

SITE REPORT FORM No.1

CHURCH: St Mary Magdalene, Madingley, Cambridgeshire

PROJECT: 20-46 Chancel Floor

ISSUE ARISING: Investigation into the make-up of the existing floor

The condition of the chancel floor has become very poor, and is posing a trip hazard to the congregation when taking communion (see figs.1 and 2).

As a result a meeting was held with the Church Commissioner, Martyn Jinks, on 24th May 2020, it was agreed to proceed with investigations to the chancel floor, and establish the make-up of the stone floor finish before proceeding any further.

The floor in question concerns the area at the west end of the chancel where it is level with the nave (and where there is a change to a pamment finish), and up to the first step of the sanctuary.

The flooring to this area comprises York stone slabs that are scored to look like smaller stones of 300x300mm size, however, some slabs are as much as 900x900mm square. There is also a large black slate ledger stone, in the centre, in memory to Agnes Stewkeley died 1704, in the centre of the floor, and against both the north and south walls are older ledger stones that appear to be medieval.

Following an interim faculty, Hibbitt Stone Masonry carried out the investigation on 10th January 2022. Two small stones, in front of the central ledger, were removed (see fig.1) and the substrate investigated (see figs.3, 4 and 5).



Fig.1, a high level view of the chancel floor in question

cont.



Fig.2, condition of the York stone floor, with a trip hazard against the ledger stone, normally covered by a carpet



Fig.3, showing the two small stones removed against the ledger stone.

cont.



Fig.4, detail view of the investigation.



Fig.5, detail view of the investigation showing the ledger stone on the left.

cont.

Findings:

The substrate underneath was dry and not very firm and altogether rather soft. The York stone itself is 50mm thick as originally conceived, and the underside is clearly pecked to provide a key. Underneath there appears to be a bed of very weak lime mortar that is some 50-75mm thick before being laid on a hardcore mix of broken stone, flint and field stone, down to fines; altogether it is quite soft and a chisel can easily be pushed further in. The ledger stone is some 125mm thick and it would appear this has been laid on the tamped hardcore and shimmed. The mortar appears to be lime based, and has to a great extent perished. A rusty nail and even small small fragments of timber were found, as well as a small piece of stone that had a “polished” surface and may once have been part of the floor or a ledger stone.

There was no concrete slab or any evidence of the use of cement in the substrate.