Project Details

Project 1: *High Level Repairs to St. Peter's Church, Witherley*
Diocese of Leicester

Listing Status: *Grade 1*

Client: *PCC St. Peter's Church, Witherley*
C/o Church Warden, Mr Derek Walker, The Old Stables,
1A Atterton Lane, Witherley, Nr. Atherstone, Warwickshire

Description of Building

The building is the Parish Church of the village of Witherley near Nuneation. The church dates from the early 14th century and the tower from the 15th. The chancel was rebuilt in 1858. The majority of the fabric is in coursed and squared Attleborough stone with the later chancel in random rubble.

The tower is in two stages and stands approximatly 24metres and carries an in set spire of 22metres. The tower has a crenellated parapet with external panelling of trefoiled arches with sunken spandrels. At each corner above the diagonal buttress there are four panelled and crocketed pinnacles. On the south elevation at the junstion of the nave to chancel is a 19th century polygonal turret which serves a small vestry and stair to the pulpit. The church is attractively sited adjacent to the river Anker, it is of substatial proportions for a small village.

Conservation Issues

The principal concerns were to the health and saftey issues relating to the delapidated state of the battlements and the possibility of falling masonary.

The second issue was to source a stone which would best match the original Attleborough, previous stone repairs had been carried out by others using a variety of stones resulting in a patchwork of repairs. The stone would be required as ashlar blocks and to be dressed and carved. The location of the high level repairs also required the stone to have excellent weathering properties. Woodkirk stone met these requirements and was approved by English Heritage.

The scaffolding was to be designed and erected to provide a substantial working platform on which dismantled material,could be stored, this minimizes handling and reduces the risk of damage to stones during hoisting. Scaffolding lifts were carefully positioned to allow principal work area to be accessible with minimal alteration to the scaffold, mechanical fixing of the scaffold to the structure was not permitted.

The retention of original stonework is of primary importance and only when stones are structurally unsound would they be replaced. The detail of original carving

and their profiles would be replicated where new work is introduced.

Tradtional mortars using lime putties and whenever possible local sands allows for reconstruction impact against retained fabric to be minimised. Contractors are required to prepare a sample panel for approval and this is used to ensure that batching and finish remain consistant. Steel trowel and raised pointing is not permitted, mortar is kept behind the face of the stone and joints rubbed to remove latents and expose aggregates in the sand.

Architects Appointment

I am the Churches inspecting Architect and had prepared St. Peters Quinquennial inspection in March 1999. I was given the benefit of the church files from the retiring Architect Mr. Ogden. Following production of the Quinquennial I attended a meeting with the PCC to discuss our findings and inparticular the dangerous state of the upper areas of the tower.

An extract from the Quinquennial follows

Tower

6.13 *East Wall (upper):* *The walling of ashlar block is in fair condition. Some of the blocks are decaying and a number of stones to the Southeast buttress particularly so. There are open joints to some stones which appear to be where previous scaffolding has been inserted. There are several decayed stones in the moulded string course below the parapet. There are a number of stones spalling approximately 1-2 metres above the nave roof.*

The RH mullion to the upper parts of the belfry window is heavily eroded. A louvre is missing to the belfry window.

6.14 North Wall:

The wall of ashlar block is in fair condition. There are open joints in places, particularly at lower level which require repointing. There is vegetation growth to the the area around the buttress which should be removed.

One timber louvre is missing from the LH opening of the window.

The frieze at the top of the tower is in very poor condition. There are some displacement of joints.

There is a section of stone missing at belfry window level under the lightning conductor. There is an open joint through the apex of the belfry window.

6.15 West Wall:

The walling of large ashlar blocks is in fair condition. There are open joints in places, particularly at lower level which require repointing. There is some weathering on the flutes to the Southwest buttress above belfry window height.

There is erosion to the stonework around and within the belfry window. There are three timber louvres missing.

6.16 South Wall:

The walling of ashlar blocks is in fair condition. Sundry stones below the parapet are decaying. Similarly the Southeast arches of the belfry window. There is a small crack below the window under the LH gargoyle. The frieze is in very poor condition with cracked stones and open joints visible from the ground. The RH pinnacle appears to have some corrosion, there is a horizontal crack and it appears to have lifted. There are open joints to many of the stones at lower level which require repointing. Some of the stones are loose and vegetation should be removed.

There are a number of loose timber louvres to the belfry window. These are dangerous and should be removed before they fall.

6.17 Spire:

Decay is occurring in some stones of the walls of the lower part of the spire which was not rebuilt after the lightning strike of 1925.

There is much decay of the jointing between stones both inside and outside. There is much erosion of the detail around the carved lucarnes. On the south side the carved detail above the head of the lowest lucarne has completely decayed. The mullion and transom of the lowest Southwest lucarne have eroded and fallen. All lucarnes are heavily weathered.

6.18 Parapet and Pinnacles:

Much of this area is unsound.

The split merlon to the north face reported in the last quinquennial is now lying in the parapet gutter.

In the east parapet wall a stone has split along its bedding plane and others are decaying. (Ref Tower east)

The west side parapet is leaning outwards at an alarming angle. The centre merlon has been removed. There is a damaged stone to the south corners and a split in the merlon adjacent to the door.

The south parapet wall also has decayed stones and stones split along their bedding planes.

The door into the parapet gutter is in poor condition.

The parapet gutter had been cleaned at some point since the last quinquennial but the outlets were again blocked and require cleaning out. The stones removed from the parapet are resting on the lead gutter.

The elder reported in the last quinquennial adjacent the doorway should be moved.

The flagpole and fixings mentioned in the previous report remain in poor condition.

6.19 Steeplejacks: Report:

A detailed steeplejacks report is available, the report was dated 17th Aug. 1996 and prepared by Church Conservation Ltd, Nottingham.

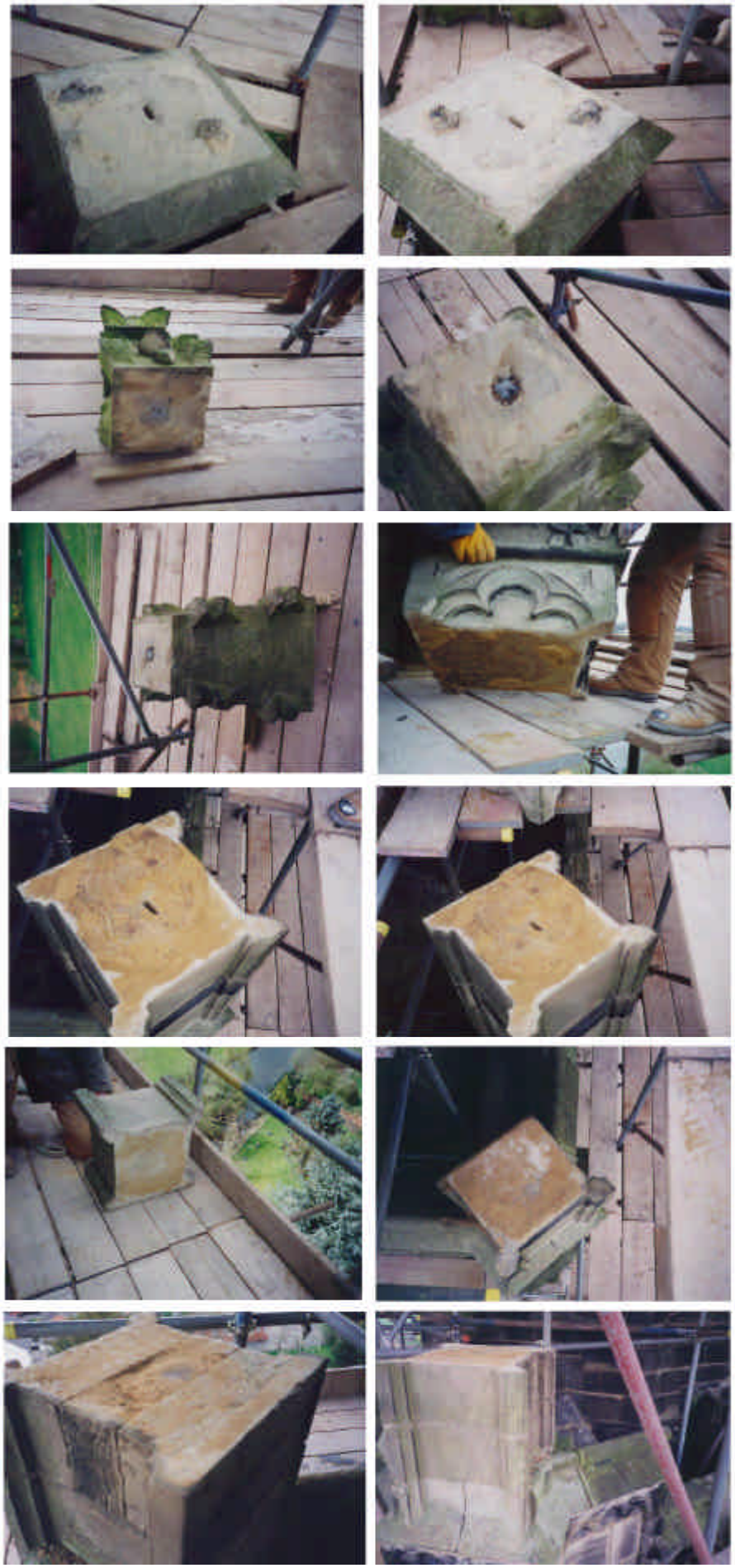
THE PROCESS OF REPAIR FOR WITHERLEY CHURCH

1. During the quinquennial inspection the battlements to the tower were found to be in a dangerous condition (as shown top centre), some merlon stones were removed for safety purposes during the inspection. Three of the four substantial corner pinnacles were noted to be rotating and out of plumb, the northeast corner being at approx 225mm off vertical. The pinnacles cantilever out from the frieze work and the weight of the pinnacles had over the years caused the base stones to displace. The spire had been struck by lightening in the 1930's and the upper section reconstructed shortly after.

2. Drawings of each elevation of the battlements were prepared and for tendering purposes areas of stones work, which would require replacing, were identified.

3. Although the spire appeared to be in reasonable condition stonework to the lucarnes had been identified in the quinquennial it was decided that due to the height of the tower scaffold would be continued up to include the spire to allow for work to the lucarnes. During the erection of the scaffold the scaffolders reported that the whole of the upper section of the spire appeared to be loose. Close inspection indicated that this movement was related to the 1930's repair and incorrect mortar specified to the rebuild.

5. All lucarnes were refurbished; one lucarne was disassembled to allow for the construction of a working platform to enable the cross trees to be installed, and then reconstructed.

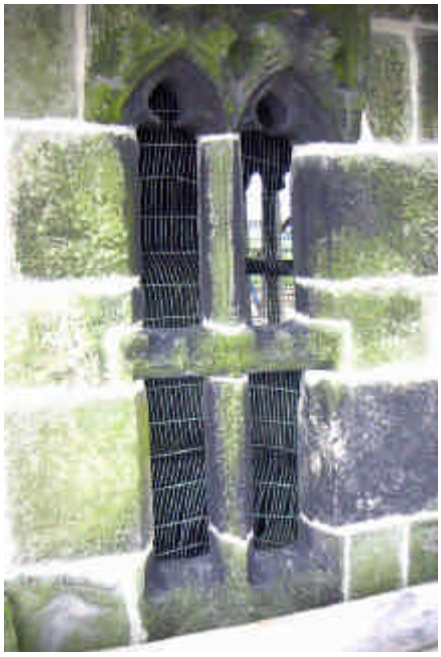


6. Close inspection of the pinnacles showed that all but the pinnacle adjacent to the tower stair were showing signs of distress in the lower courses and their staging. Following discussions and agreement with EH inspecting Architect Mr. Cox it was decided to carefully disassemble the three pinnacles. Stones were carefully numbered for reassembly.

7. The base of the pinnacles were distressed due to poor initial and original construction and the use of too small sections of stone which give only limited bonding to other elements of the tower walls.

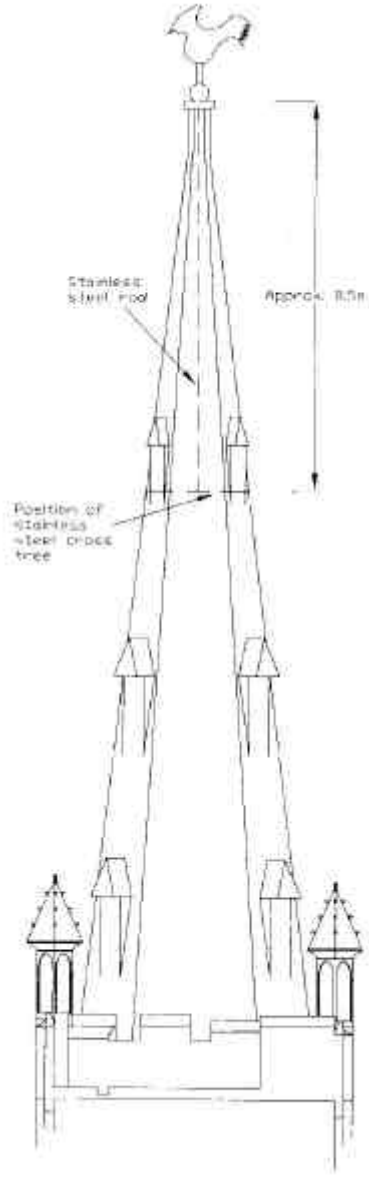
8. New Woodkirk stones to new dimensions were dressed into the walling to provide a sound and stabilized base for the reconstruction of the pinnacles. At parapet floor level a ring of stainless steel Helitie was inserted in the bed joint and extended into the bed courses of the pinnacles, this provided continuity of reinforcement into the pinnacle structure. This reinforcement was repeated just below the battlement level.

9. As the pinnacles were being reconstructed the parapet battlements were also being rebuilt, this allowed for bonding between pinnacle and walling to be improved. A percentage of the decorative frieze stones forming the battlements had to be replaced due to delamination, but care was taken to reuse the original stonework wherever possible.



10. The original stone used at Witherley was Attleborough, which was a quarry near Nuneaton, but this went out of production many years ago. The closest match is Woodkirk, which is quarried near Leeds, Woodkirk is a more sound and consistent stone compared with the Attleborough which is soft and tends to delaminate along its bed lines.

11. The original gargoyle on the southeast corner was severely weathered and the underside of the stone had weathered back as to make the stone unsafe. The stone was carefully supported and cut away and retained for reference. The new gargoyle, complete with gold leafed tooth, was installed.



Funding

Contract Value: £62,072.58

English Heritage generously funded the works at 40%. Initial pre-contract consultations had taken place with their inspecting Architect Mr. Dan Martin and at commencement of the works with Mr. Alan Cox. Mr. Cox was involved with the initial inspection as soon as the scaffolding was in place and offered practical advice when stonework was identified for replacement. Regular site meetings were held with Mr. Cox in attendance and the team worked well together.

The parish, the PCC and the vicar all made a fantastic effort to raise the remaining balance for the funding of the project to the extent that the whole village became involved in the project and a scare-crow weekend raised in excess of £8000, this is now an annual event and the monies are allowing completion of low level repairs and the installation of a toilet and kitchen, this work has received faculty and is due to commence in late 2004.