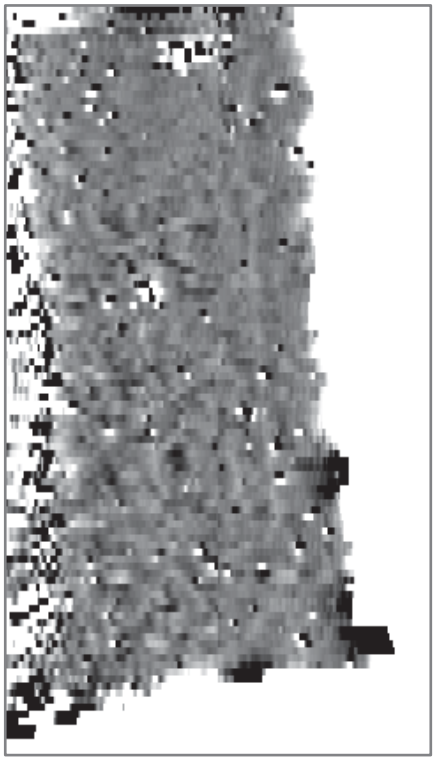
Northamptonshire Archaeology

Archaeological Geophysical Survey at Yew Tree Farm, Launton, Oxfordshire



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QUALITY CONTROL

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Verified by	Ant Maull	*AM*	6/3/2012
Approved by	Steve Parry	*SP*	6/3/2012

OASIS REPORT FORM

PROJECT DETAILS		
Project name	Archaeological Geophysical Survey at Yew Tree Farm, Launton, Oxfordshire	
Short description	Northamptonshire Archaeology was commissioned to carry out a detailed magnetometer survey of a proposed development site at the rear of Yew Tree Farm, Launton, Oxfordshire. The survey recorded a few weak magnetic anomalies of uncertain archaeological significance.	
Project type	Geophysical survey	
Site status	None	
Previous work	Desk-based assessment (Dawson 2011)	
Current Land use	Pasture	
Future work	Unknown	
Monument type/ period	Post-medieval farm	
Significant finds		
PROJECT LOCATION		
County	Oxfordshire	
Site address	Yew Tree Farm, Station Road, Launton	
Study area	*c* 1ha	
OS Easting & Northing	SP 610 227	
Height OD	*c* 65 m AOD	
PROJECT CREATORS		
Organisation	Northamptonshire Archaeology (NA)	
Project brief originator	CgMs Consulting Ltd	
Project Design originator	CgMs Consulting Ltd	
Director/Supervisor	Paul Clements	
Project Manager	Adrian Butler	
Sponsor or funding body	CgMs Consulting Ltd	
PROJECT DATE		
Start date	27 February 2012	
End date	6 March 2012	
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BIBLIOGRAPHY	Journal/monograph, published or forthcoming, or unpublished client report	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 Yew Tree Farm, Launton, Oxfordshire	
Serial title & volume	Northamptonshire Archaeology Reports 12/29	
Author(s)	John Walford	
Page numbers	4	
Date	6 March 2012	

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ARCHAEOLOGICAL GEOPHYSICAL SURVEY AT YEW TREE FARM, LAUNTON, OXFORDSHIRE MARCH 2012

ABSTRACT

Northamptonshire Archaeology was commissioned to carry out a detailed magnetometer survey of a proposed development site at the rear of Yew Tree Farm, Launton, Oxfordshire. The survey recorded a few weak magnetic anomalies of uncertain archaeological significance.

1 INTRODUCTION

Northamptonshire Archaeology (NA) was commissioned by CgMs Consulting to conduct an archaeological geophysical survey in advance of a proposed development at Yew Tree Farm, Launton, Oxfordshire (NGR SP 610 227; Fig 1). The purpose of the survey was to investigate whether there were any archaeological remains present which might be affected by the proposed development.

The fieldwork was conducted on 27th February 2012, and comprised the magnetometer survey of two small grass fields with a total area of *c* 1ha.

2 TOPOGRAPHY AND GEOLOGY

The proposed development area comprises a narrow rectangular block of land located to the rear of Yew Tree Farm and bounded to the north-east and south-west by modern housing developments (Fig 1). This land is sub-divided into several small plots, only two of which were judged to be in a surveyable condition. The remaining areas were obstructed by trees and farm equipment.

The area stands at an elevation of c 65m AOD and is fairly level. It is directly underlain by Oxford Clay, with no superficial drift (BGS 2012).

3 ARCHAEOLOGICAL BACKGROUND

The area around Launton, including the eastern fringes of Bicester, has produced little evidence for early prehistoric occupation, but is known to contain several sites of Iron Age and Romano-British date. The Oxfordshire HER records one such site approximately 500m west of the proposed development area (Dawson 2011, fig 2), and another has been excavated further to the south, at Bicester Park (Westgarth and Carlisle 2008). Hence there is a slight potential for remains of similar date to occur within the proposed development area.

As the proposed development area lies within the historic core of Launton, and forms the back-plot (or croft) of Yew Tree Farm, it may contain the remains of out-buildings, yard surfaces and other features of archaeological interest (Dawson 2011, 13-14). There is a potential for any such remains to date back as far as the medieval period, although the earliest secure evidence for Yew Tree Farm dates only from the early 17th century (Dawson 2011, 13-14, 26).

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).

An independent system of 30m grids was established within each of the two fields to be surveyed. The grids were established with a tape measure and optical square and were tied in to the Ordnance Survey National Grid by measurement to field boundaries and other points of detail. 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 2011).

The survey data were 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 grey-tone plots, at a scale of +/- 4nT black/white. The plots have 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 Figure 3.

5 SURVEY RESULTS

Field 1 (Figs 2-3)

The data from this field are almost entirely dominated by incoherent magnetic noise, indicating the abundant presence of magnetic debris (ferrous scrap, clinker, brick rubble, etc) within the topsoil. There is a slight concentration of anomalies along the line of a recently removed field boundary, and there is one particularly large ferrous anomaly located towards the south-eastern end of the field.

Field 2 (Figs 2-3)

Along the north-eastern edge of the field there is a band of intense magnetic noise, caused by the hardcore within a modern farm track. Elsewhere the data contains some more subtle magnetic anomalies which cannot be interpreted with complete confidence.

Towards the centre of the field there is one localised positive anomaly, along with two ill-defined positive linear anomalies arranged in a 'T' formation. These may represent two ditches and a pit, but the evidence is uncertain.

Two negative linear anomalies also occur in the data. The longer of the two coincides approximately with a shallow, ditch-like earthwork (P Clements *pers com*), which perhaps represents a former field boundary. The shorter anomaly is of obscure significance.

6 CONCLUSION

The survey has recorded a few magnetic anomalies which could be of archaeological significance but are too tenuous to interpret confidently. It has also led to the identification of a slight earthwork which probably represents a former field boundary.

No clear evidence was found for any former outbuildings, yard surfaces or other historic features associated with Yew Tree Farm. However, magnetometer survey is not always an effective means of detecting such features (EH 2008, 14; *cf* Gaffney and Gater 2003, 165).

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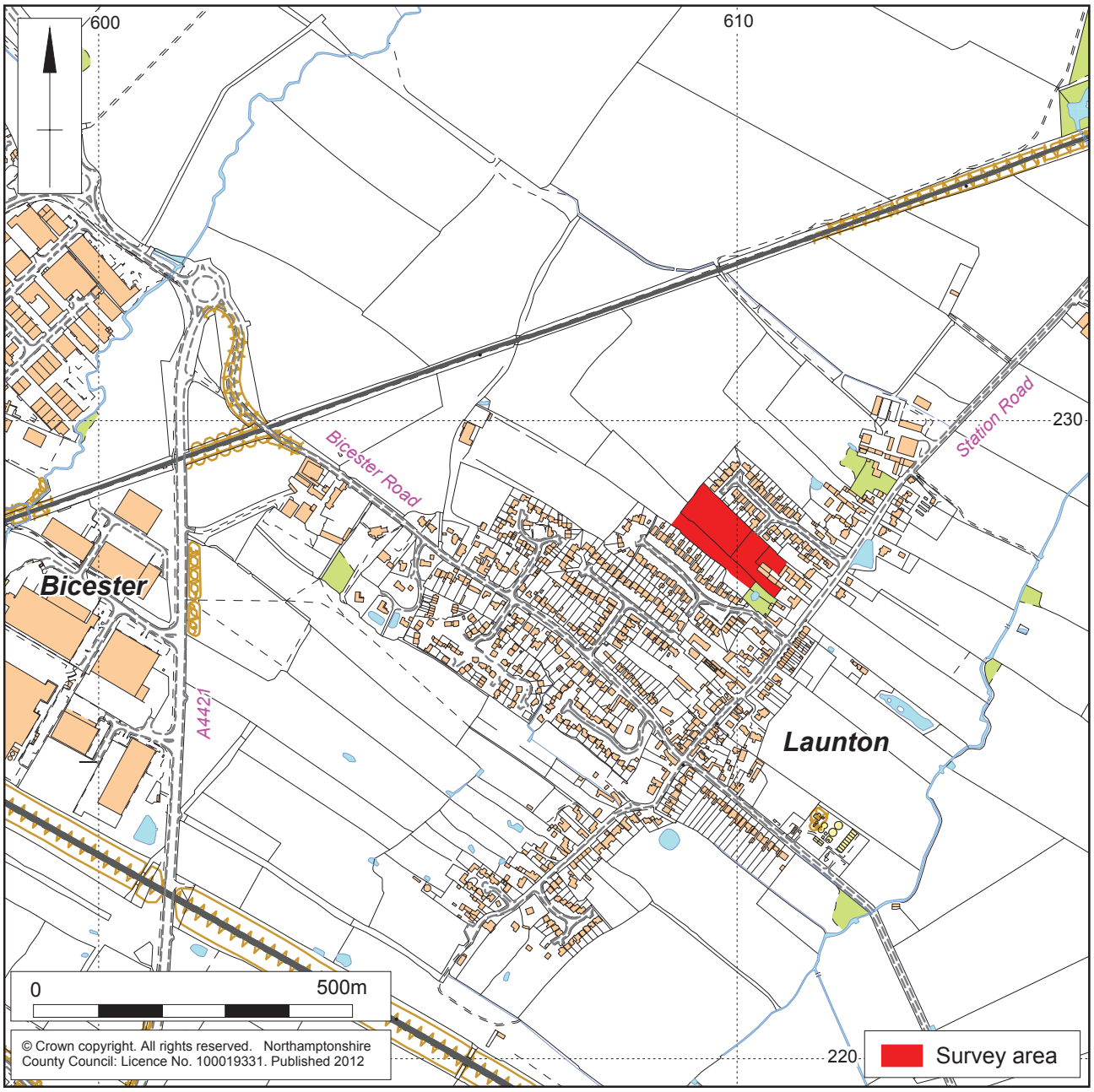
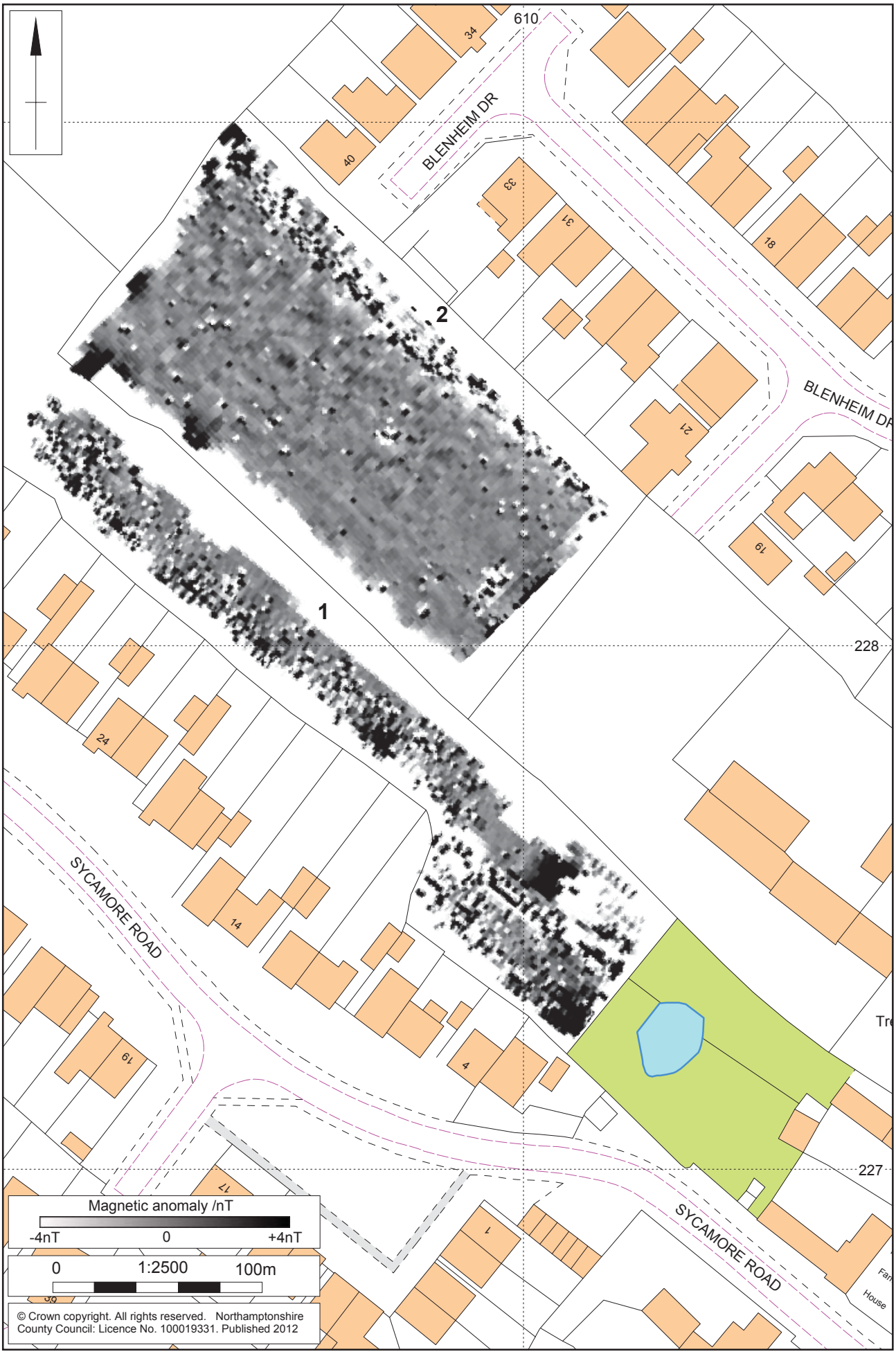


Scale 1:10,000

Site Location Fig 1



1:1,000

Magnetometer Survey Results Fig 2

1:1,000

Magnetometer Survey Interpretation Fig 3

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