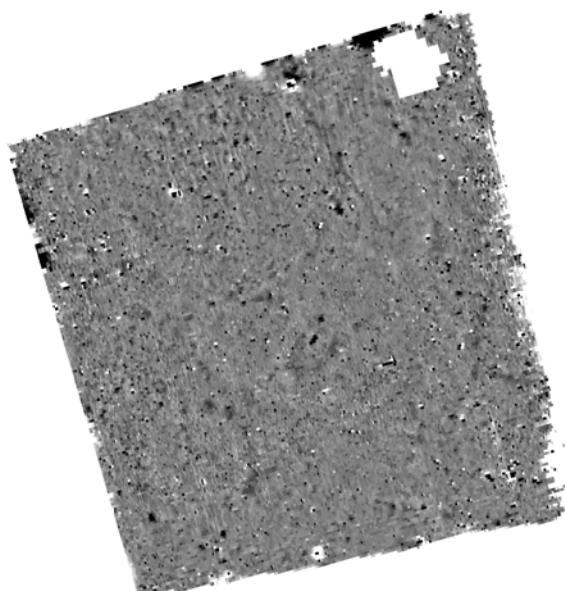




Northamptonshire Archaeology

Archaeological geophysical survey of land
at Gazeley Road, Kentford, Suffolk
December 2012



Northamptonshire Archaeology

2 Bolton House
Wootton Hall Park
Northampton NN4 8BE
t. 01604 700493 f. 01604 702822
e. sparry@northamptonshire.gov.uk
w. www.northantsarchaeology.co.uk



Northamptonshire
County Council

John Walford

Report 12/213

Site code: KTD 018

December 2012



STAFF

Project Manager: Mark Holmes BA MA MifA

Fieldwork: John Walford MSc
Oly Dindoll BA

Text and Illustrations: John Walford

QUALITY CONTROL

	Print name	Signed	Date
Checked by	Pat Chapman	<i>PC</i>	13/12/2012
Verified by	Mark Holmes	<i>MH</i>	13/12/2012
Approved by	Andy Chapman	<i>AC</i>	13/12/2012

OASIS REPORT FORM 139167

PROJECT DETAILS		
Project name	Archaeological geophysical survey of land at Gazeley Road, Kentford, Suffolk	
Short description	Northamptonshire Archaeology was commissioned to carry out a detailed magnetometer survey of a proposed development site at Gazeley Road, Kentford, Suffolk. The survey identified three ill-defined linear anomalies, two of which formed an approximately right-angled corner. It is possible that these represent sections of ditch, but a geological cause is also possible. Small, localised anomalies were also present. These probably represent geological features, although some may represent pits.	
Project type	Geophysical survey	
Site status	None	
Previous work	None known	
Current Land use	Arable	
Future work	Unknown	
Monument type/ period	Possible undated ditches and pits	
Significant finds		
PROJECT LOCATION		
County	Suffolk	
Site address	Gazeley Road, Kentford	
Study area	c 3.5ha	
OS grid reference	TL 711 665	
Height OD	c 38m 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	6 December 2012	
End date	13 December 2012	
ARCHIVES		
	Location	Content
Physical	N/A	
Paper	NA - KTD 018	Site survey records
Digital	NA - KTD 018	Geophysical survey & GIS data
BIBLIOGRAPHY		
	Journal/monograph, published or forthcoming, or unpublished client report	
Title	Archaeological geophysical survey of land at Gazeley Road, Kentford, Suffolk, December 2012	
Serial title & volume	Northamptonshire Archaeology Reports 12/213	
Author(s)	John Walford	
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**ARCHAEOLOGICAL GEOPHYSICAL SURVEY OF LAND AT
GAZELEY ROAD, KENTFORD, SUFFOLK
DECEMBER 2012**

ABSTRACT

Northamptonshire Archaeology was commissioned to carry out a detailed magnetometer survey of a proposed development site at Gazeley Road, Kentford, Suffolk. The survey identified three ill-defined linear anomalies, two of which formed an approximately right-angled corner. It is possible that these represent sections of ditch, but a geological cause is also possible. Small, localised anomalies were also present. These probably represent geological features, although some may represent pits.

1 INTRODUCTION

Northamptonshire Archaeology (NA) was commissioned by CgMs Consulting to conduct a geophysical survey in advance of a proposed development on land to the east of Gazeley Road, Kentford, Suffolk (NGR TL 711 665; 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 6-7 December 2012 and comprised the detailed magnetometer survey of c 3.5ha of land.

2 TOPOGRAPHY AND GEOLOGY

The proposed development area consists of an almost square-shaped arable field located immediately to the south of Kentford. It is bounded to the west by Gazeley Road, to the south by woodland, and to the east by an old quarry pit, now occupied by landfill. At the time of survey this field was very wet, with a large area of standing water close to the north-eastern corner.

The proposed development area stands at a height of c 38m aOD, and slopes down slightly towards the north-east. It is underlain by river terrace deposits (BGS 2012), which support light silty soils with abundant flint gravel (pers obs).

3 ARCHAEOLOGICAL BACKGROUND

Approximately 250m north-east of the proposed development area, the Suffolk HER records three Bronze Age ring ditches (KTD 002, 003 and 004) and the findspot of a Neolithic axehead (KTD 008). Further to east, in the parish of Gazeley, three Bronze Age round barrows survive as earthworks (GAZ 002, 003 and 008: Fig 1). There is thus a potential for more prehistoric remains to be found in the vicinity, although a trial trench evaluation of land just north of the proposed development area did not find anything of interest (Gill 2007).

The proposed development area lies outside of the historic core of Kentford, and the historic Ordnance Survey maps of the area, show it to have been in agricultural use from 1884 onwards.

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).

The survey area was divided into a grid of 30m squares, which were established with a tape measure and optical square and 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. This plot has been scaled, rotated and resampled (georectified) for display against the Ordnance Survey base mapping (Fig 2). An interpretative overlay is shown in Figure 3, and a plot of the unprocessed survey data is presented in Figure 4.

5 SURVEY RESULTS

The survey data contains three poorly-defined, weakly positive linear anomalies. One runs south-eastwards from the northern edge of the field, and the other two form a right-angled corner close to its eastern edge. The northern anomaly probably represents a ditch of indeterminate date. The other two are of less certain significance, but perhaps represent one corner of a ditched enclosure.

Much of the rest of the data contains weak and amorphous positive anomalies of a type which are commonly detected over river terrace deposits. The majority will relate to variations in the natural sediment, but there is a chance that a few of the stronger and more regularly-shaped ones may represent pits.

Very weakly negative parallel linear anomalies pass through the data on north-south alignments. These represent plough scars from a recent episode of cultivation.

Magnetic halos are present around the northern and eastern margins of the field, due to adjacent wire fences. A few widely scattered dipolar anomalies indicate stray pieces of ferrous debris in the ploughsoil.

6 CONCLUSION

The survey results suggest that there may be some features of archaeological interest within the proposed development area, although the evidence is not clear cut. At the east of the area there is a right-angled feature, which perhaps represents one corner of a ditched enclosure, and to the north there is a linear feature which is probably a ditch. The survey has also detected some small and poorly diagnostic anomalies, which could either represent pits or natural geological features.

BIBLIOGRAPHY

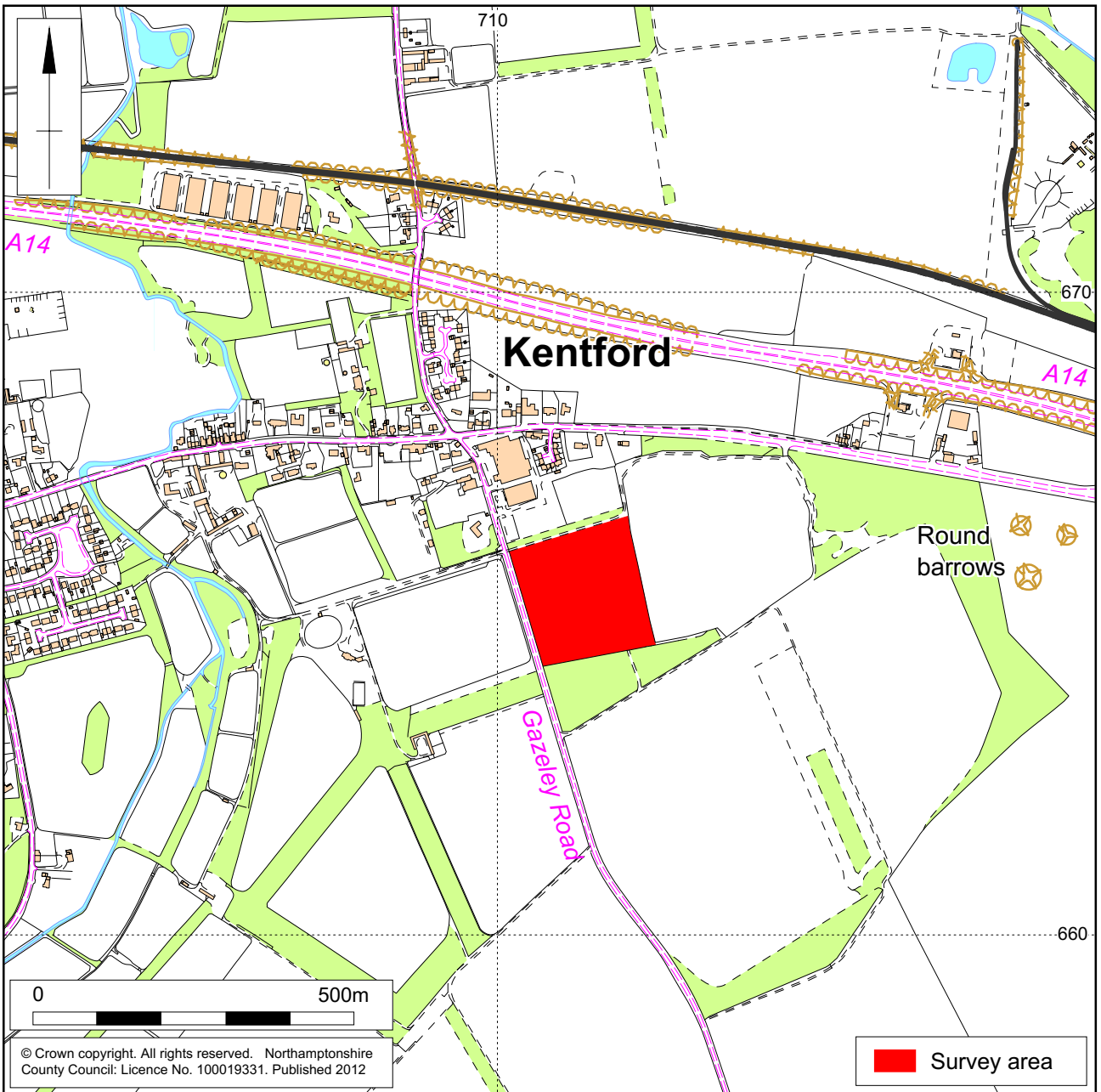
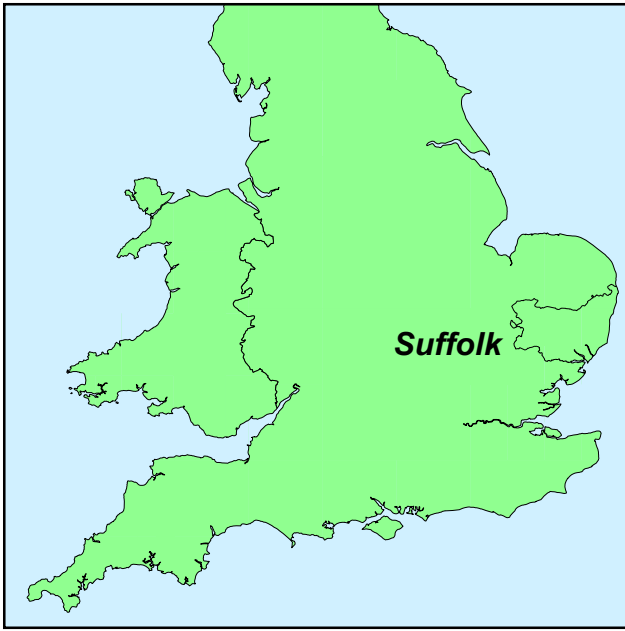
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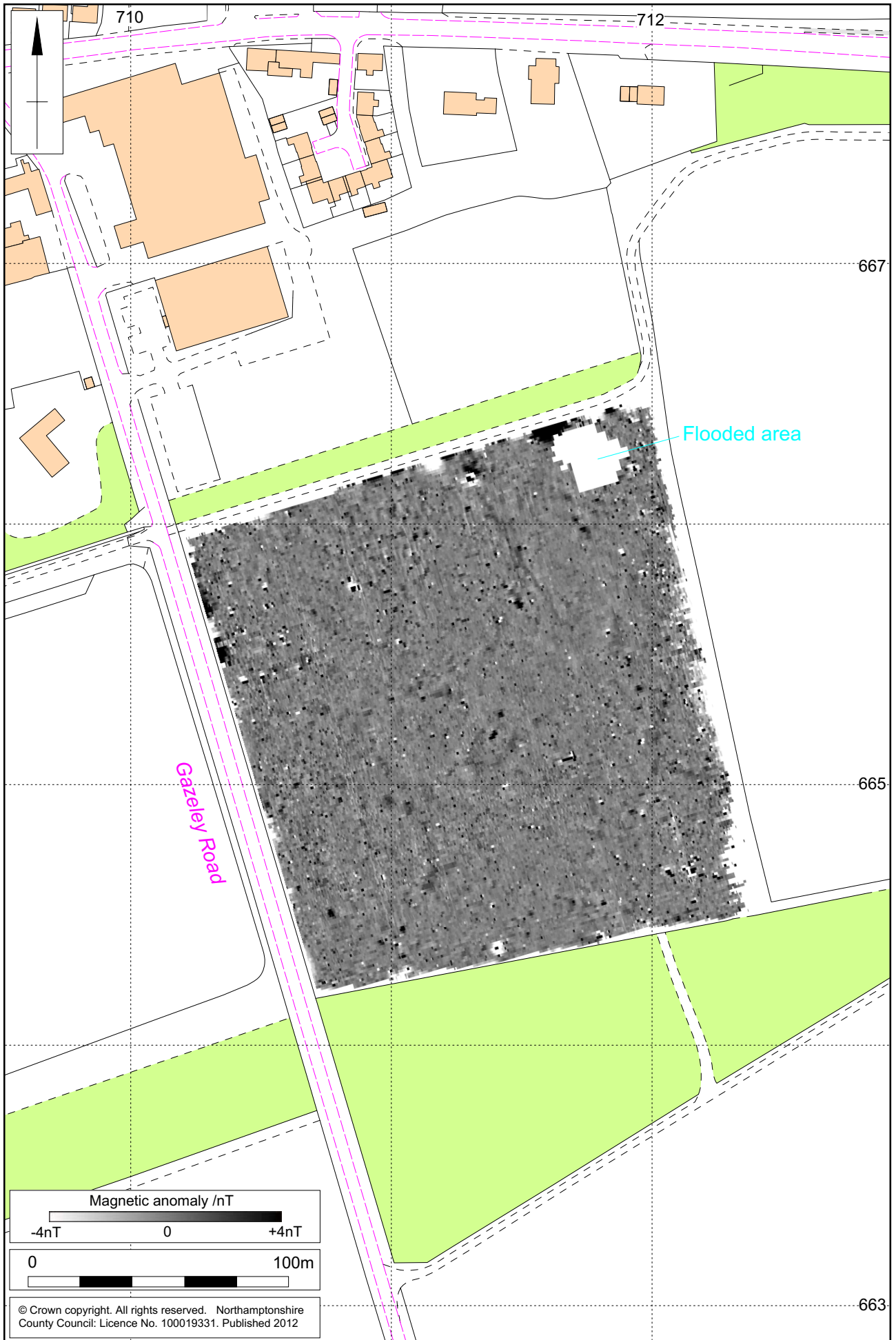
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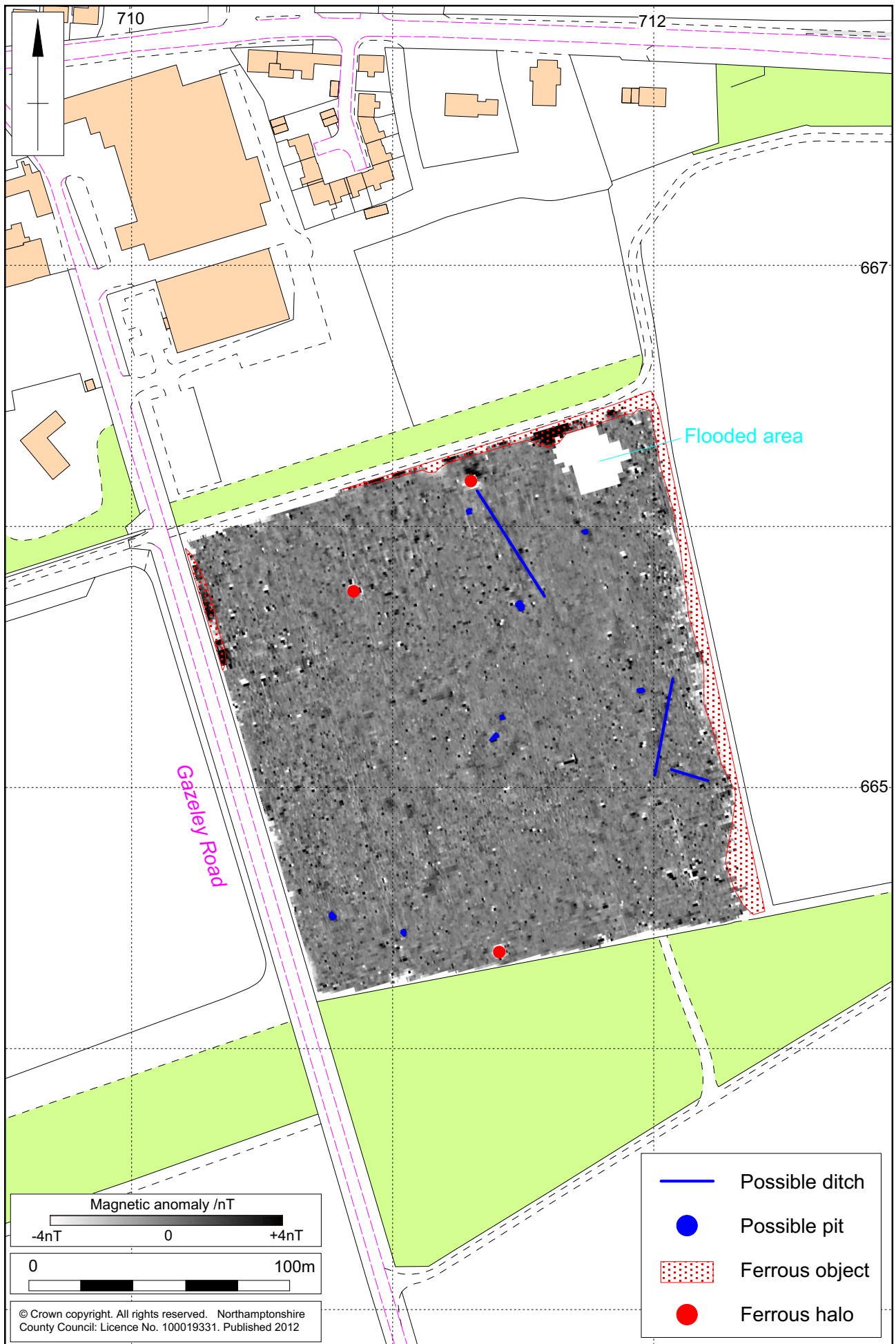
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Site location Fig 1



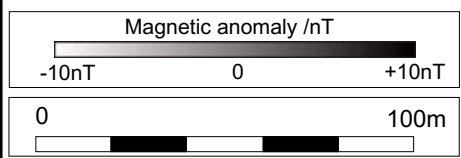
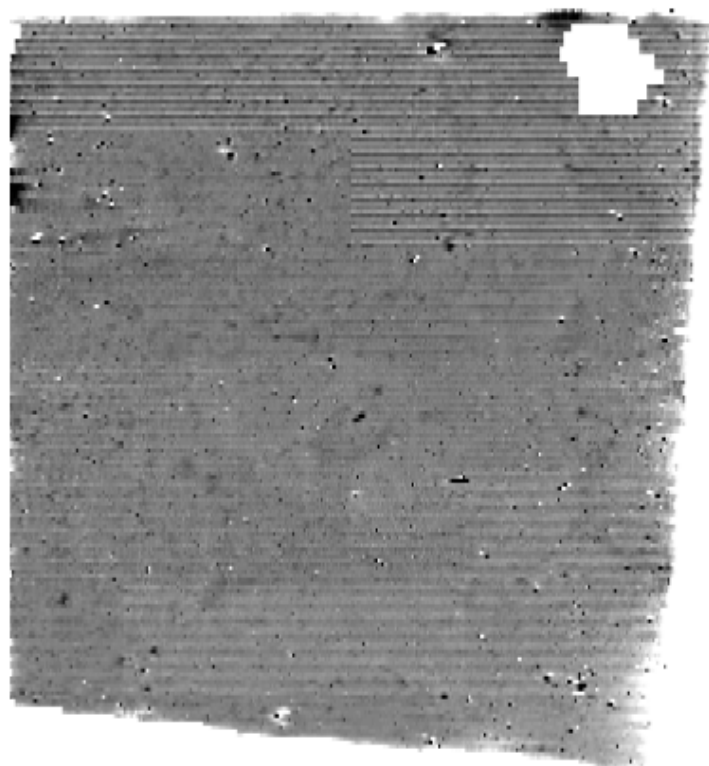
Scale 1:2000 (A4)

Magnetometer survey results Fig 2



Scale 1:2000 (A4)

Magnetometer survey interpretation Fig 3





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