



**Herefordshire
Council**

December 2012

Archaeological Assessment of the moat at Lower Brockhampton, Bromyard, Herefordshire

**Report prepared by
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Herefordshire Archaeology Report No. 314

Herefordshire Archaeology
Conservation and Environmental Planning
Planning Services
Regeneration Directorate
Herefordshire Council



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Archaeological Assessment of the moat at Lower Brockhampton, Bromyard, Herefordshire

**NGR: SO 6874 5590
EHE 2061
HAR 314**

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Herefordshire Archaeology is Herefordshire Council's county archaeology service. It advises upon the conservation of archaeological and historic landscapes, supports the maintenance of the county Sites and Monuments (Historic Environment) Record, and carries out conservation and investigative field projects. The County Archaeologist is Dr. Keith Ray.

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Summary

This report has been produced in accordance with a brief has been prepared by The National Trust in order to address the problem of erosion along parts of the embankment surrounding the moat at Lower Brockhampton. Remedial action is required to prevent damage to the Listed Buildings and further collapse of grounds bordering the moat. At present there is inadequate information regarding the structures formerly in place to contain the moat, and a general lack of data concerning the origins, early character and developed form of the moat.

The specific requirements of the brief were to establish the character, layout and phasing of the moat using early mapped, existing archival, and archaeological field data; to pull together existing information and outline recent understanding of the form and history of the moat; and to identify problem areas and make suggestions regarding the on-going management of erosion. In particular, a concern was expressed to determine how the size and layout of the moat changed over time; to identify phases of construction and infilling; to ascertain to what extent the moat was revetted with stone, and if so to establish when this revetment work was put in place; and to determine how significantly erosion has contributed to its current shape. The scope of the project that the brief specified comprised desk-based appraisal, visual inspection within the moat (following the lowering of the water-level), and where necessary detailed annotation of an existing topographical plan.

The brief was responded to with a Written Scheme of Investigation, and Herefordshire Archaeology were commissioned to carry out the recording works. The water level within the moat was lowered by approximately 0.35m. This exposed an area of "foreshore" on both sides of the moat approximately 0.7m in width on average. This enabled the banks to be inspected and their composition and condition to be recorded where feasible. It became apparent that the 'topographic survey' drawing produced in 2010, on which annotations were to be made, did not derive from a measured survey and was not accurate enough to enable the mapping of the present banks in relation to the house and gatehouse. A new surveyed base plan was therefore produced using a Total Station survey instrument, and moat-side details were added to this. Two sections of walling were recorded, one of likely late 18th / early 19th century date (associated with a drain which entered the moat at its south-western corner), the second of unknown date and serving as a revetment to the northern gable end of the house. It is possible that this wall continued along the entire northern inner edge and the western arm of the moat. Whilst no evidence of a timber revetment was recorded, a line was traced underwater that represents a significant point of increase of depth within the moat. This perhaps provides an indication of the position of the original western limit of the eastern arm of the moat.

Disclaimer: It should not be assumed that land referred to in this document is accessible to the public. Location plans are indicative only. NGR's are accurate to approximately 10m. Measured dimensions are accurate to within 1m at a scale of 1:500, 0.1m at 1:50, and 0.02m at 1:20.

Figures contained within this report contain material from the Ordnance Survey. The grid in this material is the National Grid taken from the Ordnance Survey map with the permission of the Controller of Her Majesty's Stationery Office (OS Licence 100024168). This material has been reproduced in order to locate the site in its environs.

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1. Introduction

This report (EHE 2061) provides an account of an archaeological assessment carried out by Herefordshire Archaeology at Lower Brockhampton moated manor house. The desk-based element was undertaken in late October, and following the close of fieldwork. The fieldwork element of the project took place over two days, Sunday 4th November and Monday 5th November 2012.

The report firstly sets out briefly the aims and objectives of the project, describes the location, and provides an outline historical background. It then characterises the main buildings and the moats belonging to the Lower Brockhampton site complex, and assesses the findings of the documentary and initial desk-based study. The report goes on to describe the progress and findings of the field investigative study, and concludes with an overview of the results of the project as a whole and of its implications.

2.0 Aims, objectives and methods for the study, including reporting

The National Trust has identified that areas of the moat bank at Lower Brockhampton, along both its inner and outer edges, are actively eroding and that this has been the case for a considerable time. Ways in which to arrest the erosion are being assessed, and, to assess this, information is being sought regarding the form of any revetting inserted in the past to arrest such erosion. In particular, there is a concern to gain sufficient information to make an accurate assessment of the degree of erosion which has taken place over time.

Neither the character nor development of the moat is currently well understood. It was anticipated that these works would add to our knowledge of the changes which have taken place within the moat and its environs, at least during the latter part of its developmental sequence.

An 'Archaeological brief for moat assessment' was drafted by Janine Young, Archaeological Consultant for The National Trust. This was supplied to Herefordshire Archaeology in October 2012, and a Written Scheme of Investigation (WSI) was prepared to specify how the brief would be interpreted.

The brief specified a number of aims and requirements:

- To provide a detailed assessment of the character date and layout and phasing of the moat in order to inform its ongoing management and repair
- To pull together existing work and evidence to provide a comprehensive document which outlines the most recent understanding of the moat
- To identify problem areas and provide some initial suggestions for the ongoing management of the erosion problem.

A series of specific questions were also posed:

- How has the size / layout of the moat changed over time?
- Is it possible to identify where possible the phases of construction and infilling of the moat?
- To what extent was the moat revetted with stone and when does this stone revetting date to?
- How significantly has erosion caused the moat to widen/ alter shape?

The WSI specified how this was to be addressed along the lines set out in the brief. Three principal project components were identified. These were a desk-based appraisal of current knowledge, a field-based study involving observations to be made when the moat water level was lowered, and a comparative study of a sub-regional group of similarly moated sites.

A report arising from the study (that is, this report) would include:

- A non-technical summary of the problem posed, methods used to address it, and the findings of the assessment
- Introductory statements concerning the assets affected (including site background, and the conservation issues involved)
- A specification of the aims and methods adopted during the course of the assessment (desk-based and fieldwork components)
- An outline of the principal findings of the project, supported by a presentation of the evidence in the form of maps, plans, photographs, and other data, including interpretive plans.
- This outline to highlight conclusions concerning the likely historic development of the moat in terms of size, layout, construction, and revetment of the moat, and the evidence drawn upon to reach the interim conclusions drawn. If supportable from the evidence obtained, it is to include an indication of likely date and phasing of the features concerned.
- A separate section to specify the nature and incidence of bank-side erosion, and will attempt to identify its cause or causes.
- A further section to outline tentative suggestions concerning, firstly, how the historical and developmental interpretive model might be refined through further fieldwork; and secondly, how the on-going erosion problem might most effectively and economically be addressed.
- These further sections also to be supported by relevant drawings, plans, sections and photographs.
- A catalogue of finds was to be included in the report, alongside any specialist reports that it is agreed with the Trust's archaeology adviser may be necessary.
- The main text of the report was to be concluded with a summary and discussion of the results, including a statement of significance relating to both the asset and the fieldwork.
- An index of contents and statement concerning the extent, character and location of the archive was to be provided.

3.0 Location

The National Trust's Brockhampton Estate is situated a mile to the east of Bromyard, and close to the border of Herefordshire with Worcestershire to the east. While most of the estate lies within the civil parish of Brockhampton, a detached part lies within Tedstone Delamere parish to the north. Lower Brockhampton House is situated at SO 688 560.



Figure 1: location of Lower Brockhampton within the county of Herefordshire

4.0 Background history of Lower Brockhampton

The place-name, which means simply 'Brook settlement', is first recorded in its present form in 1283. An earlier record of 1166 renders it *Brochant(one)*, held by one Bernard. Brockhamptons were the first recorded owners of the manor, from the 12th century, and Richard de Brockhampton passed the ownership of the manor to Robert de Furches in 1283. The manor was in the hands of Lawrence de Sollers by 1349 and Sir Thomas de Moigne was in possession from 1350. By 1383 it had in turn passed into the hands of John Domulton. Throughout the medieval period the parish church for Brockhampton was St. Peter's Bromyard although by the 17th century it appears that Whitbourne was regarded as the parish church for the area.

The earliest fabric of the chapel at Lower Brockhampton dates to the 12th Century. Meanwhile the open hall of the manor house can probably be dated to the early years of the 15th century. A deserted settlement at the Grove is thought to be the Studmarsh (or Stubmarsh) mentioned in the Red Book of

the Bishop of Hereford in 1268-1275, but it is not mentioned in the Lay subsidy Rolls of 1334-6 and may have been deserted by then.

At the beginning of the sixteenth the estate passed to the Habingtons of Wichford in Worcestershire, and in 1545 Richard Habington left the property equally to his three sisters. One of these sisters, Mary, married Richard Barneby of Bockleton in Worcestershire just to the north-east of Bromyard in 1552, and lived at Brockhampton.

In 1731 a nephew of the last of the male Barnebys, Bartholomew Lutley, inherited the estate. Following a change of surname from Lutley to Barneby and his marriage to Betty Freeman of Gaines in 1756, Bartholemew Barneby began building a new house at Brockhampton Park, in an elevated position to the south of the estate near the Bromyard to Worcester road. This is thought to have been designed by the renowned architect Thomas Farnolls Pritchard.

Bartholomew's son John Barneby built a new chapel close to the house in 1799. At this point Lower Brockhampton reverted to use as a farmhouse, and the medieval chapel was no longer maintained. The restoration of Lower Brockhampton House in the Victorian image of half-timbered Gothic domestic style has been proven to be the work of J.C. Buckler from around 1871.

The estate was bequeathed to the National Trust in 1946, and it formally took possession in 1950, with a further purchase in 1968 and the sale of various lands south of the A44 soon thereafter. The house, Brockhampton Park, is rented on a long lease.

5.0 Characterisation of the buildings and moat

Lower Brockhampton buildings

The Lower Brockhampton group of structures and historic features comprises the manor house partially surrounded by a moat, with a gatehouse to the south spanning one arm of the moat, a further minor moat to the north-east, and a ruined medieval chapel to the west of the moated site. This group contains most of the key historic assets on the Brockhampton Estate, besides the 18th century house, Brockhampton Park, two further significant listed Buildings, and two shrunken/deserted medieval settlements. Farm buildings constructed in the eighteenth century and nineteenth century to the south of the moated site form a significant group of vernacular buildings in its own right. They record a period in which what had been the estate centre was used only as an ancillary estate farm.

The moated manor and its detached gatehouse regularly feature on National Trust promotional literature. One reason for their popularity arises from the visual attractiveness of the closely-timbered elevations of both the main building of the manor-house and the gate-house. Such 'close-studding' was a marked feature of wealth display during the sixteenth and seventeenth centuries in England.

The rapid inventory survey of the estate undertaken by Herefordshire Archaeology in 2002-3 added some potentially important detail to the known record of the site (Ray, 2003/2010). The survey recorded a possible abandoned former course of the moat, and a probable area of settlement earthworks to the north in the adjacent orchard. It suggested that the stone elements of the manor could be earlier in origin than the timbered ones. It also emphasised the largely ornamental character of the building-group as constituted by the sixteenth century.

The manor house

This has two principal structural elements: a major hall and, set at right-angles to it, a composite east range with accommodation on two storeys throughout its length. The early fifteenth century hall comprises two bays that, following J.C. Buckler's late 19th century restoration, are open to the timber roof trusses and wind-braces. The hall is aligned broadly east-west with a former screens-passage to the east. The east range is set at the perpendicular to the eastern end of the hall, and is of indeterminate date, with different elements ranging from (possibly) as early as the thirteenth century, through to the nineteenth century. The report of the Royal Commission on the Historic Monuments of England survey, published in 1932 (Herefordshire East), suggested that the house was originally arranged on an H-plan with a west range parallel to that on the east. This, it was supposed, was destroyed at some point: although its foundations were said to survive (RCHME 1932, 32). No trace of these foundations is visible today, but geophysical surveys in 2003 and in 2010 may have located part of the footprint of this putative west range.

The two or three claimed northern extensions to the east wing that are dated by RCHME to the sixteenth and seventeenth centuries are in need of re-assessment. The most northerly of these structures is stone-founded and its internal arrangements indicate that some substantial rebuilding has taken place at some point. In view of what was also observed concerning the possible succession of moats, it is proposed here instead that this most northerly structure could once have formed part of the original stone and timber medieval manor house. If this was the case, then at some point it was substantially demolished and the remains altered to ancillary structures, perhaps around AD1400 when the new hall and cross-wings were built and the ornamental pond/moat created, perhaps in modification of an original moat. This original building might then possibly have been re-commissioned and linked to the east wing and hall, perhaps sometime after the west wing was demolished. The brickwork in this most northerly structure is most likely of late seventeenth or early eighteenth century date and this could be the date of re-construction.

This developmental interpretation (or model) is all supposition, based upon a superficial examination of the stone foundations of the northern part of the east wing in the field, and study of the (RCHME) surveyed plan of the constituent structures. It strongly contradicts the findings of the 'comprehensive analytical survey' of the manor house undertaken by Jill

Campbell in 2011 (Campbell, 2011). This study, which included dendro-chronological dating of the hall timbers, was apparently based upon an incorrectly drawn (rationalised) architectural plan of the east wing, which ignored the (accurate) detail of the Royal Commission plan. What the developmental model outlined above does permit, however, is the testing of its interim conclusions through targeted future investigative work.

The gatehouse

This was once thought to be of late fifteenth century date, but is now dated both stylistically and through dendro-chronology to the period 1545-50. The two-storey formal structure is, in practice, a miniature. It should properly be seen therefore as something of a visual pun, echoing the flamboyant close-studded eastern elevation of the manor house. The ornamental nature of the gatehouse is emphasised not only by its size, but also by the clear indication that the moat was deliberately made narrower where the gatehouse was built, to enable it to span the water. This entirely compromised the defensive function that the moat might otherwise be supposed to have performed, but created a grouping of immediate visual attractiveness and balance.

The moats

The literature on the site notes the existence of the moat surrounding the manor house, but does not as yet record either the character or the developmental sequence of moats at the site. The survey visit and survey of 2002 and 2003 produced a significant new perspective on these features. The moat that exists today is markedly broader on the eastern flank of the manor house than the west, and curves around with a flourish to mark out the location of the gate-house on the southern side opposite the screens passage. This is a very carefully designed position, but the plan of the moat reveals that the house itself does not sit squarely within the moated area. It seems likely that the present form of the moat is, rather, designed also to enhance the prospect of the house from its principal southerly to south-easterly approach (which is defined by a north-south aligned hollow-way recorded in the survey of 2003 in the fields to the south of the manor house and farm).

During 2003, *Herefordshire Archaeology* survey recorded the former northern arm of what may have been the moat which survives as a largely filled-in curving broad gully to the north of the present northern arm of the moat. This in-filled ditch is more strictly aligned east-west than the present northern arm, and this aligns much more closely with the stance of the manor house. Just as the stone-founded northern 'extension' may represent the sole surviving above-ground trace of the former, pre-1400 medieval manor house, so the possibly in-filled northern arm of the moat may represent therefore the sole surviving element of the defensive moat that once surrounded that earlier manor house. Alternatively this feature could have been excavated as a feeder ditch for the decoy island and was controlled by a sluice from the moat.

The post-1400 ornamental moat appears designed, then, to look most impressive from the south-east and this sense of a designed micro-landscape of the environs of the manor house is enhanced by the addition of two other elements that are probably contemporary with each other, dating to the mid-sixteenth century. The ornamental gate-house will be discussed below, but the other feature is a miniature moat with a central moated area that is located to the north-east of the present moat and is connected to it by a small overflow channel. This miniature moated site potentially served as an ornament designed as a pun on the larger moated site. A dam in the dingle to the west would have created a pool to the east of the complex. This was another watery element that was added to complete the tranquil scene, perhaps in the eighteenth century. It is possible also, that the moated area within the miniature moat once featured another timber-framed structure such as a dovecote.

Documentary study findings

This element of the project comprised a check of the historic Ordnance Survey maps held either as hard copies in the Herefordshire SMR, or that are available digitally within Herefordshire Council digital mapping systems. Copies of Estate Maps held by The National Trust were consulted. The County Records Office and National Monuments Record were contacted but no material was identified that extended beyond the sources already consulted for this study.

A map regression study was undertaken using all available versions of the relevant Ordnance Survey maps. It was soon apparent that the shape of the moat had changed hardly at all from the production of the 1st Edition Ordnance Survey 6" Map in 1885 to the production of the 4th Edition in 1928. The modern Ordnance Survey map and its digital counterpart record the outline of the moat as being identical to the rendering apparent on 4th Edition. (See figures 2, 4 and 5).

The Royal Commission survey plan of 1931 differs from the 1928 Ordnance Survey Map, showing a corner to the north-western angle of the moat that is closer to a right-angle. It is noteworthy that this latter situation more closely resembles that recorded in the total station plan produced as part of the present study. It is of more than passing interest, given this closeness to the measured plan of 2012, that the Royal Commission plan published in 1931 also records the existence of an unidentified building to the east of the north-eastern corner of the house which does not appear on any other map or plan (see figure 3).

The modern Ordnance Survey map shows the north-eastern corner of the house as being located actually upon the edge of the moat (figure 2). Thankfully this is inaccurate, and the corner of the building is instead located approximately 2m away from the moat edge (again, as shown on the 1931 Royal Commission plan and the earlier Ordnance Survey maps).

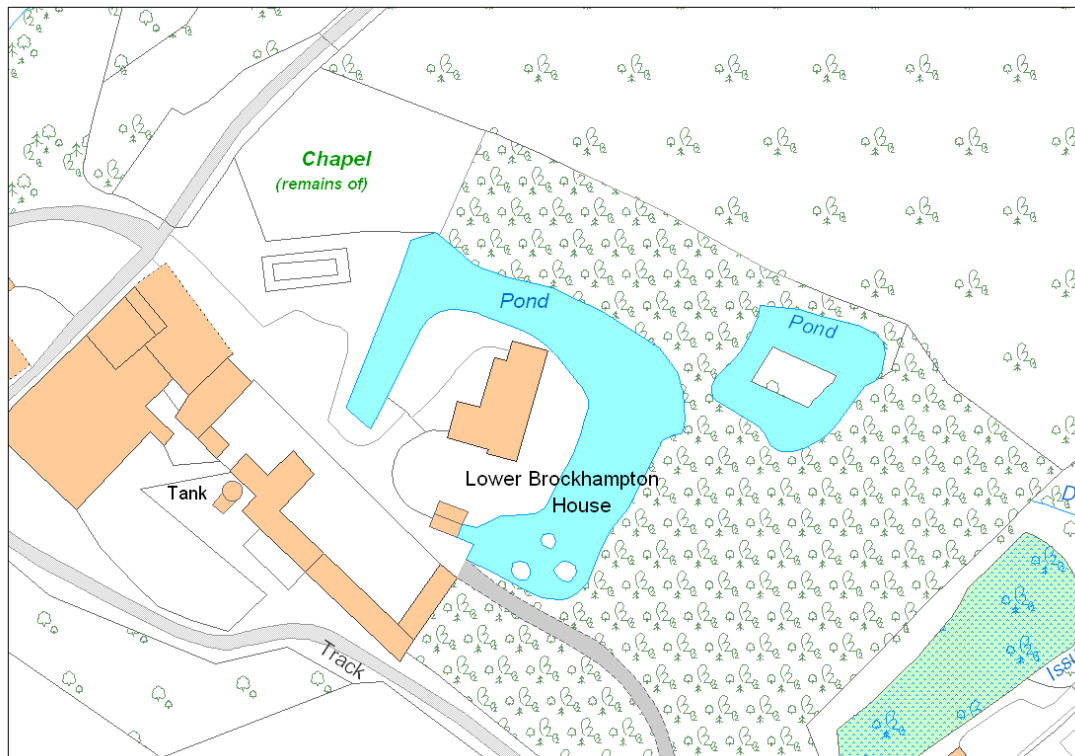


Figure 2: Extract from the modern Ordnance Survey Map

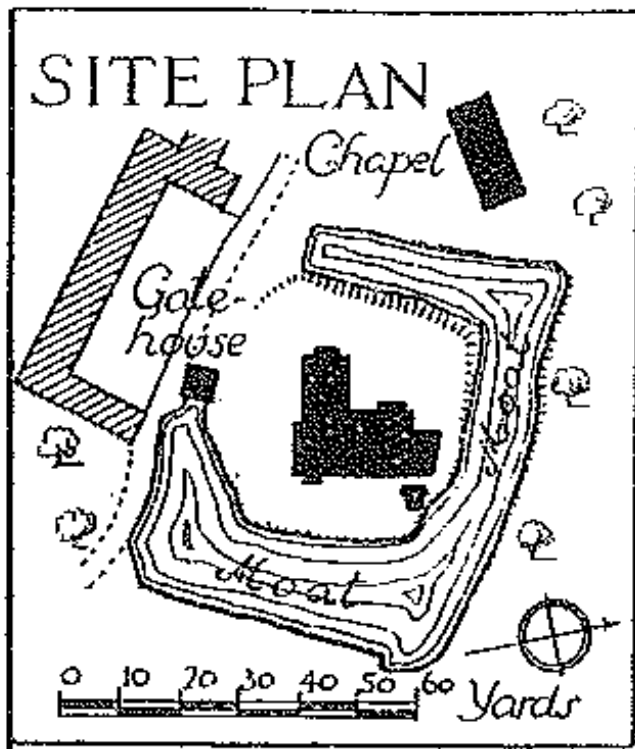


Figure 3: RCHME plan from 1931. Note the structure to the east of the north eastern corner of the house.

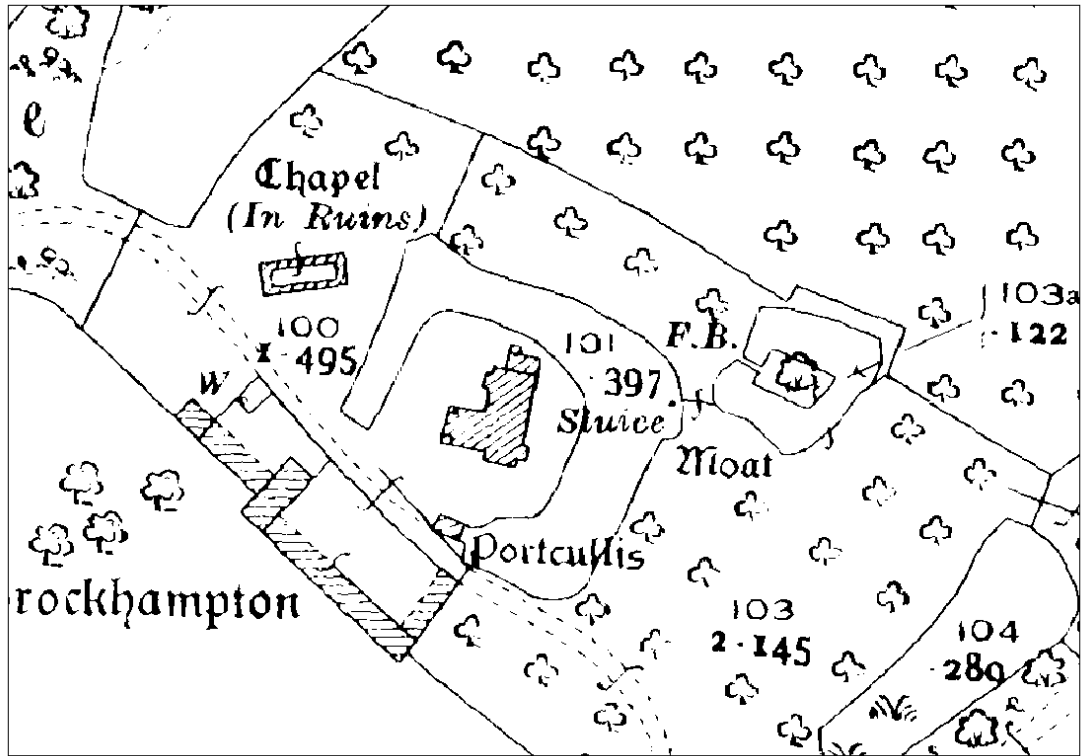


Figure 4: Extract from the 1928 4th Edition Ordnance Survey Map

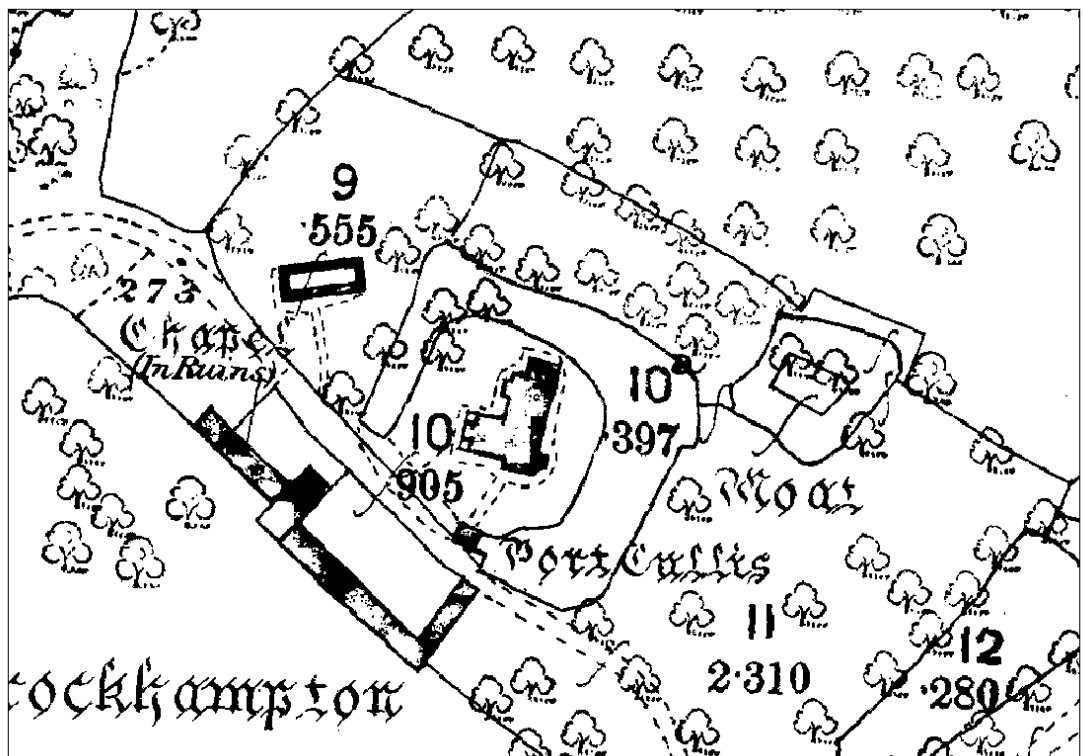


Figure 5: Extract from the 1885 1st Edition Ordnance Survey Map

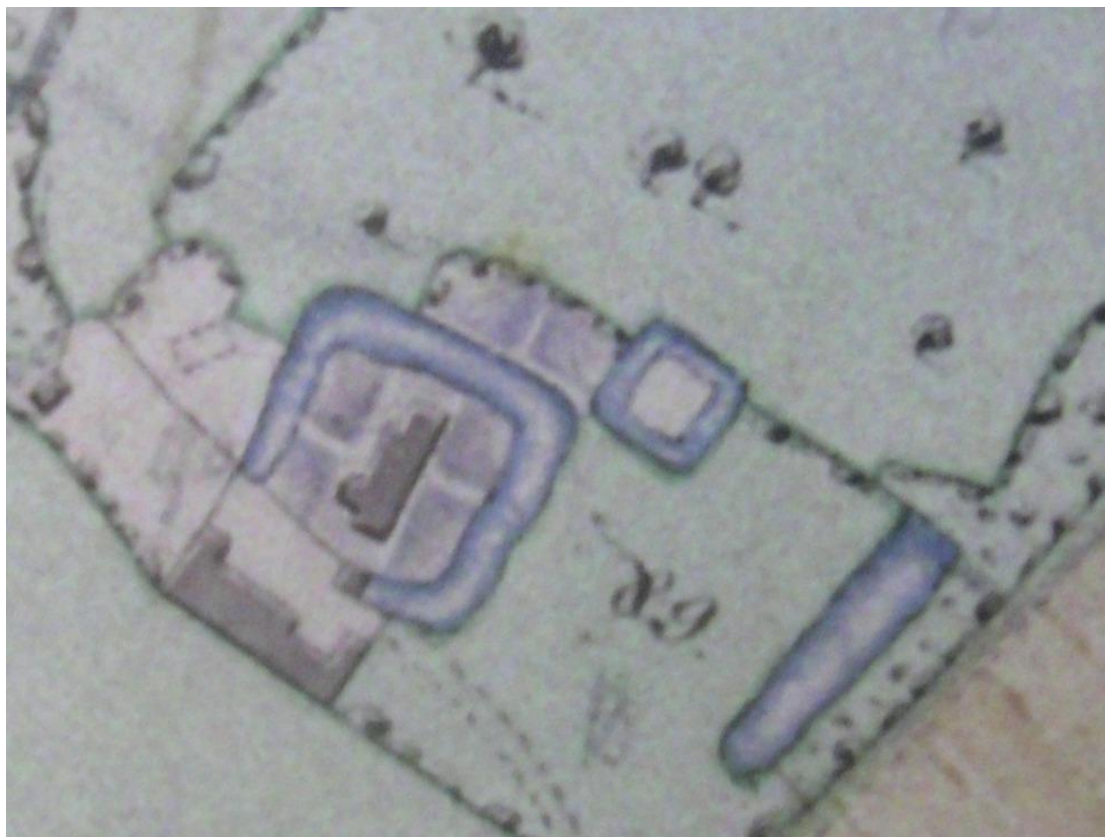


Figure 6: Extract from Thomas Leggett's 1769 Estate Survey Map

In addition to the Ordnance Survey mapping, two 18th century estate maps were examined. A version (perhaps a copy) of Thomas Leggett's estate survey of 1769 provides much detail concerning the shape and layout of the moat and its environs, (figure 6). The map clearly depicts a square moat, albeit with the south-western corner missing, that is roughly a constant width. The western arm and south-western terminal appear to be very similar to the present shape and width. The house has been drawn, perhaps schematically, exactly within the centre of the island. Whilst this is entirely possible on its east – west axis (particularly when the possible original line of the moat is taken into account), this cannot be the case for the north – south axis as the distance between the northern gable end and the edge of the moat is greater than the width of the moat.

On this map, the east wing is inaccurately privileged over the hall, which is scarcely shown at all in the way that it appears today. Moreover, the gatehouse is shown as being located directly opposite the southern gable end of the east wing, and this is clearly not the case. It very much appears that Leggett has “tidied up” at least the buildings in order to make them appear neater or more symmetrical.

The map does however show features in approximately the right place in relation to each other. Interestingly Leggett shows a small formal garden to the north of the northern part of the moat which seems to have been bordered, on its north eastern side, by a boundary along the inner side of the

ditch or hollow surveyed in 2003 (Lello & Williams, 2003) and suggested as being the line of an earlier moat. This of course may mean that this garden was constructed within the level area between the present moat and the earlier moat outline. The possibility could also be raised, however, that the earthworks recorded in 2003 were a product of the construction of this garden. The small moat to the north – east of the main moated site is depicted as a regular square with a drain / leat running from the north-eastern corner of the main moat to the south-western corner of this lesser moat. To the south-east of both moats there is a trapezoidal pond. The shape and dimensions strongly suggest that this was created as a fishpond – a common practice during the early post-medieval period.

The earliest map of the Brockhampton Estate that is known to survive is an estate map of 1737 by John Perkins, (figure 7). This does not show the house or its close environs in any detail and was of little use for the purposes of this study. It is assumed that the field boundaries and stream courses were the principal features mapped by Perkins with features such as the moat, fish ponds and other pools being omitted.

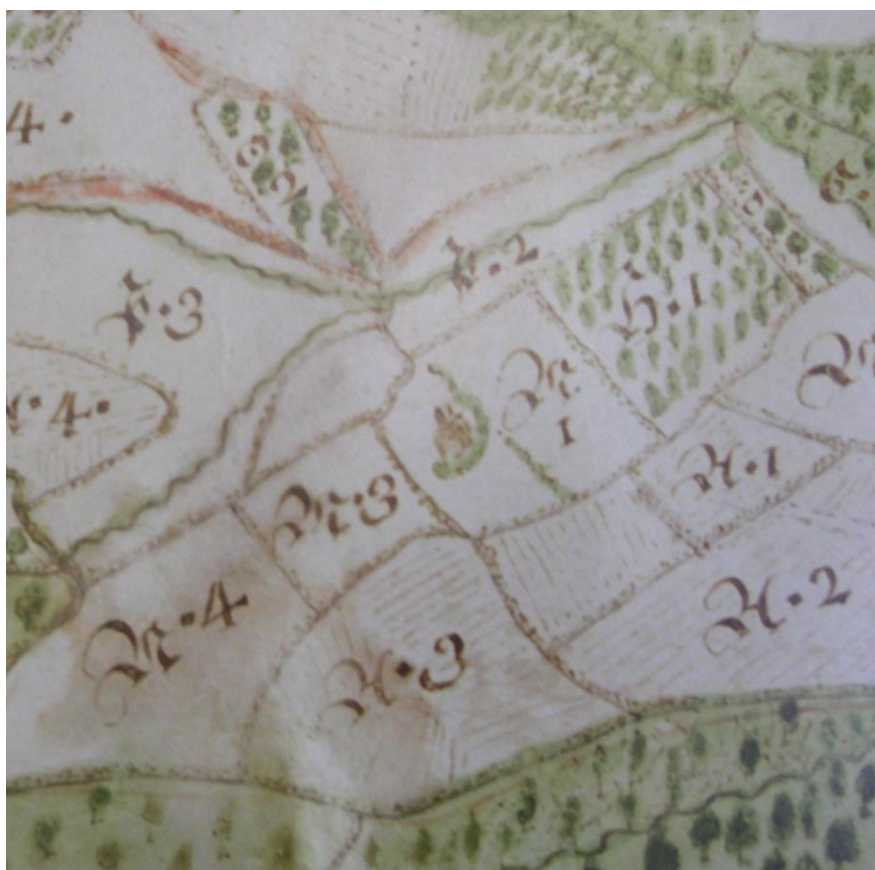


Figure 7: Extract from John Perkin's 1737 Estate Survey Map



Figure 8: Lower Brockhampton in the early 1930's by Alfred Watkins.

A number of archive photographs in the ownership of the National Trust were examined. These mostly relate to the renovation works of 1952 and did not add any additional information concerning the moat. Two photographs taken by Alfred Watkins in the early 1930's show the banks of the moat heavily vegetated (figure 8).

7.0 Previous works affecting the moat and its environs

Historically, works to the moat are not well documented. The house and gate house were substantially restored during the 1860s. It is clear that extensive works were undertaken during the re-roofing and other structural works undertaken in the 1950s. It is apparent that additional works were undertaken specifically on the eastern side of the moat possibly at the same time as the wall was repointed in 2003 (although some of this may be earlier in date). These works comprised the insertion of a timber post and board revetment which runs along most of the eastern bank of the eastern arm of the moat. During 1993 The City of Hereford Archaeology Unit was commissioned to carry out an outline analysis of the fabric of the manor house, and to carry out limited excavation and a watching brief required by the upgrading of drainage runs to take rainwater from the roof to the moat (Morriss & Hoverd 1994). During the recording of the drainage runs to the east and to the south-east of the house, no cut for the internal edge of the moat was recorded and no evidence for a revetment came to light.

In 1998 Frank W Haywood and Associates were contracted to assess the condition of the pointing of the stone wall which lines the southern arm and south-eastern corner of the moat. Areas of erosion were identified together with areas of undercutting. The same company designed the provision of a

1.2m diameter sump which was to be placed close to the south-western terminal of the moat and used as a pumping point in order to extract clean water via a fire appliance in case of fire at the site. It is understood that the sump was placed into the moat in 2002. Works were undertaken in May and June 2003, under archaeological supervision. The works comprised the repointing of some areas of wall and the re-building of others. The archaeological recording of the stratigraphy behind sections of rebuilt wall provided little evidence for the manner or date of either the construction of the moat or any earlier revetment structures. It would appear from the report (Marches Archaeology Series 318) that the walling dates from the late 18th or early 19th century.

In 2002/3 Herefordshire Archaeology undertook a rapid inventory survey, providing basic point data for identified earthworks and other surface features (Ray, 2002/2010). The report flagged up the need for further work in the close environs of Lower Brockhampton house. An earthwork survey of the area to the north and east of the moat was carried out later that year. This recorded the form of the putative early course of the moat. Then a geophysical (resistance) survey of an area inside the moat and an area to the north and east of the chapel was conducted. The geophysical data was inconclusive and although the presence of a western wing is possible, it is still far from proven (Lello & Williams 2003/2011).

During 2011 a 'comprehensive analytical survey' of the manor house was undertaken by Jill Campbell. This included a geophysical (resistance) survey in the same area as the survey undertaken in 2003. The results from this were inconclusive. A baseline survey plan was produced as an illustration within the report. This has been taken to suggest that the plan was derived from a new survey (NT brief for the present project, J. Young, November 2012). However, it was found that the plan was based simply upon a redrawing of the available Ordnance Survey information.

8.0 Fieldwork in 2012

Over the course of three days prior to the assessment taking place the water level of the moat was dropped to approximately 0.35m below normal. This was enough to provide a 'foreshore' around much of the moat which, it was hoped, would contain the remains of earlier bank revetments. Site work took place on Sunday 4th and Monday 5th November. This was primarily arranged in order to have one day (Sunday 4th) to interact with visitors to the site.

An initial inspection did not reveal any timber or masonry revetment lines within the moat 'foreshore'. A rake was used to drag the mud in order to detect any remains which might survive below the water level. However, no remains were encountered. It became clear that the plans created by Campbell in 2011 and Frank W Haywood Associates in 2002 were not accurate enough to be used to locate the present edges of the moat in relation to the house and gatehouse.

A new accurate measured survey plan was produced using a Total Station survey instrument. This new survey plotted the top and bottom of the moated area bank, together with the footprint of the house, gatehouse and chapel. This was then used as a base plan onto which features relating to changes associated with the moat could be mapped (figure 9).

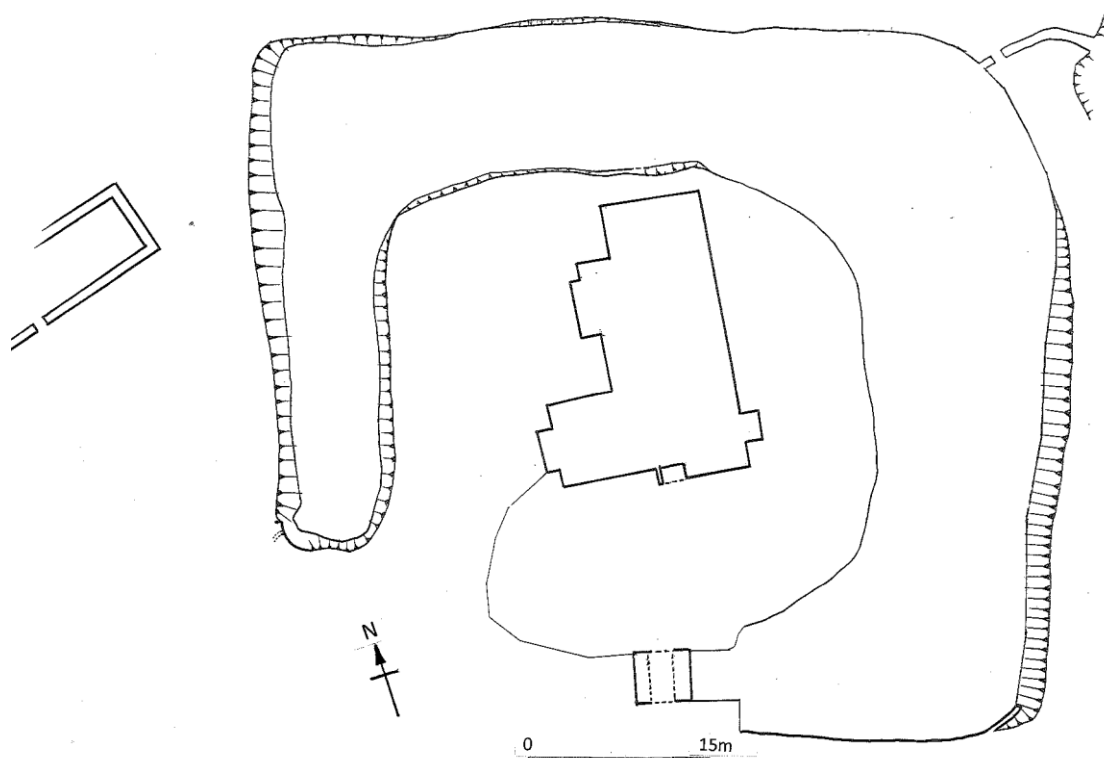


Figure 9: Measured survey plan produced in order to locate the buildings accurately in relation to the present edges of the moat.

The moated area bank

Inspection of visible areas of 'foreshore' around the bank of the moated area led to the noting of a general spread of masonry and brick rubble, together with fragments of stone and ceramic roof-tiles. This material appears to have eroded out of the flower-beds and lawned areas around the house and is comparable to be the same mix of material encountered during the excavation of drainage runs leading from the house to the moat edge in 1993 (Morriss & Hoverd 1994).

This material is almost certainly associated with the re-roofing and restoration works undertaken during 1952. This deposit was encountered *in situ* along the eastern side of the internal moat bank and was traced around the south eastern corner towards the gatehouse. The bank-edge along the inner (western) side of the eastern arm of the moat was observed to be under-cut to an average depth of 0.35m. This erosion is active and has resulted in the plastic foul water pipe, which was laid in 1993, being exposed for a length of

0.4m (east-west). The end of this pipe was almost flush with the moat-edge in 1993 (Morris & Hoverd 1994), and the area around it has been under-cut by a further 0.4m, indicating active erosion for almost a metre in the last 20 years (Plate 1).



Plate 1: Plastic pipe laid in 1993 showing amount of erosion and undercutting over the last 20 years.

The inner bank of the northern arm of the moat is higher and steeper than the bank along the western inner edge of the eastern arm of the moat. It appears that much of this stretch was revetted in the past by a masonry wall (Plate 2). The surviving extent of the walling is not known, but displaced masonry lies within the moat along most of the northern side (a distance of around 25 metres).

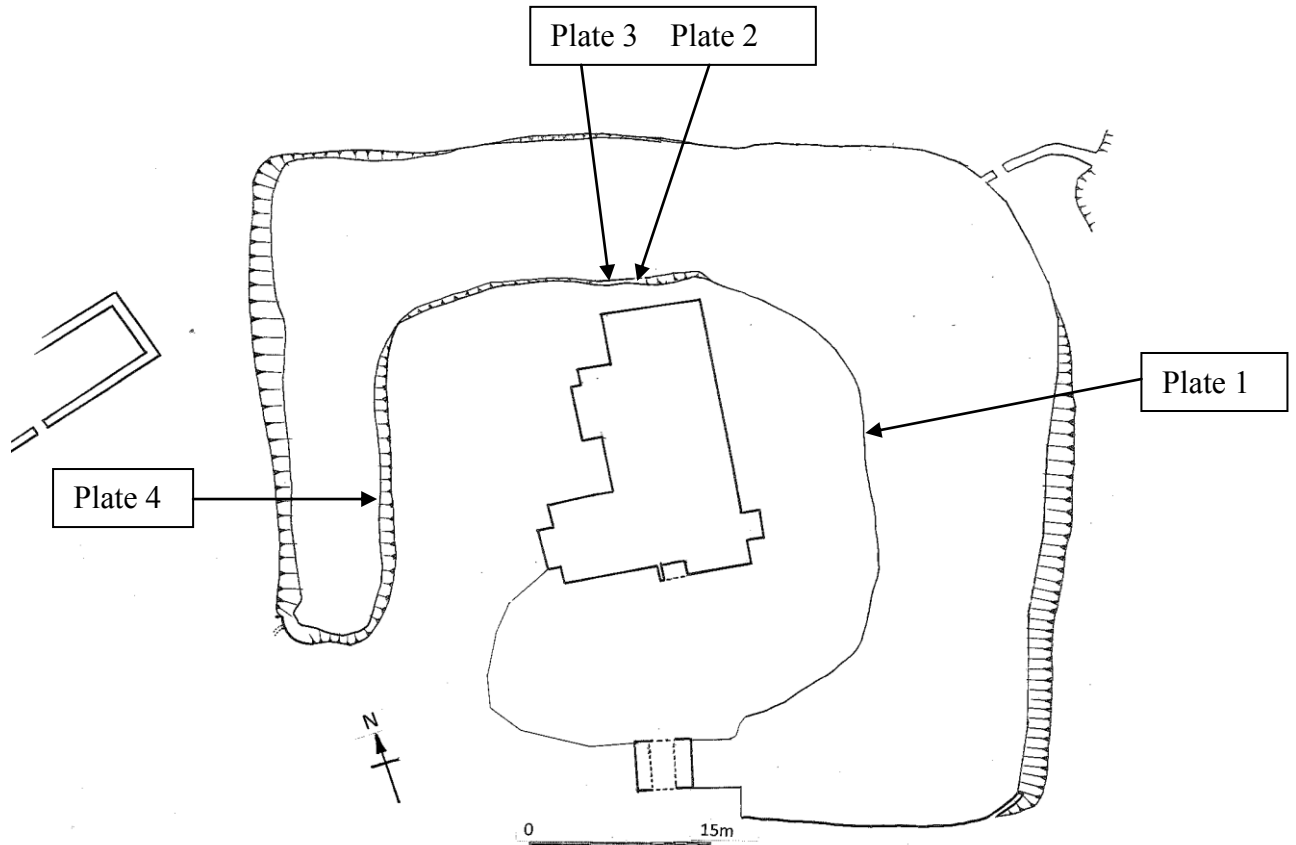


Figure 10: Location of features photographed on the inner bank of the moated area



Plate 2: Remains of masonry wall along the north-facing edge of the inner bank of the northern arm of the moat. Note the proximity of the north gable end of the east wing of the house, and the extent of under-cutting of the bank and of the consequent undermining of the revetment wall.



Plate 3: Collapsed wall immediately to the west of plate 2. Note the recent erosion of soil in the bank above the masonry.

The collapsed masonry is particularly dense along the line of the north gable end of the most northerly part of the east wing of the house, and the rubble continues around the inner bank-edge of the western arm of the moat. This suggests that this bank, also, was once revetted by a stone wall (Plate 4). In places, large stone blocks appear still to be attached to the bank. However, not enough survives to indicate the original scale of the revetment.



Plate 4: Squared stone rubble along western internal face of moat.

The outer bank of the moat

At the south-western terminal of the moat a length of well-coursed masonry wall was recorded. The stone size and the character of the build differs from the stone walling encountered along the inner circuit of the moat. The walling at the south-western terminal was completely overgrown with ivy and shrubs. After clearance the opening of a brick-lined and stone-roofed drain was encountered.

This drain measured 0.35m wide and 0.15m high and clearly came from the fold yard 25m to the south (Plate 5). It appears that the drain has been purposefully blocked by a stone slab approximately 1.6m from its end. (Plate 6). The well-built wall clearly terminates approximately 0.8m to the north of the drain. However, in the opposite direction to the south and west some degraded walling continues to run for at least 3.5m, gradually becoming fragmented by tree roots as it runs around the moat terminal. In general this length of surviving walling represents a revetment clearly defining the south-western end of the moat, presumably dating from the construction of the fold yard in the late 18th or 19th century.

With the exception of the stone wall which was re-pointed and in part rebuilt in 2003, no other evidence for revetting in stone was recorded on the external bank of the moat. The eastern bank has been revetted by timber planks and posts at some time prior to 2004.



Plate 5: Stone wall and drain in south-western corner, external bank.



Plate 6: The inside of the drain showing the vertical slab used as blocking.

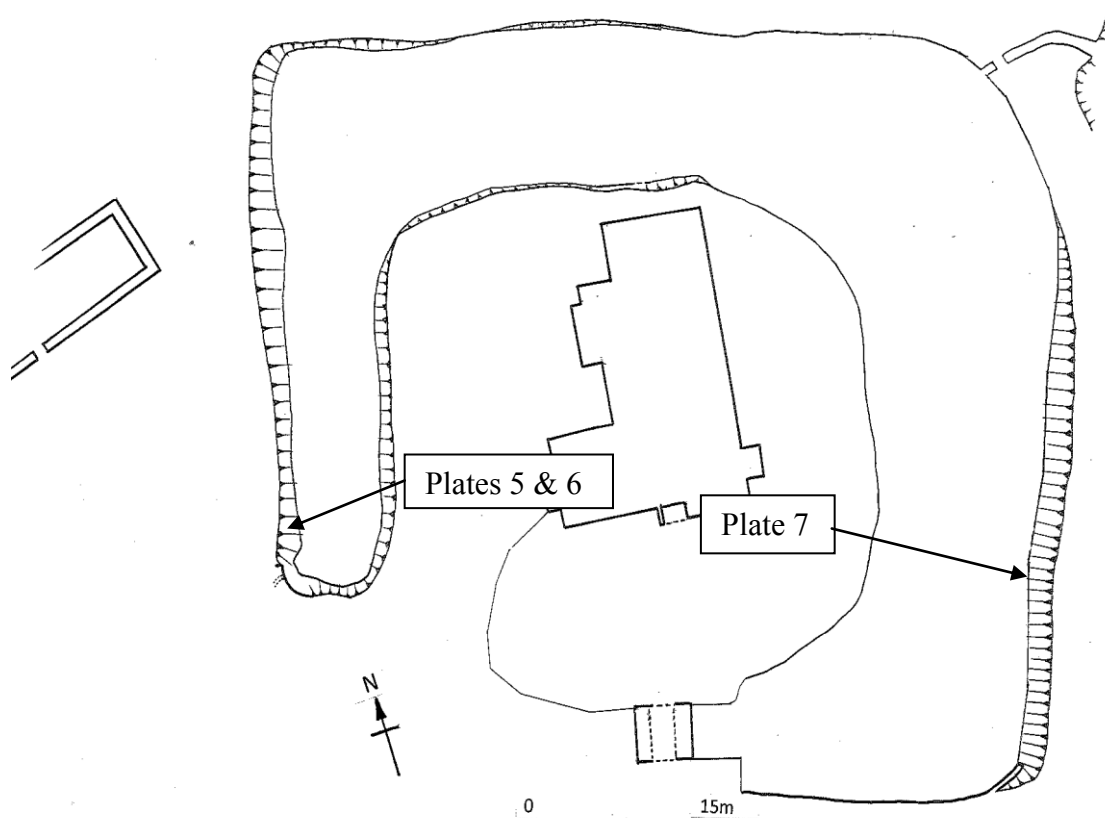


Figure 11: Location of features photographed on outer bank of moat

This system of timber revetment was presumably an attempt to halt both erosion through water action and more localised decay caused by water-fowl. This system of bank stabilisation appears to have had only limited success as the water has penetrated behind the planking and has undercut the bank (in some cases substantially). Further scars are being produced by water-fowl using localised areas to enter and exit the moat, (see plate 7).



Plate 7: Timber revetting showing under-cutting and scaring due to water-fowl.

No evidence for timber revetting was recorded around the internal bank or within the moat itself. The considerable quantity of liquid mud which fills the moat was raked in order to detect any submerged structures but none were found. An attempt was made to produce a profile of the moat using the total station and reflecting prism. However, the mud was too deep to safely access the centre of the moat. Nonetheless, in making the attempt to record the profile, it was observed that there was a distinct line running north-south beyond the inner eastern bank, that represented a rapid deepening of the water within the moat. This was detected approximately 4m to the east of the eastern internal bank of the moat (figure 6).

This line representing greater depth to the moat was traced along the eastern side of the moat and found to turn quite sharply into the southern arm of the moat. It is suggested that this abrupt change in the current moat base represents the remnant of the original cut for the moat. If this were proved to be the case it would not only provide a far more even and regular form to the moat but also place the house closer to the centre of the island, in line with the earliest close mapping of the site in 1769.

An inspection of the material on the fore-shore failed to record any building material or artefacts which pre-dated the mid-18th century. The vast majority of this material appears to be building debris originating from both the 1952 restoration and the renovation works undertaken during the 1860s.

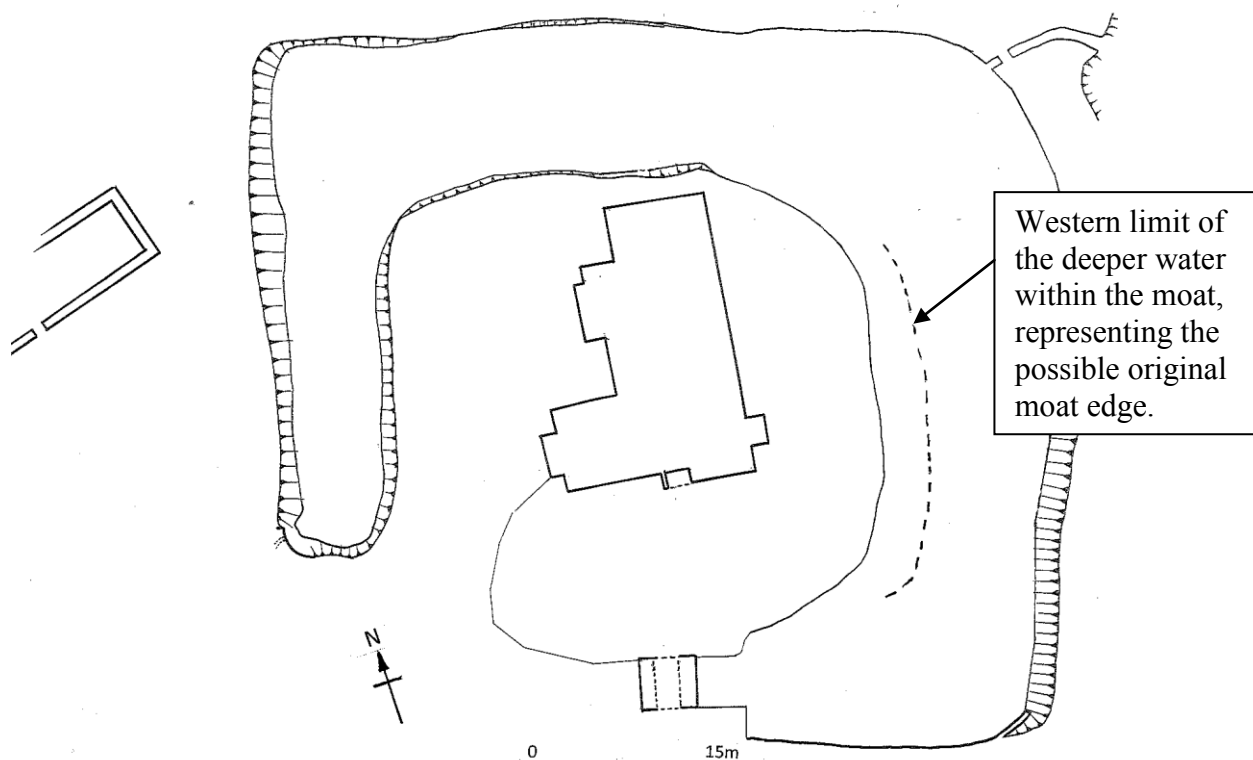


Figure 12: Location of deepening of water detected within the moat and possibly relating to the line of the original moat

9.0 Moated sites as a class of archaeological monument

The class of monument referred to as a moat typically comprises a square or rectangular platform, the 'moated area', surrounded, or at least partially surrounded, by a water-filled ditch. There are numerous variations to this basic description (Figure 2). The ditch (moat) may be irregular in shape or may be circular. The width of the moat may vary considerably, as can the extent of the area of ground enclosed within it. In profile the moat ditch is usually "U" shaped in profile and encloses either a level platform rising to hardly any height within the moat, or an area raised above the level of the ground surrounding the moat through the dumping of up-cast material during the digging. Access to the platform/moated area would usually have been via a wooden or stone bridge. Moated sites usually contained a principal dwelling which may have comprised a number of separate buildings. Ancillary buildings would normally comprise agricultural buildings, barns, dovecots, granaries, stables etc. and these were often located outside the moat or were surrounded by their own smaller moat.

The most obvious reason for constructing a moat is for defensive purposes. It is however clear that such a feature would present only a minor obstacle to a sustained attack. The moat should therefore be viewed perhaps more as a security measure against small scale brigandage, inter-family feuding or local unrest. The construction of a moat may have been regarded as an easier option than the building of a stone wall, because it eliminated the need to obtain a licence in order to crenellate or create murage. The provision of a

watery boundary may also have been dictated by topography and the underlying geology. There are reasons however, for believing that security was not the only consideration for moat building. A number of sites are only moated on two or three sides, while others have permanent causeways and many appear not to have used the up-cast from the moat construction to raise the level of the internal platform. There are instances, too, where the moated site is purposefully placed in a location where any ability to defend is compromised.

Apart from defence, a moat may therefore have served several purposes. It is likely that once constructed, a moat would have been stocked with fish for the purpose of small scale fish farming (Thirsk 1997). The construction of a moat may also, depending on topography, geology and so on, improve site drainage. It is likely that despite the physical benefits of constructing a moat, many may have been created not primarily for security, drainage or the other reasons mentioned above, but rather for the social prestige which such a feature might bring.

During the 13th and early 14th centuries the moat became an expression of social status and became fashionable at a time when a new layer of society, that of the “yeoman”, or “gentleman farmer” began to emerge. Moat building can, in some instances at least, be seen as an attempt by an emergent land owning class to imitate its social superiors and also to separate itself both socially and physically from the lower ranks of society.

As the population dramatically declined during the later 14th and 15th centuries and pressure on agricultural land became less, the need for moats and the fashion for them fell out of favour (Taylor 1983). The moat was, by its nature, a restrictive feature and was no longer in keeping with the more expansive Tudor tastes. This led to the abandonment of many moated sites during the late 15th and 16th centuries as manor houses were built in more modern styles in new locations.

During the late 16th, 17th and 18th centuries moats became incorporated into the designed landscape, becoming more “garden features” than practical constructions. During this period, moats were often widened on one or more sides to provide one or more vistas from the house towards and from house across the moat. Some continued to be used as small scale stew ponds whilst others were maintained as water features, or drained and/or in-filled.

10. Sub-regional comparative study of moated sites

Comparison with other local examples of moats is difficult as little is known concerning their origins and development. It is however clear that moats and moated sites can be divided into two categories, seigneurial and sub-manorial. Seigneurial sites were the principal residence of the lord of the manor who may hold a number of manors. Such sites are usually located in the centre of a parish and close to the parish church and village nucleus. This can be seen at the moated site of the bishop of Hereford in Whitbourne, (HSM 3951). Sub-manorial moated sites were largely occupied by wealthy freemen

and merchants who formed an agricultural “middle class” and whose newly acquired wealth allowed them to become small-scale landowners through the gradual fragmentation of the larger baronial estates during the late medieval period. These were more often located within smaller settlements or in more isolated locations.

The moated site at Lower Brockhampton appears, (at least in its present form), to fall into the sub-manorial category and may be comparable to moats of similar size and shape such as those at Stoneyard Green in Bosbury (HSM 18308), one close to Upleadon Court in Bosbury (HSM 1681), and possibly the remains at Sawbury Hill, Bredenbury (HSM 12098). This type of moated site appear to represent a regularly-shaped moat enclosing a small manor house or principal farm house of late medieval or early post medieval date. Few moated sites within the county have been researched or excavated and as a consequence little detail is available concerning their true social status, development or longevity.

One example where limited archaeological excavation has occurred, including a section across the line of the moat, is Ford Abbey, Pudleston, (HSM 1199). The moated site contained the principal farmhouse for the estate which belonged to Reading Abbey, the mother house of Leominster Priory. The excavation across the moat (now dry), indicated that the moat was never more than 1.4m deep and therefore not defensive. It was constructed in the late 15th or early 16th century and was drained of water and partially in-filled by the 18th century (Hoverd 1997).

The Pudleston example (figure 13) would appear to have some similarities with the moated site at Lower Brockhampton, at least in terms of chronology and development. However, evidence from 18th century estate maps provides additional information regarding the later development of the moat at Lower Brockhampton as a designed landscape feature (see below). It is possible that the eastern arm of the moat was purposefully widened during this period in order to make this side of the moat more of a garden feature.

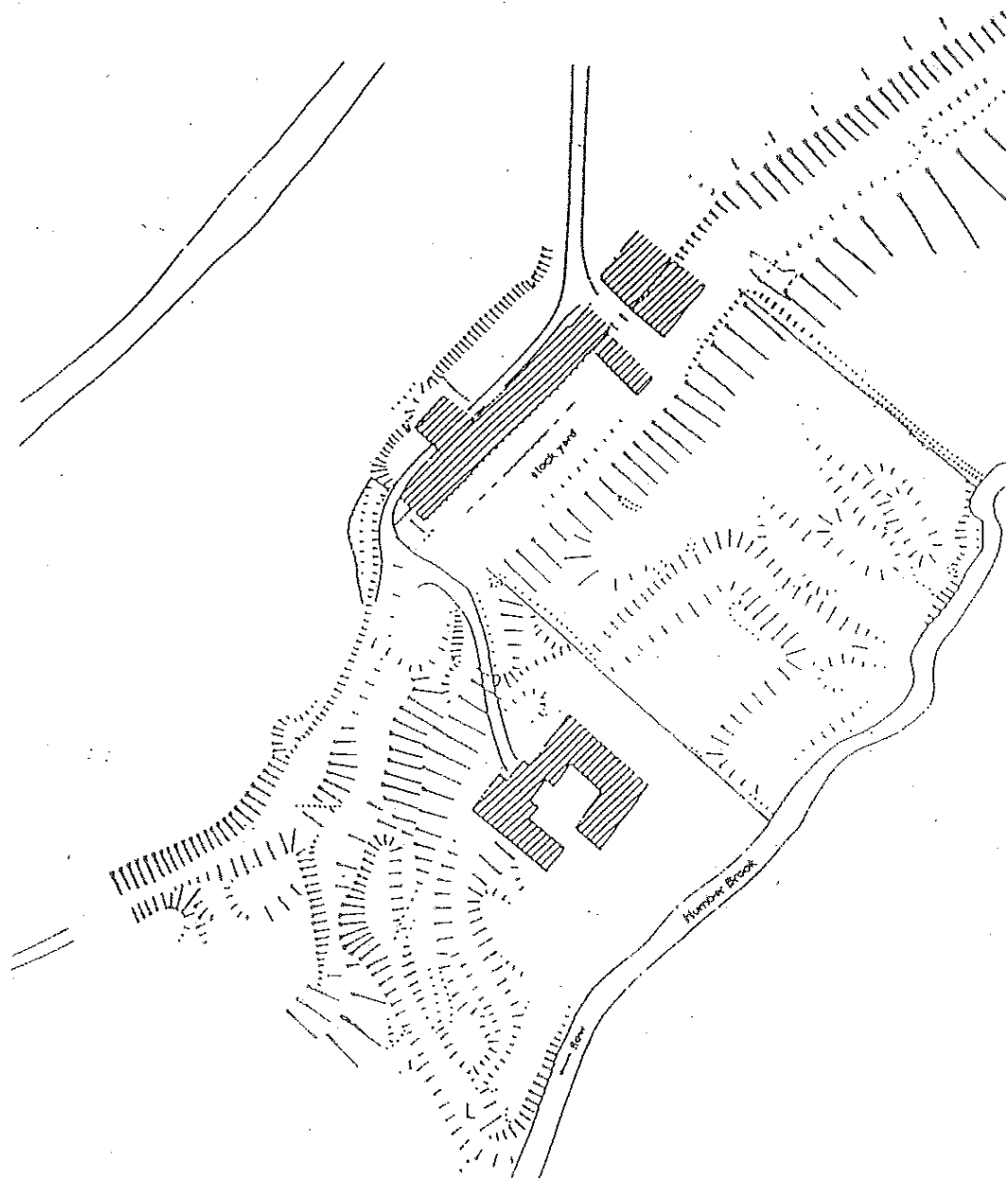
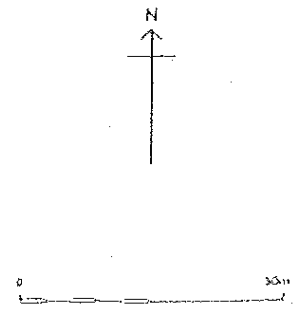


Figure 13: Plan of the earthworks and topography within the environs of Ford Abbey Farm, Pudleston.
(Caroline Atkins Consultants 1999)



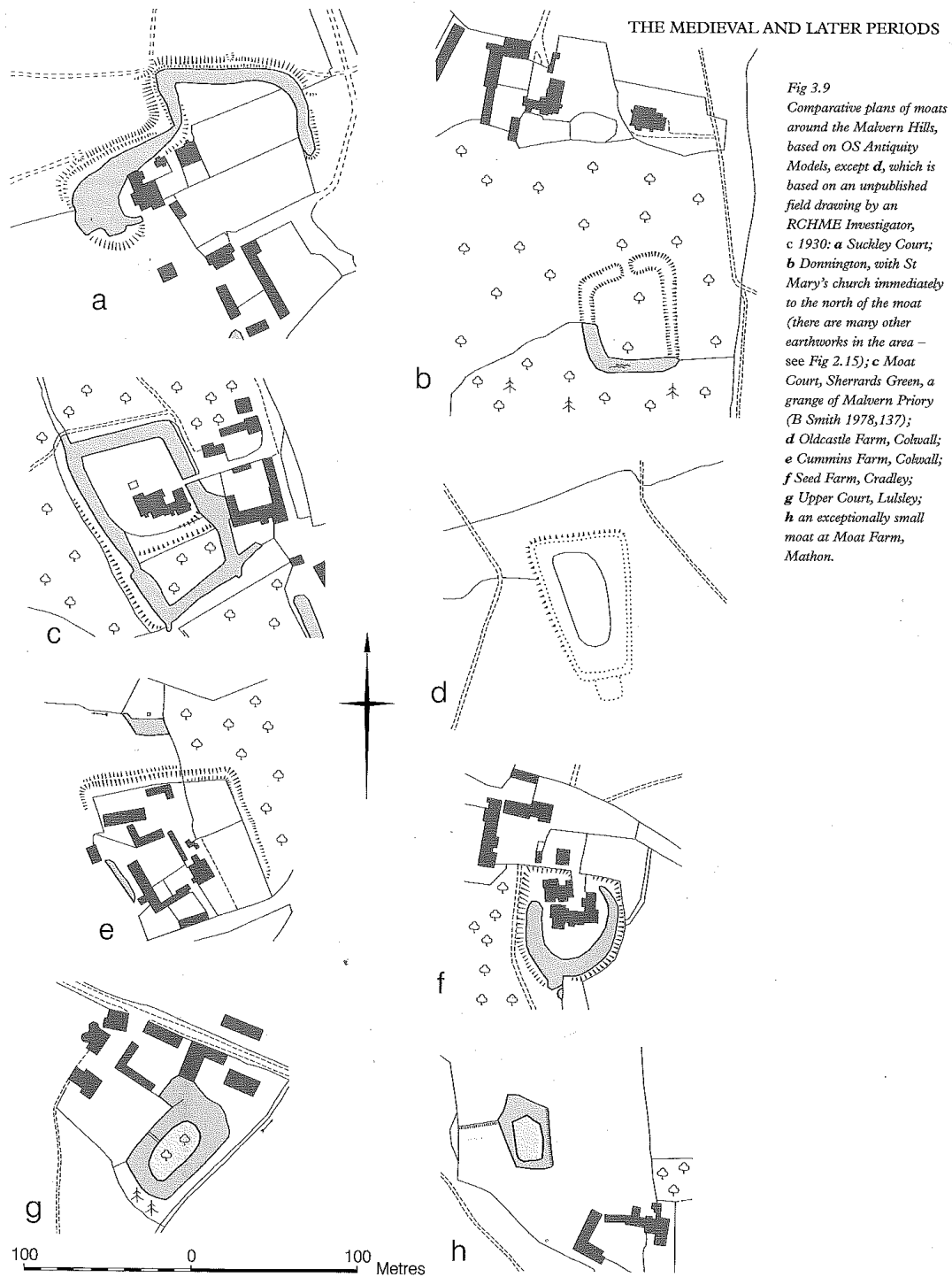


Figure 14: Survey plans of moated sites within the Malvern Hills AONB, (Bowden 2005).

Conclusions

The conclusions provided here concentrate on the main substantive questions posed in the brief for the work:

- How has the size / layout of the moat changed over time?
- Is it possible to identify where possible the phases of construction and infilling of the moat?
- To what extent was the moat revetted with stone and when does this stone revetting date to?
- How significantly has erosion caused the moat to widen/ alter shape?

In addition, there are brief sections that:

- Specify the nature and incidence of bank-side erosion, and identify causes thereof
- Suggest how the historical and developmental historical model might be refined through further fieldwork
- Suggest practical remedies to the present and on-going problems of bank-side erosion
- Summarise the findings of the report and make a revised statement of significance of the assets in light of the present project

1. Size and layout of the moat: changes over time

- 1.1 No data was retrieved that throws direct light on the question as to whether there was an original form of the moat that saw it extending further to the north (and possibly east). See 2.1, below.
- 1.2 The moat was narrowed at the point where the ornamental gatehouse was built, presumably (but not certainly) at the same time, in the early 16th century.
- 1.3 Changes to the shape of the moat since the mid-18th century appear to have been caused by erosion, with up to 4m of land contained within the moat having been lost on the eastern side of the house since 1769. Most of this erosion, which has removed the inner corner to the north-east of the east wing of the house, seems to have occurred before 1885.
- 1.4 The earliest dated plan of the moat (T. Leggett's Estate Plan of, 1769) shows the south-western corner of the moat already filled in by that time. Given the marked symmetry of the rest of the moat it seems reasonable to suppose that this occurred when the farm-yard was created, or extended, northwards. This presumably occurred when Brockhampton Park was built, and the estate centre moved, in the mid-eighteenth century.

- 1.5 The extensive erosion noted along the inner east-facing bank of the moat appears to have become worse in recent years, in part seemingly due to planting strategies and the movements of wildfowl from and into the water.

2. Phases of construction and infilling of the moat

- 2.1 It is still possible to posit an original form/location of the moat that the present arrangements represent a modification of, perhaps associated with the construction of the present (14th/15th century) house.
- 2.2 The present configuration of the moat, as a square moated area with symmetrically placed and shaped arms to north south east and west of the house was certainly in place by 1769. Its origins may however lie in the 14th/15th century (2.1, above).
- 2.3 The eastern arm of the moat may have been modified when an ornamental further moat, of miniature size, was added to the north-east. No evidence to support or refute such an idea was gained during the fieldwork for the present project.
- 2.4 The south-western corner of the moat appears likely to have been modified and in effect filled in when the fold-yard/farmyard was built in the mid-18th century.

Discussion of the development of the moat and the progress of its possible in-filling

The moat at Lower Brockhampton comprises the west, north and eastern sides of a square moat which appears to have been approximately 5-6m wide. Its date of construction is unknown. However, there is some earthwork evidence which may suggest that the present moat has partially used the circuit of an earlier moat (Lello & Williams 2003/2011). This could mean that the putative 'original' moat is contemporary with, or earlier in date than, the construction of the manor house close to its present form. The early form of the manor house is unknown, and it is possible that the stone structure that at present terminates northwards the east wing of the house is part of an earlier building, substantially replaced. This could explain why the present building has an eccentric orientation in respect to the present moat.

The form of the moat may have been modified deliberately at least twice (or in two places) in its pre-18th century use-life. The first modification could have seen a slight widening of the eastern branch of the moat and a reconfiguration of its north-eastern corner to create the stone-lined leat linking into the 'miniature moat' to the east. This may have been contemporary with the construction of that ornamental feature, and the building of the ornamental gate-house in the early 16th century.

It has been assumed that the widening of the eastern branch of the moat was due to erosion, but this is not proven. It could in fact have been consequence of a deliberate rendering of the manor-house as a Picturesque feature prior to 1885. Two periods could be considered: the end of the 18th century at the height of the Picturesque fashion, or simultaneously with Buckler's restoration of the building in 1871. Of the two, perhaps the latter is most likely since it would have provided a more visually striking setting for the newly restored building.

It has also been assumed that the south-western arm of the moat was filled in at some point between this period and the mid-18th century. This however has not been proven and it is possible that the moat was never designed to be a complete circuit. The cut recorded within trench 2 of the evaluation excavations for a new path in 2011 was not investigated in order to establish whether this was indeed the original moat edge to the west of the gate-house or a feature associated with some other structure (Hoverd & Williams 2011).

3. Revetment of the moat in stone

- 3.1 The northern, western and at least part of the southern *inner* banks of the moat appear to have been revetted in stone. The exact nature of this revetment is uncertain: there are some indications of walling employing large, well-squared blocks of stone along the western side.
- 3.2 In other areas (perhaps especially the northern side immediately adjacent to the stone-walled structure at the northern end of the east wing) it may have been rebuilt; along the southern inner side, it may have been rendered obsolete and become buried when the ornamental gatehouse was built and the moat accordingly narrowed here.

4. The impact of erosion on the widening of the moat

- 4.1 The greatest impact of bank-side erosion in terms of moat widening has been along the inner eastern bank, and this has also substantially changed the configuration of the moat and the relationship between the house and the moat.
- 4.2 The impact has been to have effectively lost up to 4m of contained ground. However, as noted above, this situation is not a new one, having occurred before at least 125 years ago

5. The nature, incidence and causes of bank-side erosion

- 5.1 Along the *inner* bank of the moated area, it is clear that the greatest erosion has occurred along the east-facing bank. This could have been deliberate, but perhaps has rather comprised the gradual cumulative impact of waterfowl movements, and lack of bank-side management. Whether this latter was caused

by a failure to maintain, and the subsequent collapse of, a former revetment wall remains uncertain.

- 5.2 It would appear that certainly much of the northern inner moat bank was at one point in the past retained by a revetment wall comprising well-coursed, squared, stones of large size. The northern inner bank is the closest to the house and therefore such a solid structure might be expected at that location. It does, however, seem probable that this wall continued around the western arm of the internal bank of the moat
- 5.3 All other bankside erosion can be attributed either to a failure to maintain revetment walls, or (in the case for instance of the outer eastern moat bank) the application of unsuitable methods of bank stabilisation. Along the northern outer bank of the moat, erosion could be attributable simply to a failure to manage bankside trees and vegetation adequately.

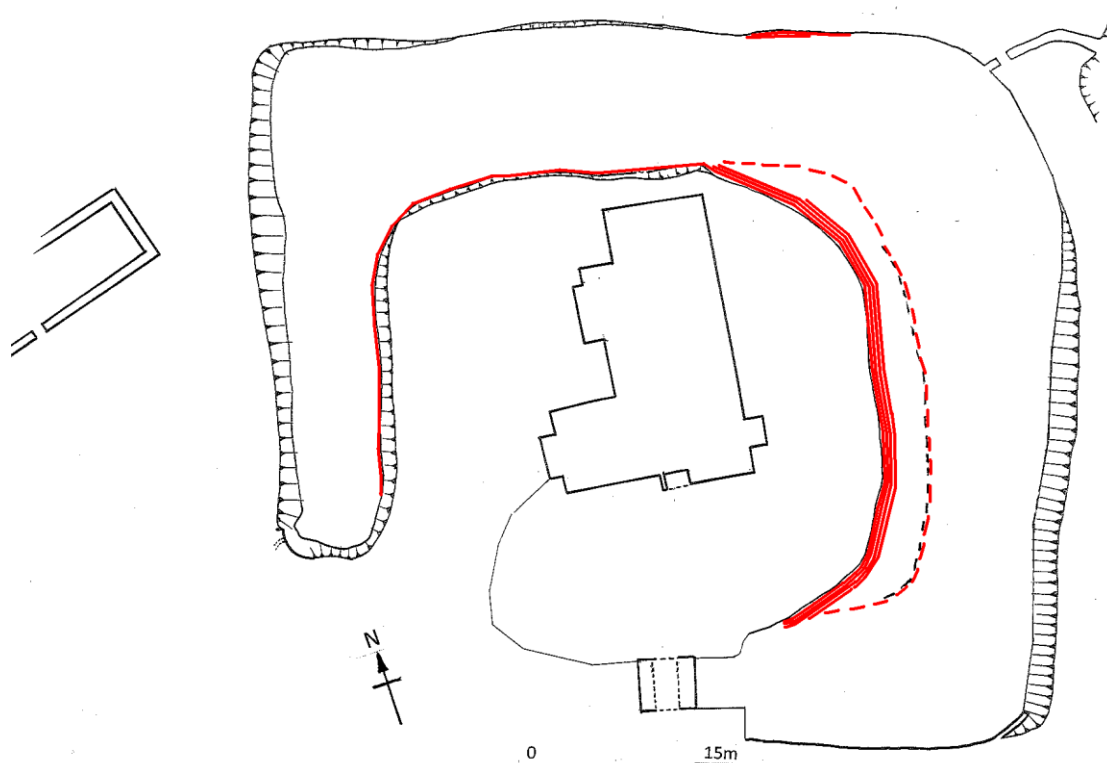


Figure 15: Areas and extents of erosion of the banks of the moat (highlighted in red)

Discussion of the revetment of the moat and the causes and nature of bank-side erosion

It seems very likely that the inner bank of the moat was, at some point in the medieval period, revetted around the whole of its circuit. While such revetting is clearly in evidence on the northern, western and southern sides of the house, it must be regarded as unproven along the eastern side, although why

this should have been neglected is unclear. The absence (or early collapse) of such a structure is clearly a likely cause of the bank side erosion here.

The remaining areas of erosion can be regarded as resulting from inadequate management or maintenance of bank-side structures. In recent years, the level of siltation of the moat that has occurred has been unacceptably high with regard to vegetation control and biodiversity, and this may have had knock-on effects for erosion by wave and waterfowl action in shallower water.

Erosion along the northern side of the internal bank comprises the undercutting of the bank to a depth of approximately 0.3m and has resulted in the collapse of the revetment walling which appears to have been constructed in order to abate erosion and to protect the northern gable end of the house and barn. Well-squared rubble is apparent along much of the length of the internal western bank suggesting that there was once a stone wall protecting this side.

The erosion on the outer bank is less simple to quantify. In general terms the external banks are higher and steeper than their internal counterparts and as a result, with the exception of one localised area of recent slippage, little evidence of erosion or undercutting was forthcoming. The timber revetting along the eastern side of the moat may have slowed erosion and may act to some extent as a support for the collapsing bank. However it is clear that the water has now got behind it and at least localised undercutting is taking place.

The 18th or early 19th century stone walling with the brick-lined drain was clearly constructed when the fold-yard 20m to the south was built. It appears that the drain was used to remove water which collected in the fold yard (possibly including water from roof gutters), and to empty it into the moat.

The assessment of the moat has recorded two separate areas of stone revetting. The first is a localised area around the south-western terminal of the moat which houses a drain and which is directly associated with the construction and use of the fold-yard to the south. This is, in the main, well preserved and with the exception of root damage at its south-eastern end, still forms a serviceable revetment for this portion of the moat.

A remnant of walling coinciding with the northern gable wall of the house / barn. The full extent of this is not known, however it is possible that the wall ran around the entire northern and western internal bank. This has almost completely collapsed leaving only squared rubble at the base of the bank.

No form of revetment was found along the eastern internal bank of the moat.

The revetment along on the outer bank (eastern side) comprises a timber plank and post structure of unknown by relatively modern date. Whilst this may have slowed erosion it is clear that there is now a void behind it and undercutting is taking place. Localised areas are being affected by the movements of water fowl.

6. Testing the historical model

- 6.1 The idea that the linear hollow to the north of the moated site could represent an earlier configuration of the moat could be economically tested in two simple ways. Firstly, a series of augur transects across the feature could gauge the depth and nature of any deposits sealed within it. Secondly, two (or perhaps three) very small excavation trenches could be placed to one side or the other of the feature, to examine its margins. The location of these potential works is marked at 'A' in figure 20, below.
- 6.2 A similar combination of auguring and at least test-pits could be employed to better determine the nature of any former revetment to the inner edge of the moat. This will be necessary in reference to the works needed to stabilise the revetment wall collapse along the northern inner edge of the moat, directly north of the manor house (Point B in figure 20).
- 6.3 The excavation of at least one small trench is also desirable in reference to the walling observed to the north-east of the gatehouse (Point C in figure 20). This would be designed to determine better the nature (and course) of any original revetment walling (this could be the only part of the circuit where its original form could be observed and recorded).
- 6.4 Ideally, it would be useful also to test the survival of lower courses of the stone-work to the west of Point B (figure 20), and at some point along the western inner bank of the moat to the west of the present manor house (possible points D and E).
- 6.5 The question of the exact date of the broadening of the moat along the eastern inner branch of the moat could be fairly simply resolved by further closely-targetted documentary historical research, tracing any evidence of mapping of the site between the key dates of 1769 and 1885.
- 6.6 Although not directly bearing upon the questions regarding the moat, some closely targeted further investigative work on the house itself could help resolve outstanding questions of date and sequence of the structures.

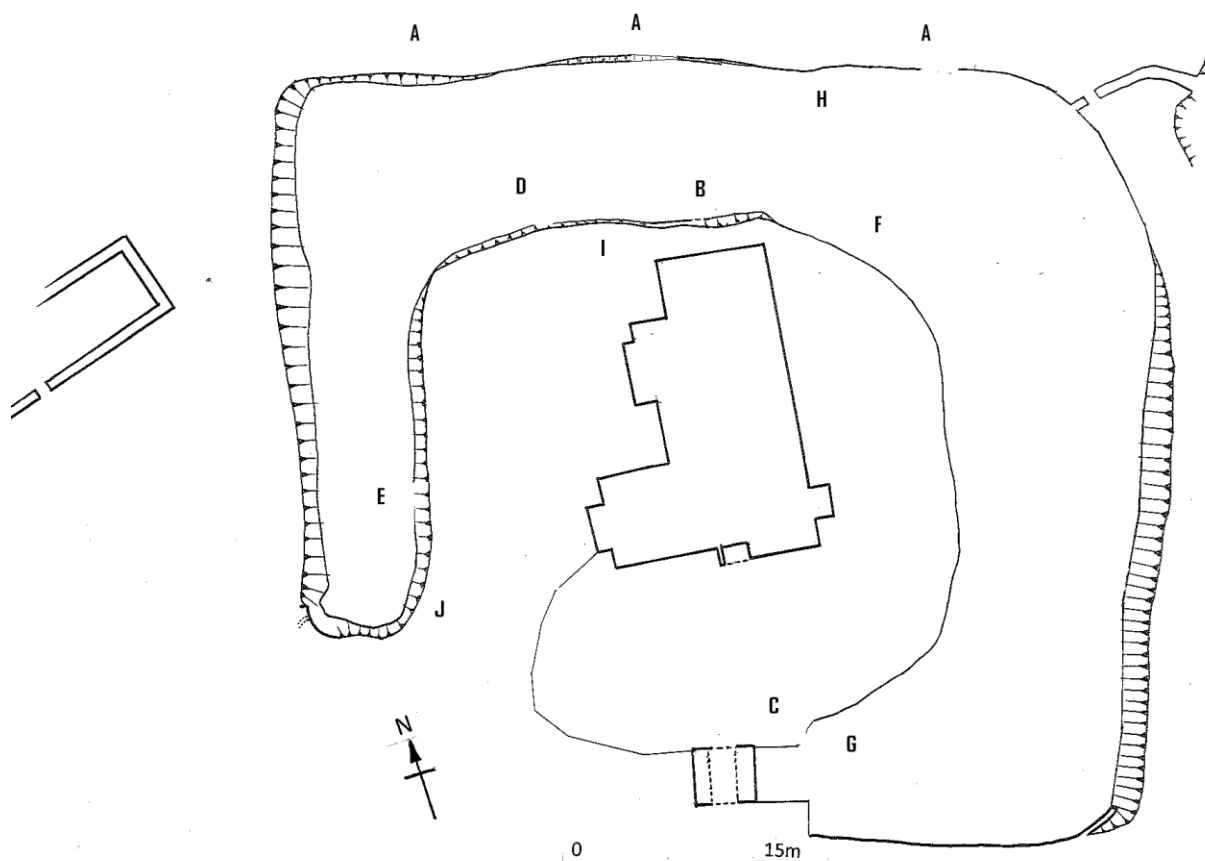


Figure 16: Location of potential archaeological works and remedial conservation actions

7. Practical remedies to bank-side erosion

- 7.1 It would not be realistic to attempt to re-instate the former configuration of the inner edge of eastern arm of the moat on its historic course – not least since this has been the situation for at least the past 125 years.
- 7.2 A remedy to the continuing erosion problem here (Point F to point G, figure 16) therefore lies in two directions: better management of siltation and water levels/quality; and reinstatement of some form of bankside revetting back to at least the situation as it was, say, 20 years ago. The former will necessarily involve the removal of much of the superficial sediment (preferably by suction) currently choking the moat. This could have the useful by-product of potentially revealing the footings of any surviving original revetment wall. If the cheaper alternative for the latter, putting in a post and plank revetment structure, is enacted, it will need to have a clear schedule of maintenance.
- 7.3 Following the excavation of a small trench at point C (6.3, above), the walling needs to be rebuilt.

- 7.4 Better simple practical solutions need to be found elsewhere, as with the areas of collapse such as that at point H (figure 16). The question that will remain concerns the feasibility of repair and re-instatement of the walling along the rest of the northern inner bank and the western inner bank (point I to point J (Figure 16).

Discussion of the recommendations concerning testing the historical/developmental model, and regarding practical remedies

The suggestions above concerning the *gaining of further information* concerning the moat and the immediate environs of the house do not necessarily involve either a major or protracted series of operations. The considerable extent of new, firm historical information they could provide could well be entirely disproportionate to the cost of the exercise. They might best be developed as a single programme in two or more seasons, with a strong visitor focus and educational component that could augment the wider visitor strategy for the property. Some of the works, however, as with those at point C (with investigation preceding stabilisation/reconstruction works, and monitoring of their progress), and those concerning the emplacement of any new revetting along the eastern inner bank, will need to be undertaken as conservation works required to adequately mitigate those works.

The practical remedies will obviously be in the hands of the Trust's works advisers. These need to be targeted on areas of collapse

8. Summary of results and (revised/augmented) statement of significance

- The inspection of both the internal and external banks of the moat has provided much information concerning its current shape, the degree of erosion and evidence for the revetment of sections of the bank.
- It is clear that much erosion has taken place around the internal bank of the moat. This is particularly prevalent on the eastern side, where loss of bank and continued undercutting has resulted in the collective loss of approximately 0.75m over the last 20 years, and up to 4m since 1769.
- While the construction date of the present house and gatehouse are now known to be between the early 15th and the mid-16th century, the date for the construction of the moat is unknown. It may be that the present circuit of the moat was contemporary with the building of the house and gatehouse. However, it is also possible that the moat predates the present house and gatehouse and that the present earthwork represents the latest phase in a series of moats dating from the medieval period.

- During the course of the documentary research it was noted that the Thomas Leggett 1769 estate map shows a small garden to the north of the moat (figure 6). It appears that this garden is located between northern arm of the moat and the earthwork ditch noted in the survey report of 2003. This raises the question of whether the earthwork ditch pre-existed and relates to an earlier moat or drainage feature as suggested in the 2003 report, or whether this feature was constructed as a boundary for the garden.
- It is clear that the moat has not been cleared out for a long time. There is a considerable depth of liquid mud, so much so that the moat does not contain much water! It was noted that after reducing the water level by approximately 0.35m only approximately 0.15m of water remained. The liquid mud is dark brown/black and appears to be predominantly made up of vegetable matter. The odour of the mud would suggest that there is little oxygen content within the water and that this material has built up rapidly. This is illustrated by the complete silting up of the 1.2m diameter sump which was inserted into the moat in 2002 in order to be used by fire appliances to pump water in case of fire on the site. During the works associated with the evaluation excavation for the proposed path in September 2011 a large quantity of carp were noted living in the moat these are no longer apparent.
- It is clear that the banks of the moat have been and still are subject to erosion. This is particularly evident on the internal circuit where undercutting is present on all sides. The internal eastern bank appears to have suffered more than anywhere. This may be due to the possibility that stone walling existed along the northern and western sides at some point in time (now almost completely collapsed). There is active undercutting on the northern internal bank below the level of the wall remnant.
- The erosion is easiest to quantify in the internal eastern bank. Here there is a point of reference in the plastic drain which was laid in 1993. It now extends into the moat due to erosion and has been undercut to a depth of over 0.35m. This would suggest that the eastern internal bank is being eroded at a rate of over 0.3m each decade. During the course of the fieldwork it was noted that erosion appeared to have been minimised at points where beds of iris had been planted next to the bank.
- It is clear that this study has added some useful information concerning the type of revetting used historically around the moat and has shed some light on its possible development. The cleaning out of the moat may provide a better opportunity to further understand its development and original form.

- The significance of the site has been enhanced, rather than diminished, as a result of the present project, although there are significant questions that remain outstanding.
- While in some ways, Lower Brockhampton is a 'typical' moated timbered manorial house, it is outstanding perhaps because of the rarity of a complete change in the location of the estate centre, and in the works that took place after 1796 to both restore the house and enhance its setting. This history of enhancement and the creation of a 'designed landscape' setting for the building may go back as far as the early 16th century.

Site Archive

46 digital photographs
4 DXF files
1 site notebook entry
1 sheet of inked drawing
Method statement
This document

Acknowledgements

Herefordshire Archaeology would like to acknowledge the help and co-operation of the National Trust staff at Lower Brockhampton, particularly David Coope and Janine Young, Consultant Archaeologist for the National Trust.

List of Illustrations

Figure 1: location of Lower Brockhampton within the county of Herefordshire.

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Figure 4: Extract from the 1928 4th Edition Ordnance Survey Map

Figure 5: Extract from the 1885 1st Edition Ordnance Survey Map

Figure 6: Extract from Thomas Leggett's 1769 Estate Survey Map

Figure 7: Extract from John Perkin's 1737 Estate Survey Map

Figure 8: Lower Brockhampton in the early 1930's by Alfred Watkins.

Figure 9: Survey plan produced in order to accurately locate the buildings in relation to the present edges of the moat.

Figure 10: Location of features photographed on inner bank of moat

Figure 11: Location of features photographed on outer bank of moat

Figure 12: Location of deepening of water detected within the moat and possibly relating to the line of the original moat

Figure 13: Plan of the earthworks and topography within the environs of Ford Abbey Farm, Pudleston.

Figure 14: Survey plans of moated sites within the Malvern Hills AONB, (Bowden 2005).

Figure 15: Areas and extents of erosion of the banks of the moat

Figure 16: Location of potential archaeological works and remedial conservation actions

Plate 1: Plastic pipe laid in 1993 showing amount of erosion and undercutting over the last 20 years

Plate 2: Remains of masonry wall on northern edge of the internal bank. Note the under-cutting

Plate 3: collapsed wall immediately to the west of plate 2. Note the recent erosion above the masonry

Plate 4: Squared stone rubble along western internal face of moat.

Plate 5: Stone wall and drain in south-western corner, external bank.

Plate 6: The inside of the drain showing the vertical slab used as blocking.

Plate 7: Timber revetting showing under-cutting and scarring due to water-fowl.

Bibliography

Bowden, M. (2005) The Malvern Hills an ancient landscape. English Heritage publication.

Campbell, J. (2011) A comprehensive survey of Lower Brockhampton, Herefordshire. Report for the Vernacular Architecture Group

Hoverd, T. (1997), Ford Abbey Farm, Pudleston, Leominster: An Archaeological Evaluation. Archaeological Investigations Ltd Report 333

Hoverd, T & Williams, D. (2011), "Evaluation Excavations at Lower Brockhampton" Herefordshire Archaeology Report 298

Kenney, J. (2004), "Lower Brockhampton Moat, a report on an archaeological watching brief", Marches Archaeology Series 318

Lello, R. and Williams, D. (2003), "Lower Brockhampton: A Survey of the Moated Site Complex", Herefordshire Archaeology Report 99

Morriss, R. K., and Hoverd, T. (1994) Lower Brockhampton near Bromyard, Herefordshire: an Outline analysis. Hereford Archaeology Series 201

Ray, K. (2003), "An Archaeological Reconnaissance Survey of The Brockhampton Estate, Bromyard", Herefordshire Archaeology Report 71

Taylor C. (1983) Village and farmstead: a history of rural settlement in England.

Thirsk, J. (1997) Alternative Agriculture: A history from the black death to the present day. Oxford.

Validation

Herefordshire Archaeology operates a validation system for its reports, to provide quality assurance and to comply with Best Value procedures.

This report has been checked for accuracy and clarity of statements of procedure and results.

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