HISTORIC BUILDING RECORDING AT KING STREET FARM KING STREET, HIGH ONGAR ESSEX





November 2007

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HISTORIC BUILDING RECORD

Client: Mr. M. Kay

FAU Project No.: 1803

Site code: HOKS 07

NGR: TL 5888 0330

OASIS No.: essexcou1-33224

Planning Application: EPF/1603/05 & EPF/LB/1604/05

Date of Fieldwork: 15th June 2007

1.0 INTRODUCTION

A programme of building recording was undertaken by Essex County Council Field Archaeology Unit (ECC FAU) on a Grade II listed Victorian planned farm at King Street Farm, High Ongar, prior to conversion. The work was commissioned by the owner/developer, Mr. M. Kay, 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 District Museum. An OASIS online record has been created.

The planned farm is known to have been constructed in 1876. All its components were recorded, as well as a cart lodge to the west belonging to a previous post-medieval farmstead. The unit is typical of Victorian planned complexes, comprising a barn, shelter sheds, stables and loose boxes following a courtyard layout.

All the above buildings are to be converted to residential usage. The farmhouse, which is also listed and dates to c.1600, will also be converted but is not covered by the archaeological condition. A brief description is given within the context of the farm.

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2.0 BACKGROUND

2.1 Site location and description (fig.1)

King Street Farm lies within the medieval and post-medieval settlement of High Ongar (HEM 2007), to the south-east of the village centre along minor roads at TL 5888 0330 (fig.1). The nearest main road is the A414 from the direction of Chipping Ongar to Chelmsford.

The farm buildings are clearly seen from the road (plate 1), arranged in three connecting ranges around the yard, open to the west, facing the barn (plate 2). The southern range is sited along the roadside. All the structures within the main farm complex are brick-built. Some have slate roofs. Apart from the stable and wagon shed/byre, that have built-in hay lofts, they are all single-floored. The list description (LBS 118398) specifically cites the barn and roadside 'byre' as listed, though the whole complex is curtilage listed as one unit. On the north-east side of the main area, across a modern concrete yard, stands a timber-framed wagon lodge (plate 3) that may predate the planned farm and is curtilage listed with the barn and farmhouse.

The timber-framed farmhouse stands opposite the main entrance, to the west of the farm buildings, within in a fairly flat agrarian landscape. It is also Grade II listed and dated to c.1600, pre-dating the existing farm. The area along the roadside is overgrown but clear around the farm buildings. The condition of the structures is generally good, suggesting the farm has been redundant for a relatively short time.

2.2 Planning background

A planning application and Listed Building Application (EPF/1603/05 & EPF/LB/1604/05) were submitted to Epping Forest District Council for change of use of the barn and associated buildings to mixed residential and business use in September 2005.

Mindful of the possible effects on the historic integrity of the listed farm complex, ECC HEM advised the LPA that a full archaeological condition should be attached to the planning permission, based on advice given in Planning Policy Guidance Note 16: Archaeology and Planning (DOE 1990).

2.3 Farming from the post-medieval period onwards

Medieval farm buildings tended to adopt an unplanned plan form, scattered around the farm house rather than around a central courtyard. Farms in the south-east of the country were 'mixed', producing cereals and livestock and consisted of a barn, where crops were threshed

and stored, granary to store the grain (or the farmhouse) and stable, built with internal hay lofts. Except for the horses, animals were kept outside or in temporary shelters. Implements (ploughs, etc) and wagons were stored in sheds or on the threshing floor of the barn. Arable and livestock farming were mutually dependent on each other. Cereals were produced as a cash crop and as animal feed and in return, the animals provided work power, manure for the crops and wool, meat and dairy products.

In the late 17th century, improvements in crop rotation, with the introduction of improved grasses and winter feed crops, heralded the end of the medieval three field system. Improvements in animal husbandry meant larger animals could be bred and increased winter feed meant that more could be kept for fattening.

Agricultural improvements led to the establishment of larger, more efficient farms. From the 1740s, the courtyard 'planned' or 'model' farm, established by improving landlords, began replacing the earlier scattered farmsteads. Cattle were fed in one or more enclosed yards, usually with an entrance to the south and a barn to north for shelter. In the yards manure was trod into threshed straw and the mixture added to the fields, increasing crop and straw yields.

Such improvement accelerated between 1850 and 1875, the period known as the 'golden age of farming,' based on an increased population and the demand for milk, meat and bread by growing urban centres, aided by the growing railway network for distribution purposes and new farming methods. New planned farms were established on the courtyard principle and others were adapted to incorporate philosophies on efficiency based on the Victorian factory system. Great debate was had in influential circles on the merits of different husbandry techniques and efficiency/labour saving devices such as mechanised threshing and ploughing machinery to increase productivity.

Between 1864 and 1876 the numbers of cattle kept on farms increased by one third, due to an increase in the demand for cattle products and an increase in price relative to corn, aided by special feed crops that improved the fertility of the soil (Peters 2003). Thanks to new feeds, farms could now specialise in cattle.

The expense of the planned model farm in its purest form was a barrier to smaller landowners. So, rather than demolish and build afresh, many farmers remodelled their farms utilising the courtyard system. Larger buildings, inevitably barns, were retained, with new housing for livestock attached around a courtyard layout. This was the prevailing trend in Essex.

Many Essex farmsteads today are composites of post-medieval buildings (barns) integrated into a 19th-century courtyard layout and augmented by 20th-century pre-fabricated structures, usually to one side of the traditional farm core. Inevitably in Essex, Britain's entry into the EEC in the 1970s accelerated the move to more intensive agriculture, amalgamation of estates and a shift away from mixed to arable farming. With larger economies of scale through larger machinery and crop yields, the smaller traditional farm buildings no longer have a role and, with the housing market booming, offer an attractive prospect for conversion.

2.4 Historical background & development

Cartographic and documentary research was undertaken at the Essex Records Office Chelmsford (ERO) to understand the development of the farm. The results are presented below with their accompanying ERO references.

Chapman and Andre's map of Essex of 1777 shows the farm to the east of two old farms, Withers and Spences (fig.2). In particular, the map shows a square plot with the farmhouse lying in the centre. King Street is named, but not the farm specifically.

The tithe award for High Ongar parish (1848) gives the owner of King Street Farm as Thomas Stokes, a major landowner in the village at the time (D/CT 263A). The holding is small, consisting of 4 acres of arable land and 8 acres of pasture. The farmhouse was split into two cottages and rented to William Norris and Stephen Brown. Unfortunately, King Street Farm cannot be seen properly on the accompanying tithe map (D/CT 263B).

The first edition Ordnance Survey map of 1873 was drawn three years before the farm was improved and clearly shows the pre-improvement layout. There are three structures forming an L-shaped plan form against the road around a single yard. Wagon lodge 8 stands to the east of the house, with an accompanying porch or shed attached (fig.3).

The fully-improved farm is shown on the second edition OS map of 1896 (fig.4), with three ranges set around a central yard close to the road, the same as today.

Minor changes occurred in the 20th-century, mainly the enclosing of the cattle sheds, concreting the yards and removing the porch/shed to the wagon lodge. Farm office 7 was added beside the yard entrance (fig.1) and the farmhouse rendered in cement over earlier clapboard. It is not certain when the farm ceased to function.

3.0 OBJECTIVES

The purpose of the historic building survey was, as outlined in the brief (ECC HEM 2007), to provide a detailed record of the traditional farm buildings to RCHME level 3/4 standard prior to conversion.

In addition, the record was required to address the following: plan form of the site, materials and method of construction, building chronology and phasing, function and internal layout, process flow, fixtures and fittings, additions and modifications from changes in agricultural practice and the context of the farm within its contemporary landscape. The study of the development and impact of the agricultural revolution and Victorian High Farming is regarded as an important area for further research by the Regional Research Agenda (Brown & Glazebrook 2000, 42 & 45)

4.0 DESCRIPTION OF WORKS

As the buildings share common themes, the complex was divided into three ranges and each component assigned a number, referenced to a block/location plan (fig.1). Copies of the architect's drawings were supplied by the client and used as part of the survey to produce annotated floor plans and elevations, as requested in the brief (figs.5 and 6). Drawn elevations are included at the rear of the report as fig. 8a-d.

External and internal architectural descriptions were made and the function of each building was assessed, along with its relationships to others as part of the agricultural environment. The structures are described in this report under their original functions and evidence for any later adaptation/ change of use included in the description.

A series of photographs (digital, medium format and 35mm black & white print) were taken to record the buildings internally and externally. Specific shots were taken of any areas of important architectural detail, fixtures or fittings. Spatial contraints meant that some smaller internal areas could not be photographed in a meaningful way. A representative selection of photographs is reproduced at the back of the report as plates 1-32. The remainder can be found in the archive.

Documentary and cartographic research was undertaken at the Essex Records Office (section 2.4) to further understand the origins and development of the farm.

5.0 HISTORIC BUILDING DESCRIPTIONS

Belonging to one contemporary build, the different components of the farm complex are firstly described by their common elements (as part of the three ranges), and then more specifically under their functional headings. As a separate structure, the wagon lodge is described exclusively under its own heading. A short paragraph is included on the farmhouse to complete the record.

5.1 General description

The farmyard is aligned with King Street on a west to east layout set around a single yard, open to the west. Around it are grouped shelter sheds, stables, loose boxes and a barn (fig.1). The barn is the largest of the buildings and the ranges extend off it, their roofs set lower at eaves level (plate 2). Entrance gates from the road are placed either end of the farm unit, with two others for access into the main yard and the yard between the wagon lodge and north range (fig.1). The ranges consist of the following structures, given in the order in which they appear in the report:

North range: shelter shed 1 and loose box 2

East range: stables 3 and barn 4

South range: shelter shed 5 and cowhouse 6

The ranges are built in slightly creased orange/red nine inch brickwork laid in Flemish bond within a sandy lime mortar. The north and south ranges are built in pier and panel construction, often used in industrial structures. The roofs are gabled with a common pitch of 35° with queen strut trusses and intermediate collars. Apart from the shelter shed 1, which has been re-clad, the roofs are clad in slate. Internal floors were re-laid in concrete in the modern period.

The wagon lodge, an open-sided wooden planked shed stands to the north of the complex (plate 3). It has deteriorated where planks are missing and areas of walling and roof patched-in in modern materials.

5.2 North range (shelter shed 1 & loose box 2)

When not out to pasture, cattle were generally be kept in the yard and open sheds. The loose box was reserved for calves, calving cows or perhaps sick animals. The north and south ranges had similar layouts originally based around the open sheds.

5.2.1 External description

The north range consists of a linear six-bay structure, gabled to the west and facing away from the entrance (fig.5). Upon the gable is a diamond pattern made from gault bricks largely obscured by an electricity mast (plates 1 and 26). The three western bays are open to the yard on its south elevation (fig.8a, plate 4). Two of the other bays have been filled-in with brickwork in the modern period. Basic softwood doors have been inserted and voids simply left in the brickwork for ventilation instead of windows or grills. The loose box (2) at the east end is unaffected externally and retains an original heavy ledged and battened cowdoor, with a hinged vent above (plate 4).

On the rear (north) elevation (plate 5) is another vented cattle door, from the loose box to the outer yard. Beside it is a small wooden-framed fixed square window. The rest of the elevation, i.e. the rear of the shelter shed, is plain brickwork.

5.2.2 Internal descriptions

Shelter shed 1

In the modern period, part of the front of the shelter shed was walled-in to create extra loose boxes. The first three western bays are still open to the yard and were separated into pens by inserting rails between the wall and posts. Those between bays three and four remain *insitu* (fig.5, plate 6). A more permanent partition stands between bays four and five, built from timber planking with inserted concrete blockwork plinth. Contemporary with this is the infilling of the front and internal square troughs (fig.5), positioned low especially for calves.

Bay divisions are represented by the piers and bay posts positioned c.3m apart. The rear wall is brick built in pier and panel construction with cement-filled rail sockets on each bay division, except the third/fourth one. Bay posts are c.14cm-wde and their feet encased in concrete, contemporary with the later sloping concrete floor, itself probably laid over an original earth or cobbled floor.

Some of the wall plates along the front are reused from an earlier post-medieval building, perhaps one of those replaced by the planned farm. One example, in bay 3 (fig.5), has exposed rafter rebates and is joined to the new timber by using an existing bladed scarf joint (plate 7). The tie beams are strapped to the plates and are fairly regular in cut.

The roof frame comprises queen strut trusses nailed and lapped straight onto the purlins (plate 6, fig.6). The rafters are hand-sawn and mainly original, though some were replaced

when the battens were renewed for the corrugated asbestos roof. Otherwise the roof timbers are quite crudely cut and often have not been completely stripped of bark.

Loose box 2

This is entered exclusively from the yards either side. The doors are original ledged and battened doors on pintel hinges (plate 8), as are all those that survive in the complex. The interior is white-washed and rendered to a height of 1.4m (plate 9). Although the dividing wall between loose box and shelter shed is built in English bond, it does not belong to a separate phase, as other areas of English bond were found inside the barn.

5.3 East range (stables 3 and barn 4)

The stables and barn were built as one unit and externally there is no difference between the two. They are the largest structures on the farm and therefore the main focus. Their elevations show a higher level of detailing, especially those to the east and south, which can be seen from the road. Being larger and more robust, they have thicker walls, built three rather than two bricks wide.

5.3.1 External description

The range is brick-built and gabled either side. Double-coursed parallel white brick banding runs around the exposed east and south elevations (plate 10). The gables either end have a double row at eaves height and along the gable. In between is some nice brick detailing: a large 'X' on the north side in burnt brick headers (plate 5) and a semi-circular louvred windeye dressed in white brick headers (plate 10). Its appearance is very much like the Grade II Listed barn at 'Readings', in nearby Norton Heath that also has a wind-eye in the gable and white brick banding (Hudspith 2003).

The east side (plate 10) has an off-centre pair of sliding doors into the barn, hanging from a heavy cast iron rail, replacements for cart doors. The upper section above the doors is blocked. Either side are single pitching hatches neatly placed between the eaves and brick banding. There is a similar hatch on the first floor of the opposing west elevation, facing the yard, above the entrance into the stables (plate 11). Hay could be pitched up here or dropped down for the cattle in the yard. It is also possible that grain was kept here, out of the way of vermin.

Like the loose box, the stable also had entrances from the main yard and north yard. In the case of the latter, the doorway has a segmental arch head (plate 5). Both doorways have wooden slatted vents over the lintel, a common feature for enclosed animal areas on the

farm. In the corner between the stable and loose box is part of the original cobbled yard (plate 8), now mostly hidden beneath the existing concrete yard.

Large ledge, braced and battened cart doors stand on the west side of the barn (plate 11), providing room for laden harvest carts. They are typical of the period. The threshold leap below contained the corn and kept animals out during threshing and could be removed to create a through draft for winnowing the grain. Between the cart doors and stable door is a diamond-shaped cartouche (plate 12) with inscribed initials and a construction date. The main initials, at the top of the diamond, are 'AC', presumably the farmer/owner. Initials further down carry the same second initial and probably belong to the same family; for instance the farmer's wife and children, of which three can be seen, and there were probably four or more. Unfortunately, modern re-pointing work in cement has caused some of the brick faces to blow (ironically, perhaps in an attempt to save it). Towards the bottom is the date 'MAY 1876', indicating when the work was completed.

5.3.2 Internal descriptions

Stables

The stables are oblong in shape, laid out as a single bay. Working farm horses were kept on the ground floor in two double stalls. Above on the first floor was a feed/hay and possibly grain store, Fed by the taking-in door facing the yard and linked to the floor below by trapdoors and a chute, both labour-saving devices associated with the planned farm.

A concrete floor has been laid over the original cobbles. Stalls were located to the east and horses were led through the west side between the two doorways. A hay rack remains high up along the east wall (fig.5, plate 13). Two door posts remain after the stalls were strippedout, and their spacing suggests four stalls in all. The presence of the same number of hand-crafted wooden harness/yoke hooks (made from tree branches) plus a smaller later one, on the west wall (plate 14), suggests there were four stalls in all. In the south-west corner is a feed chute (fig.5, plate 13). Both chute and hay rack are linked to the stores above.

The first floor is accessed by a wooden ladder attached to the west wall, strengthened by x-bracing between the joists, carrying 6 inch boards. A timber-boarded oat bin (plate 15) is attached to the south-west corner immediately above the chute (plate 15). A covered floor hatch in the north-east corner (fig.5) was used to drop hay into the rack below (plate 16).

The roof to both stables and barn employs machine-cut queen strut trusses, kept in tension by vertical iron rods bolted to the underside of 9-inch tie beams (fig.6, plate 15).

Barn

The barn is a large open building four bays wide, each measuring between 2.5 and 3m. Cart access is through the double doors either side (plates 17 & 18). A smaller modern door leads into shelter shed 5, but this access may be secondary. The walls retain areas of limewash up to door height. The interiors are built in English rather than Flemish bond, unlike the external walls. Timber matchboarding originally lined the lower parts of the walls to a height of 1.5m but remains only on the north wall and north-west corner (plate 18), most likely removed when the lower parts of the walls were rendered and concrete floor laid.

The original cart doors on the east side have been completely stripped and replaced with a pair of modern sliding doors with timber infill above. To the south there is a pitching hatch, identical to that in the feed store. The door is typical of all early doors, ledge and battened with wooden lintels. It is partly seen in plate 18.

Like the stables, the roof truss has pegged queen struts and trenched purlin. Iron tie rods keep the trusses in compression. The trusses are set directly onto the brick walls, without plates. Rafters are hidden from view by pine sarking boards.

5.4 South range (shelter shed 5, cowhouse 6 & ?farm office 7)

The front of the complex is formed by a south range that comprises the full extent of shelter shed 5 and the gable end of cowhouse 6. Cowhouse 6 forms an L-shaped projection leading outside the enclosed yard (fig.1). A possible farm office (7) is partly built inside it and is contemporary with the modern yard walls that hold an iron barred gate across the entrance (plate 26). This later structure is not visible from the road. It is interpreted as a farm office because of its plastered interior and 'domestic' doors and windows.

5.4.1 External description

The courtyard elevation (fig. 8c, plate 19) comprises shelter shed 5, whose front was filled-in to form a dairy in the 20th-century. This in-filling appears to have happened gradually in two stages. Hence the courtyard elevation is a mix of materials: cement render, timber boarding and modern brickwork.

The three eastern bays (plate 19) have an inserted timber frame, of post 1896 date (fig.4), probably early 20th-century. The end bay is cement rendered with an aperture boarded-up on both sides (plates 19 & 21). The two bays following on from this are clad externally in vertical boarding. However, in all cases, the fixtures and fittings, the half-heck door (albeit reused) and ovolo-moulded windows, predate the western half of the elevation that is built

from modern machine-made bricks (fig.5 & plate 19). A modern sliding cow door gives access to the yard. The plain two light windows either side are regularly-spaced and the lower part of the wall has rendered damp-proofing.

Cowhouse 6 extends northwards from the shelter shed, finishing in a weather-boarded gabled end, somewhat spoilt with the addition of the modern farm office 7 (plate 26). A low quality timber cow door is a modern replacement. The east wall has been rendered over to mask the contrasting brickwork of the office (plate 19).

Although partly overgrown, its roadside position makes the south elevation one of the most prominent views. The double white brick banding seen on the eastern range continues all the way along and in the cowhouse gable is a white brick decorative Cross (plate 20).

5.4.2 Internal descriptions

Shelter shed 5

As built, the shelter shed is virtually the same as shed 1 opposite, built open-sided in pier and panel construction and laid out over six bays. The trusses are slightly different in employing bolted knee braces. Any evidence for partitions or later framing is now obscured by cement render and flooring that became increasingly used after the 1950s following government advice and financial inducements for providing more hygienic surfaces to reduce disease (Lake 1989). No original fixtures or fittings remain.

In the 20th-century the building was adapted to a dairy by enclosing the open-sided front and fitting concrete milking stalls and troughs (plates 21 & 22). There are nine stalls made from cement-rendered brickwork set facing the southern wall on a raised concrete floor divided into two main areas with a third possible storage area to the east (fig.6)

Each stall is fitted out for two cattle, apart from the far eastern stall, which is single i.e. seventeen cattle in all. The eastern area contains no fittings and may have been for straw. Ceramic feed troughs and metal water pans are provided, as well as iron tethering brackets fitted either side of the stall. A drainage channel in the lower concrete floor takes waste away from the stalls (fig.6). Up in the eaves on the north-east corner is a platform for a water cistern formerly connected to a tap and pipe to the water pans (plate 24). From this end, an original ledged and battened door leads into the cowhouse.

Cowhouse 6

The cowhouse comprises three short bays c.2.5m-wide, defined by sturdy machine-sawn tie beams. Limewash covers the lower parts of the walls. The north-east part is taken-up with the inserted farm office (fig.6, plate 26) and the north gable has been completely rebuilt in machine-sawn timbers holding a lightweight pair of cowdoors. There are no other features.

Farm office 7

This is a modern brick-built structure, inserted into the north-east corner of the cowhouse and extending north beyond. It is contemporary with the later infilling of the shelter sheds. The exterior is cement-rendered and open to the roof of the cowshed (plate 25). A domestic front door leads out into the cowhouse and there is a six-pane fixed window by the cowdoors, but there are no other fixtures and fittings to verify its function. Where it extends out from the range into the yard, the roof is single-pitched and clad in corrugated iron sheeting (plate 19). The entrance is outside the yard and parts of an earlier brick surface remains to the west of it (plate 26).

5.5 Wagon lodge 8

Positioned away from the main complex, this is likely to be the wagon lodge. It belongs to the earlier, post-medieval farm that was replaced by the 19th-century planned farm. It is possible that farm horses were kept here too, with a hay loft above and a yard to the south for harnessing horse to wagon or plough. Building materials were being stored in here at the time of the survey.

The 19th-century maps show a linear structure longer in length with a small porch or shed attached, facing the fields to the north, and a small unknown protrusion to the east (figs.3 & 4). Comparison of the maps and current ground plan, as well as evidence recorded in the survey, show it is the same structure with the porch/shed and one bay removed.

The structure is racking slightly to the south. Its heavy plank cladding is reportedly built from ash (M. Kay pers. comm.) and is very unusual.

5.5.1 External description

In plan form this is a six bay linear structure built primarily from roughly-cut 1½ inch-high vertical planks on a light frame and low brick plinth (plates 27 & 28). Planks vary between 6 and 9 inches wide and are nailed onto internal rails. The area of the porch/shed can be seen in an area of weatherboarded in-fill in fig. 7 and plate 27, though it does not occupy the central position seen on the maps. An extending wall plate on the eastern end of the building

indicates the missing bay (fig.7). The roof is gabled either side with a 45° pitch and would originally have been thatched. It is currently clad in pantiles apart from the rear of the eastern bay that has been replaced with corrugated iron sheeting. In contrast to the planked exterior, the gable ends are weather-boarded which, after all, would be easier to cut to size and fit in a small area.

The south side is open fronted (plate 28) and is divided into seven equal bays by 14cm-wide posts, the same dimensions as those in the shelter sheds. They are braced to the wall plate with carved wooden brackets. The posts on the three western bays have rail slots, the first of which are intact and supported by a third post absent in the other two bays (plate 28). On the other side, to the east of the partition, there are gate pintels to the first bay (fig.5) but the following two bays are open for carts.

5.5.2 Internal description

Main framing is basic and none of the main timbers are pegged. Posts divide the bays below irregular-cut tie beams, supported on triangular brackets (plates 29 & 30), that appear to be machine-cut and therefore added later. The tie beams are fastened to the wall plates with iron straps and wall plates connected by pegged edge-halved and bladed scarf joints (fig.7). These are all original and not reused, providing a clear distinction between this and the 1876 build. The sill plate has rotted in places and stands on a cement-rendered brick plinth.

Wall framing in each bay combines a thin central post with two or three rails either tenoned or nailed either side onto which the planks are nailed (plates 29 & 30). A central partition is built in the same manner and supports the loft above, built over the two central bays. Hand tools may have been stored here or else bedding straw for the animals below, and traces of straw remain amidst superficial modern debris (plate 31). The west side of the loft (plate 31) is open, while the east side is boarded with a small ledged and battened door composed of two such boards, creating a nice feature (plate 29).

The roof is a light collar clasped purlin type, nailed rather than pegged (plate 31) which is suggestive of a late post-medieval date, perhaps the late 18th-century. Thin wind braces are contemporary with the build but are not strong enough to counteract the racking. Some of the rafters retain bark.

5.6 Farmhouse

Conversion works had started on the listed 16th-century farmhouse (plate 32) during the survey of the farmyard buildings and a short note on the structure is given below, based on limited observations at the time.

The structure had been covered in 20th-century cement render, which was removed to expose earlier weather-boarding and dry out the frame (plate 32). By viewing parts of the frame through missing boards, a better idea of the development of the house was established. The structure was built, as the listing states, in the 16th-century as a two storey cross-wing with a single storey range to the west. Heavy studwork was seen as well as external tension bracing (dated between the 14th to 17th-centuries) on the upper level of the crosswing. The chimney may be contemporary with the structure or inserted later. The original eaves were equivalent to the sills of the first floor sash windows and raised when the main range was heightened (in primary-bracing) in the 18th or 19th-century to create a first floor. Clapboard cladding was nailed to the frame and a new roof was built, extending across the crosswing and engulfing the chimney.

6.0 DISCUSSION, PHASING AND PROCESS FLOW

The farmhouse is the earliest structure on the site, dated to c.1600 in the List Description. It is not known if the early L-shaped farm group along the roadside, as evidenced by cartographic sources, is contemporary with the house, or later, nor the function of specific buildings. The only surviving structure, the wagon lodge 8, has been adapted but its general construction suggests an 18th-century date. Its heavy plank walls are an unusual feature and the necessity for such a strong structure could arise from its partial function as a byre, used keeping more robust animals such as oxen.

The land holding of the farm in the early 19th-century was small, only 12 acres, with an emphasis on pasture. Improvement came in the last quarter of the 19th-century, 1876, as it inscribed on the barn. Mixed farming was always part of the operation and it is assumed that by this date the landholding had increased significantly. The old L-shaped layout of the post-medieval farm was demolished and new barn, stable and housing for cattle built in its place around a west-facing yard. A rebuild like this, in brick and slate along with architectural detailing, would be an expensive undertaking. Of particular interest is the dated inscription on the barn wall. Original fixtures and fittings (partitions, doors, vents) survive throughout the complex, but primarily in the stables where particular items of interest are the feed chute and hay rack/hatch delivery system. Both are unusual examples of labour-saving devices influenced by model farm ideals and Victorian ideas of efficiency gained from the factory system.

In the post-war era, the shelter sheds on the south range were enclosed and fitted out to form a dairy and the sheds opposite partly enclosed to form extra loose boxes. It is possible that the wagon lodge was re-roofed and its porch removed at the same time. A farm office was created and floors and yards concreted-over.

Methods and materials of construction throughout the ranges are very similar; in brick and slate. Larger structures like the barn/stables have stronger machine-sawn frames while the sheds have a combination of machine and hand-sawn timbers. Quality reused timbers were found in shelter shed 1. The wagon lodge has distinctive characteristics that mark itself from the main farm in roof form, main framing and cladding.

Process flow of the planned farm

The barn was used to process cereals and perhaps root crops grown in the surrounding fields. After harvest, the sheaves were brought into the barn by cart, through the cart doors on the east side, which faced onto the fields and gateway by the road. The sheaves would be separated and threshed on the floors behind the cart doors where the grain was separated from the chaff, either manually or using a steam-powered threshing machine. Root crops were processed on the floor of the barn and perhaps stored at one end as animal feed. After threshing, the straw was stored in the barn or stacked in a heap outside, ready for spreading on the floors of the stables, sheds and yards. The grain was winnowed using the through-draft under the barn doors and then could have been taken for storage on the first floor of the stables through the hatch at the front. During the summer months the long grass was periodically cut and would be stored as hay above the stables via the pitching hatch on the east side and dropped through floor thatches to the rack below as required. Dry feed, including perhaps oats and the separated chaff from winnowing, would be fed down the chute into horse bags.

Cattle were placed in the cowhouse and open-sided sheds for fattening and to produce manure for the fields. Meadowland or fallow fields were used for summer grazing and cattle brought through the main yard entrance for milking. Otherwise, animals were exercised in the uncovered stockyards and ate the root crops, hay and chaff. Manure was produced from the dung and straw, and piled up in the yard to decompose for use on the fields in spring. There was a loose box, where injured or sick animals and pregnant cows could be isolated away from the group, attached to the north range, and a cowhouse by the entrance with easy access out of the yard for cattle and cleaning out of dung. Carts, wagons and ploughs occupied the sturdy structure north of the planned complex. Horses were kept in the stables and could be led out the back opposite the wagon shed and linked to carts.

7.0 CONCLUSION

King Street Farm contains an important group of single-phase structures belonging to a purpose-built planned Victorian Farm that replaced the existing post-medieval farmstead in 1876, as indicated by the inscription on barn 4. Many Essex farms were improved in the mid 19th-century and others, like King Street Farm underwent improvement at the tail end of the golden age. Often in Essex, farms were remodelled or rebuilt on the site of established post-medieval farms, generally re-utilising the larger buildings, often barns. In this particular case the earlier complex was swept away apart from the wagon lodge, and completely rebuilt in the same place. Both elements are important in the study of farming from this period; the wagon lodge is likely to date from the 18th-century and has an unusual planked construction. The later complex retains fixtures and fittings and architectural detail reflecting the existence of a wealthy concern in tune with the times. Despite the identity of 'AC' being unknown, the presence of personalised dated inscriptions on farms is extremely rare and should be preserved as part of the farm's history and character.

Investigations at King Street provide important information on the composition of planned farms, creating a bench mark in terms of stylistic dating to groups of buildings whose dating is generally rather broad and largely based on map evidence. Innovative labour-saving devices found in the stables are rare illustrations of Victorian views on efficiency and the factory system, whose philosophies were carried over into farming.

As an exemplary survival of the planned form, with good proportions, build and level of detailing, the structures are important in their contribution towards the study of Essex and East Anglian farming groups. In addition, the post-medieval wagon lodge from the earlier farmstead has an unusual construction. Both have survived remarkably well through the great changes in farming during the 20th-century within a landscape hardly altered since the farm was established.

ACKNOWLEDGEMENTS

The client, Mr. Michael Kay, is thanked for commissioning the works and supplying the drawings. 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 site was monitored by Vanessa Clarke of ECC HEM on behalf of the LPA.

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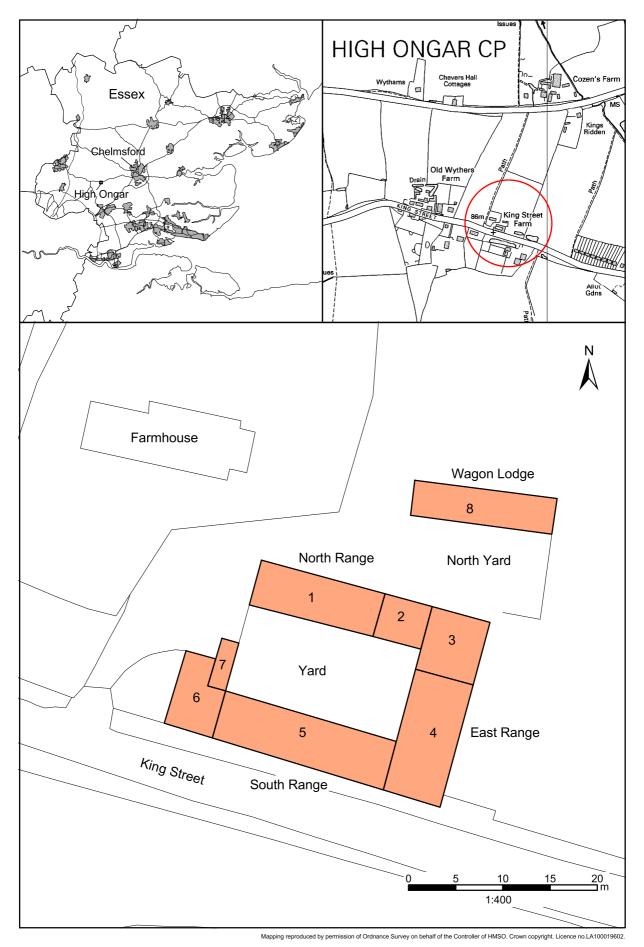


Fig.1. Site location and block plan



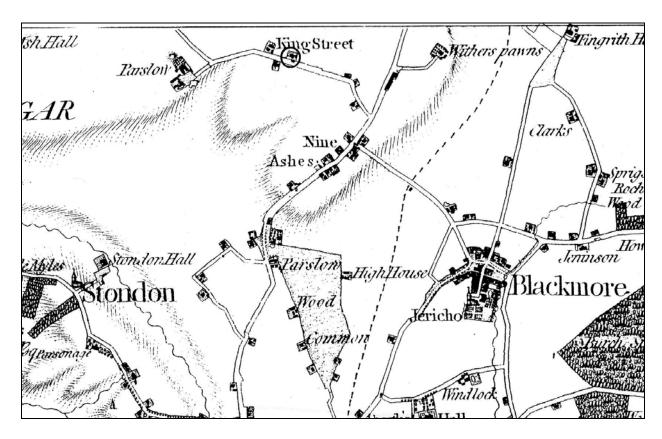


Fig. 2 Chapman & Andre map, 1777 (plate 17)

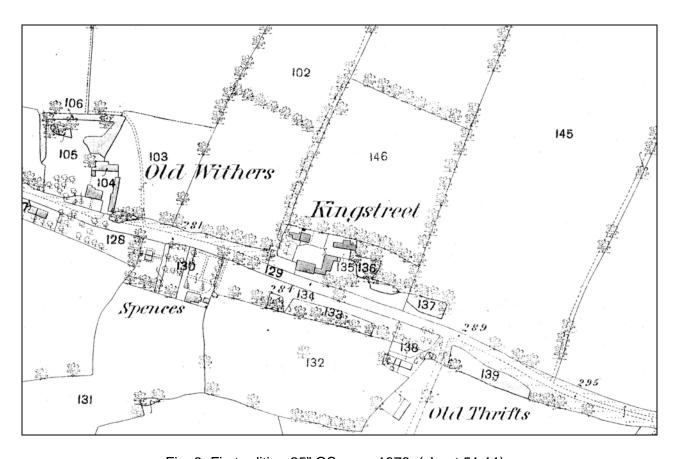


Fig. 3 First edition 25" OS map, 1873, (sheet 51.11)

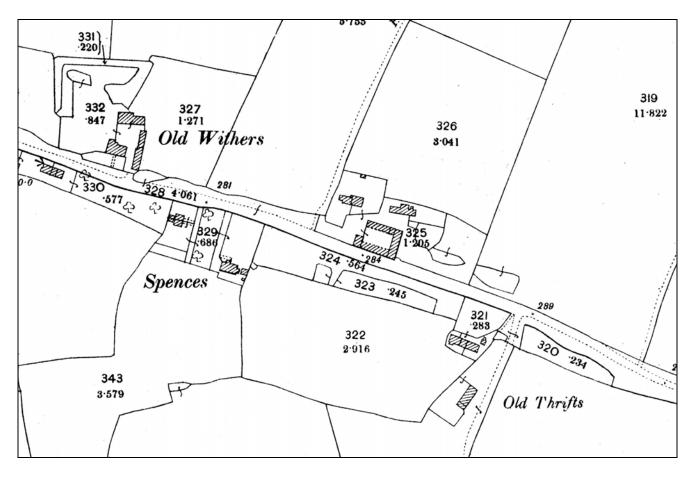


Fig. 4 Second edition 25" OS map, 1896, (51.117)

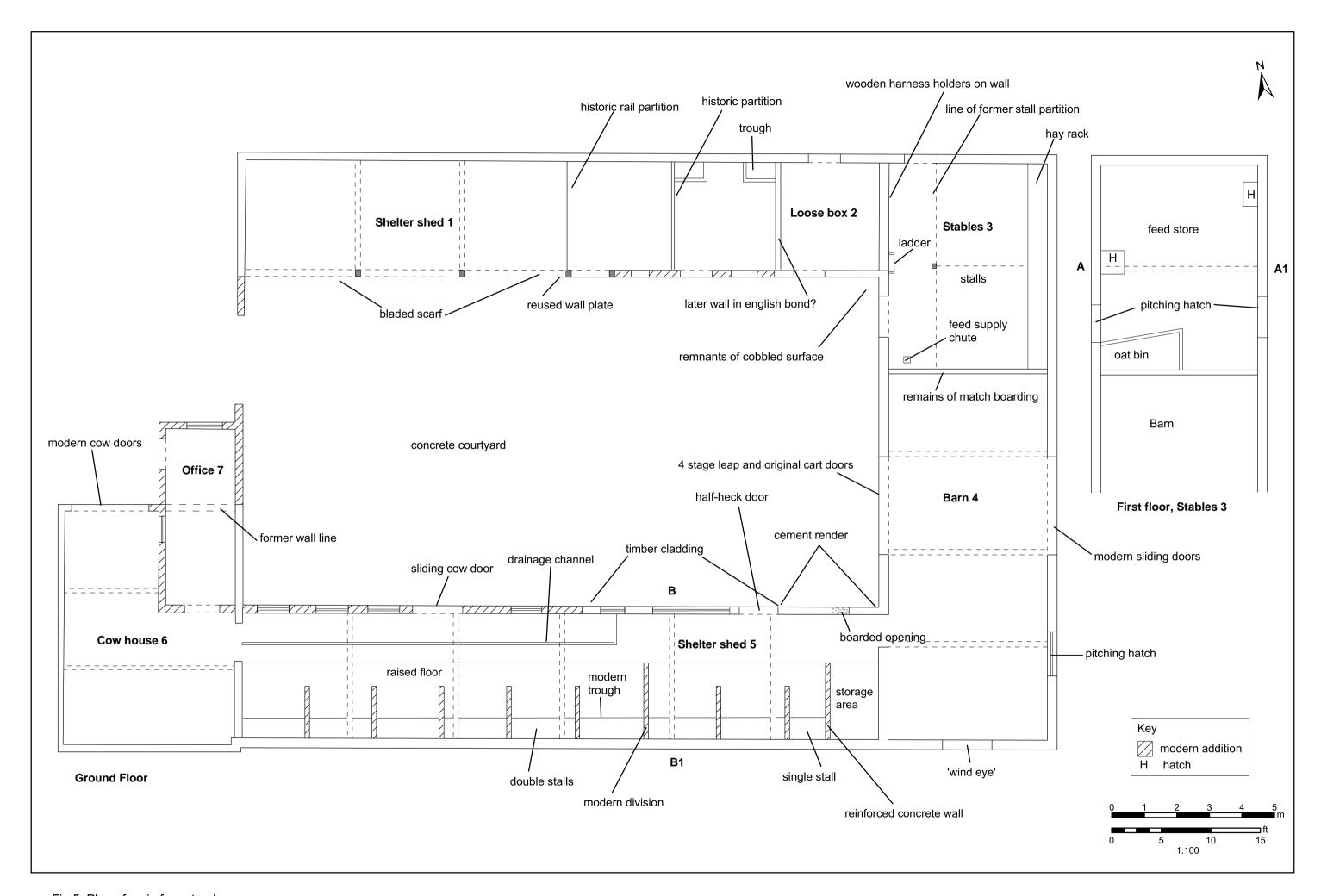


Fig.5. Plan of main farmstead

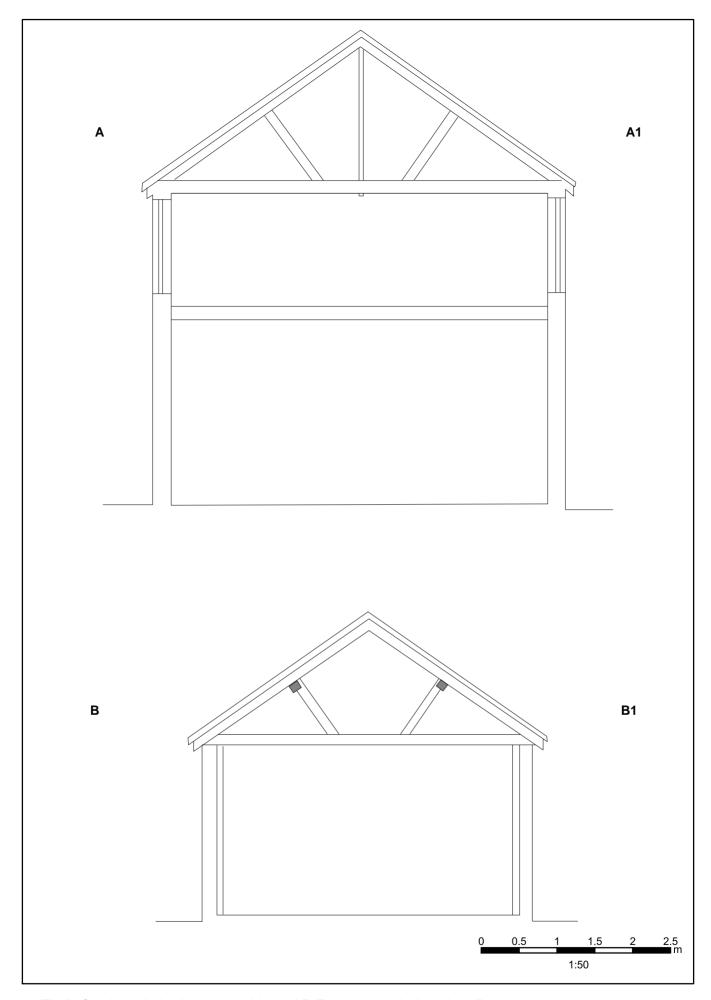


Fig.6. Sections A-A1 through stable and B-B1 through shelter shed $5\,$

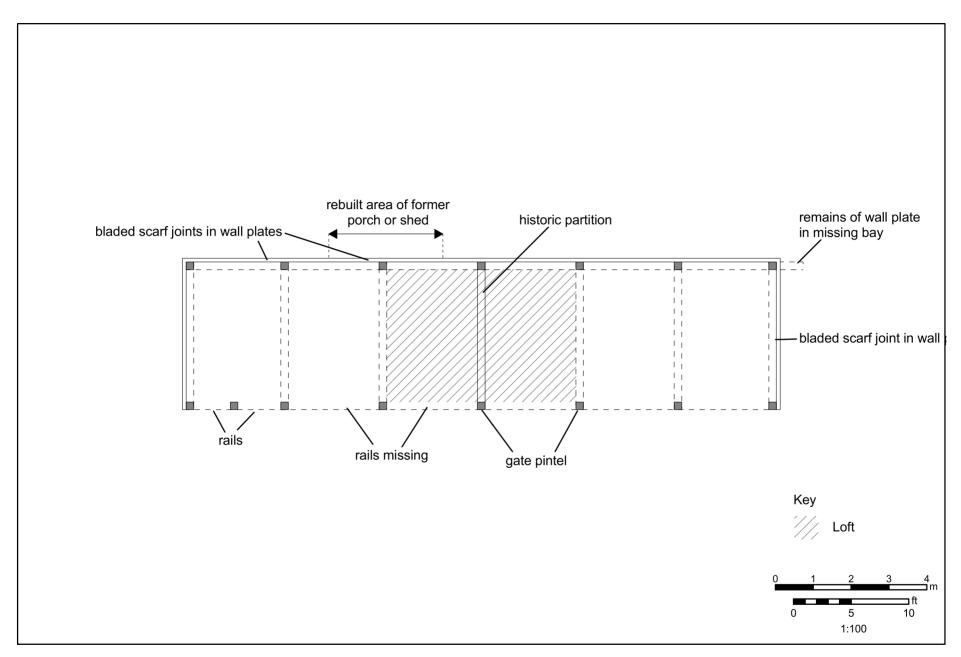
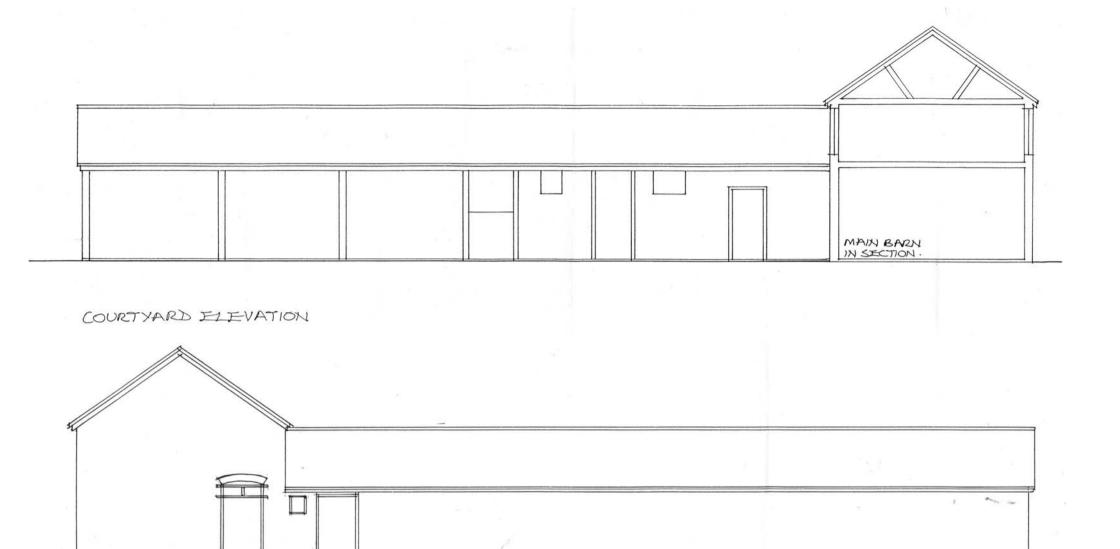
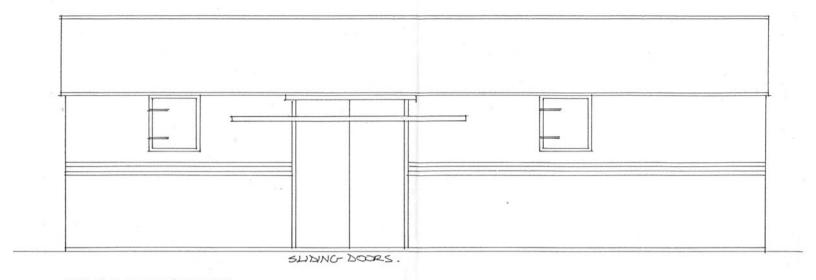


Fig.7. Plan of wagon lodge 8



NORTH ELEVATION

Fig.8a. Architect's elevations: north range, 1:100



FAST ELEVATION

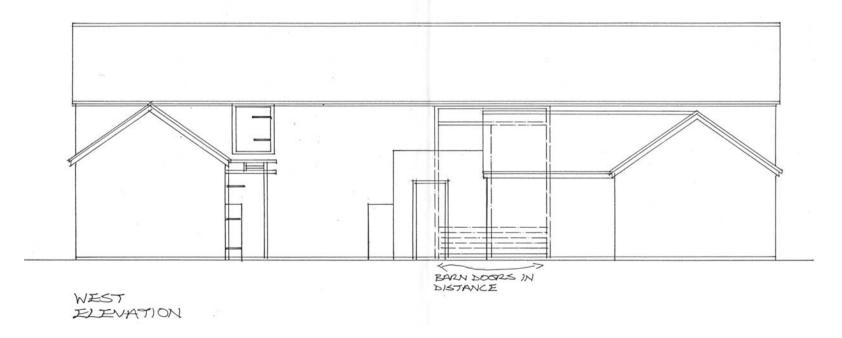


Fig.8b. Architect's elevations: east range, 1:100

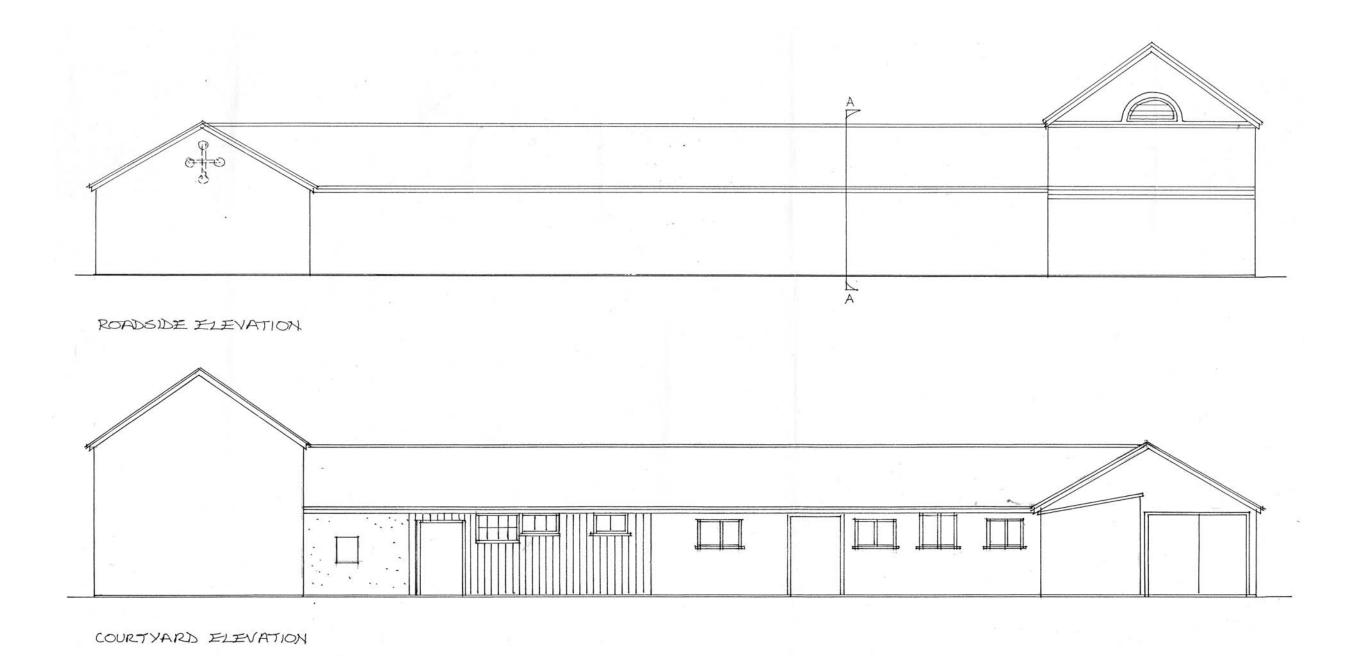
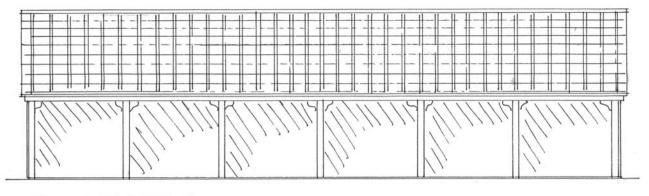


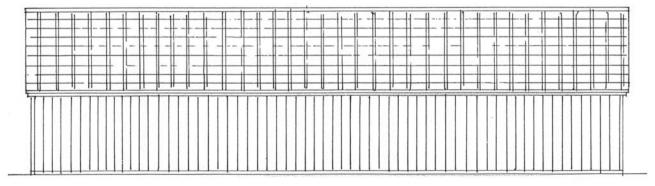
Fig.8c. Architect's elevations: south range, 1:100



FRONT ELEVATION



FLOOR PLAN



REAR ELEVATION.

Fig.8d. Architect's elevations: Wagon lodge 8, 1:100

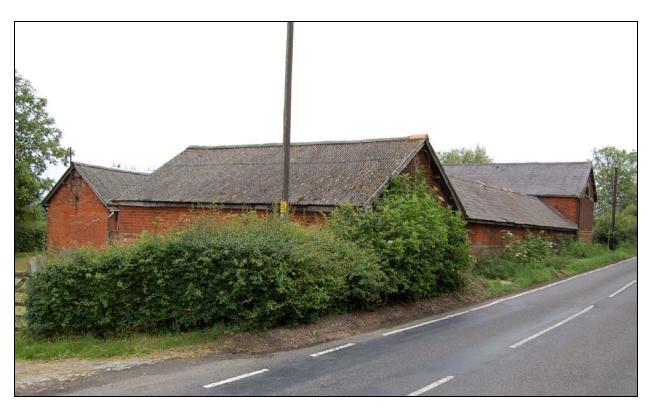


Plate 1 Planned farm viewed from south-west



Plate 2 Farmyard viewed from entrance to west



Plate 3 Farm group viewed from north-east



Plate 4 North range from yard



Plate 5 North and east ranges viewed from north-east



Plate 6 Interior of shelter shed 1 viewed to east



Plate 7 Reused wall plate in shelter shed 1



Plate 8 Original door into loose box 2

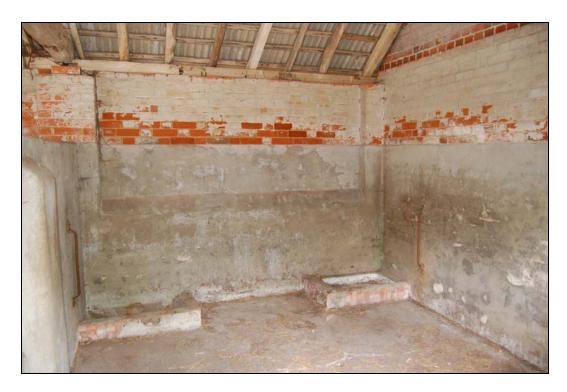


Plate 9 Interior of loose box 2



Plate 10 East range viewed from south-east



Plate 11 East range viewed from yard



Plate 12 Inscription on west wall of barn



Plate 13 Interior of stables viewed from north

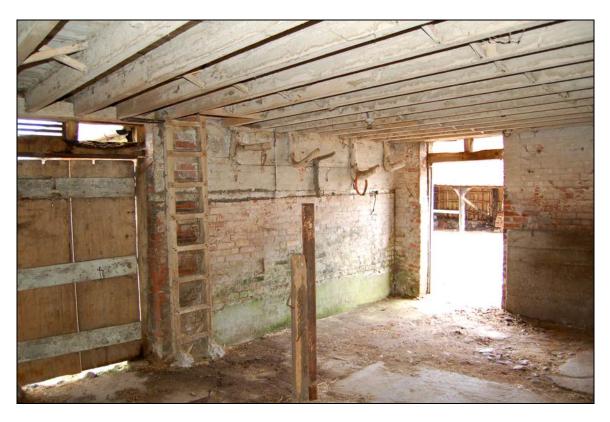


Plate 14 Interior of stables viewed from south



Plate 15 First floor interior of stables showing oat bin

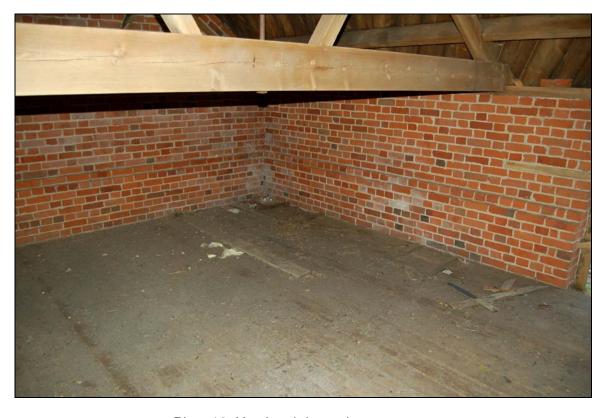


Plate 16 Hay hatch in north-east corner



Plate 17 Interior of barn viewed to north



Plate 18 Interior of barn viewed to south



Plate 19 South range viewed from yard



Plate 20 Architectural embellishment to cowhouse gable



Plate 21 Interior of shelter shed 5 viewed to east



Plate 22 Interior of shelter shed 5 viewed to west



Plate 23 Typical stall in shelter shed 5



Plate 24 Cistern platform in shelter shed 5



Plate 25 Interior of cowhouse 6 also showing farm office 7



Plate 26 View of farm group from west, showing ends of buildings 6 and 7 and brick surface in foreground



Plate 27 Rear wall of wagon lodge 8 viewed from north-west



Plate 28 Front of wagon lodge 8 and yard viewed from south-west

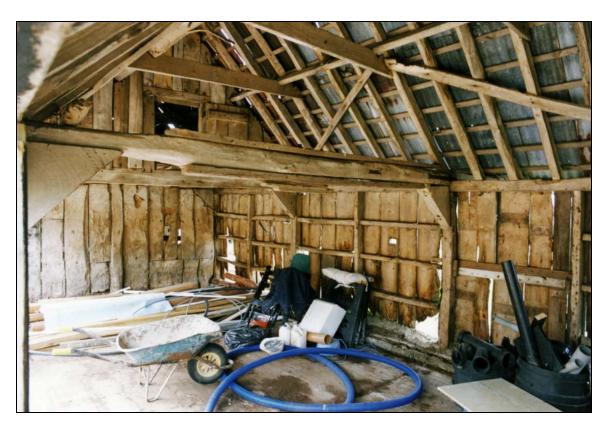


Plate 29 Interior of wagon lodge, east side



Plate 30 Interior of wagon lodge, west side



Plate 31 Hay loft above wagon lodge



Plate 32 Front elevation of farmhouse

Appendix 1: Contents of Archive

Site name: King Street Farm, High Ongar, Essex

Project no.: 1803

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 rom containing digital photographs & copy of report, pdf-formatted

2. Site Archive

- 2.1 Photographic record (digital prints, colour 120mm & monochrome 35mm prints)
- 2.2 Site notes & annotated survey drawings
- 2.3 Set of architect's drawings

Appendix 2: EHER Summary Sheet

Site Name/Address: King Street Farm, High Ongar, Essex	
Parish: High Ongar	District: Epping Forest
NGR: TL 5888 0330	OASIS record No.: 33224
Type of Work: Building recording	Site Director/Team: Andrew Letch ECC FAU
Dates of Work: 15th July 2007	Size of Area Investigated: N/A
Curating Museum: Epping Forest	Funding Source: Mr. M. Kay
Further Work Anticipated? None	Related LB Nos.:118398.

Final Report: Summary in EAH

Periods Represented: Post-medieval & modern (18th-20th-century)

SUMMARY OF FIELDWORK RESULTS:

Recording works were undertaken at King Street Farm in advance of residential conversion of a well-preserved Grade II-listed 19th-century C-shaped planned farm complex containing barn, shelter sheds, stables, loose box and cowhouse plus a probable 18th-century wagon lodge, the sole remains of an earlier post-medieval farmstead. The farmhouse dates to c.1600 and is also listed, but outside the remit of the survey.

The brick-built complex shows distinctive architectural detailing in the form of gault brick banding, dressings and motifs, signifying a development of some importance. The construction date (1876) and initials (AC)of the owning family are engraved on the barn wall, an important piece of historic detail and rare find. Inside, original hay racks troughs and partitions survive as well as an innovative trap door horse-feeding system and oat chute in the stables. Other features have been removed during 20th-century alterations to floors and walls, dairy conversion and a modern farm office.

The earlier wagon lodge is has bladed scarf joints and an unusual cladding of ash planks. It was adapted to its present form in the 20th-century but retains its historic character. Its precise date is difficult to establish but is likely to be around the late 18th-century.

The farm is a rare well-preserved example of a high-quality improved Essex farmstead dating from the tail end of the Victorian Golden Age of Agriculture.

Previous Summaries/Reports: None	
Author of Summary: A. R. Letch	Date of Summary: 16th November 2007