

# Northamptonshire Archaeology

# A Romano-British 'Ladder' Enclosure at Milton Ham, Northampton

Assessment Report and Updated Project Design



Simon Carlyle July 2008 Report 08/118

Northamptonshire Archaeology 2 Bolton House Wootton Hall Park Northampton NN4 8BE w. www.northantsarchaeology.co.uk t. 01604 700493/4 f. 01604 702822 e. sparry@northamptonshire.gov.uk



# STAFF

Project Manager:	Simon Carlyle BSc MSc AIFA
Text:	Simon Carlyle
Fieldwork:	Anne Foard-Colby Cert Ed, Simon Carlyle, Adrian Adams, Adrian Burrow MA, Rosie Chapman HND, Alexandra El-Ab BSc, Jonathan Elston BA, Tomasz Kolosek and Rob Smith
Worked flint and stone:	Andy Chapman BSc MIFA
Roman pottery:	Ed McSloy
Ceramic building material:	Pat Chapman BA CMS AIFA
Glass:	Simon Carlyle
Coins:	Ian Meadows BA
Metal objects:	Tora Hylton
Human bone:	Sarah Inskip BSc MA
Animal bone:	Karen Deighton MSc
Charcoal:	Dana Challinor
Charred plant remains:	Wallis Lord-Hart MSc
Illustrations:	Carol Simmonds BA

# **QUALITY CONTROL**

	Print Name	Signed	Date
Checked by	P Chapman		
Verified by	A Maull		
Approved by	A Chapman		

(Front cover illustration: Coin of Magnentius, AD 351-353; found in enclosure ditch at Milton Ham)

# **OASIS REPORT FORM**

# PROJECT DETAILS

PROJECT DETAILS					
Project title A Romano-British 'Ladder' Enclosure at Milton Ham, Northampton:					
	Assessment Report and Updated Project Design				
Short description	A Romano-British 'ladder'	A Romano-British 'ladder' enclosure was excavated at Milton Ham,			
(250 words maximum)	Northampton. The earliest evidence for activity on the site dates to the late				
	2nd/early 3rd centuries AD and comprised a number of small gullies,				
	possibly forming a series of livestock pens, and a small oven. Two human				
	cremation burials, which are currently undated but probably date to the				
		same period, were recovered from the southern part of the site. The 'ladder' enclosure, which dated to the 3rd and 4th centuries AD, consisted of a sub-			
		d north to south and measuring approximately			
		ivided into a number of small sub-enclosures.			
		e on the east side of the settlement, defined by			
	two boundary ditches extend	ding from the corners of the main enclosure.			
		adder' enclosure appears to be from the east.			
		primarily used to hold livestock, although the			
		nt, which had been extensively modified, may			
		ses. There was no clear evidence for habitation			
		exe, although the pottery, glass and building site suggest that there was a building, possibly			
		eval plough furrows and a possible headland			
	were also identified.	Fui plough fuitons und a possible neudland			
Project type	Excavation				
Previous work	Geophysical survey (WYAS 2	2002) and trial trench evaluation (Thorne and			
	Carlyle 2002)				
Future work	Watching brief				
Monument type and period	Romano-British 'ladder' enclo				
Significant finds	Roman pottery, tile, glass and metalwork				
PROJECT LOCATION					
County Site address	Northamptonshire				
National grid reference	Milton Ham, Northampton 4730 2573				
Area	4/30/25/5         Overall area 14.9 hectares, excavation area 0.62ha.				
Height aOD	75-68m				
PROJECT CREATORS	75 0011				
Organisation	Northamptonshire Archaeolog	2V			
Project brief originator	-				
Project Design originator	Waterman CPM				
Director/Supervisor	Anne Foard-Colby, Northamp	otonshire Archaeology			
Project Manager	Simon Carlyle, Northamptons	hire Archaeology			
Sponsor or funding body	Parkridge (Milton Ham) Ltd				
PROJECT DATE					
Start date	28th January 2008				
End date	31st March 2008				
ARCHIVES	Location	Content (eg pottery, animal bone etc)			
Physical					
5					
Digital					
BIBLIOGRAPHY	Iournal/monograph_publish	ned or forthcoming, or unpublished client			
	report (NA report)	B, or supression of one of the			
Title		nclosure at Milton Ham, Northampton:			
	Assessment Report and Updated Project Design				
Serial title and volume	08/118				
Author(s)	Simon Carlyle				
Page numbers	27 text, 2 figs				
Date	July 2008				

# CONTENTS

1		INTRODUCTION	1
	1.1	Site location and project background	1
	1.2	Topography and geology	2
	1.3	Archaeological and historical background	2
	1.4	Excavation strategy	3
2		SUMMARY OF EXCAVATION RESULTS	4
	2.1	Site summary	4
	2.2	General stratigraphy	4
	2.3	Initial settlement (late 2nd/early 3rd century AD)	4
	2.4	The 'ladder' enclosure and annexe (3rd and 4th centuries AD)	5
	2.5	Late Roman activity (4th century AD)	5
	2.6	Undated features	5
	2.7	Medieval and later features	6
	2.8	Quantification of the site archive	6
3		FINDS ASSESSMENT	7
	3.1	Worked flint by Andy Chapman	7
	3.2	Roman pottery by Ed McSloy	7
	3.3	Ceramic building materials by Pat Chapman	10
	3.4	Querns by Andy Chapman	11
	3.5	Glass by Simon Carlyle	12
	3.6	Coins by Ian Meadows	13
	3.7	Metal objects by Tora Hylton	13
4		HUMAN BONE by Sarah Inskip	14
5		ENVIRONMENTAL ASSESSMENT	14
	5.1	Animal bone by Karen Deighton	14
	5.2	Charred plant remains by Wallis Lord-Hart	16
	5.3	Charcoal by Dana Challinor	17
6		SUMMARY OF POTENTIAL AND PROPOSALS FOR ANALYSIS	18
	6.1	Review of original research objectives	18
	6.2	Revised research objectives	19
	6.3	Proposals for further analysis	20
7		REPORTING AND ARCHIVE	22
	7.1	The report	22
	7.2	Provisional publication proposals	23

8		STORAGE AND CURATION	23
9		RESOURCES AND PROGRAMMING	23
	9.1	Work completed	23
	9.2	Proposed work and completion dates	24
	9.3	Key personnel	24
		BIBLIOGRAPHY	
		APPENDIX 1 Table of contexts and features	
		APPENDIX 2 Roman pottery fabrics (grouped); incidence by context	
		APPENDIX 3 Coin catalogue	

# Figures

Fig 1:	Site location
Fig 2:	Excavation phase plan 1:500

# Tables

Table 1:	Roman pottery fabrics
Table 2:	The querns
Table 3:	The animal species present
Table 4:	Mandibles by age group
Table 5:	Seed quantification summary
Table 6:	Results of the charcoal assessment

# A ROMANO-BRITISH 'LADDER' ENCLOSURE AT MILTON HAM, NORTHAMPTON JULY 2008

#### Assessment report and updated project design

#### Abstract

In February and March 2008, Northamptonshire Archaeology carried out the excavation of a Romano-British 'ladder' enclosure at Milton Ham, Northampton. The earliest evidence for activity on the site dates to the late 2nd/early 3rd centuries AD and comprised a number of small gullies, possibly forming a series of livestock pens, and a small oven. Two human cremation burials, which are currently undated but probably date to the same period, were recovered from the southern part of the site. The 'ladder' enclosure, which dated to the 3rd and 4th centuries AD, consisted of a sub-rectangular enclosure, aligned north to south and measuring approximately 150m long by 35m wide, divided into a number of small sub-enclosures. There was a triangular annexe on the east side of the settlement, defined by two boundary ditches extending from the corners of the main enclosure. Access to the annexe and 'ladder' enclosure appears to be from the east. The enclosure was probably primarily used to hold livestock, although the northern part of the settlement, which had been extensively modified, may have had other agricultural uses. Although there was no clear evidence for habitation within the enclosure or annexe, the pottery, glass and building material recovered from the site suggest that there was a building, possibly a small villa, nearby. Medieval plough furrows and a possible headland were also identified.

# **1 INTRODUCTION**

#### 1.1 Site location and project background

In February and March 2008, Northamptonshire Archaeology (NA) carried out a strip, map and record excavation of a Romano-British 'ladder' enclosure at Milton Ham, Northampton (NGR SP 7311 5735; Fig 1). A watching brief is due to be undertaken when groundworks associated with the development of the site commence.

The work was commissioned by Waterman CPM Ltd (WCPM), acting on behalf of Parkridge (Milton Ham) Ltd, and was undertaken in order to fulfil the archaeological condition proposed to be attached to a previous scheme for outline planning permission for a mixed employment development (planning application no. WN/2006/0061 refers – deferred December 2007). The condition had been requested by Northamptonshire County Council's Archaeological Advisor, in accordance with *Planning Policy Guidance: Archaeology and Planning (PPG16), section 30* and local planning guidelines. The request was based on the findings of an archaeological evaluation (WYAS 2002; Carlyle and Thorne 2002), which had identified the remains of the Romano-British settlement and peripheral Iron Age activity. The purpose of the archaeological investigation was to mitigate against the impact of the development on buried archaeological remains within the development area.

The mitigation strategy was set out in the *Specification for Archaeological Mitigation Works* issued by WCPM (2007). This assessment report and updated project design meets the requirements of the specification and has been designed in accordance with Appendices 4 and 5

of *Management of Archaeological Projects 2* (EH 1991) and appropriate national standards and guidelines, as recommended by the Institute of Field Archaeologists (IFA).

# **1.2** Topography and geology

The overall development area, which covers an area of approximately 14.9 hectares, comprises five fields of pasture at Milton Ham, immediately to the east of Junction 15a of the M1 motorway, on the south-western outskirts of Northampton (site centred on NGR SP 730 573; Fig 1). The demolished remains of the farm of Milton Ham lie in the south-west corner of the area.

The development area is bounded to the south by the M1 motorway, to the west by the A43, by a fence along the northern perimeter, and a hedgerow and a small stream to the east and south-east respectively. The area straddles the northern end of a spur of high ground which overlooks a small stream, a tributary of the River Nene, to the north and east. The ground descends from 75m aOD in the south-west corner of the area and slopes gradually to the north-west, north and east, to approximately 68m aOD.

The excavation area covers c 0.62 hectares and lies close to the northern edge of the development area, adjacent to a small copse of trees. It is situated on the east facing slope of the spur, the ground descending from c 71m aOD along the western edge of the excavation to c 68m aOD at the eastern boundary.

The underlying geology is Boulder Clay (BGS 1969). The soils across the excavation area were predominantly of the Hanslope soil association, comprising slowly permeable, non-calcareous clayey soils (SSEW 1983).

#### **1.3** Archaeological and historical background

Reference to the Northamptonshire Sites and Monuments Record (SMR) identified 28 sites of relevant archaeological interest within the chosen study area, which covered the development area and its environs (a 2km radius centred on the site). These were related to human activity and settlement in the area from the late Iron Age through to the early/middle Saxon period. These sites are generally representative of the wider distribution of archaeological sites found in the immediate area, reflecting rich the Iron Age, Roman and medieval landscapes, which developed over time into the modern landscape seen today. Many of the sites lie in the northern half of the study area, the bias largely reflecting the pattern of modern development, with attendant archaeological investigation, in this area.

The development area has been subject to two phases of evaluation, both of which were commissioned by WCPM. The first phase was a detailed gradiometer survey carried out by West Yorkshire Archaeological Services (WYAS 2002), the results of which were used to inform a programme of targeted trial trenching undertaken by Northamptonshire Archaeology (Carlyle and Thorne 2002). The evaluation identified the remains of a multi-phase Romano-British 'ladder' enclosure, measuring approximately 150m long by 35m wide, a possible Iron Age ditch, several undated features, and remnant medieval ridge and furrow earthworks.

#### **1.4** Excavation strategy

The location of the excavation area was established by NA using Leica System 1200 RTK 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 to reveal any significant archaeological remains or, where these were absent, the natural substrate. Initially, the topsoil and subsoil were moved to the edge of the site in 30-tonne dumper trucks and stored separately in temporary bunds. However, due to wet weather and poor ground conditions, the dumpers were taken off to avoid rutting and the remainder of the soil was cast over by the excavator (hay-making). In selected areas, a JCB-type excavator was used to strip back a buried soil layer to clarify and confirm the continuation and relationships of the larger ditches.

Once the areas had been opened up and the archaeological surface cleaned sufficiently to enhance the features, a grid was established and related to the Ordnance Survey National Grid by GPS. The general site plan was hand drawn at a scale of 1:100 and selected features were planned at a scale of 1:20.

Discrete features were half-sectioned and where they were shown to form part of recognisable structures, contain deposits of particular value or significant artefact or environmental assemblages, they were fully excavated. 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. All levels have been related to Ordnance Survey Datum.

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. Significant finds (small finds) were recorded individually and the details have been entered on an Access database. A basic catalogue has been compiled, comprising material type and object identifications, together with stratigraphic information. All finds have been boxed by material type.

Samples of between 20 and 40 litres were taken for flotation from dateable contexts with a potential for the recovery of charcoal and carbonised plant remains. Human remains were excavated following receipt of the appropriate permission from the Department of Constitutional Affairs.

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 overseen by WCPM, acting on behalf of Parkridge (Milton Ham) Ltd. WCPM were responsible for liaison with the curatorial authority (NCC Archaeological Advisor), who monitored the works, to ensure that all aspects of the project were undertaken to a satisfactory standard. All works were conducted in accordance with the *IFA Standards and Guidance for Archaeological Excavations (1995, revised 2001)* and the *Code of Conduct* of the Institute of Field Archaeologists (1985, revised 2007). 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

The earliest evidence for activity on the site dates to the late 2nd/early 3rd centuries AD and comprised a number of small gullies, possibly forming a series of livestock pens, and a small oven (Fig 2). Two human cremation burials, which are currently undated but probably date to the same period, were recovered from the southern part of the site. The 'ladder' enclosure, which dates to the 3rd and 4th centuries AD, consisted of a sub-rectangular enclosure, aligned north to south and measuring approximately 150m long by 35m wide, sub-divided into a number of small, rectangular sub-enclosures (Fig 3). The geophysical survey results suggest an open, triangular annexe on the east side of the 'ladder enclosure, defined by two ditches, one extending northeastwards from the south-east corner of the 'ladder' enclosure appears to be from the east. The settlement was probably primarily used to hold livestock, although the northern part of the settlement, which had been extensively modified, may have had other agricultural uses.

Although there was no clear evidence for habitation within the enclosure or annexe, the pottery, glass and building material recovered from the site suggest that there was a building, possibly a small villa, nearby. Limestone rubble that had been cast up by a geotechnical test pit to the west of the settlement, and thought initially to perhaps be part of a stone building, was subsequently shown by the excavation of a 20m trial trench to be of natural occurrence.

At present, it has only been possible to identify three broad phases of activity associated with the settlement; further analysis of the pottery, stratigraphy and form of the settlement may define further phases in due course and provide a more detailed picture of how the settlement developed throughout its period of occupation.

Later activity on the site comprised medieval plough furrows and a possible headland, and postmedieval and modern land drains. A summary of the features and associated contexts is provided in Appendix 1.

# 2.2 General stratigraphy

The natural substrate comprised light to mid brownish yellow silty clay with occasional patches of bluish grey silty clay. Towards the eastern edge of the excavation area, on the edge of the floodplain, the natural substrate changed to alluvial gravel in a mid brownish yellow sandy silty clay matrix. Overlying the drift deposits in the central and northern part of the site there was an intermittent buried soil horizon, comprising mid greyish brown clayey silt with occasional to moderate pebbles. A small number of archaeological features were sealed by this deposit, although for the most part they were cut into it, suggesting that the horizon was formed by earthmoving activity associated with the cutting or recutting of the main enclosure and sub-enclosure ditches. The subsoil, which sealed the archaeological remains, varied in thickness from 0.1m to 0.45m and comprised mid brown clayey silt with occasional to moderate pebbles. The topsoil was approximately 0.3m thick across the entire excavation area and consisted of mid to dark brownish grey slightly clayey silt.

#### 2.3 Initial settlement (late 2nd/early 3rd century AD)

The earliest dated features consisted of a regular though fragmented pattern of small, shallow gullies in the central part of the excavation area, three pits and a possible oven (Fig 2). Pottery

recovered from these features dates to the late 2nd/early 3rd centuries AD. The regular layout of the gullies, on the same general alignment as the later 'ladder' enclosure, suggests that they immediately preceded the establishment of the main settlement. They may have been lined with hedges to form a series of small, rectangular livestock-pens. The oven [397] was located in the southern half of the site and comprised a small pit, with scorching around the edge, and contained charcoal, quern fragments and fired clay. The fired clay is probably the remains of the oven's superstructure.

Two human cremations, buried in small pits, may date to this phase of activity (see Section 2.6 below).

# 2.4 The 'ladder' enclosure and annexe (3rd and 4th centuries AD)

The 'ladder' enclosure and the annexe dated to the 3rd and 4th centuries AD. The 'ladder' enclosure appears to be formed of two main parts: a sub-rectangular enclosure at the northern end of the settlement; and an adjoining longer, narrower enclosure, subdivided into at least four sub-enclosures, extending to the south. The main boundary ditch and the internal ditches separating the individual cells within the southern part of the enclosure had been recut on at least one occasion, suggesting continued use throughout the 3rd and 4th centuries. The layout of the northern part of the settlement had been extensively modified, perhaps reflecting a change in use of this part of the site during this period.

It is probable that the annexe on the east side of the 'ladder' enclosure was added after the main enclosure was established, with access apparently through a wide opening at the bottom of the slope to the east. However, the exact layout of the entrance and the relationship of the annexe with the main enclosure could not be determined as the eastern edge of the settlement lay beyond the limits of excavation. The geophysical survey plot indicates that the southern half of the annexe was divided into a number of small sub-enclosures.

There was little or no evidence for habitation within the enclosure or annexe, in the form of pits, postholes, hut circles or beam slots. However, the relatively large assemblage of pottery, fragments of glass and pieces of roof and box flue tile from the site suggest a building, possibly a small villa, nearby, although the geophysical survey has shown that this is not within the footprint of the proposed development. Quantities of charred cereal grain and several iron tools recovered from ditch deposits indicate agricultural activities and crop processing being carried out on or near the site.

# 2.5 Late Roman activity (4th century AD)

To the east of the 'ladder' enclosure, near the centre of the annexe, there was a cluster of features that contained predominantly 4th century pottery. The features comprise a short slot, three ditches and two pits or ditch terminals. The latter extended beyond the limits of excavation and their nature and full extent could not be determined. The entire site appears to have been abandoned towards the end of the 4th century AD.

# 2.6 Undated features

There were a number of features that contained no artefactual dating evidence, but the majority of these, primarily small gullies, are probably associated with the 'ladder' enclosure. However, there were two cremation burials and several small pits and postholes that cannot be dated at present. If the cremations date to the Roman period and relate to the settlement of the site, they probably

date to the late 2nd/early3rd century AD, before inhumation became the preferred burial rite in the 3rd and 4th centuries AD. However, probable Iron Age activity was identified *c* 90m to the south-west of the 'ladder' enclosure by the trial trench evaluation (Carlyle and Thorne 2002); a radiocarbon date should be obtained to clarify their age.

#### 2.7 Medieval and later features

The remains of ridge and furrow ploughing were identified along the western edge of the site. The furrows were spaced c 8m apart and were aligned east-north-east to west-south-west. The furrows originally extended further to the east, but were removed by machine as they masked extensive areas of the Romano-British settlement. The degree of truncation of archaeological remains caused by the furrows was moderate, with much of the damage being caused to shallow gullies and ditches.

The thick deposit of subsoil overlying the eastern edge of the 'ladder' enclosure and the slight ridge seen on the surface, running southwards across the field from the copse, indicate a possible headland.

The only post-medieval and modern features within the excavation area were the networks of stone rubble and ceramic land drains, associated with the farm of Milton Ham, that were used to improve the drainage of the relatively impermeable ground.

# 2.8 Quantification of the site archive

#### Site records

Plans: A2 sheets at 1:100 5
Sections: A2 sheets at 1:10 and 1:20 13
Contexts: 411 on individual *pro-forma* record sheets
Supporting records: 38 on individual *pro-forma* record sheets
Colour slides: 167
Black and white: 5 films

#### Finds

Roman pottery (boxes): Animal bone (boxes): Tile (boxes): Worked stone (boxes): Small finds (boxes): **2** (small)

#### Environmental and dating samples

Bulk soil samples (20-30 litres): **41** Radiocarbon samples (to be obtained from charcoal in soil samples)

#### **3** FINDS ASSESSMENT

# **3.1 Worked flint** by Andy Chapman

A total of 39 pieces of flint was recovered, including an irregular chunk of burnt flint. The group is typical of material from the Nene valley, comprising mainly small pieces, rarely more than 40mm long. These are mainly in vitreous flint, brown to dark grey-black in colour, often with areas of brown, iron-stained, cortex surviving, although some pieces are in grey opaque, stony flint. The group has not been quantified, but it evidently comprises a mixture of short, squat and irregular flakes, hard hammer struck, and larger shattered pieces.

There is a single small prismatic core, 33mm high, with a single striking platform that has been used for striking small blades, and would be appropriate to a late Mesolithic or early Neolithic assemblage. There is a single blade-like flake, 43mm long, from a prepared blade, probably of early Neolithic date. The only tool is a blunt piercer, probably worked from a blade core. There are also two flakes with edge retouch.

As a whole the group can be broadly dated from the late Mesolithic onwards, and probably also includes later material resulting from accidental shattering of flint pebbles. It can all be regarded as residual and it typical of the background scatter recovered from later settlements in the area.

# **3.2 Roman pottery** by Ed McSloy

#### Introduction

Pottery amounting to 1,928 sherds (33.9kg) was recovered from 145 separate contexts. The large bulk of pottery was recovered from ditches or gullies (1498 sherds; 78% of the total), with the remainder mostly from pits/postholes (351 sherds or 18%), and with small quantities from layers, including topsoil and subsoil horizons.

The condition of the pottery can be described as good. This is reflected in a mean sherd weight of 17.63g which is moderately high for a Roman assemblage and not indicative of high levels of disturbance. Surface preservation, including of slipped fabrics which can be susceptible to weathering, is also good.

The recovered pottery dates primarily to the later Roman period, between the 3rd and 4th centuries AD. Material from selected contexts, including a large group from pit/oven 397 is earlier, dateable to the mid/later 2nd century AD. Pottery of similar date and very small quantities probably of 1st century AD dating was present as residual material.

#### Methodology

The pottery was scanned by context and quantified by sherd count and weight per context. As an additional measure, vessels identifiable to form (mostly rim sherds) were recorded for each context by fabric. A list of fabrics present within each context and context dating, expressed as a *terminus post quem*, were recorded on to an MS Access database. The samian pottery was separated and quantified in advance of fuller consideration at the analysis stage.

The type codes listed in Table 1 are adapted from the pottery fabric type series devised for use with Roman pottery from Northamptonshire and used successfully for large assemblages from Ashton (Aird and MacRobert forthcoming) and Stanwick (Perrin 2006; McSloy *et al.* 

forthcoming). Where applicable the codings of the National Roman Fabric Reference Collection (Tomber and Dore 1998) have been applied (Table 1).

#### Assemblage range and variety

#### Coarse pottery

Coarsewares, the majority of which originate locally, make up the bulk of the assemblage. Several varying traditions are represented (Table 1and Appendix 2), of which the most common are sandy reduced wares, most of which are local, the products of kilns in the Upper Nene valley. Among this material fabrics C4 and C11 are the types those most closely identifiable with the kilns to the east of Northampton (Johnston 1969). Forms are mainly medium or wide-mouthed necked jars, with some neckless channel-rim jars, and utilitarian dishes and bowls.

Code NRFRC Code		Description	Occurrence	
A	-	Belgic type grog-tempered	rare	
A8	-	Begic type grog/quartz-tempered	rare	
Al	_	UNV Hard cream grogged	moderate	
A2	PNK GT	Pink-grogged	common	
A3	-	UNV Harder cream grogged	moderate	
В	-	General shelly	common	
B4	HAR SH	Harrold shell-tempered	common	
С	_	Unclassified reduced	moderate	
C1	-	LNV reduced	rare	
C4	-	UNV grey	common	
C8	DOR BB 1	Dorset Black-Burnished	common	
C11	-	UNV grey (dark surfaces)	common	
C15	-	Grey with reddish core	rare	
C17	-	Grey with 'sandwich' core	rare	
C19	-	Dark grey, coarse	rare	
C20	-	Self-coloured grey	rare	
C24	-	Grey with oxidised surfaces	rare	
D	-	Unclassified oxidised	moderate	
D1	-	LNV colour-coated (white/cream)	moderate	
D2	-	Local/LNV cream	rare	
D4	OXF RS	Oxfordshire red-slipped	moderate	
D6/9	-	Local gritty white	rare	
D24	-	LNV colour-coated (orange)	rare	
D27	OXF PA	Oxfordshire parchment ware	rare	
BAT AM	BAT AM	Baetican amphora	rare	
SA	-	Samian (most Central Gaulish) moderate		
OXF	OXF WH	Oxfordshire white mortaria rare		
WHm				
MH	MAH WH	Mancetter-Hartshill mortaria	rare	

*Table 1: Roman pottery fabrics* 

Shell-tempered wares (fabrics B and B4) almost certainly were sourced locally, with most the products of the kilns at Harrold, Bedfordshire, approximately 17km to the east. Forms are mainly necked jars with occasional large flanged bowls and plain-rimmed dishes, all of which are known to have been produced at Harrold (Brown 1994).

White or cream-firing grogged wares (fabrics A1/A3) occur commonly in the area of the middle/upper Nene valley, with large quantities occurring at Stanwick, Northamptonshire among earlier Roman (later 1st and 2nd century) phases (McSloy *et al.* forthcoming). Forms among fabrics A1/A3 consist of channel-rimmed jars of local type. Pink-grogged type (fabric A2) belongs to a separate, later tradition, with manufacture known from north Buckinghamshire and

greatest use in the area of Milton Keynes and Towcester, Northamptonshire (Booth and Green 1989). Forms in this type consist of necked jars/bowls, large storage jars and, more unusually, an indented beaker.

Coarsewares originating beyond the region comprise quantities of Dorset Black-Burnished wares and a single Lower Nene valley greyware sherd. Incidence of the former is moderately high (Table 2). This contrasts with the nearby assemblages at Quinton (Friendship-Taylor 1979), Brixworth (Woods 1970) and Grange Park, Courteenhall (Hancocks 2006, 131) where occurrence was limited. Forms comprise conical flanged bowls (five), plain-rimmed dishes and jars (three) and one oval fish dish.

The majority of Romano-British finewares are regional imports from the Lower Nene valley (types D1/D24) or from Oxfordshire (types D4, D27). Identifiable forms among the Lower Nene valley wares consist mainly of beakers including bag-shaped, indented and funnel-necked forms. Of note are two examples of underslip barbotine decoration, including one probable example with a figural subject. Forms among the Oxfordshire red-slipped wares consist of bowls, a single example of a beaker and a face flagon. Mortaria were also sourced from outside of the region, either from Oxfordshire or from Mancetter-Hartshill, Warwickshire.

#### Samian and amphorae

A total of 59 sherds of samian and were recovered. The samian comprises mainly (or wholly) Central Gaulish material, dateable to the 2nd century AD. With the exception of a small sherd from a Drag. 37 bowl, the assemblage comprises plain forms including cups (Drag. 33) with fewer dish/bowls (Drag. 18/31; 18/31r; Drag. 31). Of note is a group of 29 sherds representing three substantially complete vessels (Drag. 18/31r; Drag. 33 and Drag. 31) from a pit/oven 397, some of which are burnt. A partial stamp from this group ]LLIM cannot at this stage be identified although a Hadrianic/early Antonine date is suggested by the form. A further stamp noted on a Drag. 18/31 vessel is indistinct (?AISTIVIM), but may possibly be attributable to the Lezoux potter Aestivius (Dickinson 1986, 202).

A single fragment of Baetican (southern Spanish) amphora is likely to date to between the mid 1st and 3rd centuries AD and was residual in its context.

#### Dating indicators

Chronological indicators are provided by the samian (above) although a significant proportion of this is residual.

Further date markers are present in the form of Romano-British traded finewares and mortaria. Most numerous are colour-coated wares from the Lower Nene valley which occur primarily as later 2nd and 3rd/early 4th century beaker forms with fewer 'coarseware' type forms indicative of dating after the later 3rd century AD. Also moderately common are Oxfordshire red-slipped wares, all of which date after *c* AD 240, with some forms indicating mid/later 4th century dating.

Typically broader indications of dating are provided by local or regionally-traded coarsewares. Significant in this respect were the quantities of pink-grogged wares (type A2), a fabric not thought to be produced before the late 2nd century and mainly dating to the 3rd and 4th centuries. Dorset Black-Burnished wares occur as late (after c AD 250) jar and dish/bowl forms (the oval 'fish dish' is also of this date), and within this region the main period of currency is between the mid 3rd and earlier 4th centuries.

#### Site chronology

Material of 1st century AD date is almost entirely lacking from this site, confined to 'Belgic' type grog-tempered sherds, all of which appear to be re-deposited. Sizeable 2nd century AD groups

are restricted to that from oven/pit 397 and probably one other pit. Samian and other early Roman material occurs elsewhere as residual material and testifies to activity of this date in the area.

There is limited evidence from the pottery for the cutting of enclosure as early as the 2nd century. The emphasis of the site is clearly with the 3rd and 4th centuries, and most likely between the mid 3rd and earlier 4th centuries. The bulk of pottery from main enclosure features is consistent with such dating. Similarly larger pottery groups (producing between 30 and 55 sherds) belong to this period.

There are very few indicators of dating to the second half of the 4th century. These might be expected to occur as larger numbers of late jar forms in Harrold shell-tempered ware and as rosette-stamped or white painted Oxfordshire red-slipped ware products. Interestingly the small number of forms occurring mid/later 4th century types, including a face flagon in Oxfordshire red-slipped fabric; and late style Harrold hooked-rim jars occur in a small area of the site.

#### Pottery use and site status

Some indications of pottery use were recognised in the form of carbonised residues, although incidence was not quantified at this stage. The range of forms represented reflects 'utilitarian' usage with jar/bowl/dish forms expected to have been used for kitchen-related tasks including cooking and storage. Some pottery, including samian vessels from a pit/oven 397, had been subjected to burning at the time of deposition.

Assessing social status from pottery assemblages poses some difficulties. Some evidence for this is from the samian, though this applies largely to the period before c AD 200. At Milton Ham this is confined to plainware forms, a probable signifier of lower status and a feature shared with assemblages from most non-urban or military assemblages. Less investigation has been undertaken on the relative status of later Roman assemblages seen through the occurrence of fineware or other fabrics. On the basis of the forms represented, the later Roman assemblage appears utilitarian in character and not suggestive of higher status.

# **3.3 Ceramic building materials** by Pat Chapman

#### Ceramic tile

This is an assemblage of 351 sherds of mainly roof tile, weighing 37,017g. At present 115 of these tiles have been identified, comprising 85 roof tile sherds, 62 *tegulae* and 23 *imbrices*, together with 18 combed flue tiles and 12 floor or *bessalis* type tiles.

The sherds are small to medium in size and many show signs of abrasion. This would tend to imply that while the tile is probably fairly close to the building of origin, it has become scattered and subject to erosion and plough damage

A quick scan of the material has identified three main fabrics, of which two accounts for about half of the assemblage. One has a brownish slightly shelly fabric with a 'soapy' feel often with a black core, the other fine sandy clay slightly soft and orange in colour. Slightly less frequent is a coarser sandy fabric. Other fabrics account for a few sherds each.

Among the *tegulae* are three which have been stained black for decorative purposes. This use of colour design on roof tiles, also including maroon, is known from villas in the region, such as Wootton villa, Croughton villa and Piddington villa, all in Northamptonshire. Four tiles also have a cutaway on the flange, used to key in the adjacent *tegula*, which may give an indication of dating. One of the *imbrices* has worn decorative wavy lines on the upper surface.

The *bessalis* type tiles are thicker than the roof tiles and are used in hypocaust systems, in conjunction with the flue tiles.

#### Fired clay

This assemblage of 81 fragments of fired clay weighs 2,038g. Three-quarters by weight, comprising 72 fragments, derives from an oven [397], with only a few pieces from the rest of the site. They are typically made from sandy clay fired to red orange, with some smaller pieces brown in colour. Well-defined wattle impressions, 10-18mm in diameter and some smooth outer surfaces are present on seven fragments, including four unusually large pieces. The assemblage from the oven is most likely from the remains of the superstructure.

#### **3.4 Querns** by Andy Chapman

There is a collection of fragments from small rotary querns, with the upper stone fragments all from flat-topped querns typically of the Roman period. The stones are all in a sandstone conglomerate, which frequently contains large quartz crystals. It is a probably a Millstone Grit from the Peak District of Derbyshire.

The group includes a virtually complete lower stone (SF 57), 330mm diameter, with a domed grinding surface, and a central conical spindle socket, 25mm diameter by 37mm deep.

There are also three joining fragments (SF 43) making up just under a half of a flat-topped upper stone, 450mm in diameter, which had been well-used, reduced to 25mm thick at the centre. This has a broad central eye, 100mm diameter, surrounded by a recessed collar. From the same context, there are also some fragments that come from what was probably the matching lower stone (SF 49).

All of the other sandstone fragments probably come from stones of similar size to the two most complete examples, at 330-550mm diameter. There are therefore no pieces that are certainly from larger-diameter millstones, as used in animal-powered mills.

The grinding surfaces are typically heavily worn and smooth, although in one instance there are remnant dimpled tool marks on the grinding face of a slightly thicker stone, which had not been as heavily worn as the others. The upper surfaces of the upper stones are typically roughly finished and some have remnant dimpled tool marks.

There is a collection of worn and eroded fragments of lava, with a total weight of 5.6kg, which are assumed to derive from broken-up lava querns. A summary of the querns is given in Table 2 below.

Small find no	(Context) [feature]	Geology	Dimensions	Comment
32	(337) [338] Pit	Millstone Grit?	<i>c</i> 550mm diam. 50-63mm thick	Fragment from circumference of upper stone. Flat quern, dimpled upper surface and grinding surface No further work
43	(391) [392] Pit	Coarse Sandstone Conglomerate Millstone Grit?	<i>c</i> 400mm diam 35-50mm thick	Fragment from circumference of upper stone. Flat quern, dimpled upper surface No further work
47	(395) [397] Oven	Coarse Sandstone Conglomerate Millstone Grit?	-	Large irregular fragment, lost surfaces, but evidently from either SF 49 or SH 53
49	(395) [397] Oven	Coarse Sandstone Conglomerate Millstone Grit?	diameter not measurable 20-60mmt thick	Fragments from circumference of lower stone, probably paired with SF53, but too incomplete to be certain
53	(395) [397] Oven	Coarse Sandstone Conglomerate Millstone Grit?	450mm diam. 25-35mm thick	Fragments making up 45% of upper stone. Flat quern, recessed central collar, well-worn Draw and photograph
57	(431) [432] Ditch	Coarse Sandstone Conglomerate Millstone Grit?	330mm diam. 40-100mm thick	Near complete bottom stone. Central pivot socket intact, some damage to circumference. Draw and photograph
63	(469) [470] Ditch	Coares Sandstone Conglomerate Millstone Grit?	diameter not measurable 50mm thick	Fragment from circumference of upper stone. Flat quern No further work
66	(237) [238] Pit	Fine Sandstone Conglomerate Millstone Grit?	<i>c</i> 500m diam 20-35mm thick	Fragment from circumference of upper stone. Flat quern Dimpled upper surface No further work
	396 [397] Oven	Lava	30mm	Small fragment from lava quern No further work
	395 [397] Oven	Lava	5.6kg up to 55mm thick	Rounded and eroded fragments, no diagnostic pieces survive

Table 2: The querns

# 3.5 Glass by Simon Carlyle

Six fragments of vessel glass (32g) were recovered. All of the fragments are Roman in date, with the possible exception of one thin fragment of pale green blown glass from a buried soil horizon, which may be post-medieval and is therefore intrusive.

All of the Roman glass is colourless or blue/green in colour and two of the fragments have diagnostic features to enable identification. One is a blue/green fragment from the base of a square prismatic bottle, which were commonly produced between the late 1st and late 2nd centuries AD (Price and Cottam 1998, 194). The other is a colourless rim fragment from a funnel-mouthed cylindrical bottle, of a type which were in use in the late 2nd/early 3rd centuries; the stump of the handle is visible just below the rim (*ibid*, 202, fig 92). A third fragment, probably

from the base of a colourless beaker or cup, bears a small circular scar that may be a pontil mark or the attachment point of a stem.

#### **3.6 Coins** by Ian Meadows

Thirteen Roman coins were recovered from the Romano-British settlement at Milton Ham, Northampton. With the exception of two unstratified coins, the remainder derive from ditch fills in the central and northern part of the settlement; the majority of these came from upper ditch fills. Following cleaning, the coins were identified with reference to Hill and Kent (1960) and Carson and Kent (1960). The catalogue (Appendix 3) has been prepared in accordance with the English Heritage guidelines outlined in *The Production, Analysis and Standardisation of Romano-British Coin Reports* (Brickstock 2004). A summary of the catalogue is provided below.

Small	Context	Description	Date
find no.	no.		
2	122	Constans	341-346
6	175	Magnentius	351-353
8	177	Claudius Gothicus	'270'
9	179	Radiate	Mid 4th century
67	u/s	Illegible flan	3rd/4th century
68	491	Constans	341-346
69	480	Minim	4th century
70	u/s	Radiate	3rd century
71	444	Radiate (Victorinus or Tetricus I)	3rd century
72	308	Constantine II	330-335
73	501	Illegible flan	4th century
74	181	Victorinus	<sup>268-270</sup>
75	213	Illegible flan	4th century

All of the coins are low denomination bronze issues in a moderate or poor condition. They date to the late 3rd and 4th centuries AD. The 4th century issues date to the first half of the century; the absence of late 4th century issues, which are commonly found on late Roman rural sites, suggests that the site had been abandoned by that time. This is reflected in the pottery assemblage, where late 4th century wares are almost entirely absent.

# **3.7 Metal objects** by Tora Hylton

#### Copper alloy

Two fragments of copper alloy were recovered. One is a small fragment of wire (SF15), 8mm long with a diameter of c 1mm; the other is a piece of thin rod (SF12), 39mm long with a diameter of c 4mm.

#### Iron

The assemblage of iron objects is dominated by nails (44), a small number of which are examples of hobnails for use on footwear. Other identifiable objects include a hoe, or possibly a pruning hook (SF33), a knife (SF56) and a possible swivel loop (SF76). There are a number of unidentifiable objects and undiagnostic fragments.

#### Lead

There are two items manufactured from lead: a thin, rectangular piece of lead sheet, approximately 27mm long, 10mm wide and 0.4mm thick (SF45); and a misshapen, roughly circular disc of lead, c 30mm in diameter and 7mm thick (SF7). The latter has a deep groove around the edge, formed when the lead was molten, suggesting that it may have been used to make a repair, perhaps to a vessel of some kind.

# 4 HUMAN BONE by Sarah Inskip

#### Summary

Two deposits of cremated human bone, which had been buried in two small pits [203 and 205], and a single fragment of human skull recovered from a ditch were received for macroscopic osteological analysis by Sarah Inskip of the University of Southampton in May 2008. The cremated deposits probably date to the early Roman period, or possibly the Iron Age, whereas the skull fragment dates to the 3rd or 4th century AD.

Both cremations were uniformly white/cream in colour suggesting a cremation temperature above 600° C. The cremated deposit from pit [205] contained 14g of long bone and skull as well as unidentified fragments that could only be identified as human. The other deposit, from pit [203], contained 822g of material, slightly under the average quantity for a modern complete adult cremation. Every major element of the skeleton was represented suggesting that the entire individual was placed in the pit. Very little information on age was recoverable but all visible epiphyses were fused suggesting that the remains were adult. The only pathological change noted was extra bone growth on the odontoid peg. The skull fragment was a piece of left parietal that had no pathological, peri-mortem or ante-mortem modifications.

# 5 ENVIRONMENTAL ASSESSMENT

#### 5.1 Animal bone by Karen Deighton

#### Introduction

A total of 11.1kg of animal bone was recovered during the course of the excavation of a Romano-British settlement at Milton Ham, Northampton. The material was assessed to establish the overall presence, survival, condition and potential of the assemblage, and to determine its potential for further analysis. Bone from sieved samples was included in the analysis. Bones were identified using the author's reference collection, and further guidelines from Bass (1995), Cohen and Serjeantson (1996), Hillson (1992) Prummel (1988) and Schmidt (1972). Due to anatomical similarities between sheep and goat, bones of this type were assigned to the category 'sheep/goat', unless a definite identification using guidelines from Prummel and Frisch (1986) or Payne (1985) could be made. Bones that could not be identified to species were, where possible, categorised according to the relative size of the animal represented (small: rodent/rabbit sized; medium: sheep/pig/dog sized; or large: cattle/horse size). Ribs were not identified to species.

Tooth wear and eruption were noted using guidelines from Grant (1982) and Silver (1969), as were bone fusion (Amorosi 1989, Silver 1969), metrical data (von den Driesch 1976), anatomy,

side, zone (Serjeantson 1996), pathology, butchery, bone working and condition (Lyman 1994) of the bones.

#### Results

The state of preservation of the bone is generally considered to be moderate to good. The animal species present are shown in Table 3. Fragmentation was heavy with only 7 (5%) of long bones complete. Canid gnawing was noted on approximately one fifth (19.5%) of the bone, suggesting some small bones could have been lost to the activities of scavengers (Payne and Munson 1985). There was little evidence of butchery (7.2%); butchery marks were consistent with dismembering and chopping. Some of the bone from a pit had been burnt.

Tahle	3:	The	animal	species	present
Inone	<i>J</i> .	1110	annai	species	present

Species	No. of	%
_	fragments	5
Cow (Bos)	69	47.9
Sheep/goat (Ovicaprid)	51	35.4
Pig (Sus)	7	4.9
Horse (Equus)	15	10.4
Domestic fowl (Gallus)	2	1.4

#### Ageing and sexing

One neonatal bone element was present along with two bones which were categorized as 'young'. Fusion was largely recorded as indeterminate. Only eleven mandibles were available for ageing, which is too few to establish any kill-off patterns (Table 4). No evidence for sexing was observed.

Taxon	Side	TWS*	Approx age
Cow	Right	А	0-1months
Sheep/goat	Left	D	1-2years
Cow	Left	D	18-30months
Sheep/goat	NA	А	0-2months
Sheep/goat	Right	D	1-2year
Cow	Left	G	Adult
Sheep/goat	Left	G	4-6year
Cow	Right	E	30-36months
Cow	Left	D	18-30months
Cow	Left	А	0-1month
Sheep/goat	Left	D	1-2years

Table 4: Mandibles by age group

\* TWS tooth wear stage

#### Discussion

Any statements are tentative due to the small size of the assemblage. The assemblage is dominated by cattle, followed by sheep/goat; this is fairly typical for the Roman period in this region. Comparisons with other local sites are cursory due to the scarcity of data, although a similar range of species and a similar order of dominance were observed at Wootton villa (Deighton 2005). Although no dog bones were included in the assemblage, the gnawing of bone attests to the presence of dogs at the settlement. The low numbers of pigs is again typical for the period and could be due to the species' lack of secondary products.

#### 5.2 **Charred plant remains** by Wallis Lord-Hart

Forty-one soil samples were taken, covering a variety of different contexts, including pits and ditches. Two of these samples came from likely cremations.

#### Methods

All samples were processed by flotation with a 1mm sieve used for the residue in a modified siraf tank, and then agitated in order to assist in separation. The floating fraction (flot) was collected into a 500 micron mesh. This fraction was then dried and scanned using a binocular microscope with a magnification of up to x 20. Seeds were then identified using several different sources.

#### Results

Most of the samples taken had charred seeds recovered from them, although only three (7, 10 and 31) had a very large number of seeds (more than 20). Most of the others had on average three seeds. The most common seeds recovered were cereal grains (*Triticum turgidum*, *Hordeum vulgare* and some *Triticum spelta*), the glume bases of *Triticum spelta* and the weeds Fat Hen (*Chenopodium album*) and Speedwell (*Veronica hederifolia*). One pit deposit contained seeds of plants typically found in coastal areas. A large proportion of the seeds were identifiable and in a good condition. Only a few seeds were fragmentary. A summary of the seeds identified is presented in Table 5 below.

Table 5: Seed quantification summary

Seed type	Number
Spelt - Triticum spelta (Glume Bases)	56
Possible Spelt - Cf Triticum spelta	2
Barley - Hordeum vulgare	65
Wheat - Triticum turgidum	4
Six rowed Barley – Hordeum vulgare	1
Possible Barley - Poss Hordeum vulgare	4
Barley - Hordeum vulgare (rachis fragment)	1
Oat- Avena sativa	7
Possible Oat - cf Avena sativa	1
Cereal Indet	11
Indet Glume base	8
Total cereal grains	160
Carrot family – <i>Apiaceae</i>	1
Hemlock – <i>cf Conium maculatatum</i>	1
Stinking Mayweed – Anthemis cotula	2
Chickweed – Stellaria media	2
Fat Hen- <i>Chenopodium album</i>	57
cf Geranium family	29
Rye Grasses – Lolium	9
Indet grass	1
Bromes – Bromus	1
Black Bindweed - Fallopia convulvus	3
Sheep's Sorrel - Rumex acetosella	19
Speedwell- Veronica hederifolia	19
Currently unidentified seeds	132
Indet seed	5
Total seeds	441

#### Discussion

Identification and quantification of the seeds that have been recovered from the 2nd to 4th century AD deposits at the Romano-British settlement at Milton Ham demonstrates that grain processing was being carried out on or in close proximity to the settlement. The evidence points to several different types of grain being processed, based on the recovery of rachis fragments of barley (*Hordeum vulgare*) and glume bases of spelt wheat (*Triticum spelta*). The range of charred seeds (mainly cereals and weeds associated with cultivation) and the small quantities recovered suggest that the assemblage largely consists of crop processing waste, a small proportion of which was deliberately discarded, with the remainder blown or trampled across the settlement. The seeds of coastal plants from a pit may have been introduced to the settlement in the form of packing material, which was then disposed of in the pit; further analysis is required to establish the range of coastal plant species present in the pit.

# **5.3 Charcoal** by Dana Challinor

# Introduction and methodology

Eleven samples were submitted for the assessment of the charcoal, from pits, ditches, gullies and an oven, dating to the Romano-British period. The charcoal was scanned under a binocular microscope at up to x45 magnification. Fragments >2mm were considered identifiable and quantified; for larger samples, random fragments were extracted, fractured if necessary and examined in transverse section. This method is reliable for the identification of ring-porous wood, but diffuse porous fragments often require further examination at high magnification (up to x400). In order to confirm the species list, some diffuse fragments were identified in full.

Sample	Fill no.	Feature type	Quantity	Identifications	Notes
no.					
4	112	Pit or ditch	++++	Maloideae r-w	Large fragments
		terminus		Quercus r-w	
31	237	Pit	++	Quercus	
				Maloideae r-w	
5	244	Ditch	-		Coal
30	295	Ditch	++	Quercus r-w Maloideae	
16	337	Pit	+	Maloideae r-w, Prunus r-	Non-charcoal
				W	material
-	355	Ditch	1 frag.	Fraxinus excelsior r-w	
6	371	Gully	++	Quercus r-w Maloideae	
-	387	Ditch	3 frags	Quercus	Knotty, fast
			-	-	grown
8	395	Oven	++	Quercus r-w	Some slow
					grown
10	423	Gully	+	Corylus	Non-charcoal
		-		Quercus	material
33	469	Ditch	3 frags	Corylus	
			-	Quercus	

*Table 6: Results of the charcoal assessment* 

+= present; ++ = occasional; +++ = common; ++++ = abundant; r-w = roundwood

# Results

The results of the assessment are given in Table 6 above. The samples were generally poor in charcoal, with only one producing a reasonable quantity of more than 50 fragments. A narrow range of five taxa was identified: *Quercus* sp. (oak); *Corylus avellana* (hazel); Maloideae (hawthorn, apple, pear etc.); *Prunus* sp. (cherry/blackthorn); and *Fraxinus excelsior* (ash). The *Corylus* was checked at high magnification to distinguish it from *Alnus* (alder). Roundwood fragments were observed in most samples and the general impression gained was that young wood had been used. Several contexts contained *Quercus* roundwood, and no tyloses were noted in any of the oak fragments examined. Sample 4 produced a large assemblage dominated by Maloideae (hawthorn group) roundwood fragments, some of which were of a decent size (>20mm). The little oak in this sample was from small twigs. Several of the samples contained non-charcoal material (mostly stone) but Sample 5 was entirely composed of coal fragments. There were no significant temporal differences in the assemblages, although the dataset was limited.

# Discussion

The provenance of the charcoal is likely to be from fuelwood remains from domestic-type fires. The range of taxa is typical for Romano-British sites, where oak tends to predominate, with hazel, hawthorn group and ash. At other sites (e.g. Higham Ferrers, Challinor forthcoming) it is suggested that fuelwood was derived from hedgerow species (hawthorn group, blackthorn) in conjunction with coppiced/pollarded woodland trees (oak, ash, hazel). The dataset at Milton Ham is too small to confirm this, but it is interesting that a large number of many of the samples comprised roundwood fragments typical of such gathering practices.

The coal from Sample 5 was present in enough quantity to suggest that it may have been utilised as a fuel for a specific function. Most commonly, coal seems to have been used for metallurgical fires or domestic heating (Dearne and Branigan 1995), but the context from Milton Ham was not conclusive. Similar deposits from other Roman sites in Northamptonshire are thought to have derived from an outcrop of the Warwickshire coalfield (Smith 1997) and it is likely that the coal from Milton Ham has a similar provenance.

# 6 SUMMARY OF POTENTIAL AND PROPOSALS FOR ANALYSIS

# 6.1 Review of original research objectives

The general aims of the archaeological investigation, as set out in the *Specification for Archaeological Mitigation Works* issued by WCPM (2007), were to:

- Record the nature of the main stratigraphic units encountered, in terms of their physical composition and their archaeological formation.
- Assess the overall presence and survival of structural remains relating to the main periods of occupation and the potential for the recovery of additional structural information given the nature of the deposits encountered.
- Assess the overall presence and survival of the main kinds of artefactual evidence and its condition, given the nature of the deposits encountered.
- Assess the overall presence and survival of the main kinds of ecofactual and environmental evidence, its condition and potential, given the nature of the deposits encountered.

The specific objectives of the excavation were to:

- Record any evidence of prehistoric/Romano-British settlement or other land use.
- Determine the extent of the enclosure complex.
- Record whether activity continued between the Iron Age and Roman periods or between this and subsequent periods.
- To sample and analyse environmental remains in order to create a better understanding of past land use.

#### 6.2 Revised research objectives

The assessment has demonstrated that the excavation has produced sufficient evidence to broadly attend to the original research objectives, as outlined in section 6.1 above. This is with the exception of the environmental objectives, where assessment of the faunal assemblage and environmental samples has shown limited potential, due to the small size of the assemblages. However, a comparative environmental study can be made with other Romano-British rural settlements in the area.

In the light of the excavation and subsequent assessment, it is now possible to revise the original generic research objectives and focus on specific aspects of Romano-British social, cultural and economic activity associated with the settlement remains on the site. However, it should be borne in mind that although a large part of the settlement was excavated, the eastern side of the enclosure and much of the annexe has only been investigated by geophysical survey and a single trial trench. In addition, no clear evidence for habitation was identified within the ladder enclosure or annexe and the location of the Roman building, which probably lies beyond the development area, remains unknown. Understanding the function of the site and its relationship with its agricultural hinterland is therefore limited to a certain degree. Nonetheless, there is still plenty of scope to examine the role of the settlement in the local Roman agricultural system.

With reference to regional research frameworks (Brown and Glazebrook 2000; Gurney 2002; Cooper 2006), the revised research objectives are listed below.

- i. The settlement will be set in the context of the wider 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. This will be assisted by the further analysis, where recommended, of the artefactual and environmental evidence.
- ii. The layout of the settlement is unusual for the region, although other Romano-British 'ladder' enclosures have been identified and at least one, at Little Paxton in Cambridgeshire, has been excavated. Where possible, the settlement at Milton Ham will be compared with other type-sites in the region to contribute to the understanding of how they operate within the Roman agricultural system.
- iii. As only part of the site has been excavated, the geophysical survey results will be used to produce an overall plan of the settlement to assist in the interpretation of how the settlement may have functioned.
- iv. With the assistance of the site records and further analysis of the pottery, the phasing of the settlement will be refined to determine how it developed over time. An attempt will be made to determine the period of its initial construction and to identify subsequent additions and alterations.

v. A radiocarbon date will be obtained for the two human cremations to determine if they are associated with the Romano-British settlement or date to the Iron Age. If they prove to be Iron Age in date, they will be related to other contemporary funerary sites in the area.

#### 6.3 **Proposals for further analysis**

#### Worked flint

There are no pieces of any intrinsic interest and no further work is required.

#### Roman pottery

The Roman assemblage, though comparatively modest in size, is of significance at a local/regional level. It remains the case that despite the high levels in archaeological work which has been undertaken, there has been relatively little publication of pottery assemblages from what is a ceramically diverse region. The assessment has highlighted a number of aspects of the assemblage which are of interest at a regional level. The seemingly high incidence of Dorset Black-Burnished ware is at odds with three published assemblages from nearby sites, though comparable with the small town at Towcester (Brown *et al.* 1983, 79). It is hoped that further research may resolve whether this pattern relates to chronology or to other factors.

The assessment demonstrates that there is good potential to construct the internal site chronology utilsing diagnostic pottery fabrics and forms. This might be achieved through full recording of the assemblage to the standards recommended by the Study Group for Roman pottery (SGRP 1994) and the integration of pottery records with the site stratigraphic sequence. Recommended recording will consist of the systematic recording of vessel form (based mainly on rim sherds), and measurement of rim percentage (Rim EVEs). Additionally the recording of attributes such as sooting or use wear will permit investigation of vessel use and when tied to form, inform wider aspects of site use and relative status. As part of the recording process it is recommended that a full catalogue of the samian should be undertaken to include identification of the samian stamps. It its proposed that this work be undertaken by specialists in this field (Geoffrey Dannell and Brenda Dickinson).

It is recommended that a relatively small number of pottery vessels are drawn, to include intrinsically interesting vessels (the face flagon) and a representative sample from the oven/pit 397.

#### Ceramic building material

Although the ceramic building material assemblage is of a reasonable size, and includes Roman roof, box-flue and floor tile, the absence of an associated structure precludes the necessity of carrying out any further work on it. However, further research to establish the date of the four pieces of tile with cutaways would be worth while. No further work on the fired clay is necessary. A summary and catalogue of the ceramic building material and fired clay should be included in the final report.

#### Querns

The complete bottom stone and the partial upper stone should both have simple line drawings to show their form and dimensions, accompanied by photographs to show stone texture and finishing.

# Glass

The small assemblage of five fragments of Roman glass, only two of which are diagnostic, is too small to warrant any further work, although a summary and catalogue of the Roman glass should be included in the final report.

# Roman coins

The coins are in a stable condition and require no specialist conservation. They are typical of the range of low denomination coins found on Roman rural sites dating to the 3rd and 4th centuries AD and further work would provide no further information. A summary and catalogue of the Roman coins should be included in the final report.

# Metal objects

When the iron objects have been X-rayed and returned, they will be identified and recorded, where possible, with reference to Manning (1985) and a full catalogue of the iron objects will be produced. It is recommended that the hoe/pruning fork (SF33) is drawn. No further works is required on the lead and copper alloy fragments.

#### Cremated human bone

Little more can be gained from any further work on the cremated bone. However, in the absence of any form of artefactual dating evidence associated with the burials, it is advised that charcoal obtained from cremation [205] should be submitted for radiocarbon age determination. It may then be possible to set the cremations in context. In the light of the radiocarbon date, the report prepared for this assessment should be revised and included in the final report.

#### Animal bone

The small size of the assemblage limits the scope of any further analysis, although a comparative approach, looking at the range of species present at the settlement with other contemporary rural sites in the area, may assist in shedding light on what form of animal husbandry was being practiced here. Given that the layout of the settlement at Milton Ham is relatively unusual, although not unknown, in the East Midlands region, an understanding of the economic base of the settlement is of significant importance.

# Charred plant remains

In general, the potential of the charred plant remains from Milton Ham is low, largely due to the small number of seeds recovered from the bulk of the samples. However, several samples produced significant quantities of charred grain and some chaff, and one sample contained seeds of coastal plants. Further work should compare the seed assemblage with those of other late Roman rural sites in the local area to determine if the assemblage is typical of the range of material recovered from such sites, or if it differs to explain the possible reasons for this. The seeds of coastal plants from a pit should be examined in greater detail and attempts made to explain how the seeds of coastal plants may have been deposited here.

# Charcoal

Further work on the charcoal samples is not merited, but it is recommended that a short note on the basis of this assessment report should be included in the final publication.

# Radiocarbon dating

Two human cremations were contained in small, isolated pits [203 and 205], which could not be stratigraphically linked to any other features, and they were not accompanied by any artefactual dating evidence. It is likely that they date to the early Roman period, although there is some background Iron Age activity in the area. It is proposed that a radiocarbon date should be obtained from charcoal from the fill of pit [205] to establish the date of the burials and set them in context.

# 7 **REPORTING AND ARCHIVE**

#### 7.1 The report

The synopsis provided below will form the basis for both the full report and the report digest prepared for final publication.

#### **Title page**

Contents

Acknowledgements

Abstract

# INTRODUCTION

Project background Site location Geology and topography Archaeological and historical background Excavation strategy Location of archive

#### **EXCAVATION RESULTS**

Initial settlement (late 2nd/early 3rd century AD) The 'ladder' enclosure and annexe (3rd and 4th centuries AD) Later Roman activity (4th century AD) Other features

#### THE FINDS

Roman pottery Ceramic building material Querns Glass Roman coins Metal objects

#### THE HUMAN CREMATIONS

# ENVIRONMENTAL EVIDENCE Animal bone Charred seeds Charcoal

#### **RADIOCARBON DETERMINATION**

#### DISCUSSION

# BIBLIOGRAPHY

#### APPENDICES

#### 7.2 **Provisional publication proposals**

It is proposed to publish the results of the excavations in a future volume of the county journal *Northamptonshire Archaeology*, to be submitted by June 2009.

# 8 STORAGE AND CURATION

A microfilm copy of the site archive and narrative will be made to RCHME 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 NCC Archaeological Advisor. It will not contain material requiring special curation. The location for the long-term storage of the site archive has yet to be arranged.

#### 9 **RESOURCES AND PROGRAMMING**

#### 9.1 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.

# 9.2 Proposed work and completion dates\*

Tasks	Personnel	Timetable
Structural site narrative	Simon Carlyle	Dec 2008
Roman pottery	Ed McSloy	Oct 2008
Ceramic building material	Pat Chapman	Oct 2008
Metal objects	Tora Hylton	Oct 2008
Animal bone	Karen Deighton	Oct 2008
Charred seeds	Wallis Lord-Hart	Oct 2008
Illustrations	NA drawing office	Jan 2009
Integration of specialist reports	Simon Carlyle	Jan 2009
Report digest and discussion	Simon Carlyle	Feb 2009
Editing	Andy Chapman	Mar 2009
Preparation of research archive	Simon Carlyle	Aug 2009

\*Subject to approval of this document by the end of September 2008.

#### 9.3 Key personnel

The key personnel associated with carrying out the tasks detailed in section 9.2 are as follows:

Simon Carlyle	Senior Project Officer (NA)
Ed McSloy	External specialist, Roman pottery
Tora Hylton	Finds Manager (NA)
Pat Chapman	Finds Supervisor, CBM specialist (NA)
Andy Chapman	Senior Archaeologist (NA)
Karen Deighton	Environmental Manager (NA)
Wallis Lord-Hart	Environmental Assistant (NA)

# BIBLIOGRAPHY

Aird, P, and MacRobert, E, forthcoming The Roman Pottery from Ashton, Northants

Binford, L, 1981 Bones: Ancient Man and Modern Myths, New York

Booth, P M, and Green, S, 1989 The Nature and Distribution of Certain Grog-tempered Vessels, *J Roman Pottery Stud*, **2**, 77-84

Brickstock, R J, 2004 *The Production, Analysis and Standardisation of Romano-British Coin Reports*, English Heritage

Brown, A, 1994 A Romano-British shell-tempered pottery and tile manufacturing site at Harrold, Bedfordshire, *Bedfordshire Archaeol J*, **21**, 19-107

Brown, A E, Woodfield, C, and Mynard, D C, 1983 Excavations at Towcester: The Alchester Road Suburb, *Northamptonshire Archaeol*, **18**, 43-146

Carlyle, S, and Thorne, A, 2002 *Archaeological Evaluation at Milton Ham, Northampton*, Northamptonshire Archaeology

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

Carson, R A G, and Kent, J P C, 1960 Bronze Roman Imperial Coinage of the Later Empire AD 346-498, London

Challinor, D, forthcoming, The Wood Charcoal, in S Lawrence and A Smith, *Excavations of a Roman roadside settlement and shrine at Higham Ferrers, Northants,* Oxford Archaeology Monograph

Chapman, A, Thorne, A, and Upson-Smith 2005, A Roman Villa and Anglo-Saxon Burial at Wootton Fields, Northampton, *Northamptonshire Archaeol* **33**, 79-112

Clason, A, (ed) 1975 Archaeozoological Studies, Amsterdam

Cohen, A, and Serjeantson, D, 1996 A manual for the identification of bird bones from archaeological sites

Crosby, V, and Neal, D, forthcoming *Excavations at Stanwick, Northamptonshire* 

Davis, S J M, 1987 Animals in Archaeology, London

Dearne, M J and Branigan, K, 1995 The use of coal in Roman Britain, *Antiquaries Journal* **75**, 71-105

Deighton, K, 2005 The animal bone, in Chapman, Thorne and Upson-Smith 2005, 107

Dickinson, B M, 1986 The samian potters' stamps, in Stead and Rigby 1986, 202-12

Fieller, N R J, Gilbertson, D D, and Ralph, N G A, (eds) *Palaeobiological investigations*, BAR Int series **266** 

Friendship-Taylor, R, 1979 Excavation of the Belgic and Romano-British site at Quinton, Northamptonshire: Site B (1973-7), J. Northampton Museums Art Gallery **13**, 1979, 2-176

Grant, A, 1982 The use of tooth wear as a guide to the age of domestic ungulates, in Wilson, Grigson and Payne (eds) 1982, 91-108

Grigson, C, 1982 Sex and age determination of some bones and teeth of domestic cattle: a review of the literature, in Wilson, Grigson and Payne (eds), 1982, 7-23

Gurney, D, 2002 Standards for Field Archaeology in the East of England

Halstead, P, 1985 A study of mandibular teeth from Romano-British contexts at Maxey, *East Anglian Archaeol* 27, 219-24

Hancocks, A, 2006 Roman Pottery, in Jones et al 2006, 107-32

Hill, P V, and Kent, J P C, 1960 *The Bronze Coinage of the House of Constantine AD 324-346*, London

IFA 1994, revised 2001 *Standards and Guidance for Archaeological Excavation*, Institute of Field Archaeologists

IFA 1985, revised 2007 Code of Conduct, Institute of Field Archaeologists

Manning, W H, 1985, *Catalogue of the Romano-British Iron Tools, Fitting and Weapons in the British Museum*, British Museum Publications Ltd

Johnston, D E, 1969 Romano-British Pottery Kilns near Northampton, Antiq. J. 49(i), 75-97

Jones, L, Woodward, A, and Buteux, S, 2006 Iron Age, Roman and Saxon Occupation at Grange Park: Excavations at Courteenhall, Northamptonshire, 1999 Birmingham Archaeology Monograph Series 1, Brit. Archaeol. Rep. Brit. Series **425** Oxford, British Archaeological Reports

McSloy, E, Wallace, C, and Perrin, J R, forthcoming, The Late Iron Age and Roman pottery, in Crosby and Neal forthcoming

Noddle, B, 1984 Exact chronology of epiphyseal closure in domestic mammals of the past, *Circaea* **2**, 21-27

Parry, S J, 2006 Raunds Area Survey: An Archaeological Study of the Landscape of Raunds, Northamptonshire 1985-94, Oxford, Oxbow Books

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

Payne, S, 1975 Partial recovery and sample bias, in Clason (ed), 1975, 78-82

Payne, S, and Munson, P, 1985 Ruby and how many squirrels?, in Fieller, Gilbertson and Ralph (eds) 1985, 31-40

Perrin, J R, 2006 Romano-British pottery, in Parry 2006, 84-91

Price, J, and Cottam, S, 1998 *Romano-British Glass Vessels: A Handbook,* Practical Handbook in Archaeology **14**, Council for British Archaeology

SGRP 1994 *Guidelines for the Archiving of Roman Pottery*, Study Group for Roman Pottery Guidelines Advisory Document **1** 

Smith, A H V, 1997 Provenance of coals from Roman sites in England and Wales, *Brittania* 28, 297-324

Stace, C, 1997 Flora of the British Isles, 2nd edn, Cambridge: Cambridge University Press

Stead, I M, and Rigby, V, 1986 *Baldock: The Excavation of a Roman and Pre-Roman Settlement, 1968-72*, Britannia Monograph, **7**, London, Society for the Promotion of Roman Studies

Tomber, R, and Dore, J, 1998 *The National Roman Fabric Reference Collection: a Handbook,* London, Museum of London Archaeology Service

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

WCPM 2007 Milton Ham, Northampton: Specification for Archaeological Mitigation Works, Waterman CPM, document no. H2156\_02

Wilson, B, Grigson, C, and Payne, S (eds), 1982 Ageing and sexing of animal bones from archaeological sites, BAR British series 109

Woods, P J, 1970 Brixworth Excavations: Vol. I The Romano-British villa, 1965–70 (Part 1: the Roman coarse pottery and decorated samian ware), re-printed from Journal 8 of the Northampton Museum and Art Galley, 3-102

WYAS 2002 *Geophysical survey at Milton Ham, M1 Junction 15a, Northamptonshire*, West Yorkshire Archaeological Services, report no. **984** 

Zohary, D, and Hopf, M, 2000 *Domestication of plants in the Old World*, 3rd edn, Oxford: Clarendon Press

#### Maps

BGS 1969 Solid and Drift Geology (England and Wales), Sheet 202, British Geological Survey 1:50,000

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

Northamptonshire Archaeology a service of Northamptonshire County Council

# **APPENDIX 1: Summary of features**

#### Abbreviations

F flint; P pottery; T tile; Br brick; Fc fired clay; G glass; B bone; c coin; sf small find (details in **Comments** column); r recut; u/s unstratified

Pottery dates: E early; M mid; L late; C century

Context	Feature type	Comments	Finds	Date of pottery
<b>no.</b> 101	Topsoil		-	
101	Subsoil		-	
102	Natural substrate		-	
104 [105]	Gully	Sealed by 102	-	
106	Posthole	Sealed by 102	-	
[107] 108	Pit or ditch		РТ	MC3-C4
[109] 110	terminus Modern land		Р	MC3-C4
[111] 112	drain Pit or ditch	[113] cuts gullies [115] [234]. Two Fe	P B T sfs	MC3-C4
[113]	terminus	nails and copper wire fragment		
114 [115]	Gully	Cut by [113]. Fe hobnail	P B T sf	MLC4
116 [117]	Ditch	See [230].	Р	RB
118 [119]	Gully	Cuts gullies [214] [216]	Р	LC2-C4
120 [121]	Gully	Cuts buried soil 187.	F P	RB
122 [123]	Gully	Short curvilinear. Coin of Constans AD341-346	F P B T c	LC2-C3+
124 [125]	Gully	Fe nail See [222]	P B T sf	LC1-C2
126 [127]	Ditch	Fe nail See [259]	P B sf	LC2-C4
128	Ditch		Р	MC3-C4
[129] 130 [131]	Gully	Cut by [135], sealed by 187. Fe nail, glass frag. See [510]	P T G sf	C2+
132 [133]	? pit		Т	RB
134 [135]	Ditch	Same as ? [137]. Sealed by 187	Р	MC3-C4
136 [137]	Gully	Same as [268]. Cut by [238] [261] [264] [270] [272]	Р	C2+
138 [139]	Gully	Cuts 278. Sealed by 187	FPT	C2-C3+
140	Modern land drain		Т	
[141] 142 [142]	Gully	Sealed by 187. Fe hobnail	P sf	RB
[143] 144 290	Main enclosure ditch		Р	C2-C3+
[145]				
146 [147]	Ditch		FP	RB
148 [149]	Ditch with terminus	Cuts posthole [159]	ВТ	
150 [151]	Pit		Р	LC2-C4
152 [153]	Furrow	Iron knife blade	sf	
154 [155]	Furrow		-	
156 [157]	Furrow		-	
158	Posthole	Cut by ditch terminus [149]	-	

Context no.	Feature type	Comments	Finds	Date of pottery
[159]				
160	Main enclosure		РТ	C2-C3
161	ditch (west side)			
[162]r	· · · /			
163			РТ	MC2-C4
164			Р	C2+
165				
[166]r				
167			Т	
[168]				
169	Post pit		-	
170		Contained stones for post packing		
171				
[172]				
173	Gully		РВТ	C3-C4
[174]				
175	Main enclosure	Coin of Magnentius AD351-353	sf	
[176]	ditch			
177	Ditch	Sealed by 187. Cuts ditches [399] [413].	P B T sf	LC2-C4
[178]		Coin Claudius Gothicus AD270+, spindle		
		whorl frag, Fe nail		
179	Ditch	Coin MC4	sf	
[180]				
181	Ditch	Lead pot mender, coin Victorinus AD	P sf	LC2-C4
[182]		268-70		
183	Ditch	See [511]	РВТ	RB
[511]				
184			В	
[212]		[212] re-cut of ditch [212]		
185	Ditch		F P T	MC3-C4
[186]				
187	Buried soil	In patches across site.	PBTG	LC2+
188	Ditch	See [465]	P sf G	MC3-C4
[189]				
190	Ditch	Two sections.	F P	LC2-C4
[191]				
192	Ditch		Р	RB
[193]				
194			FPB	C2-C3+
[195]		Re-cut of [193]		
196			FPT	MC3-C4
[197]		Re-cut of [193]		
198	Ditch	Sealed by 187. ?Brooch pin	F P B T sf	LC2-C3
[199]				
200	Ditch		РВТ	C3
[201]				
202	Pit	Cremation 1	Burnt bone	
[203]				
204	Pit	Cremation 2	Burnt bone	
[205]				
206	Pit		Burnt bone	
[207]		<u> </u>		
208	Post/stakehole	1.00m from [211]	-	
[209]				
210	Post/stakehole	1.00m from [209]	-	
[211]				
[212]	Ditch	Re-cut of [511]. See 184	-	
213	Short gully	Cut by [119] Coin C4	Р	LC2-C3+
[214]				
215	Gully	Cut by [119]	F P B T	LC2-C3+
[216]	-			
217	Ditch terminus	Sealed by 187. Cuts [220] [222] & [224].	РВТ	LC3-C4
[218]		Possible re-cut of [220]		
219	Gully	Cut by [218]	РВТ	MC3-C4
[220]	5			
221	Gully	Sealed by 187. Cut by [218]. See[125]	РТ	MC2-EC3
[222]			-	
223	Gully	Cut by [222]	-	
[224]				
	1			ł
225	Ditch	Stone with tooling marks	P B T sf	MLC4

Context no.	Feature type	Comments	Finds	Date of pottery
227	Ditch	Re-cut [230]	-	
[228] 229				
[230]r				
231 [232]	Ditch		-	
233	Gully	Cut by [236]	В	
[234] 235	Gully	Cut by [113], Cuts [234]	P B	MC3-C4
[236]	Guily			
237 [238]	Pit	Quern fragment	F P B T sf G	C2; C3-C4
239 [240]	Main enclosure ditch	See [238][247] [257]. Two Fe nails	P B sfs	MC3-C4
241	Ditch	See [109]	Р	LC2-C4
[109] 242	Ditch	Cut by [109]	F P T	MLC3+
[243] 244	Ditch		Р	MC3-C4
[245]			1	WIC5-C4
246 [247]r 255	Main enclosure ditch	See [240] [257]. Fe object	P sf	MC3-C4
248	Gully		-	
[249] 250	Ditch		F P	LC2-C4
251				
[252] 253	Ditch		РВТ	LC2-C4
[254]	Main enclosure	9		
[247]r 255	ditch	See [240] [247]	PBTG	MC3-C4
256				
[257] 258	Ditch	See [127]	РВ	MC2-C4
[259] 260	Gully	Cuts [266]	P	RB
[261]				KD
262 263	Gully		Т	
[264]				
265 [266]	Gully	Cut by [261]	-	
267	Gully		Т	
[268] 269	Gully	Cuts [274]	-	
[270]r	Cully	0.000 [27.1]		
271 [272]				
273	Gully		-	
[274] 275	Gully	Cuts [139] [279] [281]	РТ	MC2-C4
276			Р	MC3-C4
[277] 278	Gully	See [272]	F P T	MLC3
[279] 280			Р	C3-C4
[281]	Gully		Р	03-04
282	Ditch		РВТ	LC3-C4
[283]r 284				
285 286			P P	C2+ C2-C4
[287]				
288 [289]	Ditch		РВ	LC2-C4
140	Main enclosure	See [145].	-	
290 [145]	ditch			
291	Pit		Р	LC2-C3
[292] 293	Posthole		P B	C2

Context no.	Feature type	Comments	Finds	Date of pottery
[294]				
295	Ditch		-	
[296] 297	Gully	Cut by [372], [375]	_	
[298]	Guily	Cut by [572], [575]	-	
299	Ditch	Fe nail	P sf	C2
300				
[301] 302	Pit		Р	C2
[303]	110		1	02
304	Gully		Р	RB
[305] 306	Gully		Р	LC2-C4
[307]	Guily		r	LC2-C4
308	Ditch	Coin Constantine AD330-335	P sf	C3+
309			РВ	RB
[310]r 311			РТ	C2-C3
[312]		See [332]	1 1	02 05
313	Pit		-	
[314]	Certhe	See [318]	-	
315 [316]	Gully	See [318]	-	
317	Gully terminus	Cuts [316]	-	
[318]	-			
319	Ditch		РВ	RB
[320]r 321			РТ	RB
322			1 1	TLD I
[323]r				
324 325				
[326]				
327	Gully terminus	See [330]	-	
[328]		G +1 52203		
329 [330]	Main enclosure ditch (West)	Cut by [328]	В	
331	Ditch	See [312]. Re-cut [354]	Р	C2+
[332]				
333	Cancelled			
[334] 335	Ditch		-	
[336]	Ditei		-	
337	Pit	Quern fragment	P B T sf	C3+
[338]	D': 1		D.T.	1462.64
339 [340]	Ditch		РТ	MC3-C4
341	Main enclosure	Re-cuts [343] & [345] branch off from	РТ	LC2-C4
342	ditch (south)	ditch [343] at the south end.		
[343]r 344			Р	
[345]r			P	
346				
[347]			DDT	L CO CO
348 [349]	Ditch	Cut by [352]	РВТ	LC2-C3+
350	Ditch	Cuts [349]	Р	MLC4
351			Р	MC3-C4
[352]	Dital	S [222]		
353 [354]	Ditch	See [332]	-	
355	Ditch	?Knife blade, Fe object	P B T sfs	LC2-MC3
[356]		-		
357	Ditch	Fe object	P sf	LC2-MC3
[358] 359	Ditch	Fe nail	P B sf	LC2-MC3
[360]	Ditti	1 C Hull	1 0 01	102-14103
361	Ditch		Р	LC2-C3
[362]	D'1		D	
363 [364]	Ditch		Р	MC3-C4
365	Ditch	1	Р	RB

Context	Feature type	Comments	Finds	Date of pottery
<b>no.</b> [366]				
367 [368]	Ditch	Tooled stone, Fe nail	P sfs	LC2-C3
369 [370]	Ditch		-	
371 [372]	Gully	Cuts [298]	РВ	C2-C3+
373 374	Ditch	Cuts [298]	Р	C2-C3+
[375] 376	Ditch	Cut by [379], [381], [383]	Р	LC2-C4
[377] 378		ear of [077], [007], [005]	Р	C2-C4
[379]r 380				
[381]r 382			Р	LC2-C4
[383]r 384 [385]	Ditch	Cuts [387]	РВ	C2-C3
386 387	Ditch	Cut by [385]. Fe hobnail Fe hobnail, nail	PBTsf Psf	MC3-C4 LC2-MC3
[388] 389 [200]	Ditch		-	
[390] 391 [392]	Pit	Quernstone, fe object, lead	P B T sfs	MLC3
393 [394]	Pit		Р	C2+
395 396	Pit – possible oven	Three quern frags, 1 worked stone, ? metal frag, Fe nail	P B T sfs	MLC2 C2+
[397] 398 [399]	Ditch	Cut by [178], [413]	Р	MC3-C4
400 [401]	Ditch		РТ	C3-C4
402 [403]	Gully		-	
[420]r 404 [405]	Gully	Cuts [422]. Recut [420]. Fe knife blade	P G sf	C3-C4
406 [407]	Gully		Р	LC2-C4
408 [409]	Gully		Р	RB
410 [411]	Gully		РВТ	MLC3
412 [413]	Ditch	Cuts [178], [399]	Р	RB
414 [415]	Gully	See [424]	Р	C2-C3
416 [417]	Pit		Р	C2+
418 419 [420]r	Gully		Р	C3+
421 [422]	Gully	Cut by [405]	-	
423 [424]	Gully	Cuts [426] [428]. See [415]	Р	C2+
425 [426]	Gully		-	
427 [428]	Pit	Cut by [424]	-	
429 [430] 431	Ditch	Quernstone, Fe object	P B T sfs	C3+
[432]r 433	Gully		P	C2-C3
[434] 435	Main enclosure			
436	ditch		Р	LC2-C4

Context no.	Feature type	Comments	Finds	Date of pottery
[437]r 438			РТ	LC2-C4
[439] 440	Gully		-	
[441] 442	Gully		Р	LC3-C4
[443] 444	Ditch	Cut by [338] [477]. Two hobnails, Fe	F P T sfs	MC3-C4
[445] 446		nail, C3 radiate	РТ	C3+
[447] 448 [449]			РВТ	C3+
450 451	Main enclosure ditch		РТ	MLC4
[452] 453	Main enclosure		-	
[454]r 455 456 [457]	ditch			
458 [459]	Ditch	Cut by [470]	РВ	MC3-C4
460 [461]	Pit		F	
462 [463]	Gully		Р	RB
464 [465]	Gully		-	
466 467	Ditch	Cut by [470]	P P B	MLC3 C3+
[468] 469	Ditch	Cuts [459] [468]. Fe horseshoe?,	P B sfs	LC3-EC4
[470] 471	Ditch	quernstone	Р	RB
[472] 473 474		Fe object	P sf	LC2-C4
[475]r	0.11	Recut of [472]. Cuts [477]		
476 [477]	Gully	Cut by [475]		
478 [479]	Ditch		Р	LC2-C4
480 [481]	Gully	Coin C4	Р	C3+
482 [483]	Main enclosure ditch	Cut by [486]	Р	RB
484 485			Р	MC3-C4
[486]r 487	Gully	Cuts [483]		
[488] 489	Ditch		FPT	LC2-C3
[490]		Fe nail, coin Constans AD341-346		
491 [492]	Ditch	re nan, com Constans AD341-346	F P T sf	MLC3
493 [494]	Ditch		ΡT	LC2-C3+
495 [496]	Ditch terminus		Р	MC2-C3
497 [498]	Ditch		РТ	C2-C3+
499 [500]	Gully		Р	MC3-C4
501 [502]	Gully		Р	MLC3+
503 [504]r	Ditch terminus	Recuts [504], [506]	Р	RB
505 [506]r 507 [508]				C2-C3+

Context	Feature type	Comments	Finds	Date of pottery
no.				
509	Pit		-	
[510]				
183	Ditch	See 183	-	
[511]				

Description	Codes	Present in contexts
Belgic type grogged wares	A; A8	101,102,194,241
Romanised grog-tempered (Upper Nene types)	A1/A3	122,124,136,187,237,244,250,285,288,291,293,299,302,339,359,367 368,384,386,387,395,396,416,418,423,433,458,466,467, 484,497
Romanised grog-tempered (Towcester/north Bucks area)	A2	$103,112,114,118,122,126,128,150,177,181,187,188,190,196,198,200\\213,215,217,219,237,239,241,242,244,246,253,279,280,282,288,306\\308,337,339,341,348,350,355,359,367,376,382,386,391,395,398,400\\404,406,410,431,436,438,446,448,458,466,469,473,478,484,493,499$
Misc. local (Upper Nene valley) reduced wares	C; C4; C11; C15; C17; C19; C20	$101,102,103,112,114,116,118,120,122,124,126,128,130,136,138,142\\144,160,163,173,177,181,183,185,187,188,190,192,194,196,198,200\\213,215,219,221,225,235,237,239,241,242,244,246,253,255,258,260\\275,276,278,279,280,282,285,286,288,291,293,302,306,308,309,311\\321,337,339,348,350,351,355,357,359,361,363,365,367,368,371,373\\378,384,386,387,391,393,395,398,400,404,408,410,412,414,418,423\\431,433,442,444,446,448,458,466,467,469,473,478,480,482,484,489\\491,493,495,497,499,501,503,508$
Local (Upper Nene valley) whiteware	D6/9; D2	142,173,177,188, 293,299,393,395,442,444,446
Local (Upper Nene valley) oxidised	D	101,102,110,116,124,130,144,185,188,194,196,282,299,304,319,351 357,358,361,386,391,395,418,448,501,508
Local/Harrold, Beds shell- tempered	B; B4	112,114,118,120,122,124,128,132,138,146,173,188,191,194,196,198 200,215,217,221,225,235,237,239,242,244,246,253,255,276,282,288 306,311,321,348,350,351,355,357,359,361,368,373,376,384,386,387 391,393,396,398,404,410,412,418,431,436,442,444,448,451,458,462 466,467,469,471,473,478,480,489,491,499,501
Lower Nene grey ware	C1	128
Lower Nene Colour-Coated ware	D1, D24	114,128,163,198,217,219,221,225,246,258,275,282,291,348,351,357 359,361,386,387,391,395,410,418,431,442,446,458,466,467,480,484 489,491
Oxfordshire red-slipped	D4	108,112,114,128,134,191,196,217,219,225,235,239,246,255,282,350 386,398,442,444,484,499
Oxfordshire parchment	D27	363,458,499
Oxfordshire white mortaria	OXF WH	110,173,291,395,410,491
Dorset BB1	C8	112,185,188,200,219,235,237,244,276,279,280,308,337,339,355,361 386,391,400,404,410,442,446,448,466,467,469,480,501
Mancetter-Hartshill mort.	MH WH	187,244,355,359,414,446,466,469,495
Baetican amphora	BAT AM	386
Samian (most Central Gaulish)	SA	126,128,130,164,188,196,198,242,244,282,288,308,331,355,367,378 386,387,423,469,495

# **APPENDIX 2:** Roman pottery fabrics (grouped); incidence by context

# **APPENDIX 3**

# **Coin catalogue**

Small find	Ruler	Date	Dia.	Wt	Legend
no.	00010704010				
2	CONSTANS Denom: AE Wear: W/W Context: 122	341-346	16mm		Obv: CONSTAN SFPAVG Rev: VICTORIAEDDAVGGQNN Mint: Trier <sup>1</sup>
	Axis: 1				
6	MAGNENTIUS	351-353	20mm		Obv: DNMAGNEN TIVSPFAVG
0	Denom: AE Wear: SW/SW Context: 175	551-555	2011111		Rev: VICTORIAEDDNNAVGETCAE Mint: Amiens <sup>2</sup>
-	Axis: 12	(			
8	CLAUDIUS	'270'	16mm		Obv: DIVO CLAVDIO
	GOTHICUS				Rev: CONSECRATIO
	Denom: AE				Mint: -
	Wear: W/W Context: 177 Axis: 6				This is a radiate copy of this type.
9	Radiate	M4C	16mm		Obv: -
-	Denom: AE				Rev: FEL TEMP REPARATIO falling
	Wear: C/EW				horseman prototype.
	Context: 179 Axis: -				Mint: -
67	Illegible flan	3/4C	16mm		Obv: -
	Denom: AE				Rev: -
	Wear: C/C				Mint: -
	Context: u/s				
	Axis: -				
68	CONSTANS	341-346	15mm		Obv: CONSTAN SPFAVG
	Denom: AE				Rev: VICTORIAEDDNNAVGGQNN
	Wear: W/W				Mint: Trier II <sup>3</sup>
	Context: 491				
	Axis: 6				
69	Minim	4C	10mm		Obv: -
	Denom: AE				Rev: -
	Wear: C/C				Mint: -
	Context: 480				
70	Axis: -	20	165		Ohan
70	Radiate	3C	16.5mm		Obv: -
	Denom: AE				Rev: - Mint: -
	Wear: EW/EW				Mint: -
	Context: u/s Axis: 11				
71	Radiate	3C	17mm		Obv: Victorinus / Tetricus I ?
/ 1	Denom: AE	50	1 / 111111		Rev: -
	Wear: EW/EW				Mint: -
	Context: 444				Traces of original white metal coating.
	Axis: 11				Traces of original white mean country.
72	CONSTANTINE II	330-335	16mm		Obv: CONSTANTINVSIVNNOBC
	Denom:	000 000	1011111		Rev: GLOR IAEXCERC ITVS (2 standar
	Wear: VW/VW				type)
	Context: 308				Mint: Trier II <sup>4</sup>
	Axis: 6				
73	Illegible flan	4C	15mm		Obv: -
	Denom: AE				Rev: -
	Wear: C/C				Mint: -
	Context: 501				
	Axis: -				
74	Victorinus	<b>`</b> 268-	16mm		Obv: IMPCVICTORINVSPFAVG
		270'			Rev: INVICTVS
	Denom: AE	270			Kev. IIV VICI VS

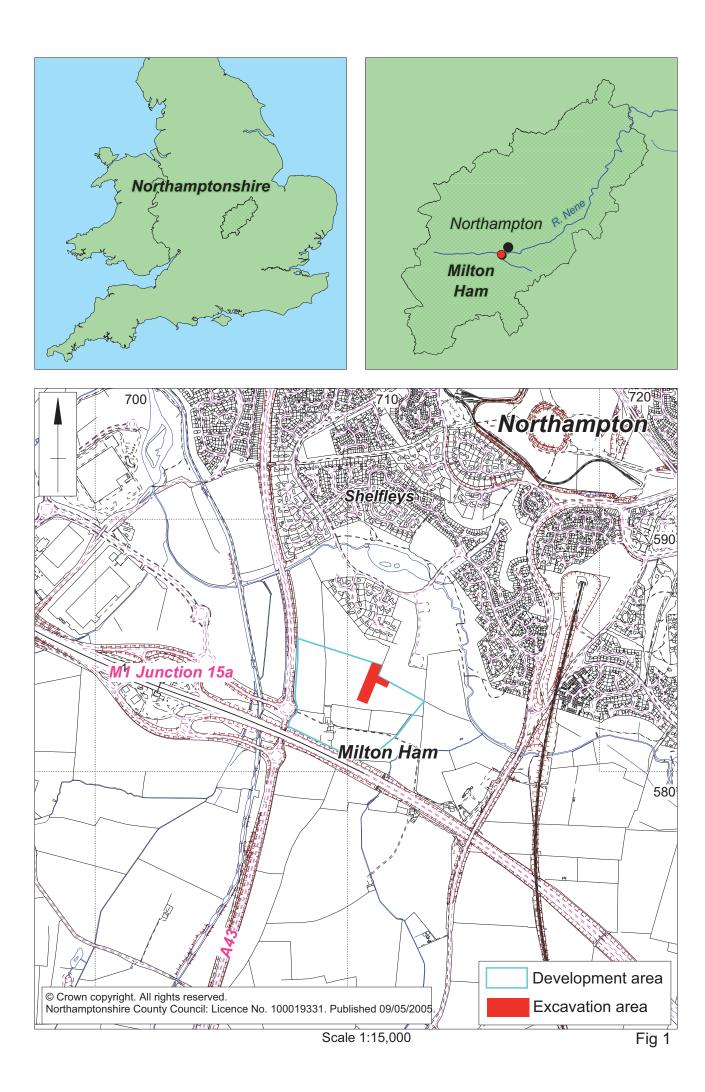
Small find no.	Ruler	Date	Dia.	Wt	Legend
75	Context: 181 Axis: 6 Illegible flan Denom: AE Wear: C/C Context: 213 Axis: -	4C	17mm		This is a radiate copy of this type. Obv: - Rev: - Mint: -

<sup>1</sup> The mint mark was lost off the edge of the flan but the letter O in the field between the facing victories and the obverse type of bust with pearls and diadems would reflect a Trier mint.

 $^2$  The partial mint mark of MB indicated Amiens. The type of the reverse was CK type 1; the issue can be paralleled as CK5-6.

<sup>3</sup> The TRS mint mark and the D in the field indicates Trier second officina HK 148-50

<sup>4</sup> The mint mark TR.S indicates Trier second officina HK 63





Scale 1:500

# Romano-British settlement, Milton Ham, site plan Fig 2