



**Archaeological geophysical survey at
Catch Yard Farm, Silverstone
Northamptonshire
November 2014**

Report No. 14/263

Authors: John Walford
Adam Meadows

Illustrator: John Walford



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OASIS REPORT

PROJECT DETAILS		Oasis No. molanort1-198878	
Project name		Archaeological geophysical survey at Catch Yard Farm, Silverstone, Northamptonshire	
Short description		MOLA was commissioned to carry out a detailed magnetometer survey on c11ha of land at Catch Yard Farm, Silverstone, Northamptonshire. The survey identified a few anomalies which have been tentatively interpreted as relating to medieval or post-medieval quarrying and land division.	
Project type		Geophysical survey	
Site status		None	
Previous work		Desk-based assessment (Dicks and Chadwick 2012)	
Current Land use		Pasture and arable	
Future work		Unknown	
Monument type/ period		Post-medieval boundaries and quarries	
Significant finds		None	
PROJECT LOCATION			
County		Northamptonshire	
Site address		Catch Yard Farm, Silverstone	
Study area		c 11ha	
OS Easting & Northing		SP 672 438	
Height OD		c 141-121m aOD	
PROJECT CREATORS			
Organisation		MOLA Northampton	
Project brief originator		Lesley-Ann Mather, Northamptonshire Archaeological Advisor	
Project design originator		MOLA Northampton	
Director/Supervisor		Adam Meadows	
Project Manager		John Walford	
Sponsor or funding body		CgMs Consulting for Bovis Homes	
PROJECT DATE			
Start date		17 November 2014	
End date		19 November 2014	
ARCHIVES		Location	Content
Physical		N/A	
Paper		MOLA Northampton	Site survey records
Digital			Geophysical survey & GIS data
BIBLIOGRAPHY		Journal/monograph, published or forthcoming, or unpublished client report	
Title		Archaeological geophysical survey at Catch Yard Farm, Silverstone, Northamptonshire, November 2014	
Serial title & volume		MOLA Northampton Reports 14/263	
Author(s)		John Walford and Adam Meadows	
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ABSTRACT

MOLA was commissioned to carry out a detailed magnetometer survey on c11ha of land at Catch Yard Farm, Silverstone, Northamptonshire. The survey identified a few anomalies which have been tentatively interpreted as relating to medieval or post-medieval quarrying and land division.

1 INTRODUCTION

MOLA was commissioned by CgMs Consulting, on behalf of Bovis Homes, to undertake a detailed magnetometer survey of c11ha of land at Catch Yard Farm Silverstone, Northamptonshire (NGR SP 671 438; Fig 1). The purpose of the survey was to contribute towards an assessment of the archaeological impacts of a proposed residential development. The fieldwork was undertaken from 17 to 19 November 2014, and is recorded on the Northamptonshire Historic Environment Record (HER) under Event Number ENN107776.

2 BACKGROUND

2.1 Location and geology

The proposed development area comprises an irregular block of land, c 11ha in extent, located on the eastern edge of Silverstone between the A413 Towcester Road and the A43 Silverstone bypass. Catch Yard Farm itself (also called Cat's Yard, or Coach Yard Farm) lies near the centre of the area, at the end of a track leading west from Towcester Road (Fig 1). The area is presently divided into eight small fields, one in arable use and the remainder under grass. The northern of these (Field 1) is occupied by a former quarry pit, and remnants of smaller quarry pits survive in several of the other fields.

The proposed development area is bisected by a minor stream valley which drains north-westwards towards Silverstone Brook. The floor of this valley stands at c 121m aOD, and the land rises from here to heights of c 141m aOD and c 135 aOD at the northern and southern edges of the area. The underlying geology is recorded as Blisworth Limestone, which is overlain by a band of alluvium along the valley floor (BGS 2014).

2.2 Historical and archaeological background

An archaeological desk-based assessment of the survey area (Dicks and Chadwick 2012) noted only a few minor archaeological remains within its boundaries. These comprised ridge and furrow, small quarry pits and other slight earthworks. One of the latter, a broad linear bank, has been truncated to the east by the A43 bypass. A trench was excavated across its line prior to the road construction, but no dating material was recovered (Trench WBR, Mudd 2007, 83).

There is only a little evidence for prehistoric or Roman activity in the vicinity of the survey area. A Bronze Age round barrow was excavated 2km to the south-east prior to the

construction of Silverstone Airfield (Grimes 1960, cited in Dicks and Chadwick 2012) and a small cluster of Iron Age and stone-packed Roman pits was found c1200m to the north during the construction of the A43 bypass (Mudd 2007, 47-8). More recently, a watching brief at Cattle End, 500m west of the survey area, resulted in the discovery of an un-urned cremation burial (Leigh 2012). The date of this burial is unknown, but it could be prehistoric and is unlikely to be any more recent than early Saxon.

During the medieval period, Silverstone comprised three separate hamlets within the forest of Whittlewood. A further area of medieval settlement may have lain c 500m east of the survey area, where the Northamptonshire HER records possible settlement remains (MNN024032).

The farmhouse at Catch Yard farm dates from 1780 and is Grade II listed. (English Heritage Building ID: 234571). A possible 18th century hunting lodge, Winterhills, stands c 100m south-east of the survey area and is also Grade II listed (English Heritage Building ID: 234570).

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. The 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 RTK GPS. 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 (Fig 2) and are shown with an interpretative overlay in Figure 3. The unprocessed survey data is presented in Figure 4.

4 SURVEY RESULTS

The survey results are quite 'busy', with many different magnetic anomalies of varied origin. They do not present any clear evidence for major archaeological remains, but there are a few anomalies for which archaeological interpretations may be plausibly suggested.

Two crooked positive linear anomalies have been detected in Field 2, and possible continuations of each are present in Field 3. They could represent infilled ditches, but their irregular courses and variable magnetic intensities suggest that alternative interpretations as natural gullies or outcrops of magnetically enhanced geological strata should also be considered. Other linear anomalies occur to their south-east, in Fields 4 and 5, and these seem more convincing as ditches. In particular, the linear anomaly which runs east to west through Field 5 appears to represent a continuation of the linear ditch which survives as an earthwork in the adjacent Field 4 (Dicks and Chadwick 2012, plate 2).

The northern half of the survey area also contains two thin, negative linear anomalies. The one in Field 2 coincides with, and represents, a deep furrow along the edge of a ploughed piece of ground (*pers obs*). The other, in Field 5, is less readily interpreted. It could represent another plough scar, but none was observed and very similar anomalies can also result from service trenches containing non-ferrous pipes or cables.

Two linear anomalies in the southern half of the survey area appear to represent former field boundaries. One, which bisects Field 8 from north to south, correlates with a former field boundary depicted on the first edition Ordnance Survey map (Dicks and Chadwick 2012, fig 4). The other, which runs southwards through Field 7 from Catch Yard Farm, does not correspond with any feature on the available historic mapping, but clearly forms part of a coherent system with the extant field boundaries to its north and south.

In the northern half of Field 7 the survey has detected a concentration of irregularly-shaped positive anomalies and weak, amorphous background patterning. Such anomalies are commonly detected in association with waterlogged or alluvial ground (as is the case here) and it is thought that they arise from the effects of groundwater on the iron content of soils. However, the patterning in the north-western part of the field contains a few atypical rectilinear elements, and the possibility of an archaeological origin for these cannot be entirely excluded.

A large and elongated magnetic anomaly has been detected in the southern half of Field 2. Its location roughly matches with a quarry pit depicted on the 1958 edition of the Ordnance Survey map (Dicks and Chadwick 2012, fig 5), and its intensity ($>3000\text{nT}$) would be consistent with a large quantity of scrap metal within the backfill of this feature. A similar, though smaller anomaly occurs at the southern end of Field 4, coinciding with the location of a shallow, embanked hollow (Dicks and Chadwick 2012, plate 2). This may also represent a quarry pit with a metal rich backfill. However, there are narrow positive anomalies which suggest flanking ditches to the north and south of this feature, and they are more difficult to reconcile with a simple quarry-pit interpretation.

Approximately 60m north of the possible quarry pit in Field 4, there is a tightly defined patch of magnetic 'noise' which suggests a small backfilled quarry pit or pond. Two much smaller anomalies in the same field suggest other pits but, from their size, these seem unlikely to have been quarries.

In the south-western corner of Field 7, there is a large former quarry pit which was too wet and overgrown to be surveyed. Immediately to its north, the survey detected an area of magnetic 'noise' within which two rectilinear elements may be discerned (Fig 2, inset).

It is likely that the noise as a whole represents a spread of ferrous or ceramic debris, and possible that the rectilinear elements mark the remnants of kilns or other minor structures associated with the quarry.

Also in Field 7, to the immediate south of Catch Yard Farm, there is an area of intense magnetic noise which suggests the presence of a dense scatter of scrap metal, brick rubble or other domestic / agricultural debris. Similar magnetic noise occurs across almost the whole of Field 6, which was recently occupied by a storage yard and car parking area (Google Earth aerial photo dated 12/2004). Less intense magnetic noise indicates a thin scatter of ferrous debris across Field 8, but the specific origin of this is unknown.

At various places across the survey area, discrete dipolar anomalies have been detected. The majority of these will represent minor pieces of ferrous debris, but four large examples in the southern half of the survey area may be attributed to extant telegraph poles.

5 CONCLUSION

The survey results indicate at least one medieval or post-medieval boundary ditch, some other possible ditches and some features possibly associated with post-medieval quarrying. Nineteenth-century field boundaries and areas of modern ground disturbance have also been detected.

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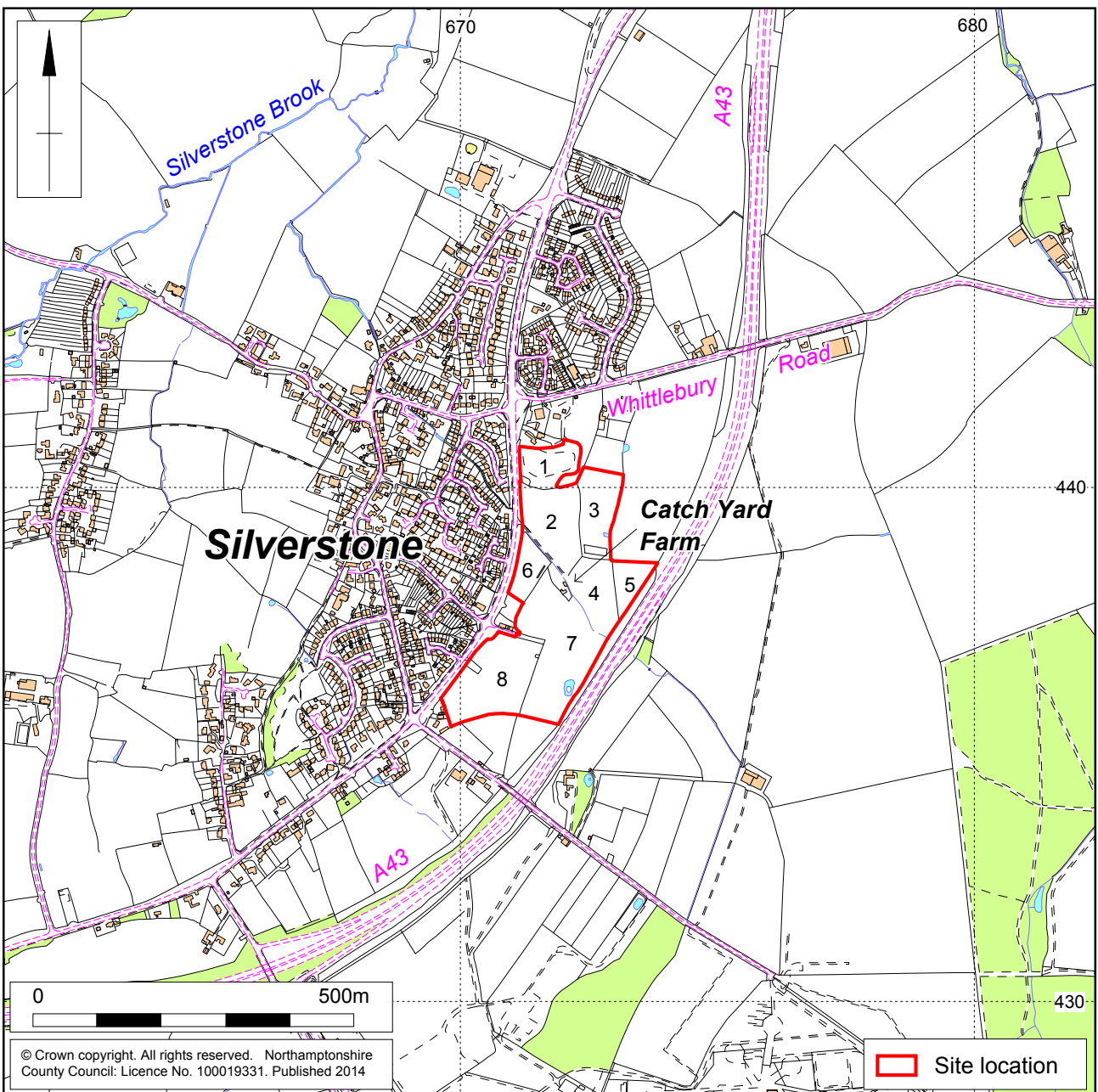
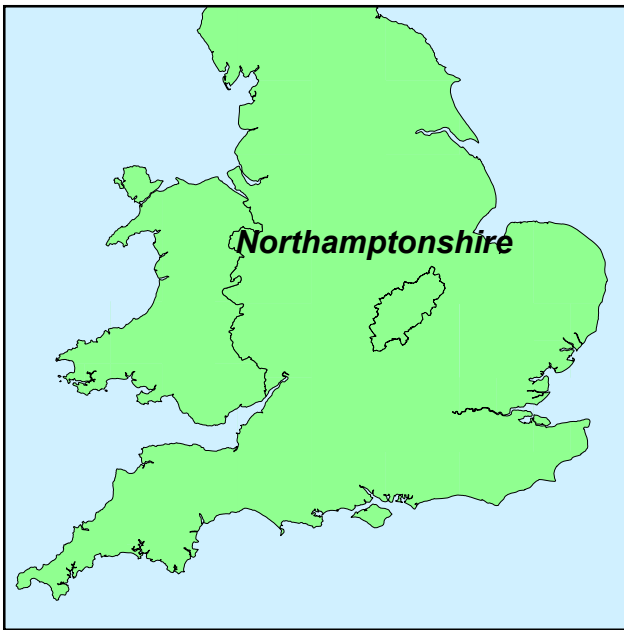
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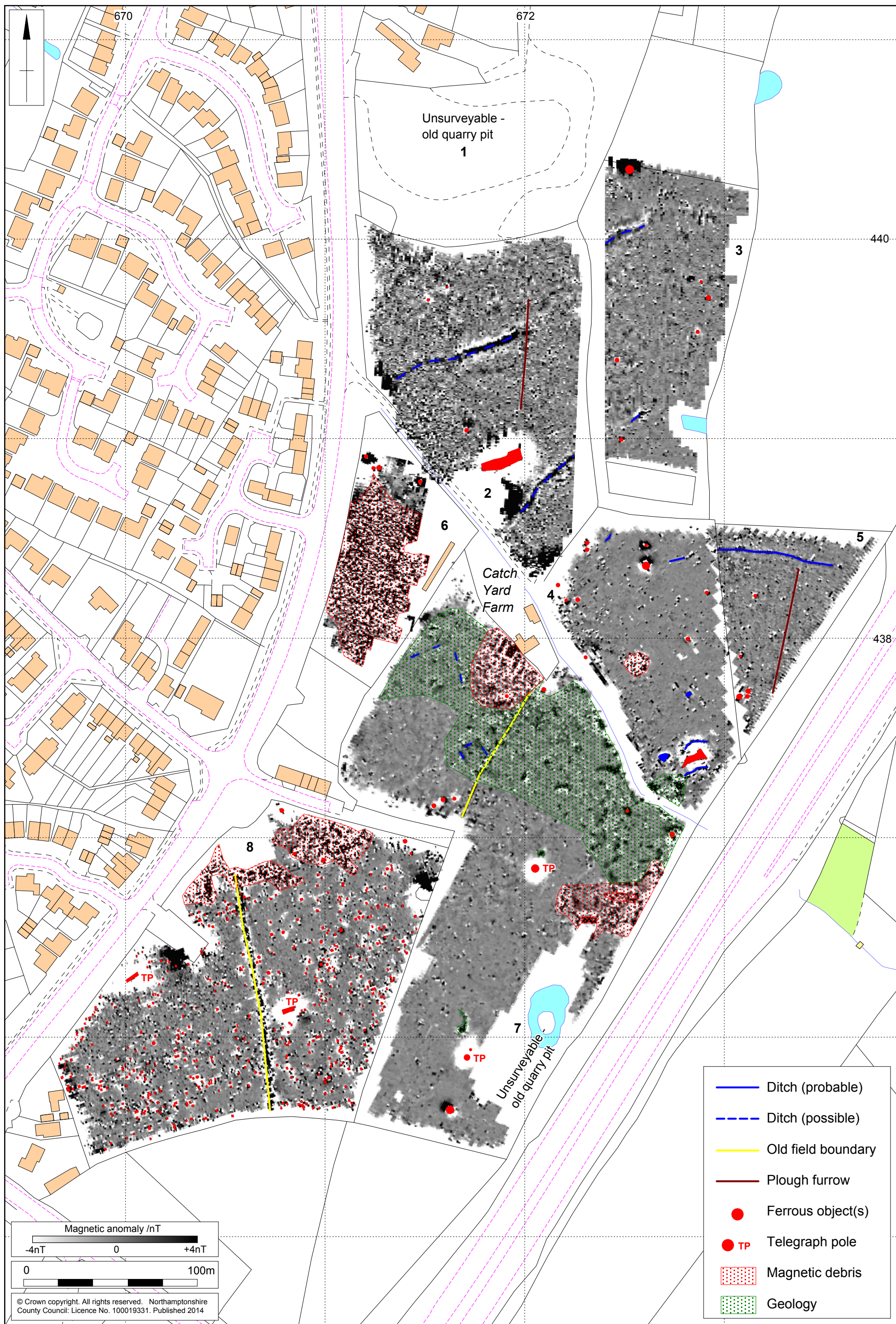
Scale 1:12,500

Site location Fig 1



Scale 1:2000

Magnetometer survey results Fig 2





Scale 1:2000

Unprocessed magnetometer data Fig 4

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