



Community
Landscape
Archaeology

GEOPHYSICAL SURVEY OF A FIELD NORTH-WEST OF BANNAVENTA, NORTHAMPTONSHIRE

OS SP 6039064850

CLASP Geophysical Report No. 17/3

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June 2017

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Abstract

As part of a large-scale geophysical survey investigation of Bannaventa CLASP conducted a fluxgate gradiometer survey on part of the hinterland landscape of the Roman posting station, centred on OS SP 6039064850 to the north-west of the site, in Norton Parish, Northamptonshire. The geophysical survey covered an area of approximately 3.5 ha. and a series of linear and circular magnetic anomalies were detected. Our rationale for under-taking the fieldwork was to establish and characterize the extent and nature of any remaining features and to try to understand the archaeological relationship between the survey area on the fringes of the settlement and the nearby posting station. The findings indicate that the area retains elements of the Roman landscape and these appear to correspond directly with the posting station. Those identified anomalies reflect the underlying agricultural focus of the site that underpinned the role of Bannaventa in the wider Roman landscape.

REPORT FORM PROJECT DETAILS		OASIS No: 269980
Project name		Magnetometer survey. Norton Lodge, Bannaventa
Short description		Geophysical survey of a field 700m NW of Bannaventa in Northamptonshire. The survey revealed ditches, possible round houses, an enclosure and 2 phases of ridge and furrow.
Project type		Research
Site status (none, NT, SAM etc)		None
Previous work (SMR numbers etc)		None
Current Land use		Pasture
Future work (yes, no, unknown)		Unknown
Monument type/ period		Early Roman
Significant finds (artefact type and period)		Ditches, enclosure, possible round houses
PROJECT LOCATION		
County		Northamptonshire
Site address		Norton Lodge, Norton, Northants
Study area (sq.m or ha)		4.4 ha
OS Easting & Northing		Centred on SP 6039064850
Height OD		C. OD 123m
PROJECT CREATORS		
Organisation		CLASP
Project brief originator		CLASP
Project Design originator		CLASP
Director/Supervisor		Stephen Young
Project Manager		Fred Kay
Sponsor or funding body		None
PROJECT DATE		
Start date/End date		Dec 2012 - Jan 2013
ARCHIVES	Location (Accession no.)	Content (eg pottery, animal bone etc)
Physical	CLASP Archive:	
Paper	CLASP Archive:	Site file
Digital	CLASP Archive:	Mapinfo plans, Word report
BIBLIOGRAPHY		
Title		
Serial title & volume		
Author(s)		Stephen Young & Fred Kay
Page numbers		

1.0 Introduction

In Dec 2013/Jan 2014 CLASP (Community Landscape & Archaeology Project) undertook a geophysical survey of a field situated near Watling Street approximately two miles to the north of the village of Weedon in Daventry District, Northamptonshire. The survey covered 3.5 ha of a 4.5 ha field to the north-west of the posting station of Bannaventa and forms part of a large-scale landscape survey of the site and its immediate hinterland.

Various magnetic anomalies were revealed, indicating that the area contains features and elements of the Roman hinterland associated with the posting station and reflecting the function and purpose of the Bannaventa in the wider Roman landscape.

Two phases of medieval ridge and furrow with different alignment were evident.

2.0 Site location and description (fig. 1 & 2)

The geophysical survey area is situated on the edge of a plateau at 123 OD the field sloping slightly to the west. Centred on SP 6039064850 it is to the west and 500m outside the boundary ditches of the Roman posting station of Bannaventa. Lying on the fringe of this settlement on the west side of the A5 (Roman Watling Street) the area forms part of the hinterland of Bannaventa.

The field under investigation at the time of survey was pasture. There is a spring arising in the field which is connected by a buried iron pipe to the farmhouse on the eastern edge. The southern boundary is a small stream. The surrounding fields were all pasture at the time of survey with metal mesh sheep fencing boundaries.

The drift geology of the site consists of glacial boulder clay (British Geological Survey sheet 185, published in 1980).

3.0 Archaeological and historical background

The site lies within an area of varied historic landscape. Nearby to the north is the site of the deserted Medieval village of Thrupp, whilst to the west is the Iron Age hill fort of Borough Hill. To the east lies the scheduled site of the Roman posting station of Bannaventa and its hinterland features.

3.1 Prehistoric Landscape Context

The general locality bordering the survey area was occupied throughout the prehistoric period and broadly reflects the wider archaeological picture of the occupation and settlement of Northamptonshire.¹ The large hill fort at Borough Hill (about 1.5 kms to the west of the site) dominated the local landscape during the Iron Age and would have most certainly influenced the development and character of the wider area at that time. However most of the possible prehistoric remains within the vicinity are largely known from unverified crop marks that have been identified from air photographs. These sites include a possible Bronze Age round barrow, with three ring ditches and three rectangular enclosures, as well as other enclosures and ditches observed in the surrounding area (SMR 966 & 1448/0/1). A possible prehistoric boundary is also indicated from air photographs near Thrupp Lodge (SMR 629/0/1), and to the south of the B4036 are some possible Bronze Age ditches (SMR951).

3.2 Roman Landscape Context

The most significant Roman remains within the locality are represented by the Roman posting station of Bannaventa (Sites and the Monuments Records (SMR) 895 et seq, Figure 5, Appendix). The *Itinerary of Antoninus* notes that Bannaventa was situated twelve Roman miles north of Lactodorum (Towcester) and a similar distance to the south of Tripontium, the neighbouring posting stations on Watling Street.

Substantial Roman remains at Bannaventa (Whilton Lodge) have been noted from the early eighteenth century, with further remains including a burial ground and large quantities of pottery and coins discovered in the area during the nineteenth century (RCHME, 1981, 150). More archaeological discoveries were made during the early 20th century, and in 1970 air photographs revealed the outline of the part of the posting station to the west of the modern A5.

These photographs, allied to small scale excavations, show that at the centre of the site was a roadside station of irregular quadrilateral shape with rounded corners, bounded by ditches, with gates in the north and south of the defences to allow the passage of Watling Street through the site (RCHME, 1981, 151-2). It is likely that the posting station acted as a local market and administrative focal point for the wider rural settlement. Recent

¹ Cooper

fieldwork has demonstrated that the site's origins lie in the pre-conquest period with major development commencing in the late 1st to early 2nd century and occupation continuing into the early 5th century AD.²

Excavation has demonstrated that buildings were constructed during the mid-2nd and 3rd centuries, the majority being timber and of rectangular sill beam construction, although the remains of stone buildings are also noted. A defensive ditch and rampart circuit enclosed about 5 ha of the site core during the 2nd or early 3rd century. This was replaced by a double ditch and wall in the later 3rd or 4th century AD. The coin and pottery assemblage from the site indicates occupation until at least the mid-5th century AD but the settlement is not known to have survived in any recognisable form into the later Saxon period (SMR 895).³

Evidence of other Roman sites/features exist outside the scheduled area and are of interest in the context of the site. A Roman settlement has been observed in the area between Thrupp Lodge and Thrupp Grounds (SMR 630 et seq). Coins, pottery and foundations were recorded during the early 19th century and fieldwork in 1960 recovered coins, pottery and tile. Since then large quantities of pottery have been noted over a wide area, mainly from the 2nd and 3rd centuries AD, as well as pits and enclosures noted from air photographs and geophysical survey in the fields to the north-east of Thrupp Lodge. However the nature and features of the site are difficult to distinguish from the deserted Medieval village of Thrupp, which partially overlies it.⁴

Further extensive Roman settlement is indicated by air photographs and a large scale geophysical survey between Lodge Farm and the B4036 near Thrupp Grounds, with the features continuing eastward to the A5 (SMR 894/1/0-6) to the north-west of Bannaventa (RCHME, 1981, 153). Metal detecting has recovered over one hundred coins, a lead weight, a lead die and four brooches, dating mainly from the 2nd and 3rd centuries AD (SMR 6491) to the south of the B4036, and two late-Roman coins from the same general area to the north of the road (SMR 9049). Further to the north-west, in Six Acre field, a quantity of Roman coins has been recorded.

² Young & Kay (forthcoming)

³ Jeremy Taylor

⁴ Young and Kay Archaeological investigation of a cable trench

3.3 Anglo-Saxon and Medieval

The existence of Saxon burials at Borough Hill (SMR 631/0/3, 631/0/9-10), and early Saxon weights and a netting needle are recorded from metal detecting south-east of Norton Lodge Farm (SMR 895/0/0). There are otherwise no records of early Saxon activity in the area, although the fact that Daventry, Norton and Thrupp are recorded in the Domesday Book of 1086 implies established settlement, agriculture and systems of land ownership by the late Saxon period. It is interesting to note that Thrupp DMV is recorded in Domesday Book to have a population of five villagers and three small-holders.

The surface remains of the village have been eroded and destroyed by more recent cultivation, but large quantities of pottery, mainly dating from the twelfth to fourteenth century, are recorded from fields to the east and north-east of Thrupp Lodge, and there are fragmentary remains of a moated site immediately to the east of Thrupp Lodge, which itself may be situated in a Medieval enclosure (RCHME, 1981, 154; SMR 626). Thrupp is recorded as having had two fields, known as East and West, in early fourteenth century *terriers* of Daventry priory, and these fields still existed in 1450. They are said to have been enclosed in 1489, and there are records from the sixteenth century of sheep being kept on the pasture and meadows of Thrupp. (Hall, 1995, 323).

4. Field methodology

4.1 Objective

The aim of the geophysical survey, using a magnetometer (gradiometer), was to establish accurately the presence, extent and character of any geo-physical anomalies within the survey area.

4.2 Gradiometer

The gradiometer uses a non-intrusive scientific inspecting technique to determine the presence or absence of some types of subsurface archaeological features (e.g. ditches, trackways, field systems, enclosures and building foundations). By scanning the surface Geophysics can identify areas of varying magnetic susceptibility, the data from which can be interpreted in a variety of graphical formats and identifying images that share morphological affinities with diagnostic archaeological remains (Clark 1990). In this case magnetic survey was employed because it

offered the best chance of locating the wider extent and structural detail of the surviving archaeology.

4.3 The survey

The area gradiometer survey was conducted using a Bartington gradiometer type 601, dual flux gate, with the 601 data logger set to make four readings per metre (Sample interval of 0.25 m). The zigzag traversed method of survey was used with 1 m wide traverses on a north/south line across a series of 30 x 30m grids. The sensitivity of the machine was set to record and detect variation in the order of 0.1 nanoTesla

4.4 Data processing

The data was processed using Snuffler Version 1.3 and filtered to reduce geomagnetic striping and operator error due to ground irregularities etc. The gradiometer data is displayed as a grey scale map in fig. 3 and an interpretation of the possible archaeological anomalies is shown in fig. 4.

5.0 Field data analysis and interpretation of results (fig 3 & 4)

The geophysical survey revealed a range of archaeological anomalies across the field. These findings can be best interpreted as corresponding to six major archaeological features within the landscape. Two of the detected features are relatively modern one being a cast iron water pipe and the other farm building debris from demolished modern structures. However the other four anomalies are believed to be indicative of agricultural activity mainly related to the Roman and Medieval periods.

5.1 Triangular enclosure

Most prominent amongst these features was a triangular shaped enclosure which dominates the centre of the field aligned from west to east along the promontory. This anomaly was subdivided into what appears to be domestic and stock rearing areas. Several of the small enclosures contain round houses which indicate an early Roman or possibly Late Iron Age origin. It is becoming increasingly evident that triangular enclosures are a more common element in the Roman 'agro-scape' than previously thought and their presence is not unknown in the surrounding

area. This particular configuration of the geophysical anomalies demonstrates the existence of a definable sub category within the broader settlement type in the surrounding Roman landscape. The size and scale are consistent and their relationship to the wider focus of a settlement is a regular feature of site layout profiles. A comparable example is the triangular enclosure identified at Harpole 2 (Barn Close & The Mere) (SP68903 62067)

5.2 Field System

To the north and south lie a series of ditches which appear to be elements of an associated field system although the overall layout and orientation of these anomalies is difficult to interpret with any definitive precision. Again this type of feature is common across all the sites dating to the Roman period and particularly the era of the early empire in the watershed area of the River Nene.

5.3 Stock enclosures

Lying astride the eastern half of the triangular enclosure are two relatively large stock holding compounds similar in scale and shape to others found in the wider hinterland area around the posting station. Their position on top of the earlier features implying a change in the agricultural regime. The evidence from the broader landscape survey implying a change from a generally mixed farming regime to one dominated by sheep rearing for the production of woollen textiles. The distribution of such pens helping to manage and work with flocks of sheep.

5.4 Ridge and furrow

The final series of anomalies indicates the existence of extensive ridge and furrow of Medieval date. Again the orientation suggesting changing patterns of cultivation within the Medieval

5.5 Modern debris

A disturbed area immediate south of the farm house probably relates to demolished modern development corresponding to outbuildings and fold yards of the Victorian farm layout.

6 Conclusions

The location of these anomalies is important because it indicates the wide extent of the immediate hinterland of the posting station at Banna-venta especially in this case towards the west. It helps demonstrate the existence of an integrated hinterland supplying the day-to-day needs of the settlement. In addition it highlights the agricultural focus underpinning the wider development of the overall settlement. The probable existence of round houses within some of the enclosures and the triangular shape imply a cohesive design and rationale for the immediate landscape and the site beyond. A possible interpretation for the triangular anomaly is that these features were associated with stock management for family needs and possible domestic garden or areas of cultivation during the early period of Romanization.

Interestingly these features appear to be overlain by at least two roughly oval compounds which could have been used to corral animals like sheep and are extremely suggestive of agricultural regime change and land-scape management.

The surrounding ditches to the north and south belonging to the wider mixed farming field system which is consistent with developments found elsewhere at Bannaventa and other rural settlements in the surrounding area where inland field systems prevail particularly under the early Roman Empire.

All of the preceding anomalies had presumably been abandoned by the Medieval period when the area was turned over to the ridge and furrow of the prevailing strip system.

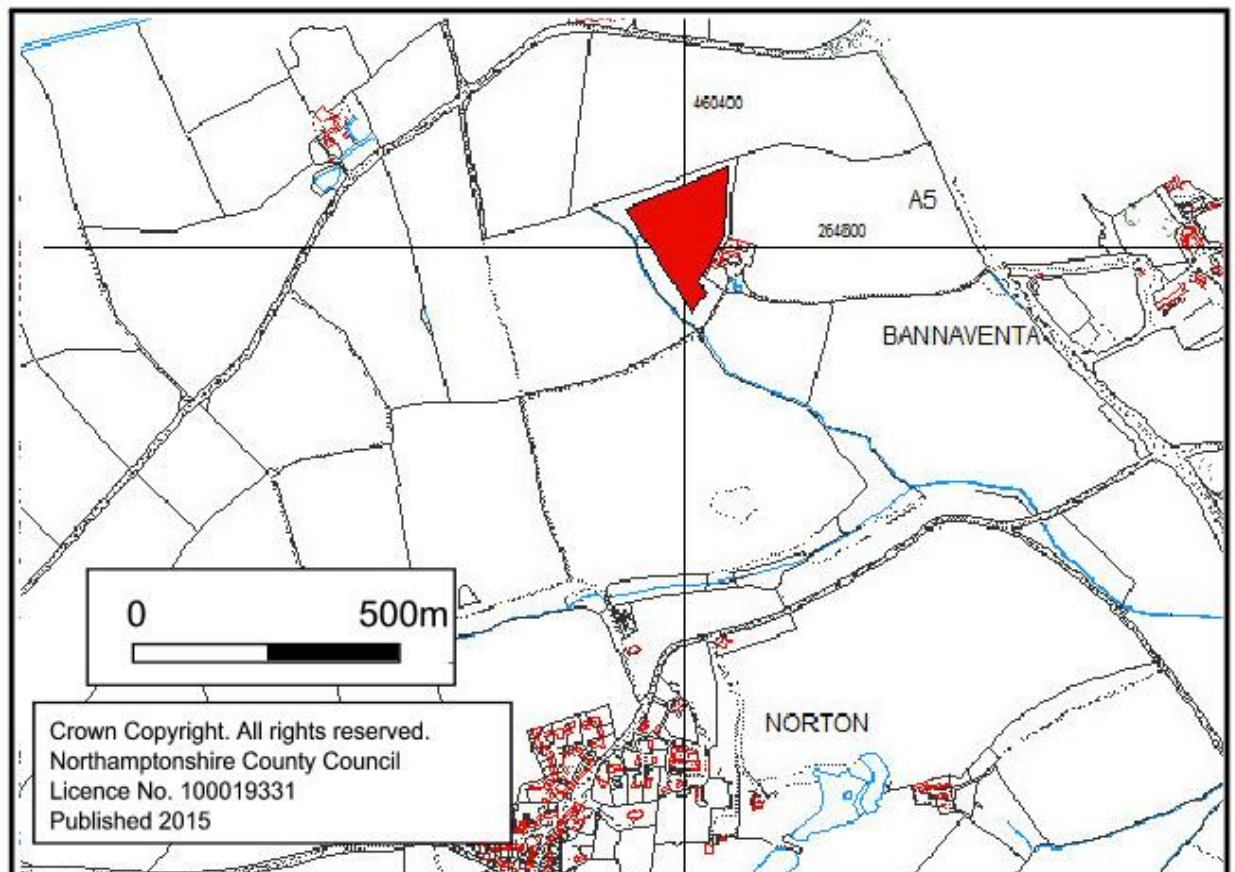
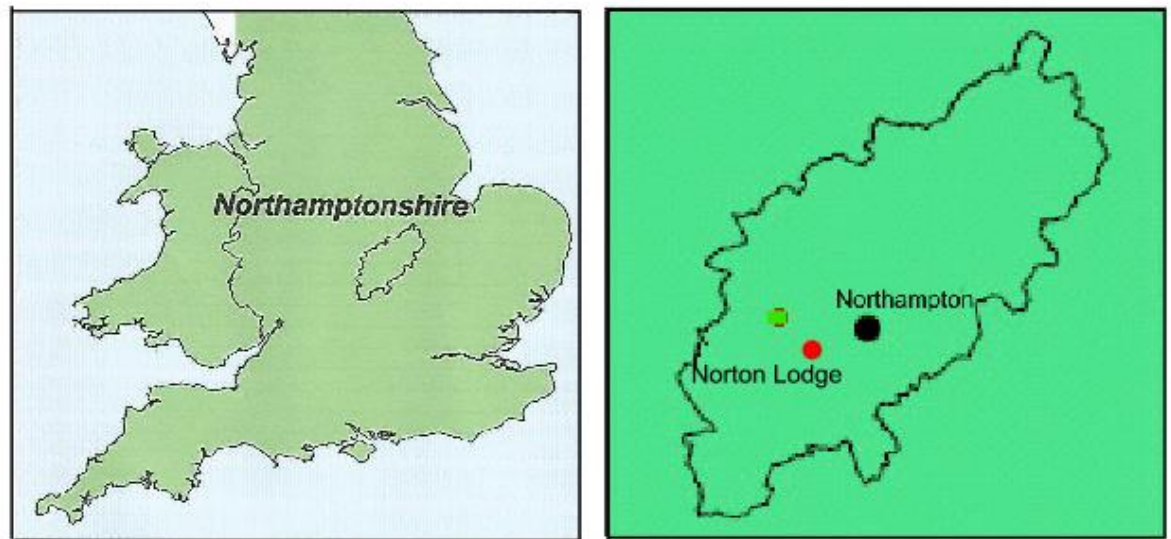


Fig. 1 Site location

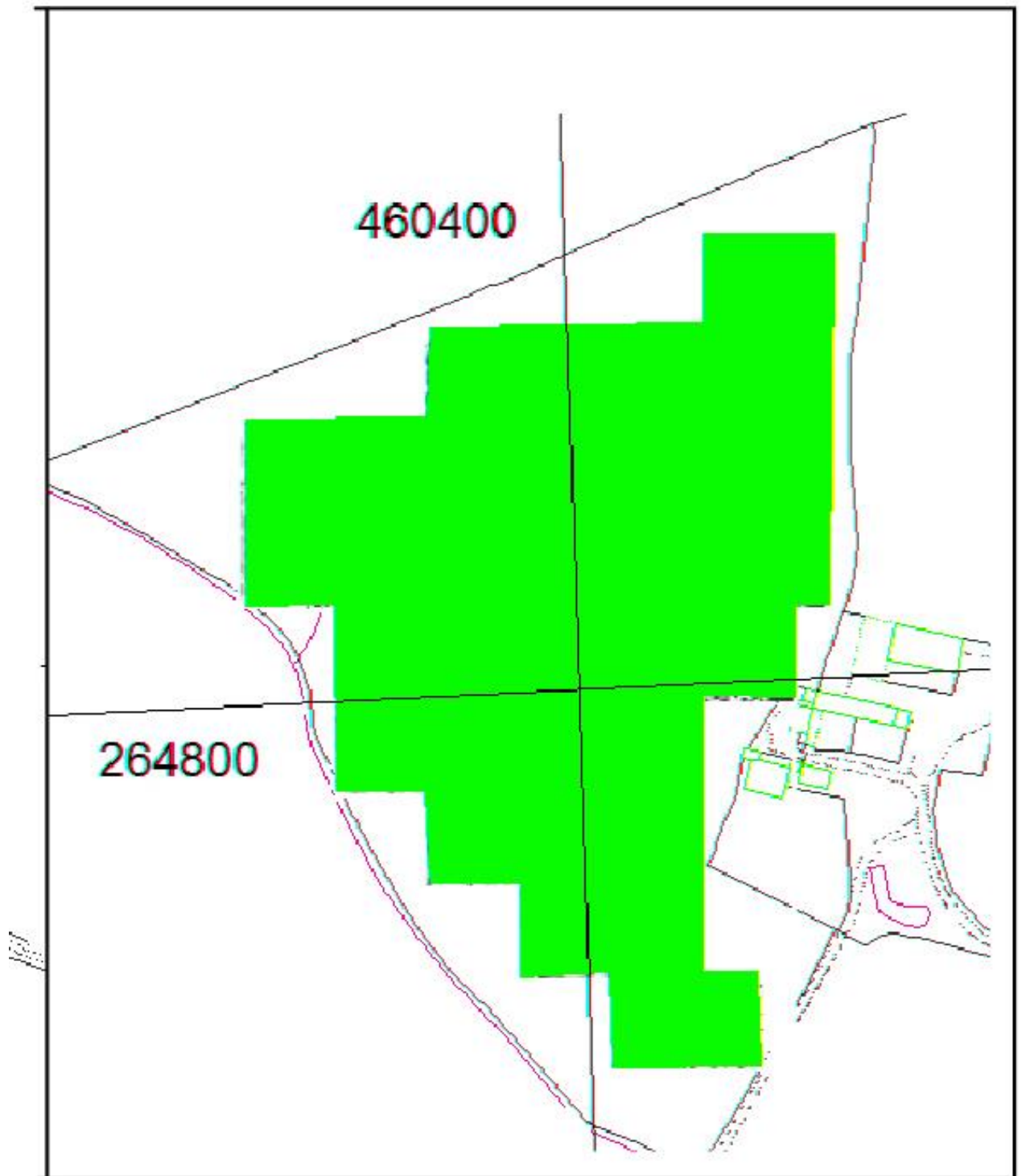


Fig. 2 Location plan showing gradiometer survey area

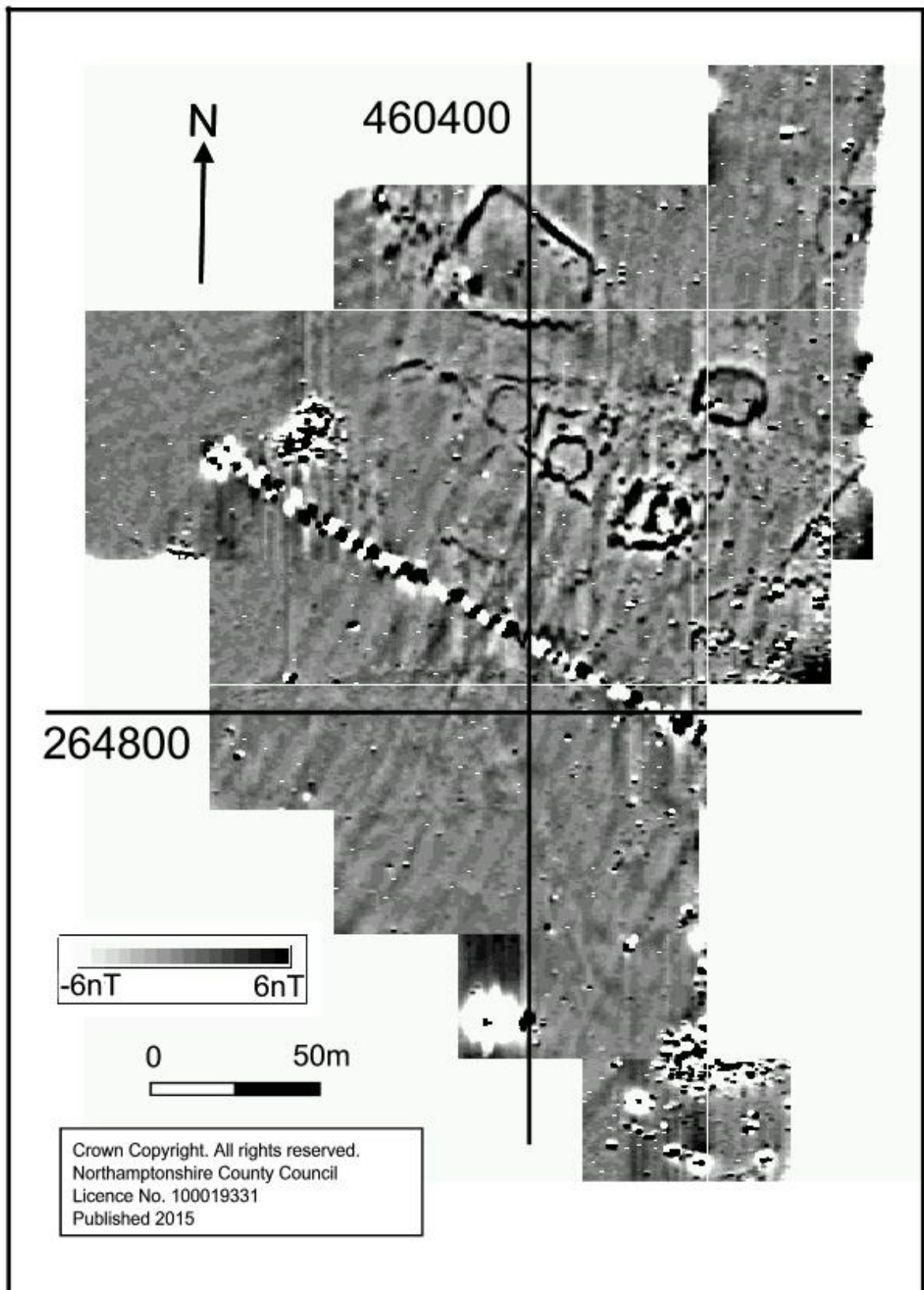


Fig. 3 Greyscale plan of gradiometer survey results

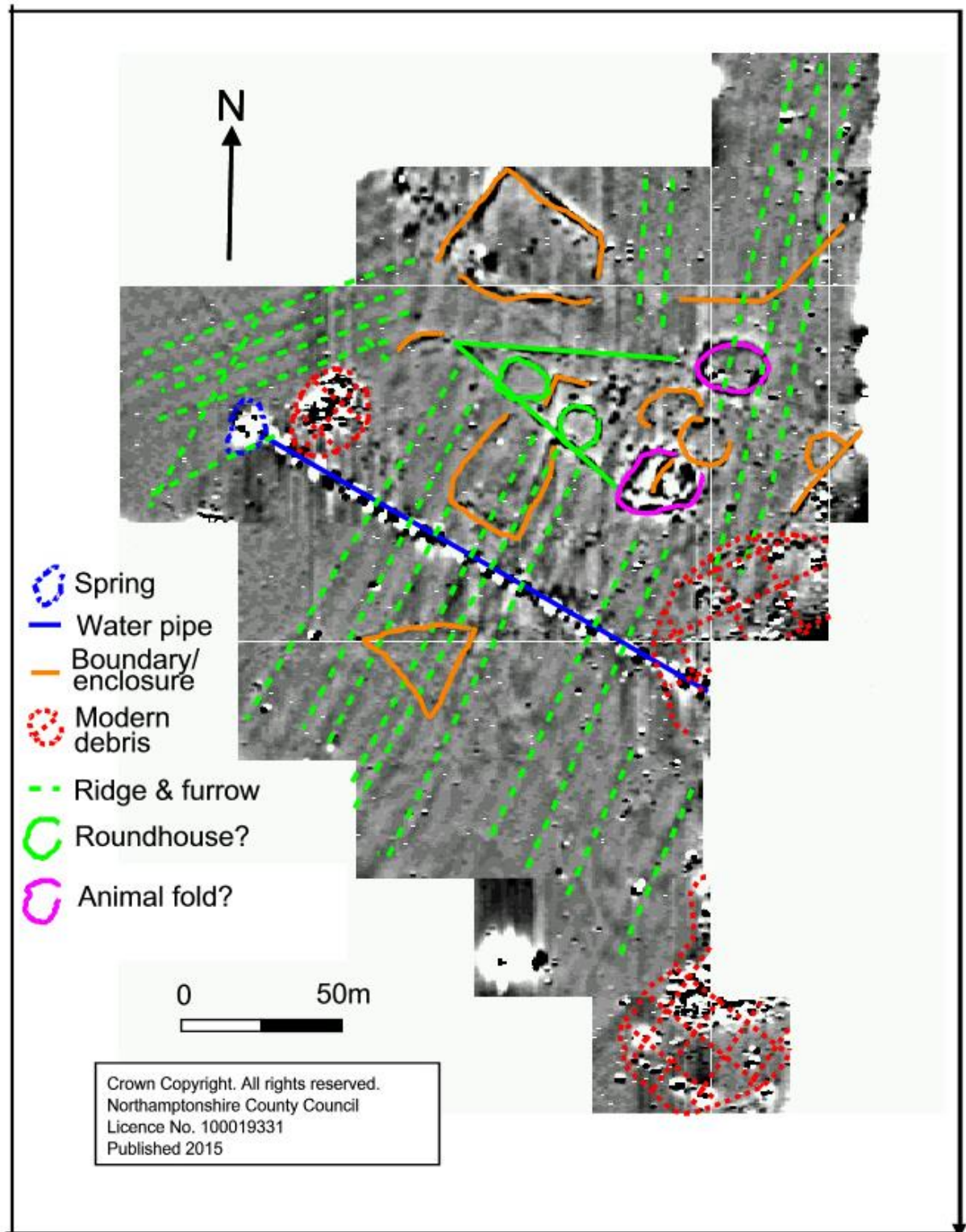


Fig. 4 Interpreted plan of gradiometer survey results

Acknowledgements

CLASP would like to thank Margaret MacIntosh, Norman Garnett, Tony Keston, Colin Evans and Robert Close of CLASP for helping with the fieldwork. and Joe Adams of Thrupp Grounds Farm for access to the site. Also Charlotte Walker, HER officer, Northants County Council for assistance with the research. Joy Kay and Don Martin for assistance with the proof reading although any errors are strictly the authors'.

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Appendix

The County HER records show large numbers of Roman small finds, i.e. pot sherds and coins in the fields surrounding Bannaventa, too numerous to list here. Below are other Roman features recorded in the area

	Type	SMR	OS co-ords	Description
MNN11430	MON	447/1	6076 6521	Watling Street Roman Road (Margary Routes 1e & 1f)
MNN11583	MON	894/1	605 649	Possible Roman Villa North West of Bannaventa
MNN127294	MON	895/1/5	6100 6458	Section of Bannaventa Town Defences (Morphed Aerial Archaeology Interpretation)
MNN127330	MON	894/1/1	6058 6493	Part of a possible Roman villa
MNN18583	MON	447/1/8	6076 6535	Inhumation from Base of Roman Ditch
MNN2489	MON	6491	6087 6509	Possible Roman settlement
MNN3773	MON	895	6101 6456	Bannaventa Roman Settlement
MNN505	MON	925	6151 6442	Duston-Bannaventa Roman Road
MNN498	MON	894	605 649	Possible Roman Settlement
MNN19543	MON	895/0/1	6096 6480	Roman rubbish pits
MNN37223	MON	6491/0/1	609650	Roman cobbled surface, nails, brick
		895/3	612 264	Possible Romano/British cemetery South of settlement

HER/SMR records

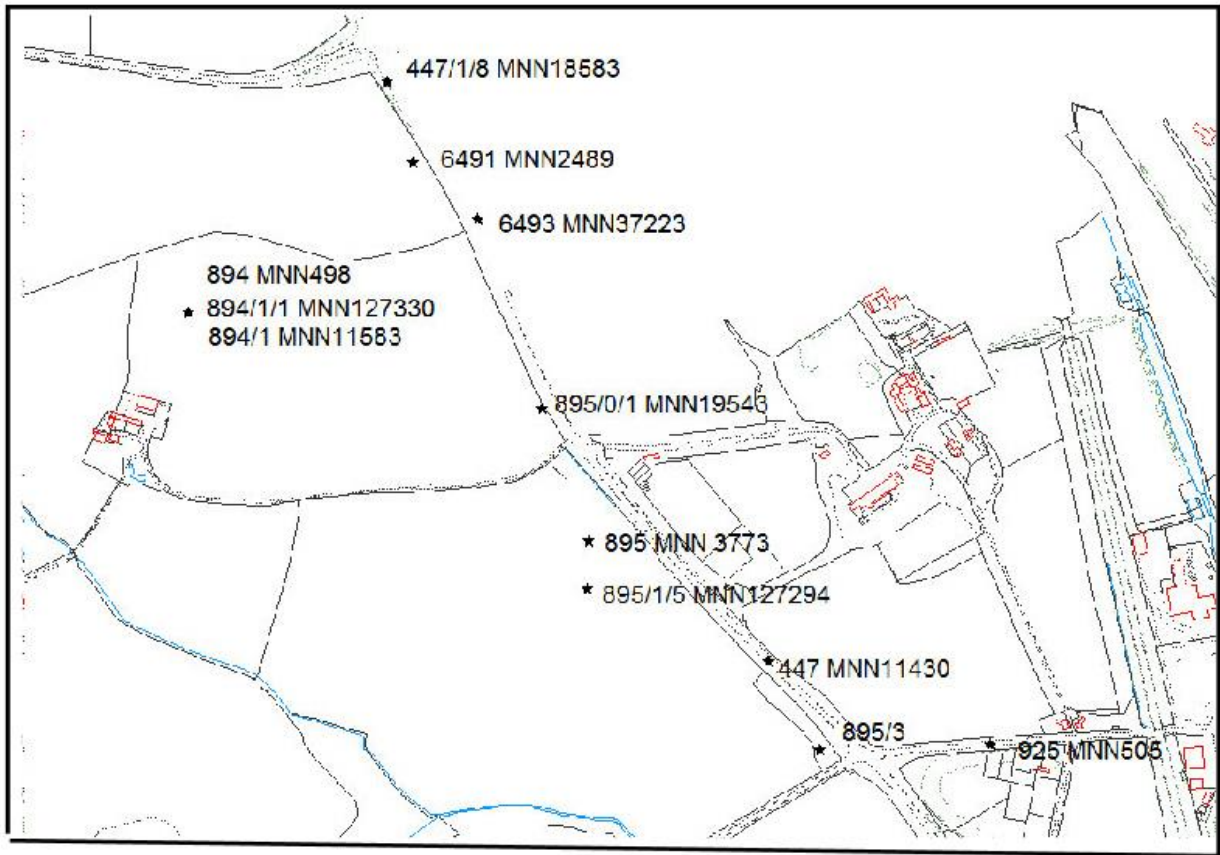


Fig. 5 HER/SMR within 0.5 km