



White Shaw Farm
Heaton
Rushton Spencer
SK11 0SR

Mr J. Gater
Greenway Hall Farm
Stoke

19th Feb 2021

Re: Structural survey of Barns at Grenway Hall Farm

Dear Mr Gater,

Further to my site visit and inspection of the barn buildings structures at the above property, I would report as follows:

The report concerns the barn buildings adjacent to the farm house immediately to north west, The barns form a 'U' shape and this report is concerned with the 2 legs of the barn that form the north east and south east elements.

The barns are constructed with a mixture of materials, the north east element is constructed with stonework and the south east element is predominantly stonework at ground floor level and brick work masonry at first floor.

The roofs are finished with Staffordshire blue tiles, which is generally in fair condition with some broken and missing tiles. The roof to the north east section has been re-roofed in the past with new timbers and roofing felt and is in good condition. The timber rafters and trusses within the south east section are in reasonable condition with only very minor localised signs of rotten elements and distortion and most of the timbers remain in good structural condition.

The first-floor timbers within the north east section have been extensively replaced and are all in good condition. The first-floor timber joists within the south east element appear satisfactory for the most part, however, some elements are unsafe to walk on due to rotten and or missing boards and rotten joists.

The walls to the north east section of the barn are in good condition and exhibit extensive re-pointing and localised re-building, the walls remain undulating and out of plumb in places due to historic movement, however, this is considered normal for the age and type of construction and is not of structural concern.

The stone walls at ground floor level of the south east section appear to be reasonably plumb and free from any significant historic or ongoing structural movement. The first-floor walls are showing signs of historic lateral movement both vertically and laterally, however, strengthening works have been carried out in the past in the form of steel portal frames providing lateral stability to the structure. The external wall has pulled away from the internal buttress wall over the years due to a lack of structural continuity.

The ground floor consisted generally of concrete, agricultural in nature, however, remains free from structural movement.

The rainwater gutters and downpipes were in reasonable condition to the north east section, however, were virtually completely missing to the south east section.

In conclusion I would provide the following comments:

- 1) The odd rafter and tile battens may require strengthening or local replacement where the ends have rotted.
- 2) The south east roof should be re-roofed with a modern membrane and insulation to meeting current building regulation.
- 3) Isolated elements of the first-floor joists and boards should be completely removed and replaced within the south east section; any new floor structure should be sufficiently strapped to the external walls to meet current building regulations.
- 4) A replacement concrete ground floor structure, insulated to comply with current building regulations.
- 5) Rotten timber lintels require replacing as required.
- 6) New rainwater goods to the south east section connected in to a suitable underground drainage system.
- 7) The roof within the north east section, although relatively new, will need to be strengthened slightly to allow for conversion for domestic loads associated with insulation and plasterboard etc.

In conclusion the barns are in reasonable structural condition and have seen structural alterations and strengthening in the past such that they remain suitable for conversion to a domestic dwelling with minimum future structural alterations. Some minor strengthening will be required in isolated locations along with some very localised repair, strapping, tying and reconfiguring etc. In our view the building can be converted without any re-building.

I trust that the above is satisfactory, however, should you have any queries or require clarification, then please do not hesitate to contact me.

Yours sincerely

S. Naylor

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Photographs



General view of barns.



General view of relatively new roof to north east section, will require some minor strengthening for domestic conversion.



Typical internal view of first floor south east section – note previously installed steel portal frames providing lateral stability.



Another internal first floor view of north east section – note timber trusses, purlins and rafters generally in good condition.



External view of south east barn showing stonework at ground floor level and brick work masonry at first floor.



Stone work and roof of north east section in good condition.



Timber first floor with south east section – note acro props supporting defective floor sections.