

**THE BEAN BARN AT LITTLE CANFIELD HALL  
LITTLE CANFIELD  
ESSEX**

**HISTORIC BUILDING RECORD AND ARCHAEOLOGICAL  
MONITORING**



Essex County Council

**Field Archaeology Unit**

February 2011

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Document Ref.	2360rep
Report Issue Date	February 2011
Circulation	Mr James Rea
	ECC Historic Environment Management
	Essex Historic Environment Record

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**THE BEAN BARN AT LITTLE CANFIELD HALL  
LITTLE CANFIELD  
ESSEX**

**HISTORIC BUILDING RECORD AND ARCHAEOLOGICAL MONITORING**

**Client:** Mr James Rea

**FAU Project No.:** 2360

**NGR:** TL 5853 2192

**Planning Application:** UTT/1596/10/FUL & 1597/10/LB

**OASIS No.:** 120207

**Dates of Fieldwork:** 13th January & 12th December 2011

## **1.0 INTRODUCTION**

A programme of historic building recording and archaeological monitoring was undertaken by Essex County Council Field Archaeology Unit (ECC FAU) on an unlisted 16th century barn, commonly known as the 'Bean Barn' at Little Canfield Hall, prior to residential conversion. The work was commissioned by the owner and carried out in accordance with a brief issued by the Historic Environment Management team of Essex County Council (ECC HEM), who also monitored the work.

Copies of the report will be supplied to ECC HEM and the Essex Historic Environment Record (EHER) at County Hall, Chelmsford. The archive will be stored with Saffron Walden Museum. An OASIS online record has been created at <http://ads.ahds.ac.uk/oasis/index.cfm>.

The barn is likely to date to the 16th century and forms a significant part of a multi-phase farmstead that includes two important listed buildings: a large medieval aisled barn and a substantial 16th-century farmhouse, Little Canfield Hall, as well as many other notable structures connected with post-medieval farming. The Hall and farm buildings stand within the remains of a large moated enclosure believed to date to the 12th or 13th century (HEM 2010) and formerly occupied by an earlier house, elements of which were incorporated into the barn and existing Hall.

The importance of recording historic farm structures prior to conversion is outlined in *Living Buildings in a Living Landscape: Finding a Future for Historic Farm Building* (English Heritage 2006) and *Research and Archaeology: A Framework for the Eastern Counties* (Medlycott 2011).

## **2.0 BACKGROUND**

### **2.1 Site location and description**

Little Canfield Hall lies to the north of the hamlet of Canfield End at TL 5853 2192. Access to the hall is by a private road off the B1256, to the west of Great Dunmow (fig. 1). The barn is part of an interesting and extensive multi-phase farm complex, dating from the 14th century to the present day and is the only building subject to conversion. The structure lies on the eastern side of the complex just to the south of the 16th century (or earlier) Little Canfield Hall, the grade II listed farmhouse (LBS 412029). On the western side of the yard is a late 14th century aisled barn, which is grade II\* listed (LBS 412029). All other buildings on the site are curtilage listed. Further to the west are the remains of the medieval moat (fig. 1), the infilled eastern arm of which is likely to lie in the vicinity of the bean barn

The barn has evolved over three main periods, which are indicated in figure 1

- Barn 1 (16th century): the main historic part of the barn, incorporating reused medieval timbers believed to be from the original hall house.
- Extension 2 (17th century): a one-bay extension on the southern end that was rebuilt in the 19th century
- Barn 3: a mid 19th century three-bay extension, refurbished in the late 19th century.

The Hall still operates as a working farm although much of the day-to-day requirements are now fulfilled by modern purpose-built structures that encroach upon the former yard area west of the barn (fig. 1). The bean barn is one of several timber-framed and brick farm structures and retains much of its historic character both externally and internally. The inclusion of earlier timbers adds further interest to the study.

The name of the bean barn is relatively recent, it having been used for bean dressing about 70-80 years ago (James Rea pers. comm.). Some of this machinery survives in the newer part of the barn (extension 3) and is included in some of the photographic plates.

## **2.2 Planning background**

A planning application for conversion of the barn to residential use was validated by Uttlesford District Council (UDC) in August 2010 (UTT/1596/10/FUL & 1597/10/LB). Mindful of the impact of conversion on the historic integrity of the building and the farm complex as a whole and historic importance of the medieval moated site, ECC HEM advised UDC that a full archaeological condition for building recording and archaeological monitoring should be attached to the planning consent, based on advice given in Planning Policy Statement 5: Planning for the Historic Environment (CLG 2010).

## **2.3 Historical background & development**

Cartographic and documentary research was undertaken at the Essex Record Office (ERO), Chelmsford, to understand the origins and development of the farm, and in particular the bean barn. List descriptions and secondary sources were also studied. The results are presented below with accompanying ERO references. Historic map extracts included in the report as figures 2-5 have been enlarged to provide greater clarity.

The origins of Little Canfield Hall are likely to date back to at least the 12th or 13th century when the moat was constructed (HEM 2010). The moat is evident in part today on the west side of the aisled barn (fig. 1). The eastern side of the moat had been filled in by the late 16th century (fig. 2), but is perhaps represented, in part, by the former trackway on the eastern side of the bean barn recorded in 19th-century mapping, particularly in figure 4.

A manor house and farmstead occupied the area inside the moat in the medieval period, when it was one of four manors in the parish (Morant 1763). Apart from some timbers in the house that are believed to date from this time (J. Rea pers. comm.), the only relic from the medieval period is the aisled west barn, which is believed to date to the late 14th century (LBS 412029) and is still in use by the farm.

Various families owned the hall in the medieval period, culminating in the Fitch family c.1450 (Morant 1763). From the Elizabethan period onwards, the manor was under the ownership of the Maynard family of Easton Lodge.

According to the List description (Listed Buildings Online), the existing timber-framed farmhouse, Little Canfield Hall, was built in the 16th century (LBS 353518), replacing the old medieval hall house, which was a common practice of the time on the richer estates. Some of the medieval timbers were reused in the bean barn, which explains its crown post roof and smoke-blackened rafters, as well as an earlier truss that is similar to some of the trusses in

the main house (J. Rea pers. comm.) and shares certain aspects in common with the 14th-century barn.

Judging from its construction, the bean barn was probably built in the 16th century but it is difficult to confirm this through contemporary mapping. The 1590 Survey of Little Canfield Manor (fig. 2) indicates the house with an enclosed yard in front and the aisled barn, part of a longer range, sited beside the moat. The bean barn is believed to form part of the eastern side of the yard (circled), drawn much farther to the west than its real position, despite the fact that the moat, house and other barn are all shown in their correct locations and proportionately accurate. None of the barns are shown on the Chapman and Andre map of 1777 (sheet 7, not shown), which illustrates the unreliability of early maps in providing factual detail.

A single-bay extension (2) was probably added to the south end in the 17th century, based on its surviving structural elements.

The Little Canfield tithe map of 1842 portrays the barn (buildings 1 and 2) with a porch facing onto the fields (fig. 3), added after the barn was constructed. The barn forms part of a much larger 'improved' farmstead, connected to a diagonal shelter/cart shed to the north and a large square structure to the south with stock yards to the west (fig. 3). The accompanying tithe award (D/CT 68A) mentions a largely arable farm with a holding of over 150 acres. The farm is owned by Viscount Maynard of Easton Lodge and tenanted by John Barnard who lived at the house but also owned at least 50 acres of grassland by the church, and land to the west of the village.

By the time of the first edition Ordnance Survey map of 1878, further structures had been added on the western side of the yards and the square structure seen on the previous map has been replaced by barn extension 3. Two feed sheds or loose boxes project from the west side of the extension and there is an open-sided cattle shed to the south (fig. 4).

By the end of the 19th century (second edition OS, 1897) the bean barn has lost its porch and a new western range has replaced the two sheds from the previous map (fig. 5). The western wall of barn 3 was rebuilt after the sheds were removed and the midstrey rebuilt in barn 1 after the loss of the eastern porch. The roof over extension 2 and barn 3 was refurbished with new machine-sawn timbers.

Part of the farmland was sold off in 1912 by the Countess of Warwick (SALE A280).



In the modern period the bean barn was used for drying and dressing beans. Today, many elements of the historic farmstead survive around the western yard but the Victorian structures around the eastern yard have been replaced by large pre-fabricated modern farm structures (fig. 1).

### **3.0 OBJECTIVES**

The purpose of the historic building record was, as outlined in the brief, to provide a detailed record of the barn in its present state prior to conversion.

As part of the work, the record was required to address the following: plan form of the site, materials and method of construction, dating and phasing, function and internal layout, fixtures and fittings, additions and modifications and the context of the farm within its contemporary landscape.

Archaeological monitoring works were directed to provide evidence for the earlier origins and development of the site, particularly any buildings, yard surfaces and floors associated with medieval and later phases of use around and inside the barn and any evidence of the eastern arm of the moat.

### **4.0 DESCRIPTION OF FIELDWORK**

The barn was recorded using drawings (floor plans, sections and elevations) supplied by the architects. A block plan was produced to show the location of the bean barn in relation to other farm structures that broadly outlines the chronology of the barn (fig.1).

A series of photographs (digital and 35mm black & white print) were taken to record the barn internally and externally. Specific shots were taken of any areas of important architectural detail, fixtures or fittings. External shots were impaired slightly by the proximity of modern structures on the western side of the barn and some of the internal framing was obscured by farm machinery and other articles kept within. Therefore internal photographs of the timber frame were also taken after external cladding had been removed during the monitoring phase. A representative selection of photographs is reproduced at the back of the report as plates 1-18. The remainder can be found in the archive.

## **5.0 BUILDING DESCRIPTIONS**

### **5.1 General description**

The bean barn is a linear nine-bay timber-framed structure standing on the east side of the farmyard, providing easy access between yard and fields. The building is almost 30m long and just over 5m wide, equivalent to six rods by one. The north end is occupied by the original barn, barn 1, followed by a short extension to the south (2) and barn 3, which is essentially a longer extension to the main barn. Each element is clearly defined by its construction, but it is difficult to tell the three building phases apart externally.

The barn has a half-boarded appearance, with the lower part clad in weatherboarding and the upper part re-rendered in cement on wooden laths traditionally used for lime render. There is evidence to suggest that the wall-framing of the early barn was exposed and that its present appearance dates to a later phase. The walls are set on a brick plinth constructed from 8¾ - 9 inch English-bonded soft red bricks of probable 19th century date (Ryan 1996). The peg-tile roof has a pitch of 45° and swept gables either end that are half-boarded up to the eaves.

Main entry into the barn is now through the cart entrance on the western side, though there is cartographic evidence for a porch, itself a later addition, on the east side that was removed in the late 19th century. At the southern end of 19th-century barn 3 is a modern sliding doorway with a ramp for vehicular access. Other smaller doorways on the long elevations appear to be modern, apart from a door in the south-west corner that connected with the former stockyard. Windows are located on the western side only and are modern in date, but there is evidence that the original barn was lit by mullioned windows.

Externally there are two 20th century attachments (shed and bean silo) connected to bean processing inside the barn 3 extension, for which machinery and fittings remain inside.

In the following text, the barn is described externally as one building and internally by its three distinct elements.

### **5.2 External description**

The **east elevation** (plate 1) faces onto the fields and exposure to the elements has meant that some of the heavy cement render on the upper parts of the walls has detached itself from the laths. Weatherboarding at the base of the wall has been rendered over to protect

the insides from damp, probably executed when the concrete silo was built up against barn 3. One historic element here is an old pitching hatch above the silo into barn 3 (plate 1).

The north end of the elevation, representing barn 1, displays no apertures for windows or doors although internally there is evidence for two mullioned windows on bays 3 and 5 (fig. 6), one of which was later enlarged to form a larger window aperture that is now blocked. The mullioned windows pre-date the construction of the porch on bay 3. When the porch was removed in the latter part of the 19th century the wall here was rebuilt and the present weatherboarding added.

The **west elevation** (plate 2) faces onto the yard and contains the cart entrance, minus the doors, whose pintel hinges remain. The doorway is positioned towards the north end of the building, broadly central to the original five-bay barn. The doors and surrounding frame were a later insertion and contain grooved timbers fitted to the jambs for the former door leaf, facing the stock yard. Empty outer sockets suggest some evidence for a porch on this side, but others suggest there was a wall here originally, or more likely a low doorway. Since the framing on this bay is largely rebuilt, and the bay posts here reused, it is difficult to confirm either, though the presence of a porch here would seem unlikely given the existence of the eastern porch in 1842 (fig. 3). The plinth is higher at this end where the ground slopes away from the field at the back to the yard, which appears to be part of the natural landscape rather than evidence for the former moat. The ground level here is considerably lower than the barn floor, indicating the extent to which the former yard has been worn away.

Further along to the south is a blocked doorway that led into the original end bay, which has been weatherboarded over and rendered on the inside (fig. 6). There is evidence for a small mullioned window below the eaves in this bay (fig. 8).

The join between barns 2 and 3 can be seen by a reduction in plinth height by 0.4m at the south end of extension 2 and a corresponding break in the brickwork, which indicates the plinth under barn 1 and 2 was inserted before barn 3 was constructed and that barn 3 was built upon its own plinth. This is best seen internally in figure 7.

A second doorway, located in the first bay of barn 3 (B7) is blocked with corrugated iron sheeting. Above it is an inserted early 20th century iron-framed casement window (plate 2). Attached to the end bay of barn 3 (B9) is a small modern timber and corrugated iron shed of little historic interest (plate 3). The end door beside it into the southern bay is an original

feature in typical ledged, braced and battened form with leap boards either side, dating from when animals were kept in the yard. There is a small cat hole at the base (fig. 8).

The **north and south elevations** have weatherboarded walls and rendered gables. The south elevation, which is rebuilt, contains a low access door and ramp for vehicles and sliding modern doors (plate 1). Cement render covers the brick plinth and there is replaced pine boarding above the door. The north elevation (plate 2) has also been re-boarded.

### **5.3 Internal descriptions**

The barn was quite dark inside but this was compensated for by the existing electric lighting. It was essentially redundant at the time of the survey, with the early barn (buildings 1 and 2) used for storing old timbers and farm machinery and the later barn (3) still containing much of its modern bean processing machinery. Throughout the barn, the floor was concreted and the stud walls rendered over at the base. Lath and plaster remained on the upper register in most bays, unaffected by later developments, and ivy had penetrated through the east wall of barn 1.

Bays and trusses referred to in the text are indicated in figures 6-8 as B1-9 and T1-7, where appropriate.

#### **5.3.1 Barn 1**

Barn 1 contains a certain amount of reused timbers from the old hall. These are quite easy to identify since their build quality is higher than the more utilitarian barn construction. In particular, this includes truss 5 and the smoke-blackened roof caused by fires in the open hearth of the hall. There is a lesser degree of blackening to some of the main timbers, such as tie beams and wall plates, which also suggests reuse.

The original barn (plates 4 & 5) is 15m long and comprises five bays of variable width. Bays 2 and 5 (B2 & B5 in fig. 6) are 3.1m wide and the midstrey (bay 3) is slightly wider at 3.6m, which is usual to accommodate carts. Bays 1 and 4 are considerably narrower at 1.6m and 2.3m respectively.

Main framing is built from fully-pegged oak trusses incorporating c.20cm<sup>2</sup> timbers, square cut and slightly chamfered. Wall posts defining the bays in all but medieval trusses 2 and 5 have a mixture of tapered and flared jowled heads, some of which are quite sharply cut rather than the more aesthetic rounded profile. Wall plates are consistent with the main build and vary in length between one and two bays, joined by edged-halved and bridled scarf joints, a later

medieval form of joinery ranging in date from the late 14th century up to c.1650 in Essex (Hewett 1980). The direction of the joints show the barn was built from north to south. Two were observed on the east wall (fig. 7 &), whose particular form, with long halvings and proportionally short bridlings, is the more common. The joint in the barn is quite crude and more likely to date from the later phase rather than being of medieval origin, being pegged along the edge and keyed through the face (plate 7). The 'key' helped lock the joint together, particularly where the wall plates are supported only by studwork rather than placed over the bay post, which is the case here. The west wall is built from three lengths of wall plate, but the plate over the cart doorway was replaced with a modern lap-jointed version when the midstrey was rebuilt in the late 19th century (fig. 8).

The sill beams, resting on the later brick plinth, were obscured in part by modern cement render but were more evident once the barn had been stripped-out. They comprise long lengths of quite ancient timbers some of which may be original, though others, lacking pegholes, were replaced when the plinth was added, sometime before barn 3 was built.

Bay 1 probably incorporates the reused remains of an end wall of the hall, in truss 2 (T2 in figs. 7 & 8). The truss, which is now open as part of the barn, contains empty sockets for a former midrail and other sockets for studwork on the tie beam and roof collars, that conform with the termination of the crown plate in the roof (plate 14). In addition, the truss 2 bay posts have well-formed jowled heads and substantial four-pegged sockets similar to truss 5, that suggest medieval origins as in-situ corner posts of the earlier building.

Similar redundant sockets for timbers on trusses T3 and T4, suggest the midstrey was formerly enclosed by timber stud wall partitions (fig. 6 & plate 4), defining different areas of barn use, most likely for animals and crops, though there are no contemporary fixtures and fittings associated with function. The walls extended up to the roof collars to allow space at the top for ventilation. After the walls were removed, long, slightly curved braces double-pegged to post and tie beam were added to provide support (fig. 8), which are absent in the other bays. In the case of T6, the original south wall of barn 1 that was removed when the barn was extended (2), the braces were replaced with slightly serpentine ones (plate 5), often associated with 17th-century structures (Hewett 1980).

Truss 5 (fig. 11) exhibits a higher standard of carpentry akin to the crown post roof to which it undoubtedly belonged. Its quality suggests it was an open truss designed for display, quite likely as a feature of the open hall itself, which is confirmed by the high degree of smoke-blackening. The truss incorporates heavy 24cm<sup>2</sup> oak posts, fine gently-swelling ogee jowls

and heavy four-pegged curved braces (plates 5 & 6). Though probably contemporary, the timbers in truss 2 have smaller scantling and a simpler form and were not intended for display in the hall.

Wall framing survives well, and few studs are replaced, though several are reused or turned, especially in the lower register, from when the sills were replaced. The walls are divided into two parts, or registers, by thick midrails, double-pegged to the bay posts. Studwork is consistently pegged to sill, rail and plate and is quite large, commonly 6-7 inches wide, 4.5 inches deep and broadly in-line between registers. There are cut and chisel marks on the sides for wattle staves. Since the bay width varies so much, so does the amount of studs per bay, but spacing is consistent at c.0.5m, which is fairly wide and more indicative of post-medieval construction. Nailed to the insides of the studs are thin, slightly-curved, tension braces, falling from wall plate to post. These are visible on the end bays (apart from bay 1, west), bay 4 south and in the north wall (fig. 9, plates 7 & 8), but would not have been seen externally. Above the midrail, the areas between the studs are plastered, but are not plastered below it (plate 5).

Bay 3 east (midstrey) was completely rebuilt in machine-sawn timber when the east porch was removed in the late 19th century, which was probably also when the cart doors were inserted on the west side (fig. 7 & plate 8). Narrow primary-braced machine-cut studs were added between the existing studwork at the same time, whose cross-shaped bracing matches the rebuilt bays on the west side of barn 3, which are likely to be contemporary (figs. 7-9).

The barn was lit by small mullioned windows set high up on the walls; two on the east wall and one on the west wall (fig. 6). Another was added at the south end when extension 2 was constructed. The barn would also be lit by rush lights, and several timbers display burn marks from their use (fig. 9 & plate 9). Each window had crude 2-inch diamond-shaped mullions forming narrow lights that are now evidenced by empty sockets. The window on the east wall of the midstrey (bay 3) has left the impressions of three mullions for five narrow c.10cm lights on the wall plate soffit. This window probably went out of use when the porch was constructed. On the same side, the window in bay 5 had wider c.25cm-wide lights. This window was enlarged later on by cutting back the wall brace and inserting a new sill (fig. 7, plate 10). The window has since been removed and the opening blocked-up and plastered over. No original sill remains to either of the east wall windows to gauge their depth, but evidence on the west wall may give a clearer indication of their original extent and form. Here

in bay 5 are the remains of a small two-light square window that retains the impression of a pegged sill between the two studs (plate 11), providing dimensions of 0.5 x 0.5m.

Carpenter's marks are scribed rather than scored, but any pattern was difficult to determine, especially on reused timbers. One of the most prominent is on the face of the T3 tie beam, representing a tagged number 13 (fig. 6 & plate 12).

One of the more interesting items of farming equipment in the barn was an old horse-drawn seed drill, located against the east wall of bay 4 (fig. 1 & plate 13). It would appear that the front part of the machine (not viewed) prepared the ground and sowed the seed and the plate at the back covered it up. Cogs linked to the wooden wheels drove the seed shaker that could be adjusted by levers on the sides

The crown post roof is well-preserved and largely intact apart from over the midstre where the rafters have been replaced. The roof is robust and well-built, providing valuable information on the type and size of the building from which it came from. There is little doubt that the roof is contemporary with truss 5. There are five crown posts, situated in the centre of each tie beam with lateral blades extending up to the crown plate below the collar (figs. 11 & 12 & plate 14). Additional machine sawn collars and purlins have been added to all but truss 5 and ridge plates added where the medieval roof joins the late 19th century one, but this does not detract from original form of the roof.

The roof frame extends almost the full length of the barn and clearly terminates at the north and south ends, trusses 2 and 6, which represent the original gable ends of the medieval building, the length of which would be 13.2m and of identical width to the existing barn. At both ends the walls are shown by empty stud sockets to the roof collar and tie beam and the unsupported crown plate extending beyond the ends. Plate 14 shows the north end of the roof and former gable end. Beyond it, additional reused medieval rafters continue up to the north wall of the barn in bay 1, but minus their collars, which have been replaced by short 19th century purlins.

### **5.3.2 Extension 2**

The southern wall of the original barn was removed and a single bay extension added a short while after the barn was built. Matching the existing barn, the extension had an exposed frame and daubed panelling and a narrow mullioned window at the southern end. Unfortunately nothing remains of the original roof. Many of the characteristics are the same, though there are some important differences that indicate a later construction date, probably

some time in the 17th century. Much of this bay was rebuilt when it was incorporated into barn 3 between 1842 and 1875 and the existing roof probably dates to the late 19th century, when barn 3 was partly rebuilt.

The extension is 2.5m-long and of equal width to barn 1. Its midrail is pegged onto the end of the main barn and it shares a common ground sill with the main barn, which dates to when the brick plinth was inserted in the 19th century. The wall plates are contemporary with barn 3, having been simply lapped over the ends of the barn 1 wall plates (figs. 7 & 8, plate 11).

Much of the wall-framing has been replaced and the only historic studs to remain are concentrated on the lower register (figs. 7 & 8). Few are pegged to the frame, but otherwise their size and spacing are the same as barn 1. Additional studs have been inserted between the historic ones. Tension bracing in the walls is external rather than internal, designed to be seen from the outside. One interesting point is the reuse of a former aisle tie as a midrail in bay 6 west (fig. 8).

The southern window survives only as a roughly-cut diamond socket on the wall plate soffit of T6, between the former middle stud and east brace (fig. 6).

### **5.3.3 Barn 3**

Barn 3 (plates 15 & 16) is the latest component of the barn, built some time between 1842 and 1875 in primary-braced construction. Parts of the barn plus the roof were rebuilt in the late 19th century, or perhaps later. At the time of the survey it contained post-war machinery and machine bases associated with bean processing, a tractor and other equipment.

The barn originally comprised three quite regular c.5m-long bays represented by narrow machine-sawn tie beams strapped to the bays posts, further divided by secondary tie beams on the half bay. It was originally attached to the south end of extension 2 by its long wall plate and latterly a secondary midrail bolted from the end post of extension 2 and bay B8 (figs. 7 & 8). This end of the barn was divided from the older part by a timber partition at truss T5, the upper part of which still survives, separating the bean-processing function from the rest of the barn (plate 15, top).

Original built elements comprise 16cm-wide bay posts and midrails with walls formed from straight 4-inch-wide studwork on the lower register and slightly arched and quite slender primary-braced studwork on the register above. The studs are pegged on the lower register



but only trenched on the upper one and nailed onto pegged braces. Some additional studs have been added on this level. Parts of the lower register are obscured by later render.

The east wall (fig. 7, plate 16, right) is the best-preserved, though some of the studwork and sill on the lower register has suffered from modern insertions, mainly the bean silo (fig. 6). The least-disturbed upper register contains an original pitching hatch (plate 16). Bays 7 and 8 on the west wall were rebuilt in machine-sawn primary-bracing (plates 15 & 17) in the late 19th century or later and the only original timbers to remain are the sill, midrail and studwork on the lower register and one of the braces in bay 9 (fig. 8). There is a ledged, braced and boarded side door in this bay leading into the farmyard.

The south (end) wall (fig. 10) was probably rebuilt in the 20th century to incorporate large modern sliding doors contemporary with its bean processing function.

The collar purlin roof is of late 19th century date and built of machine-sawn timber. The main trusses have bolted iron king rods between tie beam and ridge plate, and raking queen struts either side (plate 17).

## **6.0 ARCHAEOLOGICAL MONITORING**

Inside the barn the modern concrete floor was removed onto an earlier bitumen-type floor, probably Victorian, that stood upon the natural chalky boulder clay. Test-pits were dug by the contractors against the eastern wall (bay 3) to establish depth of footings (0.7m) and through the southern end wall plinth between extension 2 and barn 3 (plate 18), where it was only one brick deep. No archaeological features or deposits were observed or finds collected. On the basis of these results and with the agreement of the HEM officer, it was decided that further monitoring works covering excavation of underpinning trenches was unnecessary.

## **6.0 DISCUSSION**

Barn 1 represents the original barn, probably constructed in the late 16th century. Its outward appearance was fairly typical of barns at the time, with exposed timbers and wattle and daub panels, probably with a tiled roof like the other farm buildings here. The barn was lit by mullioned windows on the long elevations, and internally by rushlights. The interior comprised five irregular-sized bays, divided either side of the central midstrey into different

functional areas (e.g. cattle and hay/feed store) by internal wall partitions. Like the Listed medieval barn on the opposite side of the farmyard, it was not built with a porch, nor with large cartdoors, which were added in the 19th century. Main crop storage was undertaken by the much larger medieval barn.

The extensive reuse of medieval timbers aside, dating of the early barn through construction techniques suggests a late 16th century date. The jowled bay posts, the form of scarf joint, the slightly curved internal bracing and substantial studwork with good pegging are all good indicators, though it is well-known that traditions in carpentry continued in farm buildings for much longer than domestic structures. However, the general quality of the carpentry is quite crude and it is interesting to contrast the level of workmanship with the medieval elements in the barn, medieval truss T5 and the contemporary crown post roof, which are believed to belong to the earlier, medieval predecessor to the current hall. It would appear that the end walls of the hall survive in part as truss 2 and truss 6, which respect the extent of the crown post roof. These earlier elements appear to have been reused from a 13m-long in-line open hall house, of which the elaborate open truss T5 was probably a showpiece in the hall itself. It is interesting to note that other such timbers are said to exist in the present Little Canfield Hall, suggesting either that part of the medieval building was retained within the new hall or that both hall and barn contain reused timbers from the same source, which would support the view that the two are contemporary. However, it is open to speculation whether the barn is shown on the 1590 estate map.

Extension 2 is much the same as the earlier barn in its construction, but has external bracing and more conservative pegging to the studwork, confirming a later date. Much of this bay has been replaced, particularly the roof. Barn 3 represents a further extension to the barn during the middle part of the 19th century, refurbished in the latter part of the 19th century and again, more-latterly in the 20th century to incorporate bean processing facilities. The present plaster and half-boarded exterior may be contemporary with the addition of barn 3, but is likely to be earlier than this since it is an historic Essex form.

Map evidence and observation during archaeological monitoring suggests the in-filled eastern arm of the moat lies just to the east of the barn, outside of the area investigated.

## **7.0 CONCLUSION**

The farm at Little Canfield Hall has origins in the medieval period as a moated manorial site, but like many such sites in Essex the house was rebuilt in the post-medieval period. In this case the hall was probably rebuilt by the Maynard family of Easton Lodge who acquired the farm in the Elizabethan period, a time of great prominence and wealth for the country. Much of the existing moat was probably in-filled at the time.

The bean barn was probably built at the same time as the present hall, and combines vernacular character with good-quality craftsmanship. It has architectural significance and group value as one element of a large, well-preserved multi-phase farmstead dating from the 14th century to the present day, representing the higher end of post-medieval Essex and East Anglian farm buildings. Part of the medieval heritage of the site is displayed to great effect inside the barn in its reused medieval open truss and crown post roof belonging to a probable in-line hall house believed to be the earlier Little Canfield Hall. The timbers display a high level of carpentry skill typical of the medieval period. Such a high level of reused quality timber is seldom seen in buildings and provides important information on the size and form of the old hall house, elements of which are believed to survive in parts of the current 16th century Hall.

## **ACKNOWLEDGEMENTS**

Thanks are due to James and Suzi Rea for commissioning the works and for supplying drawings used in the survey and this report. The assistance of staff at the Essex Records Office is also acknowledged. Fieldwork, recording and photography were undertaken by the author. Illustrations were prepared by the author and produced by Andrew Lewsey. The project was managed by Adrian Scruby and monitored by Richard Havis of ECC HEM, on behalf of the Local Planning Authority.

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## **Appendix 1: Contents of Archive**

**Site name: The Bean Barn, Little Canfield Hall, Essex**

**Project no. 2360**

### **Index to the Archive**

Document wallet containing:

**1. Research Archive**

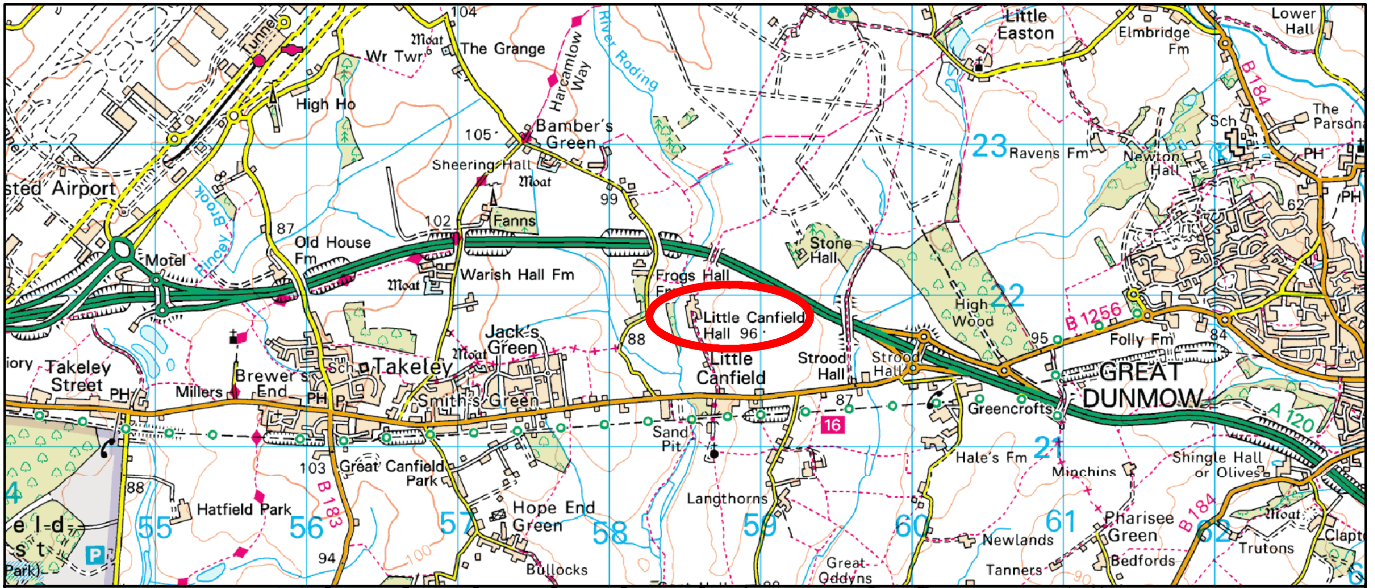
- 1.1 ECC HEM design brief
- 1.2 ECC FAU written scheme of investigation (WSI)
- 1.3 Two copies of the client report (one unbound)
- 1.4 CD containing digital images, pdf-formatted report, architects drawings, etc

**2. Site Archive**

- 2.1 Photographic registers
- 2.2 Photographic record (colour digital & 35mm monochrome prints)
- 2.3 Site notes & annotated survey plans

## Appendix 2: EHER Summary Sheet

<b>Site Name/Address:</b> The Bean Barn at Little Canfield Hall, Little Canfield	
<b>Parish:</b> Little Canfield	<b>District:</b> Uttlesford
<b>NGR:</b> TL 5853 2192	<b>Oasis ref.:</b> 120207
<b>Type of Work:</b> Building recording & archaeological monitoring	<b>Site Director/Group:</b> Andy Letch, ECC FAU
<b>Dates of Work:</b> February & December 2011	<b>Size of Area Investigated:</b> N/A
<b>Curating Museum:</b> Saffron Walden	<b>Funding Source:</b> Mr James Rea
<b>Further Work Anticipated?</b> No	<b>Related LBS Nos.:</b> Farmhouse (LBS 412029) & medieval barn (LBS 412029).
<b>Final Report:</b> Summary in EAH	
<b>Periods Represented:</b> Medieval & post-medieval	
<p><b>SUMMARY OF FIELDWORK RESULTS:</b></p> <p>A programme of building recording and archaeological monitoring was undertaken on a large post-medieval barn, known as the Bean Barn, at Little Canfield Hall prior to residential conversion. The barn forms part of a multi-phase farmstead that includes a Grade II*-Listed late 14th century aisled barn and II-Listed 16th-century farmhouse as well as several other historic farm structures as part of a working farm. The farm lies within a large medieval moated site that still retains the western arm of the moat. The majority of the moat had been filled in by the end of the 16th century. Only the bean barn is to be converted.</p> <p>The barn in its present form is 9 bays long with a weatherboarded/plaster exterior and was built in three stages. Barn 1 probably dates to the late 16th century, is of 5 bays and linear in form. Originally the exterior had exposed timbers with wattle and daub panels, small mullioned windows on the long sides and a tiled roof. The frame incorporates at two medieval trusses and a contemporary soot-blackened crown post roof, both well-preserved, that are believed to originate from a medieval hall house. According to the client, similar truss posts remain inside the present Hall. Extension 2 is a single-bay that shows different build characteristics that are probably 17th century in date. Barn 3 is a 19th century addition to the south. Large parts were rebuilt in the late 19th century and possibly also in the 20th century, when this part of the barn was used for bean processing. Some post-war equipment remains inside.</p> <p>The Maynard family of Easton Lodge acquired the hall in the Elizabethan period when the barn was constructed and the farm remained with the estate until the early 20th century. The barn is important as part of a group of medieval and post-medieval farm buildings and reflects the vernacular style of the county and region. The level of intact reused medieval timbers incorporated in barn 1 suggests the original hall from which they originate was a 13m-long in-line hall house.</p>	
<b>Previous Summaries/Reports</b> None	
<b>Author of Summary:</b> Andrew Letch	<b>Date of Summary:</b> 8th February 2012



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Fig.1. Site location and block plan

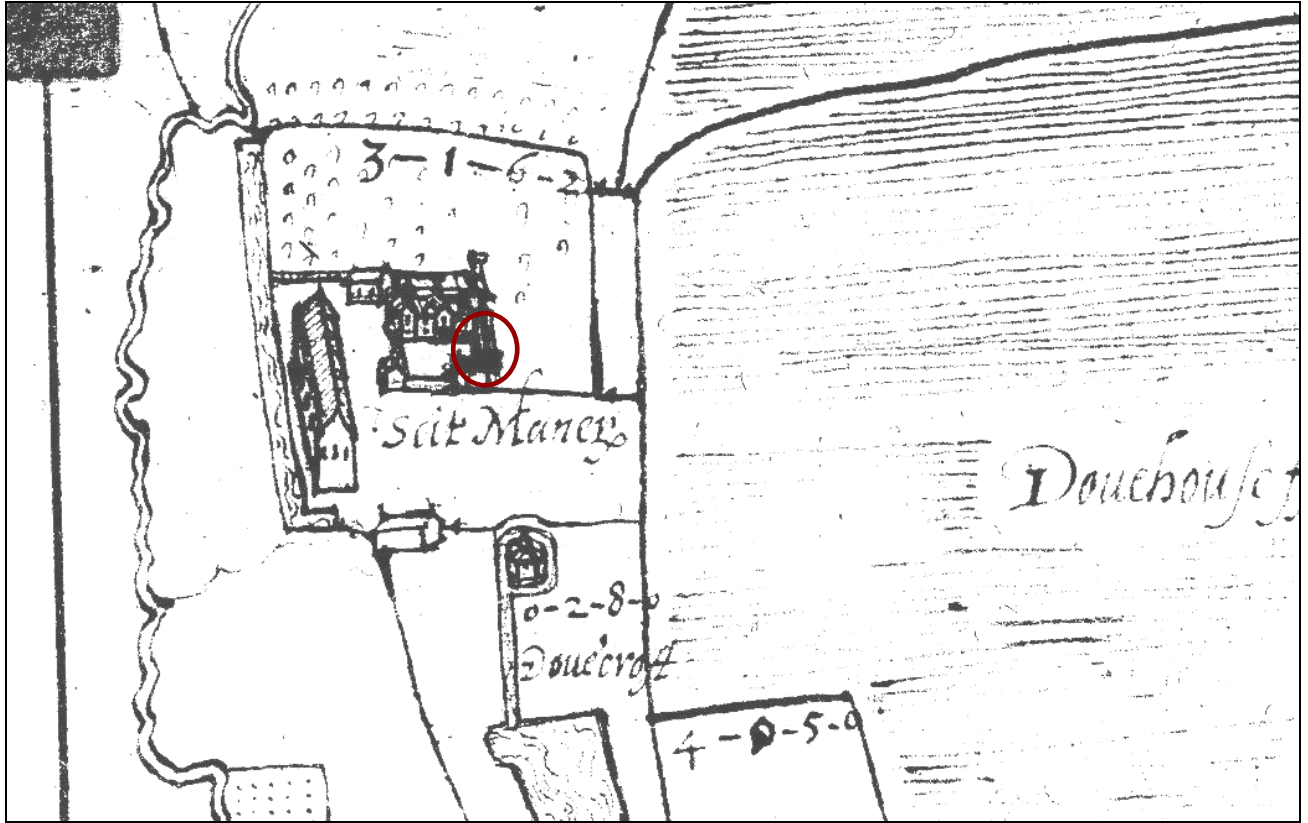


Fig. 2 Survey of the Manor of Little Canfield, 1589-90 (D/DHt M20)

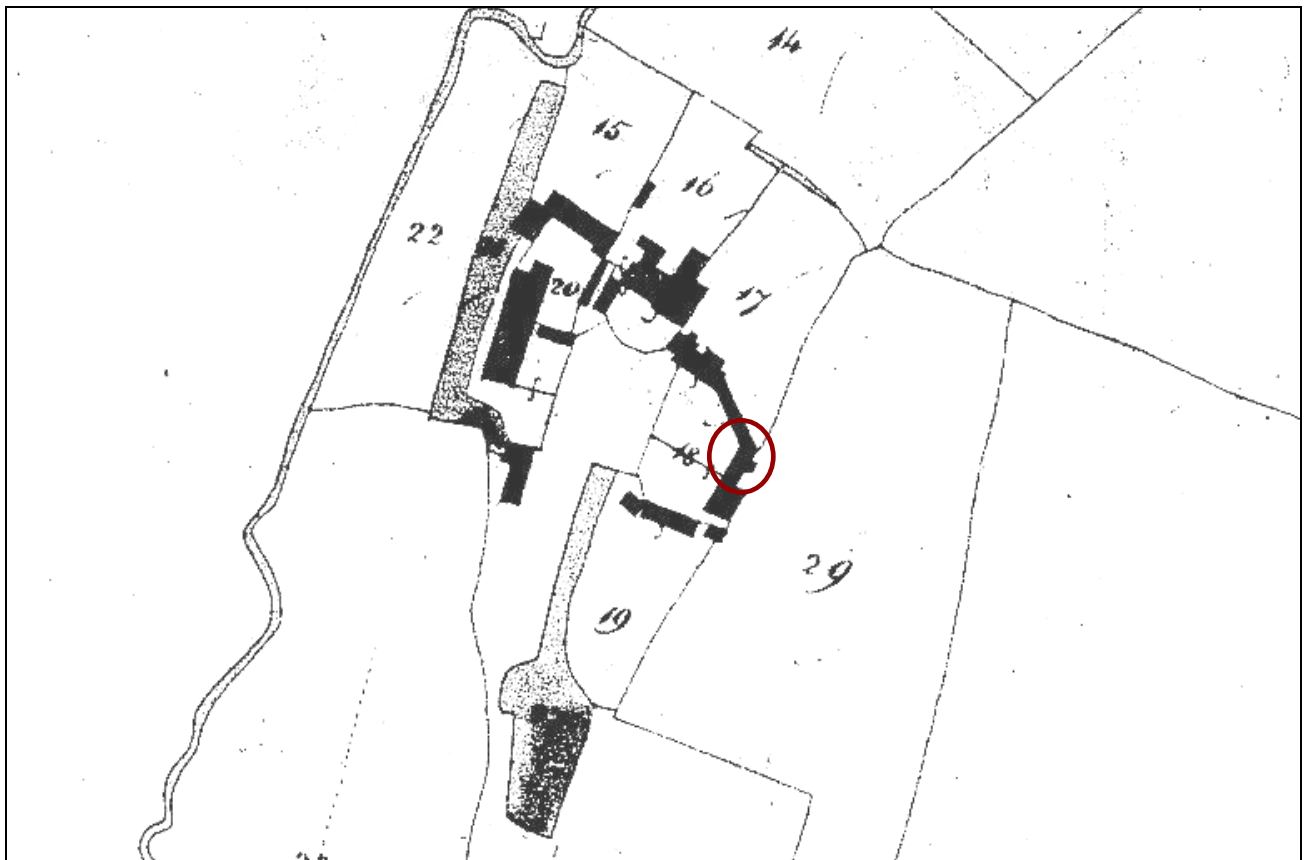


Fig. 3 Little Canfield tithe map, 1842 (D/CT 68)



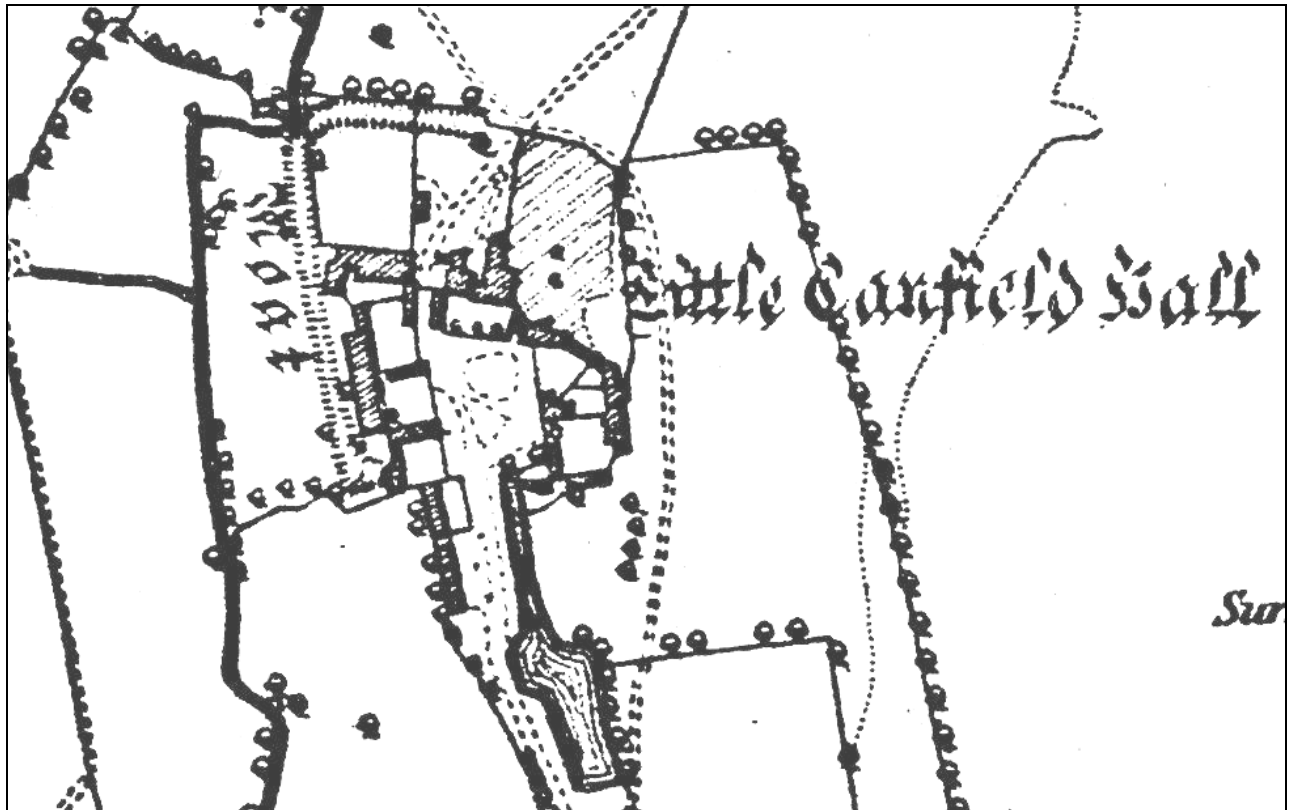


Fig. 4 First edition 6" OS map (sheet 23), surveyed 1875-6

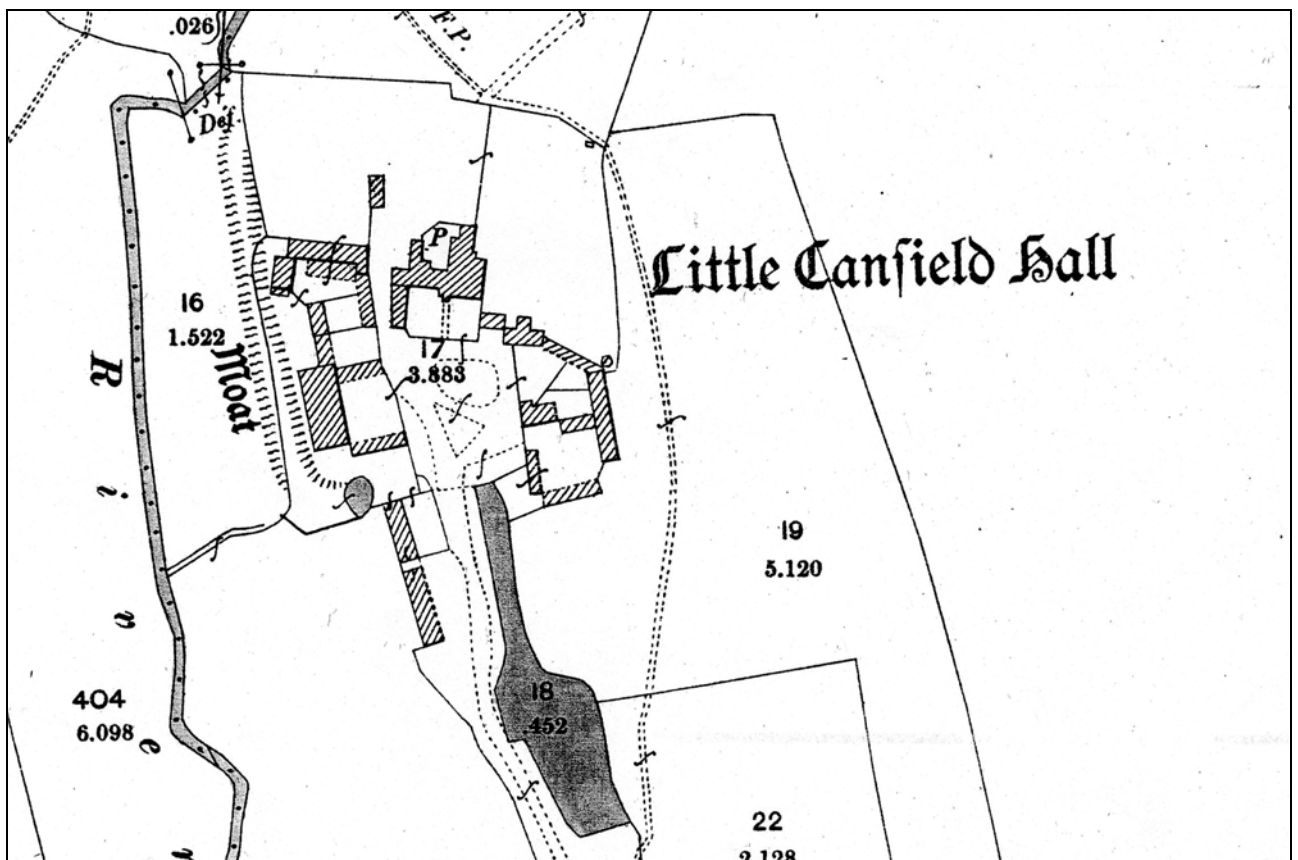


Fig. 5 Second edition 25" OS map, 1897 (sheet 23/15)

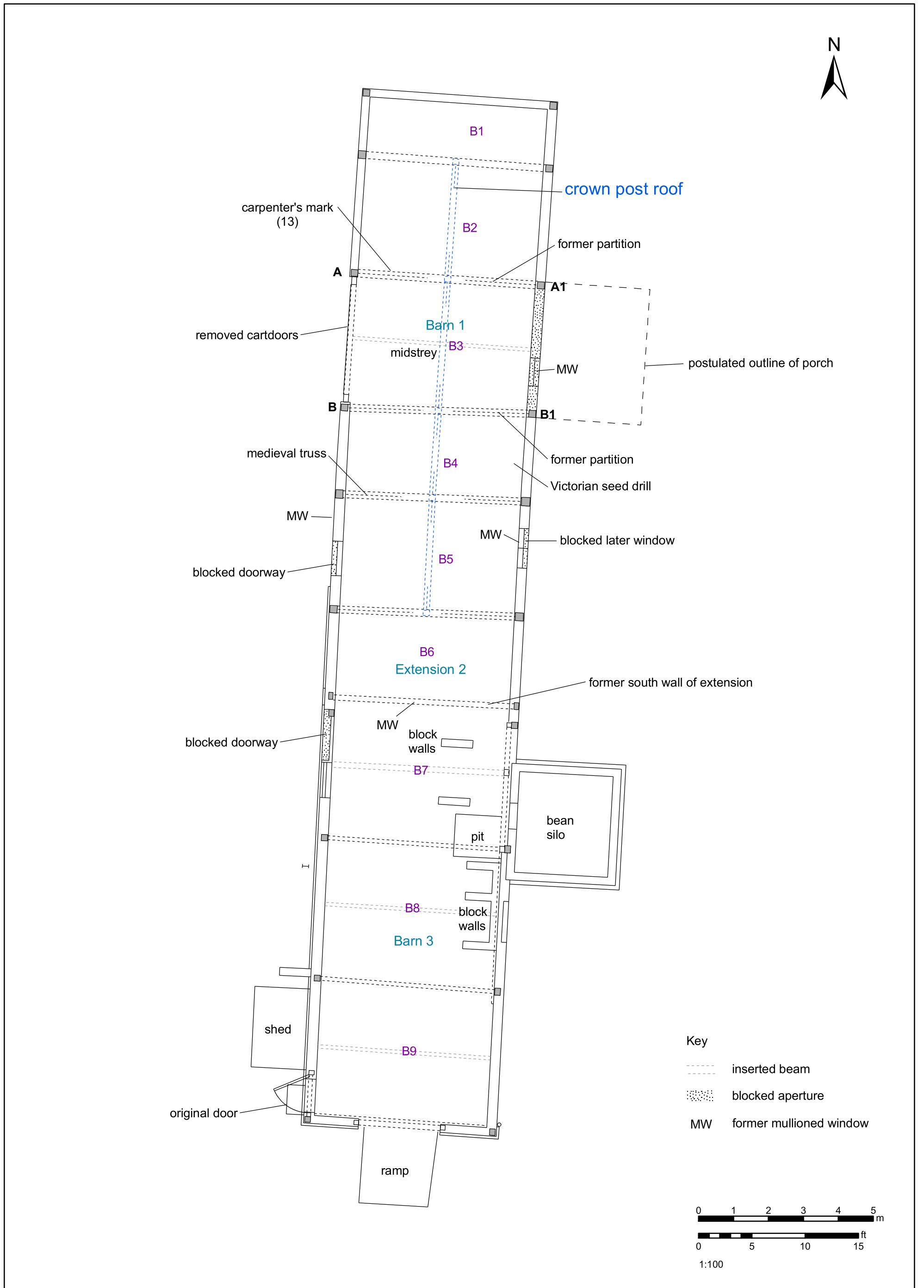


Fig.6. Floor plan of barn

Fig.7. East wall of barn

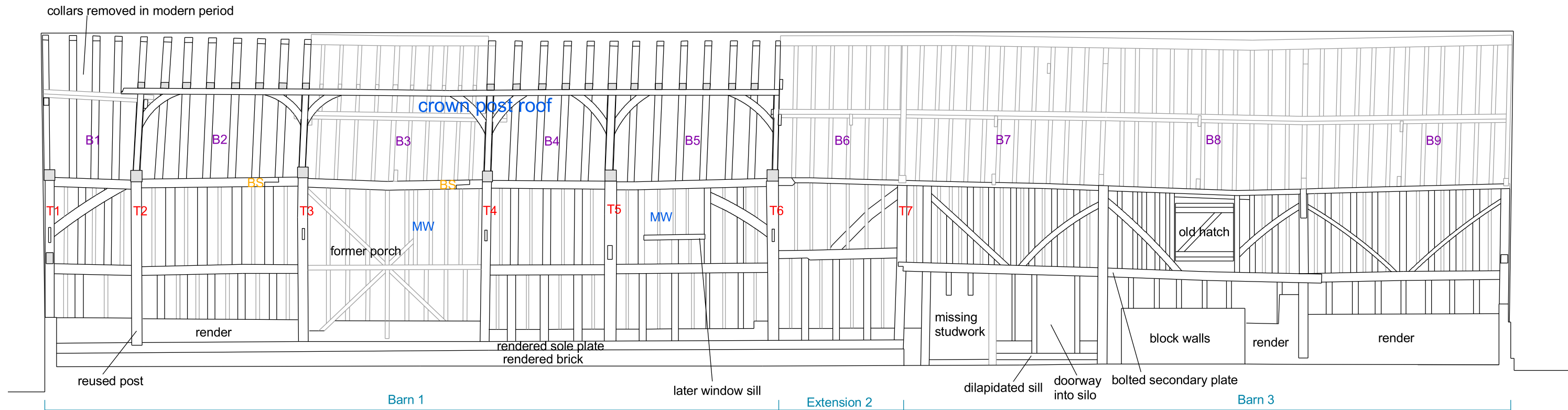
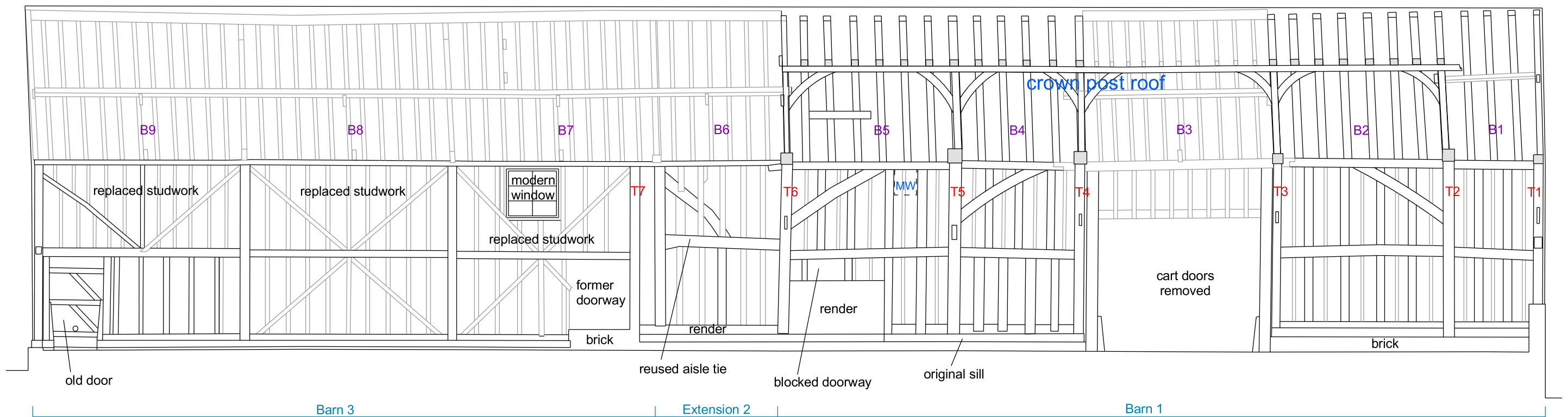
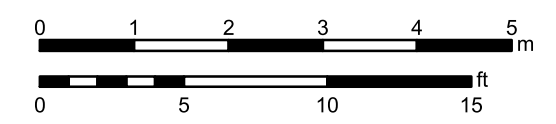


Fig.8. West wall of barn



Key	T1	truss number	MW	former mullioned window
	B1	bay number	—	timber
	BS	bladed scarf joint	—	inserted or replaced timbers



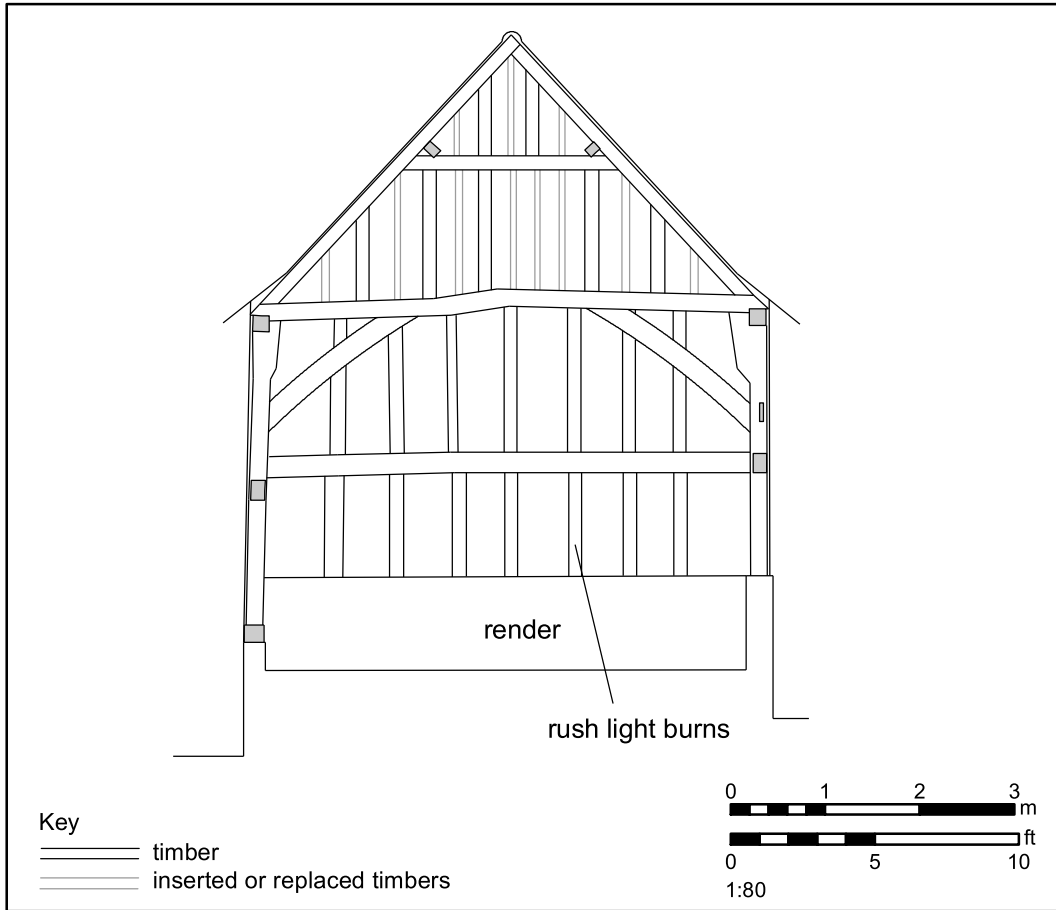


Fig.9. North wall of barn

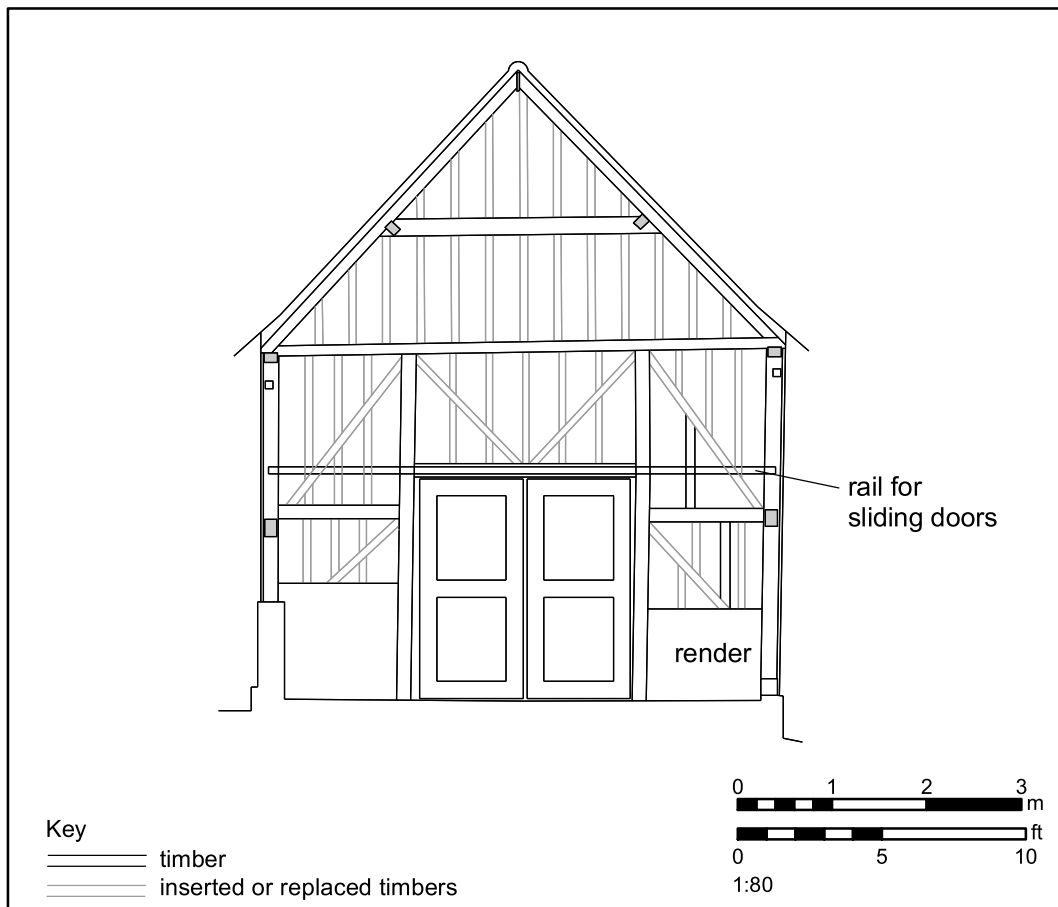


Fig.10. South wall of barn

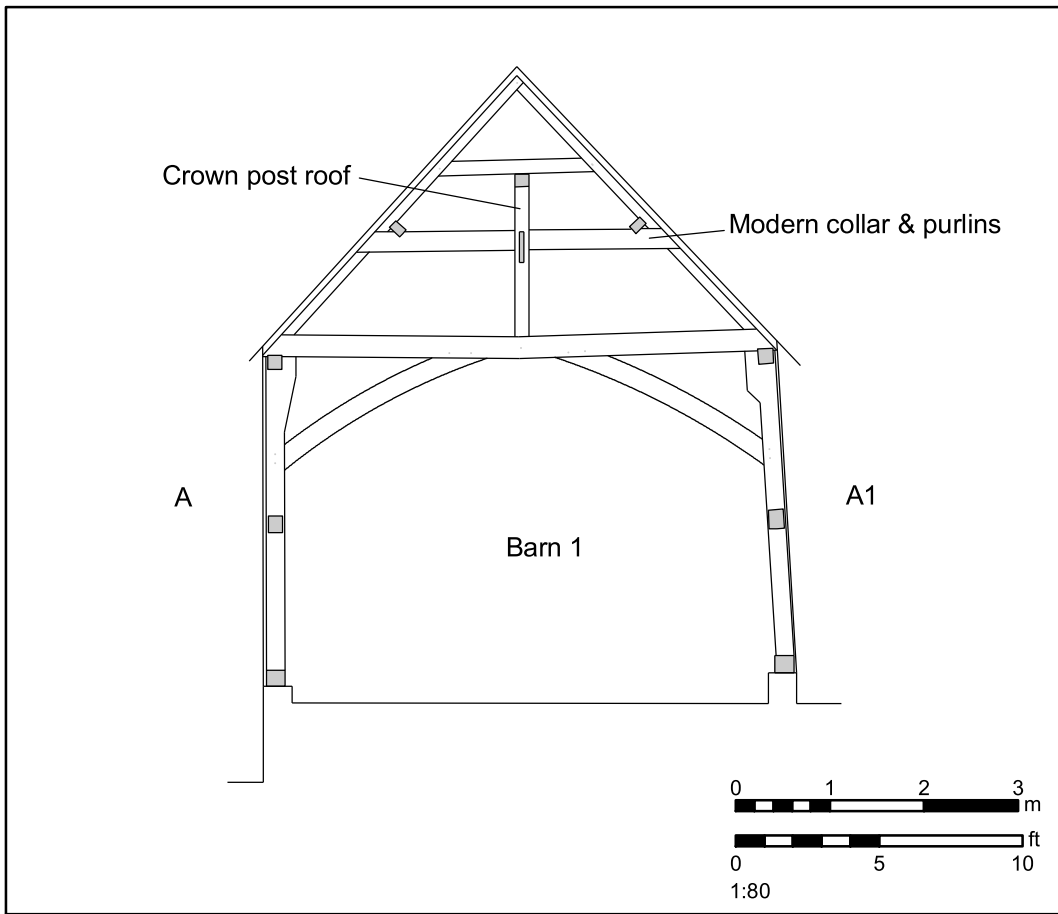


Fig.11. 16th-Century truss (T4)

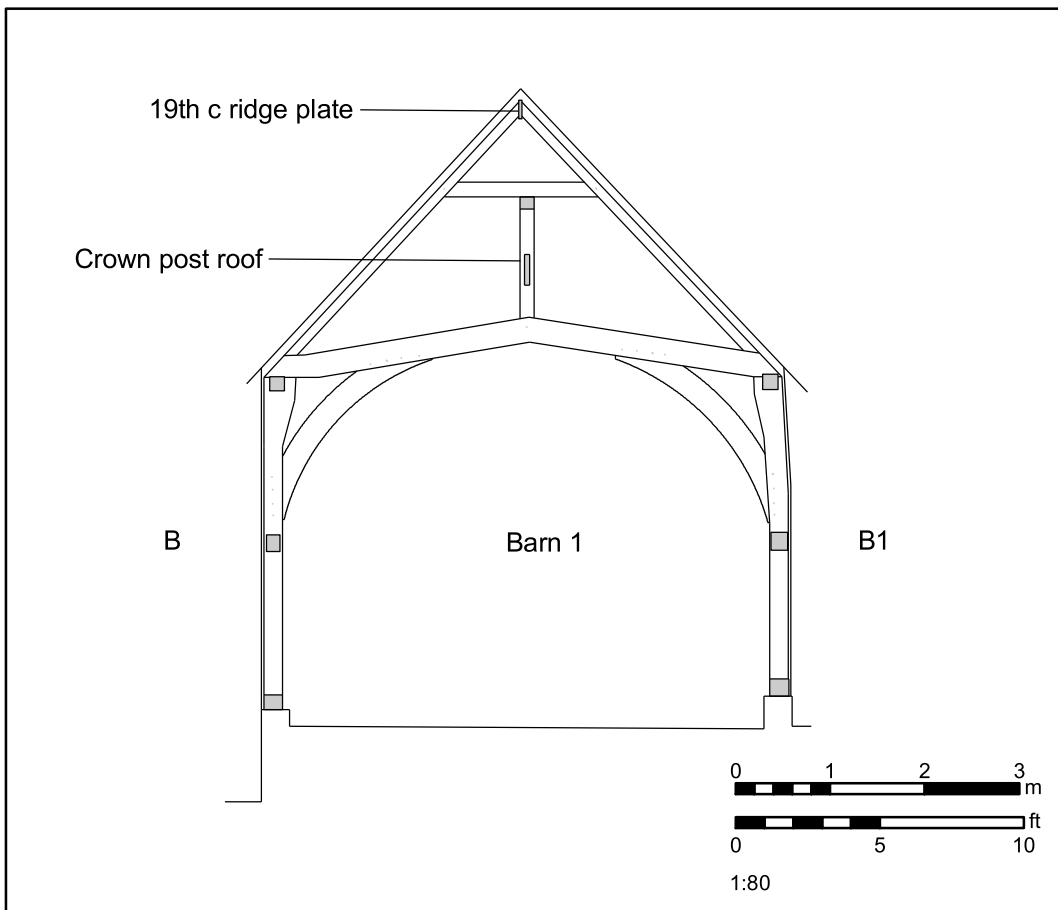


Fig.12. Reused medieval truss (T5)



Plate 1 Barn viewed to north-west



Plate 2 Barn viewed to south-east



Plate 3 Barn viewed to north-east



Plate 4 Interior viewed to south from T3



Plate 5 Interior viewed to north from T6



Plate 6 Medieval truss T5 and crown-post roof viewed to north





Plate 7 Bridge-scarf joint in bay 3 east (midstrey)



Plate 8 Timber-frame viewed internally to north-east during conversion works



Plate 9 North end of barn viewed internally during conversion works



Plate 10 Former mullioned window within later blocked window in bay 5 east



Plate 11 Join between barn 1 and extension 2 and former window, viewed to north-east



Plate 12 Tagged carpenter's mark (13) on west side of T3 tie-beam



Plate 13 Victorian seed drill in bay 4



Plate 14 End of crown post roof (T2)



Plate 15 Barn 3 and end of extension 2 viewed to south west



Plate 16 Barn 3 viewed to north



Plate 17 Barn 3 viewed to north-west showing roof structure



Plate 18 Interior of barn viewed to north during archaeological monitoring