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STRUCTURAL INSPECTION OF ROOF STRUCTURE



23-248/PKE/pk/24 May 2023

Date of Issue: **20 June 2023**

Contents

		Page
	Contents Page	i
	Disclaimers, Acknowledgements, Ownership and Copyright	*ii*
1.0	Introduction and References	1
2.0	Historical Background, Ownership and Location	2
3.0	The Property	3
4.0	The Inspection and Observations	4
5.0	Summary, Findings, Recommendations and Further Investigations	6
	Signature Page	7

Appendices

Appendix A - Photographs 1 to 58 inclusive – Taken on 24 May 2023 (PKE)

Disclaimers, Acknowledgements, Ownership and Copyright

In accordance with PKE terms and conditions, in the absence of any unpaid PKE fees this report shall be deemed withdrawn and our professional indemnity insurance null and void until such outstanding fees are paid up in full.

Some of the information presented in this report may be based upon information provided by others. That information has neither been checked nor verified by Paul Kaipah Estates (UK) Limited (PKE).

This report is based upon a visual inspection only and does not constitute a full intrusive appraisal or survey of the subject premises in areas where hidden, covered up or inaccessible. No opening up or intrusive investigations were undertaken during this inspection.

Also, this report does not aim to identify every defect and neither does it purport to concern itself with any specialist aspects or fitments and these aspects should be a matter for their respective discussions.

Therefore, this report does not purport to concern itself deeply with non-structural and cosmetic aspects or specialist aspects such as Mechanical & Electrical (M&E) fitments or appliances, gas installations (boilers, flues, and central heating), drainage and plumbing, telecommunications infrastructures, services & utilities, etc, but more specifically discusses the structural aspects of the Property in the context of the visual and photographic inspection undertaken.

Similarly, in addition to the paragraph above, damp and insect infestation issues to areas hidden or not accessible for inspection and asbestos containing materials (ACM) cannot effectively be reported in this text and these are also aspects for other specialists in those fields.

As such the above are outside the scope of this report and are, therefore, not discussed in any significant detail in this text.

In writing this report PKE assume that all known historical information and documentation held on record has been provided by all parties mentioned herein. The information imparted and included herein should be read with and referred to as part of and in the context of this report.

Courtesy is hereby acknowledged, and copyright observed for the use of any information included in this document from reports or other literature provided by others.

The primary beneficiary of this report shall be the Client named below for the subject Property shall be permitted; no further assignments shall be permitted without the written consent from the primary beneficiary or Paul Kaipah Estates (UK) Limited.

No other third party shall rely upon it or any aspects of its contents without the written consent of the primary beneficiary or Paul Kaipah Estates (UK) Limited.

The copyright shall remain with Paul Kaipah Estates (UK) Limited.

1.0 Introduction and References

1.1 This report is produced by Paul Kaipah Estates (UK) Limited (PKE) on behalf of JARP Properties Limited ("the Client") upon a verbal instruction via a telephone conversation between the Client's representative and co-owner (Mr Paul David James) and the writer on Thursday 18 May 2023.

1.2 The appointment brief was to conduct an inspection of the roof void at the subject premises known as 15-17 High Street, Warminster, Wiltshire, BA12 9AG ("the Property"); and produce a report pertaining to the structural condition of the timber roof and chimney structures.

1.3 At the time of the inspection and writing of this report PKE had no sight of any existing reports, drawings or documents relating to any previous inspections or works at the Property.

1.4 References left-hand side (LHS) and right-hand side (RHS) in this text are given as viewed looking at the Property from the rear courtyard (towards which the frontage of the Property faces) or the relevant elevation of the Property or wall in question.

2.0 Historical Background, Ownership and Location

2.1 The Property is estimated to have originally been built approximately over two hundred years ago, circa: between late 1700s and early 1800s and it is believed that the roof structure and the Property externally are generally of the original construction.

2.2 It is understood that the Property is a Grade II Listed Building (List Entry Number: 1193960, Date first listed: 28-Apr-1952) and is situated within the Warminster Town Centre Conservation Area.

2.3 As such, any works to the roof structure will require Listed Building Consent from the Heritage Officer and also planning permission, as appropriate to the proposed loft conversion, and compliance with the current Building Regulations.

2.4 The roof structure has many historic components, with the majority of the original timberwork still in service, although some members have been repaired or replaced in more recent times; and others are defective or in poor condition.

2.5 No other known previous or existing reports and drawings, as mentioned in 1.3 above, imparted by the Client, relating to any previous inspections or works at the Property, were found or available from the Client or any other sources.

2.6 Currently, the Property is under the ownership of the Client (co-owners Mr Paul David James and Mr Richard Aylward), who propose to title split the Property with 4 x leasehold titles.

2.7 The Property is situated in a secluded location accessed via a narrow lane off the High Street, within a short distance from the town centre and amenities, where there are other premises of similar age, nature, type, and character.

3.0 The Property

3.1 The usage of the Property is for domestic dwelling as self-contained units (Flats 1 to 4 as existing) having the usual accommodation expected of such normal residential units, in a regular and conventional configuration and layout.

3.2 The Property is the rear projecting aspect attached to Antiquitus and The Warminster Jeweller commercial premises, which front along the High Street, and is accessed via a narrow lane off the High Street.

3.3 The Property is a two storey building with a mixture of gable ends, hips and a valley between the main gable and hipped ended roofs to the LHS.

3.4 The roof structure of the Property is a traditional timber 'cut' form of construction, comprising large section trusses and purlins offering intermediate support to similar section common rafters, and covered with clay tiles.

3.5 The external elevations of the Property are a mixture of rubble stonework masonry and cement-sand rendered finishes, but internally, the upper gable end wall is faced finished with flintwork; all assumed to be of 'substantial' thickness and solid construction given the relatively dated age of the building.

3.6 Internally the walls at the ground and upper levels are a mixture of structural masonry and some non-load-bearing timber studwork partitions and are finished with a mixture of applied lath and plaster and board finishes.

3.7 The ground floor is believed to be a mixture of a ground bearing concrete slab, assumed overlain with screed finishes, and suspended timber forms of construction.

3.8 The upper floor is a traditional suspended timber forms of construction with floor boards and plasterboard or lath and plaster ceiling finishes.

3.9 There are two brickwork masonry chimneys and chimney stacks protruding high above the roof, which currently remain fully intact in the Property.

3.10 One chimney is central at the gable end wall to the LHS within the rubble stonework and interior flint faced gable wall and the other – a 'massive' structure – is in the central area of Flat 2 and passing through the attic void.

3.11 To the RHS of the central chimney, there is an upper room in the loft area above Flat 2, access into which is gained from the upper common landing to the RHS, but this is currently closed off, so the only access is via a small hole made in the plasterboard wall of the room. This has allowed this section of the roof to be inaccessible for a number of years and there has been no maintenance and upkeep made in this area for a number of years. The roof structure over this room, however, appears to be of more recent construction.

4.0 The Inspection and Observations

4.1 The inspection of the Property was undertaken by the writer on Wednesday 24 May 2023 at 13:30 hours, the Client's representative, and the Wiltshire County Council Senior Planning Officer (Mr Russell Brown) were also present during the site visit.

4.2 The weather at the time of the visit and inspection was generally fine, sunny, with clouds dry, and warm.

4.3 The inspection undertaken was purely visual and mainly specific to the structure of the Property; supplemented with the photographs taken on the day (see Appendix A).

4.4 The inspection was of the internal areas of the roof void of the Property and only where safe access permitted. No opening up or intrusive investigations were undertaken during the inspection.

4.5 Also, at the time of the visit and inspection the Property was occupied by the tenants, and fully furnished.

4.6 From the visual inspection undertaken the Property accommodation appeared generally to be the original construction externally, as also mentioned in Section 2(2.1) above.

4.7 Externally, the Property was found generally to be in a condition consistent with its age, where visible, accessible, and inspected (Photographs 1 to 5), although some routine and general maintenance is required.

4.8 Access into the attic space of the pitched roof was gained from the upper landing of Flat 2, via an access hatch in the ceiling over, using a telescopic ladder.

4.9 The floor of the attic was largely covered with insulation material draped over the ceiling joists, so this limited the inspection to the visible areas only (Photographs 6 to 30 and 45 to 49). Portable flood lighting, nevertheless, permitted a full inspection of the visible upper roof structure.

4.10 Our inspection of the 'cut' roof structure, nevertheless, advised the timberwork to be generally in satisfactory condition (Photographs 6 to 49), and generally not damaged, or significantly altered, or disturbed, where visible, accessible, and inspected. There were areas, however, where some alterations and repairs have been implemented unsatisfactorily.

4.11 There were some members which appeared in distress and exhibiting cracks or splits/shakes and excessive deflections in places (Photographs 17, 29, 39 and 44).

4.12 The interior flint faced gable end wall was noted to be defective at the purlin locations and some areas of the flint work had collapsed or fallen away onto the ceiling boards (Photographs 38 to 44).

4.13 It appears that previous ownership undertook some repairs to the roof structure; replacing some rafters and adding some metal restraint strapping and ties to the defective interior flint faced gable end wall at the purling locations (Photographs 6, 11, 12 and 38 to 44).

4.14 However, it does not appear that these repairs have worked to rectify the ongoing structural problems of the roof. There are several key members that are no longer bearing on anything, just merely 'floating' in the air (Photographs 16, 22 and 48, amongst others).

4.15 Upon closer inspection of the brick built central chimney structure, there were significant cracking defects and obvious signs of movement – there are areas of mortar that have 'popped' out and some brick units appeared friable (Photographs 30 to 31).

4.16 It is thought that the chimney may be leaning towards the courtyard direction, but this could not be confirmed conclusively from the limited ground level viewpoint, and as such appears to be putting lateral pressure locally on part of the timber roof structure.

4.17 There was evidence of infestation to the structural roof timberwork in the way of insects, and dry or wet rot, (Photographs 34 to 37).

4.18 The roof structure over the upper room in the loft area above Flat 2, appeared to be of more recent construction (Photographs 50 to 57).

5.0 Summary, Findings, Recommendations and Further Investigations

5.1 In our opinion, the structural elements of the Property are generally in a condition consistent with its age, type, nature, and character.

5.2 Our inspection, however, encountered some notable structural issues for immediate concern in the roof structure, gable end wall and the central chimney of the Property.

5.3 The central chimney has experienced notable structural movement in the attic void, which has resulted in significant cracking defects, and appears to be leaning and causing distress locally to the timber roof structure.

5.4 We would recommend, in the interests of Health & Safety, that this chimney is taken down, as soon as possible and practicable, to the safe upper ceiling level by careful dismantling and the salvaged bricks set aside for reuse, should the Heritage Officer require the same to be rebuilt.

5.5 Similarly, the defective flint faced interior to the gable wall and the incorporated chimney require significant repairs, including some attention to the metal restraint strapping details at the purlin locations.

5.6 The roof structure to the Property is vulnerable to structural damage from the defective central chimney and is generally in need of some repairs or strengthening, routine and general maintenance to the aspects discussed and highlighted in the photographs below, and as discussed in the preceding paragraphs above.

5.7 There have been some notable and unsuccessful repairs to the roof structure, which require further attention.

5.8 There has been infestation to the structural roof timberwork in the way of insects and dry or wet rot, which require treatment or like-for-like replacement in parts, as may be required and approved by the Heritage Officer.

5.9 Finally, our recommendations would extend to advising that the infestation and rot issues in the Property should be discussed further with other specialists in those fields.

For and on behalf of Paul Kaipah Estates (UK) Limited

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PAUL KAIPAH BEng(Hons) MSc CEng MICE MAPM
Managing Director

Date of Issue: 20 June 2023

Appendix A

Photographs 1 to 58 inclusive – Taken on 24 May 2023 (PKE)



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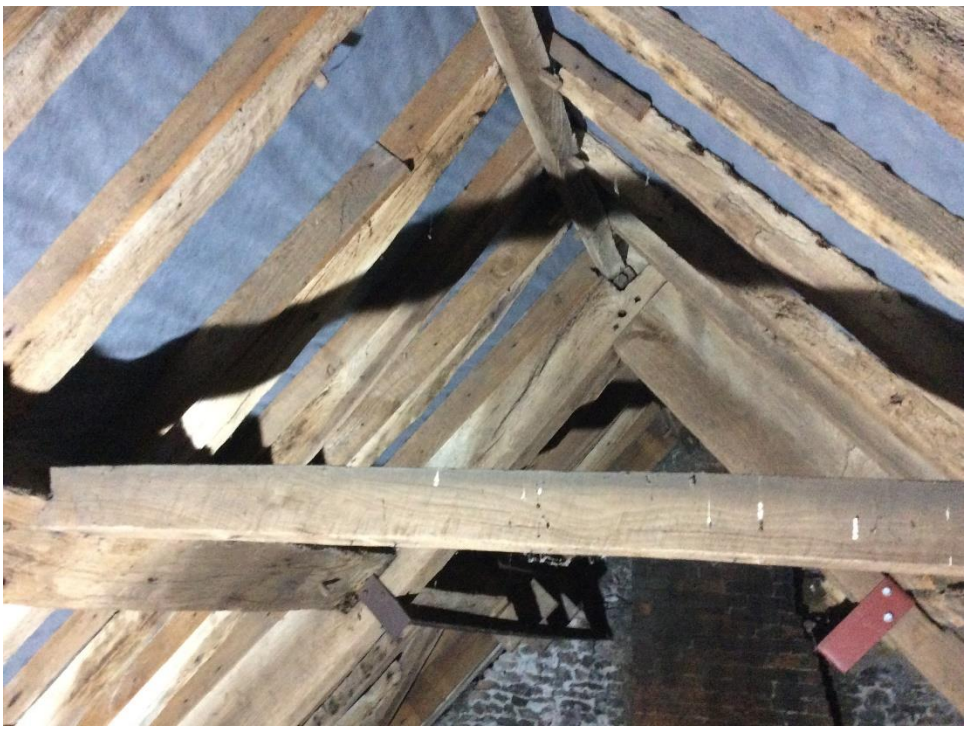

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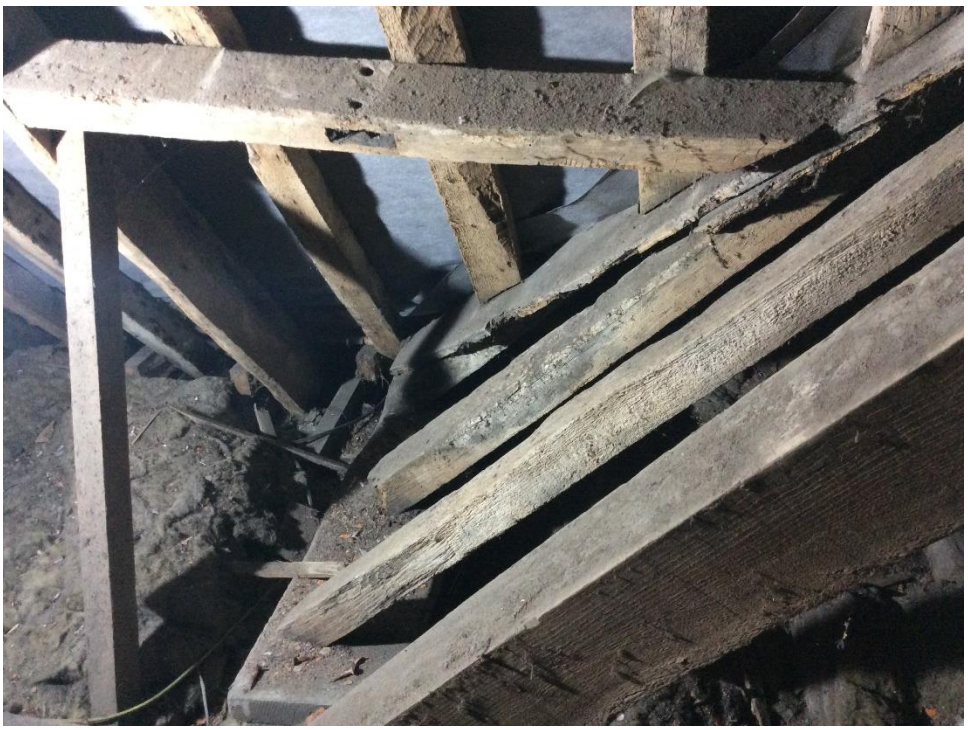

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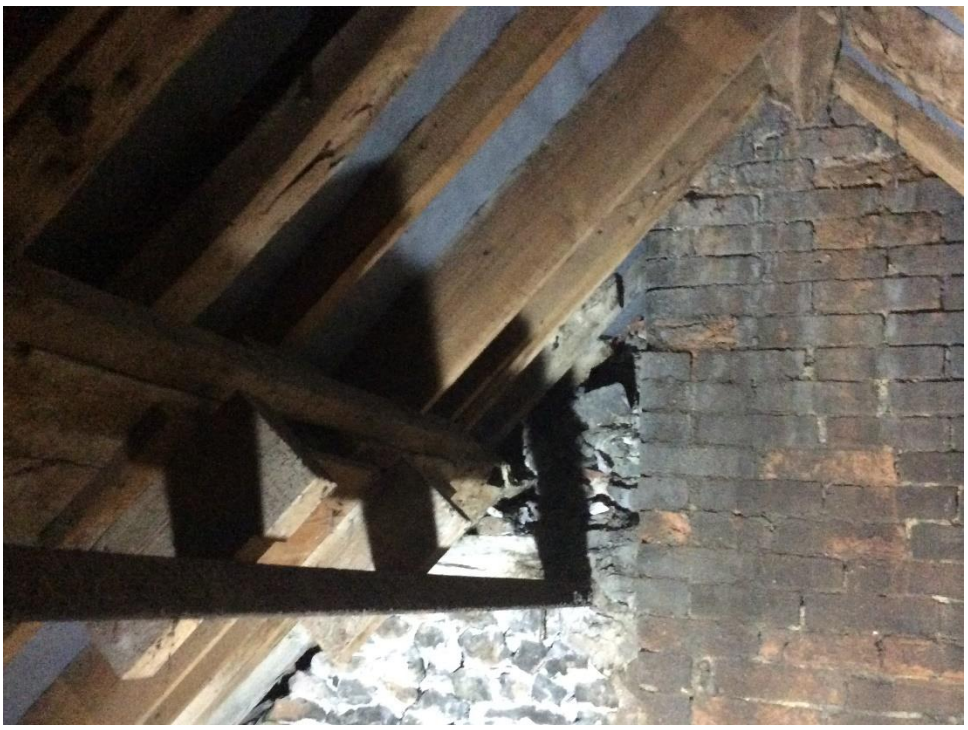

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