# ANDREW SMITH ARCHITECTS LTD

CHARTERED ARCHITECTS AND DEVELOPMENT CONSULTANTS

THE PARISH CHURCH OF

ST. BARTHOLOMEW, THURSTASTON, WIRRAL.

QUINQUENNIAL REPORT

UPON THE INSPECTION AND CONDITION

OF THE CHURCH FABRIC IN RESPECT OF

'THE INSPECTION OF CHURCHES MEASURE (1955)

AND THE ECCLESIASTICAL MEASURE 1991.'

PREVIOUS INSPECTION: 10<sup>TH</sup> DECEMBER 2004

PRESENT INSPECTION: ANDREW SMITH ARCHITECTS LTD.,

WOODLANDS,

1, CLIFF ROAD,

WALLASEY,

WIRRAL,

CH44 3DJ.

TEL/FAX: 0151 639 8089

DATE: 1<sup>ST</sup> JUNE 2011

### INTRODUCTION

This report is compiled upon the basis recommended by the publication 'Church Inspection and Repair' produced by the Council for the Care of Churches in conjunction with the Ecclesiastical Architects and Surveyors Association.

For ease of reference and continuity, the format of the proceeding report makes appropriate references to the previous quinquennial report dated  $10^{th}$  December 2004 as prepared by Andrew Smith Architects Ltd.

#### SCOPE AND LIMITATIONS OF THIS REPORT

It is emphasised that this report is compiled on the basis of a purely visual inspection undertaken principally at ground level and from other convenient vantage points to include the accessible tower storeys. It must be observed that no enclosed spaces or inaccessible elements such as boarded floors, roof spaces and the like have been opened up for inspection and that no specialist damp detection or testing instruments have been used. Any element of the building which might have been found to require further investigation will be referred to in the proceeding report under the appropriate section heading. It is particularly drawn to the Church Warden's attention that no guarantee or assurance can be given that any timbers are free from rot or live infestation.

#### RECOMMENDED WORKS OR REPAIRS

Take note that this report is not intended for the specific purposes of obtaining competitive quotations for works recommended.

### MINOR WORKS OR REPAIRS

In situations where this report recommends that works or repairs are required (refer to summary section at the end of the report) – certain items might be of such a nature that they may potentially be carried out upon an 'in-house' basis via the Church Wardens without the need to commission the Architect.

## LARGER WORKS OR REPAIRS

Larger works or specialised repairs recommended in this report – such as roofing, stonework or structural repairs, suspended floors or foundation works and the like will require a written scheduled specification and/or drawings to be prepared in order that competitive quotations can be obtained upon a fair and correct basis. In these cases, it is recommended that the advice and services of the Architect are always sought.

#### **DIOCESAN APPROVALS**

The Church Wardens and Church Council are responsible for obtaining a Faculty or Archdeacon's Certificate before any identified works are implemented.

#### SITE AND PROPERTY DETAILS

The third and current Parish Church of St. Bartholomew's was consecrated by the then Bishop of Chester, Bishop Stubbs, in 1886 and has been in constant use ever since.

Designed by Pearson, the noted Victorian Architect of Truro Cathedral, St. Bartholomew's has been upgraded by English Heritage to Grade II Star status in 2011.

A Faculty has been granted on 19<sup>th</sup> May 2010 by the Diocese of Chester (Ref. 044/09) authorising the construction of an extension to the west end of the Church to provide disabled access, toilet and refreshment facilities and a small informal meeting area and for which active fundraising is currently in hand.

## PREVIOUS QUINQUENNIAL RECOMMENDATIONS – ITEMS ACTED UPON

## Urgent

- 1. Belfry weathered joints completed
- 2. Repointing open joints at wall bases completed
- 3. Cracked cast iron rainwater pipe to porch not done
- 4. Preparation and painting of all cast ironware not done
- 5. Ivy removal to rear of church yard wall completed
- 6. Lych gate timber preservation completed but requires retreatment

#### Within the next 12 months

- 7. Ridge pointing and slipped tiles not done
- 8. Weathered mullions and tracery joints to most windows not done
- 9. Iron strapwork silicone wax protection not done
- 10. Outstanding 2 no. rope wells to bell frame not apparently needing replacement
- 11. Annual M and E Safety Checks all done up to 2010 -2011
- 12. Proposed new extension Faculty granted May 2010, Planning renewal due Nov. 2011
- 13. Cleaning of r.w.p. gullies on-going

## Within next 5 years

- 14. High level spalled stonework not done
- 15. Low level churchyard walls maintenance on-going
- 16. Tree pruning within curtiledge requiring attention

#### INSPECTION SCHEDULES

### **Electrical installation**

The installation appears to function properly and a visual inspection of the main electrical board/consumer units in the vestry revealed that the system appeared in good and well maintained condition corroborated by the current Warden. Three new meters have been

recently installed and all of the installation presents a very neat and smart appearance. The Warden confirmed that regular annual inspections were taking place to include the loose electrical appliances with appropriate certifications being obtained.

#### **Heating Installation**

The oil fired wet central heating system has been the subject of attention and light overhaul during February 2011 to address general concerns that the church is often cold and below an acceptable comfort zone during much of the year. To this end, the Warden reports that the boiler has been fully serviced together with the controls. The heating engineers have also recommended that the pipework set within the aisle floor ducts are fully vacuumed and brushed clean of the dust and dirt build up to improve heat transfer. It is considered that the current main entrance to the rear of the building causes considerable heat loss during attendances as there is no effective lobby or vestibule to retain the heat. It is anticipated that the new extension will go far in addressing this current situation.

It is strongly recommended that the air vents to the cellar are always kept clear of obstruction, grass and weeds to ensure the safe operation of the boiler plant at all times – particularly in times of snowfall, the vents being at such low level.

It is noted that the external oil tank serving the system is rusty and delaminating in certain areas. This should be addressed within the immediate future by thoroughly wire brushing and descaling the tank surfaces before applying at least two coats of a 'waxoil' type of rustproofing treatment.

#### **Lightning Conductors**

There are two lightning conductors serving St. Bartholomew's located upon the northern and southern aspects of the tower, one likely to be the original installation, the other added in 2002. They apparently work in tandem due to the reported poor earthing qualities of the ground in the vicinity of the tower base. Recently, an approximate 3.00 metre length of copper was stolen from one of the conductors rendering it inoperative. Following recent repair and testing of the dual conductors the Warden has instructed that both installations are re-earthed, this work taking place at the time of our inspection. Protective conduit type tube protection at the vulnerable bases of both conductors has also been introduced.

## Fire Fighting Equipment

The fire alarm is reported to be in working order and is maintained annually by Chubb. There are 5 no. fire extinguishers located about the premises which appear to be new and are again maintained annually.

#### Organ

The organ and most attractive casing with painted folding shutters appears to be in very well maintained condition, the instrument itself being serviced annually. A 'spring-cleaning' operation of the church interior including the organ is currently in hand to gently remove accumulations of dust and cobwebs. The zinc pipes are highly polished and the gilded oak fretwork and paintings appear very bright and vibrant.

## Clock

The original weight driven turret clock mechanism is in good working order and housed within a glazed dustproof cabinet housed within the bell ringing room in the tower. The spun steel lines supporting the weights were inspected around the winding barrels and appear to be in good condition where visible. However, other lengthy sections of the steel lines and pulleys bearing the weights are housed behind vertical pine boxing and should be inspected by a clockmaker within the next 12 months.

#### 1. STRUCTURE

For ease of reference, the format of the proceeding inspection schedule is based upon and numerated in the manner of the previous quinquennial report dated 10<sup>th</sup> December 2004.

#### Structural Walls, Piers and Buttresses etc.

In overall terms, the masonry fabric of St. Bartholomew's appears to remain in good general order. The previously reported open joints around the perimeter external wall bases have been raked out and repointed as recommended at the previous quinquennial.

Our last quniquennial, however, identified the general matter of weathered fenestration masonry joints to include mullions, traceried upper sections and splayed cills. It is our opinion, following this year's very harsh weather with long periods of freeze-thaw conditions occurring, that many of these jointed areas have suffered an accelerated loss of and general weathering of mortar jointing about all window elements. It is therefore our recommendation that our local stonemason immediately attends to the required raking out and repointing of the fenestration masonry in hydraulic base lime mortar to prevent further erosion and weathering of the stonework. Our consultation with the mason anticipates there is approximately 2 weeks work for two men to undertake this item. All can be accessed via lightweight mobile scaffolding due to the small scale of the church generally.

#### **External Wall Surfaces**

In overall terms, the external wall surfaces and carved details are in good condition and have not significantly deteriorated since the last inspection. However, there were certain high level elements of stonework which were noted to be weathered and spalled notably the porch gable and tower faces. Again, these high level areas can be inspected and reasonably attended to by a roofing contractor when the roof slopes and guttering are checked and maintained. In the long term, it will be necessary to renew certain carved details and individual stones, where pointing alone cannot be relied upon.

#### **Roof Coverings and Ridges**

The roof coverings are of the clay 'rosemary' type and appear to be in reasonable order given their age (original coverings) and tendency to spall over the years. Our previous report noted a small quantity of tiles had slipped or spalled on the nave slope overlooking the graveyard. It was similarly noted previously that some ridge pointing on this elevation had slipped away and required rectification.

Recently however, during the extreme gale force winds encountered in January 2011, approximately 100 or more tiles were blown off the roof resulting in two physical holes manifesting together with more ridge pointing having broken away to ground. Our subsequent immediate site inspection from a telescopic lift revealed that none of the tiles are actually nailed anywhere throughout the roof slopes. Although not untypical, this specification in our opinion will always cause the tiles to chatter and lift in high winds and will result in the loss and slippage of tiles upon a regular basis requiring constant attendances by a roofing contractor and ultimately manifesting in unsightly patchwork

repairs appearing steadily over the years – especially as these particular tiles are no longer available when becoming broken.

As stated in our last report, we maintain that the overall roof coverings will not require comprehensive renewal for a significant period to come but in the meantime, the Wardens will have to budget annually for on-going repairs in small areas until ultimately undertaking a potential phased re-roofing exercise at which time we would recommend appropriate nailing being introduced. During our wintertime inspection, it was observed that the original battens appeared very sound and dry – especially as they have never been nailed into – albeit there are signs of some distortion of battens between rafter to rafter causing a familiar 'waviness' to sections of the roof tiling. The slipped and broken tiles were made good at the time but the ridges require repointing immediately.

## Rainwater Disposal System

It was previously noted the overall system of gutters and downpipes is of cast iron and most likely original to the church. One cracked downspout remains evident to the porch and several others display fine hairline cracks within their fabric, particularly down the rear seams, endemic to their manufacture. The cracked pipe requires replacement and all of the remaining pipes require thorough descaling of loose paint and rust prior to undercoating and glossing by a painting contractor.

The guttering however now requires immediate attention in as much as one section blew down during the winter storms of 2011 when it was identified from aerial close inspection that the gutter brackets fixed to the rafters' sides had virtually all rusted away beyond repair. Accordingly all of the brackets require systematic replacement, preferably in stainless steel, as their location and inaccessibility renders it difficult to paint regularly and all sections of guttering systematically prepared and painted and refixed into position. One area of the church perimeter remains cordoned off as there is a risk of falling guttering close to the garden of remembrance. This item should be acted upon as a matter of urgency.

Finally, it should be ensured that the clayware gulleys at ground level are regularly checked and cleaned out of debris, moss, grass and the like to ensure all rainwater is discharged effectively.

It cannot be emphasised enough that the blocked and leaking rainwater systems can cause serious damage to buildings hence it is suggested that the rainwater goods are checked annually and the gullies cleaned out at least twice per year.

#### **Leaded Windows**

The attractive stained glass windows appear to remain in fair order albeit one window to the north side close to the chancel displays evidence of water leakage tricking down onto the internal cill and walls. Most likely, this can be attended to by the stonemason when the specific window masonry is being repainted – probably via the action of applying clear silicone. It is noted that there currently exists no protection against vandalism and future consideration may be given to this point following discussion with the church's insurers.

#### External Iron and Wood

In overall terms, the architectural iron and woodwork appears to remain in good order. The lych gate timbers are weathered and require oiling with raw linseed oil together with the gate and lower base woodwork. It was noted that the visible oak framing to the porch roof similarly requires oiling. The doors to the vestry and spiral staircase are very dry and require oiling as a matter of urgency. The ironwork is fundamentally sound but would benefit from a light application of silicone wax, such as 'waxoil', to arrest the rate of surface corrosion.

#### Tower, Spire and Bells

It has previously been noted that the tower and spire have been repointed, together with new lead and improved access to the parapet areas during the last quinquennial. Three of the five bell frames and associated rope wheels have been renewed with the remaining two reported by the restorers not requiring attention. The clock mechanism and bells appeared to be functioning well during the inspection. All visible internal timbers, stairs and louvres again appeared sound.

At the point where the stone stairs enter the bell ringing room, the small area of stone vaulted ceiling requires raking out of the joints and repointing with hydraulic lime mortar.

Again, the internal iron straps, bolts, roses and the like to the tower floor structures and the massive bell frame ironwork would benefit from an application of waxoil to arrest the rate of corrosion in these cold and exposed areas.

The warden has reported that one of the permanently fixed peton rings is considered unsafe for usage by aerial maintenance operations on ropes and is pursuing its rectification with the original installers.

### **Roof Structures and Ceilings**

It was not possible to access the timber roof structures above the stone vaulted ceilings within the church. However, during this winter's roof repairs exercise, it was possible to view into each of the roof voids from above. And there appears to be no obvious signs of deterioration of the roof structure as all roof planes and ridges appear level and true when viewed from outside. It is noted that quilted insulation has been laid in the nave roof void – accessible behind a fixed notice board within the bell ringing chamber. Attention should always be given to the tower and parapet abutment flashings which present the greatest hazard to water ingress and deterioration of roof timbers close by.

#### Internal Partitions and Doors

All appear in good condition.

#### Internal Plaster

There is no internal plaster.

#### Internal Decorations

The internal walls and ceilings are of stone. Only the areas displaying patches of efflorescence in the chancel and vestry should be lightly brushed and hoovered every six

months as it is anticipated the sources of damp penetration have been overcome when the tower structure was repointed. As mentioned earlier, the church interior is currently undergoing a spring cleaning exercise to remove surface dust, cobwebs and the like.

#### **Furniture and Fittings**

The pews, lectern and altar table together with the organ console are constructed in oak and all appear well cared for.

The pulpit and reredos are of alabaster and again appear in good condition. The font to the rear of the church is reported to be valuable and comprises elements of rare stone including blue john. It is presently in excellent condition and will be ardently protected insitu during the knock through works associated with the proposed extension.

## Monuments, relics

Apparently, a schedule is kept of all significant items and any loose items should be securely fixed where practical to prevent 'unauthorised removal.'

## Churchyard and external Works

The Lych-gate and Churchyard are most attractive in appearance and the meandering pathway, neatly trimmed evergreen shrubs and borders leading up to the main north porch are very well maintained. However, some of the evergreen shrubs have been allowed to grow outwards too much and physically encroach upon the pathway. The perimeter mixed hedging is also very vigorous and requires sympathetic pruning and shaping during the appropriate times of year by a knowledgeable gardener so as not to affect the future health of the hedging or indeed wildlife and birds nesting during springtime or early summer. There are also six no. mature sycamore trees within the graveyard to the rear, close to the rear stone boundary wall – one tree having pushed over a small area of masonry now requiring rebuilding. These trees grow vigorously and again require a pruning and crowning exercise by an arboricultural contractor to control and maintain their size within limits. All of the foregoing tree/shrub works require approval from the Local Authority as they lie within a Conservation Area and the appropriate application forms have been handed to the Warden. The external gravelled paths at the rear of the church are weedy. Several areas of coping stones to the boundary walls were also noted to be loose or uneven and a scheduled course of remedial repairs will be necessary over the next 5-10 years when hedge pruning affords access. An inspection of the old tower in the churchyard revealed no apparent defects at present.

#### SUMMARY OF RECOMMENDATIONS

## A. Matters regarded as urgent

- Attend to replacement of all gutter brackets in stainless steel and subsequently reinstate original cast iron guttering following thorough preparatory descaling, priming and repainting ensuring all joints are made watertight.
- Attend to replacement of cracked cast iron downspout serving the porch and thoroughly undertake descalings, priming and repainting of all remaining downspouts.
- Attend to recommended raking out and repointing of all window masonry in hydraulic lime mortar and simultaneously locate and silicone seal the leaking window identified on the north elevation close to the chancel area.
- Attend to repointing/rebidding of clay ridge tiles to all ridges.
- Attend to application of linseed oil or suitable wood preservative to the lych gate timbers and 2 no. small doors serving the vestry and spiral stair tower and treat their ironwork with a 'waxoil' rust inhibiting agent.
- Clean out the build-up of dust and debris accumulated within the central heating floor ducts to improve appearance and heating efficiency of the pipework.
- Attend to descaling the external oil storage tank prior to applying 2 no. coats of 'waxoil' rust inhibiting agent.
- Pursue the repairing and making safe of a suspect lower piton ring at the spire base to ensure correct functioning and safely through the original installers and check all others serving the tower and spire simultaneously.
- Complete the re-earthing and external protection of the two lightning conductors.

#### B. Matters to be addressed within 12 months

- Implement annual inspections and obtain the appropriate certification with regard to the following:
  - a. Electrical installations and appliances, Fire alarm and Emergency Lighting.
  - b. Lightning Conductors
  - c. Heating installations including boiler.
  - **d.** Fire-fighting equipment.
- Ensure the air vents serving the boiler in the cellar are unhindered and operative at all times especially when snowfall is encountered.
- Attend to the replacement of a small no. of spalled masonry blocks on the west gable.
- Attend to the crowning and pruning of the 6 no. sycamores at the rear of the graveyard and required shrub and hedge pruning following the submission of the appropriate application form to Wirral Borough Council at the appropriate season and consider wildlife implications.
- Have the tower clock steel lines, pulleys and the like checked by an horologist for condition and working integrity.
- Rebuild small section of toppled stone walling to rear graveyard wall pushed over by one of the sycamores.

 Attend, where practical to do so, to loose and dislodged perimeter wall copings following any hedge pruning that affords accessibility for repair.

# C. Matters to be addressed within the Quinquennial

- Inspect the roof slopes from time to time for signs of slipped/missing tiles and report to architect.
- Inspect rate of growth and spread of foregoing sycamore trees, shrubs in the grounds and perimeter hedging and liaise with architect/arboriculturalist accordingly before instigating any desired works.

Andrew Smith Architects Ltd.

email: jdavis@asarchitect.freeserve.co.uk

# ANDREW SMITH ARCHITECTS LTD

CHARTERED ARCHITECTS AND DEVELOPMENT CONSULTANTS

AS/JD/772

9th September 2011

John Roberts Esq./Church Warden 23, Riverbank Road, Lower Heswall, Wirral, CH60 4SQ.

Dear John,

## Re: St. Bartholomew, Thurstaston - Quinquennial Report

Further to our recent conversation regarding items identified in our Quinquennial Report requiring attention, I am pleased to expand upon the recommended ridge tile repointing matter.

When compiling my report, I noted that a significant portion of edge pointing had by now come away, undoubtedly exacerbated by last winter's prolonged subzero temperatures whereby the action of constant freeze/thawing erodes mortar and masonry elements.

However, when one considers also the gale force winds encountered in January 2011, whereby two physical holes in the roof tiling manifested, it is noteworthy that no actual ridge tiles were disturbed and stood firm.

Having this week consulted with Messrs. Spar Roofing Ltd. to enquire if it is possible to rake out and repoint the loose mortar, they have advised that a full perimeter scaffold is required due to the height and steep pitch of the slopes. Furthermore, they state that traditional roofing ladders, which typically take purchase at ridge level, cannot be utilised in this case owing to the fact the ridge tiles have ornamental crestings which would break away very easily.

Taking into account the approximate 130 year age of the roof and the fact that none of the ridge tiles have actually slipped, despite last winter's ferocious conditions, I submit that it is reasonable to defer the recommended ridge pointing/rebedding until the overall roof is ultimately renewed when the constant patching up of slipped tiles and the like becomes untenable.

email: jdavis@asarchitect.freeserve.co.uk

# ANDREW SMITH ARCHITECTS LTD

CHARTERED ARCHITECTS AND DEVELOPMENT CONSULTANTS

In the meantime, and as recommended in our quinquennial, I urge you to regularly inspect the roof slopes for any ongoing signs of distress, perhaps maintaining a digital photographic record to log the rate of any deterioration over the years.

Yours sincerely,

Andrew Smith, Architect.