

ARCHAEOLOGICAL SOLUTIONS LTD

**BARN AT GREEN FARM,
BOVINGDON GREEN, HERTFORDSHIRE**

HISTORIC BUILDING RECORDING

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NGR: TL 0110 0278	Report No: 3331
District: Dacorum	Site Code: AS1211
Approved: Claire Halpin	Project No: 3394
Signed:	Date: June 2009

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OASIS SUMMARY SHEET

Project details			
Project name	<i>Barn Conversion, Green Farm, Bovingdon Green, Hertfordshire</i>		
<i>In June 2009, Archaeological Solutions Ltd (AS) conducted an historic building recording project at Green Farm, Bovingdon Green. The works were required as part of a planning condition imposed on approval for a barn conversion. Technical analysis and historic building recording of outbuildings at Green Farm, revealed a complex sequence of structural additions and alteration in three or four distinct phases. A three-bay barn with a central porch lies at the core of the complex. This bears close similarities to the structure of the farmhouse, and may be of later 15th century date. Despite later repair, it remains largely as constructed and its northern bay is of particular historic significance as it retains almost every original timber intact.</i>			
<i>The barn was extended to the north and south in the early 17th century, being joined to the house by a lateral extension and carriageway. These extensions were initially created as open barns, but were later given inserted upper floors to create hay lofts. The modifications vary in date between the late 17th and 19th century, with a second phase of the early 18th century. Later modifications addressed deficiencies in the original timber, and include the addition of tension rods and other strengthening measures in the 19th century. A woodshed and garage were latterly added to the east in recent times. A small, disused hot-house to the south of the complex probably incorporates an older outshut.</i>			
Project dates (fieldwork)	12 th /13 th June 2009		
Previous work (Y/N/?)	N	Future work (Y/N/?)	Y
P. number	3394	Site code	AS 1211
Type of project	<i>Historic Building Recording</i>		
Site status	<i>Grade II listed, Area of Archaeological Significance</i>		
Current land use			
Planned development	<i>Barn Conversion</i>		
Main features (+dates)	<i>Late 15th century barn with later additions and phases of alteration and repair.</i>		
Significant finds (+dates)			
Project location			
County/ District/ Parish	<i>Hertfordshire</i>	<i>Dacorum</i>	<i>Bovingdon</i>
SMR for area	<i>Hertfordshire</i>		
Post code (if known)	<i>HP3 0LF</i>		
Area of site	<i>c.295m²</i>		
NGR	<i>TL 01119 02800</i>		
Height AOD (max/ min)	<i>c. 155m AOD</i>		
Project creators			
Brief issued by	<i>Hertfordshire County Council Historic Environment Unit (HCC HEU)</i>		
Project supervisor/s (PO)	<i>T Collins</i>		
Funded by	<i>Mr Graham Barrett</i>		
Full title	<i>Barn Conversion, Green Farm, Bovingdon Green, Hertfordshire: Historic Building Recording</i>		
Authors	<i>Collins, T, Prosser, L, Peachey, A & Henry, K</i>		
Report no.	3331		
Date (of report)	<i>June 2009</i>		

BARN CONVERSION, GREEN FARM, BOVINGDON GREEN, HERTFORDSHIRE

HISTORIC BUILDING RECORDING & ARCHAEOLOGICAL MONITORING

SUMMARY

In June 2009, Archaeological Solutions Ltd (AS) conducted an historic building recording project at Green Farm, Bovingdon Green. The recording was required as part of a planning condition imposed on approval for a barn conversion. Technical analysis and historic building recording of outbuildings at Green Farm, revealed a complex sequence of structural additions and alteration over three or four distinct phases. A three-bay barn with a central porch lies at the core of the complex. This bears close similarities to the structure of the farmhouse, and may be of later 15th century date. Despite later repair, it remains largely as constructed and its northern bay is of particular historic significance as it retains almost every original timber intact.

The barn was extended to the north and south in the early 17th century, being joined to the house by a lateral extension and carriageway. These extensions were initially created as open barns, but were later given inserted upper floors to create hay lofts. The modifications vary in date between the late 17th and 19th century, with a second phase of the early 18th century. Later modifications addressed deficiencies in the original timber, and include the addition of tension rods and other strengthening measures in the 19th century. A woodshed and garage were latterly added to the east in recent times. A small, disused hot-house to the south of the complex probably incorporates an older outshut.

1 INTRODUCTION

1.1 In June 2009, Archaeological Solutions Ltd (AS) conducted an historic building recording of a barn at Green Farm, Bovingdon Green, Hertfordshire (NGR TL 01119 02800; Figs. 1 - 2). The works were required as part of a planning condition imposed on approval for a barn conversion (Planning Refs.4/01378/07/FUL & 4/01266/06/LBC). It is proposed to convert the existing barn into a single dwelling, which will involve new ground works, the demolition of lean-to outbuildings and the alterations to the fabric of the existing barn. The project was commissioned by Mr Graham Barrett of Green Farm. This report relates to the recoding of the existing structure. It is understood that HCC HEU will also require the archaeological monitoring of any groundworks associated with the development. The results of the programme of archaeological monitoring and recording will be presented as a separate report once this phase has been carried out.

1.2 The relevant planning policies which apply to the effect of development with regard to 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). PPG15 (1994) is the national Planning Policy Guidance Note which applies to the conservation of the historic environment by protecting the character and appearance of Conservation Areas and protecting listed buildings (of architectural or historical interest) from demolition and unsympathetic change and safeguarding their settings as far as is possible. This condition is also widely applied by local authorities.

1.3 The project was conducted in accordance with advice from Hertfordshire County Council Historic Environment Unit (HCC HEU, Kate Batt, received 3rd February 2009) and a written scheme of investigation (specification) prepared by AS (dated 5th February 2009), and approved by HCC HEU. The building recording was carried out to Level 3 as defined in the English Heritage document *Understanding Historic Buildings: a guide to good recording practice*, 2006 and the Royal Commission's *Recording Historic Buildings: A descriptive specification 3rd edition*, RCHME 1996. It was also carried out in accordance with the Institute of Field Archaeologists' (IFA) *Standard and Guidance for the Archaeological Investigation and Recording of Standing Buildings or Structures* (revised 2001). The relevant sections of *Standards for Field Archaeology in the East of England*, East Anglian Archaeology Paper 14/ALGAO (Gurney 2003) and the IFA *Standard and Guidance for Archaeological Desk-Based Assessments* (revised 2001) were also followed.

1.4 The objectives of the historic building recording were, as set out in the specification and the IFA and English Heritage guidance documents:

- to compile a comprehensive and high quality record of the structure identified for alteration, with analysis and interpretation of that structure in conjunction with an associated documentary survey;
- to provide a review of the local and regional historical context of the building, adequately detailed to place the findings of the archaeological recording in context, and;
- to produce a high quality, fully integrated archive suitable for long-term deposition in order to 'preserve by record' the building in its current form prior to alteration.

1.5 The specification allowed for further monitoring works during alteration to the fabric of the building if these were felt to be justified. However, all elements of the building were visible for analysis and it was not considered that additional works would give any substantial further insight.

2 DESCRIPTION OF THE SITE (Figs. 1 & 2)

2.1 The small village of Bovingdon lies on fairly high ground to the south-west of Hemel Hempstead. The green now comprises a large triangle of land framed by substantial tree avenues with some residential development visible to the north-east and south-east. The green is bounded on the west by irregular open and wooded plots of land.

2.2 Green Farm is situated on the south-west side of the green, given access via a short private drive. The complex forms a U-shaped group of building around the former farmyard, now mostly laid down to ornamental gardens. The former farm house occupies the north side, with barns, stabling and storage units of different dates creating the east and west ranges. The south is now open to the countryside beyond, though further ranges of buildings formerly enclosed the yard fully. The site lies within Area of Archaeological Significance 60 designated on the Local Plan, which reflects the presence of significant buildings or archaeology of medieval and post-medieval date.

2.3 The farmhouse along with the attached farm buildings are Grade II listed. The listing describes the farmhouse as being a later 15th century open-hall house, with a 16th century inserted floor and having later alterations and additions. The west range of outbuildings is stated as predominantly 18th century in date while the east range of buildings is noted as being 17th century or earlier. Observation on site has allowed for refining of the listed date of the outbuildings which is discussed below.

2.4 The proposed development applies to the east range of buildings. These, including the carriageway connecting the range to the house, form the subject of the assessment below.

3 METHODOLOGY (Desk-based archaeological research)

3.1 Archaeological databases

3.1.1 The standard collation of all known archaeological sites, chance finds and historic landscape features in Hertfordshire is the Hertfordshire Historic Environment Record (HER). The HER database was searched for all known entries within a c. 500m radius of the assessment site. These are listed in Appendix 1 and plotted below (Figs. 3). Where relevant, entries have been discussed in Section 4.2.

3.2 Cartographic and documentary sources

3.2.1 The principal source for maps and historic documents was Hertfordshire Archives and Local Studies (HALS). All available material regarding the site was

consulted and is listed in Appendix 2. Where relevant, these sources have been discussed in Sections 4.2-3 and reproduced in Figs. 4 - 9.

3.3 Secondary sources

3.3.1 The principal sources of secondary material were HALS and AS's own reference library. All sources used have been referenced in the appendices and bibliography.

3.4 Geological/ geotechnical information

3.4.1 Information was compiled from appropriate maps published by the Geological Survey of Great Britain and the Soil Survey of England and Wales (SSEW 1983). No detailed geotechnical information for the site was available at the time of writing.

4 DESK-BASED RESEARCH

4.1 Topography, geology and soils

4.1.1 The site lies on slightly undulating land at c.155m AOD to the south of the village of Bovingdon, which is situated on the south-eastern slopes of the Chiltern Hills. The countryside rises slightly to c.160m AOD to the west and north and gradually drops away to c. 135m in the south and east. Within its local landscape setting the village is situated on an area of high ground and heavy soils that is surrounded by the Bulbourne, Gade and Chess valleys.

4.1.2 The underlying geology of the area is chalk overlain with peri-glacial brick-earth and clay-with-flints. The clay soils (Batcombe and Hornbeam 2 associations) are generally acidic or neutral and are generally well-drained, with some local seasonal water logging (SSEW 1983). Deep deposits of clay in the area can support perched water tables, such as at Bovingdon Grange, c.200m to the north of the site, and the old Bovingdon brick pits, c.700m to the west of the site. As noted above, no detailed geotechnical information for the site was available at the time of writing.

4.2 Archaeological and historical background (Fig. 3)

Prehistoric (to c. 100 BC)

4.2.1 In comparison with later periods, recorded prehistoric finds from the Bovingdon area are relatively few. Sparse Mesolithic flint work has been recovered from the Bulbourne and Chess Valleys, while important Neolithic sites

have been recorded at Apsley and Rucklers Lane in Kings Langley. An Iron Age fort has also been recorded to the west on Whelpley Hill, Buckinghamshire (Brown 2002, 3). However; all these finds were recorded in the river valleys that particularly favoured prehistoric occupation, not on higher ground (i.e. the location of the site). No prehistoric finds have been recorded in the vicinity (c. 1km radius of the site).

Late Iron Age and Roman (100 BC – AD 410)

4.2.2 The local late Iron Age tribe, the Catuvelauni were quick to embrace Roman culture and several substantial villas have been recorded in the area surrounding Bovington, including those at Kings Langley, Gadebridge, Boxmoor, Berkhamstead, Sarrat and Latimer (ibid, 3). The important thoroughfare of Akeman Street also passes the northern boundary of the parish of Bovington (ibid, 5). Roman artefacts and cremations have been recorded in Box Lane to the north-east of the village of Bovington, possibly associated with the villa in the grounds of Boxmoor House (ibid, 4) but no Roman archaeology has been recorded in the vicinity of the site.

Anglo-Saxon and medieval (c. AD 410 – 1500)

4.2.3 Little Anglo-Saxon archaeology has been found in the area although an Anglo-Saxon coin has been recorded in Bovington (HER 935), while parts of St. Mary's church nearby, have Anglo-Saxon origins (Brown 2002, 5).

4.2.4 Bovington is not mentioned in Domesday Book but is evidently well-established by the late 13th century, having a church by 1235. It may have originated as a small private estate, possibly deriving its name from 'Bofa's Down', as a piece of marginal land given to a minor landowner with an Old English name (Gover, Mawer & Stenton 1938, 29). Subsidiary settlements such as Bovington Green, which must have developed from the village centre into the 'waste' are not recorded until fairly late. One John Goulde of Green mentioned in 1599 is among the earliest references (ibid). By the end of the medieval period (c. AD1500), records of Hemel Hempstead Manor which held Bovington describe the village as comprising mostly enclosed fields with a few common fields, park land and woodland (Brown 2002, 6).

4.2.5 Cropmarks visible on aerial photographs of the east side of the green (HER 9202), show a rectilinear enclosure. It is unclear whether this enclosure was of prehistoric, Roman or medieval date.

Post-medieval (c. AD 1500 – present)

4.2.6 Most remaining architectural elements around Bovington Green are of post-medieval date, and include the 19th century pentagonal well house (HER

5903), a Baptist chapel (HER 15091) and a brick pillar wall box (HER 5903), while the site of a 19th century smithy is also known (HER 7177).

The Site

4.2.7 Green Farm (HER 13432) is one of two substantial farms that front onto the green. The second farm is now Grange Farm, although was referred to as Greenlane Farm or Green Farm prior to the development of Bovingdon Grange. This makes the history of the assessment site difficult to follow. For example, sales particulars of 'The Green Farm' in 1872 (ref. D/ELs/B890) clearly refer to the later Grange Farm, while deeds from 1646 for the 'messuage called Grenefarme' (ref. 79605) are not specific to a particular farm.

4.2.8 The farmhouse has come to the attention of notable architectural historians and is one of several late medieval hall-houses in the area (Pevsner, 2002). J.T. Smith considered a 15th century date and comments that the roof is of clasped side-purlin form with king struts in the partition trusses (Smith, 1993). A recent historic building assessment has also been carried out (Simmelman, 2006) which records the building as an open-hall with cross-wings at both ends, a parlour with a chamber over at the west end and service wing at the east. An upper floor added in the late 16th century was noted as inserted at the same time as a timber chimneystack, although the sequence is arguable. In the late 17th or early 18th century the lower east bay was heightened to the level of the main house and the timber stack replaced perhaps c.1700, while the 18th century saw the building refaced in brick. Further refinement would be possible with more study. The brick refacing for example is of two phases, including a later, 19th century intervention in Luton Grey brick. The house was restored somewhat heavy-handedly in the 1960s, when an external staircase turret was demolished and the remaining buildings on the south side of the yard removed.

4.2.9 Due to the complexity of the documentation, it is not possible to confirm specific residents for Green Farm, although perhaps as Grange farm is referred to as Greenlane Farm on late 19th century maps we can suppose that references to a Green Farm may relate to the assessment site. Historic directories of 1855 record only one Green Farm in Bovingdon and note that a Thomas Sedewell was farming at Bovingdon Green Farm, while Thomas Batchelor is recorded there in 1894. Later directories record a Frederick Gee at Green Farm in 1902, 1908 and 1914, although it is impossible to confirm that these refer to our site and not the current Bovingdon Grange.

4.2.10 Subsequently the farm was run by Horace Hearn in the 1930s, before being sold in the same decade to Alfred Matthews, a brick maker from Bellingdon. Clay from the fields of the farm was used to manufacture bricks first by Matthews, and then in the 1960s by E.H. Smith Ltd, until recently when the land was bought by the Boxmoor Trust (Brown 2002, 51).

4.3 Cartographic Sources

Dury and Andrews' map, 1766 (Figure 4)

4.3.1 The Dury and Andrews' map clearly depicts ranges in the location of Green Farm on the south-western edge of the Bovingdon Green, although it is unclear if any of these represent the current outbuildings. The current Grange Farm is depicted and the north-east side of the green has a row of presumably residential buildings. The surrounding landscape comprises agricultural fields, while the main roads in the vicinity of the farm appear as they are today.

Bryant's map, 1822 Figure 5

4.3.2 Although at a smaller scale than the previous map the farm is clearly depicted labelled as Bovingdon Green Farm, and the ranges of structures is comparable to those apparently present today, although a south range is visible unlike today.

Tithe map, 1838 Figure 6

4.3.3 The tithe map (ref. DSA4.22.2) depicts the farm layout in detail comprising four ranges enclosing a courtyard, divided internally, with the farmhouse depicted on the north side. The assessment structure comprising the east range of barns is clearly located on the east side, comprising apparently two distinct but adjoined ranges. This east range is not shown contiguous with the main house on this map. The farm (no. 685) and the surrounding fields (no.s 682-4 and 687-8) are all listed in the tithe apportionment (ref. DSA4.22.1) as owned by John Parker and occupied by Philip Brownlow. The adjacent area of the green (no. 527) is listed as common ground under 'Roads, Rivers and Waste'.

Ordnance survey map, 1898 Figure 7

4.3.4 In comparison to the tithe map the 1898 map depicts the farm in more detail, where some development has evidently occurred. The east range is now depicted as linked to the farmhouse, with further internal division apparent and a number of extensions on the east side. The farmhouse and west range of structures are similar to those seen today, although some additions present in 1898 such as those in the centre of courtyard are lost, while the entire south range of building have disappeared. An orchard occupies the field to the south-east with the green on the north and open fields on the south and west. A trackway extends across the green from the north and passes the buildings on the east side continuing to the fields on the south.

Ordnance survey map, 1924 Figure 8

4.3.5 In the 26 year period since the production of the last source the farm layout appears to be entirely unaltered, with the exception of a small glass-roofed structure added on the south side of the farmhouse. The east range of structures is the same.

Ordnance survey map, 1973 Figure 9

4.3.6 The 1973 map reveals that substantial development has occurred to the farm. The complex has undergone a significant transformation, with the demolition of many of the farm buildings, stripping back the layout to two simple ranges on the east and west with the farmhouse on the north. Most alteration has occurred to the west and north sides, while the east range subject to assessment is predominantly unaltered. A pond has been established to the south-west of the east range. The surrounding landscape has also seen substantial development, especially to the south with the construction of Hunters Close and further buildings along Long Lane, Middle Lane and Water Lane.

4.3.7 These later OS maps indicate that the farm on the north side of the green is now called Grange Farm, as opposed to Greenlane Farm noted on the 1898 map.

5 THE BUILDINGS

5.1.1 The assessment buildings lie to the east of the main house, linked by an open carriageway at the north (Plate 1). The assessment structures form a number of distinct units which are clearly of different phases and methods of construction. These have been divided into separate units for the purposes of the description, and are labelled on Fig. 10. Some later additions are present on the east side. All are timber-framed over a low dwarf wall and weatherboarded. This is predominantly of softwood, now coated in preservative, although some older boarding survives at high level within the carriageway and in other places where it has been protected from the elements. The dwarf wall is constructed of variable brick laid in English bond, although predominantly 19th century orange fabric with straight skintles or depression marks characteristic of that date. Several areas have been patched in 20th century brick including Flettons, reflecting the poor condition of the wall in places, with modern cement repointing much in evidence. The roof is covered in hand-made peg-tiles.

5.2 Exterior

5.2.1 The north façade extends eastwards, flush with the farmhouse. It is interrupted by large double gates with a shorter side wicket, all of which have all been modernised, although an upper pintle survives on the main gate jamb to show that the basic historic arrangement has been preserved.

5.2.2 The east façade is fairly homogenous. The building returns at a gable end, to a long elevation, crossed with the barn midstrey and augmented by a pent-roofed garage, woodshed and a glazed hothouse against the building to the south (Plate 2). A distinct bow suggests some structural movement along this side.

5.2.3 The east gable is pierced by a high loading door with strap hinges on pintles and at lower level by a reused iron- or steel-framed fixed four-light window. The garage is constructed in like materials, but is of little historic interest with a corrugated metal sheet roof. To the south lies the midstrey porch gives access to the interior. It has weatherboarded walls and gable, but no surviving doors. Adjoining to the south the open-fronted woodshed is of little interest. The south end of the range is occupied by a lean-to glazed hothouse, which may incorporate an early pent-roofed outshut, as its roof is contiguous with the main structure.

5.2.4 The south or end-elevation is much obscured by foliage, although the gable is pierced by a domestic, leaded Venetian window, presumably reused.

5.2.5 The west façade fronting the farmyard is also weather-boarded along its entire length, pierced at irregular intervals by large doors and reused steel-framed leaded windows (Plate 3). To the north, within the carriageway we see a wide boarded door to the interior. It is of no great age but has strap hinges on pintles, the lower bearing an interesting fleur-de-lys finial. A high-set window adjoins this door. An upper loading door is of much greater age with strap hinges with round finials. To the south beyond the carriageway, a second large door has good strap hinges although is of crude construction. The adjoining area is lit by three steel-framed leaded windows. No doors corresponding to the midstrey survive but the jambs preserve a locking bar slot, while a short boarded door adjoins to the north. To the south two separate units are given access through a wide slatted door, ledged and braced to the rear, and rudimentary gates.

5.3 Interior

Carriageway

5.3.1 Within the carriageway, the timber-framing of the farm house is exposed, and is of similar form to those elements which remain visible within the house. The jowled outer posts, a central prick post, mid-rails and robust studs all survive, nogged in part with 18th century bricks. The framing above tie-beam level is clearly a later raising as the ends of the tie-beam preserves slots for the original rafters, and a secondary tie-beam with supporting studs sits incongruously on the older frame. The central post carries through to a collar and then to the apex as a king strut. The collar clasps a single purlin in each

pitch, extending through the carriageway, and suggesting that the original end-bay of the house was raised to accommodate the barn ranges and carriageway.

5.3.2 The carriageway roof has been modified, but comprises a conventional pair of waney oak purlins, simply scarfed near the junction with the main house.

5.3.3 On the east side the outbuildings are partitioned by weatherboarding and we see secondary supporting struts, wedged in with bird-mouthed joints along with a later collar to prop up the purlins. Behind this boarding, which is fairly crude, structural timbers have been cut through to accommodate the loading door (noted below), which necessitated this support. A secondary, intermediate tie-beam has also been placed across the bay, but the central rafter couple is of more robust form. A softwood ridgeboard appears to be a later insertion.

5.3.4 The outer walls are similarly much modified. The north wall plate has sagged to an alarming degree, and been superseded by a later member. On the south side the upper studs are preserved above a lintel framing the entrance to the yard. This may be secondary although is supported on the west by a curved bracket to the upright.

Units 1 and 2

5.3.5 Unit 1 occupies the gable end of the carriageway with Unit 2 forming its return to the south. The area is now used for storage, but latterly housed livestock. Cement with brick paviers survive with a central gully and a timber manger is preserved on the east side. A hayloft above remains unused. Much of the outer wall framing has been embedded or obscured to a height of approximately 1.7m with cement, consistent with modern livestock regulations. However above this the building presents a fairly complex arrangement of studwork, visible above and below the inserted hay loft floor.

5.3.6 The wall framing of Unit 1 comprises corner posts with splay-cut jowls rising to wall-plates and tie-beams. With minor variation the wall panels are framed by the bay division posts and have mid-rails with studwork above and below. At lower level the walls are framed with primary-braced studwork on the east; the brace descending from the outer corners to the central post. The north wall has, by contrast simple studs, but these may be secondary as we see a redundant mortice for a brace in the north-west corner. The studs of the west wall frame wide doors, described above, with widely spaced studs to the north. To the south of the door the high-set window truncates the original studs, which now only survive at low level.

5.3.7 The floor at the northern end is fairly rudimentary in construction and appears to have been built in several phases. Strong binding joists respect the bay divisions, but have been cogged over the mid-rails or nailed into the wall posts. Slender gault brick piers give additional support. The floor clearly used

timber which was insufficient for the task, as the north joist falls short of the east principal post and is supported by a crude brace. It is also chamfered and stopped at both ends with great care, indicating its reuse from elsewhere. Slender commons joists are of good quality however, properly morticed into the binding joists using simple tenons with diminished haunches in the late 17th century manner. The commons at the north end either rest on the mid-rail of the north wall or occasionally fall short, and are supported by a secondary member nailed and cogged over the mid-rails to either side.

5.3.8 This unit is now continuous with the adjoining space to the south (Unit 2), which is much less coherent and has been extensively modified. The division between the two areas is defined by a rudimentary joist which appears to be secondary, but formerly held widely-spaced lower studs indicated by redundant mortices corresponding to upper studs which still survive. A cushion capital indicates where a former post has been removed.

5.3.9 Unit 2 occupies two bays, with the east and west walls exposed above the concrete rendering. Here the mid-rails are joggled to either side of the principal posts on the west (to accommodate a door) but in-line on the east. On both sides the studwork is plain; partially primary-braced on the east, with the brace simply lapped over in an early manner. The south wall is partitioned with circular-sawn weatherboarding. The inserted floor is supported by a bridging joist of two bolted sections with a cushion capital and waney common joists of poorer quality than those present on the north. By comparison to the adjacent area, this floor is very crude and forms a simple extension, falling short of the east wall by a considerable margin. As a hayloft, it probably worked well, allowing hay to be dispensed from the loft through the gap and directly into the manger.

5.3.10 At upper level the carriageway and Units 1 and 2 all appear to be of a single phase, with Unit 1 continuing the carriageway roof and Unit 2 returning to the south as a separate construction. The wall-plate / tie-beam to the carriageway on the west has an unmarked soffit indicating this area was originally open. The tie-beam here preserves heavy mortices in the soffit at each end, later infilled, possibly for braces. The wall-plate / tie-beam has been cut through to accommodate the high loading door and the partitioning of the two areas, while only a single queen posts survives, a second member being indicated but lost with the insertion of the door, although made good with inserted oak members.

5.3.11 The clasped side-purlin roof form continues, with a single purlin in each pitch supported by straight wind-braces (with a second later brace in softwood) and close-spaced oak rafters rising to a ridgeboard, which is probably a later insertion. The east gable of Unit 1 also has a loading door, this likely in an original location, as it is framed by close-spaced studs continuing those seen below the wall-plate.

5.3.12 The roof of Unit 2 is characterised by slightly cranked jowled principals marking the bay division with fairly slender straight braces to the tie-beam, above which queen posts support a nailed-on collar. At this point a tension rod extends through the tie-beam to the cushion capital below, noted above, help suspend the floor. The east wall has various additional nail-on timbers.

Unit 3

5.3.13 Unit 3 comprises a self-contained storage area of a bay and half in size, previously used as an animal shelter and as with the north unit preserving modern feeding troughs on the east side and a cement and blue-brick floor. There is no sign of an earlier manger. The space has been enclosed with a ceiling, but in modern materials. Cement covers much of the lower studwork. On the north the timber framing of Unit 2 is exposed, comprising a central post with in-line mid-rails and wide-spaced studs above and below (seven in each register), although the south mid-rail is missing. There is also a straight nailed-on brace in the east lower register. The west wall preserves mortices for earlier timbers, although now presents continuous robust studs, pierced in each bay by modern inserted leaded windows. The east wall, although obscured at low level, again has continuous studs to the mid-rail in both bays although those to the north are slender by comparison to more robust members to the south. On this side we see protruding supports for the lean-to garage. The south wall is essentially constructed of slender, more modern timbers, horizontal boarding and a jamb for a stable door, now removed, although two pintles survive.

5.3.14 Two tie-beams lie above the ceiling, characterising a division of date and construction detail. The north truss (Section G-G1, Fig. 12), marking the division with Unit 2 has a central prick post below the tie-beam, noted above, with slightly cranked braces to principal posts with splay-cut jowls. Raking struts from the tie-beam are birdmouthed to the purlins. The weatherboarding to the rear and Unit 2 is of modern softwood, supported by additional radiating struts applied to the frame.

5.3.15 The intermediate truss (Section H-H1, Fig. 12), by comparison, has gently swelling jowled principals to a waney tie-beam, triangulated by short, curved braces, each with three pegs. Redundant peg-holes in the tie-beam indicate two further studs, now removed. Above the tie-beam queen posts are pegged to a collar which clasps side purlins. A long king strut rises from the collar to the apex, while a redundant mortice suggests an earlier central strut also rose from the tie-beam to the collar (Plate 5).

5.3.16 The structural division is reinforced by subtle differences in construction detail at roof level. To the north, the purlins are clasped by bird-mouthed members, as noted above, and have a rudimentary straight wind brace on the east side. By comparison the roof of the south is marked by good curved wind-

braces to either side and in both pitches. In addition the outer wall detail shows differences; that to the north having simple studs and mid-rails, but to the south continuous studs and a pattern on both sides of lateral curved braces, terminating at a robust stud, a central stud and two flanking more ephemeral timbers.

Unit 4

5.3.17 The south bay of Unit 3 impinges into what we may now consider as part of Unit 4 as the flanking walls to the north of the midstrey continue the pattern of studwork seen on the north side of the partition.

5.3.18 With a half bay incorporated into Unit 3, two and a half bays remain, and include the porch or midstrey. This is framed by trusses of similar construction. The principal posts on the north have gently swelling jowls with curved braces to a robust tie-beam, above which there is neither collar or king strut, but instead two robust curved struts of impressive proportions, clasping the purlins and principal rafters with single peg (Plate 6). The principal rafters are slightly more robust than the commons, all rising to a plain apex. The corresponding truss to the south also displays hallmarks of this form, but many members, including tie-beam and principal uprights have been replaced with squared softwood, though care has been taken to retain the original curved braces.

5.3.19 Many timbers within the porch have also been renewed. A few appear to be of some age, such as the door lintel on the west. The current form of the north and south walls is of primary-braced panels above mid-rails with simple studs (six in each register) below. One primary-brace on the south is notched over and pegged in an earlier manner. The walls appear to make use of some older timber but careful repairs of a different date are also visible. The roof is conventional, of side-purlin form with lap-dovetail joints visible at the junction with the barn. Additional support is given by two angle-ties extending from the outer wall-plates to the lintel on the east side (Plate 7).

5.3.20 The south bay, as noted above, has suffered heavy replacement, and now terminates at a weatherboarded partition. Some older timbers survive, but we see conventional primary-bracing above a mid-rail of modern oak, while below, braces descend from a central upright and above from the bay principals. The roof is conventional, with a straight wind-brace to the south in each pitch.

5.3.21 The partition and bay-division on the south corresponds exactly to its companion on the north (within Unit 3). Jowled posts are triangulated with curved braces, pegged at the head. Four studs frame the partition below tie-beam. All are pegged, but have been augmented with nailed-on timbers. Above tie-beam level three studs below collar and a central king-strut to the apex mirror its companion. Some metal strapping provides additional support.

Unit 5

5.3.22 The southern part of the range is divided into three short bays, with overall much poorer quality. A single bay is open to the west with an earth floor, now used for storage, while to bays to the south are floored at upper level to create a loft area. By comparison to the barn (Unit 4), the dwarf wall here is lower and the timber is much wavier and more rudimentary.

5.3.23 Some early oak or elm weatherboarding survives to the internal partition to Unit 4. Nonetheless, the timber here is substantially weathered, suggesting that the area was formerly external (Plate 8). The east wall of this bay is characterised by two widely-spaced studs above and below a mid-rail, although that at lower level generally obscured by modern softwood boarding. The mid-rail to the west retains no mortices for lower studs indicating it was always open as now.

5.3.24 The bay partition to the south is in poor condition. Slightly jowled uprights support a wavy weathered tie-beam, which has been truncated at the east end to accommodate a loft door, but still preserves a straight brace at the west. The studs above the tie-beam rise to collar level, where the collar clasps purlins in conventional style with a simple king strut to the apex, these elements unweathered. The lower studwork, which was nailed on, has racked and disengaged.

5.3.25 The southern bays, though united, are divided into two stalls by a Fletton brick wall at bay division. The walling, though partially obscured appears to be fairly rudimentary, for example the south wall has a few widely-spaced wavy studs and nailed-on braces, all much supported by modern timber.

5.3.26 The hay loft floor (Plate 9) is fairly rudimentary and clearly a later addition with a central bridging joist cogged over a post at the bay division with a nail-on brace and supported at the south end by a shaped, nailed-on timber bracket. The floor boards measure 7" (178mm) and are supported by close-spaced floor joists comprising quarter-sawn timber properly morticed into the bridging joist with diminished haunch and pendant soffit joints although simply cogged over the mid-rails on the east. This was formerly the case on the west except here the entire mid-rail has been replaced in softwood and the joists now simply rest on this timber. The insertion of the new mid-rail on the west has facilitated the truncation of the bay division post, but above we see a redundant mortice for a brace to the tie-beam and the loss made good at lower level by a cushion capital and new robust post. Similarly, the south-west corner post has been truncated but remains at lower level.

5.3.27 The loft space could not be physically entered, but was viewed from the north. It is of rudimentary form with poor quality uprights to a wavy tie-beam with slender queen posts to a collar, clasping purlins. Peg-holes in the tie-beam

and redundant mortices seen in the uprights below indicate the locations of former triangulating braces. There are slender rafters, those in the open bay replaced in softwood, while those in the remaining bays comprise many apparently original members with some replaced, all rising to a ridgeboard.

5.3.28 The south end wall comprises a similar truss form with the tie-beam and flanking walls showing timber of robust form at differing levels with studs, although here the timber is not pegged. The end gable above tie-beam level has bird-mouthed struts supporting the purlin ends with later softwood studs framing the Venetian window.

Outshuts

5.3.29 The north outshut on the east side is used as a garage. It is of simple softwood construction with a single reused upright, but elsewhere a system of simple studs. There are two modern framed windows on the north side.

5.3.30 The woodshed to the south of the porch is of similar flimsy softwood construction possibly reusing some earlier timbers but essentially of little interest. The interior does however preserve some pegs set into the external wall of the barn and porch.

5.3.31 The hothouse at the south end on the east side is of slightly greater age with a peg-tile roof contiguous with the pitch of the main building. It perhaps dates to the 1960s / 70s, although it may incorporate fragments of an earlier outshut as the northern end retains fragmentary ties and a wall-plate, along with a purlin and some older rafters (Plate 10). The purlin terminates about halfway along the length of the structure. The north wall preserves some studwork and the dwarf wall is underpinned with flint and partially renewed. The outer wall of the main structure is also visible. The sill beam survives, though in poor condition, while in-line mid rails support two upper and lower studs.

6 DISCUSSION (Fig. 13)

6.1 Despite its complexity, a fairly clear and coherent phasing can be established with detailed analysis, but a great deal of repair and modification is also evident. The general sequence of phasing can be seen on Fig. 13. At the heart of the complex, a small, three-bay barn (Unit 4 with part of Unit 3) is probably contemporary with the construction of the house. Despite modification and repair, the essential symmetry of construction is still reflected in the robust curved struts flanking the midstrey, and the king-strut system, curved braces and gently swelling principals used in the former end-walls. We see a similar configuration in the older parts of the main house, and combined with the employment of long studs and wind-braces in the roof, the barn can be ascribed with confidence to the later 15th or early 16th century.

6.2 While the original form of the barn is identifiable in the principal elements, much modification has occurred. The outer walls of the porch and the east and west walls of the south bay have been rebuilt in primary-bracing, most likely during the 18th century, as the repairs retain some early characteristics such as the notching over of the bracing, and have none of the mechanical appearance of later, 19th century sawn construction. Careful 20th century repairs have also been undertaken. The north bay by contrast is particularly complete, and we see short curved bracing combined with original studs, and a conventional 15th or 16th century roof with curved wind braces and clasped side-purlins. Historically, this is a most significant survival (shown on Fig. 10) and every effort should be made to preserve its form as possible during conversion.

6.3 The barn may have stood alone originally. The south wall retains some weathering and older boarding on its external face, but eventually the building was extended to the north and south. There are notable structural differences in these additions. The later buildings use splay-cut jowls to the principal uprights, occasional joggled mid-rails and rudimentary, but contemporary primary bracing. This, together with the straighter bracing in the roof suggests an early to mid-17th century date. Within this there is also scope for refinement. To the north the barn may have been extended initially by a single bay (Unit 3) and then with a further two bays (Unit 2), together with its cross wing and carriageway (Unit 1), joined to the house by raising a pre-existing end- or service bay there.

6.4 The southern extension is much cruder by comparison, using poorer quality timber, and widely-spaced studs, though following the general system of construction, including the characteristic king-strut, which may have been a local tradition, or associated with a particular carpenter. Conceivably, the southern bays may pre-date those more competently constructed to the north, as the inserted floor is jointed with tenons of the diminished haunch and pendant soffit type, which is itself indicative of the 17th century. The hay loft floors in the northern bays by comparison show developmental characteristics which places them slightly later, and not before the end of the 17th century.

6.5 As would be expected, later modification addressed deficiencies in the original timber. This is mostly of oak, often waney and preserving bark in places. Nonetheless the building has been maintained and decay is not extensive. Repairs include the addition of 19th century industrial tension rods and various new timber (some of softwood) assisting the old material. Modern interventions include reused windows, and a rather eccentric Venetian window, perhaps of 1920s date and filched from a suburban domestic house, lighting a humble hay loft.

6.6 The dwarf wall of the entire range is a patchwork of brick, representing many phases of repair and reworking. It is predominantly late 18th or early 19th

century in date, probably superseding a flint base, of which fragments remain in places. Some elements such as the barn doors are long lost.

7 CONCLUSION

7.1 A rapid glance at the farmhouse and other agricultural buildings on the site indicate a complex which has grown and modified over many centuries. The main house began as an open hall, but we see that its modest associated barn remains, enmeshed in later alterations. At a time of rising prosperity in the early 17th century, the barn was extended and attached to the house with a carriageway, indicating perhaps that the complex had begun to take on the appearance of an enclosed courtyard. Some lost elements of the house, such as a stair turret, demolished in the 1960s may also have borne witness to this augmentation. Initially the new extensions may have formed additional storage space and an open-fronted cart shed. Later in the 17th century, upper floors were added, but of such a rudimentary and weak construction that their use as anything other than hay lofts would not have been possible. A second, impressive late 17th century barn also survives on the west side of the courtyard, to attest this further expansion of the complex. Alterations and modifications are also in evidence from the 18th and 19th century, but form a careful conservation and repair of existing buildings, rather than wholesale rebuilding. The complex thus preserves in its buildings a history of short bursts of prosperity, interspersed with a modest existence and careful use of its existing resources.

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), Hertfordshire Archives and Local Studies (HALS), and the National Monument Record (NMR), Swindon. The project archive will be lodged with Hertfordshire Archives and Local Studies (HALS)

ACKNOWLEDGEMENTS

Archaeological Solutions would like to thank Mr Graham Barrett of Green Farm for funding the works and for his kind assistance. AS would also like to thank the architect Mr Richard Onslow 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 HCC Historic Environment Record

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APPENDIX 1 HISTORIC ENVIRONMENT RECORD DATA

The following sites are those that lie within a c. 1km radius of the assessment site. The table has been compiled from data held by the Hertfordshire Historic Environment Record (HER). The locations of the sites are shown on Fig. 3. Their significance, where relevant, is discussed in Section 4.2.

HER	NGR TL	Description
<i>Anglo-Saxon and medieval (c. AD 410 – 1500)</i>		
935	TL 0100 0300 (point)	Early Medieval Coin, Bovington. Penny of Ethelred (978-1016), London mint, found at 'Bovington' (sold at Rashleigh Sale 1909, Lot 290). The NGR is arbitrary.
<i>Post-medieval (c. AD 1500 – present)</i>		
5490	TL 006 032 (point)	Brick Pillar Wall Box, Nr Half Way Public House, Bovington. Brick pillar wall box with downshoot aperture.
5903	TL 0163 0357 (point)	Well House, At Crossroads, High Street, Bovington. The well house is pentagonal with each side 2m long. On a modern brick base is the original structure of wooden pillars supporting a wooden canopy. The well has been infilled. There is an inscription which reads: 'The villagers of Bovington April 1881. This house with its well dedicated to ye beloved memory of ye honorable Granville D Ryder late of Westbrook Hay in this parish who was born November 26 AD1799 and died November 24 1879, was raised by his relations for the use and comfort of his friends' . The original railings between the pillars were removed long ago, presumably during WWII; plans have been drawn up to replace them.
7177	TL 0163 0360 (point)	Site Of A Smithy, High Street, Bovington. Site of a smithy, identified from the 1897 OS map. The buildings have been demolished and replaced by modern shops.
13432	TL 01119 02800 (point)	(Medieval to Post-Medieval) Green Farm, Bovington Green. Green Farm has an open courtyard with the farmhouse at the NE end, and ranges of outbuildings at right angles to it. Its history is confused and uncertain, as the name 'Green Farm' was used by Grange Farm in 19C documents. The 1840 tithe map shows the present layout with an additional building on the fourth side of the yard, but the farmhouse not yet joined to the SE range. OS mapping shows that further small buildings stood in the yard by 1898, but disappeared after 1924. The farmhouse is an open hall house built in the later 15C, timber-framed on a brick sill. The open hall has two bays, with cross-wings at each end; a parlour with chamber over at the west, and service wing at the east end which may also have been two storeys. In the late 16C an upper floor and large timber chimney were inserted in the hall, with the stack backing onto the cross-passage; <1> considers that the stack predates the upper floor. A two-storey west wing, and an additional eastern bay, were added at about this time, although the sequence is arguable <1>. In the late 17C or early 18C the easternmost bay was heightened to fit the rest of the house; the timber stack was replaced in brick perhaps c1700; and the house partly encased in fashionable brick in the 18C. The house was restored in the 1960s and the vanished parts of the outbuildings may have been demolished then <1>. The remaining outbuildings include a red brick stable at the west end of the house, linking it to the barn <1>Document: Karin Semmelmann. 2006. Historic building assessment: Green Farm, Bovington Green, Herts (Archaeological

HER	NGR TL	Description
		Services & Consultancy Ltd R1874).
15091	TL 01347 03752 (point)	Baptist Chapel, Applecotts, Bovingdon. The Baptist Chapel is shown on the 1877 OS, at the rear of a plot along the High Street and reached by a long path lined with trees. The building still stands, but is now separated from the High Street by housing. 'The first certificate for a meeting-house for Anabaptists in Bovingdon was issued in 1702'; about 1864 'a small Wesleyan chapel at Bovingdon began to be occupied by the Baptists'. Is this the same building?
<i>Unknown date</i>		
9202	TL 0115 0285 (point)	Parch Or Soilmark Of A Rectilinear Enclosure, Bovingdon Green. Parchmark of a sub-rectangular enclosure, with angled corners and possible internal features, measuring at least 25 x 40 m. It is cut by the track to Green Farm.
12526	TL 0112 0292 (point)	Bovingdon Green, Bovingdon. Registered common land. NGR = approximate centre.

APPENDIX 2 CARTOGRAPHIC SOURCES

Date	Title	Scale	Location
1766	A topographical map of Hertford-shire; Dury & Andrews's map	1 mile : 1.95 inches	AS
1822	The county of Hertford, from actual survey; Bryant's map	7/8 mile : 1 inch	AS
1838	Bovingdon Tithe Map and Award (DSA4.22.1 & 2)	2 chains: 1 inch	HALS
1898	2 nd Edition Ordnance Survey map: Herts. Sheet XXXVIII.2	25"	HALS
1924	Ordnance Survey map: Herts. sheet XXXVIII.2	25"	HALS
1973	Ordnance Survey map: sheet TL 0002 0102	1:2500	HALS

APPENDIX 3 HISTORIC ENVIRONMENT RECORD SUMMARY SHEET

Site name and address:	Green Farm, Bovingdong Green, Hertfordshire
County: Hertfordshire	District: Dacorum
Village/Town: Kings Langley	Parish: Bovingdon
Planning application reference:	4/01378/07/FUL & 4/01266/06/LBC
Client name/address/tel:	Mr. Graham Barrett
Nature of application:	Residential conversion
Present land use:	Outbuildings - storage
Size of application area: c. 300m ²	Size of area investigated Barn and link
NGR (8 figures):	TL 01119 02800
Site Code:	AS 1211
Site director/Organization:	Archaeological Solutions Limited
Type of work:	Historic building recording
Date of work:	June 2009
Location of finds/Curating museum:	n/a
Related HER Nos:	Periods represented: Late 15 th century 3-bay barn with later additions and phases of alteration
Relevant previous summaries/reports: -	n/a
Summary of fieldwork results:	<p><i>In June 2009, Archaeological Solutions Ltd (AS) conducted an historic building project at Green Farm, Bovingdon Green, as part of a planning condition on approval for residential conversion of a barn. Technical analysis and historic building recording of outbuildings at Green Farm, Bovingdon Green, Hertfordshire revealed a complex sequence of structural additions and alteration in three or four distinct phases. A three-bay barn with a central porch lies at the core of the complex. This bears close similarities to the structure of the farmhouse, and may be of later 15th century date. Despite later repair, it remains largely as constructed and its northern bay is of particular historic significance as it retains almost every original timber intact.</i></p> <p><i>The barn was extended to the north and south in the early 17th century, being joined to the house by a lateral extension and carriageway. These extensions were initially created as open barns, but were later given inserted upper floors to create hay lofts. The modifications vary in date between the late 17th and 19th century, with a second phase of the early 18th century. Later modifications addressed deficiencies in the original timber, and include the addition of tension rods and other strengthening measures in the 19th century. A woodshed and garage were latterly added to the east in recent times. A small, disused hot-house to the south of the complex probably incorporates an older outshut.</i></p>
Author of summary: T. Collins	Date of Summary: June 2009

APPENDIX 4 ARCHIVE CONTENTS FORM

Site Details	
Site Name: Green Farm, Bovington Green, Hertfordshire	NGR: TL 01119 02800
County: Hertfordshire	Museum Collecting Area: Dacorum
Site Code: AS 1211	Project Number: 3394
Date of Work: June 2009	Related Work: WB

Brief/s		Specification/s	
Date	Present	Date	Present
	None	April 2009	Yes

Site Records (Description)
Notes taken on site (18 pages A4)

Site Drawings (Give Details of Formats & Size)		
Drawn Plans & Sections:		
Architect's Drawings: 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
3331	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	6-15	Yes	Yes	1	10-18	Yes
2	120mm	1-15	Yes	Yes			
3	120mm	1-9	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 assessment structures adjoining the main house, taken from north-east (01)



Plate 2 View of the east side of the assessment structure, taken from the south-east (05)



Plate 3 West elevation of the assessment range with the carriageway to the rear, taken from the south-west (08)



Plate 4 Detail of the east wall of Unit 1 showing floor joist and crude brace, taken from the west (15)



Plate 5 View of roof structure over Unit 3, north outer truss of the 15th century barn, taken from the south-west (21)



Plate 6 Detail of the inner truss construction of Unit 4, taken from the east (37)



Plate 7 Roof form of the porch on the east side of Unit 4, taken from the north-west (25)



Plate 8 North side of the open-bay of Unit 4 showing the formerly external wall of the 15th century barn, taken from the south-west (26)



Plate 9 Ground floor of the central bay of Unit 5, taken from the west (29)



Plate 10 Interior of the hothouse on the east of Unit 5, taken from the south (31)

PHOTOGRAPHIC INDEX



DP 1

View of assessment structures adjoining the main house, taken from north-east



DP 2

North elevation of the assessment structure, taken from the north



DP 3

North end of the east elevation, taken from the east



DP 4

South end of the east elevation, taken from the north-east



DP 5

View of the east side of the assessment structure, taken from the south-east



DP 6

South end of the east elevation, taken from the east



DP 7

South elevation of the assessment range, taken from the south



DP 8

West elevation of the assessment range with the carriageway to the rear, taken from the south-west



DP 9

West elevation of the assessment range, taken from the west



DP 10

North end of the assessment range with the carriageway on the left, taken from the south-west



DP 11

East side of the carriageway, taken from the south-west



DP 12

West side of the carriageway showing the east end of the main house, taken from the south-east



DP 13

West side of the carriageway showing the east gable end of the main house, taken from the south-east



DP 14

North wall of Unit 1, taken from the south



DP 15

Detail of the east wall of Unit 1, taken from the west



DP 16

West wall of Units 2 and 1, taken from the north-east



DP 17

Roof structure of Unit 1 showing east gable end, taken from the south-west



DP 18

Roof structure of Unit 2, taken from the north-west



DP 19

North wall of Unit 3, taken from the south



DP 20

East wall of Unit 3, taken from the west



DP 21

View of roof structure over Unit 3, outer truss of the core barn, taken from the south-west



DP 22

East side of Unit 4, taken from the south-west



DP 23

View of roof structure of Unit 4, inner truss of the core barn, taken from the north-west



DP 24

South side of Unit 4, taken from the north



DP 25

Roof form of the porch on the east side of Unit 4, taken from the north-west



DP 26

North side of the open-bay of Unit 5 showing some weathering to timbers, taken from the south-west



DP 27

North side of the open-bay of Unit 5 showing the formerly external wall of the 15th century barn, taken from the south-west



DP 28

South side of the open bay of Unit 5, taken from the north



DP 29

Ground floor of the central bay of Unit 5, taken from the west



DP 30

Ground floor of the south bay of Unit 5, taken from the west



DP 31

Interior of the hothouse on the east of Unit 5, taken from the south



DP 32

Interior of the woodshed on the east side of Unit 4, taken from the south-east



DP 33

Interior of the garage extension on the east side of Unit 3 and 4, taken from the south-east



DP 34

Detail of the bridging joist in Unit 1 showing the chamfer stop to the beam (indicated), taken from the south-west



DP 35

West side of Units 1 and 2, taken from the south



DP 36

Dedication brick in the south dwarf wall of the porch, taken from the north



DP 37

Detail of the inner truss construction on the east side of Unit 4, taken from the east



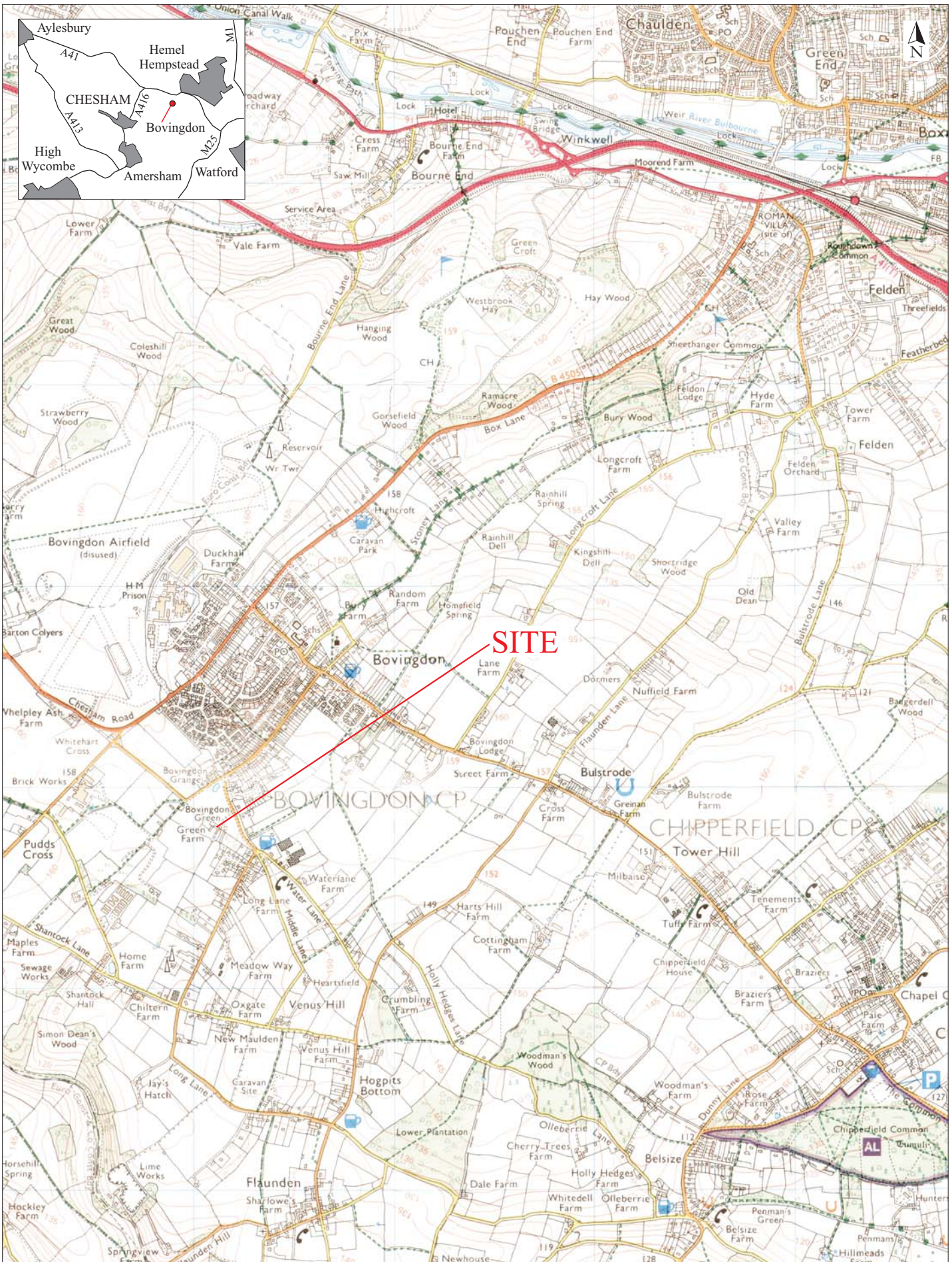
DP 38

Internal south wall of Unit 4, 15th century core, taken from the north



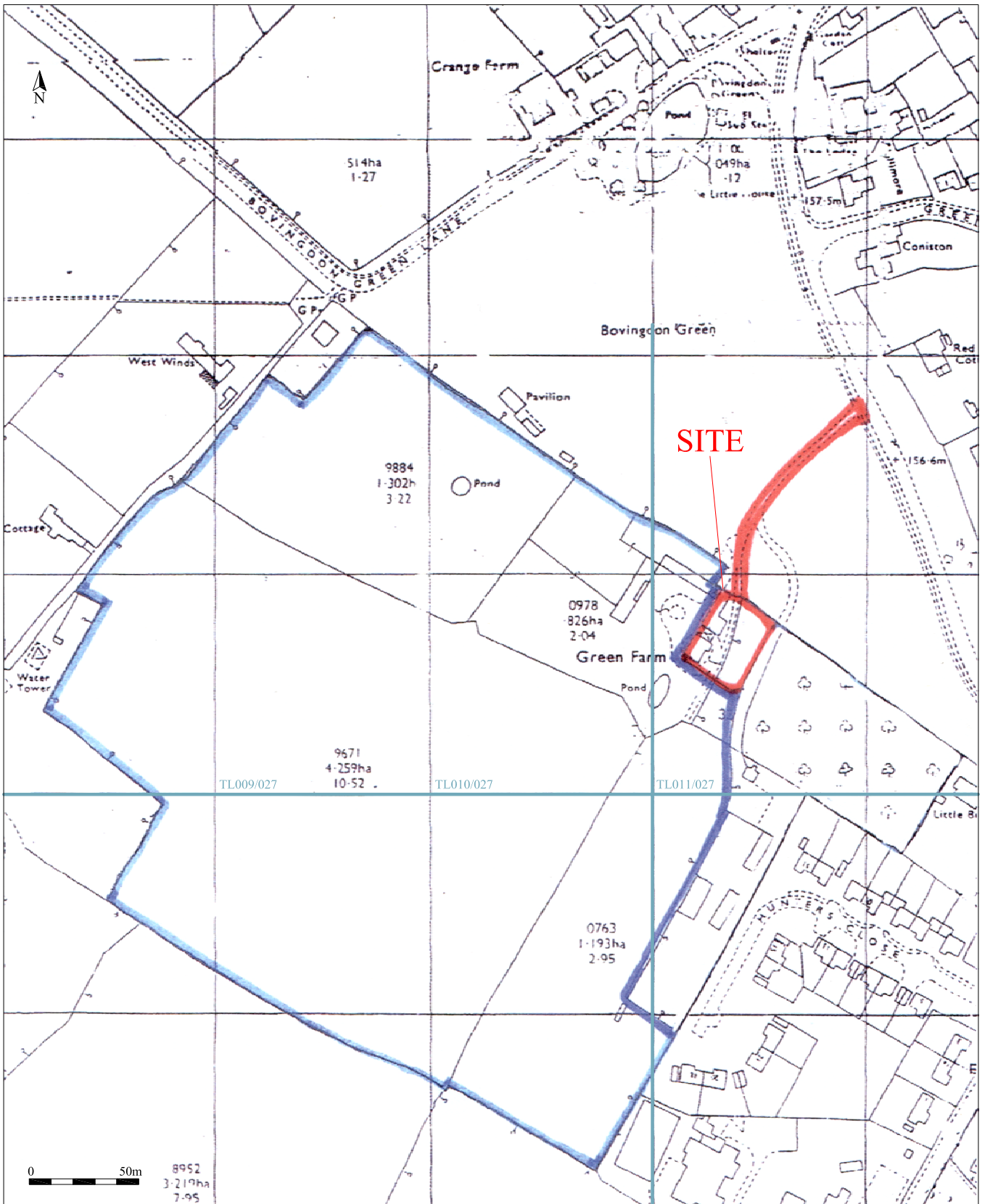
DP 39

South-east corner of Unit 5 showing later repairs to the earlier core, taken from the north-west



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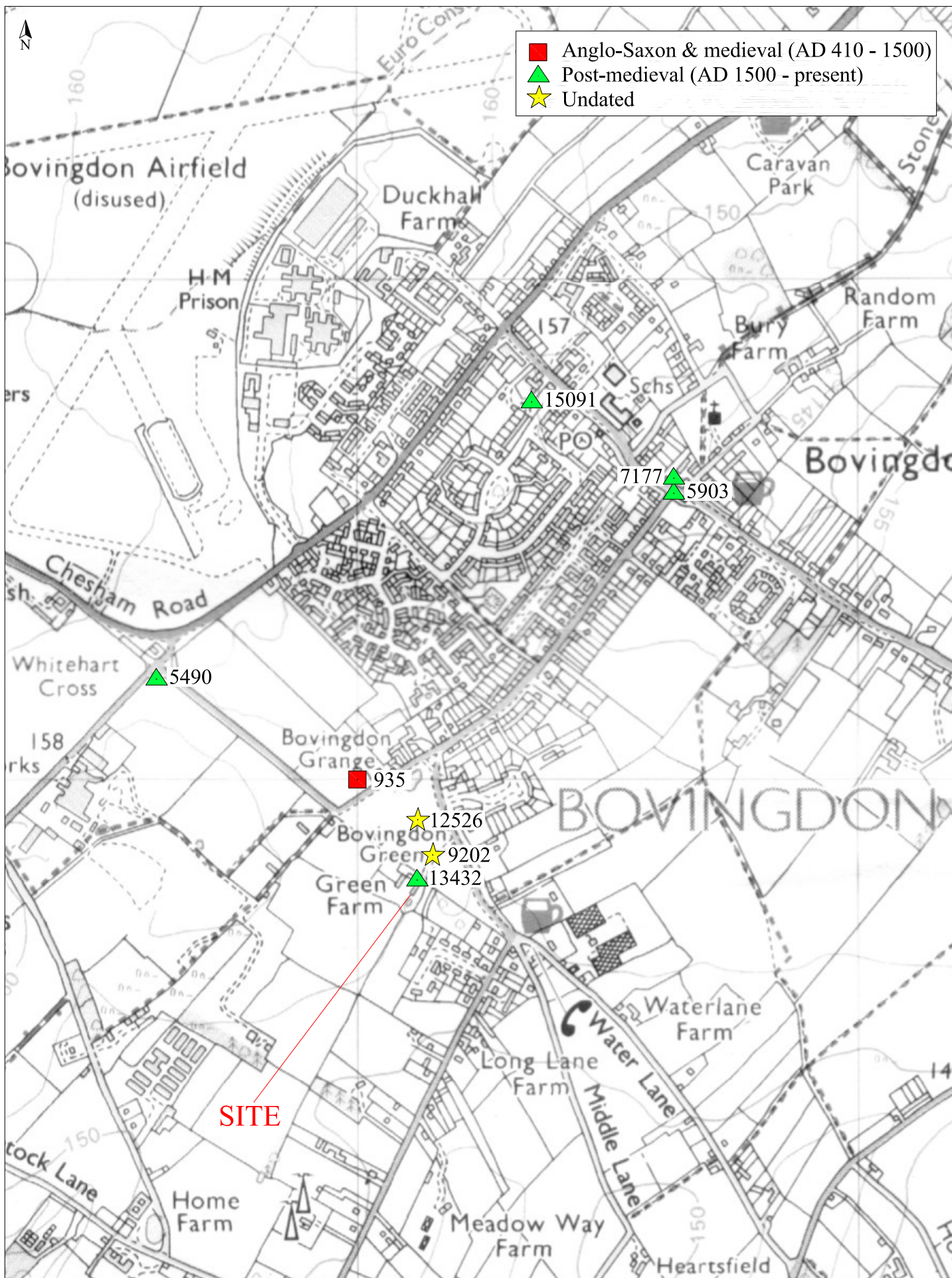
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Fig. 1 Site location plan
 Scale 1:25,000 at A4



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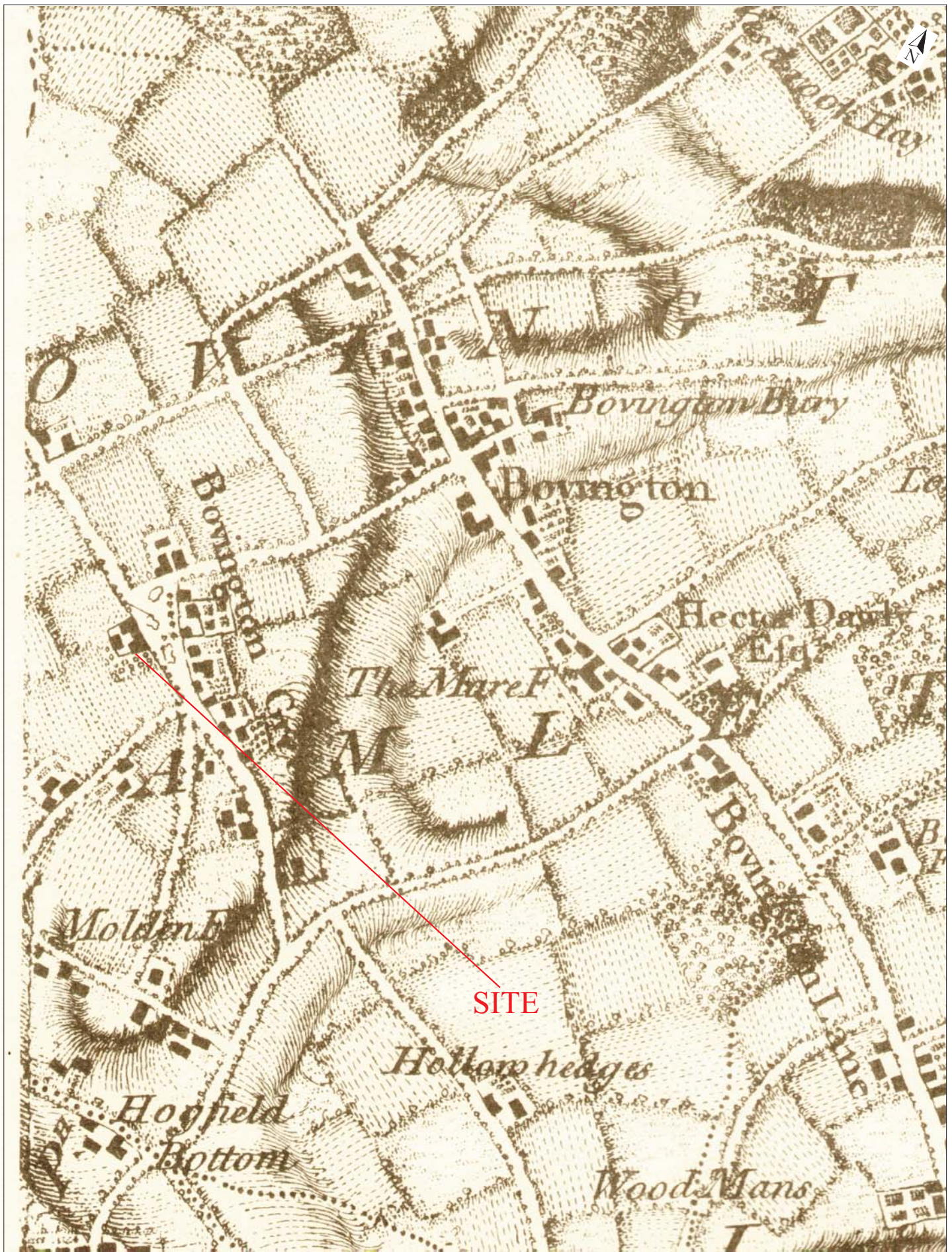
Fig. 2 Detailed site location plan

Scale 1:2500 at A4



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Fig. 3 HER data
 Scale 1:10,000 at A4



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Fig. 4 Dury & Andrews' map, 1766

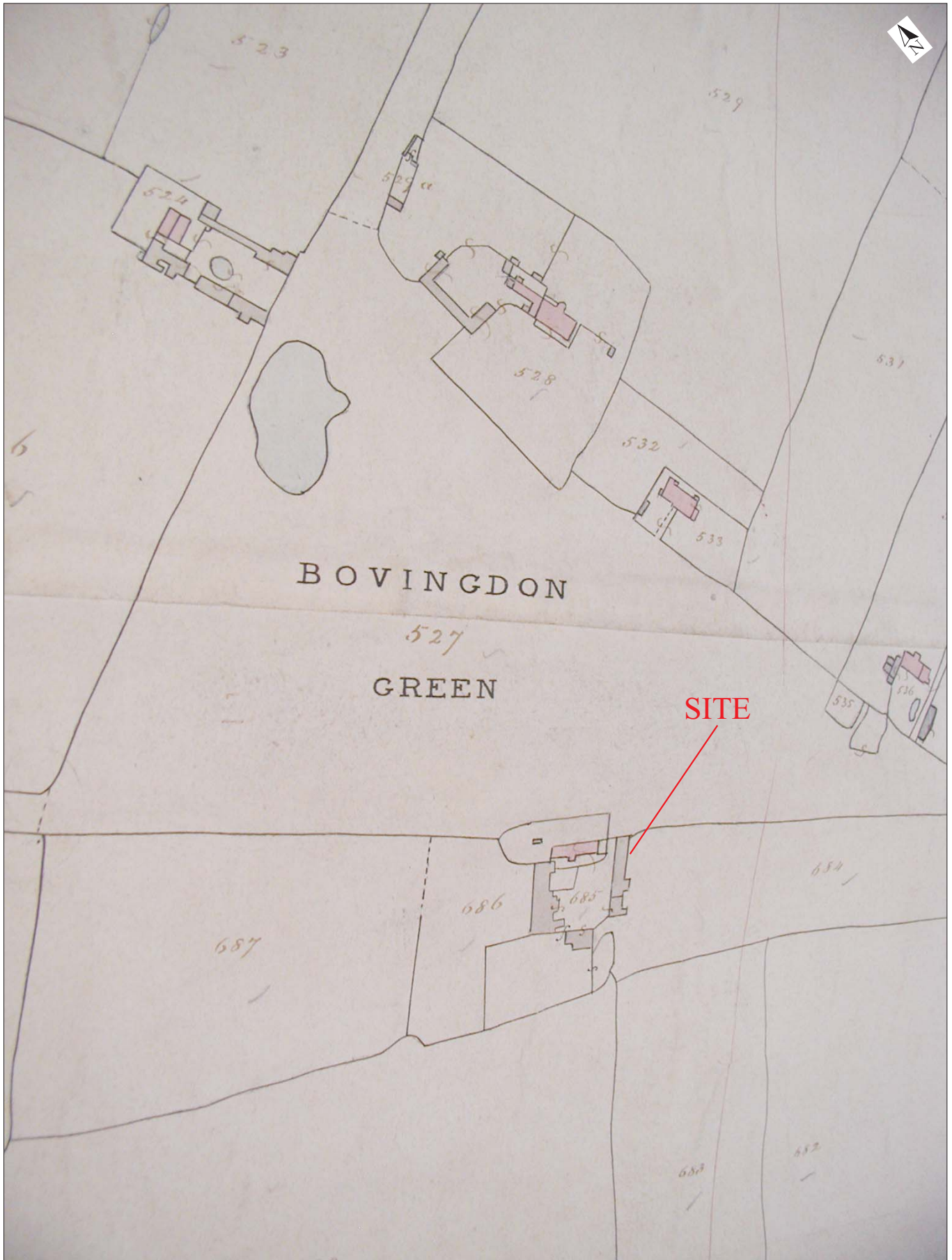
Not to scale



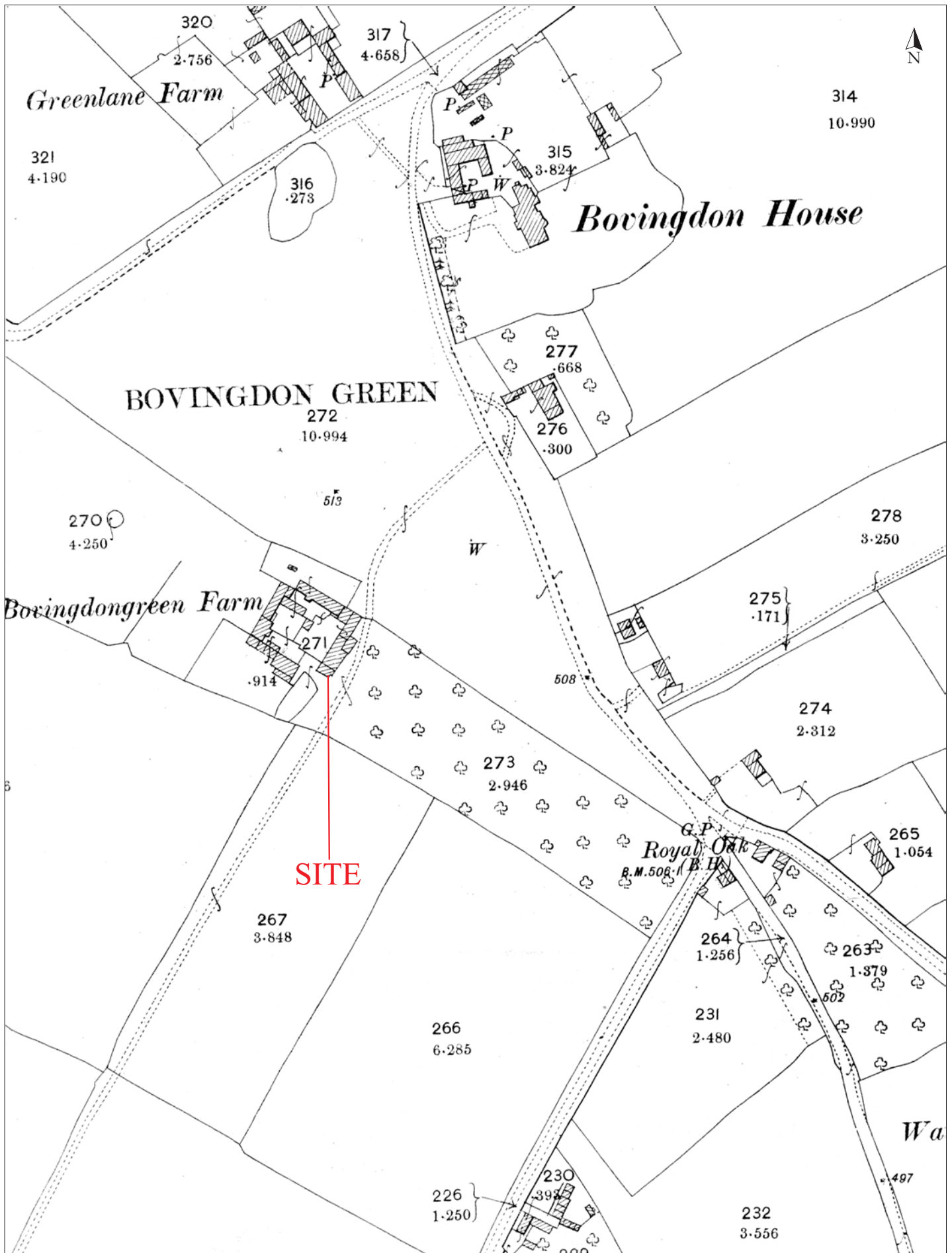
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Fig. 5 Bryant's map, 1822

Not to scale

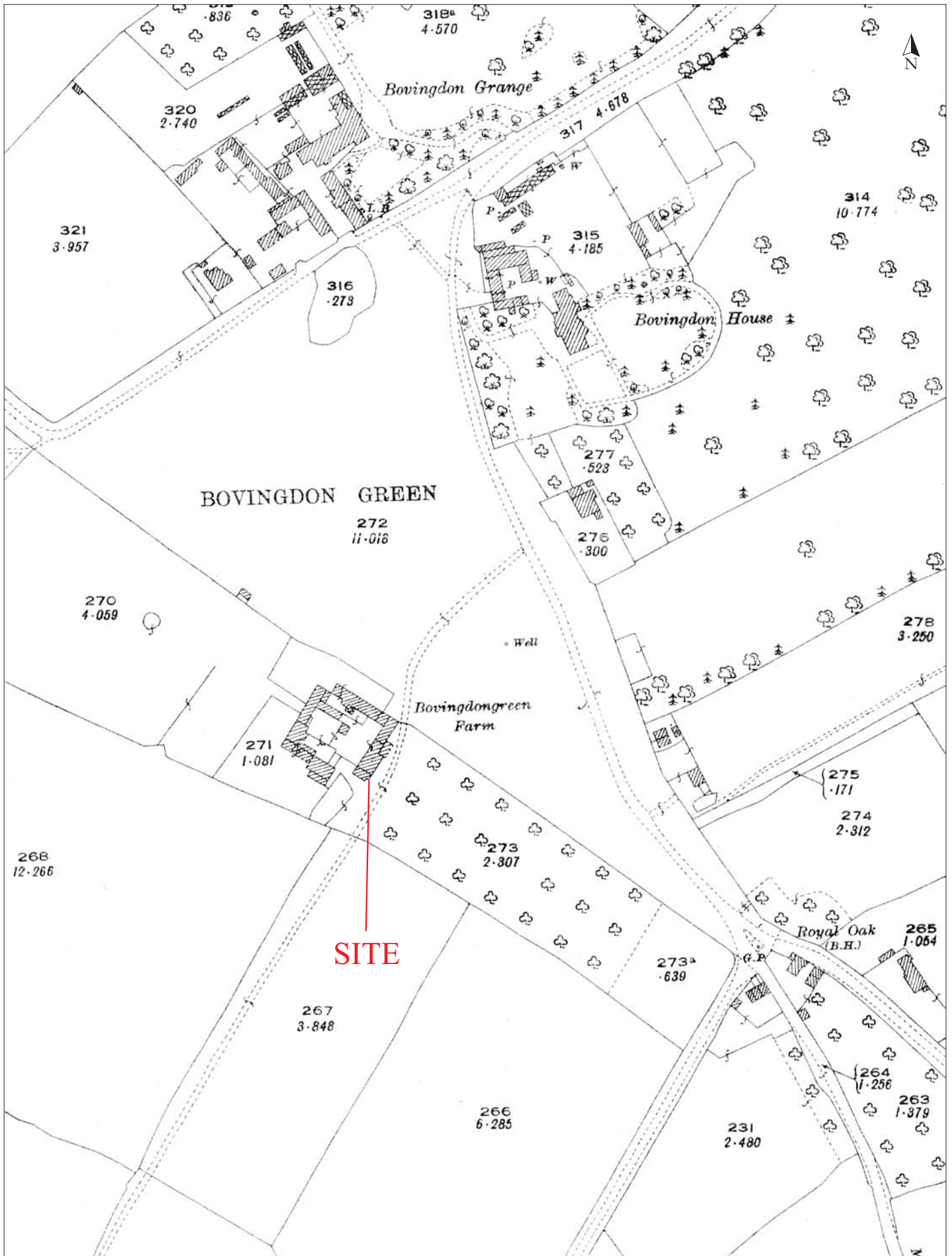


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Fig. 6 Tithe map, 1838
Not to scale



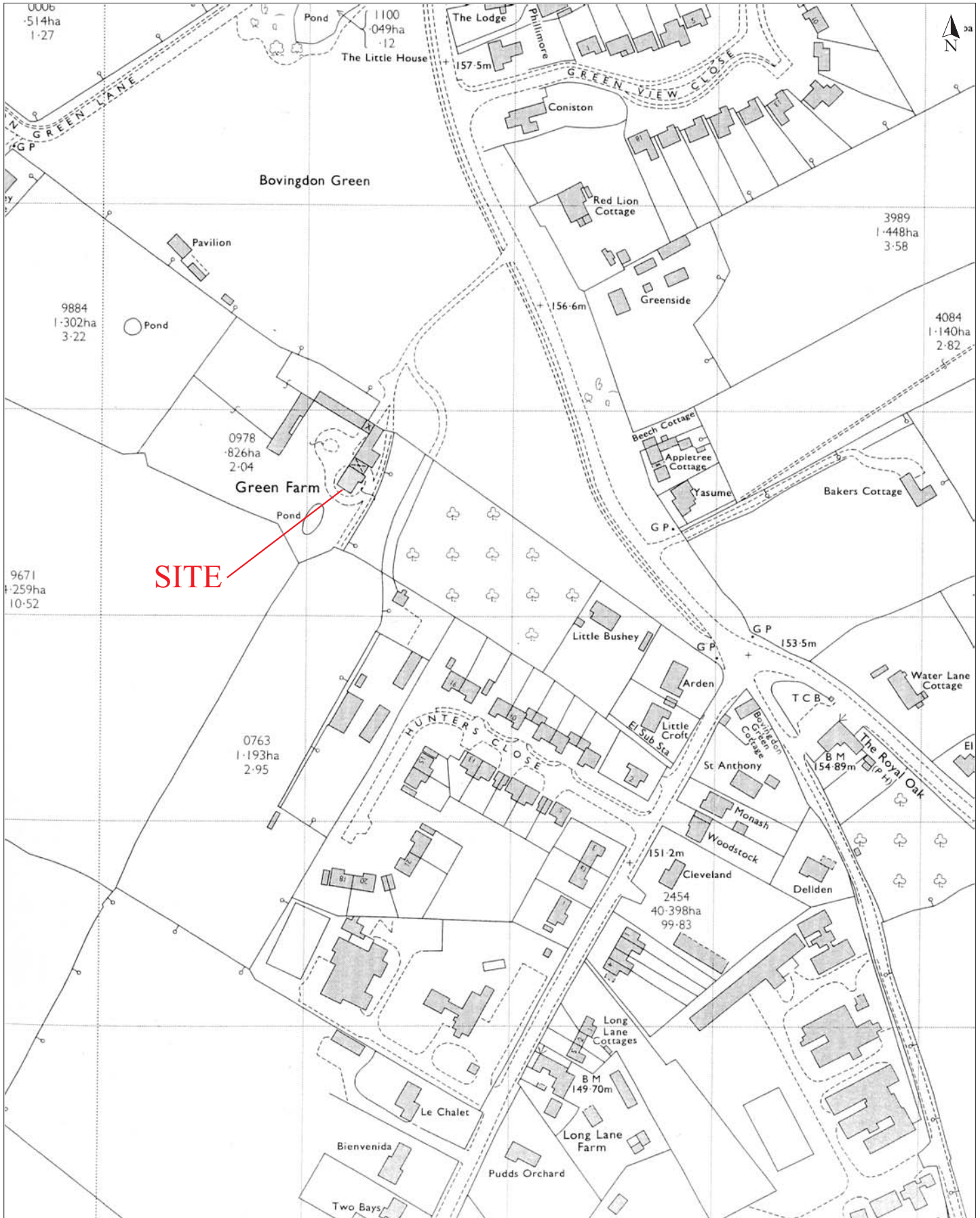
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Fig. 7 OS map, 1898
 Scale 25" to 1 mile



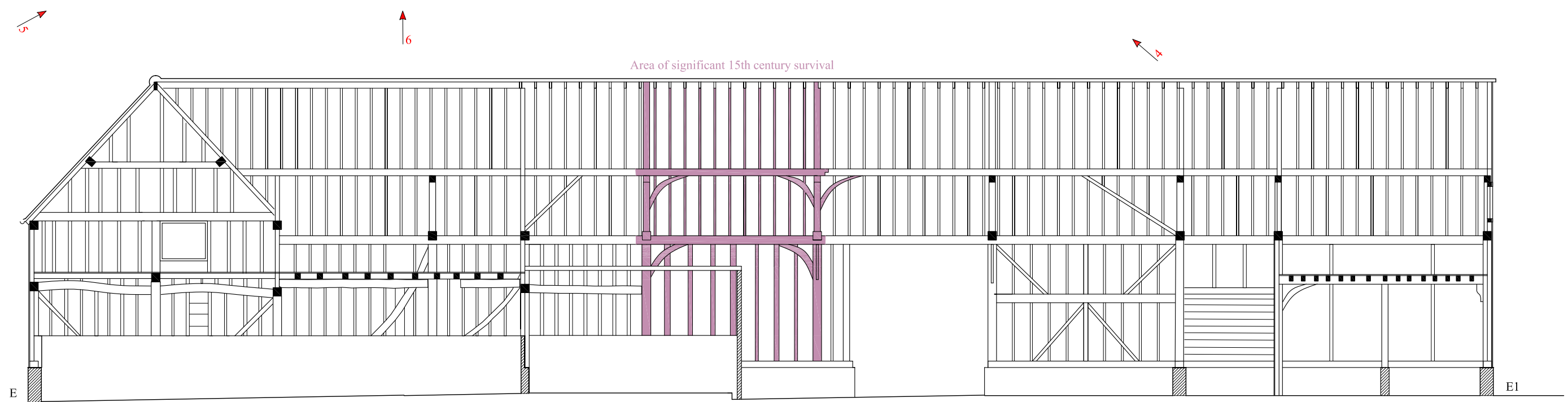
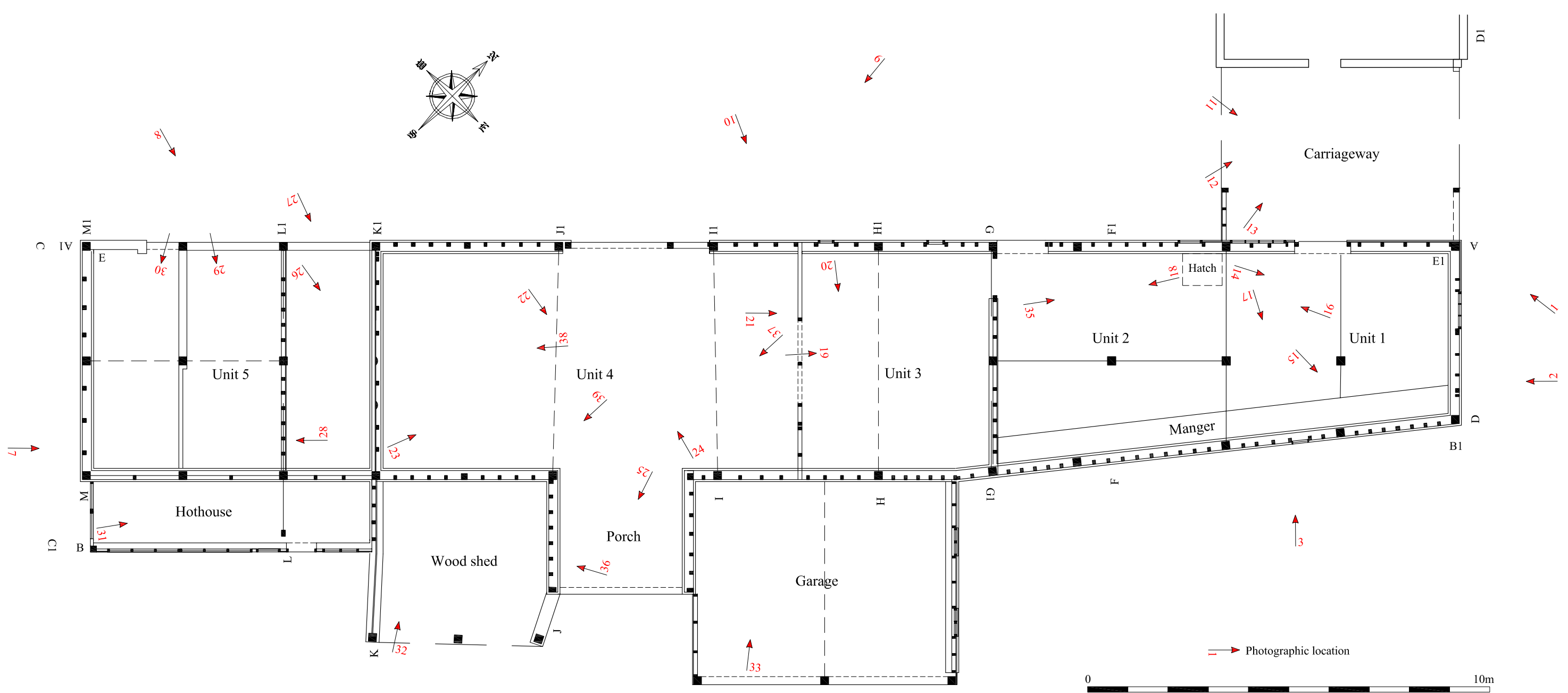
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Fig. 8 OS map, 1924
 Scale 25" to 1 mile

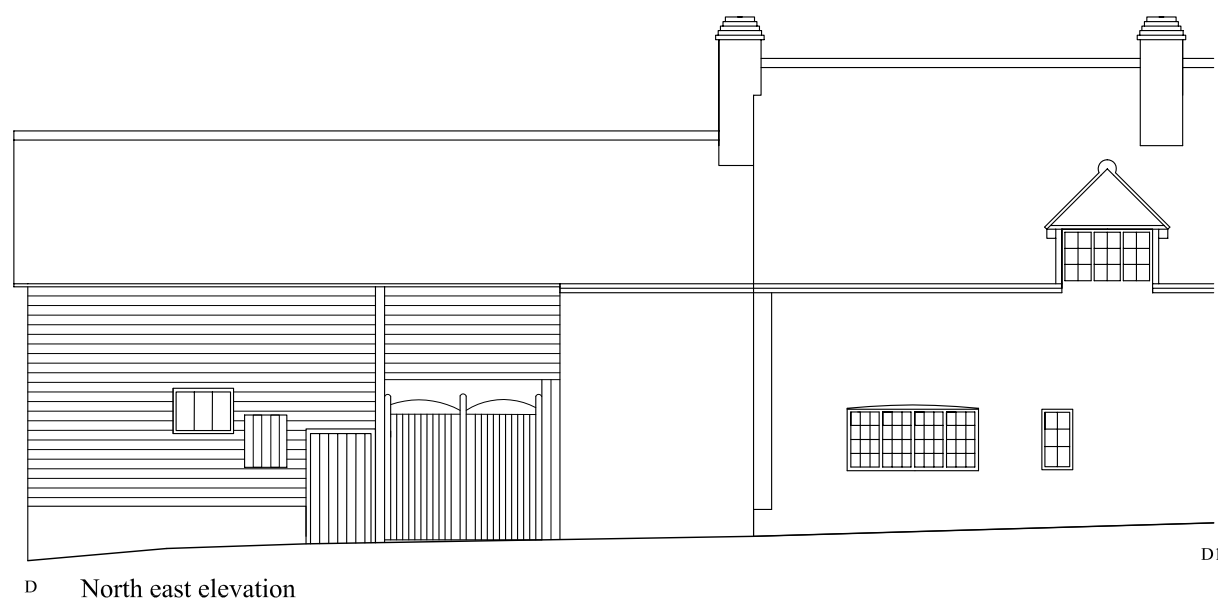
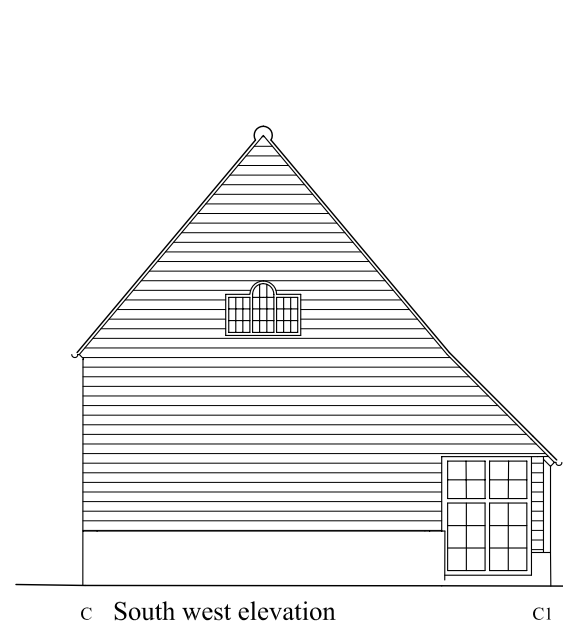
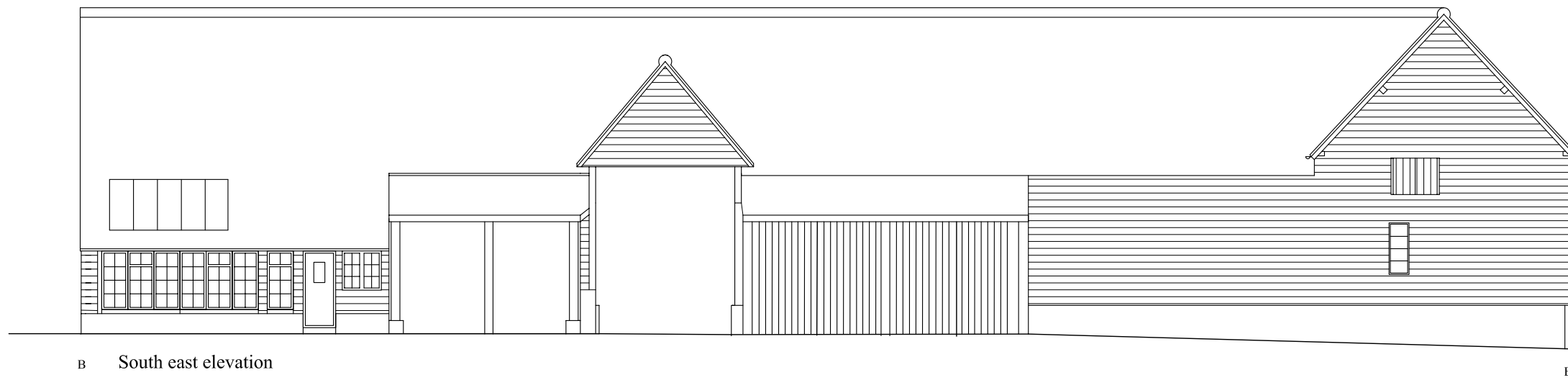
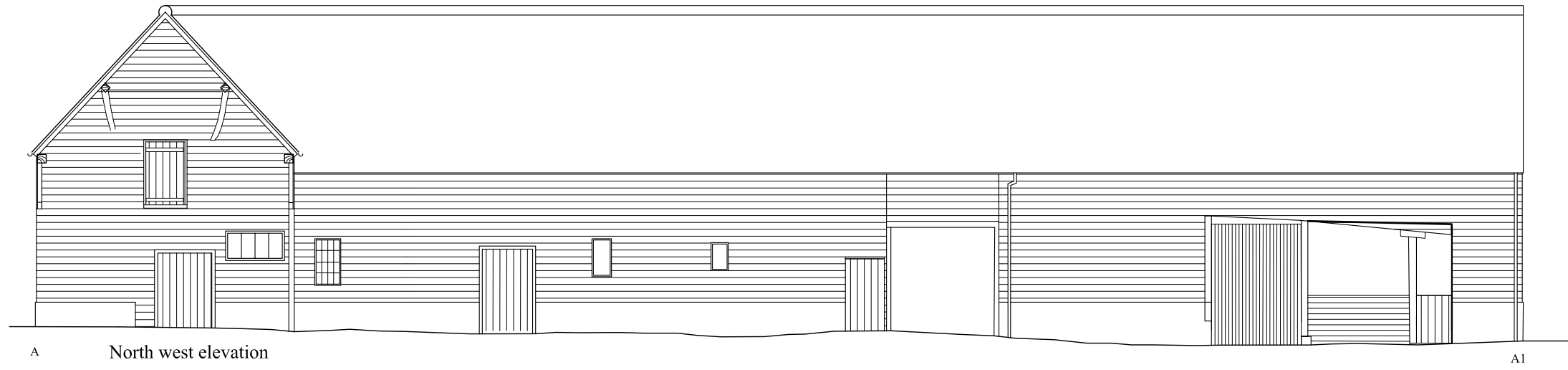


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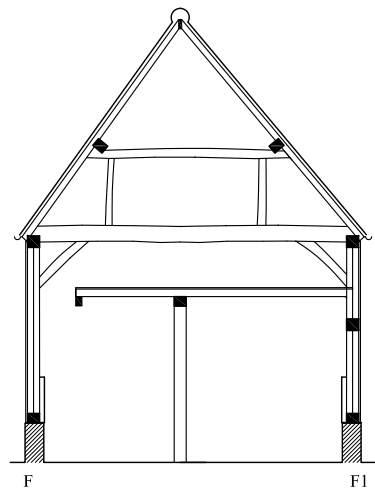
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Fig. 9 OS map, 1973
 Scale 1:2500 at A4



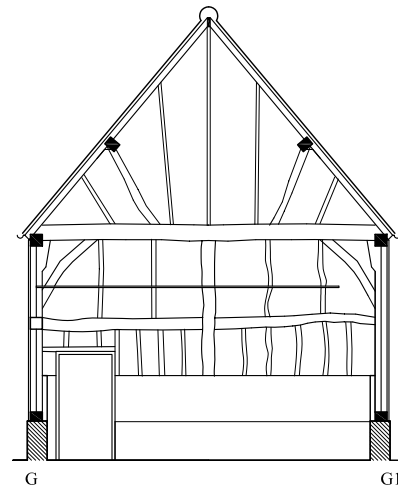
East internal elevation



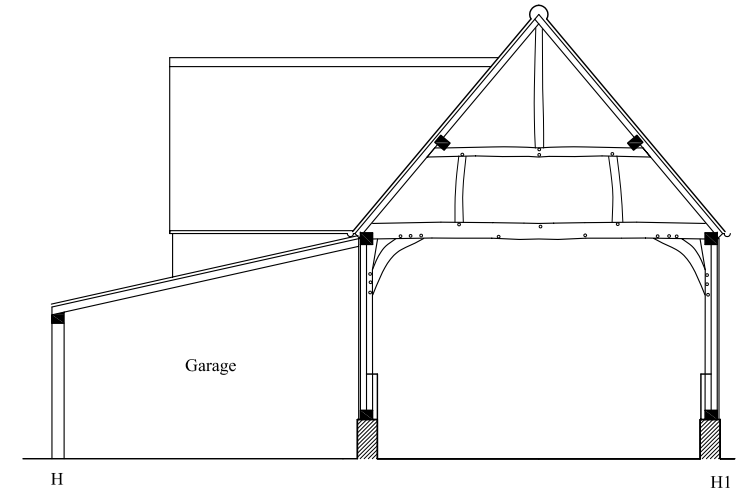
Archaeological Solutions Ltd
Fig. 11 External elevations
 Scale 1:125 at A3



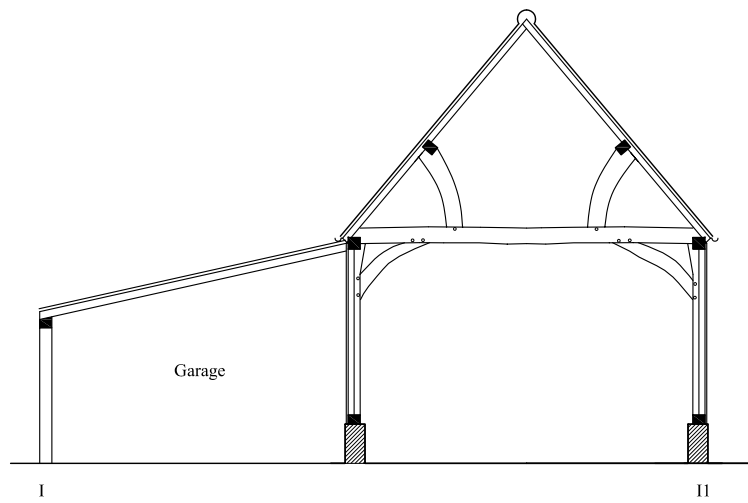
Cross-section through Unit 2



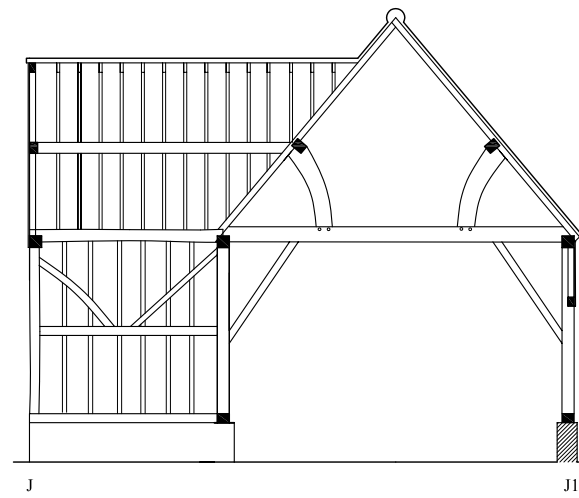
Cross-section through Unit 3 - north truss



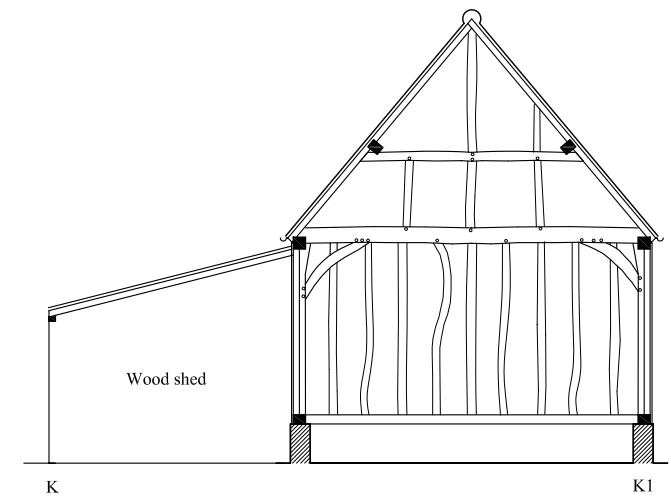
Cross-section through Unit 3 - south truss



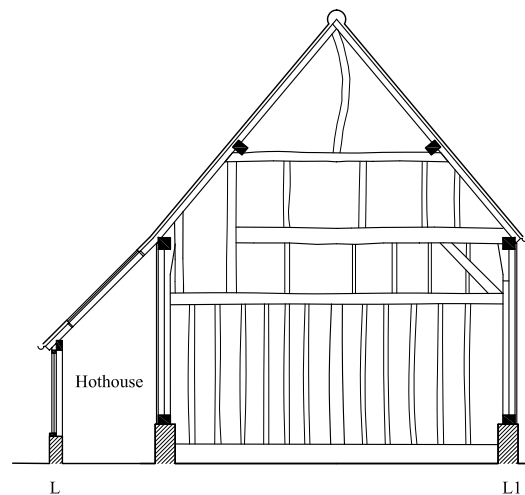
Cross-section through Unit 4



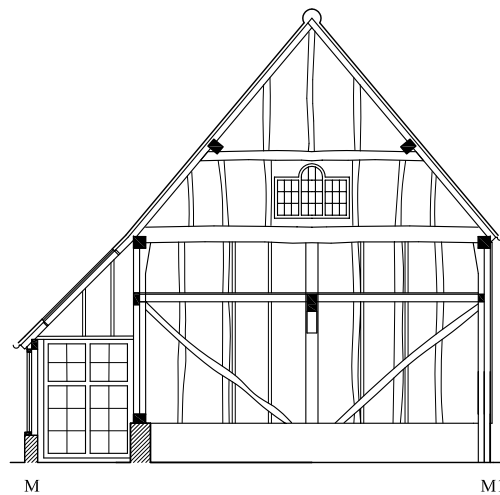
Cross-section through Unit 4 - including porch wall



Cross-section through Unit 4 - south wall

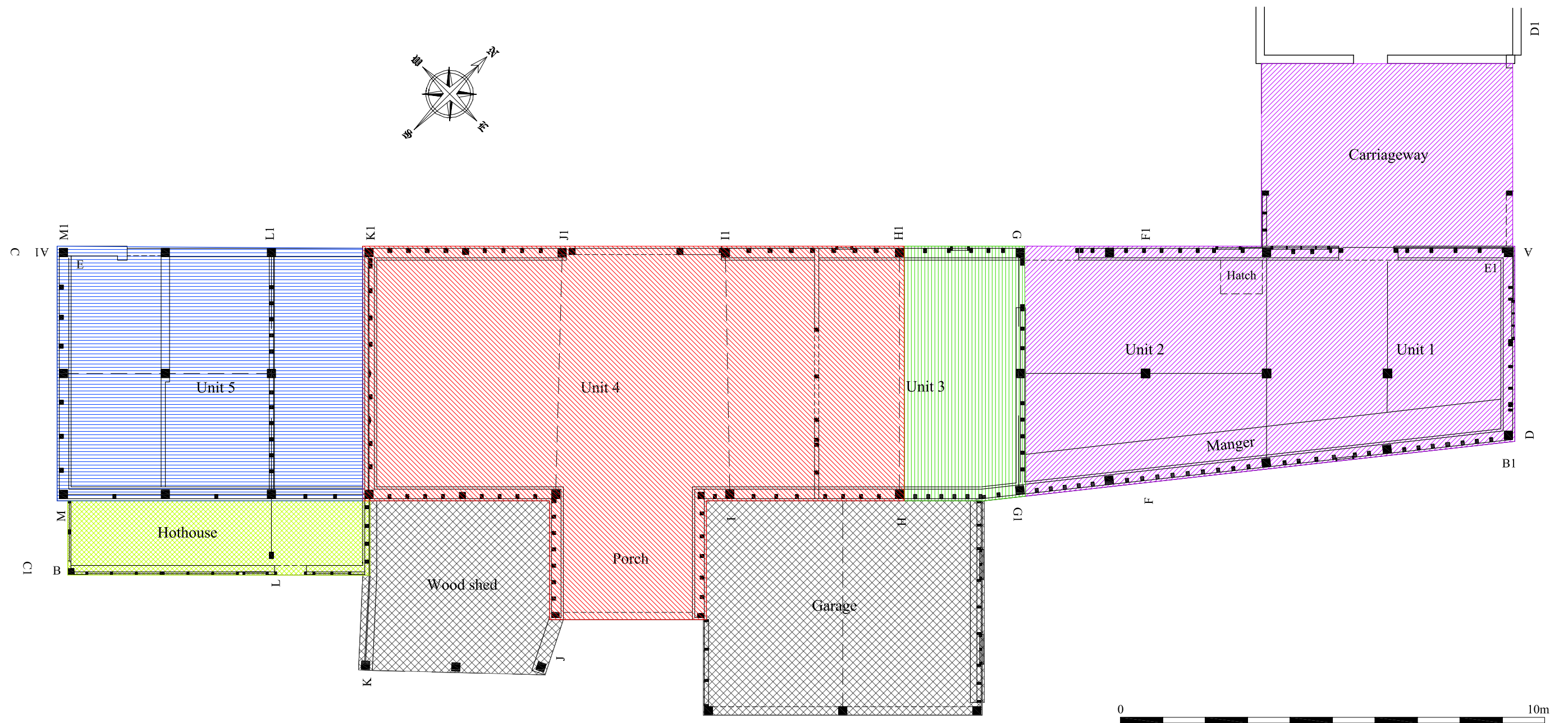


Cross-section through Unit 5



Cross-section through Unit 5 - south wall





- Phase 1 Later 15th or earlier 16th, with much later modification
- Phase 2 17th century or earlier
- Phase 3 Early - mid 17th century
- Phase 4 Early - mid 17th century (later than Phase 3)
- Phase 5 1960s / 70s (possibly incorporating earlier elements)
- Phase 6 Modern

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Fig. 13 Phase plan
 Scale 1:100 at A3