

MARSH DESIGN LIMITED

STRUCTURAL SURVEYS, DRAWINGS & DESIGN CALCULATIONS

***18, Howard Avenue
Lindley
Huddersfield
HD3 3DJ
Company No: 457 2796

(01484) 341426***

STRUCTURAL APPRAISAL REPORT

DATE: 4th May 2022

REF: MDL – 5948

1. NAME OF CLIENT

Mr. Dominic Waterson

2. ADDRESS OF PROPERTY INSPECTED

Agricultural Barn Type Outbuildings at
749, New Hey Road
Outlane
Huddersfield
HD3 3YL

3. DATE OF INSPECTION

4th May 2022

4. PURPOSE OF INSPECTION

We have been instructed to undertake an appraisal of the structural condition of the agricultural barn type outbuildings with a view to their future conversion into a habitable dwelling.

5. TYPE OF INSPECTION

A visual inspection of the agricultural barn type outbuildings was undertaken from accessible areas. The report is a structural appraisal only, and not a full condition survey report.

6. DESCRIPTION, OBSERVATIONS & COMMENTS

The agricultural barn type outbuildings comprise of two integrated structures: a duo-pitched timber framed shed/barn type building with an

attached mono-pitch barn constructed using various steel and timber framed structures.

The timber frame shed structure is constructed from 100x50mm timber stud walls, with tongue and grooved panelling to the external face of the walls. Internally the structure has been overclad in various types of timber boarding offering additional stability to the structure.

The roof duo pitched roof structure is supported on a series of timber trusses, which in turn support the timber purlins and rafter boards. The roof is overlaid with a combination of bitumen felting and profiled steel sheeting.

The mono-pitched barn structure is constructed using an array of steel and timber frames. The rear section of this building is formed using steel portal framed structures measured to be 100x100 SHS box sections, with the timber frames formed using 280mm diameter columns and beams.

The mono-pitched roof structure comprises of profiled steel sheeting supported on tubular steel purlins at approximate 1.2m centres.

The walls of this barn structure are formed with profiled steel cladding supported on the steel framed columns, with the dry stone boundary wall forming the right hand elevation to the structure.

We would estimate that both of these agricultural barn type outbuildings are in excess of 30 years old.

Inspection of the main structural members confirmed that they were free from defect, with no evidence of distress, buckling or excessive deflection of the steelwork frames or timber columns. Very minor surface corrosion was noted to the steelwork; however, no delamination of the structural steelwork was in evidence therefore we do not consider this to be a structural concern. The main bolt fixings between the stanchion columns and roof rafters were all in a serviceable condition, with no structural defects noted.

The timber framed columns were in a sound and stable structure condition, they were all well connected with additional strap strengthening having been installed historically.

The profiled steel cladding to the roof structure and walls is lightweight in nature, and this can easily be replaced with a similar type of insulated panel without significantly increasing the load onto the main structural members.

At the time of our inspection, all the foundations for the steel portal frame stanchions and walls could not be inspected, however the foundations which could be seen were of a concrete pad type construction.

These foundations appear to be performing satisfactorily, with no subsidence or settlement defects noted. It is our opinion that they would be capable and structurally adequate to support a nominal increase in loading from the a new lightweight insulated roof covering.

There was no floor structure within the mono-pitched barn, and a new concrete bearing slab will be required to form the ground floor of the proposed dwelling.

The duo-pitched timber framed structured was in a sound and stable structural condition. Over the years, historical repairs have been undertaken to ensure the structural integrity and serviceability of the building for many years to come.

The floor structure is a timber is a timber joisted constructed and was in a sound and serviceable structural condition.

The sizes of structural members used to form the timber frame structure, roof trusses etc are comparable to timber sizes used for modern day construction methods and as such we would deem them to be adequate for the long term use of the building.

7. CONCLUSIONS AND RECOMMENDATIONS

Our inspection has confirmed that the agricultural barn type outbuildings are free from major structural defect or distress.

There is no evidence of major structural defects to the structural columns and beams and no evidence of vertical settlement or subsidence.

The foundations to the agricultural barn outbuildings appear to be structurally adequate and we consider these to be suitable to support the nominal increase in loads from the proposed conversion into a habitable dwelling.

The agricultural barn type outbuildings appear to be of a significant age and it was originally constructed in such a way that it could be used for many years to come.

The agricultural barn type outbuildings are in a sound and stable structural condition and in our opinion, it can be deemed to be of a substantial and permanent construction suitable for its proposed conversion into a habitable dwelling.

8. LIMITATIONS

We have not inspected woodwork, damp proof membranes or other parts of the structure which are covered, unexposed or inaccessible and we are therefore unable to report that any such part is free from defect.

We have not at this present time conducted any intrusive or destructive testing of the fabric of the property and we cannot confirm that the property is free from asbestos or high alumina cement construction.

This report has been prepared for the sole benefit of Mr. Dominic Waterson, his professional advisors and the local planning authority.

The liability of Marsh Design Limited and their employees shall not extend to any third party.

This report should not be passed on to any third party without the express permission of Mr. D. Haigh, with whom the copyright remains.

Yours faithfully,

For and on behalf of
MARSH DESIGN LIMITED