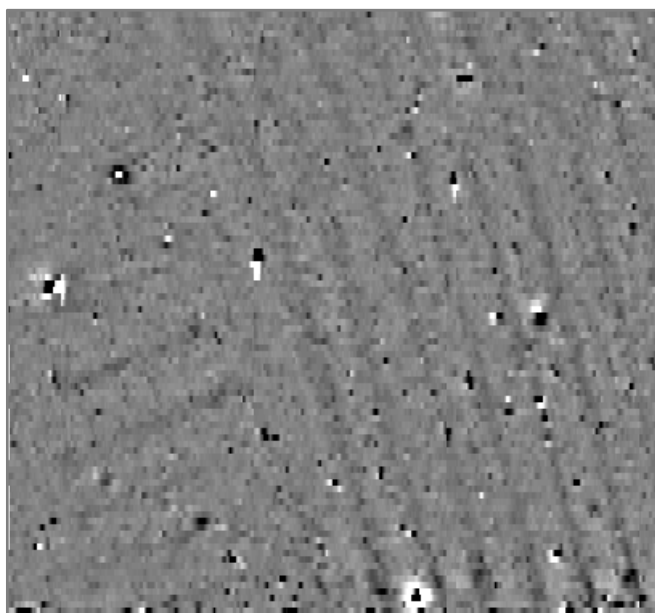




# Northamptonshire Archaeology

## Archaeological Geophysical Survey at Tower Farm Wollaston, Northamptonshire



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Report 11/212

October 2011



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## TOWER FARM, WOLLASTON

**OASIS REPORT FORM**

PROJECT DETAILS		
Project name	Archaeological Geophysical Survey at Tower Farm, Wollaston, Northamptonshire	
Short description	Northamptonshire Archaeology was commissioned to carry out magnetometer survey in advance of a proposed wind farm development at Tower Farm, Wollaston, Northamptonshire. An area of c 2ha was subject to detailed magnetometer survey. The only archaeological features identified were plough furrows relating to the former open field system of Wollaston.	
Project type	Geophysical survey	
Site status	None	
Previous work	Unknown	
Current Land use	Arable	
Future work	Unknown	
Monument type/ period	Medieval to post-medieval ridge and furrow	
Significant finds	None	
PROJECT LOCATION		
County	Northamptonshire	
Site address	Tower Farm, Wollaston	
Study area	c 2ha	
OS Easting & Northing	SP 9220 6235	
Height OD	c 90 m AOD	
PROJECT CREATORS		
Organisation	Northamptonshire Archaeology (NA)	
Project brief originator	CgMs Ltd	
Project Design originator	NA	
Director/Supervisor	John Walford	
Project Manager	Adrian Butler	
Sponsor or funding body	PG Sumner	
PROJECT DATE		
Start date	28 September 2011	
End date	12 October 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BIBLIOGRAPHY	Journal/monograph, published or forthcoming, or unpublished client report	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 Tower Farm, Wollaston, Northamptonshire	
Serial title & volume	Northamptonshire Archaeology Reports 11/212	
Author(s)	John Walford	
Page numbers	4	
Date	12 October 2011	

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**ARCHAEOLOGICAL GEOPHYSICAL SURVEY AT  
TOWER FARM, WOLLASTON, NORTHAMPTONSHIRE  
SEPTEMBER 2011**

**ABSTRACT**

*Northamptonshire Archaeology was commissioned to carry out magnetometer survey in advance of a proposed wind farm development at Tower Farm, Wollaston, Northamptonshire. An area of c 2ha was subject to detailed magnetometer survey. The only archaeological features to be identified were plough furrows relating to the former open fields of Wollaston.*

**1 INTRODUCTION**

Northamptonshire Archaeology (NA) was commissioned by CgMs Ltd to conduct an archaeological geophysical survey in advance of a proposed wind turbine development at Tower Farm, Wollaston, Northamptonshire. The area to be investigated was centred at NGR SP 9220 6235, in the south-eastern part of the parish of Wollaston (Fig 1).

It was originally intended that the survey would cover two areas of 1ha each, centred on the proposed sites of two adjacent turbines. However, the closeness of the turbines and the constricted nature of the field in which they lay required minor changes to this plan, so that a slightly irregular area, just over 2ha in extent, was actually surveyed.

**2 TOPOGRAPHY AND GEOLOGY**

The survey area occupies the eastern end of an arable field in the south-east of the parish of Wollaston. It is located towards the top of a west-facing scarp, at an elevation of c 90m AOD, and overlooks the valley of the River Nene, which flows approximately 4km to the west.

The geology of the site is mapped as boulder clay overlying Great Oolite Limestone (BGS 1989).

### **3 ARCHAEOLOGICAL BACKGROUND**

Although Wollaston is rich in archaeological sites and monuments of the prehistoric and Roman periods, the majority of these are concentrated in the western part of the parish, towards the River Nene. Fewer remains are known from the high ground in the east, and there are no cropmarks or findspots recorded within 0.5km of the present survey area (Northamptonshire HER data). However, a Roman road does pass just to the east of the area, heading northwards towards Irchester, and it is possible that as yet unknown Roman remains may occur in its vicinity.

During the medieval and post-medieval periods, the site of the present survey lay within the common fields of Wollaston, at a considerable distance from any known focus of settlement (Hall 1977, 140). It was thus thought likely that the survey would encounter traces of ridge and furrow cultivation, but little else of medieval or later date.

### **4 METHODOLOGY**

The survey was undertaken on 28th September 2011. It was conducted with Bartington Grad 601-2, twin sensor array, vertical component fluxgate gradiometers (Bartington and Chapman 2003), which 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, which was tied into the Ordnance Survey National Grid by measurement to the field boundaries. 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 Figure 3. A plot of the raw (unprocessed) survey data is given in Figure 4.

## **5 SURVEY RESULTS**

The survey results are dominated by two sets of parallel, gently curving, linear anomalies which represent sub-surface remnants of ridge and furrow. This type of cultivation is characteristic of the former system of open-field agriculture and is generally of medieval origin. The two different furrow directions present in the data indicates that the survey area straddles two separate furlongs within a former open field.

One linear anomaly with a weakly alternating magnetic polarity crosses the northern part of the survey area on a different alignment to the ridge and furrow. It probably represents a relatively modern field drain. A few individual dipolar anomalies are also apparent in the data, indicating the presence of small pieces of ferrous debris (eg horseshoes, harrow tines, etc) within the ploughsoil.

## **6 CONCLUSION**

The survey has mapped the ridge and furrow which one extended across the proposed development area, but has detected no other anomalies of archaeological interest. It thus seems unlikely that any substantial archaeological features are present. However the results do not entirely preclude the discovery of slighter remains, such as cremation burials or post-built structures, as features such as these are rarely, if ever, detectable by magnetic survey.

## **BIBLIOGRAPHY**

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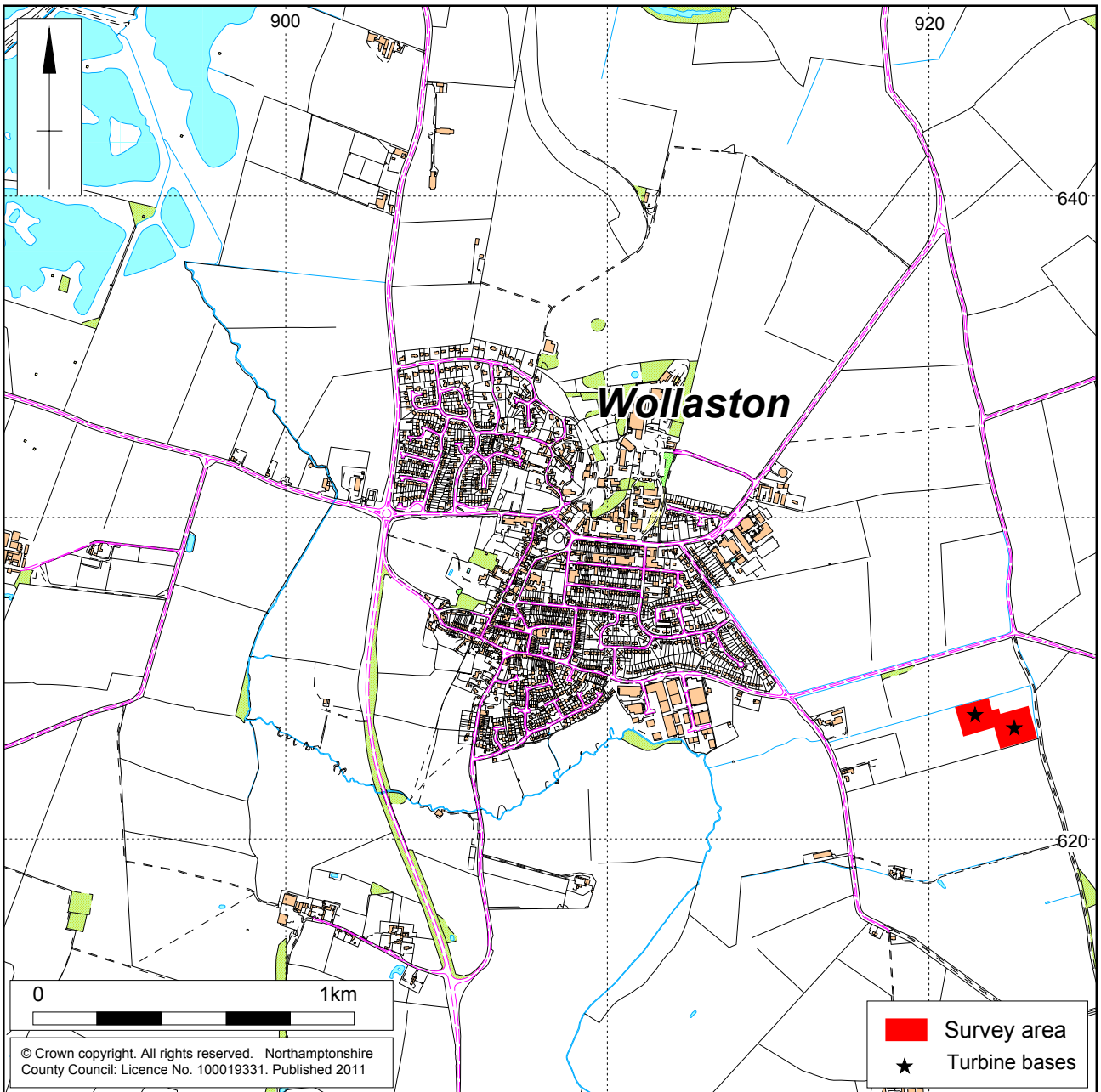
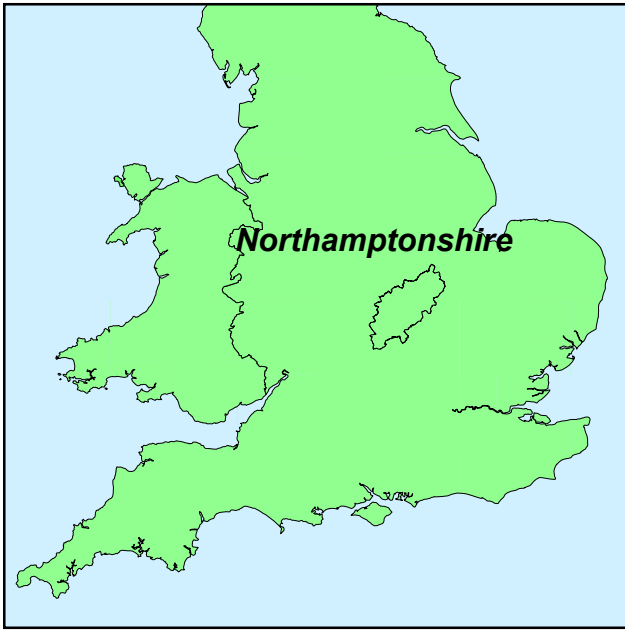
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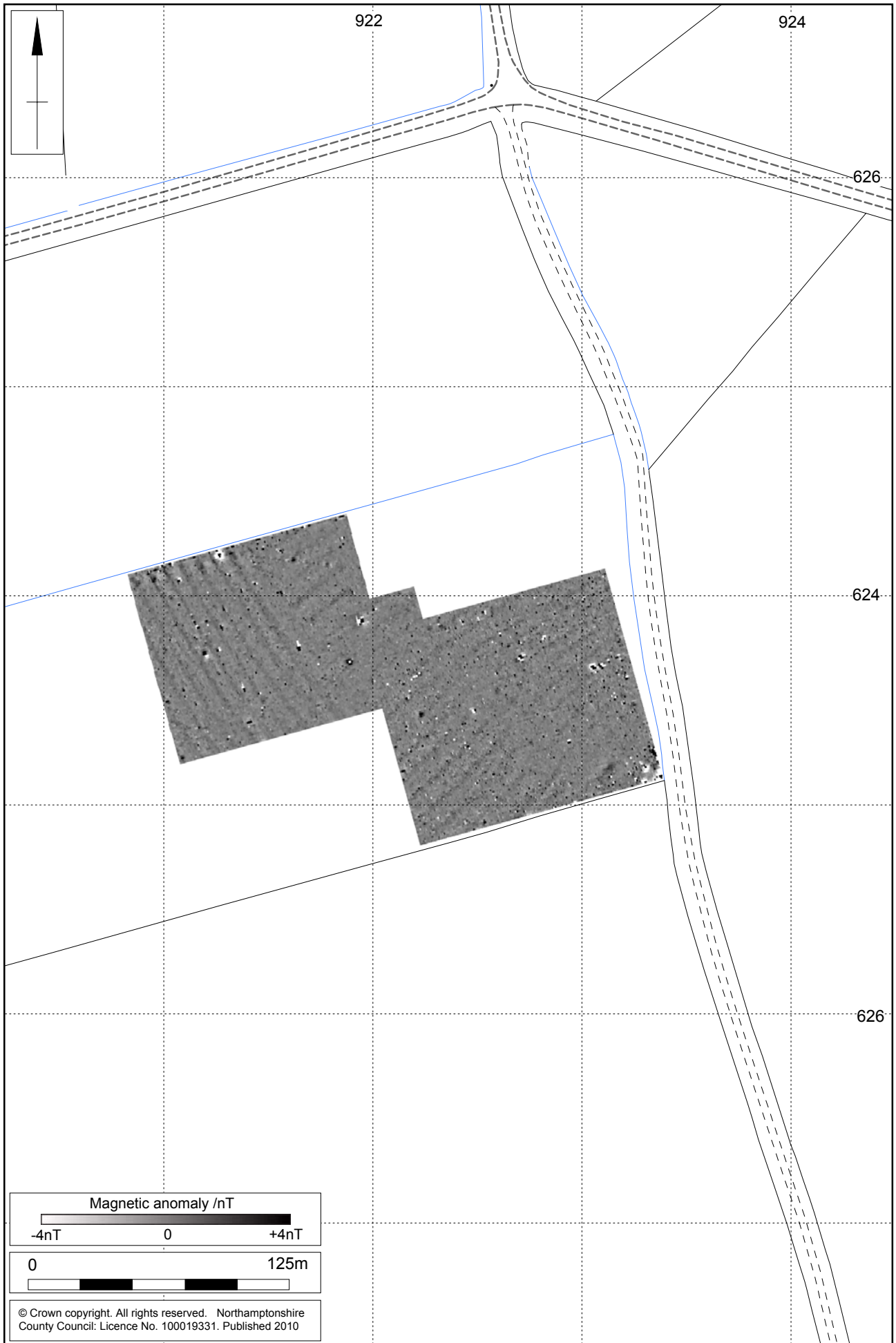
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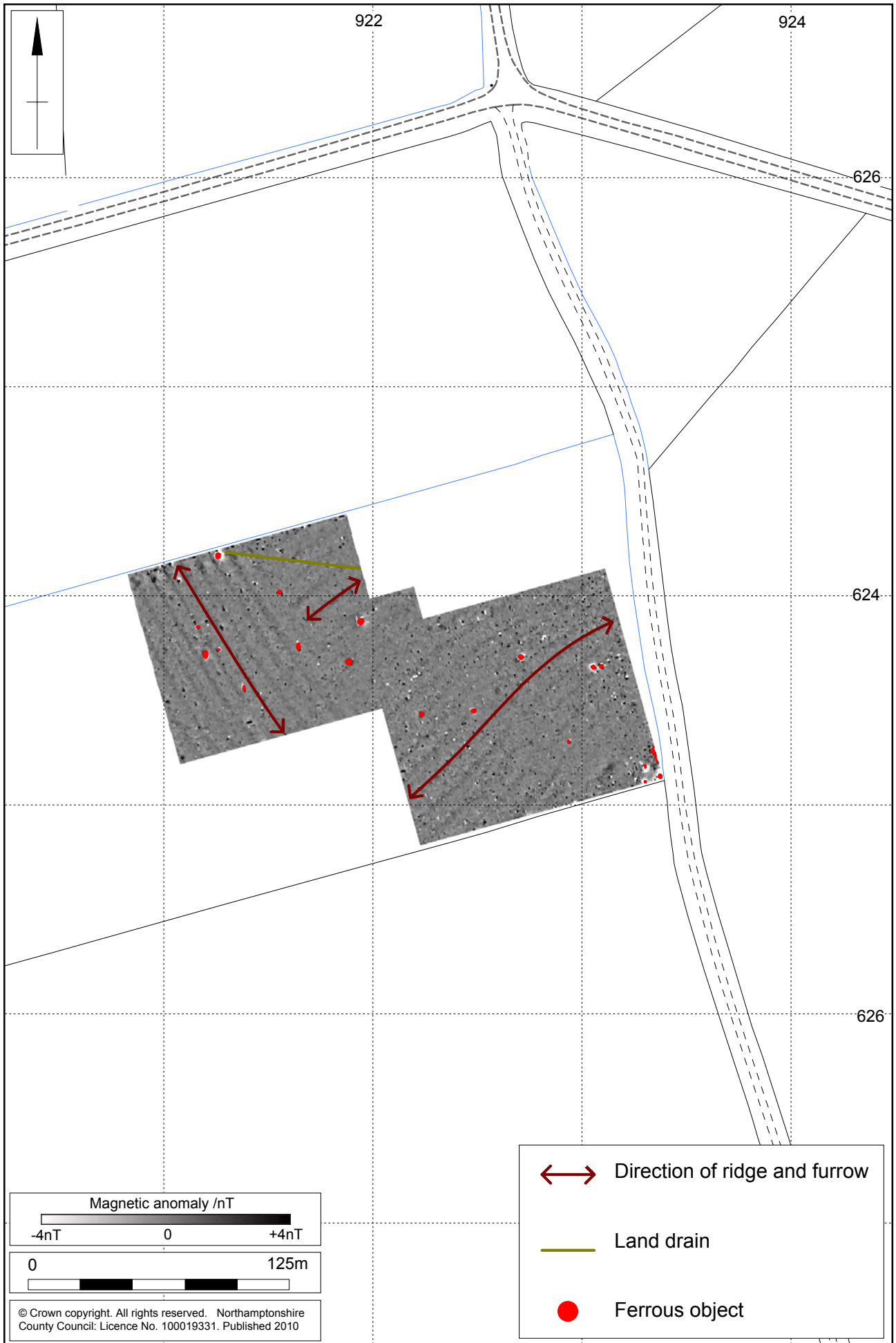
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Site location Fig 1



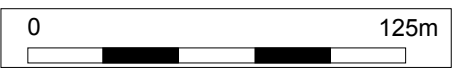
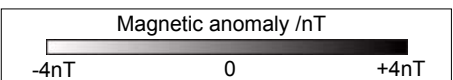
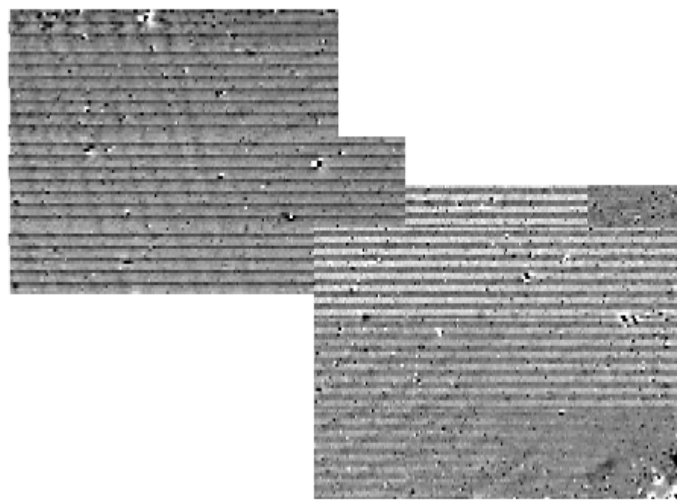
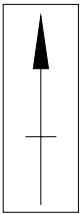
1:2500

Magnetometer survey results Fig 2



1:2500

Magnetometer survey interpretation Fig 3



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