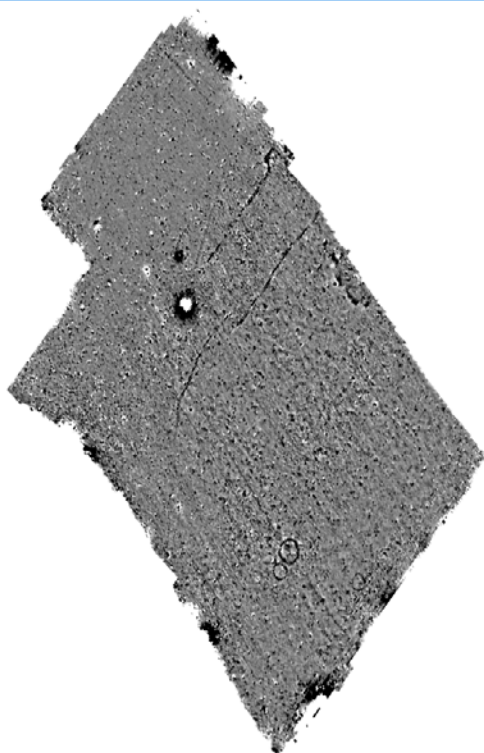




# Northamptonshire Archaeology

Archaeological geophysical survey of land at  
New Yatts Road, Witney, Oxfordshire  
May 2013



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Report 13/96

May 2013





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## QUALITY CONTROL

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Checked by	Pat Chapman	<i>PC</i>	30/05/13
Verified by	Mark Holmes	<i>MH</i>	30/05/13
Approved by	Andy Chapman	<i>AC</i>	30/05/13

**OASIS REPORT FORM 151666**

<b>PROJECT DETAILS</b>		
Project name	Archaeological geophysical survey of land at New Yatts Road, Witney, Oxfordshire	
Short description	Northamptonshire Archaeology was commissioned to carry out a magnetometer survey on land at New Yatts Road, Witney, Oxfordshire. The survey detected three small ring ditches of probable prehistoric date, as well as an undated linear ditch, medieval or post-medieval ridge and furrow and post-medieval field boundaries.	
Project type	Geophysical survey	
Site status	None	
Previous work	None known	
Current Land use	Arable	
Future work	Unknown	
Monument type/ period	Prehistoric ring ditches, undated linear ditch, post-medieval field boundaries	
Significant finds	None	
<b>PROJECT LOCATION</b>		
County	Oxfordshire	
Site address	New Yatts Road, Witney	
Study area	c6.6ha	
OS Easting & Northing	SP 368 111	
Height OD	c90 m AOD	
<b>PROJECT CREATORS</b>		
Organisation	Northamptonshire Archaeology	
Project brief originator	Oxfordshire County Council	
Project Design originator	Northamptonshire Archaeology	
Director/Supervisor	John Walford and Paul Clements	
Project Manager	Mark Holmes	
Sponsor or funding body	Taylor Wimpey UK Ltd	
<b>PROJECT DATE</b>		
Start date	20 May 2013	
End date	21 May 2013	
<b>ARCHIVES</b>	Location	Content
Physical	N/A	
Paper	NA	Site survey records
Digital	NA	Geophysical survey & GIS data
<b>BIBLIOGRAPHY</b>	Journal/monograph, published or forthcoming, or unpublished client report	
Title	Archaeological geophysical survey of land at New Yatts Road, Witney, Oxfordshire, May 2013	
Serial title & volume	Northamptonshire Archaeology Reports 13/96	
Author(s)	John Walford	
Page numbers	4	
Date	30 May 2013	

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**ARCHAEOLOGICAL GEOPHYSICAL SURVEY OF LAND AT  
NEW YATTS ROAD, WITNEY, OXFORDSHIRE  
MAY 2013**

**ABSTRACT**

*Northamptonshire Archaeology was commissioned to carry out a magnetometer survey on land at New Yatts Road, Witney, Oxfordshire. The survey detected three small ring ditches of probable prehistoric date, as well as an undated linear ditch, medieval or post-medieval ridge and furrow and post-medieval field boundaries.*

**1 INTRODUCTION**

Northamptonshire Archaeology were commissioned by Taylor Wimpey UK Ltd to conduct a geophysical survey on a proposed development area at New Yatts Road, Witney, Oxfordshire (NGR SP 368 111, 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 20-21 May 2013, and comprised a detailed magnetometer survey of c 6.6ha of land.

**2 TOPOGRAPHY AND GEOLOGY**

The proposed development site comprises a single arable field, of roughly rectangular shape, located on the northern edge of Witney. It is bounded by New Yatts Road on the north-west, by modern housing on the south-west, by the A4095 Woodstock Road on the south-east and by further arable land to the north-east. It occupies a gentle, south-east facing slope, lying astride the 95m contour.

The solid geology of the site comprises Cornbrash and Kellaways Clay (BGS 2013). No drift deposits are mapped, but the topsoil in the north-western part of the site contains an abundance of quartzite pebbles (pers obs), suggesting that a small, unrecorded pocket of high-level terrace gravel ("Northern Drift") may be present.

### **3     ARCHAEOLOGICAL BACKGROUND**

Cropmark evidence suggests that there are two possible small prehistoric ring ditches within the survey area, and that similar features lie to the south-east.

The proposed development area lies outside the historic core of Witney, in an area which was largely undeveloped until modern times. The nearest listed buildings are at Middlefield Farm, which lies c 200m to the west, on the opposite side of New Yatts Road. The farmhouse dates from the early seventeenth century, and historic records show that it was at the centre of a small estate.

### **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).

A network of 30m grid squares was established across the area to be surveyed. This was laid out with a tape measure and optical square and was 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 three positive annular anomalies, measuring between 8m and 12m in diameter, which probably represent prehistoric ring ditches. It is possible that they define Bronze Age round barrows, but their relatively small size would also be consistent with Iron Age roundhouses representing an unenclosed settlement.

A broken sinuous positive linear feature bisects the survey area on a north-east to south-west alignment. This indicates a linear ditch of unknown date. A fragmented right-angled positive linear anomaly in the northern part of the field represents a former field boundary. On the north-eastern edge of the field, there are several amorphous anomalies. These may indicate the presence of archaeological remains, but may also be agricultural and indicate the presence of a barn.

Faint positive linear anomalies, aligned north-west to south-east across the field, indicate the remnants of medieval or later ridge and furrow.

Midway along the north-eastern edge of the field there is an area of weak magnetic disturbance, measuring up to 35m across. This could represent either a small quarry pit or a natural disruption of the underling geology.

A large dipolar anomaly, located in the north-western half of the survey area, was caused by a telegraph pole (TP) with a transformer box attached (pers obs). Two weak linear anomalies radiate away from the pole, one heading north-eastwards towards the modern barn, the other north-westwards in the direction of Middlefield Farm. The anomalies themselves are not especially diagnostic, but their alignments suggest that they may represent electricity cable trenches.



## 6 CONCLUSION

The survey has identified three small ring ditches of probable prehistoric date and a ditch of unknown date. Three indeterminate anomalies may be archaeological, but an agricultural interpretation is most likely.

Remnant furrows of medieval or later ridge and furrow cultivation were also identified by the survey.

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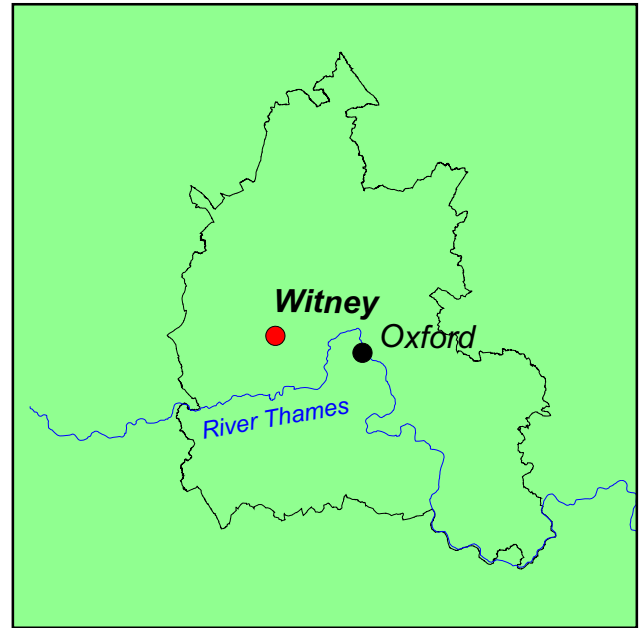
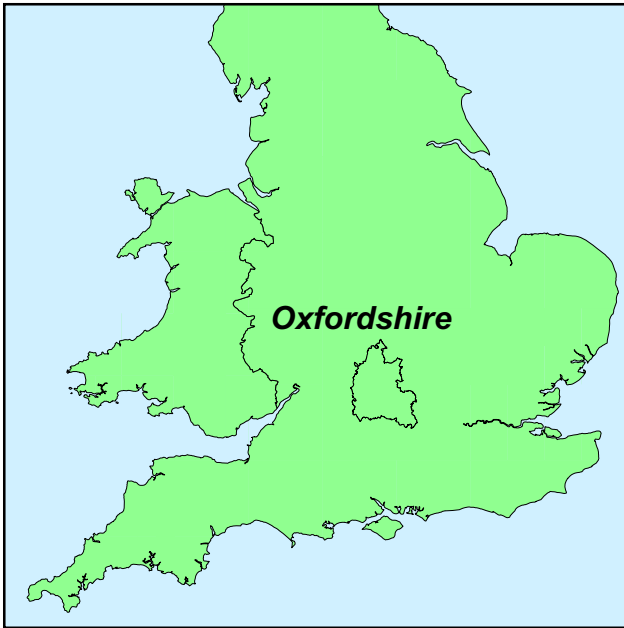
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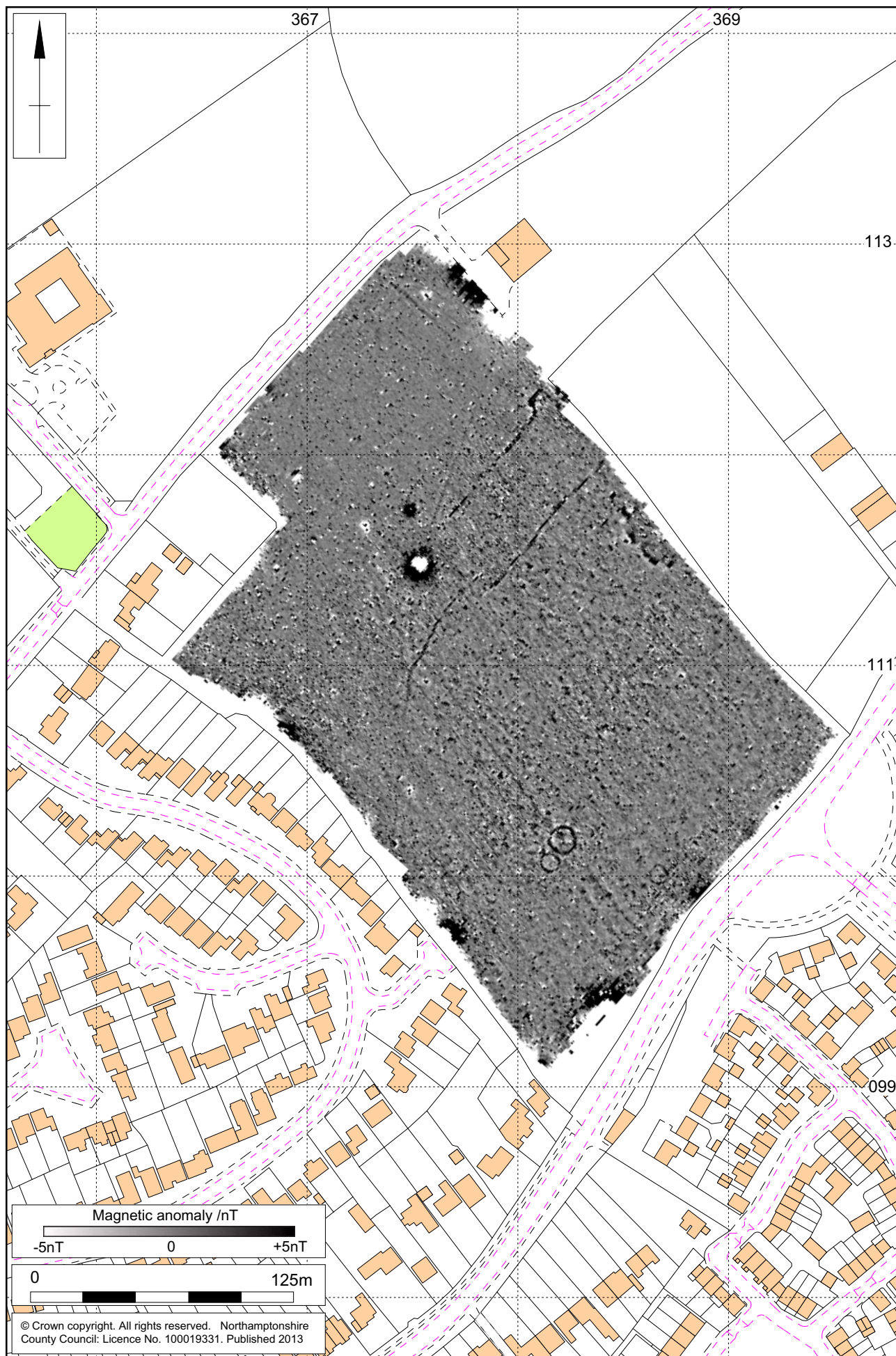
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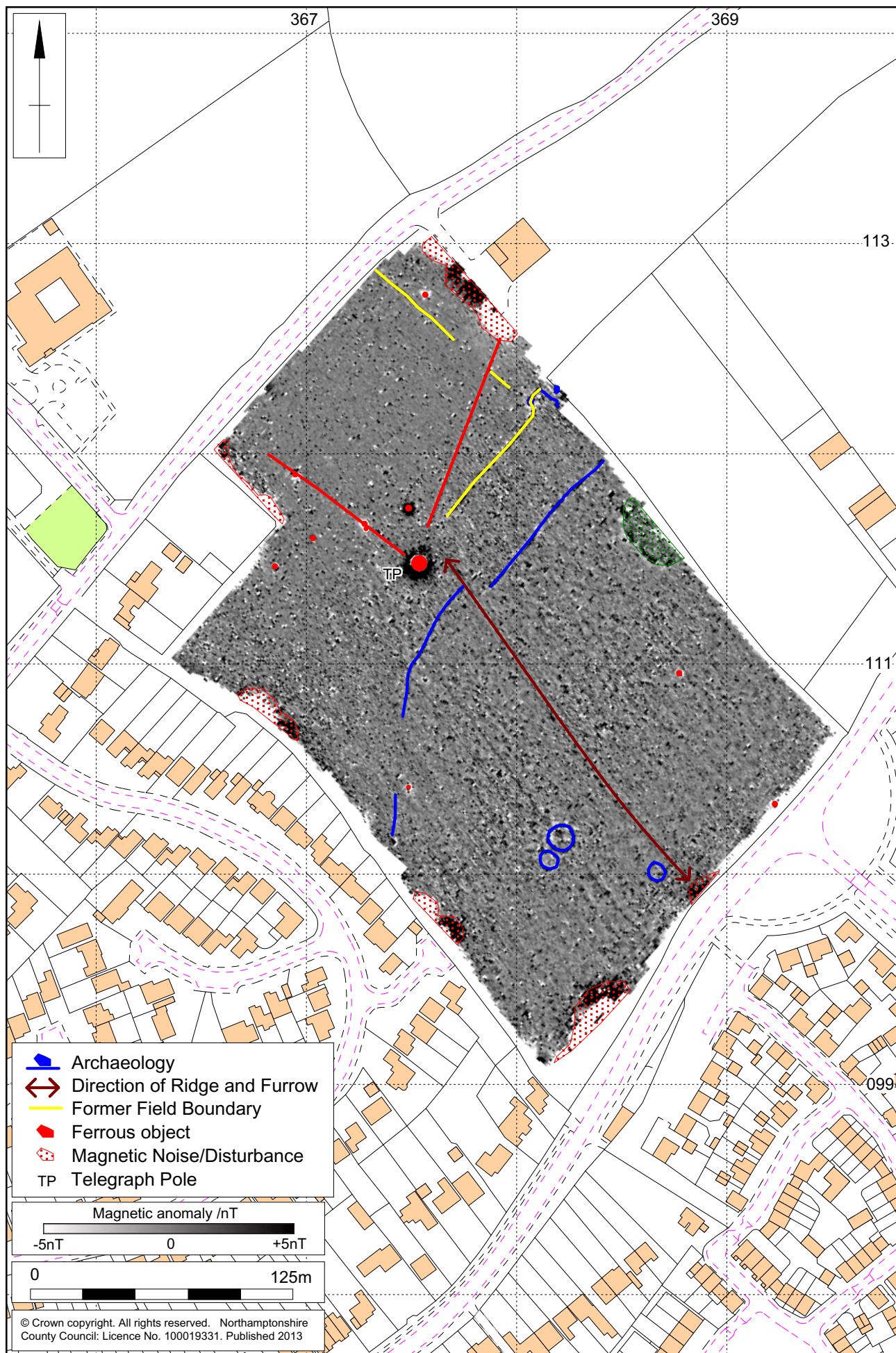


Scale 1:10,000

Site location Fig 1







Scale 1:2500 (A4)

Magnetometer Survey Interpretation Fig 3



Scale 1:2500 (A4)

Unprocessed Magnetometer Data Fig 4



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