

# Northamptonshire Archaeology

# Archaeological Geophysical Survey at Kinwarton Farm Road, Alcester, Warwickshire



Northamptonshire County Council



Adrian Butler Report 10/09 January 2010

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PROJECT				
DETAILS				
Project name	Archaeological Geophysical Survey at Kinwarton Farm Road, Alcester, Warwickshire			
Short description	Phoenix Archaeology commissioned Northamptonshire Archaeology to conduct an archaeological geophysical survey on 5.5ha land adjacent to Kinwarton Farm Road, Alcester in January 2010. The remnants of two sets of ridge and furrow cultivation were detected along with considerable ferrous debris. Otherwise no significant archaeological features were discovered by the survey.			
Project type	Geophysical survey			
Site status	None			
Previous work	None			
Current Land use	Pasture			
Future work	Unknown			
Monument type/ period				
Significant finds	None			
PROJECT LOCATION				
County	Warwickshire	Warwickshire		
Site address	Kinwarton Farm Road			
Study area	5.5 ha			
OS Easting & Northing	460000, 230000			
Height OD	50-55m AOD			
PROJECT CREATORS	·			
Organisation	Phoenix Consulting Archaeology Ltd			
Project brief originator	Phoenix Consulting Archaeology Ltd			
Project Design	Andy Richmond			
originator	·			
Director/Supervisor	James Ladocha			
Project Manager	Adrian Butler			
Sponsor or funding	Redrow Homes (M	Redrow Homes (Midland) Ltd		
body				
PROJECT DATE				
Start date	11 January 2010			
End date	14 January 2010			
ARCHIVES				
Physical	N/A	-		
Paper	N.A	Site survey records		
Digital	N.A	Geophysical survey & GIS data		
BIBLIOGRAPHY				
Title	Archaeological Geophysical Survey at Kinwarton Road, Alcester, Warwickshire			
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### OASIS REPORT FORM

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#### ARCHAEOLOGICAL GEOPHYSICAL SURVEY AT

#### KINWARTON FARM ROAD, ALCESTER,

#### WARWICKSHIRE

#### JANUARY 2010

#### ABSTRACT

Phoenix Archaeology commissioned Northamptonshire Archaeology to conduct an archaeological geophysical survey on 5.5ha land adjacent to Kinwarton Farm Road, Alcester in January 2010. The remnants of two sets of ridge and furrow cultivation were detected along with considerable ferrous debris. Otherwise no significant archaeological features were discovered by the survey.

#### 1 INTRODUCTION

Northamptonshire Archaeology was commissioned by Phoenix Consulting Archaeology Ltd, to conduct an archaeological geophysical survey on land at Kinwarton Farm Road, Alcester, Warwickshire (centred on NGR SP 60000 30000; Fig 1). A magnetic gradiometer survey was carried out on the field, comprising an area of some 5.5ha, as part of an archaeological field evaluation on behalf of Redrow Homes (Midlands) Ltd. The work was undertaken between 11th and 14th January 2010.

#### 2 TOPOGRAPHY AND GEOLOGY

The site lies mostly between the 55m and 50m contours, gently sloping towards the west. The underlying geology comprises Triassic mudstones of the new Red Sandstone Formation (BGS 2010).

A single field of pasture was surveyed. The field was orientated roughly north-west to south-east, Kinwarton Farm Road bounding the west. The road bounding the south side of the site was 'Captain's Hill'. Woodland bordered the north of the field whilst much of the eastern edge was overgrown. A line of telegraph poles was aligned with the south-eastern boundary, occasional trees between them. An electricity sub-station was situated in the west of the field, adjacent to the road (Fig 2).

#### 3 ARCHAEOLOGICAL BACKGROUND

No prior archaeological fieldwork appears to have been carried out within the survey area or the immediate surrounding fields. Alcester, however, is the site of a Roman town, of which the remains are mostly situated approximately 1km south-west of Kinwarton Farm Road. A former quarry, known as 'Bulls Pit', was located on the eastern edge of the site in the eighteenth century (Phoenix Archaeology 2009, 1).

#### 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).

Each survey area was divided into 30m grid squares. A tape measure and optical square were used to set out each field. The gradiometers were carried at a brisk but steady pace through each grid, collecting data along 1m spaced traverse lines. Measurements were automatically triggered every 0.25m along the traverses, giving a total of 1600 measurements per grid.

All fieldwork methods followed a Method Statement (Phoenix Archaeology 2009) and complied with the guidelines issued by English Heritage, and by the Institute for Archaeology (EH 2008; Gaffney, Gater and Ovendon 2002).

The survey data was processed using Geoplot 3.00u 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 greyscale plot (scale +4.0nT to -4.0nT black ~ white). These have been scaled, rotated and resampled (georectified) for display against the Ordnance Survey base mapping (Fig 2). Interpretative plots have been produced and are shown overlain onto the data in Figure 3.

#### 5 SURVEY RESULTS

The survey area was found to contain a high concentration of 'dipolar' (small paired intense positive-negative) magnetic anomalies. Such anomalies most likely represent small pieces of ferrous or brick waste contained near the surface, within the topsoil.

Parallel positive linear anomalies were detected throughout the site, indicating a likely

former ridge and furrow cultivation system. The furrows were aligned north-west to south-east between two possible north-east orientated headlands, within the northern 100m of the field. In the remainder of the field ridge and furrow was orientated approximately east-west.

Several large ferrous anomalies were detected by the survey in the southern half of the field. Two of these were attributed to the telegraph poles, the others possible larger pieces of buried ferrous debris. Anomalies relating to ferrous and brick-type debris were also located along the northern boundary of the field

#### 6 CONCLUSION

The survey has identified two sets of ridge and furrow cultivation aligned north-west to south-east in the north quarter of the site and east-west for the remainder. Considerable amounts of small ferrous debris were detected scattered across the field. Otherwise, no significant archaeological features were located

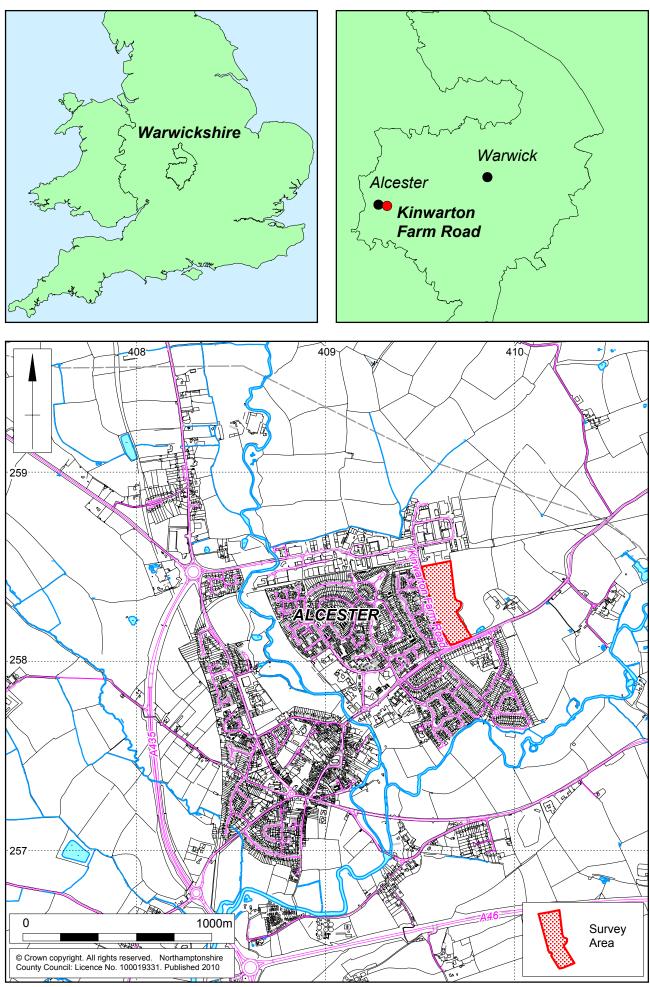
#### BIBLIOGRAPHY

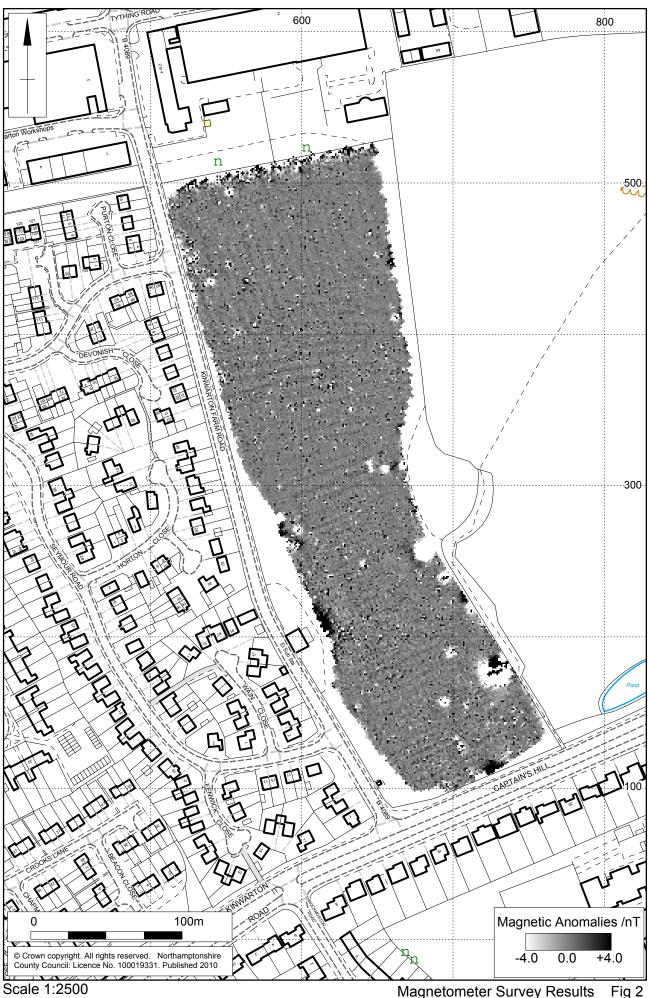
Bartington, G, and Chapman, C, 2003 A high-stability fluxgate magnetic gradiometer for shallow geophysical survey applications, *Archaeological Prospection*, **11**, 19-34

EH 2008 Geophysical Survey in Archaeological Field Evaluation, English Heritage

Gaffney, C, Gater, J, and Ovendon, S, 2002 *The Use of Geophysical Techniques in Archaeological Evaluations*, Institute of Field Archaeologists Technical Paper, **6** 

Phoenix Consulting Archaeology Ltd, 2009 *Method Statement for Geophysical Survey at Kinwarton Farm Road, Alcester, Warwickshire* 





Magnetometer Survey Results Fig 2



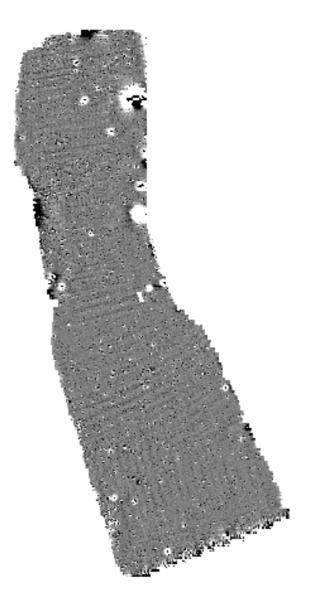
Scale 1:2500

Magnetometer Survey Interpretation Fig 3



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