

Visual Structural Inspection
of
Barn at Low Wath Cottage
For
Mr K Yorke

Reference - 2025.397 rep001 Rev -
Date - 25/06/2025
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1.0 BRIEF

- 1.1 Redstone Consulted Engineers Ltd were commissioned in June 2025 to carry out a structural inspection of the existing attached barn at Low Wath. The survey will examine if the building is structurally sound and capable of conversion as required by Cumberland Council's Validation Checklist.
- 1.2 The inspection was limited to a visual, non-destructive inspection to those areas where it was safe to access.

2.0 INSPECTION NOTES

- 2.1 The inspection was carried out on the morning of 13th June 2025. The inspection was limited to those areas safely accessible and was restricted externally to elements visual from the ground floor.
- 2.2 Examination of foundations was not possible.
- 2.2 The age of the original building structure is not known but is understood to be pre-1900.
- 2.3 Record drawings/information for the building structure were not available.
- 2.4 The building is an attached end barn. The section inspected consists of 2 structural enclosures. To the southern end this is single storey. At the northern end the barn is two-storey with the first floor structure removed.
- 2.5 The original roof to the barn has been removed. New timber trussed rafters have been installed. to the north section chipboard panels have been installed above the trussrafters. No other roof elements are in place.
- 2.6 The walls are built in solid 450 mm thk mortared cut stone to the southern end and random cut stone to the northern section. The walls are unrendered externally and part lime-washed/part plastered internally.
- 2.7 The 2 enclosure are separated by a 450 thk cross wall built in mortared random stone.
- 2.8 Lintels to windows and doors are generally timber with stone facing lintels to the external openings.

3.0 OBSERVATIONS

3.1 Southern Section End Elevation

The gable elevation is generally in good condition. There is a blockwork infill panel visible internally (see photos 3.1a & 3.1b). The walls will require repointing.



photo 3.1a



photo 3.1b

3.2 Southern Section East Elevation.

Mortar has been lost to a significant number of joints externally towards the gable end (see photo 3.2a). The corner stone at roof level is missing (see photo 3.2b).



photo 3.2a



photo 3.2b

Internally the walls are in good condition with no evidence of movement (see photos 3.2c & 3.2d)



photo 3.2c.



photo 3.2d

3.3 Southern Section West Elevation.

Externally the wall is generally good condition with limited loss of mortar to the stonework joints. (see photo 3.3a). Internally the walls have been plastered/lime washed in places. There is no evidence of movement or cracking to the structure (see photo 3.3b)



photo 3.3a



photo 3.3b

3.4 Cross Wall

The majority of the south elevation of the cross wall have been plastered/lime washed and is in good condition (see photo 3.4a). The north elevation has been lime washed to the ground floor level only. Cracking to the mortar joints is visible to the joints of the random boulder stonework above first floor level (see photo 3.4b).



photo 3.4a



photo 3.4b

3.5 Northern Section East Elevation

The external elevation is in reasonably good condition at the lower level. Loss of mortar from the joints is visible to the random boulder stonework above first floor level (see photos 3.5a).



Internally loss of mortar from the joints is visible throughout, particularly above first floor level and towards the northern end (see photos 3.5b to 3.5d).



photo 3.5b



photo 3.5c



photo 3.5d

3.6 Northern Section West Elevation

This wall is in good condition with no visible signs of movement (see photos 3.6a to 3.6c)



3.7 Northern Section North Wall

It is apparent that the barn is an addition to an earlier 2 storey stone building with a distinctive joint between the 2 buildings. The older structure is much poorer condition (see photos 3.7a to 3.7c).



3.8 Northern Section First Floor

The floor joists to the first floor have been cut at the ends and the floor removed completely. There is no evidence this has impacted the overall lateral stability of the building.

4.0 DISCUSSION

4.1 The building overall appears to be structurally stable and structurally capable of conversion to residential use.

4.2 Remedial works will be required to remedy a number of defects highlighted during the inspection:

- repointing of stonework through out using a non-cementitious mortar.
- replacement of timber lintels.
- repairs or partial rebuilding of the party (north) wall
- installation of a new first floor.