Wells Cathedral: North Nave Aisle Roof Repairs (1 of 3 projects funded)

Awarded £160,000 in November 2014 towards a £315,000 project

The need

This project focuses on the repair of the western half of the north nave aisle roof, dealing with failure of the lead, which was allowing water ingress affecting the medieval timberwork.

The completed roof. Photo credit: Nick Cox Architects.

Outcomes

The roof is now watertight and should not need any further work for 50 to 100 years. The repair works mean that the cathedral has been able to continue to run services and community events without water coming into the building and avoids further damage to other areas of the cathedral. The cathedral has improved its procedures around grant applications.

Economic and social impact

The work supported local contractors. The building works were very visible and attracted considerable community interest in the building. The cathedral team were able to leverage funding from Viridor for this project once they had received the First World War grant. They were already intending to run First World War commemorations but the Fund gave them more of a focus: they engaged more people from the community, and worked with the local museum.

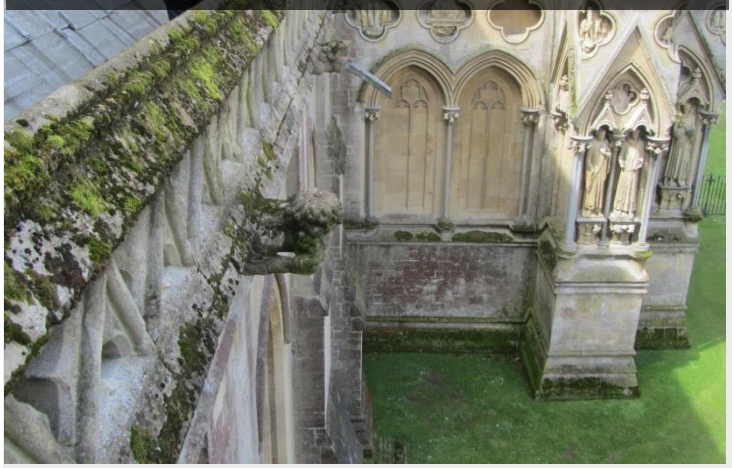
Works completed and timescale

Local Somerset company, Ellis & Co, renewed the lead at the west end of the north nave aisle roof between March and October 2015. The works included the erection of a scaffold and temporary roof to enable the works; stripping, recasting and relaying the lead roof area, including the formation of a new rainwater outlet; carpentry and structural repairs to timber substrate and roof structure, and the laying of new floor screed in the triforium below.

The Cathedral

The first abbey church on the site dates to 705 AD. Following the Norman Conquest the seat of the bishop moved between Wells and the abbeys of Glastonbury and Bath, eventually settling at Wells. The architecture of the present cathedral is entirely Gothic and mostly in a single style, the Early English Gothic of the late 12th and early 13th centuries. Work commenced in about 1175 with the construction of the quire. The church was dedicated in 1239. A subsequent phase of works, adding the central tower and an eight-sided Lady chapel, was completed in 1326. The eastward extension of the choir and retroquire continued. Also in the 14th century, the central piers of the crossing were found to be sinking under the weight of the crossing tower which had been damaged by an earthquake, and the distinctive strainer arches were inserted by master mason William Joy. By the reign of Henry VII the cathedral building was complete, appearing much as it does today. The exterior has an Early English façade displaying more than three hundred sculpted figures.

The blocked gutter overflow chute in the foreground was reinstated. Photo credit: Nick Cox Architects.



Wells Cathedral: North Quire Aisle Parapets Repairs (2 of 3 projects funded)

Awarded 160,000 in March 2016 towards a £295,000 project

The need

The poor condition of the parapets to the north quire aisle (12th to 14th century) and adjacent structures had been identified in the 2013 Quinquennial Inspection as an area of concern. There were signs of notable decay of individual stones and many very open joints and displaced masonry, such that vegetation was becoming established in places, and water penetration threatened the interiors below.

The completed work. Photo credit: Nick Cox Architects.

Outcomes

The project has rectified a significant area of defective fabric, securing its future as well as providing improved rainwater drainage and archaeological insight. The repairs were successfully completed and the areas will not require any further work apart from routine maintenance for 50 to 100 years. The project taught the cathedral team that they were able to fast-track a project and they now have a good understanding of all the necessary logistics to enable them to do this.

Economic and social impact

The principal contractor was local to Wells. The work is felt to have increased the community interest in the building's heritage. The balance of the funding was provided by other donors, including the Friends of the Cathedral and Viridor.

Works completed and timescale

The works to carry out stone repairs and stone cleaning to the North Quire Aisle parapets took place between August 2015 and April 2016. The principal contractor was Sally Strachey Historic Conservation. The work involved cleaning of the stonework, including sulphate encrusted areas, repairing stonework and removing and re-fixing lead flashings, improvements to rainwater disposal. An underspend of c. £13,000 was returned to the fund for re-allocation by the Expert Panel.

The Cathedral

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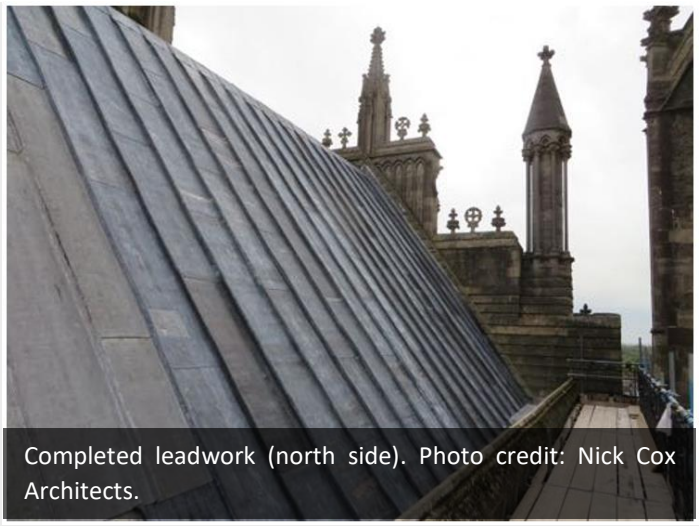
New, improved downpipes and hoppers for rainwater disposal. Photo credit: Nick Cox Architects,

Wells Cathedral: Nave Roof Repairs (3 of 3 projects funded)

Awarded £300,000 in November 2016 and a further £90,000 in June 2017 towards a £490,000 project

The need

The need for repairs to the nave roof was reported in the 2013 Quinquennial Inspection and became acute in July 2016, when leaks became apparent after heavy rainfall where lead sheets had slipped. Much of the leadwork dated from the 1860s or even earlier and was extremely thin in places, with much patching. Urgent repairs were needed to avoid prolonged exposure of the original medieval timbers and stone vaults of the nave to water penetration and the risk of decay setting in.



Completed leadwork (north side). Photo credit: Nick Cox Architects.

Outcomes

Now the repairs are successfully completed the roof is watertight and will not need addressing again for approximately 50 to 100 years. The repair has prevented leaking into structural and roof timbers, avoiding costs increasing exponentially in the future. The work was considered critical to enable the continued running of cathedral services and events. The cathedral team feels it has improved their capability in obtaining and managing grant funding. The repairs to the nave roof became an added point of interest for tour guides to show the public.

Economic and social impact

Local contractors Ellis & Co completed the work on this project. One of the leadworkers was trained and received a higher-level qualification as a result of the work.

Works completed and timescale

The works were carried out between May 2017 and December 2017 by Ellis & Co (Somerset) and involved: stripping, recasting and relaying the lead to both roof areas, including the gutters and rainwater outlets; carpentry repairs as necessary to timber substrate and roof structure; stone repair and replacement to high level masonry and parapets; removing and re-fixing lead flashings at parapet level; redecoration and localised replacement of gutter brackets, and strengthening of localised area of existing walkway to accommodate increased loading during the works. The original project cost estimate of £393,000 was exceeded by nearly £100,000 because of the complexity of the scaffolding task being underestimated and, once access was possible, the discovery of higher levels of timber decay than expected, up to 90% in places. The fund's Expert Panel re-allocated a further £90,000 towards the work from underspend elsewhere, and the balance was contributed by the Friends of Wells Cathedral.

Slipped and damaged leadwork (south side) dating from 1865. Photo credit: Nick Cox Architects.

Cathedral quote

This cathedral, and all who pass through its doors for whatever purpose this year, have every reason to be very grateful to the Government for its investment in England's cathedrals. We are always hopeful of more, for the challenges to continually repair and maintain historic fabric are ever present, but for now we are very grateful and simply wish to say a huge thank-you to all those who have worked so very hard to make this fund a reality. (John Davies, Dean, February 2018).

The Cathedral

See previous project summaries.