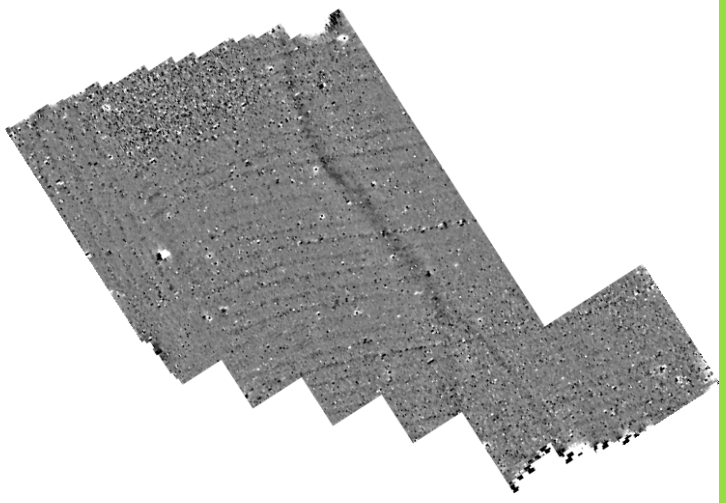
Northamptonshire Archaeology

Archaeological geophysical survey at land adjacent to Anne Hathaway's Cottage Shottery, Warwickshire



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Report 10/71

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OASIS REPORT FORM

PROJECT DETAILS		
Project name	Archaeological Geophysical Survey on land adjacent to Anne Hathaway's Cottage, Shottery, Warwickshire	
Short description	Northamptonshire Archaeology was commissioned by CgMs Consulting to conduct archaeological geophysical survey on land at Anne Hathaway's Cottage, Shottery. Magnetometry of a 30ha area revealed remnant furrows of medieval ridge-and-furrow field cultivation.	
Project type	Geophysical survey	
Site status	None	
Previous work	Unknown	
Current Land use	Arable and pasture	
Future work	Unknown	
Monument type/ period	Medieval Ridge-and-Furrow	
Significant finds	None	
PROJECT LOCATION		
County	Warwickshire	
Site address	Anne Hathaway's Cottage, Shottery	
Study area	30ha	
OS Easting & Northing	SP 1763 5515	
Height OD	36-64m AOD	
PROJECT CREATORS		
Organisation	Northamptonshire Archaeology (NA)	
Project brief originator	CgMs Consulting	
Project Design originator	NA	
Director/Supervisor	James Ladocha	
Project Manager	Adrian Butler	
Sponsor or funding body	CgMs Consulting	
PROJECT DATE		
Start date	16 March 2010	
End date	06 April 2010	
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BIBLIOGRAPHY	Journal/monograph, published or forthcoming, or unpublished client report	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 on land at Anne Hathaway's Cottage, Shottery, Warwickshire	
Serial title & volume	Northamptonshire Archaeology Reports 10/71	
Author(s)	Charlotte Walker	
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ARCHAEOLOGICAL GEOPHYSICAL SURVEY ON LAND ADJACENT TO ANNE HATHAWAY'S COTTAGE, SHOTTERY, WARWICKSHIRE APRIL 2010

ABSTRACT

Northamptonshire Archaeology was commissioned by CgMs Consulting, to conduct archaeological geophysical survey on land to the rear of Anne Hathaway's Cottage, Shottery, Warwickshire. Magnetometry of a 30ha area revealed remnant furrows of medieval ridge-and-furrow field cultivation.

1 INTRODUCTION

Northamptonshire Archaeology was commissioned by CgMs Consulting, to conduct an archaeological geophysical survey on land at the rear of Anne Hathaway's Cottage, Shottery, Warwickshire (NGR SP 1763 5515; Fig 1). The survey forms part of a planning application for residential development and associated works.

The objectives of the geophysical survey were to identify the presence or absence of archaeological remains within the proposed thirty hectare development area. The fieldwork consisted of an area magnetic gradiometer survey in ten fields totalling 30ha (Fig 2).

2 TOPOGRAPHY AND GEOLOGY

The site is situated to the south of the Alcester Road (A422) as it enters the eastern edge of Shottery which is immediately west of Stratford-upon-Avon, in Warwickshire. It is bounded to the north-east by West Green Drive and to the south-east by Shottery Brook. The Grade I listed building known as Anne Hathaway's Cottage and the western edge of the Registered Park and Garden associated with the cottage lies *c* 200m to the east of the site. The west of the site is bounded by agricultural land. Much of the site is currently in use as arable land.

The area of investigation comprises two blocks of land joined by a proposed link road and is spread over ten fields. The site slopes gently down from *c* 64m aOD in the north to *c* 36m aOD at the south of the site adjacent to Shottery Brook. The geology of the site comprises undifferentiated Triassic Rocks (mudstone, siltstone and sandstone) (www.bgs.ac.uk/GeoIndex).

3 ARCHAEOLOGICAL BACKGROUND

A desk-based assessment carried out by CgMs consulting (Bourn 2008) found no indication of any previous archaeological work having been carried out on the site or any records on the Warwickshire Historic Environment Record within the site. Mesolithic flint

artefacts have been found *c* 140m to the east of the southern block of the site and a Neolithic/Bronze Age round barrow *c* 650m to the west of the southern block of the site.

There are the remains of a Roman settlement dating to the 2nd-4th centuries, overlooking the River Avon, *c* 700m to the south-west. A second possible settlement has also been recorded *c* 700m to the west. Closer to the site a number of pottery sherds and tile fragments were found during a watching brief on a pipeline *c* 100m to the west of the northern block of the site. It is possible that settlement remains may extend into the northern block of the site.

Shottery was first mentioned in the 8th century and its name indicates it had Saxon origins. Settlement is thought to have been concentrated in the area around the church and therefore it is unlikely that there would be any remains within the site. The medieval village lay to the north-east and south-east of the site. There are a number a number of blocks of ridge and furrow recorded in the vicinity of the site but none within it. Much of the site was in agricultural use during the post-medieval period, although a rifle range was constructed in the southern block of the site in 1860. It was in use until around 1947, but it appears that there were no features within the site that were associated with the range.

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 area was split into ten fields, with each of these divided into a network of contiguous, whole and partial, 30m x 30m grid squares. These were set out manually by tape measure and optical square. The instruments were carried at a brisk but steady pace through each grid, collecting data along 1m spaced traverse lines. Measurements were automatically triggered every 0.25m along the traverses, giving a total of 3600 measurements per grid.

All fieldwork was carried out in accordance with the guidelines issued by English Heritage and by the Institute for Archaeology (EH 2008; Gaffney, Gater and Ovendon 2002).

The data was processed using Geoplot 3.00u software. Striping, occasionally caused by slight mismatches in sensor balance, was removed using the 'Zero Mean Traverse' function (ZMT) and destaggering of the data was performed as necessary. The processed data is presented in this report in the form of a greyscale plot (scale +4nT to -4nT black ~ white). This has been scaled, rotated and resampled (georectified) for display against the Ordnance Survey base mapping (Figs 2, 4 & 6). An interpretative plot has been produced and is shown overlain onto the data in Figs 3, 5 & 7.

5 SURVEY RESULTS

The major detected magnetic anomalies were alternate linear positive and negative bands representing remnant furrows of medieval/post-medieval ridge and furrow cultivation. They were present in all ten fields.

Field 1

The alternate linear positive and negative bands representing furrows are aligned north to south and curving to the south-east at the southern end of the field (Fig 3). A strongly positive anomaly at the north of Field 1 probably represents modern road construction debris. A dipolar magnetic anomaly in the central part of the field may reflect ferrous or ceramic (e.g. brick) debris.

Field 2

Anomalies describing the furrows are aligned north-west to south-east in the western and north-eastern parts of the field. They are aligned east to west in the south-eastern part of the field (Fig 3).

A stronger positive anomaly, aligned east to west on the same orientation as the furrows represents a former field boundary present in the 1st Edition Ordnance Survey map. A further east-north-east to west-south-west aligned field boundary, also present on the same map, intersects it.

In the corner of the intersection an area of strong negative and positive anomalies may represent the demolition debris (e.g. brick and tile) of a small structure also present on the 1st Edition OS map. Strong anomalies adjacent to the eastern boundary of the field probably represent ferrous or ceramic debris. A large dipolar anomaly at the south-eastern part of the field represents an electricity pylon.

Field 3

The furrows are aligned north-west to south-east (Fig 5). A strong dipolar anomaly represents a further electricity pylon.

Field 4

The furrows are aligned in the same direction as Field 3 in the north-western part of the field (Fig 5). They are aligned east to west in the rest of the field. Aligned on some of the furrows are ceramic field drains, chains of small dipolar anomalies. A concentration of negative and positive anomalies in the northern part of the field probably represents ferrous or ceramic debris.

A positive anomaly aligned north-west to south-east through the field, is likely to be a geological feature.

Field 5

The furrows are aligned north-east to south-west (Fig 5). A positive anomaly is likely to be a further geological feature. The strongly dipolar anomaly between Fields 5 and 6 represents the current field boundary.

Field 6

The furrows are on the same alignment as Field 5 (Fig 5). Some of the field was too overgrown to survey (represented by the blank areas on Figs 4-7).

Field 7

The furrows are aligned east to west (Fig 7). The strong dipolar anomalies at the western edge of the field were caused by the modern boundary. A strongly negative anomaly at the south of the field was caused by a horse feeder. It was not possible to survey the north-western corner of the field since it was overgrown.

Field 8

The furrows are aligned east to west (Fig 7). A concentration of negative anomalies in the centre of the field was caused by large iron pegs. A number of strongly dipolar anomalies are located in the north where a number of tyres had been dumped. A weakly positive anomaly aligned north-west to south-east through the north-eastern corner of the field and extending into Field 9 is likely to be a geological feature.

Field 9

The furrows were aligned east to west (Fig 7). A series of positive and negative anomalies in the north-eastern part of the field are likely to be ferrous or ceramic debris. Two strongly dipolar anomalies which divide the field were caused by metal fencing.

Field 10

The furrows are aligned east to west (Fig 5). Some parts of the field were too overgrown to survey (blank areas on Figs 4-7).

6 CONCLUSION

The magnetometer survey at land west of Shottery has produced evidence of medieval ridge-and-furrow field cultivation in all the fields surveyed. This confirms that it was part of Shottery's medieval open field system and has been in agricultural use since at least that period.

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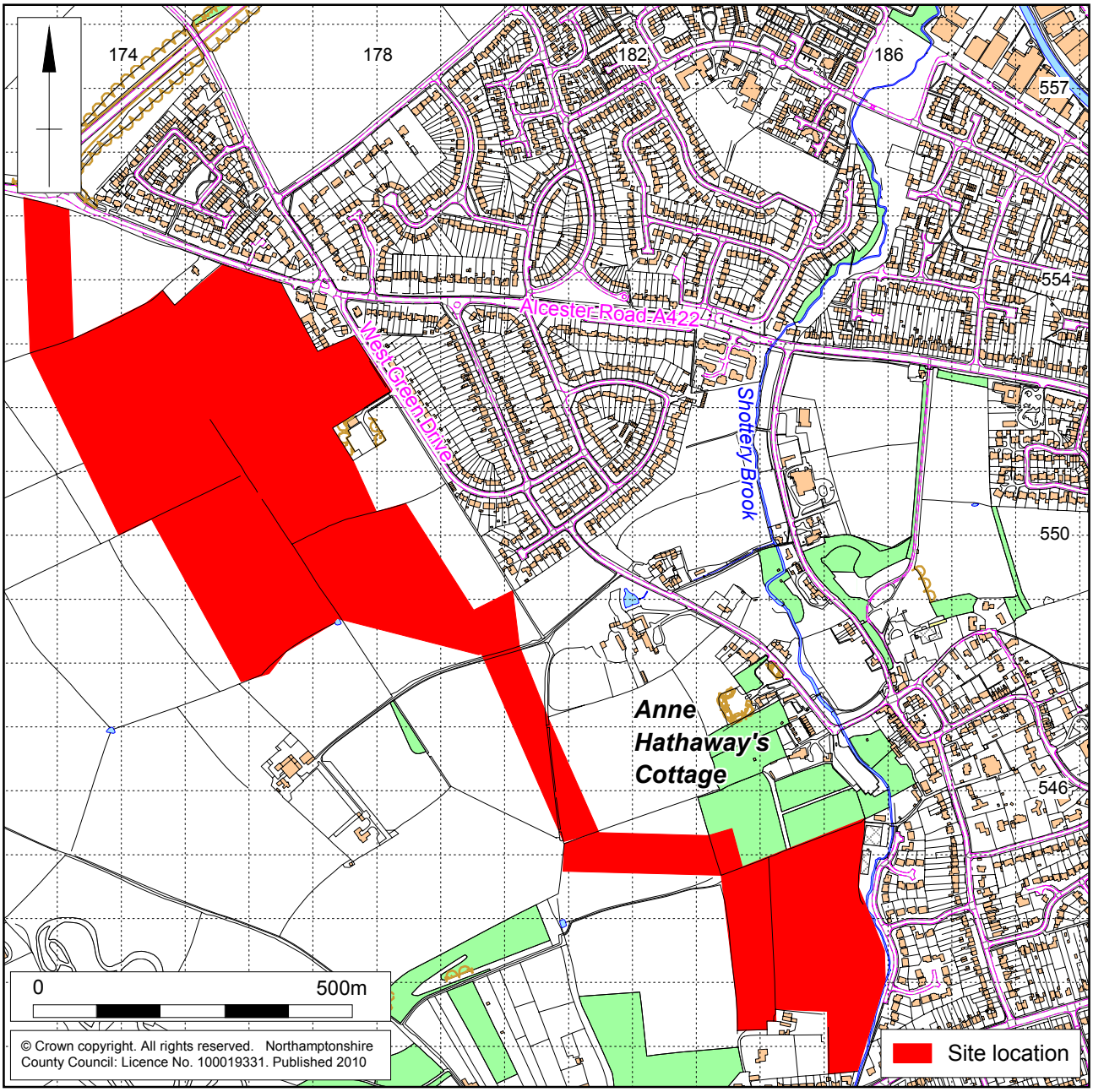

Scale 1:10,000

Site Location Fig 1

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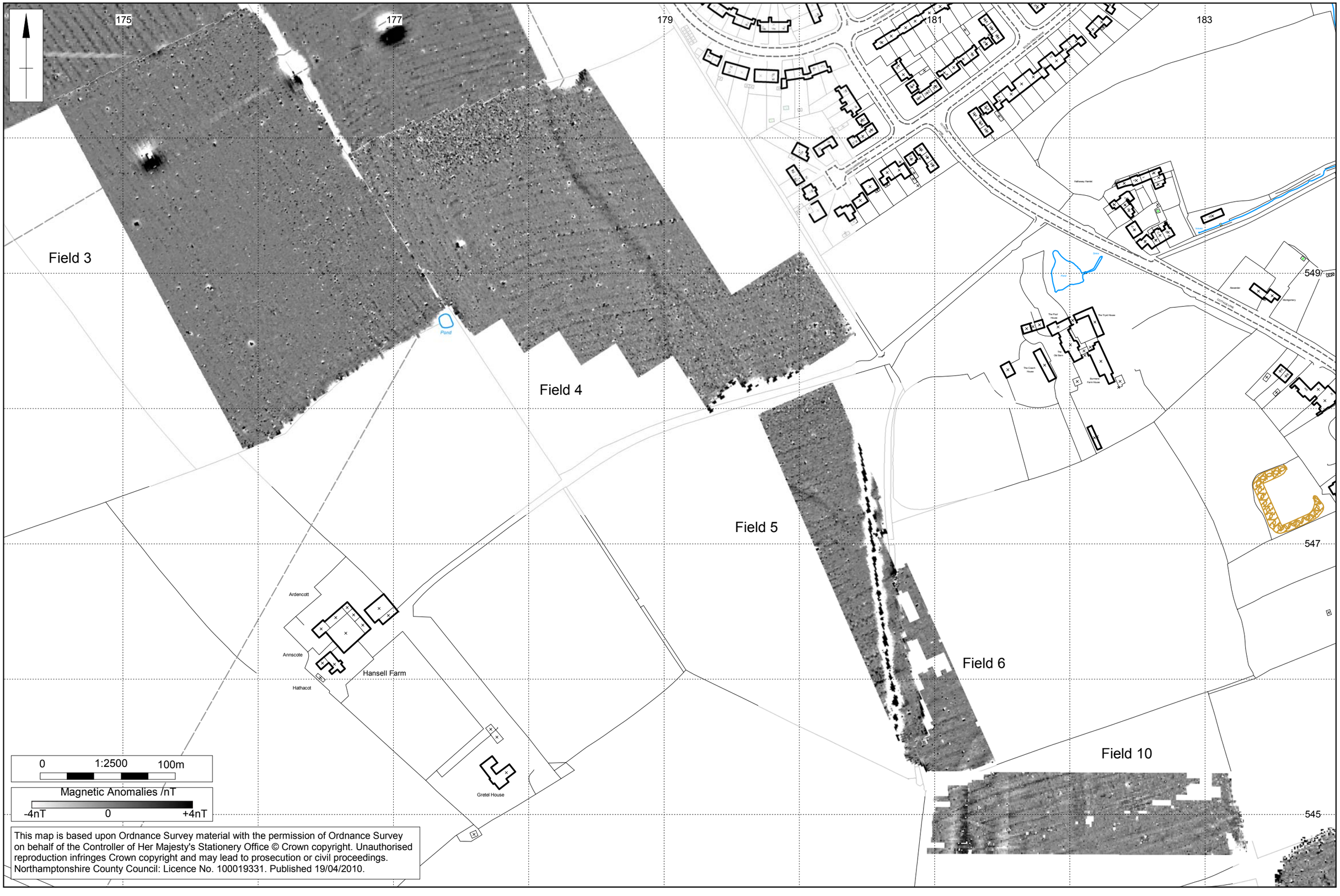
Anne Hathaways Cottage: Magnetometer Survey Results Fields 1 & 2 Fig 2

1:2500 @ A3

Anne Hathaways Cottage: Magnetometer Survey Interpretation Fields 1 & 2 Fig 3



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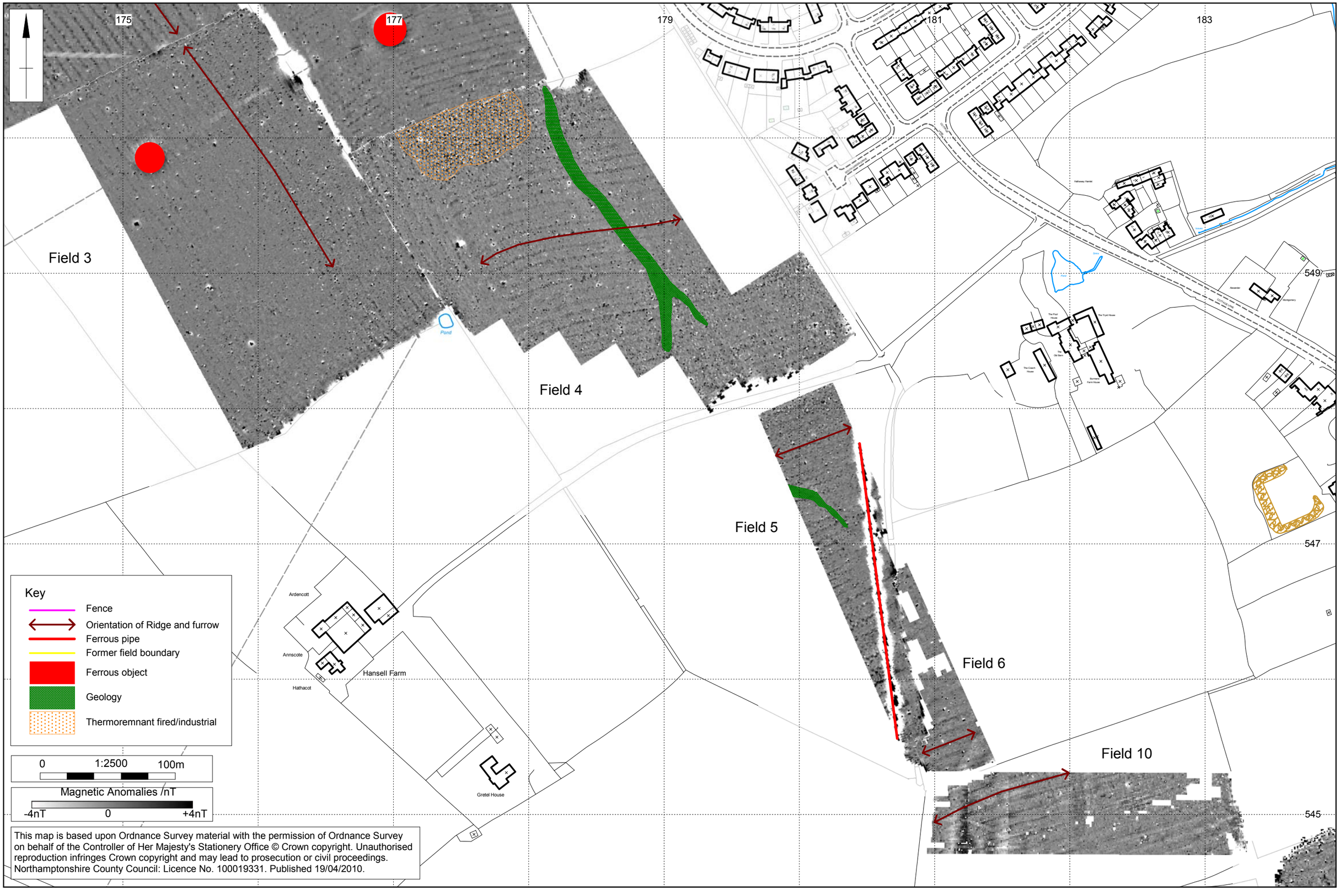
Anne Hathaways Cottage: Magnetometer Survey Results Fields 3, 4, 5, 6 & 10 Fig 4



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Anne Hathaways Cottage: Magnetometer Survey Interpretation Fields 3, 4, 5, 6 & 10 Fig 5

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Anne Hathaways Cottage: Magnetometer Survey Results Fields 6, 7, 8, 9 & 10 Fig 6

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Anne Hathaways Cottage: Magnetometer Survey Interpretation Fields 6, 7, 8, 9 & 10 Fig 7

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