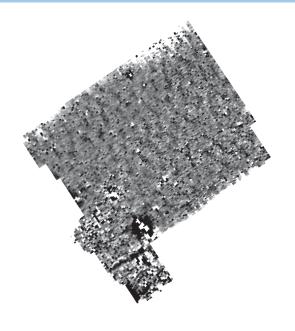


Northamptonshire Archaeology

Archaeological Geophysical Survey on land off Stanley Road, Great Chesterford, Essex April 2012



Northamptonshire Archaeology

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QUALITY CONTROL

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Verified by	Adrian Butler	Æ	03/05/2012
Approved by	Andy Chapman	AC	03/05/2012

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OASIS REPORT FORM

PROJECT DETAILS				
Project name	Archaeological Geophysical Survey on land off Stanley Road, Great Chesterford , Essex			
Short description	Northamptonshire Archaeology was commissioned to carry out a detailed magnetometer survey of a proposed development site on land off Stanley Road, Great Chesterford, Essex. Approximately 1.8ha of land was surveyed. Nothing of archaeological significance was detected			
Project type	Geophysical survey			
Site status	None			
Previous work	None known			
Current Land use	Overgrown pasture/scrub			
Future work	Unknown			
Monument type/ period	None			
Significant finds	None			
PROJECT LOCATION				
County	Essex			
Site address	Stanley Road, Great Chesterford			
Study area	c 1.8ha			
OS grid reference	TL 511 431			
Height OD	c 45 m AOD			
PROJECT CREATORS				
Organisation	Northamptonshire Archaeology (NA)			
Project brief originator	NA			
Project Design originator	NA			
Director/Supervisor	Laszlo Lichtenstein			
Project Manager	Adrian Butler			
Sponsor or funding body	CgMs Consulting			
PROJECT DATE				
Start date	20 April 2012			
End date	3 May 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BIBLIOGRAPHY	Journal/monograph, published or forthcoming, or unpublished client report			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 on land off Stanley Road, Great Chesterford , Essex			
Serial title & volume	Northamptonshire Archaeology Reports 12/88			
Author(s)	lan Fisher			
Page numbers	3			
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GREAT CHESTERFORD

Contents

1	INTRODUCTION	1
2	TOPOGRAPHY AND GEOLOGY	1
3	ARCHAEOLOGICAL BACKGROUND	2
4	METHODOLOGY	2
5	SURVEY RESULTS	3
6	CONCLUSION	3
	BIBLIOGRAPHY	3
Figur Cover	es Greyscale image of survey results	
_	Site location Magnetometer survey results Magnetometer survey interpretation	1:10,000 1:2,500 1:2,500

ARCHAEOLOGICAL GEOPHYSICAL SURVEY ON LAND OFF STANLEY ROAD, GREAT CHESTERFORD, ESSEX APRIL 2012

ABSTRACT

Northamptonshire Archaeology was commissioned to carry out a detailed magnetometer survey of a proposed development site off Stanley Road, Great Chesterford, Essex. Approximately 1.8ha of land was surveyed. Nothing of archaeological significance was detected.

1 INTRODUCTION

Northamptonshire Archaeology (NA) was commissioned by CgMs Consulting to conduct a geophysical survey in advance of a proposed development on land off Stanley Road, Great Chesterford, Essex (NGR TL 511 431; Fig 1). The aim 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 20 April 2012, and comprised the magnetometer survey of *c* 1.8ha of land.

2 TOPOGRAPHY AND GEOLOGY

The proposed development area consists of two fields to the south of Stanley Road on the eastern edge of Great Chesterford (Fig 1). The area is bounded by Walden Road to the east and garden plots to the south and west.

The survey area is largely flat with a gentle east to west slope and stands at an elevation of c 45m AOD. The underlying geology is mapped as New Pit Chalk Formation (BGS 2012).

3 ARCHAEOLOGICAL BACKGROUND

According to a desk-based assessment carried out by CgMs Consulting (Gajos 2012), there is a potential for prehistoric or Roman activity but very unlikely for anything from later periods. The proposed development area contains no known archaeological sites or find-spots. A full archaeological background of the site can be found in the desk-based assessment (Gajos 2012).

4 METHODOLOGY

The survey was conducted with Bartington Grad 601-2, twin sensor array, vertical component fluxgate magnetic 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 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 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 a grey-tone plot, 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.

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5 SURVEY RESULTS

The survey data reveals nothing of archaeological interest.

In the south-eastern part of the survey area there is a weak positive linear anomaly (Fig 3). This represents a ditch of a former field boundary.

6 CONCLUSION

The survey has detected no features of archaeological interest, and this suggests that no substantial remains exist within the proposed development area. The only anomaly detected indicates a former field boundary. However, the negative results do not entirely preclude the existence of small or ephemeral remains (eg postholes, cremations, etc) as such things rarely produce clear and diagnostic magnetic anomalies (EH 2008, 14).

BIBLIOGRAPHY

Bartington, G, and Chapman, C, 2003 A high-stability fluxgate magnetic gradiometer for shallow geophysical survey applications, *Archaeological Prospection*, **11**, 19-34

BGS 2012 *GeoIndex*, http://mapapps2.bgs.ac.uk/geoindex/home.html, consulted 02/05/2012

EH 2008 Geophysical Survey in Archaeological Field Evaluation, English Heritage

Gajos 2012 Archaeological Desk-Based Assessment land off Stanley road & Four Acres Great Chesterford Essex March 2012

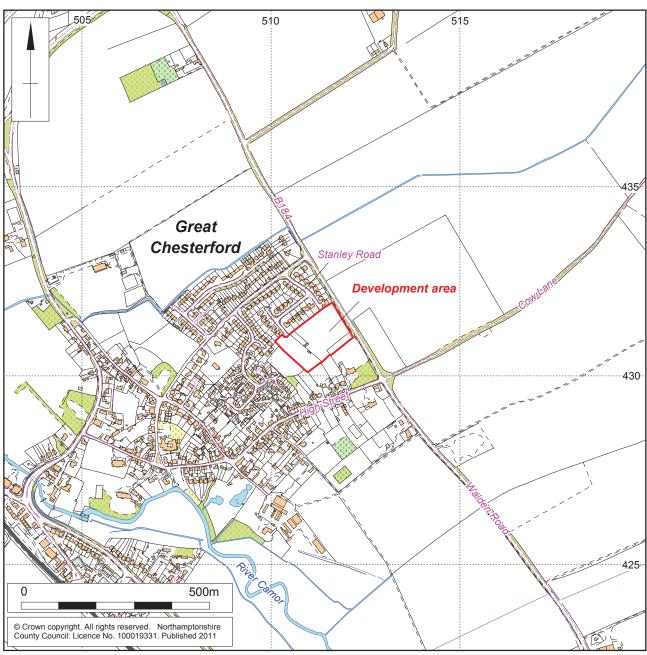
IfA 2011 Standard and Guidance for Archaeological Geophysical Survey, Institute for Archaeologists

Northamptonshire Archaeology a Service of Northamptonshire County Council

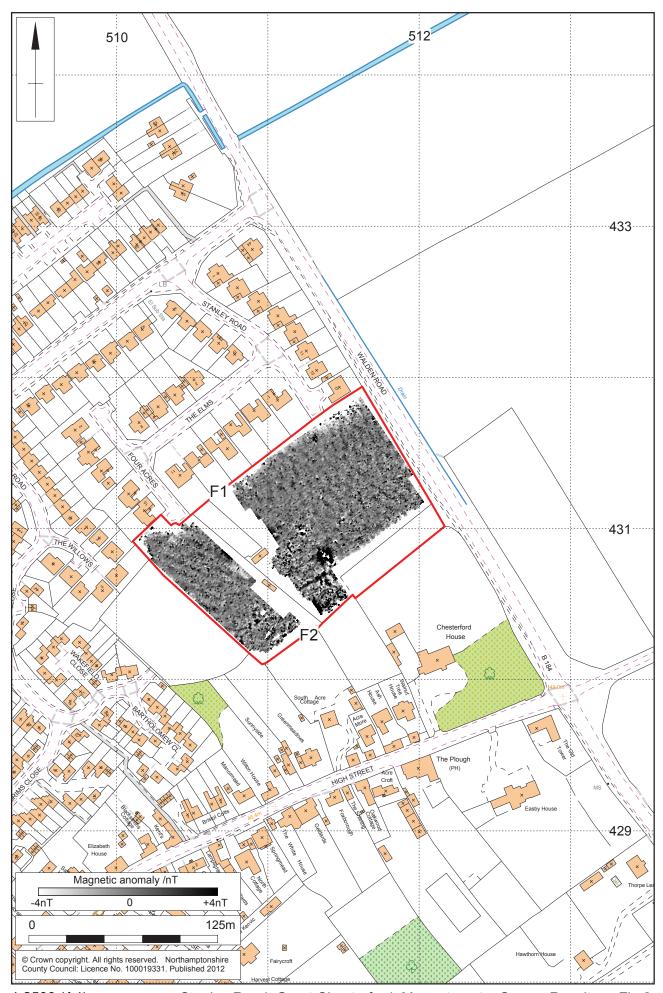
03 May 2012







Scale 1:10,000 Site location Fig 1





Stanley Road, Great Chesterford: Magnetometer Survey Interpretation 1:2500 (A4)