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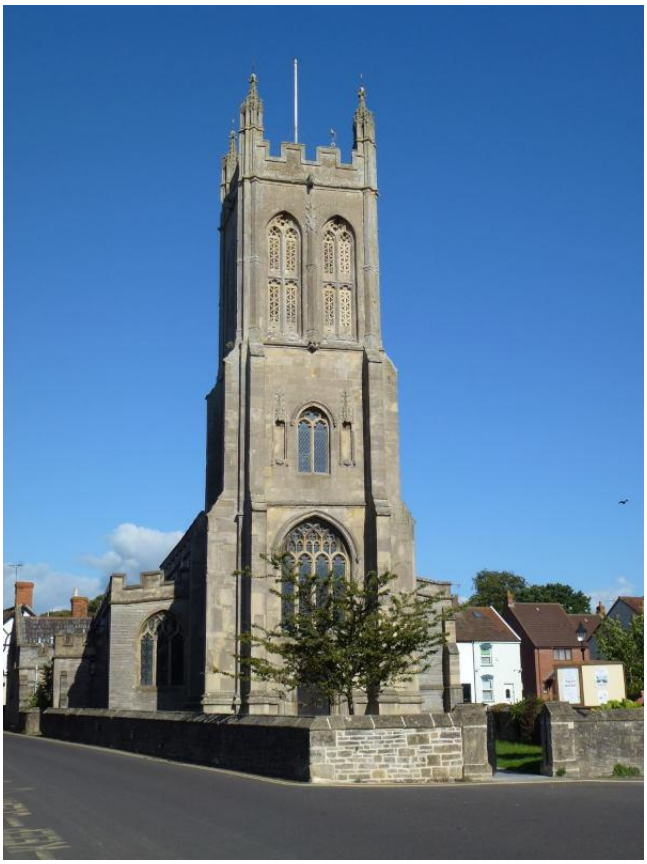
GLASTONBURY
St Benedict's

Proposed Flooring Project



NBS and Schedule of works
Project No 0875

July 2024

1. PREAMBLE

1.1 Description of Church

Grade 1 Listed - Rebuilt by Abbot Bere c. 1520. The substantial medieval remains (i.e., the nave and north aisle with timber roofs of c.1500, the north porch, and particularly the very good west tower) are significant examples of the Somerset Perp style. The church is also a prominent feature in the town.

Mainly late medieval. Chancel perhaps renewed in the mid-14th century, tower perhaps mid-15th century, north aisle and porch c. 1493-1524. South chapel, 1862, by Benjamin Ferrey. General restoration, new south aisle and transept, and the reconstruction of the north aisle and porch using old materials, by J.D. Sedding, 1884-6.

The interior is much re-ordered but the work is well considered. The interior has the tower arch panelled between thin shafts, a four-bay arcade with a three-light clerestory above. To the northeast there is the vestry, toilet facilities and a kitchen.

1.2 Condition

The church and church yard are clearly well kept. The fabric of the church has been well maintained by the PCC.

1.3 Scope and Principles of the Works

This project comprises the following range of remedial works:

- Removal of failing floor and heating system.
- Laying new stone floors.
- New heating system.
- Plaster repairs.
- Re-decoration as required.

1.4 Location of Site

The church is sited in St benedict's Street, Glastonbury, Somerset. Postcode: BA6 9NB.

1.5 Access

Arrangements to visit the church should be made by contacting Mr David Chapman, the Churchwarden, telephone 01458 830060.

1.6 The Contract

The Employer will be the PCC of St benedict's, Glastonbury. A contract will be drawn up between the Employer and the selected Contractor using the JCT Intermediate Building Contract 2016, latest edition. All contract figures shall be exclusive of VAT.

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The following Contract Particulars shall apply:

1st Recital	The Employer wishes to have the following work carried out: remedial works at St Benedicts, Glastonbury 'The Works'.
2nd Recital	A Specification (which includes a Schedule of Works and Daywork rates) and drawings have been prepared.
3rd Recital	Reference to the Bill of Quantities will be deleted.
4th Recital	The Contractor has stated the sum he will require for carrying out the Works shown on the Contract Drawings and described in the Specification, that sum being the Contract Sum stated in Article 2 and has supplied to the Employer a Contract Sum Analysis in accordance with the state requirement of the Employer or a Schedule of Rates on which that sum is based The Schedule of Works The Priced Document, the priced Activity Schedule, where provided, and (where Pricing Option B applies) the (unpriced) Specification have each for identification been signed or initialled by or on behalf of each party.
5th Recital	The 'Base Date' shall be ten days before the tender return due date. CIS – The Employer at the Base Date is not a Contractor for the purpose of the CIS.
6th Recital	All information released at time of tender.
7th Recital	The Project is notifiable.
8th Recital	Omit reference to Bill of Quantities.
9th Recital	Framework agreements do not apply.
10th Recital	Supplementary Provisions: - Collaborative working applies - Health and Safety applies - Cost savings and value improvements does not apply - Sustainable development and environmental considerations does not apply - Performance indicators do not apply - Notification of disputes does not apply
Article 4	Appointment of Quantity Surveyor – N/A
Article 5	CDM Co-ordinator – Applies
Article 8	Arbitration shall apply
Clause 1.1	Base Date - TBA
Clause 1.1	CDM Planning period – 2 weeks
Clause 1.1	Date for Completion of the works - TBA
Clause 2.4	Date for commencement of the works: TBA
Clause 2.23.2	Liquidated damages: £500 per week
Clause 2.30	The rectification period shall be **12 months**
Clause 4.6	Does not apply
Clause 4.7.1	Shall be every 28 days from the date of commencement on site.

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Clause 4.8.1	Percentage rate of the total value shall be 95% prior to practical completion.
	Percentage rate of total amount paid to the contractor shall be 97½ post practical completion.
Clause 4.8.1	Supply of documentation: 3 months
Clause 4.9.4	No bond required.
Clause 4.15 & & Schedule 4	Fluctuations for Contribution, levy and tax changes shall not apply
Clause 6.4.1.2	Insurance shall be taken out to cover an unlimited number of incidents at £5 million per incident.
Clause 6.5.1	The employers will advise their insurers.
Clause 6.7 Clause 6.7c	Insurance of the works – Option C applies & Schedule 1 Percentage shall be 15%
Clause 6.10 & Schedule 1	Annual renewal date for insurance – TBA.
Clause 6.12	Joint Fire Code – does not apply.
Part 2	Collateral Warranties are not required.
Attestation	The contract shall be executed under hand.
Clause 9.4.1	The adjudicator shall be the President or a Vice President or a Vice Chairman of the Royal Institute of British Architects.

1.7 CDM Regulations 2015 - Health & Safety Plan

At the time of the tender it is considered that the project is notifiable to the HSE because of the duration and nature of the works.

The PCC will appoint benjamin+beauchamp Architects Ltd as the Principal Designer (PD) and the successful contractor as the Principal Contractor (PC) in accordance with the CDM 2015 Regulations. The PD will prepare the Health and Safety Plan for the PC to consider with the tender. The PC will remain responsible for Health and Safety during the construction Phase and complete the Health and Safety File on Practical Completion. benjamin+beauchamp will act as architect/contract administrator for the project.

It is required to ensure that appropriate health and safety measures are employed throughout the duration of the contract and that these should include the following:

- Provide details of the site management structure and identify those members of staff with specific responsibilities for Health & Safety.
- Be satisfied that when arranging for a sub-contractor to carry out construction work, they are competent and have made adequate provision for Health & Safety.
- Carry out risk assessments and obtain and check safety method statements.
- Ensure the co-ordination and co-operation of sub-contractors.
- Have appropriate communication arrangements between sub-contractors on site for

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Health & Safety. Ensure that the subject of Health & Safety features strongly on the agenda of all sub-contractors and progress meetings.

- Make arrangements for discussing Health & Safety mattes with people on site.

- Allow only authorised people on to site and maintain a visitor's book. Ensure that all visitors are advised of any specific safety risks.

- Display notification details.

- Monitor Health & Safety performance.

- Prepare a Health & Safety File.

1.8 Variations and Unforeseen Work

The contractor is to notify the architect immediately if any unforeseen defects are uncovered. Any extra works found to be necessary during the works shall not be commenced without the architect's prior instruction, which will be confirmed in writing as a variation.

No claim for extras can be considered in the assessment of the Final Account unless this procedure has been followed.

No variations in addition to, or omissions from, the work shall be made without the written authority of the architect. All authorised variations shall be measured and valued on the basis of priced schedules supplied by the contractor.

Immediately upon receipt of a written architect's Instruction the contractor shall return one copy of the Architect's Instruction issued under the appropriate clause of the contract.

1.9 Care, Protection and Security

The church building, contents and grounds are valuable and unique. Great care is to be taken in the carrying out of the works and any necessary temporary protection is to be provided to prevent damage to property or injury to persons. The contactor is to make good, at his own expense, any damage or loss arising out of his failure to provide adequate care and protection.

The works are to be left safe and tidy and the lowest stages of any ladders are to be removed or otherwise made inaccessible at the end of each working day. Adequate safeguards are to be taken against theft or vandalism.

1.10 Property

Allow for protecting the property both real and personal of the church, their neighbours and visitors. The contractor will be held responsible for and must make good at his own expense any damage caused to buildings, roads, pavements, fencing, drains electric, gas or water services and the like, arising from the contract. He shall not allow his own or any other workmen engaged upon the works to trespass upon the grounds adjoining the works.

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The contractor will be required to make good to the architect's satisfaction all damage to paths, lawns and flowerbeds, including those within the area allocated for storage and working space. All areas of storage and transit operations at the current site must be made good to the architect's satisfaction.

1.11 Programme

The contractor is to prepare a written programme for the works for submission within two weeks of the date for commencement for the works.

The contractor will commence work within five days of the date for commencement and shall proceed regularly and efficiently with the works until completion.

1.12 Water for the Works

Water is available on site. Water must not be drawn as to cause any inconvenience to the Employer.

1.13 Lighting and Power for the Works

Provide all lighting and power for the works and for temporary arrangements for distribution about the site and pay all charges. The contractor may make temporary connections to the existing installation and will be required to pay for usage. All temporary lights on site to assist with the work will be fluorescent, **no 'hot lamp'** halogen lights are to be used at any time. The contractor is to record meter readings at the start of the contract and at completion and an allowance will be made for client use during the works based upon historic records.

1.14 Removal of Rubbish and Spoil, No Fires

The contactor is to clear and cart away from time to time, as it accumulates, all rubbish and spoil arising from the work. Paths and roadways are to be kept free of obstruction. Consent for parking a skip, if required will be the contractor's responsibility.

No water, or other liquid, containing cement, lime, paint, solvent, oils etc., is to be allowed to enter any drain and must be removed from the site for proper disposal.

1.15 Temporary Accommodation

The contractor is to provide Welfare Facilities as required by the works and Health & Safety legislation.

No WC is available on site.

The siting of temporary buildings will be agreed on site prior to commencement.

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1.16 Discoveries

Any unusual discoveries of artefacts or fragments of metal, glass, or carved wood are to be carefully preserved and reported to the architect or archaeologist if engaged.

If any human remains are inadvertently uncovered, they are to be brought to the attention of the archaeologist and the architect.

1.17 Bats

If any bats are discovered in any area of works, operations there are to cease and further advice sought from the architect. The contractor is reminded bats are a protected species.

1.18 Salvage, Removal of Material

No material is to be removed from the site without the permission of the architect. Where noted a full savage value for materials is to be allowed against the contract.

1.19 Completion and Clearing Up

On completion of the works, remove from site all temporary installations, rubbish and surplus materials. Clean the affected parts of the building and working areas. Repair paths, turf, fences etc, and leave everything clean and tidy to the satisfaction of the architect.

1.20 Plant and Equipment

The contractor is to provide all plant and equipment necessary for the execution of the works and will be responsible for ensuring that it complies with, and is used entirely in accordance with, safety recommendations and statutory regulations.

1.21 Health and Safety File

This is in relation only to the construction work carried out under this contract.

At the completion of the works, the Contractor is to supply to the CDM-Co-ordinator the completed Health & Safety file in accordance with the current legislation. The information provided should include the following:

- Schedules of the materials used showing the source of supply for each material with manufacturer's literature of all materials, plant and equipment used in the works.
- The names and addresses of every sub-contractor engaged upon the contract, together with a description of the work carried out by each company.
- A maintenance plan describing the nature and the frequency of future maintenance work and identifying risks. The employer's attention to be drawn to the use of any hazardous materials - COSHH assessments to be provided to ensure safe working methods.

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1.22 Working Times, Radios and Church Services

The main body church is not open to the public for the duration of the works. Access does need to be maintained to the ringing chamber of the tower.

We do not foresee the need for any weekend work and this should be agreed in advance.

The Contractor is not to generate noisy operations before 8am and after 5pm unless by prior agreement. Radios, CD or tape players will not be allowed at the church.

1.23 Provisional Sums

Provisional sums may be included for works that cannot be quantified until the work is opened-up. These sums are to be used as directed in whole, or in part, if not required.

Where Provisional Sums are stipulated for the cost of specialist items these are to cover the net cost of supply and delivery only. They will be spent, in whole or in part, as directed by the architect. The contractor should allow in addition for profit and any handling charges.

Where Provisional Sums are included for specialist works or services these will be assumed to be carried out by domestic, specialist subcontractors whose identity will have been discussed with the architect. The contractor should allow in addition for profit and attendance.

1.24 Drawings and Specification

Copies of the architect's specification are to be readily available at all working times. All craftsmen must read the Preliminaries and those parts of the Specification relating to their work, prior to commencement.

1.25 Record Photographs

The contractor is to provide 'before' and 'after' photographs of the works. The photographs should be dated and titled and if appropriate or cross-referenced to the drawings. They are to be presented on a CD in jpeg format prior to completion of the contract.

1.26 Conservation Practice

All works to be undertaken with due care and attention to prevent any damage to the structure and fabric of the existing building. All conservation and repair work is to be carried out to best practice standards.

All temporary electrical installations are to be inspected and tested by a competent person, before use.

Chemicals and other harmful substances must not be discharged into open watercourses or drains.

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MATERIALS AND WORKMANSHIP

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C20 DEMOLITION

SERVICES AFFECTED BY DECONSTRUCTION/ DEMOLITION

210 SERVICES GENERALLY

- Work carried out to or affecting new and/ or existing services: Carry out in accordance with the byelaws and/ or regulations of the relevant Statutory Authority.
- Services affected by deconstruction/ demolition work: Locate and mark positions.
- Mains services marking: Arrange with the appropriate authorities for services to be located and marked. Mark in accordance with National Joint Utilities Group 'Guidelines on the positioning and colour coding of underground utilities' apparatus'.
- Arrange with the appropriate authorities for disconnection of services and removal of fittings and equipment owned by those authorities prior to starting deconstruction/ demolition.
- Disconnection of drains: Locate, disconnect and seal disused foul and surface water drains. Sealing should be permanent and within the site.
- Protect drains and associated manholes, inspection chambers, gullies, vent pipes and fittings; maintain normal flow during deconstruction/ demolition and make good any damage arising from deconstruction/ demolition work. At completion of deconstruction/ demolition work, leave clean and in working order.
- Provide as necessary to maintain continuity of services to occupied areas of the site on which the deconstruction/ demolition is taking place and to adjoining sites or properties.
- Damage to services: Give notice of damaged services to be retained, and notify relevant service authorities and/ or owner/ occupier regarding damage arising from deconstruction/ demolition. Repairs should be completed as directed and to the satisfaction of the service authority or owner.

DECONSTRUCTION/ DEMOLITION WORK

310 WORKMANSHIP

- Standard: Demolish structures in accordance with BS 6187.
- Operatives shall be appropriately skilled and experienced for the type of work.
- Site staff responsible for supervision and control of work: Experienced in the assessment of risks involved and methods of deconstruction/ demolition to be used.
- Demolitions shall be done in such a manner as to cause as little disturbance as possible to the adjoining parts of the building. Works should be phased and co-ordinated accordingly. Where necessary, discuss with the Architect and submit Method Statements.
- Demolition must be carefully managed as construction may not necessarily be as anticipated.
- Dangerous openings: Provide guarding at all times, including outside of working hours. Illuminate during hours of darkness. Prevent access by unauthorized persons.
- Adjoining Property: Provide temporary support and protection. Maintain and alter, as necessary, as work proceeds. Do not leave unnecessary or unstable projections. Report any defects discovered. Minimize damage and if required repair promptly to ensure safety, stability, weather protection and security. Do not disturb support to foundations.

340 HEALTH HAZARDS AND PRECAUTIONS

- Precautions: Protect site operatives and general public from hazards associated with vibration, dangerous fumes and dust arising during the course of the Works.
- Precautions: Prevent fire and/ or explosion caused by gas and/ or vapour from tanks, pipes, etc.

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- Reduce airborne dust by employing careful measures and if so agreed periodically spraying deconstruction/ demolition works with an appropriate wetting agent. Keep public roadways and footpaths clear of mud and debris.
- Lead dust: Submit method statement for control, containment and clean-up regimes.
- Give notice immediately when hazards such as unrecorded voids, tanks, chemicals, are discovered during deconstruction/ demolition.
- Give notice immediately of suspected asbestos-containing materials when discovered during deconstruction/ demolition work. Avoid disturbing such materials. Once discovered, submit statutory risk assessments and details of proposed methods for safe removal.
- Give notice immediately of any archaeologically or historically sensitive discoveries and cease works until an assessment can be made.

MATERIALS ARISING

510 Components and materials arising from the deconstruction/ demolition work to become the property of the Contractor except where otherwise stated. Remove materials from site as the work proceeds where not to be reused or recycled for site use.

- Materials arising from deconstruction/ demolition work can be recycled or reused elsewhere in the project, subject to compliance with the appropriate specification.
- Recycled materials are to be cleaned and stacked and stored in a dry and secure environment. Extra costs associated with handling and cleaning will be deemed to have been covered by the price provided for new materials.
- Materials to be specifically reused have been so described.

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C41 MINOR MASONRY WORKS

To be read with Preliminaries/ General conditions.

GENERAL/ PREPARATION

110 SCOPE OF WORK
- Schedule: As shown on drawings or as described in the Schedule of Works

WORKMANSHIP GENERALLY

150 POWER TOOLS
- Usage for removal of mortar: Not permitted under any circumstances.

165 STRUCTURAL STABILITY
- General: Maintain stability of masonry. Report defects, including signs of movement, that are exposed or become apparent during the removal of masonry units.

170 DISTURBANCE TO RETAINED MASONRY
- Retained masonry in the vicinity of repair works: Disturb as little as possible.
- Existing retained masonry: Do not cut or adjust to accommodate new or reused units.
- Retained loose masonry units and those vulnerable to movement during repair works: Prop or wedge so as to be firmly and correctly positioned.

180 WORKMANSHIP
- Skill and experience of site operatives: Appropriate for types of work on which they are employed.

185 ADVERSE WEATHER
- General: Do not use frozen materials or lay masonry units on frozen surfaces.
- Air temperature: Do not bed masonry units or repoint:
  - In hydraulic lime: sand mortars when ambient air temperature is at or below 5°C and falling or unless it is at least 3°C and rising.
  - In nonhydraulic lime: sand mortars in cold weather, unless approval is given.
- Temperature of the work: Maintain above freezing until mortar has fully set.
- New mortar damaged by frost: Rake out and replace.

MATERIALS/ PRODUCTION/ ACCESSORIES

240 STONE
- Supplier: Contractor's choice to be agreed with the Architect
- Type: Blue Lias to match the existing as close as possible
- Quality: Free from vents, cracks, fissures, discolouration, or other defects that may adversely affect strength, durability or appearance. Thoroughly seasoned, dressed and worked in accordance with shop drawings prepared by the supplier.

250 STONE ORIENTATION
- Orientation of natural bed:
  - In plain walling: Horizontal.
  - In arches: Perpendicular to line of thrust.

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POINTING/ REPOINTING

810 PREPARATION FOR REPOINTING

- Existing mortar: Working from top of wall downwards, remove loose mortar carefully, without damaging adjacent masonry or widening joints, to a minimum depth of 30mm. Do not remove any sound mortar.
- Raked joints: Remove dust and debris by brushing and gentle flushing out with clean water.

820 POINTING TO MASONRY WALLING

- Preparation of joints: As Clause 810
- Mortar: As section Z21.
  - Mix: 1:3 Hydraulic Lime NHL 3.5: sand
  - Sand source/ type: Smooth, sharp and well graded to approval
  - Other requirements: Deep pack locally or grout any voids found.

840 POINTING WITH TOOLS/ IRONS

- General: Press mortar well into joints using pointing tools/ irons that fit into the joints, so that they are fully filled, and taking great care not to spread any mortar over the surface of the masonry units
- Face of masonry: Keep clear of mortar: Work carefully using specialist tools to suit the width of joint to avoid spreading mortar over arises or surfaces of the masonry units. Should this occur, it should be removed immediately and washed clean with clean water. Where arises are sharp and clear, gentle adhesive tape may be permitted for use as a mask. Finish joints full and neat.

860 BRUSHED FINISH TO JOINTS

- Following initial mortar set, when the mortar is still 'going off', carefully remove the surface of the mortar using saw blade or knife and dress back the joint using a stiff churn brush to compact the mortar, and to provide a coarse texture with the aggregate exposed and visible in the finished appearance.

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M20 PLASTERED/ RENDERED/ ROUGHCAST COATING

TYPES OF COATING

309 LIME:SAND PLASTERS FOR INTERNAL USE (LIME PUTTY MIXED ON SITE)
- Substrate: Masonry.
  - Preparation: Ensure that the substrate has been repaired in full to the architect's approval. All loose and failing pointing must be removed and replaced.
- Lime manufacturer: Lime putty as Z21
- Scat Coat:
  - For blockwork surfaces and surfaces where a good key is not easily obtainable first apply a slurry scat coat thrown onto the wall in advance of the scratch coat. Apply with Pozzalanic additive.

- Scratch coat: 2.5 parts sharp well graded sand: 1part mature lime putty with hair re-inforcement.
  - Thickness (excluding dubbing out and keys): not exceeding 10mm
- Floating coat: 2.5 parts sharp well graded sand: 1part mature lime putty. No hair re-inforcement.
  - Thickness (excluding dubbing out and keys): not exceeding 8mm
- Finishing coat: 1 parts kiln dried fine sieved silver sand to 1 parts mature lime putty. NO hair reinforcement. Prepare at least 7 days before use and then thoroughly knock up prior to use.
  - Thickness: 2-3mm applied in 2 applications.
  - Finish: Smooth
- Accessories: Any beads, stops or meshes specified must be austentic stainless steel.
- Allow to prepare 1Nr sample area approx 1m^2 for consideration and approval prior to commencing finishing coats.

310 LIME: SAND PLASTERS FOR INTERNAL USE (HYDRAULIC LIME BASE COATS AND LIME PUTTY FINISHING COAT)
- Substrate: Masonry
  - Preparation: Ensure that the substrate has been repaired in full to the architect's approval. All loose and failing pointing must be removed and replaced.
- Lime manufacturer: Hydraulic Lime as section Z21
  - Product reference/ Type: NHL 3.5
- Scratch coat: 2.5 parts sharp well graded sand: 1part hydraulic lime (NHL 3.5) with hair re-inforcement.
  - Thickness (excluding dubbing out and keys): not exceeding 10mm
- Floating coat: 2.5 parts sharp well graded sand: 1part hydraulic lime (NHL 3.5). No hair re-inforcement.
  - Thickness (excluding dubbing out and keys): not exceeding 8mm
- Finishing coat: 3 parts kiln dried sieved silver sand to 2part mature lime putty. NO hair reinforcement. Prepare at least 7 days before use and then thoroughly knock up prior to use.
  - Thickness: 2-3mm applied in 2 applications.
  - Finish: Smooth
- Accessories: All beads or stops specified must be austentic stainless steel.
- Allow to prepare 1Nr sample area approx 1m^2 for consideration and approval prior to commencing finishing coats.

330 PROPRIETARY LIME: SAND PLASTERS FOR INTERNAL USE
- Substrate: New and existing masonry and stud walls and lathe ceilings.
  - Preparation: Ensure that the substrate has been repaired in full to the architect's approval. All loose and failing pointing must be removed and replaced. Apply plaster coats in accordance with the supplier's recommendations.

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- Manufacturer:
  - Limebase Products Ltd, Walronds Park, Isle Brewers, Taunton, Somerset. TA3 6QP. Tel: 01460 281921.
  - Mike Wye and Associates Ltd, Buckland Filleigh Sawmills, Buckland Filleigh, Devon. EX21 5RN. Tel: 01409 281644.

  or Contractor's choice - submit proposals.
- Scat Coat:
  - For blockwork surfaces and surfaces where a good key is not easily obtainable first apply a slurry scat coat thrown onto the wall in advance of the scratch coat. Apply with Pozzalanic additive. Ensure adjacent surfaces are well protected.
- Scratch Coat:
  - Product reference/ Type: UP4 from Limebase Products Ltd or Lime Mortar 3/1 from Mike Wye & Associates Ltd.
    Fibre reinforcement: Animal hair.
  - Thickness (excluding dubbing out and keys): not exceeding 10mm.
- Floating Coat:
  - Product reference/ Type: UP4 from Limebase Products Ltd or Lime Mortar 3/1 from Mike Wye & Associates Ltd.
  - Fibre reinforcement: No hair.
  - Thickness (excluding dubbing out and keys): not exceeding 8mm.
- Final coat:
  - Product reference: FP14 from Limebase Products Ltd or Lime Plaster 3/2 from from Mike Wye & Associates Ltd.
  - Thickness: 2-3mm applied in 2 applications.
  - Finish: Smooth to match the approved sample
- Accessories: Any beads or stops specified must be austentic stainless steel but generally beads and stops are not required.
- Allow to prepare 1Nr sample area approx 1m^2 for consideration and approval prior to commencing finishing coats.

400 **PLASTER CONSERVATION AND REPAIR**

405 REPAIRS TO SMALL PATCHES OR LARGE CRACKS IN LIME PLASTER WORK INTERNALLY

- Large cracks and patches must be prepared by undercutting the edges of the well adhered plaster with a sharp knife to create a dovetail key. The area of repair may need to be widened slightly to ensure all the edges are tightly adhered to the background.
- Remove all loose dust and debris by careful brushing and the use of a vacuum cleaner.
- Treat the surrounding plaster with a weak solution of PVA solution (10%) and once dry thoroughly wet the masonry, laths and adjacent plaster with limewater. Dry plaster may require additional applications of limewater.
- The patch or crack should then be built up in coats no greater than 10mm with the lime putty finishing coat approximately 3mm thick. Finish with a soft brush to marry in with the adjacent existing surfaces.

406 REPAIRS TO SMALL CRACKS IN PLAIN LIME PLASTER WORK INTERNALLY

- Small cracks should be thoroughly cleaned; wetted with limewater and then filled with lime putty mixed with a small amount of fine aggregate. Apply with a soft brush.

MATERIALS AND MAKING OF MORTAR

481 READY PREPARED LIME PUTTY

- Type: Slaked directly from CL 90 quicklime to BS EN 459-1, using an excess of water.

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- Maturation: In pits/ containers that allow excess water to drain away.
- Density of matured lime putty: 1.3–1.4 kg/litre.
- Maturation period before use (minimum): 90 days.
- Storage: Prevent drying out or wetting. Protect from frost.

492 HAIR REINFORCEMENT TO SCRATCH COATS
- Manufacturer/ Supplier: Contractor's choice
- Product reference: Goat or cow hair between 25mm and 100mm long. The hair should be strong, soft and not springy.
- Proportions (approximate): Allow 2 kg of hair/tonne of coarse stuff for ceilings and 1kg of hair/tonne of coarse stuff for walls.
- Condition: Clean, sterile and free from grease and other impurities. Well teased before adding to the mix.
- Distribution: Evenly throughout with no balling into lumps.
- Hair must always be added to the mix as late as possible and certainly never to non-hydraulic batches which are left to 'fatten up' prior to knocking-up.

495 MIXING
- Render mortars (site-made):
  - Batching: By volume. Use clean and accurate gauge boxes or buckets.
  - Mix proportions: Based on damp sand. Adjust for dry sand.
  - Mixing must be thorough and generally for 15 – 20 minutes
- Mixes: Of uniform consistence and free from lumps. Do not retemper or reconstitute mixes.
- Contamination: Prevent intermixing with other materials.

497 COLD WEATHER
- General: Do not use frozen materials or apply coatings on frozen or frost bound substrates.
- External work: Avoid when air temperature is at or below 5°C and falling or below 3°C and rising. Maintain temperature of work above freezing until coatings have fully hardened.
- Internal work: Take precautions to enable internal coating work to proceed without detriment when air temperature is below 3°C.

PREPARING SUBSTRATES

510 SUITABILITY OF SUBSTRATES
- Soundness: Free from loose areas and significant cracks and gaps.
- Cutting, chasing, making good, fixing of conduits and services outlets and the like: Completed.
- Tolerances: Permitting specified flatness/ regularity of finished coatings.
- Cleanliness: Free from dirt, dust, efflorescence and mould, and other contaminants incompatible with coatings.

556 REMOVING DEFECTIVE EXISTING RENDER OR PLASTERS
- Plaster or render for removal: Detached, hollow, soft, friable, badly cracked, affected by efflorescence or otherwise damaged. Agree the extent of removal on site in advance as hollow, detached areas in historic plasterwork can frequently be reattached to avoid the loss of the historic plaster and decorative finishes.
  - For smooth renders, edges should be square cut or slightly undercut but for rough cast the edge should be feathered.
  - Bottom edges to external render: Do not undercut to avoid creating a water trap.
- Cracks:

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  - Fine hairline cracking/ crazing: Leave.
  - Other cracks: Discuss with architect
- Faults in substrate (structural deficiencies, damp, etc.): Discuss with architect
- Dust and loose material: Remove from exposed substrates and edges.
- Perished and salt contaminated masonry: Rake out mortar joints.
- Drying out substrates: Established drying conditions. Leave walls to dry for as long as possible before plastering.
- Great care must be taken to minimise damage to masonry.
- In certain situations and when used by skilled operatives small power or air chisels may be used to remove large flat areas of render, but render removal must always be by hand around carved stonework.
- For wide joints, carefully drilled holes into the mortar can assist with the breaking up the mortar, but care must be taken never to drill the stonework. Hacksaw blades may be beneficial for narrow joints.
- Cement pointing must be picked out with care with joints always cleaned out by hand.
- Any evidence of historic renders below should be retained for close inspection and analysis.
- Where timber lintels are revealed internally allow to counterbatten with oak laths prior to re-plastering. Externally apply stainless steel mesh over timber lintels.

INTERNAL PLASTERING

705 WALL PREPARATION GENERALLY

- Where sound backgrounds are found, with good pointing then only loose surface material needs to be removed.
- Failing and loose pointing must be raked out and replaced before a new render application is applied. All joints in masonry should be left open or raked to a minimum depth of 2.5mm.
- Dampening down must be undertaken to modify the suction characteristics of the substrate. When patch repairing, the edges of surrounding material must be well dampened.

710 APPLICATION GENERALLY

- Application of coatings: Firmly and in one continuous operation between angles and joints. Achieve good adhesion. When applying a scratch coat over laths apply diagonally.
- Appearance of finished surfaces: Even and consistent. Free from rippling, hollows, ridges, cracks and crazing.
  - Accuracy: Unless stated or agreed otherwise, finish to a true plane, to correct line and level, with angles and corners to a right angle unless specified otherwise, and with walls and reveals plumb and square.
- The substrate should be thoroughly wetted down to control suction.
- Drying out: Prevent excessively rapid or localized drying out.

720 DUBBING OUT

- General: Correct substrate inaccuracies.
- Existing and new masonry surfaces: Dubbing out prohibited unless total plaster thickness is within range recommended by plaster manufacturer.
- Thickness of any one coat (maximum): 10 mm.
- Mix: As undercoat.
- Application: Achieve firm bond. Allow each coat to set sufficiently before the next is applied. Cross scratch surface of each coat.

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725 UNDERCOATS GENERALLY

- General: Rule to an even surface and the cross scratch to provide a key for the 'floating coat'.
- Scratch coats on metal lathing: Work well into interstices to obtain maximum key.
- Wherever possible routinely inspect the rear of the lathing to ensure a good key is being maintained.
- Do not apply next coat until drying shrinkage is substantially complete. The recommended interval between coats is one to three weeks but this will vary according to humidity and temperature.
- The undercoats are to be finished with a wooden float prior to scratching.
- Ensure that the floating coat is accurately gauged to allow the finishing coat thickness to be consistent over all areas.
- It is essential that the 'floating coat' is vigorously 'scoured' or compacted with a wood float at least twice before it sets to consolidate as it shrinks on drying.
- The 'floating coat' is to be scratched with a 'devil float'.

778 WOOD FLOAT FINISH

- Appearance: An even overall texture. Finish with a dry wood float as soon as wet sheen has disappeared.

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M60 PAINTING/ CLEAR FINISHING

COATING SYSTEMS

121 CASEIN DISTEMPER
- Manufacturer: Farrow & Ball
  - Product reference: Casein Distemper

  No undercoat or primer required.
- Apply 2no coats allowing for dilution of 10% for the first coat

GENERAL

210 COATING MATERIALS
- Manufacturers: Contractor's choice unless stated.

215 HANDLING AND STORAGE
- Coating materials: Deliver in sealed containers, labelled clearly with brand name, type of material and manufacturer's batch number.
- Materials from more than one batch: Store separately. Allocate to distinct parts or areas of the work.

280 PROTECTION
- 'Wet paint' signs and barriers: Provide where necessary to protect other operatives and general public, and to prevent damage to freshly applied coatings.

PREPARATION

400 PREPARATION GENERALLY
- Standard: In accordance with BS 6150.
- Suspected existing hazardous materials: Prepare risk assessments and method statements covering 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.
- For newly lime plastered surfaces allow at least four weeks for the plaster to carbonate prior to applying paints or distempers.
- Wash off old distempers thoroughly prior to applying new coats.
- Efflorescence salts: Remove.
- Dirt, grease and oil: Remove. Give notice if contamination of surfaces/ substrates has occurred.
- Surface irregularities: Remove.
- Joints, cracks, holes and other depressions: Fill flush with surface, provide smooth finish.
- Dust, particles and residues from preparation: Remove and dispose of safely.
- Water based stoppers and fillers:
  - Apply before priming unless recommended otherwise by manufacturer.
  - If applied after priming: Patch prime.
- Oil based stoppers and fillers: Apply after priming.
- Doors, opening windows and other moving parts:
  - Ease, if necessary, before coating.
  - Prime resulting bare areas.

420 EXISTING FIXTURES, FITTINGS AND IRONMONGERY
- Generally remove before commencing work. Carefully label, refurbish as necessary, and refit when coating is dry. Hinges to doors need not be removed.
- Remove old coating marks. Clean and polish.

440 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.
  - Suspected existing hazardous materials: Prepare risk assessments and method statements covering operations, disposal of waste, containment, and reoccupation, and obtain approval before commencing work.
  - Significant rot, corrosion or other degradation of substrates.
- 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 to remove dirt, grease and contaminants.
  - Gloss coated surfaces: Provide key.
- Partly removed coatings:
  - Additional preparatory coats: Apply to restore original coating thicknesses.
  - Junctions: Provide flush surface.
- Completely stripped surfaces: Prepare as for uncoated surfaces.

570 UNCOATED MASONRY/ RENDERING
- Loose and flaking material: remove.

580 UNCOATED PLASTER
- Nibs, trowel marks and plaster splashes: Scrape off.
- Overtrowelled 'polished' areas: Key lightly.

622 ORGANIC GROWTHS
- Dead and loose growths and infected coatings: Scrape off and remove from site.
- Treatment biocide: Apply appropriate solution to growth areas and surrounding surfaces.

APPLICATION

711 COATING GENERALLY
- Application: In accordance with BS 6150, clause 9.
- Conditions: Maintain suitable temperature, humidity and air quality during application and drying.
- Surfaces: Clean and dry at time of application.
- Thinning and intermixing of coatings: Not permitted unless recommended by manufacturer.
- Overpainting: Do not paint over intumescent strips or silicone mastics.
- Priming coats:
  - Thickness: To suit surface porosity.
  - Application: 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 coating and between coats.
- For rainwater and other goods apply all coats fully prior to installation but include to redecorate locally any areas of damage caused by the fixing and installation. Where required, the touching-up should include rubbing back, priming, undercoat and two topcoats all as specified.

LIMEWASH

175 PURE LIMEWASH.

Pure limewash is used for the decoration of internal and external porous surfaces and should not be used on non-porous surfaces, cement renders, gypsum plaster, and timber painted with anything other than limewash.

- Manufacturer: Pre-prepared limewash applications can be obtained from:
  - Limebase Products Ltd, Walronds Park, Isle Brewers, Taunton. TA3 6QP Tel: 01460 281921.
  - Farrow & Ball Ltd, 33 Uddens Industrial Estate, Wimborne, Dorset. BH21 7NL Tel: 01202 876141.
  - Rose of Jericho Ltd, Horchester Farm, Holywell, Evershot, Dorchester. DT2 OLL. Tel: 01935 83676.
  - The Potmolen Paint CO Ltd, 27 Woodcock Industrial Estate, Warminster, Wilts. BA12 9DX. Tel: 01985 213960.
  - Mike Wye & Associates, Buckland Filleigh Sawmills, Buckland Filleigh, Devon, EX21 5RN. Tel: 01409 281644.
- Colour: - Colour matched to existing.
- Finishing coats:
  - Apply five full coats externally
  - Apply three full coats internally
- Sample areas: _____
- Limewash should be sourced direct from the slaking process.

801 LIMEWASH PREPARATION

- If using a specified or agreed pre-prepared limewash product then the preparation and application of the product should be fully in accordance with the supplier's information.
- Ensure all other works to the stone, render or plaster are complete before applying the limewash. Lime mortars and renders should have been allowed to carbonate for at least one month.
- Any algae or mould must be treated with an algaecide or fungicide and thoroughly washed off with clean water. Do not use proprietry fungicides containing water repellents.
- Protect any adjacent surfaces and fixtures and fittings as required to avoid splashing and spillages.
- Protect fixtures, fittings and furnishings as appropriate to prevent any damage and discolouration.
- Ensure that the surface is brushed down and washed to remove any loose dust flushed from the surface of the stone, render or plaster.
- Advise the Architect of the discovery of any wall paintings or historic paint schemes.
- Limewash must be applied to dampened stone/plaster surfaces.
- Ensure all preparatory materials are compatible with the limewash to be used.
- Ensure colourants for pigmentation are to be stirred in well to the prepared limewash to achieve the colour required.
- As far as possible, all limewash for one job should be batched, combining and inter-mixing all separately measured quantities at the start of the job.

802 LIMEWASH APPLICATION

- Ensure limewash is within the shelf life period.
- Apply limewash using a large bristle brush working the limewash well into the surface paying special attention to any eroded areas, cracks and fissures.
- Coats should be applied thinly to avoid cracking of the finish. Each coat will not at first appear to cover, but will become opaque as the limewash dries. Each coat should be well burnished into the surface with the brush as it starts to 'gel'.

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- It is important to mist spray the previous coat prior to the application of the next coat.

803 LIMEWASH PROTECTION

- Ensure all limewashed areas are properly and promptly protected. It is essential that the limewash dries slowly.
- Externally used limewash must be protected from frost before carbonation.
- Protect limewashed surfaces from premature drying as it is essential that the limewash dries slowly and remains damp for at least four hours to ensure maximum strength. Limewashed surfaces may be damped down with fine mist sprays if early drying is a problem. Protection from the sun, and or wind, may also need to be erected if drying becomes too fast.

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Z21 LIME MORTARS

300 NON-HYDRAULIC LIME MORTARS

310 LIME:SAND MORTAR MIXES
- Specification: Proportions and additional requirements for mortar materials are specified elsewhere.

320 SAND FOR LIME:SAND MASONRY MORTARS
- Type: Sharp, well graded.
- Grading/ Source: As specified elsewhere in relevant mortar mix items or if not stated to include the following:
  - Fine yellow washed pit sand
  - Bath stone dust
  - Ham stone dust
  - Lias stone dust
  - Beer Stone dust
  - Corfe Mullen sand
  - Culm measure sandstone dust
  - Crushed Thorverton stone
  - Heavitree stone dust
  - Holme sand
  - Hornton Brown sand
  - Ginger Building Sand
  - Silver sand
  - Fine red quartz sand
  - Taunton Red / Hill Head sand fine or coarse
  - Wareham washed pit sand
  - Chard Coarse stock
  - Others of the Contractor's choice
- Quality, sampling and testing: To BS EN 13139. Sands should not be marine dredged due to salt contamination.
- Ensure all sands and aggregates are stored in different stockpiles on clean hard bases that allow free drainage.
- Allow to prepare a total of 3nr mortar samples based on mixes using various sands and stone dusts for consideration for the various situations

330 READY PREPARED LIME PUTTY
- Type: Slaked directly from CL 90 quicklime to BS EN 459-1, using an excess of water.
  - Maturation: In pits/ containers that allow excess water to drain away.
  - Density of matured lime putty: 1.3–1.4 kg/litre.
- Maturation period before use (minimum): 6 months

335 READY PREPARED LIME PUTTY
- Lime putty can be obtained from various sources. Suggested suppliers include:
  - Limebase Products Ltd, Walronds Park, Isle Brewers, Taunton. TA3 6QP Tel: 01460 281921.
  - Rose of Jericho Ltd, Horchester Farm, Holywell, Evershot, Dorchester. DT2 OLL. Tel: 01935 83676.
  - Cornish Lime Company Ltd, Brims Park, Old Callywith Road, Bodmin, Cornwall, PL31 2DZ Tel: 01208 79779.
  - Mike Wye & Associates, Buckland Filleigh Sawmills, Buckland Filleigh, Devon, EX21 5RN. Tel: 01409 281644.
  - HJ Chard & Sons, 1 Cole Road, Bristol, BS2 0UG. Tel: 0117 977 7681.
- Maturation period before use (minimum): 2 months
- Ensure that all supplied lime comes in bins with the date of slaking clearly marked.

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- Store ready lime putty in conditions that prevent drying out and protect from frost.
- Note: 'Reconstituted lime putty' made by mixing bagged hydrated non-hydraulic lime with water is not acceptable.

340 POZZOLANIC ADDITIVES FOR NONHYDRAULIC LIME:SAND MORTARS
- Manufacturer/ Supplier: As for Clause 335
- Product reference:
  Metastar 501- white and based on china clay
  PFA – (for consideration in the repointing mix for the rubble walls of the house as the mortar analysis of the original records 'occasional fine fuel ash (charcoal) particles').
  The use of Pozzolanic additives should be discussed with the Architect before use. Use only as and when directed. Use is likely to depend on the analysis of past mortars used on site.
- Mixing: Mix thoroughly into mortar during knocking up and ensure that the mortar is used promptly.
- The quantity of the additive will depend on the usage and location. Seek recommendations from the supplier. Usage for Metastar products is as follows:
  External pointing – 8-12% by volume
  Rendering – 12-30% by volume
  Copings – 24-48% by volume
- Follow strict Health & Safety Guidelines when using fine mineral dusts.

360 MAKING LIME:SAND MORTARS GENERALLY
- Batching: By volume. Use clean and accurate gauge boxes or buckets.
- Mixing: Mix materials thoroughly to uniform consistency, free from lumps.
- Allow for bulking if sand is damp.
- Contamination: Prevent intermixing with other materials, including cement.

370 SITE PREPARED NONHYDRAULIC LIME:SAND MORTARS
- Mixing: Mix materials thoroughly by compressing, beating and chopping. Do not add water.
- Ensure putty and aggregates are thoroughly mixed in large batches.
- Equipment: Paddle or roller pan mixer or submit proposals.
- Maturation period before use (maximum): 7 days
- The mortar, plaster or render should be left to mature in air tight containers. Include additional covering inside the bin to prevent drying out.

390 KNOCKING UP NONHYDRAULIC LIME:SAND MORTARS
- Knocking up before and during use: Achieve and maintain a workable consistency by compressing, beating and chopping. Do not add water.
- Equipment: Paddle or roller pan mixer or submit proposals.

400 HYDRAULIC LIME MORTARS

405 Hydraulic lime is available as follows:
- NHL 2.0 – Feebly hydraulic
- NHL 3.5 – Moderately hydraulic
- NHL 5.0 – Eminently hydraulic
- NHL 5.0Z – Eminently hydraulic

410 LIME:SAND MORTAR MIXES
- Specification: Proportions and additional requirements for mortar materials are specified elsewhere.

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420 SAND FOR LIME:SAND MASONRY MORTARS
- Type: Sharp, well graded.
- Grading/ Source: As specified elsewhere in relevant mortar mix items for if not stated as follows:
- Fine yellow washed pit sand
    - Chard Coarse stock
    - Wareham washed pit sand
    - Fine red quartz sand
    - Holme sand
    - Ginger Building Sand
    - Silver sand
    - Taunton Red / Hill Head sand
    - Washed sand of the Contractor's choice
  - Quality, sampling and testing: To BS EN 13139. Sands should not be marine dredged due to salt contamination.
- Ensure all sands and aggregates are stored in different stockpiles on clean hard bases that allow free drainage.
- Prepare mortar samples based on mixes using various sands and stone dusts for consideration.

445 ADMIXTURES FOR HYDRAULIC LIME:SAND MORTARS
- Do not use any admixtures.
- Do not use cement.

460 MAKING LIME:SAND MORTARS GENERALLY
- Batching: By volume. Use clean and accurate gauge boxes or buckets.
- Mixing: Mix materials thoroughly to uniform consistency, free from lumps.
- Contamination: Prevent intermixing with other materials, including cement.

470 MAKING HYDRAULIC LIME:SAND MORTARS
- Lime can be obtained from various sources. Suggested suppliers include:
    - Limebase Products Ltd, Walronds Park, Isle Brewers, Taunton. TA3 6QP Tel: 01460 281921.
    - Rose of Jericho Ltd, Horchester Farm, Holywell, Evershot, Dorchester. DT2 OLL. Tel: 01935 83676.
    - Cornish Lime Company Ltd, Brims Park, Old Callywith Road, Bodmin, Cornwall, PL31 2DZ Tel: 01208 79779.
    - Mike Wye & Associates, Buckland Filleigh Sawmills, Buckland Filleigh, Devon, EX21 5RN. Tel: 01409 281644.
    - HJ Chard & Sons, 1 Cole Road, Bristol, BS2 0UG. Tel: 0117 977 7681.
- Mixing hydrated hydraulic lime:sand: Follow the lime manufacturer's recommendations for each stage of the mix and allow for each batch of lime to be mixed for at least 15 minutes and then left to stand for a short period to improve workability prior to application.
- Water quantity: Only sufficient to produce a workable mix.
- Contamination: Prevent intermixing with other materials, including cement.
- Working time: Within limits recommended by the hydraulic lime manufacturer.

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CONTRACT SCHEDULE

Item	Description	Tender £
A	**PRELIMINARIES**	
	Sub-total Prelims	**-00**
B	**DAYWORKS AND CONTINGENCIES**	
B1	The contractor is to allow for providing the provisional amounts of labour and materials to be used as directed by the architect in dayworks throughout the period of the contract and during the defects liability period. The rates inserted for each class of labour are interpreted as the total cost of employing one man for one hour's work on site.	
B2	General labourer .....10 hours	
B3	Tradesman .....10 hours	
B4	Carpenter.....10 hours	
B5	Joiner .....10 hours	
B6	Percentage rate .....% on the above	
B7	The materials to be used in day works will be paid for at net cost plus a percentage for handling, profit and the like. Allow the Provisional Sum of £500 for materials to be used in dayworks.	500.00
B8	Percentage rate .....% on the above	
B9	Additional general contingency	5,000.00
	Sub-total Dayworks & Contingencies	**5,500.00**
C	**PROTECTIONS**	
	Provide, install and maintain all necessary and adequate protections required to protect the building and its contents, and adjacent fabric, windows, roofs and the like against water, dust, smoke, fire, weather, mechanical damage and the like to be maintained for the duration of the contract. Clear away protections when no longer needed or at the end of the Contract.	
C1	Cover and protect all of the windows and wall monuments in the area of the works with 10mm twin polycarbonate sheeting or polythene sheeting/hessian as appropriate. Upon completion of the works, make good any damage caused by the installation of the protection.	
C2	Protect lias floor within Chancel and Sanctuary with dust sheet and plywood covering to allow safe storage of furniture, cupboards and font.	
C3	Allow for protections over the brass communion rail within Sanctuary.	
C4	In consultation with the church organist, cover and protect the organ before any work commences. Provide double layer of plastic and extend over keyboards. Check with the organist to ensure the work covers all aspects of the instrument. Include for removal and cart away on completion.	
C5	Allow here for a temporary screen with boarding set within the north aisle arch (in front of organ) to a height of 2.4m with polythene above to further protect the organ whilst works are carried out.	
C6	Allow here for a temporary dust screen set within Chancel arch and south east chapel arch and the arch between the Chancel and the organ.	

C7	Cover and protect the pulpit with timber studwork frame boarded with O.S.B before any work commences.	
C8	Construct timber studwork frame boarded with O.S.B to cover and protect glazed entance doors and cupboards in the tower base.	
C9	Cover and protect the ramp and step handrails in the tower base with pipe lagging or similar.	
C10	Protect north porch door with boarding and polythene sheeting and keep door shut for duraion of works.	
C11	Carefully wrap all light fixtures, speakers and projector with plastic sheeting taped to ensure complete protection from dust.	
	Sub-total Protections	**-00**
D	**SITE SECURITY**	
D1	Provide and maintain for the duration of the contract and at all times, all necessary and adequate measures of security, physical and otherwise, required to protect the works, the building and its contents and adjacent property against theft, trespass, vandalism, and all other unlawful intrusion.	
D2	Ensure that at the end of the working day all tools and the like are securely locked away or removed from the site.	
	Sub-total Site Security	**-00**
E	**SITE ACCESS AND PREPARATION**	
E1	Allow to isolate and drain down the existing heating system before commencement of the works.	
E2	Allow to isolate all electrical fittings, fixtures and cabling within the working area.	
E3	The Contractor should identify here the cost for the provision of their own Welfare Facilities for the duration of the works.	
E4	The contractor is to allow for a joint site inspection as part of the Pre-Contract meeting before the works commence. As part of this inspection, the Contractor is to complete a full photographic record of the site area including the building, paths, memorials and the like within the work area and between the work area and the parking/delivery area. The Contractor will be expected to make good any damage at his expense.	
E5	During heavy use and to avoid repeatedly tracking across grassed sections lay a run of hessian matting or other protection to protect the grass.	
E6	To help improve security, local homeowners will be passed details of the Contractor's site times and the names of any sub-contractors. Anyone seen on site outside of normal working hours and not booked in with the church may be reported to the police.	
E7	Any materials compound must be securely fenced in and no unfixed materials of value to be left in the open. As the church is to be closed for the duration of works, there will be an opportunity to store some materials in the church, subject to agreement. Allow for an area of the churchyard not exceeding 5m x 5m to be fenced off separately, as shown on 0875.P.010 Contractor Site Plan.	
E8	The main body of the church will be closed to the public for the duration of works, however access needs to be maintained to the ringing chamber in the	
	Sub-total Site Access and Preparation	**-00**

F	**DEMOLITIONS AND REMOVALS**	
	Allow to remove all spoils and redundant materials from site unless specified otherwise.	
	Great care should be taken to ensure that under floor heating pipes within the chancel and sactuary heating zone that run uner the central aisle are not damaged during the demolition phase.	
	Great care should be taken to ensure that under floor electric cables and wall sockets are not damaged during the demolition phase.	
F1	Allow here for the careful dismantling of fixed cupboards including heating manifold cupboards, childrens area cupboards, and servery. Set aside for reassembly within the protected storage area within the Chancel and East Chapel.	
F2	Allow here for the careful lifting of new central aisle blue lias paving and store safely, for reuse in the central aisle.	
F3	Allow here to carefully lift the of engineered oak parquet and boarded flooring, black walnut border and 18mm plywood underneath setting aside all mateirals capable of re-use.	
F4	Allow here for the careful lifting of ashlar Bath stone border around column bases and perimeter of the nave and aisles and set aside for re-use within new flooring scheme.	
F5	Allow here for the careul lifting of treated softwood timber floor joists and set aside any salvageable joists for sale or re-use.	
F6	Allow here for the removal and disposal of mineral wool insulation between the timber floor joists and PIR insulation boards under blue Lias paving in central aisle.	
F7	Allow to lift existing cork boards, setting aside any capable of re-use.	
F8	Allow to relocate the Font into the Chancel for the duration of the works. Carefully separate the bowl, plinth and base slab from each other. Each section should be protected and stored separately. Note the bowl may be cracked, so straps and lifting gear need careful thought to avoid damage. Clean mortars from each section following dismantling.	
F9	Following the removal of the C21 timber floors carefully lift historic Lias paving from the north and south aisles (all except the central aisle) and store safely in readiness to relay in the south east chapel. The cast iron heating grilles to be set aside for possible salvage.	
	Sub-total Site Demolitions and Removals	**-00**
G	**CONSTRUCTION WORKS**	
G1	Allow to break up and remove the weak concrete/limecrete sub-base that previously supported the historic parquet floor (now removed).	
G2	Allow to excavate the floor area identified on drawing 0875.S.004 to an approximate depth of 180mm below the existing underlying floor level and remove all spoils from site. All work to be under the supervision of the Archaeologist.	
G3	Allow to lay appox 50mm of compacted clean stone within the excavated area to a common level. Lay geotextile membrane over entire surface and with overlap joints of 1 metre. Run the geotextile up the walls and column bases.	
G4	Allow here to lay new run of 40mm waste pipe from boiler room to centre of font base laid to min 1:100 fall, connected in the boiler room to the existing drainage, include for a trap/bend to prevent smells. All joints to be solvent welded and pressure tested before floor is laid.	

G5	Allow here for the installation of 200mm compacted Ty Mawr Glapor insulating hardcore. Ensure that the material is distributed evenly and to a constant depth. Use a plate vibrator to ensure that a compacted depth of 200mm is achieved. Lay geotextile membrane over entire surface and with overlap joints of 1 metre. Run the geotextile up the walls and column bases.	
G6	Lay a continuous layer of lightweight stainless steel mesh over the entire floor area on to which the under floor heating pipes will be clipped. See section K.	
G7	Allow to lay 125mm Ty-Mawr lime screed (with glass fibre reinforcement) over under floor heating pipes. Floor to be left tamped level to suit finishes of varying	
G8	Allow to remove modern gypsum plaster and cement render along the north wall within north aisle and kitchen lobby area. Allow for an area of 20m2	
G9	Allow new 3-coat traditional lime plaster finish to areas of plaster removal within the north aisle kitchen lobby area.	
	Sub-total Construction Works	**-00**
H	**FINISHES**	
H1	Allow here for laying new 20mm Purbeck 'Jurassic Blend' paving to the Nave and aisle floors as shown on drawings 0875.P.006 Proposed Ground Floor Finishes Plan and 0875.P.007. Allow for a 10mm bed of lime mortar under. Slabs should be tightly jointed with max 3mm joints throughout. See architects drawings for layout and bond pattern.	
H2	Allow here for the relaying of ashlar Bath stone border tiles as shown in drawing 0785.P.006 Proposed Ground Floor Finishes Plan.	
H3	Allow here for laying the salvaged blue Lias historic flagstones within the south aisle transept as shown in drawing 0785.P.006 Proposed Ground Floor Finishes Plan. Include a **provisional sum of £750** for the supply of additional reclaimed Lias flagstones should they be required.	
H4	Allow here for the reinstating of the font into its existing position with a new 'Jurassic Blend' paving surround as shown in drawing 0785.P.008 Font Surround. The work to resite the font within the south aisle must be undertaken by an experienced conservator. Reassemble the font in its new position; bed all stones in hydraulic lime mortar/stone dust, wedging stones whilst mortar sets and rubbing back to complete. Allow to connect the outlet from the font bowl to the new drainage pipework.	
	Sub-total Finishes	**-00**
I	**JOINERY**	
G1	Allow here for the careul reassembly and repositioning of fixed cupboards, under floor heating cupboards and servery into their original locations.	
	Sub-total Joinery	**-00**
J	**DECORATIONS**	
J1	Protections: provide protections to furniture, floor finishes and the like whilst decorations are in hand. Clear away on completion of work.	
J2	Prior to decoration commencing complete a thorough clean throughout the working area including all high levels to remove all dust generated by the earlier phases of work.	
J3	Rub down the lower sections of the existing walls, generally below 600mm within Nave, Tower Base and north and south aisles to remove any loose or flaking paint. Allow in total an area of 20m2.	

J4	Ensure that the surface of the walls to be deocorated (40m2) is brushed down and washed to remove any loose dust flushed from the surface of the render or plaster. Any algae or mould must be treated with an algaecide or fungicide and thoroughly washed off with clean water.	
J5	Paint sampling: allow here for carrying out a total of 6 paint samples around the building to be sure of paint finish buildups before commencement of	
J6	Subject to the findings of paint sampling above (J5) **either** - Apply two coats of casein bound distemper, final colour to be approved.	
J7	**Or** - Allow for application of 6 coats of limewash to the plaster repairs in the north aisle servery. Colour: to match existing white. Arrange for 6 nr samples to be prepared for the church to approve before redecorations commence.	
	Sub-total Decorations	**-00**
K	**MECHANICAL SERVICES**	
	Prices to include all necessary testing, commissioning and certification	
K1	All 'hot work' (including plumbing pipework) must be undertaken using a Hot Works permit as supplied by Ecclesiastical Insurance Group.	
K2	Mechanicall installation, in accordance with details and specifications prepared by BJP Consulting Engineers Ltd.	
K3	Carefully remove 2no existing fan convection radiators for possible re-use, allow to make good wall surfaces and finishes.	
K4	Supply and fit new fan convection and under floor heating installation as per architects drawing 0875.P.009 Proposed Heating Plan all as BJP specification.	
K5	Include here for agreeing all pipework final positions with the architect on site before commencing mechanical system installations.	
K6	Include for providing record drawings of all mechanical installations and pipe routes if variation from design drawing are required. Architect will provide blank plans upon request for marking up.	
K7	Include to provide 2No Brass outside Taps as shown on drawing 0875.P.009 Proposed Heating Plan. Final location and height to be agreed with architect. Connect into existing water supply pipe within boiler room and run continuous lengths of new water pipe within the layer of insulating hardcore, there are to be no joints under the floor.	
	Sub-total Mechanical Services	**-00**
L	**ELECTRICAL SERVICES**	
	Prices to include all necessary testing, commissioning and certification. *Services layouts TBA.*	
L1	Electrical works, in accordance with details and specifications prepared by BJP Consulting Engineers Ltd.	
L2	Include here for agreeing any alterations to existing electrical calbing with the architect on site before commencing any required electrical works.	
	Sub-total Electrical services	**-00**
M	**COMPLETION**	
M1	Clean down the works thoroughly, remove all debris.	
M2	Remove all manufacturers labels from any equipment supplied.	
M3	Co-ordinate with the churchwarden to ensure all is in order before leaving site. Make good any damage to grassed areas, tarmac paths and the like before leaving.	

M4	Leave all in a clean and serviceable state.	
	Sub-total Completion	**-00**

	GENERAL SUMMARY	
	TOTAL SECTION A - PRELIMINARIES	**-00**
	TOTAL SECTION B - DAYWORK AND CONTINGENCIES	**5,500.00**
	TOTAL SECTION C	**-00**
	TOTAL SECTION D	**-00**
	TOTAL SECTION E	**-00**
	TOTAL SECTION F	**-00**
	TOTAL SECTION G	**-00**
	TOTAL SECTION H	**-00**
	TOTAL SECTION I	**-00**
	TOTAL SECTION J	**-00**
	TOTAL SECTION K	**-00**
	TOTAL SECTION L	**-00**
	TOTAL SECTION M	**-00**
	TOTAL MEASURED (TAKEN TO VALUATION)	**5,500.00**

FORM OF TENDER

FOR GLASTONBURY St Benedict's – Works for Proposed Flooring Project

Subject to the execution of a contract with the Employer, we undertake as follows:

1. To carry out and complete the works described or referred to in the drawings and specification supplied to us and to the satisfaction of the architect, and in accordance with the conditions of the latest revision of the Form of Agreements for Minor Building Works issued by the Joint Contracts Tribunal in 2005, for the sum given below.

2. To begin the works upon a date to be agreed and to proceed diligently and in a workmanlike manner until the whole of the works are complete.

3. To furnish upon acceptance of our tender a priced copy of the Schedule of Works and a Schedule of Rates for retention by the architect.

4. To complete the whole of the works within …… weeks of our unimpeded working time in compliance with a written programme which we agree to provide within two weeks of the commencement of the works. The completion date of the contract to be agreed.

5. We agree that should obvious errors in pricing in errors in arithmetic be discovered before acceptance of this offer in the priced specification submitted by us these errors will be corrected in accordance with Alternative 1 of Section 6 of the 'Code of Procedure for Single Selective Tendering 1989'.

All for the fixed price sum of: .....

..... (£ ……)

The price to remain firm for a period of 12 months from the date of this tender.

We agree that this offer shall remain open for acceptance for a period of 6 months.

For and on behalf of:

Signature ……

Date ……

benjamin + beauchamp architects
the borough studios, the borough, wedmore, BS28 4EB
T: 01934 713313 **F** 01934 713314 **email** studio@b2architects.com
www.b2architects.com

APPENDIX

APPENDIX I **Drawings**

APPENDIX II **Designer Risk Assessment**

APPENDIX III **Hot Work Permit**

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APPENDIX I – Drawings See Drawing Issue Sheet

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APPENDIX II – DESIGNER RISK ASSESSMENT

CONSTRUCTION RISKS						
ELEMENT	**DETAILS OF CONSTRUCTION**	**HEALTH & SAFETY IMPLICATIONS**	**E**	**IR**	**ACTION TO BE TAKEN**	**RR**
Demolitions	Discovery of asbestos	Obtain Asbestos report	LPW	2	Inspect asbestos report. Wear protective clothing and work in accordance with current guidelines	2
	Internal protections & high level access	Falling from height, unsafe methodology	LPWID	3	Method statements	1
Services	Electrical services	Live services	LPW	3	Carry out desk top & site survey, divert/protect & make safe	2
	Existing boiler	Fumes from extract	LW	2	Ensure adequate ventilation is maintained.	1
Finishes	Lime based products	Injury to health	LPW	2	Keep away from public, only use trained operatives. Follow current guidelines	1

Risk assessment key

EFFECT (E): Loss of Life = L, Injury to Public = P, Injury to Workforce =W, Disruption to Infrastructure = I, Damage to Works = D.
INITIAL/RESIDUAL RISK (IR)/(RR): High = 5, Probable = 4, Occasional = 3, Improbable = 2, Remote = 1.

APPENDIX III – Hot Works Permit

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5.3 APPENDIX III HOT WORK PERMIT

Date …… To be issued daily for **each** operation

A Hot Work Permit is required for all operations involving flame, hot air or arc welding and cutting equipment, brazing and soldering equipment, blow lamps, bitumen boilers and other equipment producing heat or having naked flames.

A Permit may only be issued by the person responsible for authorising the work, and a stand-by operative is to be in attendance.

PERMISSION IS GRANTED TO …….. Name

To use ……describe equipment

……

……

between the hours of …….. AM

AND …….. AM

AND/OR …….. PM

AND …….. PM

Only on the date noted above

CONDITIONS

i) **NO** blowlamps, hot air or heat producing equipment shall be used for stripping paint.

ii) Smoking is strictly prohibited at all times during building work of any type.

iii) The apparatus referred to and approved in this Permit must be operated only by skilled tradesmen.

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iv) A stand-by operative is to be in attendance at all times including tea and meal breaks from commencement of the work until one hour after the cessation of burning work.

v) All litter, rubbish and combustible material must be removed from the area before starting work. The surrounding areas of the work must be protected against heat and sparks by flame retardant boards or other suitable fire resistant material.

Where combustible material is fixed and immovable, it must be protected as above.

vi) Flame producing equipment must not be used on or near containers of inflammable liquids or compressed gases.

vii) All operatives must be aware of the nearest fire alarm activating points.

viii) Except in an emergency, the use of the apparatus must be discontinued not less than two hours before the site is vacated.

ix) An adequate number of fire fighting appliances, eg buckets of sand, fire extinguishers, or fire hoses must be to hand within and outside the building and left there until all possibility of an outbreak of fire has passed. Contractors employed on the church must provide their own equipment for fire fighting purposes.

x) Butane and not paraffin lamps should be used, and lighted appliances must not be left unattended.

Signature of person
issuing permit ……date/time

Signature of person
carrying out work ……date/time

Signature of
contractor ……date/time

Signature of person who
has made these
checks ……date/time

Signature of
contractor
on completion of the work ……date/time

This Permit is to be returned to the Contractor and copied to the architect

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