

Dilapidation Survey
Field Farm Barn, Main Street
Aunsby, Lincs.

June 2023



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This is an inspection report limited in its scope to the issues below and we have not inspected parts and issues which are not relevant to the client's instructions. The inspection was of a visual nature only. No walls or floor coverings or fixtures or fittings were removed. No intrusive means of access was made into the building fabric, nor have we inspected or tested drains or other services, other than as detailed below.

This report focuses on the visual condition of the existing structure only. Matters related to timber rot should be directed to a specialist in that field. No foundation trial holes were taken and access to some parts of the structure was prevented due to vegetation, building materials and collapsed structure.

Aerial photo on cover taken October 2022, supplied by Plan-It Design Ltd.

Version	Status	Written	Checked	Issued	To
Draft v1	Draft	WM	PM	26/06/23	Plan-It
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1.0 Brief

1.1 Stump Cross Associates Ltd were instructed by Plan-It Design to carry out a visual dilapidation survey at Field Farm Barn, Aunsby.

2.0 Site Visit

2.1 SCA attended site on 29th May 2023.

2.2 The weather was dry, bright, sunny at the time of inspection and had been warm and dry during the preceding week.

2.3 The site has been recently accessed to lay services from the road to the site of the existing structure. However several areas of the structure were not available for detailed visual inspection due to extensive vegetation cover, deposited building materials and partially collapsed structures.

3.0 General

3.1 The location of the barn is shown on the Location Plan found in Appendix A

3.2 It is currently accessed via a rough earth track parallel to and adjacent to the field boundary.

3.3 The structure is essentially L shaped, formerly used as stock pens and storage sheds.

3.4 The original structure is thought to be early 19th century with many additions and rebuilds.

3.5 The structure is constructed of a mix of brickwork and stone all partially collapsed.

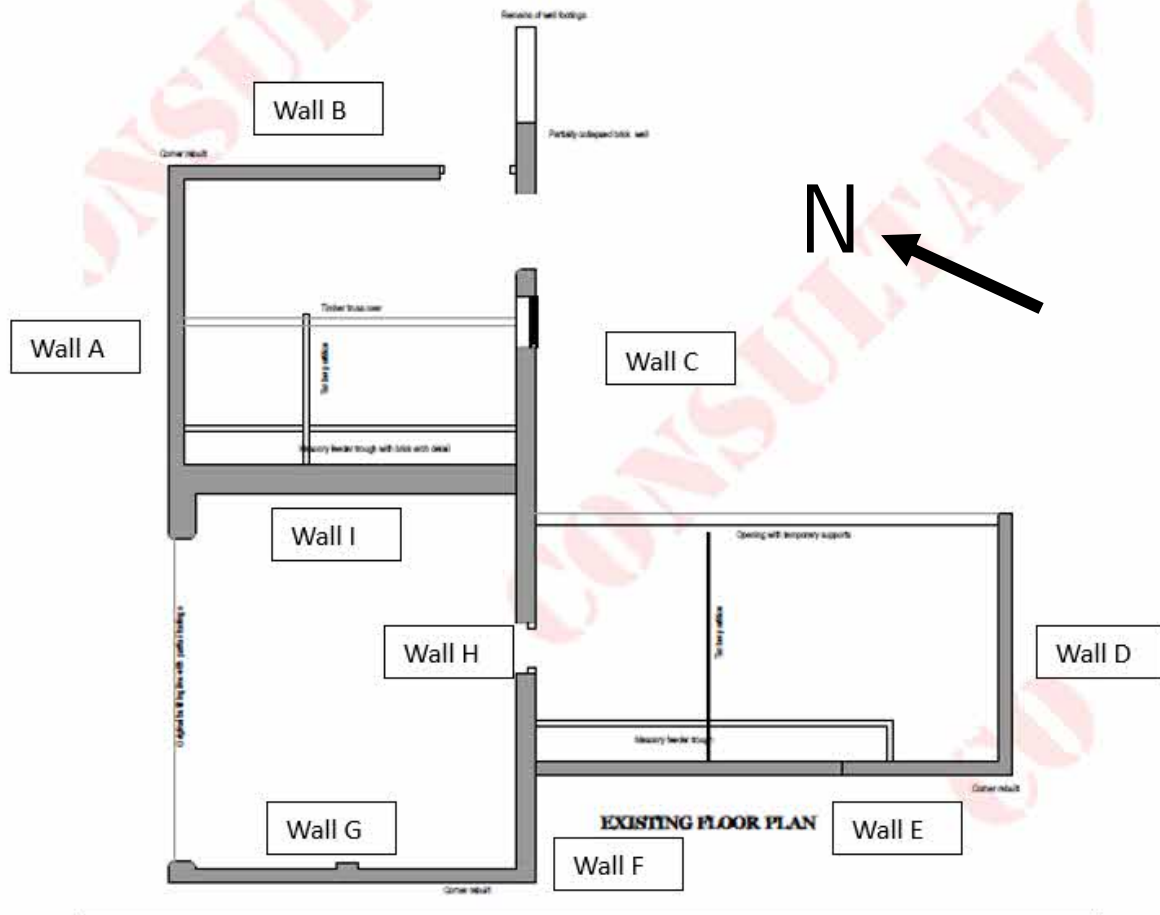
3.6 The roof structure is red clay pantile, again a significant proportion of the roof structure has collapsed.

3.7 The majority of the floor is obscured, but there is evidence of brick, earth and concrete at points around the structure.

3.8 The general structure shape is indicated in the sketch below.

3.9 Photographs referred to in the text are attached in Appendix B

Wall Layout Reference Drg



4.0 Wall Condition

The area bounded by Walls A, BC and I is referred to as the animal shelter

The area bounded by Walls D and E is referred to as the implement shed

4.1 Wall A

The lower section between Wall G & I is partially collapsed. It is unclear if this was formerly a full width opening. Debris and vegetation masking extent of openings and floor finish inside.

At the northern end, is a stone panel approximately 6.4m long, with a bullnosed brick pier to west end. Stonework approximately 1.7m high topped with 5 course brickwork. Condition is sound with recent pointing although stonework showing signs of spalling. (Photo 1)

4.2 Wall B

This gable wall is approximately 4.6m long and in poor condition. It has been rebuilt in NE corner, but is not bonded.

There is partial collapse on east corner by the opening. The opening lintol has dropped and there is cracking over door head extending high into the gable. (Photo 2 & 3)

4.3 Wall C

The wall is showing signs of rotation and is leaning outwards with loose brickwork to the head and eaves. (Photo 4)

There is a small central panel brickwork which appears sound but has a straight joint abutting the older brickwork. (Photo 5)

4.4 Wall D

This is the gable wall to the implement store. The brickwork in poor condition with major spalling and frost damage across the panel. (Photo 6)

There is evidence of settlement cracks which have been repointed and are now opening further.

The west end of the gable has significant settlement. There has been a major rebuild which is poorly jointed, unbonded and horizontally out of true level. (Photo 7)

4.5 Wall E

The rear face of implement shed is approximately 7.7m long. The south corner has been rebuilt, but brickwork in very poor condition, spalling and significant evidence of repointing with several mortar mix/colours visible. (Photo 7 & 8)

In the central section of the panel the quality and age of brickwork changes to an older construction. This section to the west is now leaning outwards and also displays well weathered and spalling brickwork.

The western end of this wall is straight jointed to the perpendicular wall and shows signs of further settlement in the corner with significant joint opening – circa 20-25mm. (Photo 9)

4.6 Wall F

The perpendicular wall returns west for approximately 1.6m . This is in reasonable condition, although where the wall returns inside the implement store it appears to be loosely bonded.

The northern return of this panel from the return has been rebuilt but again shows settlement and out of level brick coursing. (Photo 10)

4.7 Wall G

The area further to the north side is of poor quality brickwork, with spalling, and it is partially collapsed across the panel until it meets the northern return. (Photo 10)

4.8 Wall H

The centre of this panel has settled and displays multiple cracking patterns and open joints. There is evidence of previous repair. (Photo 11)
Inside the animal shelter there is evidence of rotation of this wall (Photo 4 – taken viewing towards H beyond wall I)

4.9 Wall I

This internal return wall is partially collapsed stonework. (Photo 12)
Inside there are brick stalls showing major joint movement.

5.0 Roof Structure

5.1 The roof structure is in extremely poor condition and generally unsafe.

It has partially collapsed over the animal shelter

The implement store is open fronted but the roof is only been prevented from collapse by the acrow props strategically placed internally. These are now leaning due to further settlement.

Timber work is generally weathered and rotted having been exposed to the elements for some considerable time. (Photo 13)

Main timbers and lintols additionally show signs of infestation.

6.0 External

6.1 A trial hole has been excavated to the west of the site and is left open. This shows the following: (Photo 14)

The arisings from the trial hole show stiff grey clay below the top soil.

7.0 Discussion

The structure modifications over time have used bricks of varying quality. Further the original brickwork would have been bedded in lime mortar, whilst later additions and repairs have incorporated modern mortar mixes.

The ground conditions are stiff grey clay which can desiccate in dry weather and soften when saturated.

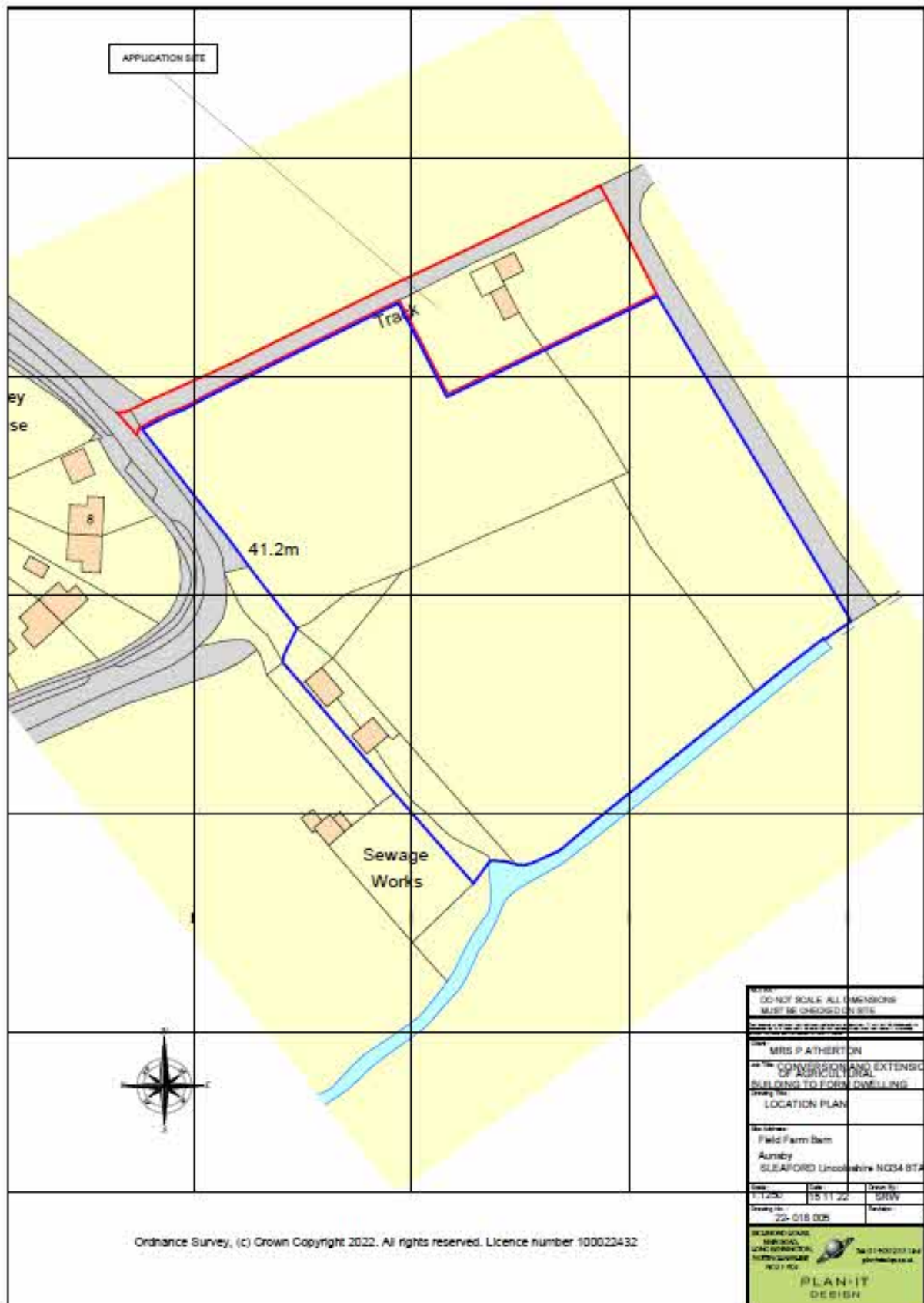
It is likely that given the fragmentary development of this structure the foundations are likely to be at varying quality, types and depths, although this will require trial holes to substantiate. There is some evidence of the brickwork being constructed off a narrow corbelled brick/stone strip in one corner of the implement shed.

Clay drying and swelling is likely to account for the many differing extents and directions of movement within the brickwork panels. This, together with the number of inadequately or straight bonded joints, points to long term uncertainty over the future stability of the brickwork.

The roof is clearly beyond repair and will require full refurbishment. It may be possible to reuse some of the clay pantiles although it is unclear if there would be sufficient number for economic reuse.

Given the generally poor condition of the brick material, the likely variability of the foundation and founding levels and the relatively short panels of viable brickwork, it is recommended that the existing structure be removed and that any new structure is built in a more composite manner with modern foundations at a more appropriate depth, built to accommodate potential clay movement problems.

APPENDIX A – Location Plan



APPENDIX B – Photographs



Photo 1



Photo 2



Photo 3



Photo 4



Photo 5



Photo 6



Photo 7



Photo 8



Photo 9



Photo 10



Photo 11



Photo 12



Photo 13



Photo 14