

STRUCTURAL ENGINEER'S REPORT

on

The Northern Section

of

The Detached Barn

at

Angram Green Farm, Worston, Clitheroe BB7 1QB

6th March 2020

6th March 2020

**Structural Engineer's Report
Northern Section
The Detached Barn
Angram Green Farm
Worston
Clitheroe BB7 1QB**

TERMS OF REFERENCE

A structural inspection of the northern section of the above barn was carried out on Wednesday the 4th March 2020 at the request of the owner, Mr John Haworth. It is Mr Haworth's intention to convert this section of the barn in to a dwelling and as such is in need of a Structural Report to assist the application to be submitted to the Local Planning Authority for approval.

The inspection consisted of a visual appraisal of elements of the northern section of the original barn only and was carried out to determine the nature of any defects affecting the stability of this section and to assess if any repair, remedial or reconstruction works are necessary, prior to any conversion works being undertaken.

Woodwork or other parts of the structure which are covered, unexposed or inaccessible have not been inspected and we are therefore unable to report that any such part of the property is free from defect.

INTRODUCTION

The original barn structure probably dates back to the late 18th or early 19th century but has subsequently been partially re-roofed in more recent times using blue slates on the front roof slope as opposed to the original stone slate found on the rear roof slope.

The external walls are formed in solid, 500mm thick, random stonework.

The roof structure consists of timber purlins carried by both internal timber trusses and the gable walls at each end of the barn.

The existing, solid ground floor is formed in concrete and the first floor in timber. The existing first floor timbers are rotten and considered unsafe.

A single storey, lean-to building, attached to the north facing gable end wall is currently used as storage space for domestic and general farm use. The roof loads here are carried by timber half trusses, fixed to the barn gable end wall at the high end and sat on the outer stone wall to this annex at the low end.

There is a recently formed, internal single skin brickwork wall at ground floor level that separates the two halves of the original barn area. This separation is carried on at first floor level in the form of vertical metal sheets fixed to a timber framework. The other half of the original barn area is owned by Mr Haworth's brother.

OBSERVATIONS

An external inspection of the northern half of the barn revealed all walls to be relatively plumb and true, free from any significant signs of structural settlement or movement. The roof slopes on this section of the barn were seen to be relatively true and free from any significant signs of roof sag.

A limited internal inspection, (due to a substantial amount of stored items within) again revealed all walls to be relatively plumb and true, with an absence of any significant signs of structural settlement or movement.

It was noted that the existing internal separating brickwork wall and metal sheeting above would be insufficient to provide a satisfactory separation from the southern half of the barn, once conversion work to a separate dwelling is undertaken and a sound and fire barrier wall will need to be constructed throughout the entire opening between the two halves of the original structure.

Close inspection of the internal roof timbers and trusses was not possible during this inspection due to an unsafe first floor within the building. Those sections that could be seen appeared to be in good condition and the fact that the external roof slopes were seen to be true plus also that a large area of the roof has recently been renewed, are good indications that there will be little or no major works required in this respect.

The proposed works to convert this property into a suitable dwelling will include the formation of new internal perimeter walls, internal dividing walls and a new first floor structure which will greatly enhance the structural stability and integrity of the property as a whole.

CONCLUSIONS

The northern section of the barn structure at Angram Green Farm was found to be in a sound and stable condition and without any need for major rebuilding measures to allow the conversion of the property to a dwelling.

As such, it is considered that the northern half of the barn structure is suitable to be incorporated into the proposed conversion works to form a dwelling without the need for any demolition or reconstruction works to the existing structure being necessary.

STANDARD EXCLUSIONS

This survey has been carried out primarily to determine the overall structural stability of the northern half of the property concerned and does not include the following items listed in the paragraphs below, unless specifically referred to in the forgoing report.

Inspections of roof space, under floor inspections, timber survey, moisture survey, inspection of roof covering, rainwater goods and flashings, inspection of electrical or plumbing installations, inspection of decorations, inspections of areas covered, unexposed or inaccessible, inspection of cavity wall ties, inspection of drains and sewers, inspection of foundations etc. unless specifically mentioned within the fore going report.

The possible presence of hazardous building materials such as asbestos and the like has not been investigated and no liability is accepted for the inclusion of such materials in the building fabric.

The report shall be for the private and confidential use of the client for whom the report is undertaken and should not be reproduced in whole or in part, nor be relied upon by third parties for any use without the express written authority of the engineer.

If provided, it must be noted that any works carried out in accordance with this report will not necessarily guarantee that **no** future movement will occur to any part of the property, but that the recommended schedule of works is intended to ensure that, should any further movement take place, the property will remain in a stable structural condition.

{ **Note;-** The cost of further inspections and supervisory works that may be required by Banks or Building Societies etc. are not covered by the fees for this report. }

L Gooding