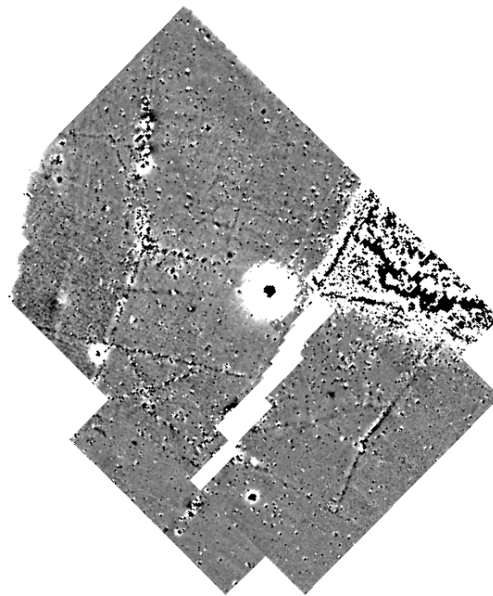




Northamptonshire  
County Council

# Northamptonshire Archaeology

Ashby Canal Restoration Project,  
Snarestone to Measham, Leicestershire  
Archaeological Geophysical Survey  
December 2006



Ian Fisher

January 2007

Report 06/192

## Northamptonshire Archaeology

2 Bolton House  
Wootton Hall Park  
Northampton NN4 8BE

t. 01604 700493 f. 01604 702822

e. [sparry@northamptonshire.gov.uk](mailto:sparry@northamptonshire.gov.uk)

w. [www.northantsarchaeology.co.uk](http://www.northantsarchaeology.co.uk)



## STAFF

Project Manager     Adrian Butler BSc MA AIFA  
Fieldwork            Ian Fisher BSc  
                              Dan Cherry MA  
                              Rhiannon Mann MSc  
                              John Walford MSc  
Text and illustrations Ian Fisher

## QUALITY CONTROL

	Print name	Signature	Date
Checked by	Pat Chapman		
Verified by	Adrian Butler		
Approved by	Steve Parry		

**OASIS REPORT FORM**

<b>PROJECT DETAILS</b>		
Project name	Ashby Canal Restoration Project, Snarestone to Measham, Leicestershire, Archaeological Geophysical Survey December 2006	
Short description (250 words maximum)	Northamptonshire Archaeology, commissioned by Geoff Pursglove of the Ashby Canal Restoration Project, on behalf of Leicestershire County Council, conducted geophysical prospection as part of the archaeological evaluation of a proposed canal route from Snarestone to Measham (Leicestershire). A total area of c 11ha, spread across four fields, was surveyed by fluxgate gradiometer. No major archaeological features were found in the four fields. A former canal turning basin was revealed by the survey. The survey also identified linear anomalies, some representing former field boundaries and remnant medieval ridge and furrow cultivation.	
Project type (eg DBA, evaluation etc)	Geophysical Survey	
Site status (none, NT, SAM etc)		
Previous work (SMR numbers etc)		
Current Land use	Pasture	
Future work (yes, no, unknown)	Unknown	
Monument type/ period	Medieval ridge and furrow, post-medieval canal and field boundaries	
Significant finds (artefact type and period)		
<b>PROJECT LOCATION</b>		
County	Leicestershire	
Site address (including postcode)	Measham, Leicestershire	
Study area (sq.m or ha)	c 11ha	
OS Easting & Northing (use grid sq. numbers)	434100,311600	
Height OD		
<b>PROJECT CREATORS</b>		
Organisation	Northamptonshire Archaeology	
Project brief originator	Leicestershire County Council	
Project Design originator		
Director/Supervisor	Ian Fisher	
Project Manager	Adrian Butler	
Sponsor or funding body	Leicestershire County Council	
<b>PROJECT DATE</b>		
Start date	December 2006	
End date	December 2006	
<b>ARCHIVES</b>		
	Location (Accession no.)	Content (eg pottery, animal bone etc)
Physical		
Paper		
Digital	Northamptonshire Archaeology	Geophysical data, GIS mapping
<b>BIBLIOGRAPHY</b>		
	Journal/monograph, published or forthcoming, or unpublished client report (NA report)	
Title	Ashby Canal Restoration Project, Snarestone to Measham, Leicestershire, Archaeological Geophysical Survey December 2006	
Serial title & volume	NA Reports 06/192	
Author(s)	Ian Fisher	
Page Numbers	1-4	
Date		

## CONTENTS

<b>1</b>	<b>INTRODUCTION</b>	<b>1</b>
<b>2</b>	<b>ARCHAEOLOGICAL BACKGROUND</b>	<b>1</b>
<b>3</b>	<b>TOPOGRAPHY AND GEOLOGY</b>	<b>2</b>
<b>4</b>	<b>METHODOLOGY</b>	<b>2</b>
<b>5</b>	<b>SURVEY RESULTS</b>	<b>3</b>
<b>6</b>	<b>CONCLUSION</b>	<b>4</b>
	<b>BIBLIOGRAPHY</b>	<b>4</b>

### Figures

Fig 1: Survey Area Locations	1:25,000
Fig 2: Fields 1 - 2 - Results	1:2000
Fig 3: Fields 3 - 4 - Results	1:2000
Fig 4: Fields 1 - 2 - Interpretation	1:2000
Fig 5: Fields 3 - 4 - Interpretation	1:2000

**ASHBY CANAL RESTORATION PROJECT**  
**SNARESTONE TO MEASHAM, LEICESTERSHIRE**  
**ARCHAEOLOGICAL GEOPHYSICAL SURVEY**  
**DECEMBER 2006**

*ABSTRACT*

*Northamptonshire Archaeology, commissioned by Geoff Pursglove of the Ashby Canal Restoration Project, on behalf of Leicestershire County Council, conducted geophysical prospection as part of the archaeological evaluation of a proposed canal route from Snarestone to Measham (Leicestershire). A total area of c 11ha, spread across four fields, was surveyed by fluxgate gradiometer. No major archaeological features were found in the four fields. A former canal turning basin was revealed by the survey. The survey also identified linear anomalies, some representing former field boundaries and remnant medieval ridge and furrow cultivation.*

**1 INTRODUCTION**

Northamptonshire Archaeology (NA) was commissioned by Geoff Pursglove of the Ashby Canal Restoration Project, on behalf of Leicestershire County Council, to conduct geophysical survey to investigate the proposed route of the restored Ashby canal from Snarestone to Measham in Leicestershire (Fig 1; NGR SK 34100,11600).

The survey was carried out during December 2006. Four fields were investigated with the objectives of locating and characterising sub-surface features within the canal route, as part of a programme of archaeological evaluation.

**2 ARCHAEOLOGICAL BACKGROUND**

No previous archaeological fieldwork has been carried out on the site.

A desk-based assessment for the proposed route of the restored canal concluded that, although passing mostly through areas of previously disturbed land, it will cross several previously undisturbed pasture fields towards the centre of the route (ULAS 2006). It was thought that any archaeological remains occurring in these fields would be likely to be well preserved.

It was thought that the most likely remains to be encountered were those of the former canal shown on the first edition Ordnance Survey map (1888). The current hedgeline separating fields 1 and 2 follows the former canal route. The former canal ran north to south before turning north-west. The occurrence of Iron Age and Roman remains was also considered possible as sites of such age are known in the wider locality.

### **3 TOPOGRAPHY AND GEOLOGY**

The proposed canal extends for 4.87km from the existing terminus north of Snarestone (SK3462,0998) to central Measham (SK3333,1209) where the former canal will be reopened. The area investigated during this survey comprises the central part of this route. It lies between the 90m and 100m contours, over breccia of the Moira Formation. No appreciable drift deposits occur (Geological Survey of England & Wales, Coalville, Sheet 155; LCC 2006).

### **4 METHODOLOGY**

All fieldwork was carried out in accordance with the guidelines issued by English Heritage and by the Institute of Field Archaeologists (EH 1995 and Gaffney, Gater and Ovendon 2002).

Two makes of magnetometer were used during the survey; Bartington Grad601-2 and Geoscan FM series instruments (FM36 / FM256). All are fluxgate gradiometers, the Bartington having a dual-sensor array and the Geoscans a single sensor. Data from the different instruments was compatible and of comparable quality.

The survey was carried out in four fields along part of the proposed route. A total area of circa 11ha was investigated. The survey blocks were subdivided into 30m x 30m grid-squares. These areas were laid out by tape-measure to an internal accuracy of +/-0.1m and an accuracy of +/- 1m in relation to OS National Grid. Within each square, the gradiometer was carried along 30 traverses, spaced at 1m intervals. These were walked in a zig-zag pattern at a brisk but steady pace. Data was recorded at 0.25m intervals along each traverse.

The data was analysed using Geoplot 3.00s software. Low (negative) magnetism is shown as white and high (positive) magnetism as black in the resultant greyscale plots. In accordance with NA standard practice, minimal processing was carried out on the data. The 'Zero Mean Traverse' function was applied as standard in order to balance the data to zero. Other functions were carried out as necessary: for instance the removal of stagger caused by irregular walking.

The processed data is presented here in the form of greyscale graphics highlighting the magnetic anomalies (scale +5nT / -5nT , black ~ white, Figs 2-5).

### **5 SURVEY RESULTS**

The results of the gradiometer survey are presented on a field-by-field basis, from west to east (Fig 1).

Figures 2-5 show the results from all four fields, together with interpretation plots. Two of the fields were found to contain features relating to previous field layouts and to the former canal.

**Field 1** (Figs 2 & 4)

The most striking features in this survey block are an area of magnetic disturbance in the north-eastern corner and a large ferrous anomaly with a 30m diameter negative magnetic halo in the centre of the survey area. Several smaller ferrous anomalies also occur. The disturbance coincides with a surface scatter of bottle glass, coal fragments and other modern debris, probably deposited during the backfilling of the original canal basin (see Field 2, below). The ferrous anomalies represent buried iron objects.

A number of linear anomalies occur across this survey block. Many of the most prominent coincide with the position of field boundaries shown on the first edition Ordnance Survey map, but no longer extant. The remainder probably represent former ditches of indeterminate date.

The unsurveyed strip in the middle of this block was due to the presence of a drainage ditch and the upcast from a recent dredging.

**Field 2** (Figs 2 & 4)

This field was surveyed as two separate blocks. The southern one contains a large area of magnetic disturbance, confirming the presence of an infilled turning basin shown on the first edition Ordnance Survey map (1888).

Three slight linear anomalies shadow the turning basin and appear to be related to it. Their exact significance, however, is uncertain. Two other linear anomalies probably represent sections of former ditch of unknown date and function.

The northern block in this field contains little of note; only a few ferrous anomalies, indicating buried iron objects, and slight linear anomalies of uncertain significance.

**Field 3** (Figs 3 & 5)

A single north-east to south-west trending linear anomaly in this data probably represents a ditch, although its purpose is uncertain.

Anomalies marking the remains of ridge and furrow cultivation occur across this survey block, and are particularly prominent in the north-west.

**Field 4** (Figs 3 & 5)

Nothing of definite archaeological significance was found in this block, although a linear anomaly shadowing the modern hedgeline may represent a former ditch of unknown date.

One small part of this survey block was obstructed by wire fences and a burnt out car and could not be surveyed.

**6 CONCLUSIONS**

The geophysical survey successfully identified medieval ridge and furrow and 19th century field boundaries, a few other former ditches and parts of the former canal, including a turning basin.

**BIBLIOGRAPHY**

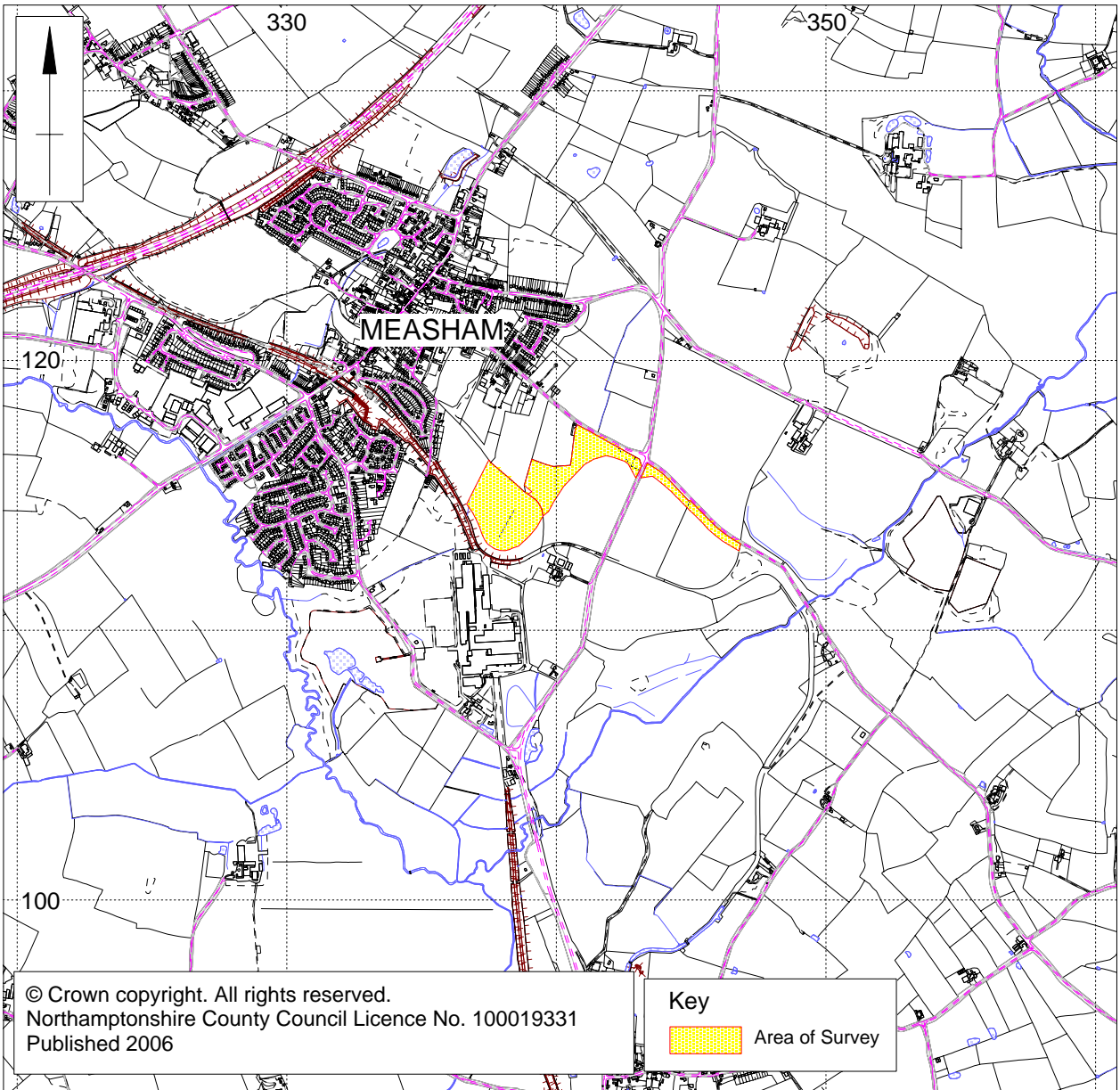
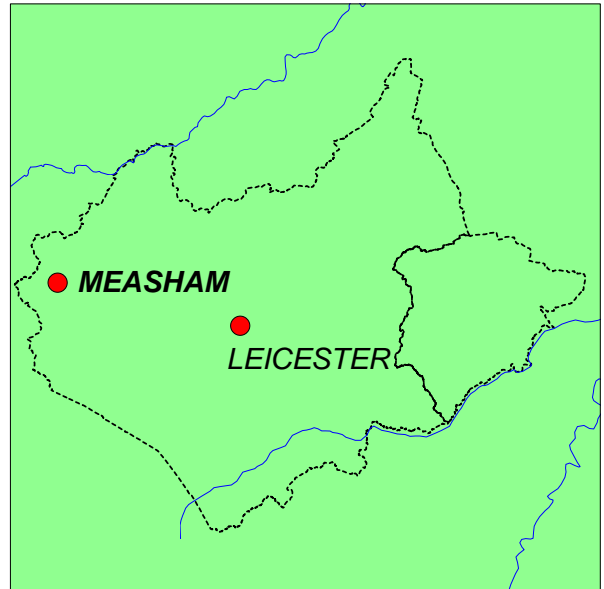
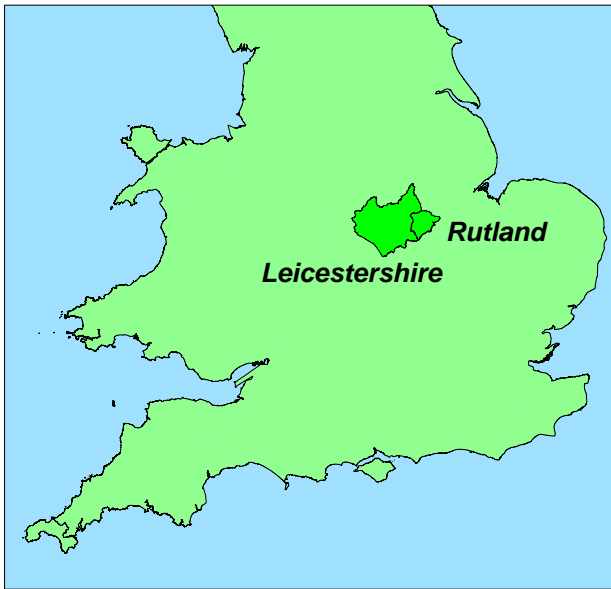
EH 1995 *Geophysical Survey in Archaeological Field Evaluation*, English Heritage, Research and Professional Services Guideline 1

Gaffney, C, Gater, J, and Ovendon, S, 2002 *The Use of Geophysical Techniques in Archaeological Evaluations*, Institute of Field Archaeologists Technical Paper 6

LCC 2006 *Brief for Archaeological Investigation by Geophysical Survey, Proposed Ashby Canal Restoration, Snarestone to Measham, Leicestershire*. Leicestershire County Council

ULAS University of Leicester Archaeological Service Report no.: 2006/049





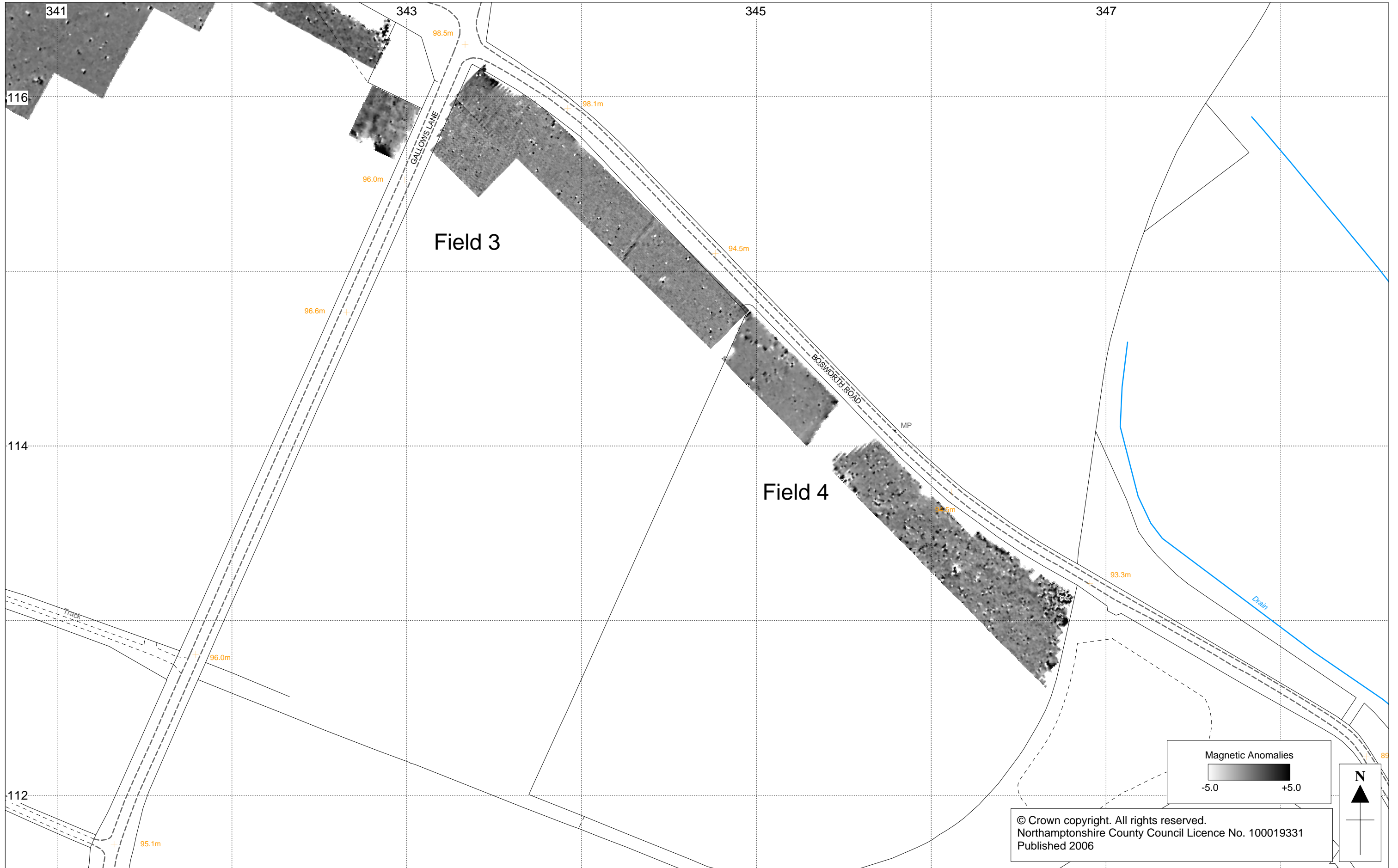
Scale 1:25,000

Fig 1



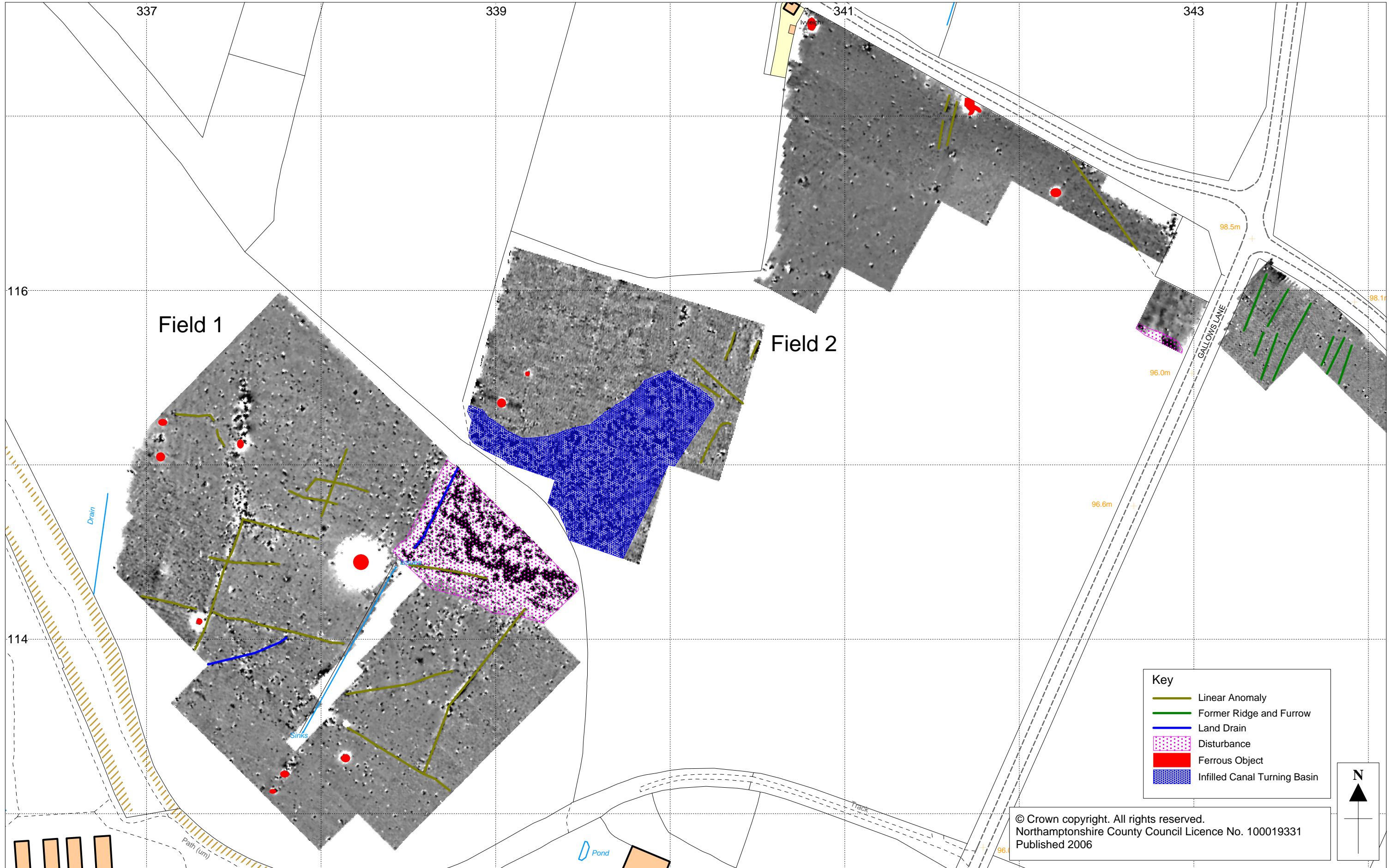
Scale 1:2000

Fields 1 - 2 Results Fig 2

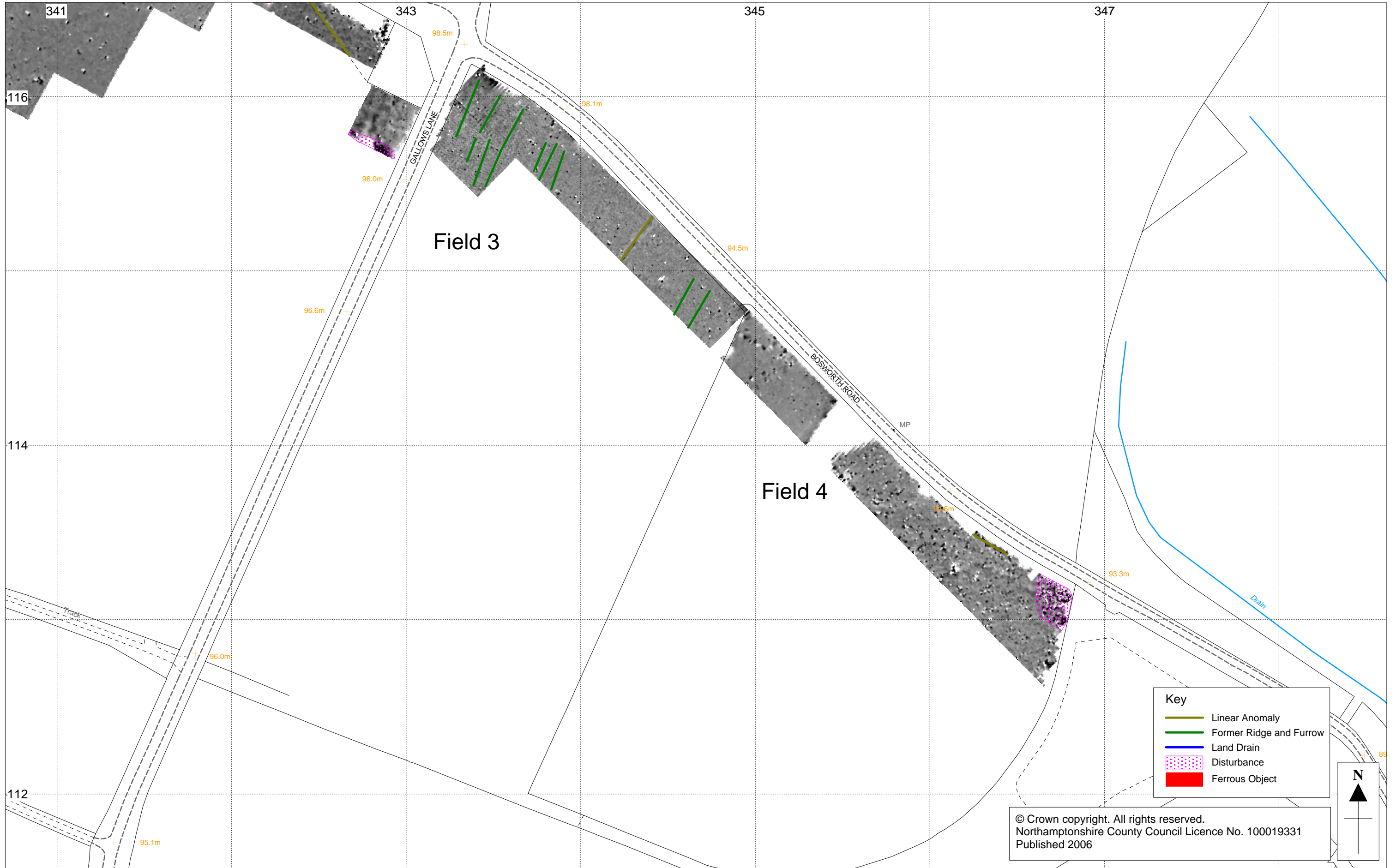


Scale 1:2000

Fields 3 - 4 Results Fig 3



Fields 1 - 2 Interpretation Fig 4



Fields 3 - 4 Interpretation Fig 5