

nickjoycearchitectsltd

architects and historic building consultants

re-roofing and repairs
tewkesbury museum

contract prelims
and
schedule of work

For	Tewkesbury Town Council Debbie Hill Town Clerk Town Hall High Street Tewkesbury GL20 5AL
Architect	Nick Joyce Architects Ltd 5 Barbourne Road Worcester WR1 1RS T: 01905 726307

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A10 PROJECT PARTICULARS

110 THE PROJECT

- Name: Tewkesbury Museum
- Nature: Re-roofing and repairs
- Location: Tewkesbury Museum, 64 Barton Street, Tewkesbury.
- Length of contract: 12 weeks.

120 EMPLOYER (CLIENT)

- Name: Tewkesbury Town Council
- Address: Town Hall, High Street, Tewkesbury. GL20 5AL
- Contact: Debbie Hill, Town Clerk
- Telephone: 01684 294639
- E-mail: Townclerk@tewkesburytowncouncil.gov.uk

130 PRINCIPAL CONTRACTOR (CDM)

- Name: The Contractor.
- Address: -.
- Contact: -.
- Telephone: -.
- E-mail: -.

140 ARCHITECT/ CONTRACT ADMINISTRATOR

- Name: Nick Joyce Architects Ltd.
- Address: 5 Barbourne Road, Worcester. WR1 1RS.
- Contact: Andrea Burton.
- Telephone: 01905 726307.
- E-mail: andrea@nickjoycearchitects.co.uk.

150 PRINCIPAL DESIGNER

- Name: Nick Joyce Architects Ltd.
- Address: 5 Barbourne Road, Worcester. WR1 1RS.
- Contact: Andrea Burton.
- Telephone: 01905 726307.
- E-mail: andrea@nickjoycearchitects.co.uk.

A11 TENDER AND CONTRACT DOCUMENTS

110 TENDER DRAWINGS

- The tender drawings are: Survey drawings – SWS072265-bs, gf, ff, sf, rp, sec and Architects drawings 2187/11A, 12A, 13A, 14A, 15, 16, 17 and 20.

120 CONTRACT DRAWINGS

- The Contract Drawings: The same as the tender drawings.

160 PRECONSTRUCTION INFORMATION

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

A12 THE SITE/ EXISTING BUILDINGS

110 THE SITE

- Description: Three-storey semi-detached. The building is grade II* listed.

120 EXISTING BUILDINGS ON/ ADJACENT TO THE SITE

- Description: Three-storey town house on east side.

200 ACCESS TO THE SITE

- Description: Restricted access - access to west side is via the neighbouring property only.

210 PARKING

- Restrictions on parking of the Contractor's and employees' vehicles: No onsite parking is available. On street parking is available.

220 USE OF THE SITE

- General: Do not use the site for any purpose other than carrying out the Works.

240 HEALTH AND SAFETY HAZARDS

- General: The nature and condition of the site/ building cannot be fully and certainly ascertained before it is opened up. However the following hazards are or may be present:
Below ground electrical services.
- Information: The accuracy and sufficiency of this information is not guaranteed by the Employer or the Employer's representative. Ascertain if any additional information is required to ensure the safety of all persons and the Works.
- Site staff: Draw to the attention of all personnel working on the site the nature of any possible contamination and the need to take appropriate precautionary measures.

250 SITE VISIT

- Assessment: Ascertain the nature of the site, access thereto and all local conditions and restrictions likely to affect the execution of the Works.

A13 DESCRIPTION OF THE WORK

120 THE WORKS

- Description: Re-roofing including new lead parapet gutter, rebuild chimney stack, external repointing, internal refurbishment including fire safety upgrade works, plastering and redecoration. Specialist conservation of decorative plaster ceiling.

A20 JCT MINOR WORK BUILDING CONTRACT (MW)

JCT MINOR WORKS BUILDING CONTRACT

- The Contract: JCT Minor Works Building Contract 2016 Edition
- Requirement: Allow for the obligations, liabilities and services described.

THE RECITALS

First - THE WORKS AND THE CONTRACT ADMINISTRATOR

- The work comprises: Re-roofing, rebuilding chimney stack, external repointing, internal refurbishment works.
- Architect/ Contract Administrator: See clause A10/140.

Second - CONTRACT DOCUMENTS

- Contract drawings: As listed in clause A11/120.
Contract documents: The following have been prepared which show and describe the work to be done A specification incorporating a schedule of work.

Third - PRICED DOCUMENTS

- Documents to be priced or provided by the Contractor: Priced Schedule of works.

THE ARTICLES

3 - ARCHITECT/ CONTRACT ADMINISTRATOR

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

4 and 5 - PRINCIPAL DESIGNER/ PRINCIPAL CONTRACTOR

- Principal Designer: See clause A10/150.
- Principal Contractor: See clause A10/130.

CONTRACT PARTICULARS

Fourth Recital and Schedule 2 - BASE DATE

- Base date: Ten days before the tender return date.

Fourth Recital and clause 4.2 - CONSTRUCTION INDUSTRY SCHEME (CIS)

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

Fifth Recital - CDM REGULATIONS

- The project is not notifiable.

Sixth Recital - FRAMEWORK AGREEMENT

- Framework agreement: Does not apply.

Seventh Recital and Schedule 3 - SUPPLEMENTAL PROVISIONS

- Collaborative working: Paragraph 1 does not apply.
- Health and safety: Paragraph 2 applies.
- Cost savings and value improvements: Paragraph 3 does not apply.
- Sustainable development and environmental considerations: Paragraph 4 applies.
- Performance indicators and monitoring: Paragraph 5 does not apply.
- Notification and negotiation of disputes: Paragraph 6 does not apply. Where paragraph 6 applies, the respective nominees of the parties are:
 - Employer's nominee: -.
 - Contractor's nominee: TO BE COMPLETED BY CONTRACTOR .
 Or such replacement as each party may notify to the other from time to time.

Article 7 - ARBITRATION

- Article 7 and Schedule 1 do not apply.

Clause 2.2 - COMMENCEMENT AND COMPLETION

- Date for Commencement of the Works: 04/09/2023.
- Date for Completion: within 16 weeks of commencement.
- Clause 2.8 - LIQUIDATED DAMAGES
- At the rate of £50 per calendar week or pro-rata thereto.

Clause 2.10 - RECTIFICATION PERIOD

- Period: Twelve months from the date of practical completion.

Clause 4.3 - PERCENTAGE OF THE TOTAL VALUE OF THE WORK ETC.

- Percentage: 95 per cent.

Clause 4.4 - PERCENTAGE OF THE TOTAL AMOUNT TO BE PAID TO THE CONTRACTOR

- Percentage: 97½ per cent.

Clause 4.8.1 - SUPPLY OF DOCUMENTATION FOR COMPUTATION OF AMOUNT TO BE FINALLY CERTIFIED

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

Clause 4.11 and Schedule 2 - CONTRIBUTION, LEVY AND TAX CHANGES

- Clause 4.11 and Schedule 2 will be deleted.

Clause 5.3.2 - CONTRACTOR'S INSURANCE - INJURY TO PERSONS OR PROPERTY

- Insurance cover (for any one occurrence or series of occurrences arising out of one event): Not less than £5 million.

Clauses 5.4A, 5.4B and 5.4C - INSURANCE OF THE WORKS ETC - ALTERNATIVE PROVISIONS

- Clause 5.4C (Existing structures insurance by Employer in own name) together with 5.4A (Works insurance by Contractor in Joint Names) applies.

Clauses 5.4A.1 and 5.4B.1.2 - PERCENTAGE TO COVER PROFESSIONAL FEES

- Addition: 15 per cent.

THE CONDITIONS

SECTION 1: DEFINITIONS AND INTERPRETATION

SECTION 2: CARRYING OUT THE WORKS

SECTION 3: CONTROL OF THE WORKS

SECTION 4: PAYMENT

SECTION 5: INJURY, DAMAGE AND INSURANCE

SECTION 6: TERMINATION

SECTION 7: SETTLEMENT OF DISPUTES

EXECUTION

- The Contract: Will be executed under hand.

A30 TENDERING/ SUBLETTING/ SUPPLY

MAIN CONTRACT TENDERING

110 SCOPE

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

145 TENDERING PROCEDURE

- General: In accordance with NBS Guide to Tendering for Construction Projects.
- Errors: Alternative 2 is to apply.

160 EXCLUSIONS

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

170 ACCEPTANCE OF TENDER

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

190 PERIOD OF VALIDITY

- Period: After submission or lodgment, keep tender open for consideration (unless previously withdrawn) for not less than 13 weeks.
- Date for possession/ commencement: See section A20.

PRICING/ SUBMISSION OF DOCUMENTS

210 PRELIMINARIES IN THE SPECIFICATION

- The Preliminaries/ General conditions sections (A10-A56 inclusive) must not be relied on as complying with SMM7/ NRM2.

250 PRICED DOCUMENTS

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

310 TENDER

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

515 ALTERNATIVE TIME TENDERS

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

530 SUBSTITUTE PRODUCTS

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

550 HEALTH AND SAFETY INFORMATION

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

570 OUTLINE CONSTRUCTION PHASE HEALTH AND SAFETY PLAN

- Content: Submit the following information within one week of request:
 - Method statements on how risks from hazards identified in the pre-construction information and other hazards identified by the contractor will be addressed.
 - Details of the management structure and responsibilities.
 - Arrangements for issuing health and safety directions.
 - Procedures for informing other contractors and employees of health and safety hazards.
 - Selection procedures for ensuring competency of other contractors, the self-employed and designers.

- Procedures for communications between the project team, other contractors and site operatives.
- Arrangements for cooperation and coordination between contractors.
- Procedures for carrying out risk assessment and for managing and controlling the risk.
- Emergency procedures including those for fire prevention and escape.
- Arrangements for ensuring that all accidents, illness and dangerous occurrences are recorded.
- Arrangements for welfare facilities.
- Procedures for ensuring that all persons on site have received relevant health and safety information and training.
- Arrangements for consulting with and taking the views of people on site.
- Arrangements for preparing site rules and drawing them to the attention of those affected and ensuring their compliance.
- Monitoring procedures to ensure compliance with site rules, selection and management procedures, health and safety standards and statutory requirements.
- Review procedures to obtain feedback.

A31 PROVISION, CONTENT AND USE OF DOCUMENTS

DEFINITIONS AND INTERPRETATIONS

110 DEFINITIONS

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

120 COMMUNICATION

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

130 PRODUCTS

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

135 SITE EQUIPMENT

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

145 CONTRACTOR'S CHOICE

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

155 SUBMIT PROPOSALS

- Meaning: Submit information in response to specified requirements.

160 TERMS USED IN SPECIFICATION

- Remove: Disconnect, dismantle as necessary and take out the designated products or work and associated accessories, fixings, supports, linings and bedding materials. Dispose of unwanted materials. Excludes taking out and disposing of associated pipework, wiring, ductwork or other services.
- Fix: Receive, unload, handle, store, protect, place and fasten in position and disposal of waste and surplus packaging including all labour, materials and site equipment for that purpose.
- Supply and fix: As above, but including supply of products to be fixed. All products to be supplied and fixed unless stated otherwise.

- Keep for reuse: Do not damage designated products or work. Clean off bedding and jointing materials. Stack neatly, adequately protect and store until required by the Employer/ Purchaser or for use in the Works as instructed.
- Make good: Execute local remedial work to designated work. Make secure, sound and neat. Excludes redecoration and/ or replacement.
- Replace: Supply and fix new products matching those removed. Execute work to match original new state of that removed.
- Repair: Execute remedial work to designated products. Make secure, sound and neat. Excludes redecoration and/ or replacement.
- Refix: Fix removed products.
- Ease: Adjust moving parts of designated products or work to achieve free movement and good fit in open and closed positions.
- Match existing: Provide products and work of the same appearance and features as the original, excluding ageing and weathering. Make joints between existing and new work as inconspicuous as possible.
- System: Equipment, accessories, controls, supports and ancillary items, including installation, necessary for that section of the work to function.

170 MANUFACTURER AND PRODUCT REFERENCE

- Definition: When used in this combination:
 - Manufacturer: The firm under whose name the particular product is marketed.
 - Product reference: The proprietary brand name and/ or reference by which the particular product is identified.
- Currency: References are to the particular product as specified in the manufacturer's technical literature current on the date of the invitation to tender.

200 SUBSTITUTION OF PRODUCTS

- Products: If an alternative product to that specified is proposed, obtain approval before ordering the product.
- Reasons: Submit reasons for the proposed substitution.
- Documentation: Submit relevant information, including:
 - manufacturer and product reference;
 - cost;
 - availability;
 - relevant standards;
 - performance;
 - function;
 - compatibility of accessories;
 - proposed revisions to drawings and specification;
 - compatibility with adjacent work;
 - appearance;

- copy of warranty/ guarantee.
- Alterations to adjacent work: If needed, advise scope, nature and cost.
- Manufacturers' guarantees: If substitution is accepted, submit before ordering products.

210 CROSS REFERENCES

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

220 REFERENCED DOCUMENTS

- Conflicts: Specification prevails over referenced documents.

230 EQUIVALENT PRODUCTS

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

240 SUBSTITUTION OF STANDARDS

- Specification to British Standard or European Standard: Substitution may be proposed complying with a grade or category within a national standard of another Member State of the European Community or an international standard recognised in the UK.
- Before ordering: Submit notification of all such substitutions.
- Documentary evidence: Submit for verification when requested as detailed in clause A31/200. Any submitted foreign language documents must be accompanied by certified translations into English.

250 CURRENCY OF DOCUMENTS

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

260 SIZES

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

DOCUMENTS PROVIDED ON BEHALF OF THE EMPLOYER

410 ADDITIONAL COPIES OF DRAWINGS/ DOCUMENTS

- Additional copies: Issued free of charge.

440 DIMENSIONS

- Scaled dimensions: Do not rely on.

460 THE SPECIFICATION

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

DOCUMENTS PROVIDED BY CONTRACTOR/ SUBCONTRACTORS/ SUPPLIERS

630 TECHNICAL LITERATURE

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

A32 MANAGEMENT OF THE WORKS

GENERALLY

110 SUPERVISION

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

120 INSURANCE

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

130 INSURANCE CLAIMS

- Notice: If any event occurs which may give rise to any claim or proceeding in respect of loss or damage to the Works or injury or damage to persons or property arising out of the Works, immediately give notice to the Employer, the person named in clause A10/140 and the Insurers.
- Failure to notify: Indemnify the Employer against any loss, which may be caused by failure to give such notice.

150 OWNERSHIP

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

PROGRAMME/ PROGRESS

210 PROGRAMME

- Master programme: Immediately when requested and before starting work on site submit in an approved form a master programme for the Works, which must include details of:
 - Planning and mobilisation by the Contractor
 - Subcontractor's work.
 - Running in, adjustment, commissioning and testing of all engineering services and installations.
 - Work resulting from instructions issued in regard to the expenditure of provisional sums.
 - Work by others concurrent with the Contract.
- Submit one copy.

245 START OF WORK ON SITE

- Notice: Before the proposed date for start of work on site give minimum notice of one week.

260 SITE MEETINGS

- General: Site meetings will be held to review progress and other matters arising from administration of the Contract.
- Frequency: Every month.
- Location: Contractor's accommodation.
- Accommodation: Ensure availability at the time of such meetings.
- Attendees: Attend meetings and inform subcontractors and suppliers when their presence is required.
- Chairperson (who will also take and distribute minutes): Architect.

290 NOTICE OF COMPLETION

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

310 EXTENSIONS OF TIME

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

CONTROL OF COST

430 PROPOSED INSTRUCTIONS

- Estimates: If a proposed instruction requests an estimate of cost, submit without delay and in any case within seven days.

A33 QUALITY STANDARDS/ CONTROL

STANDARDS OF PRODUCTS AND EXECUTIONS

110 INCOMPLETE DOCUMENTATION

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

120 WORKMANSHIP SKILLS

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

130 QUALITY OF PRODUCTS

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

135 QUALITY OF EXECUTION

- Generally: Fix, apply, install or lay products securely, accurately, plumb, neatly and in alignment.
- Colour batching: Do not use different colour batches where they can be seen together.
- Dimensions: Check on-site dimensions.
- Finished work: Without defects, e.g. not damaged, disfigured, dirty, faulty, or out of tolerance.
- Location and fixing of products: Adjust joints open to view so they are even and regular.

140 COMPLIANCE

- Compliance with proprietary specifications: Retain on site evidence that the proprietary product specified has been supplied.
- Compliance with performance specifications: Submit evidence of compliance, including test reports indicating:
 - Properties tested.
 - Pass/ fail criteria.

- Test methods and procedures.
- Test results.
- Identity of testing agency.
- Test dates and times.
- Identities of witnesses.
- Analysis of results.

150 INSPECTIONS

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

160 RELATED WORK

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

170 MANUFACTURER'S RECOMMENDATIONS/ INSTRUCTIONS

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

180 WATER FOR THE WORKS

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

SAMPLES/ APPROVALS

210 SAMPLES

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

220 APPROVAL OF PRODUCTS

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

230 APPROVAL OF EXECUTION

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

ACCURACY/ SETTING OUT GENERALLY

320 SETTING OUT

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

330 APPEARANCE AND FIT

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

SERVICES GENERALLY

410 SERVICES REGULATIONS

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

435 ELECTRICAL INSTALLATION CERTIFICATE

- Submit: When relevant electrical work is completed.

- Original certificate: To be lodged in the Building Manual.

445 SERVICE RUNS

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

450 MECHANICAL AND ELECTRICAL SERVICES

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

SUPERVISION/ INSPECTION/ DEFECTIVE WORK

525 ACCESS

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

560 TESTS AND INSPECTIONS

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

610 DEFECTIVE PRODUCTS/ EXECUTIONS

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

WORK AT OR AFTER COMPLETION

710 WORK BEFORE COMPLETION

- General: Make good all damage consequent upon the Works.
Temporary markings, coverings and protective wrappings: Remove unless otherwise instructed.
- Cleaning: Clean the Works thoroughly inside and out, including all accessible ducts and voids. Remove all splashes, deposits, efflorescence, rubbish and surplus materials.
- Cleaning materials and methods: As recommended by manufacturers of products being cleaned, and must not damage or disfigure other materials or construction.

- COSHH dated data sheets: Obtain for all materials used for cleaning and ensure they are used only as recommended by their manufacturers.
- Minor faults: Touch up in newly painted work, carefully matching colour and brushing out edges. Repaint badly marked areas back to suitable breaks or junctions.
- Moving parts of new work: Adjust, ease and lubricate as necessary to ensure easy and efficient operation, including doors, windows, drawers, ironmongery, appliances, valves and controls.

720 SECURITY AT COMPLETION

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

730 MAKING GOOD DEFECTS

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

A34 SECURITY/ SAFETY/ PROTECTION

SECURITY, HEALTH AND SAFETY

120 EXECUTION HAZARDS

- Common hazards: Not listed. Control by good management and site practice.
- Significant hazards: The design of the project includes the following:
 - Hazard: Existing buried services.
 - Precautions assumed: Isolate power from mains by NICEIC registered electrician before dismantling and excavation works commence.

130 PRODUCT HAZARDS

- Hazardous substances: Site personnel levels must not exceed occupational exposure standards and maximum exposure limits stated in the current version of HSE document EH40: Workplace Exposure Limits.
- Common hazards: Not listed. Control by good management and site practice.
- Significant hazards: Specified construction materials include the following:
 - Hazard: -.
 - Material: -.
 - Specification reference: -.

140 CONSTRUCTION PHASE HEALTH AND SAFETY PLAN

- Submission: Present to the Employer/ Client no later than not later than two weeks before commencement of work on site.
- Confirmation: Do not start construction work until the Employer has confirmed in writing that the Construction Phase Health and Safety Plan includes the procedures and arrangements required by the CDM Regulations.
- Content: Develop the plan from and draw on the Outline Construction Phase Health and Safety Plan, clause A30/570, and the Pre-tender Health and Safety Plan/ Preconstruction information.

150 SECURITY

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

160 STABILITY

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

210 EMPLOYER'S REPRESENTATIVES SITE VISITS

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

PROTECT AGAINST THE FOLLOWING

330 NOISE AND VIBRATION

- Standard: Comply with the recommendations of BS 5228-1, in particular clause 7.3, to minimize noise levels during the execution of the Works.
- Noise levels from the Works: Maximum level: 85 dB(A) when measured from the site.
- Equipment: Fit compressors, percussion tools and vehicles with effective silencers of a type recommended by manufacturers of the compressors, tools or vehicles.
- Restrictions: Do not use:
 - Percussion tools and other noisy appliances without consent during the hours of 0700 - 0900, 1600 - 1800hrs.
 - Radios or other audio equipment will not be permitted.

340 POLLUTION

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

350 PESTICIDES

- Use: Not permitted.

360 NUISANCE

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

370 ASBESTOS CONTAINING MATERIALS

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

371 DANGEROUS OR HAZARDOUS SUBSTANCES

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

375 ANTIQUITIES

- Duty: Report immediately any fossils, antiquities and other objects of interest or value discovered during execution of the Works.
- Preservation: Keep objects in the exact position and condition in which they were found.
- Special requirements: -.

380 FIRE PREVENTION

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

390 SMOKING ON SITE

- Smoking on site: Not permitted.

400 BURNING ON SITE

- Burning on site: Not permitted.

410 MOISTURE

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

430 WASTE

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

PROTECT THE FOLLOWING

510 EXISTING SERVICES

- Confirmation: Notify all service authorities, statutory undertakers and/ or adjacent owners of proposed works not less than one week before commencing site operations.

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

520 ROADS AND FOOTPATHS

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

560 EXISTING FEATURES

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

A35 SPECIFIC LIMITATIONS ON METHOD/ SEQUENCE/ TIMING

170 WORKING HOURS

- Specific limitations: No access to site permitted before 0800hrs. Site to close by 1700hrs (Monday to Friday). No work to be carried out at weekends.

A36 FACILITIES/ TEMPORARY WORK/ SERVICES

GENERALLY

110 SPOIL HEAPS, TEMPORARY WORKS AND SERVICES

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

340 NAME BOARDS/ ADVERTISEMENTS

- Name boards/ advertisements: Not permitted.

SERVICES AND FACILITIES

410 LIGHTING

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

420 LIGHTING AND POWER

- Supply: Electricity from the Employer's mains may be used for the Works as follows:
 - Metering: Metered by the Employer and charged to the Contractor.
 - Point of supply: Contractor to assess at tender stage and include all costs.
 - Available capacity: Contractor to assess at tender stage and include all costs.
 - Frequency: Contractor to assess at tender stage and include all costs.
 - Phase: Contractor to assess at tender stage and include all costs.
 - Current: Contractor to assess at tender stage and include all costs.
- Continuity: The Employer will not be responsible for the consequences of failure or restriction in supply.

430 WATER

- Supply: The Employer's mains may be used for the Works as follows:
 - Metering: Free of charge.
 - Source: Contractor to assess at tender stage and include all costs.
 - Location of supply point: Contractor to assess at tender stage and include all costs.
 - Conditions/ Restrictions: -None
- Continuity: The Employer will not be responsible for the consequences of failure or restriction in supply.

440 TELEPHONES

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

550 THERMOMETERS

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

A37 OPERATION/ MAINTENANCE OF THE FINISHED WORKS

GENERALLY

115 THE HEALTH AND SAFETY FILE

- Responsibility: the contractor.
- Content: Obtain and provide the following information: a brief description of the work carried out;
any hazards that have not been eliminated through the design and construction processes, and how they have been addressed (e.g. surveys or other information concerning asbestos or contaminated land);
key structural principles (e.g. bracing, sources of substantial stored energy – including pre- or post-tensioned members) and safe working loads for floors and roofs;
hazardous materials used (e.g. lead paints and special coatings);
the nature, location and markings of significant services, including underground cables; gas supply equipment etc.
- information and as-built drawings of the building.
- Format: Hard copy and PDF copy
- Delivery to: Architect By end of Rectification period.

F3 REBUILDING OLD BRICKWORK

1.0 Materials

- 1.1 See separate Specification for constituents and mixing of mortars (see F4 1.0).
- 1.2 Wherever possible bricks should be selected from demolition of the existing stack. New bricks should be carefully selected to match the colour, texture and size of the original brickwork. The new bricks should comply with B.S. 3921 in general terms but the dimensional tolerances may be varied to match the original work.
- 1.3 Any bricks not from the original brickwork must be approved by the architect beforehand.
- 1.4 For concealed work within the walling or below ground, ordinary quality common bricks to B.S. 3921 may be used.

2.0 Preparation

- 2.1 Any reclaimed bricks should be cleaned of old mortar, care being taken not to damage the arrises particularly on the face of the brick. Very hard mortar may be left adhering to the brick provided that it does not project more than 3mm from the surface of the brick.
- 2.2 Clean bricks should be sorted into
 - 1) Those in good condition which were exposed in the original construction.
 - 2) Those that have their faces damaged.
 - 3) Those that were totally concealed but are in good condition.
 - 4) Those from other sources.
- 2.3 Bricks should be stored on a dry surface or on supports clear of the ground and should be covered to protect them from rain. If the bricks are wet they should be protected from frost.
- 2.4 The bricks should be stacked in a manner to allow a free flow of air through the stack.

3.0 Workmanship

- 3.1 When selecting bricks for facing work preference should be given to those from stack 1) above. An assessment of these numbers should be made at the beginning of the rebuilding. If these are not sufficient to complete the work, allowing for breakages, a mixture of bricks from stacks 1) and 4) should be used. Care being taken to obtain an even mixture of types. Bricks from stacks 2) and 3) should only be used after consultation with the architect.
- 3.2 The bricks should be laid on a level bed of mortar over the full width of the wall and all vertical joints should be completely filled. The thickness of the bed and vertical joints should be set to match the original walling.
- 3.3 The walling should be formed with horizontal courses, the depth and position being adjusted to match and tie in with the original work.
Unless otherwise stated the wall should be vertical on the face and perpend should line up vertically.
- 3.4 Unless otherwise stated the brickwork should be built in a similar bond to that of the original work.
- 3.5 In particularly dry weather the bricks should be wetted before laying and any wall tops that have dried out overnight should also be wetted.

- 3.6 When there is a danger of frost any fresh walling should be protected with some non-conducting material. No brickwork shall be laid in frosty weather unless previously authorised by the architect when special precautions will be directed.
- 3.7 The brickwork should progress uniformly and no area should rise more than 1m above another.
- 3.8 Where required for bonding to old work behind, ties should be stainless steel.
- 3.9 See separate specification for pointing.
- 3.10 Unless otherwise stated the pointing may be carried out as the work progresses. This must be carried out in accordance with the approved sample and not necessarily as the adjacent walling.
- 3.11 Ensure that the face of the walling is kept clean at all times. Any mortar splashes should be removed immediately and any marking eradicated.
- 3.12 Care must be taken that water run off from any scaffolding does not mark the walling.

F4 REPOINTING

1.0 Materials

- 1.1 Lime putty for mortar may be obtained, ready slaked in sealed bags or tubs from The Traditional Lime Company, Church Farm, Leckhampton, Cheltenham, GL51 5XX (01242 525444) or Ty-Mawr Lime Units 5 & 12, Brecon Enterprise Park, Brecon, Powys LD3 8BT, UK tymawr@lime.org.uk Telephone: 01874 611350 or another source approved by the Architect.
- 1.2 Hydraulic lime (NHL) should be a natural hydraulic lime of max strength NHL 2 (St. Astier or similar) delivered in the manufacturer's sealed bags clearly labelled and stored in accordance with the manufacturer's instructions.
- 1.3 Sand for mortars must comply with BS.1200, Table One.

2.0 Mixing

- 2.1 Carry out a mortar analysis of the existing pointing mortar and provide samples for approval. Sample panels of pointing, are to be prepared and approved before work commences. Allowance should be made for several trial samples.
- 2.2 The proportions of the mix will be in the proportions of 1 part lime to 2.5 parts sand by volume.
- 2.3 The contractor should anticipate the aggregate being obtained from several sources to obtain a close match to existing mortar.
- 2.4 All mortar shall be well mixed again before use and gauging materials, if specified, shall only be added at this time.
- 2.5 The use of mortar plasticisers or anti-freeze will not be permitted.

3.0 Preparation

- 3.1 Where repointing is specified, the joints must be carefully raked out. Working from top of wall downwards, carefully remove by hand defective mortar in areas specified without damage to adjacent masonry or widening joints to a minimum depth of 2.5 x joint width. Where raking out exceeds depth specified seek instructions.
- 3.2 The joints are to be brushed out to ensure they are free from dust and debris and thoroughly wetted.

4.0 Repointing

- 4.1 Commence repointing from top downwards cleaning masonry as work progresses, pressing mortar well into joints using pointing irons of correct width for joint and ensuring joints are fully filled, using adhesive tape on each side of joint as necessary to protect surrounding masonry. New mortar to be rammed into the full available depth.
- 4.2 The pointing shall be kept back minimally to show the arrises of the brick and great care must be taken not to smear the mortar over the edge of adjoining work.
- 4.3 After initial set has taken place remove laitance and excess fines by lightly brushing with a bristle brush to expose aggregate. Do not overly compact mortar.

M8 PAINTING AND DECORATION Cast Iron Rainwater Goods

1.0 Materials

- 1.1 All paints used to be of good quality, durable and requiring no more than two coats to achieve full opacity.
- 1.2 All paints, primers sealants and undercoats to be fully compatible.
- 1.3 Only non-inflammable paint strippers should be used conforming to BS 3761.

2.0 Workmanship

- 2.1 All preparation and application of materials shall be in accordance with high standards of workmanship and good practice and also in accordance with the recommendations of the manufacturers of that material, work shall generally be executed in accordance with BS 6150.
- 2.2 Coats must be applied at proper intervals to secure maximum adhesion and where two hard gloss finishing coats are specified, the second coat must be applied within 48 hours of the first.
- 2.3 Unless other specified, the minimum specification for metalwork shall include the priming coat and one undercoat and two coats of gloss or eggshell finish.
- 2.4 The inside of rainwater gutters shall be thoroughly wire brushed and rubbed down to remove rust and loose material, areas of bare metal primed and the whole given two coats of bituminous paint in accordance with BS 3416 Type 1.
- 2.5 The use of blowlamps or open flames in stripping will not be permitted.
- 2.6 Where repainting is specified without full stripping of the existing paint:
 - Wire brush any exposed metal or rust spots,
 - Apply spot primer where metal is exposed and bring forward with undercoat to the thickness of the adjacent paint.
 - Clean and rub down all the paintwork.
 - Apply one undercoat and two top coats over the whole painted surface.

M20 REPAIRS TO LIME PLASTER

1.0 General

- 1.1 To be read in conjunction with the general specification and attached schedule of works.

2.0 Materials

- 2.1 All materials used shall comply with relevant British Standards in so far as these are applicable. Proprietary materials shall be used strictly in accordance with manufacturers' recommendations. The recommendations for use and application contained in B.S. Code of Practice 5492 'Internal Plastering' shall apply in so far as they are relevant. Materials shall be stored under dry clean conditions; bagged materials shall be kept sealed until required.
- 2.2 Shall comply with BS EN 459-1. To be generally NHL 2 or 3.5 hydraulic lime: St Astier or equivalent. Alternatively, a lime putty from a nominated supplier may be used where specified.
- 2.3 Sand: Shall comply with BS 1199 for plastering mixes. Sands shall be clean and sharp, and those containing substantial quantities of loam or clay shall not be used.

For undercoats sand shall be BS1198 type 1 passing 5.00mm sieve and for finishing coats Type 3, passing 2.36mm sieve.

For finishing coats sand shall be to table 2 of BS 1199, and for other purposes shall be to table 1.
- 2.4 Reinforcement: May be ox, goat or chopped horse hair, clean strong and free from grease or other impurities.
- 2.5 Appropriate premixed lime plasters may be obtained from The Traditional Lime Company, Church Farm, Leckhampton, Cheltenham, GL51 5XX (01242 525444); or Ty-Mawr Lime Ltd, Llangasty, Brecon, Powys, LD3 7PJ tel. 01874 658249 or agreed equivalent suppliers.
- 2.6 Materials shall be carefully batched by volume and where dry ingredients are used, thoroughly mixed dry before adding clean water; mixing shall be done in a clean mixing box. Proportions of ingredients relate to dry volumes and due allowances must be made when using wet ingredients. Refer to manufacturer's recommendations where applicable.
- 2.7 Plasters containing Portland cement or other additives reducing porosity should not be used

3.0 Cutting Out and Preparation

- 3.1 Before any cutting out or removal of existing plaster takes place the proposed areas are to be agreed on site with the architect.
- 3.2 When working on early plaster operatives are to be vigilant for any signs of wall paintings which may have been covered by subsequent decoration or plastering. If any are found work in that area must stop immediately and the architect's advice sought.
- 3.3 For larger patch repairs, remove all loose or badly adhering plaster, extending the patch to meet edges of sound plaster. Carefully brush away all loose material. Wet the backing material and edges of adjoining plaster before replastering.

- 3.4 All surfaces to be repaired shall be cleaned down to bare plaster and old wall or lining paper, paint and unbound distemper or limewash removed by stream stripping or other suitable means.
- 3.5 Craized Surfaces: Depending on severity of crazing, surfaces that are otherwise sound shall be rubbed down and washed, and coated with a thin mixture of powdered filler (e.g. Alabastine) or diluted emulsion paint.

4.0 Repair of Cracks and Patches

- 4.1 Craized Surfaces: Depending on severity of crazing, surfaces that are otherwise sound shall be rubbed down and washed, and coated with a thin mixture of powdered filler (e.g. Alabastine) or diluted emulsion paint.
- 4.2 Larger cracks shall be extended through to the backing material and widened to a minimum width of 19mm, with undercut sides. Unsound plasterwork on each side of the cracks shall be removed and all loose material carefully brushed away. The backing material and edges of adjoining plaster shall be well wetted and the cracks fully and firmly filled with a mixture of class A plaster and up to 1/3rd lime putty, finished to a true face level with adjoining surfaces and subsequently rubbed down when dry.
- 4.3 Patching finished lime plaster into a repair requires care. The finish is sand based and will abrade and degrade existing edges leading to a dull surface around the repair. A clean break of a few mm is necessary around the patch and this can be filled later with NHL 2 made into a putty (no sand added) when the patch is fully hardened.
- 4.4 For larger patch repairs, remove all loose or badly adhering plaster, extending the patch to meet edges of sound plaster. Carefully brush away all loose material, including from between or behind wood laths. Wet the backing material and edges of adjoining plaster and re-plaster in two or three coats with a weak lime finish (see 'plaster mixes' below). The thickness of any one coat shall not exceed 10mm. Undercoats shall be scratched to form a key, and the finishing coat shall be not more than 3mm thick. Three coats shall be used on wood laths. A similar technique shall be used when making good after other trades, in particular to electrical work.

5.0 Application

- 5.1 Plaster is to be made up in two or three coats with a weak lime finish (see 'plaster mixes'). The thickness of any one coat shall not exceed 10mm. Undercoats shall be scratched to form a key, and the finishing coat shall be not more than 3mm thick.
- 5.2 The first coat or render coat to be made with NHL 3.5 or NHL 2 in a 1:2 ratio with well graded sharp sand 3.5mm down.

When working on masonry surfaces the first coat of mortar should be applied by a laying-on trowel on to a dampened but not wet background at approximately 9 - 12mm thick. The render coat should not be straightened.
- 5.3 Second coat or Floating coat (straightening coat). Floating coats for two coat work shall not exceed 10mm in thickness. Using the same mortar as the render coat, apply with a laying-on trowel to a dampened background. Fill out any irregularities in thin layers and apply the floating coat to the desired line using rules or dabs. Maximum thickness should be 12- 16mm in one pass. Tighten in with a cross grained wood float and key lightly to receive the finish. Any irregularities in the background must be made good at this stage. On lath this coat should not be applied until the first coat is sufficiently hard.
- 5.4 Finishing coat. The finishing coat is made with NHL2 in a 1:1 with fine silica sand 0.8 to 0.075mm, clean and free from silt or clays. Hair is not to be used for this coat. Apply with a laying-on trowel in two passes to an overall thickness of 2mm approx. Tighten in with a cross grained wooden float, dampening as necessary as the set takes up. Form final finish

by trowelling the surface with a steel float and dampening as necessary. ^[11]_{SEP}

- 5.5 When the finish coat has hardened gently rub down to ensure a smooth junction with adjoining surfaces.
- 5.6 Unless otherwise specified a float finish is to be formed using a wood float to provide a slightly open and textured surface. A dead true surface is generally not required and some slight undulation to follow the contours of the wall behind is to be preferred.
Sample finishes for approval shall be provided on request.
- 5.7 Internal and external angles shall normally be slightly rounded, the degree of rounding being increased where the surface is more textured. Metal angle beads shall not be used. If beaded angles are required, beads shall normally be of timber and separately specified.
- 5.8 Undercoats should be left at least two days in summer and at least seven days in winter, protected by ventilated covers to ensure that the initial shrinkage is over before the next coat is applied. These are minimum times and longer intervals are desirable. Tests for adhesion and strength must be made before a second coat is applied and the surface lightly sprayed to reduce and control suction immediately before application of subsequent coats.
- 5.9 Over narrow chases the cracks should be fully and firmly filled with a mixture of class A plaster and up to 1/3rd lime putty, finished to a true face level.
- 5.10 Where work is to be undertaken in unheated buildings plastering should never be carried out in frosty conditions or where the temperature is likely to fall below 8°C during the execution of the work or until the material has hardened. Protection where used should remain in place for as long as necessary. Ensure that the rate of drying is consistent and that strong draughts are excluded from the working area. This is particularly important where a building has windows or doors open. Do not force the drying by introducing forced or excessive heating.
- 5.11 If heating is required to maintain a proper working temperature use propane heating, this has the effect of producing both moisture and heat simultaneously. Ensure the temperature is adequately controlled. In poor drying conditions, de-humidifiers may be used to accelerate the drying process.
- 5.12 On completion the surface is to be decorated as specified with mineral paint as M7 below.

M7 KEIM MINERAL PAINT

1.0 Preparation

- 1.1 Any loose, flaking and unstable material must be identified and then thoroughly removed.
- 1.2 Using stiff brushes and broad bladed scrapers to get back to a sound edge; these edges should then be feathered in. Ensure that any materials left remaining and the underlying substrate is sound and adhering well.
- 1.3 Any mould and fungal growth must be thoroughly removed using stiff brushes to remove all growths and then treated with Keim Algicide, brush applied undiluted and allowed to remain undisturbed for some 3 hours before thoroughly washing off.

1.4 Any cracks or where there is a need to equalise the surface should be filled using Keim Spachtel, a ready to use silicate mineral filler, brush or trowel applied to a pre-wetted surface and dressed back to the required level.

1.7 All surfaces must be thoroughly washed down with clean cold water to remove all surface dirt and dust. When all surfaces are clean, sound, wind dry, dust free and free from all surface contaminants, decoration using Keim Mineral Paints may proceed.

2.0 Decoration

2.1 Paint finish to be a two coat Keim system [As schedule and to manufacturers specification], applied undiluted by brush, with a minimum period of 12 hours between coats.

2.3 General points to be borne in mind when using Keim Mineral Paints are:-

- Areas to be decorated should be free from all surface contaminants, sound, dry and dust free
- All materials must be thoroughly mixed beforehand using a mechanical mixer
- On newly rendered surfaces a period of at least 15 days is allowed following rendering, prior to the application of Keim
- The material must not be applied at temperatures below 5oC nor those in excess of 30oC, nor if it is raining, or if there is an immediate likelihood of rain
- Keim Mineral Paints should be applied onto wind dry surfaces where the moisture content on or near the surface (to a depth of 5mm approximately) should be no greater than 18% by volume. For on-site purposes a moisture reading may be employed to give a qualitative reading – if the reading is in the green zone decoration may proceed
- Any splashes or spillage should be removed immediately using water - particular note needs to be taken of this in respect of Keim on glass, as it has a slight etching effect if allowed to dry hard.
- Clean all brushes and tools immediately in water.
- Always store in frost-free conditions.
- Always maintain a wet edge and work materials out well.
- Use only Keim recommended fillers and sealers. Acrylic, resin and gypsum-based fillers particularly are not recommended for use with mineral paints.
- When ordering reference to the project should be made, to ensure that in the event of re-ordering a colour match can be supplied.

R1 CAST IRON RAINWATER GOODS

1.0 Materials

1.1 Rainwater goods shall be cast iron. Supplier See schedule of work.

- 1.2 Gutters and downpipes shall comply with the dimensional requirements of BS460 and conform to a British Board of Agreement Certificate (where applicable) and shall be manufactured under BS EN ISO 9001:2000 Quality Assurance Scheme.
- 1.3 Gutters shall be of sizes and profiles specified complete with stop ends, angles, outlets and brackets as required fixed at recommended centres (depending on size, profile and type of fixing) using pre made holes where appropriate.
- 1.4 Gutters should be jointed with a stainless steel bolt and washer, together with a suitable gasket supplied with the units, or an elastomeric gutter jointing mastic used strictly in accordance with manufacturer's instructions.
- 1.5 The metal used for the manufacture of cast iron rainwater pipes, gutters and fittings shall meet the requirements specified for cast iron in BS EN 1561 Grade EN-JL 1020.
- 1.6 Downpipes: unless specified otherwise, shall be circular 75mm and be installed with a fixed or loose socket head complete with fixing ears.
- 1.7 Gutters: unless specified otherwise shall be half round gutter 125mm diameter.
- 1.8 Brackets: shall be galvanized mild steel; of a type to fit gutter profile neatly and securely. Fixing to eaves to be appropriate for roof/ wall construction to ensure long term firmness and installation to correct and regular falls.

2.0 Workmanship

- 2.1 The cast iron rainwater and gutter system shall be supplied to site protected with a black primer coat ready for on-site painting. [All in accordance with the manufacturers' painting instructions.] The contractor should ensure that any damage to the coating is repaired prior to further priming coats being applied. The final coat should be applied prior to installation.
- 2.2 Before fixing, gutters and pipes shall be stored flat to avoid damage or distortion.
- 2.3 Where pipes and gutters are cut on site, the ends shall be cut clean and square with burrs removed. All cut ends shall be made good and re-coated strictly in accordance with the manufacturers' recommendations.
- 2.4 The cast iron rainwater and gutter system shall be installed strictly in accordance with the relevant Health and Safety Regulations, to standard workmanship BS 8000, and to recommendations from the Classical Installation Guide.
- 2.5 Where the pipe is required to be projected from the wall, cast iron wall spacer plates shall be used.
- 2.6 Masonry is not to be cut back or chased to accommodate pipes or gutters unless specifically agreed on site with CA.
- 2.7 Pipes shall be secured by eared pipe sockets fixed to masonry with non ferrous expanding bolts, 8mm dia. x 50mm min, where used without a wall spacer plate and 75mm min. with a wall spacer plate.
- 2.8 Gutters are to be fixed to a minimum fall of 1:300. All downpipes are to be fitted with cast iron shoes, offsets, outlets etc. to discharge into gullies or gutters as shown.
- 2.9 Where not supplied pre- finished by manufacturer rainwater goods are to be painted, thoroughly cleaned and de-greased, primed with 1 no. coat of zinc chromate primer, 1 no. undercoat and 2 coats black gloss minimum coating of 90 microns in accordance with manufacturers' instructions.

PREAMBLES**ITEM**

- | | | |
|------------------------|--|-------|
| 1 | SITE SET-UP | |
| 1.1 Cover Scaffolding | <p>Erect and maintain during course of works all scaffolding required for the execution of the works described in the documents. A cover scaffold is required to protect the building from water ingress.</p> <p>General requirements:
 All scaffold tube must be galvanised and comply with BS EN 39 type 4; All timber scaffold boards must comply with BS2482:2009; Short boards (less than 2.4 metres long) should be secured to prevent displacement and no overlapping boards allowed; scaffold brick guards to be fitted on lifts where bricks and tiles to be stored; debris netting to be fitted to all lifts; internal ladder access to working platforms to be provided.</p> <p>Dismantle and clear away on completion of works making good any areas affected by scaffold supports.</p> | _____ |
| 1.2 Clearing Away | Allow to clear away all materials from site described below. | _____ |
| 1.3 Contractor's Items | <p>Enter into JCT MW2016 building contract with Employer.</p> <p>Accept role of Principal Contractor for the works including all responsibilities and duties included as prescribed by HSE.</p> <p>Accept responsibility for coordination, supervision and administration of the works, including subcontracts.</p> <p>Submit details of contractor's liability insurance (min. £5m).</p> <p>Work operatives to be appropriately skilled and experienced for the type and quality of work.</p> <p>Water for the work to be supplied by Employer from mains.</p> <p>Electricity for the works to be supplied by the Employer from the mains.</p> <p>Provide portaloo for duration of works.</p> <p>Provide access to hot and cold running water for duration of the works.</p> <p>Submit a programme of works before commencement of works.</p> | _____ |

- 1.4 Workmanship Comply with all contractual conditions in Prelims, including (but not limited to):

Generally fix, install, supply or lay products/materials securely, accurately, plumb and in alignment.

Check on site dimensions.

Finished work to be without defects.

Use only products/materials specified in this document and comply with all manufacturer's printed recommendations and instructions regarding fitting/laying/installing. Maintain on site all manufacturer's literature.

Setting out - check all dimensions on site and notify architect of any discrepancies and await instructions.

Protect new works against damage from water ingress.

2

ROOF WORKS

2.1 ROOF SLOPES 1 - 5 (ref dwg 2187/20)

- 2.1.1 Carefully remove existing hogsback ridge tiles and set aside for re use after removing all mortar and debris. Carefully remove all clay plain tiles, removing any mortar and debris and set aside for re use. Remove all battens and de nail and dispose of.
-
- 2.1.2 Re roof slopes with existing cleaned down roof tiles making an allowance for new handmade plain tiles to match existing of 50%. Tiles to be twice nailed every 5th course using 38.35mm stainless steel nails onto 25 x 35mm tanalised softwood battens with joints staggered (not in line above each other) nailed to rafters using 65 x 3.35mm stainless steel annular ring shank nails and nailed through layer of Klobber Permo Forte breathable underlay into rafters. Where existing good tiles do not have nail holes, allow for notching tiles either side to allow nail fixing.
-
- 2.1.3 Re use existing hogs back ridge tiles making up any shortfall in tiles to match existing allowing for 20% re claimed tiles and bed solidly in lime/sand mortar NHL 3.5 mix 1:2 ½.
-
- 2.1.4 Carefully remove existing lead covering to gutter and dispose of. Remove also gutter boarding and dispose of. Allow to re form gutters with untreated sawn penny jointed boards size 150 x 25mm fix onto new joists fixed to existing rafters out of 75 x 50 tanalised softwood and reform gutter to give 60mm upstands at the appropriate dimensions to comply with Lead Sheet Training Academy (LSTA) guidance. Finish gutters in code 6 lead onto building paper onto the gutter boarding and

dress into the existing outfall.

2.2

ROOF SLOPES 5 - 8

2.2.1

Carefully remove existing hogs back ridge tile and set aside for re use after removing all mortar and debris. Carefully remove all clay plain tiles, removing any mortar and debris and set aside for re use. Remove all battens and de nail and dispose of.

2.2.2

Re roof slopes with existing cleaned down roof tiles making an allowance for new handmade plain tiles to match existing of 50%. Tiles to be twice nailed every 5th course using 38.35mm stainless steel nails onto 25 x 35mm tanalised softwood battens with joints staggered (not in line above each other) nailed to rafters using 65 x 3.35mm stainless steel annular ring shank nails and nailed through layer of Klobber Permo Forte breathable underlay into rafters.

Where existing good tiles do not have nail holes, allow for notching tiles either side to allow nail fixing.

2.2.3

Re use existing hogs back ridge tiles making up any shortfall in tiles to match existing allowing for 20% re claimed tiles and bed solidly in lime/sand mortar NHL 3.5 mix 1:2 ½.

2.2.4

Carefully remove existing lead covering to gutter and dispose of. Remove also gutter boarding and dispose of. Allow to re form gutters with untreated sawn penny jointed boards size 150 x 25mm fix onto new joists fxd to existing rafters out of 75 x 50 tanalised softwood and reform gutter to give 60mm upstands at the appropriate dimensions to comply with Lead Sheet Training Academy (LSTA) guidance.

2.3

GUTTERS AND DOWNPIPES

2.3.1 Decorate

All existing cast-iron gutters and downpipes are to be refurbished: Existing cast iron gutters and downpipes to be taken down thoroughly derusted and prepared for redecoration.

Allow for decorating with rust inhibitive primer undercoat and two top coats including inside of gutters and back of downpipes and ears. All in accordance with the specification.

Rainwater goods to be painted RAL colour to match Farrow & Ball 'Pigeon'.

Paint specification: One coat Dulux Metal primer zinc oxide : one coat Trade Micaceous iron oxide undercoat: two coats Weathershield exterior gloss.

Location:

Roof slopes 3, 4, 5 and 6 and west wall

2.3.2 New c.i.

Allow to renew existing c.i. downpipe on south range,

downpipe	west elevation for larger diameter pipe - 100mm with ears cast on to connect to existing ogee gutter.	<hr/>
2.4 Fascias	Take off existing timber fascias and replace with hardwood timber, section sizes and bead details to match. Prepare and paint as manufacturer's recommendations with Johnstones Trade Flexible Undercoat and Flexible Satin top coat RAL colour to match Farrow & Ball 'Pigeon'. Location: Rof slope 3 and 5	<hr/>
3	CHIMNEY STACK (Specification section F3) Reinstate top courses of chimney stack as shown on drawing 2187/14A and all as specification section F3. Take down nominal 2500mm of existing brick back to line of stack where plumb. Clean mortar off bricks and set aside for re-use. Build up stack to a level 9.5m above ground level, incorporating 4no. oversailing courses as shown. Allow for 50% salvageable bricks. Bedding and pointing mortar to be 1:2.5 (NHL 2 : sharp sand) Flaunching mortar for head of stack and pots to be 1:2.5 (NHL 3.5 : sharp sand) Supply and fit 2no. Chimney pots.	<hr/>
4	REPOINTING (Specification section F4) Rake out all cementitious mortar and repoint using lime mortar mix 1:2.5 (NHL 2 : sharp sand) all as specification section F4. Location: South range, south wall and chimney stack.	<hr/>
5	EXTERNAL JOINERY Supply and fit new oak pentice boards to 3no. Windows: West elevation - ground floor window, 2.3m long West elevation - first floor window, 2.5m long East elevation - first floor window, 1.7m long Boards to be air-dried oak, ex 250 x 32mm angled to project past window head at least 75mm, fixed to triangular oak brackets each end. Brackets st/steel screwed and pelleted to oak frame, and boards st/steel screwed and pelleted to	

brackets. Board to have 6mm rebate along upper length for one-part polysulphide sealant to wall.

5

INTERNAL REFURBISHMENT WORKS

5.1

Conservation of second floor ceilings

Accept quotation by S Preece and Sons and provide attendance.

Work to be carried out after completion of roof-works.

A provisional sum is included elsewhere for the work and the quotation is appended.

5.2

Works to improve fire safety

- 5.2.1 Fireline board Supply and fit 12.5mm Gyproc Fireline board as manufacturer's recommendations. Finish with plaster skim.

Location:

Cellar - to underside of ceiling joists

Cellar stairs - to cellar side of partition wall and underside of staircase.

- 5.2.2 Second floor lobby

Construct new lobby in 50x100 sw studs lined with 12.5mm Gyproc Fireline board and plaster skim. Supply and fit sw skirting, 96mm chamfered to both faces.

Supply and fit flush fire door and frame (FD30), door size 2040x726mm.

Location:

Second floor south room

- 5.2.3 Cellar door

Upgrade cellar door as detail drawing 2187/16.

5.3

Attic works

- 5.3.1 Insulation

Allow to remove existing insulation to inspect condition of ceiling joists and other attic works and to refit following completion of all works.

- 5.3.2 Internal gutter

Ref drawing 2187/17.

Allow to remove existing lead-lined internal gutter.

Supply and fit new lead-lined timber gutter as detailed, laid to achieve a fall of 1:80 if possible. St/steel screwed to ceiling joists using timber blocks to achieve fall.

- 5.3.3 Walkway

Supply and fit boarded walkway within attic in location shown on drawing 2187/13A.

Walkway to be 600mm wide constructed of treated sw t+g boards fixed to bearers, 200x50mm each side, fixed to ceiling joists - walkway to be raised to allow depth of insulation beneath.

5.4 Plaster repairs (Specification M20)

Make good plaster where cracked/damaged using a lime plaster.
Lime plaster available from Ty Mawr t: 01874 611350

Location:

Ground Floor West Room - south wall

Ground Floor Entrance Hall - east wall adjacent ED1

Ground Floor Stairwell - over D3

Ground Floor Kitchen - ceiling

Second Floor South Room - all walls

5.5 Internal decorations**5.5.1 Walls**

Where walls/ceilings have been repaired (see 5.4)
prepare walls and apply 2 coats Keim mineral paint all as
specification section M7. Colour to match existing walls
Allow 10 sq. metres

5.5.2 Ceilings

Following conservation of ceilings on second floor
prepare walls and apply 2 coats Keim mineral paint all as
specification section M7. Colour to be agreed from standard
colour palette.
Allow 70 sq. metres.

5.5.3 New plaster

Prepare plaster and paint with
Crown Trade Matt Vinyl emulsion:
Mist coat emulsion diluted with 40% water
2 top coats

Location - new plastered walls and ceilings

5.5.4 New joinery

To new joinery prepare and paint with Crown Trade Acrylic
Satin paint:
Prime with one coat of Crown Trade New Build Acrylic
Primer Undercoat
2 coats Acrylic Satin

Location - new joinery, cellar door and fire door

6**EXTERNAL DECORATIONS****6.1 Windows**

Prepare and paint as manufacturer's recommendations
with
Johnstones Trade Flexible Undercoat and Flexible Satin top coat

Location:

W3 (NB requires new hardwood cill)

W4

W5

W6

W7

W8

W14

W15

A provisional sum is included elsewhere for joinery repairs.

7	PROVISIONAL SUMS AND CONTINGENCY	
7.1 Joinery Repairs	Include a provisional sum of £2000.00 for joinery repairs to windows.	£2,000.00
7.2 Roof Repairs	Include a provisional sum of £8000.00 for repairs to roof structure following stripping of tiles	£8,000.00
7.3 Ceiling Repairs	Include a provisional sum of £5000.00 for repairs to ceiling joists over second floor	£5,000.00
7.4 Plaster Ceiling	Include a provisional sum of £30000.00 for specialist conservation of second floor plaster ceilings	£30,000.00
7.5 Roof Insulation	Include a provisional sum of £5000.00 to supply and fit new insulation in attic roof at ceiling level.	£5,000.00
7.6 Heating	Include a provisional sum of £15,000.00 for upgrade to existing heating system.	£15,000.00
7.7 Fire safety	Include a provisional sum of £5,000.00 for upgrade to fire safety system including automatic door closers linked to existing system.	£5,000.00
7.8 Contingency Sum	Include a contingency sum of 10% of the cost of the works for works unknown at preparation of contract documents.	

8**WORKS AT END OF RECTIFICATION PERIOD**

The Contractor is to allow to return to site at the end of the rectification period (12 months after practical completion) and make good all shrinkage cracks to new plastered finishes and redecorate.

This item is not classed as a defect for the purposes of the building contract and must be included in the tender price.

9**GENERAL NOTE REGARDING PRICING OF SCHEDULE**

The schedule is not intended as a comprehensive list of items of works and is to be read in conjunction with the tender drawings. It will be assumed that the tender price will include for ALL works shown on the drawings and described in the above schedule of works.

SCHEDULE OF WORK SUMMARY

Collection
£ p

Page SW/1

Page SW/2

Page SW/3

Page SW/4

Page SW/5

Page SW/6

Page SW/7

Carried Forward £

FINAL SUMMARY

£ **p**

CONTRACT PRELIMINARIES

Page 1 - 29

SCHEDULE OF WORK SUMMARY
(include all provisional and contingency sums)

Page SW8

OVERHEADS AND PROFIT

Carried to Form of Tender £



S PREECE & SONS LTD

PLASTERWORK, STUCCO & MASONRY SPECIALISTS

Specialising in Restoration, Conservation & Repair

16th April 2022

Debbie Hill
Town Clerk
Tewkesbury Town Council
Tewkesbury

Job ref: Tewkesbury Museum, ceiling restoration

Fitment of additional timber ceiling supports props
Fitment of access platforms
Removal of builder's debris
Recording and measuring of profiles and enriched surfaces
Making of moulds and zinc profiles
Careful removal of loose delaminated and decomposed sections of plasterwork
Removal and disposal of rotten and contaminated existing ceiling laths
Preparation of background substrate
Fitment of new riven oak laths
Application of new lime plaster to ceiling areas approx. 30%
Insitu running of new cornice and moulded sections
Making squeeze moulds for enriched surfaces
Application of new paint surface ie distemper or silicate mineral colour wash

Labour, Materials & Plant £23000.00 + vat

A complete detailed method statement along with samples of materials for approval will be submitted upon request

‘Jacaleen’, Off Rock Lane, LUDLOW, Shropshire, SY8 1SF
TELEPHONE: 01584 878341

www.limeplastering.co.uk by Stuart Preece & Sons

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