

CONSTRUCTION SPECIFICATION
FOR
ALTERATIONS TO TOWER BASE
AT
ST. PETER'S CHURCH, WELFORD ON AVON



**HAWKES EDWARDS
CHARTERED ARCHITECTS
1 OLD TOWN
STRATFORD-UPON-AVON
WARWICKSHIRE
CV37 6BG**

**DATE: April 2020
REF: C128**

REVISION A - Oct 2020

Names of Parties

The Employer shall mean : The Incumbent, PCC and Churchwardens
St Peter's Church
Church Lane
Welford
Stratford upon Avon
Warwickshire
CV37 8EN

The Architect shall mean : Hawkes Edwards
1 Old Town
Stratford upon Avon
Warwickshire
CV37 6BG
Tel No: 01789-298877
Email: sarah@hawkesedwards.com

The Principle Designer shall mean : Hawkes Edwards

The Contractor shall mean : The individual or Firm or Company undertaking the works and shall include the legal personal representatives of such individual or of the persons comprising such Firm or Company and the permitted Assignees of such individual or Firm or Company.

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1.00 Preliminaries

Form of Contract

Minor Works Building Contract: 2016

The Agreement to be entered into by the employer and the contractor will be undertaken using the Minor Works Building Contract, 2016 Edition, issued by the Joint Contracts Tribunal and published by the Royal Institute of British Architects.

RECITALS:

2nd Recital "the drawings numbered/**listed in**....." DELETE "listed in"

3rd Recital "....with a copy of the priced Specification or **Work Schedules or provided a Schedule of Rates**"

DELETE "...Work Schedule or provide a Schedule of Rates"

ARTICLES:

Article 4 The Principal Designer for the purposes of the CDM Regulations will be the Architect

Article 5 The Principal Contractor for the purposes of the CDM Regulations will be the main contractor

CONDITIONS:

Article 7 DELETE "...do not apply"

Clause 2.2

Date of commencement to be agreed

Date of completion to be agreed

Clause 2.8

Damages for non-completion N/A

Clause 2.10

Rectification period 6 months

Clause 4.3

Payments due prior to practical completion 95%

Payments due after practical completion 97.5%

The Site

St Peters Church is Grade I Listed, located on Church Street in Welford on Avon.

There is no parking on site.

The Contractor's attention is drawn to the nature of the site and he will be expected to perform the works in an appropriate manner. In particular, the playing of radios, and the like, is not to be permitted. Smoking on site is strictly prohibited.

Contractors are to visit the site, to acquaint themselves with the nature of the work and the facilities and/or difficulties which may be encountered, as no subsequent claim for lack of knowledge will be entertained.

Toilet and washing facilities are available on site and may be used by the Contractor.

Water supply is available on site and may be used by the Contractor.

Power - Electricity from the Employer's mains may be used for the Works.

The site must be kept in a clean and tidy state at all times.

Health and Safety

The following risks are, or may be, present during the works and the Contractor must ascertain for himself any information he may require to ensure the safety of all persons living on or visiting site and all persons involved with the works, and the Contractor must ensure all relevant safety procedures are in operation whilst the works are carried out, complying with all current enactments, regulations and working rules.

- The church will remain open throughout the works.
- The works involve loose debris at height.

Treasure Trove

Any treasure trove or items of antiquity found on the site must be handed to the Employer.

Availability of the Works

The successful Contractor would be required to discuss and agree with the Architect / Employer, a suitable programme for satisfactory completion of the works.

Contract

The works will be carried out under the terms and conditions of the current edition of the JCT Minor Works Building Contract, a copy of which may be examined at the offices of the Architect.

Tenders

The Employer does not bind himself to accept the lowest or any tender, nor to reimburse the Contractor for any expenses involved in preparation of the tender. Any error in tendering cannot be rectified. If errors are discovered before a Contract is entered into, the Contractor will be given the opportunity to stand by his tender or withdraw.

Sub-Contractors

Should the Contractor wish to employ any sub-contractor, they will be employed as a domestic contractor for the duration of the works,

Statutory Obligations

The Contractor shall allow for making all payments and discharging all obligations in respect of plant, tools, vehicles, safety, health, welfare, insurance, holidays, and the like, and compliance with all Statutory Regulations.

Safety, Health and Welfare

For a comprehensive description please refer to the pre-construction phase health and safety plan.

During the works the Contractor must ensure the safety of all persons living on or visiting site and involved with the works, and the contractor must ensure all relevant safety procedures are in operation whilst the works are carried out, complying with all current enactments, CDM regulations and working rules relating to the health, safety and welfare of workpeople.

Redundant Materials and Cleaning

Redundant materials and debris arising from the works are to be removed at intervals, as necessary, and on completion, and the site kept in a clean and tidy state at all times.

Salvage

All salvageable materials are to be credited to the Employer and should not be removed from site without the consent of the Architect.

Equipment and Materials

The Contractor is to provide all materials and equipment, including scaffolding, necessary for the satisfactory execution of the works.

Generally, where not stated explicitly, the contractor shall include for all necessary nails, screws, clips, plugs, tiles, brackets, battens, spacers, seals, sealants, mastics, ancillary additives and fittings, connections, etc., as may be required.

Workmanship

Materials and workmanship are to be the best of their respective kinds. Unless hereinafter specified to the contrary, all materials are to comply with the latest relevant British Standard Specification. The Architect will require the replacement of any section not considered to be satisfactory.

The work is to be carried out in accordance with the Specification, Schedule and sketch details as issued. Any discrepancies should be notified immediately to the architect for a decision.

Samples

Samples of materials the contractor intends to use in the works are to be submitted to the architect at his request.

Standards

All materials and workmanship shall comply with the current edition of the relevant British Standard Specification and/or Code of Practice applicable to the operation involved.

Ensure that the whole quantity of each product and material required to complete the work is of consistent kind, size, quality and overall appearance. Handle, store and fix products with care to ensure that they are not damaged when incorporated into the work.

Protection

The buildings are of architectural and historic interest, and the Contractor is responsible for the protection of all adjacent parts of the building and the furnishing therein.

The Contractor will be called upon to make good any damage to the building, or its contents, resulting from failure of the above.

The premises will be occupied during the works and the contractor is to take adequate precautions to fully protect the buildings, their contents, and occupants and all persons passing in the vicinity insofar as his works are concerned. The Contractor will be required to make good, at his own expense, any damage or injury which may arise as a result of non-compliance with this clause.

Making Good

Making good to disturbed surfaces or fitting up to existing materials at the perimeter of the works is implicit in all instructions, and the tender sum is to allow for these items, which shall match and line through with the surfaces involved.

Water for the Works

Water is available on site.

Variations

Variations to the specified works may only be carried out on the instructions of the Architect and must be priced in fair relationship to the Contract Sum. To this end, the Contractor will be required to provide a priced copy of the Schedule before work commences on site.

Price Adjustments

Rates for variations and provisional items must bear close and reasonable relation to general rates, as allowed for in the tender. Such items will be subject to measurement and to submission to the architect for verification and approval.

Lighting and Power for the Works

Power is available on site and may be used by the contractor.

Contingencies

A sum for contingencies will be included as detailed in the Schedule of Works. This will be deducted in part or whole as directed by the Architect.

Provisional Sums

Profits, overheads, etc., for Provisional Sums will be deemed to have been included in the overall Tender Figure. Provisional Sums are estimates of work deemed necessary at basic rate and are lump sums which may be subject to adjustment in accordance with M.W. (R2) Contract, Clause 3.7, for all items pending final agreement with the architect.

Insurance

The Contractor is to maintain current insurances as required under the terms of the Contract and is to produce Certificates of Insurance when requested.

Programme

The Contractor shall furnish the Architect with a programme of work to completion.

Signboard

The Contractor is to erect a signboard to accommodate his details (if required), the architects' details.

Smoking

Smoking on site is prohibited

2.00 Specification

2.01 Drawings

These specification notes must be read in conjunction with the following drawings:

Architect
Hawkes Edwards drawing numbered: -
C77/03D

2.02 Demolitions

Controlled demolitions to be carried out to facilitate construction of new elements. Health and Safety procedures in accordance with CDM Regulations to be adopted by Contractor to ensure the integrity of the structure is retained during the works and to ensure safe working on site.

2.03 Scaffolding and Temporary Works

All scaffolding is to comply with all relevant current British Standards and legislation'

General

It is vital that all scaffolding erected in or around an historic building should be so designed and erected as to avoid causing any damage to the historic fabric. Where historic fabric is concerned, any damage is permanent, resulting often in the loss of significant detail or the scarring of an important façade. Scaffolding and temporary works must be capable of being constructed without the need for major intervention into historic fabric.

The following factors must be taken into consideration when designing and erecting scaffolding for access or for shoring

The scaffold is to be structurally self-supporting and independent of the building fabric. The design of the scaffolding is to meet all current codes of practice and health and safety legislation.

The scaffolding should be designed by specialist sub-contractor to ensure adequacy for loading from masonry works, etc. The scaffold is to be maintained during the contract and taken down on the satisfactory completion of the works.

Foundations

It is important that foundations are sound, stable and level. Where the foundation is onto soil, ensure there are no cavities by ramming the soil thoroughly and checking for the existence of basements outside the periphery of the ground floor, or below ground water storage tanks. Timber sole plates should be used with minimum dimensions of 230mm x 40mm, and where the ground is not firm, or the scaffolding is to remain in excess of 6 months, railway sleepers or other similar sized timbers should be used. Piles of bricks should not be used. Ensure the foundation and the

prop set on it are concentric, to avoid inducing bending moments. No excavation for foundations is allowed without prior consultation with the Architect, as there may be a need for archaeological supervision.

Where scaffolding is to be erected above ground with the foundations onto a roof or floor structure, it must be ensured that the structure can safely bear the weight and that the floor or roof finishes are not damaged.

Vertical Members

Ensure that all vertical members are in fact vertical as out of plumb vertical members produce eccentric loadings within the individual members and consequently horizontal forces in the structure as a whole. Stagger joints in the vertical members (standards) so that joints in adjacent standards do not occur in the same lift.

Ledgers and Transoms

These components are to be horizontal. Ledgers should be clamped to the standards with right angle couplers. The Joints in the ledgers are to be staggered and made with sleeve couplers. Transoms are to be fixed to the ledgers with right angle couplers or putlog clips. Transoms are to be at max. 1.2m centres where supporting boarding. In each bay, one of the transoms is to be not more than 300mm from a standard. All transoms as a matter of course are to have "high visibility" plastic caps to avoid damage to the building fabric.

Ties

Through ties (which 'hook' back to the inside face of the wall) are to have protective coverings where they touch the inside face of the wall. When using a through tie with a sash window, the sash is to be opened, allowing the tube to pass through, and the resulting gap sealed temporarily with plastic sheeting or hardboard. Where directed, the sashes should be screwed to each other to prevent unauthorised entry. Casement windows with leaded lights can have one small pane carefully removed temporarily. Single pane casements may be taken off their hinges and safely stored. Where reveal ties are used (which use screw jacks to grip against the reveals of a window) they must also have protective coatings.

Fixings to Masonry

No fixings are to be employed on this project. The scaffold is to be independent and freestanding from the building.

Decking

Decayed, warped or split boards must never be used, and boards that have been exposed for a long time and have become slippery or damaged should be discarded. Boards should over-sail their last support by at least 50mm but by less than 150mm. Ensure boards are held down against high winds. Do not apply excessive loading on platforms unless they have been specifically designed for this purpose.

Guard Rails, Toe Boards and Ladders

Guard rails should be between 914mm and 1143mm above the platform. Toe boards must not be less than 150mm high. Ladders must be sound, securely fixed and set an angle of 4:1.

Scaffold is to be protected during the course of the works and precautions should be taken to prevent unauthorised access by to prevent unlawful access and vandalism. Include for 4m high solid metal fencing around the base of the scaffold. All ladders are to be removed from ground level when the site is unattended overnight and out of work hours.

2.04 Carpentry / Timber Framing

Commodities:

0.1 Timber: All timbers, in general, shall be the most suitable for their respective use, free from sap, large loose or dead knots, waney edges or other defects making them unsuitable for their respective use. Softwood and hardwood shall be as defined in BS 7359:1991.

Timber for framing to be Douglas Fir or Columbian Pine unless otherwise specified. Other timbers to be as specified in the schedule.

0.2 Metal Fixings:

All nails, screws, stirrups, shoes, bindings and any other type of metal fixings that may be required shall comply with the appropriate British Standard.

0.3 Preservative Fluid

Preservative fluid for the treatment of new timber is to be as follows:

- a) New timber pressure treated in a vacuum plant prior to delivery to site.
- b) Cut ends of new timber treated on site.
- c) Using timber treated on site by brush or pneumatic sprayer.

0.4 Adhesive

Adhesive for repairs to the timber frame is to be epoxy resin.

0.5 Timber Sizes

Sawn softwood timber shall be the basic sizes of softwood and re-sawn softwood given in BS EN 1313-1 : 1997. Deviations from the sizes shall comply with the allowable tolerances in that BS.

Wrought softwood timber shall be reduced from the basic sizes by the amounts given in the above BS for constructional surfacing timbers. Deviations from the finished sizes shall comply with the allowable tolerances in the above BS.

All mouldings shall be worked from solid and where applicable in accordance with detail drawings. The workmanship to the joinery timbers shall comply with BS EN 942 : 1996.

0.6 Moisture Content

Timber is to be seasoned to a moisture content of or below the maximum recommended values in Code of Practice 112 Part 2 1971, appropriate to its position in the structure before fabrication.

0.7 Storage

Timber shall be delivered early to the site and stored undercover, clear of the ground, and protected from dampness. Joinery shall be protected from the weather during transit and shall be stored undercover, clear from the ground, before and after priming.

Framed components shall be supported to prevent distortion in the plane of the component.

0.8 Tests and Inspections

The architect is to be at liberty to select any samples he may require for testing. Facilities are to be given for the architect to inspect all work in progress in workshops or on site.

0.9 Grounds

The carpenter shall provide and fix all grounds, pellets and slips necessary for fixing the joinery.

0.10 Protection of the Work

The carpenter shall be responsible for the temporary doors and closing in of openings necessary for the protection of the works during progress. He shall also provide and maintain any boxing or temporary covering required for the protection of the dressed and finished work that might be damaged during the progress of the work if left unprotected.

0.11 Preservative Treatment (New Timber)

All carcassing timber shall be impregnated using a double vacuum process before delivery to site, to provide protection as specified in BS EN 49-2 : 1992. Certification of such preservative treatment shall be provided by the contractor.

Where timbers are cut, bored or are built into walls, these areas are to be swabbed with an approved clear preservative treatment.

0.12 Jointing Generally

All framing shall be joined as specified, shown on the drawings, or as is most appropriate in the circumstances. Joints shall be designed and constructed so that they will be structurally sound and the execution of all jointing shall be to the satisfaction of the architect.

Unless otherwise stated, all joints shall be secured with a suitable type and sufficient number of nails.

A butt joint shall, wherever possible, be secured with nails, driven from the far side of the flanking member.

Jointing surfaces of all connections exposed to the weather are to be thickly primed, except where adhesives are specified.

Surfaces to be in good contact over the whole area of the joint before fastenings are applied.

No nails, screws or bolts to be placed in any end split. If splitting is likely, holes for nails are to be pre-bored at diameters not exceeding 4/5ths diameter of the nail. Clenched nails to be bent at right angles to the grain. Lead holes to be bored for all screws.

Nuts to be brought up tight but care is to be taken not to crush the timber under the washers.

0.13 Ordering Materials

The contractor shall not order materials from the sizes or quantities in this specification or schedule but must take them from the working drawings and details and from the building.

0.14 Cleaning Up

The carpenter is to clean out all shavings, cut ends and other timber waste from all parts of the building before coverings or infillings are constructed.

2.05 Floor Construction (Over WC)

15mm marine ply on 50 x 100mm softwood floor / ceiling joists at 400mm centres. Joists supported in galvanised steel hangers. Fixings into existing walls to be located into masonry joints. Isowool Acoustic insulation to be fitted between joists.

2.06 Partition forming WC

75 x 50mm timber studs at 500mm centres built off 75mm x 50mm base rail laid on top of existing stone floor. Base rail to be set on 5mm deep timber strips set back from the outer edges to achieve a gap along either face of the partition which will be sealed with expanding foam strip (compriband or equivalent). Any timber work in contact with the floor or masonry walls to be isolated by a layer of roofing felt. To toilet side, partition to have 1 x layer 12.5mm Gyproc Wallboard plasterboard plus skim coat. Base of wall up to 1500mm to be clad in painted softwood bead board fixed to softwood battens. To outer face, full height 150mm wide vertical beech bead boards fixed to 50 x 25mm softwood battens @ 450mm cts. Isowool Acoustic Partition Roll between studs.

2.07 Staircase and Balustrades

New staircase to be manufactured in oak.

Width - To suit existing opening.
Rise - 220mm maximum.
Going - 170mm minimum.
Pitch - To suit site conditions.
Handrail - 900mm high from stringer line (oak)

2.08 Ceilings and Soffits

New ceiling over WC to be 12.5mm Gyproc Wallboard plasterboard with plaster skim finish. Fixings and finish to plasterboard to be in accordance with

All exposed hot water pipes shall be insulated to standards as recommended in the Domestic Heating Compliance Guide.

The contractor shall provide all necessary builders work in connection with the installation.

Cold water supply pipework to be provided to serve the following:

- Sink
- W.C cistern
- Wash hand basin

Hot water supply pipework to serve the following:

- Sink
- Wash hand basin

NOTE: Contractor shall ensure that all hot water taps are compatible with the hot water supply.

Taps to be mixer type with lever handles – to be agreed.

All pipework to be manufactured from copper tube to BS EN 1057: 1996, complete with brass compression fittings to BS 864 Part 2. Polymer hinged pipe clips to be fitted throughout. All hot and cold water pipework shall be installed.

Isolating valves to be fitted to all appliances (hot and cold pipework). The pipework systems shall incorporate expansion joints where necessary and drain-off cocks at low points.

The hot and cold water installations must be co-ordinated with other trades (e.g electrical services, plastering, ceilings etc) in terms of design and installation.

The Contractor will be responsible for testing and commissioning the installations. Signed test record sheets/certificates and commissioning reports must be submitted to the Architect at Practical Completion.

As-fitted drawings and records must be provided for inclusion in the Building Manual/Health and Safety File compiled by the Principle Contractor. These records should include technical information on day-to-day operation, maintenance and servicing instructions.

The Contractor shall provide illustrations and samples of all proposed fittings and appliances to the CA for approval, prior to commencement of installations.

2.15 Electrical Installation

Fixed internal lighting will be fitted with LED/ low-energy light fittings.

New electrical installation and alterations to existing installation to be carried out by a certified and registered NIC / EIC installer.

Upon completion the Building Control Officer shall be provided with an appropriate BS 7671 certificate for the installation to ensure compliance with Approved Document Part P.

Allow for all builders work in connection with the electrical installations.

Electrical supplies to mechanical services

The Contractor will be deemed to have included within his tender for all necessary cabling, connections, wiring, commissioning and setting to work associated with the mechanical services equipment, i.e : Heating and extract systems. The Electrical Contractor shall ensure that full and complete liaison and co-ordination is exercised between the electrical and mechanical services elements of the works.

Power Installations generally

All power sockets to be surface mounted 240 volt twin switched socket outlets with cabling enclosed in conduit.

The Electrical Contractor shall provide all socket outlets, fused connection units, isolators, local means of isolation, conduits, trunkings, etc., for the complete power and small power installations.

All socket outlets and small power circuits shall be protected by suitably rated MCB's or RCD's as appropriate.

Socket outlets shall be wired on ring main circuits, with no tees or spurs installed, and each circuit shall incorporate a separate CPC installed in the form of a ring.

Switches and sockets for lighting and other equipment should be located at appropriate heights between 450 – 1200mm from finished floor level.

Switches and socket plates

New light switches, socket and isolator plates and all accessories shall be MK Logic range. Flat brushed steel finish in all rooms apart from bathrooms.

2.16 Kitchen Installation

Supply and fix stainless steel sink and drainer.

2.17 Sanitary Installations

Contractor to supply, deliver and install new Ideal Standard (or equivalent approved) Doc M Contour 21+ close coupled pack, Left Hand layout, stainless steel finish rails and grey toilet seat. Taps and fittings to be connected to wastes and water supplies.

Allow for all builders work in connection with the sanitary installations.

2.18 Mechanical Ventilation

The existing mechanical ventilation installation will be utilised.

2.19 Interior Finishes

Contractor to seal and prepare the surfaces as required to create a suitable substrate for the finishes to be applied to.

Door linings, skirtings

Toilet door - Natural oak with satin finish clear coat.

Store cupboard doors - Hardwood with painted finish.

Skirtings to WC - Hardwood with painted finish.

Kitchen cupboards - Stained softwood.

Walls - Bathroom

Timber dado to walls of WC to receive satin emulsion paint. 1 x mist coat plus 2 finishing coats. Colour to be confirmed.

Plastered walls above timber dado to receive matt emulsion paint. 1 x mist coat plus two full coats. Colour: White.

Timber cladding to outer wall of WC to be finished with satin finish clear coat.

Ceilings

Plastered ceiling to receive matt emulsion paint. 1 x mist coat plus two full coats. Colour: White.

Stair treads

Oak staircase with slip resistant finish.

2.20 Painting and Decorating

All work shall be carried out in accordance with B.S.6150:2006 + A1:2014 – Painting of Buildings Code of Practice.

All paints, and the like, are to be obtained from an approved manufacturer and shall be of the best quality available. Details of the proposed materials shall be provided to the architect for approval prior to ordering. Colours will be selected by the architect or to match existing as specified. Primers, undercoats and finishing coats shall be obtained from the same manufacturer. All primers must be of a type suitable for the surface to be treated.

All materials delivered to site to be in sealed containers, suitably labelled as to manufacturer, type and quality. They shall be suitably stored, mixed and applied in accordance with the manufacturer's printed instructions and shall not be adulterated or thinned other than in accordance with such instructions and with agreement of the architect. The architect may require samples for testing purposes from sealed or opened containers and from the kettle, and the contractor shall allow reasonable access for this purpose.

Prices shall include for masking and protection of all adjacent surfaces during both preparation and application processes.

Previously painted surfaces are to be cleaned by washing or rubbing down. All loose and flaking materials are to be scraped back to a firm edge and the edges rubbed down to taper off to the adjacent surfaces. Bared woodwork or metal work shall be spot primed prior to the application of undercoats. Where burning off is required, it is to be carried out with care, using approved equipment. Precautions must be taken to avoid any fire, risk or harm to persons or property in the vicinity (refer to the specification for "HOT WORKS"). Stripped areas to be primed the same day.

Unless otherwise agreed, all coatings shall be applied by brush. Spray painting is not permitted without prior approval of the architect. Each coat of paint shall be allowed to harden before the next is applied. No paint shall be applied to surfaces structurally or superficially damp, and all surfaces must be ascertained to be free from dirt and condensation before the application of each coat. Paint shall not be applied to any surface under wet, damp, foggy or frosty conditions.

All ironmongery is to be removed prior to painting and refixed on completion, and rates are to allow for this.

Where doors, windows, hatches, and the like, are painted, care must be taken to ensure they are not jammed with paint, and where any security risk is involved they should be painted early in the day to allow drying. On completion, the contractor shall check all windows, etc., are operating freely, easing where necessary, and making good all paintwork.

Finishing coats damaged by dust or other preventable causes shall be rubbed down and completely re-painted.

Particular attention must be paid to cleaning off all paint droppings and splashes from glass, floors, walls, and the like. All areas are to be left perfectly clean on completion and all empty containers and other debris arising from the works are to be removed from site.