1665

OUTBUILDING AT LONGBARNS COTTAGE, SCHOOL LANE
ABBESS RODING
ESSEX

HISTORIC BUILDING RECORDING

Essex County Council

Field Archaeology Unit

June 2006

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CONTENTS

FIGURES

PHOTOGRAPHIC PLATES

OUTBUILDING AT LONGBARNS COTTAGE, SCHOOL LANE
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HISTORIC BUILDING RECORDING

Client: Mrs J. Cappelletto
FAU Project No.: 1665
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Planning Application: EPF/0939/03
Date of Fieldwork: 13th June 2006

1.0 INTRODUCTION

The Essex County Council Field Archaeology Unit (ECC FAU) undertook a programme of building recording on a 19th-century outbuilding in the garden of Longbarns Cottage prior to its conversion to single residential usage. The structure forms part of a grade II listed Victorian 'model farm' previously recorded by the ECC FAU during an earlier conversion phase (Cooper-Reade 1997). Being in separate ownership, the outbuilding was not part of the previous planning application.

The current survey was commissioned by the owner, Mrs J. Cappelletto, and is intended to augment and complete the earlier work. Much of the background information included in this report is drawn from the earlier report and its conclusions seek to clarify and enhance the original interpretations. The survey was carried out in accordance with a brief issued by the Historic Environment Management team of Essex County Council (Clarke 2006), who also monitored the work.

Copies of the report will be supplied to the client, ECC HEM and the Essex Historic Environment Record (EHER) at County Hall, Chelmsford. The archive, covering both phases of recording work, will be deposited with the Essex Records Office (ERO) in Chelmsford.

2.0 SITE BACKGROUND

2.1 Location, description and current use (fig.1)

The farm at Longbarns is situated beside the B184 Ongar to Great Dunmow Road, to the east of Abbess Roding (TL 57901090) (fig. 1). Much of the land originally attached to the farm lies in the adjacent parish of Beauchamp Roding (Cooper-Reade 1997).

Built in the 19th century, the farm comprised large stock yards to the north and south surrounded by brick-built cattle sheds/stables, farm offices, cart sheds and feed stores and two timber-framed barns, one of which dates to the 17th century. At the time of the previous survey in December 1996 the farm buildings were redundant, but were in a reasonable state of repair with few alterations since Victorian times. Most of the structures were retained in a successful residential conversion and are now privately owned.

The farmhouse stands to the south-west of the complex (fig. 1) with vehicular access from a curving gravel driveway off School Lane. The farmhouse was divided into two during the 1950s. The occupants of the eastern side, Longbarns Cottage, own the garden and outbuilding, which stands in the north-east corner of the garden. Its built characteristics suggest it functioned either as an open-sided cart or shelter shed. Its location away from the main cattle yard and onto a separate driveway, suggests the latter, and is referred to as such in the rest of the text. In relation to the other farm structures, the boundary to Longbarns Cottage lies along the front (north) wall of the cart shed, separated by wooden fencing. Originally the cart shed was open-sided facing onto the main complex, but, since 1997 according to the OS map included in the first report (fig. 1, Cooper-Reade) the structure was converted for domestic usage. The interior was divided into two parts: the western bays becoming a double garage and the eastern bays and former stable at the opposite end, used for storage purposes but is now largely vacant.

2.2 Planning background

The farm buildings were Grade II listed in 1982 (Listed Building Survey No. 118300). In the earlier application, proposals were submitted to Epping Forest District Council in May 1996 to convert the timber-framed barns and cattle sheds into residential units. This was undertaken after the completion of the first survey (Cooper-Reade 1997).

Epping Forest District Council received a further planning application (EPF/0939/03) for change of use and ‘conversion of a substantial outbuilding in garden’ in May 2003. Mindful of the inevitable removal of historic features and impact on the historic integrity of the former

farm complex and the need for a complete record of the complex, a full archaeological condition was attached to the planning permission, based on advice given in Planning Policy Guidance Note 16: Archaeology and Planning (DOE 1990).

3.0 AIMS AND OBJECTIVES

The aim of studying surviving 19th century farm groups before their conversion or demolition is outlined in the regional research framework for the Eastern Counties (Glazebrook 1997).

The objectives of the historic building survey, as defined in the brief (Clarke 2006), were to investigate and record the outbuilding to RCHME level 3 standard prior to conversion, thus completing the record of the listed farm. The record was required to consider the plan form of the structure and its relationship to others, materials and method of construction, date, function and internal layout and survival of early fixtures and fittings relating to original or change of usage.

4.0 DESCRIPTION OF WORK

Existing site drawings, supplied by the client, were used during the survey and the findings reproduced with annotations as figures within this report. External and internal architectural descriptions were made and original function assessed, along with its relationship to the rest of the farm complex.

A series of photographs (digital, colour medium format and 35mm black & white prints) were taken to record the cart shed internally and externally and in relation to the rest of the farm. Specific shots were taken of areas of important architectural detail, fixtures and fittings. A representative selection is reproduced at the back of the report as plates 1-13. The remainder can be found in the archive.

Historical background, including an earlier cartographic and documentary assessment, has been reproduced from the main study undertaken in 1997 and is shown as section 5.0 below.

5.0 HISTORICAL BACKGROUND (from Cooper-Reade 1997)

5.1 Cartographic and documentary research (fig. 2)

In 1086 a manor of Roding was held by Aubrey de Vere as tenant of Alan, Count of Brittany. Most of this Domesday estate later became known as the manor of Beauchamp Roding, alias Longbarns. By 1770 Longbarns had been acquired by the Harveys of Barringtons in Chigwell after which it passed, like Barringtons, to Thomas W. Bramston of Skreens (Powell, ed., 1956). A John Parris was tenant farmer of Longbarns in 1813 (E[ssex] R[ecord] O[ffice] Q/RPl 718). In 1843 Bramston's estate in Beauchamp Roding comprised 629 acres made up mainly of the separate farms of Longbarns (230 acres), Frayes and Wood End (ERO D/G 294). White's Directory of Essex, 1848, records that, with the exception of around eight acres, the entire parish was freehold and that Bramston owned most of the land. Between 1866 and 1886, however, Longbarns had been occupied by a succession of farmers all of whom had also been owners (Kelly's Directory 1866-86). In 1933 the land was farmed by John Latham, one of two principal owners in the parish, and by 1943 Longbarns and Frayes had been bought by the London Co-operative Society (Powell, ed., 1956). At this time the two farms comprised 417 acres of mixed arable and dairy.

An 18th-century survey of the Longbarns estate by Thomas Grout (ERO) shows that, with the exception of the northernmost barn, the existing farm buildings had been demolished to make way for a completely new complex of farm buildings in the 19th century. The layout of the new buildings, which utilised the one remaining barn, had many elements of contemporary 'model farm' design as expounded in the literature of the day. The first edition Ordnance Survey map (1886) shows the layout of these more recent farm buildings (fig. 2).

Longbarns farmhouse is described in the Victoria County History as being timber-framed and plastered; 'built or re-built' in the 16th century, but considerably altered during the 19th century (Powell, ed., 1956). In the 1950s the house was converted into two dwellings for employees of the London Co-operative Society (Powell, ed., 1956)

5.2 Farming in the Victorian period

The Victorian period saw great changes to agriculture and the way it was practised. At the end of the Napoleonic Wars (1815) the future for agriculture did not seem good with sluggish corn prices and falling land values leading to unemployment and bankruptcy. Much of the marginal land brought under cultivation during the wartime boom reverted to rough pasture or waste. The pattern of farming was also changing holdings which were consolidated under tenancy from a single landlord. The Napoleonic Wars had prompted another peak of

enclosure with 2000 individual Acts making their way through parliament. The process continued, though at a reduced rate for several decades after the war.

A series of reforms in the 1830s and 40s had a profound influence on the farming community. These reforms included a new Poor Law in 1834 and commutation of tithe payments in 1836. However, the reform which perhaps had the most important effect on British agriculture was the 1846 Repeal of the Corn Laws which removed protective measures on the price of corn. It was argued that a free market for food would mean more money in the pockets of the populace to spend on consumer goods and would encourage further reciprocal links with the principal food-exporting countries. The farming community were strongly opposed to this act, particularly when between 1848 and 1852 the price of grain fell significantly. In order to cope with the effects of increased competition farmers began to take measures to improve their efficiency and increase production.

Despite the removal of protection and the end of the wartime boom, fears of decline and bankruptcy were not realised and between 1840 and 1870 there was a period of comparative stability and prosperity that was subsequently looked back upon as a golden age of farming. Population expansion continued to allow the home farmer competitive access to the domestic market, helped by the emerging infrastructure of a manufacturing economy. Rail networks and steam shipping provided easy facilities for transport of produce from the country to the town and the joint stock banks offered a means of keeping farm finances on an even keel. Also of significance were a series of good harvests and the relative absence of the political and armed conflict experienced by some other European countries during this period. The increased confidence felt by the farming community, the application of the ideas of the industrial revolution to farming, technological and scientific developments, and the measures taken by farmers to boost production and improve efficiency in order to cushion the impact of free trade, all lead to the era of 'high farming' associated with Victoria's reign.

The drive for efficiency, coupled with new technological advances and the effects of the industrial revolution led many landowners to make improvements, often involving wholesale redesign of the farm and its buildings. A common early improvement made by farmers was the installation of efficient field drainage, particularly for the cold, wet, clay lands that had suffered the brunt of the earlier depression. This was made easier by the availability of government grants. Increasing outlay was made on fertiliser such as bones and Peruvian guano, new farmsteads were built to replace the inconvenient leftovers from pre-enclosure times, and more sophisticated labour-saving equipment was installed on many farms. Attention was also given to the breeding of livestock in order to replace the general purpose

farm animal with more specialist and efficient stock. During the middle of the century the Royal Agricultural Society reached the peak of its influence. The royal family was closely associated with farming; Victoria was patron of the society from 1840 until her death and Prince Albert had a particular interest in agriculture. Extensive works carried out on the royal farms at Windsor were well publicised in the literature of the time and, above all, made agricultural improvement fashionable.

During the 1870s, however, depression once again set in with a series of poor harvests culminating, in 1879, with an extremely wet year. At the same time, a world-wide recession hit Britain hard and its effect on agriculture was made much worse by the full force of cheap grain imports from America. As a result land was turned over to market gardens and orchards and there was a greater emphasis on livestock production and dairying. By the end of Victoria's reign the worst of the depression was over and those farmers that had been able to make the most of the remaining market opportunities and cut their costs had in general survived, even though on many holdings buildings, fences and farm roads had deteriorated from lack of maintenance.

5.3 Victorian farm building

J.C. Morton in his 1855 *Cyclopedia of Agriculture* describes a typical farmyard before improvement where "...uncheered by a ray of sunshine, wading in a pool of rain water from the roofs of buildings and of liquid manure from the houses, the stock was suffered to languish". The era of 'high farming' (1840-70) was however typified by the construction of new farmsteads and modernisation of existing ones. Buildings were being improved for a number of reasons, including those of fashion and status. On a more practical level enclosure may have made the complete relocation of a farmstead desirable, or the buildings which had accumulated over the centuries, might be unsuitable for present conditions. The many writers who tackled the subject of farm improvements would often compare the farmyard to a modern industrial factory. Viscount Torrington (1845) an early exponent of farm improvement, likened the farm to a mainline railway station were everything was placed 'for the required occasion' and the superintendent could see all that was going on from a strategically placed office. Improvements to farm buildings continued to take place throughout the 19th century and despite the widespread depression during the latter quarter of the century, examples of further investment in buildings, particularly livestock accommodation, can still be found as late as the 1880s and 90s (Brigden, 1986).

In the years of economic uncertainty following the repeal of the Corn Laws arable farmers were advised to place greater emphasis on livestock, not only because it made them less

heavily dependent upon corn, but also because the resulting manure would help increase yields. Dairy farms, for example, would typically keep pigs to feed off the milk by-products and, like the more exclusively stock-rearing farms, were likely to have land under fodder crops. Livestock, on the other hand, were an important element in the corn-growing arable farms as they would consume the root crops grown as part of the normal rotation, together with bought-in feed, and convert them and the straw litter into manure that went back onto the land.

When in 1850, the Royal Agricultural Society organised a prize essay competition on the subject of farm buildings one of the judges commented that 'never since the formation of the Society were so many good reports sent in for one prize' (Brigden, 1986). Indeed, the journal of the Royal Society often contained specimen plans and descriptions of newly designed farmyards. Whatever the type of farming involved the key element in farmyard design was to find the correct layout to achieve maximum efficiency and cost effectiveness. G.H. Andrews (1852) sums up the prevailing philosophy of the day:

> '...high farming is economy of labour and manure, and plenty of both. Now the economy of labour and manure, in reference to stock, will depend principally upon the judicious arrangement of the sheds, hammels, courts etc for the better supply of food, removal of dung and preservation of liquid manure...'

Torrington (1845) shared the views of many that the farmyard should be lockable at night, that too much space led to untidiness and that large barns were unnecessarily expensive. At Torrington's farm at West Peckham, for example, unthreshed corn was stored in individual stacks in a separate yard so that the wooden barn was needed only to store the contents of a single stack, the threshing equipment and some of the resulting straw. Liquid manure drained to an underground tank whilst dung was removed at periodic intervals to an open storage yard outside.

With economy of labour in mind, buildings were arranged to follow the natural flow of materials from the storage of corn and fodder crops to their conversion into feed and bedding and their distribution to the houses beyond for the fattening of livestock. The efficient collection of manure was also a prime consideration. G.A. Dean writing in 1849 outlined some basic principles of good design. The farmyard should be rectangular in form with storage areas on the northern side, livestock yards on the warmer southern side, and the horse and implement accommodation ranged down the other two sides. Ideally, the house would occupy the south-western corner of the site where the need for both privacy and

contact with the operations of the farm could be satisfied. Dean was particularly keen that farms should be technologically well equipped; although on a smaller farm it was accepted that the costs would outweigh the benefits of this.

J. Bailey Denton in his *Farm Homesteads of England* (1863) illustrates how advanced design could be applied, in an economical way, to the needs of a small farm. Denton suggested that the outlay on farmstead and house combined for smaller farms of between 200-500 acres should be about £7 per acre. Although spending rather more than his suggested sum, the new buildings at Lower Toothill Farm designed by Denton on Viscount Palmerston's Broadlands estate in Hampshire, 1861, form a good example of a typical small farm of this period. The layout of the buildings was essentially simple with a stackyard giving onto a storage and processing block, more like a conventional barn, ranged across the northern side. To the south were four open yards, three for young cattle and one for pigs, each of which was equipped with an open-fronted shelter and feeding area. Attached to the feed-processing section and flanking the yards on the eastern side was a line of buildings with accommodation for eight fattening cattle, for six cows and a number of pigs. On the opposite side, a similar line adjacent to the implement and wagon sheds held the stables for working and riding horses. The farm was too small to merit the installation of either a steam engine or threshing machine. Threshing was done in the traditional way by hand on a specially prepared floor located inside the large double doors of the barn. Attention to detail was important: all the buildings were well guttered so that rainwater was kept out of the yards where it would have diluted and spoilt the manure. This water was however collected in an underground tank and used, through the aid of a pump, to supply all the drinking troughs around the site.

The housing of stock was also part of the general farming debate during the 'high farming' era. The arguments for and against open and covered yards led to lively debate in the 1850s and 60s (Brigden, 1986). In covered yards manure was not subject to dilution by rainwater, smaller quantities of straw were required and the stock could be kept warmer thus requiring less food to maintain body weight. On the other hand, the cost of roofing had to be taken into account, arable farms had an excess of straw to be disposed of, and some exposure to the weather was reckoned to produce healthier and hardier animals. As a result an intermediate stage, as seen at Longbarns, was popular, combining open yards with open-fronted shelter sheds. Later in the century the covered yard gained increasing popularity and it was not uncommon for a very basic form of roofing structure to be thrown over existing open areas (Brigden, 1986).

In addition to yards, facilities for the more intensive feeding of stock were usually a standard feature on the larger holdings. Cattle could be put through a batch process of final fattening and preparation for market, while at the same time converting fodder into manure. Discussion centred on the respective merits of stall and box feeding, measuring the lower cost of the first against the apparent qualitative gains of the other. Stalls were cheaper to construct and more space efficient but the greater freedom of movement permitted in a box was said to induce a calmer disposition so that less nervous energy was expended and more weight was gained from the same quantity of feed. Moreover, none of the accumulating manure was allowed to run to waste and it grew in quality from the trampling that it received. Liquid manure from the pens would often drain into the adjacent yard. A number of farms opted for maximum flexibility and used both systems.

By the 1890s farm plans retained the same basic relationship between storage, processing and livestock areas as had been common to design theory forty years earlier. Fattening stalls and boxes were still a feature of many farmsteads, but they were on the wane with the growing acceptance that small covered yards produced good quality fat cattle and cheaper manure without the trouble of dung pits and underground tanks.

5.4 **Farm layout** (fig. 3)

Farming literature in the late 18th and early 19th centuries promoted planned well-built farmsteads laid out efficiently to minimise labour and maximise manure production. The model farmstead grouped barns and shelter sheds around one or more yards and examples were published in contemporary publications, the best of which maximised the principles of integrated mixed farming. Model farms used mechanisation to increase productivity and stored liquid urine and rainwater in underground tanks. Few were built due to the high level of capital investment required (Barnwell & Giles 1997) but they did influence contemporary thoughts, discussion and the design of planned farms at all levels.

The farm at Longbarns represents an unusually complete multi-period farming complex including a 17th-century timber-framed barn and 19th-century stock yards with barn shelter sheds, stables, cart sheds and farm office (fig. 3). Although based on model farm principles, it would be misleading to describe it as such. ‘Planned farm’ is a more accurate term. Much of the farm was converted to residential usage in 1997. The listed building register (Listed buildings online) describes the buildings as:

> “Model farm complex, early 19th century incorporating 17th-century timber framed barn. The early 19th century buildings are predominantly of red, Flemish

> bond brickwork with hipped pantile roofs and include byres, cart sheds and a former farm office with chimney stack and cupola. In the centre of the group is a contemporary timber framed barn clad in black weather boarding with corrugated iron roof. Five bays long with central gabled mid-stray on south side. Braced tie beams and jowled storey posts."

The existing layout belongs to at least two separate 19th-century phases. The basic form, recorded in 1886 (fig. 2) comprises two main yards split in two. The north yard, between the two barns at either end, was concerned primarily with grain storage and processing, with a stock yard attached to the south-east side of the barn. Barn 1, the north barn, dates to the 17th–century and is a relic of a little-known or understood earlier farm complex. The cart shed/covered area and lean-to (fig. 3) are post-1886 in date and were demolished as part of the earlier conversion. Contemporary design layout was incorporated into the main stock yard which was open to the south. Stock sheds and utility structures were arranged either side, with stables (mostly demolished in the earlier works), forming the top range (fig. 3). Latterly (post-1886) covered stock sheds were added, dividing the yard up further into an E-shaped plan-form. The cart shed recorded in the current survey faced the gateways into the yard across a trackway used for herding the cattle to pasture on the other side of the road.

The earlier survey concluded the farm was probably built during the 'golden age of agriculture' between 1850 and 1870, possibly as early as the 1840s. According to the list description, the earlier date is more likely. The identity of the architect has not been established. Longbarns was typical of many farms in utilising open yards, sheds and pens to rear cattle, but was not as technically advanced as the model farm.

6.0 BUILDING DESCRIPTIONS

6.1 The Outbuilding

The cart shed was located at the southern end of the farm complex away from the enclosed cattle-rearing yards to an exclusive trackway to the west that led from the cart shed to the rear of the house and then out onto School Lane (fig. 1). The stable may have held the horse to pull the cart or possibly a pony or horse used for riding. Its proximity and easy access to the farmhouse indicates a closer relationship to the house rather than to the farm. It comprises two elements: a brick-built, former open-sided cart shed and a later, pre-1886, clap-boarded stable on the eastern end.

The western half of the cart shed was adapted to become a garage for Longbarns Cottage after the first phase of building recording (Cooper–Reade 1997 fig. 1). A central division was added and interiors partly stripped out. To facilitate the garage, the open-sided north side was sealed off in clapboard and the western wall, facing the house, knocked through for two pairs of double doors to the garage. Modern doors have been fitted to the rear into shed and stable.

Generally the condition of the structure is very good although there are some disturbed roof tiles close to the eaves and some of the brick faces on the west elevation have 'blown'. The garden around the structure has been allowed to get overgrown, obscuring parts of the built fabric in some of the photographs.

6.1.1 External description

The subject of the survey (plates 1 and 2) is a linear, mainly brick-built, structure arranged on a roughly east to west alignment, in accordance with the layout of the farm. The walls are buttressed, reflecting the layout of the bays inside (fig. 4), and topped by a pantile roof, gabled to the west but half-hipped to the east over the stable area, whose sagging roof has been rebuilt in recent times.

The brickwork is built to a pattern known either as Flemish garden wall bond, Scotch or Sussex bond; a decorative pattern of three stretchers alternating with single headers. This is unusual and conflicts with the more common Flemish bond found in the main farm structures, a sign of display, conferring a more formal purpose. The blend is a combination of orange and red bricks of handmade, locally produced, appearance, with fairly thin (8mm) lime mortar joints. There are sharp arises and occasional crease marks, the latter of which would argue for an earlier rather than later 19th-century manufacture, though there are comparatively few examples. In addition, there are several kiss marks and discoloured areas from over-cooking in the kiln. Average brick size is fairly large, at c.23 x 11.5 x 6.5cm (9 x 4½ x 2½ inches) with a variation of up to 50mm.

The bottom section of the west elevation was largely removed to fit two pairs of double doors for the garage, the wall scars of which can still be seen against the original fabric (although this is not clear on the photographs). Segmental headed brick arches have been built over each entry point, with varying degrees of success (left arch in plate 3,). Between the doors the central portion of brickwork is also modern. A steel lintel provides load-bearing capacity to the wall internally. The doors themselves are identical, ledged and braced, and similar to those recorded as the rear cattle doors on the shelter sheds (Cooper-Reade 1997) and

possibly reused from this source. The attached strap hinges appear more in the modern 'heritage style' than the 19th-century version date and they are unlikely to be original fixtures. The brick sett hardstanding in front of the doors is contemporary with the modern driveway and probably originate from later farm buildings across the road now known as the 'Granite Centre'.

The other doors, on the south elevation of the cart shed and stable are modern utility doors, probably fitted into original apertures (fig. 4). However, these is some rebuilding around the central entrance, into the cart shed (plate 4), that, in this case, gives a measure of doubt. This doorway leads out onto a low external semi-circular brick-lined and stone-slabbed platform whose function is unknown, but is probably a garden feature. Only limited analysis was possible due to the amount of overgrowth here.

A modern brick sett ramp leads up to the stable at the east end (plate 5). The stable is enclosed in horizontal clap board on a light softwood frame and brick plinth, of similar characteristics as those in the main build. As a decorative statement, the clap board is beaded rather than plain like that on the in-filled north (front) elevation. The boarding wraps itself around the stable. On the prominent eastern elevation, facing onto the road, it is laid vertically (plate 6). A single paned base-hinged window gives the only natural light into the room, apart from modern glass in the door, whose fitting has removed any earlier fixtures and fittings. On the north elevation (plate 7), there is a clear distinction between the beaded boarding of the stable and the plain in-filled cladding across the front of the building (plate 8).

6.2.2 Internal description

The interior (plates 9 and 11) of the cart shed is eight bays long, divided in the middle by a modern boarded partition, creating a garage and rear storage area, now vacant. The bays are consistent in size at 2.25m, except for the end bays, which are slightly wider (fig. 4). Overall dimensions including the stables are 6.5 x 27.5m, the stable being equivalent of two bays in the main part of the structure. Traces of a crushed mortar floor remain, also recorded in the main survey of the farm. During the 1960s and 70s grants were available for flooring agricultural buildings in concrete. Their lack may signal that the farm became redundant before this date, which is suggested by the splitting of the farmhouse into two units in the 1950s.

From the interior, it can be clearly seen that the clap board is infilling to an original open-sided structure. On the formerly open (northern) side, the original bays posts have been replaced by thick concrete posts and the original bolted knee braces transferred over (plate

9), to spread the load of the heavy roof. Mortice holes are evident in the wall plate soffit where the pegged timber post tenons previously sat (plate 10). The scantling of the wall plate on this side is quite thick at 15 x 18cm and over each post, where visible, a pegged face-halved and bladed scarf joint is displayed (plate 10), a common post-medieval method of joining long sections of timber. In comparison, the opposite (brick) wall plate is only 11 x 15cm and is joined by basic pegged side-halved scarf joints. Such a difference suggests that the front wall plate originates from a post-medieval building cleared to make way for the model farm in the 19th century.

The roof framing (plate 9) is collared with raking queen posts and nailed and trenched purlins, a style of construction mirrored in the surviving 17th-century barn, again suggesting reuse. The rafters are regular and semi-regular in shape, as are the interlinking wind braces. Both are more typical of late 18th- or early 19th-century or earlier structures, built before machine-sawn timber became widespread. There are no suggestions that the minor roofing elements are reused. Construction style is consistent in both ends. None of the tie beams are cut straight, and have quite a curve, especially that in the final eastern bay (plate 11). Each of the end brick walls have timber ledges built into the walls with rows of nails for hanging ropes and probably tools. There are no other such fixtures and fittings present. The burnt headers in the end wall form a pattern in the brickwork (plate 11).

The single-bay stable was originally panelled to walls and ceiling, signalling a higher level of ornamentation than the cart shed. Inside there is a concrete floor and cement-rendered plinth walls, suggesting its primary function continued later than the main area. The eastern plinth wall has been rebuilt in modern bricks. Vertical 6” beaded pine panelling, the same as that used for the exterior, lines the room, apart from the north wall. There are remains of a high beaded skirting retained on the west wall (plate 12).

Apertures for two vents can be clearly seen between the ceiling joists, where the panelling has been removed. Originally they would have linked to wooden vents standing proud of the roof ridge, before the roof was rebuilt in the modern period. The larger of the two has a connecting trap door (plate 13).

Absence of panelling on the north wall shows the construction of the walling, which is clearly different to the infilled walling in the main part of the structure. Still built of machine-sawn timber, the studwork in the stable is wider apart (36cm) and braced horizontally. The basic collar trenched purlin roof construction is lighter and built solely from regular machine-cut timber different, probably nailed. The 10 x 15cm wall plates are smaller than the plates found

in the main structure and either abut the main structure or are scarfed onto it. In both cases any evidence is hidden by the panelling. The feet of the rafters are squared-off at the bottom rather than tapered like those in the main build. Fresh battens show a recent re-roofing phase, probably contemporary with the garage conversion, probably when the external venting was removed.

Apart from the remains of panelling and roof vents, a fire extinguisher bracket and some ancient c.1930s light switches, there are no fixtures and fittings

7.0 DISCUSSION

With its open frontage, the outbuilding within the grounds of Longbarns Cottage is likely to have originally functioned as either a cart shed and stable, or a shelter shed. However, its separation from the main southern yard and proximity to the farmhouse suggest the former functions. The cart shed was linked to the farmhouse by a former driveway suggesting an emphasis on domestic rather than agricultural usage, although these usages may have overlapped. The attached stable would have contained the horse or pony used to pull the cart. By way of an exclusive driveway, the cart could be brought to the rear of the farmhouse for collection and thence away from the farm via School Lane. In contrast, the animals were herded through the farm entrance on the east side to pasture on the other side of the road.

The architectural and built characteristics of the cart shed are contemporary with the farm structures recorded in the main survey (Cooper-Reade 1997) and clearly form part of the main structural group. However, the more unusual and decorative features, such as its Flemish garden brick bonding and beaded clap boarding, marks it out as superior in status, intended primarily for domestic usage rather than as a simply functional farm structure. Precise dating for the farm is difficult, but is likely to be the early or mid 19th-century; the early phase of the ‘golden age of agriculture’. It is possible that timbers from earlier unidentified farm structures were reused in its construction, perhaps contemporary with the surviving 17th-century barn. The stable is structurally later in date, but built sometime before 1886 when it is shown on the first edition OS map. Recent alterations to form a garage/utility area have altered the form and fabric of the building and removed fixtures and fittings relating to its original function.

8.0 CONCLUSION

The historic building survey at Longbarns Cottage completes the earlier record of the grade II listed farm complex known in the 19th century as Longbarns (Cooper-Reade 1997). In terms of layout, architecture and proportion, the cart shed and stable is contemporary with the main phase of farm 'improvement'. Barring some alterations carried out to the outbuilding, the complex as a whole has provided the rare opportunity to record a planned farm largely unaffected by later development.

Like so many Essex farmsteads, the ideas of high farming in the 19th century were readily adopted at Longbarns to improve efficiency and take advantage of improvements in agriculture as a cushion against swings in the trade cycle and economic depression. A new planned farmstead was built to replace the existing one, whilst retaining and incorporating an earlier structure, the 17th-century barn, to continue its storage and processing role on the mixed farm. The planned farm was created around two main yards, with the main stock yard open to the south. Although not as technologically advanced as some, the main principles of efficient process flow and the separation of areas for crop processing and livestock production were employed and are discussed in the previous report (Cooper-Reade 1997). The plan form evolved after 1886 to an E-shaped plan of multiple yards in the south yard and covered yards/areas to the north. However, Longbarns lacked the advanced-design technological facets of the model farm and it is therefore unrealistic to refer to it as such, although its form was undoubtedly influenced by contemporary views on improvement and design.

The research framework for the Eastern Counties (Glazebrook 1997) has identified the importance of studying surviving farm groups from the two main historic periods of agricultural improvement: the agricultural revolution (1750-1820), when new crops and rearing techniques were developed, with the introduction of the planned and model farm, and Victorian High Farming (1840-80), when farms were remodelled to bring about increased livestock (invariably cattle) yields. Through its adoption for domestic usage, the functional character of the outbuilding recorded in the recent survey has been greatly affected by modern alterations, probably carried out since the rest of the complex was converted in 1997. However, its structural integrity and overall condition remain good. In general, as a group, the farm complex at Longbarns is significant for the survival of largely contemporary model farm whose character and fabric, with the exception of the outbuilding, has not been substantially altered by modern improvement.

ACKNOWLEDGEMENTS

The survey was undertaken by ECC FAU on behalf of the owner Mrs. Joanna Cappelletto. Thanks are due to the Mrs Pat Marlow for providing access during the survey. The project was monitored on behalf of ECC HEM by Vanessa Clarke.

BIBLIOGRAPHY

Alcock, N.W. et al.	1996	*Recording Timber-framed Buildings: An Illustrated Glossary,* CBA, York
Andrews, G.H.	1852	*Agricultural Engineering, Vol. 1, Buildings*: 32
Barnwell, P.S. & Giles, C.	1997	*English Farmsteads 1750-1914* RCHME, Swindon
Brigden, R.	1986	*Victorian Farms*
Brunskill, R.W.	1997	*Brick Building in Britain* Victor Gollancz, London
Clarke, V.	2005	*Brief for Historic Building Recording at Longbarns Cottage, School Road, Abbess Roding* (ECC HEM unpub.)
Cooper-Reade, H.	1997	*Report on the Recording and Survey of Longbarns, Abbess Roding* (ECC FAU unpub.)
DOE	1990	*Planning Policy Guidance Note 16: Archaeology and Planning* HMSO, London
Dean, G.A.	1849	*Essays on the Construction of Farm Buildings and Labourers' Cottages*
Denton, J.	1863	*The Farm Homesteads of England*
Glazebrook, J. ed.	1997	*EAA Occasional Papers No. 3, Research & Archaeology: A Framework for the Eastern Counties 1: resource assessment*, Scole Archaeological Committee, Norwich
Morton, J.C.	1855	*Cyclopaedia of Agriculture*
Powell, J. (ed)	1956	Victoria County History of Essex, Vol. 4: 188-203
Viscount Torrington	1845	*On Farm Buildings, With a Few Observations on the State of Agriculture in the County of Kent*.

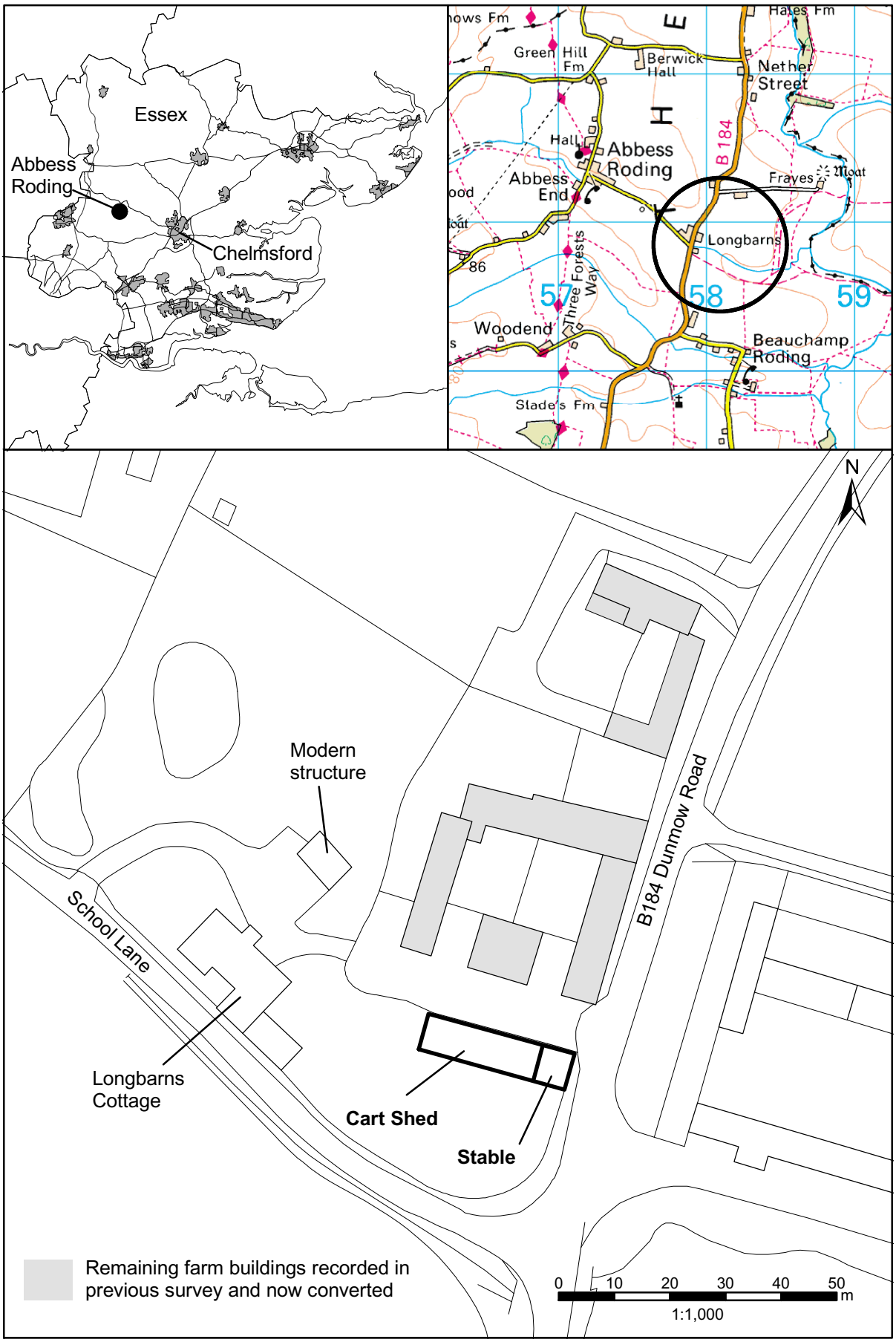

Fig.1. Site location and block plan

Essex County Council
Field Archaeology Unit

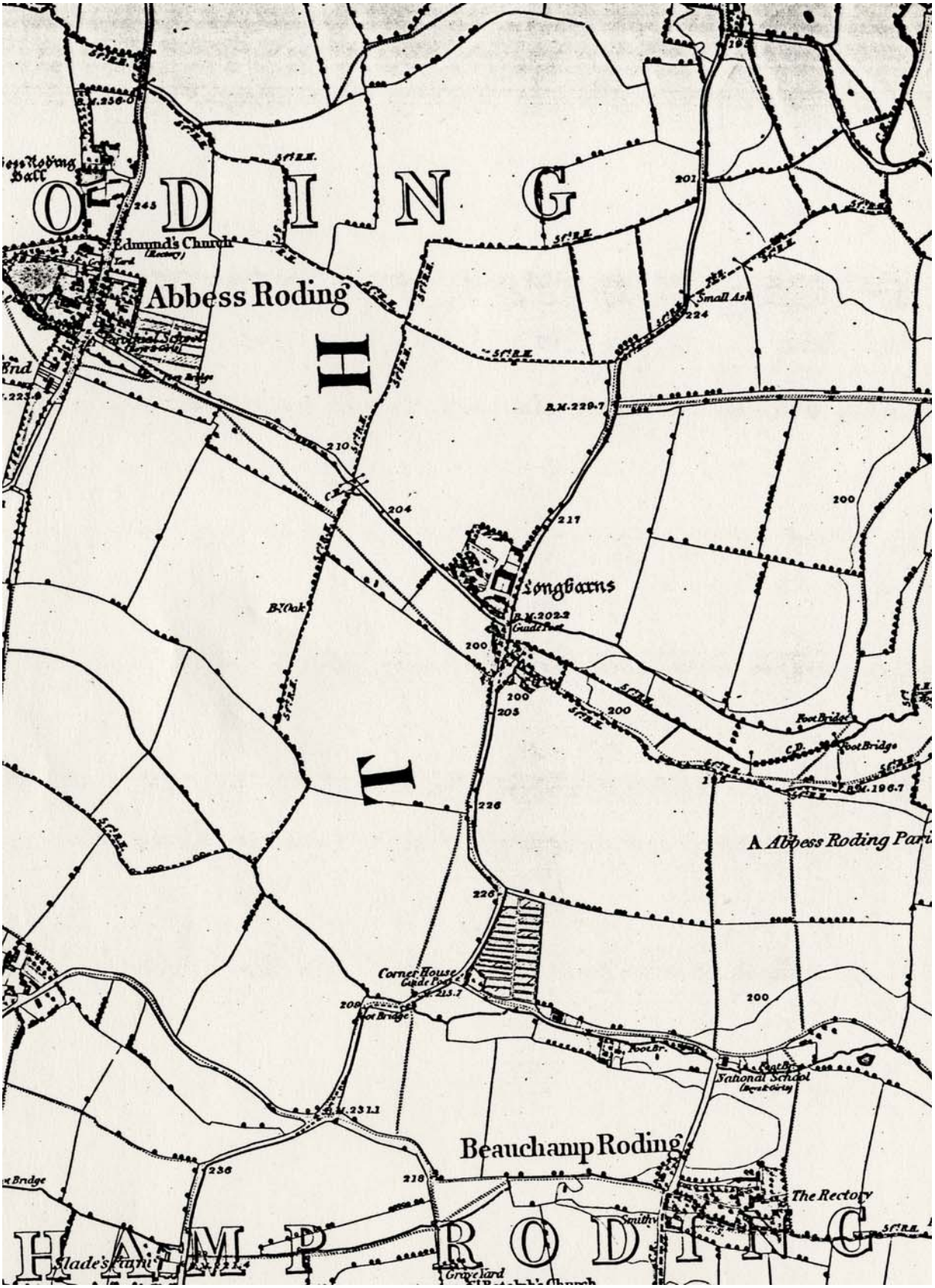

Fig. 2 Extract from First Edition OS map, 1886 (enlarged)

Fig.3. Plan of Longbarns in the late 19th century

Essex County Council
Field Archaeology Unit

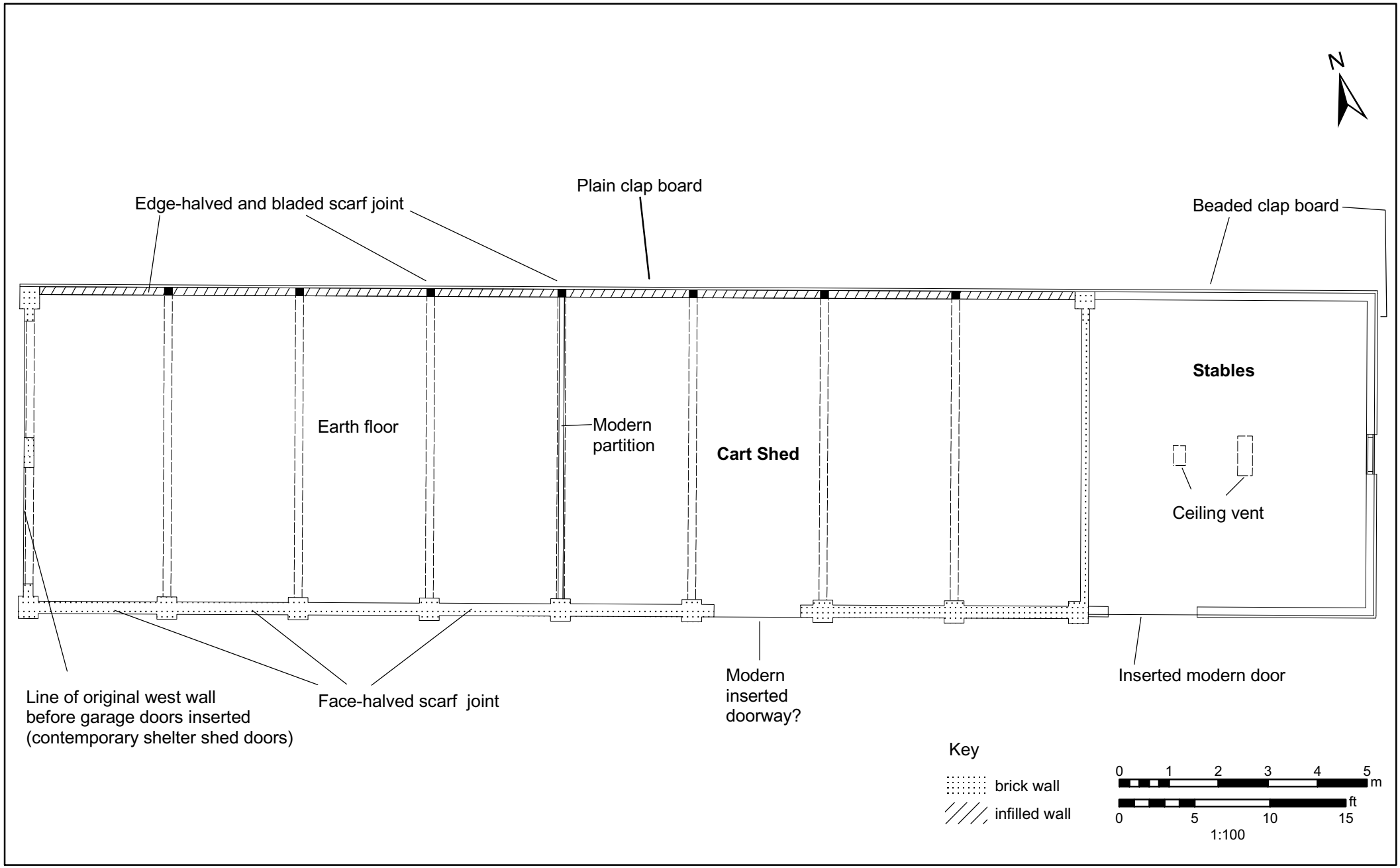

Fig.4. Existing floor plan of outbuilding

Plate 1 Cart shed viewed toward north-east

Plate 2 South elevation

Plate 3 Inserted garage doors on west elevation

Plate 4 Modern entrance into cart shed, possibly a later insertion

Plate 5 South elevation of stable

Plate 6 Longbarns farm viewed to north-west from main road

Plate 7 Cart shed viewed to south-west

Plate 8 Later plain clap board infill of cart shed (right) compared with beaded covering to stable (left)

Plate 9 Interior of cart shed viewed to east and modern partition

Plate 10 Concrete bay post partly obscuring empty mortice on wall plate soffit. Edge-halved and bladed scarf joint over

Plate 11 East wall of cart shed

Plate 12 West wall of stable

Plate 13 Detail of ventilation apertures in stable ceiling

Appendix 1: Contents of Archive

1. Introduction

1.1 Brief for works

1.2 WSI

2. Research Archive

2.1 Copy of this and earlier report

2.2 Copies of reports pdf-formatted

3. Site Archive

3.1 Site photographic record (digital images, 120mm colour prints, 35mm monochrome prints and transparencies)

3.2 Site notes & plans

Appendix 2: EHER Summary Sheet

Site Name/Address: Longbarns Cottage, School Road, Abbess Roding, Essex	
Parish: Abbess Roding	***District:*** Epping
NGR: TL 5784 1094	***Site Code:*** ABLB 06
Type of Work: Historic building recording	***Site Director/Group:*** Andrew Letch ECC FAU
Date of Work: 13th June 2006	***Size of Area Investigated:*** N/A
Curating Museum: N/A	***Funding Source:*** Mrs. J. Cappelletto
Further Work Anticipated? None	***Related EHER Nos.:*** EHER 15446
Final Report: Summary in EAH	
Periods Represented: 18th and 20th-century	

SUMMARY OF FIELDWORK RESULTS:

An outbuilding in the grounds of Longbarns Cottage was recorded by ECC FAU prior to conversion for residential usage. The structure signifies the last element recorded of the 19th-century grade II listed planned farm at Longbarns recorded in a previous FAU survey (Cooper-Reade 1997), to which the current report is intended to augment.

During the survey, the outbuilding was identified as a cart shed and stable that had been much-altered by conversion to a garage/storage area, believed to be c.1997. Its standard of décor and location close to the house, suggest it was primarily of domestic rather than farm usage, although it possible served both.

Longbarns represents a post-medieval farmstead largely rebuilt in the early or mid 19th-century influenced by contemporary the desiqn and philosophy of the 'model farm'. Like many Essex farms, the most useful structure from the post-medieval farm, the barn (17th-century) was retained and incorporated into a two-yard plan-form, open to the south surrounded by shelter sheds for cattle. Further covered areas for livestock were added in the late 19th-century.

Previous Summaries/Reports Report on the Recording and Survey of Longbarns, Abbess Roding, Essex (ECC FAU unpub.)	
Author of Summary: A. Letch	***Date of Summary:*** 26th June 2006