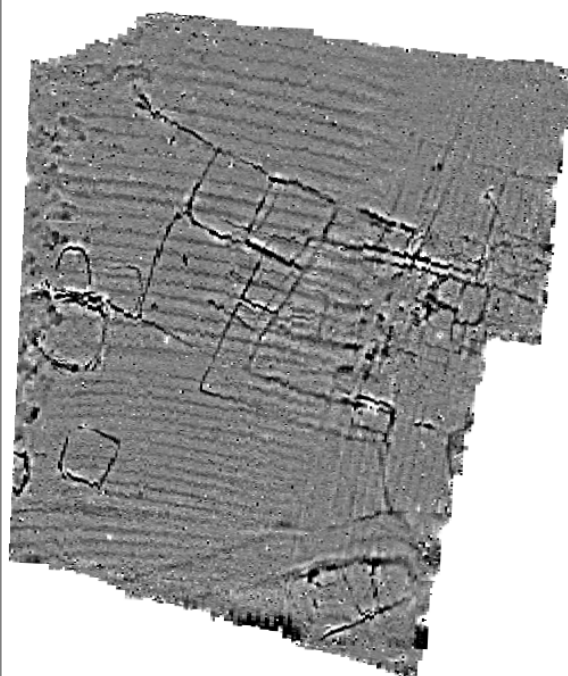




# Northamptonshire Archaeology

## Archaeological Geophysical Survey at Lubenham Hill, Market Harborough, Leicestershire



### **Northamptonshire Archaeology**

2 Bolton House  
Wootton Hall Park  
Northampton NN4 8BE  
t. 01604 700493 f. 01604 702822  
e. [sparry@northamptonshire.gov.uk](mailto:sparry@northamptonshire.gov.uk)  
w. [www.northantsarchaeology.co.uk](http://www.northantsarchaeology.co.uk)



**Northamptonshire  
County Council**

John Walford

Report 11/194

September 2011



**STAFF**

Project Manager: Adrian Butler MA BSc AlfA

Fieldwork: Ian Fisher BSc  
Sam Egan BSc  
Liam Delaney MA

Text and Illustrations: John Walford  
Adrian Butler

**QUALITY CONTROL**

	Print name	Signed	Date
Checked by	Adrian Butler	<i>AB</i>	19/09/11

**OASIS REPORT FORM**

PROJECT DETAILS		
Project name	Archaeological Geophysical Survey at Lubenham Hill, Market Harborough, Leicestershire	
Short description	Northamptonshire Archaeology was commissioned to carry out magnetometer survey in advance of a proposed development scheme at Lubenham Hill, Market Harborough, Leicestershire. An area of c 5.5ha was subject to detailed magnetometer survey. This revealed an extensive complex of enclosures, apparently representing a settlement of Iron Age or Romano-British date.	
Project type	Geophysical survey	
Site status	None	
Previous work	Desk-based assessment (Dawson 2011)	
Current Land use	Arable	
Future work	Unknown	
Monument type/ period	Iron Age or Romano-British settlement	
Significant finds		
PROJECT LOCATION		
County	Leicestershire	
Site address	Lubenham Hill	
Study area	c 5.5ha	
OS Easting & Northing	SP 7195 8720	
Height OD	c 95-110 m AOD	
PROJECT CREATORS		
Organisation	Northamptonshire Archaeology (NA)	
Project brief originator	CgMs Ltd	
Project Design originator	NA	
Director/Supervisor	Ian Fisher	
Project Manager	Adrian Butler	
Sponsor or funding body	Fosburn / Bellcross	
PROJECT DATE		
Start date	10 September 2011	
End date	20 September 2011	
ARCHIVES	Location	Content
Physical	N/A	
Paper	NA	Site survey records
Digital	NA	Geophysical survey & GIS data
BIBLIOGRAPHY	Journal/monograph, published or forthcoming, or unpublished client report	
Title	Archaeological Geophysical Survey at Lubenham Hill, Market Harborough, Leicestershire	
Serial title & volume	Northamptonshire Archaeology Reports 11/194	
Author(s)	John Walford and Adrian Butler	
Page numbers	5	
Date	20 September 2011	

# Contents

<b>1</b>	<b>INTRODUCTION</b>	<b>1</b>
<b>2</b>	<b>TOPOGRAPHY AND GEOLOGY</b>	<b>2</b>
<b>3</b>	<b>ARCHAEOLOGICAL BACKGROUND</b>	<b>2</b>
<b>4</b>	<b>METHODOLOGY</b>	<b>2</b>
<b>5</b>	<b>SURVEY RESULTS</b>	<b>3</b>
<b>6</b>	<b>CONCLUSION</b>	<b>5</b>
	<b>BIBLIOGRAPHY</b>	<b>6</b>

## Figures

Fig 1	Site Location	1:20,000
Fig 2	Magnetometer Survey Results	1:2,500
Fig 3	Magnetometer Survey Interpretation	1:2,500
Fig 4	Raw Survey Data	1:2500

**ARCHAEOLOGICAL GEOPHYSICAL SURVEY AT  
LUBENHAM HILL, MARKET HARBOROUGH, LEICESTERSHIRE  
SEPTEMBER 2011**

**ABSTRACT**

*Northamptonshire Archaeology was commissioned to carry out magnetometer survey in advance of a proposed development scheme at Lubenham Hill, Market Harborough, Leicestershire. An area of c 5.5ha was subject to detailed magnetometer survey. This revealed an extensive complex of enclosures, apparently representing a settlement of Iron Age or Romano-British date.*

**1 INTRODUCTION**

Northamptonshire Archaeology (NA) was commissioned by CgMs Ltd to conduct an archaeological geophysical survey in advance of a proposed development scheme at Lubenham Hill, Market Harborough, Leicestershire. The survey area consisted of a single arable field, c 5.5ha in extent, centred at NGR SP 7195 8720 (Fig 1). The aim of the survey was to determine whether the site contained archaeological remains which could be damaged or destroyed by the proposed development.

**2 TOPOGRAPHY AND GEOLOGY**

The survey area lies on the western side of Market Harborough. It is bounded to the south by the A4304 Lubenham Hill, to the east by a modern housing development and to the north and west by fields and by the Market Harborough parish boundary. It occupies the south-eastern flank of Lubenham Hill, a locally prominent feature which attains a maximum elevation of just over 110m AOD.

The geology of the site is mapped as clays and silts of the Middle Lias with no overlying drift deposits (Geological Survey of Great Britain 1969).

### 3 ARCHAEOLOGICAL BACKGROUND

A desk-based assessment of the proposed development area ascertained that, although no archaeological remains are known from the area itself, a number of discoveries have been made within the general vicinity. On this basis, the site was judged to have “local (*sic*) and perhaps regionally significant archaeological or heritage potential” (Dawson 2001: 17).

Evidence for early prehistoric activity within the Market Harborough area is limited, but a number of sites and finds of Iron Age and later date are known. Of most immediate relevance are a Roman coin found immediately to the west of the proposed development area, Roman and Iron Age remains found approximately 500m to the east at Clark Street, and an early Saxon cemetery discovered a similar distance to the north at Hill Crest (Dawson 2011: 11-12).

There is no evidence that the proposed development area was used for any purposes other than agriculture during the later Saxon, medieval or post-medieval periods, and it lies well away from the main foci of medieval settlement (Dawson 2011: 12-13). Thus the presence of significant late Saxon or later remains in the area is not considered particularly likely.

### 4 METHODOLOGY

The survey was conducted with Bartington Grad 601-2, twin sensor array, vertical component fluxgate gradiometers (Bartington and Chapman 2003). These are standard instruments for archaeological survey and can resolve magnetic variations as slight as 0.1 nanoTesla (nT).

A tape measure and optical square were used to divide the survey area into a grid of 30m squares, and this grid was tied in to the Ordnance Survey National Grid with a Leica Systems 1200 dGPS. The gradiometers were then carried at a brisk but steady pace through each grid square, collecting data along 1m spaced traverse lines. Measurements were automatically triggered every 0.25m along the traverses, giving a total of 3600 measurements per square.

All fieldwork methods complied with the guidelines issued by English Heritage and by the Institute for Archaeologists (EH 2008; IfA forthcoming).

The survey data was processed using Geoplot 3.00v software. Striping, caused by slight mismatches in sensor balance, was removed using the 'Zero Mean Traverse' function and destaggering of the data was performed as necessary.

The processed data is presented in this report in the form of a grey-tone plot, at a scale of +/- 4nT black/white. The plot has been scaled, rotated and resampled (georectified) for display against the Ordnance Survey base mapping (Fig 2). An interpretative overlay has been produced and is shown in Figures 3. A plot of the raw (unprocessed) survey data is given in Figure 4.

## **5 SURVEY RESULTS**

The survey results are dominated by an extensive network of linear and curvilinear positive magnetic anomalies which represent a complex of ditched enclosures. The general form and arrangement of these enclosures is typical of a multi-phased rural settlement of Iron Age or Romano-British date.

For the purposes of discussion, this enclosure complex can be sub-divided into three zones: the main concentration of enclosures located within the central and north-eastern parts of the survey area, a group of predominantly detached enclosures to the west, and a further enclosure and a possible roadway to the south-east.

The main zone of archaeological remains contains a palimpsest of variously conjoined and intersecting enclosures, the majority of which are of rectilinear form. It is clear that these represent a complex site which must have been developed and been re-shaped over a prolonged period of time. A number of small and disjointed magnetic anomalies occur in association with the enclosures, but the exact interpretation of these is unclear. Some may represent pits, and others perhaps small hearths or other pockets of burnt sediment.

A pair of parallel, weakly positive linear anomalies extend northwards from the main group of enclosures and probably represent the side ditches of a contemporary

trackway. Another, more widely spaced, pair of anomalies cross the south-eastern corner of the survey area on an east to west alignment and perhaps indicate the course of a more substantial road.

In the far south-east of the survey area, immediately south of the possible road, is a slightly disjointed group of anomalies which represent another enclosure. This measures approximately 26m by 44m across and shows some signs of internal divisions.

In the west of the field are several enclosures which are detached, or nearly detached, from the main complex. One is roughly square in plan, and measures c 22m across; another is sub-circular, with a diameter of c 30m; and another extends beyond the limits of the survey area so that its size and plan are indeterminate. The sub-circular enclosure ditch is represented by a particularly irregular 'ragged' anomaly, which suggests that it may have been re-cut several times.

All the anomalies so far discussed are overlain by a densely packed arrangement of parallel linear anomalies. These form two groups: one aligned from east to west and covering the western side of the survey area, the other aligned from north to south and covering the eastern side. They indicate the presence of ridge and furrow, produced by medieval and early post-medieval cultivation practices.

Along much of the western edge of the field there is a band of irregular magnetic disturbance which cuts across some of the archaeological anomalies and also disrupts the ridge and furrow. The interpretation of this disturbance is not entirely certain, but the most credible explanation is that it represents an area of small-scale clay extraction, perhaps of post-medieval date.

In places around the edge of the field there are small magnetic halos. These relate to various adjacent fences, gates and buildings, and are not of any archaeological significance.

## **6 CONCLUSION**

The survey has located a substantial complex of ditched enclosures, which clearly constitute an occupation site of Iron Age or Romano-British date. This site extends



across the majority of the area surveyed and continues beyond its western, southern and eastern boundaries.

The survey results also demonstrate the presence of medieval or later ridge and furrow across the entire survey area and suggest that some relatively small quarry pits may be located along its western boundary.

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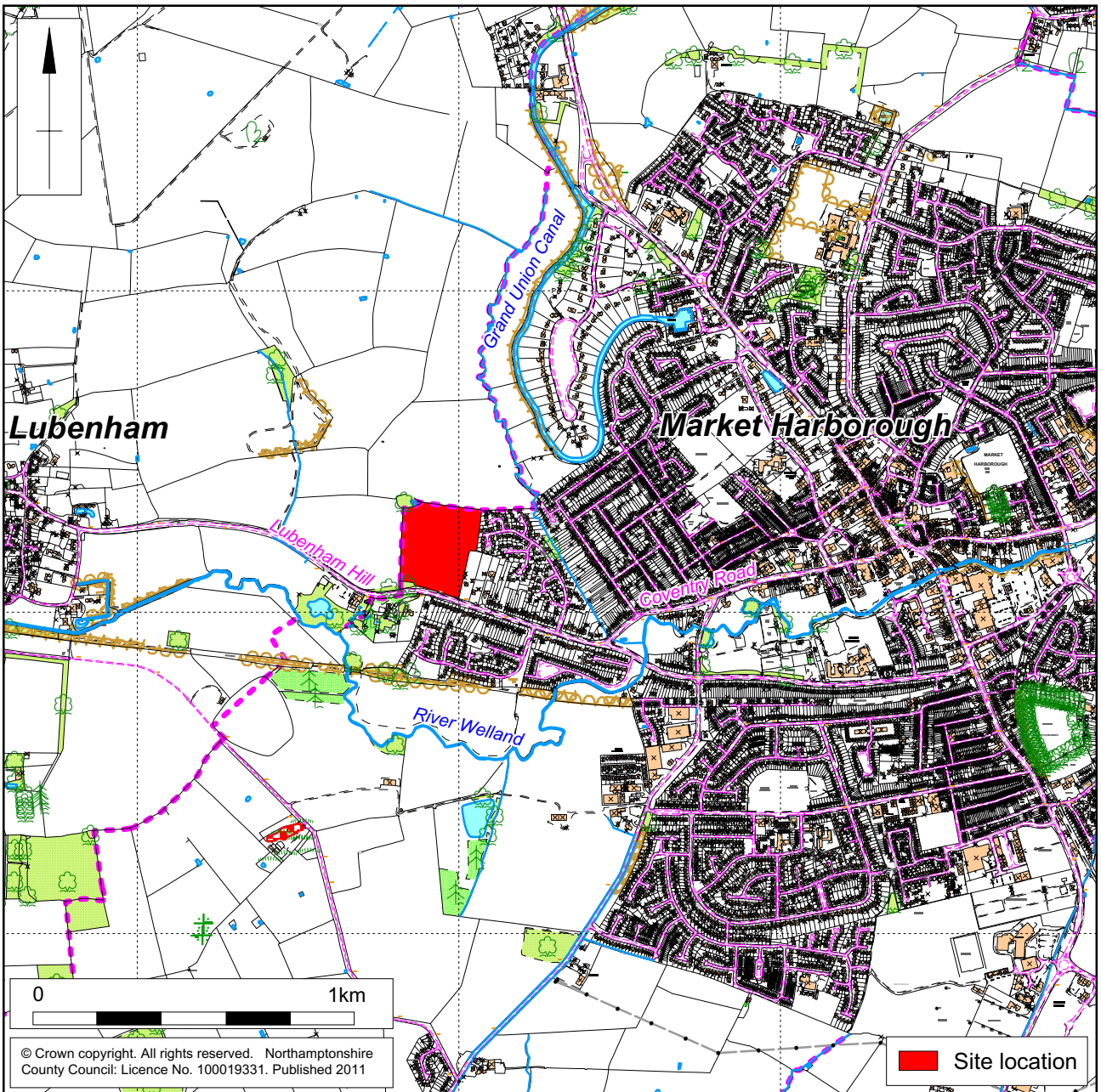
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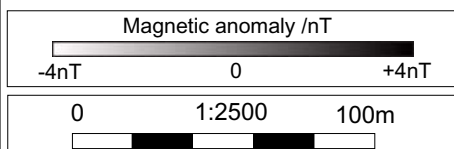
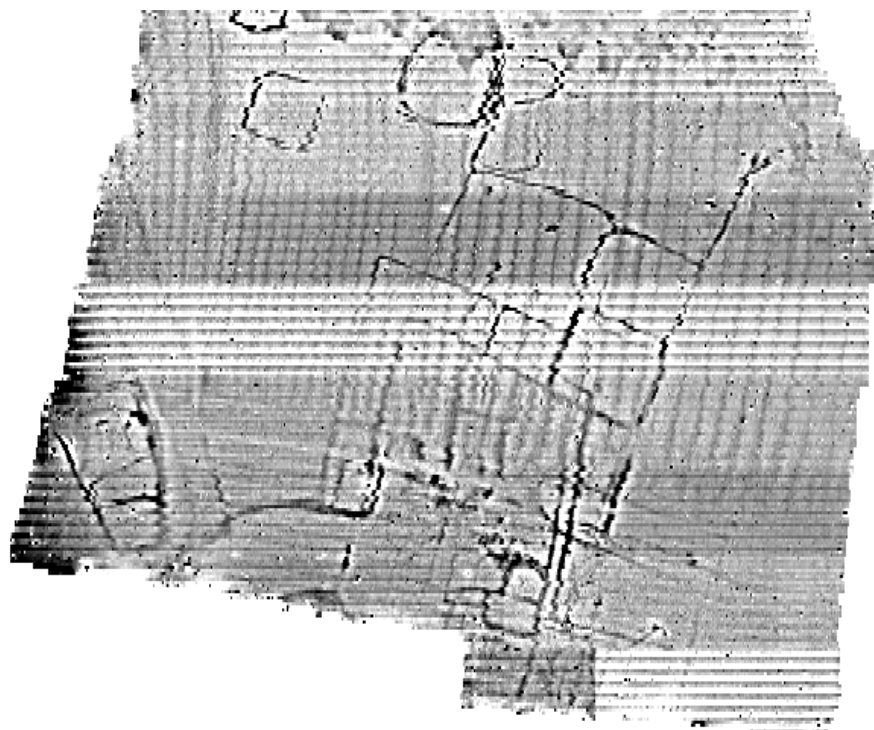
Site Location Fig 1





1:2500

Magnetometer Survey Interpretation Fig 3





Northamptonshire County Council

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2 Bolton House  
Wootton Hall Park  
Northampton NN4 8BE

t. 01604 700493 f. 01604 702822

e. [sparry@northamptonshire.gov.uk](mailto:sparry@northamptonshire.gov.uk)

w. [www.northantsarchaeology.co.uk](http://www.northantsarchaeology.co.uk)



Northamptonshire  
County Council