

**Archaeological geophysical survey
on land east of London Road
Little Irchester
Northamptonshire
December 2015**

Event Number: ENN108205
Report No. 15/226

Author: Adam Meadows

Illustrator: Adam Meadows



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OASIS REPORT

PROJECT DETAILS		Oasis No. molanort1-233787	
Project name	Archaeological geophysical survey on land east of London Road, Little Irchester, Northamptonshire.		
Short description	MOLA was commissioned to carry out a detailed magnetometer survey on land east of London Road, Little Irchester, Northamptonshire. The survey identified archaeological remains likely to date from the Iron Age or Roman periods. These comprise a number of potential enclosures, pits and linear ditches. Medieval ridge and furrow cultivation was also identified.		
Project type	Geophysical survey		
Site status	None		
Previous work	None		
Current Land use	Arable		
Future work	Uncertain		
Monument type/ period	Potential Iron Age/Roman enclosures, medieval ridge and furrow		
Significant finds	Roman pottery		
PROJECT LOCATION			
County	Northamptonshire		
Site address	London Road, Little Irchester		
Study area	c 7.7ha		
OS Easting & Northing	SP 904 659		
Height OD	c 46m – 56m aOD		
PROJECT CREATORS			
Organisation	MOLA Northampton		
Project brief originator	Northamptonshire County Council Assistant Archaeological Advisor		
Project design originator	MOLA Northampton		
Director/Supervisor	Adam Meadows		
Project Manager	Adam Yates		
Sponsor or funding body	Lanchester Land and Planning		
PROJECT DATE			
Start date	30 November 2015		
End date	1 December 2015		
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	Journal/monograph, published or forthcoming, or unpublished client report		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 on land east of London Road, Little Irchester, Northamptonshire, December 2015		
Serial title & volume	MOLA Northampton Reports 15/226		
Author(s)	Adam Meadows		
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Date	21 December 2015		

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ABSTRACT

MOLA was commissioned to carry out a detailed magnetometer survey on land east of London Road, Little Irchester, Northamptonshire. The survey identified archaeological remains likely to date from the Iron Age or Roman periods. These comprise a number of potential enclosures, pits and linear ditches. Medieval ridge and furrow cultivation was also identified.

1 INTRODUCTION

MOLA was commissioned by Lanchester Land and Planning, on behalf of Bowbridge Land Ltd, to conduct a geophysical survey on c 7.7ha of arable land to the east of London Road, Little Irchester (NGR SP 904 659; Fig 1). A detailed magnetometer survey was undertaken on 30 November and 1 December 2015 and has been recorded on the Northamptonshire County Council Heritage Environment Record (HER) under the event number ENN108205.

2 BACKGROUND

2.1 Location and geology

The survey area comprises a single arable field positioned south of Little Irchester (NGR SP 904 659). It is bounded to the west by London Road and to the south by Gypsy Lane. To the east lies a caravan park and a narrow gauge railway museum, and there are allotments to the north.

The survey area lies on a shallow north facing slope at an elevation of c 46m – 56m aOD. The geology of the area is recorded as Northampton Sand Formation Ironstone to the west and Stamford Member interbedded Sandstone and Siltstone to the east. There are no recorded superficial deposits (BGS 2015).

2.2 Historical and archaeological background

There is no record of any archaeological work previously being carried out within the survey area, nor are there any records of any ancient monuments or find spots on the HER. However a field c 200m north-east of the site was recently the subject of a geophysical survey and trial trench evaluation. These works mapped a concentration of archaeology within the south-western corner of the field which was the focus of a number of trial trenches. These uncovered linear ditches and gullies that form a complex of enclosures and potential trackways dating from between the Late Iron Age and Early Roman periods. A pottery kiln was also discovered (WA 2015, ENN107935).

Further evidence of Iron Age occupation in the area comes from archaeological works carried out prior to the construction of Victoria Park located c 800m north-east of the survey area. This uncovered three separate Iron Age sites consisting of two enclosures and an isolated cluster of pits and post holes (Morris and Meadows 2012). Furthermore a geophysical survey carried out at Chester Farm, 1.2km north of the survey area detected two Iron Age farmsteads c 500m apart (Morris and Meadows 2012).

The Roman town of Irchester is located c 1.2km north-east of the survey area. This is a walled town that covers c 18 ha of land and is located near to the River Nene at a known crossing point. The town is thought to have included an army barracks, temples and stables among a host of residential properties which extended beyond the towns defensive walls (Morris and Meadows 2012, Ian Meadows *pers com*).

Much of the land east and south of the survey area was quarried for ironstone and limestone in the 19th century up until 1969 (HER8422, HER8422/1/1). Although the survey area itself was not quarried, evidence of ancillary structures built within the survey area is present on historic Ordnance Survey maps. These include an old tramway and engine shed which feature, in various configurations, on late 19th to early 20th century editions of the Ordnance Survey map, and a wind-pumping station that features on the 1925 edition.

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 across the field to be surveyed. The grid was set out with a tape measure and optical square and was 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 Historic England and by the Chartered Institute for Archaeologists (HE 2015; ClfA 2014).

The survey data was processed using Geoplot 3.00v software. Striping, caused by slight imbalances between the magnetic sensors, was typically 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 a greyscale plot at a range of +7nT (black) to -7nT (white). This was then scaled, rotated and resampled (georectified) for display against the Ordnance Survey base mapping (Fig 2) and is shown with an interpretative overlay in Figure 3. A plot of the unprocessed data is presented in Figure 4.

4 SURVEY RESULTS

The survey has mapped some anomalies of probable archaeological origin, most of which occur in a group in the eastern half of the field. Magnetic disturbance of recent origin has also been detected, and some of this coincides with, and partially obscures, the archaeological anomalies.

Two parallel linear anomalies run westwards from the eastern boundary and others run perpendicular to these, forming an approximate grid pattern. These anomalies are likely to represent a series of ditches defining small rectangular enclosures. To their west is a curvilinear anomaly that may represent the partial remains of a D-shaped enclosure. Just north of this is an almost square shaped linear anomaly that may represent a smaller ditched enclosure with a possible entranceway to the east. A potential pit is located north of the rectilinear anomaly, appearing as a small black square shaped anomaly in the data. During the survey a sherd of Roman Samian ware pottery was found on the surface in this area.

In the western half of the survey data there are a couple of small L-shaped linear anomalies. They run in parallel orientated north to south turning to the west. A short distance south-west of these there is also a cluster of potential pits.

Medieval ridge and furrow cultivation has been detected across the south-eastern portion of the survey area, where it is represented by a series of weakly positive linear anomalies following parallel east - west alignments.

The survey has detected a number of strongly magnetic features dispersed across the survey area. These are most likely to represent buried ferrous objects. Magnetically alternating linear anomalies have also been mapped and are indicative of cables or pipelines constructed of a ferrous material. The longest of these, oriented north-south in the centre of the field follows the course taken by a tramway featuring in the 1886-88 Ordnance Survey map. Furthermore, the largest patch of disturbance to the south of the survey area is likely to be the remains of a wind-pumping station depicted on the 1925 Ordnance Survey County Series. The area of magnetic disturbance east of this is most likely resulting from modern debris.

A linear anomaly, orientated east to west, runs just south of the concentration of probable archaeology. This appears to correspond with the location of an old field boundary depicted on Ordnance Survey maps dating prior to the 1983 edition. A thin negative linear anomaly is also present in the north-east of the data. This is orientated north-north-west to south-south-east running parallel to the existing boundary. This represents the present edge of cultivation, along the side of an unsurfaced farm track.

5 CONCLUSION

The magnetometer survey has mapped a number of linear ditches, potential enclosures and some possible pits. The shape of these features strongly suggests a late Iron Age to Roman origin. This is supported by a sherd of Roman Samian ware pottery discovered on the field surface during the survey.

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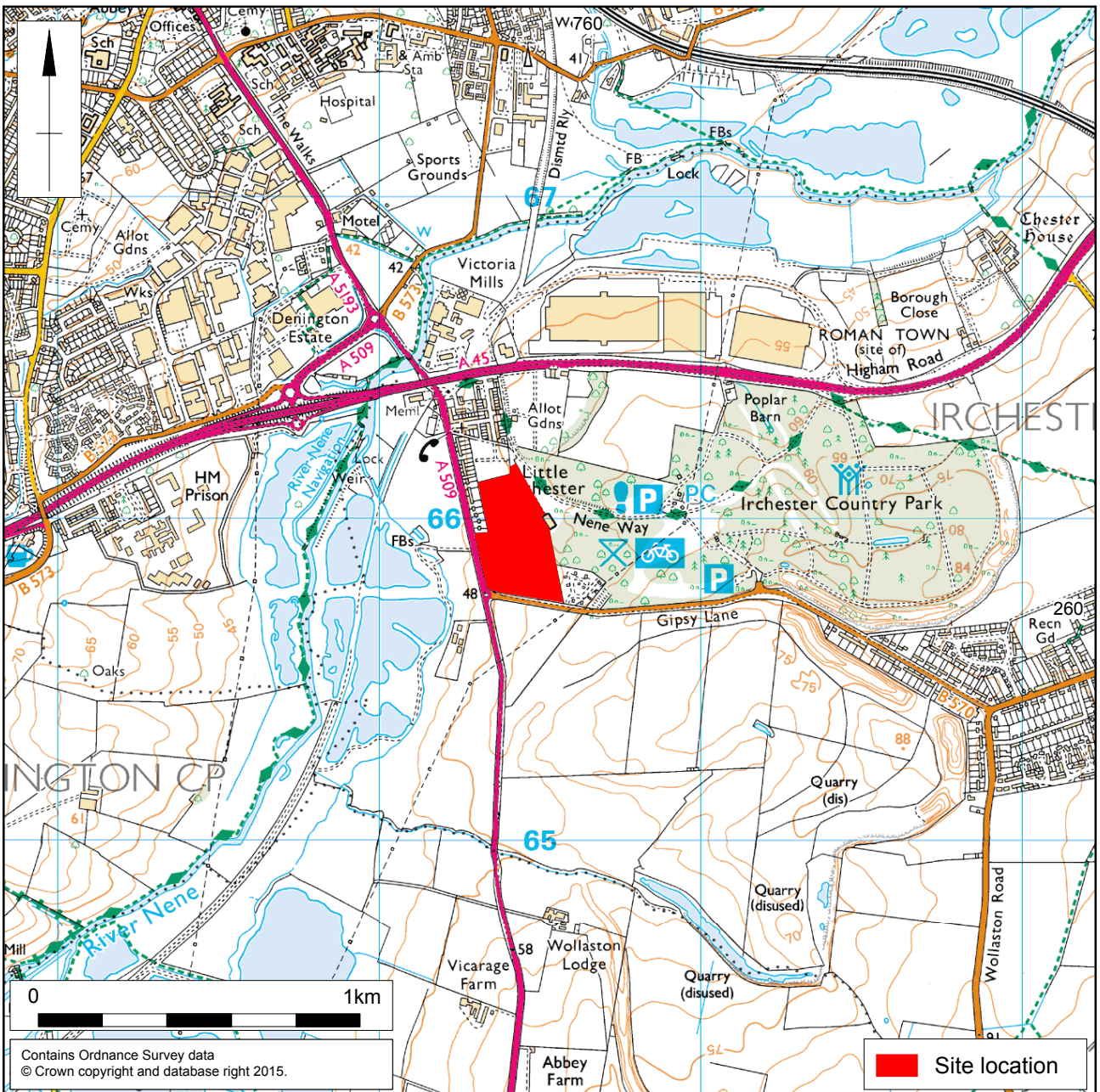
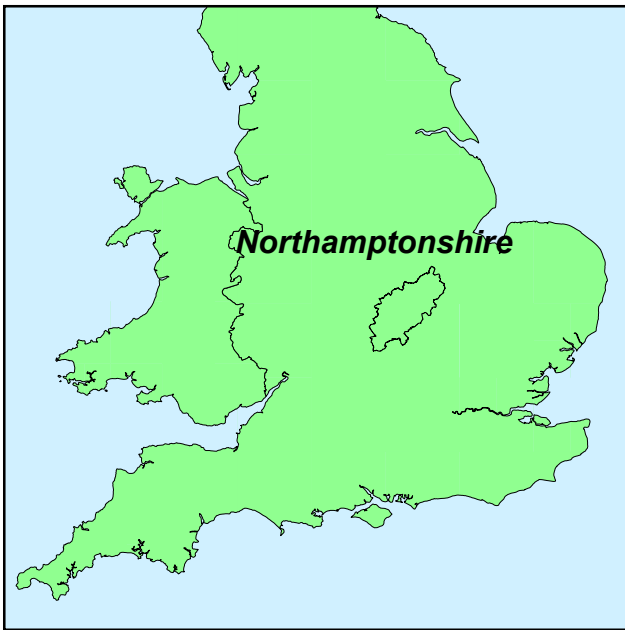
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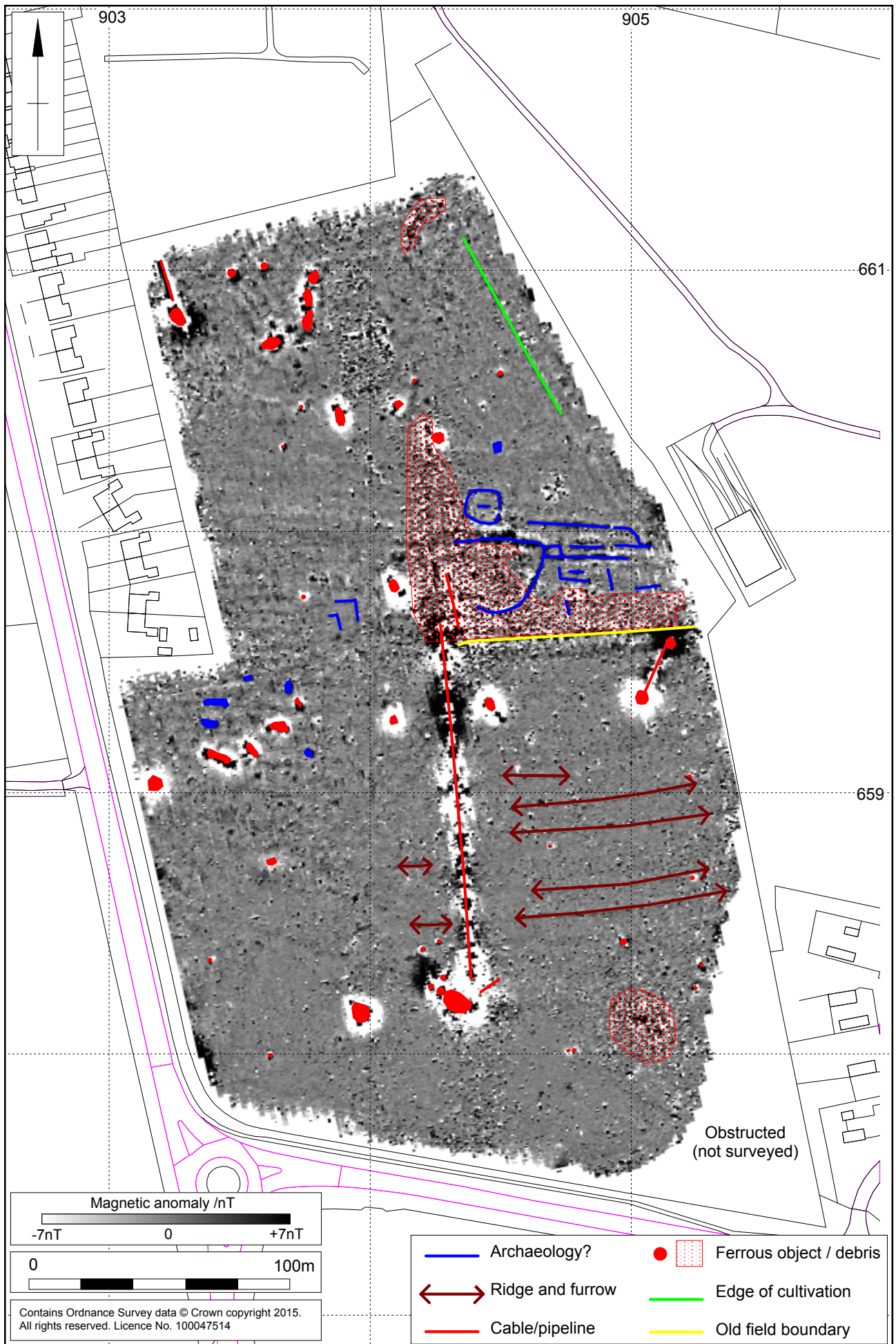
Scale 1:20,000

Site location Fig 1



Scale 1:2000

Magnetometer survey results Fig 2



Scale 1:2000

Magnetometer survey interpretation Fig 3



Scale 1:2000

Unprocessed magnetometer data Fig 4



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