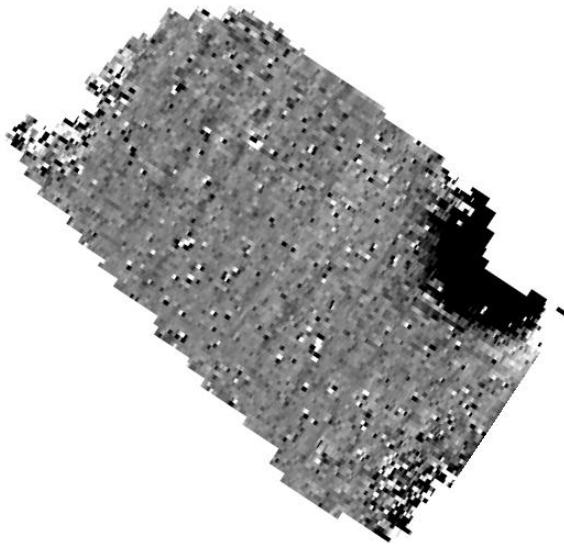




# Northamptonshire Archaeology

Archaeological geophysical survey at Springfields  
Nursery, Curbridge Road, Witney, Oxfordshire  
May 2013



## Northamptonshire Archaeology

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Report 13/90

May 2013





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**QUALITY CONTROL**

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Verified by	Mark Holmes	<i>MH</i>	28/05/13
Approved by	Andy Chapman	<i>AC</i>	28/05/13

WITNEY, SPRINGFIELDS NURSERY

**OASIS REPORT FORM 151325**

PROJECT DETAILS		
Project name	Archaeological geophysical survey at Springfields Nursery, Curbridge Road, Witney, Oxfordshire	
Short description	Northamptonshire Archaeology was commissioned to carry out a magnetometer survey at Spingfields Nursery, Curbridge Road, Witney. The survey detected traces of medieval ridge and furrow and small areas of modern disturbance.	
Project type	Geophysical survey	
Site status	None	
Previous work	None known	
Current Land use	Paddocks	
Future work	Unknown	
Monument type/ period	None	
Significant finds	None	
PROJECT LOCATION		
County	Oxfordshire	
Site address	Springfields Nursery, Curbridge Road, Witney	
Study area	c1.5ha	
OS Easting & Northing	SP 337 091	
Height OD	c90 m AOD	
PROJECT CREATORS		
Organisation	Northamptonshire Archaeology (NA)	
Project brief originator	CgMs Consulting	
Project Design originator	NA	
Director/Supervisor	John Walford	
Project Manager	Mark Holmes	
Sponsor or funding body	CgMs Consulting	
PROJECT DATE		
Start date	7 May 2013	
End date	23 May 2013	
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BIBLIOGRAPHY	Journal/monograph, published or forthcoming, or unpublished client report	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 Springfields Nursery, Curbridge Road, Witney, Oxfordshire, May 2013	
Serial title & volume	Northamptonshire Archaeology Reports 13/90	
Author(s)	John Walford	
Page numbers	4	
Date	28 May 2013	

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**ARCHAEOLOGICAL GEOPHYSICAL SURVEY AT SPRINGFIELDS  
NURSERY, CURBRIDGE ROAD, WITNEY, OXFORDSHIRE  
MAY 2013**

**ABSTRACT**

*Northamptonshire Archaeology was commissioned to carry out a magnetometer survey at Springfields Nursery, Curbridge Road, Witney. The survey detected traces of medieval ridge and furrow and small areas of modern disturbance.*

**1 INTRODUCTION**

Northamptonshire Archaeology was commissioned by CgMs Consulting to conduct a geophysical survey on a proposed residential development site at Springfields Nursery, Curbridge Road, Witney, Oxfordshire (NGR SP 337 091, Fig 1). The survey formed one stage in a programme of archaeological evaluation, seeking to determine the presence, extent and nature of any archaeological remains which might be affected by the proposed development. The fieldwork was undertaken on 7 May 2013, and comprised a detailed magnetometer survey of c 1.5ha of land.

**2 TOPOGRAPHY AND GEOLOGY**

The proposed development site comprises c1.5ha of land located to the west of Curbridge Road, on the south-western edge of Witney (NGR SP 337 091; Fig 1). It encompasses Springfield Nursery, an adjacent paddock and two small plots of grass. The ground surface in this area stands at about 90m aOD and slopes gently down to the Colwell Brook, which flows along the south-western boundary of the site. The underlying geology is mapped as Cornbrash (BGS 2013).

### **3 ARCHAEOLOGICAL BACKGROUND**

The proposed development site lies c 200m north of the A40 Witney bypass, where part of a Roman settlement and late Roman cemetery were excavated in the 1970s (Chambers 1976). The extent of this site is unknown, but a watching brief undertaken c 200m to the north-east of the excavated area, during the construction of the Burwell Farm estate, found just a few Roman coins and pot-sherds with no associated archaeological features (Williams 1982).

Other archaeological remains are known within the wider vicinity of the proposed development area. A cropmark of a large ring ditch has been identified approximately 900m to the north-west, and an unenclosed middle Iron Age settlement has been excavated approximately 750m north, at the junction of Deerpark Road and Valence Crescent (Walker 1995).

The proposed development area lies away from any known medieval or post-medieval settlement, being c 1.8km south-west of Witney town centre and c 500m north-east of the village of Curbridge. Early editions of the Ordnance Survey show that it was undeveloped arable land in the nineteenth century, and that Springfields Nursery and the adjacent cottage (also called Springfields) both date from the second half of the twentieth century.

### **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 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 and with the agreed method statement for this project (EH 2008; IfA 2011; NA 2013).

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 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. The unprocessed survey data is presented as greyscale plots in Figure 4.

## **5 SURVEY RESULTS**

The survey data contains a series of parallel, weakly magnetic, linear anomalies, aligned from north-east to south-west, which probably represent the remnants of ploughed-down medieval ridge and furrow. Apart from these the survey has only detected modern features.

Areas of magnetic 'noise' at the southern and western corners of the main paddock indicate accumulations of modern debris (scrap metal, builders' rubble, bonfire debris, etc), and a large dipolar anomaly in the small, south-eastern, paddock represents a substantial piece of buried iron. Elsewhere, there are large magnetic halos arising from the adjacent greenhouses, stable-block and fences, and from a sheet of chicken wire wrapped around a tree in the south-eastern paddock.



## 6 CONCLUSION

The fact that the survey has detected no archaeological features, other than medieval ridge and furrow, suggests that the proposed development area may be of limited archaeological interest. However, given the recognised limitations of magnetometer survey (EH 2008:14), the presence of features such as inhumations or otherwise relatively ephemeral remains cannot be absolutely ruled out.

## BIBLIOGRAPHY

BGS 2013 *Online Geology Mapping* [www.bgs.ac.uk/geoindex.htm](http://www.bgs.ac.uk/geoindex.htm) ; British Geological Survey accessed November 2013

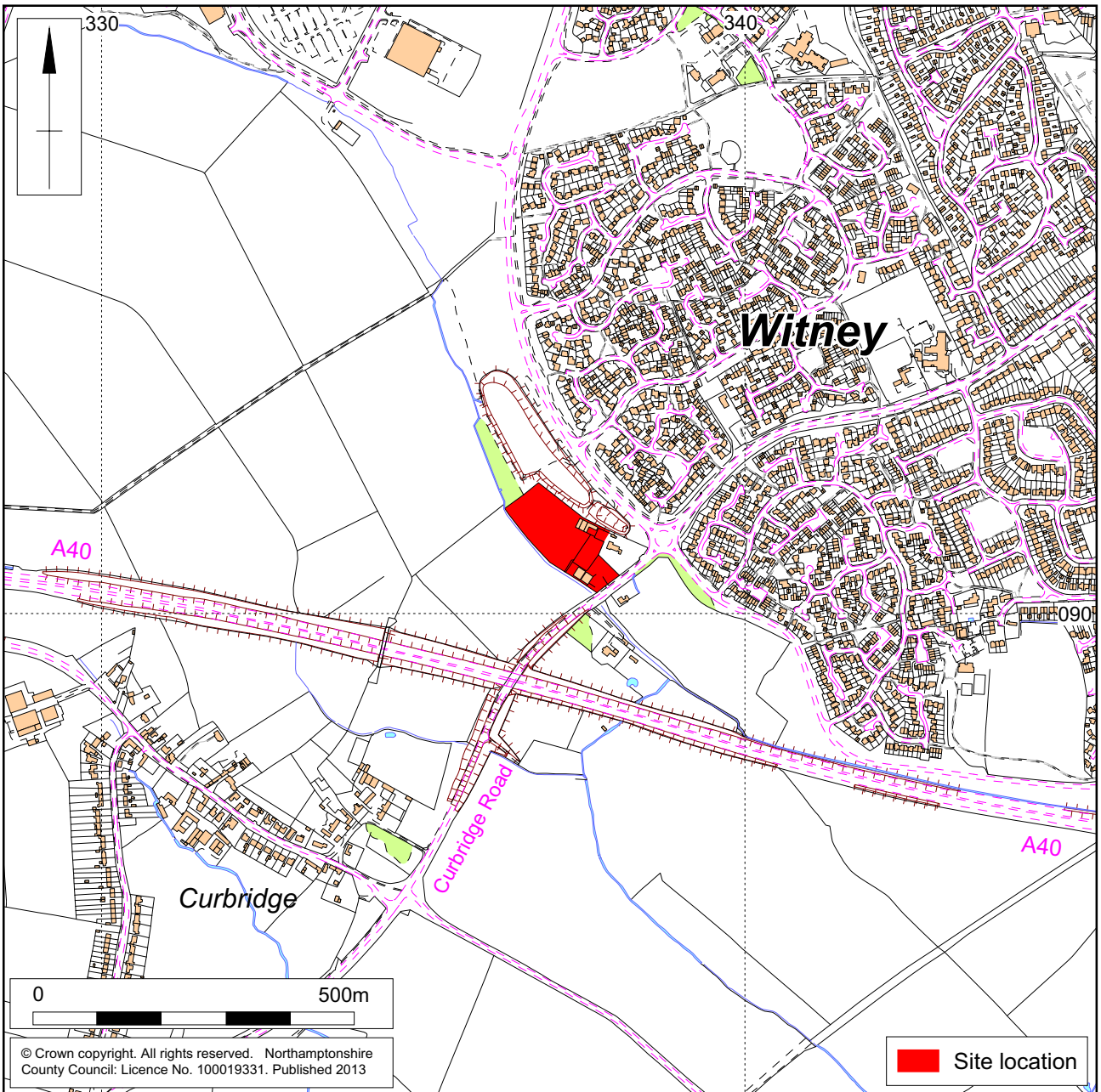
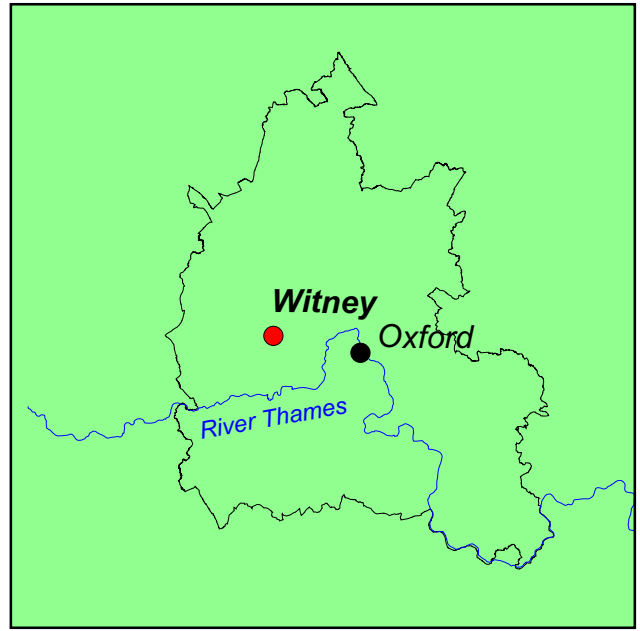
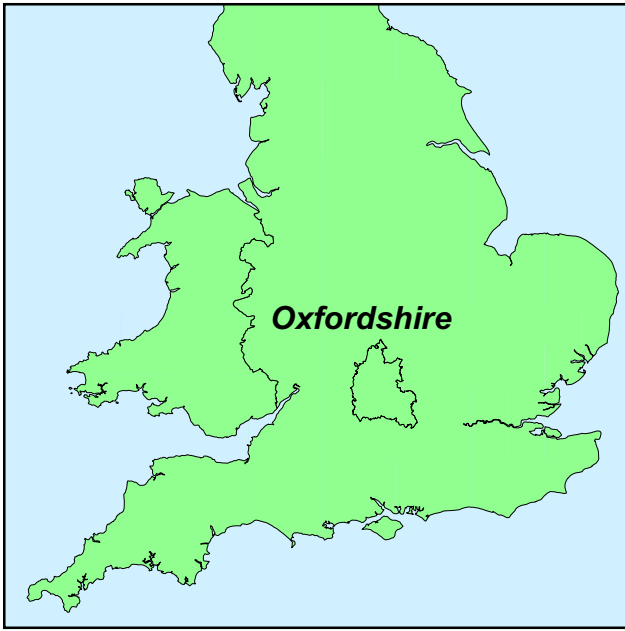
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Scale 1:10,000

Site location Fig 1



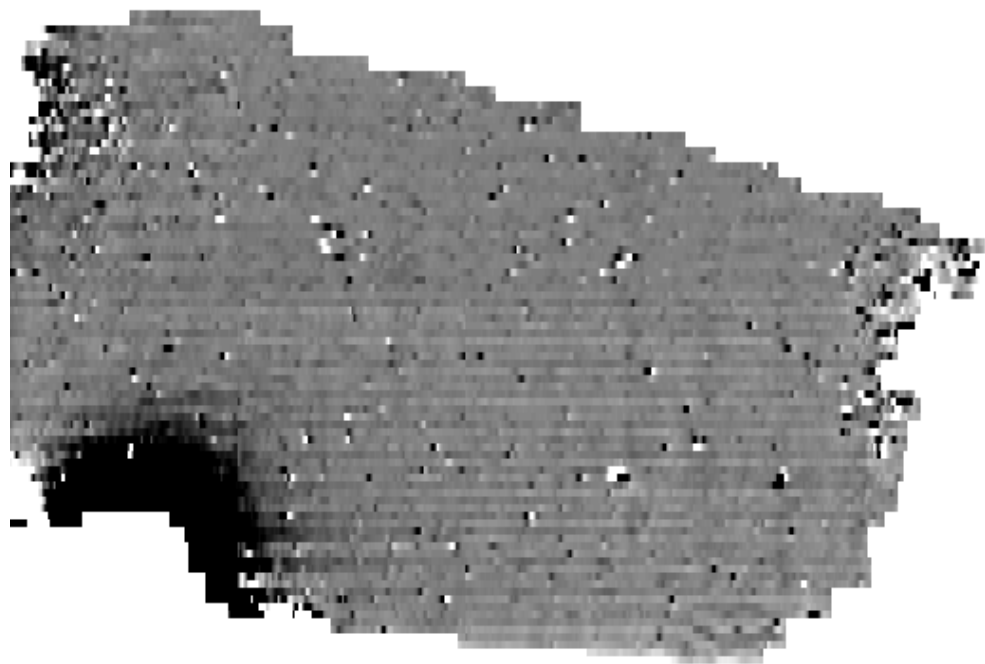
1:2000

Magnetometer survey results Fig 2



1:2000

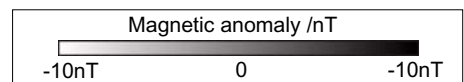
Magnetometer survey interpretation Fig 3



Field 1



Field 2





Northamptonshire County Council

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