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|  | ROOFING REPLACEMENT WORKS AT DARWEN TOWN HALL, CROFT STREET, DARWEN, LANCS, BB3 1BQ |  |
|  | **SPECIFICATION & SCHEDULE OF WORKS**  JUNE 2020 |  |

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| **Quality Management** | | | |
|  | | | |
| Date | June 2020 | | |
| Prepared by | Chris Atkinson | Signature  (for file) |  |
| Checked by | Rebecca Nicholson | Signature  (for file) |  |
| Estimated checked by | Robert Addison | Signature  (for file) |  |

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| 1. Scope of Works |

The works will comprise of the following:

Erection of full scaffolding to facilitate the removal of the existing slate finished, pitched roof coverings and complete recovering of all roof areas with reclaimed natural slate including a supplementary roofing felt. Joinery repairs and replacements to the roof construction will be carried out prior to recovering the roof slopes. All existing lead detailing forming valleys and box gutters will be removed and fully replaced. Original cast iron gutters and rainwater pipes will be replaced to each elevation.

Further works include repointing and flaunching chimneystacks, replacing all existing lead work and installing loft insulation to existing roof spaces. Some timber replacements are anticipated to the clock tower and on completion, the timber detailing will require external redecoration works to finish.

All flat roof coverings will be replaced or recovered with a new Bauder flat roof systems. Substantial preparatory removal works will be undertaken during these works to ensure a new timber deck is installed over the structural timber construction with new capping details to perimeters.

1. Preliminaries / Contract Particulars

**JCT370A10 PROJECT PARTICULARS**

110 THE PROJECT

**·** Name: Darwen Town Hall

**·** Nature: Roofing replacement works and associated repairs.

**·** Location: Croft Street, Darwen, Lancs, BB3 1BQ

**·** Length of contract: 12 weeks.

120 EMPLOYER (CLIENT)

**·** Name: Blackburn with Darwen Borough Council.

**·** Address: Third Floor, One Cathedral Square, Blackburn. Lancs, BB1 1FB.

**·** Contact: Chris Atkinson.

**·** Telephone: 01254 304594.

**·** E-mail: [christopher.atkinson@blackburn.gov.uk](mailto:christopher.atkinson@blackburn.gov.uk)

140 ARCHITECT/ CONTRACT ADMINISTRATOR

**·** Name: Blackburn with Darwen Borough Council.

**·** Address: Third Floor, One Cathedral Square, Blackburn. Lancs, BB1 1FB.

**·** Contact: Chris Atkinson.

**·** Telephone: 01254 304594.

**·** E-mail: [christopher.atkinson@blackburn.gov.uk](mailto:christopher.atkinson@blackburn.gov.uk)

150 PRINCIPAL DESIGNER

**·** Name: To be appointed.

**·** Address: TBC

**·** Contact: To be appointed.

**·** Telephone: TBC.

**·** E-mail: [TBC](mailto:John.Bryan2@capita.co.uk).

**JCT370A11 TENDER AND CONTRACT DOCUMENTS**

110 TENDER DRAWINGS

**·** The tender drawings are: Site layout / roof plans.

* Drawing No’s as follows:
* 011- BS 20/21 Pitched Roof Plan, Front Elevation,
* 011- BS 20/21 Pitched Roof Plan, Side Elevation,
* 011 – BS 20/21 Pitched Roof Plan, Entrance Porch,
* 011 – BS 20/21 Flat Roof Plan
* 011 – BS 20/21 Location Plan

120 CONTRACT DRAWINGS

**·** The Contract Drawings: The same as the tender drawings.

160 PRECONSTRUCTION INFORMATION

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

**JCT370A12 THE SITE/ EXISTING BUILDINGS**

110 THE SITE

**·** Description: The boundaries of the site are illustrated on the location plan 011 - BS 20/21.

120 EXISTING BUILDINGS ON/ ADJACENT TO THE SITE

**·** Description: The position of buildings adjacent to or adjoining the site are indicated on the location plan 011 - BS 20/21 issued with the invitation to tender.

140 EXISTING UTILITIES AND SERVICES

**·** Drawings: (Information shown is indicative only): The Contractor shall be deemed to have ascertained the position of all existing 'live' mains, drains, sewers, etc., and shall protect these during the currency of this contract.

**·** The Contractor shall include for any inconvenience or expense in working around all existing mains, drains, sewers, etc., and for all necessary precautions to avoid interruptions, disruptions and damage.

**·** Other information: Underground statutory service plans will be issued with the Pre-construction H&S plan.

200 ACCESS TO THE SITE

**·** Description: Access to the site shall be as indicated on the site details 011 - BS 20/21 issued with the invitation to tender. All existing highways and paths must be accessible and protected throughout the duration of the contract and any areas of paving or landscaping damaged during the course of the works shall be reinstated by the Contractor upon completion of the works.

**·** It is essential that the Contractor visit the site in order to make his own assessment of the location and access conditions. Due consideration should be given regarding such matters as transport of people, delivery of plant and materials, removal of debris and rubbish, etc. The Contractor shall make all necessary allowances and include in his tender for all costs involved as no claim due to lack of knowledge in respect will be considered.

**·** Limitations: Where the site is occupied (neighbouring market stalls / businesses), the contractor shall check with the premises occupiers and avoid peak times for deliveries.

**·** Neighbouring businesses must not be affected by any scaffolding, skips, site cabins or plant associated with the works. Entrances to the shop fronts must be accessible for all staff and customers at all times. Signage must be displayed stating ‘Businesses open as usual’. All public entrances must be protected with scaffolding boards, netting sheeting etc. to prevent debris from falling into pedestrian walkways etc.

210 PARKING

**·** Restrictions on parking of the Contractor’s and employees' vehicles: parking shall only be permitted on public/ private authorised carparks and in areas agreed with the client.

220 USE OF THE SITE

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

**·** Limitations: The contractor shall liaise with the client for details on restrictions. **Current government guidance for all persons working on the project relating to Covid 19 procedures and practices must be fully complied with at all times including the following:-**

1. Maintaining social distancing in line with current government guidance (currently two metre intervals)
2. Working in social bubbles including travelling to the site
3. Managing numbers of persons on site
4. Regular cleaning of on-site facilities, common touch points and equipment
5. Appropriate PPE where necessary i.e. facemasks, gloves, overalls etc.
6. When necessary follow the guidance on self-isolation and not return to work until their period of self-isolation has been completed.

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:-

See Pre-construction H&S plan and asbestos survey report.

**·** 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 health and safety risks 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.

**·** Arrangements for visit: **Site visits for the preparation of the tender shall be arranged in advance, giving a minimum of 48 hours’ notice. The contractor shall contact the Growth and Development team on 01254 304594**.

**JCT370A13 DESCRIPTION OF THE WORK**

120 THE WORKS

**·** Description: Roofing replacement works and associated repairs.

The works will comprise of the following:

Erection of full scaffolding to facilitate the removal of the existing slate finished, pitched roof coverings and complete recovering of all roof areas with reclaimed natural slate including a supplementary roofing felt. Joinery repairs and replacements to the roof construction will be carried out prior to recovering the roof slopes. All existing lead detailing forming valleys and box gutters will be removed and fully replaced. Original cast iron gutters and rainwater pipes will be replaced to each elevation.

Further works include repointing and flaunching chimneystacks, replacing all existing lead work and installing loft insulation to existing roof spaces. Some timber replacements are anticipated to the clock tower and on completion, the timber detailing will require external redecoration works to finish.

All flat roof coverings will be replaced or recovered with a new Bauder flat roof systems. Substantial preparatory removal works will be undertaken during these works to ensure a new timber deck is installed over the structural timber construction with new capping details to perimeters.

**·** The Contractor must take all necessary precautions to protect the existing structures, finishing’s, fittings and any other property left where these are being retained, not only from the weather but from any damage whatsoever caused by or during the works. Dilapidations Surveys, together with photographic records, will be carried out jointly by the Contract Administrator and the Contractor prior to commencement and completion of the Works and any defects shown by the second Survey will be made good at the Contractor's own expense.

**JCT370A20 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: Roofing replacement works and associated repairs.

**·** 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, specification and Work schedules.

Third - PRICED DOCUMENTS

**·** Documents to be priced or provided by the Contractor: Work schedules.

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: 14 days before return of tender.

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.

**·** Details:

- Date: N/a.

- Title: N/a.

- Parties: N/a.

Seventh Recital and Schedule 3 - SUPPLEMENTAL PROVISIONS

**·** Collaborative working: Supplemental Provision 1 applies.

**·** Health and safety: Supplemental Provision 2 applies.

**·** Cost savings and value improvements: Supplemental Provision 3 applies.

**·** Sustainable development and environmental considerations: Supplemental Provision 4 applies.

**·** Performance indicators and monitoring: Supplemental Provision 5 applies.

**·** Notification and negotiation of disputes: Supplemental Provision 6 applies. Where Supplemental Provision 6 applies, the respective nominees of the parties are:

**-** Employer's nominee: To be confirmed.

**-** 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 apply.

Clause 2.3 - COMMENCEMENT AND COMPLETION

**·** Works Commencement date: September 2020.

**·** Date for Completion: November 2020.

· (circa 12 weeks)

Clause 2.8 - LIQUIDATED DAMAGES

**·** At the rate of £900 per calendar week or pro-rata thereto.

Clause 2.10 - RECTIFICATION PERIOD

**·** Period: Twelve months from the date of practical completion.

Clause 4.3 - INTERIM PAYMENTS

**·** Interim Valuation Dates:

**-** The first Interim Valuation Date is: TBC.

**-** Thereafter at intervals of: 4 weeks.

**·** Payments due prior to practical completion:

**-** Percentage of total value of the work etc.: 95 per cent.

**·** Payments becoming due on or after practical completion:

**-** Percentage of the total amount to be paid: 97½ per cent.

Clause 4.3 and 4.8 - FLUCTUATIONS PROVISION

**·** The following fluctuations provision applies: No fluctuations provision applies.

**·** Where Schedule 2 applies, the percentage addition (paragraph 13) is none applicable.

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

**·** Period: Three months from the date of practical completion.

Clause 5.3 - CONTRACTOR'S PUBLIC LIABILITY INSURANCE - INJURY TO PERSONS OR PROPERTY

**·** The required level of cover for any one occurrence or series of occurrences arising out of one event:

**-** Not less than: £10,000,000.

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

**·** Clause 5.4B applies.

**·** Where clause 5.4.A or 5.4B applies. Percentage to cover professional fees: 15 per cent.

**·** Where clause 5.4.C applies:

**-** Insurance arrangements - details of the required policy or policies: Client to arrange through their broker.

Clause 7.2 - ADJUDICATION

**·** The Adjudicator is: To be confirmed.

**·** Nominating body: Royal Institution of Chartered Surveyors.

Schedule 1 paragraph 2.1 - ARBITRATION

**·** Appointor of Arbitrator (and of any replacement): President or a Vice president of the: The Royal Institution of Chartered Surveyors.

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

JCT PUBLIC SECTOR SUPPLEMENT

**·** Document: The JCT Public Sector Supplement 2011 - Fair Payment, Transparency and Building Information Modelling.

**·** Fair Payment provisions Apply.

**·** Transparency provisions Apply.

**·** Building information modelling provisions Do not apply.

**-** The BIM protocol Do not apply.

EXECUTION

**·** The Contract: Will be executed where the Contract Sum exceeds £ 150,000 the Contract will be executed under seal.

**JCT370A30 TENDERING/ SUBLETTING/ SUPPLY**

MAIN CONTRACT TENDERING

110 SCOPE

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

145 TENDERING PROCEDURE

**·** General: In accordance with the principles of: the Construction Industry Board 'Code of Practise for the selection of main contractors.

**·** Arithmetical errors: Overall price is dominant.

160 EXCLUSIONS

**·** Inability to tender: Immediately inform if any parts of the work as defined in the tender documents cannot be tendered.

**·** Relevant parts of the work: Define those parts, stating reasons for the inability to tender.

170 ACCEPTANCE OF TENDER

**·** Acceptance: No guarantee is offered that any tender will be recommended for acceptance or be accepted, or that reasons for non-acceptance will be given.

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

190 PERIOD OF VALIDITY

**·** Period: After submission or lodgement, keep tender open for consideration (unless previously withdrawn) for not less than three months.

**·** 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.

500 TENDER STAGE METHOD STATEMENTS

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

a) Construction phase plan/sequence of work (not a detailed programme).

b) Programme (week periods only).

c) Anticipated trades personnel (numbers per trade).

d) Explanation of how the Works will be carried out within the working hours, access limitations and other restrictions whilst causing the minimum amount of disruption and maintaining safe public access.

e) The proposed location for the storage of building materials, plant, machinery, equipment and vehicles required for the execution of the Works (see also A35, A36 and A41).

f) The proposed location for the temporary deposition of any spoil arising from the execution of the Works.

h) The proposed means by which any on site concrete production or the like is to be carried out together with suitable means of preventing any materials arising from the washing out of any mixing plant or equipment from entering any watercourse.

**·** Statements: Submit within one week of request.

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: Within one week of request.

570A OUTLINE CONSTRUCTION PHASE HEALTH AND SAFETY PLAN See Pre-Construction H&S Plan for full detail.

**·** 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 coordination, freedom of information between the Principal Contractor, Sub Contractors and the Client.

**-** 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 providing welfare facilities in accordance with CDM regulations, schedule 2.

**-** Procedures for ensuring that all persons on site have received relevant health and safety information and training.

**-** Arrangements for consulting with and liaising with key stakeholders.

**-** 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.

PROGRAMME

Master programme: When requested and before starting work on site, submit in an

approved programme for the Works, which must include details of:

**-** Design, production information and proposals provided by the Contractor/

Subcontractors/ Suppliers, including inspection and checking.

**-** Planning and mobilization by the Contractor.

**-** Earliest and latest start and finish dates for each activity and identification of all critical activities.

**-** Running in, adjustment, commissioning and testing of all engineering services and

installations

**-** Work resulting from instructions issued in regard to the expenditure of provisional sums (see section A54)

**-** Work by or on behalf of the Employer and concurrent with the Contract (see section

A50). The nature and scope of which, the relationship with preceding and following work and any relevant limitations are suitably defined in the Contract Documents.

• Exclusions: Where and to the extent that the programme implications for work which is not so defined are impossible to assess, the Contractor should exclude it and confirm this when submitting the programme.

• Submit: one copy within one week of request.

• The works must be properly planned and sequenced in order of priority, and well executed. The contractor should refer to the tender invite letter for proposed sequencing of works. A programme of works will be agreed on appointment and the contractor will be expected to adhere to this programme. Any sequencing/programming/phasing issues are to be agreed with the client and Contract Administrator, at a pre-start meeting.

245 START OF WORK ON SITE

· Notice: Before the proposed date for start of work on site give minimum notice of two weeks.

In the preparation of the programme, the Contractor shall be deemed to have coordinated the whole of the Works included in the Specification, including where appropriate the work of all domestic Sub-Contractors, Nominated Sub-Contractors, Nominated Suppliers, Named Persons, Local Authorities, Public Undertakings, and Service Facilities, whether engaged by him or engaged directly by the Employer. Due allowance shall also be made by the Contractor for the expenditure of all Provisional Sums.

The Contract Administrator's interest in the programme is a matter of liaison. Any comments, suggestions or agreements by him shall be interpreted at the Contractor's discretion, shall not be construed as an instruction, and shall not relieve the Contractor of his overall responsibility for the sequence, method and timing of his work.

Pricing of Tenders must include for Preliminaries costs covering the whole of the contract period detailed in the proposed Contract Particulars set out in A20, and must not be based on a foreshortened programme. The responsibility of preparing an accurate and practicable programme and for complying with it rests entirely with the Contractor.

599 FREEDOM OF INFORMATION

**·** Records: Retain, make available for inspection and supply on request information reasonably required to allow response to requests made under the provisions of the Freedom of Information Act.

**·** Determination: Submit requests received. Do not supply information to anyone other than the project participants without express written permission.

**·** Confidentiality: Maintain at all times.

SUBLETTING/ SUPPLY

SUBLETTING/ SUPPLY DOMESTIC SUBCONTRACTS

General: Comply with the Construction Industry Board 'Code of Practice for the selection of subcontractors'.

List: Provide details of all subcontractors and the work for which they will be responsible.

**·** Submit: Within one week of request.

**JCT370A31 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 advice, inform, submit, give notice, instruct, agree, confirm, seek or obtain information, consent or instructions, or make arrangements.

**·** Format: In writing to the person named in clause A10/140 unless specified otherwise.

**·** Response: Do not proceed until response has been received.

130 PRODUCTS

**·** Definition: Materials, both manufactured and naturally occurring, and goods, including components, equipment and accessories, intended for the permanent incorporation in the Works.

**·** Includes: Goods, plant, materials, site materials and things for incorporation into the Works.

135 SITE EQUIPMENT

**·** Definition: All appliances or things of whatsoever nature required in or about the construction for completion of the Works but not materials or other things intended to form or forming part of the Permanent Works.

**·** Includes: Construction appliances, vehicles, consumables, tools, temporary works, scaffolding, cabins and other site facilities.

140A DRAWINGS

**·** The Works throughout shall be executed to the Contract Administrator's detailed drawings and no work involving special design shall be put in hand without first consulting the Contract Administrator. In case of any discordance or want of agreement arising from clerical or draughtsman's errors

1. detail drawings shall be held to be more correct and binding than general drawings and (b) drawings made to a larger scale or for special instructions shall be held to be more correct and binding than drawings made to a smaller scale or for general instructions, but subject nevertheless in case of doubt or dispute to the summary decision of the Contract Administrator, and failure to comply with this instruction shall not form the basis of any claim.

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.

**·** Re-fix: 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 AND INFORMATION

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

260 SIZES

**·** General dimensions: Products are specified by their co-ordinating sizes.

**·** Timber: Cross section dimensions shown on drawings are:

**-** Target sizes as defined in BS EN 336 for structural softwood and hardwood sections.

**-** Finished sizes for non-structural softwood or hardwood sawn and further processed sections.

DOCUMENTS PROVIDED ON BEHALF OF THE EMPLOYER

410A ADDITIONAL COPIES OF DRAWINGS/ DOCUMENTS

**·** Additional copies: Two sets of Construction issue drawings/documents issued free of charge.

Additional copies: Issued on request and charged to the Contractor.

440 DIMENSIONS

**·** Scaled dimensions: Do not rely on.

450 MEASURED QUANTITIES

**·** Ordering products and constructing the Works: The accuracy and sufficiency of the measured quantities is not guaranteed.

**·** Precedence: The specification and drawings shall override the measured quantities.

460 THE SPECIFICATION

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

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.

640 MAINTENANCE INSTRUCTIONS AND GUARANTEES

**·** Components and equipment: Obtain or retain copies, register with manufacturer and hand over on or before completion of the Works.

**·** Information location: In Building Manual.

**·** Emergency call out services: Provide telephone numbers for use after completion. Extent of cover: office hours only.

**JCT370A32 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.

115 CONSIDERATE CONSTRUCTORS SCHEME

**·** Registration: Before starting work, register the site and pay the appropriate fee:

**·** Contact:

**-** Address: Considerate Constructors Scheme Office, PO Box 75, Great Amwell, Ware, Hertfordshire, SG12 0YX.

**-** Tel. 01920 485959.

**-** Fax. 01920 485958.

**-** Free phone 0800 7831423

**-** Web. www.ccscheme.org.uk

**-** E mail. enquiries@ccscheme.org.uk

**·** Standard: Comply with the Scheme's Code of Considerate Practice.

**-** Minimum compliance level: Good.

118A FREIGHT VEHICLE SAFETY REQUIREMENTS

**·** Vehicle equipment: Ensure that all freight vehicles have the following:

**-** Audible alert to other road users to the planned movement of the vehicle when the vehicle’s indicators are in operation.

**-** Prominent signage at the rear of the vehicle to warn cyclists of the dangers of passing the vehicle on the inside.

**-** Properly adjusted class VI mirror/s or Fresnel lens to eliminate the near side blind spot.

**-** Side under run guards.

**·** Driver training:

**-** Drivers must have a valid driving licence and be legally able to drive the vehicle.

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.

140 CLIMATIC CONDITIONS

**·** Information: Record accurately and retain:

**-** Daily maximum and minimum air temperatures (including overnight).

**-** Delays due to adverse weather, including description of the weather, types of work affected and number of hours lost.

150A OWNERSHIP

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

250A PROGRESS/ MONITORING

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

**·** Avoiding delays: If any circumstances arise which may affect the progress of the Works submit proposals or take other action as appropriate to minimize any delay and to recover any lost time.

260A SITE MEETINGS

**·** General: Site meetings will be held to review progress and other matters arising from administration of the Contract.

**·** Frequency: Every month.

**·** Location: To be confirmed.

**·** Accommodation: Ensure availability at the time of such meetings.

**·** Attendees: Attend meetings and inform subcontractors and suppliers when their presence is required.

**·** Chairperson (who will also take and distribute minutes): Contract Administrator.

CONTRACTOR'S PROGRESS REPORT

General: Submit a progress report at least one day before the site meeting.

Content: Notwithstanding the Contractor's obligations under the Contract the report

must include:

**-** A progress statement by reference to the master programme for the Works.

**-** Details of any matters materially affecting the regular progress of the Works.

**-** Subcontractors' and suppliers' progress reports.

**-** Any requirements for further drawings or details or instructions to fulfil any obligations under the Conditions of Contract.

CONTRACTOR'S SITE MEETINGS

General: Hold meetings with appropriate subcontractors and suppliers shortly before main site meetings to facilitate accurate reporting of progress.

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

420 REMOVAL/ REPLACEMENT OF EXISTING WORK

**·** Extent and location: Agree before commencement.

**·** Execution: Carry out in ways that minimize the extent of work.

430A PROPOSED INSTRUCTIONS

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

440 MEASUREMENT

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

450 DAYWORK VOUCHERS

**·** Before commencing work: Give reasonable notice to person countersigning day work vouchers.

**·** Content: Before delivery each voucher must be:

**-** Referenced to the instruction under which the work is authorised.

**-** Signed by the Contractor's person in charge as evidence that the operatives' names, the time daily spent by each and the equipment and products employed are correct.

**·** Submit: By the end of the week in which the work has been executed.

**JCT370A33 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.

**·** All works are to be undertaken in accordance with current Building Regulations, British Standards, Technical Regulations, Codes of Practice and manufacturer’s instructions and recommendations.

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.

360 RECORD DRAWINGS

**·** Site setting out drawing: Record details of all grid lines, setting-out stations, benchmarks and profiles. Retain on site throughout the contract and hand over on completion.

SERVICES GENERALLY

410 SERVICES REGULATIONS

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

420 WATER REGULATIONS/ BYELAWS NOTIFICATION

**·** Requirements: Notify Water Undertaker of any work carried out to or which affects new or existing services and submit any required plans, diagrams and details.

**·** Consent: Allow adequate time to receive Undertaker's consent before starting work. Inform immediately if consent is withheld or is granted subject to significant conditions.

430 WATER REGULATIONS/ BYELAWS CONTRACTOR’S CERTIFICATE

**·** On completion of the work: Submit (copy where also required to the Water Undertaker) a certificate including:

**-** The address of the premises.

**-** A brief description of the new installation and/ or work carried out to an existing installation.

**-** The Contractor's name and address.

**-** A statement that the installation complies with the relevant Water Regulations or Byelaws.

**-** The name and signature of the individual responsible for checking compliance.

**-** The date on which the installation was checked.

435 ELECTRICAL INSTALLATION CERTIFICATE

**·** Submit: When relevant electrical work is completed.

**·** Original certificate: To be lodged in the Building Manual.

440 GAS, OIL AND SOLID FUEL APPLIANCE INSTALLATION CERTIFICATE

**·** Before the completion date stated in the Contract: Submit a certificate stating:

**-** The address of the premises.

**-** A brief description of the new installation and/ or work carried out to an existing installation.

**-** Any special recommendations or instructions for the safe use and operation of appliances and flues.

**-** The Contractor's name and address.

**-** A statement that the installation complies with the appropriate safety, installation and use regulations.

**-** The name, qualification and signature of the competent person responsible for checking compliance.

**-** The date on which the installation was checked.

**·** Certificate location: 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

530 OVERTIME WORKING

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

**-** Minimum period of notice: Three days and will be at the discretion of the Contract Administrator to whether permission is granted.

**·** Concealed work: If executed during overtime for which notice has not been given, it may be required to be opened up for inspection and reinstated at the Contractor's expense.

540 DEFECTS IN EXISTING WORK

**·** Undocumented defects: When discovered, immediately give notice. Do not proceed with affected related work until response has been received.

**·** Documented remedial work: Do not execute work which may:

**-** Hinder access to defective products or work; or

**-** Be rendered abortive by remedial work.

560 TESTS AND INSPECTIONS

**·** Timing: Agree and record dates and times of tests and inspections to enable all affected parties to be represented.

**·** Confirmation: One working day prior to each 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.

730A MAKING GOOD DEFECTS

**·** Remedial work: Arrange access with Premises manager or their representative giving a minimum of 24 hours’ notice.

**·** Rectification: Give reasonable notice for access to the various parts of the Works.

**·** Completion: Notify when remedial works have been completed.

The contractor shall provide the Contract Administrator with a revised Construction H&S plan prior to commencement of any work for making good of defects.

740 HIGHWAY/ SEWER ADOPTION

**·** Work to be adopted under the Highways Act, Section 38, or the Roads (Scotland) Act, Section 16 to 18, or the Water Industry Act, Section 104: Description: roads, footpaths, street lighting, foul and surface water sewers.

**·** Work for adoption must be:

**-** Completed by the Contractor to the satisfaction of the Highway/ Sewer Authorities before the certificate stating the Works are complete is issued.

**-** Subject to a Defects Liability/ Rectification Period of 12 months (see Appendix to the Contract/ Contract Particulars).

**-** Maintained during the Defects Liability/ Rectification Period, including making good of damage due to reasonable wear and tear occurring during the Period and cleaning at the end of the Period, all to the satisfaction of the Highway/ Sewer Authorities.

**JCT370A34 SECURITY/ SAFETY/ PROTECTION**

SECURITY, HEALTH AND SAFETY

PRECONSTRUCTION INFORMATION:

Location: Integral with the project Preliminaries, including but not restricted to the following sections:

**-** Description of project: Sections A10 and A11.

**-** Client's consideration and management requirements: Sections A12, A13 and A36.

**-** Environmental restrictions and on-site risks: Section A12, A35 and A34.

**-** Significant design and construction hazards: Section A34.

**-** The Health and Safety File: Section A37.

140 CONSTRUCTION PHASE HEALTH AND SAFETY PLAN

**·** Submission: Present to the Employer/ Client no later than 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: Unauthorised visitors shall not be allowed access to the site, nor to take any photographs. A strict security of the site against such matters shall be maintained.

**·** All personnel visiting the site must record their presence with the Contractor. The Contractor shall provide all the workmen and other personnel employed by him or his subcontractors and engaged upon the Works with a form of identification approved by the Contract Administrator.

**·** It is the Contractor's responsibility to maintain the security of the site at all times throughout the duration of the Contract.

160 STABILITY

**·** Responsibility: Maintain the stability and structural integrity of the Works and adjacent structures during the Contract.

**·** Design loads: Obtain details, support as necessary and prevent overloading.

170 OCCUPIED PREMISES

**·** Extent: Existing buildings will be occupied and/ or used during the Contract as follows: Education establishment.

**·** Works: Carry out without undue inconvenience and nuisance and without danger to occupants and users.

**·** Overtime: If compliance with this clause requires certain operations to be carried out during overtime, and such overtime is not required for any other reason, the extra cost will be allowed, provided that such overtime is authorized in advance.

190A OCCUPIER’S RULES AND REGULATIONS

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

200 MOBILE TELEPHONES AND PORTABLE ELECTRONIC EQUIPMENT

**·** Restrictions on use:

Not to be used on site without permission of the Premises Manager.

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

330A NOISE AND VIBRATION

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

**·** Equipment: Fit compressors, percussion tools and vehicles with effective silencers of a type recommended by manufacturers of the compressors, tools or vehicles.

**·** Restrictions: Do not use:

**-** Percussion tools and other noisy appliances without consent of the Contract Administrator and Premises Manager.

**-** Radios or other audio equipment or permit employees to use in ways or at times that may cause nuisance.

340 POLLUTION

**·** Prevention: Protect the site, the Works and the general environment including the atmosphere, land, streams and waterways against pollution.

**·** Contamination: If pollution occurs inform immediately, including to the appropriate Authorities and provide relevant information.

350 PESTICIDES

**·** Use: Not permitted.

360 NUISANCE

**·** Duty: Prevent nuisance from smoke, dust, rubbish, vermin and other causes.

**·** Surface water: Prevent hazardous build-up on site, in excavations and to surrounding areas and roads.

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.

**-** Refer to Asbestos Survey Annex B, survey no J006109.

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: Where applicable refer to archaeology report.

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.

410A MOISTURE

**·** Wetness or dampness: Prevent, where this may cause damage to the Works.

**·** Before installation of floor coverings check RH level does not exceed BS guideline maximum of 75%.

**·** Drying out: Control humidity and the application of heat to prevent:

**-** Blistering and failure of adhesion.

**-** Damage due to trapped moisture.

**-** Excessive movement.

420 INFECTED TIMBER/ CONTAMINATED MATERIALS

**·** Removal: Where instructed to remove material affected by fungal/ insect attack from the building, minimize the risk of infecting other parts of the building.

**·** Testing: carry out and keep records of appropriate tests to demonstrate that hazards presented by concentrations of airborne particles, toxins and other micro-organisms are within acceptable levels.

430 WASTE

**·** Includes: Rubbish, debris, spoil, surplus material, containers and packaging.

**·** General: Minimize production. Prevent accumulations. Keep the site and Works clean and tidy.

**·** Handling: Collect and store in suitable containers. Remove frequently and dispose off-site in a safe and competent manner:

**-** Non-hazardous material: In a manner approved by the Waste Regulation Authority.

**-** Hazardous material: As directed by the Waste Regulation Authority and in accordance with relevant regulations.

**·** Recyclable material: Sort and dispose at a Materials Recycling Facility approved by the Waste Regulation Authority.

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

**·** Waste transfer documentation: Retain on site.

**·** The contractor must allow for removing debris on a regular basis and leaving the site clean and tidy at the end of the working period. The Contractor must ensure that on completion of the works, the areas are left clean and tidy and ready for re-occupation. All affected surfaces should be professionally cleaned after execution of the works.

470 INVASIVE SPECIES

**·** General: Prevent the spread of species (e.g. plants or animals) that may adversely affect the site or Works economically, environmentally or ecologically.

**·** Special precautions: No contaminated machinery plant to be removed from site until cleaned in accordance with statutory regulations.

**·** Duty: Report immediately any suspected invasive species discovered during execution of the Works.

**-** Do not disturb.

**-** Agree methods for safe eradication or removal.

PROTECT THE FOLLOWING

510 EXISTING SERVICES

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

**·** Identification: Before starting work, check and mark positions of utilities/ services. Where positions are not shown on drawings obtain relevant details from service authorities, statutory undertakers or other owners.

**·** Work adjacent to services:

**-** Comply with service authority's/ statutory undertaker's recommendations.

**-** Adequately protect, and prevent damage to services: Do not interfere with their operation without consent of service authorities/ statutory undertakers or other owners.

**·** Identifying services:

**-** Below ground: Use signboards, giving type and depth;

**-** Overhead: Use headroom markers.

**·** Damage to services: If any results from execution of the Works:

**-** Immediately give notice and notify appropriate service authority/ statutory undertaker.

**-** Make arrangements for the work to be made good without delay to the satisfaction of service authority/ statutory undertaker or other owner as appropriate.

**-** Any measures taken to deal with an emergency will not affect the extent of the Contractor's liability.

**·** Marker tapes or protective covers: Replace, if disturbed during site operations, to service authority's/ statutory undertaker’s recommendations.

520 ROADS AND FOOTPATHS

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

**·** Careful consideration is required to prevent any excessive plant/vehicle loadings being exerted on to the paved surfaces to the front of the building. Scaffolding and skip wagons should keep off all paved areas.

**·** Damage caused by site traffic or otherwise consequent upon the Works: Make good to the satisfaction of the Employer, Local Authority or other owner.

555 WILDLIFE SPECIES AND HABITATS

**·** General: Safeguard the following: Protect and incorporate measures shown in accompanying Ecology report.

**·** Protected habitats and species: Upon discovery immediately, advise. Do not proceed until instruction is received.

**·** Education: Ensure employees and visitors to the site receive suitable instruction and awareness training.

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: Contractor to provide written details.

**·** The Contractor shall take reasonable steps to ensure that all new work and existing parts of the buildings / site are undamaged during the contract and shall make good any damage at his own expense, resultant from lack of care, theft, loss or any other relevant cause.

**·** The Contractor is responsible for cleaning, rectification of any damage and for making good all disturbed surfaces, etc. affected by the works. The Contractor is to allow for maintaining suitable temporary protection measures to all areas affected by the works. Any damage occasioned as a result of the works, is to be the responsibility of the main Contractor and must be made good at the Contractor’s expense.

570 EXISTING WORK

**·** Protection: Prevent damage to existing work, structures or other property during the course of the work.

**·** Removal: Minimum amount necessary.

**·** Replacement work: To match existing.

580 BUILDING INTERIORS

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

**·** Allowance must be made for providing protection as required to the existing fabric of the building throughout the works to minimise dust dispersal, spreading through the building. Contractors to adequately tape up the perimeter of all doorways and sheet-off all doors to prevent dispersal of dust into adjacent rooms.

600 EXISTING FURNITURE, FITTINGS AND EQUIPMENT

**·** Protection: Prevent damage or move as necessary to enable the Works to be executed. Reinstate in original positions.

**·** Extent: Before work in each room starts the Employer will remove the following:

IT equipment that may require specialist service to decommission.

610 ESPECIALLY VALUABLE/ VULNERABLE ITEMS

**·** Protection: Ensure provision and maintenance of special protective measures to prevent damage to the following:

Computers, interactive boards and projectors, smoke detectors.

**·** Method statement: Submit within one week of request describing special protection to be provided.

620 ADJOINING PROPERTY

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

625 ADJOINING PROPERTY RESTRICTIONS

**·** Precautions:

**-** Prevent trespass of workpeople and take precautions to prevent damage to adjoining property.

**-** Pay all charges.

**-** Remove and make good on completion or when directed.

**·** Damage: Bear cost of repairing damage arising from execution of the Works.

630 EXISTING STRUCTURES

**·** Duty: Check proposed methods of work for effects on adjacent structures inside and outside the site boundary.

**·** Supports: During execution of the Works:

**-** Provide and maintain all incidental shoring, strutting, needling and other supports as may be necessary to preserve stability of existing structures on the site or adjoining that may be endangered or affected by the Works.

**-** Do not remove until new work is strong enough to support existing structure.

**-** Prevent overstressing of completed work when removing supports.

**·** Adjacent structures: Monitor and immediately report excessive movement.

**·** Standard: Comply with BS 5975 and BS EN 12812.

640 MATERIALS FOR RECYCLING/ REUSE

**·** Duty: Sort and prevent damage to stated products or materials, clean off bedding and jointing materials and other contaminants.

**·** Storage: Stack neatly and protect until required by the Employer or for use in the Works as instructed.

**JCT370A35 SPECIFIC LIMITATIONS ON METHOD / SEQUENCE / TIMING**

130 METHOD/ SEQUENCE OF WORK

**·** Specific Limitations: Include the following in the programme:

General: The limitations described in this section are supplementary to limitations described or implicit in information given in other sections or on the drawings.

COMPLETION IN SECTIONS OR IN PARTS

General: Where the Employer is to take possession of any Section or part of the Works and such Section or part will, after its practical completion, depend for its adequate functioning on work located elsewhere on the site: Complete such other work in time to permit such possession to take place.

**·** Remainder of the Works: During execution, ensure that completed Sections or parts of the Works have continuous and adequate provision of services, fire precautions, means of escape and safe access.

170 WORKING HOURS

**·** Specific limitations: Monday - Friday: 8:00 – 18:00; No site operations to be carried out at weekends or over Bank holiday periods.

* No deliveries at peak times between 8.30am - 9.30am and 2.30pm - 4.00pm

**·** Overtime working: See A33/530.

**JCT370A36 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.

ACCOMMODATION

230 TEMPORARY ACCOMMODATION

**·** Proposals for temporary accommodation and storage for the Works: Submit two weeks prior to starting on site.

**·** Details to be included: Type of accommodation and storage, its siting and the programme for site installation and removal.

TEMPORARY WORKS

320 TEMPORARY WORKS

**·** Employer's specific requirements: Provide: See A44.

340 NAME BOARDS/ ADVERTISEMENTS

**·** General: Obtain approval, including statutory consents, and provide a temporary name board displaying:

**-** Title of project: Insert brief description of scheme.

**-** Name of Employer: Blackburn with Darwen Borough Council.

**-** Names of Consultants: N/a.

**-** Names of Contractor and Subcontractors: Main contractor only.

**-** Special requirements: Agree positions and sizes prior to installation; remove on completion and reinstate surfaces disturbed.

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.

440 TELEPHONES

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

540 METER READINGS

**·** Charges for service supplies: Where to be apportioned ensure that:

**-** Meter readings are taken by relevant authority at possession and/ or completion as appropriate.

**-** Copies of readings are supplied to interested parties.

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.

570 PERSONAL PROTECTIVE EQUIPMENT

**·** General: Provide for the sole use of those acting on behalf of the Employer, in sizes to be specified:

**-** Safety helmets to BS EN 397, neither damaged nor time expired. Number required: 2 number.

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

**-** Safety boots with steel insole and toecap to BS EN ISO 20345. Pairs required: 2 number.

**-** Disposable respirators to BS EN 149.FFP1S.

**-** Eye protection to BS EN 166.

**-** Ear protection - muffs to BS EN 352-1, plugs to BS EN 352-2

**-** Hand protection - to BS EN 388, 407, 420 or 511 as appropriate.

**JCT370A37 OPERATION/ MAINTENANCE OF THE FINISHED WORKS**

GENERALLY

115 THE HEALTH AND SAFETY FILE

**·** Responsibility: combined document produced by the principal contractor and finalised by the principal designer.

**·** Content: Obtain and provide the following information: See pre-construction H&S information pack for details.

**·** Format: See pre-construction H&S information pack for details.

**·** Delivery to: Principal Designer By (date): Two days before handover and issue of Practical Completion.

**·** Late submission: Retain monies £2,500.

155 CONTENT OF THE BUILDING MANUAL

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

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

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

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

160 PRESENTATION OF BUILDING MANUAL

**·** Format: A4 size, plastics covered, loose leaf, four ring binders with hard covers, each indexed, divided and appropriately cover titled.

**·** Selected drawings needed to illustrate or locate items mentioned in the Manual: Where larger than A4, to be folded and accommodated in the binders so that they may be unfolded without being detached from the rings.

**·** As-built drawings: The main sets may form annexes to the Manual.

**JCT370A40 CONTRACTOR'S GENERAL COST ITEMS: MANAGEMENT AND STAFF**

110 MANAGEMENT AND STAFF

**·** Cost significant items: The Contractor shall include for all expenses incurred in maintaining adequate supervisory staff permanently on the site to ensure proper organisation and progress of the Works.

**·** The contractor must ensure that a directly employed suitably experienced foreman is appointed to the project at the outset and remains on the project day to day through to the completion of the works.

**·** The contractor shall provide a working foreman / Charge hand / site agent / Contracts Manager etc. as is required by the nature of the works.

**JCT370A41 CONTRACTOR'S GENERAL COST ITEMS: SITE ACCOMMODATION**

110 SITE ACCOMMODATION

**·** Details: Site accommodation required or made/ not made available by the Employer: See section A36.

**·** Cost significant items: The Contractor shall provide, erect and maintain all necessary offices for site agent, foreman etc, mess room accommodation for the use of the Contractor's and sub-contractors' workmen, including attendance, cleaning, heating and lighting, together with all necessary sheds for storage of materials etc.

**·** The location of all temporary accommodation shall be agreed with the Contract Administrator prior to the commencement of the Works and the Contractor shall allow in his tender for any relocation as may be or may become necessary.

* Site compounds/skips should be situated in areas of maximum surveillance away from surrounding properties. They should be sited so as to cause minimum interference, obstruction or inconvenience to the Staff, occupants, visitors and public, be adequately fenced including mesh to obscure from view and left secure when unoccupied.

· Flammable construction products, ignition sources and any tools that may assist would be offenders should be kept in locked secure containers when the site is unoccupied.

**JCT370A42 CONTRACTOR'S GENERAL COST ITEMS: SERVICES AND FACILITIES**

110 SERVICES AND FACILITIES

**·** Details: Services or facilities required or made/ not made available by the Employer: See section A36.

**·** Cost significant items:

POWER, LIGHTING AND FUELS

The Contractor shall provide all necessary temporary electric light, power supplies and fuels required for the execution of the Works, including the work of subcontractors, including running wiring etc. clearing away and making good on completion and paying all fees and charges in connection therewith. The temporary supplies shall comply fully with all current statutory regulations.

WATER

The Contractor shall provide all water for the Works and execute all temporary plumbing required and pay all fees and charges in connection therewith. The water for concrete, mortar, plaster etc. shall be taken only from the mains.

TELEPHONE AND ADMINISTRATION

The Contractor shall provide telephones for the use of the Contractor and subcontractors and pay all costs in connection with the installation, rental, removal and telephone call charges of these telephones. Allow for relocating as necessary.

Alternatively, the Contractor may use a mobile phone if he so wishes.

SAFETY, HEALTH AND WELFARE

Contractor to provide details of allowances, including breakdown of fixed and time related costs.

STORAGE OF MATERIALS

Contractor to provide details of allowances, including breakdown of fixed and time related costs.

RUBBISH DISPOSAL

The Contractor shall allow for clearing away all debris, surplus materials and temporary works during the course of the work and at Completion. The Contractor is to allow for skips (and tipping fees), or for the removal of debris in his own vehicles, as necessary. Skips are to be sited in positions to be agreed, at suitable distances away from the property.

The contractor must allow for removing any debris on a regular basis and leaving the site clean and tidy at the end of the working period. Due to the restrictions of the site compound and proximity to the adjacent buildings, skips should be lidded/locked and removed from site as soon as possible when full.

The contractor shall put in place a prior to the start of the works a site waste management strategy that must adopt good working practices. Consideration shall include the following:

Buying and Storing Materials: -

Order the amount of materials you need as accurately as possible;

Arrange for 'just in time' deliveries to reduce storage and material losses;

Consider the source of materials (Is the company certified with environmental standards.

Consider the packaging used for materials delivered to the site; can this be reduced or recycled.

Ensure that deliveries are rejected if damaged or incomplete.

Make sure storage areas are safe, secure and weatherproof (where required).

Store liquids away from drains, burns and in bunded areas to prevent pollution.

Site Activities: -

Ensure options for the use of reclaimed and recycled construction materials that meet the materials specification are considered and brought to the CA attention if not specified.

Recycle suitable spoil, demolition materials, vegetation, and surplus construction material arising from the works on site to avoid the need to transport materials.

Keep the site tidy to reduce material losses and waste.

Training and awareness: -

Promote good practice awareness as part of health and safety induction / training for workers onsite.

Waste Segregation: -

Segregate different types of waste as they are generated using different skips where possible (given the space available). At a minimum there should be skips for wood, inert and mixed materials, although a skip for metals may generate some income. If there is a shortage of space and not enough room for multiple skips consider a licensed waste management company to deal with waste - they may be able to recover recyclable materials from mixed skips.

The contractor will be require to fulfil all legal requirements with respect to site waste and disposal: -

Complete waste transfer notes before any waste leaves the site.

Ensure all waste carriers have a valid waste carrier’s registration certificate.

Ensure all wastes are disposed of at a correctly licensed site.

Complete notification for hazardous waste as stated by the Environment agency.

CLEANING

The Contractor must provide and maintain adequate protection to all surfaces and fittings in all public areas used by the Contractor and must keep these areas completely unimpeded and free from any obstructions at all times to the complete satisfaction of the Contract Administrator.

The Contractor shall leave the whole of the Works clean, tidy and in perfect condition at completion to the Contract Administrator's satisfaction and shall wash and clean all floors, remove all blemishes, defects etc. from brickwork and other surfaces, joinery fittings and decorated surfaces generally.

PROTECTION OF WORK IN ALL SECTIONS

The Contractor shall be liable for protecting and safeguarding the Works, materials and plant against damage or theft, and to ensure that no delay in the work is caused by such damage or theft.

SECURITY

From the Date(s) of Possession up to the Date(s) of Practical Completion of the Works or Sections thereof, the Contractor shall be liable for providing all security precautions that become necessary in relation to properties owned or leased by the Employer or to adjoining properties and shall allow for adequate measures to prevent access to the said properties from scaffolding, equipment, materials or similar, which he has provided. The contractor shall allow for close boarded security fence around the scaffold to prevent unauthorised access. All scaffolding must be netted to restrict access and prevent debris falling on to public rights of way.

MAINTAIN PUBLIC AND PRIVATE ROADS

Immediately on taking possession of the site, the Contractor shall request a joint survey and inspection with the Contract Administrator or his representative of all the street works and adjacent paved and settled areas surrounding the Works for the purpose of recording any damage then existing. In the absence of such a request, it will be assumed that all the street works concerned are in perfect order at the start of the Contract.

The Contractor shall thereafter be responsible for and making good all disturbances to public or private roads, verges, kerbs, gullies, pavements and sewers, mains or cables and the like in consequence of these Works and shall accept all responsibility for damage, wear and tear upon all such items as far as this Contract is concerned and is to meet and settle at his own risk and expense all claims by the Authorities or owners for injury to same by extra traffic for the carriage of materials, plant etc to or from the Works.

Notwithstanding the Contractor's responsibilities for damage etc, the Contractor shall be further responsible for clearing away as it accumulates all rubbish and dirt caused by the Works on all roadways, verges and pavements used by the Contractor and for maintaining the same in an unobstructed, clean and safe condition for use by the general public.

SMALL PLANT AND TOOLS

Contractor to provide details of allowances, including breakdown of fixed and time related costs.

OTHERS - NOTICES AND FEES TO LOCAL AUTHORITIES AND PUBLIC UNDERTAKINGS

The Contractor shall allow for all necessary notices and fees to Local Authorities and Public Undertakings.

**JCT370A43 CONTRACTOR'S GENERAL COST ITEMS: MECHANICAL PLANT**

110 MECHANICAL PLANT

**·** Cost significant items: Provide all mechanical plant required for the Works.

**·** Should the Contractor find himself unable to use mechanical plant, any extra expense so incurred shall not form the basis of any claim.

**JCT370A44 CONTRACTOR'S GENERAL COST ITEMS: TEMPORARY WORKS**

110 TEMPORARY WORKS

**·** Details: Temporary works required or made/ not made available by the Employer: See section A36.

**·** Cost significant items: The Contractor shall provide, construct and maintain all temporary works as may be necessary for the proper execution of the Works and make them safe and suitable in every respect to secure adequate protection of the public and for complying with all regulations.

Access scaffold

· Contractor to provide details of allowances, including breakdown of fixed and time related costs.

Support scaffold and propping

· Contractor to provide details of allowances, including breakdown of fixed and time related costs.

Hoardings, fans, fencing etc.

· Contractor to provide details of allowances, including breakdown of fixed and time related costs.

Hardstanding

· Contractor to provide details of allowances, including breakdown of fixed and time related costs.

Others

· Contractor to provide details of allowances, including breakdown of fixed and time related costs.

**JCT370A50 WORK/ PRODUCTS BY/ ON BEHALF OF THE EMPLOYER**

120 PRODUCTS PROVIDED BY/ ON BEHALF OF EMPLOYER

**·** General: Details of such products are given in the work sections, for fixing as part of the contract. Use for no other purpose than the Works.

**·** Handling: Accept delivery, check against receipts and take into appropriate storage.

**·** Surplus products: Keep safe and obtain instructions.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1. Preambles / Workmanship Standards |  |  |  |
|  |  |  |  |  |
|  | **The following clauses are applicable to all relevant roof areas that are to undergo roofing works. Refer to subsequent Schedule of Works for itemised work items.** |  |  |  |
|  | **SCAFFOLDING**  GENERAL  Scaffold tubes and associated fittings shall comply with BS 1139 and BS 1004.  Scaffold boards shall comply with BS 2482.  Detailed consideration should be given to all scaffolding to ensure that it is properly planned to meet with working requirements, designed to carry the necessary loadings and maintained in a sound condition.  Responsibility for the inspection and maintenance of scaffolding should be clearly assigned to a suitably experienced and qualified person who shall keep all necessary records.  All scaffolding erection and dismantle shall be carried out by competent scaffold erectors holding the appropriate certificates and qualifications.  All access ladders shall be securely tied to scaffolding and their bases shall rest on firm and even bases.  Access ladders shall comply with BS 1129 or BS 2037.  The Contractor is to ensure that the scaffold and ladder access is secure in order to prevent trespass and ladders are to be removed and locked at night or when to be left unattended.  The Contractor is to keep the scaffold clean and clear at the end of each working day.  **All scaffolding must be netted to restrict access and prevent debris falling on to public rights of way. Walkways should be over boarded to prevent debris falling between boards.**  The Contractor may only be reimbursed for providing, erecting, dismantling and clearing away any scaffold in connection with the work the subject of an Order, subsequent to his receipt in advance (of undertaking any work in respect of a particular premises), an Order in writing issued by the Contract Administrator in respect of such scaffold and then only in the cases set out hereunder, any other costs whatsoever in connection therewith shall be borne solely by the Contractor and are deemed to be included in his tender percentage addition/deduction.  i) For inspection purpose when specifically ordered by the Contract Administrator.  ii) When in the opinion of the Contract Administrator it is not practicable for the Contractor to undertake works above the eaves level of a two/three storey building including associated gables, chimneys and roofs by any means other than from the fully boarded working platform of an independent scaffold.  The word 'Provide' used in the Specification applicable to this section includes for the delivery, unloading, erection, maintaining, dismantling and clearing away of scaffold and any costs associated therewith. |  |  |  |
|  | **SLATE ROOFING WORKS GENERALLY** |  |  |  |
|  |  |  |  |  |
|  | ROOF SLATING ; EXISTING NATURAL SLATE ROOFS  - Substrate: battens over rafters.  - Pitch: as existing.   * Additional insulation: Not required. * Underlay: “Roofshield” breathable membrane/vapour permeable underfelt as manufactured by A Proctor Group Ltd.   - Laying: As clause below parallel to eaves.  - Horizontal lap (minimum): 150mm  - Battens: As clause below.  - Size: 25 x 50 mm.  - Fixing: using - assume using 65 x 3.35mm stainless steel annular ring shank nails.  - Slates: To BS 680-2.  - Supply: Reuse existing sound slates and supply natural sound Burlington slates to match existing. Samples to be provided for approval of CA.  - thickness and edge dressing to match existing slates.  - Size: to match existing (in diminishing courses if/where applicable).  - Headlap (minimum): 100 mm.  - Underlay support tray  - “Underlay Support Trays” to eaves locations, as supplied by A Proctor Group Ltd. or similar approved.  BASIC WORKMANSHIP  - General: Fix slating and accessories to make the whole sound and weather tight at earliest opportunity.  - Setting out: To true lines and regular appearance, with neat fit at edges, junctions and features.  - Fixings for slating accessories: As recommended by manufacturer.  - Gutters and pipes: Keep free of debris. Clean out at completion.  REMOVING EXISTING SLATING  - General: Carefully remove slates, battens, lime torching (where provided), sarking boards and cart away debris.etc. with minimum disturbance of adjacent retained slating.  - Reusable slates: Test all slates for soundness with all sound slates, salvaged from the subject property, sorted, palletised and securely stored for future use on the property. Discard un-sound slates that are not suitable for re-use.  RE-SLATING   * All re-slating work is to be carried out in accordance with BS.5534:2003+A1:2010 Code of Practice for Slating and Tiling. * The Contractor is to ensure that all slate is graded for thickness upon receipt and prior to fixing. The Contractor shall ensure that each course shall be laid with slates of similar thickness, following grading. * Fix slates in position with copper slating nails, 3.35mm diameter and be long enough to penetrate batten by at least 15 mm. The slates are to be twice centre nailed. Allow for accurately cutting slates and securely fitting in position, to provide uniform coursing. Include for double slate work at eaves detail. Work around lead flashings and soakers. Leave complete.   UNDERLAY  - Handling: Do not tear or puncture.  - Laying: Maintain consistent tautness, with membrane to be draped between rafters.  - Vertical laps (minimum): In accordance with manufacturer’s instructions, coinciding with supports and securely fixed.  - Fixing:, The membrane is to be fitted fully in accordance with manufacturer’s instructions. Galvanized steel, copper or aluminium 20 x 3.35 mm extra-large head nails/staples.  - Penetrations: Use proprietary underlay seals or cut underlay to give a tight, water shedding fit around pipes and components.  - Ventilation paths: Do not obstruct.  BATTENS/ COUNTERBATTENS  - Timber: Sawn softwood.  - Standard: To BS 5534-1, clause 2.12.1, species type A or B.  - Permissible characteristics and defects: BS 5534-1, annex E.  - Moisture content at time of covering (maximum): 22%.  - Preservative treatment: CCA vacuum pressure or organic solvent double vacuum as section Z12 and British Wood Preserving and Damp-proofing Association Commodity Specification C8.  COUNTERBATTENS ON RAFTERS  - Fixing: Into rafters at not more than 300 mm centres.  BATTEN FIXING  - Setting out: In straight horizontal lines. Align on adjacent areas.  - Batten length (minimum): 1200 mm.  - Joints in length: Square cut. Butt centrally on supports. Joints must not occur more than once in any group of four battens on one support.  - Additional battens: Provide where unsupported laps in underlay occur between battens.  - Fixing: Each batten to each support. Splay fix at joints in length.  BATTENS FIXED TO MASONRY  - Setting out: In straight horizontal lines. Align on adjacent areas.  - Batten length (minimum): 3 m.  - Fixing centres (maximum): 400 mm.  TIMBER FOR SLATING SUBSTRATE WORK  - Timber: Sawn softwood, free from wane, pitch pockets, decay and insect attack (ambrosia beetle excepted).  - Moisture content at time of covering (maximum): 22%.  - Preservative treatment: CCA vacuum pressure or organic solvent double vacuum as section Z12 and British Wood Preserving and Damp-proofing Association Commodity Specification C8.  - Penetrations: Use proprietary underlay seals or cut underlay to give a tight, water shedding fit around pipes and components.  - Ventilation paths: Do not obstruct.  SLATE FIXING  - In accordance with the Natural Roofing Slate Design & Fixing Guide; BS5534:2003+A1:2010 Code of Practice for Slating and Tiling; along with all associated/relevant British standards/codes of practice.  - Setting out: Lay slates with an even overall appearance with slightly open (maximum 5 mm) butt joints. Align tails.  - Slate thickness: Consistent in any one course. Lay with thicker end as tail.  - Ends of courses: Use extra wide slates to maintain bond and to ensure that cut slates are as large as possible. Do not use slates less than 150 mm wide.  - Top course: Head-nail short course to maintain gauge.  - Fixing: Centre fix each slate twice through countersunk holes 20 - 25 mm from side edges.  - Nails: Copper clout to BS 1202-2 or aluminum clout to BS 1202-3. Shank diameter: 3.35 mm. Length: To provide adequate withdrawal resistance and not less than 15 mm penetration into batten.  MORTAR BEDDING/ POINTING:   * Mortar: refer to repointing spec. * Bond strength: refer to repointing spec. * Weather: Do not use in wet or frosty conditions or when frost is imminent. * Appearance: Finish neatly and remove residue.   282SIDE ABUTMENTS:   * Underlay: Turn up not less than 100 mm at abutments. * Abutment slates: Cut as necessary. Fix close to abutments. * Soakers: Interleave and turn down over head of abutment slates   BEDDED VERGE WITH NAILED UNDERCLOAK:  – Nail under cloak of slate projecting 25 mm beyond face of verge board.  – Carry tiling battens over undercloak and finish 100 mm from verge edge.  – Bed edge of verge tiles flush with undercloak on 75 mm wide bed of mortar and point neatly.  RIDGE TILES   * Standards : Clay ridge tiles manufactured to comply with EN 1304 : 1998 and BS 402 : Part 1 : 1990 * Material : Clay. * Supplier : To be confirmed by contractor. Sample of tile to be approved by CA. * Style: angular to match existing styles. * Fixing : Mechanical fixed to comply with BS 5534 * Sizes ; 300mm length. * Mortar: All existing ridge tiles are to be lifted and re bedded (1:3 cement:sand) mortar * Joints: brushed back flush or concave slightly recessed from the face of stone.   VALLEYS  - Universal GRP dry valley systems are to be formed suitable for slate’s cut to the angle of the valley leaving a clear channel 125 mm wide. |  |  |  |
|  |  |  |  |  |
|  | **RE-POINTING MASONARY**  MORTAR  - Mortar: Cement : sand  - Mix: All brickwork below damp proof course - (Cement : Sand) 1:3.  Normal conditions of stonework above damp proof course – (Cement: lime: Sand) 1:1:6.  - Sand: Sand to be clean, sharp natural sand and confirming to BS 1200: Table 1. well graded sizes to suit the size of joints.  - Bond: to match existing.  - Joints: solid and well packed to match existing  - Width: to match existing  - Pointing: - well brushed back flush or slightly concave from face of stone/brick.   * Features: to match existing stone/brick in size range, texture, colour and tooling.   WORKMANSHIP : Application   * Under no circumstances is pointing to be carried out in frosty weather, nor will anti-freeze agents be allowed.   + Sample panels (approx. 1 sq.m.) are to be prepared for approval by the CA both as to colour and texture of mortar and finished appearance and contour of finished joint. Where possible the sample panels are to be in an inconspicuous position not directly on the main elevations. * Pointing is to commence at the top of the walls and work downwards, the work being cleaned down as it progresses and before the scaffolding is struck. * Re-pointing - All joints are to be raked out to a minimum depth of twice their width but not greater than 35mm and not less than 15mm. Thoroughly clean all loose material, organic growth, dust, etc.   + Before beginning re-pointing, the raked out joints are to be well wetted using an old flat distemper brush. The wall should not be soaked.   + Pointing tools are to be carefully selected, a flat pointing trowel is not desired as the finished joint must not show trowel marks. A pointing iron cranked steel flat, beaten out rod or a piece of shaped hardwood is required.   + Mortar of correct consistency can be lifted on a pointing iron. The mortar is to be pushed into the joint from a pointing iron and pressed straight into the joint with the maximum possible pressure. The mortar face should be filled flush but not so as to encroach over the arrises.   + Deep holes shall be filled to their full depth and packing stones firmly inserted. Over sized joints shall be filled with sandstone guilets.   + The mortar is to be pressed back on a daily basis until the mortar is firm but not hard and without cracks.   + The green surface is to be knocked back with a bristle brush to achieve a stippled finish. The finished profile of the joint is then to be formed flush or very slightly recessed. The finished pointing should leave all arrises visible and joint widths should be strictly maintained; chips and irregularities of the brick face should be   Surface Finish   * + Where pointing of stonework is being carried out, the face of the mortar is to be finished with a texture to imitate as near as possible the texture of the stone. The mortar texture being left rougher in appearance than the stone. After the initial set has taken place, hitting the surface with a churn brush - with a stiff bristle brush used at right angles to the mortar face. The brush is not to be dragged across the face of the mortar.   + Alternatively, rubbing the joint with a piece of coarse sacking or the end of a stick could achieve the desired effect, the final appearance being to the Architect's approval. The intention is also to expose the fine sharp stones / aggregate in the mortar.   Completion  Cleaning down is to be carried out as the work proceeds by washing and brushing down after the mortar is set to remove all 'snots', splashes etc. Protect fully adjacent materials and finishes and leave all surfaces clean on completion.  **RENDERED COATINGS**  GENERAL REQUIREMENTS FOR WORKMANSHIP  BASIC WORKMANSHIP: Comply with the clauses of BS 8000:Part 10 which are relevant to this section.  ADMIXTURES: Do not use, other than air-entraining and water-retaining admixtures, unless specified or approved.  MIXING:  - Proportions of specified mixes are by volume and for damp sand. Adjust proportions if dry or saturated sand is used. |  |  |  |
|  |  |  |  |  |
|  | **LEADWORK GENERALLY (INCLUDING LEAD SHEET COVERINGS/ FLASHINGS/ GUTTER LININGS, ETC.)**  WORKMANSHIP GENERALLY   * All new lead work to be undertaken in accordance with BS 6915:2001+A1:2014 and latest editions of 'The Lead Sheet Manual' and updates published by the Lead Contractors’ Association. All lead work to be undertaken by a member of the Lead Contractors’ Association. * Allow for new heavy-duty DPM Building Paper (or similar approved underlay) beneath all new lead work. * All new lead to be of appropriate size, thickness, with all necessary joints to suit its application. Allow for forming suitable details at all joints, abutments, upstands etc. all lead rolls as required, along with all necessary detailing / dressing of lead. * In all cases, apply a smear coat of patination oil to all exposed lead, including flashings. Patination oil is to be applied evenly in one direction during dry conditions only. * Undertake a water test upon completion and leave all lead work in watertight condition, and clean down all surfaces. * The Contractor is to ensure that all lead roof areas are sufficiently ventilated to minimise the effects of condensation.   - Standard: To BS 6915 and latest editions of 'The Lead Sheet Manual' and Updates published by the Lead Sheet Association.  - Fabrication and fixing: To provide a secure, free draining and weather tight installation.  - Operatives: Trained in the application of lead coverings/ flashings. Submit records of experience on request.  - Measuring, marking, cutting and forming: Prior to assembly wherever possible.   * Marking out: With pencil, chalk or crayon. Do not use scribers or other sharp instruments without approval.   - Bossing and forming: Straight and regular bends, leaving sheets free from ripples, kinks, buckling and cracks.  - Solder: Use only where specified.  - Sharp metal edges: Fold under or remove as work proceeds.  - Finished work: Fully supported, adequately fixed to resist wind uplift but also able to accommodate thermal movement without distortion or stress.  - Protection: Prevent staining, discolouration and damage by subsequent works.  WELDING  - Where possible, welding is to be undertaken off site.  - In situ welding: Is permitted, subject to completion of a 'hot work permit' form and compliance with its requirements, and satisfactorily insurances for ‘hot works’.  SUITABILITY OF SUBSTRATES  - Condition: Dry and free of dust, debris, grease and other deleterious matter.  UNDERLAY  - Handling: Prevent tears and punctures.  - Laying: Butt or overlap jointed onto a dry substrate.  - Fixing edges: With copper or stainless steel staples or clout nails.  - Do not lay over roof edges but do turn up at abutments.  - Protection: Keep dry and cover with lead at the earliest opportunity.  CHIMNEY FLASHINGS  - Front apron:  - Thickness Code 4.  - Dimensions:  Length: Width of chimney plus not less than 150 mm underlap to each side flashing.  Upstand: Not less than 150 mm.  Cover to roof: Not less than 150 mm.  - Fixing: Lead wedges into bed joint.  - Soakers:  - Thickness: 1.25 to 1.50 mm (Code 3).  - Dimensions:  Length: Slate/ tile gauge + lap + 25 mm.  Upstand: Not less than 150 mm.  Underlap: Not less than 100 mm.  - Step flashings:  - Thickness: Code 4.  - Dimensions:  Lengths: Not more than 1500 mm.  End to end joints: Laps of not less than 100 mm.  Front end: Turn 75 mm around chimney over apron.  Cover: Overlap to soaker upstands of not less than 65 mm.  - Fixing: Lead wedges at every course.  CHIMNEY DAMP PROOF COURSE  - Position: Level with underside of drip courses.  - Thickness: Code 4.  - Protection: Fully coated with high build bitumen based paint on surfaces to be embedded.  - Dimensions:  - Plan area of chimney plus laps on perimeters: turned up 50 mm against stack in roof void, turned down 50mm over stack externally, through flue lining and turned up 25 mm all round internally.  - Laying: On a thin even bed of wet mortar.  - Next layer of overlying construction: Bed on mortar without delay and finish joint neatly.  STEP AND COVER FLASHINGS TO ABUTMENT WALLS  - Thickness: Code 4.  - Lengths: Not more than 350mm.  - End to end joints: Laps of not less than 100 mm.  - Upstand: Not less than 85 mm.  - Cover to roof: Not less than 150 mm.  - Fixing: Lead wedges at every course and clips (clause 715) at not more than 500 mm centres along free edge.  GUTTER LINING   * Installation: In accordance with the recommendations of the Sheet Lead Association. * Substrate: Presumed Timber. * Preparation: Remove all debris, timberwork and replace with new treated timber gutter boards. * Underlay: Class A building paper to BS 1521. * Type of lead: milled as clause 520. * Thickness: Code 5 (as necessary for lengths). * Longitudinal joints: with proprietary expansion joints H60/210. * Spacing ; at 2M c/c. * Fixings: Copper clips at 300mm c/c secured by brass screws and washers into plugs at external edge of gutter. * Girth: Profile of gutter + 225mm under-lap to slating. * Outlets: formed with code 5 lead down pipe lead burned to gutter base. * Uneven surfaces : apply 2 layers of building paper * Installation: In accordance with the recommendations of the Sheet Lead Association and manufacturers details. * Proprietary expansion joints: Neoprene (polychloroprene) / Code5 lead . * Location: maximum spacing; 8 m, 4m where movement is restricted at one end, by an outlet for example. An expansion joint should also be sited within 1 m of each corner. * Completion: copper clips, secure a code 4 lead cover piece of over the neoprene section, making sure that it does not restrict the movement of the joint. |  |  |  |
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|  | **RAINWATER PIPEWORK**  - Pipes, fittings and accessories: Marley Alutec Aligator Range  - Manufacturer: Marley Alutec Unit 1 (G-H), Hudson Road, Elms Farm Industrial Estate, Bedford, MK41 0LZ - 01234 359438  - Type: Aligator Ogee No 46 with Traditional circular downpipe system.  - Nominal sizes: 4 inch diameter pipes: Hoppers to match with non ferrous metal mesh protection covers.  - Finish as supplied: Heritage Black.  - Accessories: junctions, rest bends and swan neck sections as required. Spacers on fixing brackets to space off the wall as necessary.  - Fixing: As per manufactures recommendations.  INSTALLATION :PREPARATION   * Below ground drainage. Alternatively, make temporary arrangements for dispersal of rainwater without damage or disfigurement of the building fabric and surroundings.   INSTALLATION GENERALLY  - Discharge of rainwater: Complete, and without leakage or noise nuisance.  - Components: Obtain from the same manufacturer for each type of pipework/ guttering.  - Fit access covers, cleaning eyes and blanking plates as the work proceeds.  RAINWATER OUTLETS  - Fixing: Securely, before connecting pipework. Junctions between outlets and pipework: To accommodate movement in structure and pipework.  FIXING PIPEWORK  - Pipework: Fix securely at specified centres plumb and/ or true to line.  - Branches and low gradient sections: Fix with uniform and adequate falls to drain efficiently.  - Externally socketed pipes/ fittings: Fix with sockets facing upstream.  - Additional supports: Provide as necessary to support junctions and changes in direction.  - Allowance for thermal and building movement: Provide and maintain clearance as fixing and jointing proceeds.  ACCESS FOR TESTING AND MAINTENANCE  - General: Install pipework and gutters with adequate clearance to permit testing, cleaning and maintenance.  - Access fittings and rodding eyes: Position so that they are not obstructed by other pipework, framing, etc.  MAINTENANCE INSTRUCTIONS  - General: At completion, submit printed instructions recommending procedures to be established by the Employer for maintenance of the rainwater installation, including full details of recommended inspection, cleaning and repair procedures.  IMMEDIATELY BEFORE HANDOVER  - Construction rubbish, debris, swarf, temporary caps and fine dust that may enter the rainwater system: Remove.  - Do not sweep or flush dust or debris into the rainwater system.  - Access covers, rodding eyes, outlet gratings and the like: Secured complete with all fixings. |  |  |  |
|  | **TECHNICAL SPECIFICATION BY BAUDER**  Darwen Town Hall, Darwen |  |  |  |
|  | **ROOF AREA No 1. Felt Finish (over staff areas) etc.**  **‘Safe2Torch’ advice:**    *The application of torch-on materials to or in the vicinity of combustible deck materials does not conform to the recommendations of BS8217:2005, clause 7.3.2.1, paragraph 3, or the advice given in the ‘Safe2Torch’ document produced by the National Federation of Roofing Contractors. When encountering an area which contains combustible material a minimum 900mm deep zone of the flat area around the material and any detail flashing to the material itself there is a requirement for 'Torch-Free' detailing. In these instances an appropriate alternative Bauder self-adhesive membrane should be used as described in: 'TORCH-FREE' & 'SAFE TO TORCH' ZONES - ALTERNATIVE MEMBRANES AND APPLICATION. The ‘Torch-Free’ & ‘Safe to Torch’ zone detailing and method of application will be described in the Additional Items section and the 'Torch-Free' & 'Safe to Torch' zones section of this specification and further detailed in the Bauder 'Torch-Free' & Bauder Bituminous detail drawings.*  For ‘TORCH-FREE‘ locations refer to the ‘TORCH-FREE ZONES REPORT‘ attached.  **SYSTEM CONSTRUCTION**  **Waterproofing System:** Bauder Total Roof System – Warm roof construction  **Substrate:** Felt Overlay  **Roof Fall:** 2°  It is imperative that should this information change for whatever reason, then Bauder should be contacted so that the specification can be amended accordingly.  **FELT OVERLAY**  Carefully remove all chippings, debris, etc. Star cut and fully bond down all loose areas of the upper layer of felt. All the existing waterproofing must be removed from upstands, edge details, outlets, etc. and the exposed areas prepared to receive the new waterproofing. Cut and seal all loose areas of the remaining felt system i.e. blisters etc.  Where it has not been possible to ascertain whether there is existing insulation; should it be discovered that existing insulation is found within the ceiling void space, there may be a requirement for this to be removed to prevent interstitial condensation forming.  Please contact **Bauder** in order that the build-up and proposals are assessed before works commence/continue.  **PRIMER**  **Bauder Primer-Activator (Canister), APR01-Black.** All areas receiving the new self-adhesive membranes to be thoroughly primed with **Bauder Primer-Activator (Canister), APR01-Black.**  **Purpose:** substrate primer to seal and prepare dry surfaces of a variety of common substrate material prior to the application of Bauder self-adhesive bitumen membranes.  **Before application:** All surfaces must be dry, clean and free from dust, dirt, oil, grease and loose material.  **Application method:** Spray Applied to provide even and full coverage.  Avoid pooling. Never attempt torching within 10 min of primer application, even if the surface appears dry.    **Application rate:**   * 300mm wide spray * Coverage: Approx. 96 g/m² * Two coats may be required for very porous substrates.   **Application temperature:** +5 - +30°C  **Drying time:** Approx.5 - 10 mins, dependent upon ambient temperature and material porosity.  **Coats:** Fully bond. Allow volatiles to dry off thoroughly between coats.  **Re-application:** Necessary after4 hours exposureif waterproofing has not yet been applied, to maintain adhesion performance.  **Caution:** Use only outdoors in well ventilated areas or with respiratory apparatus and keep away from all sources of ignition. Take necessary precautions to avoid the solvent vapour from entering the buildings ventilation system.  **AIR AND VAPOUR CONTROL LAYER**  **BauderTEC KSD Mica,** 2.5mm thick, aluminium lined, self-adhesive elastomeric bitumen air and vapour control layer, cold applied by removing the peel off release film. Side laps to be 100mm and head laps to be 100mm and staggered and sealed by hot air welding/torching and rolling (depending on ‘Torch-Free’ & ‘Safe to Torch’ zoning), to extrude a continuous bead of bitumen. Care should be taken to ensure adhesion when the temperature is below +5ºC. At all abutments and details the bitumen bead must be extruded from the lap joints to ensure a seal.  For ‘Torch-Free’ zones the air and vapour control layer must be dressed up all upstands and to the full extent of the detail.  This is to ensure that the detail is fully encapsulated to reduce the risk of fire to exposed combustible materials. The contractor is also to form all details in such a way that a fully bonded 100mm lap is obtained between the air and vapour control layer and the underlayer – Please see Bauder ‘Torch-Free’ detail drawings.  **FA-TE INSULATION**  **Product:** BauderPIR FA-TE  **Description:** aluminium faced, rigid urethane flatboard insulation.  **Thickness:** 120mm thick (to achieve 0.18 W/m²K ‘U’ Value)\*.  **Performance:** Zero ODP, and a Green guide rating of ‘A’.  **Application:** Bonded to the upper surface of the air and vapour control layer using suitable Bauder Polyurethane Insulation Adhesive.  (Product selection assistance available from Bauder – It is not recommended to use Bauder PU Insulation Adhesive – Tin, for adhering two foil surfaces together).  The adhesive should be applied in strips following the direction of the board length giving 2 no. (increase to 3 no. at roof perimeter)\*\* continuous and equally spaced adhesive beads within each 600 mm board width.  It is essential that the surface of the air and vapour control layer is clean, dry and free from dust etc., before applying the adhesive.  The boards are to be close butted and staggered.  Adhesive bead widths are stated on appropriate product label and datasheet.  **Important Note:** Foil to foil installation (e.g. FA-TE to FA-TE) must not be carried out using Bauder insulation adhesive from the 6.5 Kg tin.  *\*’U’ value available on request*  *\*\*BS EN 1991-1-4 uses the following guidance to calculate perimeter zones. Buildings up to and including 10m in height have a perimeter zone of not less than 2m. Buildings over 10m, uses the calculation of 2 x the building height ÷ 10. These are general guidance rules and do not take into account all of the information used in a full wind uplift calculation, they are therefore superseded by a project specific calculation.*  **Note:-**  The inclusion of flat board insulation will not improve upon the existing fall present within the roof area. If ponding water is considered undesirable, then consideration should be given to improving the fall. In the event of any queries **Bauder Limited** should be contacted.  **UNDERLAYER**  **BauderTEC KSA DUO**, 3mm thick, 200g/m² glass grille reinforced, self-adhesive elastomeric bitumen underlayer, fully bonded by removing the peel off release film. The side laps are to be 100mm and must be **laid red over blue,** and heat sealed/torched (depending on ‘Torch-Free’ & ‘Safe to Torch’ zones) and rolling with the **Bauder Long Handled Lap Roller** to extrude a continuous bead of bitumen. Head laps to be 100mm and staggered, side laps to be 80mm and heat sealed/torched (depending on ‘Torch-Free’ & ‘Safe to Torch’ zones) to extrude a continuous bead of bitumen. The underlayer must be taken up all upstands, edge details, in accordance with current British Codes of Practice, and fully heat sealed/torched (depending on ‘Torch-Free’ & ‘Safe to Torch’ zones) with the air and vapour control layer by a minimum 100mm.  **CAPPING SHEET**  **Bauder K5K,** 5mm thick, 250g/m² polyester reinforced, elastomeric bitumen capping sheet, charcoal grey slate finish, fully bonded to the underlayer by torching in the approved **Bauder** manner. Head laps to be 100mm, side laps to be 80mm, torch sealed to provide a continuous bitumen bead extrusion. A continuous bead of bitumen must extrude from all laps.  **UPSTANDS AND DETAILING**  Detail work to be carried out in Bauder K5K in accordance with current British Codes of Practice. Side laps to be 80mm, head laps to be 100mm. A continuous bead of bitumen must extrude from all laps.  The minimum recommended height for constructing waterproofing details is 150mm from the top of the waterproofing. Special attention should be paid to all structures, such as rooflights, counter-flashings, window and door cills, etc. These may have to be raised to enable a 150mm high waterproofing detail to be formed. Bauder cannot take responsibility for water ingress over waterproofing details insufficiently high.  Separate flashings must always be formed. The capping sheet taken up a detail in one piece will not be permitted.  **Level Thresholds:** Acceptable, providing conforms to BS6229:2018 and current NHBC Standards, chapter, 7.1.  **Requirements:**   * Minimum 75mm upstand height.  (This must be taken from the waterproofing or top of the insulation if an inverted roof). * Falls are directed away from the door cill. * Waterproofing is dressed up and under the door cill. * Door cill has a minimum 45mm overhang. * Provision is made for emergency overflow to prevent water getting to the waterproofing and cill interface.   Any level threshold details not meeting this standard cannot be guaranteed by Bauder.  **Note:** Bauder recommends the installation of a linear drain (Bauder KH-60 linear drain is suitable for this purpose) in front of the access door threshold, to help prevent rainwater splash back and snow build-up.  **ADDITIONAL FIXING OF BITUMEN MEMBRANES TO UPSTANDS**  **Torch Applied Capping Sheets:** Upstand details in excess of 250 mm in height; the top leading edge of the capping sheet will need to be mechanically fixed using 5 no. fixings per sheet at 200mm centres, using screw fasteners as stated below.  Screw fix through into the underlying substrate, (for cold roofs, ensuring that the pressure plates lie flush within membrane surface), utilising a separate flashing of capping sheet to cover the lap and fixings.  In the event of doubt, Bauder should be consulted regarding any specific requirement.  Up to and including 250mm, it is permissible to use a **Bauder Termination Bar** to mechanically fix the top leading edge. **Please note:** Termination bars are not suitable for brickwork substrates.   * **Underlayers:** Upstand details in excess of 500mm, provision should be made to mechanically fix through the underlayer using 5 no. fixings per sheet width at 200mm centres, using screw fasteners as stated below.  The underlayer will also need to be fixed every 500mm thereafter.   For insulated upstands, please use appropriate tube fasteners to prevent cold bridging from occurring.  **Self-Adhesive Capping Sheets:** The capping sheet will need to be mechanically fixed at 500mm in height and every 500mm thereafter using 5 no. fixings per sheet at 200mm centres, using screw fasteners as stated below. Screw fix through into the underlying substrate, (for cold roofs, ensuring that the pressure plates lie flush within membrane surface), utilising a separate flashing of capping sheet to cover the lap and fixings.  Up to and including 250mm, it is permissible to use a **Bauder Termination Bar** to mechanically fix the top leading edge. **Please note:** Termination bars are not suitable for brickwork substrates.  **Note:** It is not necessary to mechanically fix the underlayer when using Self-Adhesive Capping Sheets.  **MECHANICAL FASTENER SUPPLIER**  SFS Group Fastening Technology Ltd. 153 Kirkstall Road, Leeds, West Yorkshire. LS4 2AT  Tel: +44 (0)113 208 5500, Fax: +44 (0)113 208 5539, Email: [uk.leeds@sfsintec.biz](mailto:uk.leeds@sfsintec.biz)  Web: [www.sfsintec.biz/uk](http://www.ribaproductselector.com/Weblink.aspx?ac=&linkurl=http://www.sfsintec.biz/uk&linktype=web&from=6668)  **Mechanical Fasteners (Cold Roof Upstands):**  **Type:** IWF-5.2x35 screws together with associated IFC/IW–82x40 galvanised pressed steel washer plates.  **Mechanical Fasteners (Warm Roof Upstands):**  **Type:** Respective tube washers to be used for both membrane and insulation.  **Product reference:** Tube fastener - Tube size and fastener type for both membrane and insulation as recommended by supplier specifically for project and installed in accordance to their fixing plan. Please note that insulation tubes (round) differ from membrane tubes (rectangular 80 x 40 mm).  **‘TORCH-FREE’ & ‘SAFE TO TORCH’ ZONES - ALTERNATIVE MEMBRANES AND APPLICATION**   * For detailing application in locations constructed from or within the ‘Torch-Free’ & ‘Safe to Torch’ zones to potentially combustible materials or otherwise where it is considered appropriate by the contractor necessary to minimise the potential risk. * **Primer:** **Bauder Primer-Activator (Canister), APR01-Black** must be used when using Bauder self-adhesive membranes and a ‘Torch-Free’ application is required. * **Underlayers:** it is permissible to use a Bauder self-adhesive membrane so long as this product is a recognised component of the system specified. * Acceptable alternatives underlayers are listed below: -   + **Bauder G4E** to be replaced with **Bauder KSA Duo** * **Capping sheets:** Where appropriate, the installing contractor can use **Bauder** **KSO-P SN / KSO SN** self-adhesive capping sheet, applied using the hot air hand tools approved for use with bituminous systems. Please note that **Bauder Primer-Activator (Canister), APR01-Black** must be applied to the underlayer prior to installation of the self-adhesive capping sheet.   **Bauder KSO-P SN** is only available in one colour – Charcoal Grey.  **Bauder KSO SN** is available in two colours – Natural Slate or Brown.  **Self-adhered membranes** - Mechanically fix the top leading edge of all upstand details at 300mm centres using appropriate fasteners, and suitable termination bar if required.  **Approved Hot Air Equipment**   * The **Bauder KSO-P SN / KSO SN** membrane must be applied using the approved hot air hand tools. The list of permissible hot air electrical equipment suppliers for installing Bauder waterproofing membranes are stated below. These are available either for purchase or hire from the below companies:   **HOT AIR WELDING EQUIPMENT**  **LEISTER**  **Contact:** Welwyn Tool Group, Tel 01707 331 111, <http://www.welwyntoolgroup.co.uk>  **SIEVERT**  **Contact:** Lister Gas Pro, Tel 0800 801 046, [ch300@lister.co.uk](mailto:ch300@lister.co.uk)  **NON-COMBUSTIBLE SURFACES - ALTERNATIVE DETAILING MEMBRANES**   * For detailing to un-insulated abutment upstands, where the waterproofing is to be applied to rough or uneven non-combustible surfaces i.e. brickwork or concrete, it is permissible for the installing contractor to use the Bauder underlayer appropriate to the specified system where this product is considered to be better for application to these surfaces. For all other situations, and particularly to vertical insulation, the Bauder Self-Adhesive Underlayer appropriate to the specified system must be used.   **TECHNICAL NOTES**   1. 50mm x 50mm **BauderPIR angle fillets** must be used at all right-angled upstands. **Angle fillets will need to be installed using Bauder insulation adhesive**, or a suitable bitumen adhesive. Under no circumstances must fillets of an alternative material be incorporated (i.e. timber, cork, fibre, etc.) as this would invalidate the guarantee. 2. Against all insulation boards where the edge of the board is susceptible to mechanical damage, provision is to be made to supply and fix a timber protection batten 10mm thinner than the insulation. This to be suitably mechanically fixed to the roof deck. On internal details such as internal gutters/outlets it is permissible to use a metal hard edge angle. 3. When the ambient temperature is below 5°C, care should be taken to ensure proper adhesion of the self-adhesive membranes. 4. Any peculiarities or details discovered, which might affect the performance of the **Bauder** system, should be reported immediately to the specifier and **Bauder Limited** in order that they may assist in overcoming the problem. 5. At the end of each working day, the new waterproofing should be terminated with a secure and waterproof temporary seal, which will be left in situ, utilising **Bauder** self-adhesive underlayer material (e.g. **BauderTEC Sprint DUO**) to create the seal. The **Bauder** self-adhesive underlayer should be extended onto the flat AVCL by a minimum of 200mm from the exposed edge of the insulation and heat activate to ensure a satisfactory seal.   To ensure that no moisture contamination of the system can occur between each working period, it is essential that the night seal is properly and securely bonded.  No mopping or loose covers will be permitted.   1. Where building works are to be carried out by other trades, following completion of the waterproofing, the contractor must make adequate provision for supplying protection to prevent damage to the new membranes. The final inspection will not be carried out by the **Bauder** Site Technician until all associated trades are complete and the roof areas are clear from all debris and protection layers. 2. All mechanical and electrical work to plant and equipment should be carried out by competent mechanical and electrical qualified tradesmen. All plant is to be reinstated and recommissioned on completion of the roofing works in accordance with the client's detailed specification. 3. If any items of plant/equipment are to be situated on the finished roof, a sacrificial layer of **Bauder** capping sheet is to be loose laid beneath. This is to extend a minimum 25mm past the point of contact all round. In the case of heavy items it may be necessary to introduce a load spreading slab, please contact **Bauder** for further advice.   **DRAINAGE CHUTES**  [1] All chute liners must be examined for damage and proper fixing. Any faults must be rectified.  [2] The contractor must ensure that the waterproofing is firmly sealed to the chute liner.  [3] The contractor must ensure that all chutes are unobstructed and hopper heads free from blockages during and at the completion of the contract.  [4] The contractor is to provide suitable wire baskets to hopper heads on completion of the contract.  [5] A sump must be created around all chutes by installing a minimum 30mm thick section of insulation board.  **ADDITIONAL ITEMS**  **Provision should be made by the contractor to:-**   * **New Chase & suitable flashing to Brickwork Upstand** (A01)   Cut new chases into brickwork upstands. The chase is to be a minimum of 25mm deep and 150mm above the finished surface level. Install suitable counter-flashing, this is to be base clipped and suitably plugged at 300mm centres. Lengths should not exceed 1.5 linear metres and laps should be not less than 150mm. All chases should be brushed clean and sealed using **Bauder sealant primer** prior to the application of **Bauder sealant**. All work should be carried out by competent tradesmen in accordance with current British Codes of Practice.   * **Infill Recess at Abutment Upstand** (A14)   Infill the recess at the abutment upstand using a combination of timber and plywood to provide a flush fitting vertical upstand suitably prepared to receive the new waterproofing.   * **Dress Waterproofing up Behind Pitched Slates/Tiles** (A15)   Remove sufficient courses of slates/tiles and thoroughly inspect the area around the upstand and clear out any combustible material that may have accumulated there. Install the new waterproofing to be dressed up a minimum distance of 200mm (and a minimum vertical height of 150mm from the finished surface level) behind the slates/tiles. Care should be taken on the replacement of the slates/tiles. Any existing under slating must be lifted clear and secured. Tile battens should be temporarily removed for this purpose. Self-adhesive membranes **must** be used in this area to avoid the risk of fire. Should the existing support to the slope be insufficient, provide or extend the lay board as necessary. Reinstate battens (taking care that any rotten or defective timbers are replaced) and tiles ensuring that the under slating felt laps over the new waterproofing and that any damaged or degraded under slating is renewed. Any broken, missing or damaged tiles/slates must be replaced.   * **Raise Perimeter Kerbs** (B07)   Raise all perimeter kerbs so as to provide a height of at least 50mm above the finished surface level. Method of raising the kerb to be confirmed in the client’s detailed specification. On external faces, allowance must be made for new fascia’s or cladding due to the increased depth of kerb. The first layer of membrane **must** be self-adhesive and dressed to the full extent of the detail using Torch-Free methods. This is to ensure that the detail is fully encapsulated to reduce the risk of fire to exposed combustible materials.   * **Discard Cappings Apply New Trim** (D03)   Remove all existing metal capping’s and discard. Prepare the parapet wall by mechanically fixing 19mm exterior grade plywood to the horizontal surface.  **Bituminous Membranes:**  - The first layer of membrane **must** be self-adhesive and dressed to the full extent of the detail using Torch-Free methods. This is to ensure that the detail is fully encapsulated to reduce the risk of fire to exposed combustible materials.  - Dress the underlayer up and over the perimeter detail to provide a 25mm overhang.  Please refer to Bauder standard detail drawings.  **Trim:**  - **Setting out:** 3 mm (minimum) clear from walls, fascia and abutting lengths of trim.  - **Fasteners:** Screw fasteners of type appropriate to kerb or deck substrate. Nail fixing is not permitted.  - **Fixing:** 30mm from ends and at 300mm (maximum) centres, stagger fixed.   * 150mm deep trims – 3no. additional fixings per length of trim. The fixings are to be face fixed with screws and positioned 75mm down from the top edge, one fixing 100mm in from each end and one in the centre and capped with coloured matched plastic weathering caps.   - **Jointing sleeves / bridging piece:** All lengths should be close butt jointed using an internal jointing sleeve. This must be provided to each joint.  - **Corner pieces:** Purpose made.  **Completion:**  - **Contact surfaces:** Prime with **Bauder Primer-Activator (Canister), APR01-Black**.  - **Joints:** Cover with 200mm long pads of bitumen membrane, bonded to trim.  **Completion of bitumen membrane:**  - **Top layer/ Capping sheet:** Butt joint to rear edge of trim.  - **Cover strip:** Fully bond to trim and top layer/ capping sheet of bitumen membrane. Carry over roof edge upstand and lap 100 mm onto roof. The capping sheet is to be dressed tightly into the top lip of the trim, ensuring a bead of bitumen extrudes at the edge.  **Wall / kerb joints:** The new trim must cover any open joint that may exist at the top of the kerb or wall, by a minimum distance of 20mm.   * **Temporarily Remove Cladding** (G01)   Temporarily remove the existing cladding so as to allow the waterproofing to be dressed up the upstand to a minimum height of 150mm. Thoroughly inspect the area around the upstand and clear out any combustible material that may have accumulated there. Flammable sarking materials should be carefully lifted clear and secured. Damaged sarking membrane should be replaced/repaired. Self-adhesive membranes that can be installed using Torch-Free methods to avoid the risk of fire **must** be used in this area. All cladding is to be inspected for damage or degradation and repaired/renewed where necessary and is to be securely replaced on completion. It should be noted that provision may have to be made for the cladding to be modified.   * **Splash Pads** (H09)   Supply and fix a 300mm x 300mm piece of **Bauder** capping sheet beneath all rainwater downpipes and overflows. This to be fully bonded to the previous capping sheet layer using Torch-Free methods to avoid the risk of fire.   * **New Lead Liner to Chute Outlets Through Perimeter Detail** (J11)   Supply new Code 4 lead chute liners to all drainage chutes. All chute liners are to be site fabricated to suit the individual details with all joints being lead burned. The chute liner should be manufactured to provide a minimum of 100 mm bonding area for the cap sheet waterproofing to lap onto the lead. The flange of the lead sleeve must be positioned between the underlayer and capping sheet to ensure best security. On completion, the lead liner must be turned down and dressed into the hopper head and the ears returned back and chased into the outer wall.   * **Modify Downpipes** (J17)   Modify the existing downpipes where required, to accommodate the new surface levels imposed by the new system, ensuring that appropriate angled shoes are fitted to the bottom of each pipe with sufficient clearance from the completed system.     * **Gutter Sole Piece** (J18)   Supply and fix a layer of **Bauder** capping sheet so as to run lengthways along the gutter detail forming a continuous sole piece. All adjacent waterproofing is to be dressed down onto the sole piece to avoid water checks.   * **Construct Flatboard Insulated Gutters Between Outlets** (J22)   Construct a gutter detail within the insulation between the rainwater outlets.  -        The minimum gutter width as recommended in the current codes of practice BS 8217:2005 is 500mm, however Bauder recommends a width of 600mm to utilise the insulation boards efficiently.  -        At the lowest point install a minimum thickness of insulation to achieve a maximum U-Value of 0.35 W/m²K.  -        The gutter bed should be designed to 1:40 to achieve minimum finished falls of 1:80 to comply with drainage requirements of BS 6229:2018 and current codes of practice BS 8217:2005, this may be achieved by utilising existing falls created within the deck or tapered insulation.  **Note:** Constructing gutters that do not have a finished minimum fall of 1:80 do not follow guidance in BS6229:2018.   * **Temporarily Disconnect And Re-Route Cables Using Felt Straps** (P05)   Temporarily remove all service cables so as to facilitate the installation of the new waterproofing system. Consultation should be undertaken with the client to determine the best way in which this can be approached. The cables are to be replaced on completion and re-routed as necessary. They should be fixed using 150mm x 75mm pieces of **Bauder** capping sheet fixed at 1m centres using suitable heating methods.   * A suitable new flashing detail will need to be formed beneath the existing structural glazing. * A new weathering cravat is to be installed to the pipe penetraions. * Two gutters will need to be formed from the lead gutters to the chutes within the insulation.   **WORKMANSHIP**  [1] The **Bauder** System must only be laid by properly certified operatives, who have been trained by **Bauder Limited** or approved by **Bauder Limited** and hold the certificate of approval.  [2] The **Bauder** System must be laid with the use of roll bars, and Long Handled Lap Rollers as provided by **Bauder Limited**.  [3] Workmanship that is incorrect and not to Codes of Practice BS 8217:2005, will not be permitted, even if the system is watertight. The client will be told that all such faults must be remedied, before the Guarantee is issued.  [4] Any building work which is the responsibility of the roofing contractor and has a bearing on the life of the **Bauder Total Roof System** must be carried out by properly trained tradesmen.  [5] Consideration must be given by the contractor at all times to the aesthetic appearance of the roof, ie. alternate head laps to be in line and no unnecessary short pieces of capping sheet are to be used.  **HEALTH & SAFETY INFORMATION – ROOFING WORK**  [1] Follow the advice shown in the “Safe2Torch Checklist” produced by the National Federation of Roofing Contractors.  [2] Suitable precautions must be taken to prevent accidents occurring when roofing  systems are being installed.  [3] The contractor must ensure that adequate measures are taken to effectively  prevent injury to members of the public, contractors and any other persons who  may be affected by the works including the public  [4] Where microwave equipment is installed at roof level, care must be taken to  prevent persons working on the roof from being exposed to large doses of microwave radiation.  [5] Similarly, the contractor should liaise with the client to ensure that there are no  extract outlets situated on the roof where noxious or harmful emissions could affect persons working. Suitable precautions will be necessary to prevent exposure where this situation arises.  [6] The contractor is responsible for providing adequate fire fighting equipment in the form of extinguishers during work on the roof. These should be kept in easily accessible locations and be suitably signed.  [7] Whenever possible, access to the roof should be made via internal staircases  rather than by temporary means. Where this is not available, it is the responsibility of the contractor to ensure a safe means of access, egress and a safe workplace.  As far as roofs are concerned, edge protection in the form of scaffolding or a fixed structure should be in place to a height of 1.1 metres in accordance with the Workplace (Health, Safety and Welfare) Regulations 1992.  Failing this, the hierarchy of controls should be applied from the Work at Height Regulations 2005. Means of access should be by fixed ladder, passenger hoist or scaffolding.  [8] The contractor must ensure that suitable written method statements and risk  assessments are available for the work being undertaken. ln particular, it is essential that manual handling methods be fully assessed as roofing materials are heavy and can cause serious injury.  [9] The contractor must ensure that suitable information about the roof covering is  provided to the Client at the end of the work to ensure that work in future can be carried out safely. This information will form part of the Safety File.  [10] All persons working on the roof should be provided with, and wear, suitable  personal protective equipment and wet weather gear. Training must be provided to all contract staff on the safe use of the equipment.  [11] The installer must observe Product Safety Datasheets, relevant to the materials  being used as well as completing and complying with COSHH risk assessments  [12]We draw your attention to your duties under the Construction (Design and Management) Regulations 2015.  Regulation 4, Client’s duties in relation to managing projects states that the client must make suitable arrangements for managing a project, including the allocation of sufficient time and other resources.  Regulation 5, Appointment of the Principal Designer and the Principal Contractor states that where more than one contractor will be working on a project at any time, the client must appoint a Principal Designer and a Principal Contractor.  Please note that although Bauder will assist with the roof waterproofing system design, we will not undertake the role of Principal Designer.  [13] It is always the responsibility of the contractor to carry out a risk assessment on all aspects of the contract. The ‘Safe2Torch’ checklist is solely for guidance for the safe installation of torch-on reinforced bitumen membranes and use of gas torches in the workplace.  [14] No work must be carried out on fragile roofs or where there are skylights unless  suitable precautions have been taken to prevent persons falling through fragile roofs and openings. In particular, the following are likely to be fragile:   * Non reinforced fibre cement sheets e.g. asbestos * Corroded metal decking * Woodwool slabs * Rotten chipboard or similar * Stramit * Slates or tiles * Old roof lights * Glass (including wired)   Specifying non fragile rooflights will help reduce the risk of falls from height. A non-fragility rating is required by the HSE (Health and Safety Executive) in order to comply with CDM (Construction Design and Management) Regulations 2015.  [15] HSE guidance must be followed when carrying out any work involving interference with asbestos.  **IMPORTANT NOTE:**  On sites where asbestos has or has possibly been detected, it is to be treated in accordance with the **Control of Asbestos Regulations 2012.**  Bauder specification documentation is subject to any revisions necessary pending the findings from the above.  **GUARANTEE**  A 20 year system product, workmanship and design (including consequential loss) guarantee is to be provided upon completion following a Final Inspection by Bauder. Details regarding the full terms and conditions are available separately from Bauder Ltd upon request. This system must be installed by a Bauder Approved Contractor, to be eligible for guarantee. The system comprises the waterproofing membranes, insulation, air and vapour control layer, and attachment of these products.  **IMPORTANT NOTE**  It is imperative that the contractor conforms with the workmanship criteria as listed above. Any deviation from this will result in the contract being considered unguaranteeable by our insurers.  **CONTACT INFORMATION**  ***For further information contact Bauder Limited.***  ***Head office: T: 01473 257671 E:*** [***technical@bauder.co.uk***](mailto:technical@bauder.co.uk)  ***Area Technical Manager: Chris Rea – T: 07825 795280***  ***Site Technician: Anthony Symondson – T: 07741 311273***  *Bauder reserves the right to amend information and product specifications without prior notice. All reasonable care has been taken to ensure that the information is current and correct at the time of issue.  Please note that any future regulation changes could result in this specification requiring an update.  In the case of a previous roof survey a new survey will be necessary to establish if the condition has further deteriorated. The specifier is responsible for ensuring that this specification information is still current prior to issue, as Bauder Ltd can accept no liability for any resulting errors or omissions.* |  |  |  |
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|  | **ROOF AREA No 3. Liquid Finish (over market hall) etc.** |  |  |  |
|  | **‘Safe2Torch’ advice:**  *Follow LRWA Guidance Note No.13 for safe drying of damp substrates. Particular care should be taken in areas deemed to be “Torch Free”*  *It is always the responsibility of the contractor to carry out a risk assessment on all aspects of the contract. The ‘Safe2Torch’ checklist is solely to provide assistance in the assessment of the risks where the use of a gas torch is being considered.*  **SYSTEM CONSTRUCTION**  **Waterproofing System:** Bauder LiquiTEC Cold Roof System  **Substrate:** Overlay Existing Asphalt waterproofing  **Roof Fall:** 3°  It is imperative that should this information change for whatever reason, then Bauder Limited must be contacted so that the specification can be amended accordingly.  **Always refer to the Bauder LiquiTEC System Installation Manual for preparation methods, storage requirements and the application of each product.**  **Where there are any doubts as to adhesion, carry out an adhesion test, in accordance with the instructions given or consult the Bauder Technical Department on 01473 257671**.  **TEMPERATURE LIMITATIONS**  **Product Storage:** Bauder LiquiTEC products should not be stored in direct sunlight or in ambient temperatures above 25°C and must be protected from frost.  **Product Application Temperatures:** Please refer to the Bauder LiquiTEC Technical Installation Manual for details of ambient and substrate temperature limitations. All substrates to be tested with an appropriate Infrared non-contact digital temperature gauge before and during installation.  **ASPHALT OVERLAY (NO HOT WORKS!)**  Carefully remove all surface chippings, debris etc. from the surface of the asphalt. Also Strip and/or remove any felt patch repairs, loose or flaking solar reflective paint, liquid overlays etc. If any details are defective, carefully cut away and remove the existing asphalt skirting from all upstands and perimeter edges and prepare the exposed surfaces to receive the new waterproofing.  Repair all cracks and blows in the asphalt and prepare to leave a smooth even surface. We recommend that deflected areas of asphalt be levelled up to minimise ponding.  **Preparation Notes:** Scarify, grind or lightly bead blast before priming. Blisters and high spots must be cut away using a grinder. **Do not heat and trowel**.  **Falls:**  A design fall of minimum 1:40 is recommended in order to achieve a constructed fall of minimum 1:80. However, the Bauder LiquiTEC system is suitable for application to zero pitch roofs. Any areas of backfalls or deflection must be levelled prior to installing the system.  **PRIMER**  **Before application:** All surfaces must be dry, clean and free from dust, laitance, dirt, oil, grease, loose material and any other contaminants.  **DETAILS AND UPSTANDS – To be primed FIRST**  All Details and Upstands receiving the new Cold Applied Liquid Waterproofing System are to be thoroughly primed with the relevant **Bauder LiquiTEC Primer.**  The following primers must be used as required:   * **Bauder LiquiPRIME 1**: For Timber, Plywood or OSB/3 or KLH, Asphalt, Exposed Bitumen, Bitumen Bleed * **Bauder LiquiPRIME 2**: For Non-Porous Concrete, Screed, Blockwork * **Cryl Primer 287:** For New/Porous Concrete, Screed, Blockwork * **Special Primer 610:** For EPDM * **No Primer Required:** For Metals, Hard Plastics, PVC-P and existing Liquid Waterproof coatings (Subject to adhesion testing).   **Application:** Add catalyst to the primer at the rate indicated on the container (except Pox R103 & Special Primer 610). Apply catalysed primer using a synthetic deep pile roller to upstands and details first, before applying to the main area. **Ensure that primer is applied into the joints between panels to fill the gaps.**  **Note:** When using LiquiPRIME on upstand details in excess of 250mm high, add 1% (by weight) Liquid Thixo to the catalysed resin and stir thoroughly prior to application.  **For other substrates, consult the Bauder Technical Department on 01473 257671 for required preparation methods and priming.**  **MAIN ROOF AREA – To be primed after the Details/Upstands**  The main roof area receiving the new Cold Applied Liquid Waterproofing System is to be thoroughly primed with **Bauder LiquiPRIME 1.**  **Application method:** Add catalyst to the primer at the rate indicated on the container. Apply catalysed primer using a synthetic deep pile roller to upstands and details first, before applying to the main area.  **Application rate:** 0.4kg/m² min.  **Rainproof Times:** After approx. 30 minutes.  **Next Coat / Subject to Stress:** Can be walked upon/next coat applied after approx. 45 minutes.  **SUBSTRATE REPAIRS AND FILLING**    To be applied after priming:   * **Bauder LiquiPASTE:** Minor indentations, cracks and voids * **Bauder LiquiPASTE Mortar:** Larger indentations * **Cryl RS 240**: Cementitious substrates and Asphalt substrates   **Application:** Add catalyst at the rate indicated on the container (excluding RS 240). In the case of LiquiPASTE Mortar, catalyst must be added before adding the filler.  Apply catalysed resin using a suitable smoothing trowel and allow to cure for a minimum of 1 hour.  **WATERPROOFING TO UPSTANDS AND DETAILS**  **IMPORTANT NOTE**  The minimum recommended height for constructing waterproofing details is 150mm from the top of the waterproofing. Special attention should be paid to all structures, such as rooflights, counter-flashings, window and door cills, etc. These may have to be raised to enable a 150mm high waterproofing detail to be formed. Bauder cannot take responsibility for water ingress over waterproofing details insufficiently high.  Bauder **LiquiDETAIL** incorporating Bauder 110g Reinforcement Fleece must be used wherever it is practical to incorporate a reinforcement fleece. Bauder **LiquiFIBRE** may only be used for waterproofing complex shapes or in areas where the use of a fleece is impractical.  **GENERAL AREAS: Linear Upstands / Details**  **Bauder** **LiquiDETAIL,** Blue grey (Approx. RAL 7031) two layer ‘wet-on-wet’ liquid applied cold roof covering system, with encapsulated Bauder 110g Reinforcement Fleece,to be used wherever it is practical to incorporate a reinforcement fleece.  **Application:** Add catalyst to the Bauder LiquiDETAIL at the rate indicated on the container. Apply catalysed Bauder LiquiDETAIL (2.0 kg/m² min.) with a synthetic deep pile roller. Roll a strip of Bauder 110g Reinforcement Fleece into the wet resin, pressing trapped air free using the synthetic deep pile roller, ensuring a minimum 50mm overlap between adjacent sections of Bauder 110g Reinforcement Fleece.  Ensure the Bauder 110g Reinforcement Fleece is always fully saturated before applying a further coat of catalysed Bauder LiquiDETAIL (1.0 kg/m² min.) wet on wet.  **Rainproof Times:** After approx. 30 minutes.  **Next Coat / Subject to Stress:** Can be walked on/next coat applied after approx. 45 minutes.  **COMPLEX AREAS: Complex NON Linear Details ONLY**  **Bauder LiquiFIBRE,** Blue grey (Approx. RAL 7031), may **ONLY** be used for waterproofing complex shapes or in areas where the use of a fleece is impractical.  **Application**: Add catalyst to the Bauder LiquiFIBRE at the rate indicated on the container. Apply catalysed Bauder LiquiFIBRE (1.5 kg/m² min.) with a brush and allow to cure for a minimum of 45 minutes.  Apply a further layer of catalysed Bauder LiquiFIBRE (1.5 kg/m² min.) by brush, using brush strokes at 90° to the first layer.  **Rainproof Times:** After approx. 30 minutes.  **Next Coat / Subject to Stress:** Can be walked on/next coat applied after approx. 45 minutes.  **WATERPROOFING TO MAIN FLAT AREA**  **Bauder LiquiDEK,** Blue grey (Approx. RAL 7031)two layer ‘wet-on-wet’ liquid applied cold roof covering system, with encapsulated Bauder 110g Reinforcement Fleece.  **Application:** Add catalyst to the Bauder LiquiDEK at the rate indicated on the container. Apply an even layer of catalysed Bauder LiquiDEK (2.0 Kg/m2 min) with a synthetic deep pile roller. Roll Bauder 110g Reinforcement Fleece into the wet resin, pressing trapped air free using the synthetic deep pile roller, ensuring a minimum 50mm overlap between adjacent sections of Bauder 110g Reinforcement Fleece.  Ensure the Bauder 110g Reinforcement Fleece is always fully saturated before applying a further coat of catalysed Bauder LiquiDEK (1.0Kg/m2 min) wet on wet.  **Rainproof Times:** After approx. 30 minutes.  **Subject to Stress:** Can be walked upon after approx. 45 minutes. Able to withstand stress after approx. 2 hours.  **IMPORTANT NOTE**  There may be a difference in colour pigmentation between LiquiDETAIL, LiquiFIBRE and LiquiDEK. If aesthetic appearance is considered important then it will be necessary to incorporate a separate coat of Bauder LiquiFINISH to ensure that the finished colour is even across all areas.  **HEAVY DUTY WEARING COURSE**  **Bauder LiquiDEK** incorporating **Bauder quartz** (0.4-1.2mm)  **Location: MAINTENANCE WALKWAYS/FIRE ESCAPE**  **Application:** Add catalyst to the Bauder LiquiDEK at the rate indicated on the container. Apply catalysed Bauder LiquiDEK to the designated areas (1.5Kg/m2 min) with a synthetic deep pile roller. Embed into the liquid layer a full cover of Bauder quartz (0.4-1.2mm) (7.0Kg/m2 approx). Allow to dry for a minimum of 1 hour, sweep away excess aggregate and vacuum clean. Do not re-use aggregate.  **Next Coat / Subject to Stress:** Can be walked upon/next coat applied after approx. 45 minutes. Able to withstand stress after approx. 2 hours.  **FINISH COAT TO MAINTENANCE WALKWAYS/FIRE ESCAPE**  **Bauder LiquiFINISH, Traffic grey (approx. RAL 7043)**  **Application:** Add catalyst to the LiquiFINISH at the rate indicated on the container and apply using a synthetic deep pile roller at the rates indicated below.  **Upstands & Details:** Apply LiquiFINISH (0.5kg/m² min).For upstand details in excess of 250mm high, add 1% Liquid Thixo to the catalysed resin and stir thoroughly prior to application.  **Main Area:** Apply LiquiFINISH (0.65kg/m² min).  **Rainproof Times:** After Approx. 30 minutes.  **Subject to Stress:** Can be walked upon after approx. 1 hours. Able to withstand stress after approx. 3 hours.  **INTERNAL/PARAPET OUTLETS**  [1] Where the existing outlets are to be retained they must be carefully examined for damage and proper seating. Any faults must be rectified.  [2] The contractor must ensure that the waterproofing is firmly sealed into the outlet.  [3] The contractor must ensure that all outlets are unblocked during and at the completion of the contract.  [4] The contractor is to provide suitable grilles/wire baskets to the outlets on completion of the contract.  **TECHNICAL NOTES**   1. It is the Contractor's responsibility to ensure that the substrate is suitable and that the system is applied in all areas in accordance with Application Guidelines in force at the time.   [2] **Coverage Rates** given are guidelines based on smooth, level substrates. Allowances must be made if the substrate is uneven, rough or porous.  [3] **Drying times** stated are at +20°C and are dependent upon weather conditions.  [4] **Interruptions During Works** - If work is interrupted for more than 12 hours, use Bauder PMMA Cleaner to clean and reactivate the transition area. **Evaporation time:** at least 20 minutes - overlay within 60 minutes.  For details including Bauder 110g Reinforcement Fleece, the subsequent waterproofing layers must overlap by at least 100 mm, including the Bauder 110g Reinforcement Fleece.  [5] Any peculiarities or details discovered, which might affect the performance of the **Bauder** system, should be reported immediately to the specifier and **Bauder Limited** in order that they may assist in overcoming the problem.  [6] The contractor is to ensure water tightness of the roof at all times.  [7] Where building works are to be carried out by other trades, following completion of the waterproofing, the contractor must make adequate provision for supplying protection to prevent damage to the new system. The final inspection will not be carried out until all associated trades are complete and the roof areas are clear from all debris and protection layers.  [8] All mechanical and electrical work to plant and equipment should be carried out by competent mechanical and electrical qualified tradesmen. All plant is to be reinstated and recommissioned on completion of the roofing works in accordance with the client's detailed specification.  [9] If any items of plant/equipment are to be situated on the finished roof, suitable protection should be applied in accordance with this specification. In the case of heavy items it may be necessary to introduce a load spreading slab, please contact **Bauder** for further advice.  **ADDITIONAL ITEMS**  **Provision should be made by the contractor to:-**   * **Raise Door Cill** (A12)   Raise all door cills to ensure that a minimum upstand height of 150mm is achievable above the finished surface level. The method of raising the cill should be determined and specified by the client.   * **Infill Recess At Abutment Upstand** (A14)   Infill the recess at the abutment upstand using a combination of timber and plywood to provide a flush fitting vertical upstand suitably prepared to receive the new waterproofing.   * **New chase & Bauder Sealant** (A21)   Cut new chases into brickwork upstands, a minimum of 25mm deep, & 150mm above the finished surface level of the new waterproofing. The chase is to be brushed clean and primed with Bauder LiquiPRIME 2 in accordance with the preparation and priming schedule. The new waterproofing is to be dressed in to the new chase. All chases should be sealed using **Bauder sealant**.   * **Clean & Prepare Rainwater Outlet (Cast Iron)** (J12)   Carefully remove the retaining bolt, clamping and grille from all cast iron outlets and prepare in accordance with the preparation and priming schedule. Treat and re-decorate all exposed parts of the outlets with a rust inhibitive paint in accordance with the client's detailed specification.   * The stairwell is to be raised to allow the new system to be installed. * The new waterproofing system is to be taken up beneath the coping and a new chase formed. This is then to be sealed using polysulphide. * The coping joints are to be raked out and re-pointed in accordance with the clients’ requirements.   **WORKMANSHIP**  [1] The **Bauder** System must only be laid by properly certified operatives, who have been trained by **Bauder Limited** or approved by **Bauder Limited** and hold the certificate of approval.  [2] The Bauder LiquiTEC System Installation Manual, Standard Details and project specific Details are to be read as an integral part of this specification.  [3] Workmanship that is incorrect will not be permitted, even if the system is watertight. The client will be told that all such faults must be remedied, before the Guarantee is issued.  [4] Any building work which is the responsibility of the roofing contractor and has a bearing on the life of the **Bauder LiquiTEC System** must be carried out by properly trained tradesmen.  [5] Consideration must be given by the contractor at all times to the aesthetic appearance of the roof.  **HEALTH & SAFETY INFORMATION – ROOFING WORK**  [1] Suitable precautions must be taken to prevent accidents occurring when roofing systems are being installed.  [2] The contractor must ensure that adequate measures are taken to effectively prevent injury to members of the public, contractors and any other persons who may be affected by the works including the public  [3] Where microwave equipment is installed at roof level, care must be taken to prevent persons working on the roof from being exposed to large doses of microwave radiation.  [4] Similarly, the contractor must liaise with the client to ensure that there are no extract outlets situated on the roof where noxious or harmful emissions could affect persons working. Suitable precautions will be necessary to prevent exposure where this situation arises.  [5] The contractor is responsible for providing adequate firefighting equipment in the form of extinguishers during work on the roof. These must be kept in easily accessible locations and be suitably signed.  [6] Whenever possible, access to the roof must be made via internal staircases rather than by temporary means. Where this is not available, it is the responsibility of the contractor to ensure a safe means of access, egress and a safe workplace.  As far as roofs are concerned, edge protection in the form of scaffolding or a fixed structure must be in place to a height of 1.1 metres in accordance with the Workplace (Health, Safety and Welfare) Regulations 1992.  Failing this, the hierarchy of controls must be applied from the Work at Height Regulations 2005. Means of access must be by fixed ladder, passenger hoist or scaffolding.  [7] The contractor must ensure that suitable written method statements and risk assessments are available for the work being undertaken. ln particular, it is essential that manual handling methods be fully assessed as roofing materials are heavy and can cause serious injury.  [8] The contractor must ensure that suitable information about the roof covering is provided to the Client at the end of the work to ensure that work in future can be carried out safely. This information will form part of the Safety File.  [9] All persons working on the roof must be provided with, and wear, suitable personal protective equipment and wet weather gear. Training must be provided to all contract staff on the safe use of the equipment.  [10] The installer must observe Product Safety Datasheets, relevant to the materials being used as well as completing and complying with COSHH risk assessments  [11]We draw your attention to your duties under the Construction (Design and Management) Regulations 2015.  Regulation 4, Client’s duties in relation to managing projects states that the client must make suitable arrangements for managing a project, including the allocation of sufficient time and other resources.  Regulation 5, Appointment of the Principal Designer and the Principal Contractor states that where more than one contractor will be working on a project at any time, the client must appoint a Principal Designer and a Principal Contractor.  Please note that although Bauder will assist with the roof waterproofing system design, we will not undertake the role of Principal Designer.  [12] No work must be carried out on fragile roofs or where there are skylights unless  suitable precautions have been taken to prevent persons falling through fragile roofs and openings. In particular, the following are likely to be fragile:   * Non reinforced fibre cement sheets e.g. asbestos * Corroded metal decking * Woodwool slabs * Rotten chipboard or similar * Stramit * Slates or tiles * Old roof lights * Glass (including wired)   Specifying non fragile rooflights will help reduce the risk of falls from height. A non-fragility rating is required by the HSE (Health and Safety Executive) in order to comply with CDM (Construction Design and Management) Regulations 2015.  [13] HSE guidance must be followed when carrying out any work involving interference with asbestos.  **\*IMPORTANT NOTE:**  On sites where asbestos has or has possibly been detected, it is to be treated in accordance with the **Control of Asbestos Regulations 2012.**  Bauder specification documentation is subject to any revisions necessary pending the findings from the above.  **GUARANTEE**  A 15 year Bauder LiquiTEC system product and workmanship guarantee is to be provided upon completion following a satisfactory Final Inspection by Bauder. Details regarding the full terms and conditions are available separately from Bauder Ltd upon request. This system must installed by a Bauder Approved Contractor, to be eligible for guarantee.  **CONTACT INFORMATION**  ***For further information contact Bauder Limited.***  ***Head office: T: 01473 257671 E:*** [***technical@bauder.co.uk***](mailto:technical@bauder.co.uk)  ***Area Technical Manager: Chris Rea, Tel: 07825 795280***  ***Site Technician:*** ***Anthony Symondson, Tel: 07741 311273***  *Bauder reserves the right to amend information and product specifications without prior notice. All reasonable care has been taken to ensure that the information is current and correct at the time of issue.  Please note that any future regulation changes could result in this specification requiring an update.  The specifier is responsible for ensuring that this specification information is still current prior to issue, as Bauder Ltd can accept no liability for any resulting errors or omissions.* |  |  |  |
|  | **To Collection £** |  |  |  |

1. Schedule of Works

Any quantities given in the Schedules of Work are approximate only and are intended to be a guide for pricing purposes. Generally, quantities given have been rounded to the nearest whole unit. The contractor is required to ascertain the extent and quantity of the works from the contract documentation and from his/her site visit.

The successful contractor shall submit a fully priced Schedule of Works to the Contractor Administrator prior to award of the contract.

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| **1.0** | **GENERAL ITEMS / SITE PREPARATIONS ETC.** |  |  |  |
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|  | **Works Generally** |  |  |  |
| 1.1 | This schedule is to be read in conjunction with the drawings, preceding preliminaries, and general specification, which form the complete tender package. The contractor is to include for all works necessary or apparent from the drawings, specification and site inspection for the proper completion of the finished project. | ITEM |  |  |
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|  | **Roofs to be Re-covered** |  |  |  |
| 1.2 | The specified works are to be undertaken to the following roof areas, as shown on the drawing numbers 011 BS20/21, (front, side, porch, flat roofs, location plan) etc.  • Pitched/Hipped slate finished roof areas to the front and side elevations  • Dormer pitched slate finished roofs  • Associated works to chimneys, lead detailing, fascia’s, gutters & rainwater pipes etc.  • Timber repairs and redecoration works to the clock tower.  • Flat roof replacements/recovering to area No. 1 (insulated felt system)  • Flat roof repairs only to area No. 2  • Flat roof recovering to area No. 3 (liquid system) | ITEM |  |  |
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|  | **Scaffold, Handrails, Barrier Rails & Hoarding** |  |  |  |
| 1.3 | Contractor to include for the cost of providing the necessary working platforms, scaffolding, chimney scaffolds, ladders, bumpa hoist, etc. necessary for the safe carrying out of all roofing and project works. All plant and equipment must be of solid and sound design to suit the site conditions and be completely adequate for the type of work being carried out.  All scaffolding shall be fully boarded with adequate toe boards, walkway over boards, access ladders, brick guards, pole protection, netting etc. for safe egress and movement for site personnel and employer’s site representatives. The scaffolding shall be ‘scaff tagged’ prior to use and inspected at the required intervals. Additional safety warning signs around the site must be visible. Scaffolding should be erected and removed at sensible intervals throughout the works to minimise disruption around the building. | ITEM |  |  |
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| 1.4 | As the project will be completed during business working hours, the contractor must provide a protected temporary access to all neighbouring business premises from the existing pedestrian highways. All pedestrian access routes must be protected with extra boarding etc. to prevent the risk of falling debris. Temporary signage is required to direct customers to each premises via a safe means of access. | ITEM |  |  |
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| 1.5 | Secure fencing/hording is to be erected round the scaffolding at a height of 2m with all Health & Safety notices fixed to it. This shall include fencing the perimeter of the working area including the site compound. The exact position of compound is to be agreed with the CA. | ITEM |  |  |
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|  | **Temporary Facilities and Waste Disposal** |  |  |  |
| 1.6 | The contractor shall allow for the complete protection of the working areas and adjacent areas in order to minimise contamination/damage during the course of the contract. | ITEM |  |  |
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| 1.7 | The contractor is to ensure that all welfare facilities as necessary and detailed in schedule 2 of the Construction (Design and Management) Regulations 2015 are provided throughout the contract duration. | ITEM |  |  |
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| 1.8 | The contractor should ascertain the availability of services i.e. water and electricity, the Contract Administrator will allow the contractor to use these services, the contractor should make all necessary arrangements to supply his own water and electricity if it is not permitted or simply not practical. | ITEM |  |  |
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| 1.9 | Provide erect and maintain full site set up / compound facilities, all as stipulated in the Preliminaries. Generally allow for undertaking all necessary works in relation to site set up, formation of a contractor’s compound with all necessary cabins, mess room, temporary WC, water connections etc. Additionally allow for any additional Heras fencing and hoardings to any access routes, around the base of scaffold locations, and to any additional storage areas. Allow for all necessary signs, banksman etc. to ensure that the works are safely undertaken. Contractors are to note that vehicular access around the site is restricted and awkward in terms of vehicular access around site, and restrictions will be imposed on locating skips close to buildings, etc. especially where newly paved surfaces are present to the front of the building. | ITEM |  |  |
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| 1.10 | Unless specified otherwise, clear away and cart to an approved registered tip all rubbish, surplus materials, and general waste as it accumulates. Discarded materials should be recycled where possible. Generally the site and works should be kept clean and tidy, waste and debris should be removed as it occurs or at least at the end of each working day. | ITEM |  |  |
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| 1.11 | Provide all plant for waste disposal as is necessary, any skips brought to site will be of the enclosed and lockable type, the exact location of skips must be agreed by the Contract Administrator. | ITEM |  |  |
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|  | **Site Security and Rules** |  |  |  |
| 1.12 | The contractor shall be responsible for maintaining the site in a secure and safe condition at all times. The site manager will also be responsible for ensuring these etiquettes are maintained. | ITEM |  |  |
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| 1.13 | As a precaution against trespassing and vandalism, it is vitally important that the scaffold and roof areas are not accessible at nights and weekends, all necessary steps to prevent this must be taken. The contractor shall allow for close-boarded security fence around the scaffold to prevent unauthorised access. Any ladders must be taken down at the end of each working day and access traps should prevent unauthorised access to scaffoldings. | ITEM |  |  |
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| 1.14 | Generally it is unacceptable to bring to site radios, cd players etc. No smoking is not allowed and use of bad/industrial language will not be tolerated. All rubbish generated by site operatives must be disposed of at the end of each working day. | ITEM |  |  |
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|  | **General Workmanship Requirements and Technical Notes** |  |  |  |
| 1.15 | A responsible contracts manager is to remain on site at all times, so they are able to carry out responsibilities which will be;  1. Liaising with key stakeholders including the Premises Representative/Town Hall Staff and the Contract Administrator as is required.  2. Health and safety/CDM 2015 compliance.  3. Contract delivery.  4. Liaising with sub-contractors/tool box talks.  5. Performance review.  6. Site security.  7. Covid 19 and social distancing measures. | ITEM |  |  |
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| 1.16 | Consideration must be given by the contractor at all times to the aesthetic appearance of the roof. The Contractor is to ensure water tightness of the roof at all times. Proper day joints must be formed at the end of each working day to provide a temporary seal. | ITEM |  |  |
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| 1.17 | The contractor shall include for maintaining adequate weather protection to existing building/structure during evenings and weekends. Any damage caused by water ingress, wind etc. shall be made good at the contractor’s own expense. | ITEM |  |  |
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|  | **Existing Services Installations / Equipment** |  |  |  |
| 1.18 | The contractor should work around any services pipes / cables / netting that run across roof slopes and ensure that they remain intact and are left securely fixed upon completion. The contractor is to avoid the need to disconnect cables/services/netting, unless specifically agreed between the contractor and the Contract Administrator. To facilitate the works, the Contractor is to arrange for all cables/pipes/aerials/services/netting installations etc. to be temporarily disconnected, and reinstated and re-commissioned, as and when required. | ITEM |  |  |
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|  | **Works to Internal Rainwater Outlets / Downpipes** |  |  |  |
| 1.19 | Check downpipes prior to commencement and ensure that they are running freely, without blockages. Report any blockages or defects to the Contract Administrator. | ITEM |  |  |
|  |  |  |  |  |
| 1.20 | Allow for providing mineral wool thermal insulation wrapped internally around the head of any internal rainwater pipes/outlets (above ceilings) as necessary to eliminate the chance of condensation occurring. Allow for all leaf guards to internal outlets. | ITEM |  |  |
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|  | **Works in Relation to Making Good Internal Disturbance** |  |  |  |
| 1.21 | The Main Contractor is to undertake all necessary repairs / redecoration / making good works that may be necessary to internal areas that may be affected by the works (e.g. in particular allow for extending internal linings and redecoration as required to cloaked ceilings and roof access point locations, to Contract Administrator’s satisfaction, etc.). | ITEM |  |  |
|  |  |  |  |  |
| 1.22 | The Main contractor is to include an additional prime cost sum of £1,000 for possible additional repairs / redecoration / making good works that may be necessary on account of unavoidable damage, outside of the control of the contractor (i.e. damage that is not caused by negligence on the contractor’s part, for which the contractor would be expected to make good such damage at his own cost under the previous specification clause). This sum to be expended, or deducted in full or in part, at the direction/instruction of the Contract Administrator. | ITEM |  |  |
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|  | **Approvals and Compliance** |  |  |  |
| 1.23 | The contractor is to allow for liaising as necessary with building control, conservation officers, health and safety inspectors and all other anticipated/authorised inspections of the works by third parties, and for ensuring that all statutory notifications are made prior to works commencing. | ITEM |  |  |
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| 1.24 | Consents: The contractor is to include for obtaining all necessary consents and licences required for the works, service installations and scaffolding. The contractor is to liaise as necessary with, Health and Safety Inspectors, Local Authority Officers and all other anticipated/authorised inspections of the works by third parties. | ITEM |  |  |
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|  | **Asbestos Materials/Information** |  |  |  |
| 1.25 | A copy of an Asbestos Refurbishment & Demolition Survey Report for Darwen Town Hall is included, Annex B. In the event of any unknown ACM’s being found during the works the contractor is to include a prime cost sum of £3,000 for the removal of unforeseen asbestos containing materials (ACM’s), not identified in the Asbestos Survey Report. This element of work to be undertaken by a Named Subcontractor (specialist asbestos removal contractor), as directed by the Contract Administrator. Sum is only to be expended upon the instructions of the Contract Administrator. | ITEM | 3,000 | 00 |
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| 1.26 | The Main Contractor is to allow for placing orders, paying the applicable charges to the sub-contractor, liaising with the subcontractor, and coordinating works, and ensuring that work is undertaken in accordance with the contract programmes, etc. The Contractor is to ensure that the subcontractor provides all necessary and relevant certificates and appropriate documentation, as soon as the subcontractor’s work has been completed.  Main Contractor to include for Main Contractor’s overheads & profit in relation to the expenditure and management of these prime cost sums = | ITEM |  |  |
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|  | **Cleaning and Clearance** |  |  |  |
| 1.27 | Upon completion of the works, allow for thoroughly cleaning the site both internally and externally and any affected areas, surfaces, etc., so as to be completely free of dust, and generally returned to the same state of cleanliness prior to the commencement of the works. All windows should be appropriately washed on completion of the work and gutter lines clear of debris etc. The Contract administrator reserves the right to engage contract cleaners if these works are not to the satisfaction of the CA / Premises Representative, the cost of which will be deducted from the contract sum. | ITEM |  |  |
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| **2.0** | **PITCHED ROOFING WORKS** |  |  |  |
|  | Stripping & Preparatory Works |  |  |  |
| 2.1 | Undertake works to carefully strip and remove all existing slate coverings to pitched roofs including all hipped and dormer roof slopes illustrated on accompanying tender drawing 011 - BS 20/21 (front & side roof plans). The contractor is to allow for completely stripping all existing crested ridge tiles, slates, sarking felt and slating battens, back to the existing common rafters. Clean off and de nail all roof existing timbers and leave ready to receive new coverings. Cart away all debris from site.  *N.B. The Contractor is to allow for carefully removing and salvaging all good sound ridge tiles and slates, clean off all items and safely store on site prior to re-use.* | ITEM |  |  |
|  |  |  |  |  |
|  | Roof Spaces |  |  |  |
| 2.2 | When the roof coverings are temporarily removed, the contractor is to allow to carefully clean out any obsolete items present in roof spaces and brush out all ceiling areas to the satisfaction of the Contract Administrator. Leave roof spaces clear of all debris and ready to receive new mineral wool/insulation as specified elsewhere and cart away all debris from site. | ITEM |  |  |
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|  | Rainwater Goods |  |  |  |
| 2.3 | Undertake works to carefully take down existing cast gutters, swan neck connections and rainwater pipes and remove from site; protect existing roof as necessary to maintain weather tightness. Leave ready to receive new guttering & rainwater specified elsewhere. All cast details are to be recycled by appropriate scrap metal handlers and the reclaimed value should be reflected in the tendered rate. | ITEM |  |  |
|  |  |  |  |  |
|  | Eaves Details |  |  |  |
| 2.4 | Undertake works to carefully strip off all existing timber fascia and soffit boards and cart away all debris from site. Repoint fixing positions and leave ready to receive installations of new fascia and soffit boards specified elsewhere. | ITEM |  |  |
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|  | Chimney Works |  |  |  |
| 2.5 | Undertake works to carefully remove all lead roofing components including apron flashings, soakers, saddles, back gutters and timber support work etc. Rake out and prepare chases ready to receive new flashing details as specified elsewhere, remove all debris from site. Lead flashings are to be recycled by appropriate scrap metal handlers and the reclaimed value should be reflected in the tendered rate. | ITEM |  |  |
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|  | Box Gutters |  |  |  |
| 2.6 | Undertake works to carefully lift and remove the existing lead work/linings and defective timberwork to the full length of 2nr box gutters present to the front and rear elevations of the roof slopes to the front (south) elevation. Cart away all debris from site. | ITEM |  |  |
|  |  |  |  |  |
|  | Corbel Gutters |  |  |  |
| 2.7 | Undertake works to carefully lift and remove the existing lead work / lining to the full length of corbel gutter detail present to side (west) elevation. Cart away all debris from site. | ITEM |  |  |
|  | **JOINERY WORKS & REPAIRS** |  |  |  |
|  |  |  |  |  |
|  | Purlin Replacement |  |  |  |
| 2.8 | Provisionally allow for 20 nr replacement timber purlins. Replacement purlins to be pressure treated and to be of size and section to match existing. Securely fix in position and leave ready to receive new roof covering specified elsewhere. Cart away all debris from site. | ITEM |  |  |
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| 2.9 | Provisionally allow to provide and securely fix Simpson double twist anchor straps (L12T10) to all new purlin/external/internal wall junctions with double bend to each truss position at external walls. Secure to purlin and wall locations in accordance with manufacturer’s instructions. All works are to be in strict accordance with manufacturers product information sheet available at:  http://www.strongtie.co.uk/ | ITEM |  |  |
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|  | Rafter Replacement |  |  |  |
| 2.10 | Provisionally allow to provide and install 80 nr replacement timber rafters to pitched roof slopes. Replacement rafters to be pressure treated and to be of size and section to match existing. Securely fix in position and leave ready to receive new roof covering specified elsewhere. Cart away all debris from site and leave complete. | ITEM |  |  |
|  |  |  |  |  |
| 2.11 | Provisionally allow to cut back any rotten spar ends to facilitate splice repairs up to 0.5 linear metres. Replacement timber to be pressure treated and to be of size and section to match existing. For tendering purposes, the contractor is to allow for 30 nr of timber repairs at the rate of (*insert rate*) £ . per linear metre. | ITEM |  |  |
|  |  |  |  |  |
| 2.12 | Provisionally allow to provide and install firring timbers to all rafter lengths where necessary to ensure slate bands are installed to true lines. All timbers must be appropriately sized and tapered to ensure all new coverings are level. Cart away all debris from site and leave complete. | ITEM |  |  |
|  |  |  |  |  |
|  | Eaves Details |  |  |  |
| 2.13 | Provisionally allow the sum of £3,000 (three thousand pounds) for removing existing wall plates and replacing with new timber wall plates. Wall plates should generally be in lengths of not less than 3m but shorter lengths should extend over at least 3 joists/rafters or trusses. Wall plates should be well fixed and joined using half-lapped joints at corners and in running lengths. For tendering purposes, allow for wall plate replacements at the rate of (*insert rate*) £ . per linear metre. | ITEM | 3,000 | 00 |
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| 2.14 | Provide and install new replacement treated softwood timber fascia boards section profile to match existing to replace those previously removed. Securely fix into position and leave ready to receive decoration. Apply 2 coats of Weathershield quick dry undercoat and 2no. coats of Dulux “Weathershield Gloss” colour ‘heritage black’. All decorations, primers, undercoats and top coats to be as per manufacturer’s recommendations and specifications. | ITEM |  |  |
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| 2.15 | Provide and install new replacement treated softwood timber soffit boards section profile to match existing to replace those previously removed. Securely fix into position and leave ready to receive decoration. Apply 2 coats of Weathershield quick dry undercoat and 2no. coats of Dulux “Weathershield Gloss” colour ‘heritage black’. All decorations, primers, undercoats and top coats to be as per manufacturer’s recommendations and specifications. | ITEM |  |  |
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|  | Miscellaneous |  |  |  |
| 2.16 | Allow the Provisional Sum of £4,000 (four thousand pounds) for undertaking repairs/replacements to existing roof timbers for defects discovered following the stripping-off of existing slate finished roof coverings / valley gutters, box gutters etc. not specified elsewhere. This sum is only to be expended, or deducted in full or in part, at the direction/instruction of the Contract Administrator. Any replacement timbers are to be of pre-treated timber, of size and section to match existing. | ITEM | 4,000 | 00 |
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| **3.0** | **NEW SLATE COVERINGS & ASSOCIATED WORKS** |  |  |  |
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|  | New Coverings |  |  |  |
| 3.1 | Provide and install lay new ‘Roofshield’ roofing membrane or similar approved vapour permeable underlay to areas previously removed as illustrated on accompanying tender drawing 011 - BS 20/21. Fix in accordance with manufacturer’s instructions. Felt is to be neatly cut and taped at all projections through the felt. Allow for slack between rafters and fix appropriately. Provide and fix treated softwood slating battens, (50mm x 25mm nominal size) set to required gauge. Securely fix in position and leave complete ready to receive new slate covering. At eaves level, supply & securely fix eaves carrier tray obtained from Proctor Group or similar approved to ensure sufficient ventilation via eaves details. Install in accordance with manufacturer’s instructions. | ITEM |  |  |
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| 3.2 | In accordance with the ecology survey report, Annex C provisionally allow to provide and install 16nr natural grey slate Bat Vents to the front (south) facing elevations, all slates must be appropriately sized to appropriately match the new roof covering courses. All bat vented slates must be fixed in accordance with manufacturer’s instructions. | ITEM |  |  |
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| 3.3 | Provide and install new Welsh roof slates (or similar approved) to match the existing as closely as possible in terms of size, thickness and colour. Samples shall be provided for approval of the CA prior to fixing. The existing salvageable slates are to be re holed for fixing. Tenders’ shall allow for replacing 60% of the existing slates with new slates. All slates are to be laid to a true line with a 75 mm lap, each slate fixed with two 32 mm copper nails. Vertical joints of the slating are to be kept to a true line from eaves to ridge. Eaves are to have an additional course of slates.  *NB: if the contractor can salvage additional slates and reduce the % purchase of new slating, the credit value must be passed to the Contract Administrator.* | ITEM |  |  |
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| 3.4 | Securely re bed, all salvaged crested ridge tiles to a true line, on mortar (1:3 cement: sand). Provisionally allow to replace any defective ridge tiles, for tendering allow to supply and fix 30nr new angular crested ridge tiles to closely match the existing size, section and colour. | ITEM |  |  |
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|  | **LEADWORK & VALLEY DETAILS** |  |  |  |
|  | *All lead work to be undertaken in accordance with BS 6915 and the latest editions of ‘The lead Sheet Manual’ and updates published by the Lead Contractors Association. All new lead to be of appropriate size, thickness, code, with all necessary joints to suit its application.*  *NB: All areas are illustrated on accompanying tender drawing 011 - BS 20/21.* |  |  |  |
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|  | Chimney Flashings |  |  |  |
| 3.5 | Prepare existing chases to all elevations of chimneys stacks 1 – 9 ensuring the depth is at least 50mm. Supply and fix new Code 4 lead apron / back flashings, soakers, and saddle flashings to each stack. All lead is to be appropriately cut & dressed to shape, tucked in to chases and appropriately wedged into position. Using a pre-mixed (1:1:6 cement: lime: sand), repoint all junctions/chases between new lead work and masonry walls. Cart away all debris from site and leave complete. | ITEM |  |  |
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| 3.6 | Redress and repoint all existing lead work including apron, and cover flashings to the turret detail no 10. Ensure all joints are watertight on completion. Cart away all debris from site and leave complete. | ITEM |  |  |
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| 3.7 | Abutment details to Masonry Walls  Remove and replace all existing stepped / cover flashings and apron flashing between the abutments of the slated roof slopes, and the adjoining walls/upstands. Allow for re-forming all chases etc. as necessary to accommodate new roof coverings. Supply and fix new Code 4 lead apron, stepped flashings and soakers to each upstand detail. All lead is to be appropriately cut & dressed to shape, tucked in to chases and appropriately wedged into position. Using a pre-mixed (1:1:6 cement: lime: sand) damp down mortar beds and repoint all junctions/chases between new lead work and masonry walls. Cart away all debris from site and leave complete. | ITEM |  |  |
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|  | Lead Lined Corbel Gutter |  |  |  |
| 3.8 | Following removal of existing corbel gutter lead linings to the side (west) elevation brush down the existing surfaces to remove any residue. Using a pre-mixed (1:1:5 cement: lime: sand), rake out and repoint all stonework joints to the gutter line, neatly repoint and leave joints flush to stone surface. Leave ready for installation of new lining as specified below. | ITEM |  |  |
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| 3.9 | Fix new Code 5 level rolled lead sheet including chute / outlet details as necessary, and replace all side abutment flashings, all to match existing. Include for gutter expansion joints at no greater than 2-meter intervals and fix in accordance with the manufacturer’s instructions. All new lead work forming new gutter lining system with expansion jointing detail is to be obtained from Calder Lead, www.calderlead.co.uk and installed in accordance with manufacturer’s instructions. | ITEM |  |  |
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|  | Lead Lined Box Gutters |  |  |  |
| 3.10 | Following removal of existing box gutters to the front and rear elevations of the roof slopes to the front (south) elevation allow to replace decking boards and lay to an appropriate fall. Fix new Code 5 level rolled lead sheet, including stepped/welt details as necessary, and replace all side abutment flashings, all to match existing. All new lead work forming new gutter lining system with expansion jointing detail is to be obtained from Calder Lead, www.calderlead.co.uk and installed in accordance with manufacturer’s instructions. | ITEM |  |  |
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|  | Lead work to Hip Corners |  |  |  |
| 3.11 | Fix new Code 4 level rolled lead sheet forming fishtail detail, including at least 150mm wide under lap the straight joints to the slate finishes at each hip/corner. The contractor shall include for removing any rolled lead work details as necessary to facilitate the installation of the fishtail detail. Neatly dress all new lead work round each hip timber and securely fix prior to installing slate finishes over and above. | ITEM |  |  |
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|  | Valleys |  |  |  |
| 3.12 | Provide and install new Universal GRP Dry Fix Valley Troughs to each valley detail as appropriate ensuring the channel width is 125mm. Securely fix into position in accordance with manufacturer’s instructions and leave fully complete. | ITEM |  |  |
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|  | Lead Slates |  |  |  |
| 3.13 | Provide and install Code 5 level lead slates suitably sized, cut and welded into purpose-made flashings to suit various slate courses, roof slopes and pipe diameters at protruding soil vent pipe locations. Lead slates should be at least 400mm wide by 450mm in diameter and securely fixed into position and left fully complete. | ITEM |  |  |
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|  | Dormer Cheeks |  |  |  |
| 3.14 | Undertake cleaning to the lead apron details to dormer cheeks using ‘Premium G1 Lead Restorer’. Immediately after cleaning apply patination oil obtained from Calder Lead, www.calderlead.co.uk in accordance with manufacturer’s instructions. Ensure even coverage to each cheek detail and leave fully complete. | ITEM |  |  |
|  |  |  |  |  |
|  | Lead Finished Flat Roof |  |  |  |
| 3.15 | Lift and redress all rolled lead flat roof covering to flat roof area over the rear fire exit. Neatly apply ‘Leadmate’ sealant to all joints apply patination treatment upon completion. The sealant and oil are to be obtained from Calder Lead, www.calderlead.co.uk and installed in accordance with manufacturer’s instructions. Leave fully complete and weather tight. |  |  |  |
|  |  |  |  |  |
|  | Miscellaneous |  |  |  |
| 3.16 | Allow the Provisional Sum of £2,000 (two thousand pounds) for undertaking repairs/replacements to existing lead work for defects discovered when high level access is available not specified elsewhere. This sum is only to be expended, or deducted in full or in part, at the direction/instruction of the Contract Administrator. Any replacement lead work must be coded correctly and suitable replacements obtained from Calder Lead, www.calderlead.co.uk and installed in accordance with manufacturer’s instructions. | ITEM | 2,000 | 00 |
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|  | **GUTTER INSTALLATIONS AND RAINWATER GOODS** |  |  |  |
| 3.17 | Provide and install new rainwater gutters, swan neck connections and downpipes to all pitched roof slopes as previously removed. All pipework and fitting to be from Marley Aligator range (or similar approved). New rainwater gutters to be Heritage black ogee profile with circular rwp’s appropriately sized for each roof area. Include for all necessary support brackets, connectors/joints, outlets, bends, stop end caps, etc., and install in accordance with manufacturer’s instructions. Allow for all access equipment as required and on completion ensure the gutters are not holding water and watertight. Cart away all debris from site and leave complete and fully functional. | ITEM |  |  |
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| 3.18 | Provide replacement gutter sections to match in sizes and section where missing to the ground floor porch roof. Install in accordance with manufacturer’s instructions. Allow for all access equipment as required and on completion ensure the gutters are not holding water and watertight. | ITEM |  |  |
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| 3.19 | On completion of all roofing works clear out gutter lines to the satisfaction of the Contract Administrator. Cart away all debris from site. | ITEM |  |  |
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|  | **MASONARY WORKS TO CHIMNEY STACKS** |  |  |  |
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|  | Chimney Stacks No 1-9 |  |  |  |
| 3.20 | Rake out mortar joints to a minimum depth of 25mm being careful not to mark the stone facings, brush/clean out the joints to chimney stacks 1 – 9 as illustrated on accompanying tender drawing 011 - BS 20/21. Using a pre-mixed (1:1:6 cement: lime: sand), damp down mortar beds and fully re point each face ensuring compaction to each joint. Brush down all joints to finish and thoroughly clean off all areas on completion. Cart away all debris from site and leave complete. | ITEM |  |  |
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| 3.21 | Carefully hack off existing flaunching to chimneystacks 1 – 9 as illustrated on accompanying tender drawing 011 - BS 20/21. Re-flaunch all stacks complete with pre mixed (1:1:5 cement: lime: sand), ensure all chimney pots are well bedded and secure and cart away all debris from site. | ITEM |  |  |
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| 3.22 | Provide the Provisional Sum of £6,000.00 (six thousand pounds) to replace any cracked or defective chimney pots. New pots are to match existing including shape and size include birdcage insert and securely bed on new mortar. This sum is only to be expended in fully or in part upon the instructions of the Contract Administrator. | ITEM | 6,000 | 00 |
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|  | Copings |  |  |  |
| 3.23 | Carry out works to remove any loose copingstones to the external wall tops to dormer the dormer window details. Carefully remove all mortar and re-bed and repoint all joints in a (1:1:5 cement: lime: sand) to match existing. Cart away all debris from site and leave complete. | ITEM |  |  |
|  |  |  |  |  |
| 3.24 | On completion of all chimney works clean down all areas and remove all debris from site. | ITEM |  |  |
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|  | Loft Insulation |  |  |  |
| 3.25 | Supply and lay out two layers of 150mm thick loft Earthwool obtained from www.knaufinsulation.co.uk The contractor is to compact new insulation between ceiling joists and lay the top layer perpendicular to the bottom layer ensuring even coverage throughout all roof spaces. Where no loft access is available, the contractor should lay the insulation prior to completing the roofing recovering works. Existing services must be accessible and not overlaid ensuring they are accessible for future servicing and maintenance. | ITEM |  |  |
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| **4.0** | **EXTERNAL REDECORATION WORKS TO ORNATE CLOCK** |  |  |  |
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|  | Preparatory Works |  |  |  |
| 4.1 | When high-level access is provided i.e. scaffolding, carry out external decorations to all items that have been previously or are cyclically decorated to the Ornate Clock Tower. Prior to re-decorating, allow to remove vegetation, rub down and prepare all surfaces to enable decorations to be carried out to an excellent standard. All decorations, preparation, primers, undercoats and top coats to be as per manufacturers recommendations. Clean all clock faces and dials and leave fully complete. Colours to match existing. | ITEM |  |  |
|  |  |  |  |  |
|  | Undercoat |  |  |  |
| 4.2 | Apply one coat of Dulux Weathershield Undercoat to all prepared timbers in accordance with manufacturer’s instructions. Ensure no drips and leave ready to apply finishing product/coats. | ITEM |  |  |
|  |  |  |  |  |
|  | Finishing System |  |  |  |
| 4.3 | Apply two coats of Dulux Weathershield Gloss, is strict accordance with the manufacturer’s recommendations and instructions. Ensure no drips are left to adjacent surfaces. Ensure no drips and clear all debris and leave complete. | ITEM |  |  |
|  |  |  |  |  |
|  | Timber Repairs |  |  |  |
| 4.4 | Provide the Provisional Sum of £4,000.00 (four thousand pounds) to replace any rotten timberwork to the clock tower. All timbers should be of size and section to match the existing and be appropriately spliced/jointed and securely fixed prior to undertaking the external redecoration works. This sum is only to be expended, or deducted in full or in part, at the direction/instruction of the Contract Administrator. | ITEM | 4,000 | 00 |
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| **4.5** | The contractor must allow to remove and refix on completion any bird proofing, spikes or other fixtures as part of the works to the satisfaction of the Contract Administrator. |  |  |  |
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| **5.0** | **FLAT ROOFING WORKS** |  |  |  |
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|  | **FLAT ROOF AREA NO. 1, STANDARD BITUMINIUS** |  |  |  |
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|  | Stripping & Preparatory Works |  |  |  |
| 5.1 | To flat roof areas no. 1 (over the staff areas) as illustrated on accompanying tender drawing 011 - BS 20/21 (flat roofs) strip off existing coverings including bitumen felt finishes, and upstand details back to the ply sheeted roof deck. Cart away all debris from site. | ITEM |  |  |
|  |  |  |  |  |
| 5.2 | Carefully lift and remove the existing ply sheets coverings the roof members forming the flat roof construction and any other underlying layers or membranes. De nail all roof timbers and leave ready to receive new ply sheet covering specified elsewhere. Cart away all debris from site. | ITEM |  |  |
|  |  |  |  |  |
|  | Capping Details |  |  |  |
| 5.3 | Carefully remove the existing aluminium capping sheets and appropriately, build up to level wall tops at least 200mm with masonry where necessary. Prepare the parapet walls by mechanically fixing 19mm exterior grade plywood to the horizontal surface, leave ready for the installation of new capping system. Cart away all debris from site. | ITEM |  |  |
|  |  |  |  |  |
| 5.4 | Allow a provisional sum of £1,000 (one thousand pounds) for any unforeseen works to rebuild or repoint the external wall/tops, which are exposed when the felt coverings are removed. This sum is only to be expended, or deducted in full or in part, at the direction/instruction of the Contract Administrator. | ITEM | 1,000 | 00 |
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|  | **LEADWORK** |  |  |  |
|  | *All lead work to be undertaken in accordance with BS 6915 and the latest editions of ‘The lead Sheet Manual’ and updates published by the Lead Contractors Association. All new lead to be of appropriate size, thickness, code, with all necessary joints to suit its application.*  *NB: All areas are illustrated on accompanying tender drawings 011 - BS 20/21.* |  |  |  |
|  |  |  |  |  |
| 5.5 | Supply and fit new cover flashings to the perimeter of the flat roof areas and adjoining walls/upstands. Allow for re-forming all chases etc. as necessary to accommodate new lead work. Supply and fix new Code 4 lead flashings to all upstand details. All lead is to be appropriately cut & dressed to shape, tucked in to chases and appropriately wedged into position. Using a pre-mixed (1:1:6 cement: lime: sand) repoint all junctions/chases between new lead work and masonry walls. Cart away all debris from site and leave complete. | ITEM |  |  |
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|  | **JOINERY WORKS** |  |  |  |
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|  | Flat Roof Deck Installation |  |  |  |
| 5.6 | Provisionally allow provide and install new install 22mm thick WBP bonded exterior plywood circa 2500mm x 600mm boards or similar approved. All joints must be staggered across the roof areas, ensure nominal expansion gaps of 3mm should be provided between each board. Tape all joints with 200mm wide strips of Bauder R333. These can be retained in place with staples, clout nails or by mopping over with hot bitumen. Leave ready to receive new Bauder flat roof system. | ITEM |  |  |
|  |  |  |  |  |
| 5.7 | Allow a provisional sum of £2,000 (two thousand pounds) for the installation of additional firing timbers over and above structural joists to facilitate adequate falls in accordance with the Bauder specification and Preambles. This sum is only to be expended, or deducted in full or in part, at the direction/instruction of the Contract Administrator. | ITEM | 2,000 | 00 |
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|  | Infill Recess at Abutment |  |  |  |
| 5.8 | Supply and install new pre-treated 38mm x 68mm timber studwork to appropriately extend the elevation face of the link corridor down to leave flush on to the flat roof area. The contractor should ensure this detail is extended to the full length of the link corridor and faced with a vapour control layer with 22mm thick WBP bonded exterior plywood over and above. On completion, the contractor is to form a 150mm upstand detail to the flat roof system in accordance with the Bauder specification and technical details and leave fully complete. | ITEM |  |  |
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|  | **SLATING WORKS TO PORCH ROOF** |  |  |  |
| 5.9 | Remove lower slate courses of the rear slope of the porch roof to facilitate flat roof installation. On completion of the flat roofing works specified elsewhere reinstate all slates and leave watertight and complete. Allow for any new slates if necessary to replace any defective slates to complete. | ITEM |  |  |
|  |  |  |  |  |
| 5.10 | Supply and fix 40 No new Carmen roof slates (or similar approved) to replace all missing or damaged slates. New slates must match the existing as closely as possible in terms of size, thickness and colour. Samples shall be provided for approval of the CA prior to fixing. Cart away all debris from site and leave fully complete. | ITEM |  |  |
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|  | **BAUDER *‘or equivalent’* STANDARD BITUMINIUS FLAT ROOF APPLICATION.** |  |  |  |
| 5.11 | Re-felt flat roof areas No. 1, complete. Prepare and install new Bauder built up Total flat roof system with 120mm insulation, internal gutters, underlays, weathering cravats and capping system as specified in the Preambles of this Specification. Allow for extending finishes up perimeter upstands/dome roof light details and complete installations with perimeter trims to neatly finish to front edge to the top of external walls. Cart away all debris from site and leave fully complete.  *Nb: sectional roof detail is illustrated on the Bauder technical details, Annex E*. | ITEM |  |  |
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| 5.12 | Allow for lining chute/outlets and forming suitable surface water discharge details etc. via existing apertures. Leave fully complete.  *Nb : sectional detail of chute outlet is illustrated on the Bauder chute detail, Annex E.* | ITEM |  |  |
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| 5.13 | On completion of flat roof installations repoint and redress all cover flashings, brush clean the box gutters and reposition any services, cables, clear out rainwater pipes and hoppers etc. and leave all works fully complete. | ITEM |  |  |
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| 5.14 | Carefully wash down, clean the existing roof light and leave clean ensuring no suds or watermarks. | ITEM |  |  |
|  | **FLAT ROOF AREA NO 2, ROLLED LEAD FINISH WORKS** |  |  |  |
|  |  |  |  |  |
|  | Preparatory Works |  |  |  |
| 5.15 | To flat roof areas no. 2 (link corridor) as illustrated on accompanying tender drawing 011 - BS 20/21 (flat roofs) carefully remove any bird proofing or netting to the lead rolled finish flat roof area. Brush off the lead rolled finished roof coving complete and remove all vegetation/spoil from site. Reinstate all existing netting on completion of the works specified below. | ITEM |  |  |
|  |  |  |  |  |
|  | Sealant and Oil |  |  |  |
| 5.16 | Lift and redress all rolled lead flat roof covering to flat roof area complete. Neatly apply ‘Leadmate’ sealant to all joints apply patination treatment upon completion. Reform all drip moulds and leave fully secure and to required falls. The sealant and oil are to be obtained from Calder Lead, www.calderlead.co.uk and installed in accordance with manufacturer’s instructions. Leave fully complete and weather tight. | ITEM |  |  |
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|  | **FLAT ROOF AREA NO 3, BAUDER *‘or equivalent’* LIQUID SYSTEM** **FLAT ROOF APPLICATION** |  |  |  |
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|  | Preparatory Works |  |  |  |
| 5.17 | To flat roof areas no. 3 (over market hall) as illustrated on accompanying tender drawing 011 - BS 20/21 (flat roofs) lift and remove all walkway matting and any obsolete materials / stored items to facilitate application of liquid applied roof system. Cart away all debris off site. | ITEM |  |  |
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| 5.18 | Thoroughly wash via low-pressure washing, to remove all surface contamination and vegetation growth. Any areas, which have been noted to exhibit vegetative contamination, are to be treated with a fungicidal wash. This should be liberally applied to the affected surface and allowed to act for 24 hours. After this period, the residue of the vegetative contamination is to be removed via dry brushing or water jetting depending upon applicator preference and site conditions. On completion remove all debris from site and leave ready to receive new liquid coatings. | ITEM |  |  |
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|  | Staircase |  |  |  |
| 5.19 | Temporarily jack up/prop the fire escape stairway to enable the installation of the LiquiTEC Cold Roof System under the stairs feet. On completion of the roofing works reinstate the staircase as existing and leave fully functional and complete. | ITEM |  |  |
|  |  |  |  |  |
|  | Masonry Works |  |  |  |
| 5.20 | Carefully chase out the perimeter upstands at circa 600mm high and to the underside of the coping details to enable the liquid to terminate before applying new sealant. Ensure all upstand details are completed in accordance with the Bauder technical details and Preambles of this Specification. | ITEM |  |  |
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| 5.21 | Carry out works to remove any loose copingstones to the external wall tops. Carefully remove all mortar and re-bed and using a pre mixed (1:1:5 cement: lime: sand) mortar. On completion repoint all stonework joints using a pre mixed (1:1:6 cement: lime: sand) to match existing. Cart away all debris from site and leave complete. | ITEM |  |  |
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| 5.22 | Ensure the existing perimeter guardrail is securely fixed and where required provide new galvanised fixing bolts and brackets to firmly secure the rail to the full length of the roof perimeter. | ITEM |  |  |
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|  | **BAUDER LIQUITEC FLAT ROOF APPLICATION** |  |  |  |
| 5.23 | Re-cover flat roof areas no 3, on accompanying tender drawing 011 - BS 20/21. Prepare and install new Bauder LiquiTEC Cold Roof System with primers and upstand details as specified in the Preambles of this Specification. Ensure even coverage to all areas. Allow for extending finishes up perimeter walls and for the formation of a non-slip 1-metre wide walkway in contrasting finish to full length of the roof-providing an emergency assess route. Ensure all existing outlets are dressed with the coating to appropriately seal all joints and discharge surface water. Cart away all debris from site and leave fully complete.  *Nb : Liquid roof detail is illustrated on the Bauder technical details, Annex E.* | ITEM |  |  |
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| 5.24 | Provide and install leaf guards to all outlets, securely fix into each outlet and leave fully complete. |  |  |  |
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| **6.0** | **GENERAL ITEMS ON COMPLETION** |  |  |  |
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| 6.1 | On completion, leave the whole of the site and works clean and tidy, free from debris and surplus materials, in good working order and make good all disturbed surrounding construction/surfaces and damage, all to the satisfaction of the Contract Administrator. | ITEM |  |  |
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| 6.2 | Allow for providing the client with a Bauder Flat roof guarantee certificate for the property. | ITEM |  |  |
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| 6.3 | Allow a Contingency Sum of £10,000 (ten thousand pounds) only to be expended in part or full on the instruction of the Contract Administrator. | ITEM | 10,000 | 00 |
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| 6.4 | Contractor to list (& include within his price) any items not specifically mentioned above or noted in the Bauder Specifications that they feel are necessary – please raise at tender stage:-  A)  B)  C)  D)  E) | ITEM |  |  |
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|  | 1. Summary / Collection Page |  |  |  |
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