



**WHINBARROW DESIGN  
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**VISUAL STRUCTURAL INSPECTION  
OF THE  
ATTACHED BARN  
SPOUT HOUSE  
SANDWICH  
CUMBRIA**



**FOR**

**MR FOWLER**

**Reference - WDS/05/7819/REP01**

**Date - 18/09/2022**

**WDS/05/7819/REP01**

## **1.0 BRIEF**

- 1.1** WDS Limited were instructed by Mr Fowler to carry out a structural inspection of the barn adjacent to Spout House, Sandwith, Whitehaven. The purpose of the inspection was to verify whether the existing building is adequate to convert into a dwelling. The survey was limited to a visual, non disruptive inspection of the building where access allowed.
- 1.2** The barn comprises a single storey attached building which is formed in random stone and block masonry which supports a traditional timber truss/purlin and rafter roof. The barn is attached on its rear extent similar building. The barn is currently used as a garage/store.
- 1.3** The original building is well over 100 years old.
- 1.4** The inspection was carried out on the 19<sup>th</sup> August 2022. On the day of the inspection the weather was clear and dry.
- 1.5** It should be noted that there may be faults with the building which are masked or hidden by finishes that are not normally identified during a non-disruptive inspection.
- 1.6** The footings to the buildings were not exposed at the time of this inspection therefore no comment can be made as to their condition at this time.
- 1.7** For the purposes of this report the front elevation of the property will be considered the elevation which contains the large ground floor access door which faces the parking area.

## **2.0 OBSERVATIONS**

- 2.1** The main building generally is in an adequate structural condition the walls are relatively plumb and free from any significant cracking.
- 2.2** The roof undulates and the structure appears sub-standard. We envisage the roof structure may need replaced/strengthened as part of the conversion scheme.
- 2.3** The foundations to the property were not exposed during this inspection however considering the use of the building we see no issue with the existing wall and foundation structures supporting the loading associated with a

domestic property. We would however recommend that trial holes are excavated at two diagonal corners of the building to expose the depth and extent of the footing. This is required to ensure that the floor slab specification can be provided such that undermining of the walls is prevented during construction.

### **3.0 DISCUSSION/RECOMMENDATIONS**

- 3.1** The main building walls are generally in an adequate structural condition but will require some refurbishment work.
- 3.2** We recommend that a trial hole is excavated at each corner of the barn to expose the base level of the wall such that the ground floor slab and insulation detail can be specified to ensure that undermining of the wall does not occur during construction.

### **4.0 CONCLUSION**

- 4.1** The building is in an adequate structural condition. There are some limited areas of rebuild required however we estimate this to be less than 5% of the overall masonry structure. It is our opinion that the property is structurally suitable to be converted into a domestic property. The conversion of the property into a dwelling will secure its long-term retention as an asset.

For and on behalf of WDS Limited

Tom Short BEng (Hons) CEng MICE