 3/7 – Fifth Recital - The Base Date is 30th October 2018
- P. 3 – Sixth Recital – An Information Release Schedule is not provided
- P. 3/7 – Seventh Recital - CDM Regulations: The project is notifiable
- P. 3/7 – Eighth Recital – Sectional Working does not apply
- P. 3/7 – Ninth Recital - Framework Agreement does not apply
- P. 4 – Article 4 does not apply
- P. 7/8 - Tenth Recital and Schedule 5 - Supplemental Provisions 1-4 apply
- P. 8 - Tenth Recital and Schedule 5 - Supplemental Provision 5 does not apply
- P. 8 - Tenth Recital and Schedule 5 - Supplemental Provision 6 does apply
- P. 10 - 4.3 and 4.9 – No Fluctuations Provision applies
- P. 10 – 4.7 – No Advance Payment or Advance Payment Bond applies

TENDER AND ACCEPTANCE

A Form of Tender is included with the Tender Documents. The Contractor may insert additional documents or letters or other information in support of clarity of his Tender. A completed copy must be submitted with the Tender returned.

The lowest or any tender received will not necessarily be accepted by the Employer. No payment will be made to the Contractor or anyone else in respect of any fees, charges or costs incurred in the preparation of the tender. The acceptance of any tender will be provisional pending the execution of the form of Agreement.

SECTION 2

TRADE PREAMBLES

Workmanship of all trades will accord with the following British Standards and contractors will be deemed to be fully acquainted with the standards and recommendations.

BS 8000 2014

- Pt. 1 Code of Practice: Excavation and filling
- Pt. 2 Code of Practice: Concrete work
- Pt. 3 Code of Practice: Masonry
- Pt. 4 Code of Practice: Waterproofing
- Pt. 5 Code of Practice: Carpentry, joinery and general fixings
- Pt. 6 Code of Practice: Slating and tiling of roofs
- Pt. 7 Code of Practice: Glazing
- Pt. 8 Code of Practice: Plasterboard, linings and partitions
- Pt. 9 Code of Practice: Floor screeds
- Pt. 10 Code of Practice: Plastering and rendering
- Pt. 11 Code of Practice: Wall and floor tiling
- Pt. 12 Code of Practice: Decorative wall coverings and painting
- Pt. 13 Code of Practice: Above ground drainage and sanitary appliances
- Pt. 14 Code of Practice: Below ground drainage
- Pt. 15 Code of Practice: Hot and cold water services

EXCAVATION + CART AWAY

Excavate the whole of the required area of the building works as shown on the drawings to reduce levels to the underside of the hardcore levels.

Spoil from excavation to be stored temporarily on site for backfilling use if required.

On completion, load and remove any remaining surplus materials. The Contractor may charge reasonable costs for removing and tipping all material at an authorised location.

PUMPING AND BAILING

Keep all excavations free from water by temporary drainage or by pumping or bailing as required.

LEVELS

The Contractor will check the existing levels of the building and relate the new structure and floor levels accordingly so the floor levels align as shown on the drawings. Any difference in levels will be subject to notification to and approval by the Architect or Employer.

OVER OR UNDERGROUND SERVICES

It will be deemed that the contractor will have inspected the over or underground services as shown on the drawings and as described elsewhere in the specification, before submitting his tender.

The contractor shall notify the Architect as soon as an over or underground service not shown on any drawing or described elsewhere, is found.

HARDCORE

Hardcore shall be approved hard brick, concrete, stone, or coarse gravel, free from lime, plaster and other foreign matter and broken to the requisite gauges [to pass through a 75mm ring] for the thickness of the various beds, and in any case not exceeding 100mm gauge.

Hardcore shall be spread and leveled in 150mm layers and well rammed, watered and consolidated into a compact mass and by means of a vibrator roller weighing not less than 1 tonne with a minimum of three passes running at slow speed. Where required, it shall be packed with small pieces, wetted and blinded with fine material to receive concrete or other beds. Depth of hardcore fill shall not exceed 600mm in depth. Where the Contractor finds such areas of fill exceeding this depth he will report this to the Architect or Engineer before proceeding with the work.

BLINDING

Sand blinding shall be laid to a minimum compacted thickness of 50mm in sharp sand.

CEMENT

The cement shall be British Portland cement to comply with BS EN 197-1:2011 and shall be stored in a dry place not in contact with the ground.

Sulphate resisting cement shall comply with BS 4027:1996.

AGGREGATES

Aggregates shall comply with BS EN 12620:2002+A1:2008 from natural sources. Course aggregate for structural concrete shall be graded from 20mm to 5mm as Table 1 and shall have an aggregate crushing value not greater than 21 when treated in accordance with BS EN 12620:2002+A1:2008. Course aggregate for other concretes shall be graded from 37.5mm.

Fine aggregate shall be sand from an approved source [clean, sharp, washed river or pit sand] and complying with BS EN 12620:2002+A1:2008 for concrete and BS EN 13139:2013 for mortar. Aggregate shall be stored in separate piles on a hard sloping

surface and shall remain clean and well graded until ready for mixing.

Samples of aggregates shall be submitted to the Architect 36 days prior to commencing concreting, for approval, which may require a sample to be forwarded to an Authority laboratory for testing.

WATER

Water shall be obtained from the public supply if possible or other approved source and shall be kept free from any impurities and comply with BS EN 1008:2002 for testing.

ADMIXTURES

Admixtures will not be permitted without the approval of the Architect.

RETARDING AGENT

The use of cement retarders will not be permitted except where a key for other finishes is required.

READY-MIXED CONCRETE

The Contractor may use ready-mixed concrete provided that it complies with these preambles and BS EN 206:2013+A1:2016 and is obtained from a British ready mix Concrete Association approved depot. The Contractor will keep records of all delivery notes giving name, number or depot, date, name and location of job, cement, type and size of aggregate, type name and quantity of admixture.

Under no circumstances shall water be added to the mix on site.

Structural use of concrete will comply with BS EN 1992-1-1:2004+A1:2014. Concrete to grade 15 to BS EN 1992-1-1:2004+A1:2014

Concrete should not be placed when the temperature is 2 degrees centigrade on a falling thermometer or at least 2 degrees centigrade on a rising thermometer unless adequate precautions are taken to ensure the soundness of the concrete cast.

PROTECTION

After being placed, concrete shall not be jarred, walked on or otherwise disturbed during setting. All concrete shall be kept thoroughly damp for at least a week after concreting. Freshly placed concrete must be protected from heavy rain. Any concrete damaged during setting by any cause whatsoever, shall be replaced at the Contractor's own expense.

MORTAR

Mortar used for concrete blockwork shall accord with block manufacturer's recommendations. For further information see also BS EN 998-2:2016. Sand will comply with BS EN 12620:2013. Batching of the mix must be consistent and each constituent gauged by volume if all constituents are moisture free or by weight if not. Avoid contamination on site by keeping all material separate and covered and dry. Use clean fresh mains water to mix.

Bricks and blocks will comply with BS EN 772-1:2011+A1:2015 and will be laid, stretcher bond in mortar as designated. They will be carefully stored on site and protected and kept dry at all times, and used in strict accordance with the manufacturer's recommendations.

STRUCTURAL TIMBER

Generally all timber shall be well-seasoned, bright, sound, cut square and straight grained and shall be free from sap, wane, shakes, dry and loose dead knots or any other defect that will render it unsuitable for use.

Timber shall be in accordance with BS 4978:2007+A2:2017, BS EN 1313-1:2010 and BS EN 1995-1-1:2004+A2:2014 and shall have a moisture content of not more than 20% and not less than 15% of the dry weight at the time of fixing.

Treated timber shall be pressure impregnated with an approved preservative complying with the requirements of BS 8417:2011+A1:2014 and BS EN 1995-1-1:2004+A2:2014. All cut surfaces and knotches etc., made on site shall be treated with a suitable brush applied preservative.

Cutting, notching and drilling of all structural timber will accord with the recommendations made in the tables and schedules.

All framing should be jointed as specified or recommended or as is most appropriate and usual in according to the circumstances, the joints shall be designed and constructed so as to transmit the loads and resist stresses to which they will be subjected. The execution of all joints will be to the reasonable satisfaction of the Architect.

BOLTS AND OTHER STEEL FIXINGS

All steel fixings used in the construction will accord with that specified in this document or will be suitable for their intended use in accord with manufacturer's instructions. Bolts will be of the diameter specified with toothed connectors, washers and rings etc., occurring between each interface.

All metals will be to the correct gauge for their use and will be galvanised, stainless

steel or primed as recommended.

TIMBER AND INTERNAL JOINERY

Generally all materials for joiners' works shall be in accordance with BS EN 942:2007 Pt 1, class 1 for hardwood and clear finish softwood, and class 2 for softwood not concealed. Timber shall be used in accordance with the uses permitted in tables A and B. Timber for flooring shall be graded and sized in accordance with BS 1297:1987 and CP 201 Pt 2. Timber used for joinery purposes shall be of a recognised joinery quality, suitable in every respect for its intended purpose and shall comply with BS EN 942:2007.

Plywoods shall be in accordance with BS EN 636:2012+A1:2015 bonded with moisture resistant adhesive to BS 1203:2001 for internal use. Hardboard shall be in accordance with BS EN 315:2000, 316:2009, 317:1993, 318:2002, 319:1993, 320:2011, 321:2002, 382:1993, 622:2009, type TN and shall have a flame spread classification of class A1. Wood chipboard and similar boards will accord with BS EN 309:2005, 311:2002, 312:2010, 317:1993, 323-324:1993, 325:2012, and BS EN ISO 12460-5:2015. Tongue and groove boarding shall be to BS 1297:1987.

Blockboard shall accord with BS 8201:2011. Wood and panel doors shall be to BS 4787:1980 Pt. 1.

All work to be finished with all nails punched in and neatly puttied to give a clean, even and smooth surface ready to receive the decoration stated/specified. All work specified to be un-decorated shall not have any residues of glue or treatment visible on the surface and no filler of any kind is to be used on joints or defects within the timber surface unless approved by the architect.

All joinery specified to be painted should be knotted and primed before or immediately on delivery to site. All joinery will be carefully protected on site, before and after fixing.

PLUMBING, SERVICES AND WATER SYSTEM

Generally the services contractors or coordinators will be responsible for designing and installing complete and suitably efficient systems carrying out all works and using approved materials in accord with the British Standards, BS 6708:1988 Codes of Practices, Bye laws and Statutory Regulations applicable. Programming of installation of all services will be the responsibility of the Main Contractor.

Copper tubing and fittings shall be to BS EN 12449:2016 of approved British manufacture, clean, smooth and drawn from virgin copper, for water. Capillary and compression tube and fittings shall be to BS EN 1254:1998. PVC tubing and fittings shall be to BS EN ISO 1452:2009.

Hot water pipework shall be in copper tubing. Cold water storage systems shall be plastic to BS 4213:2004. Ball valves shall be to BS 1212:2016. Draw off taps and stop valves for hot and cold services shall be to BS 1010.

The jointing methods are to be suitable for the materials used in accordance with the recognised trade practice and to the specification of the manufacturer. Pipes used for potable water shall be jointed with lead-free solder joints or mechanical joints approved by South West Water Authority.

All pipework must be accessible in floors and walls [see requirements by SWW] and structures are to incorporate access traps and points as necessary.

The planning and design of all hot and cold water systems will be completed by qualified Contractors having liaised with the Main Contractor, Employer and Architect on all relevant matters and the scheme will be approved by them prior to installation.

Wherever possible, all pipework will be out of sight, under floors, in walls, ducts, cupboards, in roof spaces. Pipework shall be adequately fixed to the structure and other surfaces.

ELECTRICAL INSTALLATIONS

All materials and methods of work are to comply with the latest IEE 18th Edition Regulations, the Building Regulations Part M, Part P and all relevant British Standards. Cables shall be of an approved manufacture and shall carry the BASEC make or identification thread.

The types of cables, conduits and accessories used for wiring and installing must be suitable for the purpose and must be consistent throughout the installation. Ceiling roses, light switches, socket outlets and spur connectors and the like are to be white plastic or approved pattern or as specified otherwise. All switches and outlets are to be flush pattern type.

The installation will comply with the requirements of the area electricity company and the Contractor shall carry out such tests on completion that are required by the company to satisfy these requirements and issue the appropriate completion certificate.

The Contractor will ensure that all conduits and cables shall be hidden, with no surface wiring of any kind. Cables buried in plaster not in a conduited system shall be protected by conduit or other suitable cover against accidental penetration from nails and drills etc. PVC sheathed or other types of cables laid in roof spaces or under floors shall be set out neatly and systematically. Switch plates, sockets outlets and the like shall be fixed squarely and flush with wall surfaces. Socket outlets shall be generally positioned unless specified otherwise, between 450mm and 1200mm above floor

levels or 200mm above worktops. Light switches will be 1200mm above floor levels.

Chases will be provided in walls where required to hide wiring or conduit. The installation will include for external lighting on the building and extractor fans and vents as specified. Final positions of all fittings, switches, sockets etc. will be agreed on site with the Employer.

Cables located in insulation will be protected in suitable conduits.

INTERNAL AND EXTERNAL DECORATION

All decoration will be confirmed on site by the Employer, or will comply with that specified in this document and associated schedules. Colours of paint and stain, tiling and other finishes will be confirmed.

Generally knotting will be in accordance with BS 1336:1971. Stopping for timber shall be composed of pure white lead and linseed oil putty with a small proportion of cold size added, or alternatively an approved proprietary stopping may be used. Paints will be obtained from one manufacturer, approved and instructions and recommendations for use followed closely. Unless otherwise defined, all bare plaster and skim surfaces are to receive one undercoat and two full-bodied coats of hard wearing wipe-clean paint. All new wood, metal and other specified surfaces are to be prepared and primed and painted with one undercoat and two eggshell or gloss finishing coats internally (to Employer's requirements), and prepared, primed and painted two undercoats and two full eggshell or gloss coats externally (to Employer's requirements), lightly rubbed down with sandpaper between each undercoat. Areas of internal and external timber to be left natural will be treated, sealed waxed and / or stained as directed.

External barge boards, fascias, soffits, horizontal and vertical boarding, ceilings and cladding will be u-PVC in a RAL to match the windows and door frames in accordance with manufacturer's instructions.

Preservatives will comply with BS 8417:2011+A1:2014.

All standards of workmanship generally will comply with BS 6150:2006+A1:2014. All new plastered surfaces are to be thoroughly dried, brushed down, splashes or mortar and plaster and other material etc. removed, and all holes, hollows, cracks and imperfections, filled and made good before decoration.

New woodwork to be painted will be rubbed down with sand paper and knots covered with shellac knotting, with surfaces stopped as previously specified and rubbed down and cleaned off.

Open grained surfaces of plywood and the like should be adequately filled. New woodwork to be clear varnished, lacquered or polished shall be rubbed down with fine

sandpaper and any pinholes or small imperfections filled with matching coloured filler. Before the painting of wood or metal surfaces, all ironmongery and other fixings that are not to be painted, will be removed and refixed when the paintwork is hard. The priming coat and each undercoat shall be well rubbed down with fine sandpaper and stopped and touched up prior to the application of the succeeding coat of paint. Where ceilings are to be skimmed, an emulsion paint finish as specified will be applied.

Staining, treating and sealing of softwood and hardwood external doors will accord with the above unless specified otherwise.

Structural steelwork where not exposed, shall be painted to BS EN ISO 12944-1:2017 and BS EN ISO 14713:2017.

Wood primers are to be to BS 7956:2000. Metal primers are to be zinc phosphate primers. Undercoats to wood and metal are to be oil based. Gloss tops coats are to be alkaloid based.

Preparation will be in strict accordance with BS 6150:2006+A1:2014, BS EN ISO 12944:2017 and BS EN ISO 14713:2017 and the manufacturer's recommendations.

SECTION 3

SCHEDULE OF PROVISIONAL SUMS

Supply and fit of external and internal signage	£1,000
Supply and fit of emergency escape signage	£500
Rehousing/relocation of gas meter	£6,000
Supply only of internal door ironmongery (installation to be included in main price)	£250
Supply only of light fitting to client choice (installation to be included in main price)	£500
Supply and fit of GEZE glass sliding doors and windows (a quotation has been obtained for this item which will be passed to The contractor should allow a lead time of 11 weeks from placing an order	£8,000
Contingency	£5,000
TOTAL of PROVISIONAL SUMS and CONTINGENCIES	£21,250

SECTION 4

SPECIFICATION

APPRAISAL AND DEMOLITION/STRIP OUT METHOD STATEMENT

Prior to the execution of any works, the Contractor will thoroughly appraise himself of the existing building and site and the proposed works in particular the requisite method and sequences of demolition and strip out. If the Contractor has any concerns regarding the best method or the sequence, he is to consult the Architect prior to commencing the works.

Health and Safety

The Contractor and/or his Sub-Contractors will carry out a thorough survey of the existing services into and distributed within and around the building. The Employer will safely terminate or temporarily stop off all services before their complete removal. The Contractor will consult with the Employer and any of the service companies in order to allow for any works to be done by the service companies.

REMOVALS

The Employer will be responsible for removing all loose items, fixtures and fittings etc. worthy of retention from the relevant parts of the spaces to which the works affect. Any items externally that may interfere with or would likely be damaged during the course of the works will be removed by the Employer. Pavers and any other materials that the Employer wishes to salvage must be cleared by the Employer or by arrangement with the Contractor.

The Employer will remove all items of furniture, fixtures and fittings worthy of retention in order to allow the Contractor to carry out the works. Any items remaining will be included as part of the demolition works.

The Employer will temporarily disconnect/make safe and/or remove all services necessary in order to carry out the works etc., or temporarily relocate services for use during construction where necessary. If required a new temporary fuse board and distribution will be set up by the Contractor for use during the works. All temporary works will comply with Western Power Distribution (WPD) requirements.

The contractor will remove all debris and waste materials from site during the works, leaving the site clear and safe upon completion of the works.

DEMOLITION

The contractor will be responsible for examining the existing porch building and taking all necessary precautions in order to maintain the structural stability and integrity of the building during its demolition, including shoring and scaffolding. The contractor

must examine all parts of the building to be demolished and ascertain any difficulty or limitation to normal working procedures. The contractor will allow for all necessary propping and temporary support required to ensure structural stability and safety throughout all phases of the work.

If, during the course of demolition, dangerous substances in the structure of finishing which affect safety, are discovered, including positions and dimensions of any pipework, cables or points of structural significance, or are of concern in any way, the Contractor shall notify the Architect immediately.

NOTE: Asbestos Demolition Survey Pending

SITE CLEARANCE – EXCAVATION

Identify and mark the location of any existing service cables, ducts, drains and other underground installations.

Excavate for all foundation trenches including any rafts, strips, pads, steps, foul drainage and surface water trenches, slab areas, and service trenches as required, to depths, gradients, levels and positions shown.

The depth of excavation shall be below the seasonal variation levels, on firm and undisturbed ground and to the approval of the Local Authority Building Control Inspector.

Should any poor ground strata or conditions be revealed during excavation, the Contractor is to report this information to the Architect and/or Building Inspector and seek further instructions before proceeding.

LEVELS

Levels shown on the approved drawings shall be set out and checked on site. Any changes desired or necessary to accommodate site or other factors must first be reported to the Employer/Architect. Changes in levels or the setting out of any works may require amended submissions and approvals from the Local Authority before the work can proceed.

FOUNDATIONS

All foundations will be at a depth to the approval of the Local Authority building inspector and will be cast onto undisturbed and non-filled ground of suitable bearing capacity, below the seasonal variation level.

Ready mixed concrete will comply with BS 5328 Pt 1 and 2 BS12 1978 and C 10 P, delivered at not less than 4 C. Concrete will not be poured in air temperatures of less than

2 C. Concrete will be cast in a continuous operation up to any steps or breaks, and will

not be carried out in extreme weather conditions.

Concrete will be cast into clean, dry, level trenches in accordance with the drawings. Steps in trenches will be formed if necessary and as required so that the concrete will overlap equal to twice the thickness of the concrete and will not occur within 1.2m of a corner or change of direction.

If during excavation poor or filled ground is discovered, the contractor will report to the building inspector.

Generally, mass cast concrete will be not less than 20N/mm GEN 3 to BS 5328 : 1, cast in the following sizes:

Cavity walls : 600 x 220mm thick

Sub-structure threshold walls: step footing in as shown on drawings

Ensure a minimum of 150mm projection of foundation beyond face of all main walls, nibs, pillars and piers etc.

Portland cement will comply with BS 12 1991

Aggregates will comply with BS 882 1983

Sand will comply with BS 1200

Workmanship will comply with BS 5268 [CP] Pt.3

Ready mixed concrete will comply with BS EN 206:2013+A1:2016 and BS EN 197-1:2011. Concrete will not be poured in air temperatures of less than 2°C. Concrete will be cast in a continuous operation up to any steps or breaks, and will not be carried out in extreme weather conditions.

Keep excavations and ducts and trenches free from water. Excavations that have been carried out too deep are to be back filled with concrete to the approval of the structural engineer.

If during excavation poor or filled ground is discovered, the contractor will report to the Employer/Architect for further instructions.

SUB STRUCTURE - SUB DPC WALLS

Build up from foundation masonry double-skinned walls forming a 100mm cavity as shown, using min. 7N/mm² concrete / trench blocks to support masonry inner and

outer skins of external walls above, and as shown under low-level openings to form sub-thresholds. Lay blocks stretcher bond in mortar as specified by manufacturer.

Finish external blockwork skin externally with 1no. base coat and 1no. top coat of sand cement render with waterproofing additive. Render to 20mm total thickness formed in 2no. 10mm coats ensuring scratch between coats. Apply a wood float finish to the top coat. Use a sulphate resisting cement in the base coat mix. Stainless steel corner beads will be used. Render to BS EN 13914-1:2016 and sand to BS EN 13139:2013. Apply 2no. coats Keim Soldalit Mineral Paint in colour 9590, in accordance with manufacturer's instructions.

Bed and layout DPCs all round in accordance with manufacturer's instructions. Build in all ducts for services, pipes and other penetrations as required.

Trenches around foundations to be carefully back-filled and periodically compacted with good quality material.

NEW CAVITY WALLS

Inner Skin:

From ground floor concrete slab/substructure, build up 100mm thick dense concrete block internal skin with a min. 7N/mm² compressive strength laid in nominal 10mm horizontal and vertical mortar joints in a stretcher bond pattern. The walls will be built up as shown and detailed, forming all openings, nibs and returns etc., using units of 440 x 215 x 100mm thick of weight 7.1kg. Workmanship will comply with BS 8000-3:2014.

Cavity and Outer Skin:

Form 100mm cavity and partially fill with 50mm thick Kingspan Kooltherm K108 rigid insulation (or similar approved) fixed to inner skin following manufacturer's recommendations, leaving clear 50mm cavity on external side. Build up concrete blockwork external skin, using 100mm thick dense concrete blocks with a min. 7N/mm² compressive strength laid in nominal 10mm horizontal and vertical mortar joints in a stretcher bond pattern. The walls will be built up as shown and detailed, forming all openings, nibs and returns etc., using units of 440 x 215 x 100mm thick of weight 7.1kg. Workmanship will comply with BS 8000-3:2014. Form weep holes (dry perpend or use proprietary plastic weep vents) at 2.0m c/cs all around base of wall. Workmanship will comply with BS8000CP for masonry work.

Wall Ties

Wall ties will comply with BS EN 845-1:2013+A1:2016 and will be austenitic stainless steel Ancon Staifix, or similar and approved by the Architect, in accordance with BS 5268, to suit 100mm cavity.

Generally: Ties should be used at not less than 2.5 per square metre (750mm horizontal x 450mm vertical centres). Ties should be evenly distributed over the wall

area, except around openings, and should preferably be staggered. At vertical edges of an opening, unreturned or unbonded edges, and vertical expansion joints, additional ties should be used at a rate of one per 300mm height, located not more than 225mm from the edge.

Closures

Vertical and horizontal DPCs and trays will be dressed around openings over face of closers and through sills as shown.

Provide Visqueen Zedex CPT High Performance DPC at a minimum of 150mm above external ground level, provide weep holes at 900mm c/cs horizontally.

A suitable exterior grade translucent mastic sealant will be applied as a neat consistent bead at the external abutments between all frames and heads, jambs and sills.

See also requirements for check rebates at all window and door openings.

Penetrations

Build in all uPVC, concrete/stone glazed ducts, vent ducting, pipes, sleeves, airbricks etc. and allow for all other penetrations as shown and as may be required by sub contractors and service companies. Provide PC reinforced concrete lintel support + sleeve where pipes pass through walls.

Lintels

Build in masonry type steel galvanised lintel to BS EN 10346:2015 and BS 5977-1:1981 with anti-corrosion polyester resin and integral DPCs, e.g. Catnic CXL290 or similar approved, to be installed + fixed in strict accordance with manufacturer's instructions and span/load tables, maintaining minimum 150mm end bearings square and level. Weep holes to be provided over all external lintel positions with cavity tray fixed over lintel, all fixed in accordance with manufacturer's instructions. Sizes are to be checked and measured by Contractor prior to fabrication.

All steelwork to be hot dipped galvanized to BS EN ISO 1461:2009 minimum coating of 460g/m². Fixings shall be hot dip galvanized to BS7371-8:2011. For sites within 500m of a coastal shoreline an enhanced coating of 710g/m² shall be provided. All steel to be brushed on painted.

Over new internal doorway between lobby and adjacent room use a pc concrete lintel to suit 215mm wall thickness.

Internal Finish: Drylining on battens or plaster dabs with plaster skim finish

Prepare surface of existing walls where these are to become internal. Mechanically fix 38 x 38 treated sw battens vertically to face of existing walls at 400mm cs, ensuring battens are plumb and true. Fix 12.5mm gypsum plasterboard to battens.

For internal finish of the new external wall, dry-line internal face of all existing and new walls with 12.5mm Gypsum plasterboard internally using plastic expanded plaster beads and stops to all internal and external angles and other arises.

Apply 3mm smooth and level Thistle skim finish and leave ready for decoration.

External Finish: Painted Render

Where render is shown, finish external blockwork skin externally with 1no. base coat and 1no. top coat of sand cement render with waterproofing additive. Render to 20mm total thickness formed in 2no. 10mm coats ensuring scratch between coats; render around window and door reveals to 25mm total thickness. Top coat finish to match existing building. Use a sulphate resisting cement in the base coat mix. Stainless steel corner beads or drips will be used. Render to BS EN 13914-1:2016 and sand to BS EN 13139:2013. Apply three coats Dulux WeatherShield in accordance with manufacturers instructions

Finish bottom of render with bellcast drip bead to 150mm above external ground level.

Mortar

Mortar used for concrete blockwork shall accord with block manufacturer's recommendations. For further information see also BS EN ISO 15528:2013. Sand will comply with BS EN 13139:2013. Mortar in blockwork above DPC level will be 1:1:6 c/l/s by dry volume. Use a mix of 1:4 c/s or 1:1½:4½ c/l/s below DPC. Batching of the mix must be consistent and each constituent gauged by volume if all constituents are moisture free or by weight if not. Avoid contamination on site by keeping all material separate and covered and dry. Use clean fresh mains water to mix.

Bricks and blocks will comply with BS EN 772-1:2011+A1:2015 and will be laid, stretcher bond in mortar as designated. They will be carefully stored on site and protected and kept dry at all times, and used in strict accordance with the manufacturer's recommendations.

Parapet

Build up new parapet with pediment as shown on elevations and details. Parapet cavity to be closed with firestop cavity closer at head. Lay dpc across cavity as shown. Provide 30mm thick slate coping with min 50mm lip beyond face of blockwork on either side of parapet. Fix stainless steel dowels min 8mm dia in to top surface of blockwork with polysulphide mastik. Back face of slate to be scored and holes drilled to 1/2 depth to receive dowel. Slate coping to be bonded to dowels with resin and bedded in mortar.

CONTRACTION / MOVEMENT JOINTS

Contraction joints will be formed in the masonry walls in positions to be agreed but generally at 6.0m centres and within 3.0m of corners, in accordance with recommended detail. The Contractor will agree with the Architect the exact positions prior to forming these joints. Joints to be 10mm nominal in width with wall ties at either side of joints at each blockwork course. Fill joints with compressible material

and seal externally with appropriate mastic sealant. Fix plastic or stainless steel vertical render stop bead with cover strip over joints.

BUILDING AIR LEAKAGE

The building envelope should be reasonably airtight to avoid unnecessary space heating and cooling demand and to enable the effective performance of ventilation systems and installations. Generally ensure that a suitable sealant bead or proprietary foam/rubber backing is provided between the window/doorframe and the masonry reveal, and/or provide a clear sealant bead at the abutment of the interior plaster and exterior render/masonry block finish with all window/door frames. Provide a similar seal under the internal windowsill and wall junction.

DPCs, DPMs, DAMP PROOFING and DP Trays

Build in horizontal DPCs to both skins of external cavity wall as shown, at minimum 150mm above finished ground level using a pitch polymer free material such as Visqueen Zedex CPT High Performance DPC system or other similar approved. Use polyethylene DPCs to BS 6515:1984 as detailed to all horizontal and vertical cavity closers turned into frame rebates, behind heads and to form trays over openings and at abutments where shown, extending a minimum 150mm either side of openings. Dress behind and under sills and into window / doorframe rebates as detailed.

Purpose made cavity trays may also be used, e.g. door sills, roof abutments + jambs, ensuring continuity by lapping and sealing in accordance with manufacturer's instructions. Check lintel manufacturer's recommendations for additional trays over lintels.

DPM to be Visqueen Red Radon Membrane with a min. 1200 gauge, well lapped and taped to form a continuous membrane using manufacturer's impervious tape. Note: DPMs will be carried through cavity walls and stepped down through cavity as shown, forming trays as part of radon prevention measures where applicable.

EXTERNAL AND INTERNAL WINDOW SILLS

External Window Sills

External window sill is to be provided as part of powder-coated aluminium glazing system. Dress in DP tray under sill and through section as shown and apply a suitable exterior flexible sealant at the abutments of the window and doors frames and reveals.

External Sub Sills

Cut and bed 25mm thick riven slate sill and pin to stonework below using stainless steel dowel set in polysulphide mastic in pre drilled hole at 600mm c/cs. Plug pin hole flush with slate surface with slate dust and resin.

Dress in DP tray under sill and through section as shown.

Apply a suitable exterior flexible sealant at the abutments of the window and doors frames and reveals.

Internal Window Sills

Cut and fit 18mm thick primed and painted MDF internal window boards with bullnose edge.

BLOCKING UP EXISTING OPENINGS

Strip out existing windows, removing cills and bell casts above windows. Block up with single leaf of medium density concrete block laid flat, 215mm thick. Line internally with 38 x 89 treated timber studwork mechanically fixed to reveals of exiting opening, leaving clear 50mm cavity. Fix 62.5mm thick insulated plasterboard to internal face of studwork and finish with 3mm Thistle plaster skim and paint with one mist coat and two top coats of emulsion paint.

Externally, render external face of block work, surface finish to match existing, making good any joints with existing render. Repaint whole wall surface externally with Dulux WeatherShield in accordance with manufacturers instructions

ROOF CONSTRUCTION

Frame up and form roof structure in Mitek metal web roofing joists. Joists to be sized and designed by the supplier and installed in strict accordance with their instructions. including timber wall plates, straps and joist hangers.

Form opening for rooflight to suit Keylite dimension requirements, form kerb upstand to rooflight in 89 x 38 mm sw treated timber studwork with vertical studs at 400mm cs. Fix 18mm wbp ply sheathing to outer fce of upstand kerb and insulate between studs with full fill PIR insulation such as Ecotherm Eco-versal or similar approved. All joints to be taped and all gaps to be sealed with an expanding foam sealant.

All timber will be sawn treated and graded as specified. Processed timber to BS EN 1313-1:2010 + BS 4978:1996. Fixings and connectors to BS 1494 + BS EN 912:2011 – marine grade stainless steel. All timber from FSC sources.

All timber will be treated with an approved and suitable preservative to BS EN 1995-1-1:2004+A2:2014 ideally organic solvent vacuum pressure treated, but not using CCA types. Cut ends on site will be treated with a compatible preservative in accordance with the manufacturer's instructions prior to being enclosed or covered up.

All framing should be jointed as specified or as is most appropriate in the

circumstances, the joints shall be designed and constructed so they will transmit the loads and resist stresses to which they will be subjected and the execution of all joints should be to the satisfaction of the Structural Engineer.

ROOF COVERING - Sarnafil Flat Roofs

Layout, cut, glue and fix using austenitic screws at 300mm c/cs 18mm thick WBP exterior grade plywood sheathing square edged with 12mm expansion gap between edges to BS 1088:2018 over top of roof structure. Loose-lay Tyvek Airguard vapour control layer beneath plywood ensuring minimum overlaps, seals, tapes and penetrations are in accordance with manufacturer's instructions.

Cut and neatly lay and fix Kingspan TT47 tapered insulation over ply deck, min thickness 120mm with a fall of 1:40, in accordance with manufacturer's instructions. Use manufacturer's impervious tape to seal joints between boards.

Form perimeter gutter in min 80mm thick TT47 to min 1:80 fall

Fix mechanically-fastened 2mm thick Sarnafil S327-20EL (PVC) membrane to top of insulation in accordance with manufacturer's instructions, with proprietary underlay, ensuring min. overlaps and use of thermally-broken fasteners.

Form two outlets through parapet with proprietary Sarnafil T Scupper, discharging into hopper.

RAINWATER GOODS

Fix replacement uPVC black ogee gutters to match existing, 87mm dia. downpipes and accessories in accordance with manufacturer's instructions. Gutter from main existing slate roofs to discharge into purpose made aluminium hopper, powder coated black, fixed to face of new parapet wall either side of lobby entrance.

RAINWATER DRAINAGE AND DISPOSAL

RWPs will be directly connected to inlet pipes with flexible connectors or similar laid to minimum fall 1:100 bedded and surrounded in pea shingle and connected into the existing surface water drainage system.

FLOOR CONSTRUCTION

Screed

Mix, in accordance with manufacturer's instructions, Ardurapid 35 ARDEX cement substitute with clean sharp sand at 1:4 and lay at 50mm thickness unbonded screed smooth and level to all ground floor spaces where shown. Lay over continuous 500g polythene vapour control layer.

Insulation and Concrete Oversite and Base

Lay Kingspan KoolTherm phenolic K3 – 75mm thick insulation boards on minimum 100mm thick 1:3:6 mass concrete oversite cast onto 1200g Visqueen DPM lapped taped and sealed and turned up at slab edge and linked with DPCs, on 40mm sharp sand blinding on minimum 200mm thick well consolidated clean graded hardcore, laid where required in maximum 220mm compacted layers not exceeding a total depth of 600mm. Should this depth be exceeded, the architect / building inspector should be informed.

Ensure all penetrations through the floor are sealed with DPM by means of impervious tape.

In accordance with SWW plc By Laws and Regulations and all other relevant service company's similar requirements ensure that all under floor service and pipes etc. are laid out and protected and insulated as specified in proprietary trapped channels or form removable screwed down access traps over formed ducts in concrete and/or insulated floors.

Penetrations through floors will be sealed with DPMs by means of impervious tape.

EXTERNAL WINDOWS and AUTOMATED DOORS

Aluminium windows and automated doors are to be supplied and fitted by Geze. This item is covered by a provisional sum, a quotation will be provided to the successful tendering contractor.

All external windows will be to the design and size shown on the drawings and schedules and as specified. All structural opening sizes are to be checked on-site by the Contractor or window manufacturer prior to ordering of windows and doors.

Manufacturer's fabrication drawings and specifications will be submitted to the Architect for approval prior to orders being placed.

Extension pieces must be allowed for as required.

A check by the contractor or manufacturer will be made to ensure that each window will be equal in size to 10% of the floor area of the rooms they serve and the total opening light area of the windows to each room will equal 5% of the floor area of the rooms being served by the window/s.

Each window will be fitted with trickle ventilators, and discrete security locks.

GLAZING

Glazing will be provided as part of the Geze door and window package, therefore the below specification is for general information and demonstration of building regulations compliance.

All windows, glazed doors, panels and other fixed lights will be double glazed as specified with factory sealed units to BS EN 1279-1:2018 and kite marked. Check with manufacturer of sealed units that material for edge seal is compatible with proposed glazing compounds. Glazing techniques for insulating glass should comply with the recommendations given by the GGF and BS 8000-7:2014.

Glazing to a height of 1500mm in door openings + adjacent windows + windows within 300mm of door openings to be British Standard safety glass BS EN 12600:2002. Windows with glazing below 800mm above FFL will be safety glass to BS 6262:2005 and BS EN 12600:2002

All glazing must be suitable for the coastal and exposed location of the site.

All glass used for windows and glazed doors will comply with the above requirements.

Double glazed units are to be 6mm Pilkington Activ Suncool or similar approved (self-cleaning with solar control) outer pane 16mm argon filled cavity with black 'warm edge spacers' and 6mm Pilkington K Glass with low emissivity coating inner pane, impact resistant properties where required in critical areas as detailed above. Alternatives to the above glazed unit specification will be considered if similar performance characteristics can be demonstrated and written approval obtained from the Architect.

Provide clear silicone mastic pointing all round doors and window frames.

ROOF GLAZING

Supply and Fit Keylite FRL 2515 (2.5x1.5m) fixed roof lantern as shown in accordance with manufacturer's instructions, building up insulated kerbs in timber carcassing as shown to the installation dimensions required by Keylite, ensuring continuity of Sarnafil membrane all around following manufacturer's guidance and details.

Minimum overall U-Value of rooflight to be av. weighted - 1.8W/m²/K

Rooflight finish to be powder coated aluminium, grade suitable for a marine environment, colour to be white as standard.

DESIGNED U-VALUES AND INSULATION OF THE BUILDING FABRIC:

Some products are already specified in other section headings but all requirements are noted here collectively under this main section heading.

Insulation materials and overall elemental construction for: -

Ground Floor will achieve a U value of 0.22W/m²K or better as designed

External Walls will achieve a U value of 0.26W/m²K or better as designed

Roof will achieve a U value of 0.18W/m²K or better as designed

Windows will achieve an av. weighted U value of 1.6W/m²K or better as designed

External Doors will achieve an av. weighted U value of 1.6W/m²K or better as designed

Rooflights will achieve an av. weighted U value of 1.8W/m²K or better as designed

All insulation materials will be installed and fixed in accordance with manufacturer's details and instructions. Materials specified must not be altered or changed without first obtaining approval from the Architect.

ELECTRICAL INSTALLATIONS – Supply, Power, Lighting

All electrical installations, systems and controls are to be in accordance with Mechanical + Electrical Engineer's design and specification. Generally:

All Electrical works and installations as defined in the Regulations will comply with Building Regulations Approved Document P

How to Comply:

Notification or Certification

- Follow rules in BS 7671:2018 or approved equivalent standard
- Follow guidance in IEE On Site guide
- IEE Guidance Notes p 1-7
- Approved Document P includes diagrams for electrical services and layouts that may be used as a basis for installation

All works will be carried out by: -

1 - A competent person who belongs to an approved Scheme who is able to self-certify their work. The operator will inform Building Control when the works are Complete.

2 - Competent person who is a fully qualified electrician but who does not belong to an approved Scheme but can issue their serial numbered BS 7671:2018 Certificates for the completed work.

3 - Other installers and DIY persons must inform Building Control when 1st fix

works are available for inspection. A suitable report prepared by a competent person [as above] must be submitted.

All materials and methods of work are to comply with the latest IEE Regulations and all relevant British Standards.

Fixed internal and external lighting

Layout of fixed internal and external lighting is to be in accordance with Architects design and specification. **Final positions of all fittings, switches, sockets etc. will be agreed on site with Employer and/or Architect.**

Fit fixed energy efficient LED lighting throughout; ensuring fittings have a capability of taking lamps with a luminous efficacy of 45 lumens per circuit watt.

The types of cables, conduits and accessories used for wiring and installing must be suitable for the purpose and must be consistent throughout the installation.

The installation will comply with the requirements of the Electricity Board and the Contractor shall carry out such tests on completion that are required by the board to satisfy these requirements and issue the appropriate completion certificate.

All conduit and cable shall be hidden, no surface wiring of any kind will be allowed. Conduit or other suitable cover against accidental penetration from nails and drills etc shall protect cable buried in plaster not in a conduited system. PVC sheathed or other types of cables laid in roof spaces or under floors shall be set out neatly and systematically. Switch plates, sockets outlets and the like shall be fixed squarely and flush with wall surfaces. Socket outlets shall be generally positioned unless specified otherwise minimum 450mm above floor levels. Light switches maximum 1200mm above floor levels.

Where chases are provided in walls to hide wiring or conduit, follow paragraph 2C30 in Approved Document A for maximum chasing depths. The installation will include for external lighting on the building and externally any extractor fans and vents as specified. Cables located in insulation will be protected in suitable conduit.

Emergency lighting

Emergency lighting required to comply with Sections 5.36, 5.37 and Table 9 of Approved Document B2 and BS5266-1:2005. Maintained or non-maintained low-wattage LED bulkhead (such as Eden ED8), with emergency exit signage, to be installed above all doors on exit routes to Employer's requirements.

SMOKE DETECTION AND ALARMS

The Contractor will install complete in accordance with the manufacturer's instructions

self-contained smoke and heat detectors with integrated alarms, in the positions shown.

Smoke and Heat Detector units will be installed in accordance with the Mechanical + Electrical Engineer's design and specification. Generally:

Self-contained smoke alarms and heat detectors should be permanently wired to a separately fused circuit at the distribution board. They may operate at low voltage via a mains transformer.

The cable for the power supply to and interconnection of self-contained smoke alarms need have no special fire survival properties. The wiring installation should conform to current IEE Regulations.

Each self-contained smoke alarm should be fixed to the ceiling at least 300mm from any wall or light fitting, a central position is preferable. Units designed for wall mounting should be fixed between 150 to 300mm below the ceiling. It should be possible to reach the alarms to carry out routine maintenance, testing and cleaning.

Smoke alarms should not be fixed next to or directly above heaters or air conditioning outlets. They should not be fixed in WCs, En-Suites or Bathrooms, nor in places of extreme heat or cold.

It is essential that the Employer receives the manufacturer's and other relevant information on the use of the equipment and on its maintenance and information relating to approved Contractors for such work.

RADON PROTECTION

Contractors are advised to check with the Local Authority Building Control Inspector at an early stage the extent of the required radon protection measures. Full details are available from current BRE guidance and information.

Basic Measures:

Dress the DPM through the external wall cavity as shown all around and step to form a tray. Lap and tape the membrane in accordance with manufacturer's instructions to form a continuous DPM.

Full Measures:

In addition, construct a 600x600mm square radon sump from brickwork with horizontal joints laid in mortar but with perpends left open, laid on a compacted hardcore base and covered with pre-cast concrete paving slab, with 110mmØ uPVC depressurisation / vent pipe with joints using standard couplings, sealed and airtight, placed in end of sump and taken to outside of the perimeter wall and turned up above finished ground level. Pipe outlet to be fitted with an access plug ready for future

extension + fan extraction if found necessary.

Alternatively, a pre-fabricated plastic sump and pipe may be used.

LEVEL THRESHOLDS + THRESHOLD DRAINAGE

The Geze door system includes for a threshold strip /guide rails set flush with the floor surface. The contractor should set the top of screed to allow for the thickness of barrier carpet and matting, creating a final finish with carpet to be flush with the top of this guide rail.

Build across full width of automated entrance door Aco Hexdrain Brickslot or similar approved with heel safe grating and frame. Fit 40mmØ drain pipe from outlet and connect into surface water drainage system.

LEAD

Rolled lead sheet to BS EN 12588: 2006 and BS6915 Code of Practice,

Lead will be laid, dressed and fixed strictly in accordance with the current Code of Practice and LSA Guide to Practice. Lead burning in -situ only to be carried out if no other alternative i.e. lead burning on the ground or lead dressing [bossing].

The following sheet thicknesses should be used : -

Code 4 lead	:	soakers
Code 5 lead	:	flashings, valleys, gutters,

Form lap joints but not butt joints.

All nails to be copper or stainless steel jagged or annular ring shank with minimum 3.5mm shank width and 8mm diameter broad head to penetrate minimum 20mm into substrate with close nailing at 40mm c/cs and open nailing at 75mm c/cs.

Lead flashings will be smeared with patination oil on completion of work to prevent staining.

Back edges of all flashings are to be welted minimum 38mm and dressed minimum 50mm into masonry chase and areas in contact with mortar to be painted in 2cts bitumen.

Code 5 flashings to be in maximum 1.5m lengths with 100mm side lap, dressed minimum 38mm into masonry joint with welted back edge, secured with lead wedges at 500mm c/cs and pointed in. Flashings to have minimum 75mm cover over upstand / soaker behind it and on exposed areas held with lead clips.

Fixing clips to be 50mm wide minimum code 6 lead, or 0.6mm thick quarter hard copper sheet or 2.8 SWG grade 316 stainless steel strips at maximum 500mm c/cs - reducing to 300mm c/cs in areas of high exposure.

All leadwork and detailing will conform to the LSA design, specifications and recommendations per detail / location.

RAINWATER DRAINAGE + DISCHARGE

Rainwater downpipes will be directly connected to inlets set flush with finished ground level, connected to 100mmØ flexi pipe or similar laid to fall minimum 1:80 bedded and surrounded in pea shingle and laid out as shown to discharge into existing surface water drainage system.

INTERNAL JOINERY

All internal timber joinery will be of good quality in Southern Yellow Pine softwood or other approved timber. Generally, the work will include for all door linings, door stops, architraves, frames and sills where required. All work will be neatly cut, mitred, fixed and fitted and stopped in, with all exposed cut ends appropriately sealed, and left ready for decoration as required.

Skirtings to be 120mm high rectangular factory primed sw (to Employer's

Architraves to be 65mm wide, rectangular factory primed sw – paint colour to Employer's requirements. Depth to match floor tiling (to Employer's requirements). Architraves to stop 13mm above FFL with all cut ends appropriately sealed.

Internal window boards will be 18mm thick primed and painted mdf with bullnose edge.

DECORATION

All best quality materials will be selected for their suitability and applied, used and fixed in accordance with the manufacturer's recommendations.

Unless otherwise defined, all bare skimmed surfaces are to receive one mist coat and two top coats of Dulux Diamond Eggshell (colour to Employer's requirements). All new wood, metal and other specified surfaces are to be prepared and primed and painted with two undercoats and one eggshell or gloss finishing coat internally (to Employer's requirements), and prepared, primed and painted two undercoats and two full eggshell or gloss coats externally (to Employer's requirements), lightly rubbed down with sandpaper between each undercoat. Areas of internal and external timber to be left with a natural appearance will be treated, sealed waxed and / or stained as directed.

External barge boards, fascias, soffits, horizontal and vertical boarding, ceilings and cladding will be treated as previously specified and painted or stained in accordance with manufacturer's instructions.

FLOOR FINISHES

Carpet

Carpet in new porch/lobby to be Forbo Coral Duo barrier carpet, bonded to screed in accordance with manufacturers instructions.

NEW INTERNAL DOOR

New internal door, consisting of master leaf and slave half leaf is to be a solid core CE marked 60 minute fire door with smoke seals and intumescent strips. The door should have a flush finish, factory primed ready to receive a painted finish of two coats satin interior wood paint.

Three hinges to be fitted to each leaf. Hinges to have intumescent graphite pads fitted between hinge plate and door frame/lining to comply with CE mark rating.

Door linings are to be 50mm thick southern yellow pine, painted with 1 undercoat and two top coats, gaps between lining and structural opening to be filled with intumescent foam.

Locks and latches should comply with BS 3621:2017 – thief resistant or as required by Insurance Company.

Hinges for all doors must be selected for their environment and the weight of the door leaf. The product must be CE marked.

New internal door to have finger guards.

EXTERNAL WORK + LANDSCAPING

Remove existing bollards, set aside and reinstall in front of new entrance door where shown on drawings.

Scabble back and reduce existing tarmac by 80mm further away from building, to receive new base course (60mm thick) and new top coat (20mm) of tarmac. Nearer to building and new entrance reduce levels further where required to allow a min 100mm thick concrete base over the existing tarmac, allowing for localised compacted fill where required, finishing with 60mm base course and 20mm top course of tarmac. Form levels to fall, to be no steeper than 1:21 gradient from existing surfaces up to the

entrance door. Finish edges of re-laid and resurfaced tarmac flush with existing surfaces and sealed at abutments.

Mark out parking bays, including markings to denote blue badge/accessible parking bays for wheelchair users and others as shown on drawings and to the relevant recognized marking standards, in suitable thermoplastic road marking paints.

Block paving in front of entry door to be Marshalls (block type to client choice) bedded on mortar with proprietary brush in grout to joints.

BUILDING LOG BOOK

Prepare and provide the Employer with a log book giving details of installed services, plant and controls, their method of operation and maintenance, and other associated details as part of other documentation provided for the building, such as Operation and Maintenance Manuals, and the Health & Safety file.

END OF DOCUMENT