

Diocese of Durham

**JARROW GRANGE
CHRIST CHURCH**
(109)

Care of Churches and Ecclesiastical Jurisdiction Measure 1991

QUINQUENNIAL REPORT
on the architect's inspection on

11 August and 14 October **2017**

Sunderland Archdeaconry

Jarrow Deanery

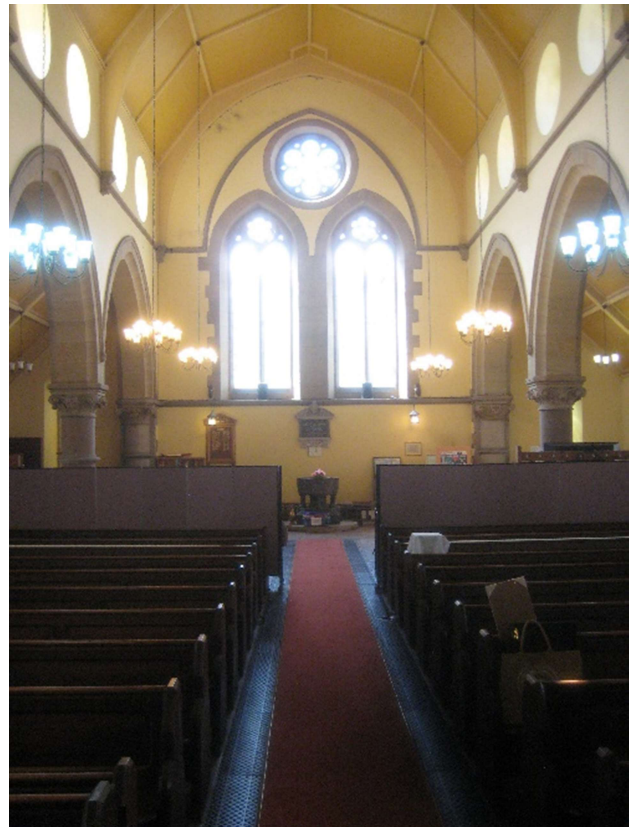
A grade II listed building
not in a conservation area

Priest in Charge Revd David Osman



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PART ONE

1. I have made a thorough general survey of the condition of the church and grounds. The inspection was such as could readily be made from ground level and ladders. I have not inspected woodwork or other parts of the structure which are covered, unexposed or inaccessible and I am therefore unable to report that any such part is free from defect. The chimney flue was not inspected and none of the services were tested. Damp meters were not used.
2. No material seen is likely to contain asbestos but the history of the church is such that asbestos could be present. However this report is an Assessment rather than a Management Survey under the Control of Asbestos at Work Regulations 2012. The PCC may wish to see the guidance on the Church Buildings Council ("ChurchCare") website.
If a management or demolition survey is required and not previously done, a specialist surveyor should be approached.

Brief description

3. The town centre church of Victorian Jarrow, built 1868 in Early English style by Johnson & Hicks. Rock faced sandstone and welsh slate. A tall Tower with long bell openings topped by a tall stone broach Spire which dominates the skyline. A flat corner site with a separate Edwardian church hall.
4. Chancel, Nave, Aisles, S Porch, Vestry with former boiler room under, organ chamber in the bottom of the Tower with a spiral stair to ringing and upper chambers. Ladder to Belfry which is open to the shell Spire.
5. The simple Early English interior has great charm. Later 1893 choir stalls and a 1922 chancel screen in carved oak make it positively 'two rooms'. The front three pews and the rear half of the nave pews have been removed and radiators repositioned to suit. Otherwise the building is unaltered.

Recent structural history

6. A new Log Book started in 2001 is being maintained. Part of the work recommended in an Access Audit has been done (releveling of paths up to the inner Porch doors and to the Hall door).
7. In 2003 a fire was started by an intruder who broke a N Aisle window to get in. Remedial work included a new carved altar and reredos, complete reinstatement of the lost stained glass in the middle E window and the Aisle window, cleaning and redecoration of the interior, cleaning and repair of the organ, rewiring, relighting and new carpets.
8. Work 2003 - 2007 included
 - new lead valleys at the Porch and new curtains at the SW doors
 - new heating system
 - repair of flooring in the SW corner
 - removal of a tree from the cap of the spiral stair, test of the lightning conductor
 - repair and refixing of a gable cross, repair of broken clerestorey glass
9. 2007 - 2012:
 - further slate repairs and gutter clearance
 - the solid masonry tip of the spire (moving in high wind because the iron holding down rod had parted) was taken down and rebuilt around stainless steel and the top of the spire repointed
10. Log Book since 2012
 - Heating pipe repaired in former boiler room, heating pump repaired twice, further pipe renewals between boiler in vestry and former boiler room. Pipework and radiator added on W wall of Nave
 - Electric heater added at S wall
 - Kitchen installed W end of N Aisle
 - Organ maintenance and minor repairs by David Tindale
 - Lightning conductor tested February 2013 (result not recorded)
 - Porch ply ceiling repaired and pigeon netting added.
 - Tree removed alongside NE corner of N Aisle and shrub removed from corner of Tower
 - Minor electrical repairs
 - Main Entry and Vestry outer door stripped and varnished.
 - Roof repairs and new guttering at E end and part N
 - Roof and gutter repairs at N side of Nave and Aisle and Aisle ceiling repairs
 - Spot lamps renewed, some pendant lamps changed to LEDs
 - Five double sockets and fused spur for water heater added wired in dado trunking to existing DB
 - Paint repairs at Chancel and at S Aisle each side of the Porch doors – repeated.
 - Altar dais repainted.

Summary of structural condition

11. The church remains stable and weathertight apart from the Spire and Tower masonry and the abutment gutter between the Tower and Chancel roof.
12. Cracks at the top of the Tower stitched in 1992 do not seem to have moved again. However the opening of resin repairs at the cracked door lintel in the Ringing Chamber noted in 2002 may be slightly wider and a crack is now noticeable at the opposite W wall.

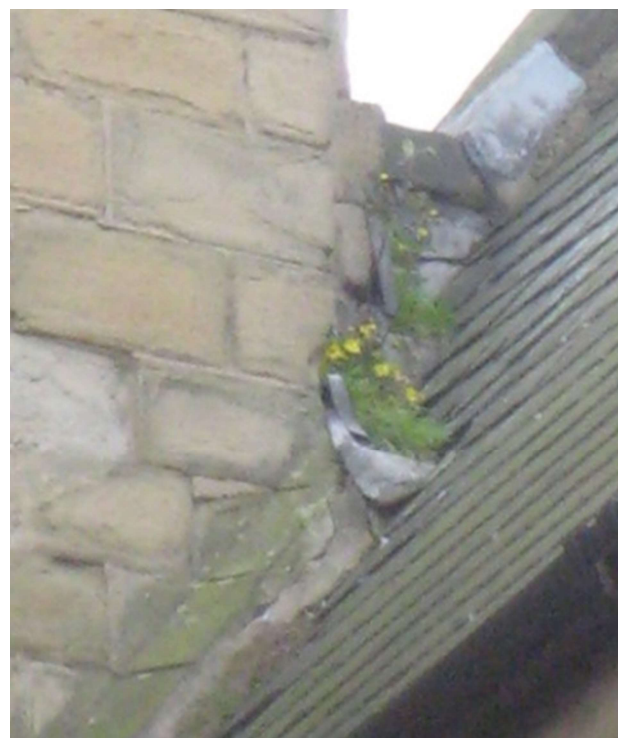
13. Outside the Tower large parts of the dressed stone surface is lost and the stone is deeply weathered in places. As well as looking ragged the stone must get well soaked, hastening weathering.
14. The eaves of the steep slate roofs overhang the walls except where intersected by the Tower buttresses. Here complicated and difficult to clean lead back gutters silt up and get blocked by plants.
15. The general sandstone walls are eroding to different degrees. Very slow erosion of large areas of walling may be hastened by some modern hard cement pointing. Some of this pointing hangs off and no harm will be done when it falls though erosion would be slowed by repointing in suitable mortar. Cracks in the Chancel and S Arcade walls were filled and painted in 2003 and show no further movement.
16. The Chancel floor tiles and stone steps are tilted by uplift underneath which ought to be corrected.
17. Present concerns:
 - A hole in the Tower abutment gutter at Tower SE corner wets concealed timbers and runs down the Chancel plaster
 - Dampness in the S Aisle wall both sides of the porch doors
 - Misuse of the Porch

PART TWO

DETAILED DESCRIPTION OF THE EXTERIOR

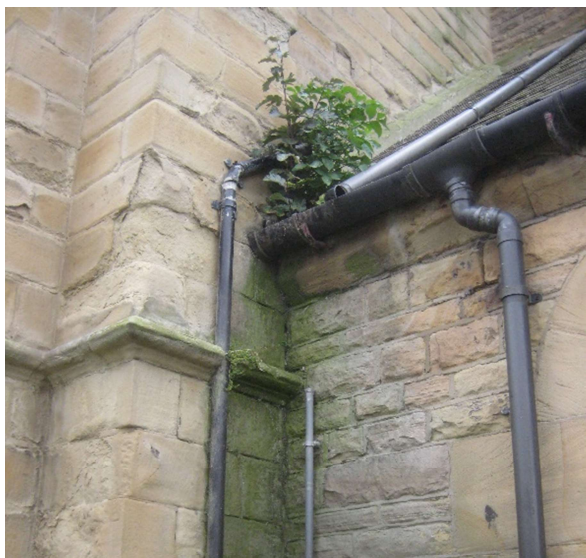
Roofs

18. **Nave** welsh slate with mortar fillets under the stone watertables. Some lost mortar under the SW watertable.
Lead flashings around the chimney may be coming loose. A small plant grows in the slates next to the chimney.
The slate fair with some clipped repairs. Some broken against NW watertable. One N slate slipping under middle of ridge. Large numbers of N side slates held on an unknown material (resin?) in slate joints below, perhaps one of the recorded storm damage repairs.
19. Where the Tower intersects the Nave roof plants still grow in silt part blocking all the back gutters.

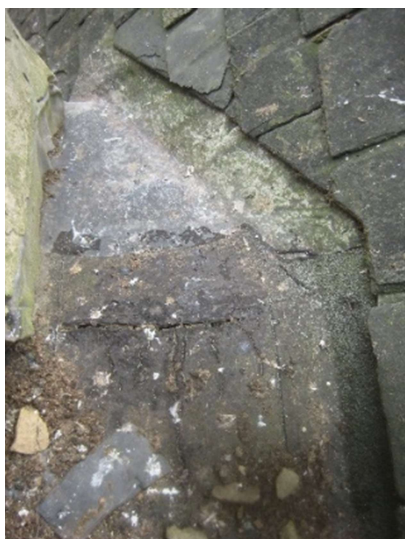


Blocked back gutters between Tower and Nave and deep decay at Tower SW buttress masonry

20. **S Aisle and Vestry** slate fair. About 5% are copper wired in position and many are broken and uneven especially each side of the Porch and over the Vestry. A wide top mortar fillet is beginning to crack. Plastic Nave downpipes extend across the Aisles with some clips screwed through its slates and with bends into the Aisle gutters.
21. **Porch** slate fair but one lost from E side of ridge. Both lead valleys have been well remade.
22. **N Aisle** slate fair though patched and uneven in places. Fewer wired slates than S Aisle. Several slipped or broken slates close to each end and E of the middle pipe crossing the roof. Loose slates at the eave.
23. At the W end two plants in cracks in the mortar fillet and in several joints in the top of the watertable.



24. A sapling is rooted into the roof itself against the Tower. Past blockage here has caused leaks.
25. **Chancel** slate fair with lead soakers and flashings where it abuts the nave. About half of the mortar infill under the gable S watertables is falling out. N slates fair. One S slate missing, one slipped close to ridge.
26. Between the N Chancel roof and the Tower a wide abutment gutter, open at one end, discharges over the Chancel slates. The gutter must have been lead lined on boards but is now aged felt on chipboard, cracked across where it discharges. Deep silt (including stone debris from the Tower and plant growth) has just been cleared revealing a fist sized hole through the gutter. A large Flashband patch laid over the hole is not adhered and so has no effect. The accessible timbers under the hole are saturated and there is high risk that the adjacent concealed Chancel truss end will rot causing very expensive repair unless all wet roof timbers are removed and the whole gutter (boards and lining) is renewed in lead to highest standard.



27. Some damage at sloping ceiling plaster suggests water is already in the joists and perhaps down onto the concealed wall head. The organ itself may be at risk.



Abutment and Tower SE gutters before clearance October 2017



14 October 2017 after clearance



28. The gutter discharges by a series of complicated flashings and back gutters around the Tower SE buttresses, also just cleaned of silted and plants which prevented good drainage into the Chancel eave gutter.

The back gutters SW of the Tower remain full of plants (para 19).

All gutters around three sides of the Tower must be completely cleaned at least once a year. The abutment gutter is readily accessible by door from the Tower and the back gutters each side might be reached from it with careful use of long brushes.

Rainwater System, Drainage

29. Cast iron gutters and pipes were changed to pvc in 1988. N Chancel and N Nave gutters have been renewed and appear sound. Two lengths of S Aisle gutter broken. N Aisle gutter fair but one joint is unsupported and seems to leak. Otherwise the system appears complete and functioning.

30. At N Chancel wall moss on the string courses close to the Tower shows spillage from gutters above, either from the Chancel eave or from the back gutters round the Tower buttresses.

31. The Nave pipes crossing the Aisle roofs have pipe clips steel screwed down through slates. Rust will crack the slates eventually. The top joint of the NE Nave pipe is loose and must spill water onto the Aisle slates.

32. The down pipe W of the Porch is blocked. Spilling water wets the wall which grows ferns and damages the paint inside.

33. N gullies and the gully E of the Porch are blocked. All gullies should be cleaned say twice a year to prevent overflow saturating the ground under the building.



Tower, Spire, Bells, Frame

34. A tall Tower and broach Spire in sandstone ashlar. Elegantly proportioned with delicate narrow Tower buttresses and Early English decoration at the bell openings and mouldings. The Spire is a hollow unbraced octagonal cone built off the Tower and open to the square Belfry.



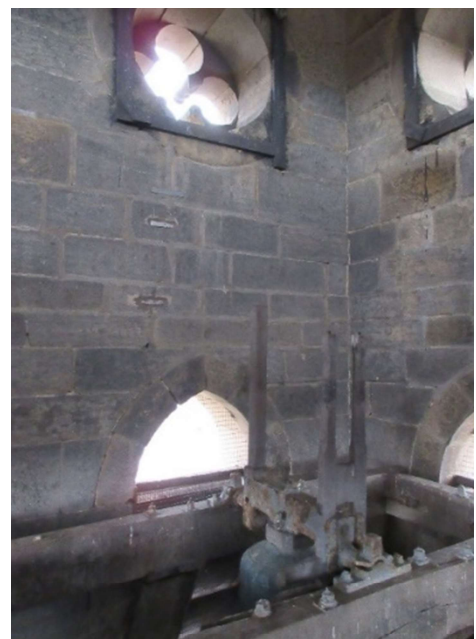
Upwards from Belfry through bell frame into spire

Tower Internal

35. In 1992 vertical cracks in the NE and SE corners of the Belfry and between 5 of the 8 pairs of bell louvres and round openings over were repaired by resin filling and one or two heavy stainless steel staples (9 total) across each. Glass telltales across some cracks, which appear intact so movement at Belfry level appears stopped.

However Tower stone erosion continues inside and especially outside.

The upper floor, stair and carpet in the Tower base are covered in pigeon litter and stone dust which should be cleaned and vacuumed out to prevent it blowing into the organ and to help understand present decay.



1992 stapled cracks between Belfry openings

36. At the Spiral Stair shaft minor vertical cracks in the NE and S sides may be left from the 1992 movement. Most widened joints are filled with cement mortar.

37. Top Chamber sound except a vertical crack through the E door lintel widest about 5mm at top. Resin filling in the vertical crack is cracked. Now also a minor vertical crack on the lintel's stair side. Lintel reinforced in 1992 by two rusting steel plates pinned underneath into resin. The plates are coming away from the lintel. Without accurate telltale comparison with my 2012 photos is not exact but it appears very slight movement over the door continues, complicated by rust behind the mild steel plates which may be forcing them off.



Rusting plates across cracked lintels at top of spiral 2012



2017 – cracks wider than 2012?



38. The Ringing Chamber below is whitewashed ashlar above a painted dado bottom half. Mainly sound.
At E wall a vertical crack through joints and stones at the top half of the wall backing onto the spiral stair, seems unchanged.
At the W wall two cracked joints in the window arch and joints in each of the four courses above suggest slight spread of the wall.



crack in ringing chamber 2012



2017 unchanged

External

39. The conical Spire is slightly deflected to the E. Its masonry (about 175mm or 7" thick). The top parts were repointed during the 2011 repairs when the tip masonry was dismantled and rebuilt around a stainless steel holding down rod.

Fair condition overall but a significant number of stones and mortar joints at lower W, SW and S are cracked, exposing openings to erosion by wind and rain.

40. Patches of Spire stones have lost surface and carved detail. Most loss at W and SW where most driven rain. Cement mortar patching around several of the slot openings where decay advances due to wind scour through the openings.



COMMON SPIRE DEFECTS 2011 photos –
cracked stones and joints, past mortar patching at openings and further wind erosion



41. The Tower is losing surface more severely than the Spire, especially at the buttresses and the S and W sides in the stage below the bell openings. Some plain panels and large parts of some buttresses have lost almost all their surface, exposing stones to further wetting and decay. Deep decay of the buttresses and cills under the louvres and many of the carved mouldings meant to throw off water means that the rest of the masonry is no longer protected as intended.
42. Although losses are a small as a proportion of the thick Tower walls
- repeated deep wetting of the stone will accelerate decay
 - water must be getting deep into the wall thicknesses and may begin to wash out or perish core mortar, weakening the structure which carries high Spire and Tower loads
 - parts of the buttresses in particular have lost significant amounts of stone and the remaining parts are perished, weakening these important structural elements.
43. The cills under the louvres are capped with slates laid in mortar beds but they do not project to throw water clear and water must run down and soak the stone.
44. Erosion at the Tower and Spire cannot be stopped but may be slowed substantially if the string course mouldings are reinstated and new lead caps added to throw water off the cills and mouldings.
45. The stone erosion also adds sand and stone debris in the roof gutters around three sides of the Tower in which plants grow, blocking good drainage.
46. Parts of the buttresses are so weakened that stone replacements appear needed very soon, perhaps with new ties rods or anchors through the Tower to hold it together while stones are removed.

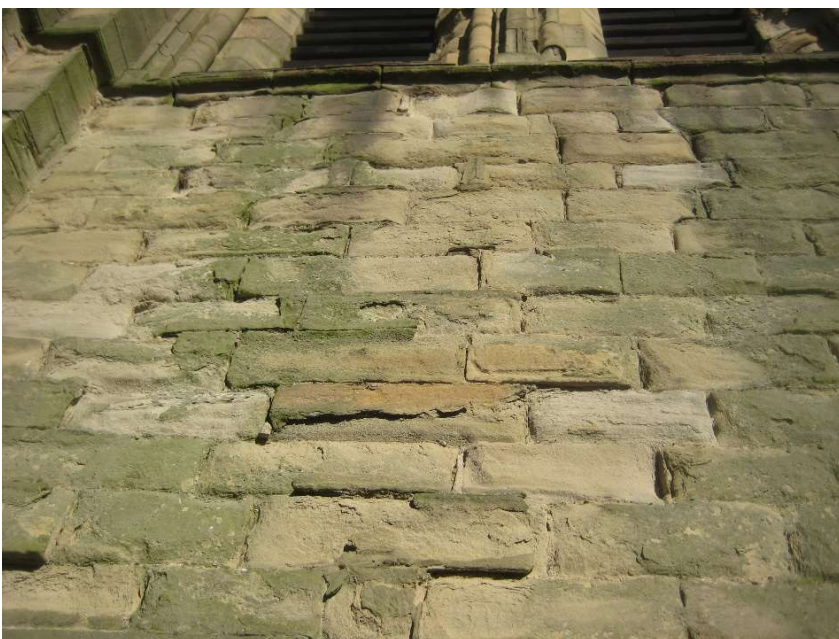
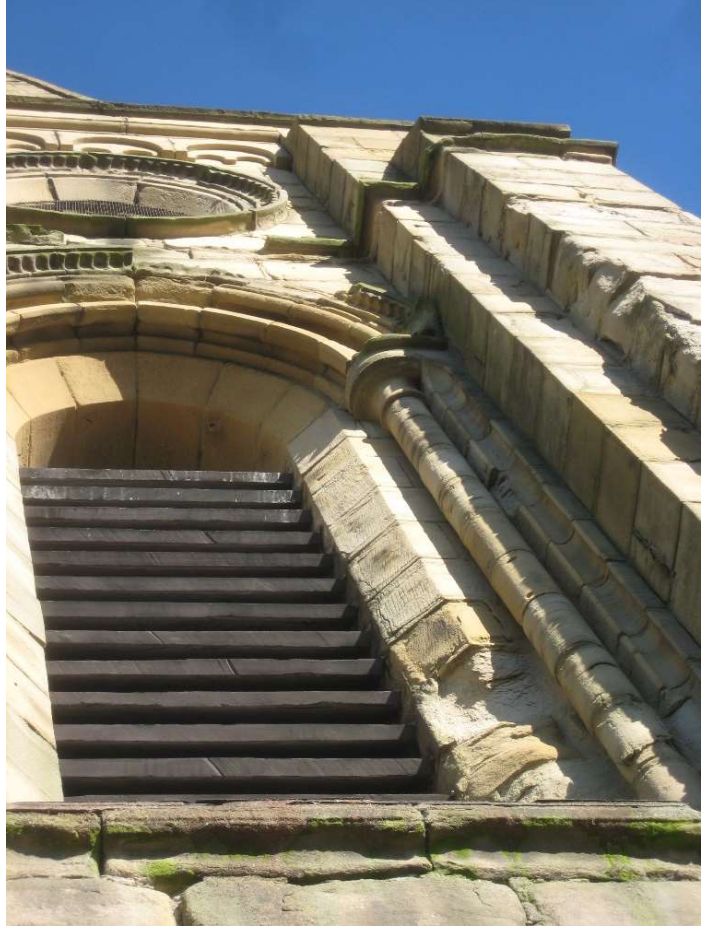
47. **E of Tower** least decayed but parts of the string courses and the low reveals each side of the louvres are missing and the ashlar surface is spalling at most of the stair turret and at three wall panels below the louvres. At the Ringing stage the double window is decayed inside and out and the opening light no longer closes, so wind passes through, increasing scour.



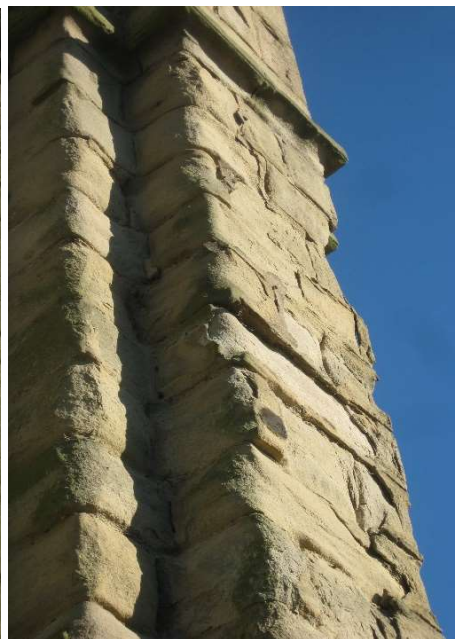
48. Erosion is deepest under the Belfry openings and at the SE buttresses facing the Chancel roof. The rendered repair of the top stage of the spiral stair turret looks sound though not well matched in colour. A tree grows again where silt is trapped between the turret and buttress.



49. **S of Tower** (facing Chancel roof) continues to decay slowly. The protective top string course is about 30% missing. Below the Belfry the walling surface is all weathered away and many joints opened by deep erosion, especially around the door into the abutment gutter. Stone debris adds to the gutter blockage. The SE buttress is most exposed to wind scour so most eroded. Large parts of the reveals, mouldings and shafts in the Belfry openings are now missing.

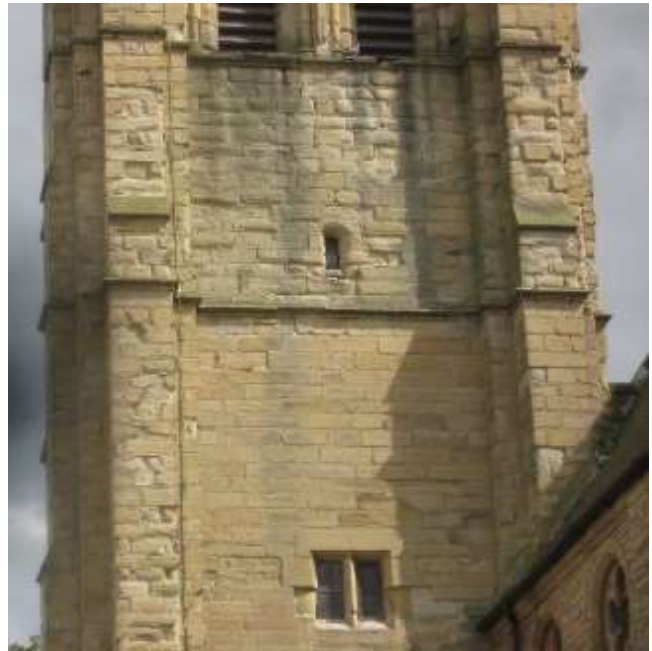


S of Tower



SE buttress

50. **W of Tower** Mouldings framing the round bell openings are about 30% deep decayed. The moulded string above the louvres is almost all destroyed. Several decayed reveals at the bottom of both louvres. Below the louvres almost all stones in the plain panel and its buttresses have lost their surfaces and are deeply decayed from the joints. About 50% decay in the rest of the NW buttress. At the Ringing chamber left window a reveal stone is so eroded that over an inch gap has opened between stone and iron window frame. Wind scour increases stone erosion here. Otherwise fair except random surface or edge decay.



51. **N of Tower** Masonry surface about 20% spalled off and more at bell openings. Loss of detail at one round opening. Several decayed reveals at the bottoms of the louvres. Deep erosion at the buttresses at mid height.
52. Photos taken from the 2011 scaffolding are appended to illustrate typical stone losses. A drone survey of the masonry of the whole Tower and Spire would be useful before future repairs.
53. Mesh fixed outside all the Belfry openings (inside at louvres) is complete and pigeons no longer enter but old pigeon litter remains including skeletons at one level and down the stair. Rubbish builds up behind the organ. A general turn out and clean out is overdue.
54. Eight bells of 1882 by Taylor of Loughborough. Three upper, five lower bells in a bellframe of heavy softwood beams on cast iron legs and tie rods which are sound but rusting. Following structural advice about 1980 the bells were altered to be chimed only. The wheels are part dismantled. Dirt builds up on all surfaces. The manual chimes are themselves disused and no longer operate. At least painting of the iron and cleaning is recommended.

Walls, Buttresses, Chimney

55. All walls are rock faced random coursed buff sandstone eroded to some degree. The dressed buttresses and watertables are in good condition but parts of the exposed moulded strings and hood moulds are decaying. The three gable crosses seem sound.
56. Remaining self seed shrubs against some walls especially E and N of Tower and E end of the N Aisle need to be removed before they damage the masonry.
57. The **Chancel** walls are ribbon pointed (mortar proud of and wider than the joints) in cement mortar which may hasten stone erosion. The pointing is failing and should not be replaced. Stones mainly good but a few losing faces at E gable low level and top and bottom of S side. Four sound carved heads in roundels are inset each side of the E window.
58. The **Nave** E gable S side (above the Chancel roof) and especially the W side of the chimney have many open joints which should be deep raked and repointed in medium strength mortar.



Plant in the slates and open joints at Chimney



Open joints around the SW kneeler

59. **S Clerestory and S Aisle** good condition. **Porch** good condition except one SE quoin, loss of mouldings left of its arch, open joints under the W valley gutter and some rising damp which may be encouraged by the raised paving inside the Porch.
60. **W end of Nave and Aisles** dressed buttresses in good condition, stone walling fair but beginning to erode behind hard pointing like E end. Minor decay in edge of Nave S watertable. Open joints in the gable peak, under the gable cross and in the watertables, at the kneelers and other isolated patches should be raked and pointed. Inside, water marks half way down the S side level with the top of the rose window, unchanged since the last inspection, suggest slight leakage.
61. **N Clerestory and N aisle** stone in good condition, mainly cement pointed.

Window and Door Openings

62. **E Chancel** 3 lancets and round multifoil window good except one cusp at L of round window has decayed back to the glass line where the tracery tip meets the iron hoop armature.
63. **S Chancel** 2 lancets good except two pieces of hoodmould are decayed, one missing.
N Chancel 2 lancets good except erosion from open joints in the hood moulds.
64. Small door opening at base of **Tower** and pairs of small lancets without hoodmoulds in **N and S Aisles** in good condition but soft beds in the arches of the Aisle end lancets.
65. At the **Vestry** door 2 pieces of hoodmould are deeply decayed.
66. **N and S clerestoreys** 8 cinquefoil windows in each.
Fair but eroding from many cusp tips like E Chancel.
Some old mortar patching of the tips. At S second window from W part of the bottom cusp is missing.



67. **Porch** good except one piece of string at arch and two pieces of hoodmould are decayed.
68. **W end** 2 major, 2 minor lancets, multifoil round window all fair.
Some decay in wide hoodmould over the windows.

External Iron and Wood

69. The multifoil windows at E and W and the clerestoreys all have iron hoop stiffening connecting the cusps. The hoops are rusty but seem stable.
70. The S external doors are boarded and framed with decorative iron and fair paint.
The pair of rebated edge Porch doors are sound but there is poor draught seal despite a carpet strip in the rebate. Might be improved to reduce heat loss.
71. The small Tower door has lost its iron decoration and needs paint.

DETAILED DESCRIPTION OF THE INTERIOR

Roof timbers

72. In Chancel joists on three trusses whose ties are visible. The concealed N end of the middle truss is at risk from leaking gutter (para 26, 27).
73. In Nave similar between scissor trusses, hidden above faceted ceilings which follow curved ties under alternative trusses on corbels. Only the truss bottom chords can be seen. No visible defect.
Small hatch at the Chancel ceiling and two vents in the Nave are inaccessible.
74. Each Aisle bay has two lean-to principal rafters with three purlins, seeming sound.

Ceilings

75. Painted plaster on concealed rafters at the Aisles and on horizontal joists at Nave and Chancel.
- slight cracks in Chancel under the valley between Chancel and Tower (para 26, 27) suggest concealed timbers are getting wet
- slight cracking and water damage each side of the Porch doors
- slight cracking and water damage in S Aisle lower three W bays
76. Vestry plaster minor cracks but sound. In Porch wood patterned ply fixed under roof.

Arcades and Internal Masonry

77. A telltale at a filled vertical crack above the W arch of the S arcade was left visible at 2003 redecoration. A hairline crack is unchanged since the last inspection. A gap in the string under the SW clerestorey made by historic movement is unchanged.
78. The round red sandstone columns are sunk into square bases. Buff sandstone caps and responds good. All bases show some surface salts due to rising damp, especially at NE and NW where damp just reaches the shafts. The mild efflorescence does not seem to damage the stone and is no worse than at last inspection. However all salt migration risks damage to stone. The only practical action here is to keep the subsoil dryer by keeping the drainage clear and in good repair. Vacuuming salt and dirt from the bases and moulded collars would improve appearance.
79. Porch inner door opening good except at upper W side efflorescence and minor stone decay (blocked pipe outside para 32).

Doors, Screens

80. Vestry batten door and oval curtain rail inside the Porch doors are good.
81. The fine carved oak chancel screen and cross of 1922 was cleaned after the fire. The added white roller screen, its chain hangings and trailing white cable are intrusive.

Plaster, Decoration

82. Chancel wall plaster good except some damp and paint damage high R of the organ, a continuation of the ceiling damage (para 75).
The lower Chancel walls between a stone skirt and string are lined with painted tiles with striking deep relief flowerhead pattern in good condition.
83. Nave good except not painted where pews removed and slight damp mark high level on the W gable S side (para 60).
84. Overall the church has an attractive warm scheme of gold ceilings, cream walls, cleaned buff sandstone, red sandstone columns and dark wood.

Ventilation

85. Church ventilated by grills into the ceiling void.
86. The Chancel, Nave and Aisle walkways and floor around the font base are solid. Flush suspended over shallow voids under the Nave and Aisle pews and at strips of the W end each side of the font. The voids appear open to the heating trenches. The suspended floors ventilated by large grills in the Aisle, Vestry and W Nave walls.

Glazing, Protection

87. The Chancel has seven Kempe windows and a multifoil all of very good quality and in good condition apart from slight loss of paint. The centre lancet destroyed in 2003 was reinstated with new glass painted by Jonathan Cooke. The other glass was cleaned inside. The N glass appears dirty outside.
88. Both Aisle W end lancets are good 1892 memorials. One pair of S Aisle lancets has 1921 memorial glass. Otherwise the Aisles and Clerestories are clear leaded with some coloured patterning. Some cracked glass in one S Clerestorey. The W Nave lancets and multifoil have modern dove and evangelist symbols in mainly clear glass, good but dirty. All appear in good condition.
89. Both Vestry windows are protected by clouded ventilated polycarbonate. External iron bars at Chancel lancets. Nil at Clerestoreys and one N Aisle lancet.
Nil at opening lights in Ringing chamber whose E light hangs loose, risking pigeons but held closed by a chair. In Tower wired cast glass is mortared into the stone openings. All others have galvanised mesh guards, some rusting.

Floors, Rails, Stairs

90. A stone spiral in the Tower in good condition. The Ringing floor is covered in lino and inaccessible beneath but appears sound. The Belfry floor is boards on timber joists, lead covered with large hatch and its own gutter leading through the wall. The floor is covered in pigeon litter which should be cleared. A crude board ceiling was fixed under the bell frame when the bells were changed to chime.
91. Good painted timber altar dais.
92. The Sanctuary floor is mixed encaustic and coloured geometric tiles to suit the Early English architecture. It is bounded by sandstone steps, one covered by fitted carpet as a kneeler. Previously the step was seen to be painted and prone to slight rising damp. Parts of the tiles and steps are heaved up and tilted a little dangerously and should ideally be rebbed level on a new subfloor. An elegant iron and oak rail.
93. A carpet runner covers the Chancel floor centre from the Chancel step to Communion step. The rest of the Chancel has similar tiles extending under the vented choir stall platforms. Some tiles are loose and a few missing.
94. Apart from areas of suspended softwood under the Aisle pews the floor is now thin oak woodblock in basketweave pattern on a mainly solid floor divided by iron grills on heating ducts. One grill wobbles. The blocks have been sanded and resealed without stain. At the back of the former pews near the entrance some loose or missing.
95. Small holes in the Aisle floor at former heating pipes must let in draughts. Some tape over heating grills.
96. Carpet added over part of the Nave W end.
97. The Vestry has fitted carpet on a ventilated suspended floor over the brick vault ceiling of the former boiler room below.
98. Porch is riven York stone flags at slight slope, flush with floor for level access. A wooden handrail at the basement steps.

Reredos, Monuments, Brasses, Furnishings, Organ

99. A robust replacement pine Altar and carved oak Reredos both of 2003, copies of the originals. A unified suit of carving in the Chancel also includes the 1893 Northbourne memorial panelling, the 1922 Chancel screen and organ enclosure which includes a disguised door. Good.
100. The few monuments are all good quality. Two brasses on arcade and two on oak grounds in the N Aisle, one of them framed by excellent oak carving. Marble on W wall and a bronze relief in the Chancel. On S Aisle wall a stainless steel plaque of 2011 marking the 1936 Jarrow Crusade.
101. The organ is in good order and regular use. Blower motor rewound and rewired about 2010.
102. The style of oak tracery continues in the matching pulpit and lectern. Victorian pews, about half removed, modern steel chairs and table.
103. A fine Frosterly marble font on four shafts at the W end is in good condition but surrounded by loose furniture and a clutter of storage.

Heating

104. Modern central heating by gas boiler, radiators and finned pipes. A wall mounted IMAX boiler in the Vestry with balanced flue through the wall. The pump, pressure vessel, insulated circuit pipes, gas supply, frostat and related electrical distribution board remain in the basement room below. A 7 day 24 hour timer in the vestry and a thermostat in the S Aisle. Heating in working order after pipe and pump repairs 2012 and since.
105. Four modern radiators in the Chancel, one in Vestry. Four at W and two central in the Nave. Some warm air from finned pipes with reflective foil below in the trenches under the cast iron grills in the walkways. A pumped loop in the NW corner.

106. The system is said to be limited in effect. The finned pipes will be more efficient if vacuum cleaned by lifting the grills.
107. Two loose electric heaters in Chancel need to be used with great care near joinery.
108. The redundant stone chimney on the Nave gable wall contains a disused stainless liner in one flue and another flue from a blocked fireplace in the Vestry. On the chimney two short stone pots which seem to be deteriorating.



109. The basement former boiler room is entirely underground with brick ceiling vault under the ventilated vestry floor. The former coal chute has been altered into an external meter house. The room is poorly ventilated by small louvres in the door whose hinges are failing. Risk of damp is increased because the boiler no longer draws air up the flue. Some of the water in the floor sump comes from the vestry sink. When full the sump should pump out automatically through a waste pipe rising to an outside gully. The modern pump works only when the water spills over the floor, adding to the damp.
110. Further damp is caused by wet rubbish, especially in the well at the bottom of the stair.
111. The damp will not harm the building but will hasten corrosion of the heating and electrical installation. The metal switches begin to rust.

Electrical

112. A three phase supply probably to suit the organ motor, through an external earthenware pipe duct which is part broken exposing the armoured cable. Meter in N Aisle. Wiring is MICC installed in 2003 serving multiple light switches, lights and several twin 13A sockets. No periodic test report (usually a condition of insurance - see Addendum) or reported work since last inspection.
113. Lighting by metal and glass pendant chandeliers with warm white low energy lamps in the Chancel, Nave and Aisles and wall mounted spots in Nave and Chancel. Older bracketed lanterns over pulpit and lectern and on the W wall. Recent change to white light LEDs in some pendants looks odd and has a high rate of failure. Five LEDs not working in pendant by pulpit.
114. A bulkhead light in the Porch. Small LED floodlights outside the Porch, Vestry and boiler room controlled by passive infrared detectors.
115. Microphones and two speakers on the Chancel arch. A motorised roller projector screen in front of the Chancel screen with trailing cable to a multi-socket perhaps intrusive.
116. In basement modern MICC cables, ceiling bulkhead light and rusting surface metal switch.

Lightning Conductor

117. Spire protected by a copper rod and tape fixed to the tower NW corner where its lower part is protected in a metal pipe into the ground. No known test point or earth rod cover. The visible parts appear complete.
118. The last recorded earth test recorded in 2013 but result not given in Log Book. Conductors need to be tested every 5 years. See Addendum. Steeplejacks may suggest the installation should be extended over the whole building to meet the British Standard. However given the prominence of the spire no extension is likely to be justified unless specifically required by insurers.

Fire Precautions

119. Extinguishers all annually serviced September 2016:

3 litre foam	Nave by the Vestry
3 litre foam	W end by Porch doors
2kg CO ₂	by the Organ
2kg CO ₂	in Vestry

In case of proposal to change note the insurer EIG advises dry powder extinguishers should be confined to boiler rooms and kitchens because discharge (including accidental and malicious) in church risks serious damage to organs and delicate surfaces due to the powder being corrosive.

A hand bell in case of fire kept at the font.

Water and Sanitary facilities

120. At NW corner a stainless steel sink (cold only) in a recent kitchen fitting.

In Vestry a stainless steel sink and cold tap and small wall electric water heater, draining to the basement floor sump.

Access and use by people with disabilities

121. After an access audit the wide level path between W gates, Church and Hall was remade in blocks and raised to the doors with care at air bricks. A further help could be to raise the Church entry door mat to floor level by adding thick ply in the deep well. A step remains outside the Vestry door.

122. Level interior as far as the Chancel step. The Hall has an accessible WC and ideally one should be added in Church.

Security

123. The grounds are enclosed by railings and padlocked gates. The Porch door has stout bolts and rim deadlock. The Vestry door has a night latch and 5 lever roller mortice deadlock. Both Vestry windows are barred inside. A large floor safe.

124. The 2003 arson was after intrusion through an unprotected Aisle window.

Grounds, boundaries, signs, paths, trees

125. Small well kept grounds shared with separate Hall, mainly grass with some small trees, shrubs and an apparent old font. Slopes down to some concrete channels at the Church walls may increase ground water under the Church if clearance of gullies and drains is neglected.

126. The low stone boundary walls, piers, railings and gates are in worsening condition. Rust gives a poor impression and damages the metal. Chipping, derusting and painting of railings and gates is needed. Plants growing in the walls should be removed and the joints raked and pointed. The NW corner is derelict and propped on bricks to stop the railing breaking.



127. The sign at the NE corner needs derusting, paint and perhaps clearer lettering.

At NW a short flag pole has lost its top and lacks paint.

Archaeology

128. Consultation with the local authority archaeologist indicates that the church and its site not are of archaeological importance.

General comments

129. The parish is to be commended for its care and steady improvement of the Church.
130. Permanent repair of the abutment gutter and if necessary roof timbers between Chancel and Tower and regular cleaning of all gutters around the Tower are essential.
131. A way must be found to protect the Tower masonry from the weather, to ensure its stability and to begin replacements of the most serious losses to slow decay of the Spire and Tower.

PART THREE

RECOMMENDATIONS in order of priority

For immediate action

Repair gutter and underlying timbers between Tower and Chancel	11, 17, 26, 27, 72, 75, 82
Remove sapling from slates at E end of N Aisle	24
Repair two S Chancel slates	25
Repair Aisle gutters and the pipe across the NE Aisle	29, 31
Clear rainwater pipes and gullies both sides of Porch	32, 33, 75, 79
Begin structural engineer's monitoring of movement in the Tower	35 - 39, 42, 46
Change white light and failed lamps	113

For completion within 18 months

Begin renewals and protection of Spire and Tower masonry and structural tying if required	11 – 13, 39 – 52
At chimney remove plant from slates, refix flashings, rake and point W side, check pots	18, 58
Repair N Aisle slates, remove plants and point W end watertable	22, 23
Obtain new Electrical System Periodic Inspection Report	112 and Addendum
Obtain new Lightning Conductor Test Report	117 - 118 and Addendum

For completion within five years

Remove remaining shrubs against walls	56
At W gable point open joints at peak, watertables, kneelers	60
At W gable replace decayed parts of hoodmoulds	68
Derust and paint railings and gates, rake and point boundary walls	126

Desirable improvements

Relay the Chancel floor, tiles and steps	16, 92
Improve draught stripping at porch doors	70
Refurbish external sign at NE corner	127

Recommendations on Maintenance and Care

Clean gutters at three sides of Tower at least once a year	14, 19, 28, 30, 45
Clean out remainder of Tower interior	35, 53, 54, 90
Vacuum clean columns	78
Clear rubbish and leaves from basement boiler room	109 - 111

APPENDIX Spire and Tower Photographs before and during the 2010 repairs from N side scaffolding typical of decay all sides

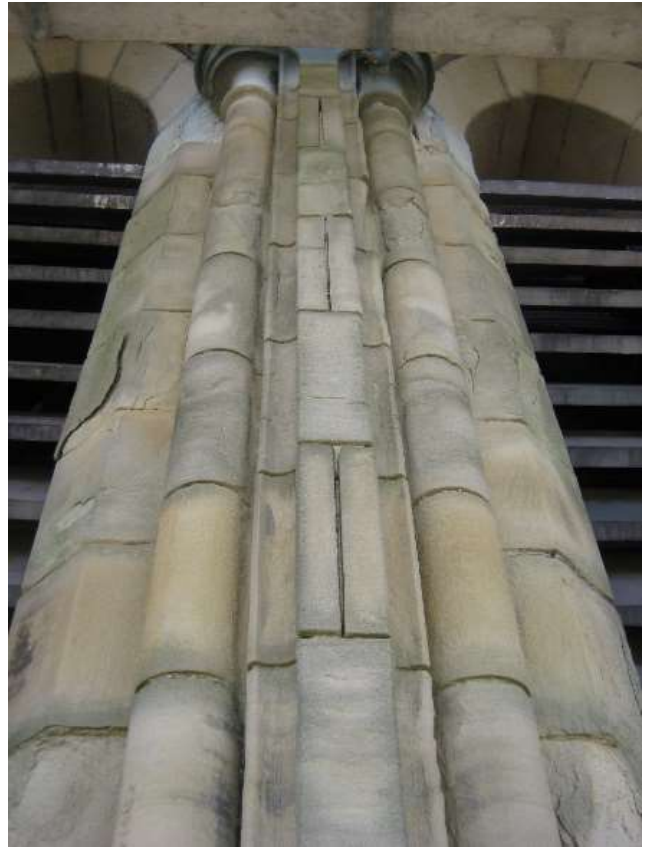
South



North Tower top lift 4



North Tower lift 3



North Tower lift 2



North Tower bottom lift 1



ADDENDUM to the SURVEY REPORT

Required under the Care of Churches and Ecclesiastical Jurisdiction Measure 1991

PURPOSE OF REPORT This is a general report only, as is required by the Measure. It is **not** a specification for execution of repairs and must not be used as such. The parish is reminded that it will be necessary to obtain either the Archdeacon's permission or a Faculty if it is intended to make repairs for which an architect's specification should be sought. The PCC minutes must record that an application is being made for permission or faculty and a copy of that minute must accompany the application together with a full specification, drawing where appropriate and an estimate of the cost of the work. In any application for grant aid a full specification is always required.

LOGBOOK The parish has a duty under Canon F13(4) to keep a Log Book recording all work carried out on the building. I commend this practice to the PCC. Not only does it help the inspecting architect but it can prove a valuable aid to the parish.

MAINTENANCE Continual vigilance to guard against blockages in gutters and the rainwater system as a whole is needed. Every parish must find for itself a reliable procedure to ensure that gutters, ground gutters, gullies and drains are kept clean. It might be:
maintenance under contract by a local builder or handyman or
maintenance by church working party
Whatever system is adopted the problem remains to remember when to organise the work. Gutters and pipes should be checked at least twice a year. If the Log Book is used as a check list of action every year and kept as an up to date record this will itself act as a reminder.

HEATING INSTALLATION A proper examination and test should be made by a qualified engineer annually **and a written report obtained for the log book**

ELECTRICAL The installation should be tested every five years and immediately if not done within the last five years by a competent electrical engineer, that is a certificate holder of the National Inspection Council of Electrical Installation Contracting (NICEIC) or a member of the Electrical Contractors Association (ECA) and a resistance and earth continuity test should be obtained on all circuits. **The test report should be kept with the Log Book.** The present report is based on a visual inspection of the main switchboard and certain random sections of the wiring without the use of instruments.
To check registration with NICEIC and ECA see www.electricalsafetyregister.com

LIGHTNING CONDUCTOR Any lightning conductor should be tested by a competent electrical engineer every five years (in addition to any recommendation in this report) in accordance with the British Standard Code of Practice. Records of the results and condition should be kept with the Log Book. Note that there is no general requirement for a Lightning Conductor.

CHURCH WARDENS' INSPECTION Although the Measure requires the church to be inspected every five years serious trouble may develop in between these surveys if minor defects are left unattended. It is recommended that the wardens should make or have made a careful inspection of the fabric at least once a year and arrange immediate attention to such matters as displaced slates and leaking pipes.

PEOPLE WITH DISABILITIES 'One of the striking characteristics of the Gospel narratives is Jesus' concern for people with disabilities but sadly the Church has, in the past, given little attention to their needs. The design of our buildings has often proved a barrier to those who attend church services' (Chairman of the Church Buildings Council). The PCC are reminded that the Disability Discrimination Act 1995 places a duty on churches to review all practices and facilities and to take all reasonable steps to avoid discrimination against people with disabilities caused by physical features, bearing in mind the limitations often found in historic buildings
Useful advice and audit sheets are to be found in 'Widening the Eye of the Needle' published by the Church Buildings Council 1999 £10.95.

INSURANCE The PCC is advised that insurance cover should be reviewed annually to take account of any rise in the cost of rebuilding.