FAIRCLOUGH

CONSULTING STRUCTURAL ENGINEERS

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STRUCTURAL ENGINEERS INSPECTION REPORT

of

BARN B,
APESFORD FARM,
APESFORD LANE, BRADNOP, LEEK,
STAFFORDSHIRE.
ST13 7EX

13 December 2023

Report No: 230829B

INTRODUCTION

INSTRUCTIONS

1. Property to be inspected : Barn B
Apesford Farm
Apesford Lane
Bradnop
Leek
Staffordshire
ST13 7EX

2. Client : Mr J Harrison

3. We have been instructed to :

   Inspect and report on the structural load bearing elements of the property.

4. The report is required for advice for a planning application.

5. The property was inspected on the 24th August 2023.

EXTENT AND LIMITATIONS OF THE SURVEY & REPORT

6. This inspection report is limited in its scope to the instructions as noted above. We have not inspected parts of the property or defects that are not relevant to the instructions unless noted in this report. Our inspection was a visual inspection internally and externally as necessary subject to safe and reasonable access being available. We shall only report upon those structural defects that materially affect the stability of the property and provided that these defects are reasonably detectable at the time of our inspection. Whilst we will use all reasonable skill and care in preparing this report, it should be appreciated that we cannot offer any guarantee that the property will be free from future defects or that existing defects will not become worse. Internal inspection is made within the limits of ready accessibility and it is not normal practice to lift floor coverings or floor boards, remove panels or plaster, or move heavier items of furniture. We have not inspected woodwork or other parts of the structure which are covered, unexposed or inaccessible and we are therefore unable to report that any such part of the property is free from defect. Such unexposed parts may contain problems and you would need to make special arrangements for these areas to be investigated if you require confirmation about their condition.

7. We are not qualified to comment upon: drainage, electrical systems, water systems, heating systems, gas and electrical systems, condition/rot/insect infestation/fungal infestation of timber, damp penetration, mechanical installations, decorative condition, mouldings, coverings, and all other non-structural matters. If we happen to notice any problems in these areas which we recognise we will draw this to your attention, however you should not assume that the absence of any such comments means that the property is free from defect in these areas.

8. This report has been prepared for the named client and for a particular purpose. Any liability, which may arise, is therefore restricted to the client and the client's professional advisers in relation to that stated purpose.

ORIENTATION

9. For the purpose of this report, unless otherwise stated, the front elevation is that which faces East towards the farmhouse and all references to left and right are given as if viewing the property from the front.

DESCRIPTION OF THE PROPERTY

10. The building is a traditionally constructed agricultural barn with mostly timber boarded elevations, and a pitched roof. The barn appears to be approximately 60 years old.

11. No details were available of any structural problems that may have occurred, nor of any structural repairs or structural alterations that may have been made to the property or to neighbouring properties except as noted in this report.

EXTERNAL OBSERVATIONS

ROOF

12. The roof was observed from ground level. The roof is pitched and covered with corrugated steel sheets. The roof is free from significant deflection or distortion.

FRONT ELEVATION

13. This elevation was visually inspected from ground level. Most of the elevation is formed from vertical timber boarding supported on timber rails. The rails span between timber posts formed from three timber studs connected together. The posts also support the timber roof trusses. The lower parts of the elevation are of 140mm concrete blockwork. Horizontal lines are level within the tolerances normally expected. The elevation is plumb within the tolerances normally expected. There

are no indications of roof/eaves spread. There are no cracks, gaps, or other signs of recent structurally significant movement.

LEFT HAND SIDE GABLE ELEVATION

14. This elevation was visually inspected from ground level. Most of the elevation is formed from vertical timber boarding supported on timber rails. The lower parts of the elevation are formed from 140mm concrete blockwork. Horizontal lines are level within the tolerances normally expected. The elevation is plumb within the tolerances normally expected. There are no indications of roof/eaves spread. There are no structurally significant cracks, gaps, or other signs of recent structurally significant movement.

RIGHT HAND SIDE GABLE ELEVATION

15. This elevation was visually inspected from ground level. Most of the elevation is formed from vertical timber boarding supported on timber rails. The lower parts of the elevation are formed from 140mm concrete blockwork. Horizontal lines are level within the tolerances normally expected. The elevation is plumb within the tolerances normally expected. There are no indications of roof/eaves spread. There are no structurally significant cracks, gaps, or other signs of recent structurally significant movement.

REAR ELEVATION

16. This elevation was visually inspected from ground level. The elevation is open. There are six regularly spaced steel stanchions which support the roof structure with a wall plate/capping beam formed from a steel channel. There is some corrosion to the steel particularly at the bases but within the limits that could be repaired.

INTERNAL OBSERVATIONS

ROOF STRUCTURE

17. The roof structure consists of 7 regularly spaced shallow timber trusses. Purlins are of timber. The trusses are supported on the steel channel wall plate at the front and on the timber posts at the rear. There are no signs of excessive deflection to the roof structure. The roof structure is free from significant decay.

FIRST FLOOR

18. The building is of single storey. There is no first floor.

GROUND FLOOR

19. The ground floor is of solid concrete construction.

CONCLUSIONS & RECOMMENDATIONS

21. The timber structural elements of the left hand side gable elevation, right hand side gable elevation, and rear elevation, have successfully supported the loads applied to them during the current use of the building and they will remain suitable for that purpose in a change of use. Secondary internal structure will be required in the normal way to compartmentalise the internal space, form insulated elevations, and support ceilings and other additional loads. The existing structure should be tied to the new.

22. The front elevation consisting of steel stanchions and a steel eaves beam could satisfactorily be used in its current form as part of a habitable building. Some corrosion repairs at the bases might be required but nothing beyond that which would normally be expected.

23. The roof structure has satisfactorily supported the loads applied to it during the current use of the building and will remain suitable for that purpose in a change of use.

24. The barn appears to be constructed on a shallow concrete raft/slab. This would not conform to current practice but its use could be justified depending upon the ground conditions and the actual depth of the slab. If the foundations were not considered to be acceptable for Building Regulations purposes then alternatives to underpinning such as the provision of a concrete skirt etc. could be considered.

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For Fairclough & Co Ltd

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