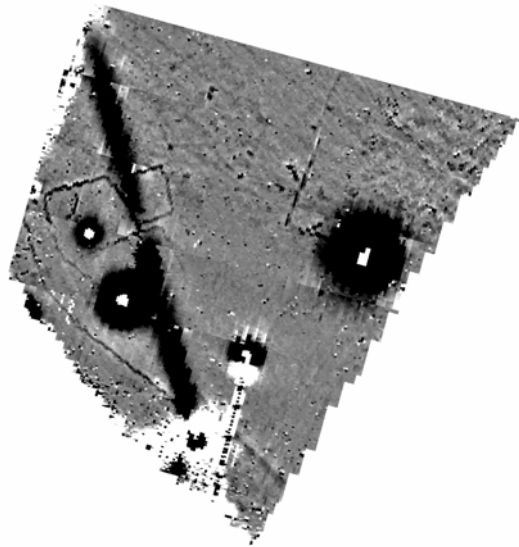




Northamptonshire  
County Council

# Northamptonshire Archaeology

An Archaeological Geophysical Survey  
of land to the north-east of Daventry,  
Northamptonshire  
November 2008



Adrian Butler and Ian Fisher

November 2008

Report 08/196

## 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             Adrian Butler  
                             John Walford MSc  
                             Joe Bampton BA  
                             Paul Clements BA  
                             James Ladocha BA  
                             Michael Puntorno BA  
                             Heather Smith MA

Text and illustrations      Adrian Butler  
   Ian Fisher BSc

**QUALITY CONTROL**

	Print name	Signature	Date
Checked by	Andy Mudd	<i>AM</i>	12/11/08
Approved by	Steve Parry	<i>SP</i>	12/11/08

**OASIS REPORT FORM**

<b>PROJECT DETAILS</b>		
Project name	An Archaeological Geophysical Survey on Land North-East of Daventry, Northamptonshire	
Short description	Northamptonshire Archaeology conducted an archaeological geophysical survey on land to the north-east of Daventry, Northamptonshire. Approximately 27ha of detailed gradiometer survey was carried out in eleven areas. Survey revealed a group of three enclosures containing a possible round house, 12 pits and two further ditches. A 290m long ditch was found to curve around the side of the valley, crossed by a pit alignment. Based on their morphology the archaeology may be of Iron Age or Roman date. In addition, a major iron pipeline was detected skirting Daventry reservoir and north towards the Grand Union Canal. Several other anomalies of unknown source were detected across the area.	
Project type	Geophysical survey	
Site status	None	
Previous work	None	
Current Land use	Agricultural	
Future work	Unknown	
Monument type/ period		
Significant finds	None	
<b>PROJECT LOCATION</b>		
County	Northamptonshire	
Site address	Daventry, Northamptonshire	
Study area	27 ha	
OS Easting & Northing	SP 585, 645 centre	
Height OD	115m – 140m AOD	
<b>PROJECT CREATORS</b>		
Organisation	Northamptonshire Archaeology	
Project brief originator	CgMs Consulting	
Project Design originator	Northamptonshire Archaeology	
Director/Supervisor	John Walford	
Project Manager	Adrian Butler	
Sponsor or funding body	CgMs Consulting	
<b>PROJECT DATE</b>		
Start date	October 2008	
End date	November 2008	
<b>ARCHIVES</b>	<b>Location</b>	<b>Content</b>
Physical	n/a	
Paper	NA	Site survey records
Digital	NA	Geophysical survey & GIS data
<b>BIBLIOGRAPHY</b>		
Title	Journal/monograph, published or forthcoming, or unpublished client report	
Serial title & volume	An Archaeological Geophysical Survey on Land North-East of Daventry, Northamptonshire	
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**AN ARCHAEOLOGICAL GEOPHYSICAL SURVEY ON LAND  
NORTH-EAST OF DAVENTRY, NORTHAMPTONSHIRE  
NOVEMBER 2008**

*ABSTRACT*

*Northamptonshire Archaeology conducted an archaeological geophysical survey on land to the north-east of Daventry, Northamptonshire. Approximately 27ha of detailed gradiometer survey was carried out in eleven areas. Survey revealed a group of three enclosures containing a possible round house, 12 pits and two further ditches. A 290m long ditch was found to curve around the side of the valley, crossed by a pit alignment. Based on their morphology the archaeology may be of Iron Age or Roman date. In addition, a major iron pipeline was detected skirting Daventry reservoir and north towards the Grand Union Canal. Several other anomalies of unknown source were detected across the area.*

**1 INTRODUCTION**

Northamptonshire Archaeology was commissioned by Myk Flitcroft of CgMs Consulting Ltd on behalf of Croudace Homes Ltd to undertake geophysical survey on land north-east of Daventry, Northamptonshire (NGR 4585, 2645; Fig 1).

The objectives of the geophysical survey were to identify the presence or absence of archaeological remains within the proposed development area. The programme consisted of a detailed gradiometer survey of approximately 27ha area of land sampled from an initial area totalling 77ha.

**2 TOPOGRAPHY AND GEOLOGY**

The site comprises eleven arable fields (A - K), extending from the A5256 Norton Road in the south to be the Grand Union Canal in the north (Figs 1 & 2). The fields slope down gently to the north-west, overlooking the Daventry reservoir which is adjacent to the south-west. The western boundary of the site is the water course that leads north-east from the reservoir outlet.

The area is mapped by the British Geological Survey as being of several types. Different strata are exposed down the side of the valley with superficial deposits of Glacial Sand and Gravel at top, underlain in turn by Middle Lias Silts and Clays, Lower Lias Clay, a further deposit of sand and gravel and finally Alluvium in the valley bottom.

### 3 **ARCHAEOLOGICAL BACKGROUND**

The archaeological background of the area has been studied in great depth in a Desk Based Assessment by John Samuels Archaeological Consultants (JSAC 2004). The survey area is situated in an area of archaeological sensitivity. Burough Hill Iron Age hillfort (SAM 17145) is located less than 500m to the south-east, the Roman small town of Bannaventa (SAM 152) at Whilton Lodge only 1km to the east. A deserted medieval settlement is known at Thrupp Lodge (HER 626) east of the area. Roman pottery and metalwork is known from the southern fields of the site (JSAC 2004). GSB Prospection carried out a magnetometer survey on the western half of the development in 2005 (Information from CgMs). Areas 23 and 24, east of Lower Thrupp Grounds, were found to contain a large number of enclosures and pits. The Daventry reservoir was imposed on the enclosed landscape, opening in 1804. The field pattern has changed very little since the late 19th century

### 4 **METHODOLOGY**

Geophysical survey was carried out in accordance with the standard NA methodology and English Heritage and the Institute For Archaeologists Guidelines (EH 2008 & Gaffney, Gater and Ovendon 2002). Seven Blocks were subject to geophysical survey.

#### **Detailed Gradiometer Survey**

All detailed magnetometer survey was undertaken using Bartington Grad601-2 fluxgate gradiometers. The Grad601-2 is constructed as a dual-sensor instrument with two vertical gradiometers separated on a yoke to enable two lines of survey to be recorded in tandem.

Eleven blocks were surveyed in detail in Blocks A - K. The detailed gradiometer survey was composed of a total of 329 whole and partial, 30m x 30m grid-squares. Each grid square was traversed at rapid walking pace in zigzag mode; and data was recorded every 0.25m along traverses spaced at 1.0m separations. All fieldwork was carried out in accordance with the aforementioned guidelines (EH 2008 & Gaffney, Gater and Ovendon 2002).

The data was analysed using Geoplot 3.00u software. Low (negative) magnetism is shown as white and high (positive) magnetism as black in the resultant greytone plots. To avoid the introduction of processing errors, minimal manipulation was carried out on the data. The 'Zero Mean Traverse' function was applied in order to bring the average level of each data line into a balanced zero.

The processed data is presented here in the form of a greyscale highlighting the weaker magnetic

anomalies (-4nT / +4nT scale; Figs 2, 3, 5, and 7) georectified to the Ordnance Survey base. Interpretative plots have been generated from the results (Figs 4, 6, and 8), both sets of figures are referred to directly in the following section.

## 5 SURVEY RESULTS

### Detailed Gradiometer Survey

The survey blocks may be assessed as a whole in Figure 2, where anomalies crossing between blocks may easily be recognised.

#### Block A (Figs 3 & 4)

The survey identified ridge and furrow, orientated north-west to south-east, across most of the survey area. On the north-east and south-east edges of the survey area geological features can be seen. The survey also detected two ferrous objects of unknown origin, possibly pieces of agricultural iron debris.

#### Block B (Figs 3 & 4)

The south-west corner of the survey area included a dense area of ceramic building material debris within the plough soil, emanating from the remains of a demolished concrete floored, brick building adjacent to an overgrown pond. The brick rubble was found to be highly detectable, and within it a right-angled linear magnetic anomaly was also detected. The feature within the brick spread may conceivably indicate a ploughed-out brick wall connected to the structure. An amorphous geological feature was also identified on the north-west edge of the survey area.

#### Block C (Figs 3 & 4)

Ridge and furrow, orientated north-east to south-west, was identified by the survey. Two ceramic field drains, one linear and one sinuous, orientated north-west to south-east were also detected cutting across the cultivation.

#### Block D (Figs 3 & 4)

A positive magnetic anomaly indicating a ditch was detected orientated south-west to north-east before turning and continuing in west to east. Ridge and furrow was identified in the north-east section of the survey area aligned north-east to south-west. Two geological linear anomalies were also located orientated north-west to south-east.

#### Block E (Figs 3 & 4)

A length of ditch, orientated north-east to south-west, was identified from a linear positive magnetic anomaly through the centre of the survey area. Two features, interpreted as geological anomalies, were detected in the south-east corner of the survey area.

**Block F** (Figs 5 & 6)

Intense positive and negative magnetic anomalies, indicating a ferrous pipeline, were located orientated north-east to south west, bending slightly adjacent to a highly magnetic anomaly and within an area of probable ferrous debris. Positive anomalies were recorded, suggesting geological features, striated north-east to south-west through the north-west of Block F. Anomalies indicating ceramic field drains, were detected north-east to south-west.

**Block G** (Figs 5 & 6)

Intense anomalies were detected by the survey recording a ferrous pipeline, as seen and on a similar alignment to that in Block F.

**Block H** (Figs 5 & 6)

The survey identified two probable linear ditches, orientated north to south and north-west to south-east as positive linear anomalies. Both extend out of the survey area. A band of ceramic debris was also identified north to south. A ferrous pipeline was located parallel to the south-western field boundary. An unknown ferrous object was also detected.

**Block I** (Figs 5 & 6)

Ferrous pipeline anomalies recorded in the north-east to south-west and turning to the south in the western corner of the survey block appear to continue the alignment of the pipeline detected through Blocks F and G. Two parallel linear highly magnetic anomalies, orientated north-east to south-west were detected crossing the survey 10m apart. As yet, no satisfactory interpretation can be offered for these features. Ditches backfilled with particularly enhanced material may be a possibility. Ridge and furrow cultivation was evident parallel with the axis of the survey block. This was crossed north-east to south-west by a single linear anomaly likely to indicate a ceramic pipe. A broad linear anomaly orientated north-east to south-west at the edge of the survey indicated a length of ditch possibly continuing into Block J.

**Block J** (Figs 5, 6, 7 & 8)

The survey detected positive anomalies describing three adjoining sub-rectangular ditched enclosures. In the west corner of the western-most enclosure a further circular enclosure can be identified. Two intensely negative anomalies (with wide positive halos) detected within the

enclosures appear likely to stem from vertical steel pipe type features, possibly capped and buried boreholes. North of the cluster of enclosures, discrete positive anomalies indicating up to 12 pits were recorded. Adjacent to the east of the pits, survey revealed an 'L-shaped' ditch orientated south-west to north-east, in line with a ditch in Block I. A length of curving ditch was detected south of the enclosures, near parallel to the existing field boundary. Ultimately the ditch appears to extend out of the survey area to the south-east.

The enclosures were bisected by a broad positive magnetic anomaly, orientated north-west to south-east. In the southern part of the survey area the broad anomaly appears to turn at a ferrous anomaly (identified as a service cover) and extend south-west into Block K. Taking an overview of the survey to include Blocks F, G and I, the linear anomaly appear to align with the pipeline detected in Block I. The broadening and lessening in intensity of the anomaly would correspond to such a ferrous pipeline increasing in depth below the surface. A linear alternating positive – negative anomaly aligned south-west to north-east in the south of Block J is likely to reflect a buried electricity cable leading to a telegraph pole at the northern end.

#### **Block K** (Figs 7 & 8)

Archaeologically, two sets of anomalies dominate in Block K. A line of discrete positive anomalies reflecting a possible Iron Age pit alignment was recorded orientated north-west to south-east through the north of the survey area. Roughly parallel to the western field boundary, survey detected a curving positive magnetic anomaly, likely to reflect a ditch. Although it could represent a modern feature, related to the reservoir, two factors act in favour of an ancient origin. Comparing the ditch with the contours showing fall of land in Figure 8, the curve merely follows the strike of the spur of land. Also, towards the north end of the ditch, the pit alignment appears to pass through or over the ditch. Although obscured slightly by anomalies towards the southern end, it would appear that the ditch curves sharply to the north and returns to the south-west for approximately 20m. A pair of discrete positive anomalies situated on the southern edge of the survey block may indicate buried pits.

The broad positive anomaly encountered in Block J appears to continue along a similar north-east to south-west alignment in Block K. A pair of ferrous type anomalies corresponds to service covers (Fig 8) along the putative pipeline. Two further ferrous anomalies at the northern end of the survey are of unknown source. A curving chain of positive anomalies to the east of the ferrous features is likely to indicate an electricity cable, possibly related to a nearby telegraph pole outside the area. Approximately midway along the pipeline, a further ferrous anomaly was recorded for which no causative feature was apparent. The similarity with other such features in the area may suggest

another covered shaft. This is true also of a ferrous anomaly at the point where the pipe exits the survey block. The ferrous anomaly adjacent to the cover at the south end of the ditch is related to a telegraph pole.

## **6 CONCLUSION**

Sample gradiometer survey of 11 blocks north-east of Daventry was successful in revealing a plethora of subsurface features. Although the majority of archaeologically significant features were detected towards the southern part of the survey, a pair of ditches in Block H may relate to other medieval archaeology around Lower Thrupp Grounds. A single ditch in Block I leads south-west to J, containing a possible continuation of the ditch, east of a dozen pits and group of three adjacent enclosures. A possible ring ditch lies in the corner of the most western enclosure in Block J. A ditch was identified orientated curving north-west to south-east around and away from the enclosures.

Further south in Block K a possible Iron Age pit alignment crossed the area south-east to north-west. Intriguingly, a ditch was identified curving for approximately 290m through the west of the area around the contour of the hillside at that point. Married with the evidence from the earlier GSB survey (above) this group of features make an interesting addition to the archaeology of Burough Hill hillfort barely 300m south-east of Block J.

The survey also revealed a number of non-archaeological features. Geological variations were noted in most of the northern blocks, probably due to the rapidly varying strata underlying the area (above). A ferrous pipeline was identified orientated north-east to south-west in Blocks F, G and I, then turned south-south-east around the reservoir, apparently plunging to greater depth through Blocks J and, turning south-west, K. Whatever utility this represents, several service shaft covers were identified, and it is almost certainly represents a feature installed after the reservoir.

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