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**TIMBER-FRAMED BARN AND GRANARY,
HILL FARM, LOVE LANE, KING'S LANGLEY,
HERTFORDSHIRE**

HISTORIC BUILDING RECORDING

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NGR: TL 0651 0287	Report No: 3343
District: Dacorum	Site Code: AS 1090
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Signed:	Date: July 2009

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Project details			
Project name	<i>Timber-framed Barn and Granary , Hill Farm, Love Lane, King's Langley, Hertfordshire: Historic Building Recording</i>		
<i>In July 2009, Archaeological Solutions Ltd (AS) conducted a programme of historic building recording at Hill Farm, Love Lane, King's Langley, Hertfordshire. The buildings assessed comprised a timber-framed barn and granary.</i>			
<i>Detailed analysis of the buildings at Hill Farm established that a number of buildings, including the barn and granary, were constructed within a limited timeframe during a phase of general rebuilding and expansion in the late 18th / early 19th century.</i>			
<i>The barn is of good systematic construction, of both oak and softwood, comprising a typical animal / livestock house with a hayloft above. Parallels between this structure and the milling barn nearby indicate these two buildings are broadly contemporary, likely built soon after the production of the tithe map in the 1830s. The second structure comprises a systematic and expertly built granary, which has experienced considerable decay. It is in typical early 19th century style. The presence of Baltic bracking marks on many of the timbers, and a mark for a specific port (Danzig) sources the timber. The interesting use of stylobates, constructed of local Luton greys, suggests a pre-fabricated building process whereby the base for the structure was built prior to the delivery of a complete set of Baltic pine for construction. The granary pre-dates the production of the tithe map and on balance likely dates from the 1820s / 30s, at a similar yet slightly earlier date to the timber-framed barn it now adjoins.</i>			
Project dates (fieldwork)	<i>22nd and 29th May 2009</i>		
Previous work (Y/N/?)	<i>Y (farmhouse)</i>	Future work (Y/N/?)	<i>N</i>
P. number	<i>2990</i>	Site code	<i>AS 1090</i>
Type of project	<i>Historic building recording</i>		
Site status	<i>Curtilage listed to the Grade II listed farmhouse</i>		
Current land use	<i>Empty</i>		
Planned development	<i>Conversion for residential use</i>		
Main features (+dates)	<i>Early 19th century barn and granary</i>		
Significant finds (+dates)			
Project location			
County/ District/ Parish	<i>Hertfordshire</i>	<i>Dacorum</i>	<i>King's Langley</i>
HER/ SMR for area	<i>Hertfordshire</i>		
Post code (if known)			
Area of site	<i>c. 300m²</i>		
NGR	<i>TL 0651 0287</i>		
Height AOD (max/ min)	<i>c. 135m</i>		
Project creators			
Brief issued by	<i>No brief; advice issued by HCC Historic Environment Unit / Dacorum Borough Council</i>		
Project supervisor/s (PO)	<i>Tansy Collins</i>		
Funded by	<i>Mr David Cox (BuildRiver Ltd)</i>		
Full title	<i>Timber-framed barn and granary , Hill Farm, Love Lane, King's Langley, Hertfordshire: Historic Building Recording</i>		
Authors	<i>Collins, T. & Prosser, L.</i>		
Report no.	<i>3343</i>		
Date (of report)	<i>July 2009</i>		

TIMBER-FRAMED BARN AND GRANARY, HILL FARM, LOVE LANE, KING'S LANGLEY, HERTFORDSHIRE

HISTORIC BUILDING RECORDING

SUMMARY

In July 2009, Archaeological Solutions Ltd (AS) conducted a programme of historic building recording at Hill Farm, Love Lane, King's Langley, Hertfordshire. The buildings recorded comprised a timber-framed barn and granary.

Detailed analysis of the buildings at Hill Farm established that a number of buildings, including the barn and granary, were constructed within a limited timeframe during a phase of general rebuilding and expansion in the late 18th / early 19th century.

The barn is of good systematic construction, of both oak and softwood, comprising a typical animal / livestock house with a hayloft above. Parallels between this structure and the milling barn nearby indicate these two buildings are broadly contemporary, likely built soon after the production of the tithe map in the 1830s. The second structure comprises a systematic and expertly built granary, which has experienced considerable decay. It is in typical early 19th century style. The presence of Baltic bracking marks on many of the timbers, and a mark for a specific port (Danzig) sources the timber. The interesting use of stylobates, constructed of local Luton greys, suggests a pre-fabricated building process whereby the base for the structure was built prior to the delivery of a complete set of Baltic pine for construction. The granary pre-dates the production of the tithe map and on balance likely dates from the 1820s / 30s, at a similar yet slightly earlier date to the timber-framed barn it now adjoins.

1 INTRODUCTION

1.1 In July 2009, Archaeological Solutions Ltd (AS) conducted a programme of historic building recording at Hill Farm, Love Lane, King's Langley, Hertfordshire (NGR TL 0651 0287) (Fig. 1). The buildings comprise a timber-framed barn and adjoining granary. The recording was required in order to compile a high-quality record of the buildings in their current form prior to conversion. The project was commissioned by Mr David Cox of BuildRiver Ltd and was undertaken as part of a planning condition on approval for the works (Dacorum Planning Refs. 4/01945/09/LBC), on advice from HCC Historic Environment Unit.

1.2 The historic building recording was carried out in accordance with a specification prepared by AS (dated April 2009), which was approved by Hertfordshire County Council Historic Environment Unit (HCC HEU). The historic building recording followed the procedures outlined in the English

Heritage document *Understanding Historic Buildings; a guide to good recording practice* (2006). The guidelines set down by the Institute of Field Archaeologists' (IFA) *Standard and Guidance for the Archaeological Investigation and Recording of Standing Buildings or Structures* (revised 2001) and the document *Standards for Field Archaeology in the East of England* (Gurney 2003) were also followed.

1.3 The level of recording for both the timber-framed barn and the granary was to Level 3 as defined in the guidance documents outlined above.

1.4 The objectives of the historic building recording were, as set out in the specification:

- To compile a comprehensive and high quality record of the buildings proposed for conversion, in order to understand the form, function, evolution and any remaining architectural / technological embellishment of the buildings in conjunction with an associated documentary survey.
- To carry out a full Level 3 photographic survey of the buildings in their present condition;
- To produce a high quality, fully integrated archive suitable for long-term deposition in order to 'preserve by record' the buildings in their current form prior to alteration.

Planning Policy Context and Research Priorities

1.5 The relevant planning policies which apply to the effects of development upon cultural heritage are Planning Policy Guidance Note 15 'Planning and the Historic Environment' (PPG15) and Planning Policy Guidance Note 16 'Archaeology and Planning' (PPG16) (Department of the Environment).

1.6 PPG15 (1994) is the national Planning Policy Guidance Note which applies to the conservation of the historic environment. This encourages protection of the character and appearance of conservation areas and protection of listed buildings from demolition and unsympathetic change, safeguarding their settings as far as possible. This condition is widely applied by local authorities.

1.7 Research priorities for the region are outlined in the East Anglian regional archaeological research framework which notes that structures of the Industrial Age, dating from 1750 – 1960, face a high rate of loss due to renovation, conversion and redundancy (Brown & Glazebrook 2000). It should be noted that the buildings fall within this time frame.

2 DESCRIPTION OF THE SITE (Figs 1 & 2)

2.1 Hill Farm, formerly known as Langley Hill Farm, is situated in the parish of King's Langley, two miles south of Hemel Hempstead and two miles north of Watford. The site lies a little to the north-west of the historic core of King's Langley, with the River Gade and the Grand Union Canal passing through the parish on the east.

2.2 King's Langley was an important medieval settlement which lay close to the site of a 13th century hunting lodge, which later developed into a favoured royal palace. To the north-west a Dominican friary was also established in 1308 by King Edward II.

2.3 The farm lies at the edge of modern residential development, but open fields to the west preserve a sense of rural isolation. King's Langley Common is opposite the site on the east side of Love Lane, reinforcing its sense of relative isolation. The farm comprises the listed farmhouse with gardens to the south and east and a complex of barns and agricultural outbuildings arranged around a large farm yard to the west, with a coach house to the south. The structures are labelled on Fig. 2.

2.4 A continuous range of stables, sheds and livestock houses enclose the courtyard on the west and north sides. Partially surviving boundary walls of mixed flint and brickwork form the south side of the yard and are also preserved in discrete areas elsewhere. The structures lie to the south and comprise a timber-framed barn on a brick dwarf wall with a timber-framed granary resting on brick stylobates adjacent to the west. These two structures, although clearly an integral part of the complex of outbuildings are divided from the yard area by a metalled track which gives access to the fields at the rear of the farm.

3 METHOD OF WORK (Desk-based research)

Historic building recording of the farmhouse carried out at an earlier date (Williamson 2007) provides the basis for the historic research and is included below. The remaining brick ranges, and a milling barn on the site have also been subject to recording as the development progressed.

3.1 Cartographic and Historical Sources

The principal source for maps and primary documentary sources was Hertfordshire Archives and Local Studies (HALS) in Hertford. All material available at HALS regarding the study area and the buildings was consulted, has been listed in Appendix 1, and where relevant, reproduced as Figs 3 - 8. Documents held elsewhere have also been listed in Appendix 1 and an estate map held at the Suffolk Record Office (Ipswich Branch) has been reproduced as Fig. 4.

3.2 Secondary Sources

The principal sources of secondary material were HALS as well as the library resources at AS. Sources have been referenced appropriately in the bibliography.

3.3 The Buildings

3.3.1 The site was visited on 22nd and 29th May 2009 in order to compile descriptions of the buildings and undertake the drawing and photographic work. Tansy Collins and Lee Prosser completed the written descriptions and analysis.

3.3.2 The photographic recording was carried out by Tansy Collins using medium format (4.5 x 6cm) black and white film and included all external views and general internal shots. This utilised a Zenza Bronica ETRS camera and Ilford HP5 IOS 400 120mm film. Colour photographs were taken using an Olympus Camedia E20 digital camera, duplicating the black and white photography. Supplementary colour photography was captured on 35mm Ektachrome colour transparency film. External lighting and weather conditions were good at the time of the survey. A scale was used wherever possible, and a flash was employed for internal shots. A pictorial index of the digital photography and selected colour plates are included below together with location plots (Fig. 9).

3.3.3 The drawing work was undertaken by Kathren Henry. Floor plans and elevations provided by the client were checked for their accuracy and sections were produced; these are included, with annotations, as Figs. 9-11.

4 HISTORICAL BACKGROUND

Documentary Sources

4.1.1 Evidence of Roman settlement has been found in the area although there is little evidence of any other prominent settlement until the medieval period.

4.1.2 The name 'Langley', or 'long clearing' is usually reckoned to represent a clearing within the great Chiltern forests which probably occurred during the Anglo-Saxon period (Gover, Mawer and Stenton 1938, 45), within which a number of smaller hamlets and dispersed settlement eventually developed. Langley was given to the abbey of St Albans in the 10th or 11th century, when it is first attested in the historic record, before part of the estate was sold to the Crown, hence the division into Abbot's and King's Langley, which persists to the present day (Page 1908).

4.1.3 In the 13th century, King's Langley came to some prominence with the establishment of a royal hunting lodge within the parish. This was later enlarged as a more permanent, palatial residence and continued in use until

the 15th century. The present-day Rudolph Steiner School is built on part of the site. No above-ground remains survive, but excavations in the 1970s found an 18m long wine cellar and several medieval decorated floor tiles (Pevsner 2002). A small monastery was also established nearby for the Dominican Order as a royal foundation. The current parish church of All Saints was originally the friary church, and preserves important associations. The tomb of Edward of Langley, fifth son of Edward III is a notable monument, and for a while, the body of King Richard II also lay in the church after his murder at Pontefract in 1400, before the translation of his body to Westminster.

4.1.4 Notwithstanding its prominent associations, King's Langley remained a predominantly rural parish until the 20th century. It had woodland and fertile meadows, with over 50 orchards noted in a survey of 1619 (Hastie 1991, 55). The main local industry in the 18th and 19th centuries was straw plaiting which augmented a number of dispersed farmsteads, including Ballspond Farm, Barnes Farm, Langley Lodge and Langley Hill Farm (now known as Hill Farm) (Hastie 1991, 55). Many of these served the London market with food and resources. The owner of Hill Farm dealt extensively in hay (*ibid.*).

The Site

4.1.5 Ownership of Hill Farm was traced in the available records from the 18th century, though further research in more obscure primary records such as taxation or hearth surveys might establish its earlier history. The building itself is testimony to occupation from at least the 16th century, and Court Rolls dating from 1382 note a certain Cecil atte Hulle, or Cecil at the Hill, which may refer to the site of the later farm. Documents held at the Hertfordshire Archives and Local Studies relate to the assignment, in 1809 of a piece of land adjoining Hill Farm held in trust under the will of Peter Thelluson (DE/KI/20578, dated 27th February 1809). Peter Thelluson (1737-1797) was a wealthy merchant of Swiss origin who left will of such complexity that it became the subject of a suit in the Court of Chancery which lasted 50 years and is said to have formed the inspiration for Charles Dickens's 'Jarndyce vs Jarndyce' suit, which formed the central theme of 'Bleak House'. He left a specified amount of land and property in trust to accumulate during the lives of his three sons, his sons' sons, and his sons' sons' children, as should be born at the time of his death 'or in due time afterwards'. The estate would then be divided between the eldest male descendants of his three sons. The trustees built up extensive estates in Suffolk, County Durham, Hertfordshire, Northamptonshire, Warwickshire, Yorkshire and elsewhere in England, as well as in Grenada.

4.1.6 An estate map of Langley Hill Farm dated 1818 (HALS HB 416/A2/34/f6) confirms Peter Thelluson as the former owner noting that 'the Black Numbers denote the Estate of the Trustees of P. Thelluson Esq.'. The map also names the adjacent landowners, including the Earl of Essex who owned the land immediately to the south.

4.1.7 The 1833 tithe apportionment identifies four, obviously high-status

individuals as trustees of Hill Farm (see Appendix 3) and the sole occupier is noted as Caroline Cooper. From 1859, the farm was occupied by a farmer, Mr J. Johnson (Kelly's Directory 1859), but at the beginning of the 20th century, the ownership of the farm transferred to Thomas Longman of the Longman family of publishers who also owned the large Shendish and Barns estates in the parish (Hastie 1991, 55). It is known that the tenant at this time was Thomas Butler, who retained the farm until c. 1922 when tenancy was conveyed to William Banting (Kelly's Directory 1922). Within a few years, the tenancy changed hands again to Fred Baldwin, and Hastie (1991, 55) notes that when Thomas Longman died in 1931, the new tenant decided to buy the Hill Farm estate (Hastie 1991, 55). Title deeds held at HALS dated 2nd December 1931 (ref: D/EWa T9) name Henry Kerr Longman as the vendor but indicate Alexander Crundall rather than Fred Baldwin as the purchaser. Nevertheless the farm was in the ownership of the Baldwins until fairly recently. The deeds also reveal that the farm was sold for the sum of £4500 and that the owner of the farm had to pay a yearly rent of 10s 0d. to the Lord of the Manor of Kings Langley for the drainage rights across Kings Langley Common. Particulars relating to this sale are held at the National Monuments Record (ref: SC00496).

4.1.8 The farmhouse at Hill Farm is Listed Grade II. The list description is fairly short; it is described as being of the late 16th century, cased in brick in 1772, and had a porch added and minor alterations made in the 19th century (Appendix 2). The building is detailed in a previous report (Williamson 2007), as are associated outbuildings comprising the brick-built barns and the milling barn (Collins *et al* 2009)

Cartographic Sources

4.1.9 The earliest map in the series is the Dury and Andrews' map of Hertfordshire, dated 1766 (Fig. 3). Langley Hill is labelled and the site of Hill Farm is represented by a group of three or four buildings situated on the west side of the common. However, the scale and accuracy of the map does not provide any particular information.

4.1.10 The following map in the sequence is the estate map of Langley Hill Farm dated 1818 (Fig. 4), which illustrates land belonging to the estate of the trustees of Peter Thellusson (as noted in Section 4.1.6). The farmhouse is depicted as an L-shape, arranged conventionally around a yard (Plot 1). A pond is shown on the south side of the yard and extensive orchards are shown to the south and west. Langley Hill Common is named to the east. There appears to be a range consistent with the alignment and dimensions of the timber-framed barn, although it is unlikely that this is the current barn as the later tithe barn shows a differing layout. The granary did not apparently exist at this date.

4.1.11 Bryant's map of Hertfordshire (Fig. 5) dated 1822 shows the site in a similar level of detail to that of Dury and Andrews. It labels Langley Hill and also identifies the remains of the royal palace as 'part of the Ruins of K. John's Palace'. The site itself is not identified by name but as on the Dury and

Andrews' map can be recognised as a group of buildings on the west side of the common. Little of particular use can be discerned.

4.1.12 The tithe map of 1833 (Fig. 6) shows the site in significant detail. It is identified on the map as Plot 281 which is listed as 'farmhouse, yard buildings, garden and brick yard' in the accompanying tithe award (Appendix 3). The farmhouse is an L-shaped building on the east of the site, while the ranges of outbuildings are now shown in detail. The orchard and pond are still apparently in existence, and in general the buildings appear consistent with those seen on the 1818 map although some development has evidently occurred. A building of similar dimensions to the granary can now be seen on this map, although to the east, in the location of the barn, there lies a north – south aligned building with small pens or similar adjoining on the east side.

4.1.13 The first edition Ordnance Survey map at the 25" to 1 mile scale is not available at HALS, while the first edition (6" to 1 mile) map, dated 1896, was consulted but not reproduced here due to the small scale and lack of additional information provided. The second edition Ordnance Survey map of 1898 (Fig. 7) is at the larger scale and shows the buildings in detail. There has evidently been a number of alterations and additions to the structures, and both the farmhouse and outbuildings have undergone modification. Several of the outbuildings shown on the tithe map are no longer present, while new structures are visible. Boundary walls are now visible, subdividing areas of the farmyard, and a second pond has been excavated to the west of the farmyard where a trackway can be seen giving access to the orchard and fields to the north-west. Both the barn and granary are now recognisable in their current layout.

4.1.14 The Ordnance Survey map of 1924 (Fig. 8) identifies the site as Langley Hill Farm. The majority of structures on the edges of the farm layout appear unaltered, although largescale redevelopment has occurred to the ranges creating the farmyard area. This has not affected the two structures which can be seen much as in the previous source. The boundary walls visible before have been slightly reworked, now more consistent with those seen today, while two ponds and a trackway giving access to the fields are visible.

5 THE BUILDINGS (Figs 9-11)

5.1.1 This element of the project comprises recording of the barn and granary. The buildings are orientated east – west fronting the trackway and south boundary wall of the yard on the north (Plate 1).

5.2 The Barn

Exterior

5.2.1 The barn is a four-bay timber-framed structure resting on a brick dwarf wall. The wall is of six courses of brick, well-laid but in a fairly random bond. The brick is orange / red in colour although Luton greys appear to have been used in places. The barn is weatherboarded, predominantly in softwood although some older planks of oak or elm remain at high level on the south where protection from weathering has been afforded by the overhang of the eaves, though a later bitumen preservative has been applied liberally. The roof is hipped and covered in old peg-tiles, except on the south pitch which has modern cement tiles made by 'Marley'. Staffordshire blue ridge tiles have been used to repair the hip, and the roof is pierced both north and south with crude skylights to admit light into a hayloft.

5.2.2 The building is entered through a central 19th century stable door on the north façade (Plate 2). This is a rudimentary plank door, ledged and braced to the rear with an original iron latch. It is flanked by a door to the west set on the dwarf wall, the lower leaf only remaining, ledged and braced to the rear, with a decorative iron latch. A third door lies at the eastern extent of this façade, also set on the dwarf wall. It is a small boarded loading door, ledged to the rear, with robust strap hinges on pintles. A window lies between this and the entrance, with metal bars at lower level and six fixed panes in the upper section. The upper façade is pierced by an open loading aperture, directly above the entrance.

5.2.3 The south elevation has a single small inserted fixed window. There is evidence for a former flimsy lean-to, now removed.

Interior

5.2.4 The barn is floored at upper level and supported by a continuous central bridging joist and three oak posts, which do not respect the bay divisions. The members are of even, squared scantling of 6" x 6" (152mm x 152mm); the bridging joist scarfed at the centre with a face-halved and bladed scarf joint and a square peg (Plate 3). The posts rest on concrete pads. A fourth, later post has been inserted to aid support. The entrance opens onto a small vestibule where the upper area is given access from a steep stair ladder to the east. It is of very simple form with plank treads and a handrail supported by long uprights to the ground. This is clearly a later insertion as a vertical fixed ladder remains as the primary form of access.

5.2.5 The east end of the barn at ground floor level has been divided into compartments with brick and studwork, utilising 19th century stable doors to create low doorways which give access to livestock pens (Plate 4). The layout is irregular and appears to follow no particular system. Most of Bay 1 comprises a single pen entered through half of a reused stable door. It is ledged and braced to the rear with additional modern applied timber. The

east wall is covered in very wide horizontal boards to ceiling level, and the small loading door seen from the exterior occupies the north side.

5.2.6 To the west a pen occupies the south side of an approximate bay width. This is reached through a ledged and braced gate which has four robust strap hinges, two of which are hung on pintles. Low brick walls frame the pen to the east and west, the wall on the east augmented and made taller by additional timber pieces. A low brick trough is set against the south wall.

5.2.7 The remaining area to the west is fairly open-plan and reached through an open doorway on the west side of the vestibule. A board is fixed horizontally at floor level creating a leap. This area evidently had multiple functions. A concrete and iron trough lies on the east and a further small low concrete trough in the north-west corner indicates this area once housed livestock. However, the presence of a slightly raised area in the south-west area formed by a series of boards along with the leap across the doorway indicates some link with threshing or crop processing. A full-height stable door on the north gives access to the exterior.

5.2.8 The south side of the barn originally held a continuous animal trough and manger. Only a short section of the manger, within the east pen survives. This displays a few original boards with upper slats for bars of diamond profile. The floor and fittings were latterly broken up and removed during the recording, allowing greater access to the external frame. This is of systematic construction comprising robust oak posts at the bay divisions resting on a decayed but continuous sill-beam.

5.2.9 The infill panels are characterised by even primary-braced oak studwork, which is most eloquently demonstrated on the south side (Plate 5). The north wall similarly expresses some symmetry while accommodating the door and east window, although the west is more disturbed. The east and west walls remain for the most part obscured by internal horizontal boarding. These are rough wide boards of elm or oak, measuring on average 7½" x 1" (191mm x 25mm). On the east wall a single tether ring and hooks survive. However it is clear that these end walls are similarly primary-braced from a central post.

5.2.10 The ceiling joists to the hayloft comprise a mixture of softwood and oak pieces which ride over the mid-rails and central bridging joist. Three joists are more robust, of the same scantling as the bridging joist and uprights, two of which extend directly over the post heads with the third nearby. Elsewhere, thin-section joists of oak and softwood all display a mixture of mechanical and hand saw marks.

Hayloft

5.2.11 At upper level, the primary bracing seen from below continues to a robust softwood wall-plate. The bay divisions are unequal to accommodate the central loading door on the north so the central tie-beam does not rest over the door head.

5.2.12 The central truss (Plate 6) has a substantial tie-beam with good queen posts pegged to a collar, which clasps a single, robust purlin in each pitch. The queen posts, collars and purlins are all of softwood. Curved braces triangulate the tie-beam to the principal uprights. The two outer trusses are of identical form, with the exception of the curved bracing. The rafters are fairly waney and knotty, apart from the principals which are of good quality and are perhaps Scots pine. There are six per bay, some quarter-sawn with waney edges. At the ends of the roof a hip board is nailed to the yoke at the apex while the ridgeboard has yoke pieces at bay divisions. As with the floor joists the roof is constructed of a mixture of mechanically-sawn and hand-sawn members. Latterly the space has been fitted with a few rudimentary cages for birds.

5.2.13 The timber scantling can be summarised as follows:

Sill-beam	6½" x 7" (165mm x 178mm)
Principal posts	6½" x 7" (165mm x 178mm)
Common studs	2½" x 3½" (64mm x 89mm)
Primary brace	3" x 4" (76mm x 102mm)
Wall-plate	6¼" x 4¾" (159mm x 121mm)
Tie-beam	10½" x 7" (267mm x 178mm)
Queen post	5" x 3¼" (127mm x 82mm)
Collar	7" x 3½" (178mm x 89mm)
Principal rafter	3½" x 4¾" (89mm x 121mm)
Common rafter	2½" x 4" (64mm x 102mm)
Purlin	4" x 5" (102mm x 127mm)
Common ceiling joists	6" x 2½" (152mm x 64mm)
Floor boards	9" (229mm)

5.3 Granary

Exterior

5.3.1 The granary (Plate 7) is typical of its form and instantly recognisable, resting on stylobate columns (commonly called staddles, but here made of brick) with low walls and a pyramidal roof. It is timber-framed and weatherboarded with a grey slate roof and Staffordshire blue tiles to the ridge and hips. The twelve stylobates are unusual, as they are constructed in circular profile using Luton greys (eight visible courses), capped by a mixture of circular and square-edged sandstone slabs, some of which have the appearance of unfinished mill-stones (Plate 8).

5.3.2 The building is in poor condition where water ingress has caused extensive decay and partial collapse on the west side. The weatherboarding is of softwood and fairly robust, latterly covered in bitumen. One or two oak or elm weatherboards survive in places. The building is entered from the north by two modern free-standing timber steps and a central door.

Interior and structural form

5.3.3 The interior of the granary is of three by two bays, well-constructed with a solid framing system, and retains original grain stalls to either side of a central corridor (Plate 9). The building is entirely constructed of softwood with several members preserving scribed Baltic trade or bracking marks. These can be seen on a single tie-beam, a number of principal uprights and a fine example on the west door jamb (Plate 10). In addition a number of the floor joists preserve marks in the soffit. A selection of bracking marks has been reproduced as Fig. 12.

5.3.4 The floor is supported by deep-section joists with well-set 9" (229mm) floorboards, many heavily decayed, over an outer supporting frame of 7" (178mm) beams which sits directly on the stylobate caps, and is fixed with large iron bolts at the corners. The wall framing is of primary-braced panels, and is entirely systematic, with five widely-spaced slender studs per bay, bisected by a single, straight brace.

5.3.5 The roof framework is connected to the stall partitions by inner uprights jointed to the tie-beams. These are properly pegged but simply coggled over the wall-plates at bay divisions and do not engage with any of the rafter couples. Slightly canted queen struts rise from the tie-beams and are bird-mouthed over a single purlin in each pitch. Common rafters ride over the backs of the purlins. The hips of the roof are supported by a thin board resting on an angle tie and short clasping dragon beam with a tusk tenon. The hip board is nailed to a yoke piece at the apex. The roof is boarded to support the slates.

5.3.6 The stall partitions framed by the tie-beams and uprights, along with an additional member riding over the top, of 3" x 3" (76mm x 76mm) and similar secondary posts set at the half width of the bay. The partitions are well-framed and boarded on one side with nailed 8½" (216mm) vertical planking rising to the outer walls. The stalls preserve nailed-on slots for original retaining doors.

5.3.7 Some modern modification is apparent with galvanised steel sheets which have replaced the earlier boarding in part.

5.3.8 Timber scantling of the whole building can be summarised as follows:

Wall-plate	5" x 6" (127mm x 152mm)
Corner post	6½" x 6½" (165mm x 165mm)
Bay post	4" x 6" (102mm x 152mm)
Primary brace	2" x 4" (51mm x 102mm)
Common stud	1¾" x 3½" (44mm x 89mm)
Floor joists	8" x 2½" (203mm x 64mm)
Tie-beam	6" x 4½" (152mm x 114mm)
Principal posts	5¼" x 2½" (133mm x 64mm)

6 DISCUSSION

6.1 Previous reports have established a broad sequence of development for the farmyard at Hill Farm. Technical evidence from the house and milling barn suggest a phase of improvement and rebuilding in the first half of the 19th century. Analysis of the barn and granary broadly confirm this sequence, though differences in materials suggest that improvements were undertaken over a number of years and not as part of a single phase of building.

6.2 The barn is both typical and modest, of good, systematic construction with careful assembly and the extensive use of pegging, with little or no reliance on iron or nails. No assembly marks are visible, which, with the standard quality and scantling of the timber indicates a more industrialised approach to buildings followed in the 19th century. Some traditional concepts have been retained, such as the preference for oak in the load-bearing timbers, here also extending to the studs of the outer walls.

6.3 Distinct parallels exist between this building and the milling barn in the quality of the oak and timber scantling, which suggests that the two are linked in date. Neither building appears on the 1833 tithe map, but must have been constructed shortly after.

6.4 The granary is likely to be slightly earlier, though still anchored firmly within the first half of the 19th century. Although water ingress has caused a great deal of decay, approximately two-thirds of the structure remains in good condition, and the survival of the original grain stalls is noteworthy. It too was conceived on industrial, systematic lines, perhaps as a pre-fabricated kit, with great attention paid to maximising strength and the integration of the internal structure with the frame. Like the barn, no ironwork was deemed necessary, and pegs are used throughout.

6.5 The survival of so-called Baltic bracking marks on many timbers is an important indicator of provenance and date. They tell the story, in this case, of the rough timber being felled and floated on giant rafts down the river Vistula to the great Hanseatic port of Danzig (the modern Polish city of Gdansk), and there purchased by English merchants for consumption in industrial and agricultural buildings in England at a time of huge expansion and improvement. As they are currently understood, they represent indicators such as the names of tradesmen, timber size or volume, quality and origin. Most recognisable in the granary is the single crossed marker of Danzig, representing timber of normal or 'middling good' quality.

6.6 One curious note is the large size of the brick stylobates with their sandstone pads. Within this we may see a process involving preparatory construction and layout to specific dimensions with the subsequent delivery of the timber, already cut to precise measurements for the raising of the granary. The granary pre-dates the production of the tithe map and on balance was probably constructed around 1820-30.

7 CONCLUSION

7.1 The buildings form part of the wider context of Hill Farm, and represent a typical development of British farming in the 19th and 20th centuries, marked by investment and subsequent modification. Documentary research indicates that local industry in the area focused on the straw-plaiting trade in the late 18th / early 19th centuries and that Hill Farm dealt particularly in hay. This ties in well with dates for the construction for both the barn and the granary and they may have been constructed specifically to take advantage of an expanding industry.

ACKNOWLEDGEMENTS

Archaeological Solutions would like to thank Mr David Cox of BuildRiver Ltd for funding the works and for his assistance.

AS would also like to acknowledge the input and advice of Mrs Kate Batt of Hertfordshire County Council Historic Environment Unit.

AS would also like to acknowledge the assistance of the staff at Hertfordshire Archives and Local Studies and the Suffolk Record Office (Ipswich Branch).

DEPOSITION OF THE ARCHIVE

An archive of all materials produced by the report has been created and listed according to English Heritage (MAP2) standards. Copies of the final report will be lodged with the Hertfordshire Heritage Environment Record (HER) and the National Monument Record (NMR), Swindon. The project archive will be lodged with Hertfordshire Archives and Local Studies (HALS) (building recording) and Dacorum Museum (monitoring and recording).

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Websites

- 1) www.kingslangley.org.uk
- 2) www.imagesofengland.org.uk
- 3) www.a2a.org.uk

APPENDIX 1 CARTOGRAPHIC AND DOCUMENTARY SOURCES

Cartographic Sources

Date	Map	Scale	Location	Reference
1766	Dury and Andrews map of Hertfordshire	-	AS	-
1818	Estate map of Langley Hill Farm. (Estate Records of the Thellussons, Barons Rendlesham.)	20": 1 mile	Suffolk Record Office (Ipswich)	HB 416/A2/34/f 6
1822	Bryant's Map of the County of Hertfordshire	-	AS	-
1833	Kings Langley tithe map	-	HALS	
1896	First Edition Ordnance Survey map of Hertfordshire - not reproduced	6":1 mile	HALS	XXXVIII.4
1898	Second Edition Ordnance Survey map of Hertfordshire	25":1 mile	HALS	XXXVIII.4
1924	Ordnance Survey map of Hertfordshire	25":1 mile	HALS	XXXVIII.4

Documentary Sources

Date	Description	Location	Reference
1200 - 1962	Estate Records of the Thellussons, Barons Rendlesham. Management and division of estates under the will of Peter Thellusson.	Suffolk Record Office (Ipswich) – not consulted	HB 416
27 th Feb. 1809	Title deeds and Manorial records of the Blackwell estate, Kings Langley, 1274-1903. Copy of assignment of a lease of a piece of land adjoining Langley Hill Farm	HALS – not available	DE/KI/2057 8
1833	Kings Langley tithe award	HALS	
15 th Sept. 1931	The Shendish Estate, Kings Langley. Sales Particulars for Langley Hill Farm	NMR, Swindon – not consulted	SC00496
2 nd Dec 1931	Longman Family, publishers: Documents relating to the Shendish estate, Kings Langley, 1659-1931. Title deeds for Langley Hill Farm	HALS	D/EWa/T9

APPENDIX 2 LIST DESCRIPTION

IoE Number: 157692

Location: HILL FARMHOUSE, LOVE LANE (west side)
KINGS LANGLEY, DACORUM, HERTFORDSHIRE

KINGS LANGLEY LOVE LANE TL 00 SE (West side) 7/161 Hill Farmhouse - -
Hill Farmhouse. Late C16, cased in brick in 1772 (dated brick on S range
gable), porch and minor alterations in C19. Timber frame on brick sill, red
brick infill to rear wing, red brick casing to S range. Steep old red tile roof. A 2-
storeys attics and cellar L-shaped house facing S with long rear wing at NW.
Large internal chimney at junction of wings. 4 windows front with 3-light
casements to 1st floor and 2 recessed sash windows with 8/8 panes and
cambered arches to ground floor with gabled tiled porch with 4 centred arch.
Straight joint in brickwork of front to LH of porch suggesting different builds to
brick casing. Timber framed walls with wide panels, jowled posts, clasped
purlin roof and curved windbraces.

APPENDIX 3 TITHE AWARD

The entries listed here are those relevant to the site area at the time of the tithe award and map (1833). The entries appear as they do in the award.

Allot.	Name/Description	Land Use	Landowner	Occupier
280	orchard	meadow	Trustees of Peter Thellusson, Abraham Wildey Roberts, Viscount Howardian and Viscount Simeon	Caroline Cooper
281	Farmhouse, yard buildings, garden and brick yard.		as above	as above
282	home meadow	meadow	as above	as above
283	home field	arable	as above	as above
371	Langley Common	Meadow	London and Birmingham Railway Company	London and Birmingham Railway Company

APPENDIX 4 HISTORIC ENVIRONMENT RECORD SUMMARY SHEET

Site name and address:	Hill Farm, Love Lane, Kings Langley, Hertfordshire
County: Hertfordshire	District: Dacorum
Village/Town: Kings Langley	Parish: Kings Langley
Planning application reference:	Dacorum Planning Refs. 4/01945/09/LBC
Client name/address/tel:	Mr David Cox (Build River Ltd)
Nature of application:	Residential conversion
Present land use:	Residential
Size of application area: c. 300m ²	Size of area investigated Entire area
NGR (8 figures):	TL 0651 0287
Site Code:	AS 1090
Site director/Organization:	Archaeological Solutions Limited
Type of work:	Historic building recording
Date of work:	22 & 29 May 2009
Location of finds/Curating museum:	None
Related HER Nos:	Periods represented: Late 18 th / early 19 th century barn and 19 th century granary
Relevant previous summaries/reports: -	
Summary of fieldwork results:	<p><i>In July 2009, Archaeological Solutions Ltd (AS) conducted a programme of historic building recording at Hill Farm, Love Lane, King's Langley, Hertfordshire. The buildings assessed comprised a timber-framed barn and granary.</i></p> <p><i>Detailed analysis of the buildings at Hill Farm established that a number of buildings, including the barn and granary, were constructed within a limited timeframe during a phase of general rebuilding and expansion in the late 18th / early 19th century.</i></p> <p><i>The barn is of good systematic construction, of both oak and softwood, comprising a typical animal / livestock house with a hayloft above. Parallels between this structure and the milling barn nearby indicate these two buildings are broadly contemporary, likely built soon after the production of the tithe map in the 1830s. The second structure comprises a systematic and expertly built granary, which sadly has experienced considerable decay, in typical early 19th century style. The presence of Baltic bracking marks on many of the timbers, and a mark for a specific port (Danzig) sources the timber well. The interesting use of stylobates, constructed of local Luton greys, suggests a pre-fabricated building process whereby the base for the structure was built prior to the delivery of a complete set of Baltic pine for construction. The granary pre-dates the production of the tithe map and on balance likely dates from the 1820s / 30s, at a similar yet slightly earlier date to the timber-framed barn it now adjoins.</i></p>
Author of summary: T. Collins	Date of Summary: July 2009

APPENDIX 5 ARCHIVE CONTENTS FORM

Site Details	
Site Name: Timber-framed Barn and Granary, Hill Farm, Love Lane, Kings Langley, Hertfordshire	NGR: TL 0651 0287
County: Hertfordshire	Museum Collecting Area: Dacorum
Site Code: AS 1090	Project Number: 2990
Date of Work: July 2009	Related Work:

Brief/s		Specification/s	
Date	Present	Date	Present
N/a	N/a	April 2009	Yes

Site Records (Description)
Notes taken on site (8 pages A4)

Site Drawings (Give Details of Formats & Size)		
Drawn Plans & Sections: Drawn plan 1 A3 sheet drawing film		
Architect's Drawings: Plans and elevations 2 sheets A1 Plans and elevations 5 sheets A3 - annotated		
Digital Drawings		
Printouts of Drawings	Printouts of Data	Digital Data
In report		Digital photographs and drawings in digital format on CD

Reports		
Report No	Report Type	Present
3343	Historic Building Recording	Yes

Site Photographs							
Black & White Contact Prints					Colour Slides		
Film No	Film Type	Negs	Negs Present	Contacts Present	Film No	Negs	Present
1	120mm	1-15	Yes	Yes	1	30-36	Yes
2	120mm	1-11	Yes	Yes			
Photographic Location Plans Present? (Give Details)							
In report and separate printouts in archive folder							
Digital Photographs (Give Details):							
Digital photography duplicates black and white photography. Index and selected plates printed in report. Separate printout of index included in archive folder and digitally on CD							

COLOUR PLATES



Plate 1 View of the barn and granary, taken from the north-west (DP 23)



Plate 2 North façade of the barn, taken from the north (DP 15)



Plate 3 Detail of scarf joint in bridging joist in the barn, taken from the north-east (DP 11)



Plate 4 Contrived vestibule in the barn, taken from the north-east (DP 2)



Plate 5 South wall of the barn (after stripping out), taken from the north-west (DP 45)



Plate 6 South side of the central truss of the barn at upper level, taken from the north-west (DP 50)



Plate 7 North façade of the granary, taken from the north (DP 20)



Plate 8 Brick stylobate and sandstone pad, taken from the north-east (DP 24)



Plate 9 Interior of the granary, taken from the north (DP 25)



Plate 10 Baltic bracking mark on west door jamb to the granary, taken from the south (DP 33)

PHOTOGRAPHIC INDEX



DP 1

View of east side of barn, taken from north-west



DP 2

Contrived vestibule in the barn, taken from the north-east



DP 3

East wall of the barn showing wide internal boarding, taken from the north-west



DP 4

West side of the east pen, taken from the north-east



DP 5

South wall of the barn (Bay 2) within the central pen, taken from the north-west



DP 6

Feeding trough in the west side of the barn, taken from the north-west



DP 7

West area of the barn showing raised boarded platform, taken from the north-east



DP 8

Detail of raised boarded platform in the barn, taken from the south-east



DP 9

North-west area of barn, taken from the south-east



DP 10

Detail of half stable door to the east pen in the barn, taken from the west



DP 11

Detail of scarf joint in bridging joist in the barn, taken from the north-east



DP 12

Area east of entrance showing crude stair to upper level, and earlier ladder (left), taken from the south-west



DP 13

Robust gate with four strap hinges to the central pen in the barn, taken from the north-west



DP 14

Upper area of barn showing the central truss form, taken from the north



DP 15

North façade of the barn, taken from the north



DP 16

east façade of the barn, taken from the east



DP 17

South façade of the barn, taken from the south-east



DP 18

South sides of the granary and barn, taken from the south-east



DP 19

North side of the barn with the granary to the rear, taken from the north-east



DP 20

North façade of the granary, taken from the north



DP 21

West façade of the granary, taken from the west



DP 22

South façade of the granary, taken from the south



DP 23

View of the barn and granary, taken from the north-west



DP 24

Detail showing brick stylobate and sandstone pad supporting the granary structure, taken from the north-east



DP 25

Interior of the granary, taken from the north



DP 26

West side of the granary showing grain stores, taken from the north



DP 27

East wall of the granary showing primary-braced studwork, taken from the west



DP 28

North side of the granary, taken from the south-east



DP 29

View of the roof structure of the granary, taken from the north



DP 30

Baltic bracking mark on timber post (granary), taken from the south-east



DP 31

Baltic bracking mark on floor joist (granary), taken from the east



DP 32

Baltic bracking mark on south tie-beam (granary), taken from the south



DP 33

Baltic bracking mark on west door jamb to the granary, taken from the south



DP 34

Baltic bracking mark on floor joist (granary), taken from the south



DP 35

Baltic bracking mark on floor joist (granary), taken from the south



DP 36

Baltic bracking mark on floor joist (granary), taken from the north



DP 37

Baltic bracking mark on floor joist (granary)



DP 38

View of test pit 1 on the west side of Range 4, taken from below



DP 39

Baltic bracking mark on floor joist (granary), taken from the below



DP 40

Interior of barn (after stripping out), taken from the west



DP 41

East end of the barn (after stripping out), taken from the west



DP 42

Detail of loading door at east end of the barn (north wall), taken from the south



DP 43

Detail of loading door at the east end of the barn (north elevation), taken from the north



DP 44

West wall of the barn (after stripping out), taken from the east



DP 45

South wall of the barn (after stripping out), taken from the north-west



DP 46

Internal detail of the dwarf wall of the barn (after stripping out), taken from the north



DP 47

Detail of the west door to the barn, taken from the south-west



DP 48

Detail of ladder giving access to the hayloft, taken from the south-west



DP 49

Detail showing latch on west door to the barn, taken from the north



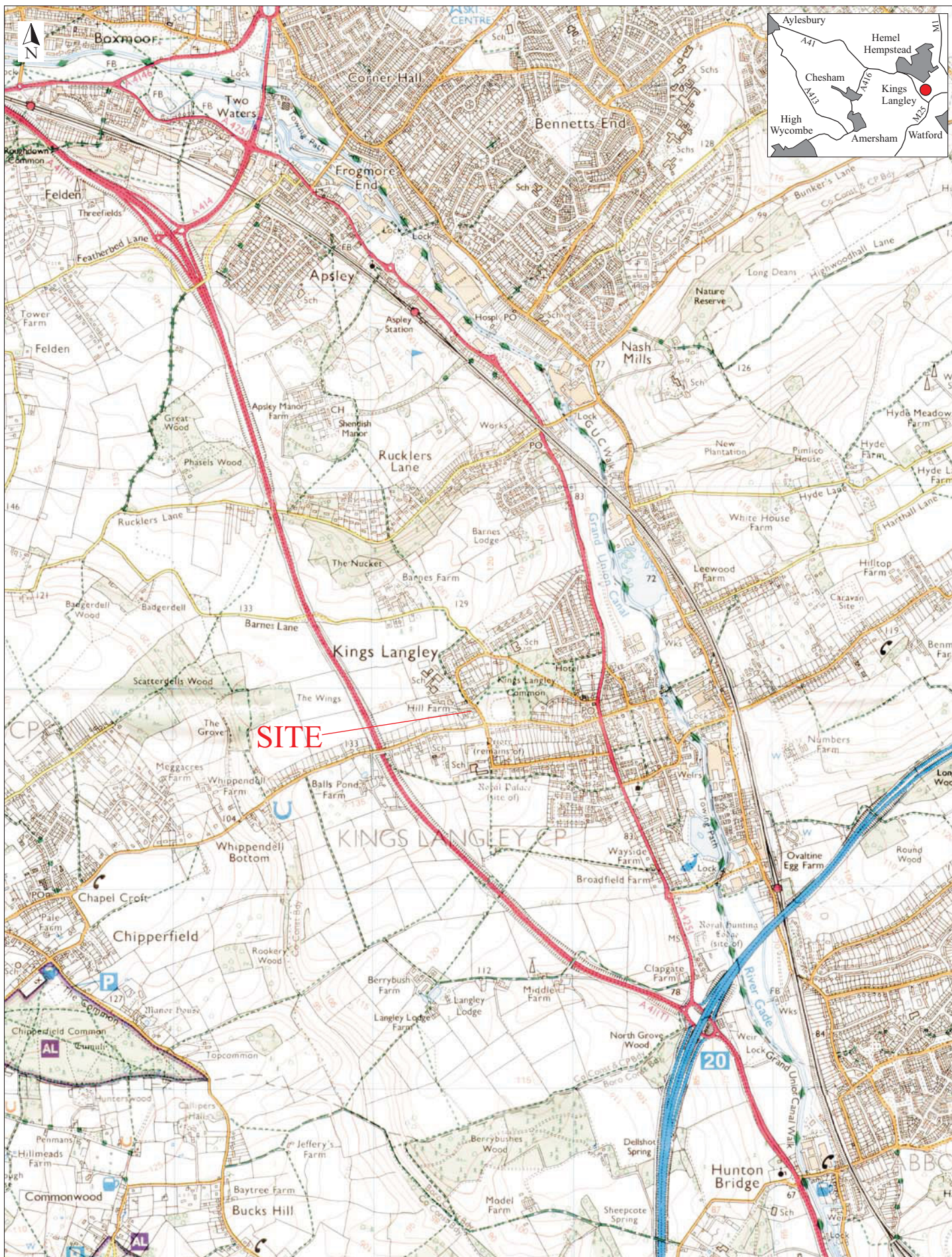
DP 50

South side of the central truss of the barn at upper level, taken from the north-west



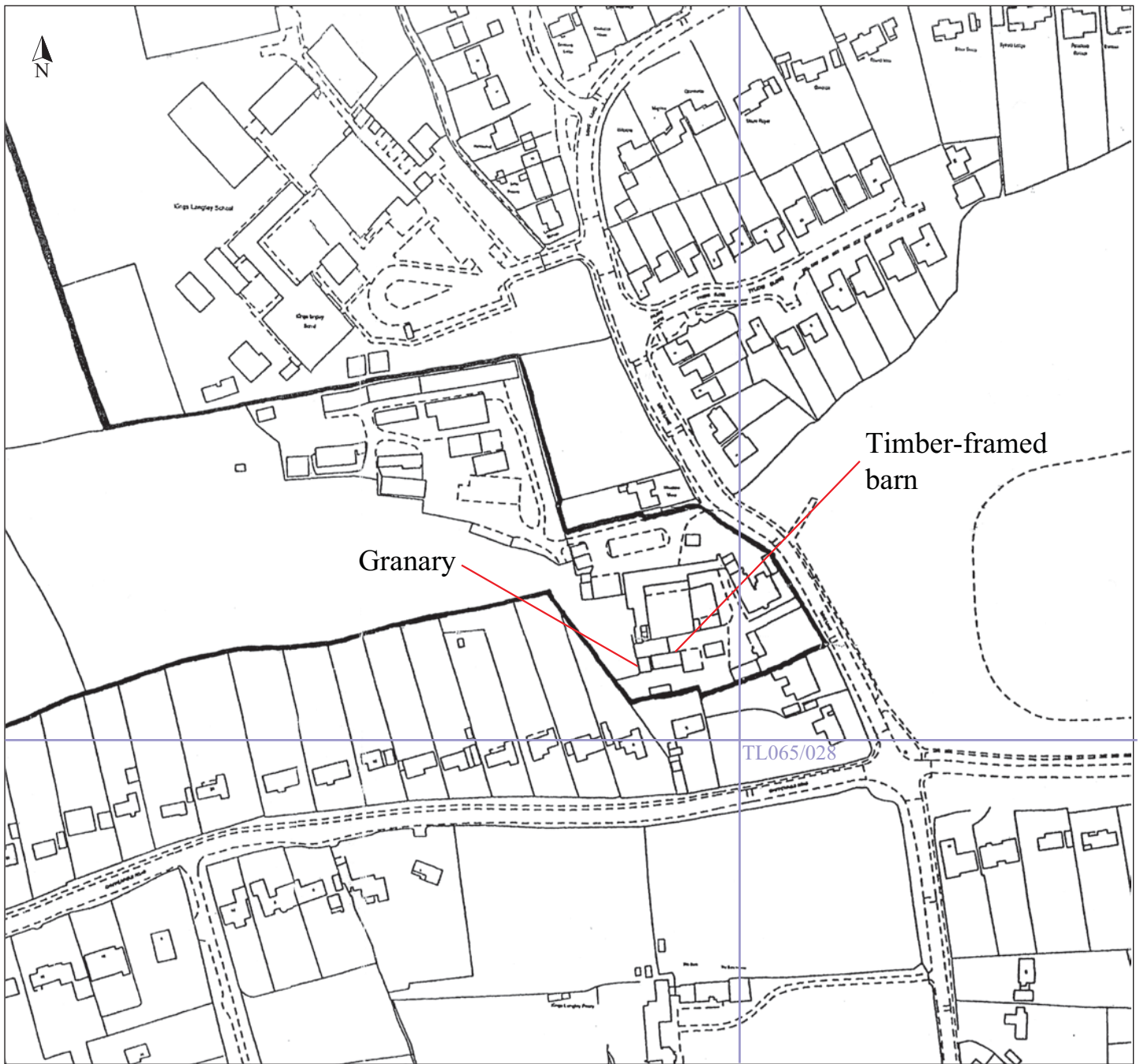
DP 51

North-east area of the barn at upper level showing animal pens, taken from the south



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Fig. 1 Site location plan
 Scale 1:25,000

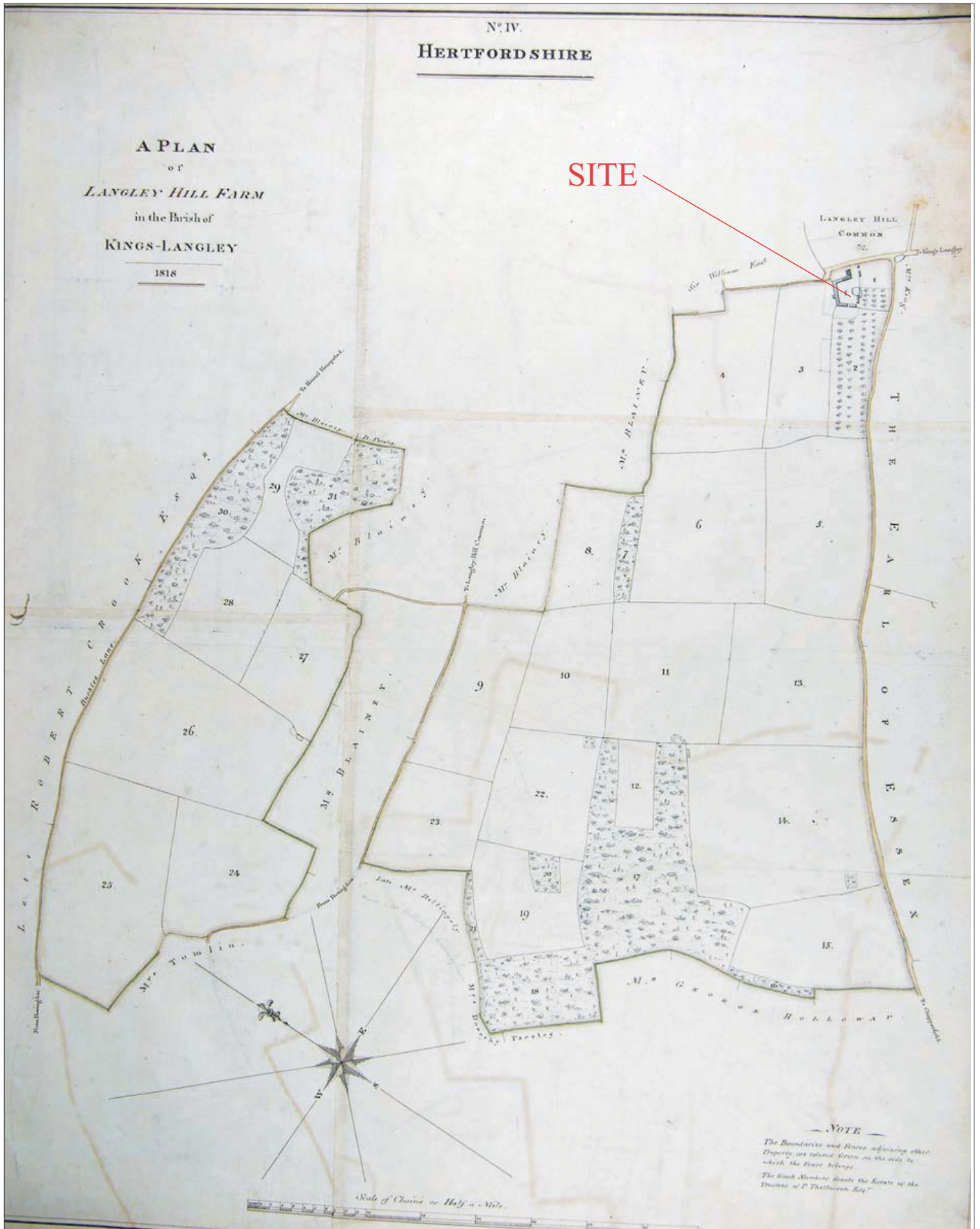


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Fig. 2 Detailed site location plan
 Scale 1:2500 at A4



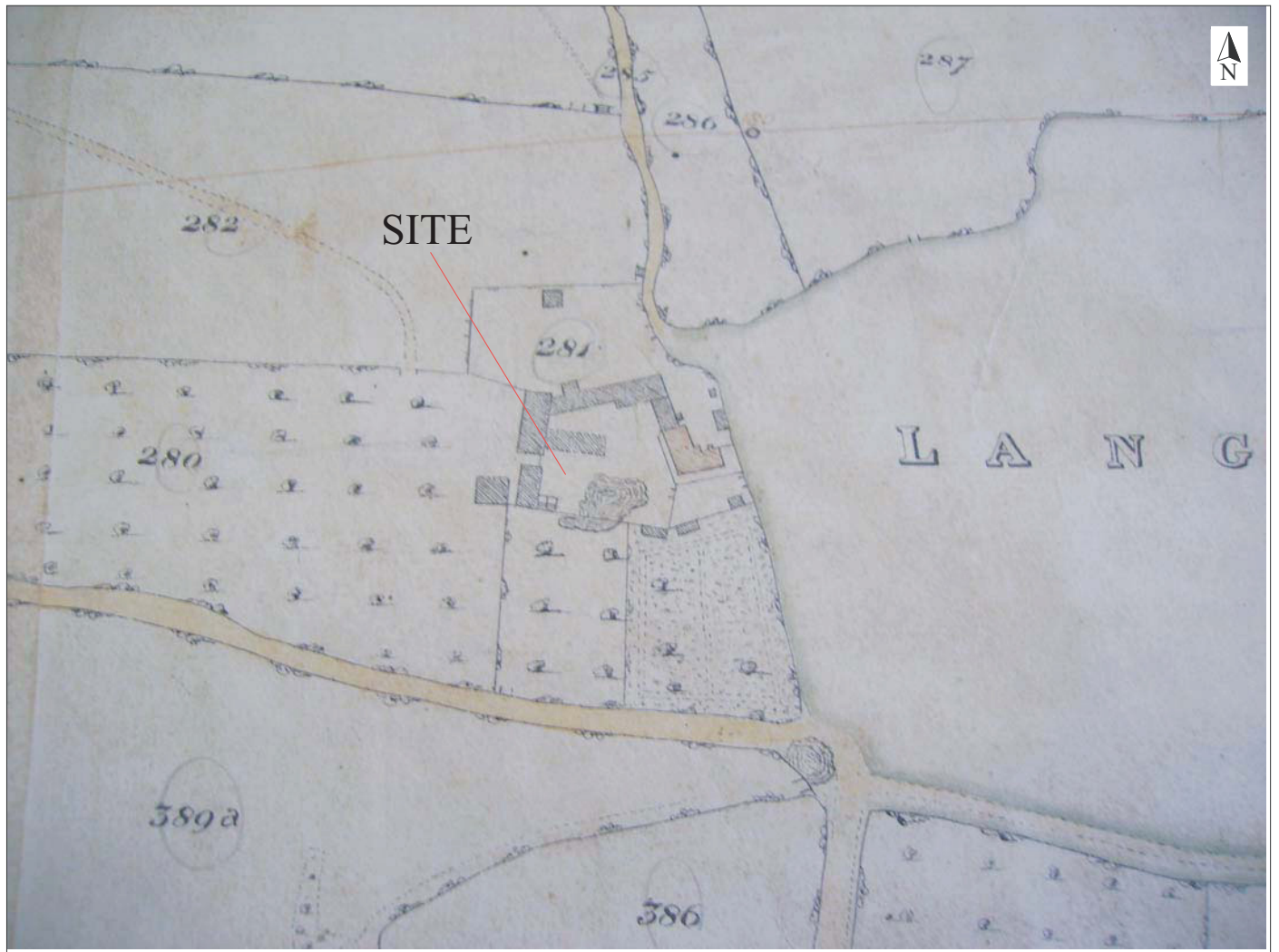
Archaeological Solutions Ltd
Fig. 3 Dury & Andrews' map, 1766
Scale unknown



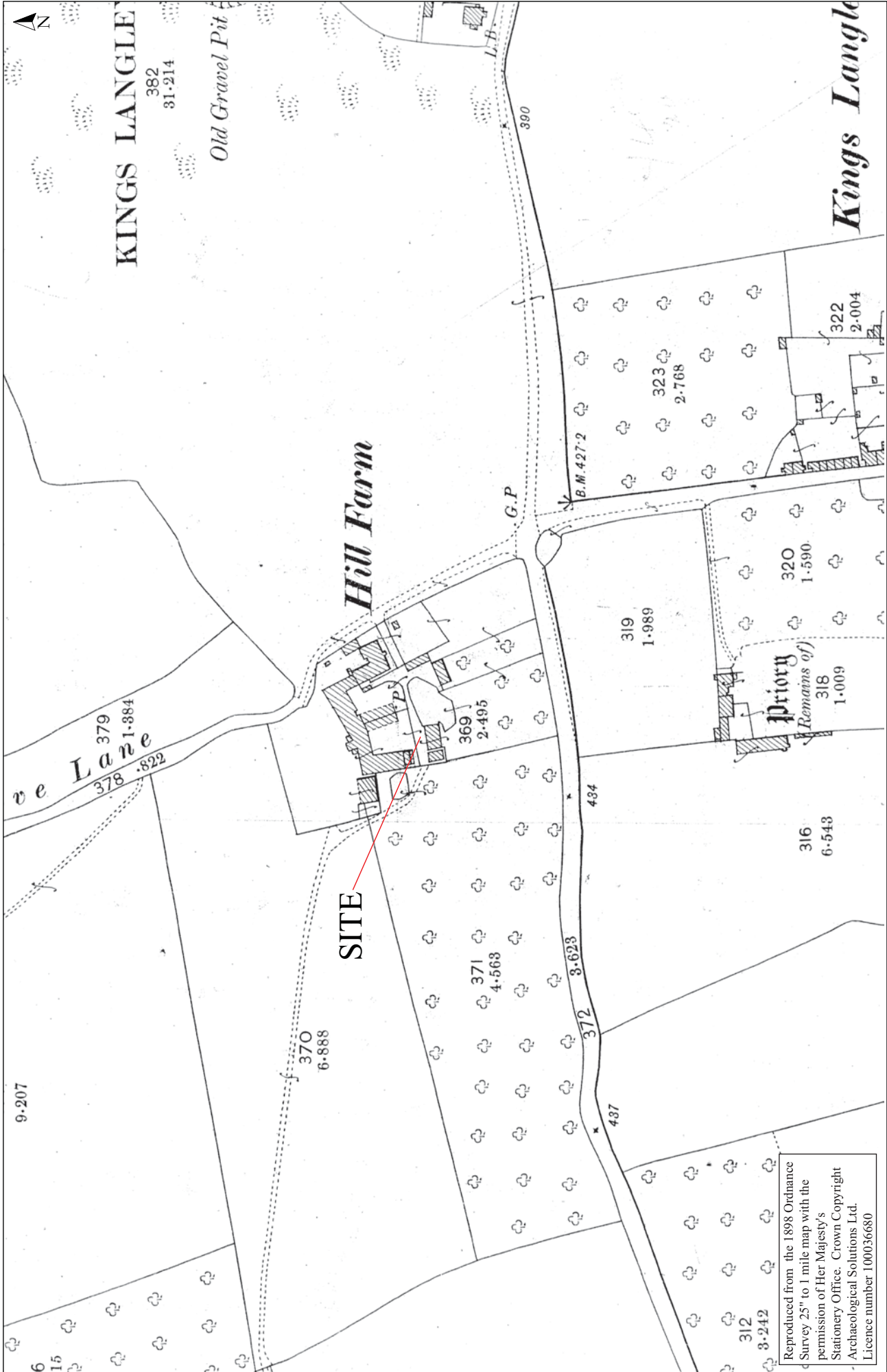
Archaeological Solutions Ltd
Fig. 4 Langley Hill Farm estate map, 1818
Scale as shown



Archaeological Solutions Ltd
Fig. 5 Bryant's map, 1822
Scale unknown



Archaeological Solutions Ltd
Fig. 6 Tithe map from 1833
Not to scale

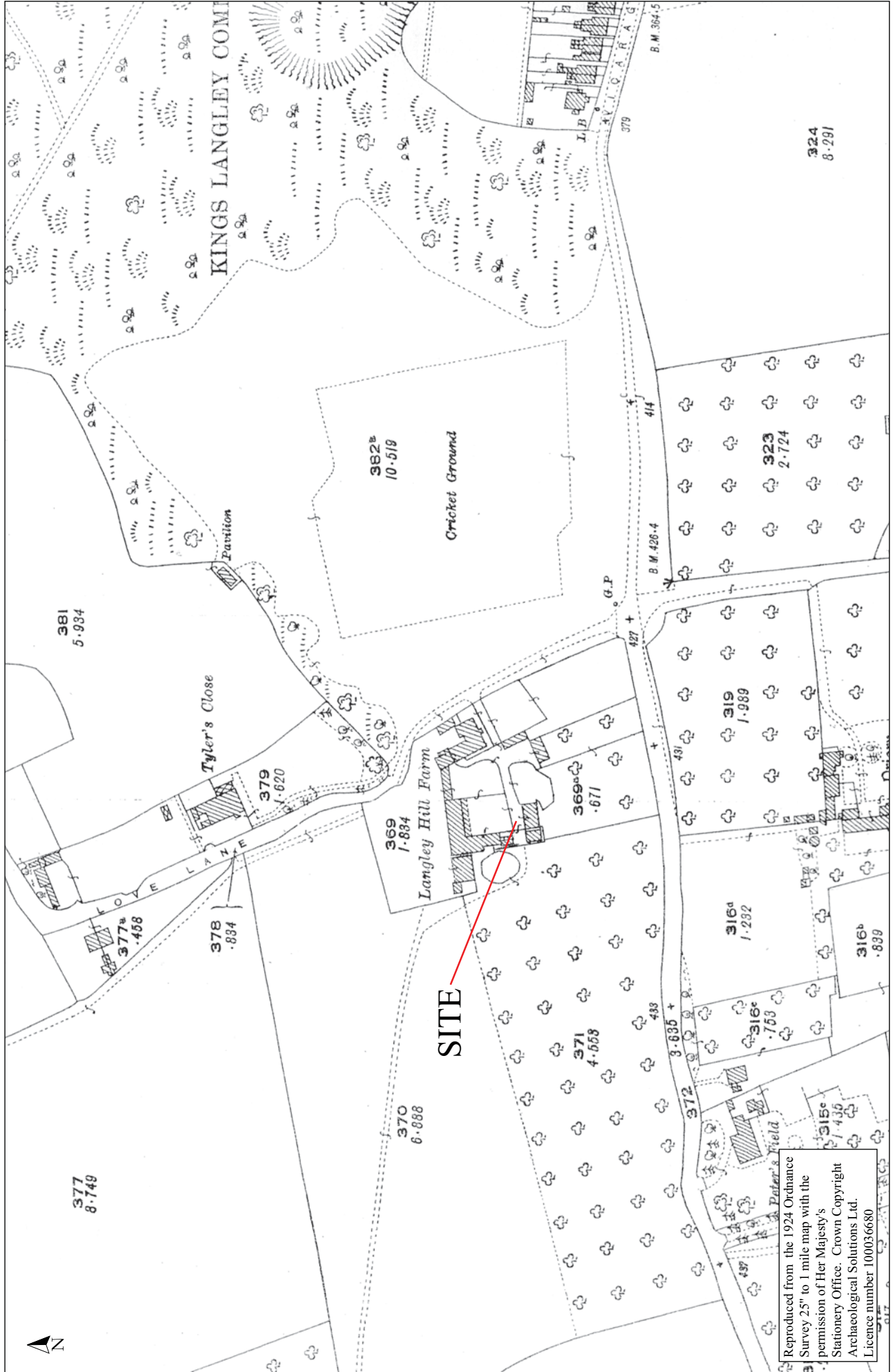


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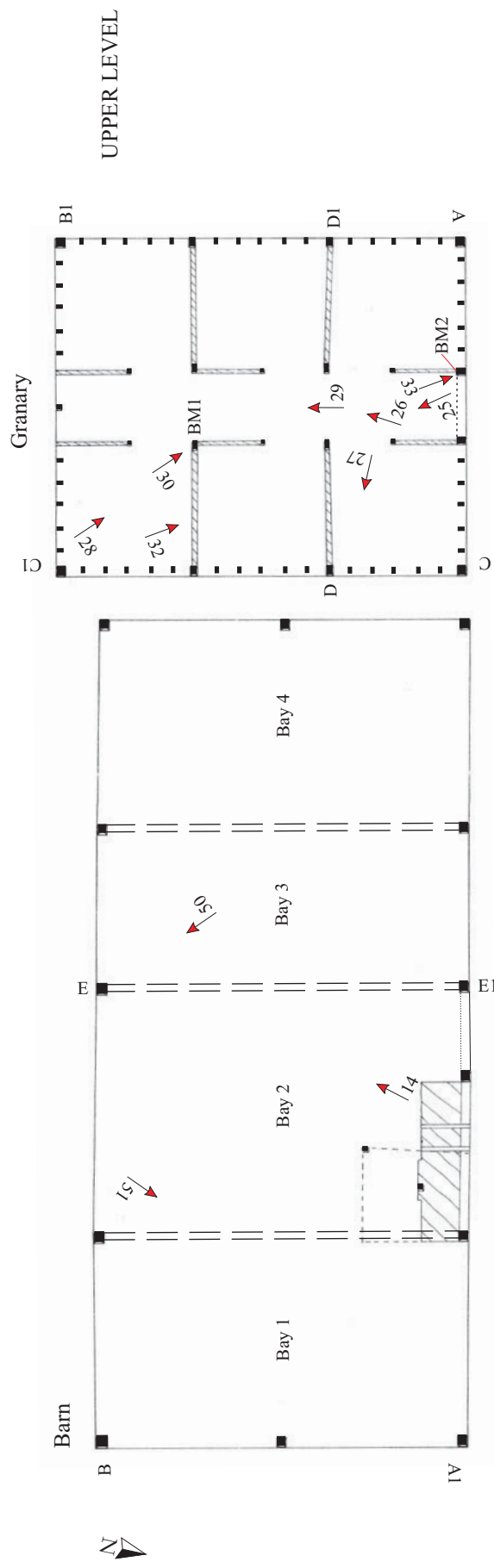
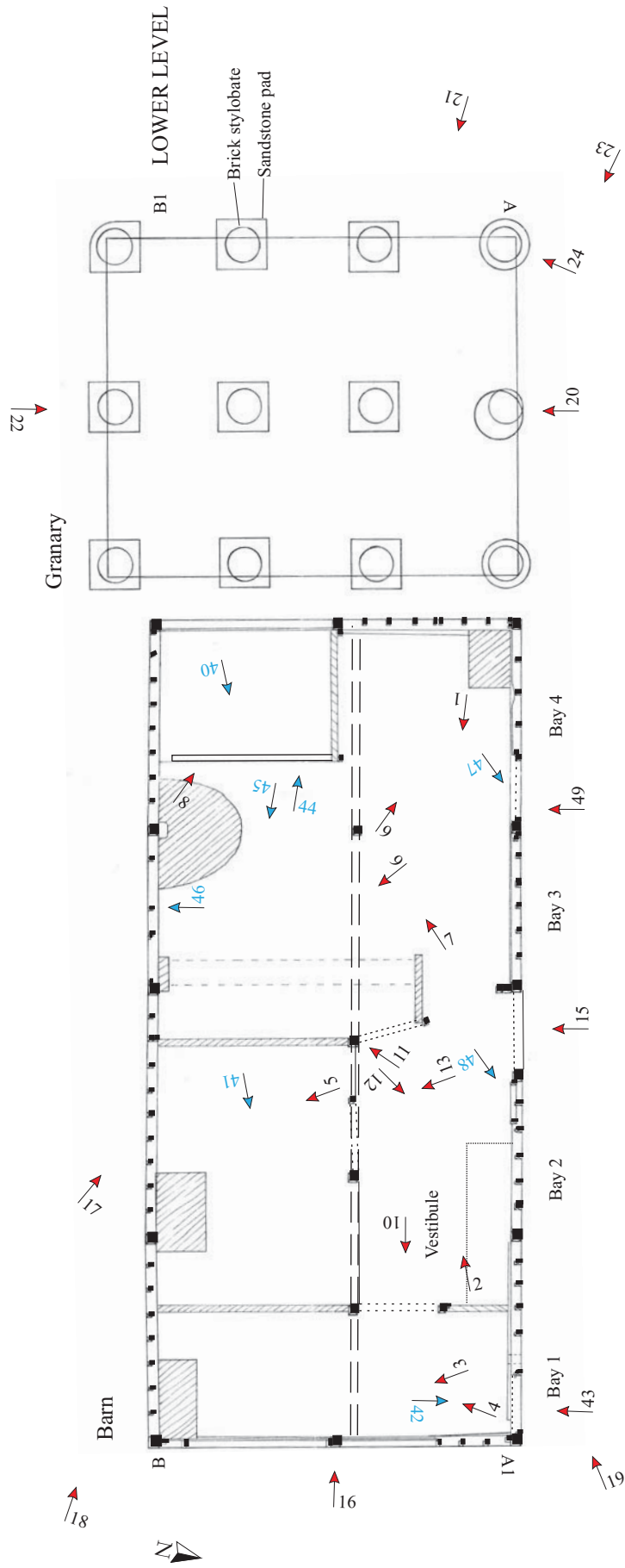
Fig. 7 Ordnance Survey map, 1898

Scale 25" to 1 mile at A4



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 Survey 25" to 1 mile map with the
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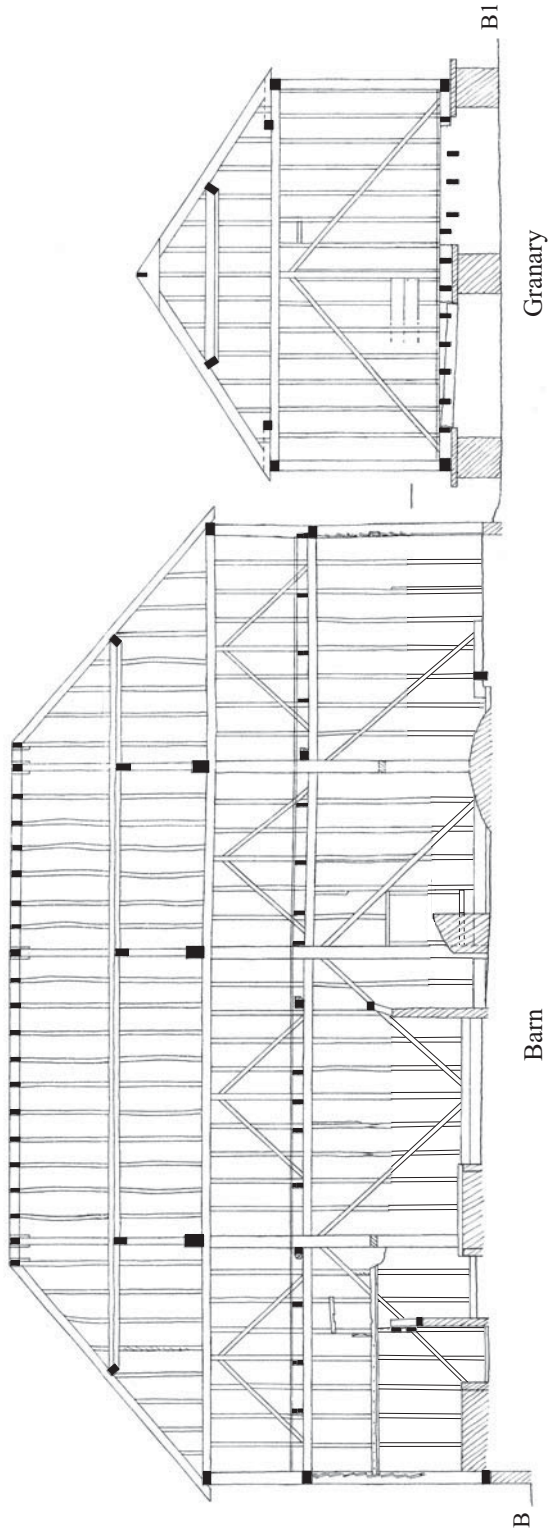
Archaeological Solutions Ltd
Fig. 8 Ordnance Survey map, 1924
 Scale 25" to 1 mile at A4



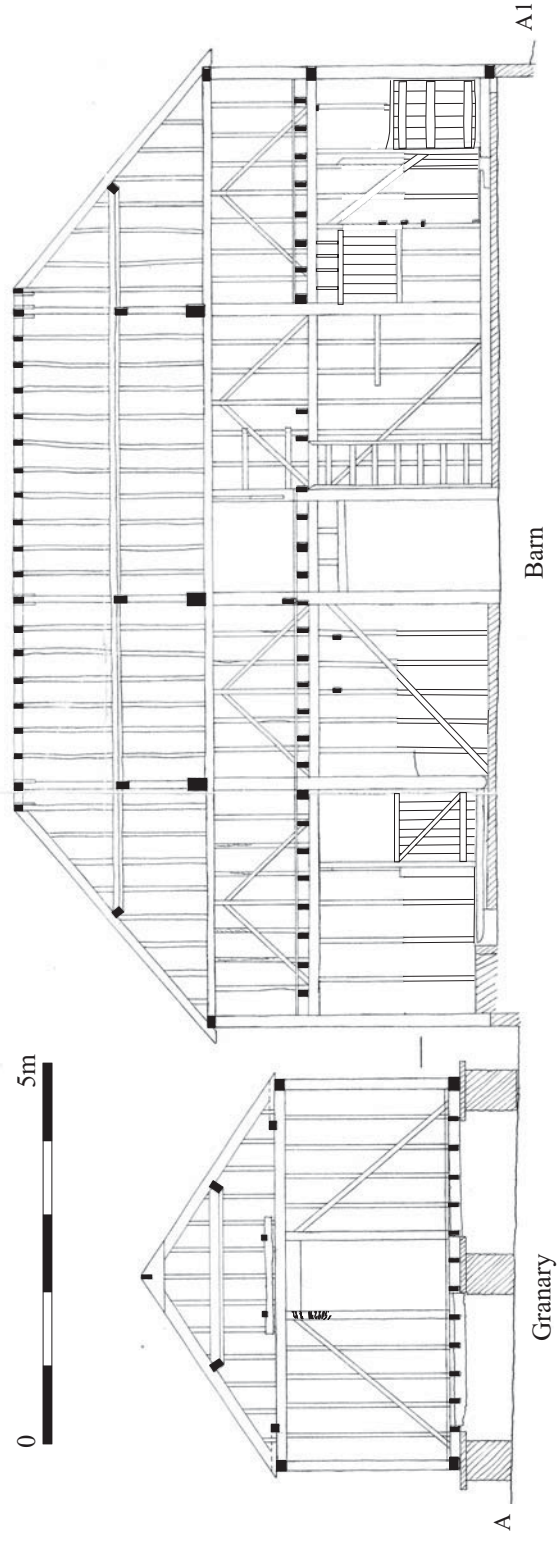
Archaeological Solutions Ltd
Fig. 9 Floor plans
 Scale 1:100 at A4

BM1 - Baltic mark
 Photo location
 Photo location after stripping out

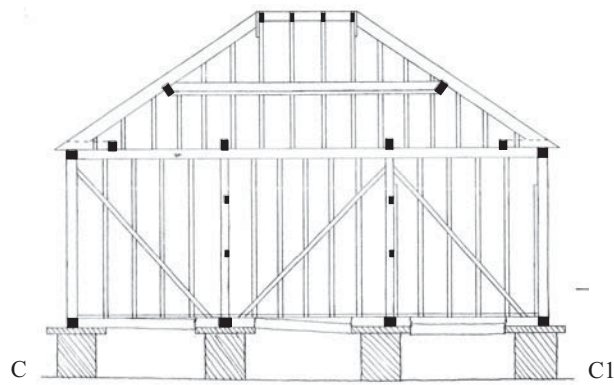




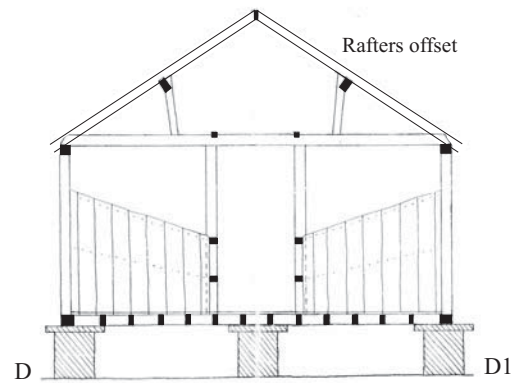
South internal elevation of barn and granary



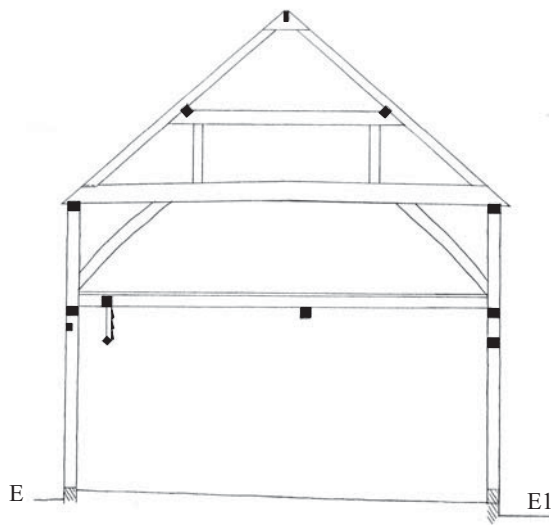
North internal elevation of granary and barn



East internal elevation of granary

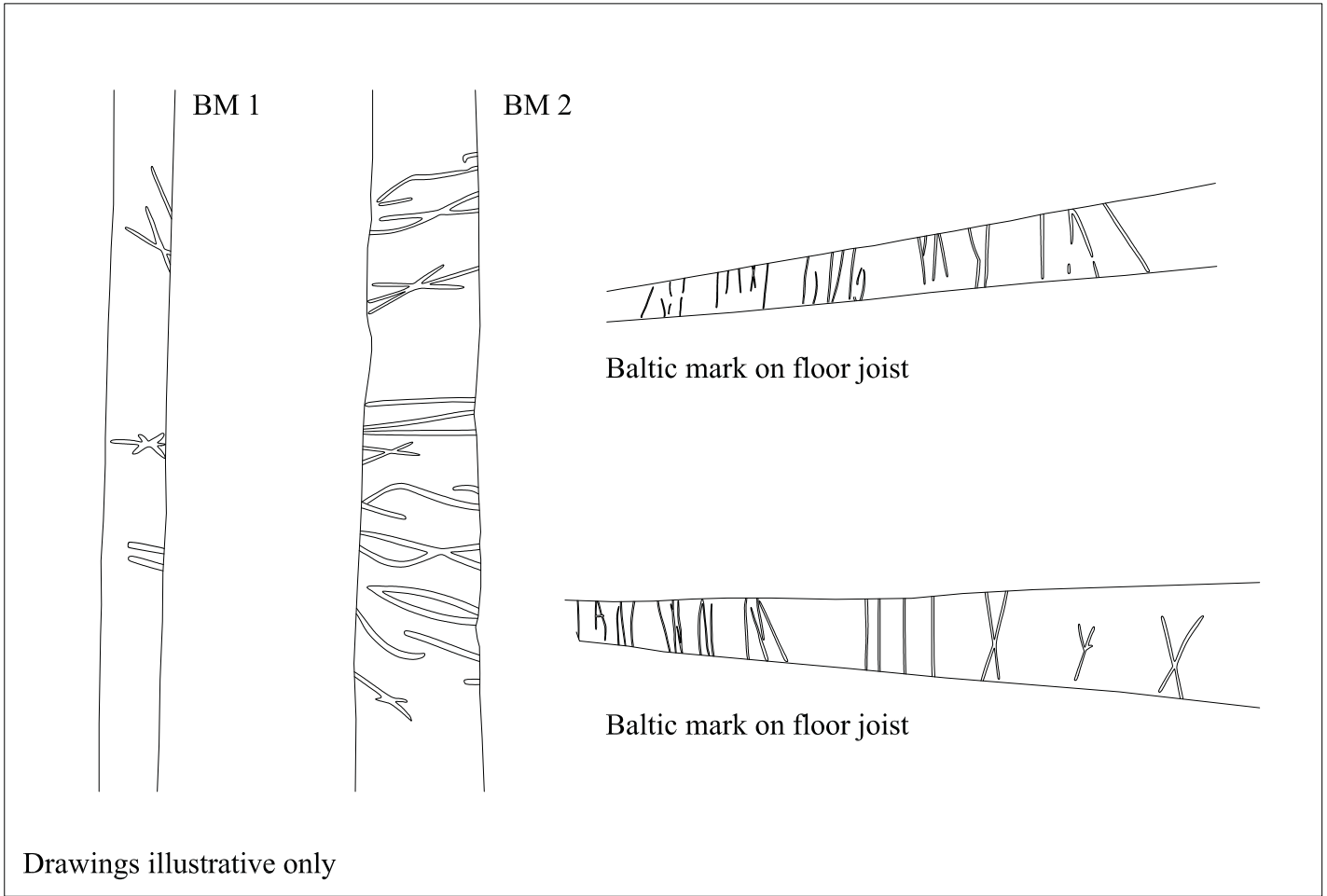


Cross-section through granary



Cross-section through barn





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Fig. 12 Selection of inscribed Baltic marks within the granary

Not to scale