

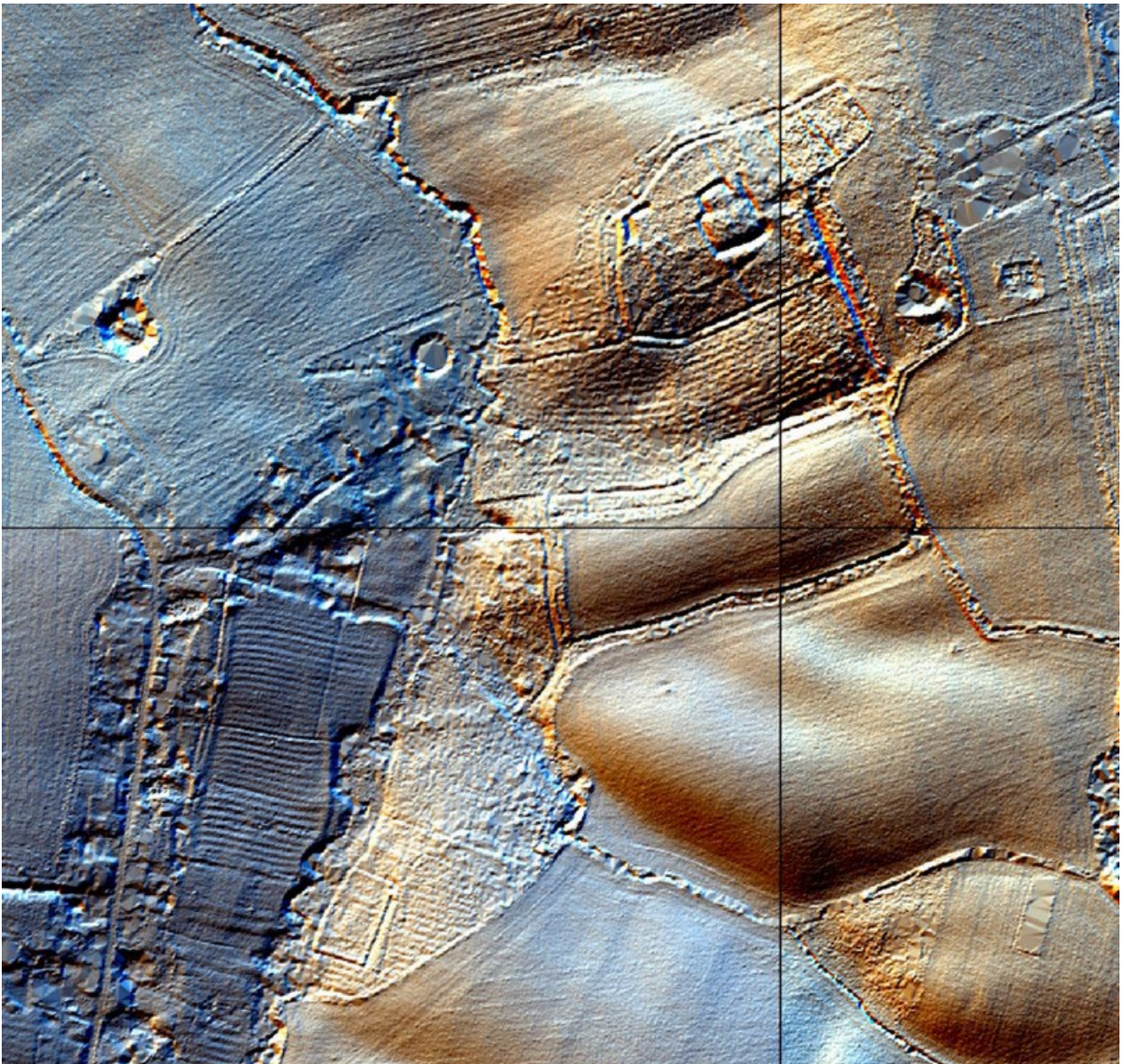


Overhall Grove Moated Site and Mound, Cambridgeshire

Archaeological Investigation

Magnus Alexander and Sarah Newsome

with Matthew Bristow



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Summary

This report is based upon an internal report by Historic England's Assessment Team (now Landscape Archaeology Team) for its East of England Listing Team, which has been updated for publication.

The original work was undertaken following Historic England's *South-West Cambridgeshire National Archaeological Identification Survey* project (Knight *et al* 2018) which identified the site as having the potential for enhancement and requiring better understanding to improve its protection and management. The approach taken was to produce a series of visualisations of the publicly available Environment Agency lidar data and to use these to provide the framework for an earthwork plan, plus a description and analysis of the site. As such this was a methodological development for the Landscape Archaeology Team that has been used on several other sites since.

The manorial moated site and the mound are clearly very different in nature and unrelated. The former is a substantial site that remained in use for several centuries developing over that time, the latter probably a short-term response to a short-term threat. Although not all of the questions have been resolved, the site is now much better understood and information for future management is available.

Contributors

Magnus Alexander undertook the fieldwork, produced the site plan and wrote the report. Sarah Newsome also undertook the fieldwork and Matthew Bristow provided supporting archival research.

Acknowledgements

Thanks are due to all those who kindly gave permission for the use of their images. They have been acknowledged in the figure captions.

Front cover image: 1m resolution lidar data of the Overhall Grove area, processed to remove superficial detail such as tree cover and standing buildings to create a Digital Terrain Model (DTM) (open-source data provided by the Environment Agency). Further processed by Historic England to show slope direction (16D, west facing slopes are at the red end of the spectrum, east facing at the blue) and hill-shaded to bring out the topography ('illuminated' from the north-east as the brain processes this more easily). Compare with Figure 13.

Archive location

The research was based almost entirely on secondary sources and as such the archive is limited. A few items have been deposited with the Historic England Archive in Swindon.

Date of research

Research commenced in 2016 but was suspended due to changing organisational priorities and access issues, and interrupted by the covid-19 pandemic. The final site visit took place in January 2022 and the internal report (see Summary above) was completed by the middle of that year.

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Introduction

In 2015, Historic England's Assessment Team (now Landscape Archaeology Team) was asked to undertake an investigation of the earthworks of a medieval moated site at Overhall Grove, Boxworth and a nearby mound at Knapwell, as part of the organisation's wider *South-West Cambridgeshire National Archaeological Identification Survey* (NAIS) project (Last 2014, see also Knight *et al* 2018, 52-55 for a general discussion of results). The moated complex and mound are scheduled together under the same National Heritage List for England entry (1006890) which was generated from an Old County Number record and consequently provides no details on the character and significance of the earthwork remains. Other settlement earthworks in Knapwell (between the mound and the church and a little to the west) are unprotected. The aim of these investigations is to increase understanding of the scheduled earthworks, support an enhanced scheduling and improve their future management.

Location

Overhall Grove lies 13km to the WNW of central Cambridge in the parish of Boxworth (Figure 1 overleaf), with its western edge defined by a stream which forms the boundary with the adjacent parish of Knapwell. The woodland is a Site of Special Scientific Interest and is managed as a nature reserve by the Wildlife Trust for Cambridgeshire, Bedfordshire, and Northamptonshire. The manorial earthworks lie within the northern part of Overhall Grove with the moat itself centred on NGR TL 3395 6328, though related earthworks extend in all directions. The mound is located on private property in Knapwell parish at NGR TL 3367 6316.

Topography and geology

The moat earthworks sit on a slight spur projecting from the edge of a plateau of high ground a little above 50m OD into a valley draining north towards the fens (see front cover). The moat itself lies at about 45m OD and, apart from slightly rising ground to the east, the underlying topography falls away on the other three sides. The mound sits in a lower position on the opposite (western) side of the valley at around 35m OD.

The moated site sits upon sedimentary glacial deposits, from the Quaternary Period, up to 2 million years old. These overlie Jurassic mudstones (BGS). The valley to the west of the moated site has cut down through these broadly horizontal layers and, being lower, the mound sits on the mudstone. The soils across the area have been classified as lime-rich loamy and clayey soils with impeded drainage characterised by 'base-rich pastures and

classic chalky boulder clay ancient woodlands; some wetter areas and lime-rich flush vegetation' (UKSO).

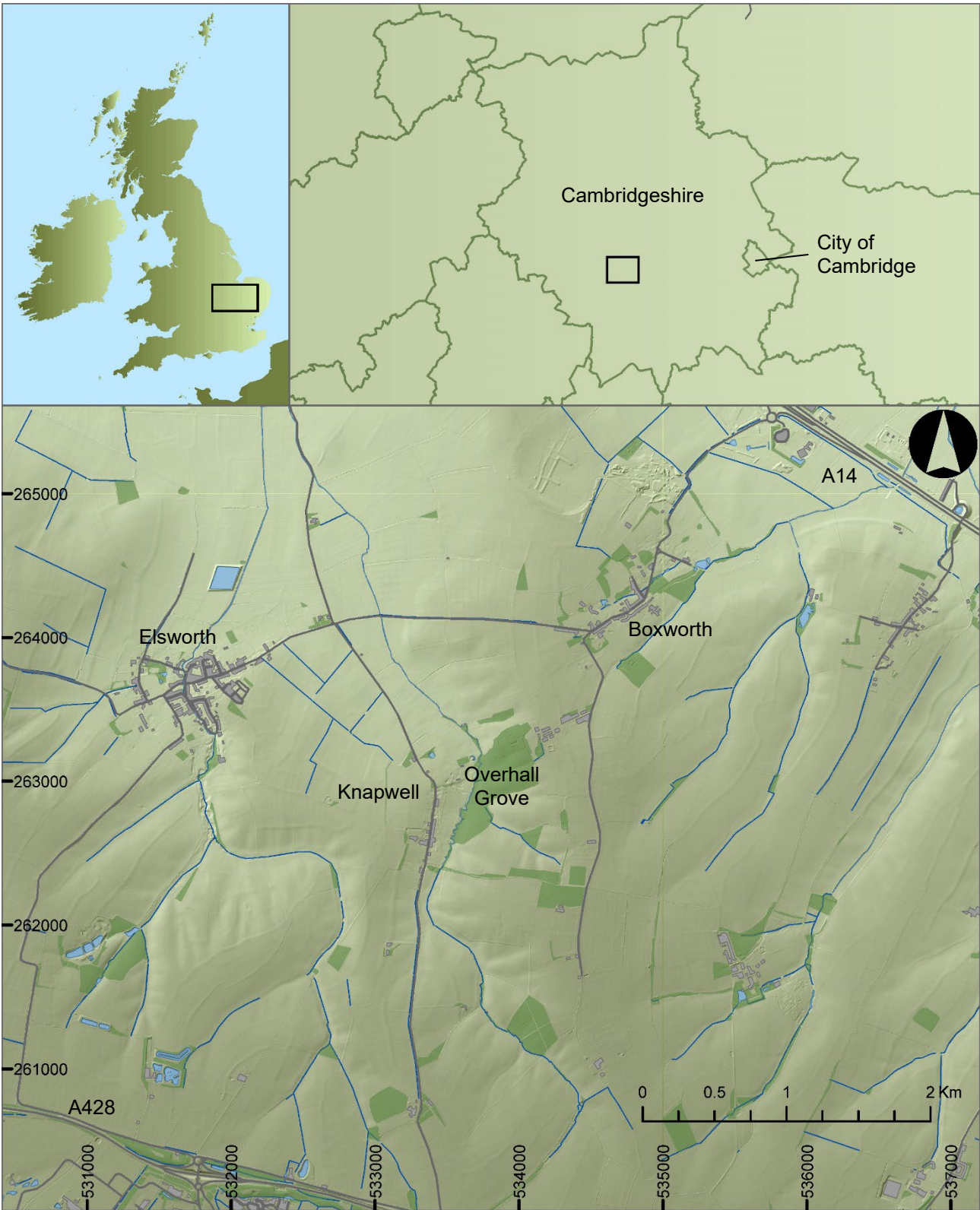


Figure 1 – Location
(© Historic England, topography derived from Environment Agency lidar data, other mapping from Ordnance Survey open data © Crown copyright and database right 2024)

Methodology

Prior to the work reported on here the site had been mapped at a nominal scale of 1:10,000 during the *National Archaeological Identification Survey: South West Cambridgeshire: Aerial Investigation and Mapping* project (Knight *et al* 2018).

The investigation of the earthworks in Overhall Grove for this report involved three days of rapid survey followed by desk-based documentary research. A digital terrain model generated from lidar data was used to provide a metrically accurate framework for the survey which was then interpreted and enhanced to identify missing elements and stratigraphic relationships. No measured survey was carried out and the resulting plan should therefore be considered a sketch plot, albeit within an accurate framework with absolute errors unlikely to exceed about 0.5m. Fallen timber and dense vegetation made field observation difficult in places and extensive badger activity within the moat itself (including the creation of an artificial sett) had partly obscured its original form. Further details of the approach taken can be found in the 'Methodological issues' section of this report (below).

The mound is located on private land, and at the time of the above work the estate was in probate and the site neglected. It was not therefore possible to access the site at this time. Permission has since been gained to access the site and the mound has been inspected (January 2022) and some GNSS levels and photographs were taken, but no detailed assessment of the lidar has been possible due to dense vegetation.

Previous research

Existing archaeological information for both the Overhall Grove moated site and the mound to the west comes almost entirely from a series of surveys and unstratified finds, apart from a small, unpublished excavation carried out on the mound in 1929. Further details of the sites are recorded on the National Heritage Record for England (moated site: HOB UID 369214; mound: HOB UID 369223) and the Cambridgeshire Historic Environment Record (moated site: 01086 and mound: 01773). Some Iron Age and Romano-British pottery has also been recovered from the site (NHRE HOB UID 369214).

Ordnance Survey (OS)

The first edition OS map published in 1887 does not show the manorial earthworks but tracks through the woods respecting their location are depicted. This earlier survey may have identified the site and prompted the survey for the second edition (below). The first edition map does include the long linear pond running along the east side of the woodland, and a small pond to the north of the main earthworks at TL 3400 6340, in the south-west corner of the field immediately to the north-east of the moat. It also shows the mound and encircling ditch in the valley bottom to the west.

The moated site appears to have first been surveyed for the second edition 1:2,500 map published in 1902 (Figure 2). This shows the moat's north, west and south arms, with most of the east arm as an isolated oval hollow. The north and west arms of the outer enclosure are depicted as two banks, and the south arm as a ditch with an outer bank. A slight, south facing scarp runs WSW from the outer enclosure's south-west corner. The linear pond remains, though the small pond to the north has gone. On the subsequent pre-Second World War Ordnance Survey maps the depiction of the earthworks changed little.

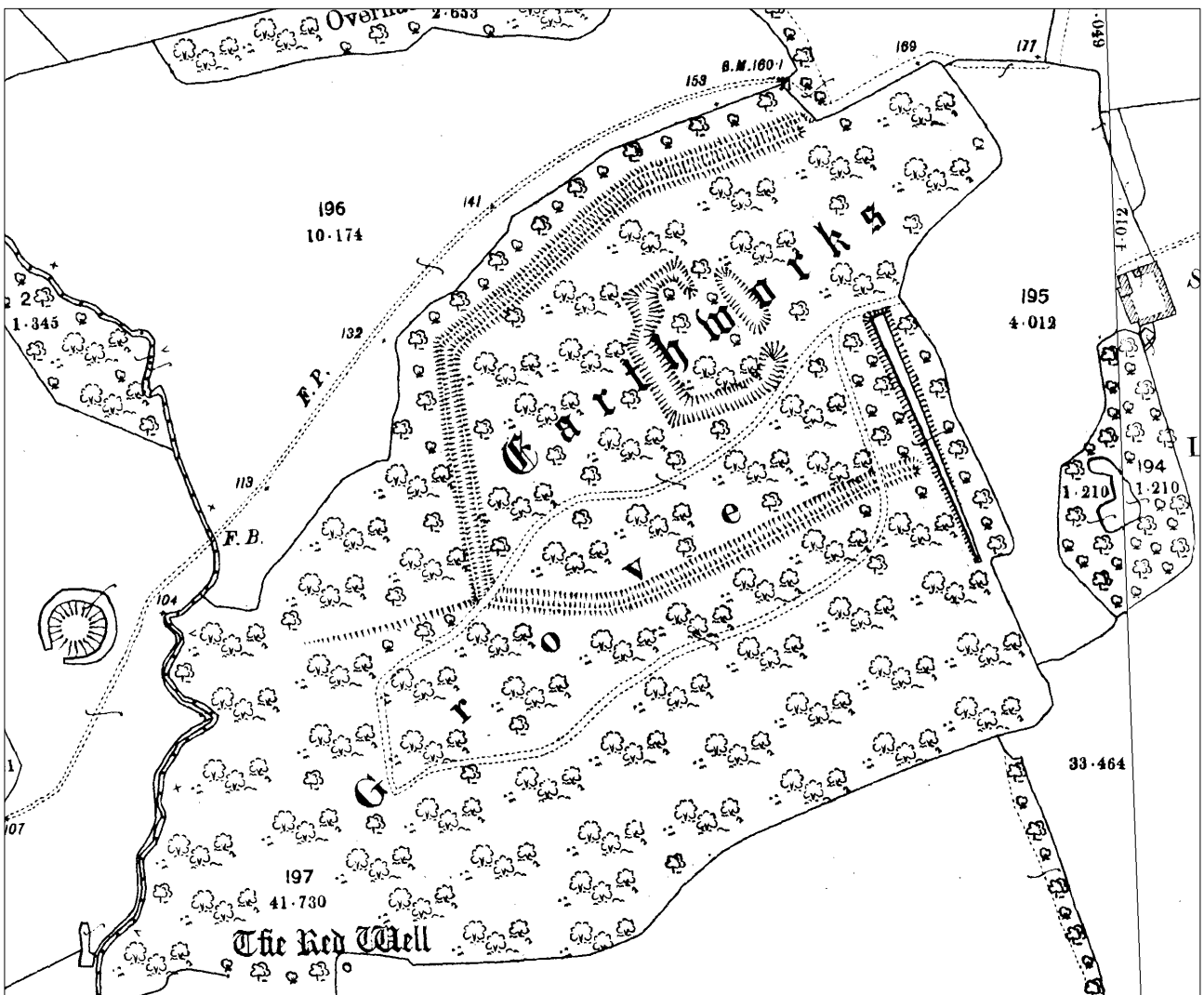


Figure 2 – Second edition 1:2,500 Ordnance Survey map published 1902
 Not to scale (Historic England corporate GIS, © and database right Crown Copyright and Landmark Information Group Ltd (All rights reserved 2024). Licence numbers 000394 and TP0024)

The post-war editions show more detail (Figure 3). The moat is much the same, but the east arm extends further to the north and the terrace to the south is shown. The north arm of the outer enclosure's outer ditch is shown as intermittent, the western as somewhat elaborated, and the southern as a double ditch. The linear features running from the

enclosure's south-west corner are not depicted. Within the enclosure, the ponds to the north-west are shown as are the ditch to the south of the moat and that to the north-east, as well as fragments of the woodland boundary in the same area. The long pond is also shown but with a dry extension to the south, with a return to the west at its south end.

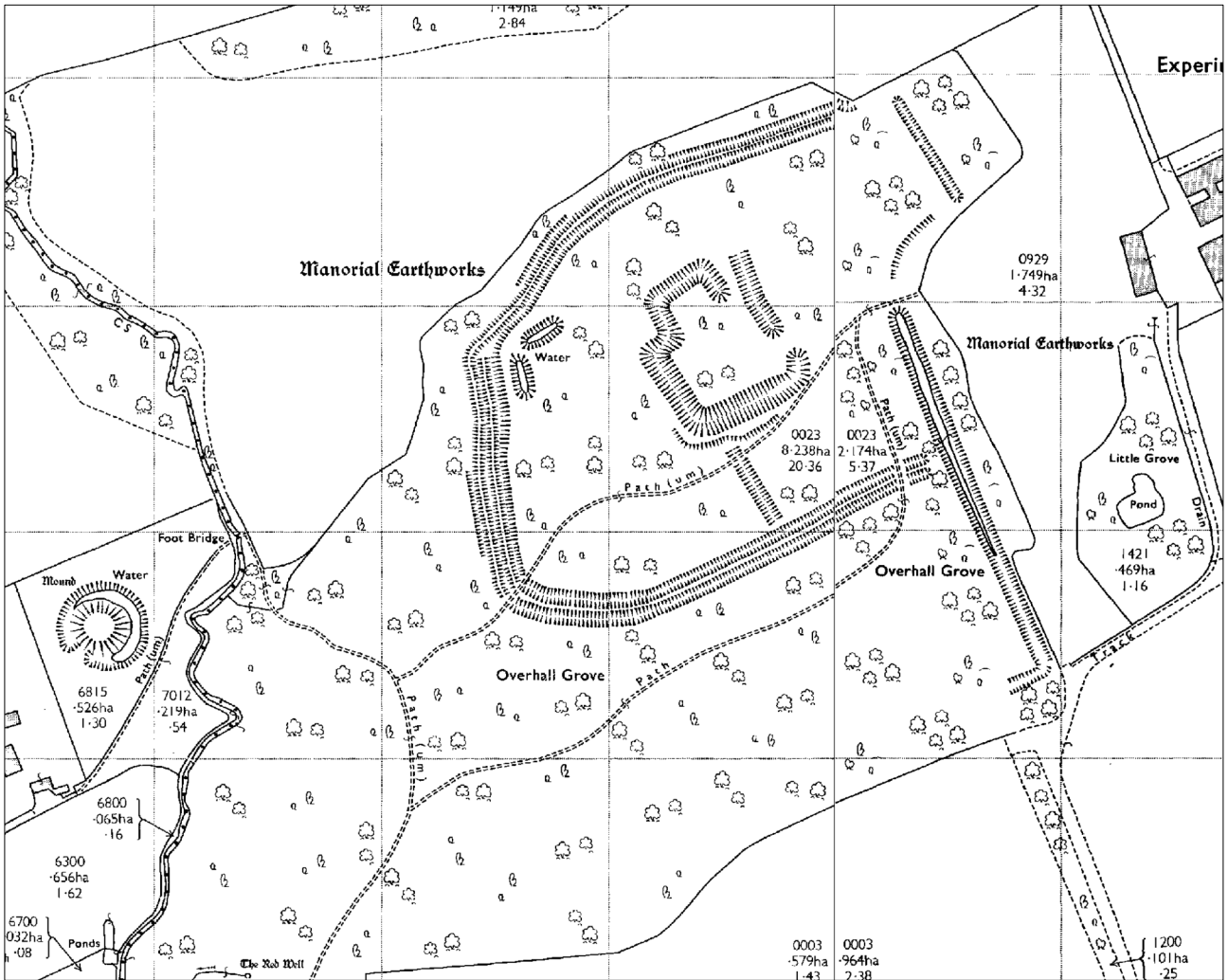


Figure 3 – First National Grid edition 1:2,500 Ordnance Survey map published 1975 Not to scale (Historic England corporate GIS, © and database right Crown Copyright and Landmark Information Group Ltd (All rights reserved 2024). Licence numbers 000394 and TP0024)

Excavation

The only published record of the 1929 mound excavation appears to be from a general discussion of late Anglo-Saxon and Norman pottery in East Anglia, published in the 1950s (Hurst 1956). It includes reconstructions of two of the pots found which were described as:

KNAPWELL (1929) (29. 369). Large bowl, found between 2 ft. and 3 ft., with hammer-headed rim with a small beading under the outer flange, black-purple, Fig. 3,15. ...

Medium-sized cooking pot with strongly everted rim squared outside and doubly bevelled inside, brown, Fig. 3, 6.

Typical cooking pot with plain everted rim (diameter 5 in.), brown.
(Hurst 1956, 57, 64-5)

The last appears to be a third, unillustrated vessel. The pottery from the site at Paxton, near St Neots, has been dated to just before the Conquest (Hurst 1956, 66), suggesting a Norman date for the mound, though the dating is vague and larger vessels are thought to date from the 12th century (ibid, 53).

Victoria County History (VCH)

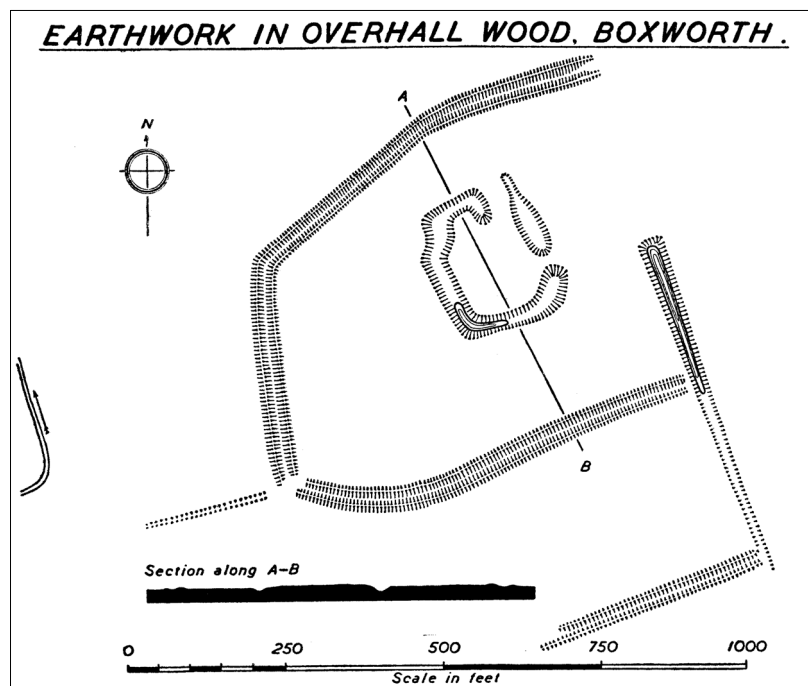


Figure 4 – Earthwork plan
(Salzman 1948, 17. Reproduced with permission from *The Victoria History of the County of Cambridge and the Isle of Ely, Volume 2* (London, 1948), Victoria County History © University of London)

In 1948 a survey of the moat earthworks was published in the second volume of the Cambridgeshire VCH (Salzman 1948, 17; Figure 4) along with a description of the site. The plan is similar to the pre-war OS maps, though the VCH shows a gully running off from the north end of the east moat arm, the south side of the outer enclosure as a double bank, and the scarp running off from the south-west corner of the outer enclosure as a gully. It also shows the linear pond to the east with less water but with its earthworks extending further south and meeting two gullies running off to the WSW. Although published in 1948, most of the volume was already in print by the summer of 1939 (ibid,

xiii) so any visit or survey must pre-date this. The mound was also described but not illustrated (ibid, 34). The history of the parishes in Papworth Hundred were dealt with in more detail in volume 9 of the Cambridgeshire VCH (Wright and Lewis 1989). This included a plan of Boxworth dated by the VCH to about 1660 (Figure 5), but apparently based upon a manuscript map of 1650 (see Figure 6).

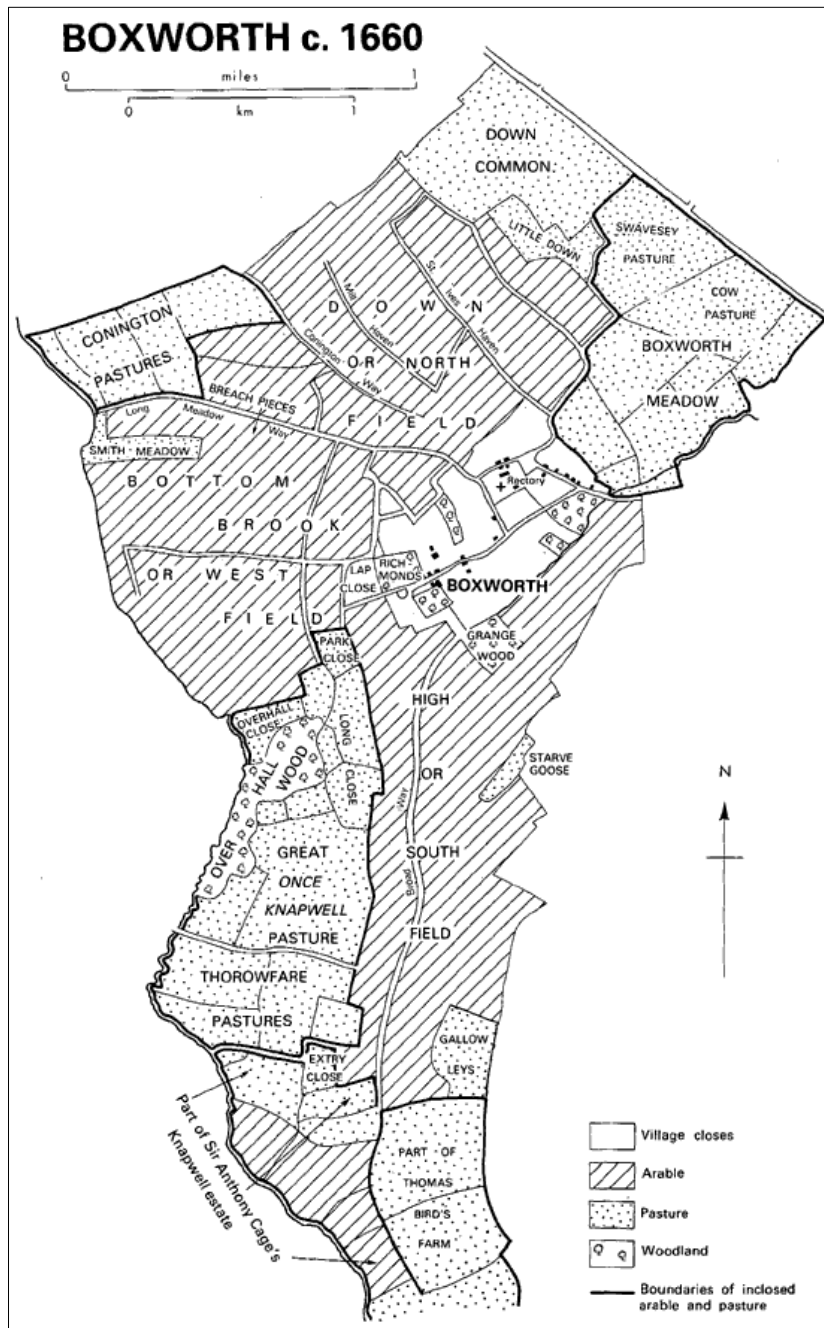


Figure 5 – Boxworth in about 1660 (Wright and Lewis 1989, Fig 16, 270. Reproduced with permission from A History of the County of Cambridge and the Isle of Ely: Volume 9, Chesterton, Northstowe, and Papworth Hundreds (London, 1989), Victoria County History © University of London)



Figure 6 – Detail of the source map for Figure 5 showing the Overhall Grove area 'The Plott, or Description of Boxworth in Cambridgeshire being parte of the demeanes of the Lady Ann Cutts', surveyed by Matthew Hayward, 1650 (image: Matthew Bristow, © Historic England, source: with permission Huntingdonshire Archives, 148/1571/LR23/367)

Royal Commission on Historical Monuments (England) (RCHME)

In 1968 a survey and description of the moat earthworks was published in the first volume of the RCHME Inventory of Cambridgeshire (RCHME 1968, 30-1). The plan (Figure 7) depicts the moat and outer enclosure earthworks in more detail than previous sources. It shows two small gullies running off from the north-east corner of the moat, a small hollow outside the north-west corner of the moat and an outer bank on the west and south sides. The outer enclosure is depicted as double ditched to the north. These ditches continue around to the west where there is an additional internal ditch and an external bank. The two ponds in the north-west corner of the outer enclosure are shown and a single scarp running west from the south-west corner is depicted. The south side of the enclosure is shown as a double bank. Once again, the north/south pond is depicted as water filled along its full length with double ditches running away to the south-west from near the south end of this pond, but the depiction of these features is rather different to that shown by the

VCH (Figure 4) where the pond is shorter and the double ditches at the southern end follow a line to the north. The VCH appears to be the more accurate here (below).

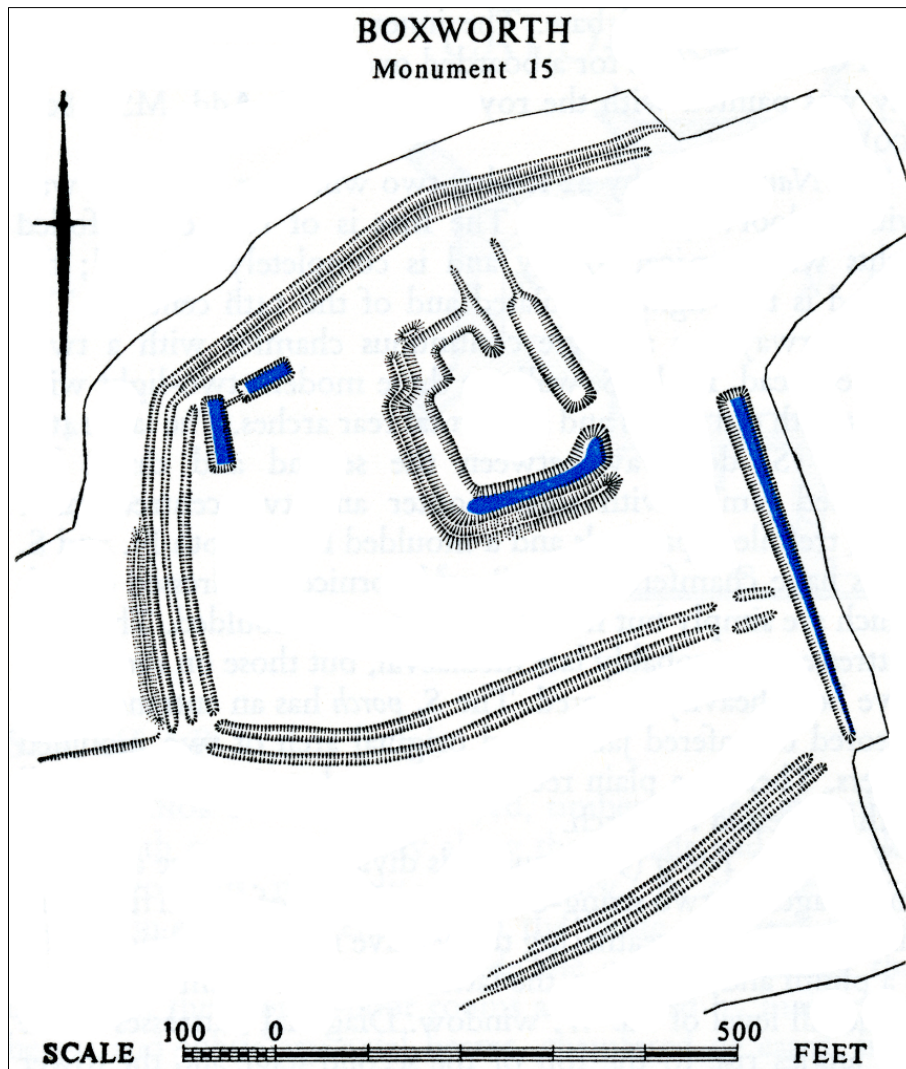


Figure 7 – Earthwork plan from the RCHME inventory (RCHME 1968, 31)

The description notes that the earthworks 'may be assumed to be those of the manor of Overall mentioned in documents of 1386, 1483, 1502, etc'. It then goes on to describe the moat and outer enclosure in detail. Of the moat it concludes that the 'entrance at the E. end of the N. side, a causeway 22 ft. wide, is original' and that the projection of the moat island to the west 'probably protected it' making a comparison with a site in Croydon (no. 19). It also suggests that 'Shallow ditches running N. from this entrance may be feeders for the Moat' and that the 'E. entrance ... is probably not original'. It concludes 'Pottery of the 11th to the 14th century has been found'. Of the outer enclosure the description suggests that the gap in the south-west 'is probably an original entrance', but that another to the

east 'was apparently made for a later footpath'. The comparable site in Croydon mentioned above lies about 16km to the SSW but the moat is much smaller and simpler, and the similarity is hard to see (RCHME 1968, Croydon 19, 79).

The circular mound in Knapwell is shown on plans of the whole village (Figure 8), and in a large-scale plan of the mound alone (Figure 9), accompanied by a detailed description. This suggests that the mound may have been 'a small Norman motte' and records 'Finds made during an unpublished excavation in 1929 include St. Neots ware from 2 ft. to 3ft. below surface of the mound' (RCHME 1968, 163).

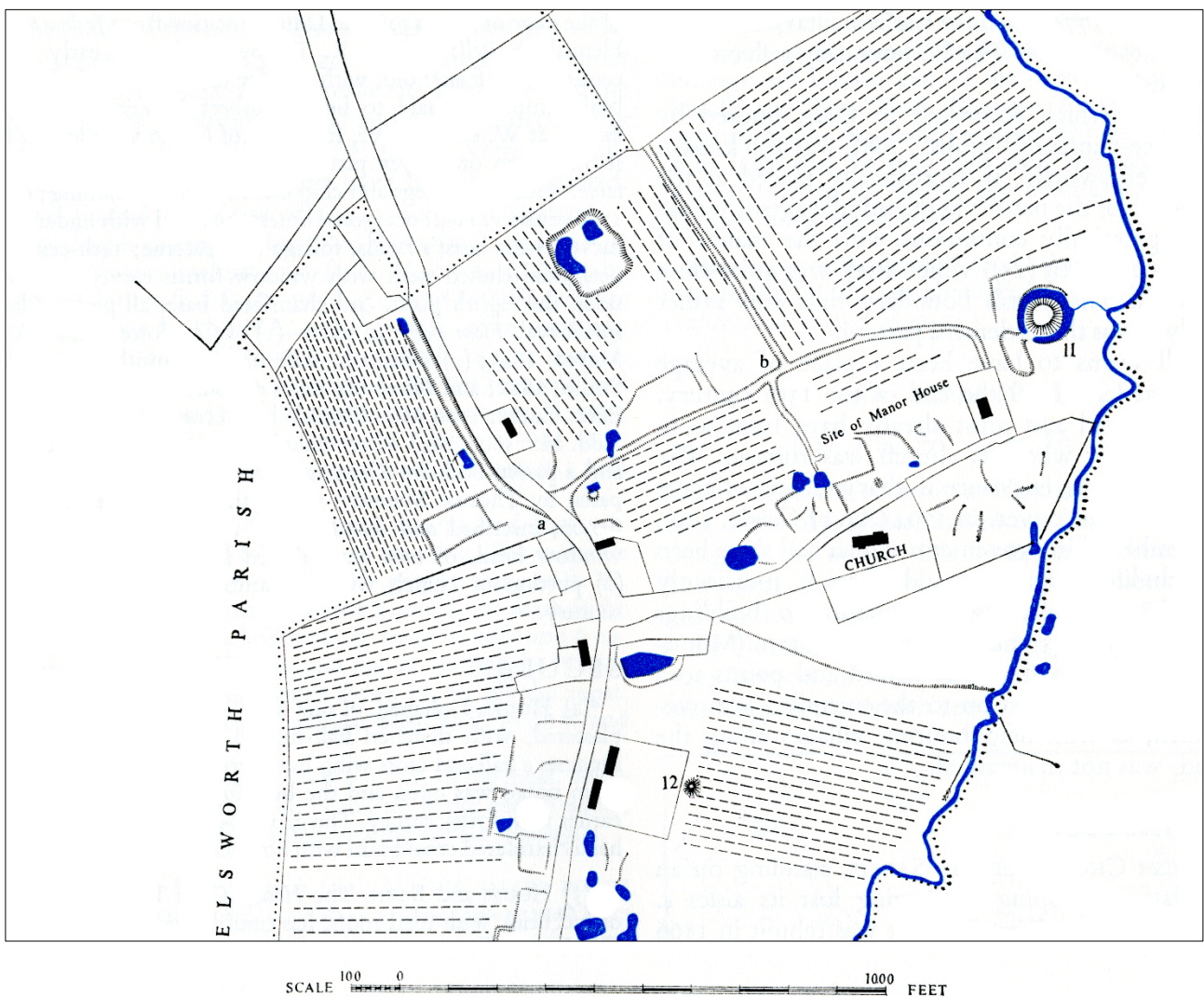


Figure 8 – Detail of the RCHME Knapwell parish plan
Showing the village remains and mound (11) north-east of the church (RCHME 1968, 162)

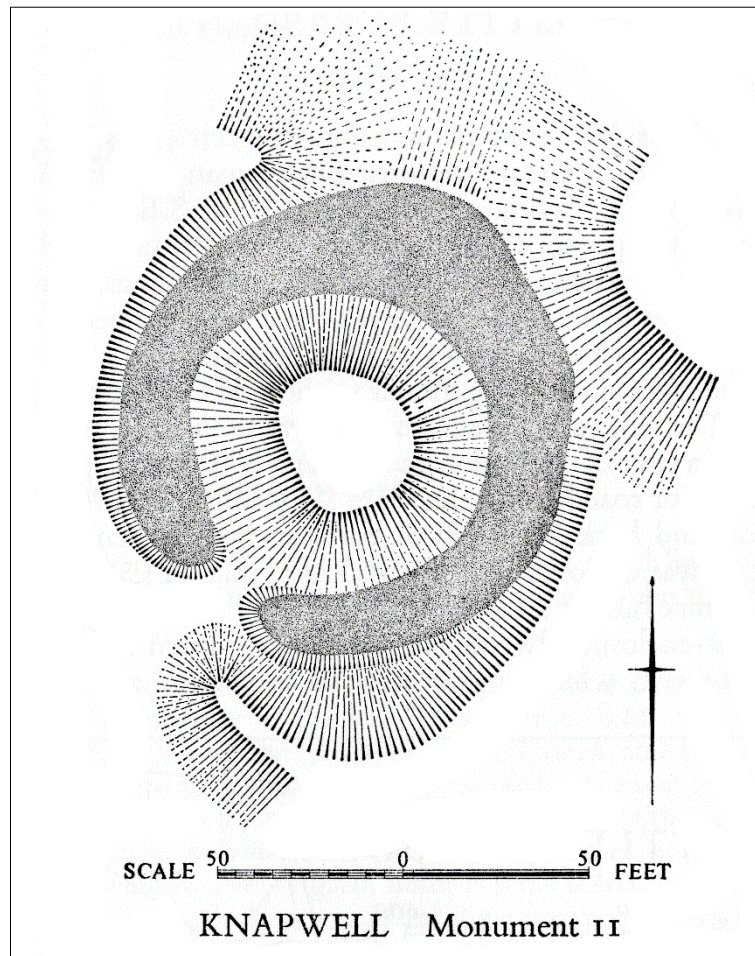


Figure 9 – The mound
(RCHME 1968, 163)

The Cambridge Archaeological Field Group (CAFG)

In the mid-1980s parts of the manorial earthworks were examined by CAFG (May 1992, 43-9). The aim of the work was to examine the chronological relationship between the inner moat and outer earthwork and two areas were surveyed where there were thought to be informative relationships. The survey concluded that the entrance to the north was not original (contra RCHME above), the original form of the moat reflecting that to the west (see Figure 10). The survey to the south concluded that a channel there was similar to one to the north but had been stopped up at its northern end (Figure 11).

200 sherds were collected by CAFG during their survey, largely of the 12th and 13th century with some from the 14th, including some St Neots type and some glazed Heddingham type sherds; many were thought to have originated from a rubbish dump (May 1992, 43-9). None appear to be as early as the 11th century as reported by the RCHME.

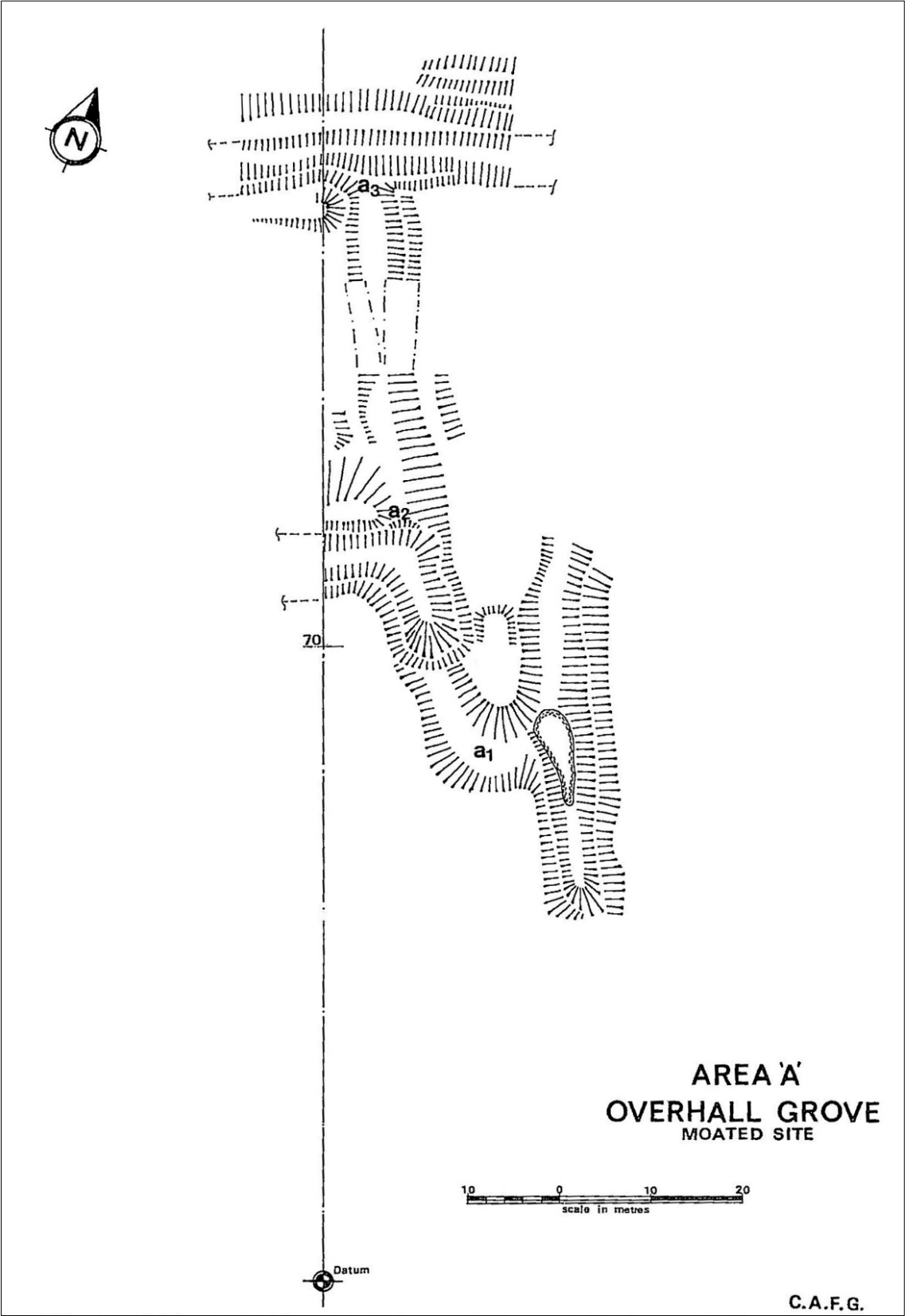


Figure 10 – C.A.F.G. survey Area A
Area depicted includes the north-east corner of the moat and extends northwards (May 1993, Fig 5, 44, with C.A.F.G./CAS permission), the approximate location is marked on Figure 29

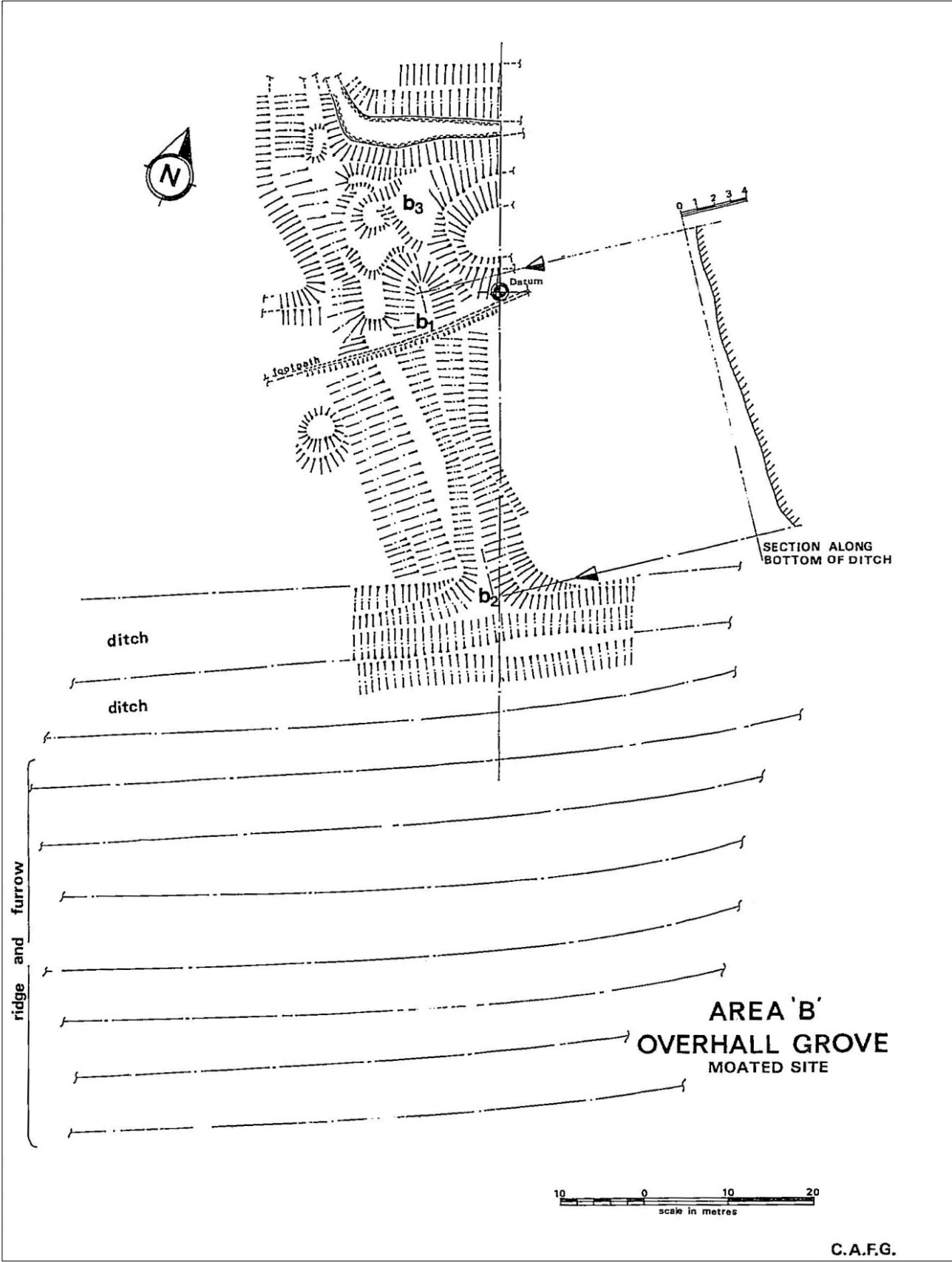


Figure 11 – CAFG survey Area B
The surveyed area extends south from the south-east corner of the moat (May 1993, Fig 6, 45, with CAFG/CAS permission) , the approximate location is marked on Figure 29

Oliver Rackham

In the late 1980s Rackham (1990, 136-8) examined the whole of Overhall Grove and presented a map of the key historic features he identified (Figure 12). The source of this map is not given, but must have contained information from his own survey, presumably based on earlier depictions. Whilst stylised it combines the accuracy of the VCH plan with the detail of the RCHME plan and adds information not depicted in any other sources.

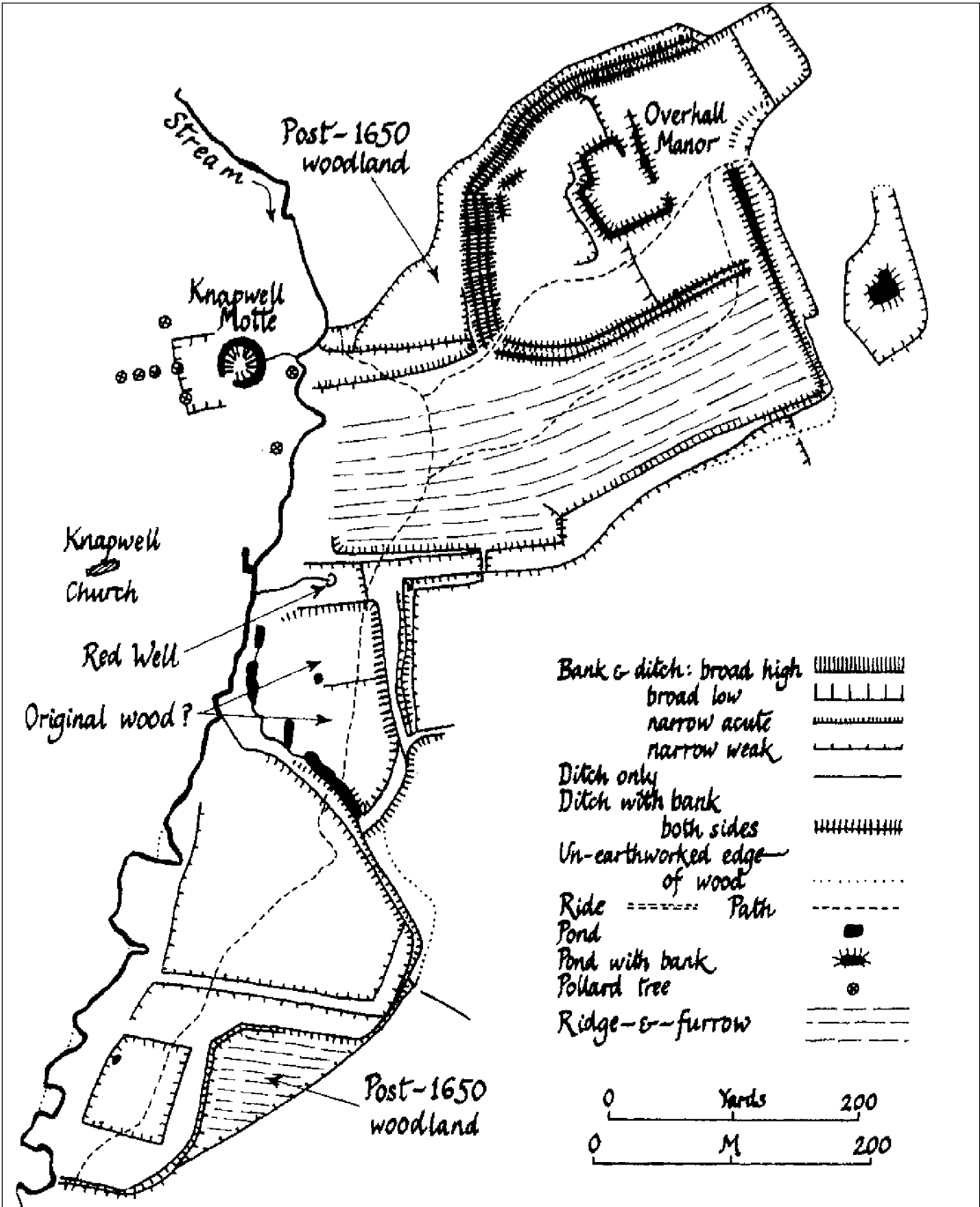


Figure 12 – Overhall Grove (Rackham 1990, fig 27, 137, with publisher’s permission)

His primary focus was on the vegetation and he noted that 'The wood is mainly of elm, of about six clones of the East Anglian group, with scattered oaks (some of them immense) and big stools of ash and maple'. He reports that Overhall Grove 'is an ancient wood: a map of 1650 shows it almost as it is now, the internal features having already been forgotten' though he does note that 'earthworks prove it to be secondary woodland except perhaps for the narrow, very wet middle part' (see Figure 12), which he suggests 'may always have been woodland', based on the presence of oxlip. He also notes that:

The wood has ground-elder and white deadnettle, both of them garden relics, not woodland plants. The moated site and most of the wood are ear-high in stinging-nettles whose vigour testifies to all the phosphate still in the soil from the high living of the ... lords of Overhall.

Documentary evidence for the history of the sites

The two sites under discussion, the moat and associated earthworks, and the mound, lie 300m apart and are separated by a small valley but would be clearly intervisible were it not for the recent growth woodland. They lie in two different parishes, Boxworth and Knapwell, the current boundary of which follows the stream in the valley bottom between them. This complicates their history, but it must be acknowledged that parishes began to emerge in the later Anglo-Saxon period and only became fully defined in the 13th and 14th centuries (Winchester 2000, 31-7). Overly focussing on the parish histories may therefore be misleading for the early periods of both sites.

Boxworth is the larger of the two parishes, approximating an inverted triangle measuring about 6.5 km north/south by 3.5 km east/west, a total of 1,053 ha. The placename is Old English (OE) and probably derives from a personal name *Bucc or bucc 'buck (male deer or he-goat)' with worth 'enclosure' (Mills 2003, 69), though as worth is used so frequently in settlement names, Gelling suggests it may mean 'enclosed settlement' (1984, 326). This name cannot be fixed in the landscape and the 'worth' may not have been located particularly close to the current village. Apart from isolated farms, the only settlement in Boxworth lies approximately 1.3km to the north-east of Overhall moat (1.55km from the mound) on the other side of an intervening plateau. Boxworth is a small village with roads leading north-east to the A14 and Swavesey, and west to Elsworth. A lane, which becomes a private track, also runs south through the centre of the parish, about 500m to the east of the moat. Two other groups of manorial earthworks lie to the north-east and south of the village.

Knapwell is about half the size of Boxworth; another triangle about 3.3km north/south with a base about 2.7km wide, approximately 500ha. Knapwell is also OE, from the personal name Cnapa or perhaps the noun meaning 'boy, servant' with welle 'spring' (Gelling and Cole 2000, 31, 35). There are two springs in the valley less than 160m from the church

(the stream that forms the parish boundary originates almost 3km to the SSE), one of which is a chalybeate spring known as the Red Well that still produces reddish iron-rich waters. In later periods these were thought to have health-giving properties and such a spring would be a notable feature in the landscape, suggesting the original place referred to by the name lay close to the Red Well.

Within Knapwell existing settlement primarily consists of a scatter of houses along the north/south road, 300m to the WSW of the mound (600m from the moat). Taylor (1983, 162) has suggested that Knapwell village 'was originally positioned along an east-to-west trackway' citing as evidence that in 1143 'the Abbot of Ramsey, lord of the manor, built a small motte to protect the village'. During the medieval period the abbey's grange (manorial farmstead) stood opposite the church, north of the lane to Overhall Grove. There were still buildings there in the late 18th century and irregular earthworks survived in 1983 (Wright and Lewis 1989, 333-334). Some still survive and were recorded during the NAIS survey (Knight *et al* 2018). Eventually however the 'trackway became less important and was replaced as a through route by the present main road 2 kilometres to the north' and the 'most important road in Knapwell parish then became the lane leading south into the fields of the village ... Gradually the village moved from the east-west road to the north-south trackway' and 'eventually the village had turned through ninety degrees and expanded in an entirely new direction'. This model has appeal, and the earthworks in Knapwell (Figure 8) do seem to suggest that the village may have once been concentrated around the church and manor house, possibly with a small triangular green. This is also supported by the placename, with the suggested centre of the village very close to the spring from which it probably took its name. This suggests that originally the township boundary probably did not follow the stream but ran somewhere to the east encompassing the spring and perhaps more. However, the date and function of the mound is perhaps less certain than Taylor presents it, and the presence of the mound does not prove the presence of an east/west routeway nor a stream crossing. No physical evidence for such a route has been recorded in any of the surveys described above, nor the recent NAIS survey (Knight *et al* 2018). If the mound was a motte ordered by the Abbot of Ramsey it was probably intended to protect his interests, primarily the manor house thought to have lain to the immediate south-west (Figure 8), rather than the village as a whole or any routeway through it.

In this context, the location of the manorial earthworks within Overhall Grove is unusual. Whilst it is common for moated sites to be in peripheral locations within the contemporary settlement pattern, it is much rarer for them to be peripheral relative to their 'own' parish (Boxworth), yet potentially dominating the primary settlement in an adjacent parish (Knapwell).

Tenorial history

The tenorial history of Knapwell is relatively straightforward. It is first recorded in 986 CE when Athelstan Mannesson left half of his Knapwell estate to his widow, a kinswoman of St. Oswald, the founder of Ramsey Abbey, along with Elsworth, and estates in Graveley and Over; the other half he left to his kinsman Leofsig (Wright & Lewis 1989, 307, 322, 333, 343). This suggests a connection between Elsworth and Knapwell from the 10th century and the two were economically and jurisdictionally linked during the medieval period; the boundary between the two parishes regularly doglegs suggesting it picked its way through medieval fields, and as late as the 1630s Knapwell was sometimes known as Little Elsworth (Wright & Lewis 1989, 332). Sometime later, probably under Cnut (1016-35), Lustwine and his wife Leofwaru left Knapwell, save for 1 hide, to the abbey of Ely. Their grant was not immediate however, Lustwine's son Thurstan evidently inherited the estate as he left it to Ely in about 1044, save for land left to a priest and a monk, perhaps the previously excepted hide. Soon after this, Eadnoth II, bishop of Dorchester (1044-9) bought the main estate and gave or left it to Ramsey Abbey which held it in demesne until its surrender in 1539 (Wright and Lewis 1989, 333-334). Following the Dissolution, Knapwell descended through several families in a manner typical of a small rural estate (Wright and Lewis 1989, 333-334).

Boxworth first appears in the historical record in Domesday Book, but in contrast to Knapwell's simple 5 hide entry it comprised five entries totalling $10\frac{3}{4}$ hides. The later descent indicates that the holding which came to be known as Overall manor was the $4\frac{1}{2}$ hides held by Pain from Hardwin de Scalers (Rumble 1981, 26,47). The other entries consisted of $3\frac{1}{2}$ hides held by Picot of Cambridge from Robert Gernon, $1\frac{1}{4}$ hides held by six sokemen (high status free tenants) from Gilbert of Ghent, 1 hide held by two sokemen from Count Alan of Brittany, and $\frac{1}{2}$ hide held by Ramsey Abbey (ibid, 21,8; 23,4; 14,54; 7,6). Picot's $3\frac{1}{2}$ hides formed a second substantial Boxworth manor in the north-east of the parish, later known as Huntingfields, and then Boxworth Manor (Wright & Lewis 1989, 273). The six sokeman on $1\frac{1}{4}$ hides over which Gilbert had lordship was held in the same way by Ulf Fenisc in 1066 and formed part of a larger estate which included $3\frac{1}{4}$ hides he held himself at Fen Drayton and $2\frac{3}{4}$ hides at Conington which eight sokemen held from him. It therefore seems that in the late Anglo-Saxon period, Boxworth had connections with Conington and Fen Drayton to the north, similar to Knapwell's with Elsworth to the east. Given these 11th century tenorial relationships to the north and east, and the lack of any such between Boxworth and Knapwell, the boundary between them may have been of some antiquity.

By 1166 Overall was held by William (I) son of Roger, under Stephen de Scalers, a descendant of Hardwin. It remained in the family for the next two centuries. By 1200 it had passed to William's son Henry (I), also known as Henry of Boxworth. Sometime between 1223 and 1235 Henry died and his son, William (II) of Boxworth, escheator (a legal officer

responsible for dealing with property reversions to the Crown in the absence of a will) for Cambridgeshire 1246-54, inherited. He died in around 1268 and his widow held half of his demesne in dower with his son Henry (II) until her death in 1279. On his marriage in 1285 Henry settled his two thirds of the manor on his wife who held them from his death in 1302. Between 1316 and 1327 or later Henry's son William (III) of Boxworth was lord of Overhall, but by 1332 the manor had descended to his son Henry (III), who died sometime after 1365; his widow was occupying the manor in 1382. Henry's son William (IV) died without issue and the fee was inherited by his sister Alice, who married William Lovett of Liscombe, Bucks, owner by 1388 and still in 1408. Lovett's son Roger held Overhall in 1412 and 1428 but it was held by his widow in 1438. The manor then descended to his grandson Simon Lovett who died sometime after 1467, and Simon's son John who died in about 1479. The Boxworth manor was then conveyed to feoffees (effectively tenants, though with more complex rights under the feudal system) for William Copley, a Yorkshire merchant stapler, who died holding Overhall in 1490. In 1496 William's feoffees sold Overhall to trustees for Lady Margaret Beaufort and in 1501 the Chancery clerk Thomas Hutton, archdeacon of Lincoln, bought Overhall for his brother John. John died the same year though, and John's young son Thomas inherited all the family estates when the archdeacon died in 1506 (Wright and Lewis 1989, 271-3).

The other significant manor in Boxworth lay to the north and became known as Huntingfields by 1550. This had descended separately until it was sold to Thomas Hutton by Sir Edmund Knyvett, probably by 1545. Following Sir Edmund's death in 1550 and Thomas's in 1552, the two manors then descended together, initially to Thomas's son John Hutton. John died in 1596 and he left his Boxworth land to his second wife Elizabeth. In 1599 she and her next husband Sir William Hinde sold it to Sir John Cutts of Childerley. Sir John died in 1615 but the Boxworth manors remained in his family until 1694-5 when heavy debts obliged his great grandson, Lord Cutts, to sell the family's Boxworth land to Josiah Bacon, a London merchant. Josiah died in about 1704 having entailed the estate on a distant cousin, Josiah Bacon, a minor, with remainder to the boy's sister Elizabeth. Their guardian, Thomas Slater, married Elizabeth in 1716 and, after her brother, took the name of Bacon, retaining the estate after his wife's death. Thomas (now Bacon) died in 1736 and under Elizabeth's will their estates passed to her half-brothers, John and Peter Standley, all of which came to Peter on John's death in 1761. At his death in 1780 Peter left his lands to his protégé Henry Poynter, who took the name Standley, but four years later debts obliged Henry to sell Boxworth to George Thornhill of Diddington (Hunts). The Boxworth lands remained with the Thornhills well into the 20th century, but most land was sold off in the post Second World War era.

Population and economy

Across England population levels rose steadily until a peak of around 5 million in 1300, but the 14th century was a turbulent period for the country with a general climatic downturn

and ongoing conflict with France punctuated by the agrarian crisis of 1315-22, and the Black Death in 1349. The first half of the century, in particular, has been described as 'catastrophic' (Platt 2010, 119-24). The population downturn in England was marked; it dropped about a third by the middle of the century and had probably halved by 1400, a level it remained at for 150 years (Hatcher 1977, Fig 1, 71).

In keeping with the rest of the country the population of Knapwell roughly doubled from Domesday to the end of the 13th century and then began to decline. In 1086, 24 heads of household were recorded, and in 1279 there were 50 landholders. By the 1327 Lay Subsidy this had dropped to 20 taxed heads of household though as this only represents the more significant lay heads of household, omitting the poor and clergy, the decline may not have been as severe as appears, and in 1377 there were 73 adults suggesting relative stability. Knapwell seems to have suffered more during the agrarian crisis than from the Black Death but the village never really recovered. During the 15th century the village shrank further, and the failure to repair houses was often recorded suggesting poverty. By 1524 only 12 people paid the Lay Subsidy though many may have been too poor to do so, and in 1563 there were only 22 households. Knapwell seems to have continued to stagnate during the 17th and 18th centuries; by 1801 20 dwellings housed 97 people (Wright and Lewis 1989, 332).

In Boxworth, the population probably more than doubled between 1086 and 1300; Domesday recorded 33 households and in 1279 there were in all about 100 landholders (Wright and Lewis 1989, 270-1). The 1327 Lay Subsidy records 49 people being taxed in the parish (Evelyn White 1904, 58-59), again perhaps not as severe decline as may appear, and the 1377 Poll Tax recorded 299 taxpayers (Wright and Lewis 1989, 270-1). There appears to have been little overall decline in population during the 14th century, if anything, it was probably higher at the end of the century than at the start. Instead, the 15th century seems to have been the period when Boxworth saw the most serious decline; by the time of the Lay Subsidy return of 1525 there were only 18 adult householders able to pay the tax. As in Knapwell the village didn't really recover for centuries; in 1563 only 17 households were recorded (Wright and Lewis 1989, 270-1), fewer than in Knapwell and the 1676 Hearth Tax returns, recorded 74 adults living in around 19 dwellings. Only seven of these had more than two hearths (*ibid*) showing that although the number of homes, and perhaps the overall population seems to have remained about the same since the decline of the 15th century, most residents were living in poor conditions.

Overhall moat

Archaeological evidence for occupation at Overhall moat, in the form of unstratified pottery finds, suggests occupation from at least the 12th to the 14th century. Some sources record the recovery of 11th century material but this would be unusually early for a moated site,

some local wares have had their dating revised suggesting they were in use later, and in any case the material may have been residual, from manuring for example.

The pottery, and the decline in the parish population between 1377 and 1525, suggests a date in the earlier 15th century for the desertion of the site. The manor Roger Lovett held Overhall in 1428 and it then passed to his widow, and on to their grandson and great grandson, who died in about 1479. A sequence of transfers and sales to various holders with no direct interest and established figures with residences elsewhere followed this (above). This does not suggest occupation, and Roger Lovett may have been the last resident lord of Overhall and his widow the last resident owner. A 1552 inquisition post-mortem indicates that no settlement remained at Overhall, with a John Hutton recorded as the lord of Overhall Manor but resident in Fen Drayton (TNA WARD 7/6/30). In about 1602, John Layer of Shepreth produced an unpublished history of Cambridgeshire (B.L. Add. MS. 5849, f. 36). His account of Boxworth, transcribed nearly 200 years later by the Rev William Cole, includes the statement; "Overhall was the Seate of Henry de Bokesworth Knt but now nothing remains thereof" confirming that the site was abandoned when Layer conducted his survey.

Unsurprisingly Overhall Grove's history reflects that of the manor. It had been reduced to about 20 acres (8 hectares) by 1496 but increased to around 35 acres (14 hectares) by the 1650s, covering the moated site, and by the 1840s had increased slightly to 38½ acres (15.5 hectares) (Wright and Lewis 1989, 269). According to Rackham (above) it covered 42 acres (17 hectares) in the late 1980s and it remains much the same size today.

Earthwork description

Most of the earthworks described below lie in the northern part of Overhall Grove (Figure 13). The Red Well lies in the south-west of this area, the manorial earthworks, comprising the moat and outer enclosure in the north and east. Ridge and furrow is preserved in much of the area between the two. Most of the remaining earthworks discussed lie near the edge of the woodland. The mound lies on the other side of the valley to the WSW of the moat. The paragraph numbering, and numbers in square brackets within each paragraph, refer to the figures on the earthwork plan (Figure 29); the latter are also intended to provide cross-references within the description text.

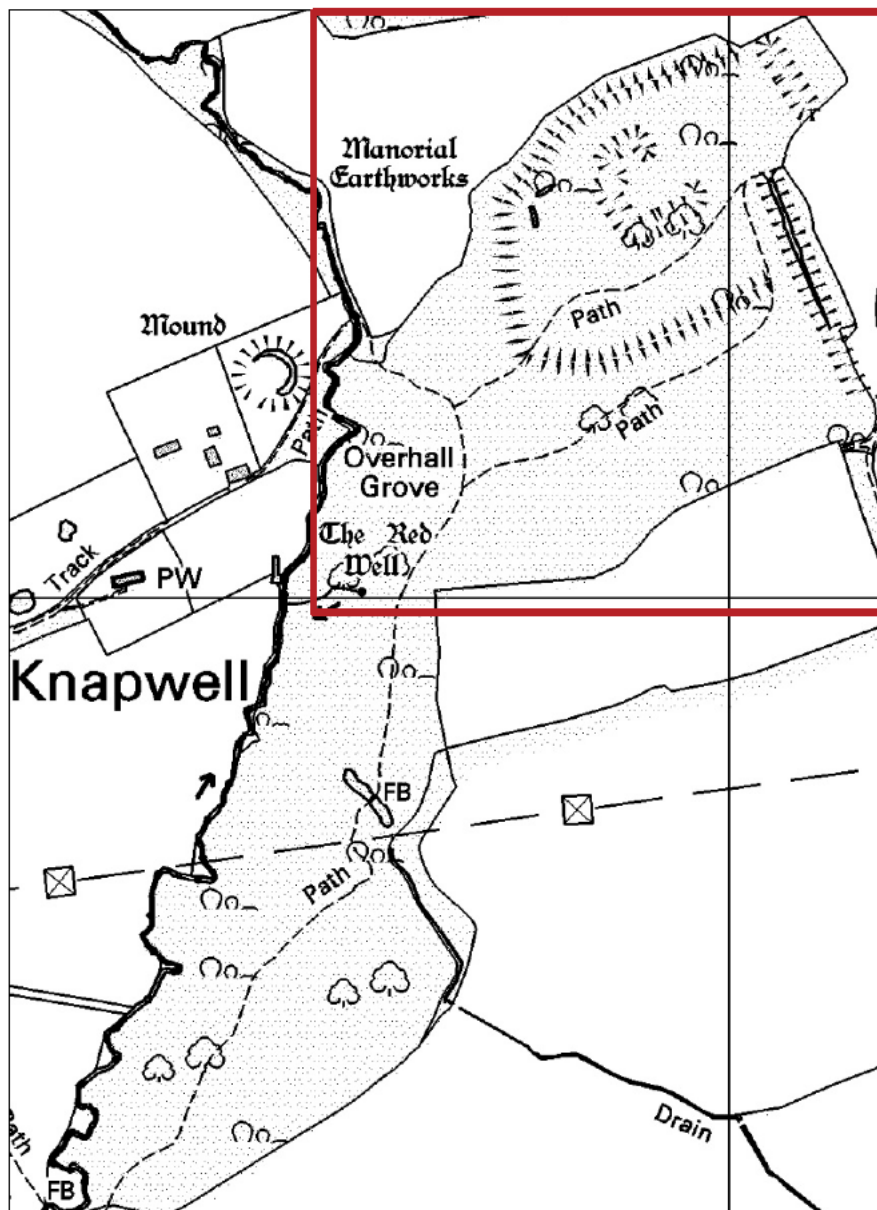


Figure 13 – Overhall Grove as depicted on the current OS 1:10,000 mapping Not to scale. The area of Figure 29 is outlined in red (© Crown Copyright and database right 2024. All rights reserved. Ordnance Survey Licence number 100024900)

The Red Well

RW. The Red Well lies in the south-west of the area surveyed, rising in a short side valley joining the main stream 60m to the west. It still flows steadily today producing brownish water that leaves rust-coloured deposits (Figure 14). The north and east sides of the side valley are well defined, steepening towards the bottom, and may have been deliberately cut back. The south side has been modified by the north facing scarp of ditch [55].



Figure 14 – The Red Well from the west
(Magnus Alexander, March 2015, © Historic England)

Possible pre-medieval land boundary

1. A broad bank approximately 11m wide is visible running roughly north to south for around 50m through the western half of the outer enclosure, terminating at a modern footpath. To the south, beyond the footpath, it is visible on the lidar but not on the ground due to fallen trees and vegetation growth (Figure 28). It is cut by the southern side of the enclosure, beyond which it aligns with scarp [2].

2. A single west-facing scarp around 6.5m wide underlies the ridge and furrow. Ploughing may have dragged material over the feature eroding and infilling the uphill side and obscuring what may originally have been a ridge, as seen within the enclosure to the north, which probably had a shorter period of cultivation.

Taking bank [1] and scarp [2] together, this feature was over 170m long and may be one of the 'long linear' boundaries that have been recorded as part of the South-West Cambridgeshire NAIS (Knight *et al* 2018, 100-122). There is no evidence for any continuation beyond the confines of Overhall Grove and it may well have been ploughed out.

Ridge and furrow

3. Ridge and furrow is clearly visible on a west-east alignment to the west and south of the outer enclosure around the moat (shown by black dashed lines indicating the rigs). It has an average width of 7m ridge to ridge. Once the moat was constructed ploughing probably continued in the southern part of the field beyond the moat's outer enclosure as the ridge and furrow appears to sweep around its outside. This seems unlikely to the west given the short truncated rigs.
4. Slight ridges on the same alignment can be seen in the south and west of the outer enclosure (again shown by black dashed lines indicating the rigs) suggesting that the ridge and furrow originally continued to the north and east and that the moat was constructed over what had previously been arable. The moat appears to take its orientation from the alignment of the ridge and furrow.
 - a. Some stronger scarps to the south of the moat appear to define a vague ditch and bank, possibly a single, better preserved, furrow and ridge. To the east this seems to be overlain by the outer earthworks of the moat and to the west may have cut bank [1] supporting a pre-medieval origin for the latter.
 - b. A shorter gully lies to the 25m north, also overlain by moat earthworks.
 - c. 30m to the north again, two north facing scarps seem to indicate a similar furrow. To the east this forms a clearer gully that appears to cut the outer bank of the moat, but this is probably a later adaptation to enhance drainage, much of the furrow perhaps being silted due to overspill from the moat. To the west the southern scarp may cut bank [1].

To the north a fourth gully [23] probably relates to the ponds to the north-west, though might also be a recut furrow (see [24] below).

5. A terrace (Figure 15), defined by a west-facing scarp, which runs for around 150m along the eastern side of the woodland, may be a form of headland related to the ridge and furrow, possibly created by the plough pulling soil down slope. The terrace

varies in width from around 4.5m to 12m and appears to be cut by the moat's outer enclosure and wood banks and more certainly by the long pond [42].



Figure 15 – Terrace to the west of the long pond
Seen from the north, the long pond can be seen through the trees to the left (Sarah Newsome, February 2015, © Historic England)

6. A slight scarp at the western limit of the ridge and furrow in the north-west corner of the site may mark the edge of the medieval field on this side. This feature is overlain by a modern boundary [39] and two parallel wood banks [35] and [36].

Moat and platform



Figure 16 – The south side of the moat
Seen from the east, note the enclosed badger viewing platform to the left (Sarah Newsome, February 2015, © Historic England)

7. The moat is located within the north-east corner of Overhall Grove just below the brow of the hill. It varies between 8m and 10m in width and between approximately 0.9m and 2.4m in depth. The moat ditch is deepest at the south-east corner (2.3m) and along its southern side (Figure 16) but it is not clear if this is related to the topography or reflects a deliberate intention to emphasise this side of the moated

platform, perhaps the more visible on approach. The moat is 1.3m deep on the northern side and on the western side the ditch is 2m deep relative to the internal platform but only 0.9m to the outside of the moat, emphasising its mid-slope position (Figure 17). The moat defines a rectangular platform, roughly 43m east/west by 30m north/south with a smaller sub-square area 19m east/west by 21m north/south on its northern side. The moat platform has been heavily disturbed by tree throws and badger setts which have obscured any subtle earthwork evidence.



Figure 17 – The west side of the moat
Looking north, showing the fall from the moat island (right) to the outer enclosure (left) (Sarah Newsome, February 2015, © Historic England)

8. An external bank runs along the northern and western sides of the moat where material excavated from the moat may have been used to raise the ground level on the downslope sides of the ditch in order to retain water (Figure 18).
9. A substantial terrace appears to have been constructed along the southern side of the moat with a flattish top up to about 10m wide. It is cut by gully [27] which obscures its original form but it appears to have an irregular mound on it and stepped end. Its purpose is unclear but again it could have been intended to enhance this

side of the moat though it is perhaps rather too substantial for this and may have been large enough to accommodate a building of some sort.



Figure 18 – The north-west corner of the moat
From the west (Sarah Newsome, February 2015, © Historic England)

10. The moat entrance lies close to the south-east corner on its eastern side, defined by a causeway just over 5m wide. It appears to be original; the moat terminals to either side are coherent and uniform.
11. A second entrance to the moat platform, 4.5m wide, in the north-eastern corner, appears to have been created by filling the moat. Slight scarps suggest that this side of the moat originally mirrored that to the west (as per May 1993, 43).
12. The section of moat to the east of secondary [11] and north of entrance [10] was isolated from the rest of the moat when the secondary entrance was created. The northern part of this section has apparently been recut and extended to the north as it is shallower and on a different alignment. To the immediate north is a hollow that opens out into the outer enclosure. Between the two is a low ridge suggestive of a dam and/or sluice, perhaps to manage water levels in the section of moat to the

south suggesting it remained water filled. Silting of this section of the moat might explain the difference in levels of the moat to each side of entrance causeway [10].

13. A gentle north-facing scarp, 2m wide, is visible defining the southern side of the small sub-square area on the northern side of the moat. Previously it has been interpreted as evidence for a square moat which was later extended, but as no counterscarp is visible defining what would have been the other side of the ditch, it is more likely to relate to the change of topography within the enclosure, an internal division of the moat island or perhaps indicate a building range.
14. A similar, but west-facing scarp, 3m wide, is visible running parallel to the western side of the moat, defining an area 6.5m east/west by 25m north/south. This probably originated in the same way as scarp [13]. If this was the site of a building range it would have had clear views towards Knapwell and been similarly prominent from there.



Figure 19 – Badger damage at the north-west corner of the moat island
From the west (Sarah Newsome, February 2015, © Historic England)

15. A slightly irregular, sub-rectangular mound in the south-eastern corner of the moat platform may also represent the site of a building. The relationship with the entrance

is a little awkward, but debris from its demolition or collapse may have obscured its original form.

16. A large area has been disturbed by badgers on the west of the platform where a substantial amount of spoil had been deposited in the moat ditch (Figure 19).
17. An artificial badger sett has been created in the south-west corner of the platform and the surface reworked. The depiction here ignores this disturbance as far as possible.
18. A modern badger-viewing platform has been constructed in wood towards the east end of the top of the southern scarp of the southern moat arm (see Figure 16 above).

Outer enclosure

The moat sits centrally within a large polygonal enclosure broadly 215m east/west by 150m north/south. Most of the enclosure survives as substantial earthworks apart from to the east where it was confused by later features.

19. The southern side of the enclosure consists of two parallel ditches with a broad flat-topped bank between them and an overall width of around 15m (Figure 20).



Figure 20 – The south side of the outer enclosure.
Looking west towards its south-west corner (Sarah Newsome, February 2015, © Historic England)

The outer (southern) ditch is 1m deep and shallower than the inner ditch (which is 1.2m deep) with more moderate scarps. The outward (south) facing scarps of both ditches are steeper than their counterparts, reflecting the topography. The eastern end is cut into [5] (possibly an earlier headland related to the ridge and furrow [3]) but is itself cut by the long linear pond [42]. At its western end the southern side of the enclosure is cut by the modern footpath and a later ditch [35].

20. The western side of the enclosure is more elaborate than the southern side and consists of three parallel ditches with two banks between, and an overall width of 17m (Figure 21). The inner ditch and bank are the most substantial, the middle ditch and outer bank less so and the outermost ditch is noticeably shallower than the inner ones. A slight west-facing scarp beyond these ditches [37] runs on a slightly different alignment and may not be directly related. At the south-west corner of the enclosure, the double ditches of the south side curve north to align with the inner two ditches on the west side, implying that the outer ditch was added later.



Figure 21 – The west side of the outer enclosure. Looking west. The ranging rods mark the inner (nearer) and central ditches (Sarah Newsome, February 2015, © Historic England)

21. The north side of the enclosure consists of parallel double ditches with a total width of roughly 13m, similar to the southern side [19], though the central bank is narrower (Figure 22). There is also a more marked difference between the more substantial inner, and slighter outer, ditches, and the steeper inner faces of both relative to the outer. To the west the outer ditch is very slight, but it strengthens to the east where there are hints of an outer counterscarp forming a very low bank (not surveyable). The variation along these ditches, and between this and the southern arm, appeared to be largely topographically determined as the ground falls away more steeply here than to the south.



Figure 22 – The eastern part of the northern outer enclosure earthworks. Looking west, with the central bank illuminated by sunlight and the ditches visible to either side (Sarah Newsome, February 2015, © Historic England)

To the west, there is a slight but clear change in the orientation of the two ditches where they run to the north of the ponds [24], and the inner scarps of both steepen suggesting that the creation of the ponds may have affected their form. At the north-west corner, the ditches of the north side curve south to align with the outer ditches of the west side of the enclosure [20], cutting and truncating the inner ditch and bank, also suggesting recutting to avoid the ponds, although nothing similar can be seen to

the west of the ponds. At the eastern end of this northern stretch the inner ditch is overlain by a bank [40] that continues eastwards around the edge of the site. The outer ditch of [21] merges with the outer ditch of [40] creating a slightly unclear relationship between the two, further complicated by a later ditch [39].

22. What is thought to be the truncated eastern side of the enclosure is similar to the southern and northern sides, consisting of two ditches with a bank between and an overall width of 19m. Here though, there is a very low bank on the inner side, a feature that may have been lost on the other sides where the ground falls away relatively steeply outwards; here the ground falls slightly inwards. Its relationship with the northern and southern sides of the enclosure has been obscured by the outer ditch and bank of the grove [40]. It is likely that to the north the boundary approximately followed the line of [40]. To the south it probably continued for a way before turning west to complete the enclosure circuit, all evidence for it having either been ploughed out or obscured by later features such as pond [42].

No original entrance into the outer enclosure was identified during the survey. It seems probable that this was in the lost south-eastern corner, particularly given the location of the moat entrance [10].

Inside the enclosure

To the west and south of the moat, several parallel features, mainly low rigs with some slightly stronger examples with surviving ditches, running approximately WSW-ENE on the line of the ridge and furrow to the west and south of the outer enclosure, have already been described [4].

23. To the north of these is a more substantial gully with a bank to the north (total width about 8m). This runs from the north-west corner of the moat, where there appears to be a cut in the outer bank, downslope to the ponds to the west [24]. It seems likely that this feature was intended to allow water from the moat to supply the ponds. This may be a section of earlier ridge and furrow that had been adapted; the main length is broad, shallow and on the same line as [4c], in contrast to the gully from the moat which curves on a different alignment, and the gully into the pond to the west which is both curved and narrow which appears to be secondary. In addition, the southern scarp continued west for a short distance beyond the channel running into the eastern pond, and the outer scarp of the bank to the north seemed to continue beneath the outer bank of the moat hinting at an earlier origin within the open fields.
24. There are two rectangular ponds in the north-western corner of the outer enclosure, one lying to the south-west of the other. The western is orientated north/south and measures 22m by 9m whilst the northern lies east/west and measures 18m by 6m. The western pond is water-filled but the east-west one is empty and approximately 1.2m deep. They may have been linked by a shallow channel at their northern and

western ends respectively and fed by [23]. The ponds appear to be secondary to the enclosure earthworks; as noted above the line of the enclosing earthworks deviated to the north in this area suggesting that material from the pond construction may have been dumped here and the ditches remodelled. The ponds were probably used to keep fish, but they may also have had an aesthetic function as their construction in this location would not have been straightforward and there would have been commanding views from this corner of the enclosure.

25. Scarps to the south of the ponds are confused but suggested a small building platform in this area measuring perhaps 7m across.
26. A west facing scarp to the west of the moat appears to define a platform measuring 24m north/south by 15m east/west. It is possible that this had been conflated with gullies [4b] and [4c] to north and south, but was perhaps rather substantial for this to be the case.
27. To the south of the moat is a broad, slightly sinuous and irregular ditch with a counterscarp to the west defining a low bank that extended 45m NNW from the inner ditch of the outer enclosure [19]. At its north end it was cut into terrace [8] and appears to be secondary to the terrace and the outer ditch, which it was not properly integrated with (contra May 1993, 47; see Figure 11). The section recorded by CAFG (ibid) shows the ditch falling slightly towards the north suggesting it was not a drain, so was probably intended to divide the east of the outer enclosure from the west.
28. To the east are two, faint, west facing scarps parallel to ditch [27] though these are difficult to trace due to dense ground cover and fallen trees.
29. To the north of the moat is a second gully also surveyed by CAFG (May 1993, see Figure 10). It does not have any clear relationship with either the moat or the outer enclosure earthworks, though the latter are rather spread where the two meet, suggesting their erosion, or a spread of material over them. The earthworks of the gully itself are quite well-defined suggesting this gully is later than ditch [27] (running south-east from the moat) and may have served a different purpose, perhaps a woodland management feature.
30. To the east of this, and parallel, is a single very low rig, similar to those south of the moat [4] but oriented at a right angle to them.
31. The south end of possible rig [30] is lost in a broad open hollow. This may have been a tree throw but is rather large (around 13m across) and its origin is uncertain.
32. Further east again is a more substantial gully with a low bank to the west. To the north the bank appears to respect the outer enclosure ditch suggesting it was later, though the ditch runs into it. To the south both peter out at about the same point, perhaps the result of erosion by traffic approaching the moat entrance:

- a. A scarp to the south suggests that the gully at least may once have continued further in this direction.
- 33. To the south, a sub-square platform measuring around 11m across is situated on terrace [5]. It is defined by scarps to the east and west, the fall into the pond to the north and the scarp of the broader bank to the south. It may mark the site of a building, but whether related to the outer enclosure, or to the pond, is unknown.
- 34. Immediately to the east and slightly north of the entrance to the moat island is a broad hollow area, 35m east/west by 20m north/south, which widens towards the east. This may have been the result of erosion of the area by people and animals over a prolonged period and supports the suggestion that this was the original approach to the moat. A low ridge to the south of the hollow may be a later modification allowing traffic to avoid the eroded area, perhaps as it was damp and prone to being muddy.

Other features in Overall Grove

The moat earthworks sit within a series of wood management boundaries which define the extent of 'Over Hall Wood' as shown on the Boxworth map of about 1660 (see Figure 5). These banks were presumably constructed after the moated site was abandoned.

- 35. A probable wood boundary runs roughly west from the south-west corner of the moat's outer enclosure almost to the stream. It consists of a bank to the north of a ditch around 9.5m in overall width. This boundary broadly respects the ridge and furrow but cuts the earthworks of the outer enclosure to the east so may be adapted from the ridge and furrow. This feature is on the approximate line of the woodland depicted on the 1660 map and likely to date from this period or earlier.
- 36. To the north is a similar feature though this is narrower than boundary [35] (about 8.5m overall) and does not respect the ridge and furrow, cutting across it to the east, on a slightly more southerly line. The accuracy of the 1660 map means that the exact location of the boundary is uncertain; it is possible that this feature marks the extent of the woodland at that date but perhaps boundary [35] is the more likely. If so, this feature may represent some post 1660 woodland expansion as seen elsewhere.
- 37. A west facing scarp runs approximately parallel to the outer enclosure of the moated site [20] with the suggestion of a continuation to the south of boundary [36] providing some support for the suggestion that [36] is later than boundary [35]. As the woodland boundary shown on the map of about 1660 tightly follows [20] this scarp could be related to the later boundary or to agricultural activity in the adjacent field rather than the earlier enclosure.

No similar secondary features were recorded along the north side of the outer enclosure [21] so it seems likely that the existing earthwork was used as the woodland boundary.

This secondary use might explain some of the variations seen along this side of the outer enclosure.

38. Two slight scarps to the north of scarp [37] could be slightly better-preserved traces of ridge and furrow, related to agriculture to the north, or mark a phase of woodland expansion. As the southern appears to be overlain by scarp [37] and the northern cuts it, one of the latter two explanations seems most likely.
39. To the north of all these features a narrow, well defined gully runs sinuously from the south-west to the NNE, crossing an area shown as open in 1660. It then curves around the north side of the outer enclosure, about 12m to the north of it. At its east end it cuts south into the outer ditch of boundary [40], presumably to drain it, creating a dogleg. This ditch appears to follow the wood margin as depicted on the 1887 OS maps.
40. To the east of the moat a section of bank around 7m in width with a narrower outer ditch runs around the eastern protrusion of the woodland. To the north-west it appears to overlie the north-east corner of the outer enclosure cutting both boundaries [21] and [22], and has itself been cut by gully [39]. To the south the bank cuts boundary [22] again, and after running south-west for about 25m and turning SSE for another 20m, the bank is in turn truncated by a modern track [41], but before this was established it may have been truncated by linear pond [42]. The outer ditch scarp deviates south from the western return of the bank to curve around on a more easterly line leaving a broad low area between the bank and the outer scarp. The origin of this could not be determined but the stratigraphy to the north suggests a date later than the outer enclosure but earlier than the mid-19th century, and as the projection it defines appears to have been in place by 1660 (Figure 5), perhaps it also predates this. This suggests a late medieval or early post-medieval wood bank, though why the existing earthworks were not used here as they probably were on the north side of the enclosure is not known.
41. A modern but overgrown track runs WSW/ENE between the bank of boundary [40] and the north end of pond [42]. To the north, a moderate south facing scarp parallels the north end of [42] suggesting the pond may have extended slightly further north. To the west, a north facing scarp seems to be on a similar alignment to the traces of ridge and furrow [4] identified to the west, but this is probably coincidental.
42. A linear pond, around 120m long, lies on the eastern side of Overhall Grove, south-east of the moated platform (Figure 23 overleaf). It changes orientation slightly about halfway along, where it meets outer enclosure [19], and the northern half is also slightly broader than the southern; about 12.6m compared to 11.3m. It seems likely that the pond was either constructed in two phases, or that it was created by modifying two different underlying features. Its northern end is overlain by modern

track [41] and it may have extended slightly further north. To the south it appears to be cut by a track, but the relationships are more complex (see [43]).

- a. There is a west facing counterscarp creating a bank along the west side of the pond south of enclosure [19], perhaps related to a slight fall in terrace [5].
- b. A lower and broader, east facing counterscarp to the east of the pond is not related to the change in orientation or topography and may have been built up by pond clearance work.

43. To the south of pond [42], the gully of a track truncates bank [42a]. A second gully to the east of the south end of the pond seems to continue its line but several metres to the north; a low bank retaining the south end of the pond separates the two making the relationship unclear; the pond may have been extended across the track at some point. It is also unclear where the track came from, and is heading to, perhaps from a block of woodland to the west towards open ground to the east, though there is no sign of any track running over terrace [5] and the way east is blocked by boundary [45].



Figure 23 – The linear pond.
From the south (Sarah Newsome, February 2015, © Historic England).

44. To the south of [42] a bank runs SSE on a line a little to the west of bank [42a], with a broad ditch to its east. The ditch may have been recut and the spoil thrown up to the west explaining both the apparent shift west and the breadth of the gully. In which case this bank may be a continuation of bank [42a] and both could represent an earlier wood boundary modified by the creation (or extension) of pond [42]. To the south the bank is cut by scarp [47] but continues past it a short distance forming a slightly projecting spur where the ditch turns sharply to the south-west.
45. To the east of this is a second parallel bank with a deep, narrow ditch to its east. This ditch is clearly a late feature and in part defined the bank to the west but the relationship between the two is uncertain, though the divergent course of the ditch to the south (see [45b] and [49]) suggests it is unrelated to the bank which may be related to [44].
 - a. To the NNW both the bank and ditch curve to the north-east then curve back to the NNW again. From this point the bank is much slighter and appears to be directly related to the ditch. It eventually peters out entirely just before the ditch turns back WSW to meet the north end of pond [42]. The northern end of the ditch, before it turned WSW, approximately aligns with the south end of the outer scarp of boundary [40] and it may be that the return WSW is secondary, cut when track [41] was created.
 - b. To the SSE the bank and ditch curve around to the south-west but after a short distance begin to diverge suggesting that the outer ditch is a separate feature to the bank/inner ditch.
46. The ditch of [44] continues to the WSW for over 200m, initially curving slightly north but curving back to the WSW towards its western end. It has a counterscarp to the north which becomes slightly stronger towards the west, but only really forming a coherent bank for the last 35m or so. At the west end it turns to the north-west for a short distance and has been recut, presumably to improve drainage into a marshy side valley. It may originally have turned south joining the next section of wood boundary [48].
47. To the north of ditch [46] a scarp falls south from the edge of the ridge and furrow [3] creating a gully. To the west, it peters out but to the east it steepens as the topography rises and curves around cutting both terrace [5] and boundary [44] and possibly overlying the counterscarp to [46] though the relationship is uncertain.
48. To the south of the west end of [46] another very similar bank and ditch runs south for 15m before turning west for 200m, ending to the north of the Red Well. The dogleg marking the junction between this and [46] does not appear as such on the 1660 map but there was a change in orientation where a third field boundary ran off to the south-east so these boundaries may have been in place by this date.

49. The ditch of [e] runs along the south side of this part of Overhall Grove, initially broadly parallel to [46], though gradually diverging from it, then curving south and back west to run parallel to [48], a total length of about 350m. This boundary would appear to be that of the woodland depicted on the 1887 OS maps.
50. A short, narrow ditch, 4m wide, runs south from the eastern corner of [48] to [49]. It is unclear if this feature pre-dates the others, or had been cut to connect them, perhaps to allow overspill from ditch [49] to drain into ditch [48].
51. A slightly irregular north/south ditch, 44m long, cuts both [48] and [49]. It may have been intended to drain the two ditches, but this is uncertain.
52. A third north/south ditch runs into ditch [49] but again the relationship is unclear.
53. At the west end of ditch [49] is a hollow and mound of uncertain origin. The hollow measures about 13m across and the mound is a little smaller but the latter may be the upcast from the former.
54. To the south of these is another bank and ditch forming the current wood boundary which continues south beyond the area surveyed. Ditch [49] probably connects with the ditch of this feature but the relationship is obscured by hollow/mound [53] and dense vegetation.
55. To the west of [54] is a broader gully that ran on a slightly different line. It continued to the south where it began to merge with [54] but this area is not examined in detail and the relationship between the two is uncertain. It appears to be an earlier wood boundary and to the north its line may previously have been continued by [52]. The ditch currently turns to the west where it runs into the south side of the Red Well valley. The south side of the gully continues past the spring and appears to have been cut back straightening this side of the valley. It gradually loses height and eventually merges with the stream bank to the west.

The mound

It was not possible to visit the mound at the time of the initial fieldwork described above. It has however recently (November 2021, January 2022) been possible to inspect the mound, though dense vegetation made detailed observations difficult.

Unfortunately, the size of the mound and the resolution of the lidar, as well as the level of smoothing in the algorithms used to create the DTM, mean that it is less useful as the basis for meaningful survey than for the earthworks in Overhall Grove. In the lidar data the mound has been entirely lost and the site appears to be a circular, flat-bottomed hollow, though adjacent features are clearer (Figure 24). For this reason no plan of the mound and associated earthworks has been produced.

The overall form of the mound, encircling ditch and causeway appear to be much as shown (Figure 9) and described by the RCHME (1968, 163):

The mound is circular, 6ft. [1.8m] high and 80 ft. [24.4m] in diameter with a flat top 30 ft. to 40 ft. [9.1-12.2m] across. The wet ditch is 30ft. [9.1m] wide on the N.E. and 20ft [6.1m] wide on the S.W. and holds about 2½ ft. [0.75m] of water. On the S.W. the ditch is crossed by a flat causeway 10 ft. [3.0m] wide which, in view of the cupped ends of the ditch on either side, is probably original.

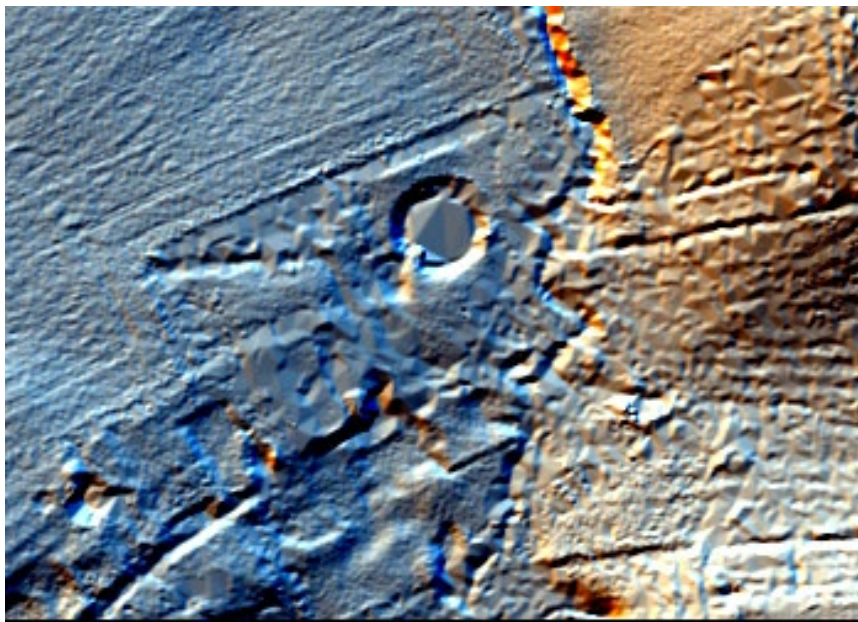


Figure 24 – Lidar DTM of the mound area with the mound above centre. For details see the front cover caption. Note how the over-processed areas are visible by their ‘faceted’ appearance - they include the mound itself, the field boundary to the north and the area around the house to the south-west.

It is unclear where the height of the mound given above derived from. The base of the ditch lies at around 30.9m OD and the top of the mound at 33.2m OD (measured with a Trimble R8 GNSS receiver, but vegetation meant only a single point could be recorded on each) so the overall height of the mound was approximately 2.3m (7ft 6in) above the ditch base. The surrounding ground surface fell from 32.1m OD to the south-west (also measured with the Trimble R8), to about a metre lower (based on lidar) on the north-east side. The mound therefore stands between 1.1m (3ft 7in) and 2.1m (6ft 10in) above the surrounding terrain depending on the viewpoint (compare Figure 25 and Figure 26). The lidar shows that the ditch surrounding the mound was close to circular and measured about 41m across which is comparable to the figures given by the RCHME above (24.4m for the mound plus 15.2m for the encircling ditch). The RCHME show a small overspill

gully running east from the then wet ditch into the stream. A very slight gully in this location is indicated by the lidar data but cannot be seen on the ground.



Figure 25 – The mound from the south, the highest adjacent ground lies to the left (Sarah Newsome, January 2022, © Historic England)

A fall onto the causeway suggests that, contrary to the RCHME, this may not be original. A broad, low and slightly irregular hollow to the immediate south-west may have been the source of the material for the causeway, but had perhaps been exaggerated by traffic onto the mound over the years. This hollow is shown on Figure 8 but as rather elongated southwards compared to that seen on lidar, which has been interpreted as having a very shallow broad gully curving south-west and west in this area.

The RCHME also commented on some earthworks beyond the mound:

On the N. and W. a bank 15ft. [4.5m] wide and 1 ft. to 2½ ft. [0.3-0.75m] high may be the remains of an outer enclosure or merely a hedge bank separating the mound and ditch from an area of ridge and furrow to the N.

These are depicted by the RCHME (Figure 8) and measurement of this suggests that the banks described lay about 40ft (12.2m) to the north and 45ft (13.7m) to the west of the

outer ditch. The northern feature approximately coincides with the northern boundary of the current enclosure around the mound, where a significant fall into the field beyond can be seen. The southward return of this feature to the west cannot be seen in the lidar or on the ground.



Figure 26 – The mound from the north-west, note its disturbed condition (Sarah Newsome, January 2022, © Historic England)

To the west of the hollow a ditch is visible in the lidar running approximately SSE to NNW for a short distance before turning to run to the west. The north/south section cannot be seen on the ground, probably due to heavy vegetation and gardening activity. That to the west is clear however, and had a prominent bank to the north, not shown on the lidar, presumably due to processing (Figure 27). Substantial trees, probably oaks, stand on this bank indicating it is of some age. This feature is also shown by the RCHME (Figure 8) to be part of a boundary system extending some way to the north and west. To the south lay east/west ridge and furrow but to the north it ran north/south, suggesting that this was a furlong boundary and that this ditch originated in a medieval open field system.



Figure 27 – The east/west boundary described above
Seen from the WSW, showing the large trees on the bank to the north (right) of the ditch (Sarah Newsome, January 2022, © Historic England)

Discussion and Conclusions

The Overhall Grove earthworks

Earlier features

A long linear feature, of a type identified across much of the South-West Cambridgeshire NAIS area (Knight *et al* 2018, 100-122), has been identified running across much of the area surveyed and confirmed on the ground during this survey. These have generally been ascribed a medieval or post medieval date by Knight but this example would appear to pre-date the ridge and furrow and so be earlier. How much earlier is not known but some have been suggested to be late prehistoric (pers comm Susan Oosthuizen, Cambridge University).

Although natural, the Red Well was also a significant historical feature. It probably gave its name to Knapwell and may have been, as examples elsewhere, seen to have healing or other mystical properties. Its side valley appears to have been cut back, to improve visibility or access, for whatever reason, practical or mystical.

Across much of the area ridge and furrow underlies other features. This runs downslope on a WSW/ENE alignment and a possible headland of sorts runs along the eastern side of the woods. The relatively uniform alignment of the rigs suggests a single open field furlong, but this may have been topographically determined; ridges often ran downhill to enhance drainage. On the flatter ground to the north-east of the moat a single rig runs at right angles to the others hinting at another furlong.

The moated manorial complex

The moat is orientated WSW to ENE (or at right angles to this) which appears to reflect the orientation of surrounding ridge and furrow. This suggests that the moat may both post-date the furlong in which it was situated and that it was created *de novo* in a previously unoccupied part of the manor. The presence of several ridges and possible modified furrows makes it more certain that the outer enclosure was secondary to the ridge and furrow. There is no evidence for any other occupation in the area surveyed and though associated settlement to the north or east could have been ploughed out, moats are frequently located at a distance from the main centres of contemporary settlement.

From the history of Boxworth, Taylor's statement (1983, 192) that 'The sub-manor of Overhall is first recorded in 1386', can only be partially correct; this may be the first reference to it by name (though other sources suggest it only became known as Overhall 100 years later), but it existed as a distinct tenurial entity by 1086. His conclusion that 'the moat may be interpreted as a late secondary settlement established on the waste of the parish towards the end of the medieval period' (*ibid*) should also therefore be treated with

caution. The field evidence suggests that the area was probably an arable field prior to the moat's construction so it was hardly waste, and occupation appears to have begun in the 12th century.

The moat is rectangular with a second, smaller rectangular projection to the north; it is symmetrical about the north/south axis but not the east/west. The moat seems to have been constructed in a single phase, despite this apparent extension. It appears that the original entrance was to the south of the east arm, contra the RCHME interpretation (above).

At some point after its creation, the north-east corner of the moat was filled in, probably to create an additional entrance. This may have been the result of a perceived need to expand the domestic space beyond the confines of the moat, combined with a reduction in its significance as a defensive structure, and perhaps as a status symbol. It may also have been the result of the construction of the outer enclosure, which would have had an impact on all three. The adjacent part of the eastern arm of the moat was extended to the north, which may have been associated with the new entrance. The presence of the earthwork remains of what appeared to be a small dam or sluice suggested that water could have been retained and the level controlled in the now isolated section of the eastern arm.

The relationship between the moat and the outer enclosure remains unclear, though both very probably post-date the ridge and furrow. On balance, the most likely scenario is that the moat was laid out first, but that as social changes led to a desire/need for more space the outer enclosure was added to accommodate additional domestic space. In this context the original entrance may have remained as the formal approach; the secondary entrance could have provided access to a service yard or similar, also accessible from the east.

Various elements are suggestive of a designed landscape: the terrace to the south of the moat is large enough to have housed a small building, the modified eastern moat arm may have acted as an ornamental pond, and the two ponds to the west appear to have been deliberately placed to take advantage of the elevated topography, rather than where they might have been constructed most easily. Most of these lie on the west side of the site and the elaboration of the west side of the outer enclosure is also notable. These may have been intended to be viewed from the possible range on the west side of the moat island, but it may be that they were also intended as a display of status to be seen from Knapwell.

The RCHME description of the site records finds of pottery from the 11th to the 14th century, though the source for this information is not given. Since the vast majority of dated moats are thought to have originated between about 1150 and 1350 CE, the 11th century would be unusually early and if the RCHME report is accurate, suggests the possibility of an un-moated precursor. The CAFG recovered about '200 sherds of pottery dug up by badgers', virtually all from the moated site and none from the wider enclosure.

They were mainly from the 12th and 13th with some from the 14th century and included several large fragments, several from the same vessel, which indicates they were from a primary deposit, perhaps a midden. The lack of 11th century material implies that the RCHME report may be an error or that the dating of the pottery concerned has been revised. The lack of 15th-century evidence suggests that the site may have been abandoned earlier than the documentary evidence suggests.

Later features

Around the medieval earthworks are several banks and ditches that appear to define the extent of the woodland as depicted on the map of about 1660. To the east these overlie parts of the medieval outer enclosure and probably removed the associated outer entrance. Elsewhere there are similar earthworks that seem to define various phases of later woodland expansion (or rather stabilisation of expansion); several correlate with the woodland as depicted on the first edition OS maps of 1887.

The linear pond appears to be a late creation post-dating the wood boundaries of the 17th century. It is first depicted on the 1887 first edition OS maps and its length appears to have varied over the years but this is likely to simply be due to the conditions at the time of survey leading to variations in water level, rather than any changes to its form. It may be of two phases, but it is equally likely that its noted change in width/orientation, is the result of it having been based upon two separate features.

The mound

It has been suggested that the mound is a small motte (above) but with a top around 11m across, an overall diameter of less than 25m and less than 2m above the surrounding ground, encircled by a ditch around 7.5m wide, it seems small. In Higham and Barker's survey of timber castles (1992) only one smaller motte can be identified: Richard's Castle, Hereford and Worcester, which is perhaps 13m across, though with a much smaller top (3m) it must have been rather higher. As it was associated with a small bailey and had no separate motte ditch it should probably be considered as a whole, which makes it much the same size as the Knapwell mound (ibid fig 2.5, 44). Another comparable example is Hockleton, Chirbury, Shropshire which is described as 'one of the smallest of mottes'; overall it is the same size as Knapwell (24m) but is again considerably higher (6m) with a smaller top (4m) which could only have supported 'a look-out tower or the equivalent of a machine gun post'. It too was associated with a bailey and the site 'was perhaps more like a defended farmstead than a castle, in the usually accepted sense of the word' (Higham and Barker 2004, 218-19, fig 7.16b). The motte at Moat, Llandinam, Powys is only slightly larger (28m), but is again higher (not given but can be seen to be so in a photograph) with a smaller top (8m), but with two baileys (ibid, 226-7, fig 7.22b). Both are also associated

with baileys and having a place within a larger complex the motte could be small and still have a role defending the whole.

The mound also looks weak to have been an effective defensive structure; it is in an unusual location on the valley floor with the village above it, it is isolated, and lacks height. The site may have primarily been determined by the location of the manorial centre it was intended to serve. It might also once have formed part of a larger whole, the outer works of which have been lost. It may simply be however, that it was always much as it survives and should perhaps be seen more as a small defensive work than a motte, a simple retreat rather than providing any sort of 'aggressive' defensive advantage. The causeway is also an uncommon feature of mottes, apparently further reducing its defensive value, though as this is now thought to be secondary it is probably not significant.

The recovery of what is probably 12th century pottery at a depth of 2-3 feet from the mound might suggest a date for the mound's construction, but with no idea of the context the pottery was recovered from, or its condition, it is of limited value. If recovered from the make-up of the mound it might originally be from somewhere in the surrounding area such as a midden and therefore only provides a date after which the mound was thrown up. If from a feature cut into the mound, such as a pit, then it can only provide the opposite information, a date before which the mound was erected. The condition would give some indication of the time gap between initial and final deposition, the more worn the sherds, the longer they might have been 'kicking around'. A relatively small excavation might be able to provide better evidence for the date of the mound.

Several sources suggest that the mound may have been constructed in 1143-4 under instruction from the Abbot of Ramsey, a response to the rebellion of Geoffrey de Mandeville, Earl of Essex, intended to protect the Abbey's interests in Knapwell. Earl Geoffrey had a turbulent history, particularly during the Anarchy of Stephen and Matilda, and was arrested by Stephen in September 1143 whilst attending court. He saw this as a betrayal and rebelled:

He 'raged everywhere with fire and sword; he devoted himself with insatiable greed to the plundering of flocks and herds' ... He sacked Cambridge, looting its churches, and pillaged the Isle of Ely. He sacked Ramsey Abbey and made it his headquarters. ... he dominated the fenland and terrorized East Anglia. (Hollister 2004 and refs therein)

Fatally wounded in August 1144, while attacking the royal stronghold of Burwell, he died a month later, a year after the arrest which sparked his rebellion. Presumably it was Earl Geoffrey's 'insatiable greed [in] the plundering of flocks and herds' that the mound would have been intended to defend against, however it could only have served as a short-term refuge for a few people and could hardly have protected a significant number of livestock,

or the villagers of Knapwell as a whole. There is no evidence that this interpretation is incorrect, but apart from the rather weak dating evidence mentioned above there is also none that it is correct either. However, its small size suggests that it may well have been constructed in a hurry, with limited resources, and in response to what was perceived as a temporary threat.

Other possibilities seem to be much less likely. The earthworks seem to be far too crisp for a prehistoric mound of some sort, even one which may have been modified, and this leaves open the question of when and why it was modified. An Anglo-Saxon structure of some sort is a possibility but all the objections to a medieval structure mentioned above apply, and there is no known Anglo-Saxon dating evidence, nor an obvious context for its construction. A similar sized mound in Wimpole 12 km to the south is known to have been the site of a 17th century post mill, possibly reusing an existing mound (RCHME 1968, 225), but the location of the mound in Knapwell seems unsuitable for a windmill; the Wimpole example is on a chalk spur. Another possibility is a garden feature of some sort, such as a belvedere but again the location doesn't seem suitable, and during the possible period of construction of such a feature the area seems to have been economically depressed.

Conclusions

The two sites, the manorial moated site and the mound, are clearly very different and not directly related. The former is a substantial site that remained in use for several centuries, the latter perhaps a short-term response to a short-term threat.

The moated site within Overhall Grove appears to have originated in the 12th century and probably been abandoned in the mid-15th century. Initially relatively small, it seems to have been enhanced with the addition of an outer enclosure and there are hints that this allowed for the expansion of the accommodation and service areas, and possibly the addition of gardens. This would be typical of many moated sites that remained occupied during the medieval period.

The mound is undated but it has been suggested that it may have been constructed in 1143-4 as a response to Geoffrey de Mandeville's rebellion. This is a reasonable, though largely unsupported theory.

Methodological issues

Approach taken

The sketch plan was intended to supplement the original lidar plotting undertaken by Historic England's Aerial Investigation and Mapping team in York. The original plot was based upon lidar obtained from the Environment Agency as a pre-processed Digital

Terrain Model (in which buildings and tree cover had been removed) with a 1m resolution. This was then processed by Historic England to create a 16D hillshade image (built up from virtually shaded terrain models lit from 16 different directions), which was then used to plot visible features at a scale of 1:10,000.

Both the original aerial mapping and the 16D lidar were printed out at 1:1,000 scale and used as a base map during field investigation of the site which was undertaken by Historic England's Assessment Team (now Landscape Archaeology Team), over three days. This provided a basic, but accurate framework which formed the basis of an enhanced sketch plan based on field observations and reinterpretation of the lidar on the ground, which was then drawn up in AutoCAD.

The resulting plan cannot be considered metrically accurate but the lidar framework means that features were located to within about 0.7m in real terms, were accurate in relation to each other, and maintain a consistent size and scale across the site.

Issues raised

The use of the 1m lidar to produce an interpretative sketch plan of the earthworks raises several issues worth taking into consideration in further such work.

Within woodland, complex processing of the lidar data is required to reveal features beneath the trees. Each laser pulse generates a series of responses and typically the first and last are recorded. The first response is usually from the canopy and the last from the ground below, but can also return from intervening features such as undergrowth, fallen trees, substantial limbs or tree trunks. The creation of a DTM uses the last pulse data and applies a smoothing algorithm to remove anomalous signals from these intervening features, creating a model of the underlying ground surface. This process causes problems when attempting to use the 1m pre-processed data at larger scales. The smoothing algorithm, when applied too severely, appears to completely remove archaeologically significant features from the data. Numerous examples are noted where linear features such as ditches are shown but adjacent and associated banks are not, and vice versa, or where both sides of a ditch or bank are not recognised giving the impression of a single scarp.

Similarly the nature of the woodland and the ground cover influences the DTM with areas of even relatively open woodland like Overhall Grove suffering from a great deal of interference from dense ground cover, and large amounts of fallen trees creating a false last return and distorting the terrain model.

Overall, it seems reasonable to conclude that mapping from lidar benefitted from time spent on ground. Whilst it is clearly a valuable tool for identifying sites, in isolation it is less

useful in their detailed interpretation. It is worth noting however that some very broad features were noted on the lidar which may not have been recognised in the field.

Another problem arises from the imposition of the grid which forces features into one square or another, potentially misaligning it by as much as half the grid's diagonal, a maximum of about 0.7m in the case of a 1m grid. Whilst the gridded lidar can show features larger than the size of the grid, their locational accuracy will not be better than this.



Figure 28 – Fallen trees within the south-west of the outer enclosure. They have disrupted the DTM and made it impossible to trace a low, spread bank [1] (Sarah Newsome, February 2015, © Historic England)

The method used to produce the DTM means that it cannot be used as accurate control for survey as points and features cannot be located with more accuracy than half the grid square diagonal. In theory a 25cm lidar grid might allow plotting at 1:1000 but this would not negate the other interpretative issues raised.

The creation of 16D hillshade images seems to cause problems, significantly enlarging and 'spreading' features. 16D lidar appears to be more appropriate for mapping at large scales across large areas. More detailed examination of earthworks using lidar, requires images 'shaded' from one direction to present a clearer image of the tops and bottoms of earthwork features. 'Lighting' across features seems to define tops well, most accurately

when 'lit' from the same side, so revealing them as 'shadows'. In contrast, 'lighting' along the features seems to define bottoms better. The best approach was therefore to work directly with the digital data, moving the illumination point as required to reveal the part of the feature being examined.

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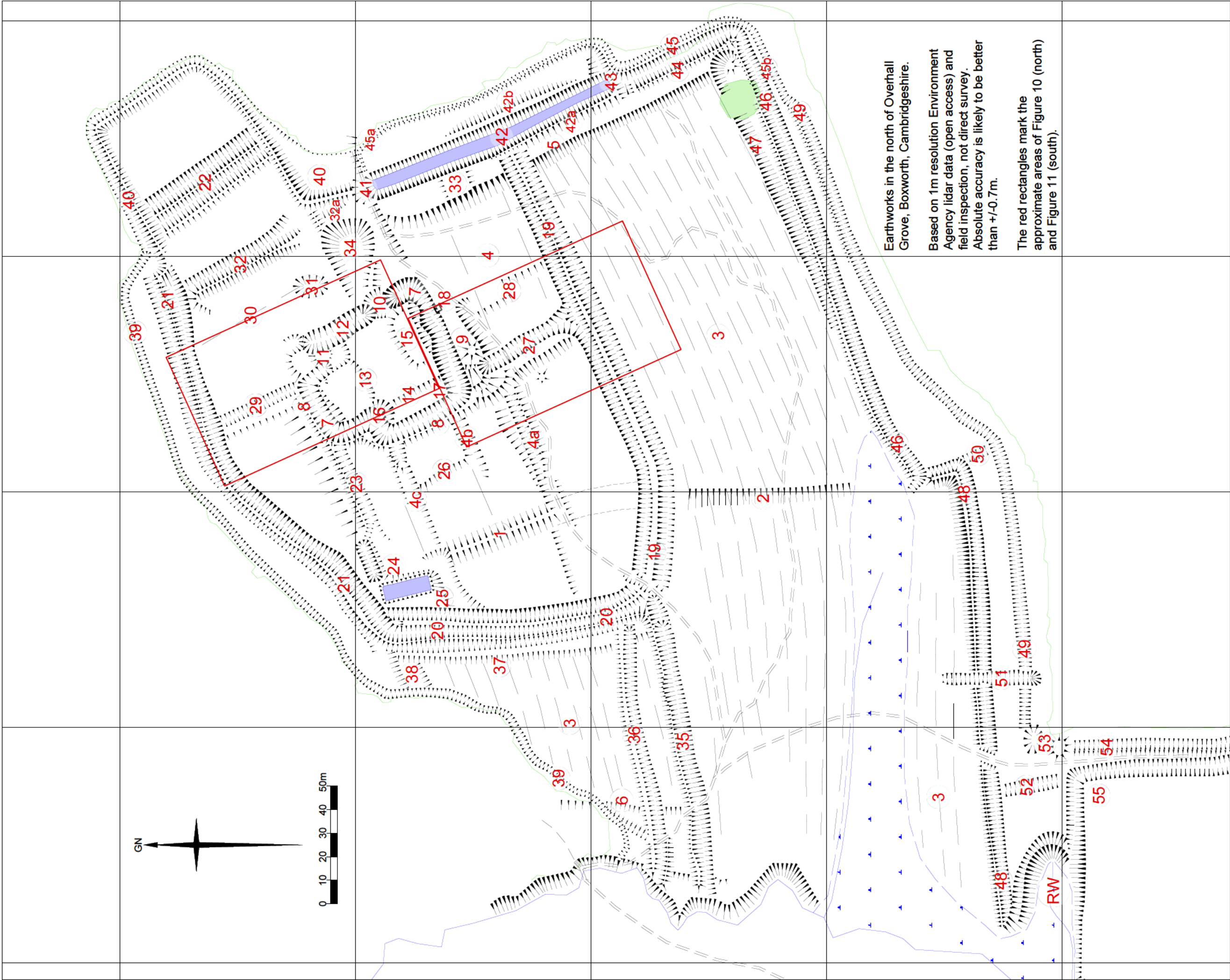
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Earthwork plan

Figure 29 – Plan of the earthworks, 1:1500 at A3 (overleaf).





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