



FLOOR TIMBER ROT
INVESTIGATION REPORT
&
REPAIR METHOD STATEMENT

At

SHODFRIARS HALL

SOUTH STREET
BOSTON, LINCOLNSHIRE

April 2023

THE NATURE OF THIS REPORT:

This investigation report and method statement has been compiled to provide the information necessary to receive approval for proposed repair work - with regard to the third condition of Listed Building consent for works at the property – Application Reference: B/22/0357

THE NEED FOR THE PROPOSED WORKS:

The area of the floor highlighted in the plans provided below was weak underfoot and had signs of rot in the plywood floor covering. Because the principal structure of this part of the building is oak frame of historic importance it was imperative to investigate the presence of fungal infestation and its extent.

Whether subject to fungal decay or simply broken, the repair of the floor is necessary to enable the room to be put into use.

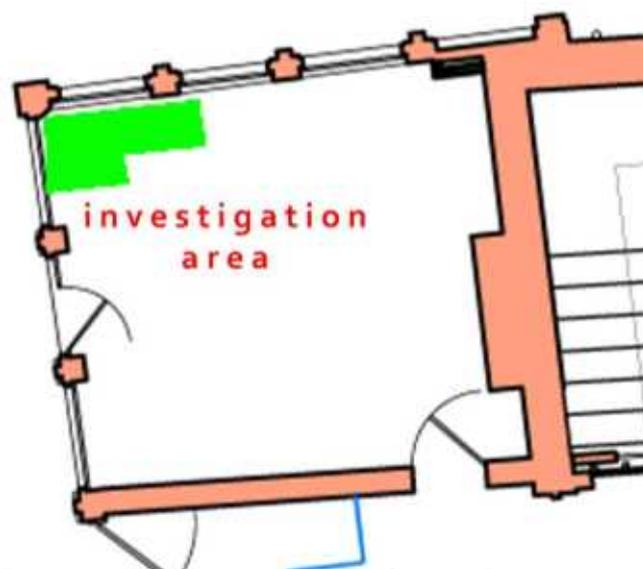
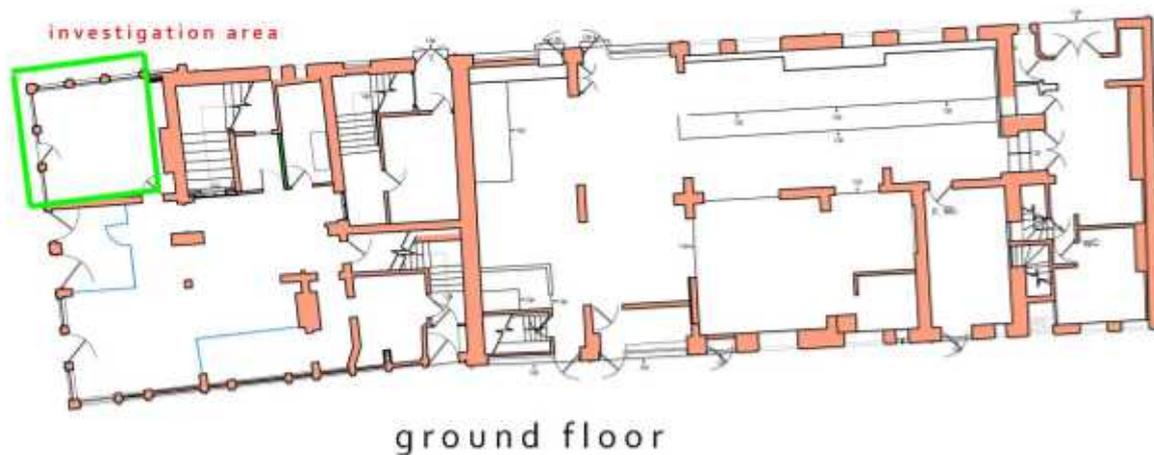


Figure 1 (top): the location of the investigation at the north-west corner of the building
Figure 2 (bottom): the exact location and size of the proposed investigation

METHOD FOR INVESTIGATION:

1. An area of the plywood floor covering and floorboards - restricted to the affected area - will be cut through to the depth of the board and levered off to expose the floor joists beneath.
2. The boards removed will be set aside for reinstatement after investigation.
3. The floor joists, structural timber and building fabric in the affected area will be examined visually and with probes to establish the presence of rot / fungal infestation or other defects that may have a detrimental impact on the historic fabric of the building.
4. Further areas of the floor covering will be removed as necessary to track any fungal decay, etc, to its fullest extent.
5. Any defects (fungal decay, infestation, breaks etcetera) will be recorded on detailed drawings and with photographs to enable the assessment of the defect and design of suitable repairs.

These steps were put into practise and the findings of the investigation are recorded on the following pages.

INVESTIGATION OUTCOME:

The investigation revealed the floor construction in this area of the room - and presumably in the rest of the room also - is as shown in *Appendix A* of this document:

The investigation also revealed that fungal decay induced by moisture (i.e. wet rot) had damaged the floorboards in the area, the ends of three floor joists and the wall plate onto which they bear; to the extent that they had failed, resulting in the noticeable weakness in that area of the floor. The decay had not spread into the adjacent building fabric but was present on the surface of the timber wall post in the same area, but the post was strong at the surface and into the core and was not damaged or weak.

MATERIALS:

Our investigation showed us that none of the floor joists, floorboards, wall plate or adjacent building fabric in the area investigated were from *before* the extensive refurbishment, reconstruction and alteration of the building in 1873. Only the timber wall posts predate those works and are understood to be the oldest building fabric.

The location and nature of defects discovered in the investigation are shown in *Appendix A* of this document.

Photographs – including annotated images - of the floorboards, joists and adjacent building fabric from the investigation are provided in *Appendix B* of this document.

METHOD FOR REPAIR AND REINSTATEMENT:

Following steps will be taken in the repair of the damage identified and reinstatement of the floor:

1. The rot-damaged sections of the joist identified in Appendix A will be cut away and replaced with a tanalised section of softwood of the same dimensions fixed to the side of the remaining floor joist.
2. The rotten section of joist bearer will be and replaced with a tanalised section of softwood of the same dimensions, in the same position.
3. The exposed wall post and all timber in the area of the fungal infestation will be treated with fungicide to kill any existing fungal decay and prevent fungal attack.
4. Existing undamaged floor floorboards will be reinstated to their original positions and those rendered irreparable by rot will be replaced like-for-like with tongue and groove softwood floorboards.
5. A plywood floor will be fitted over the whole area.
6. A layout and details of the proposed repair work are provided in Appendix C of this document.

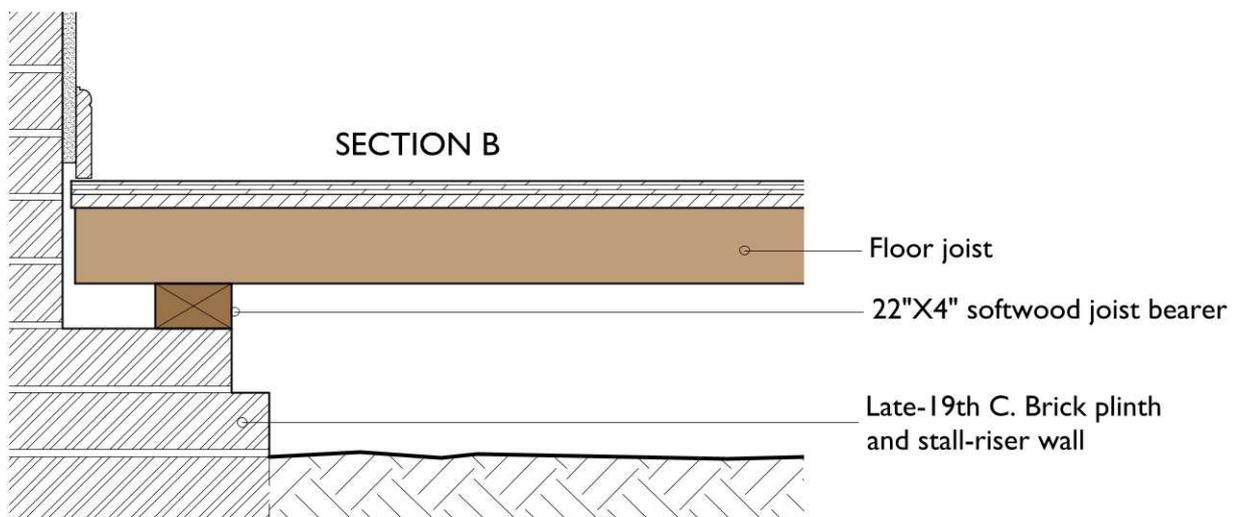
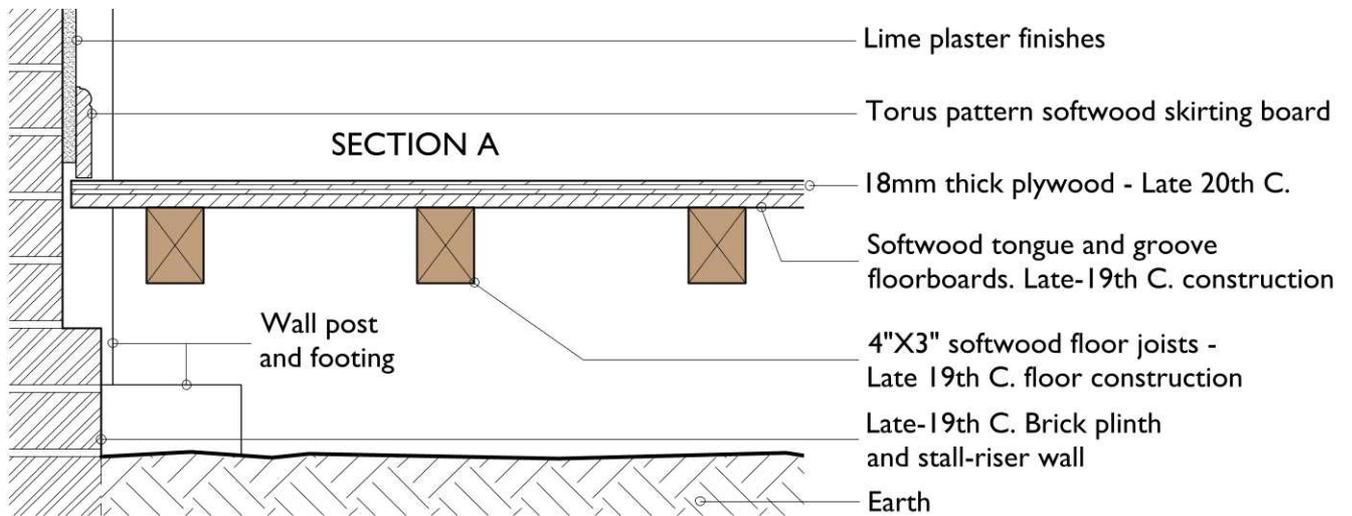
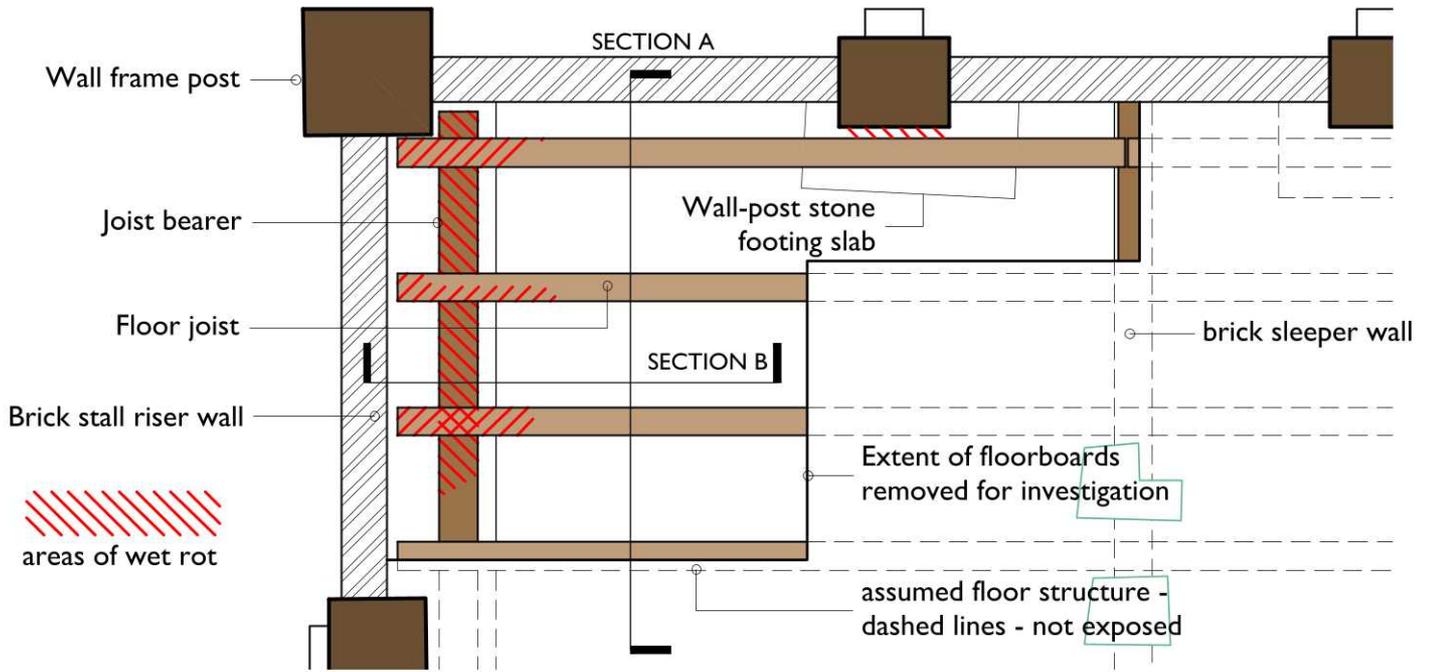
DEPOSITING THE INFORMATION:

The nature of the defects and historic importance of the fabric subject to the proposed repairs are modest and do not impinge upon any of the most important historic fabric of the building. The investigation has not revealed any artefact or hidden standing archaeology of note. Accordingly, depositing this document - with its photographic record and drawn details - with the local authority through the submission of this report will provide adequate documentary evidence of this part of the building fabric for future reference.

APPENDICES

CONTENTS:

Appendix A	EXISTING FLOOR CONSTRUCTION DETAIL DRAWING
Appendix B	INVESTIGATION PHOTOGRAPHS
Appendix C	PROPOSED REPAIR DETAIL DRAWING



Appendix A

FLOOR INVESTIGATION - FLOOR CONSTRUCTION

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Appendix B

INVESTIGATION PHOTOGRAPHS



Image A: during removal of the floorboards, showing rotten existing boards (NB - the white foam on the right is expanding foam insulation)



Image B: The area of exposed floor structure – the boards and plywood are lifted



Image C: The exposed floor structure – Boards and plywood are lifted showing the joists and void



Image D: The earlier floorboards exposed, with later softwood patching visible.



Image E: A floor joist with damage caused by wet rot



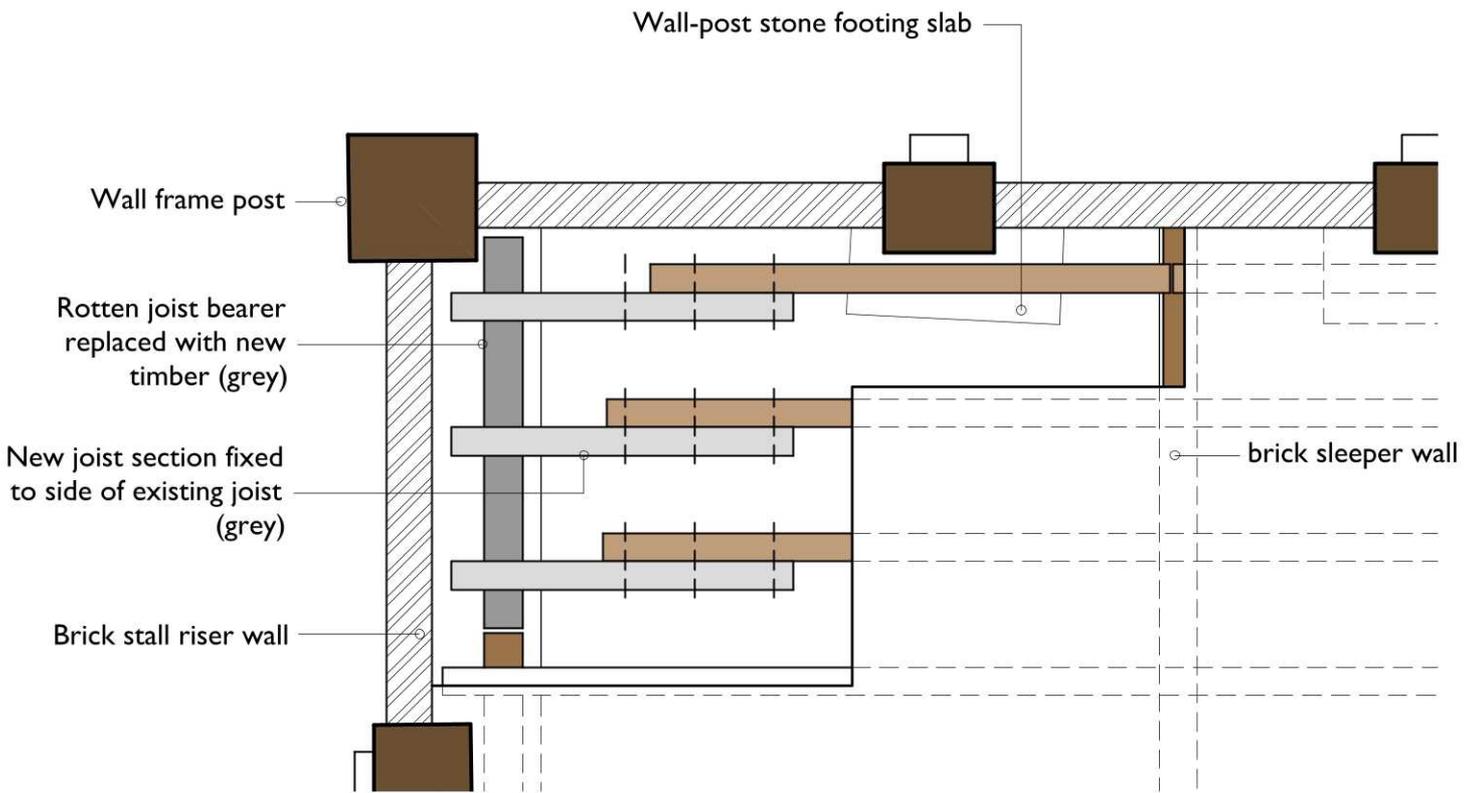
Image F: The joist bearer damaged by wet rot, laid onto the brick plinth wall



Image G: The oak wall-post footing stone in the sub-floor void



Image H: The oak wall-post footing stone, also showing the sub-floor void and sleeper wall



Appendix C
 FLOOR INVESTIGATION - REPAIR DETAIL
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