SPECIFICATION OF WORKS

For

LAWRENCE HOUSE MUSEUM, LAUNCESTON

REPAIR, MAINTENANCE AND IMPROVEMENT WORKS

Scott & Company
3 Lemon Villas
Truro TR1 2NX

CGH/7991
March 2022

Tel: 01872 263939
Fax: 01872 262299

GENERAL CONDITIONS AND PRELIMS
AND DETAILS FOR
THE PRE-CONSTRUCTION INFORMATION PACK
FOR WORK TO BE UNDERTAKEN
AT

Building Name: Lawrence House Museum, Launceston

Project: Repair, maintenance and improvement works

Client:
Contact Name: Launceston Town Council
Address: C/O Martin Cornish
martin@launceston-tc.gov.uk

Tel No: 01566 773693

Surveyors:
Christopher G Hunter B Sc (Hons) MScCHE MRICS
Joseph Davidson B Sc (Hons)
Scott & Company
3 Lemon Villas
Truro TR1 2NX

Tel: 01872 263939

Planning Permission: ~~Applicable/~~Not Applicable
Obtained **LAPP Ref No:**
Date: ……
Conditions Yes/No
Discharged: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10

Faculty Consent: Applicable/~~Not Applicable~~
Obtained Ongoing **Ref No:** ……..
Date: …….
Conditions Yes/No
Discharged: 1, 2, 3, 4, 5, 6, 7, 8, 9 10

Building Regs: Applicable/~~Not Applicable~~
Obtained NA **LABrgs Ref No:**
Date: ……
Conditions Yes/~~No~~
Discharged: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10

Builder to supply samples Yes/~~No~~

Building Listing Grade: II*
Conservation Area -Yes/~~No~~

Scheduled ancient monument in or nearby No

CDM Form F10 **Preliminary** [X] **Complete** [ ] **Sent to HSE** [ ]

Building*: ~~Domestic,~~ Commercial, ~~Ecclesiastical, Industrial, Retail, Ruin~~

Will be*: Vacant
~~Occupied~~
~~Intermittently used during project~~

Environment:** ~~Historic Garden~~
~~Living Church Yard~~
~~Bats~~
~~Owls~~
~~Rare Plants~~
~~Scheduled Ancient Monument~~
~~Urban/Heavily populated / visited~~
~~Archaeologically Sensitive~~

Licences obtained/ required for:** ~~Bats~~
~~Nesting Birds~~
~~Owls~~

Health & Safety File: **Obtained**
~~Available~~/Not Available Yes/No

Asbestos Register: **Obtained** **Survey Required**
Available~~/Not Available~~ Yes/No Yes/No

Archaeologist: ~~Yes~~/No Name: …….
Contact: ……..

Steeplejack needed: ~~Yes~~/No Name: ……..
Contact: ……..

*** Delete where inappropriate**
****Highlight where relevant**

1.00	**CONTRACT CONDITIONS**		
1.01	**Type of Contract:** JCT Intermediate Building Contract 2016 (IC 2016) The contract will be *under hand / signed as a deed* (delete one)		
1.02	**Employer** The following is to be hereinafter referred to as the Employer: Launceston Town Council C/O Martin Cornish martin@launceston-tc.gov.uk		
1.03	**Surveyors** Christopher G Hunter BSc (Hons) MSc CHE MRICS whose address/registered office is: Scott & Company, 3 Lemon Villas Truro TR1 2NX (01872 263939)		
1.04	**Form of Agreement and Conditions**		
1.05	The Agreement and Conditions will be the Joint Contract Tribunal Intermediate Building Contract 2016 together with all relevant revisions thereafter.		
1.06	Recitals, Articles and Conditions are hereinafter listed and subject to deletions, insertions and amendments as indicated:		
1.07	**Recital**		
1.08	1st Recital: The following Works are to be inserted: Repair, maintenance and improvement works At Lawrence House Museum, Launceston		
1.09	2nd Recital		
1.10	The contract drawings are numbered: S: 969-01 to 21		

1.11	3rd Recital The Employer has supplied to the Contractor: The specification (delete bill of quantities and work schedules)		
1.12	4th Recital Alternative A will apply Alternative B will be deleted		
1.13	Within Alternative A the followings words will be deleted: "Bill of Quantities/Work Schedules"		
1.14	5th Recital Construction Industry Scheme under Finance Act 2004.		
1.15	6th Recital Employer Schedule of Information Release If no Information Release, Schedule provided delete 6th Recital		
1.16	7th Recital Extent of CDM Regulations 2015		
1.17	8th Recital Division of works into sections – where applicable		
1.18	9th Recital Framework agreement – where applicable		
1.19	10th Recital Supplemental provisions		
1.20	**Articles**		
1.21	Article 1: Contractor's obligations		
1.22	Article 2: Contract sum		
1.23	Article 3: The Contract Administrator is the said Scott & Company (Cornwall) Ltd of 3 Lemon Villas, Truro, TR1 2NX		

1.24	Article 4: The Quantity Surveyor Scott & Company (Cornwall) Ltd 3 Lemon Villas Truro TR1 2NX unless separate QS employed for project		
1.25	Article 5:		
1.26	Principal Designer		
1.27	The Principal Designer for the purposes of the CDM Regulations is Scott and Company (Cornwall) Ltd, unless otherwise agreed with the assistance of:		
1.28	Or such replacement as the Employer at any time appoints to fulfil that role.		
1.29	Article 6 - Principal Contractor – insert alternative only if applicable.		
1.30	Article 7 - Adjudication		
1.31	Article 8 - Arbitration		
1.32	Article 9 - Legal Proceedings		
1.33	**Contract Particulars**		
1.34	**Part 1: General**		
1.35	5th Recital and Clause 4.6 Delete as appropriate: Employer at base date *is a contractor / is not a contractor* for the purposes of CIS		
1.36	7th Recital CDM Regulations The project *is notifiable / is not notifiable*		
1.37	8th Recital Detail sections if applicable:		

1.38	9th Recital Framework agreement if applicable Start Date: Title: Parties:		
1.39	10th Recital and Schedule 5 – Supplementary Provisions - Collaborative working *applies / does not apply* - Health and safety *applies / does not apply* - Costs savings and value improvements *apply / does not apply* - Sustainable development and environmental considerations *applies / does not apply* - Performance indicators and monitoring *applies / does not apply* - Notification and negotiation of disputes *applies / does not apply*: o Employer's nominee: o Contractor's nominee:		
1.40	Article 8 Arbitration does apply (delete "does not apply")		
1.41	1.1 - Base date: 10 days before tender return		
1.42	1.1 – BIM Protocol Where applicable: - Title: - Edition: - Date:		
1.43	1.1 - Completion Date: Completion Dates for Sections (if applicable):		

1.44	1.7 - Addresses for service of notices etc., by the parties: As per the agreement or otherwise detail below:		
1.45	2.4 - Date of Possession of Site: Date: Date of Possession of Sections where applicable:		
1.46	2.5 - Deferment of Possession of the Site: Clause 2.5 *applies / does not apply* Maximum period of deferment if less than six weeks: Deferment of Possession of Sections if applicable: Maximum period of deferment if less than six weeks:		
1.47	2.23.2 - Liquidated damage at the rate of : £ Per week Rate of liquidated damages for each Section if applicable:		
1.48	2.29 - Section Sums if applicable:		
1.49	2.30 - Rectification Period (if no other period is stated the period of 6 months): *6 / 12 Months*		
1.50	4.3 and 4.9 – Fluctuations Provision Choose one: - Schedule 4 (contribution, levy and tax fluctuations) applies - No fluctuation provision applies - The following fluctuation provision applies:		

1.51	4.7 - Advance Payment *Is / is not required* If applicable the advice payment will be: £_____ / _____% of the contract and will be paid to the contractor on _____. It will be reimbursed to the contractor in the following amounts at the following time £_____ at _____		
1.52	4.7 – Advanced Payment Bond: *Is / is not required*		
1.53	4.8.1 Interim Payments – Interim Valuation Dates First payment due date – one month after date of possession and then at the same date each month or nearest business day.		
1.54	4.9.1 – Interim payments percentage value of work: **95%** At practical completion: ***97.5% / 95%***		
1.55	4.10.4 - Listed items – uniquely identified Delete the entry if no bond is required.		
1.56	4.10.5 - Listed items – not uniquely identified Delete the entry if Clause 4.10.5 does not apply		
1.57	6.4.1 - Contractor's Public Liability insurance: injury to persons or property – the required level over cover is not less than: **£5,000,000**		
1.58	6.5.1 - Insurance – liability of Employer: *May be required / is not required* Minimum amount of indemnity if required: **£** (Not required unless it is stated that it may be required and the minimum amount of indemnity is stated)		

1.59	6.7 and Schedule 1 – Works Insurance - Insurance Option applicable: A New buildings – all risks insurance of the works by the contractor B New buildings – all risks insurance of works by the Employer C Join Names Insurance for existing structures and works in or extensions to them: Delete all but one. Where C state any special provisions that differ from prescribed clauses in Schedule 1 relating to paragraph C.1:		
1.60	6.10 and Schedule 1 – Terrorism Cover Unless otherwise stated Pool Re Cover is required – please state whether this cover is to be applied.		
1.61	6.15 - Joint Fire Code: *Applies / does not apply*		
1.62	6.18 – Joint Fire Code amendments / revisions: If 6.15 applicable state whether costs are borne by contractor or employer		
1.63	7.2.1 – Performance Bond or guarantee from bank or other approved surety: *Is required / is not required* If required the form of the bond or guarantee is set out in: Initial value: £_____ Period of validity if not specified in the form: - Date of practical completion of the works / - 2 weeks after the date of the expiry of the Rectification Period for the works / - The date for issue of the certificate of making good the works under 2.31 Reduction in value if not specified - _____%		

1.64	7.2.2 – Guarantee from Contractor's parent company *Is required / is not required* Parent company's name if applicable: The required form of the guarantee is set out in:		
1.65	7.3 Collateral Warranties If required provide details of where the parameters of the collateral warranties are set out. Delete if not required.		
1.66	8.9.2 - Period of suspension 2 months or other stated period: _____		
1.67	8.11.1.1 to 8.11.1.5 - Period of suspension 2 months or other stated period: _____		
1.68	9.2.1 – Adjudication: delete all but Royal Institute of Chartered Surveyors (unless otherwise detailed below):		
1.69	9.4.1 – Arbitration: delete all but Royal Institute of Chartered Surveyors (unless otherwise detailed below):		
1.70	**Attestation** *Under hand* *As a deed* *Other -* _____		
1.71	**Conditions**		
1.72	**Schedules**		

2.00	**MANAGEMENT & ADMINISTRATION**		
2.01	**Generally**		
2.02	Contractors to provide on and off site management and administration between main contractor, surveyor, sub-contractors, consultants and relevant statutory authorities. Include for establishment charges, overhead costs and profits.		
2.03	**Liaison**		
2.04	The contractor is to liaise with the police, local authority and other relevant bodies, or parties concerned as may be required to satisfactorily complete the contract.		
2.05	**Conditions Specific to Contract**		
2.06	Any special conditions appertaining to this contract have been included in the general clauses of this specification, within the Prelims and specifically within Sections 4 & 5 onward, to which reference should be made.		
2.07	**Materials – British Standards**		
2.08	All materials are to be of the specified quality. Where the quality is not specified, it shall be of the best available quality. Samples shall be provided to the surveyor for approval and agreement prior to ordering. Workmanship or materials with current British Standards, Agréement Certificate or Industry agreed Codes of Practice shall be complied with unless otherwise stated. All supply of materials, unless otherwise specifically agreed or specified, must be from suppliers who have complied with British Standards in the manufacture and use of materials and have current Agréement or equivalent European certification. Copies of such certification shall be provided upon request.		
2.09	**Proprietary Articles**		
2.10	Where a proprietary or trade fittings or materials are specified, they are to be stored, assembled, fixed or used in strict accordance with the manufacturer's instructions. If there is any incompatibility between materials as specified which comes to light following consultation with suppliers, the contractor shall advise the surveyor before use and/or ordering		
2.11	**Variation Orders**		
2.12	Variation Orders, contract instructions, or AIs shall be issued, as appropriate, to direct any necessary changes, additions or omissions to the contract, expenditure of contingency sums, PC or PS items without prejudice to the intent of the contract. The contractor shall produce full costed details of expenditure under Variations with relevant fully dated time sheets and supporting suppliers' invoices.		

2.13	**Daywork**		
2.14	Where authority is given for work to be executed on a daywork basis original vouchers giving full particulars of hours worked, names of craftsmen and labourers, rates of wages paid, description of work executed, materials and plant used must be forwarded to the surveyor no later than the end of the month following in which the works have been executed. The daywork sheets must be numbered in sequence and signed off by the foreman. Payment is not due until agreed by the surveyor.		
2.15	**Foreman**		
2.16	The contractor shall at all times keep a trained and competent supervising employee on site and on larger jobs is expected to have a foreman. Smaller contracts should be provided with a part-time foreman. Any instructions given to either supervising employees, who should be nominated by the contractor at the beginning of the contract, shall be deemed to have been given to the contractor, whether verbally or in writing.		
2.17	**CDM Notices**		
2.18	Details within these Preliminaries confirm contractual information as required under the CDM Regulations, 2015. The contractor must ensure that after appointment he/she is in receipt of the HSE Form F10 issued by the client, principal designer or clients CDM Advisor. The Pre-construction Information Pack will be issued by the Principal Designer or his advisor in a separate document.		
2.19	In addition, the contractor shall comply with his/her duties and requirements under the CDM regulations.		
2.20	**Building Regulation Notices**		
2.21	The contractor shall request from the surveyor relevant Building Cards or Notices with the due references, and shall be fully responsible for advising the Building Control Officers of commencement and requesting stage inspections as required. The contractor must obtain the Completion Certificate.		
2.22	**Discharge of Conditions (LBC, PP, Bldg Regs, Faculty & Archaeology)**		
2.23	The Preliminary information of the contract detailed above confirms the statutory approval status. The surveyor will be responsible for discharging any conditions. The contractor may be asked to supply certain materials for approval by the Conservation and Planning Officer. Trial pits or opening up may be required to satisfy the Building Control Officer. Allowance for archaeological attendance may be required. Copies of any relevant faculty or Listed Building consent approval forms will be provided by the surveyor and may be required to enable zero rating for VAT purposes of any specified work. All associated costs in connection with this should be included in the Preliminaries.		

2.24	**Licences**		
2.25	The contractor shall be responsible for obtaining and payment of any necessary licences in connection with dangerous structures, wild life, the use of chemicals, tipping, waste disposal, road crossings, scaffolding and statutory connection charges. Costs in connection with any other licences deemed necessary to complete the work as specified should also be included within the costings.		
2.26	**Infrastructure Charges**		
2.27	Where the contract involves new connections to or adaptations of existing services where infrastructure charges are to be levied by any of the statutory bodies, service suppliers or highways, these charges shall be included within the tender figure. Relevant connection charges for Services over and above infra structure charges shall also be included for. This may have to be in the name of the Client. Adjustment to the accounts will be made as appropriate, having allowed for such costs in the tender.		
2.28	**Services**		
2.29	Where electricity, gas, water oil or drainage is required where none exists, the contractor shall be responsible for any temporary connections, service charges and fees in connection with the use of the same. Where existing services are present, these should be fully tested and checked for compliance with current Regulations, but may be used economically by the contractors on site, subject to final ratification of the client. Upon completion any services used shall be reinstated, serviced, cleaned and left in an orderly fashion for safe use by the client upon completion.		
2.30	**Electric**		
2.31	Electrical work must be carried out by an approved member of the National Inspection Council for Electrical Installations – Installation Contracting and must conform to the latest editions of the IEE Regulations and local electric supply company. If, on small works, electrics are executed, following agreement with the contract administrator by a contractor who is not registered, this work must be certified separately by a registered contractor as being compliant at the full cost to the contractor. An unregistered electrician will only be permitted following agreement by the contract administrator. His work must be independently certified.		

2.32 **Plumbing Work**

2.33 Work on natural gas appliances can only be executed by a Gas Safe registered plumber. In addition to this works to LPG appliances required execution by a plumber with all additional certification necessary and cover should. Work on oil fired appliances must be undertaken by OFTEC registered installers . All other work must be executed by a fully registered and competent plumber who has current practice certificates. The plumber must be registered to undertake connection work to the mains water supply by South West Water, or their equivalent. No additional costs for such compliance and certification will be borne by the contract.

2.34 **Protection**

2.35 The contractor is responsible for the full protection of all electrical fittings, plant, pipe organs, historic fabric, glass, planting and landscaping, paths, roads, footpaths and fences, drains and other existing services throughout the period of contract. Proposals for protection shall be included within the tender, and agreed with the surveyor. Costs for protection shall be allowed within the Preliminary section. Upon completion include for carefully removing any protection and making good and reinstating as required.

2.36 **Lighting**

2.37 The contractor shall provide adequate lighting to allow the project to be executed safely at both high and low level. Full lighting should be provided around the site for security and safety. Scaffolding should be fully lit with warning lights where next to footpaths or roadways. For buildings that remain in occupation during the works the contractor is to allow for temporary lighting where the existing lighting, external or internal, is obscured by scaffolding or other elements necessary to undertake the works. A proposal for lighting should be developed and agreed with the contract administrator prior to installation. All wired lighting should be installed by NIC EIC accredited electricians in full accordance with all relevant codes of practice, regulations and standards. For tendering purposes the contractor is to allow for low energy fluorescent strip lights. Light levels should be sufficient to enable continued safe use of the building.

2.38 **Fences and Cordoning Off**

2.39 The contractor will be required to comply with the requirements of the insurance company and ensure that the base of the scaffolding is suitably cordoned off and protected to stop miscreants climbing up the same and gaining access to the site or building. Where possible the perimeter of the site shall be fully cordoned off. All excavations and trenches shall be suitably cordoned off and marked.

2.40	**Notices**		
2.41	The contractor shall fix notices around the site to advise the public of the danger of the construction site. Details shall include the need to wear hard hats and suitable protection, details in connection with restricted access and signing in, details in connection with contact numbers. All notices shall incorporate standard approved symbols which shall comply with current Health and Safety Legislation and Codes of Practice.		
2.42	The signs should also say "No Smoking or naked flames in uncontrolled areas".		
2.43	**Shoring and Strutting / Other Temporary Works**		
2.44	All temporary works will required designs by suitably trained persons. All opening out of the masonry shall be fully supported and strutted. Where leaning or dangerous walls require buttressing, this shall be designed by a structural engineer, who shall be engaged and paid for by the client following discussion with the surveyor unless the weakness has arisen following work incorrectly executed by the contractor. Trenching or excavation of pits shall only be undertaken following the development of an appropriate risk assessment which has been issued to and approved by the Principal Designer and the Contract Administrator. All propping and shoring work shall be undertaken with the support of a detailed method statement prepared by the contractor.		
2.45	The contractor shall provide and maintain during the execution of the works all shoring, strutting, needling and other supports and shall take all other precautions necessary to preserve the stability of the building, both new and existing, together with all other property which may be endangered or affected by the work.		
2.46	The contractor shall also protect all the same against damage and/or settlement and no part of these protected measures shall be taken down or removed until all risk of damage and/or settlement is passed.		

2.47	**Scaffold**		
2.48	Full scaffolding in accordance with the Work at Height Regulations 2005, BS EN 12811-1 and NASC Guideline TG20:13 should be employed throughout the building works. Include for hoists, protection zones to lift materials from ground level. No material should be carried up ladders. All ladders should be fixed at top and bottom. Access points between lifts shall be provided with adequate space and handrails. Scaffold shall be provided with full kick boards all round and safety rails. The scaffolding should be checked weekly by suitably trained persons and a register of that checking kept for inspection by the contract administrator. Monthly inspections by the scaffolders should be put in hand. All scaffolding shall be provided with plastic end caps where the poles abut masonry. Mechanical fixings of masonry shall only be put in hand in agreed places following consultation with the contract administrator. Should adjustments be required because scaffolding is considered not to be in compliance, these costs will not be borne by the contract.		
2.49	Where a scaffolding roof structure is required full engineering supporting details must be provided to confirm the loading. The proposal must be discussed and agreed with the contract administrator prior to execution. The scaffolding shall not rest on any ridge line, roof structure, parapet or masonry without a full and detailed assessment and agreement confirming loadings and competence. The main contractor must check the scaffolders' insurance before execution of work and throughout the period scaffolding is on site. Copies shall be provided to the Contract Administrator.		
2.50	The base of the scaffolding should be fully cordoned off with corrugated sheeting to at least 3m to stop miscreants climbing up the scaffolding. All scaffolding lifts where masonry, pointing, cleaning or conservation works are being put in hand should be provided with netting all round to stop debris falling to the ground or causing damage to the public. Where buildings have existing lightning conductor systems the scaffolding must be connected to the lightning conductor by the retained steeplejack and the earthing tested to ensure compliance to the scaffolding and the main building. A Certificate must be provided to the Contract Administrator.		
2.51	At the end of the working day all ladders and other access routes must be immobilised.		

2.52	**Temporary Building**		
2.53	Provide, erect and maintain any temporary weatherproof lock up sheds, offices, mess rooms or other temporary buildings in compliance with CDM Regulations 2015 that may be required for the performance of this contract. Keep in a clean and sanitary condition. Alter, shift and adapt from time to time as necessary. The location of all such temporary buildings to be agreed between the Contract Administrator, Client and Contractor prior to erection. Detailed requirements in accordance with CDM 2015 and the details provided in the pre-construction CDM information pack.		
2.54	**Temporary Sanitary Accommodation**		
2.55	Neither the contractor nor any of his sub contractors to use existing sanitary accommodation or washing facilities without prior consent, unless they are located within the confines of his working area. If none exists within his working area, and has not been provided by the client, he is to provide, erect and maintain suitable sanitary accommodation and washing facilities. All in compliance with CDM Regulations 2007.		
2.56	Re-locate and reinstate as necessary for the execution of the contract.		
2.57	**Telephone**		
2.58	Under no circumstances is the contractor or his sub contractors to be allowed to use the existing telephone facilities on the site. The contractor and his sub contractors are to make their own arrangements, and must either bring in a new land line if the reception for mobile phones is variable or provide mobiles. It is essential at all times to have telephone communication with the site for Health and Safety and administration reasons. The contractor shall include for an Answer phone facility.		
2.59	**First Aid and Emergency**		
2.60	The contractor must undertake a risk assessment to determine the first aid requirements and ensure that a responsible person is provided on site, who is trained in First Aid. The site shall have within it a fully equipped First Aid box, which should be kept clean and up to date throughout the contract period. In addition, the contractor must maintain an accident book registering all accidents, injuries or other events that require medical attention.		
2.61	A list must be maintained of all emergency contact telephone numbers and addresses.		

2.62 **Noise**

2.63 The contractor is to keep the noise on the site as low as can be practicably obtained. Use mufflers and acoustic enclosures if necessary. Use electric power tools and plant wherever possible with suitable circuit protection.

2.64 Unless otherwise agreed, radios or other similar devices are not to be permitted on site. To comply with BS 5228 Code of Practice for Noise Control on Demolition and Construction Sites. Ascertain the local authority's requirements in this respect. Engage a "considerate contractor's construction site policy".

2.65 **Nuisance Generally**

2.66 Prevent smoke, dust, fumes, spillage, pollution of waterways and any other forms of nuisance. Do not dump any waste in other than authorised tipping areas or skips. Comply with all reasonable requests from the public and adjoining occupiers. No burning of material is to be permitted on site. Should rats or other vermin become prevalent during the contract, take suitable action in liaison with the local authority to eradicate the same.

2.67 **Waste / Waste Management Plan**

2.68 The principal contractor will compile and implement methodologies specific to the project to ensure correct handling and disposal of waste.

2.69 **Traffic Management**

2.70 The principal contractor will compile and implement a suitably adequate Traffic Management Plan to maintain the Health, Safety and Welfare of all persons affected by his activities.

2.71 **Weather Protection**

2.72 The contractor shall provide all necessary protection to the building works. No work shall be executed prior to impending frost. Where frost does arise a suitable arrangement should be made for bringing in gentle heating equipment and for sheeting down and protecting vulnerable external elements. All work should stop when the temperature drops below 3^{o}C. Where the wind chill factor goes below this, whilst the ambient air temperature is above 3^{o}C the area worked upon must be fully protected with plastic sheeting to control the ambient air temperature within the working area.

2.73	All parts of the structure should be fully protected against rain whilst being worked upon, and for at least one week after completion, or until the fabric has suitably dried/cured. In excessively hot weather, all mortar work shall be fully damped down, misted with a spray mister and protected with damp hessian cloths in front of the pointing or mortar work. Work should stop in excessively adverse conditions. Where excessively hot temperatures are experienced or where there are drying winds, or where temperatures exceed 20°C, the area worked on should be hung with damp hessian cloths, which must be kept damp throughout the daytime and left saturated at night. The walling should be provided with a mist spray to keep the wall damp but not running.		
2.74	**Drying Out**		
2.75	The contractor is permitted to use gentle heat for drying out of internal accommodation during less clement months. By separate arrangement, if there is existing heating within the building, the existing plant may be used subject to the payment of fuel costs. The interior of buildings must be kept well vented whilst also being secure.		
2.76	**Testing**		
2.77	The contractor is to allow for costs to providing energy and attendance required for testing the plumbing and engineering installations and making all necessary arrangements with the appropriate authorities for the installation of meters and to be		
2.78	responsible for all costs until the meters are handed over.		
2.79	**Cleaning**		
2.80	Throughout the contract the site is to be kept clean and tidy. Rubbish is to be removed. No debris is to accumulate to cause either a Health or Safety hazard, nor fire risk. The site should be kept fully clean and, as far as practicable, dust free when decorators are on site.		
2.81	Upon completion all surfaces are to be cleaned down. The glass is to be fully polished inside and out throughout the working area. Any sanitary ware, fittings, tiling, marble and sheet flooring shall be fully cleaned down, washed and polished as appropriate. Any plant with filters within it, which has been used during the term of the contract shall be serviced and the filters cleaned.		
2.82	The contractor in addition is to sweep all flues, clean all gutters, pipes and sanitary fittings, flush drains and remove all rubbish and debris arising from the contract work.		

2.83	**Handover**		
2.84	Upon completion the contract administrator will issue a practical or partial completion certificate, where necessary highlighting work still to be completed. This will signify the commencement of the defects liability period. The contractor is to hand over at that stage, all keys, locks, security equipment, codes, operating manuals and details of any on-going licences or contracts, enabling the building to be used fully as intended.		
2.85	The contractor must leave the work secure against unauthorised entry.		
2.86	**Health and Safety, Operation and Maintenance Files**		
2.87	At practical completion of the project, the contractor is to compile with relevant sub contractors, a complete set of marked up working drawings, detailing services as fitted, utilising drawings provided for the tender.		
2.88	In addition full operation and maintenance manuals shall be provided detailing all matters in connection with maintenance, warranties, contracts, service requirements and Health and Safety. This document shall be passed directly to the Principal Designer / CDM Advisor, whose duty it is to complete a Health and Safety File and issue this to the client. The Practical Completion Certificate will not be issued until the PD is satisfied with the documentation received.		
2.89	**Visit the Site**		
2.90	The contractor is to visit the site before submitting his tender in order that he may obtain information as to the means of access and acquaint himself with the nature of the site. The contractor is to make himself thoroughly conversant with the nature of the work to be carried out and must allow in his tender for checking all dimensions and levels where necessary for the proper completion of the Works.		
2.91	**Incidental Work Costs** The contractor is to include for any incidental items which are necessary to complete the Works to the true intent and meaning of the Contract specification and Contract Drawings.		
2.92	**Credits**		
2.93	All scrap building materials removed from the site shall become the property of the contractor unless otherwise specified and he is to make allowance for this when making up his tender.		

2.94	**Historic Fabric and Archaeology**		
2.95	It is a categorical requirement of the contract that should any historic fabric, stone, lead, slate, timbers or buried archaeology, either above or below ground, be found that the surveyor should be informed immediately and direction sought. Where materials are removed which are marked with dates, names, references or symbols, these must be suitably recorded and set aside for the surveyor's directions for retention on site. In this context we are specifically considering marks on historic lead, stone, and glass either above or below ground.		
2.96	Similarly, should any roofing timbers or surfaces come to light that have limewash or other decorative schemes upon them, these should be similarly recorded and notice given to the surveyor. None of these items, in whatever format, shall be disturbed or damaged without prior notification and direction from the surveyor.		

3.00	**LABOUR AND WELFARE**		
3.01	**Insurances**		
3.02	Provide liability insurance and all other insurances for work people required by the National Insurance Acts and other relevant Acts, Regulations and Agreements in order to properly fulfil all contractor's duties as an employer.		
3.03	Undertake, and where relevant, insure in the employer's and jointly in the employer's name contract works as required by the JCT Contract. Evidence of insurances to be provided by the contractor.		
3.04	**Safety, Health and Welfare**		
3.05	The contractor is to prepare the Construction Phase Health and Safety plan incorporating all necessary risk assessments and method statements and other information and submit to the Principal Designer / CDM Advisor. Provide everything necessary for the safety, health and welfare of all persons on site at all times in compliance with the relevant Acts, Regulations and Bye Laws, with specific reference to the CDM Regulations 2015.		
3.06	**Safety Equipment**		
3.07	Provide hard hats, gloves and masks for all operatives and protective clothing and footwear. Spare hard hats are to be provided on site for visitors.		
3.08	**Harnesses**		
3.09	Suitable protection and, if necessary, harnesses and training in the use of, should be provided for all operatives where identified by risk assessments and method statements and in accordance with the Work at Height Regulations 2005.		
3.10	Where contractors are working over open areas on high roofs or platforms without protection below, suitable fall protection must be provided.		
3.11	**Lifting**		
3.12	The contractor shall provide suitable equipment for lifting in accordance with the Provision and Use of Work Equipment Regulations 1998 (PUWER) and the Lifting Operations and Lifting Equipment Regulations 1998 (LOLER). All bagged and other material shall be suitably sized to comply with current EEC legislation. Lifting equipment should be provided on site, including, where necessary, hoists.		

3.13 **Medical Training**

3.14 All sites shall have an operative who has had suitable medical training in First Aid. Ideally this operative should be responsible for the First Aid equipment, notices and emergency procedures.

3.15 **Smoking**

3.16 No smoking is permitted on site.

3.17 **Blow Lamps and Hot Works**

3.18 No hot works will be allowed on the site in accordance with The National Trust 'General Requirements for Building Works.' A copy of this is enclosed with the specification. Contractor to ensure a robust 'permit to work' procedure is implemented and is agreed by the Principal Designer / CDM Advisor.

3.19 **Chemicals**

3.20 All noxious chemicals or materials shall be stored in a secured pound or lock-up shed. Work with such materials must comply with the current COSHH Regulations.

3.21 **Storage**

3.22 All materials should be fully stored safely on site to enable easy access, loading and usage and to limit manual lifting. Full details of proposals for lifting of equipment to high levels should be included within the Construction Phase Health and Safety plan.

3.23 **Protection (Ref also 2.34 and 2.43)**

3.24 Full protection shall be provided to the working areas, excavations and trenching and working areas shall be so marked to avoid the risk of inadvertently falling within the same. All excavation should be shored where safe access is required for working within. Any areas where work is being executed over roof areas or above structures in which the general public will have access shall be fully protected to reduce the risk of objects falling through the same. Any scaffolding over a regularly used access way shall be fully sheeted below and around to form a plywood boxed access way for the full depth of the scaffolding up to the access door, with a raked projecting canopy beyond the scaffolding to afford further protection, all as agreed with the contract administrator on site.

3.25 **Visitors**

3.26 Visitors shall only be permitted on site by prior arrangement. All visitors must sign in and out of the working area and must be accompanied at all times. All visitors should be provided with suitable safety hats and equipment. Unless suitably trained they shall be kept well away from all working areas, excavations and moving plant.

3.27 **Security**

3.28 Safeguard the works from theft, vandalism or other damage by persons. Ensure that the security of adjacent property is not lessened due to the works activities. Prevent work people from trespassing upon adjacent properties.

3.29 **Overtime**

3.30 Give notice of proposed overtime in order that the site security and/or supervision can be arranged and clients informed where relevant.

3.31 **WELFARE**

3.32 The contractor shall provide a rest area with washing facilities in accordance with the CDM Regulations 2015. Sanitation should be provided and adequately cleansed according to use.

3.33 A list should be displayed in the rest area indicating all emergency contact numbers for minor and serious emergencies being:

1. Local Hospital
2. Accident and Emergency
3. Fire
4. Police
5. Health & Safety Executive

A book shall be kept on site in which a full record of incidents should be notified of the impending work and special access arrangements that may be required in an emergency.

3.34 **Continuing Liaison**

3.35 The principal contractor and sub-contractor's Health & Safety Plans are to be submitted to the Principal Designer / CDM Advisor in order that these may be considered prior to work being put in hand.

3.36 In the event of design changes being required due to site difficulties, the Principal Designer / CDM Advisor is to be notified immediately in order that the Health & Safety implications can be ascertained and pre-construction information pack can revised.

3.37 Tenderer's Obligations

1. All tenderers should note that, if appointed, they will be required to fulfill the role of Principal Contractor under the Construction (Design and Management) Regulations 2015 and by submitting a tender confirm their willingness to take that role.

2. In order to assess the suitability of the tenderer as a Principal Contractor, his responses to the CDM Questionnaire contained within the appendix to the Pre-construction Phase CDM Information pack **must be submitted with the tender**.

3. Tenderers should note that their key tasks as a Principal Contractor during the construction phase will be:

   a. To develop and implement his Health & Safety Plan.

   b. To be reasonably satisfied that when arranging for a subcontractor to carry out construction work, they are competent and have made adequate provision for Health & Safety.

   c. To obtain and check risk assessments and method statements from sub-contractors.

   d. To ensure the co-ordination and co-operation of contractors (particularly under the Management of Health & Safety at Work Regulations 1992).

   e. To ensure training for Health & Safety is carried out.

   f. To have appropriate communication between contractors on site for Health and Safety.

   g. To make arrangements for discussing Health & Safety matters with people on site.

   h. To allow only authorised people on site.

   i. To display notification details.

   j. To monitor Health & Safety performance.

k. To pass all technical, trade, safety and servicing information, along with as built drawings suitably marked up showing cable runs, service pipes, hazards and safety issues for the future maintenance and well being of both occupants, contractors and users of the building to the Principal Designer / CDM Advisor in the form of a suitably marked, indexed and bound file. It is a specific obligation of the principal contractor to collect and collate such information and hand it over at practical completion for assessment and approval by the Principal Designer / CDM Advisor. Two copies of the file should be provided. The file should also detail personnel, subcontractors, suppliers, agents and merchants through whom material or services have been obtained. All as detailed within the 'Information Pack' The retention will not be released until the file is complete and handed over.

4. The appointed tenderer is required to acquaint himself with all aspects of the CDM Regulations whether or not specifically highlighted here and ensure compliance with all aspects and co-operation with the Principal Designer / CDM Advisor at all stages and co-ordination with all other parties as may be appropriate.

5. The tenderer must allow for all costs that may be incurred in complying with this section and in complying with all aspects of the CDM Regulations.

4.00	**STANDARDS AND WORKMANSHIP**		
4.01	Detailed below are some guide standards which should be utilised for the purposes of tendering unless otherwise specifically specified within the documents.		
4.02	These cover areas of work as anticipated or potential work which may arise during the contract and should be referred to if instructions are given beyond the scope of the work as tendered. Inclusion of items detailed below does not infer that work specific to the use of these materials will be instructed.		
4.03	The following Schedule of Works are given as a guide to the detailed scope of the works to be executed.		
4.04	The Contractor should allow in his prices for the full extent of the work shown on the drawings and other documents issued with this Specification or implied by the descriptions which follow.		
4.05	No claims will be entertained by the Contractor's failure to appreciate the full scope of the works and price accordingly.		
4.06	The terms "provide", "lay" and "fix" are deemed to mean supplying the materials and laying and fixing. "Fix only" in relation to materials so supplied shall be deemed to include taking delivery, unloading, storing, moving to position and fixing as required.		
4.07	The Contractor will be responsible for estimating his own quantities for the work to be carried out and he will be required to submit a Schedule of Rates if his tender is being considered for acceptance.		
4.08	Where provisional quantities are given, the Contractor is required to price these items by including both a unit rate and extending the amount; these amounts will be adjusted during the running of the contract.		
4.09	All works included hereinafter are to be carried out strictly in accordance with the manufacturer's instructions. Should the Contractor wish to use alternative products then he must obtain prior approval from the Contract Administrator that the product is at least equal to the product referred to in this Specification.		
4.10	Where materials, goods or workmanship are described in this Specification as being subject to the Contract Administrator approval the Contractor is to submit to the Contract Administrator any samples and/or other evidence of the suitability of the materials or goods as the Contract Administrator may require.		

4.11	Where and to the extent that materials, goods and workmanship are fully specified in this Specification they are to be suitable for the purposes of the Works as stated or reasonable to be inferred from the Contract documents, in accordance with good building practice and standards normal within the particular trade, including the relevant provisions of the current BSI documents and Building Regulations.		
4.12	All materials used, shall, unless otherwise described, be new, sound and of a quality not less than that required by the appropriate British Standard.		
4.13	The Contractor shall locate and mark all services affected by the works including all liaison with any Statutory Authority where necessary.		
4.14	The Contractor shall ensure that all site staff are aware of the sites that have special ecological significance.		
4.15	The Contractor shall ensure that all site staff responsible for supervising and controlling the works are experienced in the type of work and that all plant and equipment used is of a suitable type and standard for the location and type of operation.		
4.16	**MORTAR MIXES**		
4.17	Mortar mixes are for bedding of stone and masonry will be either a lime mortar being 1 part of lime putty to 3 parts of sound selected approved aggregate. For the purpose of tendering the contractor shall include within his costings for the addition of gauged selected brick dust to act as a pozzolan. This should only be used if instructed on site. Full proportions will be given subject to colouring and sampling.		
4.18	An alternative, subject to instructions on site, is for the use of an hydraulic lime mortar, being St Astier and obtained from the Cornish Lime Company, Brims Park, Old Callywith Road, Bodmin PL31 2DZ, telephone 01208 79779, mixed 1part of lime to 2½ parts of sand, utilising an approved selected aggregate as below.		
4.19	**POINTING MIX**		
4.20	An approved pointing mix will be selected for the external stonework to comply with the general requirements of mortar analysis as detailed below, where two options are put forward.		
4.21	1. The pointing mix shall be a lime mortar with aggregate. The aggregate shall be a mix of locally sourced materials with Option A being 1 part of lime putty to 3 parts of sound selected approved aggregate. Again for tendering purposes include for gauging with pozzolan as above only as specifically directed by the Surveyor. The contractor must include for mature lime (minimum 3 months).		

4.22	This is to be well cut and worked either by hand or with a roller mixer to work in the aggregate/sand to form the coarse stuff. The pointing mix of mortar should stand for a minimum of 7 days under cover prior to use to rest and mature. For the purpose of the tender the contractor shall allow for 4 no samples of pointing panels of pointing to each different wall surface and masonry area to be prepared and inspected by the Surveyor and, where relevant, English Heritage for approval. Maximum number of 12 samples should be allowed in total of approximate size of half a square metre.		
4.23	2. The Alternative B mortar to be used is a hydraulic lime and mortar utilising the NHL2 St Astier unless otherwise directed. The mortar is to be obtained from the Cornish Lime Company. The lime is to be mixed with approved aggregate as detailed above and below.		
4.24	For the purpose of tendering only, and subject to selection on site, the contractor shall allow for the mortar to be a mix of CLS25 (subject to availability). Again the sand mixes and the blended sands are available from the Cornish Lime Company, Brims Park, Old Callywith Road, Bodmin PL31 2DZ, telephone 01208 79779.		
4.25	When undertaking the pointing all joints should be raked out to a depth of at least 40 mm or the equivalent of 1½ times the width of the mortar joint whichever is the greater. All loose material shall be brushed out and joints should be flushed out with water and then damped down prior to re-pointing with a mist sprayer. The pointing should be kept well off the face of the stonework which should be kept clean at all times. Pointing should be undertaken with a flexible steel pointing iron to enable sufficient spring to push the mortar into the open joints to exclusion. The finished mortar pointing shall be flush with the stonework and weather the jointing of the stones. No proud, strapped, recessed, or bucket handled joints are to be entertained. Upon completion all mortar joints should be marginally proud and then beaten/brushed back subject to the mortar utilised. Ensure that an adequate ram into the joint is achieved along with some exposure of the base aggregate. No brushing marks or smearing shall be entertained.		
4.26	The lime putty mortar (Mix A) shall be beaten back with a churn brush at the end of the day and then re-beaten the following day subject to drying and assessment. If the mortar takes a long time to carbonate or dry because of inclement conditions, a further beating back may be needed to ram the mortar into the joint and overcome any problems of hairline shrinkage cracks between the mortar and its stonework.		
4.27	The hydraulic mortar (Mortar B) will require pushing into the joint and brushing fairly soon after application. No further beating or ramming should be allowed after the initial set, which will be fairly rapid compared to the lime putty. This will only break down the bond and will not achieve an adequate key.		

4.28	When hacking out and preparing joints for re-pointing in the designated areas, the Contractor must undertake all work by hand. It is imperative that no disc cutters are allowed on site. These are not controllable and will damage the adjacent stones and bedding. The arrases and leading edges of all stonework must be respected and must not be damaged by the hacking out exercise. Only loose pointing should be removed off the face of the stone. It is likely that some of the stonework may have more resilient mortar attached to it. A full assessment with the Contract Administrator will be required. Where bed joints kiss or are so tight that to rake out the pointing would cause damage, this would not be expected to be undertaken. Again, full consultation with the Contract Administrator will be required.		
4.29	All mortar will require full protection against inclement conditions. Dry stonework should be mist sprayed before commencement and then in excessively dry, windy or hot conditions, the mortar will require spraying to slow down the carbonation. A mist spray should be used. Protection from drying winds and hot sun will be needed and provided by hanging damp hessian cloths in front of the areas that have been worked upon. Where winds are strong and accelerate drying, additional windbreak sheeting must be allowed for within the tender price and scaffolding costs.		
4.30	Where excessively inclement wind and rain or cold is experienced, the mortar must be fully protected from outwash or wetting.		
4.31	Lime mortar and lime water run off will affect the pH of surrounding stones and will kill lichens and mosses. Unless otherwise directed, these must be worked round and must not be scraped off or removed from the masonry.		
4.32	Hydraulic lime mortar must generally be used within two hours of mixing. Large batches for bedding or pointing should not generally be pre-made or stored on site. The mortar should not be knocked up for re-use if it starts to mature and go off. The mortar must be fully protected after mixing and batching and kept out of excessive weather conditions, wet or sunshine or excessive drying winds.		
4.33	We would note that hydraulic lime mortar has a different setting time dependent upon the ambient temperature and prevailing weather conditions. On occasions in the warmer summer months, hydraulic mortar will obtain an initial set as rapidly as a cement mortar. However, in colder, wetter situations the set may take in excess of one or two days. The mix therefore needs to be very carefully managed and its setting time needs to be monitored. The residual moisture in the core of the wall into which the pointing is to be placed will also affect the setting time. This has to be factored into calculations that time of use, preparation and dressing and finishing.		

4.34	When raking out the joints, large voids may be found, either within the core of the wall, or following the removal of ivy or other plant growth. These voids will need to be packed out to exclusion utilizing shard stones and gallets with the approved lime mortar, fully packing in the voids up to the pointing face.		
4.35	Where large stones abut with large mortar joints at the uneven angles of uncut, undressed stone, it could be necessary to pack out the mortar joints, both to increase the life of the pointing, and to add strength with shard stones and gallets. These should be taken from a stockpile of small stones gleaned from the site. They should be bedded in the horizontal alignment and not bedded at an angle or in the vertical. They should be cut to fit in with the void, and pointed in as they are laid.		
4.36	The pointing exercise with the large voids should allow for, where they exist, a two stage packing and pointing exercise.		
4.37	Pockets, recesses, ledges, etc, as existing and constructed for the purpose of the function of the building should be retained.		
4.38	**AGGREGATES**		
4.39	All aggregate that is approved shall be stored in a dry area fully sheeted and shall not be wet, or saturated or contaminated by ground waters, salts or agricultural effluent while stored for use.		
4.40	Unless otherwise directed the approved sand and aggregate blends shall be obtained from the Cornish Lime Company, Brims Park, Old Callywith Road, Bodmin PL31 2DZ, telephone 01208 79779 using proven approved sand blends to mix with.		
4.41	The contractor is at liberty to put forward alternatives after tendering and subject to detailed approval by the Contract Administrator		
4.42	**WALL PLASTER (LIME BASED ONLY)**		
4.43	Generally all specified lime wall plastering shall be undertaken following full raking out of all mortar and bed joints to ensure a sound key. All loose, friable and dry material shall be removed and all joints and backing shall be mist sprayed or flushed out to reduce the suction of the base against the plaster.		
4.44	The mortar mix for the wall plaster should either be Mix A, being a lime putty one part of lime putty as above to 3 parts of approved aggregate, or a NHL2 hydraulic lime of 2½ to 1. Allow for a minimum of 3 no coats unless otherwise stated with an additional coat for deep dubbing out on uneven work, damaged or make up is required to be attended to, again subject to instructions on site.		

4.45	The mortar mix for the wall plaster shall, where wholesale re-plastering is being instructed, be formed from hydraulic lime mortar, being NHL3.5 one part of lime 2½ parts of sand using CLS25. The Contractor is to apply a thrown/hurled first coat onto the wall, having undertaken the preparation to provide an initial bond. Thereafter allow for applying 1 no dubbing out first coat and 2 no further coats, nominally between 8mm and 10mm in thickness. Allow for deep dubbing out in addition for uneven work. Any loose stonework consolidation is to be executed as a separate exercise as detailed separately. Allow for damping down between coats to provide adequate bond. Full protection from the weather must be provided at all times especially where weather extremes are expected. Successive coats should be bonded following the cross keying principles using a devil float to improve the bond.		
4.46	**CEILING PLASTER (LIME PUTTY BASED ONLY)**		
4.47	All specified ceiling plaster should be applied to hazel or oak lath and shall be a 3 coat system with the first coat being 9mm of one part lime putty to 3 parts sand with hair added at the rate of 7 Kg per m^3 being fine alkali resistant goat's hair or similar approved. The first coat shall be cross keyed and the second coat apply being 6 mm of 1:3 hair reinforced coating followed by a final setting coat of 5 mm being 3 parts lime putty to 2 parts fine sand.		
4.48	Full protections will be required subject to prevailing weather conditions. The surfaces to be re-coated should be damped down to reduce suction. Allow the use of a mist sprayer.		
4.49	**LATHS**		
4.50	Laths shall be hazel or chestnut riven laths being a nominal 38 x 10 mm positioned to allow a nominal 10 mm gap for the plaster key.		
4.51	The laths shall be fixed with stainless steel 25 mm jagged shanked nails to the ceiling rafters or studs.		
4.52	All nail fixings to the timbers shall be of stainless steel. Any lap of the sheets should not be positioned so to preclude the squeezing of the first coat of plaster through the laths to enable the bond to be maintained. No loose or unsecured edges will be permitted. Where these exist they must be supported on noggins and studwork and should be included within the tenderer's costings.		
4.53	**LIME**		
4.54	Lime Mortar A or putty used on site should be fully slaked mature lime putty in excess of three months in age and must be supplied by the Cornish Lime Company unless otherwise agreed in writing. Hydraulic lime must be from fresh sources/purchases having been obtained specifically for the project and not taken from old stock. The bags must be stored on pallets, lifted away from the damp, but off the ground. They must be protected from damp and weather and stored in suitable containers to protect them from damage		

4.55	All plasters and mortars shall be mixed with the aggregate to form a coarse stuff and laid to prove for a period of 7 days prior to applications (subject to weather conditions).		
4.56	Mortar B. Hydraulic lime mortars shall be made from St Astier hydraulic lime mixed as 2½ parts of sand/aggregate to one part of lime and, unless otherwise instructed, NHL2 should be utilised.		
4.57	**AIR ENTRAINERS, WATERPROOFERS, COLOURANTS, SALT INHIBITORS**		
4.58	The Contractor is not permitted to use any modern liquid soap or chemical air entrainers, plasticizers, salt inhibitors or colourants in any of the mortar mixes, unless specifically instructed or agreed on site with the Contract Administrator.		
4.59	**GAUGING**		
4.60	No gauging of mortars shall be permitted nor mixing with cement unless specifically agreed in writing with the surveyor. Tendering as detailed above shall allow only for a brick dust pozzolan, again subject to selection and gauging and sampling.		
4.61	**LIMEWASH**		
4.62	All limewash shall be mixed from 3 months slaked lime putty and should be cut and mixed to a milky consistency. All areas for limewashing should be damped down prior to the application for the limewash for a period of no less than 24 hours being left between coats. Unless otherwise stated 7 no coats shall be tendered for.		
4.63	Where pigmentation is required to achieve a specific colour as selected by the client natural pigments will be utilised and sufficient limewash should be mixed to make sure that the room is coated in one mix application to ensure colour continuity.		
4.64	**TIMBER**		
4.65	All softwood utilised within the project shall be top quality slow grown heart wood from sustainable European growers. No African, Asian or Middle & South American imported timber will be permitted without specific consent. All softwood will be pressure impregnated preserved with a permethrine preservative. All timber applications shall be environmentally sound and approved by English Nature and shall not be harmful to bats. All cut ends of joinery shall be treated with a preservative prior to insertion within the building or within joinery repairs. Timber must be FSC or PEFC certified with appropriate Chain of Custody paperwork.		
4.66	Timber used for decking of the lead bays should be prepared, cut and laid in accordance with the carpentry section. Details concerning the treatment of the timber or otherwise are contained within this section.		

4.67	Oak utilised within the project shall be English Oak at least 4 years felled. The oak shall have been properly cut and stacked for through flow ventilation prior to being cut to size. Any oak brought to the site shall either be stacked and weighted on site or placed within the main structure immediately to overcome the problems of dimensional instability. All new oak to be sawn.		
4.68	**MASONRY**		
4.69	**Granite**		
4.70	Any granite utilised within the project will have to be approved by the Surveyor within the quarry prior to any extraction or cutting of granite to ensure a true and satisfactory match to the existing composition and colour of the granite in form and texture.		
4.71	**Killas**		
4.72	Any work on the Killas salt stone should, where possible, incorporate salvaged stone laid on its natural bed cut by hand. Stone will have to be approved and selected by the Surveyor in the quarry.		
4.73	**Pentewan Style Stone**		
4.74	Any making up of deficiencies of Pentewan style stone for crenellations and dress details will have to be approved by the Surveyor following suitable sourcing.		
4.75	**Slate Slabs**		
4.76	Any slate slabs utilised within the project will have to be approved by the Surveyor from samples or from within the quarry prior to ordering. The finished texture will have to be agreed for the situation and location and colour approved.		
4.77	**Samples**		
4.78	The Surveyor will expect to have presentation of 6 no samples of stone from different sources for the granite, killas, Pentewan and Slate stone for selection or other as selected.		
4.79	**PLAQUES**		
4.80	The contractor is to include within his costings at completion to fix to the masonry / woodwork in an agreed position at the west end of the building (if so requested) sponsors and / or funders plaques being no more than three in number requiring no more than four screws per plaque with the plaque size being no greater than 300x200mm. The plaque will be supplied by the client. Final fixing positions and methodology to be agreed between client and surveyor.		

4.81	**DESCRIPTION OF MATERIALS & WORKMANSHIP**		
4.82	The following details are given as a guide to the detailed scope of the works to be executed.		
4.83	The Contractor should allow in his prices for the full extent of the work shown on the drawings and other documents issued with this Specification or implied by the descriptions which follow.		
4.84	No claims will be entertained by the Contractor's failure to appreciate the full scope of the works and price accordingly.		
4.85	The terms "provide", "lay" and "fix" are deemed to mean supplying the materials and laying and fixing. "Fix only" in relation to materials so supplied shall be deemed to include taking delivery, unloading, storing, moving to position and fixing as required.		
4.86	Where provisional quantities are given, the Contractor is required to price these items by including both a unit rate and extending the amount; these amounts will be adjusted during the running of the contract.		
4.87	All works included hereinafter are to be carried out strictly in accordance with the manufacturer's instructions. Should the Contractor wish to use alternative products then he must obtain prior approval from the Contract Administrator that the product is at least equal to the product referred to in this Specification.		
4.88	Where materials, goods or workmanship are described in this Specification as being subject to the Contract Administrator approval the Contractor is to submit to the Contract Administrator any samples and/or other evidence of the suitability of the materials or goods as the Contract Administrator may require.		
4.89	Where and to the extent that materials, goods and workmanship are fully specified in this Specification they are to be suitable for the purposes of the Works as stated or reasonable to be inferred from the Contract documents, in accordance with good building practice and standards normal within the particular trade, including the relevant provisions of the current BSI documents and Building Regulations.		
4.90	All materials used, shall, unless otherwise described, be new, sound and of a quality not less than that required by the appropriate British Standard.		
4.91	The Contractor shall locate and mark all services affected by the works including all liaison with any Statutory Authority where necessary.		

4.92	The Contractor shall ensure that all site staff are aware of the sites that have special Ecological, Archaeological and Heritage significance and have been fenced off by the Ecological Consultant. The Contractor to immediately notify the Ecological Consultant, Archaeologist or the Contract Administrator if the fences are damaged so that a replacement fence can be erected. The Contractor to pay all costs.		
4.93	The Contractor shall ensure that all site staff responsible for supervising and controlling the works are experienced in the type of work and that all plant and equipment used is of a suitable type and standard for the location and type of operation.		

5.00	**SCOPE OF WORKS**		
5.01	The contractor is invited to price for various repair, maintenance and improvement works both externally and internally to the museum.		
5.02	The museum is located on west side of Castle Street to the north of Launceston Castle. Parking is available on the roadside to a limited number of vehicles and also within the long and short stay car parks to the east.		
5.03	Works will entail the following: - Asbestos removal and replacement - Roof repairs and improvements - Dormer window / roof repairs - Improvements to rainwater goods and disposal - Repairs to slate hanging - New flat roof to remove internal downpipe. - Skylight improvements - Joinery repairs - Pointing works - Remove impermeable paint - Works to boundary walls - Plaster repairs - Continuation of heating installation - Electrical works - Decoration		
5.04	Welfare and facilities within the museum can be used for the duration of the works along with storage to the basement floor. Subject to confirmation and agreement at the pre-contract meeting.		
5.05	Works to take place both within the museum and the flat.		

6.00	**SITE PREPARATION AND STRIPPING**		
6.01	The contractor is to allow for all necessary welfare, storage and office facilities. The exact positions of these will be determined in the pre-contract meeting.		
6.02	Care is to be undertaken to ensure that no contamination is caused to both the site. All waste must be removed as soon as possible or adequately contained to reduce the risk.		
6.03	The contractor is to allow for all necessary shoring and temporary supports as may be required during the works		
6.04	**Scaffolding and Protections**		
6.05	The contractor is to supply and install scaffolding in full accordance with the standard section of this specification.		
6.06	The scaffolding will be required to enable access to all high level work areas.		
6.07	The scaffold is to be erected by competent registered scaffolders. End caps must be provided to any poles that touch the masonry or come within 25mm. Full support is required over any uneven ground surfaces.		
6.08	All working areas shall be fully provided with kick boards and secure planking.		
6.09	The contractor shall ensure that the scaffolder undertakes the work to the approved design. Vertical sheeting will be required to all areas to prevent debris falling onto the public spaces below. Allow for suitable protection to the base of the scaffold to protect pedestrians as required.		
6.10	The scaffolder shall include for all necessary guard rails and fixed access points and be suitably guarded for ladder access. All ladder and access around the scaffolding shall be removed at the end of every working day, or made unusable as agreed by the surveyor and the Market Hall insurers. Solid timber or metal fencing 3m tall shall be fixed around the base of the scaffolding to protect the site and stop un-authorised access to the scaffolding.		
6.11	All scaffolding must be suitably marked, secured and protected. All working platforms should be provided with kick boards. All necessary working and protective lighting must be provided. No undue loading or securing to the fabric will be permitted. Any fixings required must be agreed with the surveyor before proceeding and must be to mortar joints only – no drilling of stonework will be permitted.		

6.12	Suitable security fencing must be provided to cordon off all working and storage areas, along with suitable protection and signage and lighting as appropriate for any skips which should be kept to an absolute minimum and should not be retained on site when not being used.		
6.13	The contractor will be responsible for liaising with the local authority to obtain all necessary scaffold licenses and road / pavement licenses for erecting scaffolding to the perimeter of the building.		
6.14	The scaffolder must be contracted by the contractor to check all scaffolding on a weekly basis to ensure that the scaffolding is safe and has not been adversely affected by loading or building works.		
6.15	**Stripping**		
6.16	Asbestos Removal Allow for safe disposal of asbestos as identified in Allium's report dated 29th and 30th September 2021 as attached to this document: - Cistern and therefore connected lavatory to basement WC - Ceiling to covered porch to basement yard - Ceiling panel to stair hall basement level - Panel to cupboard to cupboard in southwest corner of stair hall in basement - Cement panel used as divider between store 5 and east fire place wall cupboard - Cement panelling to outer face of walling to covered porch area in yard to basement floor - Cement panelling to underside of bay window to WW2 Room externally		

6.17	Roof Area A		
6.18	Allow for accessing roof area A which is located between the central and southern roof gables.		
6.19	Allow for stripping the slates. For the purposes of tendering allow for salvaging 50% of the slates for re-use on the roof. The remaining 50% are to be brought in as new slate to match. Exact provisions and details to be agreed on site. Remove and dispose of battens. Subject to confirmation allow for retaining the lead pitched valleys to the adjacent gable roofs.		
6.20	Allow for removing ridges. Lead to be salvaged and re-used if possible. For tendering new is to be provided.		
6.21	Roof Area B		
6.22	Allow for accessing roof area B which is located at basement floor level to the southwest corner.		
6.23	Allow for stripping the slates. For the purposes of tendering allow for salvaging 50% of the slates for re-use on the roof. The remaining 50% are to be brought in as new slate to match. Exact provisions and details to be agreed on site. Remove and dispose of battens.		
6.24	Allow for removing leadwork.		
6.25	Roof Area C		
6.26	Allow for removing the skylight glazing and all surrounding weatherings. Ensure adequate protection is provided once skylight is removed. Rafters to be retained.		
6.27	Mayor's Parlour and Exhibition Room 1		
6.28	A wallpaper conservator is to be engaged to remove the wallpaper from the area indicated on plan to the north walls of both rooms from the northwest corner up to the chimney breast of C4.		
6.29	Allow for removing the dry lining to the north walls of both rooms from the northwest corner up to the chimney breast of C4. Include for the west return up to the bay window reveal. Length 3m total to both rooms.		
6.30	Allow for lifting floor boards to Mayor's Parlour to nominal 1m into the room to access floor timbers.		
6.31	Allow for removing lath and plaster ceiling to nominal 1.2m from the north wall of Exhibition room 1.		

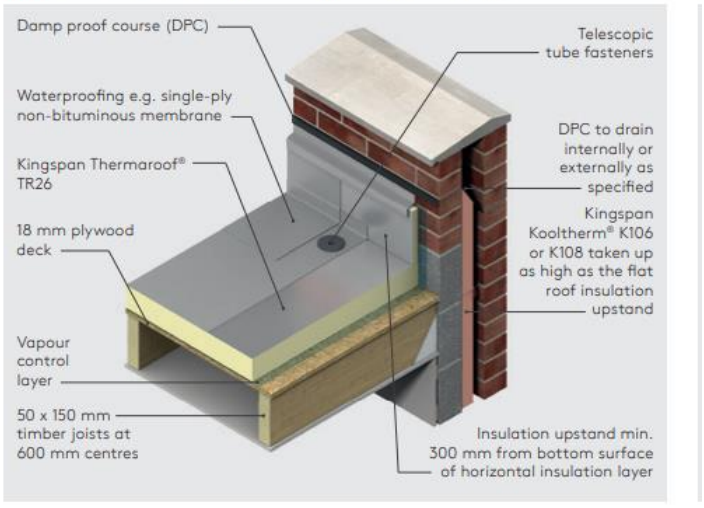
6.31	Allow for cleaning down exposed masonry to walls. Allow for maintaining exposure of the masonry surface for as long as possible during the works to allow for drying out.		

7.00	**ROOFING AND ASSOCIATED WORKS**		
7.01	**Roof Area A**		
7.02	Carpentry Allow for accessing the roof structure and undertaking timber repairs as required. Full details to be confirmed on site. For tender purposes allow for the following timber repairs: - Side plant repairs to 10no rafters. Allow for 50x75mm douglas fir timber nominal 600mm long – 2no plants per rafter secured with dog toothed connectors. - Allow for scarf repairs to 4m run of wallplate being 150x50mm douglas fir. - Allow for replacing 4no rafters nominal 50x75mm douglas fir 1.2m long.		
7.03	All subject to confirmation on site.		
7.04	Allow for Tyvek or similar breathable membrane (subject to confirmation re bats etc) to the rafters and provide 50x25mm slating battens at centres to suit slates.		
7.05	Allow for new nominal 150x25mm fascia board to walkway walling.		
7.06	Slating		
7.07	Allow for re-slating to west side using salvaged slates from existing.		
7.08	Allow for nailing the slates directly to the battens with minimum 40mm jagged shanked slating copper nails.		
7.09	The contractor must include for slate and a halves to ends. No slate fingers will be permitted. The slating must rise up to the ridge line ensuring a constant lap and exposed tail end. The upper course of slating must not present a greater exposed tail end than successive lower courses. Full dry and lap must be provided under the ridge tiles.		
7.10	No fixing with use of Grip-fix or tingles will be permitted. All slating work to be in full accordance with British Standard BS5534:2003 – Codes of Practice for Slating and Tiling (including Shingles) and BS8000 – Workmanship on Building Sites, Part 1: rev 1990 – Code of Practice for Slating and Tiling Roofs and Cladding.		

7.11	Ridges		
7.12	Allow for new lead ridge formed from code 5 lead with a 50mm lead roll to the apex onto the ridge beam. Install in full accordance with LSA guidelines with clips secured to the roll at 300-500mm centres. Turn clips over at least 25mm. Allow for min 150mm dressing down each slope and 150mm lap between lead sheet sections. Dress onto pitched valleys at either end to weather.		
7.13	**Roof Area B**		
7.14	Carpentry		
7.15	Allow for accessing the roof structure and undertaking timber repairs as required. Full details to be confirmed on site. For tender purposes allow for the following timber repairs: - Side plant repairs to 15no rafters. Allow for 50x75mm douglas fir timber nominal 600mm long – 2no plants per rafter secured with dog toothed connectors. - Allow for scarf repairs to 3m run of wallplate being 150x50mm douglas fir. - Allow for replacing 6no rafters nominal 50x75mm douglas fir 2m long.		
7.16	All subject to confirmation on site.		
7.17	Allow for Tyvek or similar breathable membrane (subject to confirmation re bats etc) to the rafters and provide 50x25mm slating battens at centres to suit slates.		
7.18	Allow for new nominal 150x25mm fascia board.		
7.19	Allow for 75mm Celotex between the rafters and allow for additional underdrawing to ceiling using 2no layers of 12.5mm fire check plasterboard.		
7.20	Slating		
7.21	Allow for re-slating using salvaged and 50% new random width diminishing course Trevillet or Delabole natural Cornish slates. To match existing.		
7.22	Allow for nailing the slates directly to the battens with minimum 40mm jagged shanked slating copper nails.		

7.23	The contractor must include for slate and a halves to ends. No slate fingers will be permitted. The slating must rise up to the ridge line ensuring a constant lap and exposed tail end. The upper course of slating must not present a greater exposed tail end than successive lower courses. Full dry and lap must be provided under the ridge tiles.		
7.24	No fixing with use of Grip-fix or tingles will be permitted. All slating work to be in full accordance with British Standard BS5534:2003 – Codes of Practice for Slating and Tiling (including Shingles) and BS8000 – Workmanship on Building Sites, Part 1: rev 1990 – Code of Practice for Slating and Tiling Roofs and Cladding.		
7.25	<u>Leadwork</u>		
7.26	Allow for new lead hip formed from code 5 lead with a 50mm lead roll to the apex onto the hip beam. Install in full accordance with LSA guidelines with clips secured to the roll at 300-500mm centres. Turn clips over at least 25mm. Allow for min 150mm dressing down each slope and 150mm lap between lead sheet sections.		
7.27	Allow for code 5 cover flashing down from the abutting parapet wall. Allow for worm dressing into the wall to a depth of nominal 50mm. Run flashing down the face of the wall and over the slate by nominal 200mm. Point to chase as required.		
7.28	Allow for lead cowl to boiler flue – subject to confirmation.		
7.29	Allow for forming a wide lead chute against the bay window wall. This is to be nominal 200mm wide set down between the rafter line as far as possible – assume 50mm with an upstand to the rafter and under the slates – as per secret gutter detailing. This is to provide a degree of separation between the slate hanging and the bay window to improve water run off in this area. Allow for forming chute from 22mm yellow pine boards with stainless steel countersunk screws.		
7.30	Allow for bearers as necessary being 50x50mm treated timber at nominal 400mm centres.		
7.31	Treat yellow pine with chalk slurry prior to laying lead to prevent oxidation.		
7.32	Allow for code 5 lead to chute with 150mm upstand against the bay window wall and the slate hanging to provide weathering to the chute. Allow for code 5 downstand from above where feasible.		

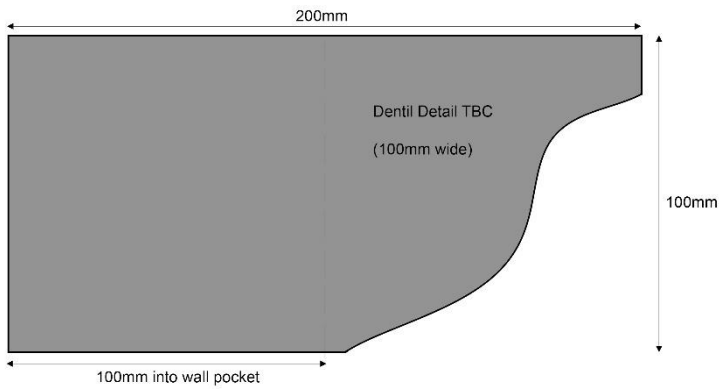
7.33	**Ridges / Upper Slates Generally**		
7.34	To all areas allow for accessing all ridges for checking and assessment. Allow for lifting lead to provide addition course of slate to both sides of the ridge. Allow for second hand Cornish Slates. Secure with 2no jagged shanked slating nails to battens at the roof apex.		
7.35	Allow for resetting lead ridges.		
7.36	For the purposes of tendering allow the provisional allowance of 10m run of new lead ridge.		
7.37	Allow for new lead ridge formed from code 5 lead with a 50mm lead roll to the apex onto the ridge beam. Install in full accordance with LSA guidelines with clips secured to the roll at 300-500mm centres. Turn clips over at least 25mm. Allow for min 150mm dressing down each slope and 150mm lap between lead sheet sections.		
7.38	**Dormers**		
7.39	The dormers generally appear sound (windows dealt with in joinery section). Allow for accessing for assessment. Some repairs to timberwork, slating or leadwork may be necessary. Allow for cleaning out all intersections and lead. For tendering allow a provisional sum of £1,500 per dormer to allow for necessary repairs. There are four dormers.	**£6,000**	
7.40	**Area D – New Flat Roof**		
7.41	Allow for the provision of a new flat roof to the east side of link roof A to remove the need for an internal valley and downpipe in this location. This will enable better protection of the building below and ensure the risk to exhibits and archives is limited.		
7.42	<u>Carpentry</u>		
7.43	Allow for option price for new lead flat roof to the east of link roof A. Allow for omitting the cost of reslating the east side of roof A as per above leaving the ceiling below but exposing the roof timbers. Slating to west side of A as per 7.01 detail.		
7.44	Allow for stripping slates to the valley sections east of roof A. These slates can be used for other slopes. Existing leadwork can be retained.		
7.45	Allow for spiking 150x50mm tanalised treated C24 joists between the structure of roof A and the opposing slope west of the main roof. Allow for locating at max 400mm centres. Joists to run east to west and to be set at a fleet of 1:80. Allow for 3no rows of full depth noggins.		

7.46	Allow for running into the roofs on the north and south sides and for running timbers against the north wall of C1.		
7.47	Include for the provision of bearers, back gutters and carpentry as detailed for working around abutments.		
7.48	Allow for forming flat roof deck using 18mm marine grade plywood to the joists. Allow for Tyvek or similar vapour control layer. Take up under slates to form upstand to north, south and east sides. Allow min 150mm vertical upstand from deck level up at the angle of the roof. Allow for tilting fillet to kick lower course of slates.		
7.49	Allow for 100mm Kingspan Thermaroof board onto the VCL.		
7.50	Allow for the provision of Sarnafil mechanically fixed single ply membrane onto the insulation. The Sarnafil should be the lead effect system and provided with imitation rolls to for 8 bays. Install in full compliance with manufacturer details. Allow for Sarnafil to pitched upstand over the tilting fillet.		
7.51	Allow for dressing Sarnafil nominal 200mm down the west face of link roof A and secure with suitable detail fixings as per manufacturer details.		
7.52	Allow for 150mm upstand against C1.		
7.53	Allow for re-fixing slates over Sarnafil over the tilting fillet.		
7.54	See example detail below (ignore the parapet wall detail and plasterboard ceiling). Timber Deck with Plasterboard Ceiling  		
7.55	Allow for dressing code 5 lead cover flashings with a worm dressing to the chimney masonry down over the Sarnafil upstand.		

7.56	**Slate Hanging and Bay Roof to Bedroom 4**		
7.57	Subject to final confirmed allow for stripping the slate hanging to the northern end gable on the west elevation to bedroom 4 etc. Retain slates for rehanging.		
7.58	Include for stripping the roof to the bay on bedroom 4. Salvage slates for re-use.		
7.59	Allow for re-laying slates to bay. Allow for Tyvek breathable membrane to the roof timbers and allow for new 25x50mm battens to suit slating. Allow for lead mitres to the hip details. Allow for re-laying slates using min 2no jagged shanked copper slating nails per slate. All slating as per details for roof A above.		
7.60	Allow for soakers to slate hanging and code 5 lead saddle to top. Dress up under slate hanging.		
7.61	Allow for removing any dilapidated battening to slate hung areas. Bring in 40% new battens to the slate hung sections. Leadwork detailing to be retained where possible.		
7.62	Allow for cleaning down walling to remove any debris.		
7.63	Allow for re-hanging existing rag slates using min 2no jagged shanked copper slating nails per slate. No grip fix is allowed.		
7.64	Make up any deficiencies from salvaged slates to roof areas A and D.		
7.65	Re dress lead as required including lead from cill to bedroom 4 window. 		

7.66	**Bay to WW2 Room**		
7.67	All for stripping slates to this bay. Salvage slates for re-use.		
7.68	Allow for re-laying slates to bay. Allow for Tyvek breathable membrane to the roof timbers and allow for new 25x50mm battens to suit slating. Allow for lead mitres to the hip details. Allow for re-laying slates using min 2no jagged shanked copper slating nails per slate. All slating as per details for roof A above. Include for an addition course of slating to bring the drip detail further out in order to protect the timberwork below.		
7.69	Existing lead to be folded back and re-dressed into place to avoid disturbance to slate hanging.		

8.00	**GENERAL CARPENTRY WORKS**		
8.01	**Basement Yard**		
8.02	To areas where asbestos stripped allow for accessing supporting timbers and undertaking all necessary repairs. For the purposes of tendering allow for the following provisional repairs:		
8.03	Ceiling to Covered Porch		
8.04	Allow for side plant repairs to 8no joist ends. Allow for nominal 175x50mm douglas fir side plants 900mm long to joist ends – allow for 2no side plants per end to sandwich existing joists. Allow for connecting with dog toothed connectors.		
8.05	Allow for the provision of 100mm Rockwool Slab between the joists prior to installation of ceiling to provide increased insulation to floor.		
8.06	Allow for the provision of 12.5mm Knauf Aquapanel Exterior Cement board. Allow for Knauf Aquapanel Exterior joint tape and exterior joint filler.		
8.07	Allow for Knauf Aquapanel Basecoat Primer, reinforcing mesh and Exterior Basecoat.		
8.08	Apply Aquapanel and coatings in full compliance with manufacturer instructions and utilise Knauf Aquapanel Rustproofed Screws as appropriate.		
8.09	Allow for suitable thin coat silicone or similar render to the Aquapanel basecoat.		
8.10	South Facing Wall to Covered Porch (below window to Train Set Room)		
8.11	Allow for scarf repairs to 8no studs. Allow for nominal 150x50mm douglas fir studs scarfs nominal 500mm long.		
8.12	Allow for the provision of 100mm Rockwool Slab between the studs prior to installation of wall boarding.		
8.13	Allow for the provision of 12.5mm Knauf Aquapanel Exterior Cement board to studs. Allow for Knauf Aquapanel Exterior joint tape and exterior joint filler.		
8.14	Allow for Knauf Aquapanel Basecoat Primer, reinforcing mesh and Exterior Basecoat.		
8.15	Apply Aquapanel and coatings in full compliance with manufacturer instructions and utilise Knauf Aquapanel Rustproofed Screws as appropriate.		

8.16	Allow for suitable thin coat silicone or similar render to the Aquapanel basecoat.		
8.17	Bay Window Soffit (below WW2 Room bay)		
8.18	Allow for side plant repairs to 8no joist ends. Allow for nominal 175x50mm douglas fir side plants 450mm long to joist ends – allow for 2no side plants per end to sandwich existing joists. Allow for connecting with dog toothed connectors.		
8.19	Allow for the provision of 100mm Rockwool Slab between the joists prior to installation of ceiling to provide increased insulation to bay floor.		
8.20	Allow for the provision of 12.5mm Knauf Aquapanel Exterior Cement board. Allow for Knauf Aquapanel Exterior joint tape and exterior joint filler.		
8.21	Allow for Knauf Aquapanel Basecoat Primer, reinforcing mesh and Exterior Basecoat.		
8.22	Apply Aquapanel and coatings in full compliance with manufacturer instructions and utilise Knauf Aquapanel Rustproofed Screws as appropriate.		
8.23	Allow for suitable thin coat silicone or similar render to the Aquapanel basecoat.		
8.24	**Front and Part South Elevation Cornice (to lead parapet gutter)**		
8.25	Allow for accessing the cornice. Allow for scraping / burning back all paint to expose bare wood. Full extent of repairs to be uncovered. Allow for the following provisional repairs.		
8.26	Allow for replacing 20no dentils using douglas fir cut to match existing size. Final size to be confirmed on site. Allow for design as below. 		

8.27	Allow for scarf repairs to outer fascia face nominal 5m long. Assume 100x50mm douglas fir timber scarfed into existing.		
8.28	Allow an additional £2,500 to cover repairs to this gutter.	**£2,500**	
8.29	**Mayor's Parlour and Exhibition Room 1**		
8.30	Joists		
8.31	Allow for cutting back rotten timber to joist ends where bearing into the masonry. Allow for scarf repairs to the floor joists where bearing into north wall.		
8.32	Allow for scarf length no less that 3 times the depth of the joists. Secure scarf joint with M10 bolts, nuts and washers either side of central timber wedges. Assume 200x75mm joists and min 600mm scarf. Allow for douglas fir timber. Cut to be provided at central point of scarf to allow for timber wedges to be hammered in to tighten.		
8.33	Extent of repairs to be agreed. Allow for scarf joints to 10no joist ends.		
8.34	Allow for re-laying existing floor boards.		
8.35	Dry Lining		
8.36	Allow for new dry lining to north and partial west walls of both rooms. Allow for 75x50mm tanalised treated studs at max 400mm centres. Allow for 2no diagonal braces up the height of the lining from the same.		
8.37	**Floors Generally (to all areas inc Flat as opened up and confirmed on site)**		
8.38	Allow for following provisional repairs.		
8.39	Allow for cutting back nominal 30no rotten timber to joist ends where bearing into the masonry. Allow for scarf repairs. Allow for scarf length no less that 3 times the depth of the joists. Secure scarf joint with M10 bolts, nuts and washers either side of central timber wedges. Assume 200x75mm joists and min 600mm scarf. Allow for douglas fir timber. Cut to be provided at central point of scarf to allow for timber wedges to be hammered in to tighten.		
8.40	Allow for re-laying existing floor boards having lifted to access.		
8.41	In addition allow for 15m run of new 200x75mm douglas fir joists bearing onto existing grounds.		

9.00	**SKYLIGHT (Roof Area C)**		
9.01	Allow for the provision of Lonsdale ThermGard ALM100/HCWF Heritage profile aluminium framing system. See https://www.lonsdalemetal.co.uk/wp-content/uploads/2021/10/ThermGard_Design_Guide_2021.pdf page 15.		
9.02	Frames to be fixed down onto the rafters and weathered in full accordance with manufacture details. Allow for end bar and verge detail system as per page 29 to each end.		
9.03	Allow for dressing down over existing base detail with glass stops, seals and draught excluders as per manufacturer details.		
9.04	Allow for the provision of 28mm toughened clear glass double glazing with argon filled cavity. Allow for Solar Control glass to limit solar gain through the skylight. Secure to glazing bars with all necessary seals etc.		
9.05	Allow for lead flashing to head as existing and bring down over the top edge of the glass nominal 150mm over the profile bars to weather. Allow for code 4 lead. Take up under the lead ridge as existing. Internally allow for concealing the lead with 20mm thick plain boards secured between the rafters. Rafters and board to be painted white as per decoration section for joinery.		

10.00	**MASONRY WORKS**		
10.01	**Chimneys**		
10.02	The chimneys have been repaired by steeplejacks. Whilst repair works have been successful there is only so much that can be achieved with limited access off ropes etc. For the purposes of tendering allow for access to inspect the chimneys in full. Allow a provisional sum of £1,800 for C1, £1,000 for C2, £1,800 for C3 and £1,800 for C4 to cover any additional repairs that may prove necessary.	**£1,800** **£1,000** **£1,800** **£1,800**	
10.03	**East Elevation**		
10.04	Allow for hacking out the cement pointing to the brickwork on the 1913 extension that runs beyond the large wall lamp northwards to the old boiler room, Tasmanian Room and Family Heritage Display Room. Allow for raking out to a depth of nominal 45mm as per standard section.		
10.05	Allow for repointing in NHL2 hydraulic lime mortar. Allow for CLS28 yellow sand from Cornish Lime Company. Undertake pointing in full accordance with standards section.		
10.06	In addition allow for patch re-pointing as above to nominal 20m2 to the brickwork on the remaining 1753 areas of the east elevation – subject to assessment and agreement on site.		
10.07	Allow for removing the paint to the killas plinth areas to take back to the stone below. Allow for scraping back and poultice to remove. Sand blasting etc is not accepted.		
10.08	Allow for re-pointing in NHL2 hydraulic lime to the whole plinth using sand as above.		
10.09	Allow for flaunching the top of the plinth with a 45 degree angle fillet formed from NHL3.5 hydraulic lime which will be painted in with mineral paint as per the rest of the plinth – see decoration section.		
10.10	Allow for removing capping lead / concrete to the cills and bring back to stonework. Allow for assessment but the aim is to reinstate the covered masonry sills. Allow for pointing in to the cill as required in NHL 2 as above.		
10.11	Allow for raking out mortar to steps to porch and down to cellar floor. Allow for re-pointing in NHL3.5 hydraulic lime with CLS 28 sand.		

10.12	**South Elevation**		
10.13	Allow for localised repointing as required following full assessment. Allow for raking out and repointing as above / standards section. Allow for NHL2 hydraulic lime mortar and CLS 28 sand. Allow area of nominal 20m2 in patches as required and as per assessment on site.		
10.14	**West Rear Elevation**		
10.15	Allow for localised repointing as required following full assessment to the killas stone lower sections of masonry. Allow for raking out and repointing as above / standards section. Allow for NHL3.5 hydraulic lime mortar and CLS 28 sand. Allow area of nominal 10m2 in patches as required and as per assessment on site.		
10.16	Allow for stripping back painted areas to the courtyard to bring back to bare masonry. Allow for making good to surfaces and re-pointing in NHL2 hydraulic lime mortar as above. Allow for decoration in mineral based paint as per decoration section.		
10.17	**Brickwork Boundary Wall – East Elevation South End**		
10.18	Allow for raking out the wall that runs from the southeast corner southwards to the front elevation. Allow for front and back including the cracked area behind the magnolia.		
10.19	Allow for repointing in NHL2 hydraulic lime as above and standards section with CLS28 sand.		
10.20	**Garden Wall to Rear Garden**		
10.21	Subject to final confirmation allow for raking out all joints to brickwork / stonework as per standards section. The contractor will need to make an assessment of the boundary wall on site. Cut back all ivy / saplings etc. Allow for re-pointing in NHL2 hydraulic lime as per standards section. Allow for CBS 28 sand.		

11.00	**PLASTERING**		
11.01	Lime plasterwork to be undertaken by The Natural Plaster Company – Jethro Marsh.		
11.02	**Lath and Plaster (Ceilings and dry lined walls)**		
11.03	Laths		
11.04	Allow for securing hazel or oak lath to studs / joists being nominal 38x10mm in size with a 10mm gap for the plaster key. Laths to be secured with stainless steel 25mm jagged shanked nails. No loose or unsecured edges will be permitted. Where these exist they must be supported on noggins and studwork and should be included within the tenderer's costings.		
11.05	Plaster		
11.06	Allow for plastering with a 3 coat system with the first coat being 9mm of one part lime putty to 3 parts sand with hair added at the rate of 7 Kg per m^3 being fine alkali resistant goat's hair or similar approved. The first coat shall be cross keyed and the second coat apply being 6 mm of 1:3 hair reinforced coating followed by a final setting coat of 5 mm being 3 parts lime putty to 2 parts fine sand.		
11.07	Locations		
11.08	Allow for plastering as above to the following areas. Include for stripping if not already detailed: a) Dry lining to Mayor's Parlour and Exhibition Rm 1 b) Stripped ceiling to Exhibition Rm 1 c) Attic floor east office d) Attic dormer cheeks to east elevation. e) Attic level stairwell to nominal area 2m2 at head of stairs. f) Walling and ceiling to Photo Gallery and nominal 2m2 to ceiling in bedroom 4. g) Bay and nominal 1m eastward to WW2 Room ceiling h) Flat Living Room Ceiling i) Additional 30m2 to other areas.		

11.09	**Plaster Ceiling Stabilisation and Support**		
11.10	Allow for access the following ceilings and allow for the provision of stainless steel screws and plaster washers in a grid pattern with nominal 450 – 600mm centres. Allow for nominal 35mm ss screws. The washers are to be recessed. Allow for lime skimming plaster to finish in readiness for decoration with mineral based paints.		
11.11	Provide strengthening to the following ceilings (subject to final confirmation and agreement): - All remaining areas to attic floor - Family Heritage Display Room - Toy Room - Tasmanian Room - Mayor's Parlour – to central crack sections – nominal 2m2 - Old Kitchen - Exhibition Rm 2 - Additional 10m2 to other areas.		

12.00 **RAINWATER DISPOSAL**

12.01 Extensive works to adjust and improve rainwater disposal from the roofs to all areas to be undertaken. Existing cast iron box gutters and downpipes to be taken down for assessment. For the purposes of tendering the assumption is that a significant number of new sections will be required to all areas in order to achieve the worst case cost – it is assumed that some salvage will be possible and a full assessment and confirmation of approach will be provided on site when full access is available.

12.02 **Cast Iron Downpipes**

12.03 Not including specific works outlined below - allow for taking down existing downpipes. Clean down all paint and strip to metal. Allow for filling where necessary. The downpipes vary to all areas. For tendering allow for 2no replacement 100mm round downpipe sections in cast iron and 2no 100mm square section downpipes. Include for replacement brackets to match existing.

12.04 **South Elevation**

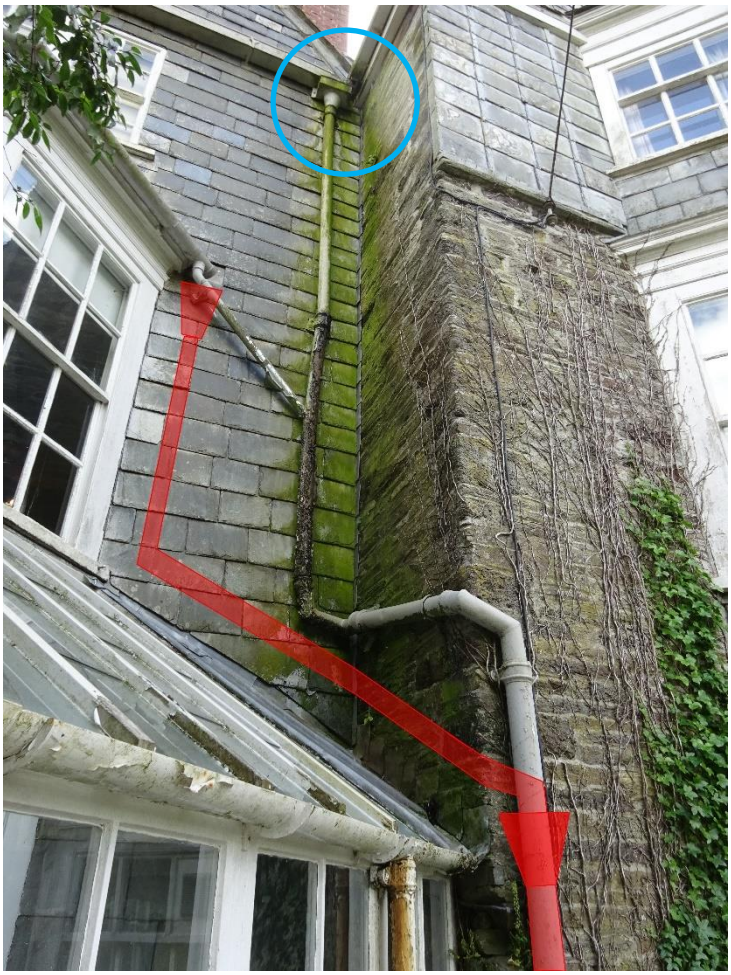
12.05 Allow for accessing the downpipe outlet from the lead lined gutter over the flat side porch.

12.06 The chute from the gutter into the guttering below is underside and this is adding to the potential for blockage. Allow for removing the existing chute and reforming the lead outlet to increase the size.

12.07 Allow for new code 5 lead chute to nominal 100mm diameter – locate in same position and dress in lead as appropriate. Chute to terminate into gutter as existing.

12.08	Install in full accordance with LSA guidelines.		
12.09	Allow for the provision of a larger hopper head to this point being a No 51 14" long by 9" deep by 6" tall cast iron hopper head from Long Bottom Foundry (see page 13 of catalogue - https://longbottomfoundry.co.uk/wp-content/uploads/2019/03/Longbottom-40-Page-Catalogue.pdf). Secure with ears to masonry. Existing pipe from gutter to run into the hopper as existing.		
12.10	Allow for the provision of code 5 lead weathering dressing into the hopper and running up the wall face to a worm dressing just below the timber cornice. This is to protect the wall from water splashing back at the various transition points.		
12.11	**Cast Iron Box Gutter**		
12.12	Box gutter sections run on the west, part south and part north elevations primarily to the rear. Generally allow for taking down all guttering for assessment. Sand back to remove paint surfaces. Allow for filling any damaged sections subject to agreement on site. For the purposes of tendering allow for the provision of 10m run of new guttering being new 6x4" sand cast moulded iron beaded box gutters from Long Bottom Foundry (note this will need to be agree with them to match the existing profile). The size is to be confirmed.		
12.13	Existing brackets to be retained and repaired. For the purposes of tendering allow for bringing in 10no new brackets. These will need to be worked up by a blacksmith the to same profile. 		
12.14	View showing box gutter profile with beaded upper edge and bracket detail.		

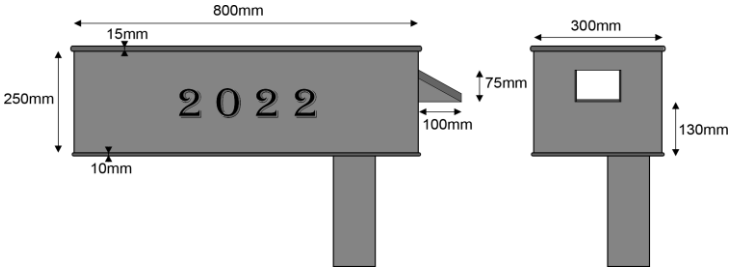
12.15	**Internal Chute**		
12.16	Subject to confirmation on roof adaptation above, allow for accessing the internal roof chute that runs from the hidden valley east of roof area A and allow for blocking off the outlet point where it runs externally. Chute to be retained subject to confirmation.		
12.17	**Rainwater Goods to Toy Room Bay**		
12.18	Allow for removing UPVC guttering to the roof of this bay window and disposing off site. Allow for the provision of new half round cast iron 100mm gutters and run to outlet point. Secure with standard half round fascia brackets.		
12.19	Allow for all necessary stops, outlets and junctions.		
12.20	Allow for diverting the downpipe from this section so it runs to the ground independently of the nearby roof drainage, which has caused severe water ingress into the walling of the Mayor's Parlour and Exhibition Room 1. Allow for the provision of a new No1 flat hopper with 4" outlet. Provide small section of downpipe from gutter into hopper head. See detail on https://longbottomfoundry.co.uk/wp-content/uploads/2019/03/Longbottom-40-Page-Catalogue.pdf page 10. Allow for securing into the walling through the slate hanging. Provide code 5 lead weathering behind as required.		
12.21	Bring pipe down to nominal 150mm above leadwork below and run at an angle above the lead to the wall of Exhibition Room 1 – turn and run at an angle to the west wall of the room before running down to ground level via a No1 hopper as per above against masonry. Prior change in direction at the corner of Exhibition Room 1 wall allow for an access pipe A.590 (see page 7 in the Longbottom Catalogue as per above). See schematic detail on photograph below.		
12.22	Allow for new 100mm diameter round downpipe from hopper into water trough as existing.		



12.23 **Outlet to Main Gutter West of CH4**

12.24 Allow for removing the undersized hopper and downpipe that runs around the Exhibition Room 1 / Mayor's Parlour. Dispose of offsite. Existing gutter arrangement to be maintained but hopper detail to be improved. Circled in blue on the photograph above.

12.25 Allow for the provision of bespoke lead hopper formed from code 5 lead. Hopper to be nominal 800mm long by 300mm wide and 250mm deep with date engraving and overflow chute. See detail below and on proposed roof plan. Subject to final confirmation and agreement. Allow for lead outlet to chute to flow into 100mm downpipe.



12.26	Allow for the provision of 100mm diameter cast iron round downpipe to replace existing. Pipe to run down the north wall of bedroom 1 and out westwards and into the hopper on the west wall of the Mayor's Parlour as per detail from bay above.		
12.27	**East Elevation inc East Porch**		
12.28	Allow for removing the low diameter pipe from the south side of the porch. Remove the pipework that runs under the porch and the small section of pipework and hopper on the south side which is no longer required following the works below.  		
12.29	Allow for forming lead chute from the south side gutter to the porch 75mm wide to fall into a new hopper below. Allow for increasing the size of the outlet on the north side with a corresponding 75mm chute.		
12.30	Allow for extending the downpipe on the north side of the porch and take down to ground level below. Allow for nominal 75mm pipework from the bend and run to a shoe. Allow for taking down the existing downpipe and hopper and sanding back and de-rusting as required before re-fixing as existing.		
12.31	Allow for lifting the slate slabs at lower ground level and digging down to form a new surface water pipe run below ground to tie into the combined sewer just outside the basement door. Nominal 1.2m run of 100mm UPVC pipework at a nominal depth of 300mm below ground surrounded in pea gravel. Reset slate slabs on top.		

12.32	On the south side allow for cutting the existing downpipe from the main roof that runs close to the porch and provide a new No42 hopper with 4" outlet – 12" wide. This is Take the outlet from the south gutter on the porch into the hopper. Allow for reinstating existing downpipe from main roof below running into hopper outlet. See detail on https://longbottomfoundry.co.uk/wp-content/uploads/2019/03/Longbottom-40-Page-Catalogue.pdf 		
12.33	Image showing position of No42 hopper. The small diameter pipe from the south side of the porch is to be removed with the outlet from the porch running into the hopper along with the main roof gutter.		
12.34	**Generally**		
12.35	All retained rainwater goods need access, levelling, sealing internally and externally, checking of gaskets and seals, outlets and stop ends whilst also allowing for full preparation and redecoration as below.		

13.00	**JOINERY**		
13.01	The contractor is to allow for accessing and allow for removing all paint from casements and box frames inside and out. All windows should be taken down to bare timber. Allow for removing sash casements / box frames as required to work on within a designated workshop space within the museum (to be agreed).		
13.02	The following standard repairs as per 'Repair of Wood Windows SPAB Technical Advice Note' (which is included following this document). Details are shown below:		

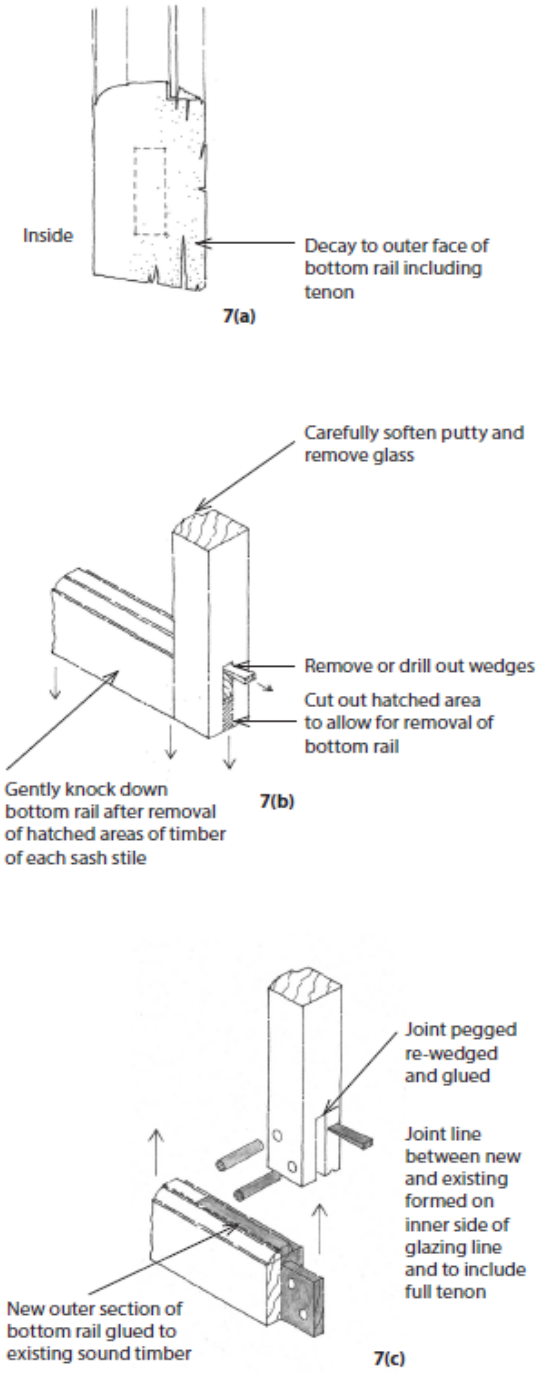


Figure 7: Bottom rail of sash: **(a)** Decay. **(b)** Dismantling. **(c)** Repair. Illustrations: SPAB

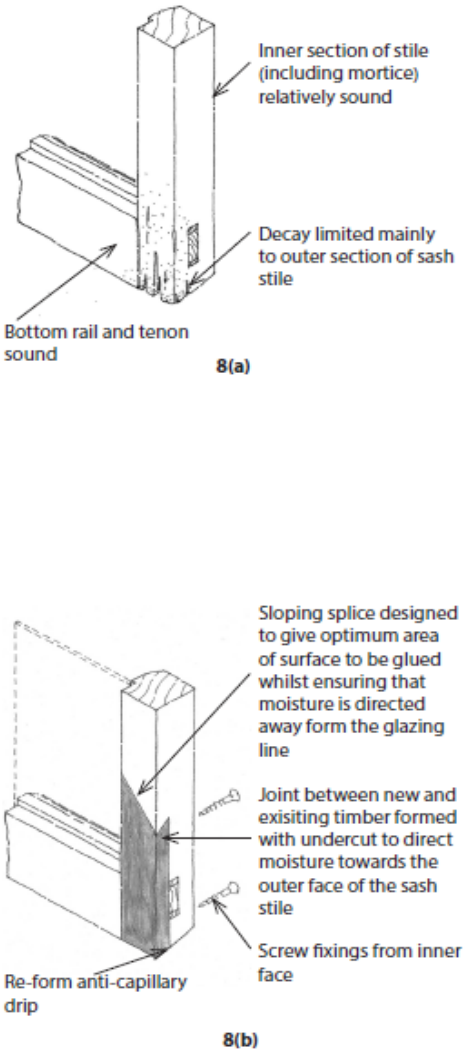


Figure 8: Sash stile (outer face): **(a)** Decay. **(b)** Repair. Illustrations: SPAB

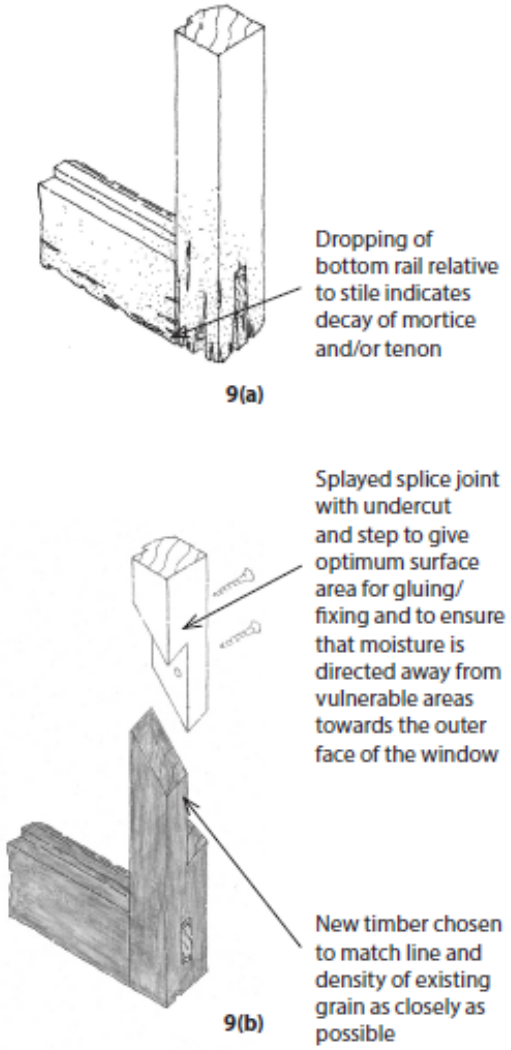


Figure 9: Bottom rail/base of sash stile: **(a)** Decay. **(b)** Repair. Illustrations: SPAB

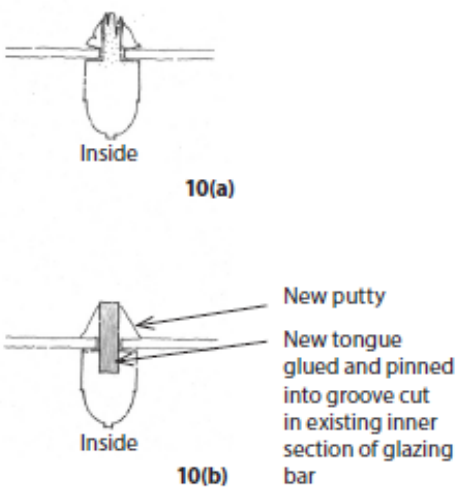


Figure 10: Tongue of glazing bar: **(a)** Decay. **(b)** Repair. Illustrations: SPAB

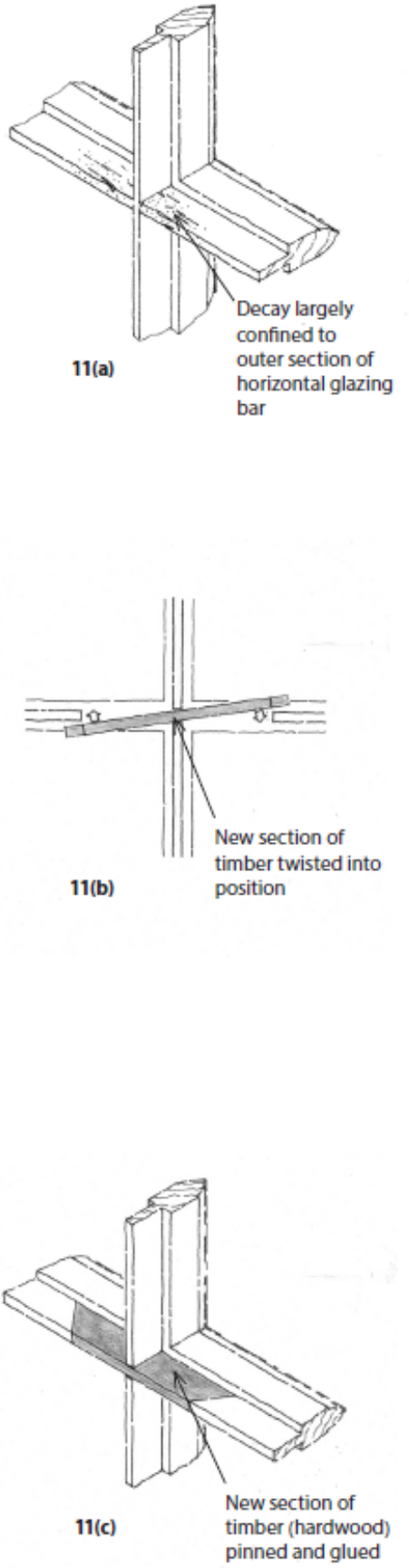


Figure 11: Tongue of glazing bar at junction of bars: **(a)** Decay. **(b)** and **(c)** Repair. Illustrations: SPAB

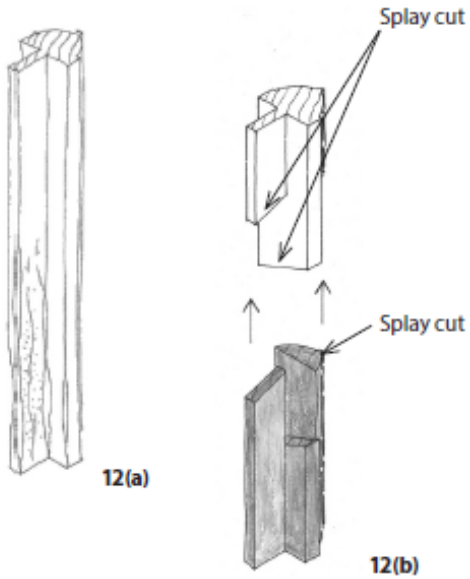
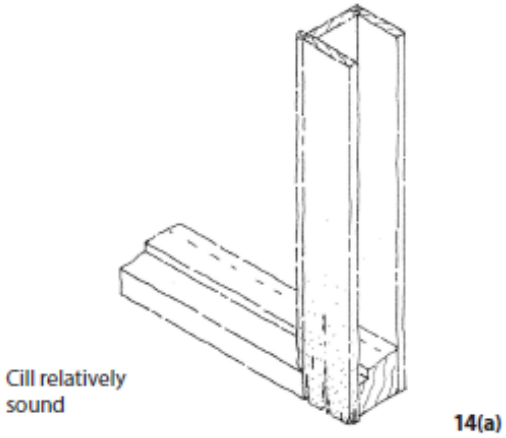


Figure 12: Glazing bar: **(a)** Decay. **(b)** Repair. Illustrations: SPAB



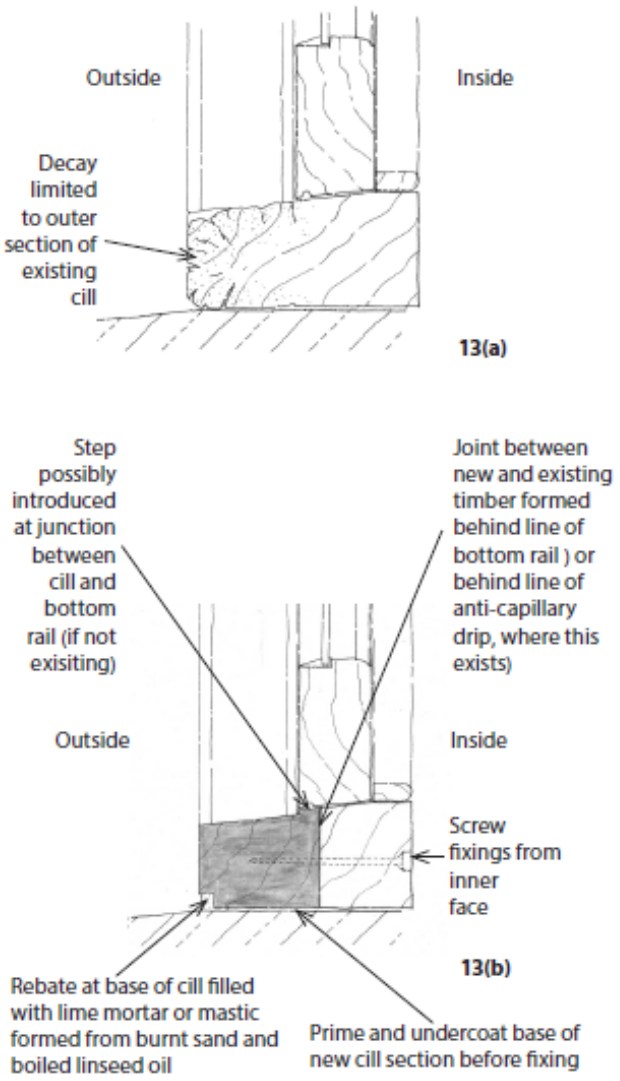


Figure 13: Cill to sash window: **(a)** Decay. **(b)** *In situ* repair. Illustrations: SPAB

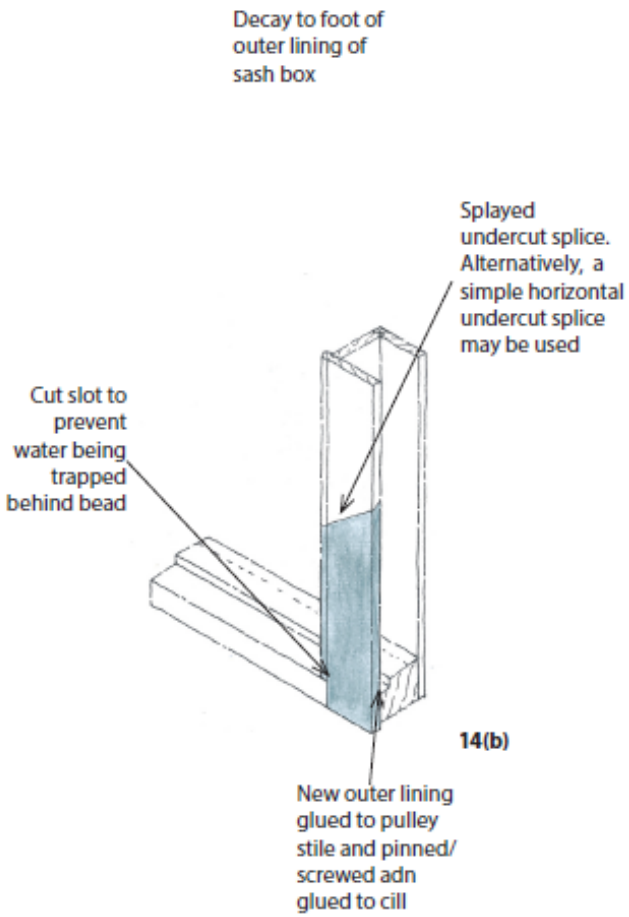


Figure 14: Outer lining of sash box: **(a)** Decay. **(b)** Repair. Illustrations: SPAB

13.04	**Windows**		
13.05	Allow for the following provisional repairs to the windows as per the references on plan. Full confirmation to be provided once full access and paint removal has been provided. No work is to happen until assessment and confirmation has been provided.		
13.06	Allow for protecting glass. New glass to be heritage single glazed panes.		
13.07	Allow for re-puttying all windows with linseed oil putty. Allow for painting putty within 2 days to reduce shrinkage.		
13.08	Allow for top quality softwood for repairs. Consider redwood joinery quality timber. Final softwood selection to be agreed on site. Allow repairs in line with the SPAB details above.		
13.09	At least one casement / sash on the window should be openable.		
13.10	<u>Cellar / Lower Ground Floor</u>		
13.11	W1: Sliding sash with 9no panes and 1/3 size top sash. Allow for cill repair as per figure 13 and scarf repair to box frame both sides nominal 300mm as per figure 14.		
13.12	W2: Sliding sash with 9no panes and 1/3 size top sash. Allow for cill repair as per figure 13 and scarf repair to box frame both sides nominal 300mm as per figure 14.		
13.13	W3: Sliding sash with 9no panes and 1/3 size top sash. Allow for cill repair as per figure 13 and scarf repair to box frame both sides nominal 300mm as per figure 14.		
13.14	Bay W4: Inner bay window. Sound		
13.15	Conservatory W5 (inc roof): The conservatory requires major repairs: - Allow for cill repairs to all window elements as per figure 13. - Allow for glazing bar repair 12 to nominal 3m run. - Allow for bottom rail repair to full width on all windows as per figure 9 with sides to nominal 300mm - To roof allow for replacing 5no glazing bars to full length. - Allow additional PS of £1,500 to cover other repairs	**£1,500**	
13.16	Bay W6: Sliding sash windows within with 9no panes each and 1/3 size top sash. Allow for cill repair as per figure 13 to one window and scarf repair to box frame both sides nominal 300mm as per figure 14.		

13.17	W7: 3 casement mullion window to lower kitchen. Allow for cill repair as per figure 13 to whole cill. Allow for scarf repairs to outer frame stiles on both sides to 400mm.		
13.18	W8: Mullion casement to rear extension lobby. Allow for cill repair as per figure 13 to whole cill.		
13.19	W9: Single casement to rear extension lobby. Allow for cill repair as per figure 13 to whole cill.		
13.20	Ground Floor		
13.21	1W1: 12no pane sliding sash windows. Allow for replacing cill as per figure 13 along with 300mm to box frames as per figure 14.		
13.22	1W2: 12no pane sliding sash windows. Allow for replacing cill as per figure 13 along with 300mm to box frames as per figure 14.		
13.23	1W3: 12no pane sliding sash windows. Allow for replacing cill as per figure 13 along with 300mm to box frames as per figure 14.		
13.24	1W4: round window sound.		
13.25	Bay 1W5: bay with 3no 12 pane sliding sash windows. Allow for replacing cills to each as per figure 13 along with 450mm to box frames as per figure 14.		
13.26	Bay 1W6: bay with 3no 12 pane sliding sash windows. Allow for replacing cills to each as per figure 13 along with 450mm to box frames as per figure 14.		
13.27	Bay 1W7: bay with 3no 12 pane sliding sash windows. Allow for replacing cills to each as per figure 13 along with 450mm to box frames as per figure 14.		
13.28	1W9 and 1W10: 4no 12 pane sliding sash windows with small 4 pane window to corner. Allow for cill replacing cills to the whole run of windows on west and south sides as per figure 13 along with 450mm to box frames as per figure 14 to all 6no box frame elements.		
13.29	Bay 1W11: bay with 3no 12 pane sliding sash windows. Allow for replacing cills to each as per figure 13 along with 450mm to box frames as per figure 14.		
13.30	1W12: Allow for replacing cill as per figure 13 along with 300mm to box frames as per figure 14.		
13.31	1W13: 15 pan window to porch. Allow for replacing cill as per figure 13 along with 450mm to box frames as per figure 14.		

13.32	1W14: 15 pan window to porch. Allow for replacing cill as per figure 13 along with 450mm to box frames as per figure 14.		
13.33	First Floor		
13.34	2W1: 9no pane sliding sash windows with 1/3rd upper sash. Allow for replacing cills to each as per figure 13 along with 300mm to box frames as per figure 14.		
13.35	2W2: 9no pane sliding sash windows with 1/3rd upper sash. Allow for replacing cills to each as per figure 13 along with 300mm to box frames as per figure 14.		
13.36	2W3: 9no pane sliding sash windows with 1/3rd upper sash. Allow for replacing cills to each as per figure 13 along with 300mm to box frames as per figure 14.		
13.37	2W4: 9no pane sliding sash windows with 1/3rd upper sash. Allow for replacing cills to each as per figure 13 along with 300mm to box frames as per figure 14.		
13.38	2W5: 3no pane sliding sash windows with 1/3rd lower sash. Allow for replacing cills to each as per figure 13 along with 300mm to box frames as per figure 14.		
13.39	2W6: 14no pane sliding sash windows with arched head detail. Allow for replacing cills to each as per figure 13 along with 400mm to box frames as per figure 14.		
13.40	2W7: 3no pane sliding sash windows with 1/3rd lower sash. Allow for replacing cills to each as per figure 13 along with 300mm to box frames as per figure 14.		
13.41	2W8: mullion sash window with 3no sliding sash 8 pane windows. Allow for replacing cills to each as per figure 13 along with 300mm to box frames (including mullions) as per figure 14.		
13.42	Bay 2W9: bay with 3no 9 pane sliding sash windows. Allow for replacing cills to each as per figure 13 along with 450mm to box frames as per figure 14.		
13.43	2W10: mullion sash window with 3no sliding sash 8 pane windows. Allow for replacing cills to each as per figure 13 along with 300mm to box frames (including mullions) as per figure 14. Allow for meeting rail replacement to all windows.		
13.44	2W11: Small sliding sash window to flat bathroom. Allow for replacing cills to each as per figure 13 along with 300mm to box frames as per figure 14.		

13.45	2W12: Small sliding sash window to flat porch. Allow for replacing cills to each as per figure 13 along with 300mm to box frames as per figure 14.		
13.46	2W13: Mullion window with 2no 8 pane sashes. Allow for replacing cills to each as per figure 13 along with 300mm to box frames (including mullions) as per figure 14.		
13.47	Attic		
13.48	3W1: 6no pane sash window to dormer with small metal fan light. Allow for accessing and removing metal fanlight and bringing in heritage glass to reinstate central pane. Allow for easing and providing sash cords to make both sashes slide.		
13.49	3W2: as per 3W1.		
13.50	3W3: as per 3W1.		
13.51	3W4: as per 3W1.		
13.52	3W5: as per 3W1.		
13.53	3W6: as per 3W1.		
13.54	3W7: allow for applying frosting film to the glass as this window will be access to the void below the new flat roof.		
13.55	Skylight SK1: allow for overhauling and easing the skylight.		
13.56	**External Doors**		
13.57	D1: Allow for easing and overhauling door. Allow for scarf repairs to base rail and side rails to 300mm. Allow for scarf repair to 500mm of frame bases.		
13.58	D2: Allow for easing and overhauling door. Allow for scarf repairs to base rail and side rails to 300mm. Allow for scarf repair to 500mm of frame bases.		
13.59	D3: Allow for easing and overhauling door. Allow for scarf repairs to base rail and side rails to 300mm. Allow for scarf repair to 500mm of frame bases.		
13.60	D4: Allow for easing and overhauling door. Allow for scarf repairs to base rail and side rails to 300mm. Allow for scarf repair to 500mm of frame bases.		
13.61	1D1: Allow for easing and overhauling door. Allow for scarf repairs to base rail and side rails to 300mm. Allow for scarf repair to 500mm of frame bases.		

13.62	1D2: Allow for easing and overhauling door. Allow for scarf repairs to base rail and side rails to 300mm. Allow for scarf repair to 500mm of frame bases.		
13.63	1D3: Allow for easing and overhauling door. Allow for scarf repairs to base rail and side rails to 300mm. Allow for scarf repair to 500mm of frame bases.		
13.64	1D5: Allow for easing and overhauling door. Allow for scarf repairs to base rail and side rails to 300mm. Allow for scarf repair to 500mm of frame bases.		
13.65	1D6: Allow for easing and overhauling door. Allow for scarf repairs to base rail and side rails to 300mm. Allow for scarf repair to 500mm of frame bases.		
13.66	1D7: Allow for easing and overhauling door. Allow for scarf repairs to base rail and side rails to 300mm. Allow for scarf repair to 500mm of frame bases.		
13.67	**Internal Doors**		
13.68	Allow for accessing and easing and oiling all ironmongery. All doors should be operational and should be latched / locked correctly.		
13.69	**Gates**		
13.70	G1: Allow for easing and overhauling gate. Allow for scarf repairs to base rail and side rails to 400mm. Allow for scarf repair to 500mm of frame bases.		
13.71	G2: Allow for easing and overhauling gate. Allow for scarf repairs to base rail and side rails to 400mm. Allow for scarf repair to 500mm of frame bases.		
13.72	**General**		
13.73	Allow an additional £3,000 to cover joinery repairs as exposed throughout the works.	**£3,000**	

14.00	**DECORATION WORKS**		
14.01	Allow for decoration to all previously glossed existing woodwork and all new windows. Woodwork is to be fully prepared and where new knotted. Thereafter apply 2 no coats of aluminium leafing primer to new wood prior to applying 2 no full coats of oil based approved undercoat and 1 no full gloss coat. Existing wood to have 2 undercoats and 1 gloss. Colours to be agreed – assume white. Allow for Dulux gloss paint. All work to be undertaken in full accordance with standard codes of practice and recommendations and manufacturer's guidance.		
14.02	All new and existing plasterboard surfaces to be provided with mist coat and two top coats of Dulux emulsion.		
14.03	Colours to be agreed.		
14.04	**External Walls**		
14.05	Allow for decoration to east elevation plinth and west elevation areas using 2no coats of Beeck Rensil. Allow for all necessary primers and etchers etc. Liaise with Cornish Lime Company over supply and surface preparation etc following repairs undertaken as per above. Allow for white.		
14.06	Allow for cleaning down hood mould over window 2W5, 2W6 and 2W7.		
14.07	**Wallpaper**		
14.08	Conservator to be allowed access to rehang wallpaper as required.		
14.09	**Lime Plaster Surfaces (as per 11.02)**		
14.10	Allow for using Beeck Insil interior mineral based paint. Colours to be confirmed. Allow for 2 coats on suitable sub base layer to newly plastered walls and ceilings. Colour to match existing but white to ceiling areas etc.		
14.11	**Decoration to Cast Iron Elements**		
14.12	All cast iron units as shall be de-scaled where necessary – includes gutter, downpipes, hoppers and brackets etc. Allow for two coats of red oxide and then 3no undercoats and 4no top coats of suitable grey paint to all units to match existing. Allow for top quality metal gloss paint. Paint the interior of the new gutters, existing and new hoppers with 1 no coat of bitumen paint on top of paint layers.		
14.13	Include for decoration of the railings to the east elevation as per the above to match existing colours.		

14.14	**Internal Painted Walls and Ceilings (not inc newly plastered surfaces)**		
14.15	The degree of internal decoration generally is to be agreed. For tendering allow for decoration to the whole cellar (walls and ceilings) and to all walls and ceilings in the first floor Flat (bedroom 1, bedroom 2, bedroom 3, box room, kitchen, corridor, lobby, living room and bathroom. Allow for using Beeck Insil interior mineral based paint. Colours to be confirmed. Allow for 2 coats on suitable sub base layer.		
14.16	In addition allow for decoration to a further 100m2 internally to wall surfaces.		

15.00	**ELECTRICAL WORKS**		
15.01	All electrical work is to be undertaken by a contractor registered with NICEIC or similarly appropriate certification scheme and all work should be done in full accordance with the current IEE Regulations and current codes of practice and recommendations. All wiring should be concealed in chases or behind boarding wherever possible. All wiring should be fully circuit protected.		
15.02	The main contractor is to allow for attendance on the electrician and the electrician is to make the contractor fully aware of all chases, boxing and enclosures etc that are required in good time.		
15.03	The electrician is to undertake a full electrical test on the building as part of the contract. Any defects identified are to be outlined and then costed to take place within the contract. For tendering purposes allow a provisional sum of £6,500 to cover any works required.	**£6,500**	
15.04	Allow a further provisional sum of £4,000 to cover any upgrades / additions that may be necessary to the system.	**£4,000**	

16.00 **HEATING SYSTEM**

16.01 Plumber to be registered GAS SAFE installer with all necessary accreditation. Include for all liaison with Wales and West Utilities and allow for road licences etc.

16.02 The contractor is invited to quote for the installation of a gas fired boiler and wet heating system to the above. The contractor is to cost for the whole building on all floors, but is allow for phasing with the priority being the basement floor, which currently has no heating.

16.03 The specification is a performance specification. The contractor must choose the fittings and plant to achieve the heating throughout the building based on the parameters below. Note given space restrictions and the location of displays etc, achieving full BTU for each room will not be feasible. A degree of flexibility in the system will be necessary and it is anticipated that some rooms will not be heated to the correct level.

16.04 The building is grade II* listed so service and pipe runs are important.

16.05 **Gas Supply**

16.06 Allow for liaising with Wales and West Utilities for the provision of new gas feed. Pipe to run from the road on the east side of the building through the side gate location and down the gravel path on the south side of the building for connection into the rear lean to lavatory block, where the boilers are to be located. Allow for all necessary meters and licences etc.

16.07 Assumed feed route

16.08	**Boilers**		
16.09	Allow for the provision of at least 2no new gas boilers to service the heating system. Make and model down to the contractor. Boilers can be located anywhere within the lavatory lean-to extension to the west side of the basement. See drawing excerpt below – red zone area where we see the boilers can be located. Assume fluing through the roof, but again subject to contractor preference in line with regulatory requirements. Allow for sizing accordingly.		
16.10	Allow for all necessary pumps, controls and fittings. Include for electrical connections and thermostats etc. Contractor to recommend zoning and to a degree this can be further controlled by thermostatic radiator valves. Each floor should be separately zoned and assume individual zoning to corridor / hallway spaces and rooms separate to those communication routes.		
16.11	**Pipework**		
16.12	Where possible all pipework should be in copper. Surface fixed pipework is recommended secured with suitable saddle brackets. Options for decorative ducting to be discussed. It is assumed that pipework to be painted in with the wall. Allow for lagging where required although this should not be within the main body of the building where on show. Size accordingly.		
16.13	Pipe routes subject to suggestion and to be agreed. Contractor to recommend pipe routes between and throughout floors as necessary.		
16.14	**Heat Emitters**		
16.15	Allow for the provision of column radiators throughout. Contractor to recommend brand / sizing.		
16.16	Radiators to be white finished with thermostatic valves as required.		
16.17	Please provide details of radiators recommended.		
16.18	**Commissioning**		
16.19	System to be installed and fully commissioned regardless of extent of work undertaken. Provide all necessary certification and allow for undertaking full demonstration of the system to end user		
16.20	**Hot Water**		
16.21	Existing under / over sink electric water heaters to be retained. Allow provisional sum of £1,000 to deal with any works.	**£1,000**	

17.00	**COMPLETION**		
17.01	Completion certificates must be provided for the electrical and plumbing systems.		
17.02	The contractor must provide all information for the Health and Safety pack, which must include all instruction manuals and details for fittings and fixtures installed. The material must be provided in the correct content and format as required by the CDM co-ordinator.		
17.03	Ensure the site is fully, cleared, cleaned and prepared for hand over. Wash down all glazing. Clean and clear all affected external areas.		
17.04	Ensure all drains have been rodded through and are clear and running correctly.		

	SUMMARY SHEET		
1.	Preliminaries		
2.	Management and Administration		
3.	Labour and Welfare		
4.	Standards		
5.	Scope of Works		
6.	Site Preparation		
7.	Roofing and Associated Works		
8.	General Carpentry Works		
9.	Skylight		
10.	Masonry Works		
11.	Plastering		
12.	Rainwater Goods		
13.	Joinery		
14.	Decoration Works		
15.	Electrical Works		
16.	Heating System		
17.	Completion		
	Total		
	Contingencies @ 10%		
	GRAND TOTAL		

Daywork Rates: **Tradesmen:**

Labourers:

Percentage Costs on: **Materials:**

Labour

Percentage Costs for Prelims:

Company: …….

Address: ……

……

Signed …… Date: ……..