Quinquennial Inspection Report

St Luke's Church, Pallion, Sunderland

Diocese - Durham

Archdeaconry - Sunderland

Deanery - Bishopwearmouth

Report prepared by:

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Brief description

St Luke's Church was constructed in 1874 in the Early English Decorated style. The architect was J P Pritchett. The church has a high Chancel and 5-bay Nave with South Aisle, North Porch and North East Tower. The church is linked to the Johnson Bailey Parish Hall via a single storey flat roofed block constructed in 1968. The former vicarage site to the west has been redeveloped into an aged-persons development.

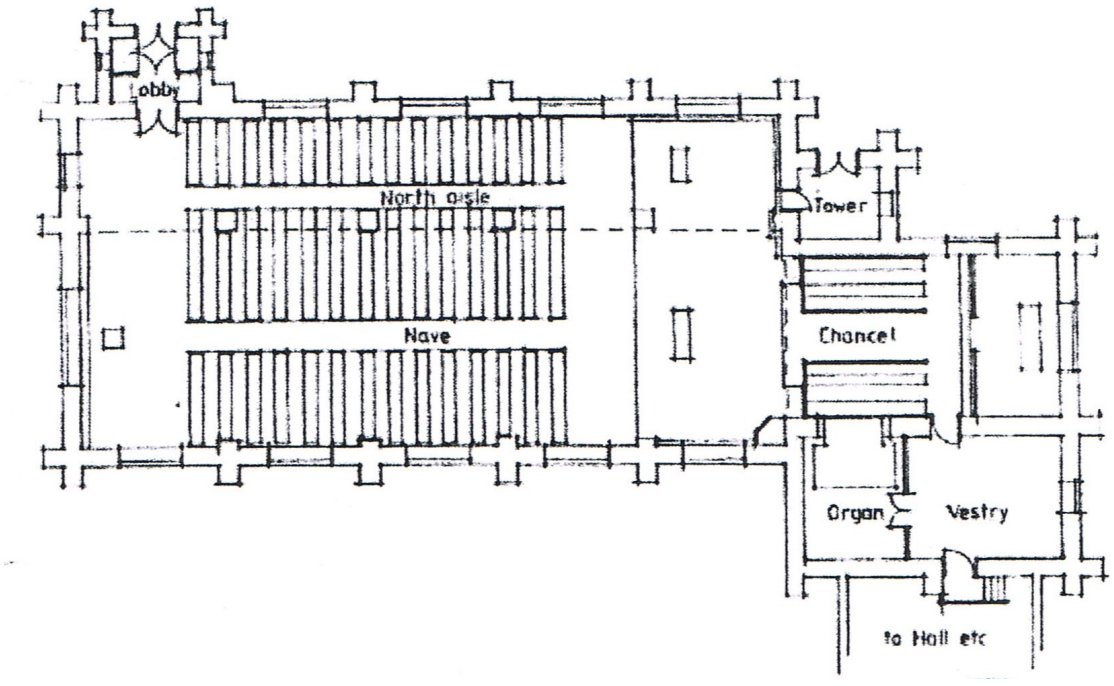
Externally the roofs of the church are slated in large Westmorland slates of diminishing courses with stone gable copings. The external walls have irregular courses of rubble sandstone with ashlar dressings. There is a 4-light east window with geometric tracery and a large 3-light west window. 2-light clerestory windows with trefoil roundels to the Nave are repeated at lower level in the Nave and North Aisle. The Tower has a north door, a 2-light window in second stage and blind roundels in short third stage, tall louvred belfry openings with crocket-capitalled shafts, parapet and corner blocks replacing pinnacles removed in 1982 when the spire was taken down. The gabled north Porch has ball flower stopped drip mould over roll moulded arch on water leaf capitalled nook shafts.

Internally the high Chancel arch is set on a pair of corbelled shafts. The South wall of the Nave comprises a blind arcade with block capitals on pilasters. The north arcade has roll-moulded soffits with crocket capitals on round pink sandstone piers. The scissor braced roof trusses are set on moulded corbels with two levels of purlins. Walls are plastered and painted with ashlar dressings to windows. The Chancel reredos has 4 cusped arches on shafts. The stained glass to the east window depicts Christ In Glory with Passion and Crucifixion while the west gable window in contrast is generally of plain glass with some coloured work in the roundels and dove in the head of the central light. Other stained-glass windows include the west window and north windows of the North Aisle adjacent to the Porch. All other windows have clear glass with some feature-coloured glass to roundels etc.

Listing grade:

This church is grade II listed.
Date of listing: 10-Nov-1978
English Heritage Building ID: 1292949

Floor plan (NTS)



Executive summary

The condition of the church building continues to give cause for concern. There appears to have been no maintenance or repair carried out since the 2018 inspection and the condition of the interior has deteriorated further. Many of the recommendations of the 2018 report are therefore repeated.

Roofs and rainwater goods:
There are some missing, slipped and rotated slates which need replacing and refixing respectively. There appears to be a leak in the gutter on the north side of the Nave by the west gable. This is causing a damp patch externally and blistering plaster internally. Sealing the leak is needed to prevent further damage. Other gutters should be checked for leaks and sealed as necessary. It is recommended that the gutters are cleared twice a year to prevent blockages to outlets.

Upstand walls:
The water-tabling to gables are in poor condition due to frost action on the soft sandstone as reported in the previous two inspections. The worst affected water-tabling (the Vestry, Chancel and Nave east gable and Porch) should be replaced to prevent further water ingress through the wall heads. The water tabling to the North Aisle west gable needs repointing and the flashings sealed to stop the damp penetration which is causing blistering plaster and paint internally. The chimney stack on the Nave east gable has deep open joints which require repointing.

Tower:
The previous inspection report highlighted the damage to the Tower interior. At this inspection the ladders were insecure and there was considerable debris at the base of the Tower making access unsafe. As previously reported, there has been some considerable water damage done to the ceiling at the base of the Tower and 50% of the plaster ceiling has collapsed and come away from the laths. It is not known whether the cause of the leak has been investigated or any repairs made since the 2018 inspection. If not, this should be carried out as a matter of urgency.

External walls and window masonry:
The walling and pointing are generally in reasonable condition but repointing is needed to open joints on some buttresses, below plinth course. The hood moulds to some of the Nave south windows; the Chancel east window and the Porch door have badly decayed sections. Localised replacement is needed.

Window glazing and protection:
The easternmost window to the North Aisle has suffered an attempted break in. Some of the glass is broken and the leading bent. Repairs are needed as soon as possible. The polycarbonate over-glazing to the Chancel east; Nave west and N Aisle west windows are discoloured and opaque. Replacement with UV resistant glazing is recommended. The metal mesh covers to the North Aisle windows are badly rusted and worn thin and those to the Nave south windows are rusting and some are badly fitted. Again, replacement in UV resistant polycarbonate is recommended. The stained glass to the East window seems very dark and grimy. The advice of a glazing conservator is recommended.

Internal walls:
Damp plaster was removed from the north wall of the Chancel backing onto the Tower prior to the 2018 inspection. The cause of this damp is suspected to be from a concealed valley gutter at the junction of the Tower south wall and the Chancel north roof slope. The outlet is likely to have been blocked resulting in water by-passing the pipe and discharging through the wall head damaging the plaster. This needs investigation and appropriate action to remove the blockage from the outlet. Once the damp ingress has been cured and the wall is sufficiently dry it can be re-plastered and redecorated.

See paragraphs above on rainwater goods and upstand walls for comments on dealing with damp patches, blistering plaster and paint to other walls. See the paragraph below on heating which deals with the problem of mould discolouration to walls.

Floors:
The encaustic tiles to the Chancel and Sanctuary are loose and un-bonded in places. Localised re-bedding by a specialist is recommended to prevent further deterioration.

Heating:
The existing heating system with large bore pipework has been abandoned and the church is heated with wall mounted electric halogen infra-red heaters. This type of heating system while providing radiant heat for people does not provide adequate background heat to keep the building at a stable temperature. This is resulting in surface condensation and associated mould discolouration. Consideration should be given to introducing electric radiators or off-peak storage heaters to provide background heat and so stabilize the building's structural temperature. The infra-red heaters can then be used during services to provide a boost without causing surface condensation.

Electrics:
It is not known when an electrical test was last carried out. It is recommended that an electrical test is carried out as soon as possible and thereafter every 5 years. Any portable electrical appliances should be tested annually.

Lightning protection system:
A lightning conductor is fitted to the Tower parapets. However, the down tape is missing. A new tape should be fitted and connected to the parapet tapes as soon as possible. Once re-fitted the system should be re-tested. Thereafter the lightning protection system should be tested every five years.

Practical path to net zero carbon
On 12 February 2020 General Synod recognised that we are in a climate emergency and committed to an ambitious carbon reduction target of Net Zero by 2030. The culture is changing fast, both outside and within the Church; questions of sustainability should inform all our buildings-related decisions from now on. The PCC are encouraged use the 'Practical Path to Net Zero Carbon for our Churches' (PPNZC) document in Appendix A to look at ways of reducing energy use and carbon emissions.

Work carried out since the previous report

- Annual testing of fire extinguishers
- Maintenance of grassed areas
- Localised repair to electrical system

Limitations of the report

- The inspection was carried out from ground level only. The inspection and was purely visual. Access to the Tower was considered unsafe due to insecure ladders etc and this was not inspected. Concealed spaces (e.g. sub floors and ceiling voids etc.) were not inspected. Access was not gained to the Organ Chamber and Boiler House. The inspecting architect cannot state that these uninspected areas are free from defect.
- This is a summary report; it is not a specification for the execution of the work and must not be used as such. The professional adviser is willing to advise the PCC on implementing the recommendations and will, if so requested, prepare a specification, seek tenders and oversee the repairs.
- The PCC is advised to seek on-going advice from the professional adviser on problems with the building.
- Contact should be made with the insurance company to ensure that cover is adequate.
- The repairs recommended in the report (with the exception of some minor maintenance items) are subject to the faculty jurisdiction. Guidance on whether particular work is subject to faculty can be obtained from the DAC.

The Report

Category scale
A – Urgent, requiring immediate attention
B – Requires attention within 12 months
C - Requires attention within the next 18-24 months
D – Requires attention within the quinquennial period
E – A desirable improvement with no timescale
M – Routine maintenance (i.e., clearing leaves from a gutter). This can be done without professional advice or a faculty.

1.0 Exterior:

1.1 Roof coverings	Clay ridge tiles. Welsh slates set to diminishing courses.	
Condition	Generally, in fair condition. Chancel – slating in fair condition. Nave – north slope: in fair condition but some slates with broken corners. Nave – south slope: 4No missing slates; 1No rotated slate; some slates with broken corners. North Aisle – in fair condition but some slight uplift on the slates at the west end above the Porch. Porch – east slope – 1No slipped slate by valley gutter; west slope – 1 or 2 slates with broken corners; some replacements slates don't match original for size, grade or colour. Vestry – 1 or 2 slates with broken corners	
Repair needs	Replacement of missing slates. Refixing of rotated and slipped slates. Replace worst affected slates with broken corners. Ideally replace mismatched slates on Porch west slope.	B B B E

1.2 Rainwater goods and disposal systems		
Condition/ repair needs	Generally aluminium powder coated gutters and downpipes taken to gullies and soakaways throughout. The rainwater goods are generally in good condition. There is staining on the north wall of the Nave near the west gable below the gutter indicating a leaking joint. The joint needs to be checked for leaks and sealed. The valley gutter between the south face of the Tower and the north slope of the Chancel is vulnerable to blockages in the outlet pipe. The water ingress which has resulted in the damp on the north wall of the Chancel is likely to have its origins here. Checking and unblocking the gutter and clearing the outlet is needed.	 B B

1.3 Tower	See item 4.5 for re-fixing of the lighting conduction tape. Not inspected internally above ground level internally due to unsafe access.	
Condition	Ground floor: The 50% of the plaster to the ceiling at the base of the Tower has broken off the laths and has collapsed to the floor. This may have been resulted from the flow of water that cascaded down the tower during the clearance of the Tower roof outlet approx. 10 years ago or it may be an on-going leak from the internal downpipe. The cause of the damp needs thorough investigation and a solution found before the ceiling can be re-plastered and re-decorated.	

1.4 Parapets and upstand walls, finials, crosses and chimneys		
Condition	Vestry: Water-tabling badly decayed in places to both gables. Chancel: East gable upstands - water-tabling badly decayed at joints on south slope. Nave: Considerable surface decay to water-tabling to East gable. Minor surface decay to water-tabling of West gable. North Aisle: Considerable damage to plaster of west gable due to water ingress to west gable upstand wall. Surface decay to water tabling. Porch: Water-tabling badly decayed near apex. Apex crosses: Appear to be missing from Nave gables. Nave: Deeply receded joints to chimney stack to east gable.	
Repair needs	Replacement of the badly decayed water tabling to the gables of the Vestry, Chancel (east) and Nave (east) is needed to prevent water ingress through the wall heads. Replacement of the badly decayed water tabling either side of the apex to the Porch is also needed to prevent water penetration. Pointing the open joints in the chimney to the east gable of the Nave is needed to prevent water ingress. The joints in the water tabling should be checked and pointed and the flashings checked and sealed to stop water ingress to the North Aisle west gable wall which is resulting in the blistering plaster and paint. Consideration should be given to replacing the missing apex crosses.	C C C C E

1.5 External walling	See para 1.7 for window masonry.	
Condition	The masonry and pointing of the external walls are generally in fair condition. However, there are some defective areas which need attention: - Nave west gable – decay to stones at high level and below plinth level; some hard pointing to string course height; receding joints to upper parts of buttresses. Nave south wall – receding joints below corbel to east water tabling; decay to eaves course. Nave north wall – receding joints. Porch – decay of stonework near door LH jamb at low level. Hood mould badly decayed to LHS. Receding joints to gable wall and buttresses. North Aisle – open joints in buttress capping. Tower – surface decay to roundel on east elevation. Chancel – some open joints below plinth course; some open joints in buttresses. Generally - staining of the masonry from the rusting mesh window grilles.	
Repair needs	Open joints should be raked out and repointed. Decayed stonework should be replaced.	D D

1.6 External doors and surrounds		
Condition	The Porch and Tower doors are of robust timber construction (framed, ledged braced and battened) and robust security (decorative strap and pin hinges, multiple bolts, box locks etc., rim latches). Porch door surround – hood mould badly decayed on LHS; surface decay to base of shafts; open joints to jambs. Tower door surround – receding joints to hood moulds.	
Repair needs	Redecoration of doors during the quinquennial period to prevent water ingress and timber decay. Replacement of decayed masonry; repointing of open joints.	D D

1.7 Windows:		
Condition / repair needs	<u>Masonry</u>: Nave clerestory windows - some decay of hood moulds on south side – replacement stone ideally required - mullions and tracery in fair condition - decay on some of the cills (south side) Nave lower windows - some past repairs to eroded cills Nave west window - replacement masonry in fair condition North Aisle north window - hood moulds, tracery and mullions in fair condition - past repairs eroded cills North Aisle west gable – some decay to LH cill which needs repair. Tower windows - some open joints in tracery – repointing needed Chancel north - masonry in fair condition Chancel east - some decay and delamination to sections of hood mould and some arched stones (LHS); replacement stone needed - tracery & mullions in fair condition but some open joints which need repointing Vestry east - in fair condition <u>Glazing</u>: Nave – clerestory and south lower windows: clear glass and leading in fair condition Nave west window: coloured glass, clear glass and leadwork in fair condition North Aisle - west gable: stained glass and leading in fair condition. North Aisle – north: stained glass window adjacent Porch door and 3No clear leaded windows in fair condition; easternmost window has damaged lead through a break in and has been partly boarded. This needs a permanent repair. Tower windows: clear glazing and leading fair. Chancel north window: clear glazing and leading fair. Chancel east window: somewhat dark stained glass – recommended advise on cleaning by specialist conservator Vestry east window: clear glazing and leading fair.	D D D D A E

	<u>Window protection</u>:	
	The mesh grilles to 3 of the 4 Aisle windows are eroded badly and are wearing thin. Replacement is needed as they afford little protection. UV resistant polycarbonate would be the best option.	E
	The mesh grilles to the upper and lower windows on the south elevation of the Nave are rusted and some are poorly fitted. The rust is causing staining on the masonry. Ideally these should be replaced (again in UV resistant polycarbonate)	E
	The polycarbonate covers to the Chancel east window, Nave west window and Aisle west window are opaque due to ultra violet light. Ideally replacement in UV resistant polycarbonate is needed.	E
	The Porch windows are vulnerable to break ins and have been boarded up with plywood on the west side. Ideally the window should be re-glazed and fitted with security bars and then polycarbonate outer glazing fitted.	E

2.0 Interior:

2.1 Roof and ceiling voids and ventilation		
Condition	Vestry: The suspended ceiling tiles are in fair condition. The void above the ceiling was not inspected and the inspector cannot state that the void is free from defect.	
Repair needs	None.	

2.2 Presence of bats and other protected species		
Comments	On previous inspections of the Tower there was no evidence of bats roosting. (See section 6 – advice to PCC).	

2.3 Roof structures, ceilings		
Condition	Chancel: The ceiling appears in fair condition apart from some deterioration of the string course at eaves level on the north side. Nave: Some minor cracking to the plastered infill panels. North Aisle: Some blistering of plaster and paint in bay nearest to west gable wall and in 2nd and 4th bay from Porch.	
Repair needs	Chancel: Localised repair of the stone string course followed by localised redecoration of same. Nave: Monitoring of cracks. North Aisle: Investigation as to cause of water ingress (see items 1.2 and 1.4 for actions)	D

2.4 Partitions, screens, panelling, doors		
Condition / repair needs	Dado panelling to Nave and North Aisle in fair condition. Internal doors structurally robust and decoration fair. Ironmongery appropriate for security and use.	

2.5 Floors, Platforms		
Condition	Chancel: Decorative encaustic tiling is un-bonded in places. Choir stalls and platforms are in good condition. Nave and North Aisle: Carpet tiling to the dais are in satisfactory condition, though rather faded; pine pews and pew platforms are in fair condition.	

	Vestry: The suspended timber floor is carpeted but the carpets were not lifted and the inspector cannot state that the floor below is free from defect. Porch: Quarry tiles in fair condition. Tower-ground floor: Decorative encaustic tiling – obscured by dust and debris from plaster ceiling collapse.	
Repair needs	Chancel: re-bedding of loose encaustic floor tiles. Tower-ground floor: the floor needs a good clear out of all fallen plaster and other debris.	C C

2.6 Internal wall finishes		
Condition	Chancel: ▪ East gable and south wall – mould discolouration and some faking paint ▪ North wall - the previously blistered plaster has been removed from 80% of the north wall. The walls appear to have dried out since the previous inspection though this should be tested with a moisture meter at various heights. The remaining plaster by the north window is in similar condition to the east and south walls. Nave: ▪ East wall – stonework to Chancel arch in fair condition. Some, cracks, mould and flaking paint to plasterwork above the arch. ▪ South wall – some blistering plaster and paint at high level between 2No westernmost windows; some flaking paint in lower arches. ▪ West gable – flaking paint near return to north wall; mould discolouration above the window arch; some cracks at high level and a long crack from the window cill downwards. ▪ North wall – plaster and paint flaking especially by return to west gable; some cracks; stone arcade of columns and arches in good condition. North Aisle: ▪ West half gable – in poor condition with detached plaster and badly blistering paint resulting from water ingress through upstand wall above. ▪ North wall – crumbling plaster and paint by west gable return; some localised cracks. ▪ East half gable – cracks and mould.	
Repair needs	Chancel: North wall – the cause of the damp (which resulted in the plaster being removed) needs to be fully investigated and appropriate action taken. It may have resulted from the catastrophic leak through the tower roof which damaged all the plaster and ceilings in the Tower. It may also have been caused through a leak in the valley gutter between the south face of the Tower and the north roof slope of the Chancel roof. Only when the dampness has been cured and the north wall is dry, can replastering and redecoration be carried out. (See 1.2 and 1.3 for actions).	

	Nave: The cause of the high-level blistering on the north and south walls needs investigation. The gutters need checking for leaks and sealed as needed. (See 1.2 for action). The blistering plaster and paint on the west gable is likely to be cause by water ingress through the water tabling and possibly the roof to wall upstand junction. Repointing and repairs to water tabling and checking of flashings are recommended. (See 1.4 for action). North Aisle: The blistering plaster and paint to the west gable wall is likely to be caused by water ingress from the water tabling and roof to upstand wall junction. These need investigation, appropriate repairs and drying out before any replastering and redecoration are attempted. (See 1.4 for action). Generally: The mould problem can only be solved by reducing the dampness in the building. The dampness is caused partly by leaks in the fabric and partly by surface condensation resulting from the infra-red heating system. Some form of background heating is needed (see section 4.1). This will allow the walls to dry out and prevent surface condensation. Only then should redecoration be attempted.	

2.7 Monuments, tombs etc.		
	The wall mounted metal plaque in the Sanctuary has been removed from the wall (presumably due to the plaster removal adjacent). Re-fixing is recommended once the wall has been replastered and redecorated.	E

2.8 Vestry, kitchen and toilet		
Comments	A kitchen and male and female toilets are located in the flat roofed link block adjacent to the church. These areas were not inspected. The Vestry is fitted with a sink, vestment chests and cupboards, a substantial table and chairs.	

2.9 Disabled access and provision		
Comments	There is level access for wheelchair users from the entrance footpath into the Porch and Nave, though not to the Chancel or Vestry due to the raised dais at the foot of the Nave. The PCC should consider the introduction of a wheelchair accessible toilet within the church premises.	E

2.10 Fittings, fixtures, furniture and moveable articles	These include 1No brass eagle lectern; 2No oak bishop's chairs; 1No oak armchair; fitted oak reading desks; 1No modern Nave altar in oak veneer; an oak fronted pulpit; 1No piano; a model of the church in a case; a model of a ship in a case; a painted stone font.	
Condition	All appear in fair condition.	

2.11 Organ		
Condition/ repair needs	The organ is tuned regularly and is understood to be in good working order. The organ chamber was not inspected and the writer cannot state that the area is free from defect.	

Interior – facing west

Interior – facing east

Chancel – north wall

Nave – south wall

North Aisle – west wall

3.0 Churchyard and environs:

3.1 Paths and access issues		
Condition	Block paved paths by the porch and west gable in fair condition. There is a minor depression in the concrete path on the south side of the Nave which is ponding.	
Repair needs	Localised repair concrete path.	C

3.2 Gates and fences		
Condition & repair needs	Gates - the metal gates by the main entrance are in fair condition. However, the gates by the east side of the Chancel require redecoration. Fences - the hooped top railings on the west boundary are showing signs of rust and re-decoration is needed to prevent further deterioration.	D D

3.3 Boundary walls		
Condition & repair needs	Dwarf boundary wall on the north and east sides – the sandstone copings have eroded and patch repaired in concrete over the years. The copings have further deteriorated and further repairs are needed. There are open joints in the boundary walls especially at low level. These should be pointed up to prevent erosion of the masonry. The railings on top of the walls are rusting in places and in are generally in need of redecoration.	D D D

3.4 Churchyard		
Condition & repair needs	The grassed areas on the north and south sides are cut during the growing season. The flower and shrub beds are in tidy condition.	

3.5 Trees		
Safety	There are a number of a sycamore trees adjacent to the west boundary. The branches of the one tree by the SW corner is very close to the building. It is recommended that an arborist give engaged to give advice on whether the tree branches need lopping. The cherry tree 5m from the south wall of the Nave has grown significantly since the last inspection. Pruning is recommended during the quinquennial period. The rowan tree on the west side of the porch would best be removed as the roots could affect the foundations.	M M M
Importance	The trees are not of major significance but contribute to the setting.	

4.0 Services, installations and other matters:

4.1 Heating		
	The existing heating system with large bore pipework has been abandoned and the church is heated with wall mounted electric halogen infra-red heaters.	
Condition 	The heaters were not tested during the inspection but are understood to be in working order. This type of heating system while providing radiant heat for people does not provide background heat to keep the building at a stable temperature. This is resulting in surface condensation and associated mould growth.	
Repair needs	Consideration should be given to introducing electric radiators or off-peak storage heaters to provide background heat and so stabilize the building structural temperature. The infra-red heaters can then be used during services to provide a boost without causing surface condensation.	D

4.2 Electrical		
Condition	Internally: The lighting system in the Nave, Side Aisle and Chancel comprises a combination of LED lights and floodlights. The system appears to give reasonable levels of illumination. Externally: Floodlights are located on the east, north and west sides of the building but were not tested.	
Repair needs	It is not known when an electrical test was last carried out. It is recommended that one be carried out as soon as possible and thereafter every five years.	B

4.3 Sound system		
Comments	The system was not tested during the inspection but is understood to be in good working order.	

4.4 Fire protection		
Comments	The fire-fighting equipment should continue to be serviced annually.	

4.5 Lightning Protection		
Comments	A lightning conductor is fitted to the Tower parapets. The down tape however is missing. A new tape should be fitted and connected to the parapet tapes as soon as possible. Once re-fitted the system should be re-tested. Thereafter the lightning protection system should be tested every five years.	B

5.0 Summary of repairs

Category scale
A – Urgent, requiring immediate attention
B – Requires attention within 12 months
C - Requires attention within the next 18-24 months
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E – A desirable improvement with no timescale
M – Routine maintenance (i.e. clearing leaves from a gutter). This can be done without professional advice or a faculty

Category	Comment	Broad Budget Costs
A	Repair to broken glass/ bent leading to North Aisle easternmost window (1.7)	£400
B	Slating repairs (1.1)	£900
B	Check and seal leaking Nave north slope gutter at west end (1.2)	£250
B	Check/unblock outlet from valley gutter behind Tower (1.2)	£900
B	Investigate cause of leak from Tower/ seal as necessary (1.3)	£500
B	Electrician to carry out full electrical test (4.2)	£450
B	Re-fix lightning conduction tape to Tower / re-test (4.4)	£450
C	Replacement of badly decayed water tabling (1.4)	£5,000
C	Repointing of open joints to water tabling (1.4)	£3,500
C	Repoint joints of chimney (1.4)	£2,000
C	Localised path repair (3.1)	£150
C	Re-bed loose encaustic tiles to Chancel and Sanctuary floors (2.6)	£450
C	Clear debris from floor of Tower (2.6)	DIY
D	Rake out / repoint open joints in external walls where indicated (1.5)	£1,500
D	Replace badly decayed stonework (1.5)	£7,500
D	Redecoration of external doors/ replace decayed door masonry (1.6)	£400/£2,500
D	Replacement of decayed window masonry/ repointing window masonry (1.7)	£2,000
D	Localised repair internal stone string course to Chancel north wall (2.3)	£1,500
D	Redecoration of gates and fences (3.2)	£900
D	Repair copings and fill open joints in boundary walls (3.3)	£450
D	Decorate railings to boundary walls (3.3)	£500
D	Consider new supplementary heating system to cure mould problems (4.1)	£30,000
E	Replace mismatched slate to Porch roof west slope (1.1)	£250
E	Consider replacing missing apex crosses to Nave roof (1.4)	£10,000
E	Consider seeking a glazing conservator's advice on East window (1.7)	£150
E	Replace rusting mesh window guards in polycarbonate (1.7)	£5,000
E	Replace cloudy polycarbonate outer glazing in UV resistant type (1.7)	£5,000
E	Consider re-glazing and improving security to Porch west window (1.7)	£500
E	Re-fix brass memorial plaque to Chancel north wall when re-plastered (2.7)	£75
E	Consider introduction of a wheelchair accessible toilet (2.9)	£30,000
M	Obtain arborist's comments/ prune sycamore tree on west boundary (3.5)	£150
M	Pruning cherry tree south of Nave (3.5)	£150
M	Remove Rowan tree by Porch (3.5)	£150

6.0 Maintenance recommendations and general advice

Accessibility and disabled people
The Equality Act 2010 bans unfair treatment and helps achieve equal opportunities in the workplace and wider society. Duties under the Act are placed on 'service providers', which include churches and the service they provide for worship and wider activities either in the church or a church hall. The PCC should ensure that they have understood their responsibilities under the Equality Act 2010. Further details and guidance are available at http://www.churchcare.co.uk/images/Accessibility_Sept2017

Asbestos
A suitable and sufficient assessment should be made as to whether asbestos is or is liable to be present in the premises. The assessment has not been covered by this report and it is the duty of the PCC to ensure that this has been or is carried out.

Bats and other protected species
The PCC should be aware of its responsibilities where protected species are present in a church. Guidance can be found on http://www.churchcare.co.uk/churches/guidance-advice/looking-after-your-church/bats

Electrical Installation
Any electrical installation should be tested at least every five years in accordance with the recommendations of the Church Buildings Council. The inspection and testing should be carried out in accordance with IEE Regulations, latest edition, and an inspection certificate obtained in every case. The certificate should be kept with the Church Logbook.

Fire extinguishers
Obtain advice from Local Fire Prevention Officer on the correct type and location. Enter into a contract for annual maintenance with the supplier.

Heating Installation
A proper examination and test should be made of the heating system by a qualified engineer each summer before the heating season begins, and the report kept with the Church Logbook.

Health and Safety
Overall responsibility for the health and safety of the church and churchyard lies with the Incumbent and PCC. This report may identify areas of risk as part of the inspection, but this does not equate to a thorough and complete risk assessment by the PCC of the building and churchyard.

Insurances
Ensure adequate cover is maintained for the full cost of re-building and replacement of contents and ensure this is index linked to cover inflation.

Painting rainwater goods
Paint cast iron rainwater goods every five years min. Scrape and wire brush to remove rust. Apply primer/undercoat. Topcoat with 2 coats gloss paint. Use bituminous paint on inside of gutters.

Pointing of masonry
Must be done under the direction of the Church Architect who will advise on the correct mortar mix and method of application. (NB the wrong mortar mix can do more harm than good).

Plasterwork
Loose plaster is a problem in many churches and can be dangerous if large sections fall off the walls or plaster and lath ceilings. Loose sections are not always visible and sometimes can only be identified by tapping. It is advisable to check suspect areas from ladders where possible.

Rainwater disposal systems
Rainwater goods include the gutters and downpipes which are key to the survival of a church building. Together with a watertight roof, they ensure that rainwater is directed safely away from the building. As water is the greatest cause of damage to buildings, it is vital to keep these elements well maintained. Clean out gutters and gullies twice per year – late spring, late – autumn after leaves have fallen. See Church Care website under http://www.churchcare.co.uk/images/Guidance_Notes/Rainwater.pdf

Roof coverings
A roof keeps out water and prevents the deterioration of the building and its contents. It needs to be carefully maintained in order to retain its weatherproof properties. Check frequently and repair as necessary. See Church Care website under http://www.churchcare.co.uk/images/Roofs_August_2016.pdf

Sustainable buildings
A quinquennial inspection is a good opportunity for a PCC to reflect on the sustainability of the building and its use. This may include adapting the building to allow greater community use, considering how to increase resilience in the face of predicted changes to the climate, as well as increasing energy efficiency and considering other environmental issues. See Appendix A for 'a Practical Path to "Net Zero Carbon" for our churches'.

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APPENDIX A

A practical path to "net zero carbon" for our churches

These recommendations aim to help churches reduce their energy use and associated carbon emissions. They are based on the findings of our church energy audit programme and input from of a range of professionals in the field.

NOTE: Many of the suggestions below require faculty; please seek input early on. If the church interior is of historic, artistic, architectural or artistic interest, seek professional & DAC advice first, before making changes; stabilising the environment for these interiors is important to minimise cycles of treatment, with their inherent carbon cost.

A. Where do we start?

These are actions that nearly all churches can benefit from, even low occupancy churches used only on a Sunday. They are relatively easy, with relatively fast pay back. They are a good place for churches to start, when trying to move towards 'net zero'.

The building itself:

- A1. Maintain the roof and gutters, to prevent damp entering the building and warm air escaping.
- A2. Fix any broken window panes* and make sure opening windows shut tightly, to reduce heat loss.
- A3. Insulate around heating pipes to direct heat where you want it; this may allow other sources of heat to be reduced in this area.
- A4. If draughts from doors are problematic, draught-proof the gaps* or put up a door-curtain*.
- A5. Consider using rugs/floor-coverings (with breathable backings) and cushions on/around the pews/chairs.

Heating and lighting:

- A6. Switch to 100% renewable electricity, for example through Parish Buying's energy basket, and "green" gas.
- A7. Match heating settings better to usage, so you only run the heating when necessary*.
- A8. If you have water-filled radiators, try turning-off the heating 15 minutes before the service ends; for most churches this allows the heating system to continue to radiate residual warmth*.
- A9. If you have radiators, add a glycol based "anti-freeze" to your radiator system and review your frost setting.
- A10. Replace lightbulbs with LEDs, where simple replacement is possible.
- A11. Replace floodlights with new LED units.
- A12. If you have internet connection, install a HIVE- or NEST-type heating controller, to better control heating.
- A13. If your current appliances fail, then replace with A+++ appliances.

People and policies:

- A14. Complete the Energy Footprint Tool each year, as part of your Parish Return, & communicate the results.
- A15. Create an Energy Champion who monitors bills and encourages people to turn things off when not needed.
- A16. Write an energy efficiency procurement policy; commit to renewable electricity & A+++ rated appliances.
- A17. Consider moving PCC meetings elsewhere during cold months, rather than running the church heating.

Offset the rest:

- A18. For most low usage "Sunday" churches, once they have taken steps like these, their remaining non-renewable energy use will be very small. For the majority, all they need to do now to be "net zero" is offset the small remaining amount of energy through Climate Stewards or other reputable schemes.
- A19. Also, think about your church grounds. Is there an area where you could let vegetation or a tree grow?

B. Where do we go next?

These are actions with a reasonably fast pay back for a church with medium energy usage, used a few times a week. Perhaps half of churches should consider them.

Most actions cost more than the ones above, and/or require more time and thought. Some require some specialist advice and/or installers. They are often good next steps for those churches with the time and resources to move on further towards 'net zero'.

The building itself:

- B1. If you have an uninsulated, easy-to-access roof void, consult with your QI about insulating the loft*.
- B2. If you have problematic draughts from your door, and a door curtain wouldn't work, consult with your QI about installing a glazed door within your porch, or even a draught-lobby*.
- B3. Consider creating one or more smaller (separately heatable) spaces for smaller events.
- B4. Consider fabric wall-hangings or panels, with an air gap behind, as a barrier between people and cold walls.

Heating and lighting:

- B5. Learn how your building heats/cools and the link to comfort, by using data loggers (with good guidance).
- B6. Improve your heating zones and controls, so you only warm the areas you are using.
- B7. Install TRVs on radiators in meeting rooms & offices, to allow you to control them individually.