

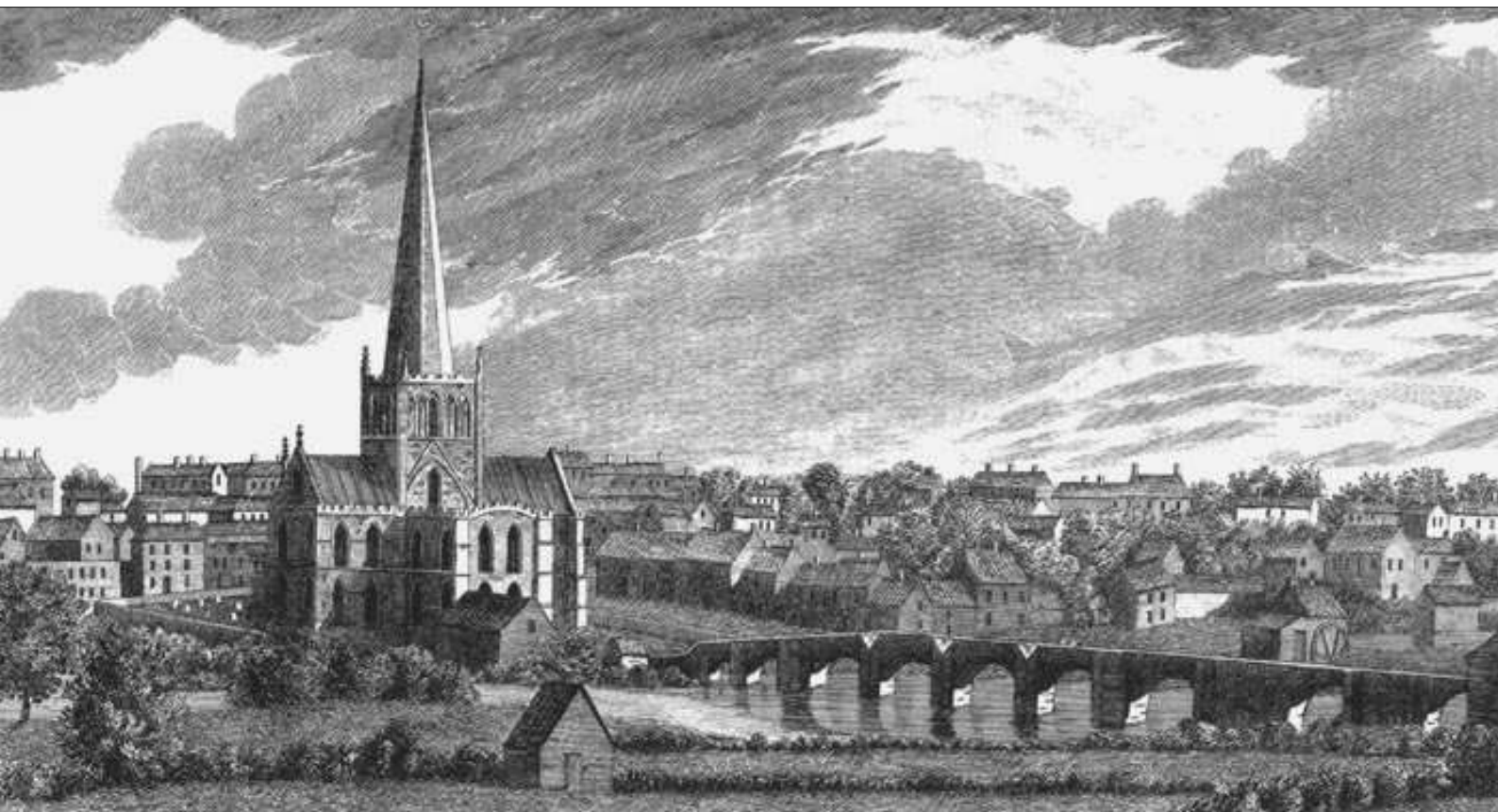
ST CUTHBERT'S CHURCH

Darlington

Diocese of Durham
Archdeaconry of Auckland
Deanery of Darlington

Inspecting Architect Ulrike Knox RIBA AABC

Report on Quinquennial Inspection 2019



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1. Introduction

This report summarises the findings of an inspection of St Cuthbert's Church, Darlington. Carried out on 31st July 2019 by Ulrike Knox and Stephen McConnell.

The weather on the day of the inspection was fine.

This is a summary report only, as is required by the Inspection of Churches Measure 1959 as amended by the Care of Churches and Ecclesiastical Jurisdiction Measure 1991. It is not a specification for the execution of the work and must not be used as such.

The Architect is willing to assist the PCC in applying for a faculty, as may be required to comply with regulations. The PCC is reminded that their Minutes must record the fact that application is being made for a certificate or faculty, and that a copy of that Minute must accompany the application together with a full specification, drawings where applicable, and an estimate of the cost of the work.

Limitations of the report

Access into the below ground boiler house was not possible. The roofs were inspected from the tower and from the ground. In addition, a steeplejack has reported on the roof and provided photographs. No opening up was undertaken.

The PCC should note the following:

If not already in place, the PCC are strongly advised to enter into an annual contract with a local builder for the cleaning out of gutters and down pipes twice a year, unless members of the Church can undertake this themselves.

Although the Measure requires the Church to be inspected by an Architect every five years, it should be realised that serious trouble may develop in between these surveys if minor defects are left unattended. It is strongly recommended that the Church Wardens should make, or cause to be made, a careful inspection of the fabric at least once a year, and arrange for immediate attention to such minor matters as displaced slates and leaking pipes. Guidance may be had from the CBC website on this address:
www.churchcare.co.uk/churches/guidance-advice/looking-after-your-church

The PCC are reminded that insurance cover should be index-linked, so that adequate cover is maintained against inflation of building costs. It is, of course, important to ensure that the basic sum insured is adequate at inception of index-linking, as this will deal only with future inflation. The Ecclesiastical Insurance Office Limited, which covers the majority of churches in this country, will send its regional surveyors without charge to offer guidance as to the appropriate level of assessment in every case.

Fire Safety Advice

Can be found at <http://www.churchcare.co.uk/churches/guidance-advice/looking-after-your-church/health-safety-security/fire-precautions>

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, Guidance Note No. 3, and an inspection certificate obtained in every case. The certificate should be kept with the Church Log Book.

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 Log Book.

Lightning Protection

Any lightning conductor should be tested at least every five years in accordance with the current British Standard by a competent engineer. The record of the test results and conditions should be kept with the Church Log Book.

Asbestos

A suitable and sufficient assessment should be made as to whether asbestos is or is liable to be present in the premises. Further details on making an assessment are available on <http://www.churchcare.co.uk/churches/guidance-advice/looking-after-your-church/health-safety-security/asbestos> .

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.

Equality Act

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/churches/open-sustainable/welcoming-people/accessibility>.

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.

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 at: <http://www.churchcare.co.uk/shrinking-the-footprint/taking-action/wildlife/bats>

Open and 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. Further guidance is available on <http://www.churchcare.co.uk/churches/open-sustainable> and <http://www.churchcare.co.uk/shrinking-the-footprint>

Maintenance

The PCC has responsibility of the Church building and the churchyard, being a closed churchyard, is maintained by the Local Authority.

Executive Summary.

Whilst structurally sound and quite well maintained, the church has some significant problems to overcome.

The southern roofs to the Nave and Chancel and West & South Transept have been renewed but the Aisle roofs are becoming unreliable and are leaking in various places. The Aisle roofs require urgent repair.

There are some areas of masonry work required at high level, and some pointing the spire should be budgeted for as a necessity in the next 6 to 10 years.

The clockface is suffering from corrosion and some of the numerals have become detached and fallen down. The minute hand is not moving properly and it requires work to repair and balance the movement. Following a report it is clear that the movement requires cleaning and some of the gears and bearings require replacement since they are worn.

The windows are also causing some concern. A comprehensive report on their condition was done and subsequent repair and protection with new stainless steel guards is recommended.

The periodic electrical report has highlighted deficiencies including the need to replace one distribution board.

Previous report.

The previous report was dated 2013 by Ulrike Knox.

Brief description

St Cuthbert's Church is known as one of the finest churches in the North of England. The church is cruciform with Chancel, Nave and Transepts all of equal height radiating from the central tower with octagonal spire constructed in dressed local sandstone. There are two vestries to the south side of the chancel. Below there is an organ blower chamber to the south and boiler room to the north.

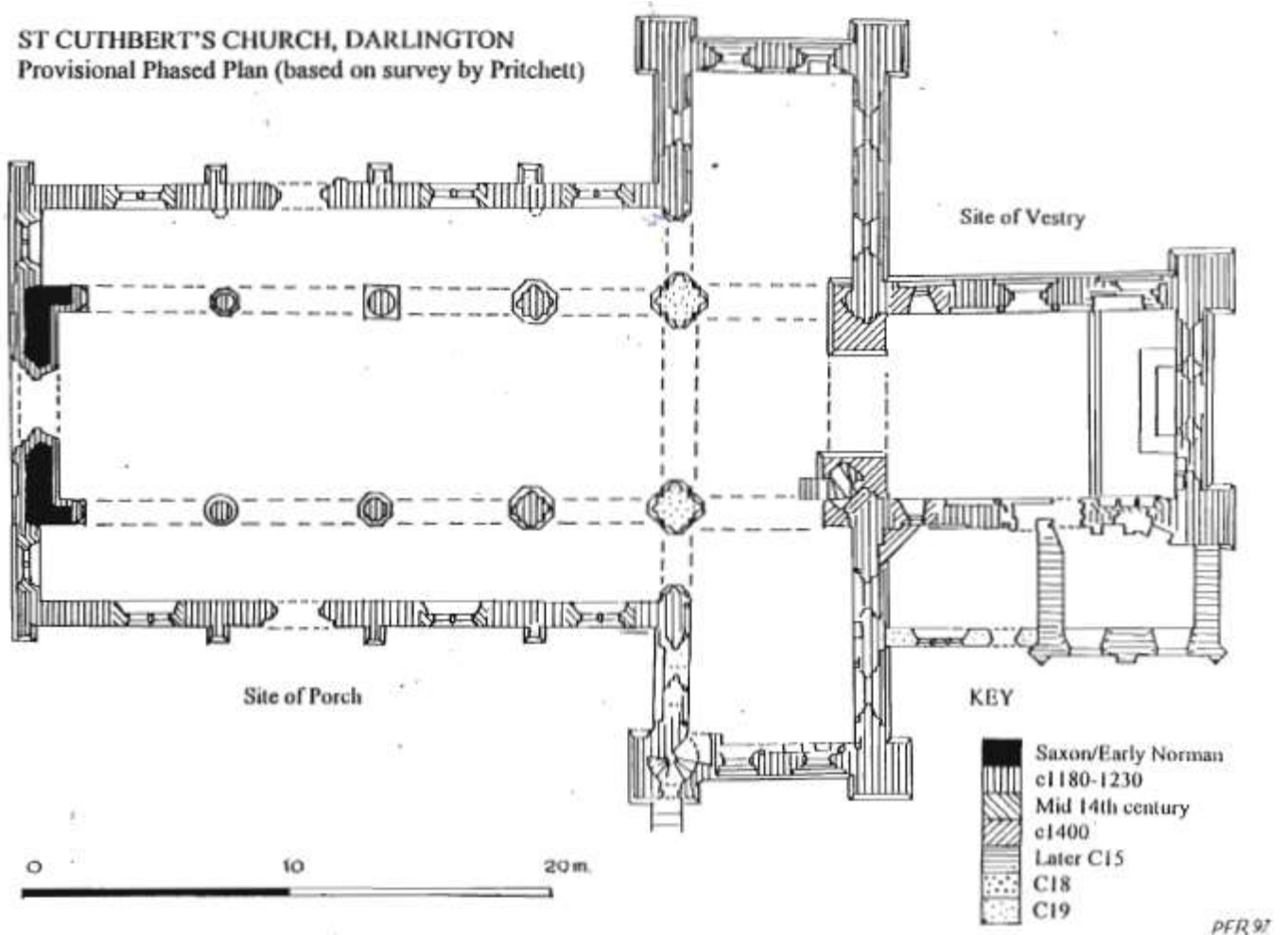
The church is almost entirely of late 12th early 13th century construction in Early English style. In the 14th century the aisle roofs were raised and new windows inserted and the belfry and

spire added. The clergy vestry is mostly 15th century and the choir vestry added in 1891. The church was extensively restored in the 19th century.

Listing grade

Grade I (some of the churchyard structures are Grade II). The church lies within the Darlington Town Centre Conservation Area.

Chronology



Notation of Report

Against each of the items in the report where some action is required, a letter has been placed indicating the extent of urgency in carry out the work, or indicating the kind of work required, as follows:-

A Items which need urgent attention

B Items which should receive attention within the next twelve months

C Items which should receive attention within the next twenty-four months

D Items which should receive attention within the quinquennium

E A point to note and monitor and/ or a desirable improvement with no timescale

M Routine maintenance

The broad budget cost bands noted are;

- | | |
|----------|------------------------------------|
| 1 | £0 to £1,999. |
| 2 | £2,000 to £9,999. |
| 3 | £10,000 to £29,999. |
| 4 | £30,000 to £49,999. |
| 5 | £50,000 to £249,999. |
| 6 | £250,000 or more than this. |

2. Exterior

2.1. NAVE ROOF

2.1.1. **Nave Roof:**

Inspected from the base of the Spire – looking down

The Nave Roof is made up of approximately 32/33 bays of lead on a steeply pitched roof with over-hanging sprocketed eaves. At the west end are two pinnacles and a gable surmounted with a stone cross. To the south and north are lower Aisles with also lead roofs.

2.1.2. **Condition:**

On the north side, there is some evidence of slumping and the clips are likely too tight, however the condition is currently satisfactory. Keep monitoring.

The south side has been renewed since 2018 and is in excellent condition.



2.1.3. **Recommendations:**

- | | | |
|----------|--|---------------------------|
| E | <ul style="list-style-type: none"> • Monitor lead sheet covering to North Nave | Broad Budget Costs |
| | | 1 |

Broad Budget Costs

1

2.1.4. **Stonework at nave roof level:**

There are two pinnacles at the west end and copings.

2.1.5. **Condition:**

The southern pinnacle of the nave roof western elevation has been repointed in 2018.



2.2. NORTH AISLE ROOF

2.2.1. The North Aisle Roof is at a much shallower pitch than the main Nave roof. There is a wide lead lined gutter with two outlets.

2.2.2. **Condition:**

The gutter appears to be clear, but there are certain areas that were blocked in the past and have overflowed, particularly the area towards the east. A recent roof inspection has revealed a number of serious defects which require remedy.



2.2.3. **Recommendations:**

- | | | |
|----------|---|---------------------------|
| B | <ul style="list-style-type: none"> • North Aisle roof requires replacement. In the interim, ensure gutters are clear. | Broad Budget Costs |
| | | 5 |

Broad Budget Costs

5

2.3. SOUTH AISLE ROOF

2.3.1. Again, lead covered with wide lead gutter with two outlets.

2.3.2. **Condition:**

A recent roof inspection has revealed a number of serious defects which require remedy including historic lead splits and failure to the mortar at the flashings.



2.3.3. **Recommendations:**

- B**
- **South Aisle roof requires replacement. In the interim, ensure gutters are clear.**

Broad Budget Costs

4

2.4. SOUTH TRANSEPT ROOF

2.4.1. The South Transept Roof is similar to the Nave Roof. It is a steeply pitched lead covered roof with sprocketed dripping eaves. There are about 12 bays covered with four sheets on the east and west. To the east side, there are a number of previous repairs, particularly in the lower two sections of lead.

2.4.2. **Condition:**

The west side was replaced in 2018. The east has a number of defects.

The western octagonal turret contains the staircase and this has a lead roof to it. The stonework has been repointed and the lead checked.

To the east side, there is a square base. This has a concrete top to it which appears to be in reasonable condition. The stonework requires repointing.



2.4.3.	Recommendations:	Broad Budget Costs
B	<ul style="list-style-type: none"> Replace roof to east slope of South Transept. 	4
B	<ul style="list-style-type: none"> To the South Transept point East Turret. 	1

2.5. CHANCEL ROOF

2.5.1. As elsewhere, is lead covered, steep, sprocketed and dripping eaves. Split into approx. 16 bays with four sheets of lead per bay. To the south side of the Chancel, the lead has been replaced. To the north side, it is in reasonable shape. To the north and south, there are pinnacles and a gable with a cross on top.

2.5.2. **Condition:**
The cross base has an area of shaled stone; however, it appears to be secure. To the north pinnacle, nearer the base of the pinnacle, there are a few open joints which should be repointed when possible. Some open joints to the pinnacles.

Lead to north deteriorating but not yet requiring renewal.



2.5.3.	Recommendations:	Broad Budget Costs
C	<ul style="list-style-type: none"> Repoint stonework to pinnacles. 	2

2.6. VESTRY ROOFS

2.6.1. To the south of the Chancel, there is the Vestry and Choir Vestry with stainless steel roof. The flashing around the roofs was lead originally, although this was stolen and replaced. The coping stones have been re-bedded and re-pointed 2017.

2.6.2. **Condition:**
Generally reasonable condition. The gutters to the Vestries require cleaning out regularly.



2.6.3.	Recommendations:	Broad Budget Costs
M	<ul style="list-style-type: none"> Clear out gutters. 	1

2.7. NORTH TRANSEPT ROOF

2.7.1. Again, similar construction in lead, split into approx. 12 bays of four sheets of lead each. The North Transept Roof has stone gable coping and two square Turrets to the east and west. These are surmounted in masonry.

2.7.2. At the apex of the coping at the gable, there is a large mortar joint which is showing signs of failing which should be noted in the future.

The western Turret has a number of plants growing out of it which should be removed. The roof itself appears to be in fair condition with no repairs visible.



2.7.3.	Recommendations:	Broad Budget Costs
A	• Remove vegetation from western turret.	1
A	• Repoint large mortar joint to apex of gable.	1
A	• Repoint turret.	1

2.8. ROOF TO THE BASE OF THE SPIRE

2.8.1. The base of the Tower is square and the Spire is octagonal. The roof area is lead, discharging into four outlets at the corners. There are flag poles at each corner and small pinnacles.

2.8.2. **Condition:**
NW & SW pinnacles have cracks requiring repair.

The lead work to the roof is in fine condition.

The doorway out onto the roof also requires decoration.

There is a clock face to the east and the west sides. These need redecoration and some repairs to the numerals – these are not secure – see clock report.

There is a lightning conductor up the Spire in good condition.

At the top of the Spire is a weather cock which does not appear to move.

The exterior of the Spire itself, following inspection by steeplejack, appears to be in fair condition with only minor pointing required. The apex stone/weathervane transition, however, is in a poor state and requires repair and redecoration.

The Parapet at the base of the Spire is also in good condition, although very low for inspection purposes, but a mansafe system has now been installed.



Some open joints/cracking at the flashing on the coping stones requires re-pointing.



2.8.3.	Recommendations:	Broad Budget Costs
C	• Door requires redecoration and minor repair.	1
A	• Clock face requires repair.	3
B	• Repair corroded weather vane and apex stone.	2
B	• Point/repair cracks in pinnacles.	1
B	• Point flashing.	1
B	• Remove all unsafe timber access systems from inside the spire.	2

2.9. WEST END

2.9.1. The exterior is of good quality sandstone ashlar with lancet windows and blind arcading.

2.9.2. **Condition:**
The masonry to the west end is generally in good condition with some evidence of opening up of the joints over the central blind arcaded lancets underneath window no.59. This should be repointed and monitored.

The guards to window no.23 and no.24 are in good condition but would be better if they were black powder coated.

The outer hood mould of the doorway has some open joints which would benefit from repointing.

There are areas of cement pointing which are unattractive and will do eventual long-term damage to the stone work. This should be removed, if possible, in due course.

To south and north copings – some open joints and moss growth.

To the west end of the south aisle there are open joints at the coping and directly underneath.



2.9.3.	Recommendations:	Broad Budget Costs
B	<ul style="list-style-type: none"> At the West End -Rake out and repoint open joints over lancets. Monitor for further cracking. 	1
B	<ul style="list-style-type: none"> At the West End -Point around pinnacles, aisle windows. 	1
C	<ul style="list-style-type: none"> Point hood mould of west door and coping stones. 	1
E	<ul style="list-style-type: none"> At the West End -Remove cementitious pointing and repoint using lime based mortar. 	3
B	<ul style="list-style-type: none"> At the West End -Repoint at west end of south aisle. 	1
B	<ul style="list-style-type: none"> At the West End -Remove vegetation from north aisle. 	1

2.10. NORTH AISLE ELEVATION

2.10.1. The exterior, as elsewhere is of good quality sandstone ashlar with lancet windows and a north door into the church.

2.10.2. **Condition:**

Generally, the stonework is in reasonable condition, although there are some more open joints at the parapet.

The eastern down pipe is split and should be repaired/replaced.

Around the first downpipe from the west, there is a large area of algae and moss growth and this indicates frequent blockages in the downpipe. This gully was blocked and not maintained.

Around the three windows on the North Aisle elevation, there are ferrous fixings in the jambs which should be removed and pointed up. The poly-carbonate protection and the wire-guards are in reasonable condition, but the poly-carbonate looks very poor in the position that it is in and aesthetically distracting.

The door has been badly affected by damp at the bottom and is rotten.

The black pipe to the east is a dummy and acts as the flue for the new boiler installation below. All the downpipes should be decorated black to match.



2.10.3.	Recommendations:	Broad Budget Costs
A	<ul style="list-style-type: none"> To the North Aisle - Repair down pipes – consider upgrading to next size up. 	2
A	<ul style="list-style-type: none"> At North side - Clean out blockages and maintain free flow. 	1
D	<ul style="list-style-type: none"> Remove ferrous fixings and upgrade window protection to powder coated stainless steel. 	3
B	<ul style="list-style-type: none"> Repair and redecorate north door and ironmongery. 	1
D	<ul style="list-style-type: none"> Decorate all rainwater goods a colour to match adjacent – black. 	2

2.11. NORTH CLERESTORY WALL

Good quality sandstone ashlar with lancet windows and blind arcading.

2.11.1. Condition:

Generally, the stonework and pointing are in good condition although it appears to be pointed in many places with cement mortar. To the left of window no. 53, the attached columnette has a cracked stone around the first joint. This should be repaired and re-fixed.

Mortar repairs around hood moulds (in red mortar) are in places, failing.

2.11.2. Around window no.54 to the right hand jamb, there is evidence of some stone spalling and open joints. This requires a closer inspection and repair. Windows appear buckled.

2.11.3. Directly under the eaves at the west end of the Clerestory, there appears to be some decay to the wall plate under the eaves. This is likely to require further repair and certainly closer inspection.



2.11.4.	Recommendations:	Broad Budget Costs
B	<ul style="list-style-type: none"> Inspect wall plate and eaves at west end of north nave roof. 	2
C	<ul style="list-style-type: none"> Inspect stonework around window 54 and repoint open joints. 	2
C	<ul style="list-style-type: none"> Repair columnette to window 53. 	2
C	<ul style="list-style-type: none"> All windows require closer inspection. 	2

2.12. NORTH TRANSEPT

This shows clearly the historic settlement of the tower.

2.12.1. Condition:

North Transept West Elevation:

The stonework to the west elevation is in fair condition generally; however, there has been some unsympathetic patching with inappropriate mortar. Some areas have mortar repairs.

2.12.2. There is some cracking over the head of Window 43 and the sill. The pointing around the jambs meeting the windows is very visually obtrusive. This may be in an attempt to stop water ingress due to the excessive buckling of the windows. These windows should be overhauled, and the housing re-done.

2.12.3. The string course below the windows is shaling and should be monitored for future decay. Replacements due.

2.12.4. The sill and jamb of window no.4 are deteriorating badly. This will require repair in due course, although it is not currently urgent.

2.12.5. At high level at the top of the corner turret, there is vegetation which requires removal and the holes left repointed. Point open joints.



2.12.6. North Transept North Elevation:

The elevation is generally in a fair condition, except for the top stage where deterioration is more evident. At the upper stages, there have been some mortar repairs utilised in the past and this is beginning to fail. The coatings are beginning to fall away. This should be monitored and the erosion checked in the next quinquennium. There are cracks that have been pointed up in the past over the windows no.5 and no.6 in the lower stage and these do not appear to have moved any further.



2.12.7. North Transept East Elevation:

This elevation is in reasonable condition. Previous movement cracks have been pointed and don't appear to have opened up at all. Although there is an unusual detail where the Chancel meets the Transept at eaves level, there doesn't appear to be particular issues caused by the water run-off.

There is also an unattractive poly-carbonate window cover to the east face of the north transept.

- 2.12.8. Around window no.7 there are some redundant fixings, which ought to be removed and the stone repaired. The Pace window no.47, has a hole in two of the panes. This pace window is also buckled.



2.12.9.	Recommendations:	Broad Budget Costs
D	• North Transept - Overhaul window 43 and stone surround.	2
D	• North Transept - Overhaul window 47.	2
D	• North Transept - Remove redundant ferrous fixings around window 7, repair holes.	2
D	• North Transept - Monitor stone deterioration at top of N Transept gable.	1
D	• North Transept - Repair/replace string course stones.	3
A	• North Transept - Remove vegetation from top of west turret and repoint.	2
D	• North Transept - Repair sill and jamb to window 4.	2

2.13. CHANCEL

- 2.13.1. **Chancel North Elevation:**
The masonry on this elevation is generally in fair condition except for the jambs around windows no.10 and no.11. The stonework here is somewhat shaled and flaky, exacerbated by ferrous fixings which should be removed, and the stonework repaired. The wire grille protecting the windows has got dead leaves behind it.

- 2.13.2. The upper two windows no.35 and no.34 are protected in a poly-carbonate sheet which looks very distracting. This should be improved if possible.



2.13.3. Recommendations:		Broad Budget Costs
D	<ul style="list-style-type: none"> Upgrade window protection to windows 35, 34 and clean out debris to others. 	2
C	<ul style="list-style-type: none"> Repair stonework to jambs to windows 10,11. 	2

2.13.4. **Chancel East Elevation:**

The masonry on the east elevation is generally fair. It was noted that the window no.12a, 12b & 12c have been repaired. Around all of the windows, all appear to be ferrous fixings which ought to be removed and the stonework repaired. Parts of 2no colonettes have been replaced.

Joints are open at the apex and especially at the heads of the blind arcade hood moulds – north side.



2.13.5. The southern off-shoot to this elevation is the east elevation of the Clergy Vestry. This has had mortar repairs to the stonework in the past which is beginning to fail and fall away. It is unlikely that they were really necessary in the first place and it is worth considering removing them.

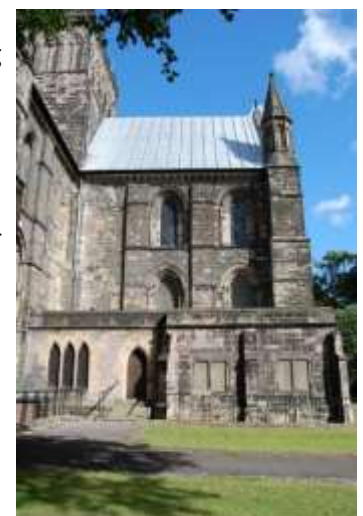
2.13.6. To the down pipe dated 1964, the hopper head requires redecoration.

2.13.7. Recommendations:		Broad Budget Costs
D	<ul style="list-style-type: none"> Redecorate hopper head and downpipe. 	1
D	<ul style="list-style-type: none"> Remove cementitious mortars and repoint vestry walls. 	2
D	<ul style="list-style-type: none"> Remove ferrous fixings around windows. 	1
D	<ul style="list-style-type: none"> Point high level stonework. 	3

2.13.8. **South Elevation:**

The lead downpipe at the junction with South Transept is leaking (probably blocked). Requires repairs and maintenance.

Some of this elevation is obscured by the Vestries at low level. The stonework is generally in fair condition, with the exception of the window surround to window no.26. Both no.26 and no.25 have poly-carbonate protection and the fixings are screwed poorly into the stonework and are rusting. These should be replaced because damage to the stonework is inevitable. The upper windows have been refurbished in 2017.



2.13.9.	Recommendations:	Broad Budget Costs
C	• Repair stonework around window 26.	1
D	• Upgrade window protection and remove ferrous fixings to windows 25,26.	2
B	• Repair and maintain downpipe at South Transept / Chancel Junction.	2

2.14. VESTRIES

2.14.1. **Chancel South Elevation:**

The stonework to the Clergy Vestry is beginning to deteriorate at plinth level and a number of the reddish coloured stones are shaling quite badly. At higher level, there are some minor areas that require repointing. At present it is in reasonable condition. There is a white waste pipe from the Vestry which looks poor and should be painted in. This is discharging into a gully.



2.14.2. **Condition:**

To the base of the Choir Vestry is a stone outshoot which houses the steps down to the Blower Room. The flat roof covering has deteriorated very badly and requires replacement. There is no lintel over the door to the steps and a concrete lintel should be inserted where the timber lintel has decayed. It is noted that the lower chamber, directly below the Choir Vestry is beginning to flood regularly. The drainage around this area should be investigated to determine which way it flows and to make sure that the gullies are clear.



Windows to the Clergy Vestry have metal glazing bars and polycarbonate glazing. Poor condition. Consider replacement and exterior shutters.

The downpipe between the Clergy and Choir Vestry has been replaced.

The timber door is in fair condition although there is evidence of water making its way underneath in certain conditions.

2.14.3.	Recommendation:	Broad Budget Costs
C	• Repair lintol to blower room.	1
C	• Repair reinforced concrete bridge to vestry door.	2
C	• Replace windows to clergy vestry.	2

2.15. SOUTH TRANSEPT

2.15.1. South Transept East Elevation:

Again, the masonry is in reasonable condition. The secondary moulding to the head of the window no.16 is cracking and may fall away in small pieces. Some pinning and mortar repair may be required within the next 5 years. Window no.36 has a lot of unsightly making-good around the head of the window which should be improved in due course when the window is over-hauled.

There are ferrous fixings around the windows which should be removed. The window no.16 has a wire guard which has lots of debris trapped behind it. It is rusty and requires redecoration or renewal. There appears to be some small amount of water damage to the timbers at the junction between the Chancel and the South Transept at the eaves.



2.15.2.	Recommendations:	Broad Budget Costs
D	<ul style="list-style-type: none"> • Repair window mouldings to window 16. 	2
D	<ul style="list-style-type: none"> • Remove ferrous fixings and rusty wire guards around windows 16, 36. Make good around 36. 	2

2.15.3. South Transept South Elevation:

The masonry is generally in a fair condition, with the exception of some open joints on the western turret below the upper sections which has been repointed. Upper levels of masonry are beginning to deteriorate and around the turret there have been mortar repairs which appear to be failing. These are shaling and falling away – especially at strings and hoods.



2.15.4. Small repairs around the sill of window no.18 should also be factored in. There are a number of ferrous fixings around the lower windows which ought to be replaced and the stonework repaired. The door to the Turret requires redecoration.

2.15.5.	Recommendation:	Broad Budget Costs
B	<ul style="list-style-type: none"> • Conservation repairs required to masonry at high level. Especially to the moulded string courses and hood moulds. 	3
D	<ul style="list-style-type: none"> • Repair sill of window 18. 	1
D	<ul style="list-style-type: none"> • Remove ferrous fixings around lower windows to south transept south elevation. 	1
D	<ul style="list-style-type: none"> • Decorate tower door. 	1

2.15.6. **South Transept West Elevation:**

Generally, in reasonable condition, except for the Turret at higher levels where the string courses are particularly weathered. Areas of string course ought to be replaced before the moulding is lost.

Open joints at plinth (top stage repaired 2018).

Areas around the head of window no.41 are poorly made up in black mortar and could be improved substantially. There are ferrous fixings around window no.19 which should be removed and the stonework repaired.



2.15.7.	Recommendations:	Broad Budget Costs
B	<ul style="list-style-type: none"> • Replace string course moulding stones to turret and towards lower window. 	3
D	<ul style="list-style-type: none"> • Remove ferrous fixings around window 19. 	1
E	<ul style="list-style-type: none"> • Improve mortar repairs above window 41. 	1
D	<ul style="list-style-type: none"> • Point at plinth level. 	1

2.16. SOUTH NAVE ELEVATION

2.16.1. Condition:

Generally, the stonework on this elevation is good. There are areas of weathering but this is not having a structural impact yet.

There are a couple of open joints to the right hand jamb of window no.22.

Around the south doorway, to the head at the right hand side, there is a stone in the outer moulding which is beginning to lose its face substantially and should be dressed back. Other stones closer to the door frame have also shaled significantly and repairs should be considered. To the outer colonette of the doorway to the right hand side, the base of the colonette is beginning to weather and a protective mortar repair should be considered to halt deterioration.

There is an area of salting stonework to the side of the buttress adjacent to the doorway, which is in a cavity, which ought to be cleaned out and repointed.

Door in fair condition.

Around windows no.21 and no.20, there are again ferrous fixings which ought to be removed and stonework repaired. Generally, all of the rainwater goods require redecoration and increasing in size, since they are taking all the water from the south nave and aisle at this level.



2.16.2.	Recommendations:	Broad Budget Costs
D	• Repoint to window 22.	1
C	• Repair masonry around door mouldings.	2
C	• Remove salt and repoint cavity.	1
C	• Upgrade down pipes for capacity.	2

2.17. SOUTH CLERESTORY ELEVATION

2.17.1. Condition:

Generally, the stonework on this elevation is in good condition.

Window no.54 has poly-carbonate protection and this looks incongruous on this elevation.

Windows due inspection/repairs. Appear quite buckled.

There is also a sundial which requires some repair at the bottom left hand corner.



The eaves again at the end, the timber work looks like it should have a closer inspection.

2.17.2.	Recommendations:	Broad Budgets Costs
B	• Repair sundial to bottom left. Repaint.	1
E	• Remove polycarbonate and replace with grille to window 54.	1
B	• Inspect windows and schedule repair.	1

2.18. BASE OF THE SPIRE

2.18.1. **Condition:**

West Elevation:

The elevation appears to be in fair condition, although the tracery details to the blind arcading are slowly eroding away. The only area of concern is the line of moulding following the original pitch of the roof which is in deteriorated stonework. This is beginning to look increasingly poor, although it is not performing a significant weathering purpose at the moment.

2.18.2.

North Elevation:

Again, in reasonable condition with weathering to the mouldings at high level.

2.18.3.

East Elevation:

This elevation was somewhat obscured but appears to be in good condition as the previous elevations

2.18.4.

South Elevation:

In good condition as before.



2.19.

SPIRE

2.19.1.

Condition:

As mentioned elsewhere, the stonework to the Spire appears to be in good condition although there are small areas of pointing which are allowing limited water ingress up the whole height of the Spire. Repointing the Spire should be considered within the next 5 years.

Certainly the interior of the Spire and the fixings at the top of the Spire should be checked by a Steeple Jack every 5 years.



2.19.2.	Recommendations:	Broad Budget Costs
D	• Repoint spire within 5 years in patches.	4
D	• Carry out inspection of interior of spire.	2

2.20. BLOWER ROOM

2.20.1.

Condition:

Glass pane in door broken. Steep steps needs hand rail.

Some dampness coming in at corner with entrance. Lintel requires repairs and roof of entrance also needs repair. Mentioned in earlier section.

Bridge to Vestry is a steel structure which is exposed and rutting. Needs repair to halt deterioration. Mentioned in earlier section.



2.20.2.

Recommendations:

Broad Budget Costs

C	Provide handrail to the steep steps.	1
C	Repair broken glass in door.	1

3. Interior

3.1. NAVE

3.1.1. **West Elevation:**

The west elevation has three lancet windows, two at Clerestory level and one at triforium level. Around the Great West Doors is a timber and glass inner porch. Above this, there is a hatchment fixed to the wall which has recently been conserved. At the West Doors, there are three risers, to external finish levels and within the porch there is a new LED lantern.



Condition:

Above and below the southern window, there is evidence of a previous movement crack. This has been pointed externally but it is still visible internally.

Note constant sound of running water, high level heating pipework.



3.1.2. **North Arcade - Looking from the Nave:**

This is a four bay arcade, the first two arches are round headed and the second two, closest to the east are slightly pointed. The columns vary from circular Norman type columns to octagonal to multi-fluted Gothic style. Above the arches are four Clerestory windows.



Condition:

The stonework generally is in good condition, but is rather dirty.

3.1.3. **East Wall / Crossing Arch:**

The arch is a wide, slightly pointed archway with decorated mouldings above which is another opening into the Belfry walkway. Two iron wall ties are visible at high level.



Condition:

All appear to be in good condition.

3.1.4. **South Arcade:**

Again, a four bay arcade. All arches slightly pointed and again, a mixture of circular, octagonal and fluted. At the western most bay is the stone Pulpit.

Condition:

The stonework is in generally a good condition.



3.1.5. Recommendations:		Broad Budget Costs
E	• Clean internal masonry throughout.	5
D	• Repair crack and monitor for further movement.	1

3.2. NORTH AISLE

3.2.1. West Elevation:

The end of the aisle is somewhat cluttered with pipework and electrical installations.

Condition:

This elevation is particularly dirty and damaged by water marks and other run off. High level leak to north west corner, dripping onto electrics below.

The Cottier window is of significance and would benefit from cleaning and conservation.



3.2.2. North Elevation

This is a mixture of ashlar and rough faced irregular block work. There are a number of stone monuments fixed at mid-height. Also, there are two corbel stones which probably correlate to the structure of the previous Gallery seating area which was removed in the 1860s.

Condition:

The fixings for the monuments should be checked on a regular basis since they are ferrous and liable to corrode.

The stone work is generally in reasonable condition, although there is some evidence of salting, particularly close to the North Door. This relates to a blocked down pipe beyond. High level leak to east side of north door dripping onto the pew.



3.2.3. East Elevation:

In good condition.

3.2.4. South Elevation / Arcade:

In good condition. Large heating pipe runs along under the ceiling, both at the junction at the ceiling and the walls.

3.2.5.	Recommendations:	Broad Budget Costs
D	<ul style="list-style-type: none"> • Check monument fixings throughout. 	2
D	<ul style="list-style-type: none"> • Monitor salting around north door after remedial work externally. 	1
C	<ul style="list-style-type: none"> • Clean and conserve the Cottier window. • Check roof above for leaks – mentioned in roof section. 	2

3.3. NORTH TRANSEPT

3.3.1. **Condition:**

West Elevation:

The west elevation masonry is generally in good condition. There is a cracked stone above the arch to the north aisle.



3.3.2. **North elevation**

The masonry is in good condition. There is a niche in the wall containing the Danish Hogback tombstone which appears to be simply wedged with a timber wedge and this should be secured more safely.

Also, on this elevation is the book case memorial.

Above the lower eastern window no 6 to the east side of the head, there is a crack which goes up to the string course. This should be pointed and monitored since there is also a crack below the window directly above the niche to the Hogback tombstone.



3.3.3. **East Elevation:**

Generally in good condition, however there is a little disturbance to the bottom left of the Allen Memorial which is fixed to the wall at mid-height. These stones should be re-fixed and repointed. Again, there are monuments on the wall and the fixings should be checked if possible. At corner with north facing arch to the crossing there is staining to the left hand wall.



3.3.4. **The Pulpitum leading to the Chancel:**

This is a pointed arch above which is the pipe organ. At low level to the north, the stonework is somewhat damaged by salts. These should be brushed back and monitored. To the south side of the arch are steps up the access door to the organ. This area is also showing signs of salt damage.

There are a number of ferrous fixings which should be removed and the stone repaired.

There is a large First World War monument to the north side of the arch. In good condition.



3.3.5. **Roof:**

Again, reuse of Medieval timbers, even more extensively in this area.

There is evidence of previous water ingress, however this appears to be relatively minor with no reports of leaks made recently.

3.3.6.	Recommendations:	Broad Budget Costs
B	<ul style="list-style-type: none"> Point and monitor crack over aisle arch to north transept, also above window 6. 	2
B	<ul style="list-style-type: none"> Secure Hogback tombstone in the niche. 	1
C	<ul style="list-style-type: none"> Refix stones to bottom left of Allen memorial. 	1
D	<ul style="list-style-type: none"> Salts at the base of the pulpitum stonework to be brushed back and monitored. 	1
D	<ul style="list-style-type: none"> Remove ferrous fixings to the pulpitum stonework. 	1
M	<ul style="list-style-type: none"> Regular checks for insect infestation should be undertaken. 	1

3.4. **SOUTH TRANSEPT**

3.4.1. **East Elevation:**

The stonework is generally in good condition and near the crossing has good selection of older stones, some of which have salt deposits on the surface.

There are three large major monuments on the wall and the fixings for these should be checked.

Movement cracks above the windows appear to have been pointed and not moved since.

To the north there is the sound cupboard and lighting fuse board. These could be better disguised.



At low level there are a number of artefacts. First, the ringing machine by Edwin Cowper. Next to this in an Altar Frontal store in timber dedicated to Second World War memorial. A collection of cross slabs.

3.4.2.

South Wall:

The stonework is generally in good condition. It was noted that there is a movement crack over two windows and these should be pointed up and monitored. Above this, the Roundel Rose Window at the top shows that water is getting in around that window. Investigation into the cause of the water ingress would be advantageous.

In front of the south wall is the Font which is of frostily marble base with a sandstone and lead top. The 17th Century Font cover has been adapted to sit on its base, supported by steel work designed by Simms or Pace.

Fixed to the wall is an effigy. To the west side of this elevation is the entrance to the Turret which gives access to the roofs. In good condition.



3.4.3.

West Elevation:

Generally in good condition. On this wall is the list of incumbents.



3.4.4.

Roof:

Again, this is a reconstruction using Medieval timbers added to by Victorian structure.

There appears to be evidence of water ingress towards the south-east corner in the 2nd and 3rd bays from the south wall.



The timbers appear gnarled and these should be investigated for live insect attack, especially around the entrance to the stair Turret where the vertical member and the raking member meet and there appears to be some insect attack around this area. This should be treated. This could only be noticed at close quarters and it is possible other areas of timber work are also infested and not able to be seen from a distance. When access is available at high level, then the timbers should be checked for beetle attack.

3.4.5.	Recommendation:	Broad Budget Costs
E	<ul style="list-style-type: none"> Redesign sound cupboard and lighting fuse board. 	2
B	<ul style="list-style-type: none"> Point and monitor movement crack over two windows 17 and 18 	1
B	<ul style="list-style-type: none"> Investigate cause of water ingress around the Roundel Rose Window. 	1
B	<ul style="list-style-type: none"> Leak around the stair turret has encouraged beetle infestation. Treat affected timbers. 	2
D	<ul style="list-style-type: none"> Make inspection at close quarters of all roof timbers in due course. 	2

3.5. BASE OF TOWER / CROSSING

3.5.1. **Condition:**

Above the arches, there is a timber walkway which gives access to the higher levels of the Tower and Spire. This is in good condition with a safe access route available.

3.6. SOUTH AISLE

3.6.1. **Condition:**

South Elevation:

A mixture of ashlar at the lower level and rougher stone blocks above. All in good condition.

High level leak new pulpit to ceiling above.



- 3.6.2. **West Elevation:**
In good condition. Unfortunately, a very well used repository for ladders etc.



- 3.6.3. **North Elevation / Arcade**
All in good condition. Within the second bay of the Arcade. There are two Saxon stones which are rather precariously balanced on a timber stand and these should be properly displayed and fixed.



- 3.6.4. In the bay closest to the Crossing is the stone Pulpit dated 1865 by Scott.



- 3.6.5. Furniture at the forward Altar on the stone dais was designed by Ronald Simms and installed in 1975.



3.6.6.	Recommendations:	Broad Budget Costs
D	• Design a more secure display for the Anglo Saxon stones.	1
D	• Check roof above for leaks – mentioned in roof section.	Inc.

- D • **Monitor salting to surface of east nave to south transept – check exterior downpipe for leaks which may be causing dampness in this area.**

1

3.7. **INSIDE THE SPIRE**

3.7.1. This is the highest accessible level in the Spire, where there is housed the clock mechanism, clock weight and also the Carillon.

3.7.2. **Clock and Clock Mechanism:**

This is regularly serviced by Smith of Derby. It is housed within a timber and glass unit and chimes regularly. There is a large clock weight which is suspended from a timber structure within the Spire base. The clock mechanism requires repair, some of the gears are badly worn. It would benefit from an automatic winding system that does not use such a large weight.

3.7.3. **Carillon**

This is also housed within a timber and glass structure. It is currently not in use because the pegs are worn and the metal sheets for the music are also beginning to wear out. This could be refurbished when possible.

3.7.4. **Timber Structure within the Spire:**

This allows for precarious access up within the Spire itself. The timbers have had various levels of insect attack and have recently been repaired and provided with brackets where appropriate.

It was not possible to inspect the timber framework in detail. The top of the inside of the Spire is extremely high. This can only be accessed with the help of a Steeple Jack. At the very top of the Spire is an ironwork beam and bar which is tensioned to hold the top of the Spire in position. This should be checked every 5 years and therefore a Steeple Jack should be commissioned to ascend the inside of the Spire to check the construction. There is a timber platform high up in the Spire and this particularly should be checked for insect attack, especially considering the previous attacks in other areas of timber work below.

3.7.5. **Floor:**

The floor is timber boarded and is in reasonable condition. There is some evidence of small areas of dampness, although it is not clear exactly where this would be coming through. In the Spire it was noted where a few areas where dampness may have got into the structure. These correlate to some very minor open joints externally. Because the stonework is relatively thin and canted at an angle, then wind-blown rain can come through the joints. There is evidence that some areas has been pointed from the inside using cement, particularly to the northern side.

3.7.6. **Condition:**

Evidence of previous insect attack to the timbers forming the access platform and ladders and previous remedial work evident. The Carillon is generally worn out and not in use.



3.7.7.	Recommendations:	Broad Budget Costs
E	• Refurbish carillon.	2
D	• Commission a steeplejack to ascend the inside of the spire and provide an inspection report.	2
E	• Repoint the interior of the spire to prevent leaks.	3
B	• Repair clock mechanism (further repairs required to the faces).	3

3.8. BELFRY

3.8.1. There is a peal of 8 bells on the steel bell frame, which was inserted in 1937. Above this is a construction of both Medieval and Victorian timbers to the base of the clock housing etc.



3.8.2. **Floor:**
The floor of the Belfry is covered in a mat which may well harbour dampness and a number of insect infestations. This should be removed as soon as possible and the floor timbers inspected at close quarters.

3.8.3. **Windows:**
The openings are covered in mesh and there are oak louvres beyond. Inside there are timber shutters which have been left open.



3.8.4. **Condition:**
There is evidence of previous wood-boring insect infestation in a number of the timbers and this is important to keep under review. It is understood that the end of one of the supporting beams above the entrance from the bell ringing chamber below is regularly treated with liquid wood-worm treatment, but this needs to be confirmed.

There is evidence that some birds are making their way into the Belfry, although generally the pest control is good. The floor is covered with a mat which may well harbour dampness and a number of insect infestations. This should be removed as soon as possible and the floor timbers inspected at close quarters.

3.8.5.	Recommendations:	Broad Budget Costs
B	• Ensure and confirm regular treatment of timbers to the clock chamber above.	1
B	• Check and ensure efficacy of the bird mesh.	1
B	• Remove the mat on the bell chamber floor. Inspect the floor for rot and infestation.	2

3.9. BELL RINGING CHAMBER

3.9.1. Ceiling:

The ceiling is covered in a fibre board which affords some level of sound insulation from the bells above. This also prevents inspection of any of the timbers above and it should be noted that this makes it more important to remove the matting from above to check the timbers from above.



3.9.2. Walls:

The walls are stone in reasonable condition.

3.9.3. Windows:

The window openings have hoppers to allow for ventilation. These seem to be in working order.

3.9.4. Floor:

The floor is fully carpeted and not inspected.

3.9.5. Stair:

There is a timber staircase leading from the bell ringing chamber down to the intermediate level of access.

3.9.6. Condition:

Generally in satisfactory condition.

3.10. NAVE ROOF STRUCTURE (as viewed from the Belfry access balcony)

3.10.1. The timber roof structure which is largely Medieval timbers rebuilt by Scott in the 1860s is generally in good condition.

3.10.2. **Condition:**

The Medieval timbers are somewhat gnarled, with evidence of past furniture beetle infestation, however it is understood that the major timbers have been treated in the past.



3.11. CHANCEL

3.11.1. East Elevation:

This three level elevation has a set of three stained glass windows in the first level and clear quarries in the second and third. Below this is a reredos of mosaic.

Condition:

This appears to be generally in good condition and relatively clean. The base is of timber panelling. The masonry is in good condition.



3.11.2. South Elevation

The stonework is generally in good condition, although around the eastern most window 25 the decorative florets around the window have become detached in places and are missing. It would be a good idea to check them for stability.

Above this window are some ferrous fixings which should be removed and the stone repaired. To the left of the head of window 25 is a crack which should be pointed and monitored. Also at high level towards the west there are two ferrous brackets which should be removed.



3.11.3. West Elevation:

The masonry is in good condition. As is the Organ casing. It would however be worth considering decorating the Chancel side of the Organ casing when funds allow.



3.11.4. North Elevation:

The stonework again is generally in good condition. There is an open joint in the string course directly in the sill of the upper western most window which should be repointed.

Below the eastern most window no 11 is a vertical row of ferrous fixings which should be removed. Again, the window 11 reveal has florets, some of which are becoming detached and should be checked.

At the bottom of the western most window no 9 where there is a hopper, there appears to be some water ingress. This should be carefully checked because the run-off would run behind the timber work below.



To the east there is the Easter Sepulchre. Within the arch of the niche, cement pointing has been used and this is very unsightly. Consideration should be made to completely remove the cement and repoint with lime pointing.

3.11.5. **Floor:**
The majority of the Chancel floor is covered with carpet, however encaustic tiles extend below and there are a number of loose tiles. These should be conserved and re-bedded as soon as possible.



3.11.6. **Sanctuary Floor:**
This is in mosaic and in good condition.

3.11.7. **Timber work and fittings:**
The Chancel houses an outstanding collection of Misericords. Above this is panelling which is likely to be Victorian. The Misericords to the south of the Chancel appear to be generally original and in good condition. Conservation was carried out during 2014 by Rupert McBain.



3.11.8. **Roof:**
The Chancel Roof appears to be entirely rebuilt. Victorian.



There are small areas where water ingress previously occurred. The area over the sanctuary has not been able to be inspected from this level.

No leaks reported – in fair condition.



3.11.9.	Recommendations:	Broad Budget Costs
B	• Refix decorative florets to windows 11 and 25.	1
C	• Remove ferrous fixings below window 11.	1
B	• Point and monitor crack to the left of the head of window 25.	1
D	• Remove ferrous brackets on south elevation of chancel.	1
C	• Repoint open joint in the string course directly in the sill of the upper western most window.	1
B	• Repair hopper to window 9.	2
E	• Remove cement pointing and repoint niche to the Easter Sepulchre.	1
C	• Conserve encaustic floor tiles.	3

M	• Generally check all timber in the chancel for insect attack.	1
M	• Carry out regular timber condition inspections.	1

3.12. VESTRIES

3.12.1. Clergy Vestry:

The Vestry has an exposed timber roof low level. There is a leak evident at the junction between the roof and the abutment wall of the Chancel. This is likely to be due to poor flashings around the stainless steel roof. This needs urgent attention.

Crack to corner wall to plaster – same corner as leak to ceiling.

There are fitted cupboards around most of the east side of the room. The walls are generally covered in rough artex and painted in good condition. The floor is solid parquet, mostly covered by carpet and appears to be in good condition. There is no access.

In the corner there is a hidden lavabo which drains to a gully outside.

The windows are diamond lattice work with obscured glass in reasonable condition, except for a couple of broken panes.



3.12.2.	Recommendations:	Broad Budget Costs
B	• Carry out external remedial work to flashings and make good decorations.	1
C	• Repair window quarries.	1

3.12.3.

Choir Vestry:

Again, this is a timber boarded ceiling, with a flat roof. It is noted that there have been leaks at the abutment with the Clergy Vestry roof. In the past this has been due to failures in the flashing or lead theft. The roof is now stainless steel.

Around the majority of the room are fitted cupboards and panelling. The rest is stonework, some of which is painted. There is a small crack evident in the section between the external door and the window.

The floor is solid and close carpeted and not inspected.

Crack to stone left hand (east) window, reveal to mortar joint vertically leading up to arch.



3.12.4.	Recommendations:	Broad Budget Costs
C	• Make good decorations following leaks.	1
C	• Monitor crack for further deterioration.	1

3.13.

WINDOWS

3.13.1.

Windows:

The windows are in various states of repair. Some of the 20th century Simms windows have particularly suffered, some having severe buckling. A full glazing survey should be carried out in order to schedule repairs.

Condition:

Generally the observations on site are as follows: (numbered as window report 2015)

North Transept

Buckled N7, N8, N4, nV

South Transept

Twisted SVIII, S7

Check STI for leaks.

North Clerestory

Buckled N9, N10

South Clerestory

Buckled S8, S9 (concern from the Cooke's that none of these is properly fixed within openings)

West end

Cracked quarries SXII.

Chancel

Repair hopper nIV

Buckled nII, sII

Cracked quarries sIV

Vestries

Cracked quarries VII

3.13.2.	Recommendations:	Broad Budget Costs
B	<ul style="list-style-type: none"> • Commission comprehensive window survey and phase repairs. 	Inc.

3.14. BOILER ROOM and HEATING SYSTEM

3.14.1. Basement boiler room:

This was not able to be inspected at the time of the QI, however it is reported that it suffers from extreme damp, to a large extent caused by the adjacent downpipe and overflowing gullies.

There are two gas fired boilers which are coming to the end of their life. One has failed and the other does not have the capacity to heat the building alone. There appear to be blockages within the system, or problems with the pump, since some pipes are not reaching the temperatures which should be expected.

The flue is directed to a brick built chimney set in the centre of the churchyard to the north side.



3.14.2.	Recommendations:	Broad Budget costs
A	<ul style="list-style-type: none"> • Ensure downpipes and gullies are clear and check underground drainage. 	2

3.15. ELECTRICAL INSTALLATION

3.15.1. **With reference to the Periodic Inspection Report:**

- The distribution board in the boiler room is very badly corroded.
- The socket in the boiler house RCD has failed.
- The boiler pump has exposed terminals.
- 1 mm cable is not protected on side of organ.
- Socket near altar has a cracked earth pin.
- Various DBs have connector blocks but should be through crimped.
- DBs feeding the clock tower is dated and should be upgraded to RCD type.
- There is no emergency lighting.
- Full RCD protection is not present for all circuits and does not comply with 17th Edition BS7671.

3.15.2. **Recommendations:**

Broad Budget costs

- B**
- Carry out improvements to the electrical installation:
 - DBs feeding the clock tower is dated and should be upgraded to RCD type.
 - The distribution board in the boiler room is very badly corroded. Replace.
 - The socket in the boiler house RCD has failed. Replace.
 - The boiler pump has exposed terminals. Rewire.
 - 1 mm cable is not protected on side of organ. Use conduit.
 - Socket near altar has a cracked earth pin. Replace.
 - Various DBs have connector blocks but should be through crimped.
 - There is no emergency lighting.
 - Full RCD protection is not present for all circuits and does not comply with 17th Edition BS7671

2

3.16. CHURCHYARD

3.16.1. The churchyard is closed, on the whole cleared of gravestones and maintained by the Local Authority. A landscaping scheme by the council in the 1960's incorporated the hardstanding and the 'moat' around the building.



The trees are protected since they lie within the conservation area and permission should be sought for any work. The LA should be able to lend some expertise in assessing the condition of the trees.

The Boer War monument was not inspected in detail, but appeared in good condition.

3.16.2. **Condition:**

The 'moat' around the building is deteriorating in places and will require routine maintenance.

The railings require re-decorating each 5-7 years.

Vegetation around the perimeter should be regularly treated with biocide. There are a number of mature trees in the churchyard and they should be reviewed since the setting of the church could be enhanced with some judicious treatment of the trees.



3.16.3.	Recommendations:	Broad Budget Costs
D	• Maintain masonry in moat.	1
D	• Decorate railings.	2
D	• Review trees and obtain report on condition.	2

4. Summary

The following gives outline costs only and must only be used in the most general terms. An accurate estimate can be obtained by specifying the works and either obtaining a pre-tender estimate from a cost consultant or getting competitive quotes. Do not rely on these figures.

4.1 URGENT WORKS/ INVESTIGATIONS – CATEGORY A

Item	Comment	Broad Budget Costs
2.7.3	To the North Transept Roof:	
	• Remove vegetation from western turret.	1
	• Repoint large mortar joint to apex of gable.	1
	• Repoint turret.	1
2.8.3	• On the roof to the base of the spire, the clock face requires repair.	1
2.10.3	To the North Aisle:	
	• Repair down pipes – consider upgrading to next size up.	2
	• At North side - Clean out blockages and maintain free flow.	1
2.12.9	• North Transept - Repair sill and jamb to window 4.	2
3.14.1	• To the boiler room and heating systems - Ensure downpipes and gullies are clear and check underground drainage.	2

4.2 ATTENTION WITHIN NEXT TWELVE MONTHS – CATEGORY B

Item	Comment	Broad Budget Costs
2.2.3	• North Aisle roof requires replacement. In the interim, ensure gutters are clear.	5
2.3.3	• South Aisle roof requires replacement. In the interim, ensure gutters are clear.	4
2.4.3	To the South Transept:	
	• Replace roof to east slope of South Transept.	4
	• Point East Turret.	1
2.8.3	To the roof of the base of the spire:	
	• Repair corroded weather vane and apex stone.	2
	• Point/repair cracks in pinnacles.	1
	• Point flashing.	1
	• Remove all unsafe timber access systems from inside the spire.	2
2.9.3	At the West End:	
	• Rake out and repoint open joints over lancets. Monitor for further cracking.	1
	• Point around pinnacles, aisle windows.	1
	• Repoint at west end of south aisle.	1
	• Remove vegetation from north aisle.	1
2.10.3	• To the North Aisle - Repair and redecorate north door and ironmongery.	1
2.11.4	• To the North Clerestory Wall - Inspect wall plate and eaves at west end of north nave roof.	2

2.13.9	• To the Chancel South Elevation - Repair and maintain downpipe at South Transept / Chancel junction.	2
2.15.5	• To the South Transept South Elevation - Conservation repairs required to masonry at high level. Especially to the moulded string courses and hood moulds.	3
2.15.7	• To the South Transept West Elevation - Replace string course moulding stones to turret and towards lower window.	3
2.17.2	To the South Clerestory Elevation:	
	• Repair sundial to bottom left. Repaint.	1
	• Inspect windows and schedule repair.	1
3.3.6	To the North Transept:	
	• Point and monitor crack over aisle arch to north transept, also above window 6.	2
	• Secure Hogback tombstone in the niche.	1
3.4.5	To the South Transept:	
	• Point and monitor movement crack over two windows 17 and 18	1
	• Investigate cause of water ingress around the Roundel Rose Window.	1
	• Leak around the stair turret has encouraged beetle infestation. Treat affected timbers.	2
3.6.6	To the South Aisle:	
	• Design a more secure display for the Anglo Saxon stones.	1
	• Check roof above for leaks – mentioned in roof section.	Inc
	• Monitor salting to surface of east nave to south transept – check exterior downpipe for leaks which may be causing dampness in this area.	1
3.7.7	• Inside the Spire - Repair clock mechanism (further repairs required to the faces).	3
3.8.5	To the Belfry:	
	• Ensure and confirm regular treatment of timbers to the clock chamber above.	1
	• Check and ensure efficacy of the bird mesh.	1
	• Remove the mat on the bell chamber floor. Inspect the floor for rot and infestation.	2
3.11.9	To the Chancel:	
	• Refix decorative florets to windows 11 and 25.	1
	• Point and monitor crack to the left of the head of window 25.	1
	• Repair hopper to window 9.	2
3.12.2	• To the Vestries - Carry out external remedial work to flashings and make good decorations.	1
3.13.2	Commission comprehensive window survey and phase repairs.	Inc
3.15.2	• Carry out improvements to the electrical installation:	2
	○ DBs feeding the clock tower is dated and should be upgraded to RCD type.	
	○ The distribution board in the boiler room is very badly corroded. Replace.	
	○ The socket in the boiler house RCD has failed. Replace.	
	○ The boiler pump has exposed terminals. Rewire.	

- 1 mm cable is not protected on side of organ. Use conduit.
- Socket near altar has a cracked earth pin. Replace.
- Various DBs have connector blocks but should be through crimped.
- There is no emergency lighting.
- Full RCD protection is not present for all circuits and does not comply with 17th Edition BS7671

4.3

ATTENTION WITHIN NEXT TWENTY FOUR MONTHS – CATEGORY C

Item	Comment	Broad Budget Costs
2.5.3	<ul style="list-style-type: none"> • To the Chancel Roof - repoint stonework to pinnacles. 	2
2.8.3	<ul style="list-style-type: none"> • To the roof of the base of the spire - Door requires redecoration and minor repair. 	1
2.10.3	<ul style="list-style-type: none"> • To the West End - Point hood mould of west door and coping stones. 	1
2.11.4	<p>To the North Clerestory Wall:</p> <ul style="list-style-type: none"> • Inspect stonework around window 54 and repoint open joints. • Repair columnette to window 53. • All windows require closer inspection. 	2 2 2
2.13.3	<ul style="list-style-type: none"> • To the Chancel North Elevation -Repair stonework to jambs to windows 10,11. 	2
2.13.9	<ul style="list-style-type: none"> • To the Chancel South Elevation - Repair stonework around window 26. 	1
2.14.3	<p>To the Vestries:</p> <ul style="list-style-type: none"> • Repair lintol to blower room. • Repair reinforced concrete bridge to vestry door. • Replace windows to clergy vestry. 	1 2 2
2.16.2	<p>To the South Nave Elevation:</p> <ul style="list-style-type: none"> • Repair masonry around door mouldings. • Remove salt and repoint cavity • Upgrade down pipes for capacity. 	2 1 2
2.20.2	<p>To the Blower Room:</p> <ul style="list-style-type: none"> • Provide handrail to the steep steps. • Repair broken glass in door. 	1 1
3.2.5	<ul style="list-style-type: none"> • Clean and conserve the Cottier window in the North Aisle 	2
3.3.6	<ul style="list-style-type: none"> • To the North Transept - Refix stones to bottom left of Allen memorial. 	1
3.11.9	<p>To the Chancel:</p> <ul style="list-style-type: none"> • Remove ferrous fixings below window 11. • Repoint open joint in the string course directly in the sill of the upper western most window. • Conserve encaustic floor tiles. 	1 1 3
3.12.2	<ul style="list-style-type: none"> • To the Vestries - Repair window quarries. 	1
3.12.3	<p>To the Choir Vestries:</p> <ul style="list-style-type: none"> • Make good decorations following leaks. • Monitor crack for further deterioration. 	1 1

4.4

ATTENTION WITHIN THE NEXT QUINQUENNium – CATEGORY D

Item	Comment	Broad Budget Costs
2.10.3	To the North Aisle:	
	• Remove ferrous fixings and upgrade window protection to powder coated stainless steel.	3
	• Decorate all rainwater goods a colour to match adjacent – black.	2
2.12.9	To the North Transept:	
	• Overhaul window 43 and stone surround.	2
	• Overhaul window 47.	2
	• Remove redundant ferrous fixings around window 7, repair holes.	2
	• Monitor stone deterioration at top of N Transept gable.	1
	• Repair/replace string course stones.	3
	• Repair sill and jamb to window 4	2
2.13.3	• To the Chancel North Elevation - Upgrade window protection to windows 35, 34 and clean out debris to others	2
2.13.7	To the Chancel East Elevation:	
	• Redecorate hopper head and downpipe.	1
	• Remove cementitious mortars and repoint vestry walls.	2
	• Remove ferrous fixings around windows.	1
	• Point high level stonework.	3
2.13.9	• To the Chancel South Elevation - Upgrade window protection and remove ferrous fixings to windows 25,26.	2
2.15.2	To the South Transept East Elevation:	
	• Repair window mouldings to window 16.	2
	• Remove ferrous fixings and rusty wire guards around windows 16, 36. Make good around 36.	2
2.15.5	To the South Transept South Elevation:	
	• Repair sill of window 18.	1
	• Remove ferrous fixings around lower windows to south transept south elevation.	1
	• Decorate tower door.	1
2.15.7	To the South Transept West Elevation:	
	• Remove ferrous fixings around window 19.	1
	• Point at plinth level.	1
2.16.2	• South Nave Elevation - Repoint to window 22.	1
2.19.2	To the Spire:	
	• Repoint spire within 5 years in patches.	4
	• Carry out inspection of interior of spire.	2
3.1.5	• To the North Arcade looking from the Nave - Repair crack and monitor for further movement.	5
3.2.5	To the North Aisle:	
	• Check monument fixings throughout.	2
	• Monitor salting around north door after remedial work externally.	1
3.3.6	To the North Transept:	
	• Salts at the base of the pulpitem stonework to be brushed back and monitored.	1

	• Remove ferrous fixings to the pulpitum stonework.	1
3.4.5	• To the South Transept - Make inspection at close quarters of all roof timbers in due course.	2
3.7.7	• Inside the Spire - Commission a steeplejack to ascend the inside of the spire and provide an inspection report.	2
3.11.9	• Remove ferrous brackets on south elevation of chancel.	1
3.6.3	To the Churchyard:	
	• Maintain masonry in moat.	1
	• Decorate railings.	2
	• Review trees and obtain report on condition.	2

4.5 DESIRABLE/ NOTABLE – CATEGORY E

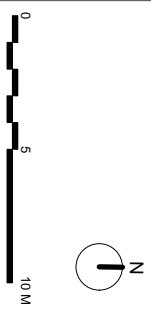
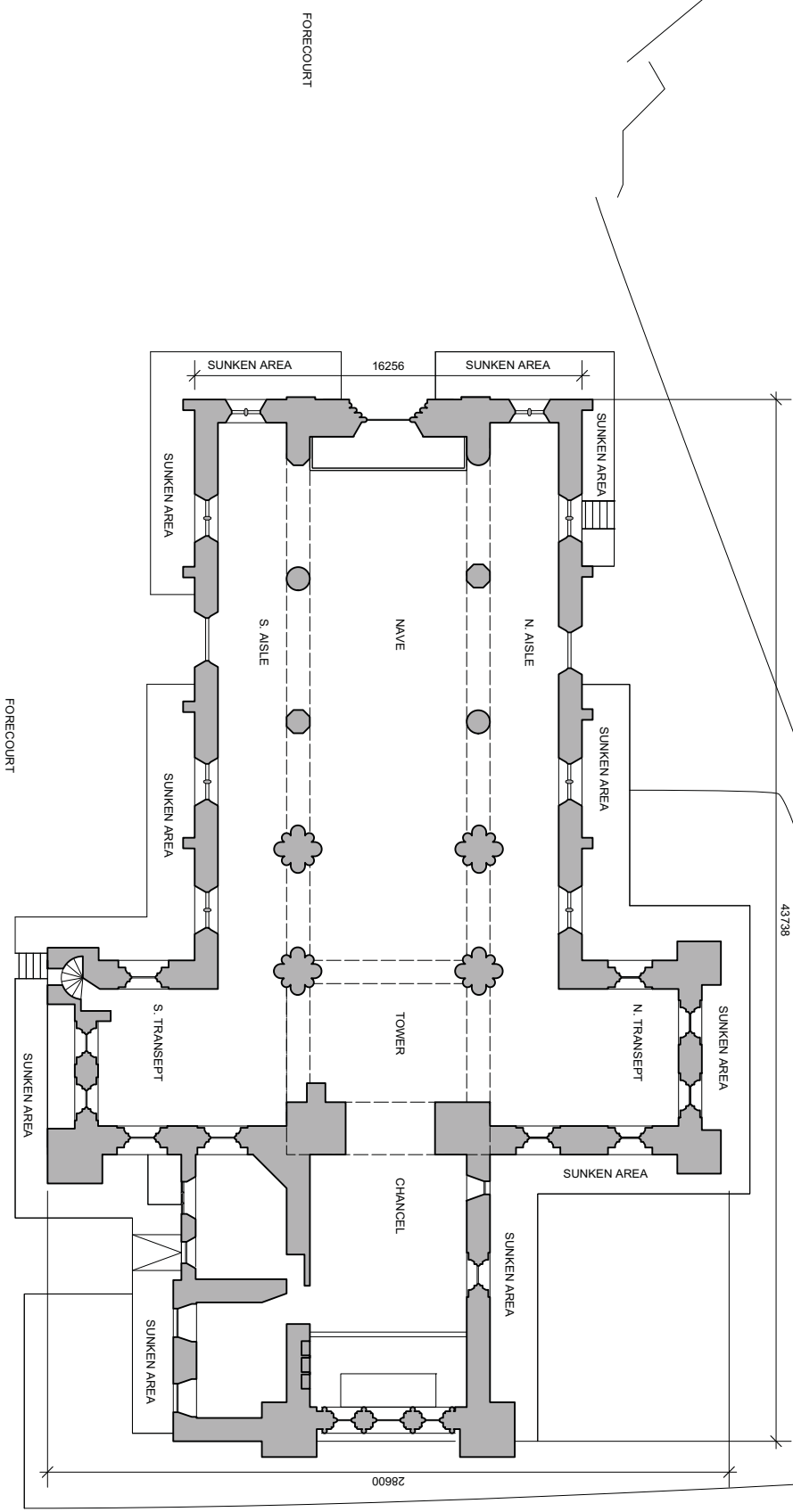
Item	Comment	Broad Budget Costs
2.1.3	• Monitor lead sheet covering to North Nave	1
2.9.3	• At the West End -Remove cementitious pointing and repoint using lime-based mortar.	3
2.15.7	• To the South Transept West Elevation - Improve mortar repairs above window 41.	1
2.17.2	• To the South Clerestory Elevation - Inspect windows and schedule repair.	1
3.1.5	• To the Nave - Clean internal masonry throughout.	1
3.4.5	• To the South Transept - Redesign sound cupboard and lighting fuse board.	2
3.7.7	Inside the Spire:	
	• Refurbish carillon.	2
	• Repoint the interior of the spire to prevent leaks.	3

4.6 ROUTINE MAINTENANCE NOTED – CATEGORY M

Item	Comment	Broad Budget Costs
2.6.3	• Clear out gutters to the Vestry roofs	1
3.3.6	• To the North Transept - Regular checks for insect infestation should be undertaken.	1
3.11.9	To the Chancel:	
	• Generally check all timber in the chancel for insect attack.	1
	• Carry out regular timber condition inspections.	1

APPENDIX A: Plan of Church

NOTES
 1. Unless indicated, this drawing is for information only. Knox McConnell Architects accepts no liability for use of this drawing by parties other than the party for whom it was prepared or for purposes other than those for which it was prepared. Do not scale from this drawing. All dimensions to be checked prior to work commencing on site.



Revision History

DSC06/003
St Cuthbert's, Darlington
ROOF REPAIRS PROJECT
PHASE 2
Existing Floor Plan
 Scale 1:200@A3
 Jan 2018
 FOR INFORMATION
 Rev:

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 Bradford BD18 3JR
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knoxmcconnell
 architects

APPENDIX B: Maintenance Plan

MAINTENANCE

The following list gives an indication of the time of year when certain jobs should be done:

SPRING / EARLY SUMMER

Make full inspection of the church for annual meeting
 Check church inventory and update log book
 Sweep out any high-level spaces. Check for bats and report any finds to the nature conservancy agency
 Cut any ivy starting to grow up walls and poison
 Spray around the base of the walls to discourage weed growth
 Check heating apparatus and clean flues
 Arrange for routine servicing of heating equipment
 Check interior between second week of April and second week of June for active beetle infestation and report findings to the professional adviser
 Check all ventilators in the floor and elsewhere and clean out as necessary
 Spring clean the church

SUMMER

Cut any church grass
 Cut ivy growth and spray again
 Re-check heating installation before autumn and test run
 Arrange for any external painting required

AUTUMN

Check gutters, downpipes, gullies, roofs etc. after leaf fall
 Rod out any drain runs to ensure water clears easily, especially under pavements
 Inspect roofs with binoculars from ground level, counting number of slipped slates etc. for repair
 Clean rubbish from ventilation holes inside and out
 Check heating installation, lagging to hot water pipes etc. and repair as necessary

WINTER

Check roof spaces and under floors for vermin and poison
 Check under gutters after cold spells for signs of leaking roofs
 Bleed radiators and undertake routine maintenance to heating systems
 Check temperature in different areas of the building to ensure even temperature throughout and note any discrepancies

ANNUALLY

Arrange for servicing of fire extinguishers
 Check condition of outside walls, windows, steps and any other areas likely to be a hazard to people entering the building
 Check the extent of any insurance cover and update as necessary

EVERY 5 YEARS

Arrange for Quinquennial Inspection
 Arrange for the testing of the electrical systems
 Arrange for the testing of any lightning protection

APPENDIX C: The Equality Act 2010

The Act makes sure everyone has the same opportunities at work and in wider society, including in churches and church buildings. It protects people from unfair treatment and discrimination in many different areas of life.

It should be noted that disabled access does not just mean providing for wheelchair users. It includes people with slight, speech or hearing difficulties, physical disabilities, elderly people, expectant mothers, parents and others in charge of small children, children themselves, those who are temporarily injured, sick or ill, and so on. And it is not just a matter of removing porch steps: thought has to be given to activities within the church, such as:

- can the deaf hear?
- can those with impaired sight see?
- do altar steps create a barrier?
- what if a wheelchair-bound person wants to sing in the choir?

Further information can be found in *Widening the Eye of the Needle – Access to Church Buildings for People with Disabilities* by John Penton, published for the Council for the Care of Churches by Church House Publishing.

APPENDIX D: Asbestos

The Control of Asbestos at Work Regulations 2004

Under this Act, from 21 May 2004 those responsible for 'non-domestic premises' (known as 'dutyholders') are obliged to assess whether asbestos is present and what condition it is in, as part of a process of preparing a plan to manage the risk posed by that asbestos.

There is a need for inspections, assessments of the condition of asbestos-containing materials and the risks posed by them, plans to be written and implemented, and regular reviews. There is also a duty on professional advisors to co-operate with the dutyholders, so if any dutyholder asks for relevant records in the possession of an advisor, he must provide them (for a reasonable fee).

There is a free booklet published by the Health & Safety Executive (HSE) that will help the PCC to familiarise itself with the issues: A short guide to managing asbestos in premises. This is available as a PDF download from the HSE site: <http://www.hsebooks.com/Books>. This will give the PCC an understanding of what the new regime is, and what to expect of professionals and contractors who claim to be asbestos specialists.

APPENDIX E: Electrical Report

Attached is a copy of the Periodic Inspection Report for the Electrical installation carried out 4th April 2014.

This identifies 5 areas requiring improvement within the next 12 months and a further 4 requiring action within 5 years.

PERIODIC INSPECTION REPORT FOR AN ELECTRICAL INSTALLATION

Issued in accordance with *British Standard 7671 - Requirements for Electrical Installations* by an Approved Contractor or Conforming Body enrolled with NICEIC, Warwick House, Houghton Hall Park, Houghton Regis, Dunstable LU5 5ZX

A. DETAILS OF THE CLIENT

Client: ST Cuthbert's church Address: markets place
Darlington DL1 5QG

B. PURPOSE OF THE REPORT

This Periodic Inspection Report must be used only for reporting on the condition of an existing installation.

Purpose for which this report is required: Electrical condition reports.

C. DETAILS OF THE INSTALLATION

Occupier: ST Cuthberts Church Description of premises: Domestic Commercial Industrial
Address: markets place Other: (Please state) _____
Darlington Estimated age of the electrical installation: 35 years
Postcode: DL1 5QG Evidence of alterations or additions: YES If yes, estimated age: 2 years
Date of previous inspection: NA Electrical Installation Certificate No or previous Periodic Inspection Report No: _____
Records of installation available: NA Records held by: NO

D. EXTENT OF THE INSTALLATION AND LIMITATIONS OF THE INSPECTION AND TESTING

Extent of the electrical installation covered by this report:
Church building only 20% inspection of every circuit DB2 cannot be tested as all Accessible points are at height

Agreed limitations (including the reasons), if any, on the inspection and testing:
No testing at height due to health and safety aspect, no lightning protection tested. clock tower machinery/bells not tested. Full insulation resistance tests on some circuit cannot be carried out due to risk of damage to sensitive equipment which cannot be disconnected due to height

This inspection has been carried out in accordance with BS 7671, as amended. Cables concealed within trunking and conduits, or cables and conduits concealed under floors, in inaccessible roof spaces and generally within the fabric of the building or underground, have not been visually inspected.

E. DECLARATION

I/We, being the person(s) responsible for the inspection and testing of the electrical installation (as indicated by my/our signatures below), particulars of which are described above (see C), having exercised reasonable skill and care when carrying out the inspection and testing, hereby declare that the information in this report, including the observations (see F) and the attached schedules (see H), provides an accurate assessment of the condition of the electrical installation taking into account the stated extent of the installation and the limitations of the inspection and testing (see D). I/We further declare that in my/our judgement, the said installation was overall in unsatisfactory condition (see G) at the time the inspection was carried out, and that it should be further inspected as recommended (see I).
* (Insert 'a satisfactory' or 'an unsatisfactory', as appropriate)

INSPECTION, TESTING AND ASSESSMENT BY:

Signature: [Signature]
Name: (CAPITALS) PAUL GORMAN
Position: Qualified Supervisor
Date: 04/04/14

REPORT REVIEWED AND CONFIRMED BY: † See note below

Signature: [Signature]
Name: (CAPITALS) PAUL GORMAN
(Registered Qualified Supervisor for the Approved Contractor at J)
Date: 04/04/14

† This Periodic Inspection Report should be reviewed and confirmed by the registered Qualified Supervisor for the Approved Contractor responsible for issuing the Report.

NOTES FOR RECIPIENTS

**THIS PERIODIC INSPECTION REPORT IS AN IMPORTANT AND VALUABLE DOCUMENT
WHICH SHOULD BE RETAINED FOR FUTURE REFERENCE**

The purpose of periodic inspection is to determine, so far as is reasonably practicable, whether an electrical installation is in a satisfactory condition for continued service. This report provides an assessment of the condition of the electrical installation identified overleaf at the time it was inspected, taking into account the stated extent of the installation and the limitations of the inspection and testing.

The report has been issued in accordance with the national standard for the safety of electrical installations, British Standard 7671 (as amended) - *Requirements for Electrical Installations*.

Where the installation incorporates a residual current device (RCD), there should be a notice at or near the main switchboard or consumer unit stating that the device should be tested at quarterly intervals. For safety reasons, it is important that you carry out the test regularly.

Also for safety reasons, the electrical installation will need to be re-inspected at appropriate intervals by a competent person. The recommended maximum time interval to the next inspection is stated on page 3 in Section I (*Next Inspection*). NICEIC* recommends that you engage the services of an Approved Contractor for this purpose. There should be a notice at or near the main switchboard or consumer unit indicating when the next inspection of the installation is due.

Only an NICEIC Approved Contractor or Conforming Body is authorised to issue this NICEIC Periodic Inspection Report form.

The report consists of at least six numbered pages. The report is invalid if any of the pages identified in Section H are missing. The report has a printed seven-digit serial number, which is traceable to the Approved Contractor to which it was supplied by NICEIC.

For installations having more than one distribution board or more circuits than can be recorded on Pages 5 and 6, one or more additional *Schedules of Circuit Details for the Installation*, and *Schedules of Test Results for the Installation* (pages 7 and 8 onwards) should form part of the report.

This report is intended to be issued only for the purpose of reporting on the condition of an existing electrical installation. The report should identify, so far as is reasonably practicable and having regard to the extent and limitations recorded in Section D, any damage, deterioration, defects, dangerous conditions and any non-compliances with the requirements of the national standard for the safety of electrical installations which may give rise to danger. It should be noted that the greater the limitations applying to a report, the less its value.

The report should not have been issued to certify that a new electrical installation complies with the requirements of the national safety standard. An 'Electrical Installation Certificate' or a 'Domestic Electrical Installation Certificate' (where appropriate) should be issued for the certification of a new installation.

This report should not have been issued for electrical work in a potentially explosive atmosphere (hazardous area) unless the Approved Contractor holds an appropriate extension to NICEIC enrolment for such work.

You should have received the report marked 'Original' and the Approved Contractor should have retained the report marked 'Duplicate'.

If you were the person ordering the work, but not the user of the installation, you should pass this report, or a full copy of it including these notes, the schedules and additional pages (if any), immediately to the user.

The 'Original' report form should be retained in a safe place and shown to any person inspecting or undertaking further work on the electrical installation in the future. If you later vacate the property, this report will provide the new user with an assessment of the condition of the electrical installation at the time the periodic inspection was carried out.

* NICEIC is a trading name of NICEIC Group Limited, a wholly owned subsidiary of The Electrical Safety Council. Under licence from The Electrical Safety Council, NICEIC acts as the electrical contracting industry's independent voluntary regulatory body for electrical installation safety matters throughout the UK, and maintains and publishes registers of electrical contractors that it has assessed against particular scheme requirements (including the technical standard of electrical work).

For further information about electrical safety and how NICEIC can help you, visit www.niceicgroup.com

continued on the reverse of page 3

F. OBSERVATIONS AND RECOMMENDATIONS FOR ACTIONS TO BE TAKEN

Referring to the attached schedules of inspection and test results, and subject to the limitations at D:

There are no items adversely affecting electrical safety.

or

The following observations and recommendations are made.

Item No		Code †
1	DB 6 in Boiler room is very badly corroded	C2
2	Socket in Boiler house RCD Has Failed	C2
3	Boiler Pump has exposed terminals	
4	1 mill cable is not protected on side of organ mounts pulling in Flexi conduit	C2 C2
5	various DBS have connector blocks inside should be brought crimped	C3
6	Socket near altar is cracked Earth pin needs replacing	C2
7	DBS Feeding dock Tower is Dated would recommend upgrading to modern RCD Type	C3
8	There is no emergency lighting in the church to aid exit in event of power loss	C3
9	Full RCD protection not present for all circuits so does not comply to 17th Edition BS7671	C3

Note: If necessary, continue on additional pages(s), which must be identified by the Periodic Inspection Report serial number and page number(s).

† Where observations are made, the inspector will have entered one of the following codes against each observation to indicate the action (if any) recommended:-

1. 'requires urgent attention' or
2. 'requires improvement' or
3. 'requires further investigation' or
4. 'does not comply with BS 7671

Please see the reverse of this page for guidance regarding the recommendations.

Urgent remedial work recommended for Items: **1-2-3-4-6**

Corrective action(s) recommended for Items: **5-7-8-9**

G. SUMMARY OF THE INSPECTION

General condition of the installation:

Installation is Dated but in sound condition Puro cables
Has been updated with some new Fuse boards / RCDs.

Note: If necessary, continue on additional page(s), which must be identified by the Periodic Inspection Report serial number and page number(s).

Date(s) of the inspection: **4/4/14**

Overall assessment of the installation:

Unsatisfactory

(Entry should read either 'Satisfactory' or 'Unsatisfactory')

GUIDANCE FOR RECIPIENTS ON THE RECOMMENDATION CODES

Only one Recommendation Code should have been given for each recorded observation.

Recommendation Code 1

Where an observation has been given a Recommendation Code 1 (requires urgent attention), the safety of those using the installation may be at risk.

The person responsible for the maintenance of the installation is advised to take action without delay to remedy the observed deficiency in the installation, or to take other appropriate action (such as switching off and isolating the affected part(s) of the installation) to remove the potential danger. The NICEIC Approved Contractor issuing this report will be able to provide further advice.

NICEIC make available 'dangerous condition' notification forms to enable inspectors to record, and then to communicate to the person ordering the report, any dangerous condition discovered.

Recommendation Code 2

Recommendation Code 2 (requires improvement) indicates that, whilst the safety of those using the installation may not be at immediate risk, remedial action should be taken as soon as possible to improve the safety of the installation to the level provided by the national standard for the safety of electrical installations, BS 7671. The NICEIC Approved Contractor issuing this report will be able to provide further advice.

Items which have been attributed Recommendation Code 2 should be remedied as soon as possible (see Section F).

Recommendation Code 3

Where an observation has been given a Recommendation Code 3 (requires further investigation), the inspection has revealed an apparent deficiency which could not, due to the extent or limitations of this inspection, be fully identified. Items which have been attributed Recommendation Code 3 should be investigated as soon as possible (see Section F).

The person responsible for the maintenance of the installation is advised to arrange for the NICEIC Approved Contractor issuing this report (or other competent person) to undertake further examination of the installation to determine the nature and extent of the apparent deficiency.

Recommendation Code 4

Recommendation Code 4 [does not comply with BS 7671 (as amended)] will have been given to observed non-compliance(s) with the **current** safety standard which do not warrant one of the other Recommendation Codes. It is not intended to imply that the electrical installation inspected is unsafe, but careful consideration should be given to the benefits of improving these aspects of the installation. The NICEIC Approved Contractor issuing this report will be able to provide further advice.

It is important to note that the recommendation given at Section I Next Inspection of this report for the maximum interval until the next inspection is conditional upon all items which have been given a Recommendation Code 1 and Code 2 being remedied without delay and as soon as possible respectively.

It would not be reasonable to indicate a 'satisfactory' assessment if any observation in the report has been given a Code 1 or Code 2 recommendation.

H. SCHEDULES AND ADDITIONAL PAGES

Schedule of Items Inspected and Schedules of Items Tested: Page No 4 Additional pages, including additional source(s) data sheets: Page No(s) 2

Schedule of Circuit Details for the Installation: Page No(s) 5-7 Schedule of Test Results for the Installation: Page No(s) 6-8

The pages identified here form an essential part of this report. The report is valid only if accompanied by all the schedules and additional pages identified above.

I. NEXT INSPECTION

I/We recommend that this installation is further inspected and tested after an interval of not more than 5 YEARS
(Enter interval in terms of years, months or weeks, as appropriate)

provided that any items at F which have been attributed a Recommendation Code 1 and Code 2 (requires urgent attention) are remedied without delay and as soon as possible respectively. Items which have been attributed a Recommendation Code 3 should be actioned as soon as practicable (see F).

J. DETAILS OF NICEIC APPROVED CONTRACTOR

Trading Title: M H LORMAN

Address: 12a Bartree Lane
Darlington
Co Durham

Telephone number: 01325 351486

Fax number:

Enrolment number: 013129
(Essential information)

Branch number:
(if applicable)

Postcode: DL3 0XX

K. SUPPLY CHARACTERISTICS AND EARTHING ARRANGEMENTS

Tick boxes and enter details, as appropriate

System Type(s)	Number and Type of Live Conductors			Nature of Supply Parameters			Characteristics of Primary Supply Overcurrent Protective Device(s)	
TN-S <input checked="" type="checkbox"/>	a.c. <input checked="" type="checkbox"/>	d.c. <input type="checkbox"/>		Nominal voltage(s): <u>600</u> V	$U_o^{(1)}$ <u>600</u> V		BS(EN) <u>1361</u>	
TN-CS	1-phase (2 wire) <input type="checkbox"/>	1-phase (3 wire) <input type="checkbox"/>	2 pole <input type="checkbox"/>	Nominal frequency, $f^{(1)}$ <u>50</u> Hz	Notes:		Type <u>I</u>	
TN-C	2-phase (3 wire) <input type="checkbox"/>	3-phase <input type="checkbox"/>	3-pole <input type="checkbox"/>	Prospective fault current, $I_{pf}^{(2/3)}$ <u>1-60</u> kA	(1) by enquiry		Rated current <u>60/80</u> A	
TT	3-phase (3 wire) <input type="checkbox"/>	3-phase (4 wire) <input checked="" type="checkbox"/>	other <input type="checkbox"/>	External earth fault loop impedance, $Z_e^{(3/4)}$ <u>0.28</u> Ω	(2) by enquiry or by measurement		Short-circuit capacity <u>33</u> kA	
IT	Other <input type="checkbox"/>	Please state <u></u>		Number of supplies <u>1</u>	(3) where more than one supply, record the higher or highest values			
					(4) by measurement			

L. PARTICULARS OF INSTALLATION AT THE ORIGIN

Tick boxes and enter details, as appropriate

Means of Earthing		Details of Installation Earth Electrode (where applicable)			
Distributor's facility: <input checked="" type="checkbox"/>	Type: <u>NA</u> (eg rod(s), tape etc)	Location: <u>NA</u>			
Installation earth electrode: <u>NA</u>	Electrode resistance, R_A : <u>NA</u> (Ω)	Method of measurement: <u>NA</u>			
Main Switch or Circuit-Breaker		Maximum Demand (Load): <u>60</u> kVA / Amps	Protective measures against electric shock: <u>ADS</u>		
* (Applicable only where an RCD is suitable and is used as a main circuit-breaker)					
Type: BS(EN) <u>60947-3</u>	Voltage rating <u>600</u> V	Earthing and Protective Bonding Conductors			
No of Poles <u>2</u>	Rated current, I_n <u>175</u> A	Earthing conductor		Main protective bonding conductors	
Supply conductors material <u>Copper</u>	RCD operating current, $I_{\Delta n}$ <u>30</u> mA	Conductor material <u>Copper</u>	Conductor material <u>Copper</u>	Bonding of extraneous-conductive-parts (✓)	
Supply conductors csa <u>25</u> mm ²	RCD operating time (at $I_{\Delta n}$) <u>0.02</u> ms	Conductor csa <u>16</u> mm ²	Conductor csa <u>10</u> mm ²	Water service <input checked="" type="checkbox"/>	Gas service <input checked="" type="checkbox"/>
		Continuity check <input checked="" type="checkbox"/> (✓)	Continuity check <input checked="" type="checkbox"/> (✓)	Oil service <u>NA</u>	Structural steel <u>NA</u>
				Lightning protection <input checked="" type="checkbox"/>	Other incoming service(s) <u>NA</u>

* Where a number of sources are available to supply the installation, and where the data given for the primary source may differ from other sources, a separate sheet must be provided which identifies the relevant information relating to each additional source.

NOTES FOR RECIPIENTS (continued from the reverse of page 1)

Section D addresses the extent and limitations of the report by providing boxes for the *Extent of the electrical installation covered by this report* and the *Agreed limitations, if any, on the inspection and testing*. Information given here should fully identify the scope of the inspection and testing and of the report. The Approved Contractor should have agreed all such aspects with the person ordering the work and other interested parties (eg licensing authority, insurance company, building society etc) before the inspection was carried out.

A declaration of the overall condition of the installation should have been given by the inspector in Section E of the report. The declaration must reflect that given in Section G, which summarises the observations and recommendations made in Section F. A list of observations and recommendations for urgent remedial work and corrective action(s) necessary to maintain the installation in a safe working order should have been given in Section F, where appropriate. For further guidance on the recommendations, please see the reverse of page 2.

Where the installation can be supplied by more than one source, such as the public supply and a standby generator, the number of supplies should have been recorded in the box entitled *Number of Supplies*, in Section K *Supply Characteristics and Earthing Arrangements* on page 3 of the report, and the *Schedule of Test Results* compiled accordingly.

Should the person ordering the periodic inspection (eg the client, as identified on Page 1 of this certificate), have reason to believe that the report issued by the Approved Contractor does not reasonably reflect the condition of the electrical installation reported on, the person should in the first instance raise the specific concerns in writing with the Approved Contractor. If the concerns remain unresolved, the client may make a formal complaint to NICEIC, for which purpose a standard complaint form is available on request.

The complaints procedure offered by NICEIC is subject to certain terms and conditions, full details of which are available upon application. NICEIC does not investigate complaints relating to the operational performance of electrical installations (such as lighting levels), or to contractual or commercial issues (such as time or cost).

SCHEDULE OF ITEMS INSPECTED

† See note below

PROTECTIVE MEASURES AGAINST ELECTRIC SHOCK

Basic and fault protection

Extra low voltage

JA SELV NA PELV

Double or reinforced insulation

✓ Double or Reinforced Insulation

Basic protection

✓ Insulation of live parts NA Barriers or enclosures

JA Obstacles** NA Placing out of reach**

Fault protection

Automatic disconnection of supply

- ✓ Presence of earthing conductor
- ✓ Presence of circuit protective conductors
- ✓ Presence of main protective bonding conductors
- ✓ Presence of earthing arrangements for combined protective and functional purposes
- NA Presence of adequate arrangements for alternative source(s), where applicable
- NA FELV
- ✓ Choice and setting of protective and monitoring devices (for fault protection and/or overcurrent protection)

Non-conducting location**

NA Absence of protective conductors

Earth-free equipotential bonding**

NA Presence of earth-free equipotential bonding

Electrical separation

- NA For one item of current-using equipment
- NA For more than one item of current-using equipment**

Additional protection

- ✓ Presence of residual current device(s)
- ✓ Presence of supplementary bonding conductors

** For use in controlled supervised/conditions only

Prevention of mutual detrimental influence

- ✓ Proximity of non-electrical services and other influences
- NA Segregation of Band I and Band II circuits or Band II insulation used
- NA Segregation of Safety Circuits

Identification

- ✓ Presence of diagrams, instructions, circuit charts and similar information
- ✓ Presence of danger notices and other warning notices
- ✓ Labelling of protective devices, switches and terminals
- ✓ Identification of conductors

Cables and Conductors

- ✓ Selection of conductors for current carrying capacity and voltage drop
- ✓ Erection methods
- ✓ Routing of cables in prescribed zones
- ✓ Cables incorporating earthed armour or sheath or run in an earthed wiring system, or otherwise protected against nails, screws and the like
- NA Additional protection by 30mA RCD for cables concealed in walls (where required, in premises not under the supervision of skilled or instructed persons)
- ✓ Connection of conductors
- ✓ Presence of fire barriers, suitable seals and protection against thermal effects

General

- ✓ Presence and correct location of appropriate devices for isolation and switching
- ✓ Adequacy of access to switchgear and other equipment
- NA Particular protective measures for special installations and locations
- ✓ Connection of single-pole devices for protection or switching in line conductors only
- ✓ Correct connection of accessories and equipment
- ✓ Presence of undervoltage protective devices
- ✓ Selection of equipment and protective measures appropriate to external influences
- ✓ Selection of appropriate functional switching devices

SCHEDULE OF ITEMS TESTED

† See note below

- ✓ External earth fault loop impedance, Z_e
- NA Installation earth electrode resistance, R_A
- ✓ Continuity of protective conductors
- NA Continuity of ring final circuit conductors
- ✓ Insulation resistance between live conductors
- ✓ Insulation resistance between live conductors and Earth
- NA Protection by separation of circuits

- NA Basic protection by barrier or enclosure provided during erection
- NA Insulation of non-conducting floors or walls
- ✓ Polarity
- ✓ Earth fault loop impedance, Z_s
- ✓ Verification of phase sequence
- ✓ Operation of residual current devices
- ✓ Functional testing of assemblies
- ✓ Verification of voltage drop

† All boxes must be completed.

- ✓ indicates that an inspection or a test was carried out and that the result was **satisfactory**
- X' indicates that an inspection or a test was carried out and that the result was **unsatisfactory**
- 'N/A' indicates that an inspection or a test was **not applicable** to the particular installation
- 'LIM' indicates that, that exceptionally, a **limitation** agreed with the person ordering the work (as recorded in Section D) **prevented** the inspection or test being carried out.

SCHEDULE OF CIRCUIT DETAILS FOR THE INSTALLATION

Original (To the person ordering the work)

TO BE COMPLETED IN EVERY CASE	TO BE COMPLETED ONLY IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION*	
Location of distribution board: Front of Church	Supply to distribution board is from: _____	No of phases: _____ Nominal voltage: _____ V
Distribution board designation: DB1	Overcurrent protective device for the distribution circuit: Type: BS(EN) _____ Rating: _____ A	Associated RCD (if any): BS(EN) _____ RCD No of poles: _____ I _{Δn} _____ mA

CIRCUIT DETAILS

Circuit number and phase	Circuit designation	Type of wiring (see code below)	Reference method	Number of points served	Circuit conductors: csa		Max. disconnection time permitted by BS 7671 (s)	Overcurrent protective devices				RCD	Maximum Z _s permitted by BS 7671 (Ω)
					Live (mm ²)	cpc (mm ²)		BS (EN)	Type No	Rating (A)	Short-circuit capacity (kA)		
1 R	Cubboard light	H	B	1	1.5	min	0.4	60898	C	6	10	NA	3.83
1 Y	DB2 Lighting	A	B	1	16	10	S	60898	C	50	10	NA	0.46
1 B	Nave Sockets left	H	B	3	2.5	min	0.4	60009	C	20	10	30	1.15
2 R	Organ motor	F	F	1	2.5	sw	S	60898	C	20	10	NA	1.15
2 Y	" "	F	F	1	2.5	sw	S	60898	C	20	10	NA	1.15
2 B	" "	F	F	1	2.5	sw	S	60898	C	20	10	NA	1.15
3 R	SPARE												
3 Y	SPARE												
3 B	SPARE												
4 R	Clock/DB5	H		1	6.0	min	S	60898	C	20	10	NA	1.15
4 Y	Boiler room DB6	H		1	2.5	min	S	60898	B	20	10	NA	2.30
4 B	DB3 middle church	F		1	16	min	S	60898	C	50	10	NA	0.66
DB3													
1	vestry DB	H		1	2.5	min	S	60898	C	32	10	NA	0.72
2	Tower stairs lights	H		8	1.5	min	0.4	60898	B	6	10	NA	7.67
3	Bell Ringers lights	H		4	1.5	min	0.4	60898	B	6	10	NA	7.67
4	SPARE												
5	SPARE												
6	Socket opp side of organ	H		1	2.5	min	0.4	60009	B	16	10	30	2.87
7	Socket below	H		1	2.5	min	0.4	60009	B	16	10	30	2.87
8	Organ/stair light	A		2	1.5	min	0.4	60898	B	6	10	NA	7.67
9	organ socket/light	H		2	2.5	min	0.4	60009	B	16	6	30	2.87
10	CTS north side	A		3	1.5	1.5	0.4	60898	C	10	6	NA	2.30

† See Table 4A2 of Appendix 4 of BS 7671

CODES FOR TYPE OF WIRING								
A	B	C	D	E	F	G	H	O (Other - please state)
PVC/PVC cables	PVC cables in metallic conduit	PVC cables in non-metallic conduit	PVC cables in metallic trunking	PVC cables in non-metallic trunking	PVC/SWA cables	XLPE/SWA cables	Mineral-insulated cables	

* In such cases, details of the distribution (sub-main) circuit(s), together with the test results for the circuit(s), must also be provided, on continuation schedules.

See next page for
Schedule of Test Results

SCHEDULE OF TEST RESULTS FOR THE INSTALLATION


<p>TO BE COMPLETED ONLY IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION</p> <p style="text-align: center;">Characteristics at this distribution board</p> <p style="text-align: center;">Confirmation of supply polarity</p> <p>★ See note below</p> <p>Z_s <input type="text"/> Ω Operating times of associated RCD (if any) At I_{Δn} <input type="text"/> ms</p> <p>I_{pf} <input type="text"/> kA At 5I_{Δn} (if applicable) <input type="text"/> ms</p>	<p style="text-align: center;">Test instruments (serial numbers) used:</p> <p>Earth fault loop impedance 100 239 101 RCD <input type="text"/></p> <p>Insulation resistance <input type="text"/> Other <input type="text"/></p> <p>Continuity <input type="text"/> Other <input type="text"/></p>
--	--

TEST RESULTS

Circuit number and phase	Circuit impedances (Ω)					Insulation resistance + Record lower or lowest value				Polarity (✓)	Maximum measured earth fault loop impedance, Z _s ★ See note below (Ω)	RCD operating times	
	Ring final circuits only (measured end to end)			All circuits (At least one column to be completed)		Line/Line +	Line/Neutral +	Line/Earth +	Neutral/Earth			at I _{Δn}	at 5I _{Δn} (if applicable)
	r ₁ (Line)	r _n (Neutral)	r ₂ (cpc)	R ₁ + R ₂	R ₂	(MΩ)	(MΩ)	(MΩ)	(MΩ)			(ms)	(ms)
1 R	NA	NA	NA	0.02	NA	NA	720	720	720	✓	0.40	NA	NA
1 Y	NA	NA	NA	0.06	NA	NA	720	720	720	✓	0.28	NA	NA
1 B	NA	NA	NA	0.14	NA	NA	720	720	720	✓	0.34	80	17
2 R	NA	NA	NA	0.61	NA	720	720	720	720	✓	0.96	NA	NA
2 Y	NA	NA	NA	0.58	NA	720	720	720	720	✓	0.94	NA	NA
2 B	NA	NA	NA	0.61	NA	720	720	720	720	✓	0.95	NA	NA
3 R													
3 Y													
3 B													
4 R	NA	NA	NA	0.38	NA	NA	720	720	720	✓	0.58	NA	NA
4 Y	NA	NA	NA	0.21	NA	NA	720	720	720	✓	0.43	NA	NA
4 B	NA	NA	NA	0.13	NA	NA	720	720	720	✓	0.36	NA	NA
1	NA	NA	NA	0.13	NA	NA	7200	7200	7200	✓	0.36	NA	NA
2	NA	NA	NA	0.68	NA	NA	7200	7200	7200	✓	0.66	NA	NA
3	NA	NA	NA	0.75	NA	NA	7200	7200	7200	✓	0.73	NA	NA
4	NA	NA	NA		NA								
5	NA	NA	NA		NA								
6	NA	NA	NA	0.37	NA	NA	7200	7200	7200	✓	0.48	15	8
7	NA	NA	NA	0.14	NA	NA	7200	7200	7200	✓	0.27	28	18
8	NA	NA	NA	0.23	NA	NA	7200	Lim	Lim	✓	0.44	NA	NA
9	NA	NA	NA	0.33	NA	NA	7200	7200	7200	✓	0.36	18	8
10	NA	NA	NA	0.10	NA	NA	7200	Lim	Lim	✓	0.36	NA	NA

* Note: Where the installation can be supplied by more than one source, such as a primary source (eg public supply) and a secondary source (eg standby generator), the higher or highest values must be recorded.

TESTED BY

Signature: 	Position: <u>Qualified Supervisor</u>	Page 6 of 8
Name: (CAPITALS) <u>PAUL WORMAN</u>	Date of testing: <u>06/06/16</u>	

SCHEDULE OF CIRCUIT DETAILS FOR THE INSTALLATION - CONTINUATION

TO BE COMPLETED IN EVERY CASE	TO BE COMPLETED ONLY IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION*	
Location of distribution board: <input style="width: 100%;" type="text"/>	Supply to distribution board is from: <input style="width: 100%;" type="text"/>	No of phases: <input style="width: 50px;" type="text"/> Nominal voltage: <input style="width: 50px;" type="text"/> V
Distribution board designation: <input style="width: 100%;" type="text"/>	Overcurrent protective device for the distribution circuit: Type: <input style="width: 100px;" type="text"/> BS(EN) Rating: <input style="width: 50px;" type="text"/> A	Associated RCD (if any): BS(EN) <input style="width: 100px;" type="text"/> RCD No of poles: <input style="width: 50px;" type="text"/> I _{Δn} <input style="width: 50px;" type="text"/> mA

Original (To the person ordering the work)

CIRCUIT DETAILS													
Circuit number and phase	Circuit designation	Type of wiring (see code below)	Reference method	Number of points served	Circuit conductors: csa			Overcurrent protective devices				RCD	Maximum Z _s permitted by BS 7671 (Ω)
					Live (mm ²)	cpc (mm ²)	Max. disconnection time permitted by BS 7671 (s)	BS (EN)			Operating current, I _{Δn} (mA)		
								Type No	Rating (A)	Short-circuit capacity (kA)			
11	1 chance - 1 ch-off lights	A		3	1.5	1.5	0.4	60808	B	6	10	NA	767
12	2 into South housept	A		3	1.5	1.5	0.4	60808	C	10	10	NA	230
13	Controler Supply	A		1	1.5	1.5	0.4	60808	B	6	10	NA	767
14													
DB4													
1	Lights Basement	B		1	1.5	mm	5	60808	B	6	6	NA	767
2	Vestry lights	H		3	1.5	mm	0.4	60808	B	6	6	NA	767
3	Spere												
4	WATER HEATER	H		4	2.5	mm	0.4	60808	B	32	6	30	144
5	Socket Below DB	H		1	2.5	mm	0.4	60808	A	16	6	30	287
DB5 only sockets tested due to Height work check lower													
1	Sockets	H		3	2.5	mm	0.4	3036	✓	20	✓	70	✓
DB6													
1	Lights	H		2	1.5	mm	0.4	60808	B	6	6	NA	767
2	Heating	H		1	2.5	mm	0.4	60808	B	16	6	NA	287
3	STC	H		1	2.5	mm	0.4	60808	B	20	6	30	230

↑ See Table 4A2 of Appendix 4 of BS 7671

CODES FOR TYPE OF WIRING								
A	B	C	D	E	F	G	H	O (Other - please state)
PVC/PVC cables	PVC cables in metallic conduit	PVC cables in non-metallic conduit	PVC cables in metallic trunking	PVC cables in non-metallic trunking	PVC/SWA cables	XLPE/SWA cables	Mineral-insulated cables	

* In such cases, details of the distribution (sub-main) circuit(s), together with the test results for the circuit(s), must also be provided on continuation schedules.

SCHEDULE OF TEST RESULTS FOR THE INSTALLATION - CONTINUATION

<p>TO BE COMPLETED ONLY IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION</p> <p style="text-align: center;">Characteristics at this distribution board</p> <p style="text-align: center;">Confirmation of supply polarity</p> <p>★ See note below</p> <p>Z_s * Ω Operating times At I_{Δn} ms</p> <p>l_{pf} * kA RCD (if any) At 5I_{Δn} (if applicable) ms</p>	<p style="text-align: center;">Test instruments (serial numbers) used:</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Earth fault loop impedance</td> <td style="width: 20%;">100 234 101</td> <td style="width: 10%;">RCD</td> <td style="width: 15%;">11</td> </tr> <tr> <td>Insulation resistance</td> <td>11</td> <td>Other</td> <td></td> </tr> <tr> <td>Continuity</td> <td>11</td> <td>Other</td> <td></td> </tr> </table>	Earth fault loop impedance	100 234 101	RCD	11	Insulation resistance	11	Other		Continuity	11	Other	
Earth fault loop impedance	100 234 101	RCD	11										
Insulation resistance	11	Other											
Continuity	11	Other											

TEST RESULTS														
Circuit number and phase	Circuit impedances (Ω)						Insulation resistance † <small>Record lower or lowest value</small>				Polarity (✓)	Maximum measured earth fault loop impedance, Z _s <small>* See note below</small> (Ω)	RCD operating times	
	Ring final circuits only (measured end to end)			All circuits (At least one column to be completed)			Line/Line †	Line/Neutral †	Line/Earth †	Neutral/Earth			at I _{Δn}	at 5I _{Δn} (if applicable)
	r ₁ (Line)	r _n (Neutral)	r ₂ (cpc)	R ₁ + R ₂	R ₂	(MΩ)	(MΩ)	(MΩ)	(MΩ)	(ms)			(ms)	
						(MΩ)	(MΩ)	(MΩ)	(MΩ)					
11	NA	NA	NA	0.9	NA	NA	760	720	720	✓	0.34	NA	NA	
12	NA	NA	NA	0.10	NA	NA	740	720	720	✓	0.34	NA	NA	
13	NA	NA	NA	0.08	NA	NA	740	740	720	✓	0.30	NA	NA	
1	NA	NA	NA	0.42	NA	NA	720	720	720	✓	0.60	NA	NA	
2	NA	NA	NA	0.21	NA	NA	740	720	720	✓	0.54	NA	NA	
3														
4	NA	NA	NA	0.23	NA	NA	720	740	720	✓	0.66	28	18	
5	NA	NA	NA	0.14	NA	NA	720	720	720	✓	0.50	28	18	
1	NA	NA	NA	0.18	NA	NA	720	720	720	✓	0.36	28	14	
1	NA	NA	NA	0.66	NA	NA	720	720	720	✓	0.60	NA	NA	
2	NA	NA	NA	0.82	NA	NA	720	720	720	✓	0.80	NA	NA	
3	NA	NA	NA	0.31	NA	NA	720	720	720	✓	0.39	X	X	

* Note: Where the installation can be supplied by more than one source, such as a primary source (eg public supply) and a secondary source (eg standby generator), the higher or highest values must be recorded.

TESTED BY

Signature:	Position: <u>Qualified Supervisor</u>
Name: (CAPITALS) <u>PAUL WORMAN</u>	Date of testing: <u>06/06/16</u>

APPENDIX F: Lightning Conductor Report



Lightning Protection Inspection & Test Certificate

ATLAS NO. **0301** REFERENCE **MA/00057/11519**PASS / FAIL: **PASS**

DETAILS OF CLIENT

Name: William Maybrey

Address: Market Place, Darlington, Durham, United Kingdom, DL1 5QG

SITE ADDRESS

Name: St Cuthberts Church Darlington

Address: Market Place, Darlington, Durham, DL1 5QG

Work Type: Inspection & Test

Comments: Annual Test & Inspection

AIR TERMINATION NETWORK

ROOF TYPE

Lead

ROOF COLOUR

Grey

AIR RODS

500mm

1000mm

2000mm

None

MATERIAL

Copper

Aluminium

Steel Frame

Re-Bar

Metallic

CONDUCTOR SIZE

20 x 3mm

25 x 3mm

8mm

50 x 6mm

50mm CSA

70mm CSA

95mm CSA

120mm CSA

PVC COLOUR

Brown

Black

Grey

White

Stone

Bare

Green/Yellow

FIXING

Non-Metallic

Slate Holdfasts

Felt Cleats

Self Adhesive

Metallic

In Cavity

MESH GRID SIZES

20m x 20m

15m x 15m

10m x 10m

5m x 5m

ROOF STYLES

Flat

Pitched & Hipped

Pitched & Gabled

BONDING

MATERIAL

Copper

Aluminium

Steel Frame

Re-Bar

Metallic

CONDUCTOR SIZE

20 x 3mm

25 x 3mm

8mm

50 x 6mm

50mm CSA

70mm CSA

95mm CSA

120mm CSA

FIXING

Non-Metallic

Slate Holdfasts

Felt Cleats

Self Adhesive

Metallic

In Cavity

BONDS

AC Unit

TV Aerial

Balcony

CCTV

TYPE OF BONDS

B Bond

Rivet

Tower Clamp

Nut & Bolt

DOWN CONDUCTOR NETWORK

INTERNAL DOWN CONDUCTORS

MATERIAL

Copper

Aluminium

Steel Frame

Re-Bar

Metallic

CONDUCTOR SIZE

20 x 3mm

25 x 3mm

8mm

50 x 6mm

50mm CSA

70mm CSA

95mm CSA

120mm CSA

PVC COLOUR

Brown

Black

Grey

White

Stone

Bare

Green/Yellow

FIXING

Non-Metallic

Slate Holdfasts

Felt Cleats

Self Adhesive

Metallic

In Cavity

TEST CLAMPS

Oblong

Bi-Metal

Square

Plate Type

Stainless Steel

A Clamp

Screw Down

GROUND CONDITIONS

Wet

Dry

Damp

CONDUCTOR TYPES

High Level Bond

Low Level Bond

EARTH TEST RESULTS

REF	RESISTANCE	GROUND TYPE	HOUSING TYPE	EARTHING TYPE	EARTH SIZE	EARTH LENGTH	TEST FACILITY	TEST POSITION	TEST METHOD	PASS OR FAIL?
E1	8.15 ohms	Concrete	None	Unidentified	Other	Other	Bi-Metallic	Housing	Fall	PASS
E2	7.24 ohms	Concrete	Plastic Dehn	Electrode Copperbond	15 Dia	Other	A-Clamp	Housing	Fall	PASS

Through System Test:

3.834

Mean Resistance:

3.834

EQUIPOTENTIAL CONDUCTOR

INSTALLED

Yes

No

MATERIAL

Copper

Aluminium

Steel Frame

Re-Bar

Metallic

CONDUCTOR SIZE

20 x 3mm

25 x 3mm

8mm

50 x 6mm

50mm CSA

70mm CSA

95mm CSA

120mm CSA

PVC COLOUR

Brown

Black

Grey

White

Stone

Bare

Green/Yellow

FIXING

Non-Metallic

Slate Holdfasts

Felt Cleats

Self Adhesive

Metallic

In Cavity

SURGE PROTECTION

MAIN INCOMER

Quantity:

0

Type:

ESP 415/I/TNS

Installation By:

Not Specified

SUB DISTRIBUTION

Quantity:

0

Type:

ESP 415/I/TNS

Installation By:

Not Specified

DATA INSTALLATION

Quantity:

0

Type:

ESP 415/I/TNS

Installation By: Not Specified

TELECOMS INSTALLATION

Quantity: 0

Type: ESP 415/I/TNS

Installation By: Not Specified

INSPECTION & TESTING

Date of Inspection: 02 August 2019


Next Inspection Due: August 2020

Test Engineer: Matthew Atkins


Instrument Ref: N/A

DECLARATION OF CONFORMITY

Engineer:

Signature		Date:	02 August 2019	Name:	Matthew Atkins
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Reviewed By:

Signature		Date:	06 August 2019	Name:	Hannah Bradley
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APPENDIX G: Work Carried Out Since Last Inspection

2014

Full electrical inspection.
 Restoration of medieval woodwork in the Chancel along with 20th century altar rail.
 Restoration of 19th century table in the clergy vestry (formerly used as an altar).
 Repairs to fixings of various pews throughout the church.
 Repairs to the fixings of the altar frontal cupboard / World War II memorial (South Transept).
 Isolation of dangerous gas boiler.
 Isolation of high level heating pipes.
 Fitting of safety harness system to tower parapet.
 Heating Condition Report and programme for heating improvements produced.
 Installation of Archive Cupboard to the west wall of the North Transept.

2015

Removal of two condemned gas boilers, pipework and associated materials.
 Removal of asbestos from boiler house and heating ducts.
 Complete rewiring of boiler house. Fixing of four 'condensing' boilers (Ideal Keston) along with electrical control systems (Bells)
 Reinstatement of high level heating pipes.
 Fixing of new flue system to the North Wall.
 Repair of two windows to the choir vestry and renewal of window guards.
 Replacement of two defective control panels for the lighting system.
 Complete reprogramming of lighting system.
 Replacement of the stone lintel to the blower room doorway.
 Detailed inspection of the condition of the high level roofs / stonework

2016

Restorations of the chancel roof (south).
 Restoration of stonework above the vestries.
 Restoration of two 'cathedral' glass windows at clerestory level (south wall of chancel).
 Further repairs to pew fixings.
 Major restoration of the David Johnstone Memorial in the churchyard (funded by Darlington Borough Council).

2017

Replacement of lead flashings above the vestries with stainless steel (following vandalism).
 Repairs to alarm system (vestry roof).
 Replacement to shutters to blower room and repainting of blower room door.
 Replacement of three-phase electrical consumer unit in blower room.
 Overhaul of blower motor.
 Installation of new street lighting to the churchyard (funded by Darlington Borough Council).
 Archaeological investigation of disarticulated human remains discovered during the lighting work (funded by Darlington Borough Council).
 Burial of wall to the south side of the churchyard as part of the development of a new 'Riverside Park' (funded by Darlington Borough Council).
NB. The wall concerned was constructed in the 1960s and does not mark the edge of the historic churchyard, full details included in the Faculty. A series of posts were put in place to mark the churchyard boundary, which is slightly to the south of the, now concealed, wall.

2018 /19

Complete replacement of light bulbs throughout the nave, transepts and chancel.

Installation of memorial marking the 100th anniversary of the end of World War I (Funded by the Royal Signals Regiment).

Restoration of the south Nave and west side South Transept Roofs, with associated stonework.

Restoration of turret above the newel stairway in the South Transept.

Repair of moat wall adjacent to the clergy vestry (funded by Darlington Borough Council).

Installation of handrail to newel stairway in the South Transept.

Restoration of four 'cathedral' glass windows and three stained glass windows all in the east wall.

Replacement of damaged Dunhouse stone columns in the east wall along with associated repainting.

Renewal of lead flashings above North Aisle (like for like).

Start of 5-year tree management programme by Darlington Borough Council.

Replacement of damaged inspection cover to the east of the North Door (funded by Darlington Borough Council).

Replacement of the gas meter (funded and carried out by our supplier).

Annual

Servicing of the Roof Alarm System by Ebound AVX Ltd of Louth (Last Service March 2019)

Servicing of Clock by Smiths of Derby (Last Service June 2019).

Servicing of gas boilers by A. J. Clacher of Darlington (Last Service March 2019).

Inspection of roofs and clearing of high level guttering, hoppers etc. by Stone Technical Services of Darlington (Last inspection March 2019).

Inspection of Lightning Conductors by Stones Technical Services of Darlington (Inspection due, to be confirmed ASAP).

These inspections take place every 11months as recommended.

Servicing of electrical installations within the boiler house and blower room by British Engineering Services of Manchester.

Inspection & servicing of fire extinguishers by Peterlee Fire Company.