

Northamptonshire Archaeology

Archaeological evaluation of land off Merles, West Fen Road, Willingham Cambridgeshire

October 2007



Jim Brown

November 2007

Report 07/172 CHER Event No. ECB2675 OASIS Ref. 33031

Northamptonshire Archaeology

2 Bolton House Wootton Hall Park Northampton NN4 8BE

- t. 01604 700493 f. 01604 702822
- e. sparry@northamptonshire.gov.uk
- w. www.northantsarchaeology.co.uk



STAFF

Project Manager Andy Mudd BA Cert Arch Oxon MIFA

Text Jim Brown BSc PGDip AIFA

Fieldwork Jim Brown

Heather Griggs BA

Illustrations Jacqueline Harding HND BA

Pat Walsh BA

Aerial photographic rectification Adrian Butler BSc MA AIFA

Geophysical survey Adrian Butler

Paul Kajewski BA PGDip

Pottery Jane Timby BA PhD MIFA FSA

Palaeo-environmental Karen Deighton MSc

Wallis Lord MSc

QUALITY CONTROL

	Print name	Signed	Date
Checked by	P Chapman	P Theym	8/11/07
Verified by	A Mudd	1 Pain	8/11/07
Approved by	A Chapman	A Chymn	8/11/07

OASIS REPORT FORM

PROJECT DETAILS								
Project name	Archaeological evaluation of land off Merles West Fen Road, Willingham, Cambridgeshire, October 2007							
Short description (250 words maximum)	Trial excavation identified field enclosure ditches of probable Roman origin that formed part of a larger network of field systems identified from aerial photographs and surveyed by geophysics							
Project type	Trial excavation, geophysical survey and aerial photographic plotting							
Site status	None							
Previous work	None							
Current Land use	Hay meadow and farm	ı yard						
Future work	To be advised							
Monument type/ period	Roman							
Significant finds	Pottery							
PROJECT LOCATION								
County	Cambridgeshire							
Site address	Land off Merles West Fen Road, Willingham, Cambridgeshire							
Study area	3 ha approx.	Ten roud, winingham, camerageomic						
OS Easting & Northing	TL 3970 7131							
Height OD	c4.27m OD							
PROJECT CREATORS								
Organisation	Northamptonshire Arc	chaeology						
Project brief originator	Andy Thomas, Cambr							
Project Design originator	Mike Dawson, CgMs							
Director/Supervisor	Jim Brown, Northamp							
Project Manager	Mike Dawson for CgN							
		amptonshire Archaeology						
Sponsor or funding body	CgMs Consulting Ltd							
PROJECT DATE								
Start date	October 2007							
End date	October 2007							
ARCHIVES	Location (Accession no.)	Content						
Physical		Pottery, a horseshoe nail & environmental floats/fine residues						
Paper	Site trench record, photographic record, plans, section drawings, levels & client report							
Digital	Client Report							
BIBLIOGRAPHY	Journal/monograph, client report (NA rep	published or forthcoming, or unpublished port)						
Title	Archaeological evaluation of land off Merles West Fen Road, Willingham, Cambridgeshire, October 2007							
Serial title & volume	Client report 07/172							
Author(s)	Jim Brown							
Page numbers	9							
Date	6/11/07							

Contents

1	INTE	RODUCTION	
2	BAC	KGROUND	
	2.1	Topography and geology	
	2.2	Archaeological background	
3	OBJI	ECTIVES AND METHODOLOGY	
	3.1	Aerial photographic cropmark plotting	
	3.2	Geophysical survey	
	3.3	Trial excavation	
4	AER	IAL PHOTOGRAPHIC SURVEY RESULTS	by Adrian Butler
5	GEO	PHYSICAL SURVEY RESULTS	by Adrian Butler
6	TRIA	AL EXCAVATION RESULTS	by Jim Brown
	6.1	Trench 1	
	6.2	Trench 2	
	6.3	Trench 3	
	6.4	Trench 4	
7	THE	POTTERY	by Jane Timby
	7.1	Description of assemblage	
	7.2	Conclusions	
	7.3	Further work	
8	THE	ENVIRONMENTAL EVIDENCE	by Karen Deighton
	8.1	Method	
	8.2	Preservation	
	8.3	Results	
	8.4	Discussion	
	8.5	Potential	
9	DISC	CUSSION	
	BIBI	LIOGRAPHY	

Tables

Table1: Roman pottery sherd count and weight quantified by context

Table 2: Plant species represented

Figures

Fig 1: Site location

Fig 2: Gradiometer survey results
Fig 3: Cropmarks, trenches and features

Fig 4: Trial trench plans

Fig 5: Excavated section drawings

Plates

Cover: Ditch 104, Trench 1 under excavation by Heather Griggs

Appendices

Appendix 1 Aerial photographs consulted

Appendix 2 Context list

ARCHAEOLOGICAL EVALUATION OF LAND OFF MERLES WEST FEN ROAD, WILLINGHAM CAMBRIDGESHIRE

OCTOBER 2007

An examination of aerial photographs, followed by geophysical survey and trial excavation on 3 ha of land north-west of Willingham (Cambridgeshire) identified field enclosure ditches of probable Roman origin. These form part of a larger network of field systems known from cropmarks in fields to the north and west of the site.

1 INTRODUCTION

Northamptonshire Archaeology was commissioned by CgMs Consulting Ltd, acting on behalf of the landowner, to conduct an archaeological evaluation in the area of the proposed development on land off Merles West Fen Road, Willingham, Cambridgeshire (NGR TL 3970 7131: Fig 1). The work was undertaken in compliance with PPG16 at the request of Cambridgeshire Archaeology Planning and Countryside Advice (CAPCA) to inform planning decisions for the development (Planning Application: S/0204/07/F).

The project was conducted following a *Project Design* jointly prepared by Northamptonshire Archaeology and CgMs Consulting Ltd (Chapman & Dawson 2007) in accordance with the recommendations of CAPCA (Thomas 2007). The *Project Design* for the fieldwork and the subsequent programme was prepared in accordance with current best archaeological practice as defined in the Institute of Field Archaeologists' *Standards and Guidance for Archaeological Field Evaluation* (1999 revision), English Heritage's procedural document *Management of Archaeological Projects* (*MAP 2*) (1991) and the East Anglian Archaeology *Standards for Field Archaeology in the East of England* (Gurney *et al* 2003). All works were approved and monitored by CAPCA who inspected the site on 19th October 2007.

2 BACKGROUND

2.1 Topography and geology

The site lies approximately 1 km north-west of the village of Willingham, and is situated towards the edge of the lower Great Ouse Valley, about 3 km south of the river (NGR TL 3970 7131). The plot covers nearly 3 ha, although only about 0.6 ha is proposed for buildings and access roads. The land terrain is flat and maintains a fairly consistent level at c4.27m above Ordnance Datum. Land divisions are marked by modern drainage ditches, barbed wire fencing and scrub hedgerows. The underlying geology is river terrace gravel with occasional patches of sand.

The site is partly occupied by redundant farm buildings and areas for the storage of materials, which lie on the eastern third of the site nearest West Fen Road. The remainder of the site is open hay meadow. The north-east corner of the site was occupied by a gravel quarry, shown on the 1926 Ordnance Survey map, now infilled and grassed over.

2.2 Archaeological background

No archaeological remains have been recorded from the development site itself although cropmarks in the surrounding fields indicate extensive Roman land use in the area. The most extensive cropmarks are mapped to the north and west of the site. Some of these cropmarks extend into the north-west portion of the site (Fig 3).

3 OBJECTIVES AND METHODOLOGY

This evaluation was conducted to provide information to contribute towards informed decisions within the planning process and an enhanced understanding of the potential of the archaeological resource on the site.

The objective was to determine the location, extent and nature of any surviving archaeological remains which may be impacted by the development. This was particularly directed towards providing information of use in informing any further mitigation measures that may be required. Every effort was made to interpret the nature of the archaeological deposits within the site in relation to what is known of the archaeology in the surrounding area.

It was agreed that the evaluation was expected to have a limited potential for addressing the archaeological research agendas for this part of the country, which are directed towards broad themes and the processes of social and economic change (Brown & Glazebrook 2000). However, archaeological deposits would be considered within their appropriate research framework as far as possible.

3.1 Aerial photographic cropmark plotting

A search was made of relevant aerial photographs of the site and its environs, and the accurate plotting of archaeological cropmarks was undertaken at a suitable scale. Information was garnered from the Cambridge University Unit for Landscape Modelling and the National Monuments Record (NMR). A complete list of photographs consulted is presented in Appendix 1.

Photographic rectification was undertaken digitally using the ERMapper software from scanned images and plotted on to the modern Ordnance Survey base at a scale of 1:2500.

3.2 Geophysical survey

Detailed gradiometry survey was carried out in the area of the undisturbed hay meadow. Prospection was targeted on the largest block of land proposed for development, c0.4 ha in the western part of the site in pursuit of the cropmarks. The survey was designed to bracket the target site in order to gain the maximum available information on any archaeological features.

The magnetometer survey was undertaken using Geoscan Instruments FM36 and FM256 fluxgate gradiometers. Fieldwork was carried out in accordance with the guidelines of English Heritage and the Institute of Field Archaeologists (EH 1995; Gaffney *et al* 2002).

In the event it proved possible to cover more than the target area in this survey and a total of 18 separate full and partial 30m x 30m grid-squares, totalling c 1.5ha, were surveyed. Each grid square was traversed at rapid walking pace in zigzag traverses spaced at 1m intervals with data recorded every 0.25m along these.

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

The processed data is presented here in the form of greyscale highlighting the magnetic anomalies (-3nT / +3nT scale, Fig 2) and is referred to directly in the following Results section.

3.3 Trial excavation

Four trenches, with a total length of 200 m, were positioned to examine the plotted cropmarks and to assess other parts of the site in accordance with the *Project Design* and with the approval of CAPCA (Fig 3).

The excavation of the trenches was conducted using a JCB excavator fitted with a 1.6m wide toothless ditching bucket. Trenches were set out and excavated to their full extent. All machine operation was carried out under continuous archaeological supervision. The trenches were excavated until the archaeological horizon or the natural substrate was encountered.

Potential archaeological features were cleaned by hand, excavated, photographed, drawn to scale and recorded on *pro-forma* registers in accordance with standard Northamptonshire Archaeology practice detailed in the *Project Design* (paras 6.19-6.21).

All artefacts were retained. Levels were established in relation to Ordnance Datum and the trench positions were recorded in relation to the Ordnance Survey national grid. Fieldwork was conducted in October 2007.

4 AERIAL PHOTOGRAPHIC SURVEY RESULTS by Adrian Butler

Twenty-six aerial photographs of the site were examined (Appendix 2). All had been primarily taken to show the cropmark complexes to the north and north-west and showed the present field either incidentally or not at all. The vast majority of the photographs were therefore unsuitable and only one, showing the cropmarks with sufficient reference points for accurate plotting, was selected for rectification (ref. NMR 15285 60; Fig 3).

The fields in the general area to the north and north-west of the site contained an assortment of cropmarks indicating rectilinear ditched enclosures. A field 60m north of the site contained evidence of linear, rectilinear and circular features. No cropmarks were visible in the field adjacent to the north on any of the photographs examined. The present site and the fields to the north were under pasture at the time of the photograph (22 June 1995) and all these cropmarks are growth marks in otherwise parched grass. This may well account for the relative paucity of features and their indistinctness when compared with the arable fields to the north-west.

Cropmark features in the site comprised a pair of parallel linear ditches, c 48m in length, orientated north-east to south-west in the western portion of the site (Fig 3). Similar parallel ditches were identified aligned perpendicular to these, c 38m to the east of their course. No other archaeological cropmarks were observed in the rectified aerial photograph. Other possible features appear more likely to be non-archaeological.

5 GEOPHYSICAL SURVEY RESULTS by Adrian Butler

Little of interest was located by the gradiometer survey (Fig 2). A general scatter of ferrous debris was detected across the site. Broad changes in magnetism, common to variation in gravel geology, were identified in the north-east of the area. Two intensely magnetised anomalies adjacent to the southern boundary of the field are likely to be larger buried iron objects. The cropmark features do not appear to have been detected by the survey, at least

not with any clarity, and the survey results are not a reliable indication of archaeological remains.

6 TRIAL EXCAVATION RESULTS

by Jim Brown

The position of trenches within the proposed development area with extrapolations of the main features found, are shown in Figure 3. Individual trench plans showing the features present are shown in Figure 4 and is supplemented by the illustrated excavated sections of the features in Figure 5. All of the features identified and excavated cut the natural gravel substrate and were subject to rising water during excavation.

For the most part, subsoil was absent throughout the site, appearing in patches. Where it was present the subsoil comprised hard mid-greyish orange-brown sandy clay with frequent mixed gravel (102/202/302/402 – see Appendix 2). In general it was no more than 100mm thick and constituted a blend of the weathered natural surface of the underlying gravels and ploughsoil. This varied only in the vicinity of Trench 2 where features that cut the subsoil, cut a deposit up to 200mm thick. The topsoil was distributed evenly across the site and appeared deeper in places where the subsoil was absent. It constituted hard dark greyish brown clay loam (101/201/301/401) with frequent small mixed gravels and matted grass roots.

6.1 Trench 1

Trench 1 contained one pit, [106], and two ditches, [104] and [110] (Fig 4). Only ditch [110], running north-east to south-west, approximately matched the position of aerial photographic cropmarks. Ditch [110] produced a single sherd of grey Roman pottery from its uppermost fill deposit (107) (Timby, this report).

Pit [106] was partially exposed in the south-west side of the trench. It measured 1.08m wide in plan and was 0.31m deep with a sharp 50° sloped side and a broad flattish base (Fig 5, Section 2). The fill comprised soft light bluish grey-white sandy clay (105) with orange flecks and very slight root intrusions. It was truncated by ditch [104] on its northeast side.

Ditch [104] was 1.06m wide by 0.55m deep, aligned north-north-west to south-south-east. It had steep sloping sides at 70-80° to the horizontal which changed rapidly to meet with a narrow flat base that was 0.45m wide (Fig 5, Section 2). It was filled by soft wet pliable dark bluish-grey clay (103) with orange brown smears and frequent small mixed gravel inclusions up to 10mm in diameter. It also had occasional larger pebbles up to 40mm in diameter.

Ditch [110] was a major field boundary aligned north-east to south-west, and contained three fills showing evidence of silting, animal burrowing within the south-east side and deliberate backfill in its upper horizon. It measured 2.7m wide by 0.9m deep. The sides were generally gently concave sloping at between 45-50° towards a broad slightly rounded base (fig 5, Section 1). The lowest ditch fill (109) comprised mixed orange brown sandy clay with moderate amounts of disturbed dirty gravel (up to 30mm in diameter) spread across the base and mounded on the south-east side. This deposit was up to 210mm thick and was associated with animal burrowing into the side of the ditch. It was buried by dark mottled blue-grey and russet orange clay (108), 340mm thick, which contained occasional small mixed gravels less than 20mm in diameter. This appeared to be a silting deposit very different to the material that followed. The top of the ditch contained friable blackish silty clay loam (107) with occasional white chalky flecks and small mixed gravels all poorly sorted up to 40mm in diameter.

6.2 Trench 2

The majority of features from the evaluation were concentrated in this trench (Fig 4). The features (six in all) were linear ditches and all were aligned north-west to south-east with only one exception, [204], which was aligned north to south and was probably a recent boundary. Two of the ditches, [206] and [208], were present on aerial photographs as cropmarks giving the impression of a trackway (Fig 3). A surprising element of stratigraphy with regard to these two ditches, not evident amongst the others, was they both cut the subsoil which was notably thicker there, up to 200mm, and tended to slump into the sides at the top of the ditches. Ditch [204] also cut the subsoil, but as a more recent boundary this was expected. None of these ditches produced pottery.

Ditch [210] was fairly narrow and shallow, little more than a gully. It measured 0.43m wide by 0.15m deep with shallow concave sides that curved into a narrow rounded base (Fig 5, Section 6). The fill (209) comprised light grey sandy silt with frequent quartz inclusions and a few small rounded pebbles up to 30mm in size, poorly sorted. There were also occasional iron salts and small root intrusions evident.

Ditch [212] was broad and shallow much like a furrow (Fig 5, Section 9). However, these were absent elsewhere, so its apparent shallow form is perhaps indicative of truncation, or perhaps a spread filling a natural hollow. It measured 2.2m wide by 0.22m deep with shallow concave sides and a broad uneven base. The fill (211) comprised light mottled blue and orange gravely clay with frequent well sorted rounded pebbles up to 24mm in size.

Ditch [214] was well formed; it measured 0.74m wide by 0.34m deep and had sharp 70-80° sloping sides that met with a narrow flat base (Fig 5, Section 10). The fill (213) comprised light mottled grey and orange gravely clay with frequent well sorted rounded pebbles up to 30mm in size.

The subsoil comprised hard mid-greyish orange-brown sandy clay with frequent mixed gravel (202). It was mounded towards the centre of the trench in a deposit up to 200mm thick, which gradually thinned to less than 100mm thickness at either end of the trench.

Ditch [206] measured 1.7m wide and was 0.76m deep below the subsoil with sharp 60-70° sloping sides that met with a broad flat base, 0.7m wide (Fig 5, Section 4). The fill (205) showed great variation in its constituents but lacked distinct points of division or banding. It comprised mottled blue-grey clay with flecks of russet orange iron salts, mixed orange-brown silty clay patches and frequent small rounded gravels up to 30mm in size, poorly sorted. A few small root intrusions were evident.

Ditch [208] had some similarity to its potential counterpart, [206], but was noticeably smaller and slightly more concave towards the base (Fig 5, Section 5). It measured 0.94m wide by 0.48m deep and the sides sloped at a 50-60° angle to the horizontal. The base was fairly narrow and rounded. Its fill (207) comprised dark blackish blue-grey silty clay with dark russet iron salts, small mixed gravel inclusions up to 10mm in size and occasional pebbles up to 40mm in size, poorly sorted.

Ditch [204] was visible on the surface as a shallow earthwork, probably created by grubbing out a hedgerow and filling in the ditch. It measured 0.5m wide and was 0.24m deep below the subsoil with sharp 70° sloping sides and a narrow flat base (Fig 5, Section 3). The fill (203) comprised friable dark reddish brown silty loam with frequent sandy quartz inclusions, an absence of gravel and very root intrusions. It contained a single iron horseshoe nail, (SF1). The ditch was likely to have been of post-medieval origin although this has not been verified.

6.3 Trench 3

Trench 3 contained a single feature, a large broad ditch, [306], aligned north-east to south-west. The ditch did not appear as a cropmark and contained one recut from which a single sherd of highly abraded red oxidised Roman pottery was recovered (Timby, this report).

The surviving part of the original ditch cut [306] was 0.4m wide and sloped gently down at 30° to the horizontal on the north-west side to a maximum depth of 0.25m (Fig 5, Section 7). Its fill (305) was light blue-grey silty clay with orange patches of sandy clay and occasional poorly sorted rounded pebbles up to 30mm in size. The recut [304] constituted the larger part of the ditch and measured 1.12m wide by 0.54m deep. It had sharp 70-80° sloping sides that met with a narrow flat base, 0.5m wide. The ditch appeared to have silted up naturally with dark blue-grey silty clay (303) containing frequent coarse grit and reddish brown iron salt smears.

6.4 Trench 4

One ditch, [404], aligned north-west to south-east, was located within the trench but was not evident from the cropmark survey. The ditch measured 2.0m wide by 0.64m deep. It had sharp 60° sloping sides that merged with a broad, flattish base, which was 1.0m wide (Fig 5, Section 8). The south-west side cut a natural gravel edge that was heavily disturbed by root activity.

The ditch had two fills. The base fill (405) comprised dark organic material mixed amongst black silty loam with a few root intrusions, infrequent mixed gravels and sand particles. The deposit lay within the base of the ditch and was unevenly distributed with a slump on the south-west side. Soil samples were taken to test for environmental residues which were shown to be present in the form of charred seeds (Deighton, this report). The upper fill (403) comprised hard light to medium greyish brown sandy silt with frequent coarse grit, pebble flint and mixed gravels up to 30mm in size. It appeared to have been deliberate backfill and contained the majority of Roman pottery retrieved from the site, in generally large and well preserved fragments (Timby, this report).

7 THE POTTERY

by Jane Timby

The evaluation resulted in the recovery of a small assemblage of 45 sherds of Roman pottery weighing 919 g.

The assemblage is well preserved with an average sherd size of 20 g. Several sherds derive from single vessels giving a minimum number of eight pots, probably all jars.

Pottery was associated with three contexts with most of the sherds, 43 in total, coming from fill (403) from ditch [404].

For the purposes of the assessment the sherds were scanned to determine the possible date range and quantified by sherd count and weight by context. The resulting data are summarised in Table 1.

Table1: Roman pottery sherd count and weight quantified by context

Context	Forms	No	Wt	Date
107		1	23	Roman
303		1	3	Roman
403	jars	43	893	Roman, early 2nd-3rd century?
TOTAL		45	919	

7.1 Description of assemblage

The assemblage comprises 'local' sandy wares, both reduced and oxidised, with just two jar rimsherds. Both handmade/wheel turned and wheelmade wares are present.

Providing a precise date is hampered by the small size of the group, the limited number of diagnostic featured sherds and the absence of any recognisable traded wares.

Both jars have slightly bifid rims, which could be indicative of a date from the 2nd century. Several bodysherds from a greyware jar with a carinated body and a cordon from fill (403) are likely to be early Roman. The admixture of handmade and wheelmade vessels, and the lack of variety might also be more typical of an early Roman date.

7.2 Conclusions

The assemblage suggests a low level of activity in the Roman period. It is difficult to determine a close chronology from such a small group but provisionally it is suggested that this dates to the early Roman period. The limited form and fabric repertoire might suggest a modest rural domestic settlement with little evidence of a Roman way of life, but again the assemblage is too small to draw many conclusions. What is clear is that there is a good level of preservation with large, relatively fresh sherds, suggesting the site has high potential for the recovery such material.

7.3 Further work

The group is a small one that does not warrant further detailed analysis at present. If further work is carried out at the site the present pottery should be taken into consideration and reviewed against any additional material, which may help refine the chronology.

8 THE ENVIRONMENTAL EVIDENCE

by Karen Deighton

A single 20 l sample was hand collected from Roman ditch [404], fill (405), during the course of excavation. The aim of assessment was to establish the nature, preservation and presence of ecofacts and their potential contribution to the understanding of the function and economy of the site.

8.1 Method

The material was processed using a siraf tank fitted with a 500-micron mesh and float sieve. The resulting float was dried and analysed using a microscope at 10x magnification. Identifications were made with the aid of a seed atlas, the SCRI seed ID website and the seed ID workshop (Schoch *et al* 1988; www.scri.ac.uk; www.oardc.ohio.state.edu).

8.2 Preservation

Preservation was solely by charring. The charred remains were in reasonable condition with little evidence of surface abrasion or fragmentation.

8.3 Results

Table 2: Plant species represented

Cereal Taxa	Number	Wild/weed taxa	Number	
Naked Barley Hordeum vulgare var nudum	2	Fat Hen Chenopodium album	4	
Wheat/Barley Triticum/Hordeum	4	Nettle <i>Urtica</i> dioecia	1	
Cereal indet Cerealia	1	Dock family Rumex sp	1	
		Campion family Silene sp	1	
		Sow thistle Sonchus sp	1	
		Sedge family Cyperaceae	1	
	Rush fami Junaceae			
		Cabbage family Cruciferaceae	1	
		Indet pulse Leguminosae	1	
Total	7		12	

8.4 Discussion

The low numbers and variety of material could suggest the sample to represent 'background'. This can be defined as small amounts of charred material blown or washed into features which are unrepresentative of any particular activity.

8.5 Potential

The scope of further work would be severely limited by the low numbers of ecofacts recovered.

9 DISCUSSION

Each of the trenches uncovered fairly substantial ditches that were in good condition. Few of these have been plotted on aerial cropmark surveys, perhaps largely because the field appears to have been under pasture in recent years, but they are likely to form a southern extension to the existing pattern of known Roman ditch systems to the north. Due to the nature of the gravel geology, virtually none of the ditches were identifiable by magnetometer survey.

In general, examination of both pottery sherds and charred seed remains from the ditches highlights a good state of preservation for these materials, although their low frequency may still indicate a relatively peripheral location in relation to Roman settlement. The concentration of pottery in ditch [404] could easily be an isolated occurrence of rubbish dumped in the fields, although it may suggest occupation located nearby. The absence of wheat chaff from threshing or other agricultural residues in the charred remains is consistent with crop processing not having taken place close by, and there were no smaller features, such as gullies, postholes or occupation debris spreads to indicate settlement on the site.

Overall, the results suggest the presence of field and trackway boundaries relating to areas of Roman settlement lying principally to the north and north-west.

BIBLIOGRAPHY

Brown, N & Glazebrook, J, (eds), 2000 Research and Archaeology: A Framework for the Eastern Counties, 2. Research Agenda and Strategy, East Anglian Archaeology, Occasional Paper 8

Chapman, A, and Dawson, M, 2007 Project Design for Archaeological Evaluation at Merles, West Fen Road, Willingham, Cambridgeshire, CgMs Limited August 2007

EH, 1991 The Management for Archaeological Projects 2, English Heritage

EH, 1995 Geophysical Survey in Archaeological Field Evaluation, English Heritage Research and Professional Services Guideline, 1

EH, 1997 English Heritage Archaeology Division Research Agenda, English Heritage

EH, 2002 Environmental Archaeology. A guide to the theory and practice of methods, from sampling and recovery to post-excavation, English Heritage

Gaffney, C, Gater, J, and Ovendon, S, 2002 *The Use of Geophysical Techniques in Archaeological Evaluations*, Institute of Field Archaeologists Technical Paper, **6**

Glazebrook, J (ed), 1997 Research and Archaeology: A Framework for the Eastern Counties, 1. Resource Assessmen, East Anglian Archaeology, Occasional Paper 3

Gurney, D, et al, 2003 Standards for Field Archaeology in the East of England, Association of Local Government Archaeological Officers, East of England Region, East Anglian Archaeology

Institute of Field Archaeologists 1999 Standards and Guidance for Archaeological Field Evaluation

Schoch, W H, Pawlik, B, and Schweingruber, F H, 1988 *Botanical Macro-remains*, Berne, Paul Haupt

Thomas, A, 2007 *Brief for Archaeological Evaluation,* Cambridgeshire Archaeological Planning and Countryside Advice, July 5 2007

Northamptonshire Archaeology a service of Northamptonshire County Council





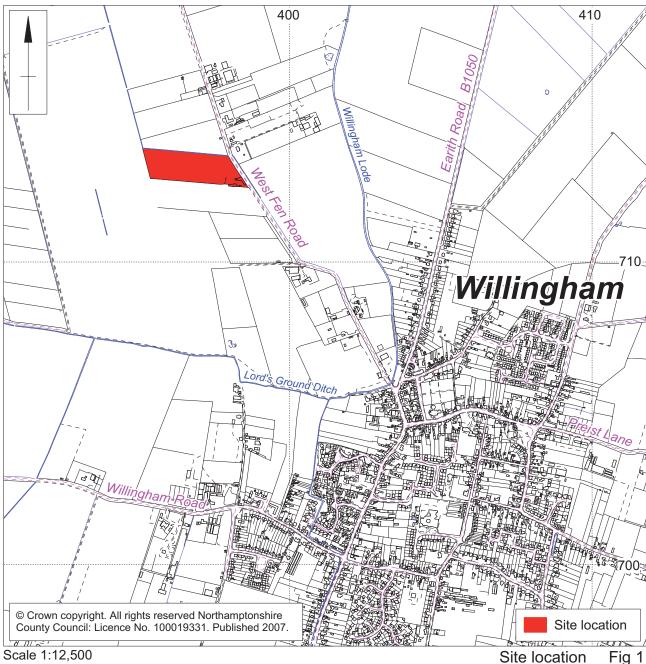
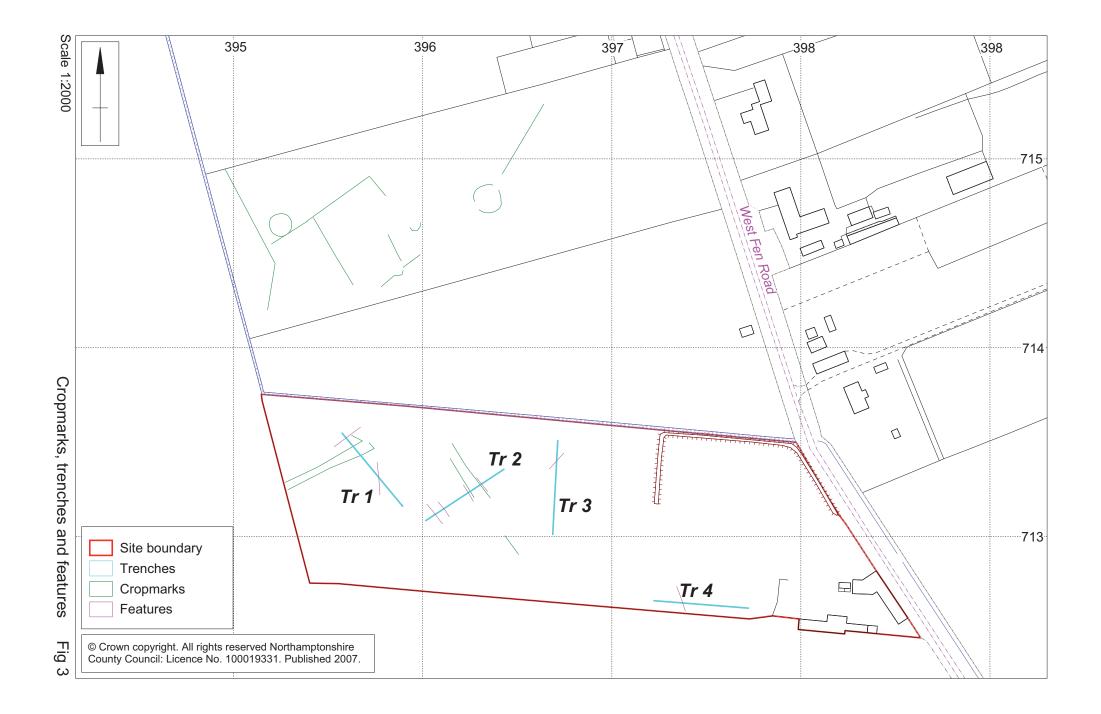
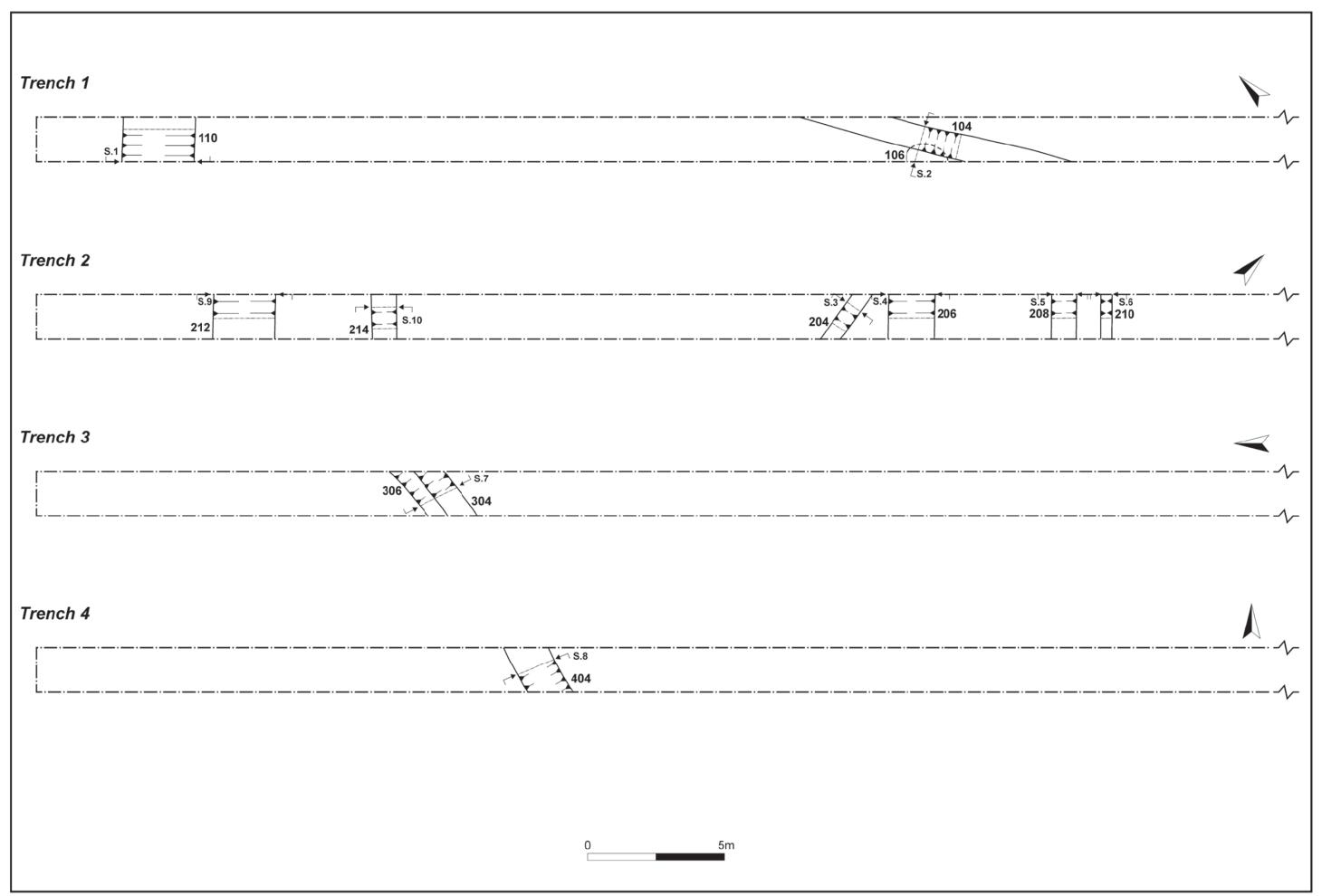
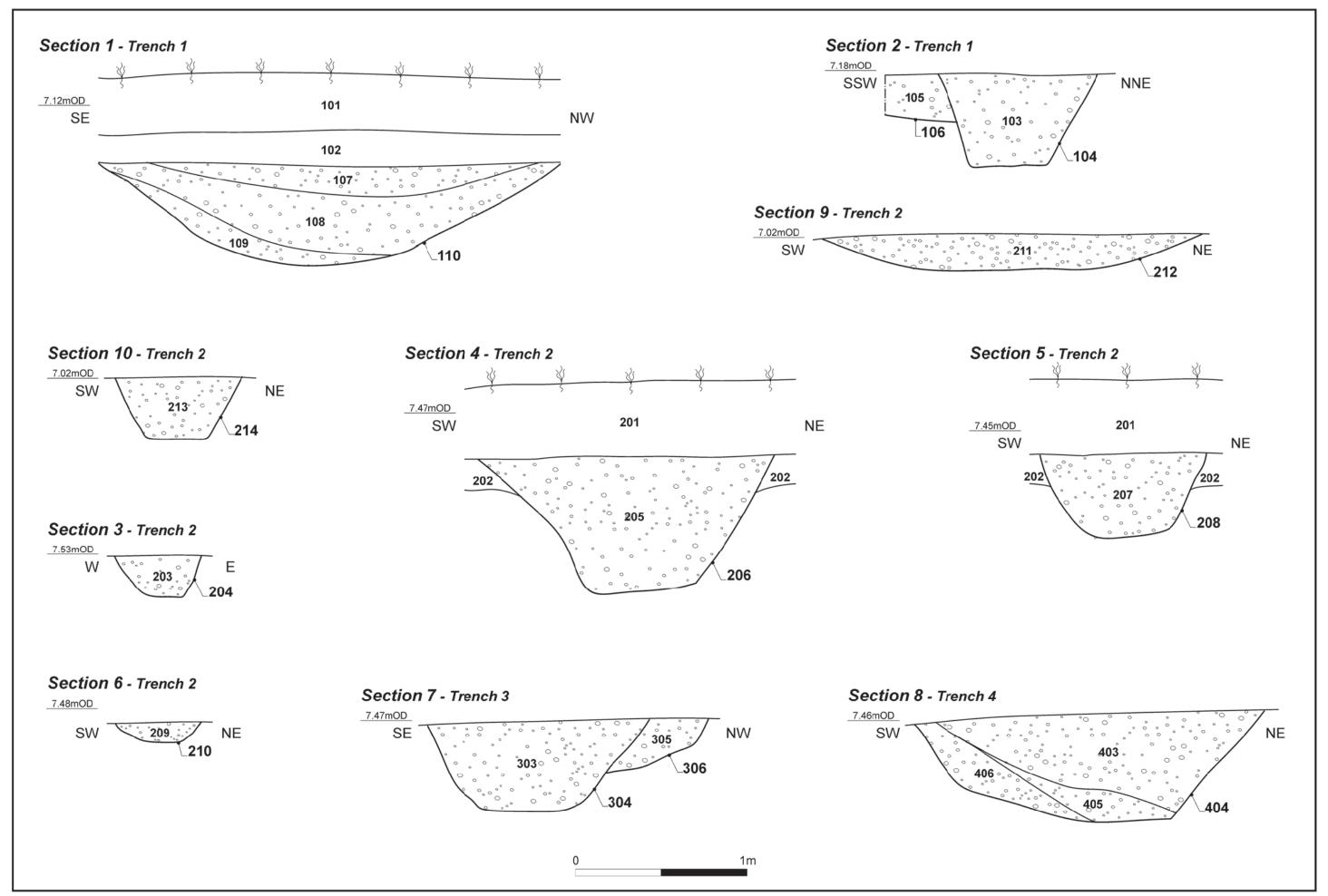


Fig 1 Site location









Appendix 1: Aerial Photographs consulted

1) NMR Oblique

NGR Index Number	Accession Number	Frame	Original Number	Copyright	Repository	Film Details		Date Flown	DF	6 Fig NGR
TL3971/1 TL3971/2	JLB 9668 JLB 9668	ORACLED3 ORACLED4	10 11	JLB JLB	JLB	B 35 mm B 35 mm	Black& white Black& white	25-Oct-53 25-Oct-53	1	TL394715 TL394715
TL3971/10 TL3971/11	JLB 9647 JLB 9647	ORACLED9 ORACLED10	9 10	JLB JLB		B 35 mm B 35 mm	Black& white Black& white	29-Jul-53 29-Jul-53	1 1	TL393715 TL393715
TL3971/20 TL3971/21	JLB 9653 JLB 9653	ORACLED3 ORACLED4	20 21	JLB JLB		B 35 mm B 35 mm	Black& white Black& white	12-Jul-52 12-Jul-52	1 1	TL396716 TL396716
TL3971/27 TL3971/28	NMR 1145 NMR 1145	339-340 341-342	F 352 F 352	CRW CRW		B 70mm,120,220 B 70mm,120,220	Black& white Black& white	•	1 1	TL394716 TL393715
TL3971/32 TL3971/33	NMR 1303 NMR 1305	473-474 470-471		CRW CRW		B 70mm,120,220 B 70mm,120,220	Black& white Black& white	15-Aug-78 10-Aug-78	1 1	TL396712 TL398712
TL3971/34 TL3971/50	NMR 1305 NMR 15285	472 60		CRW CRW		B 70mm, 120,220 B 70mm, 120,220	Black& white Black& white	10-Aug-78 22-Jun-95	1 1	TL398712 TL395716
TL3971/51 TL3971/52	NMR 15285 NMR 15285	61 62		CRW CRW	NMR	B 70mm,120,220 B 70mm,120,220	Black& white Black& white	22-Jun-95 22-Jun-95	1 1	TL395716 TL395716

2) NMR Vertical

Sortie Number	Library Number	Cam Pos	Start Frame	End Frame	Held	National Start	Reference End	Date	Date Flag	Quality	Scale	Focal Length	Format	Repository	Copyright
RAF/106G/UK/1557 OS/70177	386 10508	RV V	6366 33	6369 35	-		TL388722 TL400707		1	AC A	9800 7500	36 12	BW87 BW99	MOD NMR	RAF CRW

3) University of Cambridge Unit for Landscape Modelling

Index Reference
BYA 24
BYA 27
BYA 28
BYA 29
BYA 30
BYA 31
BYA 32
CCX 6
CCX 7
CCX 8
·

Appendix 2: Context List (Site Code WMER 07)

		Deposit Type	Width (m)	Depth (mm)	Artefact types
1	101	Topsoil		320	
	102	Subsoil		100	
	103	Fill of Ditch 104		550	
	104	Ditch	1.06	550	
	105	Fill of Pit 106		310	
	106	Pit cut by 104	1.08	310	
	107	Upper fill of 110		220	Roman pottery
	108	Fill of 110		300	
	109	Lowest fill of 110		210	
	110	Ditch	2.70	900	
2	201	Topsoil		300	
	202	Subsoil		180	
	203	Fill of 204		240	
	204	Ditch	0.50	240	
	205	Fill of 206		760	
	206	Ditch	1.70	760	
	207	Fill of 208		480	
	208	Ditch	0.94	480	
	209	Fill of 210		150	
	210	Gully	0.43	150	
	211	Fill of 212		220	
	212	Gully	2.20	220	
	213	Fill of 214		340	
	214	Ditch	0.74	340	
3	301	Topsoil		300	
	302	Subsoil		80	
	303	Fill of 304		540	Roman pottery

Trench	Context	Deposit Type	Width (m)	Depth (mm)	Artefact types
	304	Ditch, re-cut of 306	1.12	540	
	305	Fill of 306		250	
	306	Ditch, cut by 304	0.4	250	
4	410	Topsoil		280	
	402	Subsoil		120	
	403	Upper fill of 404		380	Roman pottery
	404	Ditch	2.0	640	
	405	Fill of 404		180	
	406	Lowest fill		240	