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SUMMARY

The presence of a set of cruck blades within the barn may suggest an early antecedent but it appears likelier that these supports have been transplanted into an early 19th Century agricultural barn, perhaps as part of a folk tradition or piece of opportunism rather than an earlier predecessor.

The barn was the earlier of the two elements comprising the study buildings but the fabric has been considerably altered; a southern doorway removed and possibly later windows inserted.

The garage and workshop were later additions with the workshop illustrating air vents, a true indicator that part of the building had been used either for grain storage or keeping animals.

During the 20th Century, this wing was converted into a garage, gutting most of the internal fabric and removing any illustrative architectural features.

1. INTRODUCTION

1.1 Project origins

Cumbria County Council's County Historic Environment Service was consulted by Carlisle City Council regarding a planning application for the conversion of a barn into agricultural workers dwellings at Gelt House Farm, Hayton, near Carlisle; Planning Application No. 1/10/0844.

The study building was located at NY 5046 5910.

The scheme has the potential to affect the character and appearance of a building of special architectural and historic interest. The proposal will affect the character and appearance of the building and, as a result, a condition has been placed on planning consent requiring a programme of archaeological building recording to be undertaken prior to the development taking place

In order to ascertain the historical and archaeological merits affected by this development, the brief issued by the curatorial authority requires investigation of known historical records through a rapid desk-based assessment and the survival of extant buildings via a programme of building recording equivalent to Level 2 as described by English Heritage *Understanding Historic Buildings A Guide to Good Recording Practice, 2006*.

The desk-based assessment included visits to Carlisle Library and The Cumbria Record Office, Carlisle. The objective of this exercise was to collate sufficient detail to identify the issues and potential for academic research, provide a series of questions for targeted archaeological enquiry and outline, if any, possible mitigation response.

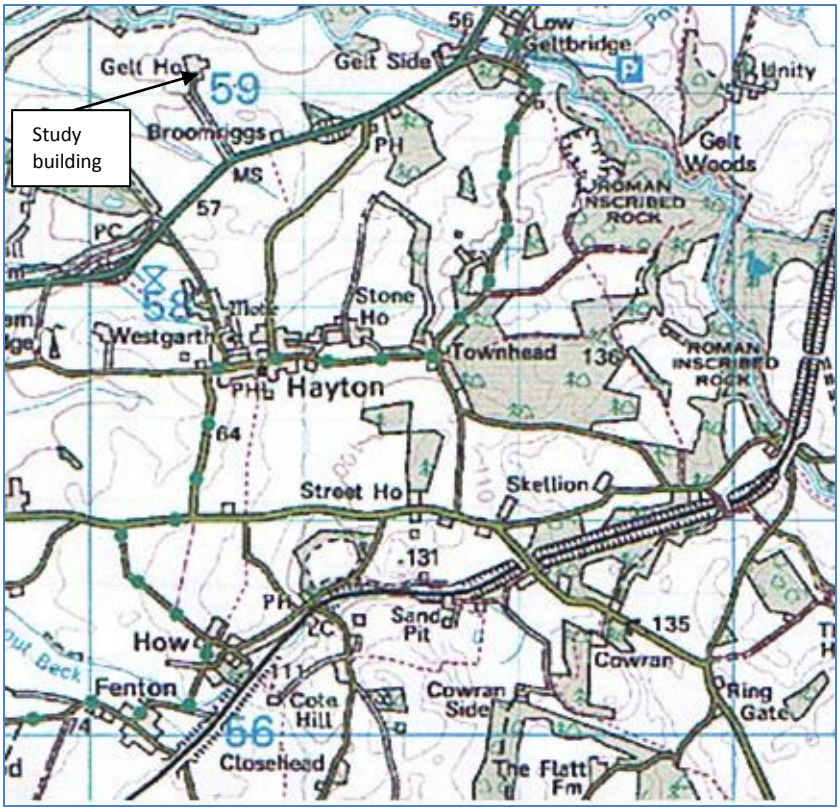

Figure 1. Location of survey. (OS copyright licence no. 100044205).

2 METHODOLOGY

2.1 Project Design

In response to a request by Cumbria County Council's County Historic Environment Service, Gerry Martin Associates Ltd submitted a project design (Written Scheme of Investigation) for the archaeological recording of an extant barn. This document outlined the contractors' professional suitability, a brief historical summary of the study area, general objectives required of the project, the methodology and the resources needed for the successful implementation of this work.

The project design on being accepted by the curatorial body, Gerry Martin Associates Ltd was commissioned to undertake the desk-based assessment and the archaeological survey by the client Mr Christopher Reed.

The following report has been assembled to the relevant standards and protocols of the Institute of Field Archaeologists, combined with accepted best practice and in accordance with the brief prepared by the curatorial authority.

Fieldwork took place on February 8th 2011.

2.2 Desk-based assessment

In accordance with the Design Brief, the desk-based assessment investigated primary and secondary historical sources, maps and other literature in order to set the survey results into their past cultural, historical and topographic context.

The desk-based assessment comprised a search of three archival repositories.

Carlisle Library provided sources for published works including newspaper articles, archaeological and antiquarian reports, photographs and journals.

Cumbria Record Office, Carlisle was sought for details of landowners, occupiers and cartographic evidence.

The Historic Environment Record, online, provided the Sites and Monuments Record describing previous archaeological observations and electronic media showing the spatial distribution of these findings.

2.3 Archive

The archive has been compiled in accordance with the project design and the guidelines set out by English Heritage (1991) and the Institute of Field Archaeologists (1994, 2007 and 2008).

The archive will be deposited with an appropriate repository and three copies of the report donated to the County Sites and Monuments Record, as requested by the curatorial authority.

2.4 Walk-over survey

A walkover of the study area on February 8th 2011 did not suggest any upstanding monuments such as derelict buildings, walls or tofts existed.

3 BACKGROUND

3.1 Location, topography and geology

The study area lies in the parish of Hayton where the rivers Gelt and Irthing meet. Reference to the geological map of the area indicates that the underlying geology of the area comprises Permian and Triassic sandstones, overlain by boulder clay and moraine drift deposits.

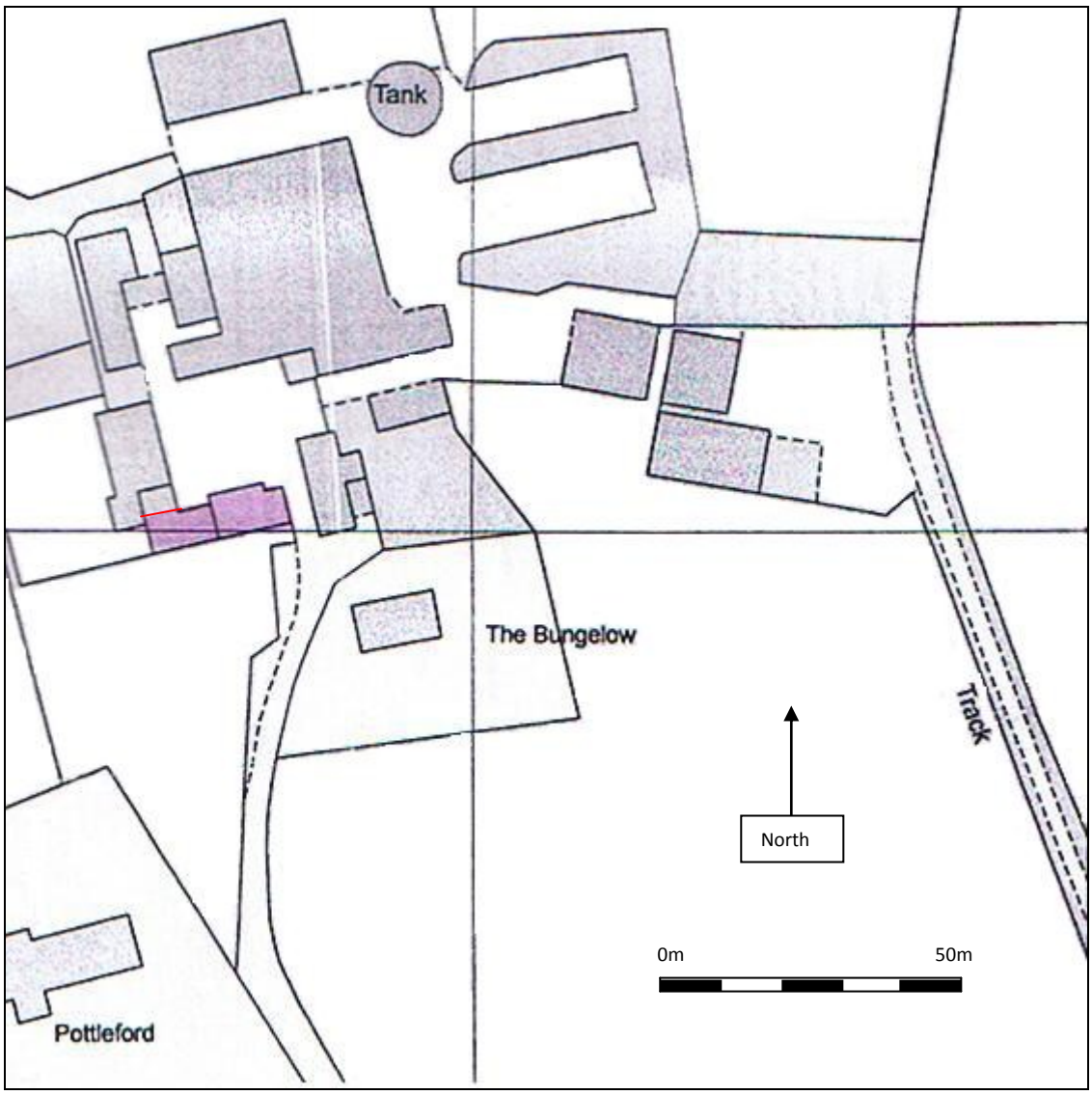

Figure 2. Location of study building (purple shade)

4 HISTORICAL CONTEXT

4.1 Historical background

The study building although not listed as a protected building, existed from at least the mid 19th Century as shown on the first edition Ordnance Survey map (figure 3). Despite some alterations recently, the barn retains architectural features that include raised crucks.

The Manor of Hayton belonged to the Earl of Carlisle, in right of his barony of Gilsland. In the Denton MS Hayton, *villa in colle (*"estate in the hills"*)*, was freehold in the time of Hubert de Vaux (died

1164), who is said to have given it to his cousin (sic), Eustace de Vaux although Eustace de Vaux was his son (http://familytreemaker.genealogy.com/users/b/o/l/Andrew-N-BOLS/PDFGENE20.pdf). After four generations, it passed by the marriage of the heiress to John de Denton, who in the reign of Henry VII, gave it to Lord Dacre.

This church was given by Robert de Vaux, or Vallibus, to the prior and convent of Carlisle, and was shortly afterwards appropriated to that monastery. After the suppression of religious houses it was transferred to the dean and chapter, who still retain the patronage.

The *Church*, dedicated to St. Mary Magdalen, was erected in 1780, upon the site of the old church and in 1842 the chancel was rebuilt. In 1888, the church was thoroughly restored, and the tower raised (Bulmer 1901).

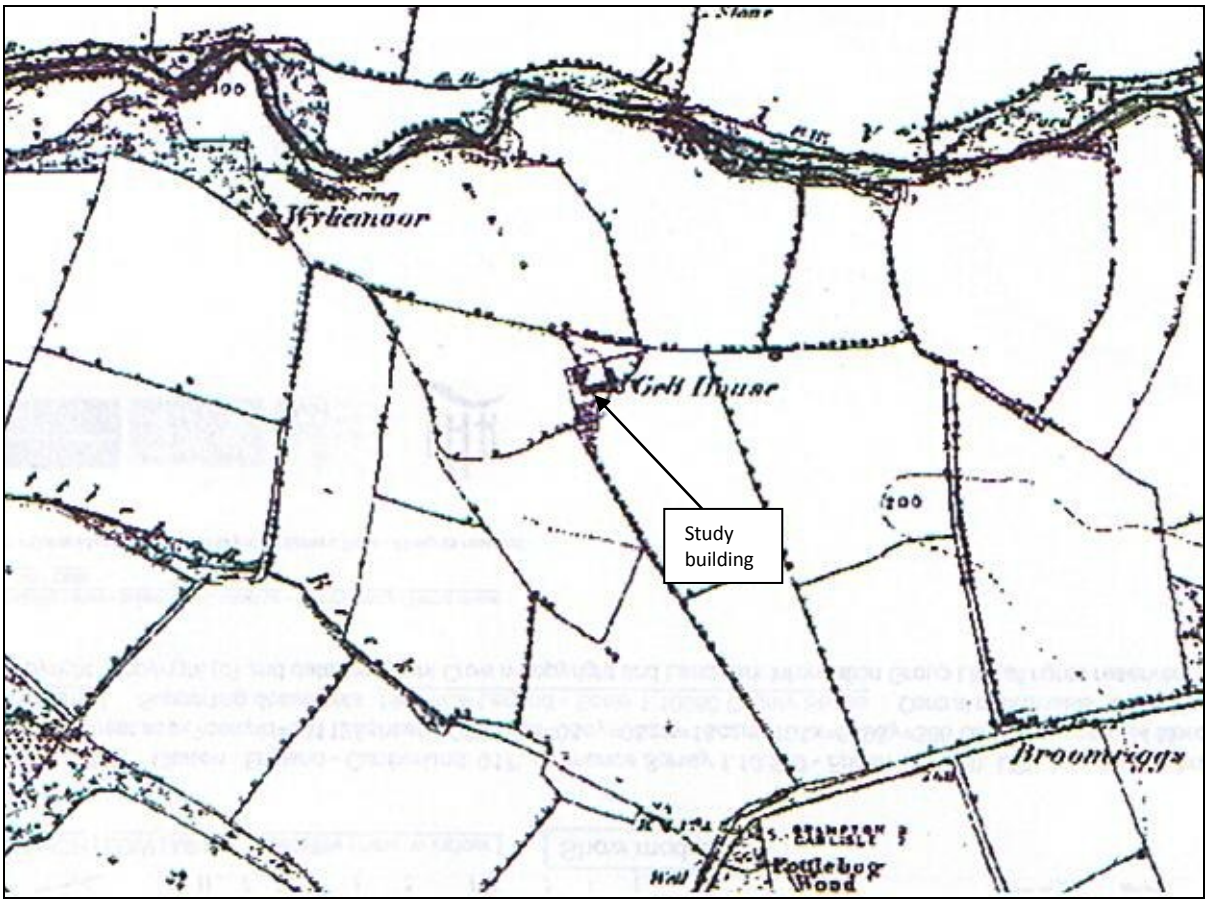

Figure 3. Ordnance Survey First Edition map of 1868

5 DISCUSSION

5.1 Academic merit

Past cultural settlement in Cumbria has been predominantly rural, where agriculture has been the main economic driver and product. Increasingly, those features associated with past farming technique have been lost or converted for domestic use or for local tourism.

A challenge to historians, archaeologists and other researchers is to compile a record of those rural buildings that indicate past agricultural practice and social conditions before their industrial, agricultural and historic context is lost.

6 RESULTS

6.1 Methodology

The buildings in the study area were surveyed on February 8th 2011 by Richard Woolley assisted by Carl Savage using a Disto measuring device and hand-held GPS equipment.

The buildings were fully accessible, although natural light was slightly restricted within the study building requiring occasional flash photography.

The survey comprised of scaled photographic recording of the interiors and elevations of all the buildings, with detailed photography of any worthy architectural elements.

Using the architectural plans, notations were undertaken regarding the characteristics of these farm buildings, including metrical data, thresholds, materials and building techniques employed.

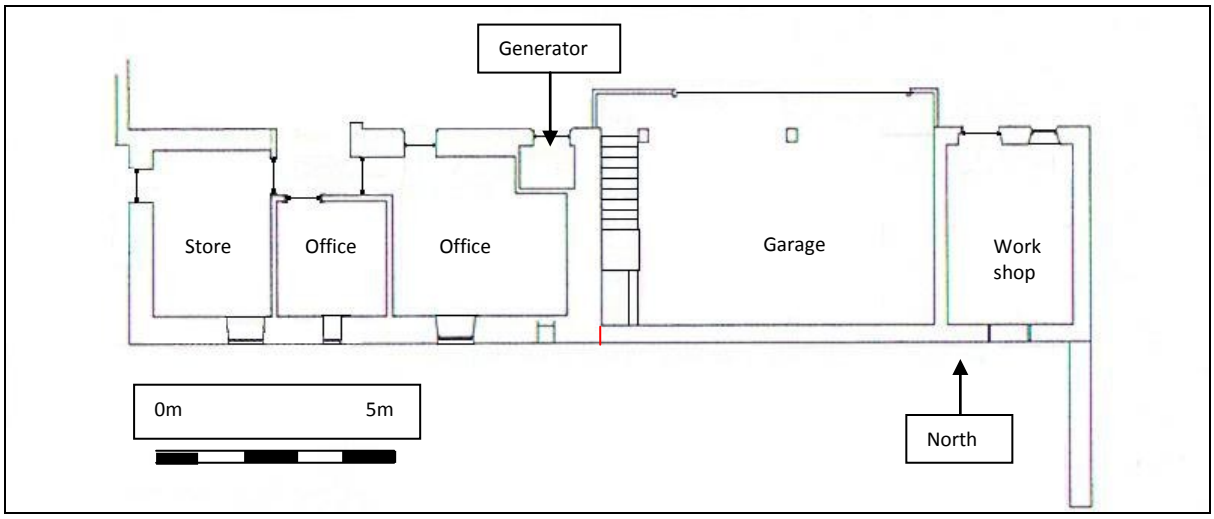

Figure 4. Ground floor plan of the study buildings

The study buildings comprised of two elements (figure 4); a barn that had been sub-divided into a store, two offices and a generator room and a workshop that had become a garage and a workshop.

The two storey study building is aligned east-west with a later two room extension to the east with both elements sharing a recent slate roof. It measured 23.00m in length and 5.00m in width.

The corpus of the following report is formed from these notes and photographs. The following report describes each room within the study building.

6.2 Survey results; the barn and workshop (exterior)

<u>South elevation</u>

The southern elevation illustrated both the barn and the workshop.

The roof to the barn was 0.50m higher than the workshop roof.

The walls comprised randomly coursed sandstone rubble-stone with the later workshop keyed into the earlier barn and measured 0.50m in thickness.

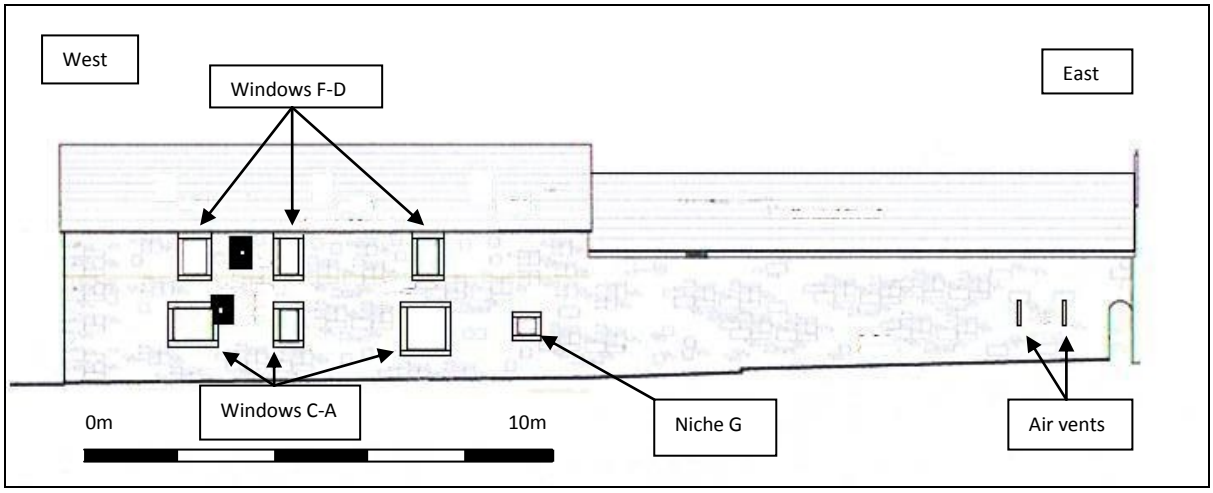

Figure 5. Southern elevation of both barn and workshop

Figure 6. South elevation of barn

Figure 7. Window A converted from a door

The details illustrated in the southern elevation (figure 5 and 6) are as follows:

- Window A measuring 0.75m x 0.90m was a probable former doorway the western sandstone jamb extending to the floor (figure 7). The window possessed a rough hewn sandstone lintel, the original window frame having been removed. The former door would have measured 1.67m x 0.98m
- Window B measuring 0.45m x 0.65m was a window formed from rough hewn sandstone lintel, jamb and sill (figure 8). It is currently unglazed, the frame having been removed.
- Window C measuring 0.68m x 0.82m was a window formed from rough hewn sandstone lintel, jamb and sill (figure 8). It is currently unglazed, the original frame having been removed.
- Window D measuring 0.41m x 0.69m was a window formed from rough hewn sandstone lintel, jamb and sill (figure 9). The wooden frame was still extant containing four lights.
- Window E measuring 0.45m x 0.73m was a window formed from rough hewn sandstone lintel, jamb and sill (figure 8). The wooden frame was still extant containing four lights.
- Window F measuring 0.45m x 0.73m was a window formed from rough hewn sandstone lintel, jamb and sill (figure 8). The wooden frame was still extant containing four lights.
- A niche was formed from rough hewn rectangular sandstone blocks forming a former window subsequently blocked inside by brickwork (figure 10)
- Two air vents measuring 0.50m x 0.10m were built into the south elevation of the workshop that have been blocked from the inside (figure 11).

- Two steel reinforcing plates were inserted beside windows C and F in order to brace the barn (figures 5 and 8).

Figure 8. Windows (right to left) B, C, E and F

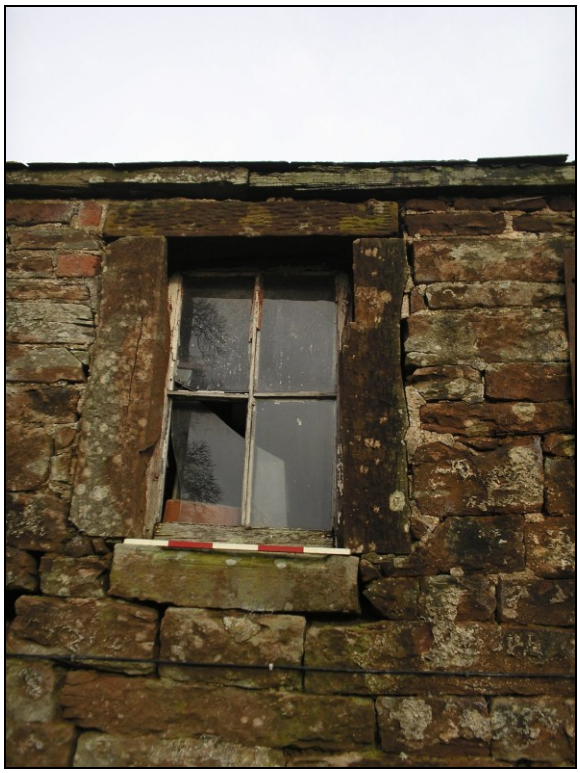

Figure 9. Window D

Figure 10. Niche, now a blocked window

Figure 11. Air vents within the workshop

<u>North elevation</u>

The northern elevation illustrated both the barn and the workshop (figure 12).

The workshop had been rebuilt when converted to a garage, the northern workshop being extended 0.70m northwards with the erection of a recent brick porch. Wooden sliding doors occupied the majority of the elevation (figure 13).

The earlier walls for the workshop and barn comprised randomly coursed sandstone rubble-stone with the later workshop keyed into the earlier barn by brickwork.

The details illustrated in the northern elevation (figure 12 and 13) relating to the workshop are as follows:

- A window made from machine-cut red sandstone forming measuring 0.60m x 0.76m formed from rough hewn sandstone lintel, jamb and sill (figure 14). The wooden window frame had been removed.
- A red sandstone door jamb complete with lintel measuring 0.88m x 1.80m (figure 14). The wooden tongue and groove door was probably not original.

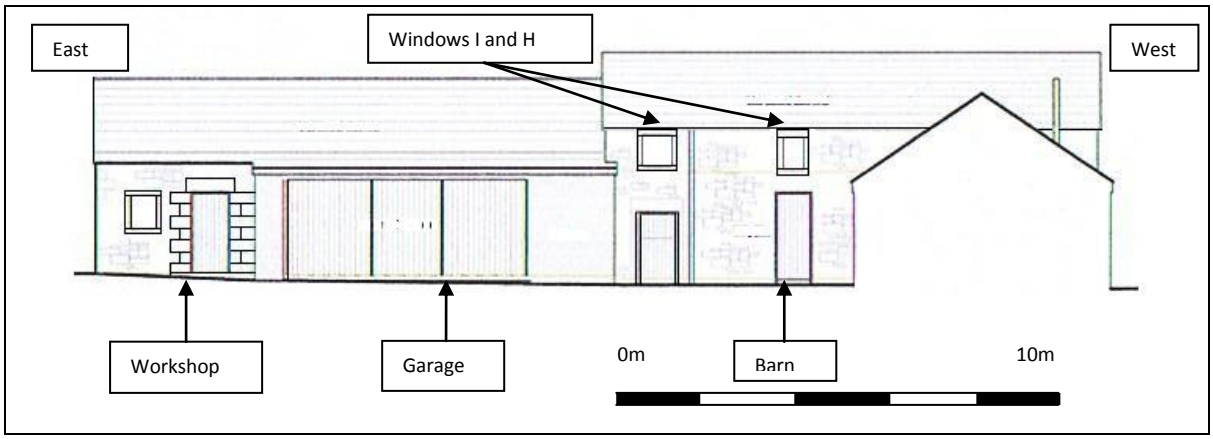

Figure 12. North elevation

Figure 13. North elevation of workshop and barn Figure 14. Window and door to workshop

Details seen within the northern elevation relating to the barn area as follows:

- Window H measuring 0.48m x 0.68m was an attic window formed from rough hewn sandstone lintel, jamb and sill (figure 9). The wooden frame was still extant containing four lights (figure 15).
- Window I measuring 0.56m x 0.83m was an attic window formed from rough hewn sandstone lintel, jamb and sill (figure 8). The wooden frame was still extant containing four lights (figure 15).
- The eastern door measured 0.75m x 1.50m and possessed a large red sandstone block for a lintel with a thin sandstone jamb. The wooden tongue and groove barn door possessed four iron hinges and latch (figure 15).
- The western door measured 2.00m in height and 0.80m in width and comprised of crude jambs and lintel probably a later addition introduced when the adjacent eastern door became the only ingress to the generator room (figure 15).

Figure 15. Elevation showing windows H and I

Figure 16. West elevation

West elevation

The western elevation showing the barn was obscured by a wooden canopy (figure 16) but illustrated randomly coursed sandstone rubble-stone walls.

An attic window (J) measured 0.60m x 0.60m and comprised of a red sandstone surround (figure 17) that was blocked with hardboard.

A ground floor door with wooden surround measured 1.80m in height and 0.75m in width, the door being a later addition (figure 17).

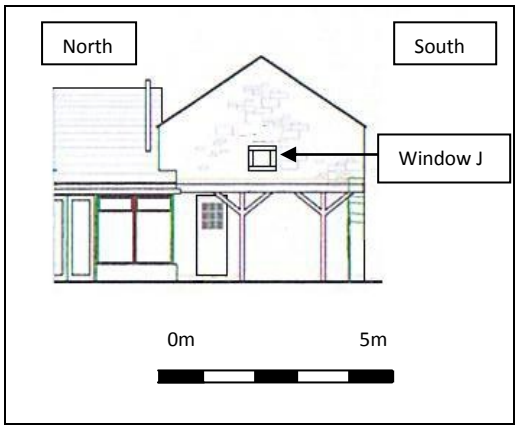

Figure 17. Detail of west elevation

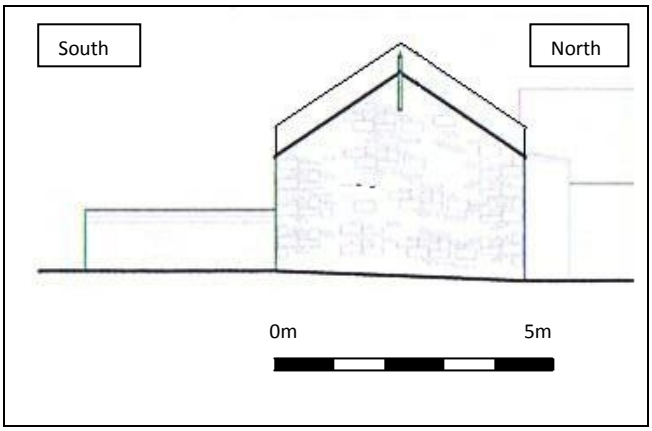

Figure 18. East elevation

East elevation

Comprising of randomly coursed sandstone rubble-stone walls, the eastern elevation had been left plain (figure 18).

6.3 Survey results; the barn (internal)

The barn was the earlier element and pre-dated the adjacent farmhouse as a window (G) measuring 0.60m x 0.80m was blocked off by the farmhouse (figure 19).

The internal area within the barn measured 10.32m x 4.31m and had been divided into two floors.

Figure 19. Blocked window G

Figure 20. Eastern cruck blade within attic

Figure 21. Detail of carpentry, eastern roof truss

Figure 22. Northern rib of Eastern cruck blade

Figure 23. Southern rib of Eastern cruck blade

The ground floor had been divided into four areas by breeze block partitions; a store, two offices and a generator room. The floor was finished in concrete.

The walls forming the ground floor were whitewashed covering any putative architectural embellishments.

The attic possessed a modern suspended floor resting on a breeze block walls whilst the two roof trusses supported the roof.

The cruck blades formed A-frames (figure 20) where the two sides are made from a single piece of timber, split into two so that both sides form "mirror images" of each other. This Saxon technique was common place during the Medieval period and continued beyond that era in areas where wood was scarce and stone plentiful.

The hand-made cruck blades measuring 0.25m in thickness were formed from re-used timbers (figure 23) held in place by pegs and dowels supporting a single cross-beam (figure 21). Purlins rested above the cruck blades whilst a modern roof frame had been nailed to these beams.

The eastern cruck blades (figures 22 and 23) both demonstrated that they reached to the floor and did not rest upon the shell of the building perhaps suggestive of an earlier precursor.

The western cruck blades had been heavily restored with modern timber replacing the upper part of the blade (figure 24)

However, there was no evidence for clay dabbins and these cruck blades and purlins are probably the result of opportune re-cycling from an earlier source and then installed when the barn was built.

Figure 24. Western cruck blades

Figure 25. Blocked doorway within the garage

6.4 Survey results; the workshop and garage (internal)

The attic floor for the barn was accessed from the garage via a flight of seven sandstone steps (figure 28) that blocked an earlier doorway measuring 1.40m x 1.00m (figure 25) which remained unseen within the eastern office of the barn. The steps led to a timber planked door that entered the attic (figure 27).

The cruck blades present in the barn were not evident, the roof resting upon the stone shell of the building and comprising machine-cut timbers and roof joists.

Figure 26. Eastern wall within garage

Figure 27. Western wall within garage

Figure 28. Steps leading to the barn attic

Figure 29. Blocked air vent in the workshop

The garage walls on the eastern (figure 26) and southern elevation have been whitewashed obscuring any delicate architectural features.

The workshop was whitewashed throughout (figures 30 and 31) obscuring any delicate architectural features. However, a blocked air vent (figure 29) measuring 0.46m x 0.23m and 0.26m in depth and a possible protruding beam, beam support or stone “through” (figure 31) measuring 0.18m x 0.10m and 0.07m in thickness were observed on the western elevation.

The workshop possessed a concrete floor and shared the same roof as the garage.

Figure 30. North wall of workshop

Figure 31. Protruding beam or "through"

6.5 Discussion

The large windows in the barn (they appear to be consistent with a mid 19th Century date) would suggest that this annex was intended for domestic use although the lack of a chimney breast and chimney and paucity of any architectural embellishment appears to contradict this assertion.

Renovation had occurred on the barn as a doorway on the south elevation was blocked and replaced by a window, whilst another doorway on the eastern side of the barn was also blocked to be replaced by a flight of steps.

It would appear probable that at this juncture the barn was converted from a single space into two floors probably a change in use from an agricultural barn to domestic use possibly for agricultural workers.

In Cumbria, following the Irish Potato Famine of 1846 there was an influx of migrant unskilled labourers seeking work. Primitive accommodation sometimes known as "Paddy houses" was often provided, comprising of a central stove or range vented directly through the ceiling. Formal chimneys and fireplaces appear to be absent and the internal fixtures were minimal; conditions considered suitable for itinerant seasonal workers but less appealing for established families and local employees.

Unfortunately, due to the portable nature of this occupation, there remains little tangible physical evidence within the archaeological record and few sites have been definitively identified (pers comm. J.Parsons). Gelt House may fall within this category although substantive proof is elusive.

The study building appears to belong to a period of investment in farm buildings initiated during the later 18th Century that lasted to about 1880. This period reflected three distinct phases:

- The second half of the 18th Century when demand increased from industrialising communities and transport improvements facilitated long distance trade
- The Napoleonic War 1793-1815, when there was nationally, a large rise in agricultural production and where protectionism maintained high prices
- 1815-1880 when increased mechanisation and scientific methods increased the efficiency of the Cumbrian farm (Brunskill 2002, 27-28)

Development was enhanced by the effects of enclosure that rationalised farm holdings and scientific improvements in farming that lead to greater productivity and efficiency. This evolution was

reflected in the farm buildings where basic forms developed into specialised structures, culminating in designs of some ingenuity with architectural pretensions and at a considerable cost (Brunskill 2002, 95).

The study barn at Gelt House Farm probably belongs to the third phase of agricultural improvement (1815-1880) and would have probably been used for grain storage before its possible domestic conversion. Most probably the barn was constructed during the early to mid 19th Century as it is featured on the First Edition Ordnance Survey map.

Subsequently, as agriculture declined in importance, the barn took on other uses, mainly for storage of non-agricultural items and for private use in this case as a garage.

7 ARCHIVE

The archive for this project will be deposited with the appropriate archaeological curator, Tullie House, Carlisle. This archive has been assembled in accordance within the protocols of Management of Archaeological Projects (MAP2).

8 ACKNOWLEDGMENTS

I am grateful to Mr Christopher Reed for his assistance with the report and commissioning the work. I would also like to thank Jeremy Parsons for his help and guidance with the archaeological brief and reviewing my provisional draft of this report; the staff of Carlisle Library with my research into the local history of the area and the staff of Cumbria Record Office, Carlisle with the map regression and other documentary research.

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