



Northamptonshire Archaeology

A geophysical survey at
Langlands Farm, near Willand, Devon
June 2012



Northamptonshire Archaeology

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Report 12/113
June 2012



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OASIS REPORT FORM 128906

PROJECT DETAILS		
Project name	A geophysical survey at Langlands Farm, near Willand, Devon, June 2012	
Short description	Northamptonshire Archaeology undertook a detailed magnetometer survey of c 5ha of land at Langlands Farm, near Willand, Devon in June 2012. The work was undertaken in advance of a proposed solar park. The survey identified a ring ditch of possible prehistoric date, other possibly associated features and a series of infilled ditches, many relating to former post-medieval field boundaries.	
Project type	Geophysical survey	
Site status	None	
Previous work	None	
Current Land use	Pasture	
Future work	Unknown	
Monument type/ period	None	
Significant finds	A circular ditch of possible prehistoric date and post-medieval field boundaries	
PROJECT LOCATION		
County	Devon	
Site address	Langlands Farm, near Willand, Devon	
Study area	c 5ha	
OS Easting & Northing	ST 0441 1179	
Height OD	c 81-96m aOD	
PROJECT CREATORS		
Organisation	Northamptonshire Archaeology	
Project brief originator	CgMs Consulting Ltd	
Project Design originator	NA	
Director/Supervisor	Ian Fisher, Northamptonshire Archaeology	
Project Manager	Mike Dawson, CgMs Consulting Ltd Mark Holmes, Northamptonshire Archaeology	
Sponsor or funding body	CgMs Consulting Ltd	
PROJECT DATE		
Start date	18/06/12	
End date	19/06/12	
ARCHIVES	Location:	Content
Physical	Northamptonshire Archaeology	Map extracts, site survey records Mapinfo Plans, Word report and Geophysical survey & GIS data
Paper		
Digital		
BIBLIOGRAPHY		
Title	A geophysical survey at Langlands Farm, near Willand, Devon, June 2012	
Serial title	12/113	
Author(s)	Ian Fisher and Robyn Pelling	
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Front Cover: General view of the site looking south

Fig 1: Site location

Fig 2: Geophysical survey results

Fig 3: Geophysical survey interpretation

**GEOPHYSICAL SURVEY AT
LANGLANDS FARM NEAR WILLAND, DEVON
JUNE 2012**

ABSTRACT

Northamptonshire Archaeology undertook a detailed magnetometer survey of c 5ha of land at Langlands Farm, near Willand, Devon in June 2012. The work was undertaken in advance of a proposed solar park. The survey identified a circular ditch of possible prehistoric date, other possibly associated features and a series of infilled ditches, many relating to former post-medieval field boundaries.

1 INTRODUCTION

Northamptonshire Archaeology (NA) was commissioned by CgMs Consulting to conduct an archaeological geophysical survey in advance of a proposed development at Langlands Farm, near Willand (NGR ST 0441 1179; Fig 1).

The fieldwork was conducted on 18th June 2012, and comprised the detailed magnetometer survey of one arable field with a total area of c 5ha.

2 TOPOGRAPHY AND GEOLOGY

Willand Village is located on the B3181, to the south of the M5. The proposed development area is situated to the north-east of the village, adjacent to Moorfield Dairy which is to the south. It comprises an irregularly-shaped rectangular pasture field, bounded by Moorfield Dairy and the B3440 to the south, and the B3181 to the north.

The site sits between 81-96m above Ordnance Datum (aOD) and slopes to the south and east towards the River Culme which lies approximately 1km distant. Surrounding the site on the east and west are hedge-bounded arable fields, whilst to the north lie an assortment of local businesses situated on the B3181. In the south-east corner of the field is an enclosed area of solar panels, directly in front of a chicken shed. Gardens border the south-west edge. Through the centre of the field a temporary electric fence has been erected on a north-south alignment.

The bedrock consists of a sedimentary mudstone, and is part of the Aylesbeare Mudstone Group formed during the Jurassic period. Superficial layers of River Terrace Deposits of undifferentiated sands and gravels may encroach upon the south side of the site (www.bgs.ac.uk).

3 ARCHAEOLOGICAL BACKGROUND

A full Archaeological background can be found in the Desk-Based Assessment carried out by CgMs Consulting (Dawson 2011). Below is a summary of the findings.

The majority of prehistoric evidence in the area lies to the east of the site less than 0.5km away at Four Ways Cross, Willand. A Neolithic ring ditch (HER 77255) and a significant number of remains from the Bronze Age, including a pit alignment and burial mounds, suggest a significant area of activity (HER 77253, 77254, 77256, 77258, 77273, 77274). There is also considerable evidence that the settlement continued into the Iron Age with the excavation of a D-shaped enclosure (HER 77272) amongst others. (Dawson 2011).

A Roman road (HER 68192) is believed to pass close to the site and the possibility of a settlement focus in the area has been postulated. There is some settlement evidence at Four Ways Cross, specifically a Romano-British pit (HER 77257).

During the Anglo-Saxon period there is evidence for surrounding villages having been well established due to their entry in the Domesday survey. For example, Willand, entered as *Willelande* meaning 'waste land', and Uffculme, or *Offecoma*, meaning 'Uffa's winding river' (Ekwall 1980). On the site itself there is little evidence of remains except for the possibility of old field boundaries, a medieval farm at Old Bridewell (HER 20802), and a settlement at Muxbere (HER 19302).

Maps of the area from the late 19th century onwards show the site to have been given over to agriculture with generally little change up to the present day, other than the removal of some post-medieval field boundaries and post-World War II the expansion of roads such as the B3181 (www.old-maps.co.uk).

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).

An independent system of 30m grids was established within the field to be surveyed. The grids were established with a tape measure and optical square and were tied in to the Ordnance Survey National Grid by means of a Leica Systems 1200 dGPS. The gradiometers were then 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 were processed using Geoplot 3.00v software. Striping, caused by slight mismatches in sensor balance, was removed using the 'Zero Mean Traverse' function and destaggering of the data was performed as necessary.

The processed data are presented in this report in the form of grey-tone plots, at a scale of +/- 4nT black/white. The plots have been scaled, rotated and resampled (georectified) for display against the Ordnance Survey base mapping (Fig 2). An interpretative overlay has been produced and is shown in Figure 3.

5 SURVEY RESULTS

The entire field was surveyed, although there were minor obstructions caused by an enclosed area of solar panels in the south-east corner of the site and a freestanding electric fence bisecting the site (Fig 3).

A circular positive linear anomaly, approximately 10m in diameter, towards the north-east of the site maybe of prehistoric date, possibly a ring ditch associated with funerary

or domestic activity. Two nearby smaller anomalies, to the north and north-east, might be associated features.

Also present were a number of positive linear anomalies representing infilled ditches. Many of these relate to former field boundaries shown on the 1st edition Ordnance Survey map of 1890 (www.old-maps.co.uk).

Two ditches do not appear on the 19th century mapping. A sinuous ditch along the north-western edge of the site is parallel to the line of the current road, and may be of post-medieval date. A ditch in the north-eastern corner of the site is of unknown date.

The survey data displays a high level of interference around the north-west edge of the field due to fluctuating readings caused by metal fencing. The electric fence caused similar interference along its length.

6 CONCLUSION

The geophysical survey identified a circular feature, 10m in diameter, of possible prehistoric date. This may be a ring ditch associated with prehistoric funerary or domestic activity, forming part of the known prehistoric landscape around Willand.

A number of linear features were also identified. Many of these relate to field boundaries shown on 19th century mapping, although others are undated.

No other evidence of significant archaeological remains was located by the geophysical survey.

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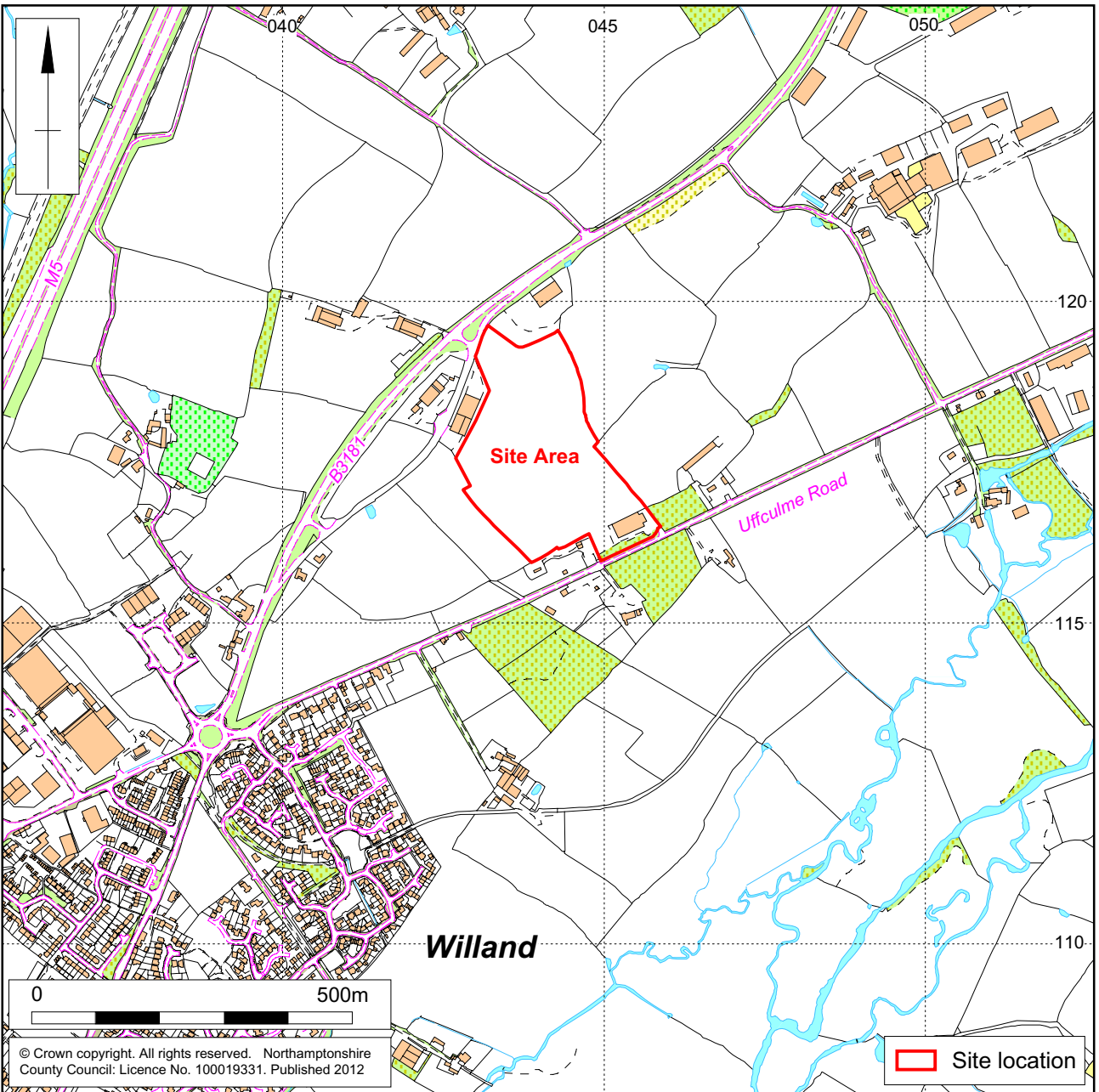
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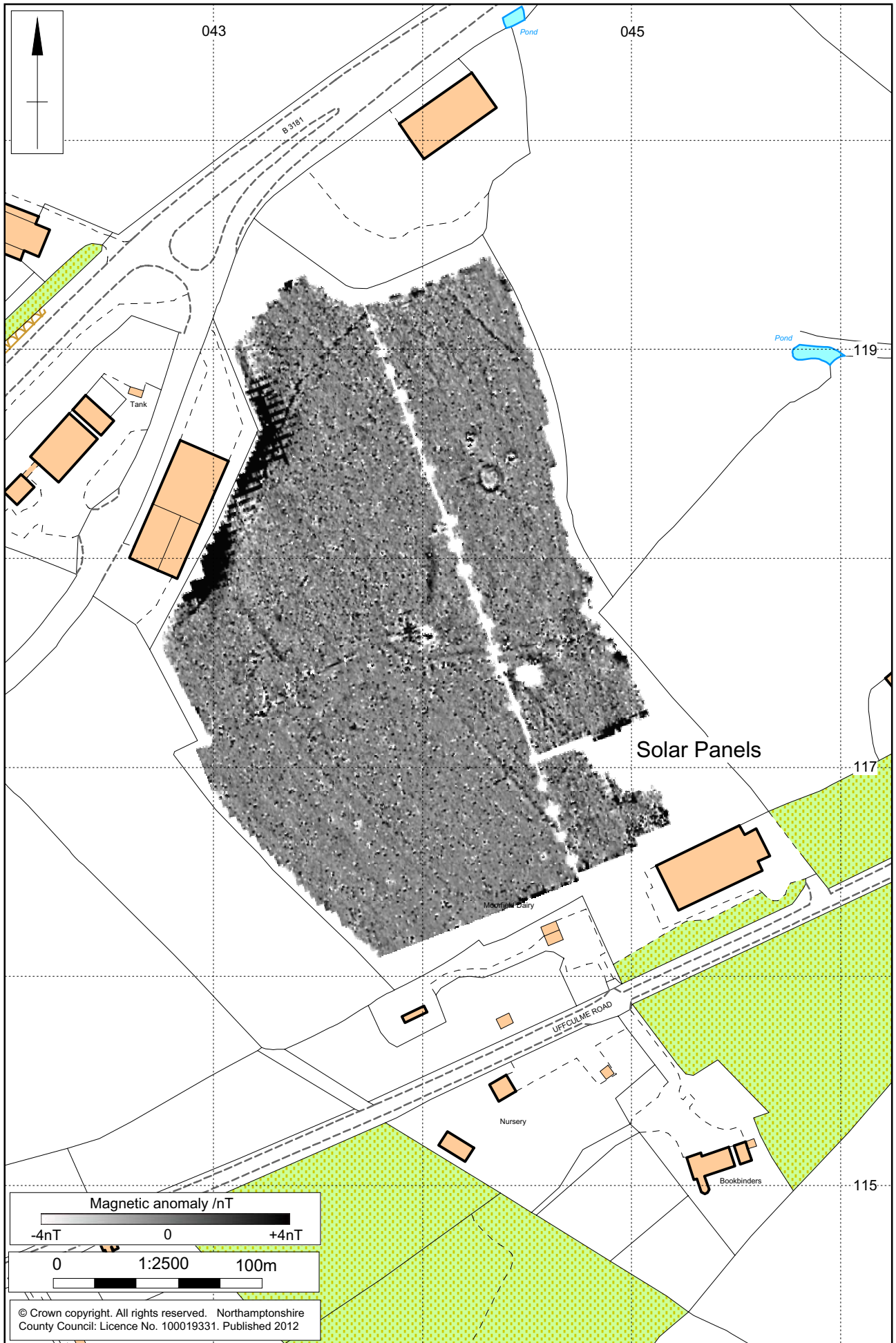
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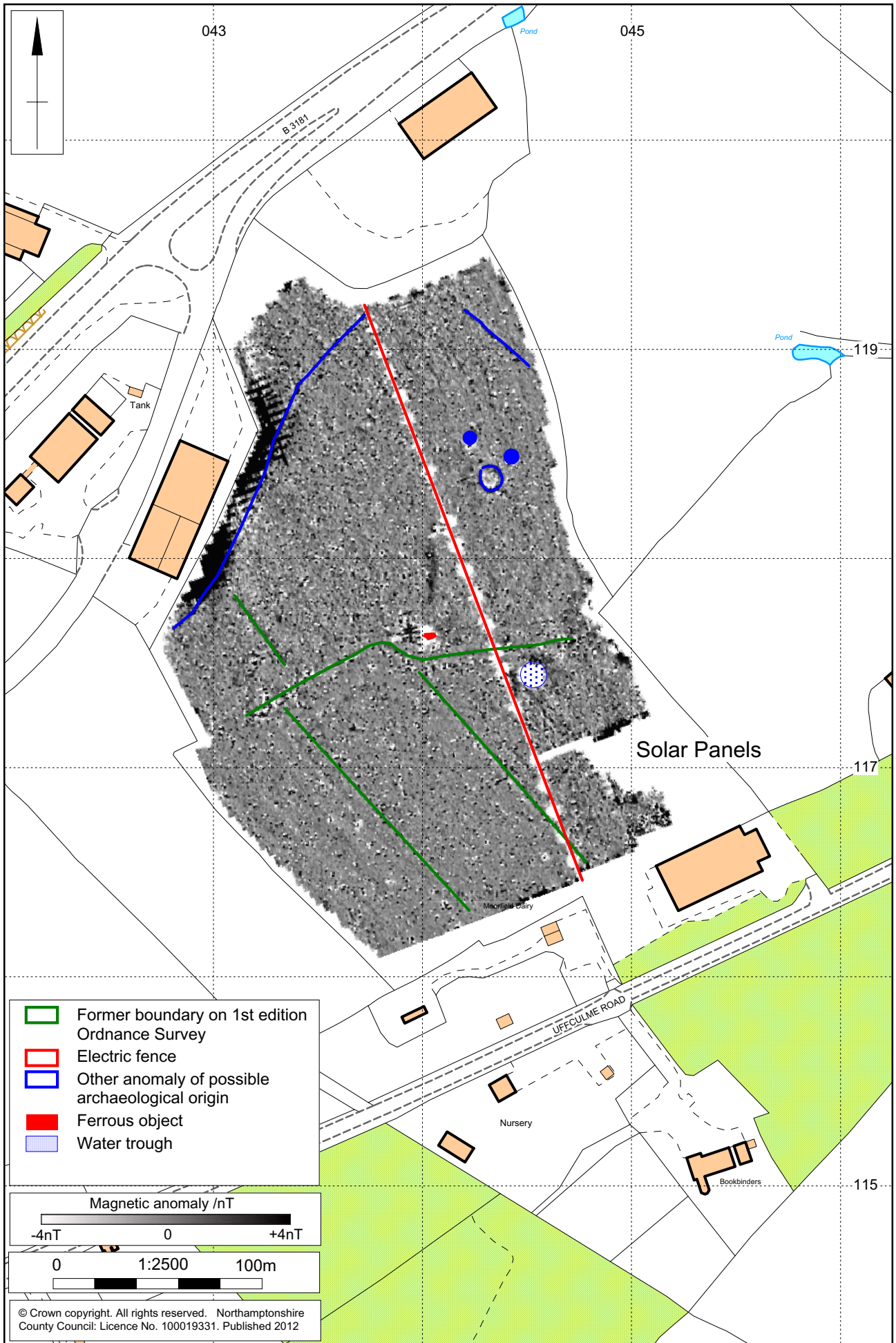
Scale 1:10,000

Site location Fig 1



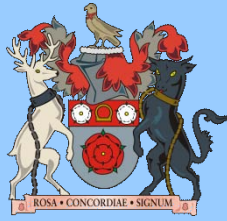
Scale 1:2500

Langlands Farm Geophysical Survey Results Fig 2



Scale 1:2500

Langlands Farm Geophysical Survey Interpretation Fig 3



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