

**Archaeological geophysical survey at
Normandy Way, Hinckley
Leicestershire
May to October 2014**

Report No. 14/233

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Accession No: X.A71.2014

Report No. 14/233

Quality control and sign off:

Issue No.	Date approved:	Checked by:	Verified by:	Approved by:	Reason for Issue:
1	27/11/2014	Pat Chapman	Mark Holmes	Andy Chapman	Client approval
2	23/01/2015				Updated in light of fieldwalking results

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OASIS REPORT

PROJECT DETAILS		Oasis No. molanort1-196597
Project name	Archaeological geophysical survey at Normandy Way, Hinckley, Leicestershire	
Short description	MOLA Northampton was commissioned to carry out a detailed magnetometer survey on land at Normandy Way, Hinckley, Leicestershire. The survey identified undated archaeological remains, comprising a trackway, a rectilinear enclosure, ditches and pits of possible Roman date. The survey results also provided evidence for medieval ridge and furrow cultivation, 19th-century field boundaries and land drains. The former Tithe Farm was not clearly detected, and its remains may lie just outside the eastern boundary of the survey area.	
Project type	Geophysical survey	
Site status	None	
Previous work	Desk-based assessment (Mortimer 2014)	
Current Land use	Arable	
Future work	Fieldwalking	
Monument type/ period	Possible Roman trackway, enclosure ditches and pits Medieval to early post-medieval ridge and furrow	
Significant finds	None	
PROJECT LOCATION		
County	Leicestershire	
Site address	Normandy Way, Hinckley	
Study area	c 44ha	
OS Easting & Northing	SP 407 947	
Height OD	c 95m – 105m aOD	
PROJECT CREATORS		
Organisation	MOLA Northampton	
Project brief originator	Teresa Hawtin, Leicestershire Senior Planning Archaeologist	
Project design originator	MOLA Northampton	
Director/Supervisor	Ian Fisher, James Ladocha and Chris Chinnock	
Project Manager	John Walford	
Sponsor or funding body	CgMs Consulting	
PROJECT DATE		
Start date	19 May 2014	
End date	23 October 2014	
ARCHIVES	Location	Content
Physical	N/A	
Paper	MOLA Northampton	Site survey records
Digital	X.A71.2014	Geophysical survey & GIS data
BIBLIOGRAPHY	Journal/monograph, published or forthcoming, or unpublished client report	
Title	Archaeological geophysical survey at Normandy Way, Hinckley, Leicestershire, May to October 2014.	
Serial title & volume	MOLA Northampton Reports 14/233	
Author(s)	John Walford	
Page numbers	4	
Date	27 November 2014	

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Archaeological geophysical survey at Normandy Way, Hinckley, Leicestershire May to October 2014

ABSTRACT

MOLA Northampton was commissioned to carry out a detailed magnetometer survey on land at Normandy Way, Hinckley, Leicestershire. The survey identified undated archaeological remains, comprising a trackway, a rectilinear enclosure, ditches and pits of possible Roman date. The survey results also provided evidence for medieval ridge and furrow cultivation, 19th-century field boundaries and land drains. The former Tithe Farm, was not clearly detected, and its remains may lie just outside the eastern boundary of the survey area.

1 INTRODUCTION

MOLA Northampton was commissioned by CgMs Consulting to conduct a geophysical survey on 44ha of land to the west of Normandy Way, Hinckley, Leicestershire (NGR SP 407 947; Fig 1). The survey was carried out in two stages, with 17.5ha of land being surveyed in May 2014 and the remaining 26.5ha being surveyed in October of the same year. This report presents the full survey results, and supersedes the earlier report on the initial stage of work (Fisher 2014).

The survey was undertaken in fulfilment of a brief issued by Teresa Hawtin, the Senior Planning Archaeologist for Leicestershire. It has been recorded with the Leicester Historic Environment Record under accession number X.A71.2014.

2 BACKGROUND

2.1 Location and geology

The survey area consists of an almost rectangular block of arable land located on the north-western edge of Hinckley, south of the hamlet of Wykin. It lies immediately east of Normandy Way and is bordered by farmland to the north and west and by warehousing to the south.

The survey area lies on a gentle south facing slope between 95m and 105m aOD and is bisected by a small stream. The geology of the area is recorded as Mercia Mudstone overlain by Bosworth Clay and other Quaternary drifts (BGS 2014).

2.2 Historical and archaeological background

The Leicestershire HER records the findspot of a Palaeolithic quartzite implement (MLE 6061) at the northern end of the survey area. This is one of a number of similarly dated artefacts found in the immediate vicinity which, given the general scarcity of Palaeolithic remains, are collectively of local to regional importance (Mortimer 2014, 10).

Evidence for later prehistoric activity comprises several Mesolithic to Bronze Age flint scatters observed in the surrounding landscape and a possible Bronze Age whetstone found within the survey area (MLE 9160) and. The evidence for Roman activity is similarly sparse, amounting to only a few nearby finds of pottery and coins.

Approximately 300m north of the survey area is the shrunken village of Wykin (MLE 2875), of which the most notable remnant is the 17th-century Wykin Hall (MLE 12978). A possible pottery kiln of medieval date has been identified to the south of Wykin, slightly beyond the northern boundary of the survey area (MLE 18030).

Nineteenth to early 20th-century Ordnance Survey maps of the survey area show that a farm called Tithe Farm stood at its eastern edge, either on or immediately adjacent to the present line of Normandy Way. It was in existence by 1814, and appears to have been demolished at some time between 1938 and 1955.

An archaeological desk-based assessment of the survey area has been recently undertaken by CgMs Consulting (Mortimer 2014). A fieldwalking survey was undertaken by MOLA, running concurrently with the second stage of geophysical survey, and has been reported on separately (Wolfmann-Murray 2014).

3 METHODOLOGY

The magnetometer 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 network of 30m grid squares was established within each of the fields to be surveyed. These grids were set out with a tape measure and optical square and were tied in to the Ordnance Survey National Grid by means of a Leica Viva dGPS. 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 was processed using Geoplot 3.00v software. The striping was removed using the 'Zero Mean Traverse' function and destaggering of the data was performed where necessary. The processed data is presented in this report in the form of greyscale plots at a range of +4nT (black) to -4nT (white). These have been scaled, rotated and resampled (georectified) for display against the Ordnance Survey base mapping (Figs 2 & 4) and are shown with interpretative overlays in Figures 3 and 5. The unprocessed survey data is presented in Figures 6 and 7.

4 SURVEY RESULTS

The survey has detected a group of weakly positive magnetic anomalies extending across parts of two fields in the north-western quarter of the survey area. These represent a series of ditches which define a sub-rectangular field or large enclosure, c 120m long by 60m wide, with a trackway along its southern edge. Further linear anomalies to the north and south appear to represent sections of boundary ditch forming other elements of wider system of rectilinear fields or enclosures. Similarly, a tightly curving linear anomaly to the east may represent part of an oval-shaped enclosure ditch.

A number of small magnetic anomalies appear to represent pits and short sections of ditch or gully loosely associated with the enclosures. Amongst these there are two short curvilinear anomalies which together define around a third of a circle c 10m in diameter. It possibly represents part of a roundhouse, but the evidence for this is too slight to be fully convincing.

Although the date of the detected remains cannot be firmly established on present evidence, a Roman date would seem to be most plausible. This is suggested not only by the presence of the possible roundhouse, but by the recovery of twenty Roman potsherds from the vicinity of the remains during the fieldwalking survey which immediately followed this geophysical survey (Wolfram-Murray 2014). However, the possibility of some medieval or post-medieval elements within the complex cannot be absolutely ruled out, as there is a striking commonality of alignment between the archaeological remains and the present field boundaries.

The survey has detected very extensive sets of field drains, mostly represented by linear anomalies with alternating magnetic polarity. Although the drains themselves are not of archaeological interest, their layout seems to have fossilised much of the layout of the medieval open fields. Many of the drains, especially in the western half of the survey area, are closely spaced and follow gently curving alignments which are diagnostic of medieval ridge and furrow ploughing. This indicates that the drains were laid out in the bases of the former furrows at a time when the latter still survived as conspicuous earthworks.

A number of magnetic anomalies correlate with former field boundaries depicted on the first edition Ordnance Survey map. In some cases the boundary ditches are represented by weak positive linear anomalies, in other cases they are marked by field drains, and in others they are marked by diffuse bands of small dipolar anomalies representing accumulations of ferrous scrap along the edges of the former field. One of the boundaries, in the south-western field, intersects with a small positive cruciform anomaly of indeterminate origin.

The former field boundary which bisects the north-eastern field kinks northwards at its eastern end where it skirts around the former curtilage of Tithe Farm. No other trace of this farm has been detected, and a study of the first edition Ordnance Survey map suggests this may be because the remains of the farm buildings themselves lie just outside the survey area, beneath Normandy Way.

A very crooked positive linear anomaly has been detected close to the centre of the survey area. Its position coincides with a 19th-century field boundary, but its irregular form seems most likely to represent a natural stream channel predating the channel itself. Natural causes can also be attributed to the weak and diffuse positive linear anomalies which lie to the north of this channel, and to the similar anomalies which form a rectilinear pattern close to the north-western corner of the survey area.

A line of telegraph poles has produced a very distinct set of large dipolar anomalies running south-eastwards from a point midway along the western edge of the survey area. Another pole, at the edge of the south-eastern field, has also produced a large dipolar anomaly. The smaller dipoles elsewhere in the survey area can mainly be attributed to a random scatter of ferrous debris in the ploughsoil, but the cluster of slightly larger dipoles on the northern edge of the area may represent a small pond or extraction pit infilled with modern junk.

Very distinct bands of magnetic disturbance, composed of hundreds of small magnetic dipoles and 'spikes', run through the north-western and south-western fields. These are likely to represent concentrations of weakly magnetic debris; possibly hardcore from former farm tracks, or else fine pieces of scrap metal introduced through manuring of the fields with 'green waste'. The magnetic noise which covers much of the north-eastern field probably has a similar origin.

5 CONCLUSION

The survey has identified a weak set of magnetic anomalies relating to an enclosure, trackway, boundary ditches and pits. The date of these remains has not been conclusively established, but it is relevant to note that fieldwalking has recovered over twenty sherds of Roman pottery from their immediate vicinity (Wolfmann-Murray 2014).

The survey has also detected a very widespread system of field drains. Whilst these are not of inherent archaeological interest, their arrangement appears to have fossilised much of the layout of the medieval open fields, as well as certain field boundaries of 19th-century date.

The survey has not detected any definite trace of Tithe Farm, which once stood on the eastern edge of the survey area. Considering this fact, along with the evidence of historic maps, it is suggested that any surviving remains of the farmhouse and its associated buildings may lie under Normandy Way, and that only the western part of their former curtilage extends into the survey area.

BIBLIOGRAPHY

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

BGS 2014 *Geoindex*, <http://www.bgs.ac.uk/geoindex/home.html>, British Geological Survey, consulted 21 May 2014

EH 2008 *Geophysical Survey in Archaeological Field Evaluation*, English Heritage

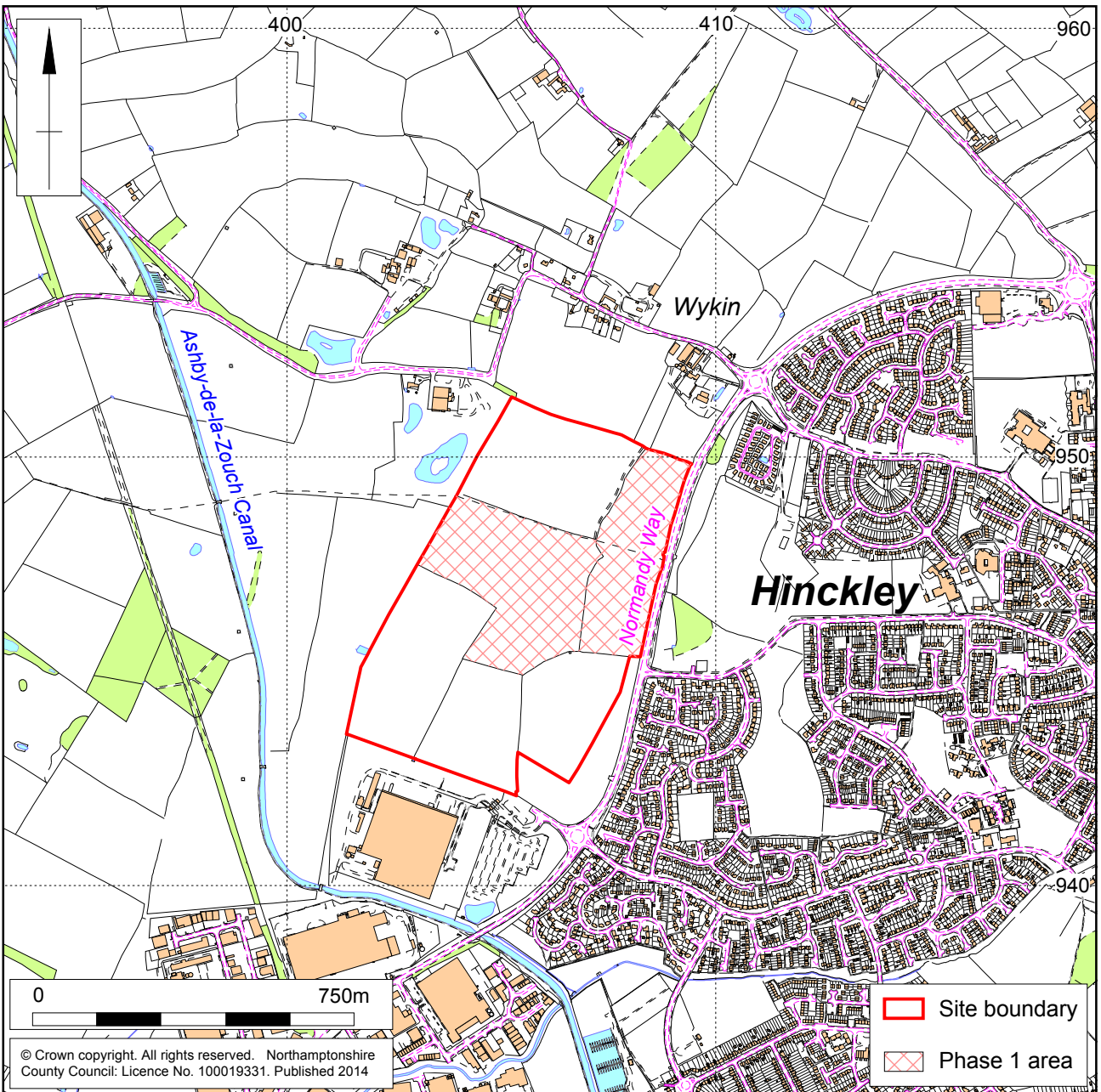
Fisher, I, 2014 *Archaeological geophysical survey at Normandy Way, Hinckley, Leicestershire, May 2014*, MOLA Northampton report, **14/123**

IfA 2011 *Standard and Guidance for Archaeological Geophysical Survey*, Institute for Archaeologists

Mortimer, S, 2014 *Archaeological Desk-Based Assessment, Land at Hinckley West, Leicestershire*, CgMs, draft report **SM/17117/01**, June 2014

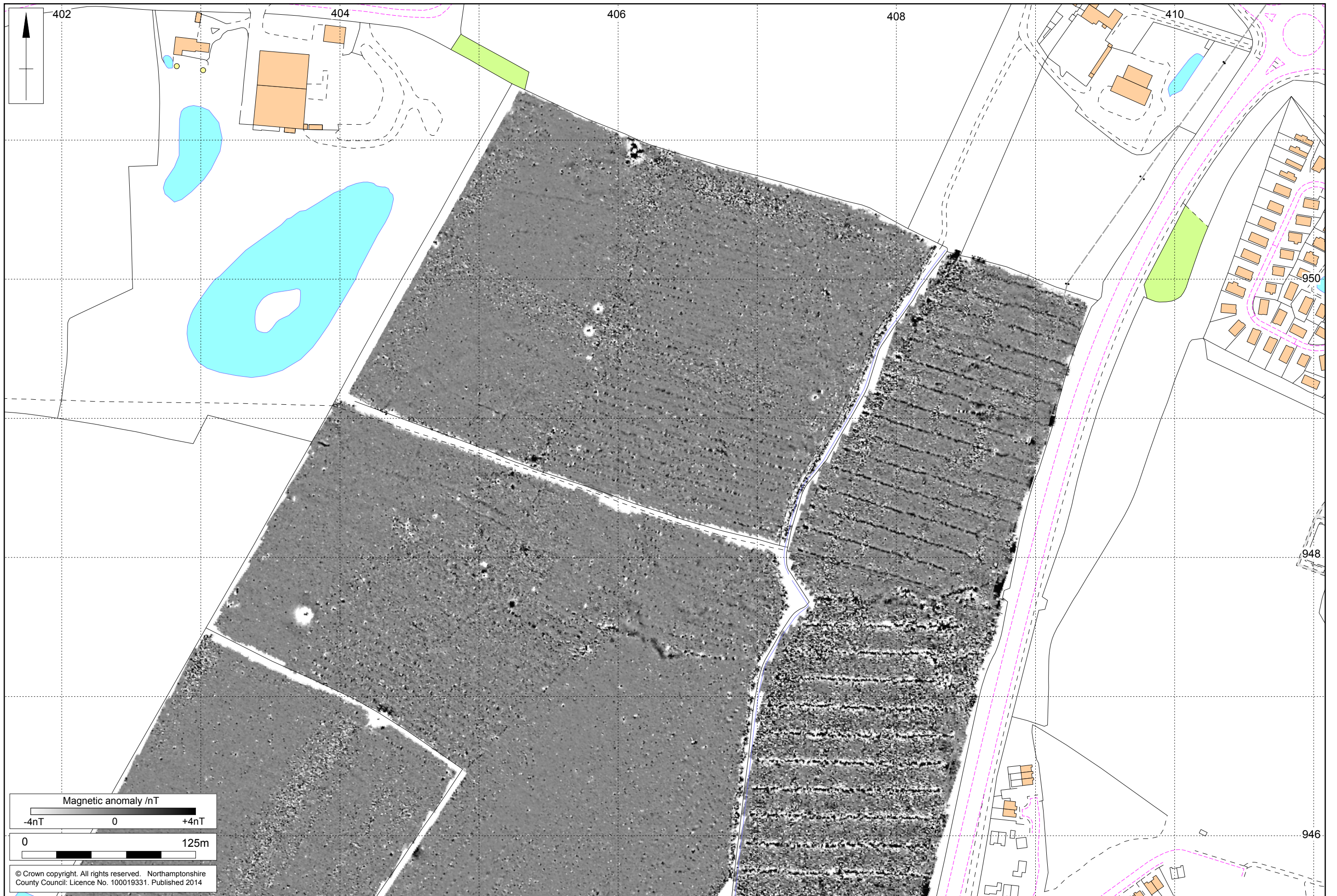
Wolfmann-Murray, Y, 2014 *Archaeological fieldwalking survey on land west of Normandy Way, Hinckley, Leicestershire, October 2014*, MOLA Northampton report, **14/253**

MOLA
27 November 2014



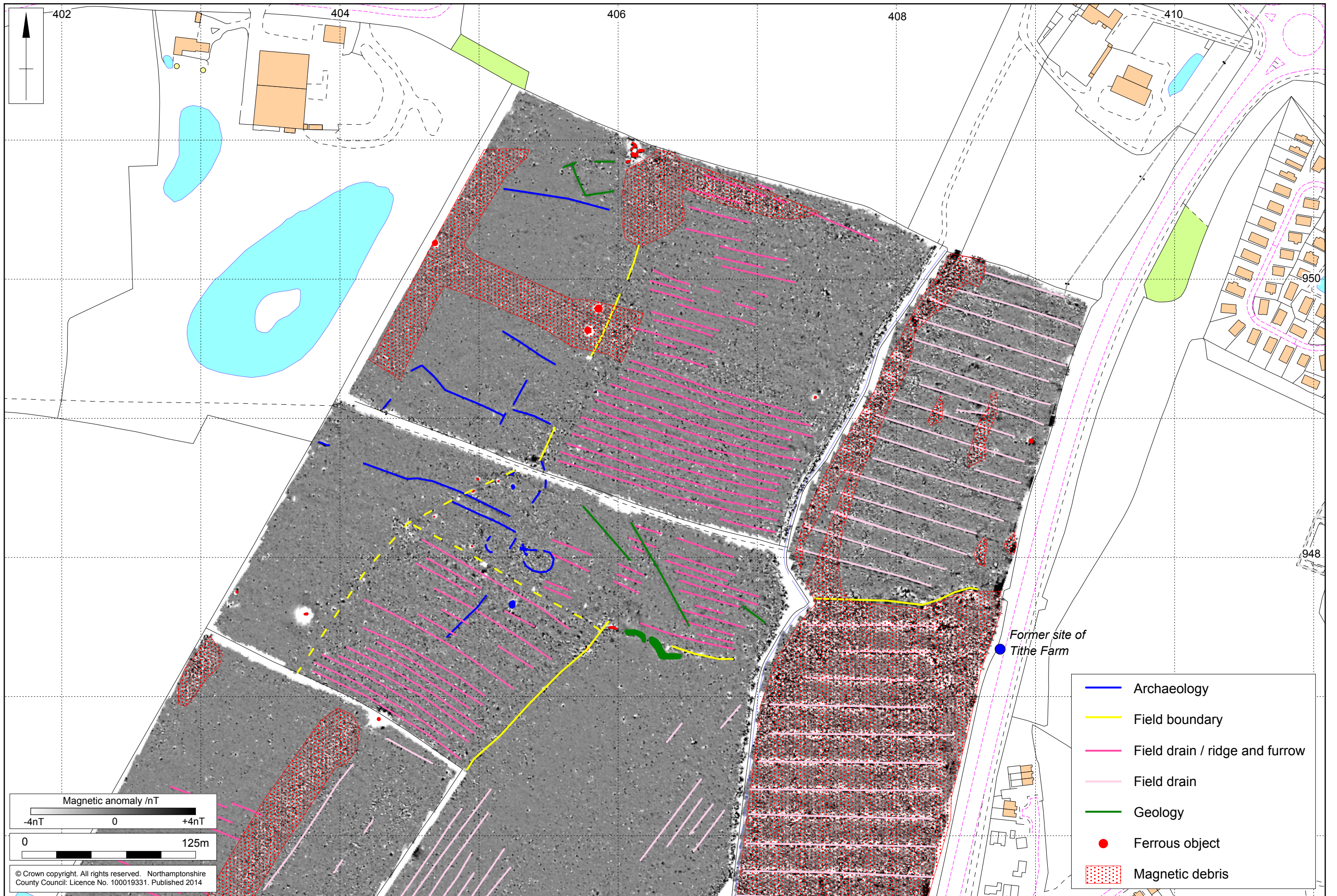
Scale 1:15,000

Site Location Fig 1



Scale 1:2500

Magnetometer survey results (north) Fig 2



Scale 1:2500

Magnetometer survey interpretation (north) Fig 3



Scale 1:2500

Magnetometer survey results (south) Fig 4



Scale 1:2500

Magnetometer survey interpretation (south) Fig 5

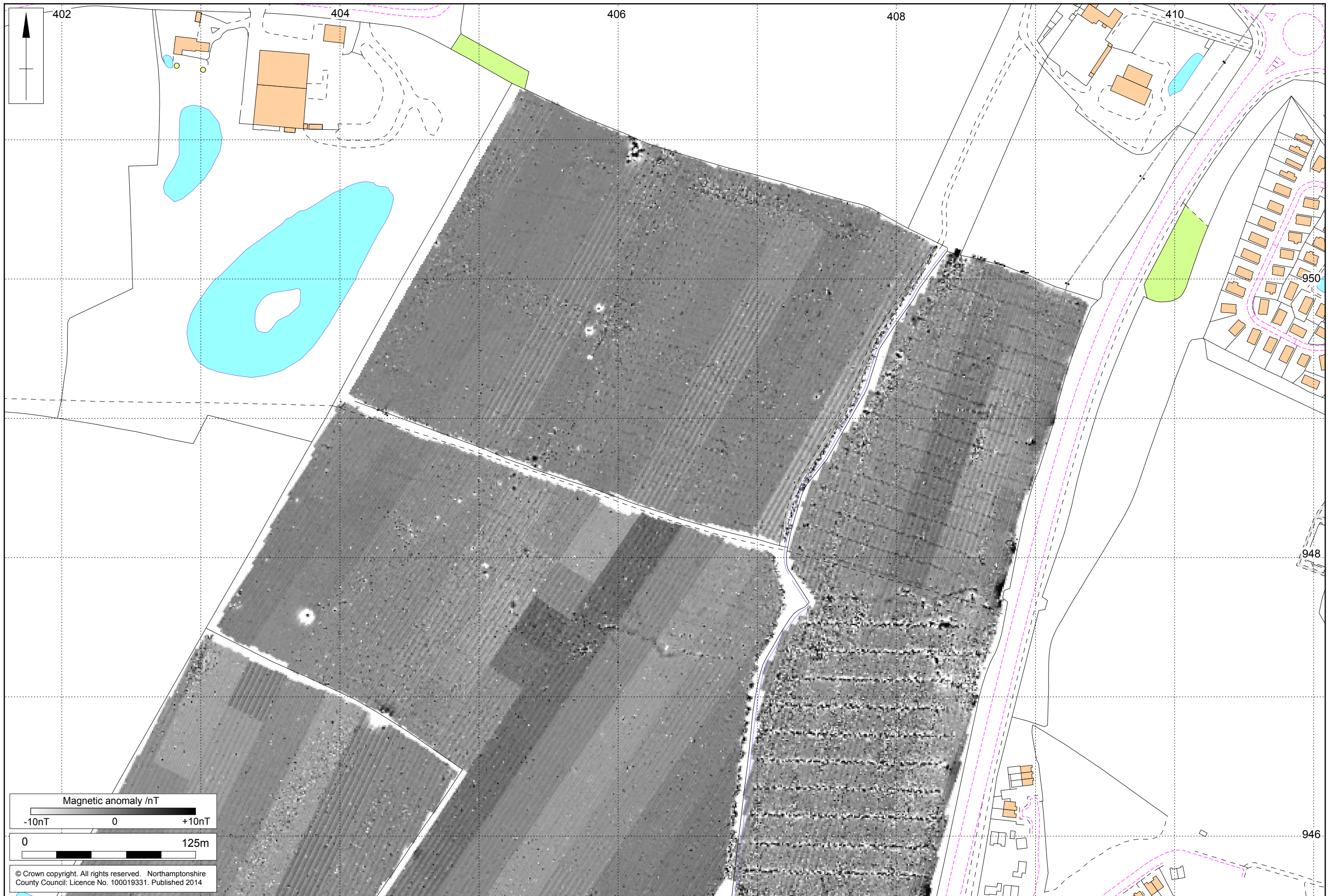
Magnetic anomaly /nT

-4nT 0 +4nT

0 125m

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- Archaeology
- Field boundary
- Field drain / ridge and furrow
- Field drain
- Geology
- Ferrous object
- Magnetic debris



Scale 1:2500

Unprocessed magnetometer data (north) Fig 6



Scale 1:2500

Unprocessed magnetometer data (south) Fig 7



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