Subject:RE: All Saints Wrington

Date: Thu, 27 Feb 2025 12:04:07 +0000

From: Mark Lidster <Mark.Lidster@bathwells.anglican.org>

To: Gabrielle Wilson <gwaw@agwilson4.plus.com>

CC: Archdeacon Bath <adbath@bathwells.anglican.org>, Dan Wills <dan.wills@bathwells.anglican.org>

Dear Gabrielle

I have had a good look at the images and agree that there is a deathwatch beetle outbreak amongst other small timber eating bugs. As this had not been noted as an issue at the last intervention or installation of the vestry services that did include water in the construction ,reduced or compartmenting of a zone that includes timber, has reduced air flow around below floor timber elements ,and has introduced water drainage-I would ask your architect for site records as to what condition the timbers were in before sealed into an unvented space?
This may have been present at the time of the last works and not noticed yet it is a known problem that the embedding of timbers below a new surface will alter the way that the timbers may perform or cope with reduced air flow-this always delivers a softening of timber and exposes them to infestation or decay. If there were any mitigations allowed for ,such as ventilation grilles or ducts to the inner air space of the church-these should have enjoyed an fine insect mesh to preclude the passage of flying inspects that may wish to lay eggs and larvae onto the soft hardwood.
The other element that the church should now take note of is the that the church is now substantially warmer and has had various draught proofing added to the church with the goal of reducing cold air and to retain heat. This will inevitably increase humidity and cause interstitial condensation that will be harmful to the fabric due to the lack of air movement and effective ventilation.

The congregation may well feel warmer and more comfortable, yet this is clearly at the expense of the church fabric and especially concerning the timber elements that you cannot see very easily ,such as the embedded timbers below the floor and more significantly the timbers that for the roof and bell frame.

I would discuss this with your architect as to their opinion on this matter that could indicate that the infestation was always present and nothing was actioned .It could indicate that some treatment was added to the timbers prior to closing them into the subfloor. It may well indicate that humidity levels have accelerated due to the in creased heat and reduced ventilation-this will require some monitoring with humidity meters to understand exactly what is taking place within the heated space of the church.

There is a path of acceptance to be counselled considering the impending alterations to this part of the church-the acceptance being that fault or blame is a route to misery and conflict as opposed to a route of understanding and now being aware of the situation relating to warm air, ventilation and relative humidity.

The raised floor can now be removed with good reason.

The need for ramps into the tower base are now likely to be not required.

The design of drainage, walking surfaces and circulation of both air and people should now inform the designer as to "what the church fabric requires" to recover from this infestation.

Likely causes to be a combination of-missed signs of activity during the last phase of work, inappropriate treatment of timbers ,lack of understanding as to the potential impact of interstitial condensation and increased humidity levels caused by reduced air flow and increased air temperatures.

Immediate actions-take regular min/max temperature reading from within and without the church to understand exactly how much difference you are achieving

Take humidity readings at fixed points during the cycle of heating-to understand exactly when the humidity levels spike to above 40-60% (normal levels that still require forced ventilation)-more than this indicates water is present-instate a thorough ventilation protocol and do not attempt to retain heat as the building will simply become damp.

We have a number of churches that are being educated to manage mould growth, infestations and general good practice relating to solid wall medieval buildings. I hope you can discuss this with your architect and to set measures in place to manage the situation I am able to attend meetings to act on behalf of the church fabric if you require me to do so.

This is a normal problem that can be resolved quite easily if all involved are working together. I have copied into this message your Archdeacon and my colleague Dan Wills for their introduction to this problem and to offer guidance if necessary.

Best wishes

Mark Lidster
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