

ARCHAEOLOGICAL MONITORING REPORT

Suffolk County Ser SCCAS REPORT No. 2008/79



Letheringham Hall, Letheringham **LRM 001**

HER	Inform	ation

HER Information	until Council	
SAM No:	21300	
Date of Fieldwork:	November 2008	
Grid Reference:	TM 2798 5804	
Funding Body:	Mr. P. Clarke	
Curatorial Officer:	Will Fletcher	
Project Officer:	Linzi Everett	
Oasis Reference:	suffolkc1- 73514	
county set		CO



Summary

Monitoring of desilting works at Letheringham Hall, Letheringham, was carried out as a condition of the Scheduled Ancient Monument consent. (SAM 21300). Remnants of revetting walls survived around both the inner and outer sides of the moat ditch, the locations of which were recorded using a GPS. Only one small area of consolidated silt and gravel deposits were observed, located within the internal face of the northern arm of the moat, below a section of flint and mortar revetting. It was not possible to determine any stratigraphic relationship with the flint and mortar revetting but one large rim sherd from a medieval coarseware vessel was recovered from this deposit. Elsewhere, only recent organic silts were present, suggesting that the moat had been thoroughly cleaned and maintained over its history.

1. Introduction and methodology

Desilting works at Letheringham Hall, Letheringham, required a programme of archaeological monitoring as a condition of the Scheduled Ancient Monument (SAM) consent as provided by English Heritage. The site lies at TM 2798 5804 (Figure 1), at a height of approximately 19m OD.

Various visits were made to the site by the Field Projects Team of Suffolk County Council's Archaeological Service (SCCAS) in order to supervise the moat clearance as it took place. Supervision was intended to provide a record of the moat clearance, ensure that only recent deposits were removed, any consolidated deposits present were preserved in situ and the profile of the earthwork was not compromised. The deposits removed were discarded in a known location and allowed to weather before being inspected for artefactual evidence. A Leica SmartRover RTK GPS 1200 connected to Leica SmartNet data recorder giving sub 5cm accuracy was employed to plot the perimeter of the moat platform and any notable features and to provide measured profiles of the moat from bank to bank, where practicable.



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Figure 1. Site location

The site was recorded under the Historic Environment Record (HER) code LRM 001. A Brief and Specification for the archaeological work was produced by William Fletcher of the SCCAS Conservation Team (Appendix I). The fieldwork took place during November 2008 and was funded by Mr. P. Clarke.

The monitoring archive is held in the County HER in Bury St. Edmunds.

2. Archaeological and historical background

The square moat is located in an isolated position beside the River Deben, which forms the parish boundary, and immediately south of a water mill which has occupied the site since at least the 18th century. Letheringham Mill may also be the site of a medieval church and churchyard (LRM 005) known from documentary evidence, but now lost.

The moat island is reached by a causeway revetted with brick which could be as early as 16th century towards the base. Other revetting is present in various locations around the internal and external banks of the moat, with brick, sandstone and flint and mortar wall fragments represented.



Figure 2. Extract from Hodkinson's Map of Suffolk, 1783

3. Results

Prior to desilting, trial excavation was carried out on two sides of the moat in order to determine the nature and depth of the deposits present. These suggested that no significant consolidated deposits survived within the moat which would require preservation in situ, only recent organic silts were observed overlying the natural gravel and clay deposits which formed the sides and base of the moat. Where the machine needed to work from within the moat, access was gained on the south side from a point where the original ditch profile appeared to have already been compromised, perhaps to allow livestock access to the moat water, and from the north eastern corner. In both cases, a layer of sand was laid down to protect the existing profile from any further damage by the machine tracks.

A small area of consolidated gravelly silts (0002) was recorded along the internal bank of the northern arm of the moat (Figure 3). It was situated below a fragments of flint and mortar revetting, but no relationship between the masonry and the deposit was determined. A large sherd from a late medieval vessel was recovered from 0002 which suggests that this deposit accumulated no earlier than this period and could be significantly later, incorporating the pot sherd as a residual find.



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Approximately 5m south west of 0002, a collection of modern brick fragments and general rubbish behind a decayed corrugated iron sheet appeared to be a fairly recent attempt to reinforce the internal bank.

The silts removed from the moat profile were dumped in a disused extraction pit and once this was full, the remainder was spread over the fields surface (Figure 4). The silts were allowed to drain and weather for several weeks before they were subject to a visual inspection for any artefactual evidence and a metal detector survey by a local volunteer. In both cases, no pre-modern evidence was recovered.

Various traces of revetting were observed around the internal, and to a lesser degree, the external banks of the moat. The locations and extent of the visible masonry fragments were recorded with the GPS and are shown on Figure 3. Three main fabric types were represented:

- Brick The causeway and part of the front face of the moat island are revetted with brickwork. This is believed to date from the sixteenth century but is eroded and has been much repaired. Remnants of pre-modern brickwork also exist at the rear of the island but their age is uncertain. Two brick built buttresses on the southern internal bank appear to be of quite early construction.
- *Flint and mortar* Fragments of undated, but pre-modern, brick were incorporated within its fabric. In places, surviving flint and mortar has been used as a base to build later brick structures off (Plates 10 & 11). There is no evidence to suggest the flint and mortar revetting is of recent origin but its date is unclear. Erosion appears to have undermined some of this masonry, causing it to break and slip down the bank (Plate 11).
- Sandstone Revetting constructed of blocks of possible crag sandstone occurs mainly on the front face of the island and on the external moat bank south of the causeway, where two parallel rows of sandstone blocks form a stepped profile at this point in the bank (Plate 13). Whilst the wall on the south front face of the island is quite eroded and has been heavily repaired (Plate 7), that on the north of the causeway survives in better condition and is neatly faced (Plates 3 & 8). A disused extraction pit in a field to the east of the moat (Figure 4) had an outcrop of sandstone such as this at its base, suggesting that the stone used around the moat sides could have been quarried from here or very nearby.



Fig. 4. 1st edition OS map showing the disused sand pit east of Letheringham Hall, and the approximate area of silts spread over the field. The moat is shaded blue.

A shallow service trench cutting across the moat platform from the rear of the house to the moat edge was also monitored during the course of the project (Figure 5; Plates 14 & 15). The trench measured c.0.3m wide with an average depth of 0.35m, remaining within topsoil throughout. Finds recovered from the upcast spoil were all of modern origin, including china and brick fragments, none of which were retained.

Once the desilting was complete, the GPS was used to record profiles across three of the four moat arms (Figure 5) These are shown as Figures 6-8, with Figure 9 showing the north and south profiles in their correct relative positions. This was carried out in order to provide a representative record of the depth of the moat and its profile on completion of the works. The profiles also illustrate the difference in ground level between the exterior of the moat and the internal platform, which is on average 1.2m higher than the surrounding land.



Figure 5. Location of excavated service trench and moat profiles



Figure 6. NE-SW profile across southern moat arm



Figure 7. SE-NW profile across western moat arm



Figure 8. NE-SW profile across northern moat arm





Introduction

c0	Unchice		, .			COUNCICE
N	Context	Pott	ery	СВ	M	Spotdate
intial	5	No.	Wt/g	No.	Wt/g	Invals
Conjca	0001	1	1	1	2180	Unstratified
11 109.	0002	1	181			15th-16th C
for e0,	0003	1	7	2	665	Late med/early p
Suchar						med SV AV
Art	Total	3	189	3	2845	AIG
		Та	ble 1. F	inds qu	antities	6

Finds were collected from three contexts, as shown in the table below.

Pottery

Three fragments of pottery were recovered from the monitoring (0.189kg).

The substantial remains of a medium-sized bowl made in a fine dull orange-brown sandy micaceous fabric with occasional splashes of lead glaze was found in moatfill 0002. The vessel is likely to have been made in Essex and dates to the 15th-16th centuries.

A single fragment of unglazed LMT dating to the 15th-16th century was identified in moat platform deposit 0003, and a single unstratified wheelthrown greyware is likely to be a reduced example of the same fabric.

Ceramic building material

Three pieces of ceramic building material were collected (2.845kg). A complete unstratified brick (dimensions L220mm, W107 and depth 55-58mm) made in a red-fired fabric (msfe), with a grey mortar on all surfaces cannot be assigned a closer date than the post-medieval period. A fragment of post-medieval pegtile in the moat platform deposit 0003 is made in a fine sandy fabric with flint. The remains of a coarse sandy fully oxidised brick (height 42mm) from the same context is likely to be Tudor.

5. Discussion

Monitoring of the desilting works identified only one small area which could be described as consolidated deposits along the bank at the rear of the house. Elsewhere, the only material overlying the natural clay and gravel was recent humic silt, the result of eroded soils, leaf litter and other organic matter collecting in the moat ditch. This

suggests that the moat has been cleaned out before, probably many times over its lifetime, in order to prevent the build up and consolidation of silty deposits. Where possible consolidated deposits were recorded, they may have been afforded some protection during previous cleaning by the fragments of revetting in this location, some of which has recently collapsed.

The draining and cleaning of the moat allowed the opportunity to carry out basic recording of the surviving revetting. This was most extensive and most formally built at the front of the platform, either side of the causeway, but whether or not the island was ever fully revetted is not known, nor is it clear whether the different fabrics used represent different phases of revetting. The bricks used at the front of the house and for the causeway would have incurred considerable expense in the sixteenth century. Their use where they would be most visible could have been a deliberate expression of wealth and status by the owners at the time, opting to use cheaper materials such as flint and mortar at the rear of the house where they would not be seen.

The ditch profiles show that the internal platform is 1-1.5m higher than the surrounding ground level and was likely to have been raised during the original moat construction, using spoil from the excavated ditch.

Linzi Everett March 2010

CONTEXT	IDENTIFIER	DESCRIPTION	Finds?
0001	Unstatified	Finds from topsoil or of uncertain provenance	ouncice
0002	Deposit	Moat silts- pale grey gravelly silt present against the internal bank centrally on the NW arm. Loose, but left in situ as far as possible.	Serry
0003 Suichaeol	Ser Layer	Moat platform deposit- dark brown loamy topsoil mixed with chalky clay patches and rich in brick and tile. Occasional oyster shell and animal bone noted, one sherd glazed china and one sherd terracotta flower pot present but not retained.	Y



Plate 1. SW moat arm, looking SE



Plate 3. SE moat arm, looking NE



Plate 5. SE moat arm, looking SW



Plate 7. SE moat arm, looking NE towards causeway bridge and showing island revetting. After de-silting



Plate 2. SW moat arm, looking SE after desilting



Plate 4. E moat arm, looking NE after de-silting



Plate 6. NW moat arm, looking NE after desilting



Plate 8. SE moat arm, looking SW towards causeway bridge and showing island revelling. After de-silting



Plate 9. Machine entering the SE moat corner



Plate 11. Collapsed flint, mortar and later brick wall section within the internal face of the northern moat arm



Plate 13.



Plate 15. View of excavated service trench



Plate 10. Flint and mortar revetting in situ within the internal face of the northern moat arm



Plate 12. Fragment of flint and mortar wall in situ within the internal face of the northern moat arm



Plate 14. Location of the excavated service trench, looking SE



Plate 16. Surveying within the NE corner of the moat

SUFFOLK COUNTY COUNCIL ARCHAEOLOGICAL SERVICE - CONSERVATION TEAM

Brief and Specification for Archaeological Consultation and Monitoring of Specific works relating to the refurbishment of moats and moated sites.

Relating to the Moat at Letheringham Hall, on behalf of Mr Paul Clarke.

NB. This site is a Scheduled Ancient Monument (SAM), and this archaeological work is central to and a condition of the SAM consent as provided by English Heritage

Although this document is fundamental to the work of the specialist archaeological contractor the developer should be aware that certain of its requirements are likely to impinge upon the working practices of a building contractor and will have financial implications, for example see paragraphs 2.1 & 4.1

1. Background and General Principles

- 1.1 Moated sites are one of Suffolk's commonest archaeological sites with nearly 1000-recorded examples surviving to the present day. This does not diminish their importance as it is a factor of the local settlement and soil condiments that means Suffolk has more than any other county in England.
- 1.2 These are settlement features of the medieval landscape and the majority of them date to the period between 1200 and 1350 AD, although there are both earlier and later examples in Suffolk. In form they are normally a square, or sub-square shape with a single entrance or causeway. Again however a local geographical conditions and variations produce a wide range of forms and sizes. They are however almost an entirely a feature of the high Suffolk Clay soils, which often share issues relating to drainage.
- 1.3 Many moats have associated features, such as adjoining fishponds, ditches and ancillary moats or are found in clusters around a landscape feature such as a large former green or common. On the whole the main buildings were on the central island with the farm on the outside, although many moats are no longer inhabited or the current building is of a later period.
- 1.4 Up to 20% of the moats in Suffolk are Scheduled Ancient Monument, and protected under national legislation. These monuments are considered of national importance. Any work on a SAM will require permission from English Heritage. Many of the remaining moats are recognised on the County based Sites and Monuments Register (SMR) and are considered to be of regional importance, and of a high management priority. Consent is required for-
 - Any work within the area of scheduling
 - Work affecting the setting of a SAM monument including areas directly outside of the scheduled area
- 1.5 Damage to archaeological deposits commonly occurs during the following management tasks
 - Scrub management, tree clearance of the ditch or Island
 - Ditch cleaning
 - Environmental and conservation activities
 - Development work relating to building within the island, and around the curtiledge of the monument
- 1.6 The archaeological element of a moated site are-
 - <u>The site context</u> e.g. it setting and location
 - The interior (or island) of the moat- e.g. Surviving elements that include
 - A raised island created from ditch upcast
 - Surviving (above ground) structures e.g. house, gate house, or bridge
 - Preserved below ground archaeological deposits relating former structures and habitation
 - <u>The moat ditches</u>-
 - The shape of the moat in plan
 - The shape of the moat ditches in profile
 - Archaeological material from within the moat ditch, e.g. preserved structures, building or demolition debris, preserved organic finds such as wood

- <u>Preserved ditch deposits and archaeological sediments</u> e.g. silts and organic rich mud from with in moat ditches
 - Primary and secondary deposits could contain preserved organic and non-organic archaeological finds relating to the site and they should be left in situ as an intact part of the archaeological record.
 - These sediments have the potential to preserve plant remains, molluscs, or small micro fossils such as pollen, which have the potential to inform on past environments relating to earlier periods
- <u>Areas adjacent to site</u>- e.g. immediately outside of or surrounding the moat
 The archaeological remains of external or ancillary buildings both above and below ground
 - The archaeological remains of additional features such as ponds, secondary or ancillary moats
 - Ditches and drainage features feeding into or draining away from the moat,

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- 1.7 Moat ditches that are currently unexcavated or are dry should only be excavated when an acceptable program of archaeological monitoring has been agreed and a palaeo-environmental assessment has taken place.
- 1.8 Wet ditches, i.e. those that retain water all year round are very likely to have been cleaned out at some point in the past. Therefore the removal of tertiary deposits (such as detrital build up within a wet moat) essential to maintain the water table of the moat, is a generally desirable principle, as this maintains the context of that monument. Two principles apply
 - only silts that can be demonstrated to be modern (i.e. recent detrital build up) should be removed
 - Excavation of detrital build up should <u>not</u> impinge or damage surviving archaeological deposits or deeper primary/secondary fills.
- 1.9 The shape in plan of the site and the shape and profile of the ditches should not be compromised or altered by any work Palaeo-environmental assessment prior to the commencement of any capital works may be required to establish the state of affairs.
- 1.10 No work should be carried out on the interior or 'island' of the moat with out SAM consent, and work including access by heavy plant or other machinery should be restricted to prevent damage to surviving archaeological deposits.

2. The Archaeological Consultation and Monitoring - Background

- 2.1 SAM consent has been granted conditional upon an acceptable programme of archaeological work being carried out. Assessment of the available archaeological evidence indicates that the potential exists for archaeological deposits or finds to be present at the sites.
- 2.2 This work is the refurbishment of the moat at Letheringham Hall, Letheringham, by clearing vegetation and the removal of a build up of modern detrital material.
- 2.3 The moat is considered a part of a large-scale archaeological monument, is part of the Scheduling and it is assumed that there is a potential that archaeological deposits will be affected and compromised by this proposal.
- 2.4 This work can however be adequately managed, guided and recorded under a program of careful works, which has included archaeological consultation with the conservation team of Suffolk County Council Archaeological Service. Archaeological control will be provided by way of a three stage monitoring.
 - Part one The archaeologist will be consulted prior to and during the initial stages of the work. They will seek to guide and inform the contractor on the level, depth and amount of sediments to be removed. This is ensure that important archaeological deposits are not removed during this work
 - Part Two- The archaeologist will monitor the work as it progresses to ensure that the moat and the work is adequately recorded, and that any features uncovered are identified, recorded and protected insitu.
 - Part Three- The contractor will ensure that material removed from the ditch is spread out locally and allowed to weather down. The archaeologist will be allowed access to this waste to recover any archaeological material for recording and analysis

- 2.5 The contractor is to seek archaeological guidance at and during each stage of the works
- 2.6 In accordance with the standards and guidance produced by the Institute of Field Archaeologists this brief should not be considered sufficient to enable the total execution of the project. Therefore a Project Design or Written Scheme of Investigation (PD/WSI) based upon this brief will be required. This is two fold and should include a methodological statement by both the contractor used for the moat refurbishment and the archaeological contractor commissioned to undertake the monitoring work on how the moat work will be undertaken, what equipment will be used and under what condition.
- 2.7 This must be submitted by the developers, or their agent, to the Conservation Team of the Archaeological Service of Suffolk County Council (Shire Hall, Bury St Edmunds IP33 2AR; telephone/fax: 01284 352443) for approval <u>prior</u> to the commencement of the project. Furthermore work must not commence until this office has approved both the archaeological contractors as suitable to undertake the work, and the PD/WSI as satisfactory. The PD/WSI will *provide the basis for measurable standards* and will be used to establish whether the requirements of the planning condition will be adequately met.

3. Brief for Archaeological Monitoring

- 3.1 The work here is to be provided in three stages.
 - To provide initial guidance for the moat refurbishment by undertaking on site visual evaluation of the situation, before and during the first stage of the works, to ensure that only those deposits, which are considered not to be of archaeological value, are removed.
 - To provide a monitoring and recording of the work as it progresses, to ensure that the refurbishment does not over cut or expose new and previously unexcavated areas around the remainder of the sites
 - To evaluate the material that has been removed from the ditch to recover any artefactual evidence
- 3.2 The main academic objective will be to monitor, investigate and record the moat, and deposits exposed as work progresses and to provide a record of any archaeological deposits, which are accidentally damaged or removed during the development, permitted under this proposal.
- 3.2 Further examination of deposits that have been removed will be required to ensure that any archaeological artefacts are recovered.

4. Arrangements for Monitoring

- 4.1 To carry out the monitoring work the developer will appoint an archaeologist (the archaeological contractor) who must be approved by the Conservation Team of Suffolk County Council's Archaeological Service (SCCAS).
- 4.2 The developer or his archaeologist will give the Conservation Team of SCCAS five working days notice of the commencement of ground works on the site, in order that the work of the archaeological contractor may be monitored. The method and form of development will also be monitored to ensure that it conforms to previously agreed locations and techniques upon which this brief is based.
- 4.3 Allowance must be made to cover archaeological costs incurred in monitoring the development works by the contract archaeologist. The approved archaeological contractor should estimate the size of the contingency from the building contractor's programme of works and timetable.
- 3.4 If unexpected remains are encountered the Conservation Team of SCCAS must be informed immediately. Amendments to this specification may be made to ensure adequate provision for archaeological recording.
- 3.5 This work may be weather critical and arrangement should be made not to undertake work which may compromise archaeological control in unfavourable conditions
- 5. Specification

- 4.1 The developer shall consult initially with and will afford access at all reasonable times to both the County Council Conservation Team archaeologist and the contracted 'observing archaeologist' to allow archaeological observation of building and engineering operations which disturb the ground.
- 4.2 The 'observing archaeologist' will initially set the level and extent to which the deposits are removed based on the conditions found on site. This is to ensure that the moat shape and profile are not compromised, that no primary archaeological deposits are removed and that structures or feature revealed in the moat such as causeways or bridges are left intact.
- 5.2 Opportunity must be given to the observing archaeologist to hand excavate any discrete archaeological features which appear during earth moving operations, retrieve finds and make measured records as necessary.
- 5.3 Opportunity must be given to the observing archaeologist to observe any silt deposits removed from the site. These should be spread out in a nearby location in a manner to ensure that they can be examined and material recovered if necessary. All finds are to be kept, processed and recorded as part of the work.
- 5.4 All archaeological features exposed must be planned at a minimum scale of 1:50 and sections at 1:20.
- 5.5 All contexts must be numbered and finds recorded by context.
- 5.6 The data recording methods and conventions used must be consistent with, and approved by, the County Sites and Monuments Record.

6. **Report Requirements**

- 6.1 An archive of all records and finds is to be prepared consistent with the principles of *Management* of *Archaeological Projects* (*MAP2*), particularly Appendix 3. This must be deposited with the County Sites and Monuments Record within 3 months of the completion of work. It will then become publicly accessible.
- 6.2 Finds must be appropriately conserved and stored in accordance with *UK Institute of Conservators Guidelines*. The finds, as an indissoluble part of the site archive, should be deposited with the County SMR if the landowner can be persuaded to agree to this. If this is not possible for all or any part of the finds archive, then provision must be made for additional recording (e.g. photography, illustration, analysis) as appropriate.
- 6.3 A report on the fieldwork and archive, consistent with the principles of *MAP2*, particularly Appendix 4, must be provided. The report must summarise the methodology employed, the stratigraphic sequence, and give a period by period description of the contexts recorded, and an inventory of finds. The objective account of the archaeological evidence must be clearly distinguished from its interpretation. The Report must include a discussion and an assessment of the archaeological evidence. Its conclusions must include a clear statement of the archaeological value of the results, and their significance in the context of the Regional Research Framework (*East Anglian Archaeology*, Occasional Papers 3 & 8, 1997 and 2000).
- 6.4 A summary report, in the established format, suitable for inclusion in the annual 'Archaeology in Suffolk' section of the *Proceedings of the Suffolk Institute of Archaeology*, must be prepared and included in the project report.
- 6.5 County Sites and Monuments Record sheets must be completed, as per the county SMR manual, for all sites where archaeological finds and/or features are located.

Specification by: William Fletcher

Suffolk County Council Archaeological Service Conservation Team Environment and Transport Department Shire Hall Bury St Edmunds Suffolk IP33 2AR

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This brief and specification remains valid for six months from the above date. If work is not carried out in full within that time this document will lapse; the authority should be notified and a revised brief and specification may be issued.

If the work defined by this brief forms a part of a programme of archaeological work required by a Planning Condition, the results must be considered by the Conservation Team of the Archaeological Service of Suffolk County Council, who have the responsibility for advising the appropriate Planning Authority.

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