

# CHURCH OF ST MARY, CHILDWICK GREEN, ST ALBANS Quinquennial Inspection Report 2017

by

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# PARISH CHURCH OF ST MARY, CHILDWICK GREEN, ST ALBANS

# QUINQUENNIAL INSPECTION

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# **INTRODUCTION**

# General

The church was designed by Sir George Gilbert Scott and is situated on the Childwickbury estate. It was built in 1867 by Henry Joseph Toulmin, the owner of the estate at the time. The church complex consists of three main elements, namely: the Church, the Schoolroom and a linking Annex. There is also a small and separate WC and store block and there is a low level structure on the east side of the Annex that used to contain the central heating boiler. The complex is constructed with double pitched roofs covered in tiles except for the lavatory block which is covered with slate, a small flat-roofed extension of the annex covered in lead, and the flat-roofed boiler enclosure which is covered with felt. The external walls are in local red brick with stone cills. There is an entrance porch on the south side constructed of a painted timber frame under a double pitched tile roof all sitting on a facing brick plinth.

The church is Listed Grade 2 as being of special historical or architectural interest and it is the daughter church of St Michael's in St Albans, some four miles away. There is a short description of the church in the Hertfordshire edition of "The Buildings of England" by Nikolaus Pevsner, the latest edition being 1977 edited by Bridget Cherry.

This report is based on a comprehensive inspection carried out on Monday 9<sup>th</sup> October 2017 along the lines of the recommendations of the Diocesan Advisory Committee. The survey consists of a visual inspection of all accessible parts made from ground floor level and those upper roof levels reached from the external doors from the Clock chamber and the Belfry. It does not include spaces concealed within the floor, roof or other voids. The roof structures were not inspected. It has not been possible to survey concealed or otherwise inaccessible floor, roof or other voids, structural timbers, joists, wall plates or other smaller timbers in respect of wet or dry rot, wood worm or other infestation and only certain areas were inspected in detail.

The report indicates in the right hand margin of each page the order of priority recommended for works of repair and action under the following headings:

Category 1	-	of utmost urgency
Category 2	-	essential within the next 18 months
Category 3	-	essential within the quinquenium
Category 4	-	eventual, ie desirable repairs, renewals etc
Category 5	-	items of routine maintenance/monitoring
Category 6	-	items requiring specialist advice

The report is generally set out under the following sections:

- 1.0 Summary of works carried out since the last inspection in 2012
- 2.0 General condition of the fabric
- 3.0 Recommendations for care and significant repairs
- 4.0 Inspection Report.

Key plans are provided in Appendix 1.

This is a general report and does not form a schedule for repair work though it can be used as a reference for planning a programme of repairs and maintenance as well as for monitoring.

# Summary of work carried out since previous inspection 2012

Since the last Quinquennial Report a number of items of repair and improvement have been carried out. A summary is set out below:

2017	-	Structural engineer's visit to monitor structural movement including Report and Recommendations
2017	-	Installation of combination box for key storage
2017	-	Installation of spotlights in the schoolroom
2015	-	Installation of new cupboard in the schoolroom
2014	-	Refurbishment of William Morris altar frontal
2014	-	Installation of new lock for the schoolroom
2013	-	Redecoration of timberwork

The following items are the subject of regular maintenance:-

- Gutters, downpipes and gullies are cleared twice a year by voluntary labour.
- The fire extinguishers are serviced and tested annually.
- The gas fired boilers are serviced annually.
- The electrical system has a quinquennial test, the portable items are PAT tested annually.

# General condition of the fabric

The condition of the church fabric is generally satisfactory to good. Refurbishment works to the floor, heating system and the internal and external redecorations have contributed to this. The exception to this is in the SE corner of the schoolroom where movement is undermining the structure and finishes.

### **Roof covering**

The tiles to the church and the schoolroom appear to have some life. There is however a mismatch of plain clay and machined tiles on the north side of the church and along the ridge. It is also noted from inspection that the nails beneath the tiles have rusted and the battens slipped in places.

### Damp

The historic problems of damp have been improved in recent years through the installation of french drains, reduction in ground levels and more recently with the renewal of an efficient sub floor heating system and the introduction of sub floor ventilation.

### **Roof spread**

This continues to be monitored. The structural engineer should be asked to return to inspect this area of movement shortly. There are signs of fresh movement either side of the south porch, with new cracks appearing on the inside.

#### Walls

Some minor open joints, but generally good.

# Floor

The floor structure has been repaired and renewed. Sub floor ventilation has been established. The carpet has been replaced in the church. This is in good condition.

#### Heating system

New boilers and finned heating elements have been installed, the latter within the Victorian floor ducts.

#### **External timber**

A programme of repair and redecoration has been completed.

#### Redecoration

A programme of internal and external redecoration has been adopted since the last inspection.

# Surface water well

This should be inspected on a periodic basis to ensure it is draining effectively particularly in the light of the active structural movement to the schoolroom.

# **Recommendations for care and significant repairs**

### **Roof covering**

This should be renewed with replacement battens and anodised or stainless steel nails and recycling the existing plain clay tiles. The should be as soon as funds permit. It may be appropriate to phase the works in which case the nave and north aisle roof slopes should be first. The opportunity should be taken to renew in plain clay tile throughout, replacing both the machined tiles and inconsistent ridge tiles.

# **Re pointing**

There are some minor open joints towards the base of the west gable of the schoolroom and there are some weathered joints to the exposed east gable of the sanctuary. There is no cause for concern and it would be inappropriate to patch mortar repairs to these areas. In the longer term re pointing an entire wall surface in matching grey ash-lime mortar may be appropriate but this will not be required in the foreseeable future.

There are also some open joints internally to the circular stone window surround in the sanctuary. These have not deteriorated since the last inspection and will not compromise the fabric, however if the church feel it is desirable to re point, these should be re pointed in lime putty and silver sand with an aggregate colour to match existing.

# Window No 23

The cill of this window is severely eroded and requires repair. It will be possible to infill a matching stone composite.

# **Glass Panes**

There are some missing panes to the high level circular lights in the east and west gables of the Schoolroom that are covered in contraband. These should be replaced when funds permit.

#### **Car Park**

There are a number of patch repairs. The surface is satisfactory.

### Monitor

Monitor roof spread, particularly SW corner of church and around south porch.

Monitor subsidence SE corner schoolroom and apply underpinning in accordance with structural engineer's recommendations Report on Schoolroom Walls - November 2016.

Maintain clear unobstructed sub floor vents to the church.

Monitor any further outbreaks of infestation. It is anticipated that with new heating system and improved sub floor ventilation the risk will be reduced.

Generally given the age of the building and the financial constraints of the parish the general condition is good and is showing evidence of continued care and maintenance since the last inspection.

# **Proposed Disabled WC Extension**

Town Planning permission has been obtained to extend the 'link' from the kitchen over the site of the old boiler house. This will house an internal lobby (providing access from the 'link') and disabled WC. It is recommended during the groundworks for the extension that underpinning should be applied to the SE corner of the schoolroom.

# **QUINQUENNIAL INSPECTION**

# **1.00 ROOFS, GUTTERS AND DOWNPIPES**

# 1.01 Nave

The roof is covered with handmade clay tiles except for a section at the west end over the north wall that are concrete tiles. There are blue clay ridge tiles to the west of the Bell Tower and ornamental red clay ridge tiles over the Chancel.

There is a dormer vent on the south slope of the Nave.

When funds permit the roofs require lifting and storage of the plain clay tiles, disposal of the concrete tiles, renewing the battens and re laying plain clay tiles throughout. This gives the opportunity to replace the machined tiles and to remove the moss/lichen growth on the north and south slopes of the church.

There is a broken tile on the north slope over the chancel beneath the ridge. The lean-to organ has cracked mortar to the verge.

There is a metal cross at the gable end of the church and a timber cross on the gable at the eastern end.

#### 1.02 Bell Tower

This is a timber-framed structure sheathed with plywood and clad with timber shingles. It is surmounted with a decorative cross and a lead capping.

Fifteen years ago a detailed investigation of the structure was carried out which revealed that it was in a dangerous condition, the main framing having rotted at the base. It was therefore removed and rebuilt. It is now in good condition.

There is a single bell in the open enclosure under the roof that has been fixed and is no longer rung.

### 1.03 South Porch

The roof is covered in handmade clay tiles as is the Nave. The junction of the roof tiling and the Nave wall is pointed in cement mortar.

This structure is leaning due to roof spread, see notes of additional cracking to the walls.

The tiling is generally in a satisfactory condition. However I recommend the moss growth is carefully removed from the east slope with a garden hoe.

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The underside of the roof has exposed timberwork that forms the ceiling of

the Porch.

### 1.04 Schoolroom and link

The roofs are covered in plain handmade clay tiles with blue clay ridge tiles. All appear to be in reasonable order. There is some moss growth on south and north slopes of schoolroom and over north porch. This is more difficult to remove, except perhaps with an extendable (window cleaners) pole and hoe attached.

There is a flat roofed extension to the link on the west side that is covered in lead. It was not possible to inspect the condition of the lead. There was however no evidence of any defect when roof maintenance was carried out last summer.

# 1.05 **External WC and store**

This is covered in slate with blue clay ridge tiles and is in satisfactory condition. The west slope was not inspected as it is obscured by the neighbour's yew hedge.

The ivy that was noted growing at the east end of the roof and on the brick corner below in the previous report has been removed.

#### 1.06 **Boiler house**

This is a low level structure with a felt roof on the east side of the link. The boiler has been removed and it is now used as an external store until the works commence for the disabled WC. The old safe (formerly kept in the schoolroom) has been left outside the store and should be removed.

### 1.07 **Exposed roof timbers**

The gable end roof timbers are exposed on the brickwork at the west end of the Nave, the east end of the Chancel, at both gable ends of the Schoolroom as well as on the end of the Porch and on the toilet block. There are also some exposed timbers surrounding the dormer vent on the south side of the Nave roof and to the open enclosure of the bell at the foot of the bell tower.

The timberwork to the Church, Schoolroom, Porches, and toilet block have been repaired and redecorated. New sections of timber have replaced rotten members on the fascia to the north side of the Nave and on both gable ends of the Schoolroom. Some of the timbers to the west gable of the church have flaking paintwork and require redecoration.

#### 1.08 Gutters, surface water drainage and downpipes

The gutters and downpipes are a mixture of metal and plastic. The downpipes generally discharge into gullies

As noted in the previous report a new gulley has now been provided beneath

the downpipe at the SE corner of the Schoolroom removing the need for the temporary discharge arrangement into a remote gulley.

The new french drain installation on the north side of the Schoolroom and the two new gullies to the downpipes noted in the previous report appear to be working well. The history of poor surface water discharge and high ground levels in this area appears to have been addressed.

The surface water on the north side of the church goes into a well. The well should be inspected regularly to ensure that it does not get blocked.

### 2.00 EXTERNAL

There is no tower.

2.01 **External walls, buttress and windows** including masonry to windows and doors with notes on foundations, the buttress, stability and dampness.

The walls are built of local bricks with flush stone cills and a stone surround to the east window.

The brickwork is laid in what appears to be a grey ash mortar much of which has been re pointed. Future repairs to cracks should attempt to match the mortar.

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High ground levels around the Schoolroom previously referred to, have been reduced on the north side and the result is most satisfactory.

There is a brick plinth all around the church with metal ventilation grilles on most façades. The brick plinth continues around the Schoolroom and the ventilation grilles are now above ground level, sometimes set in brick enclosures. There is no plinth and there are no ventilation grilles to the WC block.

There is a raking brick buttress on the south wall towards the east that has stone quoins.

Windows are generally metal framed set in timber surrounds except for window W8 at the west end of the Nave.

Most windows contain leaded light glazing with stained glass to windows W1, W2, W3, W4, W15 and W16.

The windows in the Schoolroom are as elsewhere except that some panes are clear glass.

There would appear to be sufficient opening lights and ventilators generally to provide adequate ventilation. All moving parts should be regularly checked to ensure ease of operating.

All external exposed timber, including doors, fascias, rafter feet, other structural timbers and window surrounds have been redecorated.

# 2.02 Nave south wall

There is a history of a crack on the west side of Window W7 noted previously that has been investigated and relates to the history of roof spread. This should continue to be monitored.

It was noted that the flush stone cills cause rainwater staining on the brickwork. This may cause local erosion due to frost action in the long term

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but at present it is not causing any problem apart from it being somewhat unsightly.

# 2.03 South Porch

This is an open timber structure on a brick plinth wall with a timber seat on either side of the access to the door to the church.

There is a small crack in the plinth on the south west side and two damaged bricks in the plinth on the east side.

There is a chip in the brickwork of the arch over door D1.

## 2.04 East wall of the Sanctuary

All appears to be satisfactory. See 3.00 Recommendations for Care

### 2.05 North wall of the Sanctuary and north wall of the Aisle

The ivy that was growing at the north east corner of the Sanctuary as noted in the previous inspection appears to have been removed.

#### 2.06 Nave west wall

All appears satisfactory. There is evidence of historic repairs to structural cracks caused by the roof spread mentioned elsewhere in the report.

### 2.07 Schoolroom and annex

The cracking in the south wall of the Schoolroom close to the east corner has deteriorated significantly. There is a structural engineer's 'Report on Schoolroom Walls' - November 2016 recommending action including underpinning. It is anticipated that this work will be carried out with the construction of the disabled WC extension.

There are some minor open joints at low level on the west wall of the Schoolroom see 3.00 Recommendation for Care.

There is some significant erosion of the stone cill to Window W23 that requires repair see 3.00 Recommendation for Care.

There are some missing panes of glass in the circular windows at the top of the West and East gables of the Schoolroom covered in contraband that should be replaced see Recommendation for Care.

# WC block

The walling is in a satisfactory condition, the ivy as noted previously has been removed.

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### 2.09 **Old Boiler house**

This is a low level brick and timber structure with a felt roof that is to be retained as an external store.

The enclosing timber fence has been removed.

### 2.10 **Boiler(s)**

These are now located in the kitchen of the annex.

#### 3.00

# 3.01 INTERNAL

### Church

The Nave ceiling is composed of lath and plaster over exposed rafters with collars and wall plates. There are 39 collared rafters and a decorative chancel arch beam supported on stone corbels. There are some cracks in the plaster on the south side over the bishop's seat.

The  $5^{\text{th}} \& 7^{\text{th}}$  collared rafters from the east end have splits and there is a small split in the collared rafter supporting the chandelier towards the east end. These splits should be monitored.

There is evidence of historic water ingress on the ceiling beneath the Bell Tower on the south slope and down the north wall. There has been remedial work in the past to redress the flashing however I note there is some new staining on the step to the chancel and on the carpet beneath the bell tower that should be monitored.

The north aisle ceiling is plastered between exposed rafters; all appears to be satisfactory.

The walls are painted brickwork and there is a stone columned arcade between the Nave and the north aisle.

There is an undecorated rendered panel 1.6m high lining the walls to the Sanctuary. This was apparently provided to combat damp penetration and it appears to have been successful.

There is a niche on the south wall near the altar; it has a brick surround and a stone shelf.

There is a crack in the render and in the brick in the south east corner of the Sanctuary as noted in previous report that should be monitored.

There are thin open joints in the stone surround of window W1 above the altar see 3.00 Recommendations for Care.

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The south wall is leaning outwards due to lateral thrust from the collar roof. This has caused the south Porch to be distorted since it is acting as a buttress. Structural works to restrain the wall were carried out some years ago and the problem appears to have been moderated. A structural engineer's inspection is due. There are fresh cracks over the door arch to the south porch and on the east and west sides of the door. As noted elsewhere in the report it would be prudent to monitor the situation.

The walling on the north side has no sign of the problem this is due to the north aisle colonnade and annex acting as a buttress.

The major crack in the stone cill and surround to window W8 in the west wall as noted in the previous report has opened again about 1-2mm and should be monitored as above. This should be subject to the structural engineer's inspection.

The floor of the Chancel Sanctuary is finished with red and black quarry tiles laid to a pattern with stone steps and carpet to the central access way.

There is a carved timber communion rail.

The altar is surmounted by a pair of decorative stone columns with Corinthian capitals.

Major works to repair and renew the floors in the Nave and north aisle were completed in 2009. This included the renewal of the floor structure (in part), floor boards and carpets and integration of a new trench heating system in the old Victorian sub floor heating ducts. The raised platform at the west end was also removed and the severely collapsed SW corner renewed. The floor plates were replaced and new joists laid alongside existing where necessary. The sub floor ventilation was upgraded with new openings in the sleeper walls. The decorative metal grilles over heating ducts have been retained; one running centrally and the other in the north aisle. These ducts also serve as under-floor ventilation and they should be checked to ensure that they are not obstructed. The spaces between the pews and adjoining walls have also been cleared. The overall impression is of an attractive, 'airy' and gracious space. The new carpet has 'lifted' the interior reflecting light and emphasising the vertical dimension of the space.

There is a fine timber carved pulpit in good order as is the Bishop's seat. The pews are constructed in pine and there are some decorative choir stalls constructed in oak, all appear to be in good order.

There is a carved stone font in the form of two angels holding a scallop shell. This is a memorial to two daughters of the Maple family.

#### 3.02 Annex

This contains the kitchen/servery. A new kitchen was installed in 2009 and

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houses 2no new boilers, one for the Church and one for the Schoolroom. There is a plaster painted ceiling and the walls are painted brickwork except for painted plaster and wall tiles around the sink area. There is a ceramic tile floor. The sink and cupboard facilities are a welcome improvement. The historic water penetration through the cills of windows W17 and W18 noted in previous reports appears to have been rectified. The room is in satisfactory decorative condition. 3.03 Schoolroom and North Porch There is severe fresh cracking evident in the ceiling and walls adjoining the 5/6 SE and NE corners which has worsened since the last report. The structural engineer has suggested that the proposed extension work will provide an opportunity for underpinning remedial works. 5 The ceiling is painted plaster and there is a loft hatch. The loft was not inspected. There is a metal ventilation grille in the ceiling. The walls are painted brickwork. There is a hatch to the kitchen between door D3 and window W26. The floor is covered with softwood timber boards with metal grilles over heating ducts. A portion of the floor is covered with carpet that is fixed down. The floor was replaced in 2014 and the infestation in the floor has been investigated and treated by a timber specialist. The safe on the south wall and piano adjoining window W19 has been removed and there is a new painted timber cupboard in their place. The north Porch finished are generally as for the Schoolroom with fitted timber cupboards on the east and west walls. Some of the floor boards are loose and require fixing. 3.04 WC Block The ceilings and walls are painted plaster. The floor is paved with red quarry tiles and is in satisfactory order. 3.05 **Decorations** The decoration is in reasonable order.

### 4.00 ORGAN

There is one manual organ by Bishop and Sons of London. The organ maintainer has recently changed.

### 5.00 MONUMENTS

There are two monuments to members of the Maple family behind the font on the south wall of the Nave.

### 6.00 SERVICES

# 6.01 **Electrical installation**

The electrical installation appears to be working satisfactorily. The period testing by an NIC EIC registered electrician was carried out 27/04/2017 and the recommended remedial works have been implemented.

# 6.02 Lightning conductor

There is no lightning conductor.

# 6.03 Heating Installation

#### 6.03.1 Boiler

Heating and hot water is provided by two Vaillant gas fired boilers located in the kitchen. These boilers and the new 'finned' heating elements in the Church were installed since the last inspection.

The record of the previous service was not available. The boilers should be serviced annually.

The flues discharge through the external wall of the kitchen.

The efficiency of the system appears to be satisfactory

### 6.03.2 Installation

The boiler provides energy to serve hot water and hot water radiators and the 'finned' elements' in the floor ducts in the Church. The Victorian grates that sit over the ducts have been retained. The programme control is sited in the kitchen area.

#### 6.04 **Sanitary facilities and foul drainage**

There is a unisex WC and wash basin in the lavatory block to the west of

the Schoolroom and this facility appears to be satisfactory. There are proposals for a new disabled WC extension which will be accessible from the kitchen link.

There is a plastic sink in the kitchen annex which discharges into the foul drainage system.

The foul drains discharge into a manhole with an interceptor and are thought to connect into the estate sceptic tank. It is recommended that the drains be checked and rodded every five years.

### 7.00 FIRE PRECAUTIONS

There are three fire extinguishers that are tested annually. It was not evident whether the testing is up to date.

There is one water extinguisher inside the church by the south Porch, one CO<sub>2</sub> extinguisher and one powder extinguisher, both in the kitchen annex.

There is apparently no fire plan but there are external doors to the Nave and the Schoolroom that should afford quick and easy evacuation in an emergency.

#### 8.00 SECURITY

The outside doors namely D1 to the Church and D5 to the Schoolroom, can be locked: the Nave door by an old key and a dead bolt and the Schoolroom by a double key and Yale lock.

There is a new combination lock cupboard housing the various keys for the church and schoolroom. The safe has been removed from the schoolroom.

The general security of the building and contents appears to be satisfactory.

**9.00 CHURCHYARD** including boundary walls and hedges, fences, gates, paths, trees and any monuments or memorials of special interest.

The small churchyard is well maintained and the hedges are kept tidy. There is a large copper beech tree in the south east corner which appears to be in good order. It should be inspected every 5 years by an arboriculturalist.

The Maple family vault is in the south east corner of the churchyard otherwise there are no burials in the churchyard.

There is a car park on the north east side of the churchyard that is finished with tarmac and gravel. The surface is uneven in places although satisfactory.

As noted in the previous report the grassed areas of the churchyard are very well maintained.

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The south boundary is lined with a low timber fence and gate that has been the subject of local repair. Mostly satisfactory I noted two areas where the fence is loose and could do with further repair.

There is a hedge to the east boundary which appears to be satisfactory. The wooden gate to the car park has been overgrown and the condition was not inspected. The hedge should be cut back.

There is a hedge to the north boundary and to the west boundary with a painted fence and gate north of the WC block all of which appear to be satisfactory.

Signature of Architect : ... Stephen Melvin.....

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