Neutral Citation Number: [2016] ECC Sal 1

In the Salisbury Consistory Court

In the matter of St Mary Charminster

JUDGEMENT

1. The church of St Mary Charminster is a delightful grade I listed building in a rural village not far from Dorchester.
2. Unfortunately, although it makes for an attractive setting, the River Cerne which is very close. is at a higher level than the church. It is also constricted by a nearby bridge, and the overall result is that by a combination of high ground water levels and inundation both the church itself and surrounding properties have been flooded many times. This has happened on at least ten occasions since 1937, of which six involved the church itself.
3. Serious flooding occurred in the church in both January and February 2014, following which the building has been out of use. One of the major reasons for this is the fact that the wood block flooring which covers part of the nave became disturbed to the extent that it is not safe to allow the public to walk on it.
4. I do not propose to deal with the causes of the flooding in any detail because although there are plans to ease the restriction caused by the bridge it is now recognised that this will not provide a solution for the church. Whatever repairs and modifications are made to the flooring they must take account of the fact that there will be more flooding in the future.
5. Attempts have been made in the past to alleviate the problem. The church was extensively restored in 1895-6 at which time the wood block floor was laid on layers of concrete and bitumen. There has been a dispute in these

proceedings, to which I shall return, as to whether that floor was pervious or not.

6. Heating the church has also been difficult and the current plans seek to make improvements.
7. Putting it simply, the parish now proposes to replace those parts of the nave floor which have been in wood block with stone, with under floor heating powered by an air source heat pump.
8. When the matter came before the DAC in the autumn of 2014 an issue arose as to the insulation to be used under the new stone floor. There has never been any suggestion that stone would not be sensible but what goes under it is contentious.
9. Once again, putting it simply, the parish, upon the advice of its architect Mr. Mark Richmond, wants to use closed cell insulation, manufactured as "Celotex". This insulation is impervious and will not become water logged.
10. It is also proposed that there should be a "wicking margin" around the stone floor at the walls and pillars, suitably filled. This would allow moisture from under the floor to evaporate without damaging the stone above the floor.
11. In its Notification of Advice dated 26.09.2014 the DAC did not recommend that I should grant the necessary faculty. Its advice reads: "The proposed closed cell, impermeable Celotex insulation is unacceptable; loose fill insulation like recycled glass (there are others) permits moisture to move through it and this is essential in traditional construction to avoid huge problems arising which will affect other areas of the church, particularly by driving moisture towards the perimeter and to the nave piers. Even if the drying area will wick preferentially to the walls, it will not do so entirely and a proportion of the migrating moisture will end up in the walls or piers. To set up migration in the first place is wrong. The inspecting architect's comments concerning the floor's performance were followed up by the DAC with Ty Mawr (*the manufacturer of an alternative system*) who unsurprisingly confirmed that the thermal performance of the floor will diminish during a flood but they also confirmed that once the water level returns to normal, the spaces between the insulation will drain and the thermal performance will return. The committee was unconvinced that the water table remains permanently so high as inferred and that the sub-floor will remain permanently

water-logged. The flood risk is understood to be 1 in 10 years and appears to be due to a nearby bridge being built too small, but mitigation measures by the local authority are now in place to address this. Also there is no evidence of rotting in the church building which suggests the water table is not so high as indicated. If the inspecting architect's argument against permeable insulation is the clay substrate which he suggests might result in a more or less permanently wet insulation which would be unsatisfactory, neither the permeable or the non-permeable insulation seems appropriate and under-floor heating might not be the right solution for this church. Also, if installed, the under floor heating would provide a relatively small component of the heat output and additional emitters elsewhere might render it unnecessary."

12. I have set out the DAC advice in full as it essentially explains the position of the DAC, although matters have moved on to some extent since September 2014.
13. After receipt of this advice the petitioners expressed concern that it had been produced without members of the DAC having visited the church. As a result of this I convened a conciliation meeting which I chaired, and which was attended by two architect members of the DAC and by representatives of the church, including its architect.
14. At the meeting, which took place on 05.12.2014, the DAC members demonstrated one of their concerns, namely that the closed-cell insulation would result in the main part of the floor becoming buoyant and being forced upwards by future flood water. This was shown in a bucket of water.
15. I suggested at that meeting that it would help the petitioners' case if any church where a similar solution had been used could be found. As a result of this suggestion DAC secretaries nationally were written to and a number of responses was received. This material is not presently admissible before me as it is not in proper form but I can take note of the fact that following my suggestion I have not been presented with any support such as I suggested might help.
16. Before the meeting the parish had written to me, in a letter dated 1st November 2014, of its plans and its answers to the concerns of the DAC. Although this letter is not in proper form to be considered as evidence the material in it is reproduced elsewhere and it is convenient to refer to the letter.

17. The letter points out that the 1895 floor has not caused the kind of salt problems envisaged by the DAC, and that the old floor was no more impervious than that now suggested. I shall return to this.
18. The letter also points out that English Heritage (as it then was - now Historic England) had, after discussion with the church architect, accepted the closed-cell approach.
19. In addition it pointed out that the alterations to the bridge are not expected (by the Environment Agency) to lower the water table to any great extent.
20. After the meeting I offered to stand aside and allow my deputy to deal with the matter. There were three reasons for this. Firstly, I had chaired the meeting. Secondly I had expressed the view that the petitioners would have a hard row to hoe in attempting to prove their case, and thirdly because I have a fairly close relationship with one of the DAC architects who is the architect to my own church where I chair the Development Committee.
21. The petitioners asked that I should not stand aside, and that I should decide the case on written representations. I agreed to both of these. The DAC is not a formal party to these proceedings although I asked its architects to make statements.
22. The evidence as eventually placed before me consists of a witness statement from the church architect dated 25th March 2015, and a lengthy document entitled (by the Registry) "Witness statement prepared by the DAC". It is undated and in reality consists of a series of emails and other documents dealing with the background. More importantly there is a statement dated late April 2015 (various dates of signatures) from four DAC architects. There is also a statement from a Chartered Civil Engineer, Mr. Mark Lovell, dated 5th June 2015 - this may have been obtained in response to my suggestion that it would assist the case of the petitioners to find expert support for their position. There is a DAC response to this statement dated 29th June 2015.
23. At the December 2014 meeting I observed that I was faced with two views, both from highly experienced sources, both put forward in the utmost good faith. On the one hand the church architect could only support closed cell insulation whereas the DAC architects were strongly opposed and preferred open cell. I also observed that because of the difficulty of the problem no-one could be absolutely sure that they were putting forward the correct solution.

24. I have been substantially assisted by Mr Lovell's evidence. He is very plain in his view that it is necessary to maintain and preserve the current equilibrium moisture conditions within the ground strata. It is his opinion that the solution proposed by the DAC architects would make the new floor more permeable, and would therefore allow a greater quantity of water vapour into the building. He says that this would be to the general detriment of the fabric. I would not expect anyone to disagree with this sentiment.
25. The question is how should the desirable end of maintaining the equilibrium be achieved? Mr Lovell says that this should be done by using closed cell insulation, although he does not recommend Celotex which he says has a poor life in damp conditions. He suggests the use of a material such as Dow Styrofoam Floormate 500A which lasts much better and which does not suffer from buoyancy. Mr Lovell also makes the point that because the precise ground conditions cannot be known until further investigations take place the presently-planned Limecrete might have to be changed for another material.
26. I have taken note of the response from the DAC architects dated 29.06.2015 but I nonetheless accept the proposal put forward by Mr Richmond with the modifications suggested by Mr Lovell as being appropriate for this church. As I said at the meeting on 04.12.2015 there can never be absolute certainty when dealing with the fabric of a building such as St Mary's, but I am clear that the petitioners have proved their case upon the balance of probabilities. I am satisfied that the closed cell insulation would have a similar characteristic to that which has been below the floor for more than 100 years. In addition I am satisfied that the wicking margin as suggested by Mr Richmond is appropriate. I am also satisfied from the evidenced of Mr Lovell that there is no substantial risk of a buoyancy problem.
27. I am also satisfied to the necessary standard that the underfloor heating system proposed is appropriate for this church. This follows largely from my conclusion that Mr Richmond's proposed insulation is the correct one for the building.
28. I have no doubt that as the early stages of the work proceeds it will be necessary to make adjustments in the light of precisely what is found.

29. I conclude this judgement by expressing my thanks to all those who have contributed to the state of knowledge about St. Mary's and to what is sensible to make the building one which can withstand inundation in the future.
30. Further, although the faculty was issued on 7th August 2015 I regret that it has taken until now for me to be able to give my detailed reasons.

Samuel Wiggs

8th January 2016