

# Northamptonshire Archaeology

# Archaeological excavation at Booth Rise, Northampton: Assessment Report and Updated Project Design



# **Northamptonshire Archaeology**

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Liz Muldowney Report 13/166 October 2013



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# **OASIS REPORT FORM**

PROJECT DETAILS	OASIS No: 159669		
Project title	Archaeological excavation on land at Booth Rise, Northampton: Assessment and Updated Project Design		
Short description	Archaeological excavation was carried out by Northamptonshire Archaeology between September 2012 and January 2013, on behalf of William Davis Homes. Part of an early Romano-British rural settlement was uncovered as well as a small number of late Iron Age pits and early Anglo-Saxon settlement. The ditch systems were constructed in the early 1st century AD and were maintained and modified through to the middle to late 2nd century AD when the area was abandoned. The core of the settlement associated with these features was not within the boundaries of the excavated area, although the relatively large pottery assemblages often comprising large unabraded sherds, in field ditches suggests that domestic structures were not far away.		
Project type	Excavation		
Site status	Wasteland for housing		
Previous work	Geophysical Survey, Trial tren	ching 2012	
Current land use	Wasteland	<u>-</u>	
Future work	Unknown		
Monument type/period		e pit. Saxon building	
Significant finds	Roman ditch systems, Iron Age pit, Saxon building  Late Iron Age and Roman pottery, animal bone, human bone; ceramic building material; glass; industrial waste; metalwork		
PROJECT LOCATION		· · · · · · · · · · · · · · · · · · ·	
County	Northamptonshire		
Site address	Land off Booth Rise, Northam	oton	
Study area	1.3 ha		
OS Easting & Northing	SP 7871 6474		
Height OD	98.5 to 102m OD		
PROJECT CREATORS			
Organisation	Northamptonshire Archaeology		
Project brief originator	Northamptonshire County Council		
Project Design originator	Northamptonshire Archaeology		
Director/Supervisor	Liz Muldowney/Jason Clarke and Simon Markus		
Project Manager	Anthony Maull		
Sponsor or funding body	William Davis Homes		
PROJECT DATE			
Start date	17 September 2012		
End date	18 January 2013		
ARCHIVES	Location	Content	
Physical	Project code: NOR BOR 12	Pottery; animal bone, antler, metalwork, slag, glass, cbm, human bone; photographs; plans and sections on permatrace	
Paper		Site records; background data	
Digital		Survey data; reports; digital photographs	
BIBLIOGRAPHY	(NA report)	d or forthcoming, or unpublished client report	
Title	An archaeological excavation and UPD	at Booth Rise, Northampton: Assessment	
Serial title & volume	13/166		
Author(s)	Liz Muldowney		
Page numbers			
Date	October 2013		

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# ARCHAEOLOGICAL EXCAVATION AT BOOTH RISE, NORTHAMPTON ASSESSMENT REPORT AND UPDATED PROJECT DESIGN

#### Abstract

Archaeological excavation was carried out by Northamptonshire Archaeology between September 2012 and January 2013, on behalf of William Davis Homes. Part of an early Romano-British rural settlement was uncovered as well as a small number of late Iron Age pits and early Anglo-Saxon settlement. The ditch systems were constructed in the early 1st century AD and were maintained and modified through to the middle to late 2nd century AD when the area was abandoned. The core of the settlement associated with these features was not within the boundaries of the excavated area, although the relatively large pottery assemblages often comprising large unabraded sherds, a burial and a pottery kiln indicate that domestic structures lay nearby.

#### 1 INTRODUCTION

# 1.1 Background

SLP Consulting on behalf of William Davis Homes commissioned Northamptonshire Archaeology to undertake archaeological mitigation work on the proposed development site on land off Booth Rise, Northampton (NGR SP 78710 64740, Fig 1). The works were required as mitigation following geophysical survey (Souterrain 2012) and trial trench evaluation (MetroMOLA 2012) in response to a planning application for residential development (08/0214/FULWNN).

In accordance with paragraph 141 of the National Planning Policy Framework (DCLG 2012), Northamptonshire County Council have required that the impact of development on heritage assets present on the site to be mitigated through a programme of archaeological investigation and recording, leading to analysis and publication of the results. The scope of these works is set out in a brief prepared by NCC (2012).

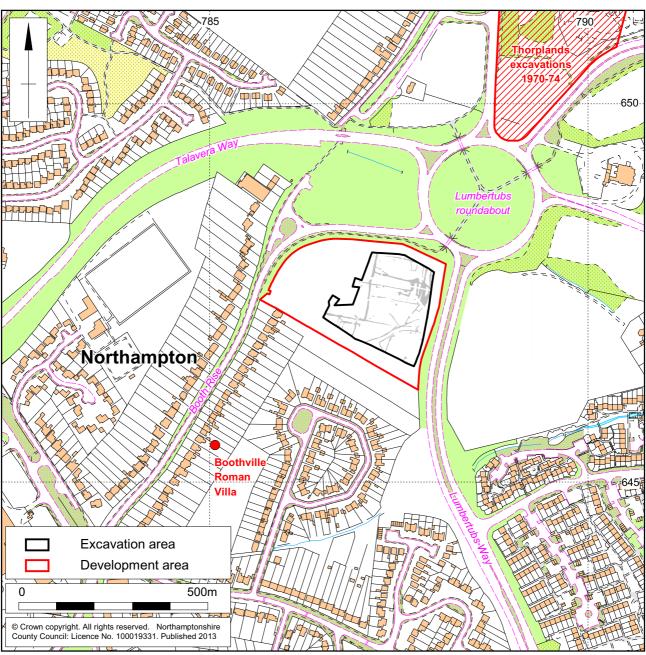
# 1.2 Site location and topography and geology

The site is located within a plot of land allocated for development and, though formerly comprising arable fields, has been fallow for several decades. It is bounded by the curving line of Booth Rise to the west and north, by the A43 (Lumbertubs Way) to the east and by residential development to the south. The ground slopes gently down from a plateau at the west towards the east becoming steeper to the north-east corner. The ground lies between 98.5m above Ordnance Datum at the lower east end of the site and 102m at the western limit of excavation.

The underlying geology of the site is composed of Northampton Sand formation – ooidal ironstone (BGS 2013). Superficial geological deposits were only observed in the north-eastern part of the site where the ironstone bedrock was overlain by reddish-brown firm silty clay with frequent ironstone inclusions. Elsewhere on site removal of the topsoil and subsoil revealed the solid geological horizon.







Scale 1:10,000 Site location Fig 1

# 1.3 Historical and archaeological background

The development site lies within a rich archaeological landscape with finds primarily dating from the prehistoric to the Roman periods. The background of the site and surrounding area around Booth lane and Lumbertubs Way has been detailed in a Desk-Based Assessment (Jamieson 2005) and the evaluation report (MetroMOLA 2012). This collated details of the Historic Environment Record, cartographic/historical records held in the Northampton Record Office and aerial photographic sources. This is summarised below:

# Prehistoric activity

The southern edge of the development area contains a record of prehistoric finds which could indicate that there is activity in this area possibly predating the Roman activity to the south. Further prehistoric activity is also known to the east of the site, where a Bronze Age flint scraper and other prehistoric worked flints were found during excavation and fieldwalking.

# Iron Age and Roman

At Boothville, approximately 130m south of the development area, a Roman villa with possible late Iron Age origins has been identified from the discovery of a tessellated pavement, flue tiles, painted plaster and other Roman artefacts during the 1950s to 1970s (Fig 1). The finds suggest that the building was of some importance (RCHME 1985, 313-14; NAS 1974, 91). A further Roman settlement site at Thorplands Farm (now Round Spinney), located c 230m to the north, was excavated in the 1970s. Structures dating from the 2nd century AD were succeeded by 3rd-century AD circular buildings with stone foundations and a courtyard (Hunter and Mynard 1977).

#### Saxon/medieval

The site previously lay within agricultural land between the medieval villages of Weston Favell and Kingsthorpe.

### Post-medieval

During the post-medieval period, the site lay within arable fields that formed part of Booth Farm.

# Site Investigation 2012

The geophysical survey undertaken by Souterrain Archaeological Services identified a number of anomalies of possible archaeological origin. These were subsequently investigated through 14 trial trenches excavated by MetroMOLA, which identified some of them as of archaeological origin and others as natural or of modern origin. A series of other archaeological features were also found which were not identified during the geophysical survey. The majority of the investigated features were boundary and drainage ditches, which were dated by the pottery assemblage to *circa* 0-125 AD. The remains, along with the analysis of a number of environmental samples, suggested that the site could be characterised as a low status rural farmstead, with activity concentrated in the south and east of the site, specifically around trenches 7-14, with a lesser concentration around trenches 3, 5 and 6. In their conclusions the excavators suggested that occupation probably began in the pre-conquest period and probably expanded in the second half of the 1st century. The activity then seems to have ceased by the second quarter of the 2nd century AD.

# 1.4 Scope of mitigation works

The mitigation strategy was designed by Lesley-Ann Mather, Northamptonshire County Council's County Archaeological Adviser, in consultation with SLR Consulting acting on behalf of their client, William Davis and Northamptonshire Archaeology.

A programme of open excavation was undertaken by Northamptonshire Archaeology as specified by the County Archaeological Advisor (NCC 2012). The works were executed in a staged, although continuous, scheme due to the presence of an active badger sett in the south-eastern part of the site (Fig 2). The appropriate timescales and stand off area were maintained in line with advice from the ecological consultants. This part of the site had been excluded from the previous phase of work by MetroMOLA because the badger was still resident.

The first phase comprised the excavation of a roughly L-shaped area measuring *c*0.8 ha, targeting the results from evaluation trenches 7 to 14. Three small excavation areas (two measuring 10m by 10m and a third measuring 15 by 17m) were investigated to target results from Trenches 3, 5 and 6. Two of these areas were immediately adjacent to the excavation area and were incorporated into the main investigation area. Whilst excavation of the main area was underway the badger sett was removed and the south-eastern area was evaluated by means of seven 20m long evaluation trenches (Trenches 15 to 21). This followed a trench plan provided by SLR Consulting and agreed by the Northamptonshire County Council Archaeological Advisor. The south-eastern part of the site, measuring approximately 0.5ha was then included in the main excavation area on the basis of the evaluation results.

# 1.5 Excavation methodology

Removal of the topsoil and other overburden was carried out by tracked 360° mechanical excavator, fitted with a toothless ditching bucket, operating under constant archaeological supervision. Mechanical excavation proceeded to the natural substrate or the first significant archaeological horizon.

All works were carried out in accordance with the Institute for Archaeologists Code of Conduct (2010), Standard and Guidance for Archaeological Excavation (2008). All works conformed to English Heritage procedural documents Management of Archaeological Projects 2nd edition (1991) and Management of Research projects in the Historic Environment (2006). Site recording procedures followed Northamptonshire Archaeology's in-house Archaeological fieldwork manual (NA 2011).

The excavation areas were measured in and marked out, prior to the commencement of work, using Leica System 1200 GPS operating to an accuracy of +/- 0.05m to Ordnance Survey National Grid. The spoil heaps and excavated areas were scanned with a metal detector to ensure maximum finds retrieval.

The location of all archaeological features and deposits were plotted using a survey grade GPS (Leica System 1200) operating to an accuracy of +/- 0.05m to produce a base plan. All archaeological deposits and artefacts encountered were fully recorded following standard Northamptonshire Archaeology procedures (NA 2011).

The excavation method followed the standards set out in the WSI (NA 2012) which in turn followed the brief provided by the Northamptonshire County Council Archaeological Advisor (NCC 2012).



# 2 RESEARCH OBJECTIVES

The purpose of the work was to determine and understand the nature, function and character of the archaeological site in its cultural and environmental setting.

The general aims of the investigation were to:

- Establish the date, nature and extent of the activity or occupation on the development site;
- Recover artefacts to assist in the development of type series within the region;
- Recover palaeo-environmental remains to determine past local environmental conditions.

Specific research objectives have been drawn from national and regional research frameworks documents (English Heritage 1991 and Knight, Vyner and Allen 2012) in order to enhance our understanding of the transitional Iron Age to Roman activity identified in the evaluation.

The specific research objectives listed below are those thought to be appropriate before the excavation took place, it is part of the purpose of the post-excavation assessment and updated research design to review these research aims and amend and add to them as appropriate: The updated research aims are in Section 8.3 below.

- Understanding the extent, chronology and layout of the enclosure system through excavation, artefact and ecofactual recovery and scientific dating if appropriate;
- Refining our understanding of the Iron Age/Roman settlement patterns at Booth Rise and Lumbertubs Way, Northampton;
- Determining how the Iron Age and Roman activity relates to the nearby Roman villa Boothville.

Broad research themes were drawn from the research objectives outlined in Knight *et al* (especially 4.5, 4.6, 4.8, 4.9, 4.10, 5.4 and 5.5).

# 3 THE EXCAVATED EVIDENCE

Archaeological features were encountered across the excavated area, with the greatest levels of activity seen in the south-western and north-eastern parts of the development area (Fig 3). The archaeological remains overwhelming consist of ditches, with much smaller numbers of pits and postholes and very low numbers of other feature types including a grave, a kiln and one or two structures.

# 3.1 Summary of chronology

Four main periods of activity have been identified:

Period 1: Prehistoric (1st century BC)

Period 2: Romano-British (early 1st century AD to mid 2nd century AD)

Period 3: Anglo-Saxon (early 6th century AD)

Period 4: Modern (Mid 20th century AD)



Period 2 has been subdivided into separate phases; the other periods represent single use phases. For the prehistoric period datable activity is confined to the later Iron Age. For the Roman period the ceramic assemblage suggests that the landscape was laid out in the Iron Age to Romano-British transitional period with use remaining at a fairly constant level, with some modifications to layout and form, until the mid to late 2nd century when this parcel of land ceased to have an archaeologically visible use. The next datable activity was the construction of an early Anglo-Saxon structure (Period 3). Following this there is no evidence for medieval or post-medieval land use; the next period of visible use occurred in the middle of the 20th century when the area was given over to tree nursery plantation. Unphased activity is restricted to a single possible structure G1084 and will be discussed at the end of the excavated evidence section.

#### Period 2:

Phase 2.1	Early Romano-British (early to mid 1st century AD)
riiase z. i	Early Rolliano-British (early to find 1st century AD)
Phase 2.2	Early Romano-British (mid to late 1st century AD)
Phase 2.3	Early Romano-British (late 1st century AD)
Phase 2.4	Early Romano-British (late 1st to early 2nd century AD)
Phase 2.5	Mid Romano-British (early to mid 2nd century AD)

A summary of the phasing is presented below by period and then by phase where appropriate. A tabulated summary of feature groups and their preliminary dates is in Appendix 1.

# 3.2 Period 1: Late Iron Age pits (1st century BC)

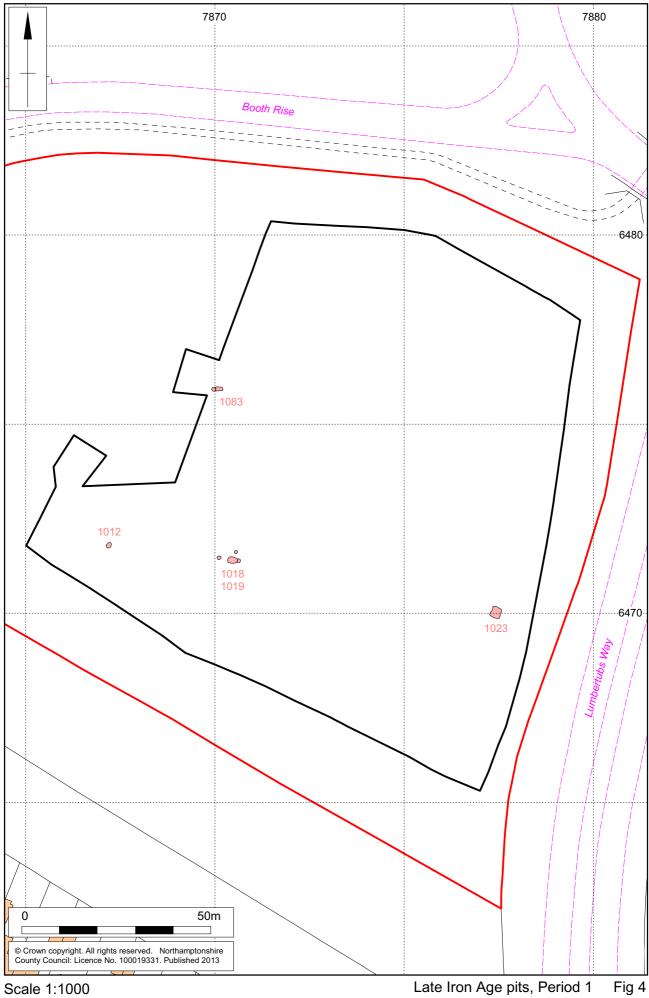
This period comprises the construction of eight pits scattered across the south and western parts of the site (Fig 4). Although the archaeological evidence suggests that the area was not extensively used prior to the early 1st century AD, the presence of a colluvial deposit on the lower slope at the north-east end of the site, predating the Romano-British activity, suggests that prehistoric arable farming upslope had allowed unconsolidated material to wash down slope.

The earliest feature was a small, extremely shallow, circular pit close to the western edge of the site (Fig 4 and Fig 5). Despite being extremely shallow this feature contained approximately 130 sherds of mid to late Iron Age pottery from more than one vessel, with the latest element datable to the 1st century BC. This pit appeared to cut an equally shallow oval pit and the pair is grouped as G1083.

The six other features included in this period were all undated and are tentatively included here on the basis of their stratigraphic relationships to early elements of the Romano-British landscape.

Pit cluster G1018 comprised three, closely spaced, small circular pits. All three had been backfilled with tabular limestone fragments (Fig 6). Within this cluster one pit had been carefully filled with shaped limestone fragments and was truncated by a similarly filled but much larger pit (G1019) (Fig 7).

The large oval pit (G1019) measured 3.2m long by 1.5m wide and 0.98m deep. It was entirely filled with large tabular limestone fragments that had been deliberately shaped to fit the edge of the pit (Fig 8). The stones were so closely spaced that there was little or no silt in the gaps indicating a single event of deposition. The stone used was not derived from the immediate vicinity and had been imported to the site from the local region (Steve Critchley, pers comm). It had the appearance of a substantial foundation for an above ground feature that needed a weight bearing base.





Late Iron Age pit in pit group G1083, looking east

Fig 5



Stone-filled pit in cluster G1018, showing tabular limestone fill, looking east

Fig 6



Pit G1019 cutting earlier similar pit, looking south

Fig 7



Pit G1019 showing stone fill and fully excavated, looking west

Fig 8

An oval pit (G1012), 30m to the west of pit G1019, was isolated within this part of the site and contained no datable material, but it stratigraphically predated elements of the late 1st century AD landscape.

Sub-square pit G1023 was very different in form and depth from the other pits included here. However, it was recorded as predating an early element of the

Romano-British ditch system and is therefore likely to be of prehistoric date. The pit was badly damaged by ruts associated with the mid 20th century tree nursery.

# 3.3 Period 2: Romano-British settlement (1st to 2nd centuries AD)

The majority of the features recorded within the excavated area dated to the Romano-British period; from the earliest years of the 1st century AD till the middle to late 2nd century AD. Latest Romano-British pottery types were barely represented and it is believed that use of the area contracted significantly in the middle of the 2nd century AD and ceased before the end of the century. If the area had any use in the later Romano-British period it was archaeologically invisible.

The Romano-British period saw the construction of a series of boundaries, enclosures and trackways as well as features associated with non-specialised rural settlement. However, no structures were identified and it is likely that the core of the settlement was some distance beyond the development area.

# Phase 2.1: Transitional Iron Age to early Romano-British landscape layout (early to mid 1st century AD)

This phase comprises the initial layout of a series of ditches offset from a north to south aligned boundary ditch that maintained a significant influence on the use of the area throughout the period. These seem to be associated with the establishment of a trackway or droveway in the south-east part of the site (Fig 9).

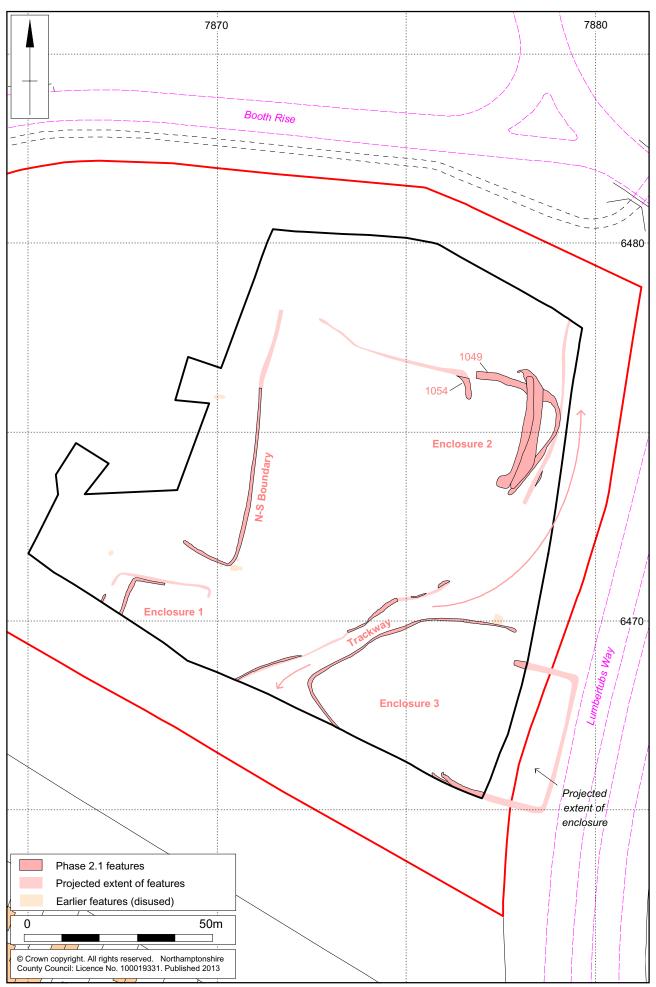
The ditched trackway is on a divergent alignment to the other elements included here but it is possible that it represents the formalizing of a previously established route following the natural contours of the landscape on the south-east facing valley slope. It was approximately 4m wide and had no evidence for metalling or consolidation. It is likely to have provided a route between a series of paddocks up slope to the north and west, and the pasture down in the valley associated with the Billing Brook.

The earliest version of the major north to south boundary was constructed. At its southern end it probably turned to the west before terminating (G1004 and G1015). This north to south ditch probably marked the boundary between partially enclosed paddocks to its west and east.

In the south-west was a possible rectilinear enclosure (Enclosure 1) surviving only as the western arm and the north-west corner. The remainder of the feature was removed by later recuts and its full form is unknown. It was soon replaced by a slightly larger version on similar lines. In this second version the enclosure had an open east side and a narrow entrance to the west. The gap between the north side of the enclosure and the L-shaped north to south boundary ditch was 4m wide and presumably functioned as an access route between the two.

Offset from the east side of the north to south boundary is the earliest version of an east to west ditch, the majority of which had been removed by later similar features (G1054). It is likely to have been an internal ditch within a larger enclosure bounded by the major north to south boundary to the west and the trackway to the south and east (Enclosure 2).

An L-shaped ditch (G1049) was constructed as an adjunct to this east to west ditch. It shared its northern line and seemingly terminated close to its corner. Its function is uncertain as it would not have formed a completely enclosed area. It was rapidly replaced by two 30m long slightly curved ditches. This layout was retained, with frequent minor modifications until the end of the 1st century AD, and was therefore significant to the use of this part of the site in this period, despite recurrent problems with flooding on the down slope.



Scale 1:1000 Romano-British settlement, Phase 2.1 (early - mid 1st century AD)

Enclosure 3 was located in the south-east part of the site, it was slightly irregular in plan and offset from the trackway. There was some evidence for recutting of the ditch terminal on the south side of the enclosure during this phase.

# Phase 2.2: Modification and maintenance of the ditch systems (mid to late 1st century AD)

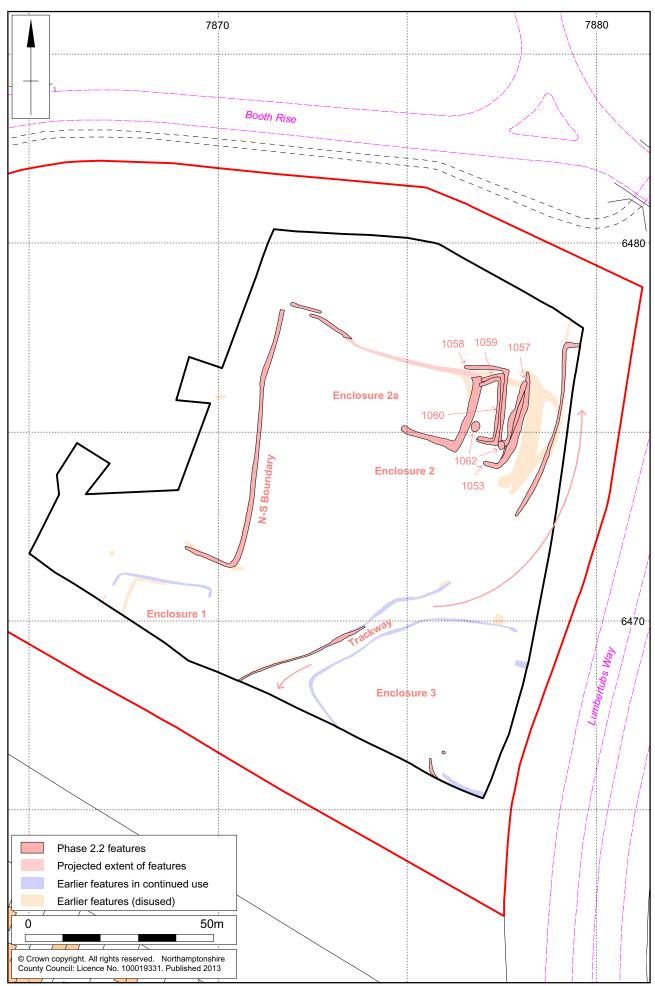
This phase comprises a sequence of short-lived modifications made to the ditch systems, laid out at the beginning of the 1st century AD (Fig 10). This phase did not represent any significant alteration to the landscape use, rather a development of the earliest Romano-British layout.

The north to south boundary was cleaned out and retained along the same line, although later recutting means its northern extent is uncertain. The trackway was retained and some of the ditches were recut and cleaned out.

Enclosures 1 and 3 were also retained with minor modifications to their limits. A small pit was located within Enclosure 3.

The main modifications in this phase took place in the north-east part of the site within Enclosure 2. Hook-shaped Enclosure 2a was constructed offset from the north to south boundary ditch that formed the western side of the putative larger Enclosure 2. This internal enclosure would have had a 35m wide gap on the southern side and a 4.5m wide gap on the northern side that was subsequently sealed off by the construction of a short ditch segment.

Between the east side of Enclosure 2a and the trackway the short, slightly curved north to south ditches from the previous phase continued to be recut repeatedly. This sequence of ditches shifted over time to the west slightly and became more regular in plan (G1052-3, G1057-60). No structures or otherwise associated activity were identified that would necessitate this level of remodelling within an otherwise fairly static landscape. It is possible that there was some form of structure in the area between Enclosure 2a and this modified ditch but no trace of it was recovered. Two fairly large, deep pits (G1062) were associated with the construction of the latest version of the ditch. One of these pits was recorded during the evaluation, where it was interpreted as a ditch terminal. Fragmentary remains of a number of complete or near complete pots were recovered from the lower fill, two of which had had holes drilled in their bases. The second pit was similar in size and depth and was filled with humic rich deposit and moderate quantities of domestic refuse (Fig 11). The presence of these two features in an area generally devoid of pits supports the possibility that a building had been present nearby.



Romano-British settlement, Phase 2.2 (mid - late 1st century AD)



Large pit (G1062) containing domestic refuse cut by a later ditch, looking west Fig 11

# Phase 2.3: Maintenance of ditch systems (late 1st century AD)

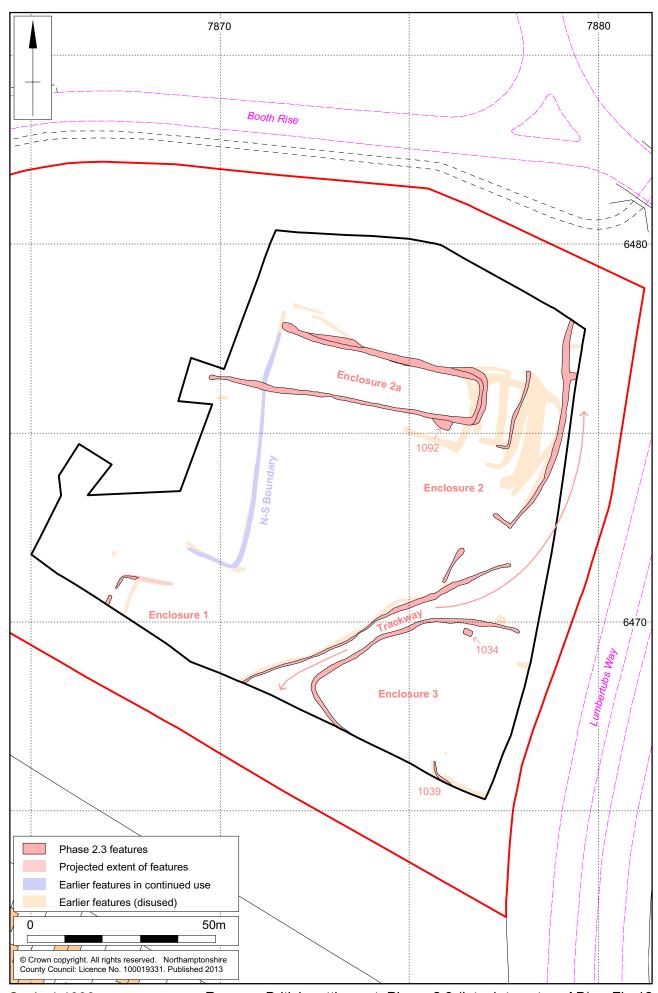
This phase, similar to the previous phase, comprises a sequence of short-lived modifications to the already established layout (Fig 12). This indicates that the occupants had a settled form of existence with this area being maintained as a series of paddocks and stock enclosures as part of a broader mixed agricultural settlement.

The north to south boundary was again maintained, although later recutting means its northern extent is uncertain. The trackway was recut with some remodelling on the western side altering the access into Enclosure 2.

In the south-west, Enclosure 1 was maintained and its ditches were recut. To the south-east, Enclosure 3 was probably also retained although its full form is uncertain as the majority lay beyond the limit of excavation. Pit G1034 was within the enclosure.

Enclosure 2a was remodelled, its northern side was recut along the same line and straightened up at the western terminal, apparently maintaining a 10m gap between it and the retained north to south boundary. The southern arm of the enclosure shifted slightly to the north but its terminal location was lost due to later recutting. It might have stopped just short of a large shallow pit (G1092). This change was contemporary with a reversion to the earlier position and form of the ditch segment to the east.

This version of Enclosure 2a was rapidly modified by the construction of a version that transgressed the line of the north to south boundary. It is possible that the early versions of this boundary were segmented or otherwise non-continuous and therefore that stretches of the ditch were maintained despite this modification.



# Phase 2.4: Re-organisation of the landscape (late 1st to early 2nd century AD)

This phase represents a reorganization of the boundaries and enclosures into a more rectilinear pattern that suggests an increasingly unified approach to the management of this area but it was not a significant departure from the previous layout and does not necessarily represent a break in continuity of use or function (Fig 13).

The trackway was no longer in use and was presumably diverted to accommodate the rectilinear layout of the ditch systems. The north to south boundary ditch was retained and extended and formed the spine between the remodelled Enclosure 2 to the east and Enclosure 6 to the west.

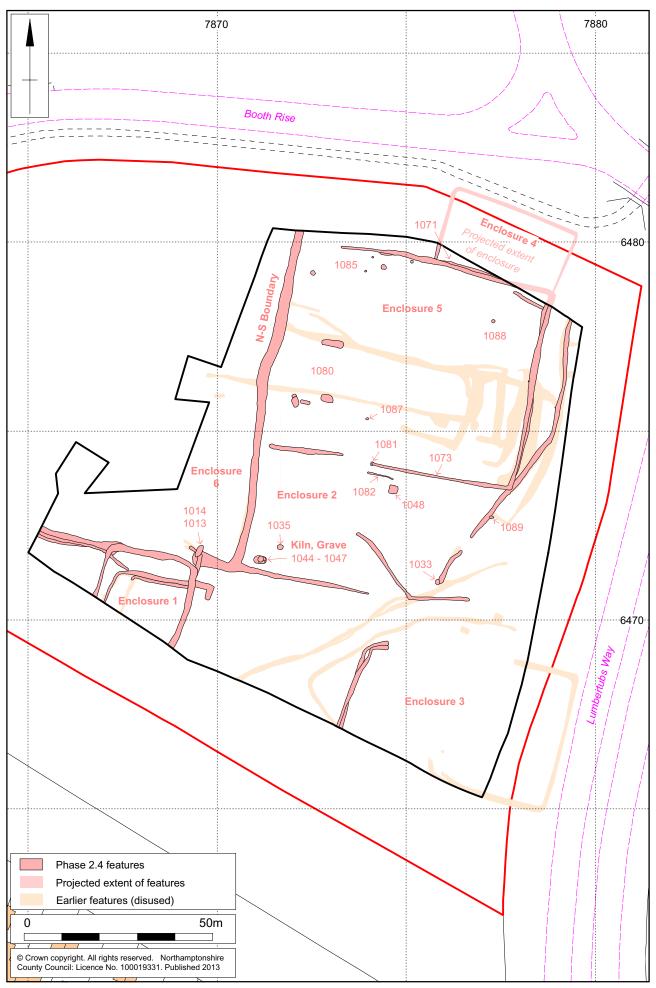
Enclosure 1 was retained and was initially similar in form to the earlier versions with an open eastern side. It was slightly offset from the southern side of Enclosure 6 and a gap was retained between the two. This gap was subsequently sealed when the enclosure was shifted to the north and the eastern side was closed in. The entranceway to the latest version of the enclosure would have been beyond the limit of excavation to the south. No internal features were associated with this phase of its use, but a possible animal tethering point was located just to its north-east (G1013-4).

Enclosure 2 was retained and although made slightly more rectilinear the southern and eastern sides initially retained the contour following boundaries of the previous phase. At the south-eastern corner were a series of funnelled entranceways associated with stock control. Six discrete features and a pit cluster within the enclosed area are believed to be contemporary with this phase of use:

A kiln (G1044) was sited in the south-west corner of Enclosure 2; it was sub-rectangular in plan, measuring 3.6m long by 2.2m wide by 0.7m deep. It had a stepped western side leading to a stokehole area and then the firing chamber, marked by the burning of the natural ironstone base (Fig 14). It had no internal structure, but numerous kiln bar fragments, partially fired clay superstructure fragments and deposits of fuel ash slag were recovered from its fill, as well as the features cut into it and the surrounding contemporary enclosure ditches, indicating that it was probably a pottery kiln. It is possible that its use was short lived, perhaps only one firing.

A small pit (G1045) was cut into the backfilled, disused kiln (Fig 15) and seems to have deliberately targeted the kiln perhaps to recover reusable materials. This activity in part accounts for the dumps of kiln bars and fuel ash slag in some of the contemporary ditches and pits.

This pit was in turn cut by a grave (G1046) (Fig 16) which contained a semi-crouched adult male (Fig 17). The grave respected the southern edge of the kiln and it is likely that it was deliberately positioned to make use of the softer ground. The individual in the grave was an adult male aged somewhere between 25 and 35 years, of fairly robust stature although with evidence for periods of nutritional stress during childhood and development. He was in a loosely crouched position with his knees drawn up against the edge of his grave, his hips and lower back were flat on the base of the grave but the upper torso was turned on to his left side with his arms tucked up and his hands loosely flexed close to his face. Grave goods had been carefully placed between his stomach and grave edge. These consisted of a copy of a Gallo-Belgic platter (SF18) dating from between 40 and 70 AD with an inscribed Aucissa brooch (SF19) sitting on it and a butt-beaker copy (SF17) just above it. The butt-beaker vessel had tipped over during settling in the grave fill and it had fractured at the shoulder. The grave was cut by a later pit (G1047) and the right hip was damaged. This was the only grave recorded within the excavated area.



Scale 1:1000 Romano-British settlement, Phase 2.4 (late 1st - early 2nd century AD) Fig 13



Kiln G1044 showing the step to the rear and the burnt ironstone base, looking west Fig 14



Pit G1045, fully excavated, cutting into kiln G1044, looking north-east

Fig 15



Grave G1046 cutting into base of kiln G1044 at rear, looking south

Fig 16



Adult male (315) in grave G1046 with grave goods, looking east

Fig 17

A large pit (G1047) was cut into the grave and was probably dug to extract reusable material from the kiln. The pit clipped the right side of the body in grave G1046, which suggests that the presence of the grave was not well marked.

A small pit was located 4m to the north-east of the kiln (G1035); it contained no debris from the kiln firing but might have been a contemporary feature as discrete features were uncommon in this part of the site.

A large sub-square pit was located 40m to the north-east of the kiln (G1048), it was sub-rectangular with near vertical sides measuring 2.5m long, 1.7m wide and 0.8m deep (Fig 18). The lower fills contained dumps of partially burnt pottery, fuel ash slag and charcoal. This had been dumped in the pit whilst still hot enough to scorch the stone base and edge slightly but was not burnt *in situ*.

Three small discrete pits were located within the enclosure, one was directly below the terminal on the south side of Enclosure 5 and was therefore probably visible at the time this enclosure was constructed (G1081). The second was located 11 metres to its north and although shallow contained large pottery sherds and two fragments of a flat rotary quern (G1087). The third pit was located towards the north-east corner of the site and might have been the remains of a hearth base, although no ashy material was recovered (G1088). The base of the pit was lined with ironstone fragments and kiln plates had been reused to edge part of the pit. The upper parts of some of the stones were burnt, but it is not clear if this is because a fire had been set above it or because they had been recovered from the kiln in that condition (Fig 19).

A cluster of five pits was sited towards the northern end of the site (G1085). The pits were loosely grouped and differed in size and depth, one pit contained the remains of a 1st century AD vessel set into it (Fig 20).



Pit G1048, looking west

Fig 18



Pit/hearth base G1088 showing burnt stones and reused kiln plate, looking south Fig 19



Pit [347], in pit cluster G1085, containing 1st-century AD pottery vessel, looking west Fig 20

Enclosure 3 might have continued in use although only the recut western side of the enclosure survived within the excavated area. No internal features were associated with this phase of its use.

Enclosure 4 was located at the very northern limit of the excavated area and comprised two fragments of ditch that both predated later activity. They might have formed part of the western and southern sides of a rectilinear enclosure of unknown extent sited within the larger Enclosure 2; however, the majority of this putative enclosure would have been north of the excavation area.

Enclosure 5 post-dated Enclosure 4 and may have been a replacement of the less regular Enclosure 2. In its original form it was a partial enclosure, similar in form to the earlier smaller staple-shaped ditches repeatedly recut in this part of the site. A short ditch segment on its southern side may have been a marking out ditch associated with its construction (G1082). The enclosure was recut on the same lines and extended westwards towards the main north to south boundary ditch to narrow the gaps in its line. A dump of redeposited kiln debris was recorded in one of the excavated segments on its northern side (Fig 21).



Dump of kiln/hearth debris in Enclosure 5 ditch G1073, looking north

Fig 21

Two large postholes cut through the disused eastern arm of Enclosure 2 and might have been associated with the remodelling of the site when Enclosure 5 was constructed (G1033 and G1089).

A cluster of substantial pits was located either in Enclosure 5 or the larger earlier Enclosure 2 (G1080). The largest and deepest pit contained domestic material throughout and a deliberate discrete dump of debris material derived from the kiln (Fig 22).



Pit [385] within cluster G1080 showing dump of kiln debris, looking west

Fig 22

Enclosure 6 was probably similar to Enclosure 2 but the majority lay beyond the western limit of excavation.

# Phase 2.5 Contraction of land use (early to mid 2nd century AD)

This phase represents the final, identifiable, Romano-British use of the area. All archaeologically visible activity from this period ceased on the site before the turn of the 3rd century AD at the very latest and probably some time before that. Use of the area had contracted to the north-east part of the site and comprised two enclosures and some pits (Fig 24).

Enclosure 7 was located at the northern end of the area; it was rectilinear in plan and measured 14m+ long and 2.6m wide. The entranceway would have been to the north of the excavation area. Its function is uncertain but it may have been associated with stock management. Part of a late 1st to 2nd century AD jar was recovered from the enclosure ditch (Fig 23), with a post-firing hole cut into its base.

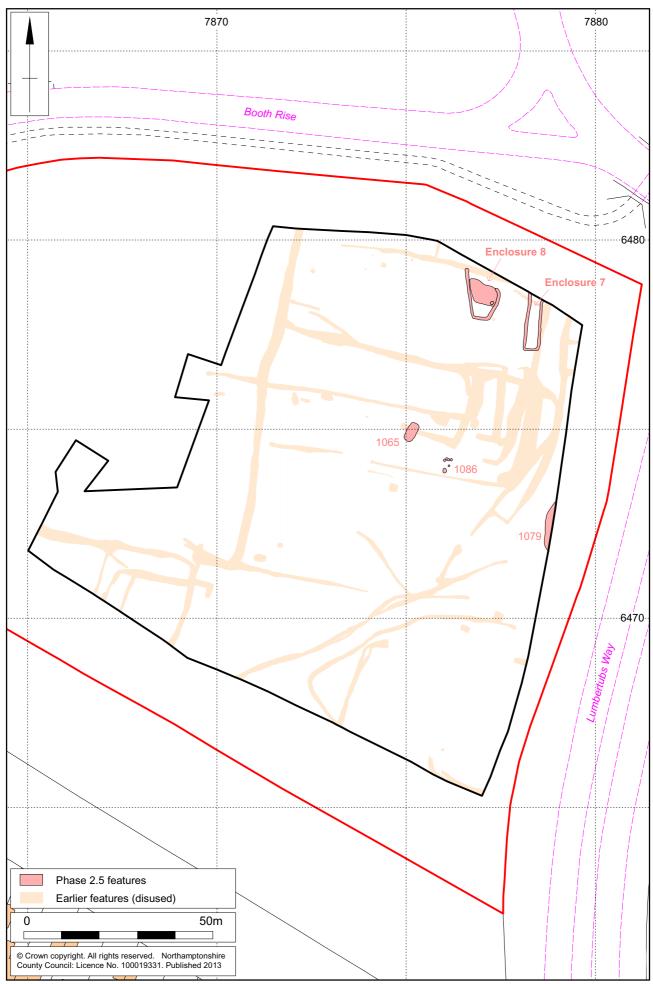


Pottery jar in Enclosure 7 ditch during excavation

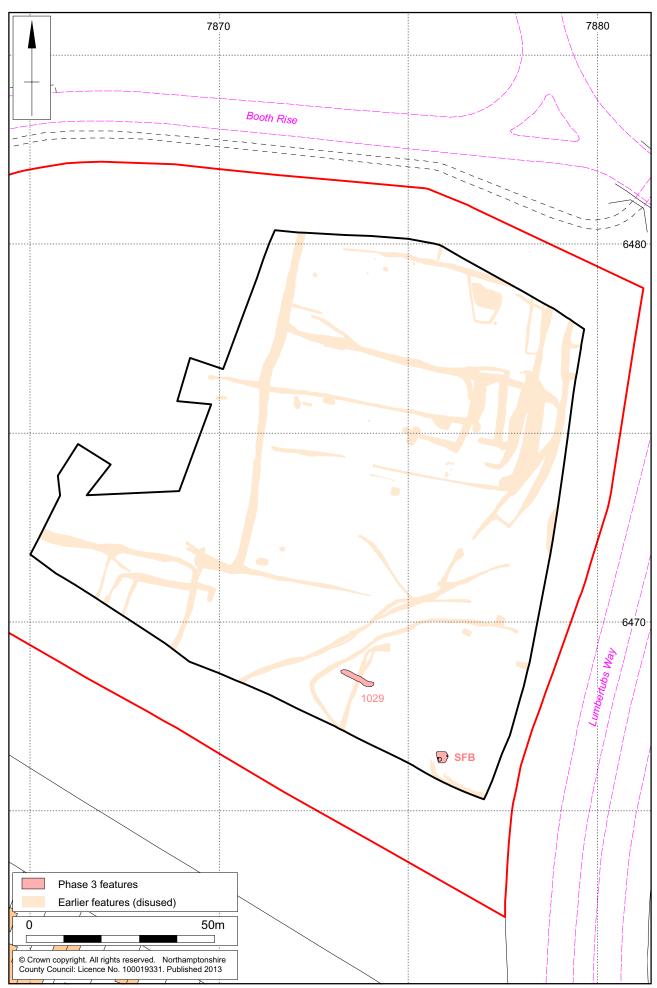
Fig 23

Enclosure 8 was located 9m to the west of Enclosure 7 and was hook-shaped in plan with an open northern side. Internally it measured 6.5m by 10m and was associated with an eroded hollow area that was probably formed by trampling from livestock or people. A small pit had been cut into this hollow and was probably associated with the use of the enclosure.

A large sub-rectangular pit (G1065) was located to the south of these enclosures. It was similar to earlier features in pit cluster G1080 but contained pottery dating from the mid to late 2nd century AD. A cluster of small pits was located close to this larger pit (G1086), one of which was dated to this period. A large pit was located at the eastern edge of the site, mostly beyond the excavated area (G1079). Where excavated it had vertical sides and a flat base but its full form and function could not be established within the excavated area. It too contained pottery dated to the 2nd century AD.



Scale 1:1000 Romano-British settlement, Phase 2.5 (early - mid 2nd century AD)



Scale 1:1000

Early Anglo-Saxon activity, Period 3 (early 6th century AD)

# 3.4 Period 3: Anglo-Saxon (early 6th century AD)

For approximately three hundred years, following the disuse of the Romano-British enclosures in the middle of the 2nd century AD, there was no known use of this area. Then in the early Anglo-Saxon period a sunken-featured building (SFB) was constructed towards the south-east corner of the excavated area (Fig 25). This building was likely to be part of a wider settlement mostly lying beyond the development area.

The building was sub-square, measuring approximately 3m by 3m and 0.45m deep, with two opposing postholes, centrally positioned on the east and west sides. Pottery dated to the early 6th century AD was recovered from one of the postholes and from the final fill within the main building. No post-built structures were recorded in the immediate area. The soil sample produced little environmental material except charcoal. However, part of a field vole jaw bone was recovered indicating that the landscape nearby comprised rough ungrazed grassland. The presence of immature frog bones indicated that there would have been areas of standing water nearby where frogs could breed; either in ponds or water-filled ditches. Parts of three or four antlers had been placed in the upper part of the backfill, two of which were carefully placed side by side (Fig 26).

A linear spread of domestic debris and silt in a very shallow hollow, 25m to the northwest, might have been the remains of a track leading to the structure (G1029).



Antlers placed in upper fill of the Sunken Featured Building

Fig 26

## 3.5 Period 4: Modern (mid 20th century AD)

There was no surviving archaeological evidence for use of the site between the earlier Anglo-Saxon period and the middle of the 20th century AD. Late 19th-century Ordnance Survey mapping shows the development area as part of a larger field. In the 1960s the Northamptonshire Development Corporation used the area for a temporary tree nursery. This involved the excavation of a significant number of evenly-spaced tree planting pits in rows aligned north to south across the site and a small number of associated drainage features (Fig 27). Following this the site was used as a paddock before being left to lie fallow for some years.

A number of the tree planting pits were excavated to determine their origin and others were investigated where they truncated earlier features. Some contained residual Romano-British pottery derived from the underlying features.

## 3.6 Unphased features

A possible post-built structure, comprising five postholes in an arc, was located at the north-west limit of excavation (G1084, Fig 3). No western side to the possible structure was recovered and no datable artefacts were recovered. It might have been the remains a roundhouse but the absence of a clearly defined circuit makes interpretation uncertain.



Scale 1:1250

#### 4 THE FINDS

## **4.1 Flint** by Yvonne Wolframm-Murray

Two pieces of worked flint were recovered as residual finds from Roman and Anglo-Saxon features, a broken blade and a thumbnail scraper (Table 1).

The condition of the artefacts is good to moderate. Post-depositional damage is present on the artefacts consisting of occasional irregular nicks on the edges or breakage. The raw material is dark grey-brown vitreous flint. The cortex, where present, is white and light brown in colour. It is likely that the raw material was locally procured from river gravel deposits.

The proximal end of a heavily patinated blade was recovered. One lateral edge had patinated edge damage, which was probably due to utilisation. The thumbnail scraper had abrupt and semi-abrupt retouch on the distal end and the lateral edges reaching almost to the striking platform, which was cortical.

The broken blade is not directly dateable but its characteristics suggest an early/middle Neolithic date. The thumbnail scraper is typical of the late Neolithic/early Bronze Age.

Table 1: Summary of worked flint

Fill/cut	Group	Period/ Phase	Flake/Blade	Portion	Tool/Date	Comments
(30) fill of SFB [29] (SF13)	G1043	3	Flake	Whole	Thumbnail scraper Late Neolithic/early Bronze Age	heavy post- depositional edge damage
(322) fill of ditch [324]	G1073	2.4	Blade	Proximal	Early/middle Neolithic	Utilised; post- depositional breakage

## 4.2 Iron Age pottery

by Andy Chapman and Ed McSloy

One pit contained an Iron Age pottery assemblage, small numbers of Iron Age sherds were recovered as residual elements within a Romano-British ditch.

## Iron Age pit

The fill (166) of pit [167] (G1083) produced c130 sherds, weighing 350g, of hand-built pottery. The assemblage comprises mainly small sherds, measuring 5-30mm long, and the largest sherd is only 50mm long. The average sherd weight is 2.7g.

The majority of the sherds contain either frequent large pieces of shell, up to 7mm long, or voids where the shell has been leached. They typically have grey cores and grey or light brown to orange-brown surfaces, possibly coming from only two or three vessels. They are all plain body sherds, apart from a single rim, which is a simple rounded and upright rim.

There are also four sherds from a vessel containing sparse fine shell, dark grey throughout, well fired with a burnished outer surface.

This small group can be broadly dated to the middle/late Iron Age, with the dark grey burnished vessel characteristic of the late Iron Age, the 1st century BC.

### Residual Iron Age pottery in a Romano-British feature

Five abraded bodysherds (41g) in a hand-built coarse shell-tempered fabric probably date to the middle or later Iron Age. All appear to be re-deposited; within fill (54) in ditch [55] (G1000, Phase 2.4), together with material of Roman date.

## 4.3 Romano-British pottery by Ed McSloy

Pottery amounting to 2309 sherds (42.8kg/ 28.47 EVEs) was recovered. It was derived from 151 separate deposits, with a small quantity (25 sherds) unstratified. All but eight sherds, which were recorded from bulk soil samples, were hand-recovered. The assemblage was derived from 151 separate deposits, relating to 117 features, mainly ditches (Appendix 2). Larger context groups (87314 sherds) derive primarily from Phase 2.4 ditches (features 144/G1001, 383/G1030, 385/G1080 and 551/G1073) and from Phase 2.4 pit [291]/G1047 (166 sherds). A single inhumation burial of early Roman date G1046 was accompanied by two complete pottery vessels.

The assemblage has been fully recorded; scanned by context and quantified according to fabric by sherd count, weight and rim EVEs (estimated vessel equivalents). Vessel form, where identifiable, has also been recorded as has evidence for vessel use, in the form of carbonised or other residues. The system of fabric-type codes is adapted from that utilised to record the large Northamptonshire assemblages from Ashton (Aird and MacRobert unpub.) and from Stanwick (Perrin 2006; McSloy forthcoming).

The assemblage includes 'transitional' Late Iron Age/early Roman pottery. The condition of the Roman pottery is good. Sherd surfaces survive well, with very little abrasion or weathering apparent. A number of vessels are substantially complete and/or can be reconstructed to full profile (Table 2). The mean sherd weight is 18.6g, a high figure for a Roman assemblage and not suggestive of high levels of re-working or disturbance.

Period/Phase	Feature	Group	Context
2.2	North to south boundary	G1017	Ditch [67]
2.4	North to south boundary	G1001	Ditch [64]
2.4	Enclosure 6	G1002	Ditch [96]
2.4	-	G1046	Grave [305]
2.4	Enclosure 5	G1073	Ditch [408]
2.5	Enclosure 7	G1075	Ditch [393]

Table 2: Features containing substantially complete vessels

## Late Iron Age/'transitional' (pre-Flavian)

Context-level dating is shown in Appendix 2. The larger portion of the pottery assemblage is attributable to the early and middle 1st century AD, the period encompassing the Late Iron Age/Early Roman transition. This period is characterised in the region by wheel thrown vessels in the 'Belgic' tradition and, particularly distinctive of the Nene/Ouse valley area, by jars with channel-rims or 'lid seating' (Friendship Taylor 1999). Two fabric groups dominate; those where the primary inclusion is grog (fabrics a, ab, ac) and types containing fossil shell (fabric b) (Table 3). A relatively narrow range of vessel forms characterises groups of this date from Booth Rise: jars dominate and are mostly of the channel-rimmed type, with fewer large, necked storage jars; bowls/cups are next most common and consist of carinated forms (mostly Thompson 1982: classes D2–1 and E1–2), some with a

degree of elaboration as multiple cordons and zoned decoration. The lid-seated jars are the single most abundant form occurring in fabrics a and b (Table 4). A variant form with slashed decoration to the rim which is thought to date to the AD 40s/50s (Friendship Taylor 1999) is common, occurring from a number of deposits (Table 5). Other forms are present only scarcely: the grave group (305/G1046) contained a complete platter (below) and there are further examples, of simple, straight-sided form from deposit 325 in Phase 2.4 pit G1045, and represented as a base sherd from fill 81 in ditch G1011, part of Phase 2.4 Enclosure 1. This latter vessel is the sole example in the assemblage with an (illiterate) maker's stamp; this feature resembling those on vessels from the pre-Flavian kilns at Rushden (Woods and Hastings 1984, fig 9.1).

Table 3: Pottery summary quantification by fabric

Date/group	Fabric	Description	No	Wt (g)	EVEs
Iron Age	SH	Coarse shelly	5	41	-
Grog	а	'standard' grog-tempered	637	11158	4.15
(LIA/transitional)	ab	Grog with shell	104	9273	2.53
	ac	Grog with quartz	53	743	0.47
Shell (LIA/transitional and Roman)	b	Shell-tempered	428	5954	4.60
'Developed' grog	a1	Hard cream grogged	159	3720	2.88
(Roman/Upper Nene valley)	a4	Harder, pink/grey grogged	32	1125	1.18
Reduced	С	Indet. reduced	11	139	-
(Roman/most	c3	Fine, self-coloured grey	4	37	-
Upper Nene Valley)	c4	Grey with paler core	339	3715	5.45
	c6	Fine greyware	28	660	1.25
	c7	Fine greyware (micaceous)	1	38	0
	c10	Coarse, hard grey	5	64	0.11
	c11	Dark grey/black with paler core	40	495	0.48
	c15	Grey with reddish-yellow core	19	223	0.07
	c16	Grey with reddish-yellow/grey 'sandwich' core	61	1119	0.23
	c17	Grey with cream/light-grey 'sandwich' core	2	8	0.02
	c19	Coarse, hard dark grey or black throughout	170	1651	2.45
	c19f	As above, finer	15	468	0.95
	c20	Grey, self-coloured	76	1020	0.59
	c24	Grey with oxidised surfaces	2	24	-
	cli	Greyware with limestone/shell	4	55	0.05
Oxidised (Roman/	d3	Fine, oxidised (pale orange)	10	32	-
Upper Nene Valley	d4	Oxford red slipped ware	2	108	-
and Oxford)	d24	Grey with oxid. ourfaces	1	3	-
,	dg	Fine oxidised with grog	3	15	-
White (Roman/most	d2	Fine white/cream	60	393	0.18
Upper Nene Valley)	d9	Sandy whiteware	36	447	0.83
Samian	lgf sa	South Gaulish (La Graufesenque) samian	3	7	-
(Roman/imports)	lez sa2	Central Gaulish (Lezoux) samian	4	161	

Table 4: Pottery forms summary, shown by fabric group with quantities as EVEs

Form (generic)	grog	shell	reduced	devel. grog	white	Total (%total)
flagon	-	-	-	-	0.22	0.22 (<1%)
beaker	0.23	-	1.18	_	-	1.41 (4.9%)
jar	1.43	0.09	4.82	1.39	0.61	8.34 (29.3%)
jar (channel rim)	0.44	4.08	2.26	1.89	0.15	8.82 (31.1%)
jar (large)	1.92	0.33	0.19	0.34	-	2.78 (9.8%)
cup	_	-	-	-	0.03	0.03 (<1%)
bowl	2.67	-	1.23	0.34	-	4.24 (14.9%)
dish	_	-	0.83	-	-	0.83 (2.9%)
platter	0.46	-	1.05	-	-	1.51 (5.3%)
Unid.	-	-	0.09	0.10	-	0.19 (<1%)

Table 5: Lid seated jars with slashed rim decoration by period and feature

Period/Phase	Feature	Group	Context
2.2	Enclosure 2a	G1055	Ditch [470]
2.4	North to south boundary	G1001	Ditch [146]
2.4	Enclosure 1	G1009	Ditch [130]
2.4	Enclosure 1	G1011	Ditch [104]
2.4	-	G1044	Kiln [290]
2.4	-	G1047	Pit [289]

Adult male SK 315 in grave [292] (G1046) was accompanied by two vessels, placed in close association, central to the grave next to the body. Platter SF18 in a fine reduced fabric (c6) is complete, although there was significant spalling from its base the damage apparently occurring prior to its deposition. The form of SF18 copies Gallo-Belgic CAM 14 platters (Hawkes and Hull 1947), a vessel form typically dating c AD 40–70. The second vessel SF17 (in fine sandy fabric c19f) is a butt-beaker copy. Its form is far removed from the Gallo-Belgic CAM 113 prototypes and lacks the fine roller stamped decoration common with such forms including those from Rushden (Woods and Hastings 1984, figs 9.18–9.21). The pottery from the grave suggests later pre-Flavian or perhaps early Flavian dating, probably in the 50s to 70s AD range. Such an early (provisional) date for an inhumation would make the burial unusual, cremation being the usual rite in the period before c AD 150/200.

## Early Roman: Late 1st to 2nd centuries AD

The bulk of the remaining part of the assemblage dates to this period (Appendix 2). This period was one of technological development seen in local pottery assemblages in the presence of a range of kiln-fired grey and oxidised wares. At Booth Rise, earlier Roman production is represented as grey and black-firing sandy coarsewares (c4, c11, c19, c20), whitewares (d9) and as white or pink-firing 'developed' grogged wares (a1–a4). Shell-tempered wares also occur from context groups of this date and it is probable that production of these wares continues well beyond the late 1st century. Light-bodied greywares (types c4 and c11) are most characteristic of local, upper Nene valley, production which is attested locally at Ecton, northeast of Northampton (Johnston 1969).

Jar forms dominate among the reduced coarsewares (Table 4). The majority are medium-mouthed, necked forms, some recovered from Phase 2.1 trackway ditch G1067; from Phase 2.4 Enclosure 5 ditch G1073 and from Phase 2.5 Enclosure 8 ditch G1076 had the multiple-cordoned necks common with Upper Nene valley greywares. At least two vessels in greyware fabric c4 (jars from Phase 2.3 and Phase 2.4 elements of Enclosure 2 ditches G1069 and G1070), exhibit bands of red

painted decoration, which is a feature of some Upper Nene valley pottery (Marney 1989, 109). Continuity from the preceding period is apparent most clearly from vessel forms and the continued abundance of channel-rimmed jars in reduced, shelly and grogged wares (Table 4). Similarly, carinated bowls, high-shouldered bowls and platters derived from earlier vessel forms also occur, though in small numbers. 'New' vessel forms are few in number, but include a ring-necked flagon in whiteware d9 from Phase 2.4 Enclosure 5 ditch G1073 and a bowl of S-shaped type from Phase 2.4 Enclosure 2 ditch G1070. The influence of southern British Black-burnished wares, which is seen with local greywares from the middle decade of the 2nd century, is apparent from jars found in Phase 2.3 trackway ditch G1022 and plain or moulded-rim dishes from the Phase 2.4 Enclosure 5 ditch G1073 and from the Phase 2.5 Enclosure 8 ditch G1076.

The early Roman pottery from Booth Rise includes few fineware fabrics. A sherd in a fine greyware fabric C6 and with stamped roundel and scored decoration from Phase 2.4 Enclosure 2 ditch is an example of the London ware style and is dateable to the first half of the 2nd century AD. Production of similar material is evidenced in the Lower Nene valley region (Perrin 1980) and this vessel may be a regional import.

Continental finewares are present in the assemblage as a small group of Gaulish samian, seven sherds weighing 161g, representing six vessels. Bodysherds from both Phase 2.3 Enclosure 2 ditch G1069 and the earlier version of Phase 2.4 Enclosure 5 (G1071) are of south Gaulish (La Graufesenque) origin and as such are dateable before *c* AD 110. The remainder are Central Gaulish (Lezoux) products and consist of a Drag. 27 cup (from Phase 2.3 trackway ditch G1022) and dishes/bowls of Drag. 18/31 (from Phase 2.4 Enclosure 5 ditch G1073) and Drag. 31r. The Central Gaulish vessels all date to the 2nd century; the form 27 and 18/31 vessels common to the Hadrianic and earlier Antonine and the form 31r to the later Antonine.

#### Late Roman: Late 3rd to 4th centuries

Material definitely dating after AD 250 is very poorly represented in the assemblage; as two bodysherds in Oxford red-slipped wares (fabric D4). In view of the absence of other evidence for this period, it is possible that this material is intrusive and relates to post-Roman activity.

## **4.4 Anglo-Saxon pottery** by Paul Blinkhorn

The early Anglo-Saxon pottery assemblage comprises 54 sherds with a total weight of 1249g. The following fabric types were noted:

**F1:** Fine Quartz. Sparse to moderate sub-angular quartz up to 0.5mm, most less than 0.2mm. Rare organic voids. 9 sherds, 79g.

**F2:** Coarse Quartz. Sparse to moderate sub-angular quartz up to 2mm, moderate fine flecks of silver mica, rare calcareous material up to 0.5mm. Rare organic voids. 19 sherds. 806a.

**F3:** Quartz and Chaff. Sparse to moderate organic voids up to 5mm, rare subangular quartz up to 1mm, sparse flecks of silver mica. 2 sherds, 32g.

All the sherds have an external 'wet hand' finish and/or light burnishing which generally obscures the inclusions. All the pottery occurs in a single SFB G1041-3, all from the final fill (30), apart form a single sherd (fabric 1, 4g) which was present in the structure's posthole (245) in [246]. The range fabric types is typical of sites in the Northampton area (eg Gryspeerdt 1981).

The group includes rimsherds from a baggy jar with simple everted rim and three rimsherds from straight-sided vessels (jar?) with simple rims. Two bodysherds are decorated: a burnished sherd in fine sandy fabric features two shallow, curving grooves and a small sherd in fine sandy/micaceous type exhibits stamped ring decoration within a zone defined by double grooves. Three have fragments of linear decoration, including the single sherd from posthole [246]. These can all only be generally dated to the early Anglo-Saxon period, as most of the designs used during that time incorporation incised lines.

A fourth sherd is more closely dateable. It has a fragment of an internally pressed boss, probably a long-boss which is flanked by incised lines, and has stamping running down the central ridge. Such designs were classified by Myres (1977) as 'stamped and bossed panel style', and are largely dateable to the earlier 6th century AD (ibid 42-44). The decoration on this sherd has close similarities with a vessel of, unfortunately, uncertain provenance from the lcklingham/Lackford area of Suffolk (ibid. fig 253 no. 3307). Two joining sherds from the foot-ring of a vessel base were also noted. Such forms are generally early Anglo-Saxon in date, but occur throughout the period, on a wide range of forms, although they are not as common as plain bases (ibid 34-7).

Most of the pottery from the SFB comprises single sherds from different vessels, but a near-complete bowl is also present. It has a flat base and near-vertical sides, and is a very unusual form for an Anglo-Saxon pot, with few direct parallels in the Myres *corpus*, although it does have some similarities with some Romano-British pottery forms, particularly the shallow, straight-sided bowls known as 'dog-dishes'. Four rimsherds from jars were also noted. They all have simple upright and slightly everted profiles, which is typical of the period.

Anglo-Saxon pottery of this date is a comparatively rare find within the boundaries of modern Northampton, other than the large groups of material from the Chalk Lane and St. Peter's Street area of the town. At Chalk Lane (Gryspeerdt 1981), the decorated pottery suggested that activity began at broadly the same date as at this site, although just two very small fragments of bossed vessels were noted there (ibid fig 14), and the earliest radiocarbon date suggests the main period of occupation was the late 6th century and later (ibid 108). All the hand-built Anglo-Saxon pottery from St Peter's Street (McCarthy 1979) was undecorated, and thus not closely dateable other than to within the broad early/middle Anglo-Saxon period, and the only two reasonably closely dateable decorated sherds from the St Peter's Gardens site are small and have fragments of stamps, again suggesting a later 6th century date (Denham 1985a, 50), and decorated pottery was entirely absent from the site at Black Lion Hill (Denham 1985b). Pottery of a similar date and style was recovered from excavations at Overstone Park, some 2km to the east of this site (Blinkhorn 2010), and so it seems likely there was Anglo-Saxon settlement, of a somewhat dispersed nature, on the east side of modern Northampton in the first half of the 6th century AD.

#### **4.5 Kiln furniture debris** by Pat Chapman

An assemblage of fragmented kiln furniture debris was recovered from 18 contexts (Table 6). There are 290 fragments, weighing 2.88kg, of which 170 were recovered from samples and are very small, only 20 of these sharing the same context as hand collected debris. Of the remaining 120 fragments thirteen are large, either in one piece or pieced together. The condition of all these fragments is fragile. The furniture was made in two materials, hard fine sandy clay typically orange-brown in colour and a hard fine silty clay typically pale brown or reddish-brown with buff and black areas.

The assemblage includes the end of one roughly-made kiln bar, square in section, measuring 40x40mm. The remaining fragmented kiln furniture could be plates or rectangular kiln bars, but cannot be fully identified. One possible plate, at least 30mm thick, has lost the outer surfaces, but has a remnant perforation 25mm in diameter. Other structural pieces typically have at least one smooth surface adjoining a straight or curved vertical edge and are between 18-45mm thick. One piece is roughly cylindrical, 60mm in diameter, looking as if it had been squeezed into shape and left without smoothing down, possibly coming from lining. One small thin irregular black piece, 50mm long by 20x10mm, could be a plug, or the remnant of one.

Table 6: Kiln furniture assemblage

Phase	Group	Feature	Context/cut	Number	Weight	Comment
	•				(g)	
2.1	G1050	Ditch	598 / [599]	2 joining	95	kiln, 40mm one side x 40mm surviving
2.2	G1053	Ditch	627 / [628]	4	10	-
2.2	G1057	Ditch	623 / [624]	5	125	1- kiln, 28mm min thick
2.2	G1062	Pit group	604 / [603]	4	65	1- kiln, 18mm thick
2.3	G1066	Encl. 2a	452 / [453]	2-2 join	185	<b>plate</b> , perforation 25mm diam
2.3	G1066	Encl. 2a	468 / [469]	1	200	<b>bar</b> , square end 40mmx40mm
2.4	G1001	North to south boundary	146 / [144]	1 in 5 bits	125	kiln, corner, 20mm min thick
2.4	G1009	Encl. 1	125 / [124]	1	10	-
2.4	G1009	Encl. 1	130 / [128]	1	220	SF26, kiln, 45mm min thick
2.4	G1044	Kiln	290 / [334]	1	10	from sample
2.4	G1047	Pit Encl. 5	289 / [291]	4-5 joinin g 120	270	1- kiln, 22mm thick 2- rounded 60mm diameter, in -5 pieces 3 kiln, 22mm max thick 4-fine thin irregular black, plug? 20 from sample
2.4	G1073 G1080	Pit group	550 / [551] 386 / [385]	53	200	from sample Black very friable fragments
2.4	G1080	Pit group	388 / [385]	3	20	-
2.4	G1080	Pit group	389 / [385]	17	20	from sample
2.4	G1088	Pit	585 / [586]	15-2 join	210	kiln, 2 joining 130mm long, 20mm min thick
2.4	G1089	Pit	433 / [436]	44-4 joining	900	kiln, 4 joining pieces, 40mm thick kiln, 45mm thick + 42 fragments from both
2.5	G1076	Encl. 8	483 / [484]	11	5	from sample
2.5	G1076	Encl. 8	497 / [499]	1	10	-
Totals				290	2880	

Kiln - refers to object that cannot be fully identified

There are possible comparable items of kiln furniture at Cherry Orchard, 1½ miles south of Booth Rise, and another site a few miles away in Wellingborough. A Roman clay-lined pottery kiln, dated to the 1st century AD, was identified during construction of the Cherry Orchard School buildings in 1953 (Bunch and Corder 1954).

Excavations at the Cherry Orchard site in 2012 recovered the partial remains of 71 kiln bars, both square and tapering (Chapman in Upson-Smith 2012). Flat rectangular kiln bars are known from rescue excavation and observations at Hardwick Park, Wellingborough (Foster *et al* 1977). Four pottery kilns, dated to the 1st and 2nd centuries AD, were recorded with various types of kiln furniture, including square pedestals with ends flattened and expanded to support kiln bars and lengths of perforated plates.

## **4.6 Slag** by Andy Chapman

A total of 4.5kg of slag was recovered, mainly by hand but with additional material, mainly very small pieces, coming from the processing of bulk soil samples.

Phase	Group	Feature	Context/cut	Bulk finds (g)	Soil samples (g)	Total (g)
2.1	G1050	Ditch	598/[599]	15		15
2.4	G1001	N-S				
		boundary	146/[144]	4		4
2.4	G1001	N-S				
		boundary	19/[18]	140		140
2.4	G1009	Encl. 1	94/[93]	2		2
2.4	G1030	Encl. 2	343/[342]	15		15
2.4	G1044	Kiln	290/[334]		240	240
2.4	G1044	kiln	337/[334]	845		845
2.4	G1045	Pit	325/[326]	455	140	595
2.4	G1046	Grave	305/[292]	325	80	405
2.4	G1047	Pit	289/[291]	725	35	760
2.4	G1048	Pit	379/[381]		5	5
			Other slag	1480		1480
Totals				4006	500	4506

The assemblage is consistent in comprising fragments, often measuring 70-150mm, with convoluted and fluid surfaces, of highly vesicular and very low density slag, with the exposed surfaces varying in colour from red-purple through grey to cream, with occasional fluid and glassy areas, green-grey or green-white in colour.

This material is all fuel ash slag derived from high-temperature burning. It is not necessarily associated with iron working, and there are no other materials to indicate that iron working was being carried out on site.

## **4.7 Querns** by Andy Chapman

There are fragments from three small diameter rotary querns, all in forms and geologies commonly found in Roman settlements in Northamptonshire.

From the fill of Phase 2.4 Enclosure 2 ditch G1070 (SF21), there is a small fragment from the circumference of an upper stone in Old Red Sandstone from the Forest of Dean (Shaffrey 2006). The stone is fine-grained and contains sparse quartz pebbles, typically 5-15mm diameter, scattered through the matrix. The concave grinding surface is worn smooth. The stone had a low domed upper surface, and is 20mm thick at the edge and up to 45mm thick inside this, although the central area is missing and would have been thicker.

From the fill of Phase 2.1 Enclosure 2 ditch G1049, there is a fragment from the circumference of a flat upper stone (SF25), c400mm diameter and up to 41mm thick, with a smooth grinding surface and a dimpled upper surfaces. This is also in Old Red Sandstone from the Forest of Dean, and contains sparse quartz pebbles, 11-18mm diameter.

From the fill of Phase 2.4 pit G1087, there are two, non-joining fragments from the circumference of a broken-up flat upper stone in a ferruginous sandstone, possibly Spilsby Sandstone from South Lincolnshire. The concave grinding surface is worn smooth, while the circumference and upper surface are uneven and irregular. The stone was c400mm in diameter and is up to 45mm thick.

## **4.8 Other finds** by Tora Hylton

Fourteen metal and bone finds are described below by period (full catalogue descriptions are included in Appendix 3).

#### Roman finds

Finds of Roman date comprise four copper alloy brooches. With the exception of one extremely corroded example (SF5), all are in a relatively good condition. An Aucissa (Mackreth Type 2a), was recovered from Grave G1046. It had been placed on the top of a Gallo-Belgic platter (copy) with a butt beaker, which in turn had been placed beside the body. The Aucissa is inscribed and it may be paralleled by an example from Richborough, Kent (Bayley and Butcher 2004, plate 50, 74), where it was recovered from a deposit dating to AD 65-80. The ceramic vessels, associated with this brooch, have been dated to *c* AD40-70 (see Section 4.3), this corresponds closely with the date of the brooch, which according to Macketh had passed out of use by AD70/71 (ibid 2011, 132).

Three of the brooches were recovered from the fills of ditches; one from the Phase 2.3 Enclosure 2a ditch G1063, one from the Phase 2.4 north to south boundary ditch G1001 and the third from the Phase 2.5 Enclosure 8 ditch G1076, and therefore are presumed to be casual losses. They include a Trumpet brooch, a Colchester Derivative and a possible Aucissa, which together date to the mid/late 1st and 2nd centuries AD.

## **Anglo-Saxon finds**

A small group of bone and antler finds were recovered from the sunken-featured building, in the south-east corner of the site. The finds include a pin beater, its presence alluding to the manufacture of textiles, a roughout, possibly for a pin and a substantial amount of red deer antler, presumably representing manufacturing debris and waste.

The pin beater is double-pointed, a type which would have been used with a warp-weighted loom. It was used during the process of weaving to separate the coarse threads that catch on each other when the shed is changed. Pin beaters are common finds on settlement sites dating from the 5th century onwards and it has been suggested that pin beaters occur in two distinct size ranges (Waller 1993, 117-119). This particular example measures *c*169mm in length and therefore represents the larger size range.

A substantial amount of red deer antler, possibly amounting to parts of three or four antlers had been deposited within the fill of the sunken-featured building. The presence of sawn beam fragments and the removal of tines suggest that the deposit relates to manufacturing debris from the working of antler.

In total approximately 181 pieces of antler weighing *c*1,833kg were recovered (Table 8), this includes the two near complete but fragmentary examples that had been carefully placed side by side. The largest surviving piece of beam measures up to 495mm in length. The assemblage also includes two burrs, both display natural ruptures, indicating that they had been naturally shed. Other fragments include a crown, 17 tines and numerous small burr and tine fragments.

Considering the large amount of antler present, a relatively small number of pieces have been worked. These are mainly represented by sections of transversely sawn antler beam. Two pieces have saw marks, illustrating where preliminary attempts at cutting through the beam have been made and one burr has had the bez tine removed.

Table 8: Red Deer antler from the Sunken Featured Building

	SF7	SF8	SF9	SF15	Fragments	Total
Burr	-	1	-	1	-	2
Crown	-	-	1	-	-	1
Tine	4	4	4	2	3	c 17
Beam (frags)	7	9	5	1	7	c 29
Misc. frags	42	36	22	38	24	c 132
Weight	524g	559g	447g	103g	200g	1,833kg

#### Post-medieval

There are four finds of post-medieval date. An iron key for a mounted lock dating to the 19th/20th centuries from the Phase 2.5 pit G1065, a perforated lead weight and a shard of clear bottle glass from Enclosure 2a ditches G1055 and G1066. Part of a horseshoe was recovered from a modern tree planting pit.

## 5 HUMAN SKELETAL REMAINS by Chris Chinnock

The single grave (G1046) contained a single semi-crouched individual.

The grave is one event in a complex series of intercutting features (Fig 13), with the grave itself aligned roughly east to west. The head of the individual lay at the eastern end of the grave facing south. The legs were flexed and arranged vertically, resting against the southern edge of the grave (Fig 28). Both arms were flexed with the hands together at the left shoulder. Several grave goods were found with the burial including a platter with a brooch sat on its surface and a butt beaker type jar (Section 4.3). These grave goods and the crouched position suggest a date of towards the end of the 1st century AD.



Grave G1046, looking east

Fig 28

The individual is well represented with only minimal damage to the skeleton caused by later pit G1047. The condition of the bone is generally good although some isolated areas seem to have suffered much more than others, probably due to varying taphonomic conditions within the grave. The surface of the pelvis is particularly degraded and to a lesser extent the lower legs. These were the areas of the skeleton that were affected by the digging of the later pit. The cortical bone on the skull is delicate and flaking in patches.

Assessment suggests this individual is male and between 25 and 35 years of age. Relatively little pathology is noted, however, the dentition displayed pronounced enamel hypoplasia across the majority of the surviving teeth (Fig 29). Evidence for

the metabolic disorder, cribra orbitalia, was noted in both the right and left orbits (Fig 30). The combination of these indicators suggests several periods of arrested development or stress during childhood growth. Slight dental calculus was noted on many of the teeth and a single carious lesion was observed on the left third mandibular molar.



Enamel hypoplasia on mandibular teeth

Fig 29



Cribra orbitalia in right orbit

Fig 30

#### 6 THE ENVIRONMENTAL EVIDENCE

## **6.1 Animal bone** by Philip Armitage

This report presents the results of an analysis of the animal bones recovered from Romano-British contexts at the site, with the majority of specimens from ditch deposits (58 contexts) and the remainder from pits (15 contexts), and a grave fill (1 context). In addition, a small group of animal bone from a Saxon SFB (2 contexts) was also examined.

## Methodology

Basic NISPs (number of identified specimens) data were collected for species/taxon and anatomical determinations, carried out using the author's modern comparative collections and with reference to standard published osteological/zooarchaeological works (including Schmid 1972, Lawrence & Brown 1973 and Getty 1975). Wherever possible, sheep and goat bones and teeth were differentiated following Boessneck *et al's* (1964) and Payne's (1985) criteria. Although no positive identifications of goat were made and all elements with diagnostic features proved to be sheep, it remained a possibility there may have been a few unrecognised goats among the broken elements. All ovicaprid material in this report is therefore referenced as sheep/goat, except where specific mention is made to positively identified sheep elements (Table 9). Measurements (in mm) were taken on selected elements using a Draper dial calliper (graduated 0.02 mm); following the system of von den Driesch (1976).

Table 9: Numbers of identified specimens present (NISP) and species represented

Period	RB	RB	RB	RB		Sax	
Feature type Number of	pits	ditches	grave	Totals	%	SFB	%
contexts	[15]	[58]	[1]			[2]	
Cattle	22	66	-	88	41.9%	15	40.6%
Sheep/goat	38	65	1	104	49.5%	12	32.4%
Pig	1	6	-	7	3.3%	9	24.3%
Horse	-	10	-	10	4.8%	-	-
Dog	-	1	-	1	0.5%	-	-
Goose	_	-	-	-	-	1	2.7%
Totals	61	148	1	210		37	

#### Romano-British

The hand-collected assemblage from the combined Romano-British deposits totalled 399 specimens of which 210 (52.6%) are identified to species and anatomy and 189 (47.4%) remain as unidentified fragments (Table 10). The sieved samples yielded three identifiable specimens (Table 11). Owing to the very high degree of fragmentation of the unidentifiable fraction from each of the sieved samples a precise quantification of this material is unfeasible but appears to be almost entirely derived from mammalian bones.

Table 10: Hand collected animal bone (Summary counts of numbers of unidentified mammal bone fragments by category and feature type)

Period	RB	RB	RB	RB		Sax	
Feature type	pits	ditches	grave	Totals	%	SFB	%
Number of contexts	[3]	[13]	[0]			[2]	
Cattle-sized fragments	5	32	-	37	19.6%		
Sheep/goat-sized fragments	3	7	-	10	5.3%	6	10.5%
"scrappy"/highly fragmented	12	130	-	142	75.1%	51	89.5%
Totals	20	169	0	189		57	

Table 11: Animal bones from the sieved samples (Summary counts of numbers of identified specimens (NISP) by taxon and feature type)

Period Feature type Number of contexts/samples	RB pits [1]	RB ditches [0]	RB grave [1]	RB Totals	Sax SFB [2]
cattle	-	-	-	-	1
sheep/goat	2	-	1	3	2
pig	-	-	-	-	3
field vole	-	-	-	-	1
common frog (MNI = 4)	-	-	-	-	24
small wild bird (MNI = 1)	-	-	-	-	3
(possibly Great Tit)	-	-	-	-	
Totals	2	0	1	3	34

Five mammalian species are represented in the Romano-British material: horse *Equus caballus* (domestic); cattle *Bos* (domestic); sheep *Ovis* (domestic); pig *Sus* (domestic); dog *Canis* (domestic). No bird, fish, amphibian or reptile species are present in the submitted assemblage.

## Saxon SFB

A total of 37 (39.4%) of the 94 elements recovered by hand during excavation are identifiable, representing cattle, sheep/goat and pig plus a single goose *Anser anser*. In addition, the sieved samples from the two Saxon contexts yielded evidence for the presence at the site of micro-fauna (small vertebrates): field vole *Microtus agrestis* and common frog *Rana temporaria*. A small wild bird (possibly Great Tit *Parus major*) is also represented. No fish or reptile species are present in the submitted samples.

#### Taphonomy and condition of the bone

## Romano-British deposits

The general condition/state of preservation of the bones is assessed as fair to good but with relatively high numbers of fragmented material especially from the ditches, including a highly fragmented horse skull from the Phase 2.1 Enclosure 2 ditch G1049. The Phase 2.4 kiln G1044 and the pit (G1047) cutting through it and the grave each contained cattle skulls whose brittle state of preservation resulted in much breakage/fragmentation during excavation and post-excavation handling. Ditches yielding poorly preserved leached/eroded bone are recorded in Table 12. Clear evidence of chopping is restricted to a single cattle humerus from the Phase 2.3

Enclosure 2a ditch G1066 and therefore the assemblage offers limited insight into butchering techniques. However, it is clear that many of the cattle and sheep/goat long bones had been smashed open in order to extract the marrow (Tables 13 & 14). There are two dog gnawed bones (both cattle): 1 metatarsus from the Phase 2.4 pit G1047 and 1 radius from the Phase 2.2 ditch G1058. Eighteen specimens had been burnt (Table 13).

Table 12: Poorly preserved, leached/eroded bone from ditches

Phase	Group	Feature	Context
2.1	G1050	Ditch	[645]
2.2	G1060	Ditch	[618]
2.3	G1031	Enclosure 2	[316]
2.4	G1001	North to south boundary	[144]
2.4	G1011	Enclosure 1	[109]

Table 13: Burnt bones within the Romano-British assemblage

Phase	Group	Context	Feature	Species	Element(s)	Description
2.2	G1062	539	Pit group	Sheep/goat	1 long bone shaft	Burnt/black
2.3	G1066	475	Enclosure 2a	Sheep/goat	2 long bone shafts	Burnt/black
2.4	G1047	289	Pit	Cattle Sheep/goat	1 scapula 1 mandible 1 humerus & 1 rib 1 tibia & 1 astragalus	Charred Charred Burnt/black Burnt/calcined
2.4	G1048	378	Pit	Sheep/goat Indeterminate	1 tooth & 1 first phalanx 7 scrappy fragments	Burnt/black Burnt/black

#### Saxon SFB deposits

The general condition/state of preservation of the bones is assessed as fair to good but with a relatively high incidence of scrappy/much fragmented material. Some leaching and root etching of the bones is noted. Evidence of butchery is limited to two cattle rib blades from the fill within the SFB that exhibit knife cut marks. This same deposit produced a bone-working "blank" 67.6 x 7.4 x 18.7mm, cut from a cattle long bone shaft.

## Descriptions of the species identified

#### Romano-British

Horses – Based on crown heights in the lower cheek teeth of a mandible from the North to south boundary ditch G1001 the horse represented had been aged 8 – 9 years at time of death (criteria of Levine 1982). Ditch G1058 produced a horse skull (very much fragmented) whose age is assessed at 15 – 17 years based on eruption/wear in the upper incisor teeth (criteria of the American Association of Equine Practitioners 1966). From the lateral length (286.0mm) of the complete horse radius from Enclosure 2 ditch G1070 the withers height of the living animal is estimated at 1.24m (method of Kiesewalter 1888; referenced in von den Driesch & Boessneck 1974). This animal had been of only slightly taller stature than the modern New Forest pony skeleton in the collections of the Natural History Museum London (reg.no.H37) whose withers height is 1.22m. From the available measurements and appearance of the other equid bones from the Romano-British deposits, all of the individuals represented would have been "pony-sized". Pathology is evident only in a left femur from north to south boundary ditch G1001, where there is exostoses of the

peripheral distal epiphysis and marked grooving of the articular surface of the trochlea, indicating the joint was afflicted with osteoarthritis, perhaps arising from heavy working/riding.

Cattle – Based on the available metric data, the majority of the cattle appear to have been of small stature and build, including several dwarf animals similar to modern Dexter cattle. However, the site also yielded the remains of at least two larger-sized castrates (oxen): the skull/horn cores (much fragmented) of a young adult mediumhorned castrate (classification of Armitage and Clutton-Brock 1976) from pit G1047 and an innominate bone from pit G1077 in Phase 2.5 Enclosure 8, identified also as a castrate based on the criteria of Grigson (1982). Using eruption and wear patterns in the lower cheek teeth (criteria of Simonds 1854 and Bond & O'Connor 1999, 346) the ages at time of death in four cattle are determined as follows: 1 calf of 6 to 8 months and three young adults 3 to 5 years. An example of bovine spavin, a pathological condition sometimes found in draught cattle (Baker and Brothwell 1980, 117) is evident in a metatarsus from Phase 2.1 ditch G1050. In this specimen the os centrotarsal (naviculo-cuboid) and cuneiform (smaller tarsal bone) are both fused to the top of the metatarsus. The dorsal articular surface of the os centrotarsal is not pitted or worn indicating the astragalus was unaffected. Although this condition would have only caused a relatively mild degree of lameness it perhaps would have rendered this animal only useful for slow, less demanding, draught work (ibid 119).

Sheep –In appearance the sheep were clearly small-sized, gracile-limbed animals, probably resembling modern Soay sheep. Using the eruption/tooth wear in their recovered mandibles (criteria of Payne 1973) the ages of nine sheep were determined as follows (Table 14).

Table 14: Age at death of nine identified sheep

Wear stage	Suggested age	NISP
С	6 to 2 months	1
Е	2 to 3 years	4
F	3 to 4 years	2
G	4 to six years	2

At least one sheep (aged 4 to 6 yrs) had periodontal disease as evidenced in a mandible from pit G1048.

*Pigs* – All pig bones derive from domestic animals and no wild boar are represented. A male pig is recognised from the morphology of its canine tooth (tusk) (criteria of Mayer & Brisbin 1988) recovered from ditch G1058. Applying the formula of Becker (1980, 27) the stature (withers height) in one animal is estimated at 70cm based on the length measurement (GL 75.0mm) of its metatarsus III from Enclosure 2a ditch G1066.

Dog – Despite the presence of gnawed bones, the remains of dog are notably absent apart from part of a single jawbone from the north to south boundary ditch G1001. The carnassial tooth is fully erupted and in wear, indicating this animal was an adult.

#### Saxon

Cattle - A female innominate bone was recovered from the fill of the SFB.

Goose – SFB posthole [246] produced a proximal fragment of a right carpometacarpus. The Romans are believed to have first developed the domestic goose from the wild grey-lag goose *Anser anser*, resulting over time in a larger, much more heavily built bird compared with its wild ancestor. However, it is recognized by

#### BOOTH RISE, NORTHAMPTON

zooarchaeologists that there is often difficulty in separating the domestic and wild geese in Roman and Saxon archaeological assemblages owing to the close similarity is size between the early domesticate and its contemporary wild relative. Therefore although the proximal breadth (Bp = 19.7mm) in the Booth Rise specimen approaches the values recorded in two modern grey-lag geese (Bp 20.9 & 22.1mm) (author's collections) it is not possible to say with any degree of certainly that the goose represented was a wild grey-lag goose rather than a domestic bird.

Micro-fauna – Sieved sample <2> from context the fill of the SFB yielded a jawbone of a field vole Microtus agrestis and 24 elements from several immature common frogs Rana temporaria. Three very small wild bird bones (humerus, tibiotarsus and tarsometatarsus) were recovered in sieved sample <3> from posthole [246] and tentatively ascribed to a Great Tit Parus major.

## Site wide anatomical distributions

Table 15: Summaries of anatomical distributions of the cattle by feature (Hand collected bone and sieved samples combined)

Bone type	pits	ditches	grave	Totals	SFB
horn core & skull	1	-	-	1	-
skull	1	-	-	1	-
mandible	3	4	-	7	-
incisor	-	-	-	-	1
upper cheekteeth	1	7	-	8	-
lower cheekteeth	-	6	-	6	-
indet.tooth frag.	-	1	-	1	-
cervical	1	-	-	1	-
lumbar	1	1	-	2	-
sacrum	2	-	-	2	-
rib	-	3	-	3	6
scapula	1	7	-	8	-
humerus	1	4	-	5	-
radius & ulna	-	2	-	2	-
radius	-	3	-	3	-
ulna	-	1	-	1	-
carpal	-	1	-	1	-
innominate	1	3	-	4	1
femur	2	1	-	3	-
tibia	-	1	-	1	-
tarsal	-	1	-	1	-
os centrotarsale	-	1	-	1	-
metatarsus	2	3	-	5	-
phalanx I	1	2	-	3	1
phalanx II long bone shaft	-	1	-	1	-
frag.	4	13	-	17	7
Totals	22	66	0	88	16

Table 16: Summaries of anatomical distributions of the sheep/goats by feature (Hand collected bone and sieved samples combined)

bone type	pits	ditches	grave	Totals	SFB
skull	-	1	-	1	-
premaxilla	-	-	-	-	1
mandible	6	7	-	13	1
upper cheekteeth	2	6	-	8	1
lower cheekteeth	5	6	-	11	1
thoracic	-	-	-	-	1
rib	8	3	1	12	6
scapula	1	-	-	1	-
humerus	2	1	-	3	-
radius	2	3	-	5	-
metacarpus	1	1	-	2	-
innominate	-	-	-	-	1
femur	2	-	-	2	-
tibia	4	8	-	12	1
astragalus	1	-	-	1	1
metatarsus	-	4	-	4	-
phalanx I	1	-	-	1	-
phalanx II long bone shaft	-	-	1	1	-
frag.	5	25	-	30	_
Totals	40	65	2	107	14

Table 17: Summaries of anatomical distributions of the pigs by feature (Hand collected bone and sieved samples combined)

bone type	pits	ditches	grave	Totals	SFB
skull	-	1	-	1	1
premaxilla	-	1	-	1	-
maxilla	1	-	-	1	1
incisor	-	-	-	-	1
canine	-	1	-	1	-
lower cheek teeth	-	-	-	-	1
humerus	-	-	-	-	1
ulna	-	1	-	1	-
innominate	-		-	-	1
tibia	-	1	-	1	1
fibula	-	-	-	-	1
astragalus	-	-	-	-	1
metatarsus	-	1	-	1	-
metapodial	-	-	-	-	2
phalanx I	-	-	-	-	1
Totals	1	6	0	7	12

Table 18: Summaries of anatomical distributions of the horses by feature (Hand collected bone and sieved samples combined)

bone type	pits	ditches	grave	Totals
skull	-	1	-	1
mandible lower	-	2	-	2
cheekteeth	-	1	-	1
radius & ulna	-	1	-	1
metacarpus	-	2	-	2
innominate	-	1	-	1
femur	-	1	-	1
phalanx III	-	1	-	1
Totals	0	10	0	10

## Conclusions and discussion

### Romano-British assemblage

Although it would be unwise to draw too many conclusions from such a small assemblage, it seems the animal bone evidence from the Romano-British contexts points to the existence of a local pastoral economy based primarily on cattle and sheep. The presence of horses at the site would have been important to the livestock enterprise, providing an invaluable role during the movement of cattle and sheep between grazing areas and paddocks. On the basis of the submitted bone material pigs appear to have been a relatively minor component of the farm stock but there is a possibility more of these animals had been kept elsewhere at some distance from the excavated area and in consequence are underrepresented in the archaeological record available. What is evident however from the anatomical distributions of the food animals (Tables 15, 16 & 17) is that virtually all body parts are represented, indicating the excavated bone comprises waste from the local slaughtering, butchering and consumption of the cattle, sheep and pigs.

#### Saxon assemblage

There seems to be a hint in the assemblage that pigs had become of almost equal importance to cattle and sheep in the local diet, and were being slaughtered, butchered and consumed on or near the site. A glimpse of the site's surrounding environment is provided by the micro-faunal remains: the presence of at least one field vole indicates rough, ungrazed grassland (its preferred habitat – Lawrence & Brown 1973, 91) in the vicinity and the existence of several immature *Rana temporaria* signifies frogs were breeding in nearby bodies of water (ponds and/or ditches).

#### **6.2** The charred plant macro fossils by Val Fryer

## Introduction and method statement

Samples for the retrieval of the plant macrofossil assemblages were taken from pit, ditch, posthole and grave fills and from the fill of an early Saxon sunken-featured building. Twelve assemblages were submitted for assessment.

The samples were bulk floated by NA and the flots were collected in a 300 micron mesh sieve. The dried flots were scanned under a binocular microscope at magnifications up to x 16 and the plant macrofossils and other remains noted are listed in Tables 19 and 20. Nomenclature within the table follows Stace (1997). All

plant remains were charred. Modern roots, seeds and arthropod remains were also recorded.

#### Results

Cereals/chaff and seeds of common weeds and grassland herbs were present at varying densities within all assemblages (Tables 19 and 20). Whilst most cereals and seeds were moderately well preserved, some specimens were severely puffed and distorted, probably as a result of combustion at very high temperatures.

Oat (*Avena* sp.), barley (*Hordeum* sp.) and wheat (*Triticum* sp.) grains were recorded, with wheat occurring marginally more frequently than barley. Of the wheat grains, most were of an elongated 'drop' form typical of spelt (*T. spelta*), and spelt glume bases were noted within eight assemblages. Asymmetrical lateral grains of six-row barley (*H. vulgare*) were noted within the assemblage from sample 10 taken from pit [385] in pit cluster G1080.

Seeds of common segetal weeds and grassland herbs were present throughout, occurring most frequently within the assemblage from sample 10. Taxa noted included brome (*Bromus* sp.), small legumes (Fabaceae), black bindweed (*Fallopia convolvulus*), goosegrass (*Galium aparine*), corn gromwell (*Lithospermum arvense*), medick/clover/trefoil (*Medicago/Trifolium/Lotus* sp.), grasses (Poaceae), knotgrass (*Polygonum aviculare*), dock (*Rumex* sp.), sheep's sorrel (*Rumex acetosella*) and field penny-cress (*Thlaspi arvense*). Wetland plant macrofossils, including sedge (*Carex* sp.) and spike-rush (*Eleocharis* sp.) nutlets and seeds of blinks (*Montia fontana*), were noted within six assemblages, although mostly as single specimens. Sample 4 from pit G1047 contained a sloe (*Prunus spinosa*) fruit stone and sample 12 from Enclosure 8 ditch G1076 included a fragment of hazel (*Corylus avellana*) nutshell. Charcoal/charred wood fragments were present throughout (although scarce within sample 1 from pit [203] within cluster G1080) along with fragments of charred root or stem, and other plant macrofossils included pieces of heather (Ericaceae) stem and indeterminate buds, culm nodes, prickles and tuber fragments.

The fragments of black porous and tarry material and the vitreous concretions, which were present within most assemblages, were all probable residues of the combustion of organic remains (including cereal grains and straw/grass) at very high temperatures. Other remains occurred less frequently, but did include fragments of bone (some of which were burnt/calcined), small pellets of burnt or fired clay, pieces of an indeterminate burnt organic concretion and small fragments of coal (coal 'dust'). At the time of writing it was unknown whether the latter were contemporary with the contexts from which the samples were taken, or later contaminants.

Table 19: The Romano-British charred plant macrofossils

Sample	1	4	7	9	11	10	12	13	5 8	k 6
Context	202	289	325	379	491	389	483	550	30	)5
Feature Period/	203	291	291	381	490	385	484	551	29	92
Phase	2.4	2.4	2.4	2.4	2.2	2.4	2.5	2.4	2.	4
Group	1080	1047	1047	1048	1061	1080	1076	1073	10	46
Feature type	Pit	Pit	Pit	Pit	Pit	Pit	Ditch	Ditch	Gra	ave
Cereals										
Avena sp. (grains)	-	x	-	xcf	-	XX	x	-	х	-
(awn frags.) Hordeum sp.	-	-	-	х	-	х	-	х	-	-
(grains)		xcf	х	xcf	-	xx	х	x	Х	xcf
(rachis node)	-	-	-	-	-	х	-	-	-	-

Sample	1	4	7	9	11	10	12	13	5 8	k O
Context	202	289	325	379	491	389	483	550	30	)5
Feature Period/	203	291	291	381	490	385	484	551	29	92
Phase	2.4	2.4	2.4	2.4	2.2	2.4	2.5	2.4	2.	.4
Group	1080	1047	1047	1048	1061	1080	1076	1073	10	46
Feature type H. vulgare	Pit	Pit	Pit	Pit	Pit	Pit	Ditch	Ditch	Gra	ave
(asymmetrical ateral grains)	-	-	-	-	-	x	-	-	-	
<i>Triticum</i> sp. grains)	-	х	х	xx	-	xx	xx	х	x	)
(glume bases)	-	х	х	-	-	-	-	-	-	
(spikelet bases) (rachis	-	-	x	x	-	x	x	x	х	
nternodes) <i>T. spelta</i>	-	-	-	-	-	-	-	-	Х	
glume bases) Cereal indet.	-	Х	Х	Х	-	Х	Х	Х	Х	2
grains) (detached	-	XX	XX	XXXX	-	XX	XX	XX	х	2
sprout) Herbs	-	-	Х	-	-	-	-	-	-	
Anagallis arvensis Anthemis cotula	- X	-	-	-	-	-	-	-	-	
Antnemis cotula  Apiaceae indet.	x -	-	-	-	-	-	-	-	-	
A <i>rrhenatherum</i> sp. tuber)	-	-	-	-	-	-	-	-	-	
Asteraceae indet.	-	x	-	-	-	-	-	-	-	
Atriplex sp.	-	-	-	-	-	-	-	-	х	
Bromus sp. Caryophyllaceae	-	x	x	x	-	-	x	x	x	:
ndet.	-	-	-	-	-	Х	-	-	-	
Centaurea sp. Chenopodium	-	-	-	-	-	-	-	-	-	
album C. ficifolium Sm.	-	-	-	X	-	-	-	-	-	
Chenopodiaceae	-	Х	-	Х	-	-	-	-		
ndet.	-	-	Х	-	-	Х	-	-	Х	
Fabaceae indet. Fallopia	-	XX	XX	Х	-	Х	Х	х	XX	2
convolvulous	-	X	х	х	-				X	2
Galium aparine Lapsana	-	х	XX	-	-	Х	X	Х	х	2
communis	-	-	-	-	-	-	-	-	-	2
inum catharticum ithospermum	-	xcf	-	-	-	-	-	-	-	
arvense Medicagol Trifolium/Lotus sp	- vof	Х	X	XX	Х	X	-	-	X	×
Trifolium/Lotus sp.	xcf	-	X	XX	-	xx	X	-	xcf	:
Medicago lupulina	-	-	-	-	-	Х	-	-	-	-
Papaver sp. P. argemone	-	- x	-	-	-	-	-	-	-	
argemone dubium	-	-	-	-	-	xcf	-	-	-	
Plantago anceolata	-	×	-	-	-	X	-	-	-	
Small Poaceae ndet.	xcf	х	x	xx	-	xxxx	х	х	x	:
₋arge Poaceae ndet.	х	х	-	-	-	xx	х	-	х	;
Polygonum aviculare		x		х	_	xx	x	x	x	;

Sample	1	4	7	9	11	10	12	13	5 8	& 6
Context	202	289	325	379	491	389	483	550	3	05
Feature Period/	203	291	291	381	490	385	484	551	2	92
Phase	2.4	2.4	2.4	2.4	2.2	2.4	2.5	2.4	2	.4
Group	1080	1047	1047	1048	1061	1080	1076	1073	10	146
Feature type	Pit	Pit	Pit	Pit	Pit	Pit	Ditch	Ditch	Gr	ave
Potentilla sp.	-	-	-	x	-	-	-	-	-	-
Ranunculus parviflorus	-	-	-	-	-	х	-	-	-	
Rumex sp.	-	х	x	x	-	xxx	x	-	х	×
Rumex/Carex sp.	-	-	-	-	-	-	-	х	-	
R. acetosella	-	x	x	x	-	x	-	-	-	
Sherardia arvensis	-	-	-	-	-	x	_	x	-	
Silene sp.	_	-	-	-	_	x	_	-	-	
Stellaria graminea	_	_	_	_	_	_	х	_	_	×
S. media (L.)Vill	_	_	х	_	_	х	_	_	_	· ×
Thlaspi arvense	_	х	x	_	_	x	_	_	х	<i>,</i>
Tripleurospermum	-	^	^	-	-	^	_	-	^	,
inodorum Valerianella	X	-	-	-	-	-	-	-	-	
dentata	-	х	-	-	-	х	-	-	-	
Wetland plants										
Carex sp.	-	х	-	x	-	x	-	х	х	
Eleocharis sp.	-	-	-	x	-	-	-	-	-	
Montia fontana	_	-	x	x	-	x	_	-	-	
Tree/shrub macrofossils										
Corylus avellana	-	-	-	-	-	-	х	-	-	
Prunus spinosa Other plant	-	Х	-	-	-	-	-	-	-	
macrofossils										
Charcoal <2mm	Х	XXX	XXXX	XX	XXXX	XXXX	XXX	XXXX	XXX	XX
Charcoal >2mm	-	Х	XX	Х	XXXX	XXX	XXX	Х	XX	Х
Charcoal >5mm	-	-	x	x	XXXX	XX	XX	-	Х	>
Charcoal >10mm	-	-	-	-	XX	Х	Х	-	-	
Charred root/stem Ericaceae indet.	x	xx	xx	xxx	x	xxx	х	x	-	Х
(stem)	-	-	x	х	-	-	x	х	-	X
Indet.bud	-	-	x	-	-	-	-	-	-	
Indet.culm node	-	-	-	-	-	Х	-	-	-	
Indet.prickle	-	-	-	-	-	Х	-	-	-	
	х	x	x	xx	-	-	x	x	-	
Indet.seeds	_	-	х	х	xfg	-	-		х	×
Indet. tubers Other remains										
Indet. tubers  Other remains Black porous	х	xx	xx	xxxx	-	x	х	_	xx	>
Other remains Black porous 'cokey' material Black tarry	х									
Other remains Black porous 'cokey' material Black tarry material		-	x	x	-	x x	x	-	-	
Other remains Black porous 'cokey' material Black tarry material Bone	х									
Indet.seeds Indet. tubers Other remains Black porous 'cokey' material Black tarry material Bone Burnt/fired clay Burnt organic concretions	х	-	x	x	-		x	-	-	· ·

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Sample	1	4	7	9	11	10	12	13	5 8	<b>&amp;</b> 6
Context	202	289	325	379	491	389	483	550	3	05
Feature Period/	203	291	291	381	490	385	484	551	2	92
Phase	2.4	2.4	2.4	2.4	2.2	2.4	2.5	2.4	2	.4
Group	1080	1047	1047	1048	1061	1080	1076	1073	10	46
Feature type	Pit	Pit	Pit	Pit	Pit	Pit	Ditch	Ditch	Gr	ave
Small mammal/ amphibian bones	-	-	х	-	-	xb	-	-	-	-
Vitreous material	-	xx	xx	xx	-	х	х	х	xxxx	XXXX
Sample volume (litres) Volume of flot	40	40	40	40	20	20	40	40	15	20
(litres)	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
% flot sorted	100	100	100	100	100	100	100	100	100	100

## **Key to Table**

x = 1 - 10 specimens xx = 11 - 50 specimens xxx = 51 - 100 specimens xxxx = 100 + 50 specimens

cf = compare fg = fragment b = burnt ph = posthole

Table 20: The Anglo-Saxon charred plant macrofossils

Sample	2	3
Context	29	245
Feature	30	246
Period/ Phase	3	3
Group	1041	1041
Feature type	SFB	SFB PH
Cereals Hordeum sp. (grains)	X	_
Triticum sp. (grains)	x	-
Cereal indet. (grains)	X	Х
Herbs	^	^
	vof	
Anagallis arvensis Anthemis cotula	xcf	-
	X	-
Apiaceae indet.	Х	-
Atriplex sp.	-	X
Bromus sp.	xcf	
Centaurea sp. Small Poaceae indet.	-	x x
	- V	^
Rumex sp. Other plant macrofossils	X	<del>-</del>
Charcoal <2mm	xxxx	xxx
Charcoal >2mm	xxxx	xxx
Charcoal >5mm	Х	xx
Charcoal >10mm	Х	-
Charred root/stem	х	x
Indet.seeds	-	Х
Other remains Black porous 'cokey' material	_	x
Black tarry material	Х	-
Bone	x xb	X
Burnt/fired clay	X	-
Small coal frags. Small mammal/	x	x
amphibian bones	XX	X
Vitreous material	Х	X
Sample volume (litres)	40	10
Volume of flot (litres)	0.1	<0.1
% flot sorted	100%	100

#### **Discussion**

The Romano-British pit and ditch assemblages are broadly similar in composition, with most containing a moderate to high density of cereal grains, some chaff and a range of weed seeds. Such assemblages are often indicative of cereal processing waste, but it is currently unclear which stage of processing may be represented. However, it is noted that the condition of many of the grains is very poor, probably suggesting that they had been burnt at very high temperatures, possibly on more than one occasion. Such assemblages could be indicative of either parching waste, where the grains were heated to release them from the chaff, or the use of cereal processing waste as tinder or kindling within a domestic context. It is possibly of note that at least four assemblages also contain small fragments of heather stem. Heather was widely used within ovens and hearths as it ignited easily and maintained an even, high temperature throughout combustion. The highest densities of material occur within pit G1047 (samples 4 and 7), pit G1048 (sample 9) and pit [385] in pit cluster G1080 (sample 10), possibly suggesting that these features were nearest to the sources of the material. Somewhat unusually, grave G1046 (samples 5 and 6) also contains a moderate density of similar processing waste, but this is almost certainly a result of the fact that both the grave and the pit cut into the kiln G1044 which was probably the original source of the material.

The assemblage from the early Saxon sunken-featured building is largely typical of material from such contexts, containing a high density of charcoal, but very little else (Table 20). It is generally assumed that the remains are derived from hearth waste, which fell through the floor of the structure into the cavity below.

#### **Conclusions**

In summary, it would appear most likely that the majority of the assemblages of Romano-British date are partly or wholly derived from cereal processing waste, although it remains to be determined whether this is in a primary context or whether it is indicative of the use of processing debris within a secondary domestic context. Notwithstanding this, it would appear that the cereals were largely being grown on light, well drained soils, possibly within newly cultivated areas of former grassland.

#### 7 SUMMARY OF POTENTIAL AND RECOMMENDATIONS FOR FUTURE WORK

## 7.1 Stratigraphic and structural data

The excavation data was recorded to a sufficient standard to allow further analysis to take place.

## Range and variety of feature types

The range of features recorded on the site is listed below (Table 21). The overwhelming majority of the contexts recorded related to ditches (73% of total number of contexts); pits formed 16%; postholes 5% and modern tree planting pits 3% of the total. All other feature types combined represented 3% of the total recorded.

Table 21: Total number of recorded feature types and associated number of contexts

Feature type	Number of feature types	Total number of contexts
Extensive		
layers:		
Colluvium	1	1
Natural	1	1
Subsoil	1	1
Topsoil	1	1
Ditch	205*	475
Grave	1	2
Kiln	1	2
Pit	40*	106
Posthole	17	34
Scouring	1	1
SFB	1	4
Skeleton	1	1
Slot	2	4
Spread	1	1
Surface -	1	3
external		
Tree planting	8	18
pit		
Totals	283	655

<sup>\*</sup> These represent the number of excavated elements of linear features and larger pits and do not represent the total number of individual feature types

## 7.2 Flint

No further analysis is required. A report will be included in the final publication.

## 7.3 Iron Age pottery

No further analysis is required for the small assemblage of Iron Age pottery, a report will be included in the final publication.

## 7.4 Romano-British pottery

The assemblage merits publication, as reasonably discretely-dated and with some larger and well-preserved context groups. The spot dates should be reassessed in terms of the site phasing during the analysis for final reporting. Publication should be accompanied by selective illustration (maximum of 20 vessels), concentrating on the

larger context groups and intrinsically interesting vessels including these from grave G1046.

## 7.5 Anglo-Saxon pottery

The relatively small, though interesting, assemblage of Anglo-Saxon pottery requires a minimum amount of further work, including the illustration of a maximum of five sherds.

#### 7.6 Kiln debris

No further analysis is required. A report will be included in the final publication.

## **7.7** Slag

The fuel ash slag has been fully quantified and described and does not require further analysis prior to publication.

#### 7.8 Querns

The querns require no further analysis prior to publication as they were all fragmentary and deposited in secondary contexts.

#### 7.9 Other finds

No further analysis is required for the Romano-British brooches, the better surviving examples should be illustrated in the final report. The Anglo-Saxon antler assemblage should be analysed in full. The post-medieval items require no further work.

#### 7.10 Human skeletal remains

The good condition and relative completeness of the skeleton should allow for accurate age, sex and stature estimations along with other metric analyses. The more subtle and delicate indications of pathology may be less obvious due to the erosion of cortical bone in certain areas. However, the presence of dental enamel hypoplasia and cribra orbitalia warrants further analysis.

## 7.11 Faunal remains

The animal bone assemblage, although small, is sufficient to merit its analysis in relation to the site phasing to determine whether there are any variations in deposition process or composition of the assemblage within the Romano-British period.

## 7.12 Charred plant remains

The majority of the charred plant assemblages of Romano-British date are partly or wholly derived from cereal processing waste, although it remains to be determined whether this is in a primary context or whether it is indicative of the use of processing debris within a secondary domestic context. Notwithstanding this, it would appear that the cereals were largely being grown on light, well drained soils, possibly within newly cultivated areas of former grassland.

The following assemblages are of particular note, as all contain a sufficient density of plant remains for quantification (ie 100+ specimens):

Sample 4	Context 289	Feature 291	G1047	Pit
Sample 7	Context 325	Feature 291	G1047	Pit
Sample 9	Context 379	Feature 381	G1048	Pit
Sample 10	Context 389	Feature 385	G1080	Part of pit cluster
Sample 12	Context 483	Feature 484	G1076	Enclosure 8 ditch
Sample 13	Context 550	Feature 551	G1073	Enclosure 5 ditch

Analysis of the above assemblages has the potential to provide valuable interpretative data on local agricultural practises and landscape usage during the Romano-British period within this area of Northamptonshire.

#### 8 REVIEW OF RESEARCH OBJECTIVES

## 8.1 General objectives

Mitigate the potential impacts from the proposed development of the site through archaeological recording, analysis and dissemination.

The archaeological works have succeeded in recording the archaeological remains on site. The programme of assessment works already undertaken and the proposed programme of further works and publication will enable the full realisation of this objective.

## 8.2 Specific objectives

Refining the date, nature, character and extent of the activity on the development site

This objective was fully realised by the excavation works and the collection of sufficient artefacts and environmental samples to characterise the site and its development. Full analysis of the Romano-British and Anglo-Saxon pottery in association with the analysis of the specified environmental samples will complete this objective.

Focus on furthering understanding of the dynamics of the ditch system, its historical development, associated landscape use, and settlement activity

The results of the excavation provide a good and clear stratigraphic sequence of development for the ditch systems within the development area for the Romano-British period. Analysis of this sequence in relation to known sites of similar date in the vicinity will complete this objective. However, associated settlement activity was sparse within the development area and it will not be possible to pursue this line further.

Examining the transition from the Iron Age into Romano-British culture at the site and its impact on the landscape

Evidence for Iron Age use of the area was scant and as such it will not be possible to examine the change from this period to the Romano-British period within the confines of this project. However, the first significant use of the area took place in the key transitional period surrounding the Roman invasion. The relatively large pottery assemblages recovered from the landscape elements of this date should help to refine knowledge of this transitional time and analysis of the site within its immediate

#### BOOTH RISE, NORTHAMPTON

local context should contribute towards specific research agenda 5.4.1 (Knight et al 2012).

Recovering artefacts to assist in the development of type series within the region

Both the Romano-British and Anglo-Saxon pottery assemblages recovered from the site have the potential to address this research aim. The Romano-British assemblage in composition is typical of rural assemblages from the period, however, the large size of some of the pottery groups in association with the generally well defined date ranges increases its intrinsic research value. The Anglo-Saxon pottery assemblage is relatively small and related to the use of a single structure, however, it comprises unusual examples of early 6th-century pottery and therefore has potential to contribute to the development of the type series.

Recovering palaeo-environmental remains to determine past local environmental conditions

Environmental remains were recovered from a number of features across the site and for the Romano-British period a small number of the samples recovered merit further analysis to address questions concerning the prevailing local environmental conditions.

How the Iron Age and Roman activity relates to the nearby Roman villa Boothville

The results of the Booth Rise excavations will be analysed in relation to available records for the Boothville villa. However, as the villa was investigated prior to the inception of commercial archaeology it is anticipated that the records will only be sufficient to draw the broadest conclusions.

## 8.3 Updated research objectives

A number of further research objectives have been identified following the assessment of the results of the excavation that could not have been anticipated prior to the start of the project. All have been related to the appropriate section of the regional research agenda (Knight *et al* 2012).

#### Romano-British

5.6.3 Investigate production, movement and consumption of pottery.

Analysis of the pottery kiln G1046 and the distribution of waste material derived from it has the potential to contribute to the understanding of small scale pottery production in the local area in second half of the 1st century AD.

Analysis of the Romano-British pottery assemblage has the potential to contribute to the study of local and regional pottery distribution networks.

5.8.4 Early Romano-British burial practices

There is a general absence of evidence for the interment of the dead in the early Romano-British period within the region. The single burial from the site at Booth Rise has the potential to contribute to the understanding of funerary practices in the period immediately following the Roman conquest.

## Anglo-Saxon

6.4.1 Investigate the impact of Anglo-Saxon immigration on rural settlement patterns.

The single Anglo-Saxon structure identified at Booth Rise has some potential to add to the understanding of the changing nature of landscape use and settlement pattern in the post-Roman period. Its isolation within the excavated area reduces the chances of providing a definitive contribution; however, analysis of this example in relation to others from the local area should have a positive impact on the understanding of the date and nature of settlement.

6.7.4 Investigate the changing nature of animal husbandry and resource management between the Romano-British and Anglo-Saxon period.

Analysis of the animal bone assemblage in relation to the site phasing is likely to provide a positive contribution to the understanding of changing agricultural practices and food resource management between the two periods of settlement.

#### 9 RESOURCES AND PROGRAMME

## 9.1 Work completed

All work has been completed, on all aspects of the project, to assessment stage.

#### 9.2 Future works

In order to address the updated research aims identified in Section 8 and bring the project to final reporting and publication a programme of future works will be undertaken.

Table 22: Post-excavation analysis task list

Tasks		Personnel
1.	Report introduction and background	Liz Muldowney
2.	Report structural site narrative	Liz Muldowney
3.	Documentary research	Liz Muldowney
4.	Romano-British pottery analysis and report	Ed McSloy (Cotswold Archaeology)
5.	Anglo-Saxon pottery analysis and report	Paul Blinkhorn
6.	Charred plant remains analysis and report	Val Fryer
7.	Animal bone analysis and report	Philip Armitage
8.	Other finds	Tora Hylton
9.	Illustrations	Amir Bassir
10.	Integration of specialist reports	Liz Muldowney
11.	Report digest and discussion	Liz Muldowney
12.	Editing	Andy Chapman
13.	Preparation of research archive	Theodora Anastasiadou-Leigh

# 9.3 Programme

The programme will commence once the Assessment Report and UPD has been approved by the County Archaeological Officer.

Table 23: Post-excavation analysis programme

Task	Month 1	Month 2	Month 3
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			

#### 10 REPORTING, PUBLICATION AND ARCHIVE

#### 10.1 Reporting

A full site report will be prepared by Northamptonshire Archaeology. This will form the basis of a short article to be submitted to the journal of the Northamptonshire Archaeological Society. The proposed structure of the report is as follows:

#### INTRODUCTION

- 2 **BACKGROUND** 
  - 2.1 Location, topography and geology
  - Previous archaeological work 2.2
- **OBJECTIVES** 3
- **METHODOLOGY**
- 5 SITE CHRONOLOGY
  - Summary of site chronology 5.1
  - 5.2 The worked flint by Yvonne Wolframm-Murray

#### THE ROMAN SETTLEMENT

- 6.1 Late Iron Age pits
- 6.2 Romano-British activity
- 6.3 The Iron Age pottery by Andy Chapman 6.4 The Romano-British pottery by Ed McSlov The Romano-British finds 6.5 by Tora Hylton et al
- The human skeletal remains 6.6
- 6.7 The animal bone by Philip Armitage
- by Val Fryer 6.8 The charred plant remains

#### 7 THE ANGLO-SAXON BUILDING

- **Anglo-Saxon Sunken featured building**
- by Paul Blinkhorn The Anglo-Saxon pottery 7.2 7.3 The Anglo-Saxon finds by Tora Hylton The animal bone by Philip Armitage 7.4 The charred plant remains by Val Fryer 7.5

- THE TREE NURSERY
  - 8.1 The modern tree nursery
  - The modern finds by Tora Hylton 8.2

#### 9 DISCUSSION

- 9.1 The late Iron Age pits
- The Romano-British settlement 9.2
- 9.3 The Anglo-Saxon settlement
- 9.4 The modern tree nursery

Each section will be subdivided where necessary to articulate intra-period phasing and to address specific research aims. Within the narrative text illustrations will include overall phase plans, detailed drawings of individual features or feature groups, photographs and finds illustrations. The discussion will include figures

showing the archaeological context of the works in relation to other archaeological investigations discussed in the text and other figures as necessary.

#### 10.2 Archive

A digital copy of the site archive and the site narrative will be made to RCHME standards and submitted to the National Archaeological Record. The archive will comprise all written, drawn and photographic records, and all material finds and processed sample residues recovered from the second phase trial trench evaluation and excavation phases. All records and finds generated by the excavation will be compiled in a structured archive in accordance with the guidelines of Appendix 3 in the English Heritage procedural documents, *Management of Archaeological Projects* (EH 1991) and *MoRPHE* (EH 2006). Site details will be entered onto the OASIS online database.

#### 10.3 Excavation records archive

The records generated by the excavation have all been cross-referenced and checked for internal consistency. The context records and finds catalogues have been entered on to a database (Access 2007). All records and finds are kept under the site code NOR BOR 12.

The excavation generated the following records:

655 Context records

86 pencil drawn plans on A3 permatrace sheets (varying scales)

182 pencil drawn sections on 22 A3 permatrace sheets (varying scales)

13 Environmental sample records

18 Photographic record sheets (9 for monochrome and 9 for digital images)

9 monochrome films and 448 digital images

6 Section registers

1 Plan register

2 Individually recorded finds registers

1 levels book

#### 10.4 The finds archive

Table 24: Finds archive quantities

Material	Quantity	Weight
Iron Age pottery	135 sherds	395g
Romano-British pottery	2309 sherds	42.8kg
Anglo-Saxon pottery	54 sherds	1.25kg
Kiln debris	290 fragments	2.88kg
Slag	-	4.5kg
Querns	4 pieces	-
Flint	2 pieces	-
Individually recorded finds	27 (total number)	-
Animal bone	-	Approx 20kg
Environmental flots	13 flots	-

#### **BIBLIOGRAPHY**

Aird, P, and MacRobert, E, unpublished *The Roman Pottery from Ashton, Northants,* Unpublished typescript report

American Association of Equine Practitioners 1966 Official Guide for Determining the Age of the Horse, USA, American Association of Equine Practitioners

Armitage, P L, and Clutton-Brock, J, 1976 A system for classification and description of the horn cores of cattle from archaeological sites, *Journal of Archaeological Science*, **3**, 329-348

Baker, J, and Brothwell, D, 1980 *Animal Diseases in Archaeology,* London: Academic Press

Bayley, J, and Butcher, S, 2004 Roman Brooches in Britain: A technological and Typological Study based on the Richborough Collection, Society of Antiquaries

von Becker, C, 1980 *Untersuchungen an Skelettresten von Haus- und Wildschweinen aus Haithabu*. Neumunster: Karl Wachholtz Verlag

Blinkhorn, P, 2010 Saxon pottery, in C Simmonds 2010

Boessneck, J, Müller, H-H, and Teichert, M, 1964 Osteologische Unterscheidungmerkmale zwischen Schaf (*Ovis aries* Linné) und Ziege (*Capra hircus* Linné), *Kühn-Archiv, Bd.* **78**, H.1-2

Bond, J M, and O'Connor, T P, 1999 Bones from Medieval Deposits at 16-22 Coppergate and Other Sites in York, The Archaeology of York, 15/5, York: York Archaeological Trust & CBA

Bunch, B, and Corder, P, 1954 A Romano-British Pottery Kiln at Weston Favell, near Northampton, *Antiquaries Journal*, **34**, 218-225

DCLG 2012 National Planning Policy Framework

Denham, V, 1985a The Pottery, in JH Williams et al 1985, 46-64

Denham, V, 1985b The Pottery, in M Shaw 1985, 123-33 and fiche

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

von den Driesch, A, and Boessneck, J, 1974 Kritische Anmerkungen zue Widerristhöhenberechnung aus Langenmassen vor-und frühgeschichlicher Tierknochen. Saugetierkundliche Mitteilungen, **22**, 325-348

EH 1991 The Management for Archaeological Projects 2, English Heritage

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

Foster, P J, Harper, R, and Watkins, S, 1977 An Iron Age and Romano-British settlement at Hardwick Park, Wellingborough, Northamptonshire, *Northamptonshire Archaeol*, **12**, 55-96

Friendship-Taylor, R M, 1999 Late La Tène Pottery of the Nene and Welland Valleys of Northamptonshire: with particular reference to Channel-rim Jars, Oxford, British Archaeological Reports, British Series, **280** 

Getty, R, 1975 Sisson and Grossman's The Anatomy of the Domestic Animals, Philadelphia, W B Saunders Company (5th edition), **1 & 2** 

Grigson, C, 1982 Sex and age determination of some bones and teeth of domestic cattle: a review of the literature, in B Wilson *et al* 1982, 7-23

Gryspeerdt, M, 1981 The Pottery, in J H Williams 1981, 108-121

Hawkes, C F C, and Hull, M R, 1947 Camulodunum: first report on the excavations at Colchester 1930–1939, Society of Antiquaries, **14** 

Hunter, R, and Mynard, D, 1977 Excavations at Thorplands near Northampton 1970 and 1974, *Northamptonshire Archaeology*, **12**, 97-109

IfA 2008 Standard and Guidance for Archaeological Excavation, Institute for Archaeologists

IfA 2010 Code of Conduct, Institute for Archaeologists

Johnston, D E, 1969 Romano-British Pottery Kilns near Northampton, *Antiquaries J*, **49**(i), 75–97

Kiesewalter 1888 referenced in von den Driesch and Boessneck

Knight, D, Vyner, B, and Allen C, 2012 East Midlands Heritage: An updated research agenda and strategy for the Historic Environment of the East Midlands, Nottingham Archaeological Monog, 6, York Archaeological Trust

Lawrence, M J, and Brown, R W, 1973 *Mammals of Britain Their Tracks, Trails and Signs*, London: Blandford Press. Revised Edition

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

Mackreth, D F, 2011 Brooches in late Iron Age and Roman Britain, 1 & 2, Oxbow Books

Marney, P T, 1989 Roman and Belgic Pottery from Excavations in Milton Keynes 1972–82 Aylesbury, Buckinghamshire Archaeological Society Monog, 2

Mayer, J J, and Brisbin, I L, 1988 Sex identification of *Sus scrofa* based on canine morphology, *Journal of Mammalogy*, **69 (2)**, 408-412

MetroMOLA 2012 Archaeological evaluation on Land at Booth Rise, Northampton June 2012, Museum of London Archaeology

McCarthy, M, 1979 The Pottery, in J H Williams 1979m 151-242

McSloy, E, forthcoming Pottery, in V Crosby and D Neal forthcoming *Excavations at Stanwick*, *Northamptonshire* 1984–1991

Myres, J N L, 1977 A Corpus of Anglo-Saxon Pottery of the Pagan Period, 2 vols, Cambridge

NA 2011 Archaeological fieldwork manual. Northamptonshire Archaeology

NA 2012 Written scheme of investigation for Archaeological excavation, recording, analysis and publication of land at booth rise and Lumbertubs Way, Northamptonshire, Northamptonshire Archaeology

NAS 1974 *Archaeology in Northamptonshire in 1973*, Northamptonshire Archaeology, **9**, 83-115

NCC 2012 Brief for a programme of archaeological excavation, recording, analysis and publication of land at Booth Rise and Lumbertubs Way, Northamptonshire, Northamptonshire County Council

Parry, S, 2006 Raunds Area Survey. An archaeological study of the landscape of Raunds, Northamptonshire 1985-92, Oxbow Books

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

Payne, S, 1985 Morphological distinctions between the mandibular teeth of young sheep, Ovis, and goats, Capra, Journal of Archaeological Science, 12,139-147

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

RCHME 1985 Archaeological Sites and Churches in Northampton, an Inventory of the Historical Monuments in the County of Northamptonshire, **V**. Royal Commission on Historical Monuments (England)

Schmid, E, 1972 Atlas of animal bone, Elsevier, Amsterdam

Shaffrey, R, 2006 *Grinding and Milling: A study of Romano-British rotary querns and millstones made from Old Red Sandstone*, British Archaeological Reports, British Series, **409** 

Shaw, M, 1985 Excavations on a Saxon and Medieval site at Black Lion Hill, Northampton, *Northamptonshire Archaeology*, **20**, 113-138

Simmonds, C, Archaeological trial trench evaluation on land at Overstone, Leys, Overstone, Northamptonshire, Phase 2, Northamptonshire Archaeology reports, 10/216

Simonds, J B, 1854 The Age of the Ox, Sheep, and Pig; being the Substance of Two Lectures Delivered before The Royal Society of England on the Structure and Development of the Teeth of these Animals, London: W S Orr and Co

Souterrain Archaeological Services 2012 Booth Rise, Northampton, Archaeological Geophysical Survey, Report **SOU12-221** 

Stace, C, 1997 New Flora of the British Isles, 2nd edition, Cambridge University Press

Thompson, I, 1982 *Grog-tempered 'Belgic' Pottery of South-eastern England*, Oxford, British Archaeological Reports, British Series, **108** 

Upson-Smith, T, 2012 An archaeological excavation at the former Cherry Orchard School, Northampton February 2012, Northamptonshire Archaeology report, **12/166** 

Waller, R, 1993 Pin beaters, in R J Williams 1993, 117-119

Williams, J H, St Peter's St, Northampton. Excavations 1973-76, Northampton Development Corporation Monog, 2

Williams, J H, Excavations in Chalk Lane, Northampton, *Northamptonshire Archaeol*, **16**, 87-135

Williams, J H, Shaw, M, and Denham, V, 1985, *Middle Saxon Palaces Northampton*, Northampton Development Corporation Monog, **4** 

Williams, R J, 1993 *Pennylands and Hartigans: Two Iron Age and Saxon Sites in Milton Keynes*, Buckinghamshire Archaeological Society Monog, **4** 

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

Woods, P J, and Hastings, B C, (ed K Brown) 1984 *Rushden: The Early Fine Wares*, Northamptonshire County Council

#### **WEBSITES**

BGS 2013 <a href="http://mapapps.bgs.ac.uk/geologyofbritain/home.html">http://mapapps.bgs.ac.uk/geologyofbritain/home.html</a>, accessed on 2 Sept 2013

Northamptonshire Archaeology A service of Northamptonshire County Council

October 2013

### **APPENDIX 1: THE GROUP HIERARCHIES**

Period 1 Group hierarchy

Group	Group name	Context	Spot date
number	Group manne	Context	Spot date
1012	Pit	74	-
		75	-
1018	Pit cluster	147	-
		148	1st century
		154	-
		159	-
		160	-
		659	-
1019	Pit	149	-
		150	RB
1023	Pit	238	-
		239	-
		240	-
1083	Pit cluster	166	1st century BC
		167	-
		179	-
		180	-
		181	-
		182	-
1091	Colluvium	638	

Phase 2.1 Group hierarchy by Sub-phase

Sub- phase	Group number	Group name	Context	Spot date
2.1.1	1004	North to south boundary	138	-
		•	139	-
			142	-
			143	-
			168	-
			169	-
	1006	Enclosure 1	60	-
			61	-
			110	-
			113	-
			114	-
			115	-
	1020	Trackway ditch	33	-
			34	Mid-late 1st century AD
			35	
			36	Late 1st -2nd century AD
			41	-
			42	-
			249	-
			250	-
			263	Late 1st -2nd century AD
			264	-
			275	Late 1st -2nd century AD
			276	-
			466	-
	4004	T	467	-
	1021	Trackway ditch	207	-
			208	-
			667	-
			668 660	-
	1036	Enclosure 3	669	-
	1030	Eliciosale 3	259 260	-
	1040	Englesume 0	260	Late 1st 2nd sentime AD
	1049	Enclosure 2	441	Late 1st -2nd century AD
			442 567	2nd contury AD
			567 568	2nd century AD
			568 587	-
			58 <i>1</i> 588	- -
			500 589	- Late 1st -2nd century AD
			600	Late 15t -Zilu Celitury AD
			601	_
			657	- -
			658	_
	1054	Enclosure 2	552	
	1004	LIICIOSUIE Z	552 553	_
2.1.2	1007	Enclosure 1	83	-
۷.۱.۷	1007	Enclosure I	83 84	Farly-mid 1st contury AD
			89	Early-mid 1st century AD
			90	- -
	1015	North to south	70	-
		boundary	7.4	
	40.15		71	-
	1016	Slot	68	-
			69	-
	1026	Enclosure 3	213	-

Sub- phase	Group number	Group name	Context	Spot date
			214	-
	1037	Enclosure 3	257	
			258	-
			265	-
			266	-
	1050	Ditch segment	563	-
		-	564	-
			597	Late 1st -2nd century AD
			598	Late 1st -2nd century AD
			599	-
			636	-
			637	-
			644	Early-mid 1st century AD
			645	-
	1051	Ditch segment	460	-
			561	-
			562	-
			631	-
			634	-
			635	-
			664	-
			671	-
	1067	Trackway ditch	572	-
			573	1st century AD
			574	- -
			578	Late 1st -2nd century AD
			579	-
			580	-

Phase 2.2 Group hierarchy by Sub-phase

Sub- phase	Group number	Group name	Context	Spot date
2.2.1	1005	North to south boundary	136	-
			137	-
			157	-
			158	-
	1017	North to south boundary	65	-
			66	Early-mid 1st century AD
			67	-
	1024	Trackway ditch	37	-
			38	-
			43	-
			44	-
			251	1st century AD
			252	
	1052	Ditch segment	607	-
			608	-
			625	-
			626	<u>-</u>
	1053	Ditch segment	507	-
		-	508	-
			609	-
			610	-
			627	-
			628	-
	1055	Enclosure 2a	344	-
			345	-
			450	-
			451	-
			470	Mid 1st century
			471	-
			472	-
			515	-
			516	RB
			554	-
			555	
	1057	Ditch segment	534	-
		-	535	-
			623	-
			624	-
			650	-
			651	<u>-</u>
	1068	Trackway ditch	416	-
		-	569	-
			570	-
			571	-
			670	<u>-</u>
2.2.2	1038	Enclosure 3	221 222	-
	1040	Pit	48	-
	- <del>-</del>	-	49	-
			50	-
	1056	Enclosure 2a	311	-
			312	-
	1058	Ditch segment	485	-
	. 555	2.co. ooginont	486	RB
			100	

Sub- phase	Group number	Group name	Context	Spot date
			487	-
			523	-
			524	-
			532	-
			533	-
			593	-
			594	1st century AD
			652	-
			653	-
			654	Early-Mid 1st century AD
			655	1st century AD +
			656	-
	1059	Ditch segment	488	-
			489	Late 1st -2nd century
			530	-
			531	-
			590	-
			591	-
			592	Late 1st -2nd century
			621	-
			622	-
	1060	Ditch segment	495	-
			496	Late 1st -3rd century AD
			617	1st century AD
			618	-
	1061	Pit	490	-
			491	-
			492	-
			493	-
			494	-
	1062	Pit cluster	536	-
			537	-
			538	-
			539	1st century AD
			540	-
			603	-
			604	1st century AD
			605	Mid-late 1st century AD
			606	-

Phase 2.3 Group hierarchy

Group number	Group name	Context	Spot date
1008	Enclosure 1	85	-
		86	1st century AD
		91	-
		92	Early-Mid 1st century AD
		116	-
		117	-
1022	Trackway ditch	21	-
		22	Early-Mid 2nd century AD
		23	-
		206	Late 1st-early 2nd century AD
		226	Late 1st-early 2nd century AD
		227	- Ond continuit AD
		235	2nd century AD
		236	-
		237 269	-
		209	Late 1st 2nd contumy AD
		270 271	Late 1st- 2nd century AD
		271	-
		277	-
		278	-
		660	-
		666	_
1025	Trackway ditch	39	
1023	Trackway ulton	40	Late 1st century AD
		45	-
		46	
		209	_
		210	_
		211	_
		212	_
		253	1st century AD
		254	-
		261	_
		262	_
		273	_
		274	-
		335	_
		336	-
		425	-
		426	-
1031	Trackway ditch	316	-
	•	317	-
1034	Pit	31	Late 1st- 2nd century AD
		32	<del>-</del>
1039	Enclosure 3	233	-
		234	-
		664	-
		665	-
1063	Enclosure 2a	331	-
		332	-
		431	-
		432	-
		473	-
		474	-
		559 560	-

Group number	Group name	Context	Spot date
		613	-
		614	-
		619	-
		620	-
1064	Enclosure segment	595	
		596	RB
		602	-
		611	Late 1st- 2nd century AD
		612	-
		639 640	-
		640 641	1 of contury AD
		642	1st century AD
		643	
1066	Enclosure 2a	186	Late 1st- 2nd century AD
1000	Liiciosure za	187	-
		188	_
		191	_
		192	-
		193	-
		200	Late 1st- 2nd century AD
		201	-
		452	RB
		453	-
		468	-
		469	Late 1st- 2nd century AD
		475	Late 1st- 2nd century AD
		476	-
		477	-
		478	-
		502	Late 1st- 2nd century AD
		503	-
		556	Late 1st- 3rdcentury AD
		557 550	Late 1st- 2nd century AD
		558 615	- Mid lote 1et contury AD
		616	Mid-late 1st century AD
1069	Trackway ditch	350	Mid-late 1st century AD
1003	Trackway ditori	351	-
		423	_
		424	_
		443	-
		444	-
		448	-
		449	-
		454	-
		455	Late 1st- 3rd century AD
		456	Late 1st- 2nd century AD
		575	-
		576	Mid-late 1st century AD +
		577	<u>-</u>
1092	Pit	500	-
		501	-

Phase 2.4 Group hierarchy by sub-phase

Sub- phase	Group number	Group name	Context	Spot date
4.1	1000	Enclosure 6	54	Mid-late 1st century AD
			55	<del>-</del>
			58	-
			59	-
			76	-
			77	-
	1001	North to south boundary	18	-
		,	19	Mid-late 1st century AD
			20	RB
			27	-
			28	LC1-C2
			62	Mid-late 1st century AD
			63	1st century AD
			64	-
			144	_
			145	- Mid-late 1st century AD
			145	Mid-late 1st century AD
			151	Mid-late 1st century AD
			152	
			152	Mid-late 1st century AD
			155	-
				-
			156 161	- Mid loto 1ot contum: AD
			161	Mid-late 1st century AD
			162	1st century AD
			163	-
			170	-
			171	-
			174	-
			175	-
			183	Late 1st-2nd century AD
			184	RB
			185	-
			309	-
			310	1st century AD
			313	-
			314	-
			327	Mid-late 1st century AD
			328	1st century AD
			329	<del>-</del>
			330	-
	1009	Enclosure 1	87	-
			88	1st century AD
			93	-
			94	Early-mid 1st century AD
			111	-
			112	-
			124	-
			125	Late 1st-2nd century AD
			128	-
			129	_
			130	- Mid-late 1st century AD
			131	-
			132	<del>-</del>
	1027	Englosure 2		<u>-</u>
	1027	Enclosure 3	217	-
			218	-
			224	-

Sub- phase	Group number	Group name	Context	Spot date
			225	<u>-</u>
	1030	Enclosure 2	255	-
			256	Late 1st-2nd century AD
			342	-
			343	Late 1st-2nd century AD
			370	-
			371	Late 1st-2nd century AD
			383	-
			384	Late 1st-2nd century AD
			427	<del>-</del>
			428	-
	1032	Enclosure 2	24	-
			25	-
			26	-
			228	Early-Mid 1st century AD
			229	-
			241	-
			242	1st century AD
			318	-
			319	-
	1035	Pit	279	-
			280	-
			281	1st century AD
	1044	Kiln	285	-
			286	-
			287	-
			290	Late 1st-2nd century AD
			333	-
			334	_
			337	1st century AD
	1048	Pit	377	Mid-late 1st century AD
	1040	1 10	378	1st century AD
			379	-
			380	Mid-late 1st century AD
			381	-
			382	Mid-1st century AD
	1070	Enclosure 2	247	Wild-13t Certary AB
	1070	Eliciosule 2	247	-
			348	-
			348 349	-
			349 413	- Early 2nd contumy AD
			413 414	Early 2nd century AD
			414	Late 1st-2nd century AD
				-
			439	2nd century AD
			440	- MOD
			446	MOD
			447	-
			457 450	-   -t- 4-t-0
			458	Late 1st-2nd century AD
			459 505	-
			565	Late 1st-early 2nd century AD
			566	-
	1072	Enclosure 4	404	-
			405	-
_	1074	Enclosure 4	352	-
			353	-
			357	-

Sub- phase	Group number	Group name	Context	Spot date
	1081	Pit	398	-
	100=		399	1st century AD +
	1085	Pit cluster	306	-
			307	-
			308	-
			338	-
			339	-
			340	-
			341	-
			346	1st century AD
			347	-
			366	-
			367	-
			400	-
			401	-
	1087	Pit	194	-
			195	1st century AD
	1088	Pit	585	-
			586	-
2.4.2	1002	Enclosure 6	56	-
	.002		57	_
			78	_
			79	_
			80	_
			95	Early-mid 1st century AD
			96	Larry-filld 1st Certifity AD
			100	-
				-
	4000	Fralsaura 1	101	_ <del>-</del>
	1003	Enclosure 1	140 141	-
	1010	Enclosure 1	106	<u>-</u>
	1010	Eliciosule	107	-
			118	-
			119	-
				-
			120	- DD
			121	RB
			126	-
	1000	D''	127	<u>-</u>
	1033	Pit	320	-
	16:-		321	-
	1045	Pit	325	Mid-late 1st century AD
		_	326	-
	1046	Grave	292	-
			305	Mid 1st century AD
			315	<u>-</u>
	1071	Enclosure 5	323	-
			361	-
			362	-
			421	-
			422	-
			445	-
			629	Late-1st century AD
			630	-
			632	_
			633	_
	1080	Pit cluster	198	Late 1st-2nd century AD
	1000	FIL GIUSLEI	198	Late 15t-21th Certainy AD
			202	- Mid late 1st contury AD
			202	Mid-late 1st century AD

Sub- phase	Group number	Group name	Context	Spot date
			203	-
			204	-
			205	-
			282	Late 1st-2nd century AD
			283	-
			284	-
			385	-
			386	Mid-late 1st century AD
			387	-
			388	Mid-late 1st century AD
			389	Mid-late 1st century AD
			390	Late 1st-2nd century AD
			429	
				1st century AD
	1000	<b>5</b> 77.1	430	Late 1st-2nd century AD
	1082	Ditch segment	409	<del>-</del>
			410	Late 1st-2nd century AD
			417	-
			418	<u>-</u>
	1089	Pit	433	Late 1st-3rd century AD
			434	-
			435	Late 1st-2nd century AD
			436	-
2.4.3	1011	Enclosure 1	51	
2.4.3	1011	Eliciosure i		- Late 2rd 4th contury AD
			52	Late 3rd-4th century AD
			53	-
			72	-
			73	-
			81	Mid 1st century AD
			82	-
			97	-
			98	-
			99	RB
			104	-
			105	
			103	_
				-
			109	-
			133	Mid-late 1st century AD
			134	-
			135	-
	1013	2 post structure	172	-
			173	-
			176	-
			177	-
	1014	Hollow	178	-
	1028	Enclosure 3	215	1st century AD
	1020	LITOIOSUI & J	216	13t Containy AD
				- Early mid 1st southern AD
			219	Early-mid 1st century AD
			220	-
			230	-
			231	<del>-</del>
	1047	Pit	288	Mid-late 1st century AD
			289	Mid-late 1st century AD
			291	-
	1073	Enclosure 5	164	
	1073	Eliciosale 3	165	- Late 1st-2nd century AD
			100	Late 13t-2110 Certain AD
				Corby mid 4-4 AD
			189	Early-mid 1st century AD
			189 190	Early-mid 1st century AD
			189	Early-mid 1st century AD - -

## BOOTH RISE, NORTHAMPTON

Sub- phase	Group number	Group name	Context	Spot date
			322	1st century AD
			324	-
			372	-
			373	-
			394	-
			395	-
			396	-
			397	-
			401	-
			402	-
			403	-
			406	Late 1st-2nd century AD
			407	Late 1st-early 2nd century AD
			408	-
			419	2nd century AD
			420	-
			437	Late 1st-2nd century AD
			438	-
			504	Late 1st-2nd century AD
			505	2nd century AD
			506	-
			549	2nd century AD
			550	Early-mid 2nd century AD
			551	-
			646	-
			647	-
			661	-
			662	-
			663	-

Phase 2.5 Group hierarchy

Group number	Group name	Context	Spot date					
1065	Pit	479	-					
		480	-					
		513	-					
		514	Mid-late 2nd century AD					
1075	Enclosure 7	354	-					
		355	-					
		356	-					
		359	Late 1st- 3rd century AD					
		360	-					
		363	-					
		364	-					
		365	-					
		374	-					
		375	-					
		376 391	Late 1et 2nd century AD					
		392	Late 1st-2nd century AD					
		392 393	_					
1076	Enclosure 8	481	1st-2nd century AD					
		482	-					
		483	1st century AD +					
		484	-					
		497	Late 1st-3rd century AD					
		498	1st century AD					
		499	-					
		511	-					
		512	-					
		517	-					
		518	-					
		525	-					
		526	Late 1st-2nd century AD					
		527	-					
		528	-					
		529	Aid late On discretions AD					
		547 549	Mid-late 2nd century AD					
		548 591	-					
		581 582	-					
1077	Pit in Encl 8	583	_					
1011	FIL III LIICI O	584	_					
1079	Pit	461	-					
1010		462	Late 1st-3rd century AD					
		463	2nd century AD					
1086	Pit cluster	464	-					
		465	-					
		519	-					
		520	-					
		521	-					
		522	-					
		541	-					
		542	-					
		543	- DD					
		544 545	RB					
		545 546	-					
		546 547	- Mid late 2nd contury AD					
		547	Mid-late 2nd century AD					

Period 3 Group hierarchy

Group number	Group name	Context	Spot date
1029	Track way	232	-
1041	SFB structure	29	-
		47	-
		223	-
		243	-
		245	Early 6th century AD
		246	-
		267	-
		268	-
1042	Pit	243	-
		244	-
1043	SFB backfill	30	5th-7th century AD
			Early 6th century AD

## Period 4 Group hierarchy

Group number	Group name	Context	Spot date
1078	Ditch segment	509	-
	•	510	-
1090	Tree planting pits	4	-
		5	-
		6	-
		7	-
		8	1st century AD
		9	-
		10	-
		11	-
		12	-
		13	-
		14	-
		15	-
		16	-
		17	-
		368	-
		369	-
		411	Late 1st-2nd century AD
		412	-

# Unphased features Group hierarchy

Group number	Group name	Context	Spot date
1084	Structure	293	
		294	
		295	
		296	
		297	
		298	
		299	
		300	
		301	
		302	
		303	
		304	

**APPENDIX 2: ROMANO-BRITISH POTTERY BY CONTEXT** 

8         C1         1         -         -         -         -         -         1         1         -		Wt (g)	No	modern	Saxon	samiam	white	oxidised	reduced	dev. grog	shell	grog	date	Context
19		748		-	-	-	-	-	23	1	-			
20         RB         -         1         -         -         -         1         -         14         14         22         EMC2         -         -         2         8         -         3         1         -         -         14         14         22         1         -         -         -         -         -         3         3         3         1         -         -         -         -         -         -         3         3         3         3         1         1         - <t< td=""><td>4 0</td><td>14</td><td>1</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>1</td><td>C1</td><td>8</td></t<>	4 0	14	1	-	-	-	-	-	-	-	-	1	C1	8
22         EMC2         -         -         2         8         -         3         1         -         -         14         14         28         LC1-C2         -         -         2         1         -         -         -         -         -         -         3         3         3         1         -         <	25 .15	225	26	-	-	-	-	1	14	-	-	11	MLC1	19
28	2 0	2	1	-	-	-	-	-	-	-	1	-	RB	20
30	l5 .11	145	14	-	-	1	3	-	8	2	-	-	EMC2	22
31         LC1-C2         3         -         1         1         -         -         5         -         10         13         34         MLC1         1         -         -         4         -         -         -         -         5         -         -         -         -         5         -         -         -         -         5         -         <	.06	35	3	-	-	-	-	-	1	2	-	-	LC1-C2	28
34	.30	313	24	-	23	-	_	-	-	-	-	1	C5-C7	30
34	3 0	133	10	_	5	-	_	-	1	1	_	3	LC1-C2	31
40	59 0	59	5	_	_	-	_	-	4	_	_	1	MLC1	34
40		99	6	_	_	_	_	_	5	_	_	1		
52         LC3-C4         -         -         -         1         -         -         5         -         1         9         -         -         1         9         -         -         1         9         - </td <td>.42</td> <td>111</td> <td>11</td> <td>_</td> <td>_</td> <td>_</td> <td>_</td> <td>_</td> <td>10</td> <td>1</td> <td>_</td> <td>_</td> <td></td> <td></td>	.42	111	11	_	_	_	_	_	10	1	_	_		
54         MLC1         -         -         -         2         -         -         5         -         7         8           62         MLC1         13         -         -         2         -         -         -         -         15         31           63         C1         14         -         -         -         -         -         -         14         77           66         EMC1         35         -		98	1	_	_	_	_	1		_	_	_		
62 MLC1 13 - 2 2 15 31 63 C1 14 14 77 66 EMC1 35 14 77 66 EMC1 35 35 46 81 MC1 7 1 1 8 19 84 EMC1 1 1 1 86 C1 2 1 1 87 EMC1 1 1 1 1 88 C1 1 1 1 1 89 EMC1 1 1 10 1 1 89 EMC1 1 1 1 1 89 EMC1 1 1 1 1 80 EMC1 1 1 1 1 80 EMC1 1 1 1 1 81 EMC1 1 1 1 1 82 EMC1 1 1 1 1 83 EMC1 1 1 1 1 84 EMC1 1 1 1 1 85 EMC1 1 15 8 - 2 4 4 4 4 86 C1 1 15 8 - 2 4 4 2 87 EMC1 1 15 8 - 2 1 1 88 C1 1 1 1 1 89 EMC1 1 1 1 1 80 MLC1 1 1 1 1 80 MLC1 1 1 1 1 81 MLC1 1 1 1 1 82 EMC1 1 1 1 1 83 MLC1 1 1 1 1 84 C1 1 1 1 85 MLC1 1 1 1 1 86 LC1-C2 1 1 3 3 1 1 87 MLC1 1 1 1 88 C1 1 89 EMC1 5		83		_	5	_	_	_		_	_	_		
63    C1		310		_	_	_	_	_		_	_	13		
66	5								_			.0	201	02
66		770	14	_	_	_	_	_	_	_	_	14	C1	63
81       MC1       7       -       -       1       -		466	35	_	_	_	_	_	_	_	_			
84		190		_	_	_	_	_	1	_	_			
86       C1       2       -       -       -       -       -       -       2       6       88         C1       1       -       -       -       -       -       -       -       1       3         92       EMC1       1       10       -       -       -       -       -       11       14         94       EMC1       15       -       -       -       -       -       -       11       14         99       RB       - <t< td=""><td></td><td>11</td><td></td><td>_</td><td>_</td><td>_</td><td>_</td><td>_</td><td>_</td><td>_</td><td>_</td><td></td><td></td><td></td></t<>		11		_	_	_	_	_	_	_	_			
88         C1         1         -         -         -         -         -         -         1         13         39         92         EMC1         1         100         -         -         -         -         -         -         11         14         94         EMC1         1         -         -         -         -         -         -         11         14         99         RB         -         -         -         -         -         -         -         15         52         29         12         RB         - </td <td></td> <td>66</td> <td></td> <td>_</td> <td>_</td> <td>_</td> <td>_</td> <td>_</td> <td>_</td> <td>_</td> <td>_</td> <td></td> <td></td> <td></td>		66		_	_	_	_	_	_	_	_			
92		34						_	_					
94		149	-	_	_	_	_	_	_	_	10			
95	3 .02			-	-	_	_	-	-	_	10			
99 RB 4 4  104 C1 15 8 - 2 25 29  121 RB 33 3 1  125 LC1-C2 1 4 5 1  130 MLC1 4 1 4 9 37  133 MLC1 1 1 5 3 27 36 56  146 MLC1 21 26 7 4 5 8 73  148 C1 1 1 1  150 RB 1 1  151 MLC1 1 4 1 1  152 MLC1 2 1 - 1 1  153 MLC1 1 1  154 MLC1 1 3 3 1 1  155 MLC1 2 22 1 3  183 LC1-C2 - 3 - 1 1  184 RB - 25 1 1  189 EMC1 5 1 3				-	-	-	-	-	-	-	-			
104       C1       15       8       -       2       -       -       -       -       25       29         121       RB       -       -       -       3       -       -       -       -       3       1         125       LC1-C2       1       -       -       4       -       -       -       -       -       5       1         130       MLC1       4       1       4       -       -       -       -       -       9       37         133       MLC1       1       -       -       -       -       -       -       -       9       36       56         145       MLC1       1       5       3       27       -       -       -       -       1       2         146       MLC1       21       26       7       4       -       -       -       -       1       -       -       -       -       1       -       -       -       -       1       -       -       -       -       1       -       -       -       -       1       -       -       -       -       1	9 0			-	-	-	-	-	-	-	-	13		
121       RB       -       -       -       3       -       -       -       -       3       1         125       LC1-C2       1       -       -       4       -       -       -       -       5       1         130       MLC1       4       1       4       -       -       -       -       -       9       37         133       MLC1       1       -       -       -       -       -       -       -       9       37         145       MLC1       1       5       3       27       -       -       -       -       1       2         146       MLC1       21       26       7       4       -       -       -       -       58       73         148       C1       1       -       -       -       -       -       1       -       -       -       1       -       -       -       1       -       -       -       1       -       -       -       1       -       -       -       -       1       -       -       -       -       1       -       -       -					-	-	4	-		-	-	- 4 <i>E</i>		
125       LC1-C2       1       -       -       4       -       -       -       -       5       1         130       MLC1       4       1       4       -       -       -       -       -       9       37         133       MLC1       1       -       -       -       -       -       -       9       37         145       MLC1       1       5       3       27       -       -       -       -       36       56         146       MLC1       21       26       7       4       -       -       -       -       58       73         148       C1       1       -       -       -       -       -       1       -       -       -       1       -       -       -       1       -       -       -       1       -       -       -       1       -       -       -       1       -       -       -       1       -       -       -       1       -       -       -       1       -       -       -       -       1       -       -       -       -       1       -					-	-	-	-			Ö	15		
130       MLC1       4       1       4       -       -       -       -       -       9       37         133       MLC1       1       -       -       -       -       -       -       -       1       2         145       MLC1       1       5       3       27       -       -       -       -       36       56         146       MLC1       21       26       7       4       -       -       -       -       -       58       73         148       C1       1       -       -       -       -       -       -       1       -       -       -       -       1       -       -       -       -       1       -       -       -       -       1       -       -       -       -       1       -       -       -       -       1       -       -       -       -       1       -       -       -       -       1       -       -       -       -       -       1       -       -       -       -       -       -       -       -       -       -       -       -       - <td></td> <td>17</td> <td></td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td></td> <td></td> <td>-</td> <td>-</td> <td></td> <td></td>		17		-	-	-	-	-			-	-		
133       MLC1       1       -       -       -       -       -       -       1       2         145       MLC1       1       5       3       27       -       -       -       -       36       56         146       MLC1       21       26       7       4       -       -       -       -       58       73         148       C1       1       -       -       -       -       -       -       1       -       -       -       -       -       -       1       -       -       -       -       -       1       -       -       -       -       -       1       -       -       -       -       -       1       -		15		-	-	-	-	-	4					
145       MLC1       1       5       3       27       -       -       -       -       36       56         146       MLC1       21       26       7       4       -       -       -       -       58       73         148       C1       1       -       -       -       -       -       -       1       -       -       -       -       -       1       -       -       -       -       -       1       -       -       -       -       -       1       -       -       -       -       1       -       -       -       -       -       1       -<		378		-	-	-	-	-	-	4	1	-		
146       MLC1       21       26       7       4       -       -       -       -       58       73         148       C1       1       -       -       -       -       -       -       1         150       RB       -       -       -       1       -       -       -       -       1         151       MLC1       14       -       -       1       -       -       -       -       -       15       7         152       MLC1       2       -       -       222       -       -       -       -       24       14         162       C1       3       1       -       -       -       -       -       -       -       24       14         165       LC1-C2       -       3       -       4       -       -       -       -       1       3         183       LC1-C2       -       3       -       4       -       -       -       -       7       7         184       RB       -       25       -       -       -       -       -       -       5       7		24		-	-	-	-	-						
148       C1       1       -       -       -       -       -       -       1         150       RB       -       -       -       1       -       -       -       -       1         151       MLC1       14       -       -       1       -       -       -       -       -       15       7         152       MLC1       2       -       -       22       -       -       -       -       24       14         162       C1       3       1       -       -       -       -       -       -       24       14         165       LC1-C2       -       -       1       -       -       -       -       -       1       3         183       LC1-C2       -       3       -       4       -       -       -       -       7       7         184       RB       -       25       -       -       -       -       -       25       65         186       LC1-C2       1       -       1       3       -       -       -       -       5       9         195 <td></td> <td>567</td> <td></td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>		567		-	-	-	-	-						
150       RB       -       -       -       1       -       -       -       -       1         151       MLC1       14       -       -       1       -       -       -       -       -       -       -       15       7         152       MLC1       2       -       -       22       -       -       -       -       24       14         162       C1       3       1       -       -       -       -       -       -       -       -       4       5         165       LC1-C2       -       -       1       -       -       -       -       -       1       3         183       LC1-C2       -       3       -       4       -       -       -       -       -       7       7         184       RB       -       25       -       -       -       -       -       -       2       5       65         186       LC1-C2       1       -       1       3       -       -       -       -       5       9         195       C1       7       5       -		731		-	-	-	-	-	4	7	26			
151       MLC1       14       -       -       1       -       -       -       -       -       15       7         152       MLC1       2       -       -       22       -       -       -       -       24       14         162       C1       3       1       -       -       -       -       -       -       -       -       -       4       5         165       LC1-C2       -       -       -       1       -       -       -       -       -       -       1       3         183       LC1-C2       -       3       -       4       -       -       -       -       -       7       7       7         184       RB       -       25       -       -       -       -       -       -       2       2       5       65       65       65       186       LC1-C2       1       -       1       3       -       -       -       -       -       5       7       7       189       EMC1       5       -       -       -       -       -       -       -       12       66       <	6 .05	6		-	-	-	-	-	-	-	-	1		
152       MLC1       2       -       -       22       -       -       -       -       24       14         162       C1       3       1       -       -       -       -       -       -       4       5         165       LC1-C2       -       -       -       1       -       -       -       -       -       1       3         183       LC1-C2       -       3       -       4       -       -       -       -       7       7       7         184       RB       -       25       -       -       -       -       -       -       -       25       65         186       LC1-C2       1       -       1       3       -       -       -       -       -       5       7         189       EMC1       5       -       -       -       -       -       -       5       9         195       C1       7       5       -       -       -       -       -       -       12       6         198       LC1-C2       -       1       -       2       -       -	1 0		-	-	-	-	-	-		-	-	-		
162       C1       3       1       -       -       -       -       -       -       4       5         165       LC1-C2       -       -       -       1       -       -       -       -       -       1       3         183       LC1-C2       -       3       -       4       -       -       -       -       -       7       7       7         184       RB       -       25       -       -       -       -       -       -       -       25       65         186       LC1-C2       1       -       1       3       -       -       -       -       -       5       7         189       EMC1       5       -       -       -       -       -       -       -       5       9         195       C1       7       5       -       -       -       -       -       -       -       12       6         198       LC1-C2       -       -       1       -       -       -       -       -       -       1       1         200       LC1-C2       -       1		70		-	-	-	-	-		-	-			
165       LC1-C2       -       -       -       1       -       -       -       -       1       3         183       LC1-C2       -       3       -       4       -       -       -       -       -       7       7         184       RB       -       25       -       -       -       -       -       -       25       65         186       LC1-C2       1       -       1       3       -       -       -       -       -       5       7         189       EMC1       5       -       -       -       -       -       -       -       5       9         195       C1       7       5       -       -       -       -       -       -       -       12       6         198       LC1-C2       -       -       1       -       -       -       -       -       1       1         200       LC1-C2       -       1       -       2       -       -       -       -       1       1         202       MLC1       1       -       -       -       -       -		146		-	-	-	-	-	22	-	-			
183       LC1-C2       -       3       -       4       -       -       -       -       7       7         184       RB       -       25       -       -       -       -       -       -       25       65         186       LC1-C2       1       -       1       3       -       -       -       -       -       5       7         189       EMC1       5       -       -       -       -       -       -       -       5       9         195       C1       7       5       -       -       -       -       -       -       -       -       12       6         198       LC1-C2       -       -       -       1       -       -       -       -       -       -       1       1         200       LC1-C2       -       1       -       2       -       -       -       -       1       1         202       MLC1       1       -       -       -       -       -       -       -       -       -       1       -       -       -       -       -       - <t< td=""><td></td><td>55</td><td>4</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>1</td><td>3</td><td>C1</td><td>162</td></t<>		55	4	-	-	-	-	-	-	-	1	3	C1	162
184       RB       -       25       -       -       -       -       -       -       -       25       65         186       LC1-C2       1       -       1       3       -       -       -       -       -       5       7         189       EMC1       5       -       -       -       -       -       -       -       5       9         195       C1       7       5       -       -       -       -       -       -       -       12       6         198       LC1-C2       -       -       -       1       -       -       -       -       -       1       1       1         200       LC1-C2       -       1       -       2       -       -       -       -       3       2         202       MLC1       1       -       -       -       -       -       -       -       -       -       -       1       -         206       LC1-EC2       -       -       1       25       -       -       -       -       -       -       26       32         215	88 0	38	1	-	-	-	-	-	1	-	-	-	LC1-C2	165
186       LC1-C2       1       -       1       3       -       -       -       -       -       5       7         189       EMC1       5       -       -       -       -       -       -       -       5       9         195       C1       7       5       -       -       -       -       -       -       12       6         198       LC1-C2       -       -       1       -       -       -       -       -       1       1       1       1       1       -       -       -       -       -       -       1       1       1       1       -       <	78 0	78	7	-	-	-	-	-	4	-	3	-	LC1-C2	183
186       LC1-C2       1       -       1       3       -       -       -       -       -       5       7         189       EMC1       5       -       -       -       -       -       -       -       5       9         195       C1       7       5       -       -       -       -       -       -       12       6         198       LC1-C2       -       -       1       -       -       -       -       -       1       <	6 0	656	25	-	-	-	_	-	-	_	25	_	RB	184
189     EMC1     5     -     -     -     -     -     -     -     -     -     5     9       195     C1     7     5     -     -     -     -     -     -     -     12     6       198     LC1-C2     -     -     -     1     -     -     -     -     -     -     1     1       200     LC1-C2     -     1     -     -     -     -     -     -     -     -     3     2       202     MLC1     1     -     -     -     -     -     -     -     -     1       206     LC1-EC2     -     -     1     25     -     -     -     -     2     26     32       215     C1     -     8     -     -     -     -     -     -     -     -     8     3       219     EMC1     7     -<	0 0	70	5	_	_	-	_	-	3	1	_	1	LC1-C2	
195       C1       7       5       -       -       -       -       -       -       12       6         198       LC1-C2       -       -       -       1       -       -       -       -       1       1         200       LC1-C2       -       1       -       2       -       -       -       -       -       3       2         202       MLC1       1       -       -       -       -       -       -       -       1       1         206       LC1-EC2       -       -       1       25       -       -       -       -       2       26       32         215       C1       -       8       -       -       -       -       -       -       8       3         219       EMC1       7       -       -       -       -       -       -       -       -       -       7       -	.18	95	5	_	_	_	_	_	_	_	_	5		
198       LC1-C2       -       -       -       1       -       -       -       -       1       1         200       LC1-C2       -       1       -       2       -       -       -       -       -       3       2         202       MLC1       1       -       -       -       -       -       -       -       1       -       -       -       1       -       -       -       -       -       -       -       1       - </td <td></td> <td>69</td> <td></td> <td>_</td> <td>_</td> <td>_</td> <td>_</td> <td>_</td> <td>_</td> <td>_</td> <td></td> <td></td> <td></td> <td></td>		69		_	_	_	_	_	_	_				
200       LC1-C2       -       1       -       2       -       -       -       -       -       3       2         202       MLC1       1       -       -       -       -       -       -       -       1         206       LC1-EC2       -       -       1       25       -       -       -       -       -       26       32         215       C1       -       8       -       -       -       -       -       -       8       3         219       EMC1       7       -       -       -       -       -       -       -       7       -       -       -       -       -       -       -       -       7       - <td></td> <td>15</td> <td></td> <td>_</td> <td>_</td> <td>_</td> <td>_</td> <td>_</td> <td>1</td> <td>_</td> <td></td> <td></td> <td></td> <td></td>		15		_	_	_	_	_	1	_				
202       MLC1       1       -       -       -       -       -       -       1         206       LC1-EC2       -       -       1       25       -       -       -       -       26       32         215       C1       -       8       -       -       -       -       -       -       8       3         219       EMC1       7       -       -       -       -       -       -       -       7       8		29			_	_	_	_		_	1			
206 LC1-EC2 1 25 <b>26 32</b> 215 C1 - 8 <b>8 3</b> 219 EMC1 7 <b>7 8</b>	4 0			_	_	_	_	_		_				
215 C1 - 8 <b>8 3</b> 219 EMC1 7 <b>7 8</b>		328		_	_	_	_	_						
219 EMC1 7 <b>7</b> 8		36		_	_	_	_	_				_		
		87		-	-	-	-	-	-			- 7		
220 LOTEO2 1 4 9 44 <b>30 /</b> 0		703		-	-	-	-	-	44					
					-	-	-	-	44					
		253			-	-	-	-	-					
		287			-	-	-	-			-			
		147		-	-	-	-	-	-	-	-			
251 C1 1 1 2	27 0	27	1	-	-	-	-	-	-	-	-	1	CT	251

Context	date	grog	shell	dev. grog	reduced	oxidised	white	samiam	Saxon	modern	No	Wt (g)	EVEs
253	C1	1	-	-	3	-	-	-	-	-	4	101	0
256	LC1-C2	-	-	-	17	-	-	-	-	-	17	240	0
263	LC1-C2	1	-	-	11	-	-	-	-	-	12	236	.32
270	LC1-C2	-	-	3	5	-	-	-	-	-	8	259	.24
275	LC1-C2	-	-	1	3	-	-	-	-	-	4	24	.04
281	C1	-	1	-	-	-	-	-	-	-	1	8	.02
282	LC1-C2	-	-	-	1	-	-	-	-	-	1	38	0
288	MLC1	2	-	-	1	-	-	-	-	-	3	102	0
289	MLC1	40	12	-	4	1	-	-	-	-	57	245 3	.43
290	LC1-C2	3	2	_	8	_	_	_	_	_	13	159	.05
305	MC1	1	2	_	16	_	_	_	_	_	19	101	1.95
												2	
310	C1	1	13	-	-	-	-	-	-	-	14	195	.10
322	C1	1	1	-	-	-	-	-	-	-	2	17	.05
325	MLC1	10 5		2	2	-	-	-	-	-	109	744	.66
327	MLC1	4	9	_	5	-	-	_	-	_	18	322	.32
328	C1	3	3	-	-	-	-	-	-	-	6	47	0
337	C1	1		-	-	-	-	-	-	-	1	34	0
343	LC1-C2	1	1	8	11	-	-	-	-	-	21	272	.20
346	C1	40		-	-	-	-	-	-	-	40	397 0	.30
350	MLC1	1	_	35	16	_	_	1			53	766	1.36
359	LC1-C3	_	_	_	5	_	_	_	_	_	5	92	0
371	LC3-C4	-	-	-	-	1	-	-	-	-	1	10	0
377	MLC1	3	6	-	1	-	-	-	-	-	10	289	.10
378	C1	-	2	-	-	-	-	-	-	-	2	35	.09
380	MLC1	1	47	-	-	-	-	-	-	-	48	101 4	.67
382	MC1	9	7	1	_	_	_	_	_	_	17	337	.63
384	LC1-C2	10	26	9	60	3	11	_	_	_	119	101	1.76
												8	
386	MLC1	60	45	5	35	-	-	-	-	-	145	168 1	.83
388	MLC1	20	8	2	-	-	-	-	-	-	30	230	.36
389	MLC1	4	9	-	-	-	-	-	-	-	13	86	.07
390	LC1-C2	75	1	9	2	-	-	-	-	-	87	933	.84
391	LC1-C2	-	-	9	-	-	-	-	-	-	9	487 17	.10 0
399 406	C1+ LC1-C2	1 1	-	-	-	-	-	-	-	-	1 6	161	.05
407	LC1-C2 LC1-EC2	2	-	-	5 5	- 1	- 7	-	-	-	15	184	.34
410	LC1-C2	-	_	1	3	<u>'</u>	, 14	_	_	-	18	267	.46
411	LC1-C2	2	_	1	4	_	-	_	_	_	7	106	0
413	EC2	3	_	2	8	_	_	_	_	_	13	71	.23
414	LC1-C2	14	-	8	27	2	-	-	-	-	51	182 9	1.17
419	C2	1	1	4	28	_	_	_	_	_	34	279	.65
429	C1	1	-	_	_	_	_	_	_	_	1	15	0
430	LC1-C2	1	25	_	12	-	-	-	_	_	38	363	.24
433	LC1-C3	-	1	-	2	-	-	-	-	-	3	28	0
435	LC1-C2	-	-	-	5	-	-	-	-	-	5	182	0
437	LC1-C2	-	-	13	-	-	-	-	-	-	13	256	.45
439	C2	1	2	2	32	-	-	-	-	-	37	324	.12
441	LC1-C2	1	-	-	3	-	-	-	-	-	4	88	0
446	MOD	1	1	-	1	-	-	-	-	1	4	61	0
452 455	RB	-	1	-	-	-	-	-	-	-	1	8	0
455	LC1-C3	-	-	-	1	-	-	-	-	-	1	42	0

Context	date	grog	shell	dev. grog	reduced	oxidised	white	samiam	Saxon	modern	No	Wt (g)	EVEs
456	LC1-C2	1	1	-	21	-	-	-	-	-	23	571	.26
458	LC1-C2	8	4	-	14	-	2	-	-	-	28	508	.28
462	LC1-C3	-	-	-	2	-	-	-	-	-	2	68	0
463	C2	-	2	-	14	3	5	-	-	-	24	78	.03
469	LC1-C2	2	3	-	4	-	-	-	-	-	9	68	0
470	MC1	2	13	-	-	-	-	-	-	-	15	370	.24
475	LC1-C2	11	9	-	-	-	7	-	-	-	27	356	.17
481	C1-C2	-	1	-	-	-	-	-	-	-	1	9	.05
483	C1+	1	1	-	-	-	-	-	-	-	2	14	0
486	RB	-	1	-	-	-	-	-	-	-	1	3	0
489	LC1-C2	1	3	1	-	-	-	-	-	-	5	29	.02
496	LC1-C3	-	2	-	3	-	-	-	-	-	5	46	0
497	LC1-C3	3	-	-	1	-	-	-	-	-	4	11	0
498	C1	1	-	-	-	-	-	-	-	-	1	25	0
502	LC1-C2	6	16	2	34	-	-	-	-	-	58	100 3	.68
504	LC1-C2	_	_	_	2	_	_	-	_	_	2	11	0
505	C2	_	_	_	2	_	1	_	_	_	5	281	.12
514	MLC2	-	3	-	3	_	-	1	-	-	7	88	.12
516	RB	-	2	_	-	-	-	-	-	-	2	18	0
526	LC1-C2	1	-	-	-	_	1	-	-	-	2	25	.15
539	C1	3	-	-	_	_	-	-	-	-	3	15	0
544	RB	-	1	-	_	_	-	-	-	-	1	1	0
547	MLC2	1	-	_	5	_	-	-	-	-	6	99	.41
549	C2	-	4	-	29	_	3	-	-	-	36	454	1.27
550	EMC2	-	5	26	14	3	1	2	-	-	51	856	.29
556	LC1-C3	1		-	1	-	-	-	-	-	2	15	0
557	LC1-C2	-	-	1	-	-	-	-	-	-	1	42	0
565	LC1-EC2	-	-	2	1	-	-	-	-	-	3	41	.05
567	C2	-	-	-	1	-	36	-	-	-	37	200	0
573	C1	1	-	-	-	-	-	-	-	-	1	4	0
576	MLC1+	-	-	-	2	-	-	1	-	-	3	18	0
578	LC1-C2	6	-	1	16	-	-	-	-	-	23	124	.14
589	LC1-C2	3	-	-	11	-	-	-	-	-	14	129	0
592	LC1-C2	-	-	2	1	-	-	-	-	-	3	77	0
594	C1	-	-	3	4	-	1	-	-	-	8	33	.03
596	RB	-	9	-	-	-	-	-	-	-	9	4	0
597	LC1-C2	2	-	1	2	-	-	-	-	-	5	99	.21
598	LC1-C2	1	-	-	3	-	-	-	-	-	4	100	0
604	C1	1	2	-	-	-	-	-	-	-	3	19	.05
605	MLC1	7	6	-	3	-	-	-	-	-	16	465	.55
611	LC1-C2	1		-	2	-	-	-	-	-	3	25	0
615	MLC1	1	2	-	5	-	-	-	-	-	8	35	0
617	C1	50	-	-	-	-	-	-	-	-	50	235 4	0
629	LC1	1	_	_	2	-	-	1	_	_	4	28	0
641	C1	4	-	-		-	-	-	-	-	4	23	0
644	EMC1	23	13	_	_	-	-	-	_	-	36	481	.15
654	EMC1	10	1	-	-	-	-	-	-	-	11	96	.07
655	C1+	2	-	-	-	-	-	-	-	-	2	28	0

#### APPENDIX 3 - INDIVIDUALLY RECORDED FINDS CATALOGUE

#### Roman

**Trumpet brooch**, copper alloy. Incomplete, pin and loop missing. Good patina. Single lug behind expanded head, two coiled springs, one either side of the lug and held in place by a metal sleeve which runs through the coils. The bow has a flat underside, the upper section is decorated with two vertical grooves, there is a relatively plain central moulding and the lower part of the bow is plain and terminates in a moulded foot. L: 53mm

Date: c late 1st - 2nd century

SF 2, Context 559, Enclosure 2a Ditch 560 (G1063), Phase 2.3

Colchester Derivative brooch, copper alloy. Incomplete, spring, pin and part of catch-plate missing. Small two-piece brooch, the spring would have been secured to the brooch, by means of pierced plate positioned behind the head of the bow. The axis bar through the coils would have passed through the lower of two perforations, the chord (still extant) being held in the upper. The wings are curved to seat the spring and they are simply decorated with a single groove at each end. The bow is decorated with a longitudinal centrally placed rib and the plate behind the head is carried over the top in the form of a low crest. What remains of the catch-plate indicates that it is an open catch-plate with a large triangular cut out. L:31mm

Date: c second half of the 1st century

SF 3, Context 498, Enclosure 8 Ditch 499 (G1076), Phase 2.5

**Brooch**, copper alloy. Incomplete, bow only. Extremely abraded, bow appears plain, but much of patina has flaked off. The outline of the bow suggests that it may be the remains of an Aucissa brooch. The upper bow is arched and it appears to terminate in a flat head plate with a vestige of the head tube. L: c 37mm

Date: second half of 1st century

SF 5, Context 183, Boundary Ditch 185 (G1001), Phase 2.4

Aucissa brooch (inscribed), copper alloy. Complete. Represents a Mackreth's Type 2a (plate 90, 8587). The pin is hinged on an iron axis bar within a narrow tube formed from the top of the bow (the terminal of the head plate has been rolled back on its self to form the tube). The head plate is decorated with a central flute with U-shaped cut outs at each end. Adjacent to the bow, the head plate is inscribed with Aucissa (? the maker or factory owner – cf Mackreth 130ff). Ferrous corrosion deposits from the axis bar obscure further decoration. The bow is decorated with a centrally placed longitudinal ridge comprising a line of recessed beading. The sides of the bow are bordered by plain ridges. A transverse moulding separates the bow from the collared foot knob, which like an example from Richborough appears to be separate (Bayley and Butcher 2004, Plate 50, 74). The rectangular –sectioned pin is held in a closed position by the catch plate. L: c 41mm

SF 19, Context 305, Grave 292 (G1046), Phase 2.4

#### **Anglo-Saxon**

**Roughout for pin or needle**, bone (cut from a sliver of longbone). Tapered square-sectioned shank with small crudely modified spatulate head. Longitudinal knife cut facets are evident on the shank and head, but there is no sign of wear. L: 79mm Width of head: 10mm

SF 6, Context 30, SFB 29 (G1041), Phase 3

**Pin beater,** bone. Incomplete, consisting of two terminals and most of shaft but central section missing. Double-pointed with circular cross-section. L: 169mm Dia: *c* 7mm.

SF 14, Context 30, SFB 29 (G1041), Phase 3

**Red deer antler**, fragmented. Antler beam measuring c. 495mm in length, has been sawn through close to bez tine which has been removed. Two saw marks from preliminary attempts at cutting the beam are apparent. Four tines recovered, one with possible notch close to terminal of tine. Assemblage also includes seven other beam fragments and 42 miscellaneous fragments. Wgt: 524g

SF 7, Context 30, SFB 29 (G1041), Phase 3

**Red deer antier**, fragmented. Section of antier beam with burr attached (naturally shed), Saw marks evident where bez tine has been removed. Brow and trez tine present plus one other and one tine from the crown. Assemblage also includes nine beams fragments and 36 miscellaneous fragments. Wgt: 559g SF 8, Context 30, SFB 29 (G1041), Phase 3

**Part of red deer antler,** includes a large section of the beam in five pieces which join (*c* 180mm in length), also includes 1 crown, 4 tines, and 22 misc frags. One terminal of the beam fragment has been sawn through. Weight: 447g SF 9, Context 30, SFB 29 (G1041), Phase 3

**Part of red deer antler** (smaller than previous examples), small burr with broken brow tine. Assemblage also includes 2 tines, 1 beam fragment, and 38 miscellaneous fragments. Wgt: 103g

SF 15, Context 30, SFB 29 (G1041), Phase 3

**Miscellaneous fragments red deer antler**. Includes 3 tines, 7 beam fragments and 24 misc frags. Of the 7 beams fragments, some join to form offcuts or fragments of beam which have been sawn transversely. Fragment with a small saw mark from a preliminary attempt at cutting. Wgt: 200g

No SF, Context 30, SFB 29 (G1041), Phase 3

#### Post-medieval

Key for mounted lock, iron. Incomplete, most of oval bow missing. Solid shank which extends beyond symmetrically-shaped bit. L: 95mm Date: 19/20th century SF 24, Context 480, Pit 479 (G1065), Phase 2.5

**Weight, lead**. Discoid with large central perforation. Diameter: 22mm Height: 6-9mm. Wgt:

SF 4, Context 468, Enclosure 2a Ditch 469 (G1066), Phase 2.3

**Vessel, glass**. Small undiagnostic body sherd from a modern clear glass vessel. Fresh breaks. Dimensions: 24 x 20mm TH: 6mm SF 23, Context 470, Enclosure 2a Ditch 472 (G1055), Phase 2.2

*Horseshoe*, iron. Incomplete, terminal of both branches missing. One surface displaying signs of extreme wear, the other is flat. Form suggests a post-medieval date for the shoe. No measurements.

SF 1, Context 10, Tree planting pit 9, Phase 4



Northamptonshire County Council

# Northamptonshire Archaeology



## Northamptonshire Archaeology

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