

REPORT ON THE STRUCTURAL CONDITION OF
THE ELMS, SPRING HILL, COLSTON BASSETT, NG12 3FR
and VARIOUS OUTBUILDINGS

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1.0 INTRODUCTION

1.1 This report is on The Elms, Spring Hill, Colston Bassett, NG12 3FR together with various outbuildings

1.2 This report follows a visual inspection that took place on Monday the 7th September 2020, on instructions received from The Art of Building Ltd.

1.3 The site is situated on Spring Hill. The report is on the house (Photograph 1) and three outbuildings. One is used as a garage and storage (Photograph 2), the second is empty (Photograph 3) and the third is also empty (Photograph 4).

1.4 I must stress that my inspection was purely a visual inspection of the elements of structure that were visible at the time.

1.5 The report is to assess the suitability for reinstatement and refurbishment.

1.6 The foundations were not uncovered inspection, but considering the age, they probably consist of one or two courses of brick spreaders.

2.0 CONSTRUCTION

2.1 The house and outbuildings were probably built about 150 years ago. The only change since that time is the addition of a small extension to the house, probably about 80 years ago.

2.2 The roof to all four buildings are duo pitched and covered with plain clay tiles. The tiles are supported on battens on common rafters on purlins. The small empty building behind the garage has had the tiles and battens replaced with chipboard and felt.

2.3 The house has a small extension with a lean-to roof covered in plain clay tiles (Photograph 5).

2.4 The "garage/storage" building also has a small extension with a lean-to roof also covered in plain clay tiles (Photograph 2).

2.5 The external walls are solid brick 230mm thick. It was noted that the original house was built in header bond, which is inherently weaker than traditional English bond or Flemish bond (Photograph 6).

- 2.6 The ground floor of the house is partly timber and partly solid.
- 2.6 The “garage/storage” building has a brick floor.
- 2.7 The empty outbuildings have no floors.
- 2.8 There is no damp proofing in any of the walls.

3.0 CONDITION

- 3.1 The buildings generally are in poor condition structurally.

3.2 House

3.2.1 The walls are reasonably plumb downstairs, but there are several cracks in the brickwork, mainly visible internally and problems with rising damp. Upstairs, the walls lean slightly outwards as a result of the raised collar roof. The external walls need re-pointing generally.

3.2.2 The window and door openings have no lintols over them. The brickwork over is supported on the replacement PVC windows.

3.2.3 The roof is in fair condition, but an area of tiles has been blown off by the wind. The tiles are old and clay tiles become brittle and start to warp. This makes them prone to damage at an exposed site like this. In addition, the fixing nails have probably worked loose. Tiles have been blown off the roof frequently in recent years. The whole roof should be completely removed and replaced, including providing a stiffer structure that does not exert horizontal forces on the external walls.

3.2.4 The timber floor in the lounge is springy and feels soft in one corner. This is probably the result of rot, there being no damp proofing or air bricks. This should be investigated before any work commences. It would be more practical to replace it with a ground bearing concrete slab, since there is no underfloor ventilation. Since the foundations are probably quite shallow, it would be impracticable to provide effective underfloor ventilation

3.2.5 The roof timbers were not seen, but since they are inaccessible and will not have any sarking felt to protect them, they are at a high risk of being damp and probably rotten in places, particularly as the roof tiles often fail.

3.2.6 The timber first floor is springy in all rooms. These should be further investigated before work commences. This could be due to damp coming through the walls or inadequate timbers in the first place.

3.3 Garage/Storage Building

3.3.1 The brickwork is generally in poor condition. The lean-to section at the back is suffering from subsidence with a severe diagonal crack in the side wall. There is a vertical crack at the rear in the left-hand side wall of the left-hand store that has been repaired and has moved again.

3.3.2 The roof is not tied and sags due to roof spread. It is in poor condition. The lean-to section leaks badly and has plastic sheeting attached to it.

3.3.3 The door and window openings have timber lintols.

3.4 Small Storage Building behind the Garage/Storage Building

3.4.1 The brickwork is in poor condition and has extensive cracking. At the rear, the ground level is some 450mm above inside ground level.

3.4.2 The roof is not tied and is in poor condition.

3.4.3 The door and window openings have timber lintols.

3.5 Remote Empty Building

3.5.1 The brickwork is in very poor condition and in fact leans outwards dangerously at the front of the left-hand wall. It is at risk of imminent collapse.

3.5.2 The roof is in very poor condition with tiles missing and the roof timbers left exposed to the atmosphere. There are two ties at ceiling level, but they are not fixed well enough to prevent roof spread.

4.0 OPINIONS AND RECOMMENDATIONS

4.1 The outbuildings (Photographs 2,3 & 4) are in such poor condition that they are not fit to be refurbished. In fact, the remote empty building (Photograph 4) is in danger of imminent collapse.

4.2 The house (Photograph 1) is in need of extensive repairs and renovation, but if this is carried out it would still have external walls built in header bond. This bonding is nowhere near as strong as more traditional bonding such as English bond or Flemish bond. It has less resistance to foundation movement and lateral forces. The foundations are almost certainly one or two courses of brick spreaders at a shallow depth by current standards.

4.3 The repairs referred to include replacing the roof including all the tiles and making the roof structure stiffer to prevent future roof spread, installing lintols over all the windows and doors, repointing the walls and providing a complete damp proof course. The foundations should also be investigated, as they are almost certainly brick spreaders and will probably need underpinning. The timber ground floor will probably need to be replaced due to damp in the walls and a lack of ventilation. The ground floor, walls and roof all need thermal insulation.

4.4 It is my opinion that the cost of renovating the house would be more than the cost of demolishing it and rebuilding. If renovated the house would still have solid brick walls in header bond, which is weaker than more traditional bonding and be prone to further damp penetration.

4.5 The outbuildings in Photographs 2,3 & 4 are not structurally safe and should be demolished and rebuilt.

for BURR HOUSE



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5.0 Photographs

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