Northamptonshire Archaeology

Sapley to Sawtry AWS Pipeline

Iron Age and Roman settlement at Alconbury Hill, Cambridgeshire

July 2009

Assessment report and updated project design

ECB 3220

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

Northamptonshire County Council

Simon Carlyle

Report 10/7

February 2010

STAFF

Project manager:	Simon Carlyle BSc MSc MIfA MIEnvSc
Fieldwork:	Adrian Burrow PGDip Tim Upson-Smith BA Hons PGDip Lazlo Liechtenstein MA Simon Carlyle Paul Clements BA
Text:	Simon Carlyle
Iron Age pottery:	Andy Chapman BSc MIfA
Roman pottery:	Tora Hylton
Fired clay:	Pat Chapman BA CMS AIfA
Animal bone:	Karen Deighton MSc
Plant macrofossils and molluscs:	Karen Deighton
Illustrations:	Amir Bassir BSc

QUALITY CONTROL

	Print name	Signed	Date
Checked by	Pat Chapman		
Verified by	Anthony Maull		
Approved by	Andy Chapman		

OASIS REPORT FORM

PROJECT DETAILS		
Project name	Sapley to Sawtry AWS Pipeline: Iron Age and Roman settlement at Alconbury Hill, Cambridgeshire	
Short description	An archaeological excavation was conducted in advance of the construction of a section of the Anglian Water Services mains replacement between Sapley to Sawtry, near Alconbury Hill, Cambridgeshire. The investigation targeted the site of a late Iron Age and Roman settlement that had been identified by an earlier evaluation. Within the bounds of the pipeline corridor, the settlement comprised a large enclosure ditch, with a possible return or internal division to the south, several smaller ditches and gullies, and four small pits. Pottery from the features dated from the 1st century BC to the late 2nd century AD. Later features included two post-medieval or modern agricultural features, which extended down the length of the site, and a number of modern land drains.	
Project type	Strip and map excavation	
Site status	-	
Previous work	Evaluation, Cambridgeshire Archaeology (CAM ARC 2008)	
Current land use	Arable	
Future work	None	
Monument type/ period	Late Iron Age and Roman rural settlement	
Significant finds	Iron Age and Roman pottery	
PROJECT LOCATION		
County	Cambridgeshire	
Site address	Alconbury Hill	
Study area	0.07ha	
OS Easting & Northing	51850 27905	
Height aOD	49m	
PROJECT CREATORS		
Organisation	Northamptonshire Archaeology (NA)	
Project brief originator	Cambridgeshire County Council	
Project Design originator	Simon Carlyle (NA)	
Director/Supervisor	Adrian Burrows (NA)	
Project Manager	Simon Carlyle (NA)	
Sponsor or funding body	Anglian Water Services Ltd	
PROJECT DATE		
Start date	2nd July 2009	
End date	16th July 2009	
ARCHIVES	**Location**	**Content**
Physical	NA store	Pottery, animal bone and fired clay (1 box)
Paper	NA store	Drawings, 5 sheets; 1 BW film; 36 colour slides; 1 document box
Digital		Photographs and report
BIBLIOGRAPHY		
Title	Sapley to Sawtry AWS Pipeline, Iron Age and Roman settlement at Alconbury Hill, Cambridgeshire: Assessment Report and Updated Project Design	
Serial title & volume	10/7	
Author(s)	Simon Carlyle	
Page numbers	15 text, 4 figures	
Date	February 2010	

Contents

Tables

Figures

SAPLEY TO SAWTRY AWS PIPELINE

IRON AGE AND ROMAN SETTLEMENT AT

ALCONBURY HILL, CAMBRIDGESHIRE

JULY 2009

Event no. ECB 3220

Assessment Report and Updated Project Design

Abstract

In July 2009, an archaeological excavation was conducted by Northamptonshire Archaeology in advance of the construction of a section of the Anglian Water Services mains replacement between Sapley to Sawtry, near Alconbury Hill, Cambridgeshire. The investigation targeted the site of a late Iron Age and Roman settlement that had been identified by an earlier evaluation. Within the bounds of the pipeline corridor, the settlement comprised a large enclosure ditch, with a possible return or internal division to the south, several smaller ditches and gullies, and four small pits. Pottery from the features dated from the 1st century BC to the late 2nd century AD. Later features included two post-medieval or modern agricultural features, which extended down the length of the site, and a number of modern land drains.

1 INTRODUCTION

1.1 Site location and project background

In July 2009, Northamptonshire Archaeology (NA) investigated part of an Iron Age and Roman settlement, which extended across the route of a new section of water main constructed by Anglian Water Services Ltd (AWS). The route runs northwards from Sapley to Sawtry, via Alconbury Hill (NGR: TL 18768 76380 to TL 18208 80138) and the settlement lies to the north of Alconbury Hill, adjacent and to the east of the B1043 (NGR: TL 1850 7905; Fig 1).

The settlement had been identified by an archaeological evaluation, undertaken by Cambridgeshire Archaeology in February 2008 (CAM ARC 2008). In order to mitigate against the impact of the pipeline on the buried archaeological remains, Cambridgeshire Archaeology Planning and Countryside Advice (CAPCA) requested an archaeological investigation of the settlement, which was encountered in Trench 2 of the evaluation, and a brief was issued for the work in April 2008 (CAPCA 2008). NA was commissioned by AWS to carry out this work.

The investigation was carried out in accordance with the brief (*ibid*) and the project design prepared by NA (Carlyle 2009). This assessment report and updated project design has been prepared in accordance with the English Heritage Procedural documents *Management of Archaeological Projects 2*, *Appendix 3* (EH 1991) and relevant sections of *Management of Research Projects in the Historic Environment* (EH 2006).

1.2 Topography and geology

The site, which covered an area of approximately 0.07ha, lay 0.3km to the south-west of Monks Wood Farm, in an arable field adjacent and *c* 50m to the east of the B1043 and A1, which follows the route of Roman *Ermine Street* (Fig 1).

Topographically, the site is located on the northern edge of a ridge of high ground on the north side of Alconbury Hill, at approximately 49m aOD, with extensive views to the north and north-east. Locally, the ground is relatively flat and the underlying geology comprises Oxford Clay overlain by glacial till (www.bgs.ac.uk/geoindex). Soils on the site belong to the Evesham 3 (411c) soil association, comprising slowly permeable calcareous clayey and fine loamy over clayey soils (SSEW 1983).

1.3 Historical and archaeological background

Preliminary research of the Cambridgeshire Historic Environment Records (HER) has identified a number of sites within a 2km radius of the excavation site (Fig 1).

The earliest remains are those of a Bronze Age saucer barrow, Monk's Hole Barrow, located approximately 1km to the north-east of the site (HER 819; SAM 27165).

The late Iron Age and Roman settlement, the subject of this report, was identified from cropmarks and investigated as part of a programme of trial trench evaluation by Cambridgeshire Archaeology in 2008 (CAM ARC 2008). The settlement extends across the field to the east of the site and appears to comprise one or more enclosures (HER 815). One half of an Iron Age beehive quern was found less than 150m to the north of the site (HER 816) and a field system, possibly associated with the settlement, has been identified *c* 0.6km to the north (HER 814). In the Roman period the settlement was situated adjacent to Ermine Street (HER CB15034), the major Roman road leading northwards from London (*Londinium*) to York (*Eburacum*), which locally follows the route of the modern B1043. Further evidence for Roman settlement and activity in the vicinity has been identified *c* 0.3km to the west of Ermine Street, at South Farm, Upton, where sherds of Roman pottery and several features have been investigated (HER 2068). Roman pottery has been found to the north of Monk's Wood Farm (HER 818) and a coin of Faustina II (HER 4066) was discovered close to the B1043, *c* 100m to the north-west of the site. In the wider area, extensive Roman remains have been investigated at Vinegar Hill, *c* 1km to the south.

Medieval remains largely comprise furrows, remnants of an open-field agricultural system, which have been identified near Alconbury Hill (HER CB 15565).

1.4 Excavation strategy

The easement was marked out by AWS's site contractor and the excavation area, centred on Trench 2 of the evaluation, was located by NA using Leica System 1200 GPS surveying equipment. The area was stripped under archaeological supervision using a 360° tracked mechanical excavator fitted with a toothless ditching bucket. The topsoil and subsoil were removed in separate operations and stored in temporary bunds along the eastern edge of the easement and at either end of the site. Mechanical stripping continued to the north and south of Trench 2 until no further archaeological features were uncovered for a distance of *c* 5-10m.

Once the area had been opened up and the archaeological surface cleaned sufficiently to enhance the features, a grid was established and a digital base plan was produced using GPS, with the grid and site datum related to the Ordnance Survey National Grid and Datum. The general site plan was hand drawn at a scale of 1:50.

Discrete features were half-sectioned, or fully sectioned if features were part of recognisable structures, contained deposits or artefacts of particular value or were likely to hold significant artefact or environmental assemblages. Intersections were investigated to establish stratigraphic relationships. Representative sections of linear and curvilinear features were sample excavated away from intersections with other features or deposits, to obtain unmixed samples of material. Sections were drawn at a scale of 1:10 or 1:20, as appropriate.

Artefacts and ecofacts were collected by hand and retained, receiving appropriate care prior to removal from site (Watkinson and Neal 1998). Unstratified animal bones and modern material were not collected. The excavated area and spoil heaps were scanned with a metal detector to ensure maximum finds retrieval. All finds have been boxed by material type.

Samples of between 20 and 40 litres (volume dependant on deposit size) were taken for flotation from dateable contexts with the potential for the recovery of charcoal and charred plant remains.

A photographic record of the project was maintained using 35mm black and white negative and colour transparency film, supplemented with digital images. All records were compiled during fieldwork into a comprehensive and fully cross-referenced site archive.

The project was monitored by CAPCA, to ensure that all aspects of the project were undertaken to a satisfactory standard. All works were conducted in accordance with the Institute for Archaeologists' (IfA) *Standard and Guidance for Archaeological Excavation* (1995, revised 2008) and *Code of Conduct* (1985, revised 2008). In addition, all works complied with the guidelines detailed in *Standards for Field Archaeology in the East of England* (Gurney 2002).

2 SUMMARY OF EXCAVATION RESULTS

2.1 Site summary

Within the bounds of the pipeline corridor, the settlement comprised a large enclosure ditch, with a possible return or internal division to the south, several smaller ditches and gullies, and four small pits (Figs 2 and 3). Pottery recovered from these features indicated that the settlement was probably established in the 1st century BC and continued to be occupied until the late 2nd century AD. Given the limited area of the settlement available for investigation and the small number of features present within the excavation area, it has only been possible to ascribe this general date to the archaeological remains on the site.

There was no further evidence for activity on the site until the post-medieval/modern period, when the land was used for arable farming. Modern land drains and mole-plough scars were evident across the site.

The archaeological remains were generally well-preserved, although ploughing had caused some truncation to archaeological features, particularly at the southern end of the site. A summary of the archaeological features encountered within the excavation area is given in Appendix 1.

2.2 General stratigraphy

The natural substrate, 3, was glacial till (Boulder Clay). At the surface it occurred as light to mid orangey-yellow silty clay and contained occasional sub-angular to rounded flint pebbles. At a depth of *c* 0.4m below the surface of the natural substrate the colour of the till changed to mid greyish-blue, due to reducing conditions. In places there were patches of gritty, fine angular gravel in a silty clay matrix. Drainage of surface water was poor to moderate.

The subsoil, 2, which sealed the archaeological remains, was approximately 0.2m thick and comprised mid brown silty clay with moderate pebbles. The topsoil, 1, was 0.2m to 0.3m thick across the entire excavation area and consisted of mid to dark brownish-grey slightly clayey silt.

2.3 Late Iron Age and Roman settlement

Part of a late Iron Age and Roman settlement was exposed within the easement for the pipeline corridor, with the greater part of the settlement extending into the field to the east. All of the features identified in the trial trench were located (Fig 2).

The northern boundary of the settlement was formed by a large, steep-sided enclosure ditch, 33, that was aligned west-south-west to east-north-east. It was *c* 4m wide and 1.65m deep at the western edge of the site, narrowing to 2.3m wide and 1.0m deep to the east (Fig 4, ditch segment 38). It contained a sequence of fills, with the majority of the material deriving from the weathering of the ditch sides and gradual soil accumulation. Late Iron Age pottery was recovered from the lower fills and Roman pottery from the upper, indicating that the ditch was probably cut in the 1st century BC and continued in use until the late 2nd century AD, by which time it had largely silted up.

At the southern end of the site the earliest features encountered were two gullies, 48 and 52, and two pits, 41 and 56. Gully 48, which was aligned west-south-west to east-north-east, was 0.55m wide by 0.13m deep and terminated near the centre of the excavation area. Parallel and 0.8m to the north of this was gully 52, which measured 0.3m wide by 0.1m deep and extended beyond the confines of the excavation area.

Approximately 2.3m to the south of the gully 48 were two shallow pits, 41 and 56. Pit 41, the earlier of the two, measured at least 1.1m in length and was 1.0m wide and 0.26m deep. It was cut by pit 56, which measured 0.9m wide by 0.14m deep and had a surviving length of 0.8m, its western end having been truncated by ditch 14.

Cutting gully 52 and pit 56, and possibly forming a partition or sub-enclosure within the main enclosure, ditch 14 was at the southern end of the site and was aligned north-west to south-east. It had a steep-sided, V-shaped profile with a narrow, concave base and

measured up to 1.7m wide by 1.2m deep. It contained late Iron Age and Roman pottery of a similar date to that recovered from ditch 33.

Situated between these two main ditches were two smaller ditches, 7 and 24. Ditch 7, which was up to 1.0m wide by 0.50m deep, ran roughly parallel and to the east of ditch 14, although it appeared to be slightly curved, veering eastwards at its southern end. Ditch 24 was aligned east to west, measured 1.3m wide by 0.66m deep and had a steep-sided, V-shaped profile.

In addition to the two pits mentioned above, there were two further pits, or possibly postholes, that may be associated with the settlement, although they remain undated. Pit 5, which lay between ditches 7 and 14, had a diameter of 0.8m and a depth of 0.08m. Pit, 50 was located approximately 2m to the south of ditch 33 and had a diameter of *c* 0.4m and a depth of 0.12m.

2.4 Later features

At the southern end of the site and cutting ditch 7 were two parallel, shallow, linear depressions, 20 and 22. They were aligned east to west, petered out near the centre of the excavation area and were approximately 1.0m wide and 0.10m deep. They are too shallow to be termed ditches and may have been caused by superficial agricultural disturbance.

Extending down the length of the excavation area on a north-north-west to south-south-east alignment were two shallow, linear features, spaced approximately 4m apart. They measured *c* 1.0m wide by 0.12m deep and their regularity suggests that they are probably post-medieval or modern in date. Although their spacing and general appearance is correct for post-medieval furrows, their alignment in relation to the Roman road suggests that they are not furrows but are probably more recent agricultural features.

2.5 Quantification of the site archive

Site records
Plans: 3 A2 sheets at 1:100
Sections: 2 A2 sheets at 1:10 and 1:20
Contexts: 56 on individual *pro-forma* record sheets
Supporting records: 8 on individual *pro-forma* record sheets
Colour slides: 36
Black and white: 1 film

Finds
All finds (boxes): 1

Environmental samples
Bulk soil samples (40 litres per sample): 7

3 FINDS ASSESSMENT

3.1 Iron Age pottery by Andy Chapman

Three contexts produced hand-built vessels dated to the Iron Age, a total of 30 sherds weighing 95g, an average sherd weight of only 0.32g. Each group is from a single sherd family, and the sherds from fills (28) and (29) of ditch 33 are probably from the same vessel. The sherds from ditch 10 provide the only dating evidence for this feature. While Iron Age pottery is present in the lower fills (29) and (28) of ditch 33, the upper fills have produced Roman pottery (28) and (26).

All the sherds are in a fabric containing dense inclusions of crushed shell. In the fill (8) of ditch 10, the sherds contain finely crushed shell, with the platelets no more than 2mm in diameter, while in the material from ditch 33 the platelets are frequently up to 5mm diameter, and the soft fabric has laminated and crumbled. The core is brown to grey in colour, and the inner and outer surfaces are similarly grey with brown mottling.
The sherds from the fill (8) of ditch 10 are body sherds from a thin-walled vessel, 4-6mm thick, well finished, with smoothed surfaces.

The sherds from the fills (28) and (29) of ditch 33 are from a vessel with a well-developed square rim. The body sherds are not exceptionally thick, 8mm, suggesting that this was a smaller jar or bowl form and not a large storage jar.

The lack of diagnostic features makes it impossible to propose a definitive date for this material, but the developed rim of the vessel from ditch 33 might suggest a late Iron Age date, 1st century BC.

3.2 Roman pottery by Tora Hylton

A total of 43 sherds with a combined weight of 0.137kg were recovered from seven individual deposits. The pottery was concentrated in the upper fills of enclosure ditch 33/38 and ditch 14/18. Although the quantity of Roman material is small, its presence indicates that there was activity in the area during the late 1st to early 2nd century. In general terms the assemblage is not well preserved, the sherds are small and abraded and there are few diagnostic features; this is reflected in the overall average sherd weight of 3.1g. The analysis included sherd count and weight by fabric type.

With the exception of one sherd of Samian, all the pottery appears to be of local origin, mainly sherds in greyware fabrics. Diagnostic forms and features include necked jars, one with a cordoned neck and girth groove.

Imported wares are represented by a rim sherd from a Samian hemispherical bowl (Dragendorff Type 37) dating from the late 1st to late 2nd century (Webster 1996, 47).

Table 1: Roman pottery quantification by fabric, context and weight (g)

Context/feature	**11/14**	**15/18**	**26/33**	**28/33**	**34/38**	**35/38**	**44/46**
Fabric	**No (wt)**	**No (wt)**	**No (wt)**	**No (wt)**	**No (wt)**	**No (wt)**	**No (wt)**
Grog tempered ware	--	1 (12g)	--	--	--	--	--
Greyware	--	2 (18g)	1 (5g)	--	25 (42g)	7 (30g)	2 (11g)
Misc. sandy wares	2 (9g)	--	--	--	--	--	--
Samian	--	--	--	1 (2)	--	--	--
Shell-gritted ware	--	2 (8g)	--	--	--	--	--
Total	2 (9g)	5 (38g)	1 (5g)	1 (2)	25 (42g)	7 (30g)	2 (11g)

3.3 Fired clay by Pat Chapman

One fragment of fired clay, recovered from the fill (23) of ditch24, has a 30mm long semicircular wattle impression of 15mm diameter. The clay is hard, pale pink and white. The surrounding surfaces are very smooth including those adjacent to the impression. It has the appearance of being a single object, but is most likely a fragment from some structural debris.

4 ENVIRONMENTAL ASSESSMENT

4.1 Animal bone by Karen Deighton

A total of 3.3kg of animal bone was collected by hand from a range of contexts during the course of excavation and from soil samples taken from the main ditches. This material was analysed to ascertain the level of preservation, the species present and the potential to contribute to the understanding of the site.

The animal bone was scanned and identifiable elements were noted (following Halstead 1985 after Watson 1979). Preservation and modification (after Binford 1981) were also noted. Any available biometrical data (after von den Driesch 1976) was noted as was any available ageing data. Ageing data included state of fusion (after Silver 1969) and tooth eruption and wear (after Payne 1973 for sheep/goat and Halstead 1985 after Payne 1973 for cattle and Levine 1982 for horse).

Fragmentation and surface abrasion were heavy, which adversely affected identification and the collection of ageing and metrical data. Cut marks were seen on a single bone from ditch 33 (fill 31) and only three examples of canid gnawing were noted. The apparent paucity of both butchery evidence and canid gnawing could be due to the high level of bone surface abrasion. It would seem that the poor preservation is due to soil conditions. A single fragment of burned bone was observed from ditch 44 (fill 46), possibly suggesting that this was not a preferred method of disposal. A summary of the animal bone recovered by hand from the late Iron Age and Roman features on the site is presented in Table 2 and the bone recovered from soil samples taken from the ditches is presented in Table 3 (mesh sizes: 3.5mm, 1mm and 500microns).

Table 2: Animal species present by context

Cut/fill	Feature	Horse *(Equus)*	Cattle (Bos)	Sheep/goat (Ovicaprid)	Pig (Sus)	Dog *(Canid)*	Large ungulate *	Total
14/11	Ditch	3	--	--	--	--	--	3
14/12	Ditch	2	--	--	--	--	--	2
14/13	Ditch	--	2	--	--	--	--	2
18/15	Ditch	--	1	--	--	--	--	1
24/23	Ditch	--	4	--	1	--	--	5
33/27	Ditch	--	--	1	--	--	--	1
33/28	Ditch	--	1	--	--	--	--	1
33/29	Ditch	--	1	1	--	1	--	3
33/31	Ditch	--	3	1	--	--	--	4
37/38	Ditch	--	3	-	--	--	1	4
44/46	Ditch	--	2	3	--	--	--	5
		5	17	6	1	1	1	31

* Hoofed animal

Table 3: Animal bone recovered from soil samples by context

Species	Feature/deposit				
	Ditch 18/17	**Ditch 46/44**	**Ditch 46/45**	**Ditch 33/28**	**Ditch 33/29**
Cattle(Bos)	--	1	--	--	--
Sheep/goat(Ovicaprid)	--	1	3	--	--
Field vole (*Microtus agrestis*)	--	2	--	--	1
Bank vole (*Clethrionomys glareolus*)	--	1	--	2	--
Water vole (*Arvicola terrestris*)	2		--	1	--
House mouse (*Mus musculus*)	--	1	--	--	--
Rodent sp	--	5	--	--	16
Small mammal	1	11	3	3	--
Amphibian sp				--	1
Total	3	22	6	6	18

Ageing and metrical data

The number of bones suitable for metrical analysis and age determination are shown in Table 4 below.

Table 4: Metrical and age determination data available by animal species

Data type	Horse *(Equus)*	Cattle (*Bos*)	Sheep/goat (Ovicaprid)	Pig *(Sus)*
Fusion	2	8	1	1
Tooth wear	3	--	--	--
Measurements	6	2	--	--

Discussion

Little can be gleaned of the economy or function of the site from the animal bone due to the poor preservation and scarcity of identifiable material. It can be stated that a small range of common domesticates were utilised at the site and that the taxa present are typical for an Iron Age/Roman site.

The potential for further analysis is severely limited by the paucity and poor preservation of material, therefore no further work is recommended.

4.2 Plant macrofossils and molluscs by Karen Deighton

Seven soil samples (40 litres per sample) were selected for assessment to establish to presence, nature and state of preservation of any ecofacts. The sampling strategy and procedures followed English Heritage guidelines (EH 2002). The samples were processed using a modified siraf tank fitted with a 500-micron mesh and 250-micron flot sieve. The resulting flots and residues were dried and sorted for ecofacts using a binocular microscope (10 x magnification). For charred seeds and cereal grains, identifications were made with the aid of the author's reference collection and a seed atlas (Cappers *et al* 2006). Kerney and Cameron (1994), Gloer and Meier-Brook (2003) and the conchological society website were consulted for mollusc identifications.

The results of the assessment are presented below in Tables 5 and 6. Preservation was fair, although the charcoal was heavily fragmented. Two of the samples were entirely sterile.

Table 5: Plant macrofossils by context and sample

Type	**Feature/deposit**	
	Ditch 46/44	**Ditch 46/45**
Charcoal	500+	500+
Cereal	6	3
Wild/weed	4	

Table 6: Molluscs by context and sample

Species	**Feature/deposit**				
	Ditch 18/17	**Ditch 46/44**	**Ditch 46/45**	**Ditch 33/28**	**Ditch 33/29**
Cochlicopa lubrica		42	19	3	13
Discus rotundatus	1	23	10	1	2
Pupilla muscorum	4	5	1	7	1
Carychium minimum	20	81	4	27	16
Cepaea nemoralis				4	4
Vallonia sp	2	42	20		
Clausillia sp		1			1
Trichia sp		7			
Indet	13	150	50	20	25
Galba truncatula		24	9	43	14
Radix balthica	1	72	36	11	100
Anisus leucostoma		31	1	1000e	1000e
Sphaeriidae sp	1		1	1	

Discussion

The weed species noted was fat hen (*Chenopodium album*), a ubiquitous taxon of disturbed ground. Cereal grains could only be recorded as wheat/barley.

The freshwater mollusc taxa suggest the presence of standing water which possibly dries up in summer as both *G Truncatula* and *R Balthica* can be amphibious. Again, the land taxa are largely indicative of a damp environment, although the presence of *P muscorum* could suggest some drier areas (i.e. stone walls).

Assessment suggests that further analysis of charred plant remains would add little to the understanding of the site due to the paucity of charred seeds and grains and the poor preservation of charcoal. Further work on molluscs would add little more to the statements made above. The assessment has shown little potential for further work and none is recommended.

5 SUMMARY OF POTENTIAL AND PROPOSALS FOR ANALYSIS

5.1 Review of original research objectives

The main aim of the investigation, as originally outlined in the brief issued by CAPCA (CAPCA 2008), was to preserve the archaeological evidence contained within the site by record and to attempt a reconstruction of the history and use of the site.

The specific objectives of the project were to:

- Identify the character and extent of Iron Age activity within the area, including evidence for or against the continuity of land use into the Roman period;
- Fully record the ditches recorded in the evaluation in order to plan their alignments and determine their function and purpose;
- Attempt to model the landscape and its transformation brought about by the settlement's inhabitants and due to natural events, using appropriate environmental techniques.

5.2 Revised research objectives

The excavation has broadly succeeded in achieving the original research objectives outlined in Section 5.1 above. However, this assessment has shown that the small assemblage of finds, the limited number of archaeological features encountered within the narrow confines of the pipeline easement and the poor environmental results has limited the scope for further post-excavation analysis and the research potential is therefore moderately low. This is particularly the case when considering the environmental objectives, where assessment of the soil samples has shown limited potential, due to the extremely small size of the assemblage and the poor state of preservation of ecofacts. However, a comparative environmental study can be made with other Late Iron Age and Romano-British rural settlements in the area.

With reference to regional research frameworks (Glazebrook 1997; Brown and Glazebrook 2000), the revised research objectives are listed below.

i. The settlement will be set in the context of the local and regional late Iron Age and Roman rural landscape and attempts will be made to understand the function of the site in terms of its economic base and its organisational structure.

ii. As only a very small part of the site has been excavated, the plots of cropmarks shown on aerial photographs will be referred to, if available, so as to be able to relate the features encountered in the excavation with the wider settlement. An attempt will be made to produce an overall plan of the settlement to assist in the interpretation of how the settlement may have functioned and developed over time. The limitations of the cropmark evidence will be considered and taken into account.

5.3 Proposals for further analysis

The small size and range of material in the finds assemblage from the site precludes any further analysis. The occurrence of ecofacts, in the form of charcoal and charred plant remains, was notably extremely poor. On these grounds, no further work is recommended.

6 REPORTING AND PUBLICATION PROPOSALS

A client report will be prepared and distributed in accordance with the instructions set out in the project design (Carlyle 2009). The client report will be entered on to the Archaeology Data Service (ADS) through OASIS. A summary of the excavation will be included in 'Fieldwork in Cambridgeshire 2009' in the next volume of the *Proceedings of the Cambridge Antiquarian Society*.

The synopsis provided below will form the basis for the full report.

Title page
Contents
Acknowledgements
Abstract

INTRODUCTION

Project background
Aims and objectives
Topography and geology
Archaeological and historical background
Excavation strategy

LATE IRON AGE AND ROMAN SETTLEMENT

The late Iron Age and Roman settlement
(late 1st century BC to late 2nd century AD)

Finds
Iron Age pottery
Roman pottery

Environmental evidence
Animal bone
Plant remains
Molluscs

DISCUSSION

BIBLIOGRAPHY

7 STORAGE AND CURATION

A microfilm copy of the site archive and narrative will be made to English Heritage standards and submitted to the National Archaeological Record. The final report will be uploaded onto the Online Access to the Index of Archaeological Investigations (OASIS) and will include the OASIS summary form and reference number.

The site archive will comprise all written, drawn and photographic records, and all material finds and processed sample residues recovered from the excavation. The site archive will be accompanied by the research archive, which will comprise the text, tabulated data, the original drawings and all other records generated in the analysis of the site archive. The archive will be fully catalogued and stored to the requirements of the Cambridgeshire Museum Service. It will not contain material requiring special curation. The location for the long-term storage of the site archive has yet to be arranged.

8 RESOURCES AND PROGRAMMING

8.1 Work completed

Work completed to-date includes the consolidation of the site archive, finds and environmental sample processing, assessment of structural evidence, finds and ecofacts, and the preparation of the interim report and assessment report and updated project design.

8.2 Proposed work and completion dates

Tasks	Personnel	Timetable*
Preparation of client report	Simon Carlyle	August 2010
Preparation of summary report for publication	Simon Carlyle	August 2010
Illustrations	NA drawing office	August 2010
Editing	Andy Chapman	August 2010
Preparation of research archive	Simon Carlyle	December 2010

**Subject to approval of this document by the end of May 2010.*

8.3 Key personnel

The key personnel associated with carrying out the tasks detailed in Section 8.2 are as follows:

Simon Carlyle	Senior Project Officer (NA)
Andy Chapman	Senior Archaeologist (NA)

BIBLIOGRAPHY

Binford, L, 1981 *Bones: ancient myths and modern man*

Brothwell, D, and Higgs, E, (eds) *Science in Archaeology*, London, Thames and Hudson

Brown, N, and Glazebrook, J, 2000 *Research and Archaeology: A Framework for the Eastern Counties 2: Research Agenda and Strategy*, East Anglian Archaeol Occasional Paper, **8**

CAM ARC 2008 *Sapley to Sawtry (via Alconbury Hill) Anglian Water Pipeline: Archaeological Evaluation,* Cambridgeshire Archaeology report, **1008**

CAPCA 2008 *Brief for Archaeological Investigation: Sapley to Sawtry (via Alconbury Hill) pipeline replacement scheme, Cambridgeshire,* Cambridgeshire County Council Archaeology Planning and Countryside Advice Section

Cappers, R, Bekker, R, and Jans, J, 2006 *Digital Seed Atlas of the Netherlands,* Netherlands, Barkhuis Publishing

Carlyle, S, 2009 *Sapley to Sawtry Mains Replacement (Alconbury Hill), Cambridgeshire: project design for archaeological investigation,* Northamptonshire Archaeology

EH 1991 *Management of Archaeological Projects 2,* English Heritage

EH 2002 *Environmental Archaeology: A Guide to Theory and Practice for Methods, from sampling to post-excavation,* English Heritage

EH 2006 *Management of Research Projects in the Historic Environment (MoRPHE),* English Heritage

Glazebrook, J, 1997 *Research and Archaeology: A Framework for the Eastern Counties 1: Resource Assessment*, East Anglian Archaeol Occasional Paper, **3**

Glöer, P, and Meier-Brook, C, 2003 *Susswassermollusken*, Hamburg, DJN

Gurney, D, 2002 *Standards for Field Archaeology in the East of England*, East Anglian Archaeol Occasional Paper, **14**

Halstead, P L, 1985 A study of mandibular teeth from Romano-British contexts at Maxey, in F Pryor and C French, 219-24

IfA 1985, revised 2008 *Code of Conduct*, Institute for Archaeologists

IfA 1995, revised 2008 *Standard and Guidance for Archaeological Excavation*, Institute for Archaeologists

Kerney, M P, and Cameron, R A D, 1994 *Land Snails of Britain and North-west Europe*, London, Harper Collins

Levine, M A, 1982, The use of crown height measurements and eruption-wear sequences to age horse teeth, in B Wilson *et al*, 223-250

Payne, S, 1973 *Kill-off patterns in Sheep and goats: the mandibles from Asvan Kale,* Anatolian Studies, **23**, 281-303

Pryor, F and French, C, 1985 *The Fenland Project No 1: Archaeology and environment in the Lower Welland Valley,* East Anglian Archaeol, **27**

Silver, I, 1969 The ageing of domestic mammals, in D Brothwell and E Higgs (eds), 283-302

von den Driesch, A, 1976 *Guide to the measurement of animal bones from archaeological sites,* Harvard University Press

Watkinson, D, and Neal, V, 1998 *First Aid for Finds*, 3rd Edition, RESCUE / UKIC

Watson, J P N, 1979 The estimation of the relative frequencies of mammalian species: Khirokitia, *Journal of Archaeological Science, **6**, 127-137*

Webster, P, 1996 *Roman Samian Pottery in Britain*, Practical Handbooks in Archaeology 13, Council for British Archaeology

Wilson, B, Grigson, C, and Payne, S, (eds) 1982 Ageing and Sexing Animal Bones from Archaeological Sites, *BAR British Series,* **109**

Websites

http://www.bgs.ac.uk/GeoIndex/index.htm (accessed 15.8.09)

http://www.conchsoc.org (accessed 24.11.09)

Maps

SSEW 1983 *Soils of Eastern England*, Sheet 4, Soil Survey of England and Wales 1:250,000

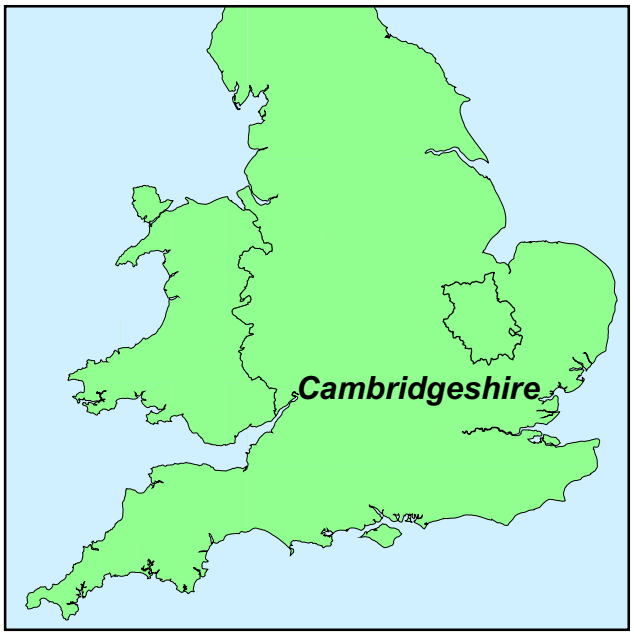
Northamptonshire Archaeology
A service of Northamptonshire County Council 3 February 2010

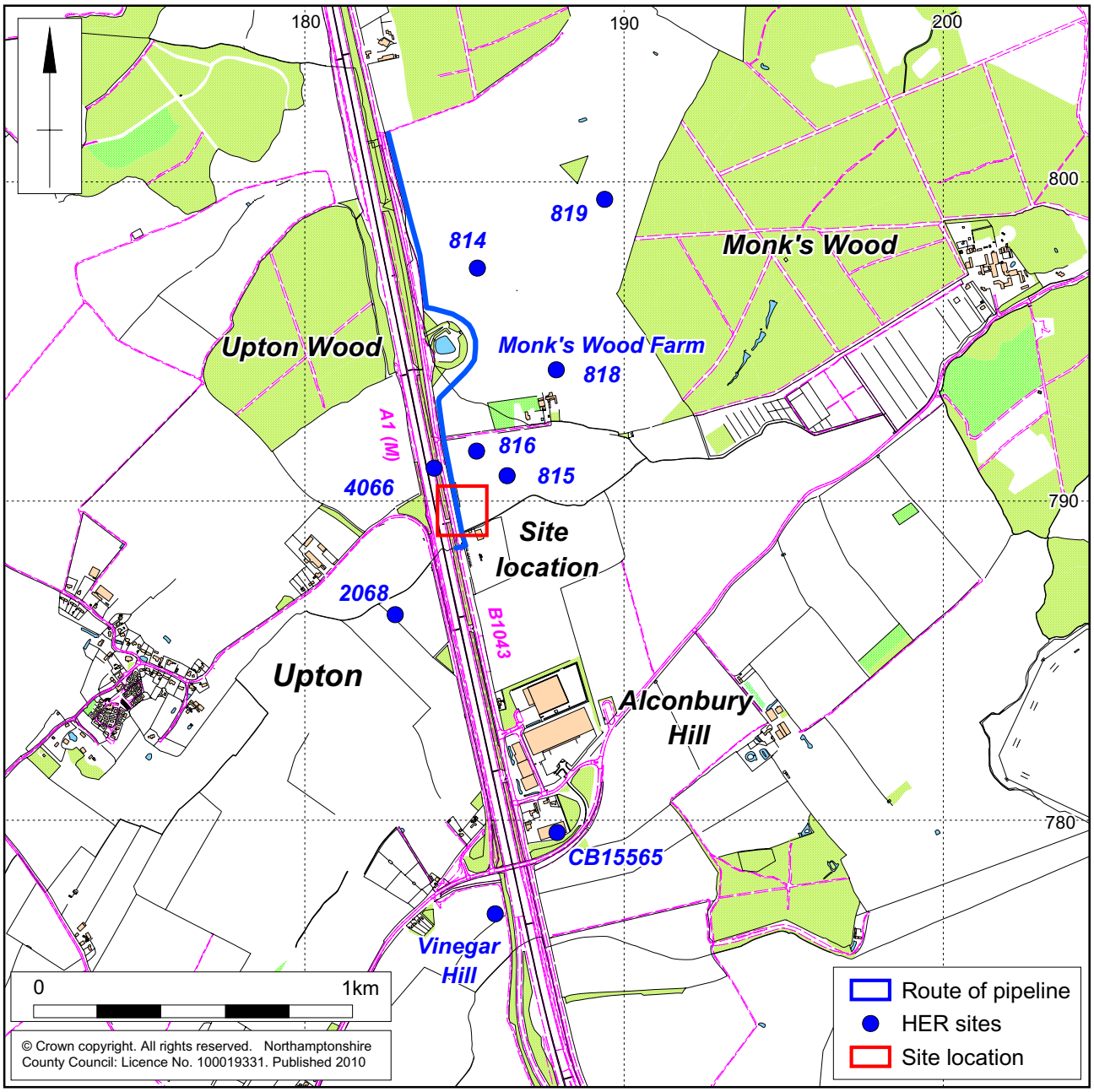
APPENDIX: SUMMARY OF FEATURES AND CONTEXTS

Abbreviations: P pottery; B animal bone; Fc fired clay

Context no.	Feature type	Comments	Date of feature	Finds
1	Topsoil			-
2	Subsoil			-
3	Natural substrate			-
4 [5]	Posthole		Late Iron Age/Roman?	-
6 [7] *8* *9* *[10]*	Ditch	Cut by feature [22]	Late Iron Age/Roman	B P -
11 12 13 [14] *15* *16* *17* *[18]*	Ditch	Cuts Gully [52] and pit [56]	Late Iron Age/Roman	P B B B P - -
19 [20]	Agricultural feature		Post-medieval/modern	-
21 [22]	Agricultural feature	Cuts ditch [7]	Post-medieval/modern	-
23 25 [24] *44* *45* *[46]*	Ditch	Cut by feature [43]	Late Iron Age/Roman	B Fc - - P B -
26 27 28 29 30 31 32 [33]	Enclosure ditch	West section	Late Iron Age/Roman	P B P B P B - B -
34 35 36 37 [38]	Enclosure ditch	East section	Late Iron Age/Roman	P P B B
39 40 [41]	Pit	Cuts pit [56]	Iron Age	- -
42 [43]	Agricultural feature	Cuts ditches [24] and [14]	Post-medieval/modern	-
47 [48]	Gully		Iron Age	-
49 [50]	Pit		Iron Age/Roman?	-

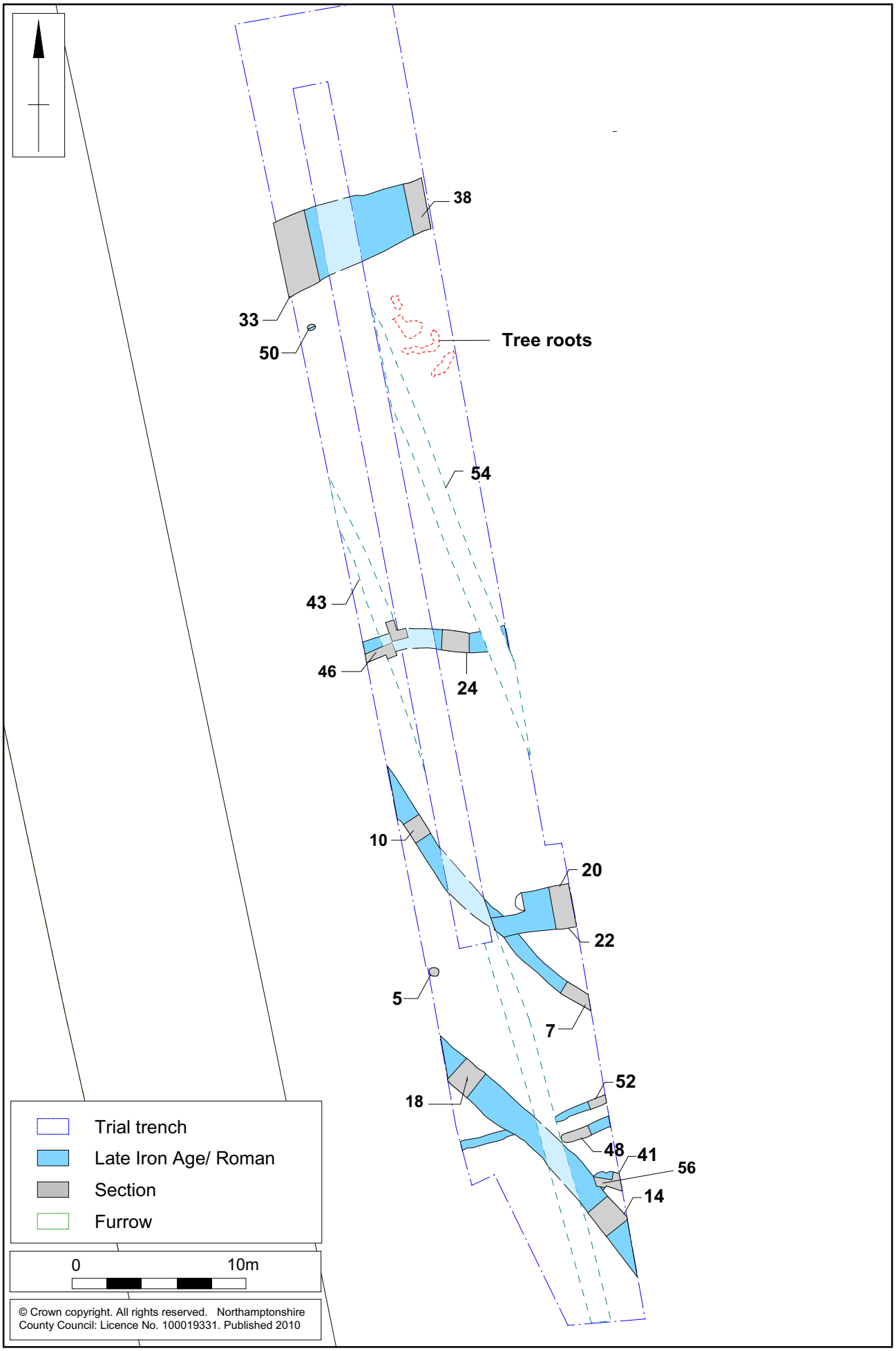
Context no.	Feature type	Comments	Date of feature	Finds
51 [52]	Gully	Cut by ditch [14]	Iron Age	-
53 [54]	Agricultural feature	Cuts ditches [24] and [33]	Post-medieval/modern	-
55 [56]	Pit	Cut by pit [41] and ditch [14]	Iron Age	-





1:20,000

Site location and HER sites Fig 1



General plan Fig 2

General view of site, facing north Fig 3

Enclosure ditch 38, facing north-east Fig 4

Northamptonshire County Council

Northamptonshire Archaeology

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