ROLLS FARM BARNS, HASTINGWOOD ROAD MAGDALEN LAVER ESSEX

HISTORIC BUILDING RECORD





December 2009

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Document Ref.	1948rep
Report Issue Date	22nd December 2009
Circulation	Mrs R. Padfield
	ECC Historic Environment Management
	Essex Historic Environment Record

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ROLLS FARM BARNS, HASTINGWOOD ROAD
MAGDALEN LAVER

ESSEX

HISTORIC BUILDING RECORD

Client: Mrs Rosemary Padfield

FAU Project No.: 1948

NGR: TL 4998 0794

OASIS No.: essexcou1-69121

Planning Application: EPF/02960/04

Dates of Fieldwork: 15th & 16th July 2009

1.0 INTRODUCTION

A programme of building recording was undertaken by Essex County Council Field Archaeology Unit (ECC FAU) on elements of a multi-phase farmstead at Rolls Farm, Magdalen Laver, prior to residential conversion. The work was commissioned by the owner, Mrs Rosemary Padfield, 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 Epping Forest Museum. An OASIS online record has been created at http://ads.ahds.ac.uk/oasis/index.cfm.

Rolls Farm comprises an impressive semi-aisled timber-framed barn and good-quality brick stables, granary and animal ranges from the 19th century, within the grounds of a Grade II-listed 15th/17th century farmhouse, partly enclosed inside a large medieval moat. All of the farm buildings are curtilage listed with the house and as follows:

- Barn (1): single-aisled, probably late 17th century, with extension
- Early 19th century granary & stable range (2 & 3) and probable cart shed (4)
- Mid-late 19th century cattle range (5)- partly demolished
- Modern south range and covered yard (6)

1

2.0 BACKGROUND

2.1 Site location and description

Magdalen Laver is a small country parish situated to the east of Harlow, the nearest major town. Rolls Farm (TL 4998 0794) occupies a roadside position between the village centre and the nearby parish of Hastingwood (fig. 1). It comprises a Grade II-listed farmhouse, a large barn and covered yard, and brick-built stable range. The farmhouse stands at the centre of a moat (EHER 4225) which survives along the roadside frontage and originally swung around the north side of the barn, beneath the present concrete hardstanding. The moat was constructed in an unusual elliptical shape (HEM 2009) rather than the typical, more regular form, such as that surrounding the site of 'Wynters Armourie' to the north (fig. 1). The surrounding area is largely arable farmland.

The farm buildings subject to conversion are accessed by a concrete trackway between the barn and modern farming units to the north (fig. 1). Most of the traditional farm buildings are now redundant and in recent years the farm has been used as a training centre for agricultural students, with accommodation provided in the refurbished stable block. The large semi-aisled barn was last used for storing grain in large concrete silos and mixing animal meal, but is now redundant. So too is the large covered yard area. The granary was latterly linked to the barn by an aerial grain conveyor track.

Much of the yard areas between the buildings are now concreted over, including the likely route of the north arm of the in-filled moat. Gardens and a tennis court stand to the east of the farm and to the west are the driveway, lawn and gardens, and extant moat along the roadside.

2.2 Planning background

A planning application for conversion of the barn and outbuildings to residential use was submitted to Epping Forest District Council (EFDC) in 2006 (EPF/02960/04). Mindful of the archaeological significance of the site and its curtilage listing with the house, the impact of conversion on the historic integrity of the farm buildings, and the importance of farming in the East Anglian region during the post-medieval and Victorian periods, ECC HEM advised EFDC that a full archaeological condition should be attached to the planning consent, based on advice given in Planning Policy Guidance Note 16: Archaeology and Planning (DOE 1990).

2.3 Historical background & development

Cartographic and documentary research was undertaken at the Essex Record Office, Chelmsford (ERO) to understand the origins and development of the farm. References are supplied within the text. Historic map extracts are included as figures 2-5 and have been enlarged in the report to provide greater clarity.

As a moated site the origins of Rolls Farm are likely to extend back into the medieval period, primarily the 13/14th century (HEM 2009), when the fashion for moats in Essex was at its peak (HEM 2009). Parts of the oval-shaped moat survive on the southern and western side and still contain water. The farmhouse dates to the 15th century (cross wing) with 17th century additions (LBS 118116). A manorial reference from 1539 cites it as *Rolles* (Reaney 1969) occupying 82 acres belonging to Sir William Sulyard, who owned the half manor of Otes in High Laver (VCH vol. 4 1956).

It is difficult to identify the barn, moat and house from Chapman and Andre's map of Essex (1777, plate 11) which provides only a basic representation of the site, though it is interesting to note the reference to 'Rose' rather than 'Rolls' (fig. 2). Barn (1) is the earliest structure recorded in the survey and was initially built of five-bays, probably in the late 17th century, with a three-bay extension probably added soon after.

The Magdalen Laver tithe map of 1847 (D/CT 211) was drawn at the beginning of the 19th century farming boom known as the 'Golden Age of Agriculture' and shows the barn and accompanying early Victorian farmstead. The brick-built granary, stable block and open shed (buildings 2-4) are constructed around two yards, with a lean-to building added to the southern side of the barn (fig. 3), since removed. The tithe award shows that Rolls is owned and occupied by John Wilson, with a reduced holding of 58 acres of land, mostly arable (D/CT 211A). The moat has been diverted away from the farm, to the east, and there are breaks for entrances to the west (present day driveway), north (entrance to farmyard) and to the east (fig. 3).

A western brick range (5) was built in the third quarter of the 19th century (1847-73), probably consisting of shelter sheds for cattle (fig. 4), which now forms part of the covered yard but can be seen in its original form of two units on the second edition OS map (1897, fig. 5).

In the second half of the 20th century a southern range was added to the yard, built from Fletton bricks. At a later stage the yard was covered over, probably to protect a larger dairy

herd though possible to create more room for larger farm machinery and equipment after the herd had gone. At the same time, the south side of the barn was probably opened-up and large concrete grain silos installed inside, with elevating machinery and conveyor links to the granary and mixing machinery for animal meal.

In recent times farming has shifted from the traditional core and the buildings are now either redundant or used by the agricultural students. Parts of the stable range and granary have been refurbished as accommodation and the open shed attached to the granary has become a mess room. Large modern farming units have been erected to the north of the farm, and while the old barn and yard are largely redundant.

2.4 Farming in the medieval and post-medieval periods

Early farm buildings were often scattered rather than grouped around a yard. Several aisled medieval barns survive in Essex built for large manorial estates or religious institutions, the most famous being the barley and wheat barns at Cressing Temple (constructed c.1200 and 1250). However, no complete farmsteads in East Anglia date before 1600 and few to before 1750 (English Heritage 1997). Usually the only buildings to survive are barns, because of their adaptable size and good construction. Stables sometimes survive, but lesser so livestock accommodation which, before the 18th century, consisted of temporary shelters at best.

Between 1540 and 1760 the population of England more than doubled to 6 million. To feed this expanding population new land was colonised (commons, etc), 'permanent tillage' (i.e. elimination of the fallow year) introduced with new root crops and grasses, and improvements made in manuring, drainage and stock breeds, collectively known as the 'agrarian revolution'. From the 1740s large estates were established by improving landlords and new planned farms replaced the earlier farmsteads. Typically the layout of a 'model farm' was square, based around a central courtyard with the barn (often retained from the earlier farm) on one side and perpendicular wings or ranges either side; one side stables, the other cattle sheds. The bottom range was usually composed of feed stores, cartlodges and ancillary buildings and was usually positioned along the roadside.

By the end of the Napoleonic wars (1815) farming had slumped following a wartime boom, but as a result of further improvements in farming methods by the 1840s the industry was expanding again. In fact the era between 1840 and 1870 witnessed a 'golden age' of farming, when grain prices were at their peak, leading to an acceleration in farm building and improvement. Demand for grain grew alongside the growth of towns and cities. In this period,

the courtyard system was adopted to its full potential, aided by mechanisation, artificial fertilisers and new feeds. Mixed farming, combining grain production with rearing meat and dairy cattle was advocated by contemporary writers as a cushion against depression. Intensive farming placed an emphasis on the cycle whereby food and straw was produced for the animals which in turn provided manure for the fields. Buildings were arranged to maximise the natural flow of materials, with the yard open to the warmer southern side, surrounded by open-fronted shelter sheds on the remaining three sides and stores for feed and bedding.

Although the model farm remained an ideal, the expense restricted its use to the wealthier estates. Many smaller landowners remodelled and modified their farms, retaining some of the older buildings while constructing new housing for livestock.

After 1870 imports of North American grain and refrigerated meat from New Zealand and Argentina flooded the markets causing prices to slump again, marking the beginning of the 'Great Depression'. In the next twenty years wheat prices halved leading to arable land being abandoned in favour of meat and dairy cattle and market gardening. It was not until the period after the Second World War that the agrarian economy recovered.

3.0 OBJECTIVES

3.1 Historic Building Survey

The purpose of the historic building survey was, as outlined in the brief (ECC HEM 2006), to record the existing farm buildings to English Heritage level 3 standard prior to conversion. As part of the project the survey was required to record plan form, function and internal layout, materials and method of construction, building chronology and phasing, and historic fixtures and fittings.

3.2 Archaeological Monitoring

Archaeological monitoring of groundworks associated with the development will be undertaken at the start of conversion works. The primary objectives will be as follows:

- Evidence for site origins and development of the medieval manor
- · Course of the moat and analysis of backfill deposits
- Evidence for earlier farm structures, floors, yard surfaces, etc.
- Relationship between below-ground evidence and standing buildings

Details of the monitoring works will be presented in a separate report once completed.

4.0 DESCRIPTION OF WORKS

The survey was undertaken of the buildings in their present state, prior to the start of conversion works, using drawings (floor plans and internal/external elevations) supplied by the client and architects, Strutt & Parker. A numbered block plan was produced to show the location of the structures within the survey (fig.1).

External and internal architectural descriptions were made and building function assessed. The buildings were free to access apart from the east end of the barn where the grain silos stand. Whilst the exteriors of the stable and granary retain historic integrity, some interiors have been lost through refurbishment. Most of the Victorian west range was removed when the yard was covered over.

A series of photographs (digital and 35mm black & white print) were taken to record the main buildings internally and externally. Specific shots were taken of any areas of important architectural detail, fixtures or fittings or carpenter's marks. A representative selection of photographs is reproduced at the back of the report as plates 1-26. The remainder can be found in the archive.

Documentary and cartographic research (section 2.3) was undertaken to investigate the origins and development of the farm and study the alignment of the medieval moat.

5.0 BUILDING DESCRIPTIONS

The farm layout comprises two units - the large post-medieval barn and covered yard orientated north-west to south-east and the L-shaped Victorian stable/granary range askew to the barn, but in line with the farmhouse (fig. 1). The brick structures are well-built and in good order. Part of the southern wall of the barn was removed when the yard was covered over, while the eastern extension is hidden behind (or embedded within) the grain silos. Similarly the Victorian west range was gutted when the yard was covered and all that remains are the yard walls and the outer part of the roof.

As far as possible the buildings are described under their likely historic function, largely based on evidence gained from the survey. Floor plans are provided as figures at 1:100 scale, except for the plan of the modern yard that is drawn at 1:200 in order to place it in context with the barn.

5.1 Barn 1

Barn 1 (plates 1-4) is a large timber-framed and weather-boarded threshing barn standing on the north side of the farmyard (fig. 1). Such a position was designed to screen the stock yard from the prevailing wind and also to utilise the wind during grain processing (winnowing). The aisled barn developed on larger estate farms in the medieval period to increase capacity and the Rolls Farm example is aisled on one side, giving it in part the outer form of a medieval barn. Aisled barns continued to be built into the 18th century although their quality deteriorated as good timber became scarcer and more expensive.

Traditionally the barn was used to store the harvest and thresh the grain in the winter time, though the threshing floor is no longer present. Barns were one of the most useful and adaptable buildings on the farm and often had varied functions in the post-medieval period; to keep straw, feedstuffs, animals and store farming implements.

From the survey, the barn appears to have been constructed as a five-bay semi-aisled building with a central midstrey, perhaps in the second half of the 17th century. Each bay measures c.3.5m in width, with the midstrey (bay 3) slightly wider at 4m, to allow heavily laden harvest carts into the barn. A three bay extension was added soon after, to create 8 bays in all, with an overall size of c. 29m x 8.2m and height of 9.7m. The boarded walls are tarred and stand on an inserted brick plinth and the roof is pitched at c.50°. The north side of the roof is tiled and it is possible the whole barn was originally tiled, rather than thatched. The rest of the roof has been replaced with slate. Despite modern intrusions (discussed in section 2.3), the fabric, where it survives, is in good condition and comparatively intact.

5.1.1 External descriptions

North elevation

The main elevation is on the north side with the aisle, which gives it the characteristic low eaves (plates 1 & 2). Boarding on this side is mainly in replaced softwood apart from those to bay 1 that are heavily tarred and appear more ancient in character.

Towards the west end of the elevation, over bays 2 & 3, is a modern corrugated tin 'awning' or short porch, built into the aisle roof (plate 1) inserted during the era of mechanised grain

processing. The doorway to bay 2 is completely modern and has a ramp at the front so vehicles could unload grain straight into the barn (fig.6). The second doorway, on the barn midstrey, has been refurbished with later cartdoors, held on the old strap hinges, but slots for 'leap boards' can be seen on the aisle posts either side to indicate the earlier cart entrance.

A narrow 20th century shed is attached to bay 6 on the barn extension (1a) that resembles a porch (plate 2), though there it has no access into the barn. The interior contains wooden shelving most likely connected to the later function of the barn.

West and east elevations

The end gables are hipped to the east and half-hipped to the west and slate-covered like the Victorian farm buildings. The eastern end has been under-built in yellow brick and the pitching hatch reused as a grain conveyer passage between the barn and granary (plate 2). The western end remains unaltered from the outside, apart from some replaced boarding to top and bottom (plate 1).

South elevation

The southern elevation is harder to piece together due to the impact of later developments to the barn and yard (plate 4). This side was built without an aisle and only two full bays of framing survive exposed (bays 1 & 2). Any framing to bays 3 and 4 has been removed, although the lack of stud sockets on the bay 3 wall plate shows this was the cart entrance through the yard. There is no indication of a porch on this side either, as there are cut-outs either side of the bay posts for a removed lintel.

Bays 5 to 8 have some boarding on the upper register exposed but the lower part is hidden by the back wall of the brick lean-to demolished in the late 19th century (figs. 3 & 4, plate 5). A full assessment of the frame could not be accomplished with the grain silos *in-situ*, and it is likely the frame forms part of their construction. The roof frame above is slate-covered externally and exposed on the inside.

5.1.2 Internal description

The interior of the barn (plates 6 & 7) contains a meal-mixing machine (red hopper) along the south edge of bay 2 and along the opposite wall past the cart doors are iron shafts and wheels, presumably to drive grain hoists and processing machinery (fig. 6, plate 6). In the main barn, cement render covers all the north wall with the exception of bay 1, while on the south wall only bays 1 and 2 are visible. The entire west end is visible, but the wall-framing of

the extension (bays 5-8) is hidden by grain silos that made the eastern end inaccessible during the survey.

Timber-framing is in oak and elm, with low levels of reuse throughout. Main framing comprises straight 20cm-wide bay posts and tie beams originally connected with double-pegged slightly-curving braces (partly extant along the aisle plate) but in all cases replaced by cast iron ornamental brackets (fig. 7, plate 8). Long lengths between one and two bays in length, are used for the wall and aisle plates, connected by edge-faced and bladed scarf joints (fig. 6, plate 8), broadly indicative of post-1600 construction. The plates are supported by slightly curved aisle braces, approximately half of which have been replaced by iron brackets (plate 8) and iron straps have been added to the tie beam/plate join, which is commonplace in barns.

The north aisle is supported with thick rather elegant curved braces spanning outwards from the aisle tie up to the principle rafter (fig. 7, plates 9 & 10). They are tenoned to the tie but only lapped and nailed to the rafter (i.e. not pegged). Those in bays 2 and 3 are augmented with straight nailed pieces to hold the awning (plate 10) At the base of the frame none of the sole plates remain; which were probably lost when the bay post bases were concreted-in (fig. 7), if not before.

It is difficult to see the join between the main build and the extension, though there are clear differences in construction at the bays 5 and 6 interval. On the north side the join is obscured by remnants of the silo walls and an iron strap that holds the two wall plates. The iron strap here is in itself a good indication and suggests a rudimentary join rather than a proper scarf joint, which is not unusual. The join on the south side is completely hidden by the silo wall. Missing main-framing on the original east wall is shown by midrail sockets on the end posts (plate 12).

Where wall-framing survives intact, i.e. in the main part of the barn, the level of modern intrusion or reuse of earlier timbers is low. The original build commonly comprises five studs per bay, quite widely spaced at c.40cm. Dimensions vary around 5 x 3 inches scantling (18 x 13cm), which is a good size. The back wall and gables are primary-braced in the upper register and about 50% are pegged. Many of the studs on the rear (south) wall have marks for wattles, suggesting the back wall was originally daubed, shown by chisel marks in the lower register and slash marks in the upper register. No such evidence was found on the other walls, suggesting the rest were originally either plastered or boarded.

The western wall has a high proportion of replaced modern timbers, mainly in the lower register, presumably due to subsidence/damp from the moat on the outside of the wall. A secondary midrail and post have been bolted onto the frame to stabilise this end of the building (plate 10).

The original eastern wall, at the junction of bays 5 and 6 (fig. 6, plate 11), retains studwork in the gable stud and stud rebates under the wall plate, where the lower part of the wall was removed. There is a profusion of nail holes on the outer face of the studs and end framing (plate 12), indicating the original gable was lath and plastered. Somewhat strangely there is no suggestion of there being a hip this end to match the opposite one, though there is no such consistency in the present gables either. Above the wall plate is the outline of an old pitching hatch (plate 12). The studs of the gable are in-line and tenoned at the base but lapped and nailed at the top, which is often a feature of post-medieval structures where these details would have been covered up on the outside.

The barns have two separate roof frames that meet at bays 5 and 6 (plate 12). The roof in the main part has a raking queen strut form with birdsmouth collars on the half bays (fig. 7), while the roof in the three bay extension is of butt-purlin form (plate 12), as is the aisle (plate 8), perhaps rebuilt when the extension was added. This butt-purlin roof is of basic form, where the principle rafters are pegged and tenoned to the purlins but the secondary rafters are only tenoned. The rafters have similar scantling to the studs but are closer together, with between 6 and 7 per bay. Additional, narrow, rafters have been added between the original ones along the north side and all those in bay 5 are replaced (plate 6). Some rafters in the extension have not been properly finished and still retain bark, though their scantling is comparable with the main build.

There are no obvious carpenter's marks, but there is some graffiti carved to the lower inside face of the eastern doorpost of bay 3. This reads 'RSP 36' in well-carved lettering. Below it is something older, a letter 'W', usually known as a 'witch' mark. The mark is actually an inverted M, representing the Virgin Mary and carved to deter evil (plate 13). Such a location as the threshold would be the ideal place to prevent evil spirits coming in with the harvest.

5.2 Granary 2

The granary forms part of the L-shaped eastern range of 19th century buildings alongside the former stable block 3 (plate 14) and cart shed 4 (plate 1, left), and is now a mess room and store. It is a prominent oblong planned two-storied structure positioned at the entrance to the farm that has been adapted internally but retains much of its external character. Like the rest

of the range, it is built from yellow stock bricks in Flemish bond. It has a slate roof, hipped either end. Stable range 3 leads away to the south-east.

In the latter stages of the working farm grain was conveyed to the granary from the barn for storage but originally it would have been hoisted up through the taking-in doors at the front (plate 15).

5.2.1 External description

The main elevation faces the yard to the south and includes two doorways and a window on the ground floor and a taking-in door and hatch on the first floor (plate 15). The eastern part is attached to the stable range. The ground floor window has been replaced and the eastern doorway was narrowed when the interior was re-partitioned (fig. 8). Otherwise, the rest of the fixtures are original. The doors are ledged, braced and battened in a traditional form and all such features are topped by cambered yellow brick arches on the ground floor and flat arches on the first (plate 15).

There are no features on the hipped elevations to west and east and the north elevation is occupied by building 4, which, like the granary has been re-roofed in corrugated iron (plate 22).

5.2.2 Internal description

The interior has been altered in recent years to suit the requirements of its owners and traces of early plan form and fixtures have either been removed or are hidden internally by modern additions in the form of blockwork and plasterboard wall coverings (fig. 8).

The western part of the ground floor has been refurbished for storage purposes and the floor above is now a self-contained flat, entered by a new stair cut into the former floor above the eastern part (plate 16). The surrounding walls are lined with concrete blockwork and racking and the floor is also of concrete. The walls are white-washed below a collar purlin roof, partly-rebuilt with modern machine-sawn timbers.

5.3 Stable 3

The stable is a low, linear structure of the same character of the granary, forming the eastern side of the farmyard. The former horse stalls (fig. 8) have been refurbished inside, providing accommodation for agriculture students and altering the form and layout to the northern half of the building. The southern half is unaffected and only the bed-sitting room (former stalls) and store (tack room) are part of the re-development scheme (fig. 8). The garage beyond the

yard wall (fig. 8) will continue to function with the house, and are only given summary descriptions in this report.

5.3.1 External description

The western elevation faces onto the old yard and retains much of its character. At the northern end is the only remaining wide stable doorway, formerly one of three, which is of the same ledged, braced and battened form as the granary (plate 17). The other two doorways have been partially blocked to accommodate windows (fig. 8). All the old openings (probably slatted vents or a combination of vents and windows) are replaced with modern windows along the entire range (plate 17), but their cambered brick arches remain. A wide, fixed tripartite window has been inserted at the south end of the former stalls (fig. 8).

Another ledged, braced and battened door provides entry into the tack room, positioned further along the main elevation, on the north side of the yard wall (fig. 8). Beyond the yard, and also the development area, are service buildings relating to the farmhouse. The first is a probable chaise house, with its own double doorway for cart access. Chaise houses were often found close to the house, where the family's carriage would be kept, commonly a small two-wheeled carriage called a chaise, usually with a folding canopy (Proctor 1985). Next to it appears to be a former wash house, suggested by chimney for an old copper, though the copper is no longer present. Folding garage doors have been inserted at the front, now largely hidden behind the flower bed (plate 14). Both these areas are referred to as garages in figure 8. The eastern elevation finishes in a hipped slate roof and plain chimney on the south end. Entry into the washhouse from the house is at the south end (fig. 8)

.

Much of the eastern elevation on the tennis court side is obscured by shrubs and other plants (plate 18). The only features are two replaced windows inserted into existing openings (fig. 8).

5.3.2 Internal description

As mentioned previously, the former stalls had already been converted, so there was no information for internal layout and features to record. As part of the conversion it would appear the interior was lined out in studwork and plasterboard to provide proper insulation, bringing the walls out from 35 to 50cm. Modern carpets and other fittings were inserted and sleeping, sitting and utility areas demarcated (plate 19).

The store, south of the bed-sitting area has not been affected and the fixtures and quality of décor suggest this was built as a tackroom. It has a limewashed interior and lath and plaster

ceiling with the remains of a moulded ceiling vent (plate 21). A painted beam with beaded corners divides the room in two (plate 20). The internal walls are boarded and the northern wall contains four harness racks.

The garage interior is also lime-washed and used for storage purposes. There is a plastered stud wall between it and the tack room and the floor is made up of worn yellow stable bricks. Its cart doors and location close to the house suggests this was formerly a chaise house.

The south part of the garage was probably a wash house/utility room but was adapted some time ago for a garage, although now it is used for storage purposes. This is the only part of the stable block where the roof is properly exposed and shows a pegged collar clasped purlin assembly.

5.4 Cart shed 4

This is now a mess room/diesel store but the original building was an open-sided cart or animal shed, contemporary with the granary/stable range. In recent times, the front (north side) has been in-filled and the roof replaced (fig. 8). The interior has a more 'rustic' feel, which is absent in the other buildings.

The structure is attached to the north side of the granary. Next to it is a modern agricultural building to the east that probably sits over the moat (fig. 1). The side walls are built of yellow stock brick and the front in a light, weather-boarded modern frame. The lean-to roof above is laid in corrugated tin sheeting (plate 22), but was probably slated originally like the rest of the range.

Inside are five bays, defined by heavy 5 inch thick softwood trusses laid over the brick wall at the back and 7 inch thick posts at the front (plate 23). The bays are quite narrow, at up to 2.5m wide, and the mess room and store areas are separated by a modern partition on the line of the second and third truss from the west (fig. 8). Each truss comprises a beam with a short raking strut pegged centrally that cups the purlin in the roof (plate 23 & 24). The struts are strengthened either side by diagonal braces that could have supported a much heavier roof.

The diesel store is separate to the mess room and was only partially accessed but the southern wall shows a possible blocked doorway into the granary, underneath the truss (fig. 8, plate 24).

5.5 Western range 5

The western range is contemporary with the formal laying—out of the main yard in the third quarter of the 19th century, probably functioning as a shelter shed for livestock. It therefore post-dates the eastern range.

Unfortunately, most of the range was lost when the yard was covered over in the modern period. Only the outer wall remains and the western side of the roof, as the expansive roof of the modern yard is built off the ridge (fig. 9). The extent of the range has been extrapolated from old maps and a roof scar against the south wall of the barn.

The exterior facing the road stands in an attractive part of the garden beside the moat and is built from uniform Flemish-bonded yellow bricks, in keeping with the other Victorian range (plate 25). The slate roof on this side appears to be intact.

Inside the yard the interior has been completely stripped-out and the ridge propped-up on telegraph poles, though the outline of the original gable roof can be seen on the barn wall (plate 4). The back wall is rendered and lime-washed and the use of machine-sawn softwood rafters in the roof support a later 19th century construction date. There is no evidence of internal walls or fixtures and fittings.

5.6 Modern range & covered yard 6

A modern south range was built while the western range was still functioning, before the yard was covered-over. This is shown by the fact there are still rafters on the inside pitch of the roof (plate 26). This activity probably dates to the second half of the 20th century as the build is of Fletton brick and concrete block. It was divided into three section (fig. 9) and it is likely the function of the range was related to cattle or other livestock.

The covered yard is supported on a framework of steel joists and timber rafters that carry a large expanse of corrugated cement sheeting (plate 26). The roof is pitched at a shallow gradient towards the south, away from the barn. The floor of the yard is unmade.

6.0 DISCUSSION

Rolls Farm developed as a moated manor site in the medieval period. The moat has an unusual elliptical plan form around a 17th century farmhouse that contains 15th century elements, though the moat could pre-date this. The large aisled barn is likely to date to the late 17th century, based upon its method of construction, quality of framing and joinery. This was an important episode in the development of Rolls Farm because it ties in the enlargement of the house with the rebuilding of the farmstead. With its extensive tile roof (tile being an expensive commodity) it would have been an impressive sight from the road along with the house and moat, and a suitable component to a wealthy farmstead.

In its early form, the barn had cart doors to the midstrey and no porches; the simple awning of today is a later insertion. A 'witch mark' beside the wagon doors on the south elevation shows this was the traditional route into the barn for the harvest carts. It is unclear whether the structure was originally weatherboarded, as there is also evidence for wattle and daub and lath and plaster, though wall coverings can be mixed and also change over time.

Soon after its construction, perhaps in the early 18th century, the barn was extended. The framing of the roof is different to the main part, though the same as the aisle, suggesting the aisle was rebuilt at this time. Timbers used in the roof are slightly cruder than the main build and more indicative of early 18th century construction. A sizeable barn such as this would have been necessary for a large farm, with a holding of 82 acres in the 16th century.

The farm gradually developed in the 19th century with improvements in farming. An attractive L-shaped granary/stable range was built in the Regency style of the 1820s or 30s, enclosing the eastern side of a large yard. Along with the granary, close to the barn, this supplied stalls for the horses and a tackroom and, outside the yard, service buildings for the farmhouse, a probable chaise house and washroom. The 19th century holding was around 58 acres, approximately one fifth of which was pasture. In the latter part of the century a linear range, in the same style, was built onto the back of the barn as a shelter shed for cattle, reflecting the move time away from arable farming into dairy and meat-rearing. The yard was covered over in the 20th century to form a large single cattle shed.

7.0 CONCLUSION

The farm buildings at Rolls Farm form an interesting and unusual study group that represent the development of a wealthy farmstead from the late 17th century through the Victorian and modern periods, within the context of an important medieval moated site. The large semi-aisled barn is a relatively late example of this form and its tiled roof an expensive and unusual feature for a vernacular building of the time, and a clear display of wealth. The granary/stable block has a strong Regency flavour, with an austere front and hipped slate roofs and its aspect is reminiscent of some of the 'model farm' architecture of the large estates. Its architecture is complimented by the cattle range and cart shed.

Like most Essex farms, the site was improved in the 19th century by retaining an earlier barn and adding new ranges either side to enclose a central stockyard. Unlike many other Essex farms though, Rolls Farm was a wealthy estate and could afford new ranges that reflected the architectural character of the time rather than the local vernacular tradition. As such, they form a significant regionally-important group of buildings with the barn.

Although the site is fortunate in not being overly-developed, the farmstead has been affected by changes in the modern period reflecting the decline of the traditional agricultural regime. Such changes are not unusual on modern farms and in this case have impacted more on the internal aspects of the buildings. Outwardly much remains of the historic character, which is further enhanced by the fine setting within the moated garden and Listed farmhouse. This setting will be further enhanced when the modern elements are removed from the traditional yard during redevelopment, though it is unclear at this stage when this will be. When this does occur, the results from the monitoring works will be included in a separate report.

ACKNOWLEDGEMENTS

Thanks are due to Rosemary Padfield for commissioning the works and supplying drawings, and for her assistance during the survey. Thanks also to the staff at the Essex Records Office. Fieldwork, recording and photography were undertaken by the author. Illustrations were prepared by the author and produced by Andrew Lewsey of ECC FAU. The project was managed by Adrian Scruby and monitored by Adam Garwood of ECC HEM, on behalf of the LPA.

BIBLIOGRAPHY

Alcock, N.W. et al	1996	Recording Timber-framed Buildings: An Illustrated Glossary CBA York
Brown, N. & Glazebrook, J. ed.	2000	EAA Occasional Papers No. 8, Research & Archaeology: A Framework for the Eastern Counties 2: Research Agenda & Strategy, Scole Archaeological Committee, Norwich
Brunskill, R.W.	1997	Brick Building in Britain Victor Gollancz, London
DOE	1990	Planning Policy Guidance Note 16: Archaeology and Planning HMSO, London
ECC HEM	2008	Brief for Archaeological Monitoring & Historic Building Recording at Rolls Farm Barns, Magdalen Laver (ECC HEM unpub.)
Hewett, C.A.	1980	English Historic Carpentry, Phillimore & Co., Chichester
Powell, W.R.	1956	Victoria County History vol. 4 University of London
Proctor, P., ed.	1985	Longman Concise English Dictionary, Longman, Harlow

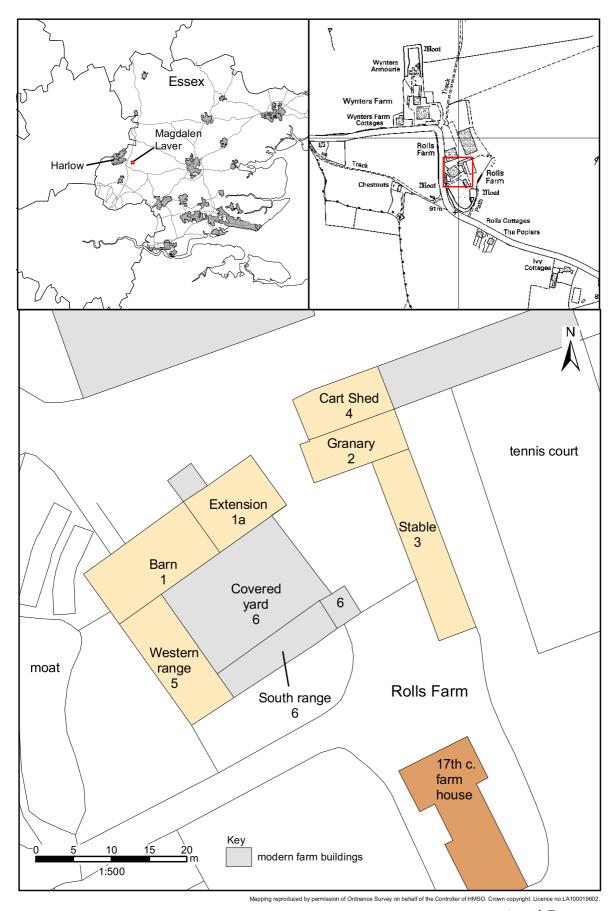


Fig.1. Site location and block plan



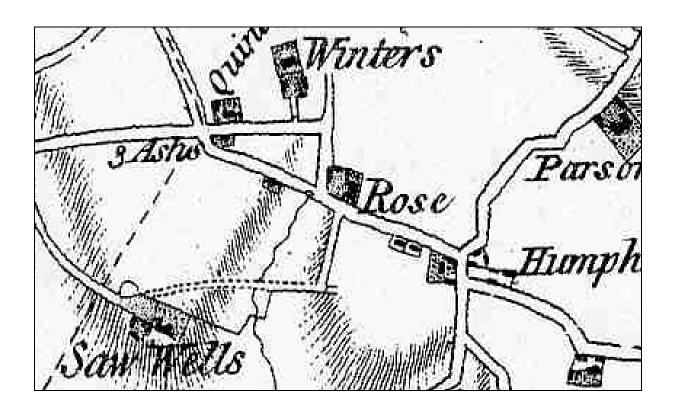


Fig. 2 Chapman & Andre map of 1777 (plate 11)

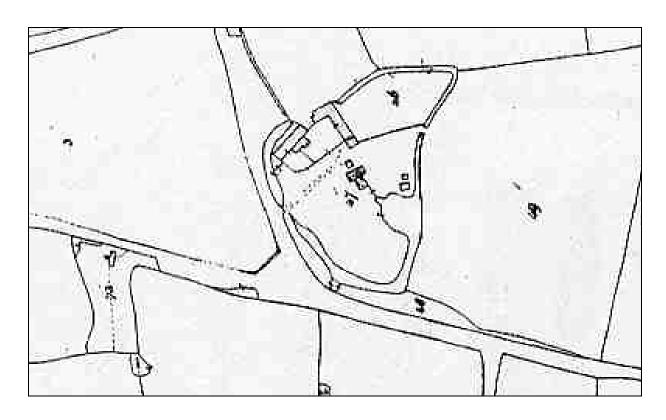


Fig. 3 Magdalen Laver tithe map, 1847 (CT211/B)

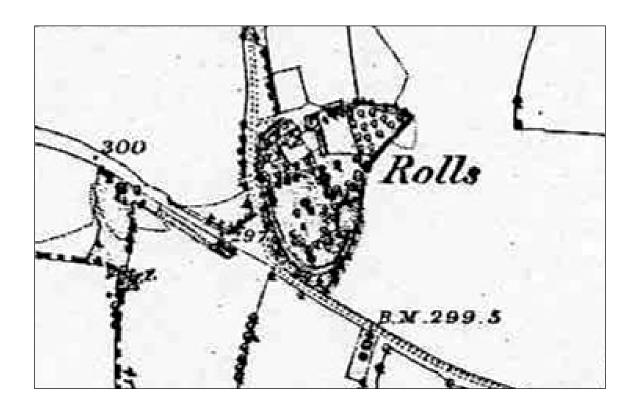


Fig. 4 First Edition 6 " OS map (1873, sheet 41)

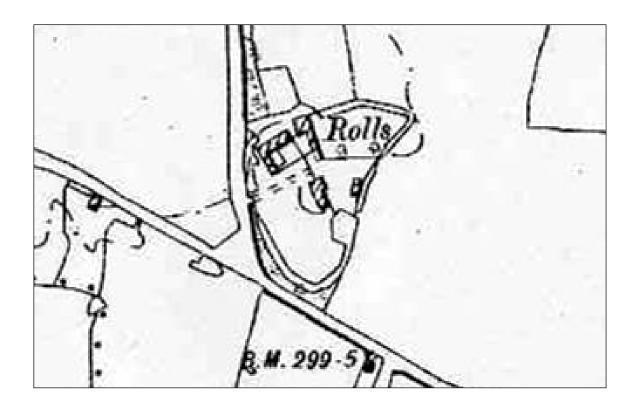
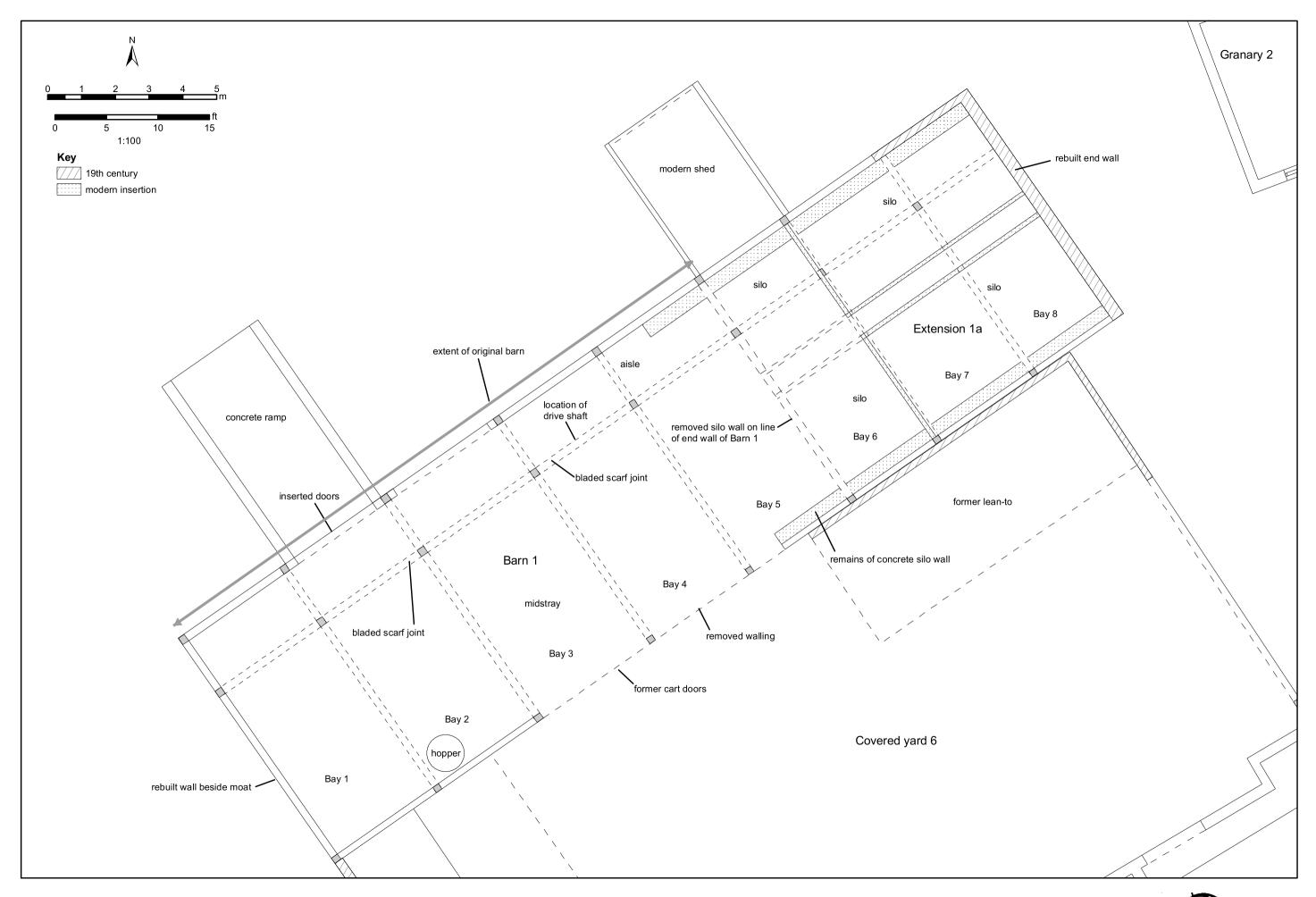


Fig. 5 Second Edition 6" OS map (1897, sheet 41SE)





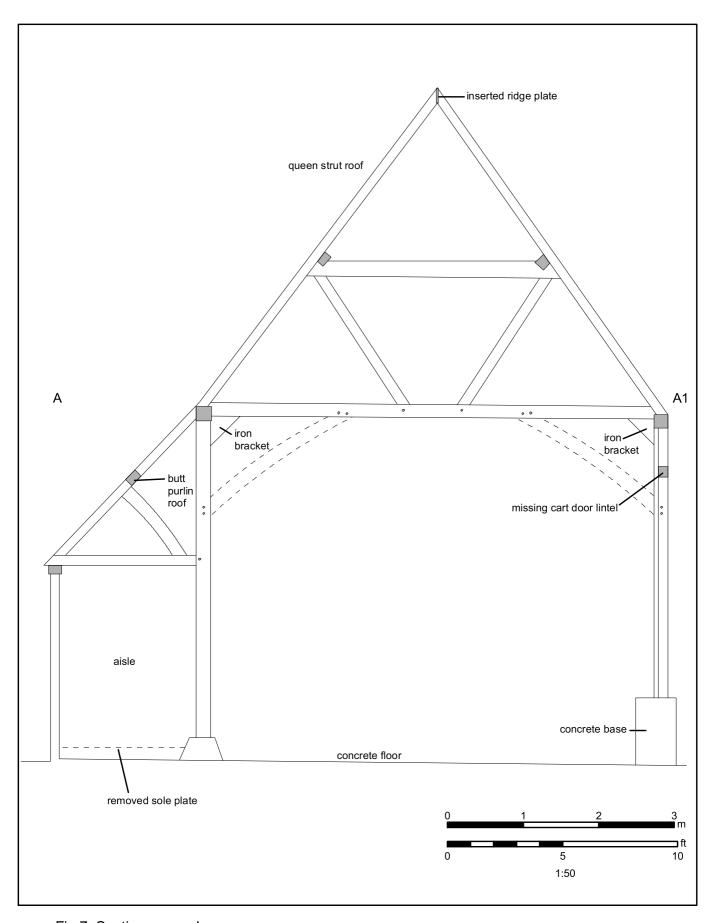


Fig.7. Section across barn





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Fig.8. Plan of eastern range (buildings 2, 3 and 4)

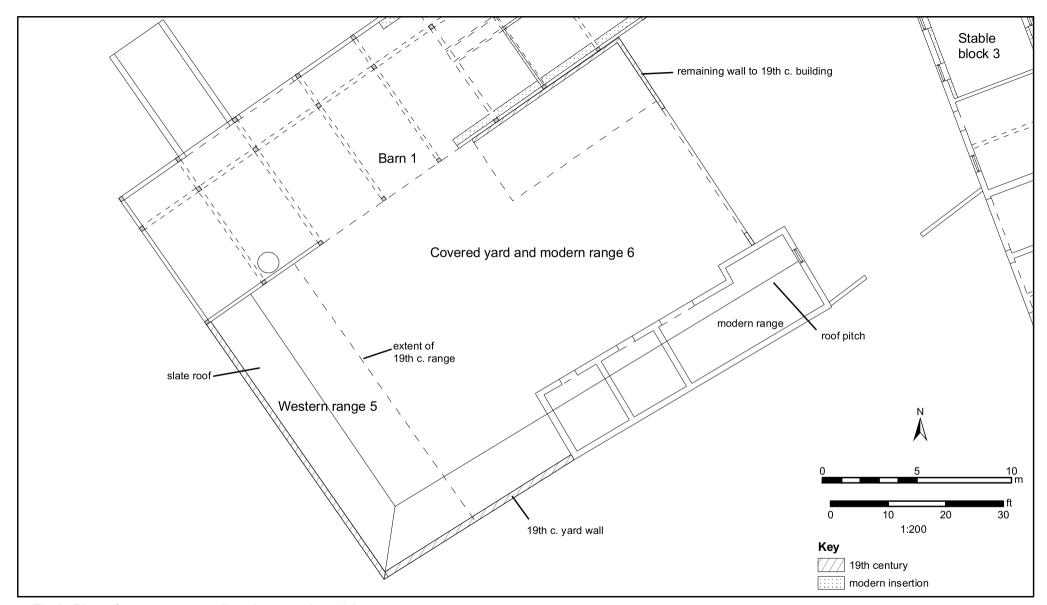


Fig.9. Plan of western range 5 and covered yard 6





Plate 1 Barn viewed to south-east



Plate 2 Barn viewed to south



Plate 3 Rear of barn and covered yard viewed to north



Plate 4 South wall of barn viewed to north



Plate 5 South wall of barn viewed to north-west



Plate 6 Interior of barn viewed to west



Plate 7 Interior of barn viewed to east



Plate 8 Detail of bladed scarf joint and aisle roof



Plate 9 Aisle framing and extant southern wall of barn



Plate 10 Partially-rebuilt western wall



Plate 11 Original internal east wall and remains of concrete grain silos



Plate 12 Original east wall viewed to south-west



Plate 13 Carved graffiti by southern threshold ('W' toward base of post)



Plate 14 Eastern range viewed to north



Plate 15 Granary viewed to north-east



Plate 16 Interior of granary viewed to west



Plate 17 Stable viewed across former yard to east



Plate 18 Rear of eastern range viewed to west



Plate 19 Interior of bed-sitting area inside stable



Plate 20 Interior of tackroom



Plate 21 Ceiling vent inside tackroom



Plate 22 Former cart shed 4 viewed to south-east



Plate 23 Mess room inside former cart shed

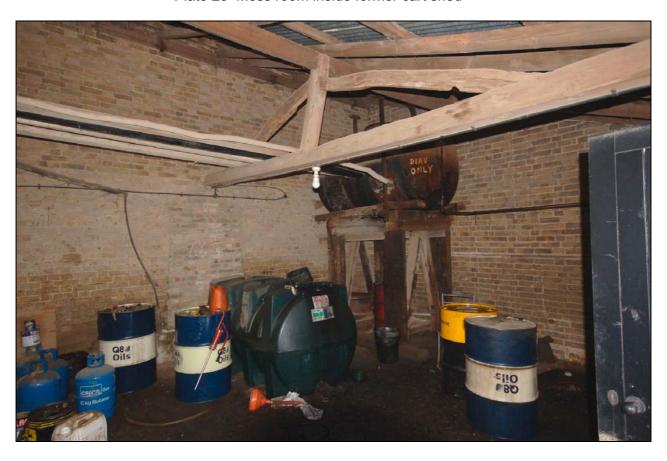


Plate 24 Diesel shed inside former cart shed



Plate 25 Farm buildings viewed to north from driveway



Plate 26 Interior of covered yard showing west and south ranges

Appendix 1: Contents of Archive

Site name: Rolls Farm, Hastingwood Road, Magdalen Laver, Essex

Project no.: 1948

Index to the Archive:

Document wallet containing:

1. Introduction

- 1.1 HEM design brief
- 1.2 FAU written scheme of investigation
- 1.3 Client/archive report
- 1.4 Unbound version of report
- 1.5 CD containing digital photographs & copy of report, pdf-formatted

2. Site Archive

- 2.1 Photographic record (digital prints & monochrome 35mm prints & negatives)
- 2.2 Photographic registers
- 2.3 Site notes & annotated survey drawings
- 2.4 Architect drawings (plans, elevations & frame survey)

Appendix 2: EHER Summary Sheet

Site NamelAddress: Rolls Farm, Hastingwood Road, Magdalen Laver, Essex		
Parish: Magdalen Laver	District: Epping Forest	
NGR: TL 4998 0794	Site Code.:	
Type of Work: Building recording	Site Director/Team: Andrew Letch ECC FAU	
Dates of Work: 15th & 16th July 2009	Size of Area Investigated:	
Curating Museum: Epping Forest	Funding Source: Mrs R. Padfield	
Further Work Anticipated? No	Related EHER/LB Nos. EHER 4225;LBS 118116 (house)	

Final Report: Summary in EAH

Periods Represented: post-medieval, Victorian

SUMMARY OF FIELDWORK RESULTS:

Recording works were undertaken on a probable late 17th century semi-aisled barn and two brick-built Victorian ranges in advance of residential conversion. They are located within a medieval moated site that may be contemporary with a 15th century cross-wing within the 17th century Grade II-listed farmhouse.

The barn, originally of five bays, is timber-framed and boarded with a tiled roof and appears to have been extended around the early 18th century to form an eight bay construction. Concrete grain silos have been added at the east end, obscuring all of the wall framing to the extension, while framing in the main part is also missing in places.

The two Victorian ranges are well-built in yellow brick. The main range (east) comprises a granary, stable, tack room and former cart shed along with service buildings for the house, while the west range was a former shelter shed. These have been altered internally but retain much of their historic character externally. A southern range, built of Fletton bricks, was constructed in the 20th century along with a covered yard to create a large cow house.

The structures belong to a wealthy post-medieval and Victorian farmstead. The barn is well-built for the period but only retains part of its framing, preventing full analysis. The eastern range is built of brick and has a Regency-style grandeur, reflective of contemporary model farm architecture. The west range is slightly later but blends in with the planned unit attached to the earlier barn. Internal fixtures and fittings have been removed.

Rolls Farm has adopted the plan form of a typical Victorian mixed farmstead during two phases of agricultural improvement in the early and late 19th century. The barn was retained at the top end, with stables and animal ranges either side of a large central yard. The main structures retain some architectural significance individually and as a group for their use of materials, design and setting alongside the Listed farmhouse and moat.

Previous Summaries/Reports: None	
Author of Summary: Andrew Letch	Date of Summary: 18th December 2009