



Northamptonshire Archaeology

Stanion Roman Villa April to July 2010 Assessment and Updated Project Design



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Report 11/90

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STANION VILLA ASSESSMENT AND UPD

PROJECT DETAILS		
Project name	Stanion Roman Villa	
<p>Between April and July 2010 Northamptonshire Archaeology undertook an archaeological excavation as part of a proposed development of a waste recycling facility. The excavation revealed a Late Iron Age boundary and three early Roman roundhouses. These were superceded by a Roman villa together with ancillary structures, which included a post-built aisled barn with drying oven, two further drying ovens, stone-lined wells and water cistern. The main buildings were clearly a continuation of the corridor wing excavated to the west in 2002.</p> <p>To the east of the buildings there was a possible metalworking area focused around a stone-built roundhouse. A driveway defined by parallel ditches led to a partially metalled ford over the Harpers Brook.</p> <p>The villa, the processing area and perhaps the driveway appear to have gone out of use by the late 3rd century, when a series of ditches, some utilised for animal stock control were created, and an oven was inserted into the demolition deposits of one of the villa buildings.</p> <p>The site appears to have been abandoned in the 4th century AD. During the medieval period the site was unoccupied; but a small amount of medieval pottery recovered from the building rubble suggests post-Conquest robbing of the villa for building stone. Medieval cultivation was shown by remnants of ridge and furrow.</p> <p>Most recently the archaeological deposits were truncated by two phases of tree cultivation, which was visible as a series of circular pits aligned across the site from east to west. There were also ceramic land drains and two large stone-lined drains.</p>		
Project type	Excavation	
Site status	None	
Previous work	Excavation (2002), Geophysical Survey 2010	
Current land use	Tree Plantation	
Future work	Unknown	
Monument type/period	Roman buildings and agricultural features	
Significant finds	Roman pottery, monumental stone, statuette	
PROJECT LOCATION		
County	Northamptonshire	
Site address	Brigstock Road, Northamptonshire	
Study area	c1 ha	
OS Easting & Northing	SP 924 869	
Height OD	67.07 AOD	
PROJECT CREATORS		
Organisation	Northamptonshire Archaeology	
Project brief originator	Northamptonshire CC	
Project Design originator	CgMs Consulting Ltd	
Director/Supervisor	Jason Clarke	
Project Manager	Mike Dawson (CgMs Consulting) and Tony Walsh (NA)	
Sponsor or funding body	CgMs	
PROJECT DATE		
Start date	April 2010	
End date	July 2010	
ARCHIVES	Location (Accession no.)	Content (e.g. pottery, animal bone etc)
Physical	NA offices	Pottery, animal bone, metalwork, flint, stonework
Paper		site records
Digital		PDF
BIBLIOGRAPHY		
Title	Journal/monograph, published or forthcoming, or unpublished client report Stanion Roman Villa, April to June 2010, Assessment and Updated Project Design	
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Contents

1	INTRODUCTION	1
1.1	Site location and project background	1
1.2	Scope of the assessment and Updated Project Design (UPD)	1
1.3	Topography and geology with Steve Critchley	3
1.4	Historical and archaeological background	3
1.5	Excavation strategy	4
1.6	Aims and objectives	5
2	SUMMARY OF EXCAVATION	6
2.1	Phase 1: Late Iron Age and early Roman settlement (1st century BC-1st century AD)	6
2.2	Phase 2: Construction of the villa (2nd century)	8
2.3	Phase 3: The aisled barn and related activities (late 2nd-early 3rd centuries)	10
2.4	Phase 4: Abandonment and reuse (late 3rd- 4th centuries)	12
2.5	Phase 5: Medieval and later land use	12
2.6	Quantification of the site archive	13
3	FINDS ASSESSMENT	13
3.1	Worked flint by Yvonne Wolfram-Murray	13
3.2	The Iron Age pottery by Andy Chapman	13
3.3	Roman pottery by Jane Timby	14
3.4	Other finds by Tora Hylton, Ian Meadows and Donald Mackreth	17
3.5	Marble statuette by Martin Henig	23
3.6	Millstones and querns by Andy Chapman	24
3.7	The metalworking debris by Andy Chapman	25
3.8	Architectural stone by Ian Meadows	26
3.9	Building material by Pat Chapman	27
3.10	Tesserae by Tora Hylton	29
3.11	Painted wall plaster by Tora Hylton	29
3.12	Late Saxon and medieval pottery by Iain Soden	29
4	HUMAN BONE ASSESSMENT	31
4.1	Adult burial by Sarah Inskip	31
4.2	The infant burials by Andy Chapman	33
5	ENVIRONMENTAL ASSESSMENT by Karen Deighton	34
5.1	Animal bone	34
5.2	Plant remains	35
6	SUMMARY OF POTENTIAL AND PROPOSALS FOR ANALYSIS	37
6.1	Summaries of potential	37
6.2	Review of original aims and objectives	39
6.3	Proposed future research aims	40
6.4	Archaeological context	42
6.5	Proposals for further analysis	43

7	REPORTING AND ARCHIVE	44
7.1	Provisional publication proposals	44
7.2	The report	44
8	STORAGE AND CURATION	45
9	RESOURCES AND PROGRAMMING	45
9.1	Work completed	45
9.2	Proposed work: tasks and programme	45
9.3	Key personnel	46
	BIBLIOGRAPHY	47
	APPENDIX 1: POTTERY TABLES	
1.1	Quantified summary of the Roman pottery assemblage	
1.2	Comparison of assemblages from the 2002 and 2010 excavations	
1.3	Comparison of Stanion with assemblages from Higham Ferrers, Oundle and Irchester (expressed as percentage weight)	
	APPENDIX 2: PRODUCTS OF ENVIRONMENTAL SAMPLE FLOTATION BY PHASE	
2.1	Late Iron Age and Early Roman settlement	
2.2	Construction of the villa (2nd century)	
2.3	The aisled barn and related activities (late 2nd-3rd centuries)	
2.4	Abandonment and reuse (late 3rd-4th centuries)	
2.5	Burials	
2.6	Unphased	

Figures

Front Cover: General view of villa during excavation, looking north east

Fig 1: Site Location, 1:10,000

Fig 2: Archaeological features by phase, 1:400

Back Cover: Venus statuette, rear view

Tables

Table 1: Preliminary phases and principal features

Table 2: Quantification of the site archive

Table 3: Quantification of Iron Age pottery

Table 4: The small finds quantified by material type

Table 5: The small finds quantified by functional category

Table 6: Quantification of architectural stone

Table 7: Quantification of Late Saxon and medieval pottery

Table 8: Skeletal preservation categories

Table 9: Metric data for infant burial long bone lengths

Table 10: Taxa by phase

Table 11: Ageing and metrical data (Iron Age)

Table 12: Ageing and metrical data (Roman)

Table 13: Suggested samples for full analysis

Table 14: Proposed tasks and personnel

Table 15: Post-excavation analysis programme

STANION ROMAN VILLA

ASSESSMENT REPORT AND UPDATED PROJECT DESIGN

Abstract

Between April and July 2010 Northamptonshire Archaeology undertook an archaeological excavation as part of a proposed development of a waste recycling facility. The excavation revealed a Late Iron Age boundary and three early Roman roundhouses. These were superseded by a Roman villa together with ancillary structures, which included a post-built aisled barn with drying oven, two further drying ovens, stone-lined wells and water cistern. The main buildings were clearly a continuation of the corridor wing excavated to the west in 2002.

To the east of the buildings there was a possible metalworking area focused around a stone-built roundhouse. A driveway defined by parallel ditches led to a partially metalled ford over the Harpers Brook.

The villa, the processing area and perhaps the driveway appears to have gone out of use by the late 3rd century, when a series of ditches, some utilised for animal stock control were created, and an oven was inserted into the demolition deposits of one of the villa buildings.

The site appears to have been abandoned in the 4th century AD. During the medieval period the site was unoccupied; but a small amount of medieval pottery recovered from the building rubble suggests post-Conquest robbing of the villa for building stone. Medieval cultivation was shown by remnants of ridge and furrow field cultivation.

Most recently the archaeological deposits were truncated by two phases of tree cultivation, which was visible as a series of circular pits aligned across the site from east to west. There were also ceramic land drains and two large stone lined drains.

1 INTRODUCTION

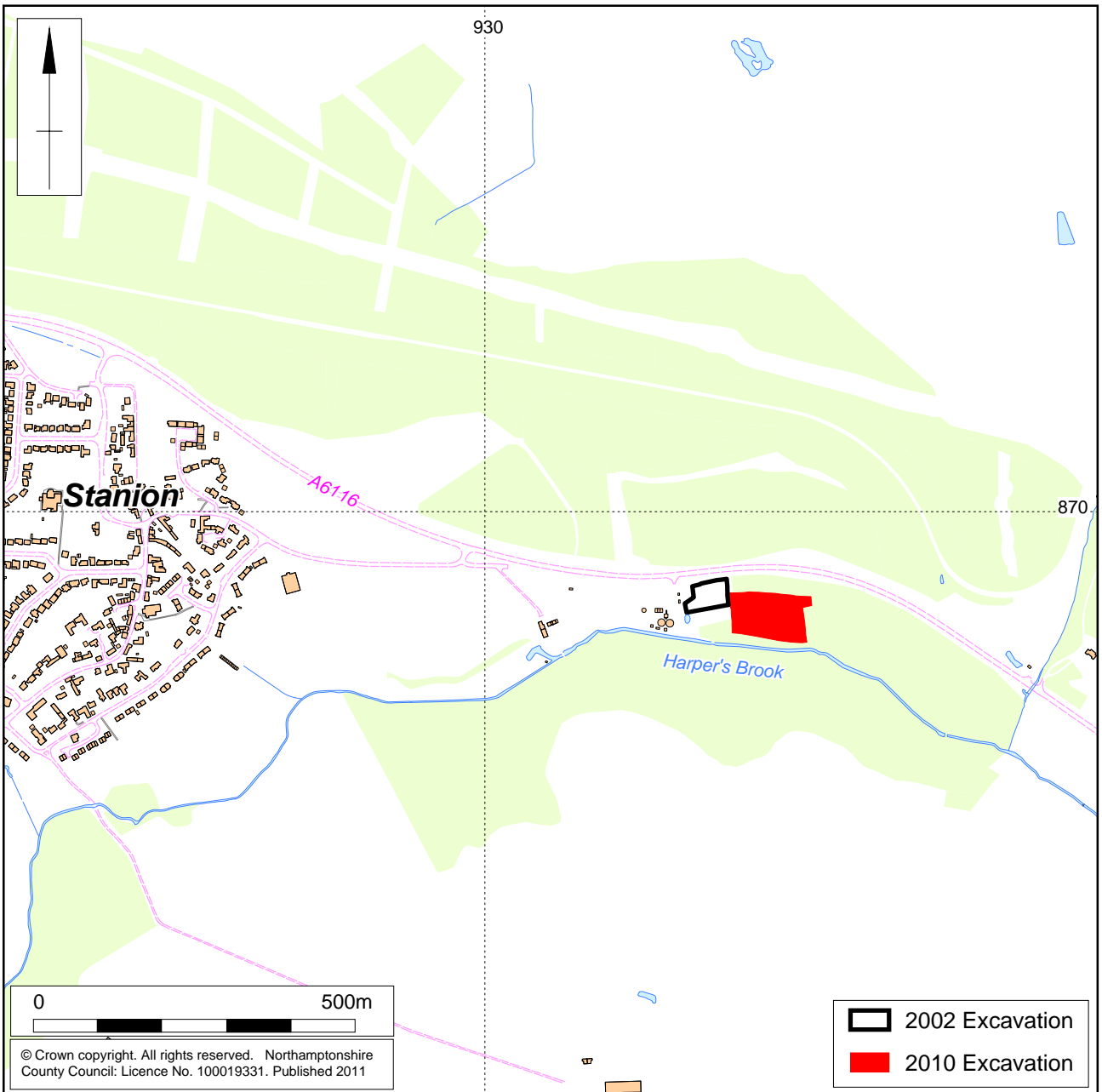
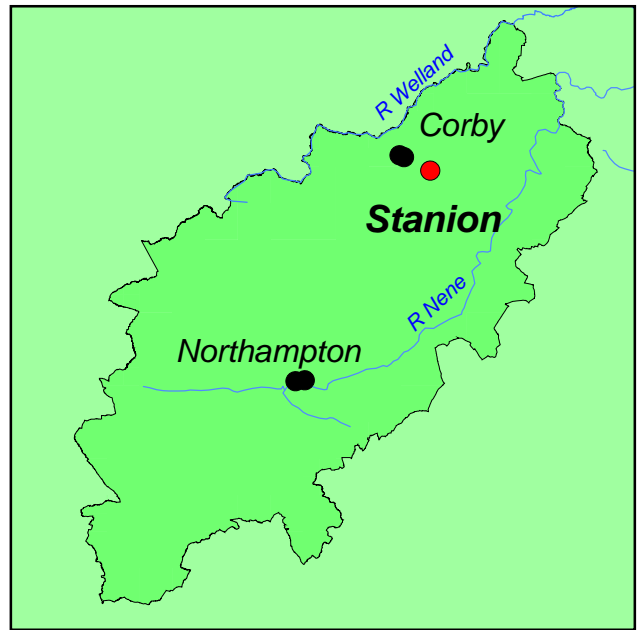
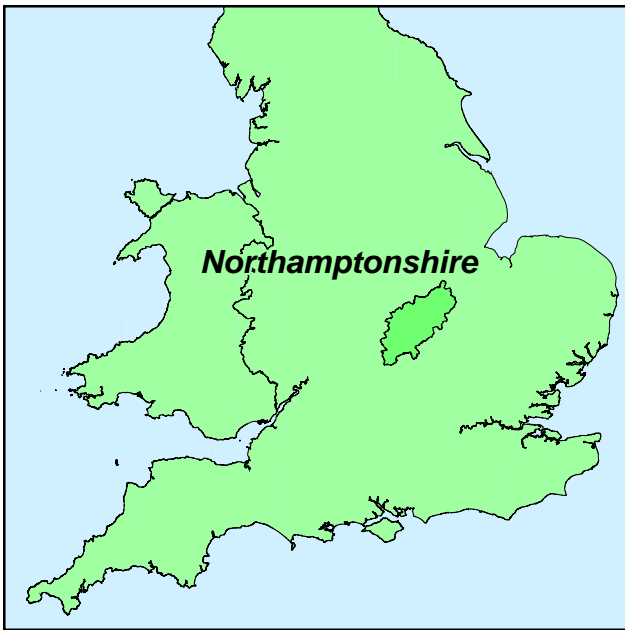
1.1 Site location and project background

Between April and July 2010 an archaeological excavation was carried out by Northamptonshire Archaeology (NA) on land off Brigstock Road, near Stanion, Northamptonshire (SP 924 869, Fig 1). The work was carried out prior to the construction of a waste recycling facility. The proposed development comprises the construction of new buildings and provision of hard standing. During the topsoil/subsoil stripping a soil bund was constructed along the north and east edge of the development area, which was intended to preserve any archaeological buildings *in situ*.

The work was undertaken on behalf of CgMs Consulting for their client and follows a Written Scheme of Investigation (WSI) prepared by CgMs Consulting (Dawson 2010) which was agreed by the Northamptonshire County Council Archaeological Advisor.

1.2 Scope of the assessment and Updated Project Design (UPD)

In preparing this assessment report the structural evidence is only briefly described but most aspects of the finds and environmental evidence have been fully analysed, and will require little, if any further analysis. However, full integration of the specialist reports with the structural evidence will occur at the stage of final reporting. Any context feature numbers given in the current text relate to the site archive and will be integrated to the relevant excavated evidence in subsequent analyses.



Scale 1:10,000

Site Location Fig 1

1.3 Topography and geology with Steve Critchley

The site is located adjacent to the A6116 Brigstock Road approximately 1km east of the village of Stanion in north-east Northamptonshire. It is located on a south facing slope above Harper's Brook at between 60m and 70m AOD, with the ground sloping down from north to south and from north-west to south-east.

The underlying natural geology of the area mainly comprises rocks belonging to the Lias and Inferior Oolite Groups of Middle Jurassic age. Harper's Brook is floored by alluvium covered mudstone of the Whitby Mudstone Formation (formerly known as the Upper Lias), above which and exposed in the banks of the brook are the sandy ironstones of the Northampton Sand Formation (formerly known as the Northampton Sand Ironstone). This in turn is overlain by the Grantham Formation (formerly the Lower Estuarine Series), a succession of laminated clays, silts and sands. Exposures of the Grantham Formation are noted to the west of the villa buildings, which are founded on an apparently unmapped outcrop of coarse-grained, fossiliferous, yellow-brown limestone of the Lincolnshire Limestone Formation. It is likely that there is a faulted junction between the two Formations.

1.4 Historical and archaeological background

Roman activity at Stanion was first mentioned by John Morton in his *Natural History of Northamptonshire*, which described how Roman coins were found in "Stanion field betwixt the town and the wood" (Morton 1712). The entry for Stanion in Whellan's Directory of 1874 states that "In Willow Spring Close, near the village, were found some Roman Pavements, some years since" (Whellan 1874, 809). The RCHME (1979, 135) suggests that the find spot may be related to Willow Lane, a street within Stanion.

A survey of historic maps held in the Northamptonshire Records Office did not reveal any significant information about the site or indicate the location of "Willow Spring Close". The Enclosure Map (NRO 2856) for Stanion dates from 1802 and lists field names surrounding the village which include "Willow Lane Close" immediately to the south and "Spring Close" to the north-west. The field in which the site is located is not named, although it appears on an estate map of 1639 (NRO 2991/6) as part of "Neather Feilde"

Ordnance Survey maps from the first edition to the present, show the field in which the villa was found marked with a cross and the appellation "Roman remains found here 1840". This is mentioned in the Royal Commission volume, although the precise location of the site is unclear (RCHME 1979, 135). Approximately 200m to the north-east of the site there is another cross recording a coin hoard, also found in 1840. Perhaps because these finds were not precisely located by the Royal Commission neither appeared on the Northamptonshire Sites and Monuments Record (SMR) in 2002.

During the 1950s there were sporadic reports in the journal of the *Northamptonshire Architectural and Archaeological Society* describing finds of Roman pottery from an area approximately 300m north of the site which was then part of a modern ironstone quarry (RCHME 1979, 135).

The SMR records indistinct cropmarks approximately 400m south of the site and the known and probable course of a Roman road, which appeared to pass to the east. The SMR finds record (SMR No 6166/0/1) also noted evidence of Roman iron working, 125m to the north-west of the site (in fact, the finds were located along a stretch of road works and the nearest were approximately 75m from the site and less than 50m from the known extent of the buildings). This was investigated in 1984 when a watching brief

was carried out by Pat Foster, Dennis Jackson and Gill Johnston during road improvements on the A6116 between Stanion and Brigstock (Tingle 2008).

Two aerial photographs (NCC Photo Number 9286/033 & 9286/034) (Tingle 2008, fig 5) taken in 1996 and held in the SMR archive, show a complex of buildings at the location of the exposed villa. On the reverse of the photographs a possible interpretation of “WWII Building” is suggested. The photographs indicate a rectangular building measuring approximately 10m by 30m.

In 2002 part of a Roman villa was unexpectedly revealed, together with ancillary structures during the course of topsoil stripping prior to the construction of a composting facility immediately west of the current development area (Fig 1), (Tingle 2008). The main villa building was constructed in the later 1st century AD. The excavated remains comprised the westernmost room of a villa building aligned west to east, and at least 30-35m long, with a corridor along the northern side, perhaps forming an open veranda. The excavated and aerial photographic evidence would suggest a simple plan form, with the main strip building perhaps comprising some five domestic rooms. There were remnants of tessellated pavements in both the corridor and the excavated room, and displaced smaller *tesserae* from the room may suggest the presence of a small central mosaic. A small amount of box-flue tile suggesting the presence of at least one room with a hypocaust heating system. A corn drier or malting oven lay to the west of the villa, along with a small oven that incorporated the base of an amphora. In this area there was also a stone-lined well, and its fills contained sherds of amphora, partially articulated cow skeletons and the skeleton of a raven.

In the late 2nd or early 3rd centuries the building was abandoned. Deposits of burnt debris lying on the scorched surface of the tessellated pavement probably relate to the systematic dismantling of the building, as accumulations of burning debris. Very small quantities of 4th-century pottery indicate that there was some later activity nearby.

In 2010 and immediately prior to the current excavation, a c1ha magnetometer survey was undertaken by Northamptonshire Archaeology. The survey was severely restricted by tree cover. The results indicated a magnetically noisy area with very little pattern within the area of investigation. However, a 20m wide band of more bland data was identified parallel and south of Brigstock Road, indicating an edge to the noisy, possibly debris-filled area.

1.5 Excavation strategy

Following the geophysical survey and immediately prior to excavation the tree plantation was felled. The area of excavation, approximately rectangular in plan, c1ha, was then stripped under archaeological supervision using 360° and bulldozer tracked mechanical excavators fitted with toothless ditching buckets. The topsoil and subsoil were removed in separate operations and stored in bunds at the edges of the sites.

Following stripping the archaeological surface was cleaned sufficiently to enhance the features, a grid was established and a digital base plan was produced using GPS, with the grid and site datum related to the Ordnance Survey National Grid and Datum. The general site plan was hand drawn at a scale of 1:50 or 1:100.

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

scale of 1:10 or 1:20, as appropriate. Recording followed the procedures outlined in the *Archaeological Fieldwork Manual* (NA 2006).

Artefacts and ecofacts were collected by hand and retained, receiving appropriate care prior to removal from site (Watkinson and Neal 1998). The stripped areas and spoil heaps were scanned with a metal detector to ensure maximum finds retrieval. All finds have been catalogued and boxed by material type.

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

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

All works were conducted in accordance with the method statement prepared by NA (2010) and the Institute for Archaeologists' (IfA) *Standard and Guidance for Archaeological Excavation* (1995, revised 2008) and *Code of Conduct* (1985, revised 2008). Health and Safety considerations complied with the Health and Safety Policy of Northamptonshire County Council.

1.6 Aims and objectives

The original aims and objectives were stated in the Specification prepared by CgMs (Dawson 2010):

2.1 The principal objective of the archaeological excavation is to determine and understand the nature, function and character of any important archaeology on the site in its cultural and environmental setting.

2.2 The aims of the excavation are:

- To determine the presence, date, character, integrity, state of preservation and depth of burial of any archaeological deposits*
- To examine the site in its relation to its environment, economy, land use and development from the prehistoric to post-medieval periods*
- To examine evidence from the site for palaeoenvironmental and/or economic development.*

2 SUMMARY OF EXCAVATION

The archaeological excavation comprised part of the main building range of a Roman villa together with ancillary structures, which included a post-built aisled barn with drying oven, at least two further drying ovens, stone-lined wells and water cistern (Fig 2). The main buildings were clearly a continuation of the corridor wing excavated to the west in 2002 (Tingle 2008).

Preliminary analysis of the stratigraphic and ceramic sequence suggests that excavated remains correspond to four phases of activity spanning the Late Iron Age to late Roman periods. The site appears to have been abandoned in the 4th century AD.

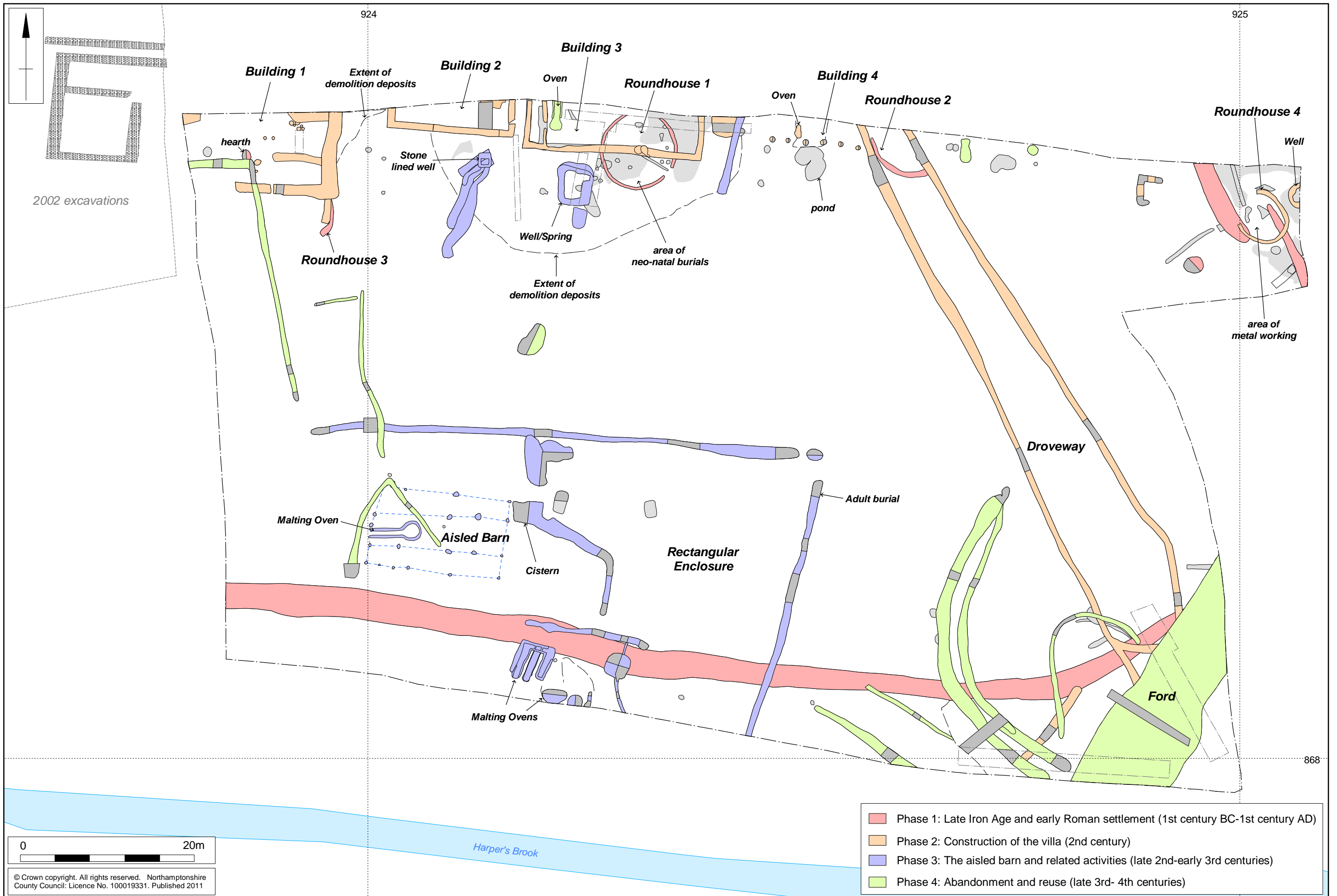
The features had been truncated to a degree by later agricultural practices, most recently by two phases of tree cultivation, which was visible as a series of circular pits aligned across the site from east to west. There were also ceramic land drains and two large stone-lined drains.

Table 1: Preliminary phases and principal features

Phase 1: Late Iron Age and early Roman settlement (1st century BC-1st century AD)	The earliest activity comprised a substantial Iron Age boundary ditch, parallel to Harper's Brook. In the early to mid 1st century AD three roundhouses were constructed north of the Iron Age boundary. Other activity included two parallel ditches to the east.
Phase 2: Construction of the villa (2nd century AD)	Principal villa buildings 1-4 were constructed. To the east was a droveway, bounded by parallel gullies leading to a partially metalled ford over the Harper's Brook. Development of possible ironworking area, including stone-built roundhouse, well and yard. Infant burials 1-3
Phase 3: The aisled barn and related activities (late 2nd-early 3rd centuries)	Building 1, the winged corridor building, partially excavated in 2002, was abandoned. Immediately south of buildings 2 and 3 a stone-lined well and large well/spring were constructed, the latter may have had a ritual function. A crop processing area bounded by a rectangular enclosure was constructed in the south-west, between the villa and the Harper's Brook. This contained an aisled 'barn' with drying oven; at least two further drying ovens outwith the barn, and a stone-lined cistern with associated gullies.
Phase 4: Abandonment and reuse (late 3rd-4th centuries)	The villa, processing area and perhaps the droveway appear to have gone out of use, when a series of north-south ditches, some utilised for animal stock control, were created at the west, and an oven was inserted into the demolition deposits of one of the villa buildings.
Phase 5: Medieval and later land use	Possible mining of stone from Roman buildings, cultivation and drainage.

2.1 Phase 1: Late Iron Age and early Roman settlement (1st century BC-1st century AD)

The earliest feature found on the site comprised a substantial Late Iron Age boundary ditch parallel to and north of Harper's Brook. In the early to mid 1st century AD three roundhouses were constructed north of the Iron Age boundary, which continued as a major landscape feature. Other activity included two parallel ditches to the east (Fig 2).



Along the north edge of the site were a number of irregular features/hollows, possibly natural ponds, similar to that previously encountered below the wing building, excavated in 2002 (Tingle 2008, fig 8). A buried soil was also present within the central northern part of the site, in and around roundhouse 1.

The Late Iron Age boundary

To the south, and parallel to Harper's Brook, there was a well defined substantial ditch, aligned east-west, 2.8-3.7m wide by 0.9m deep (Fig 2).

The ditch appears to have silted naturally. There may also have been some deliberate consolidation over the silted ditch where it was overlain by later Roman features.

The ditch is likely to be the earliest major feature. However, it is relative large, and accumulated datable material, principally pottery, over a long period of time.

Early Roman roundhouses and other activity

Roundhouse 1

Adjacent to the north boundary of the excavation area roundhouse 1, 8.0m in diameter, was defined by a ring gully with a south-east facing entrance, and overlay an irregularly-shaped hollow, possibly a natural pond. The building had a central hearth and the internal structure of the building is indicated by the remains of seven postholes and post-pads.

The fill of the ring gully contained Romano-British pottery dated to the 1st century AD, small amounts of tap slag and fragments of kiln furniture.

Roundhouse 2

Located c20m to the east was a possible second roundhouse, defined by a curving gully. Only the south-west quadrant of the gully was present. To the north was a single posthole, which may be contemporary. Both features were truncated by the later driveway.

Roundhouse 3

In the north-west corner of the site was the heavily truncated south-east arc of a possible stone-built roundhouse. It was constructed from pitched limestone bonded with lime mortar and clay. No internal features were present.

Other activity

In the north-east area of the excavation was a pair of parallel ditches, which contained the earliest Roman pottery recovered from the site, provisionally dated to the later 1st century.

2.2 Phase 2: Construction of the villa (2nd century)

This phase saw the construction of the principal villa buildings, buildings 1-4; a driveway, and to east a possible metalworking area, located in the vicinity of a stone-built roundhouse, a well and a yard (Fig 2). The driveway led south to a partially metalled ford over the Harpers Brook.

Building 1

Building 1 forms the eastern part of the winged corridor building previously excavated in 2002. The building is of simple plan, aligned east-west and measured 33m long by 12m wide. It consisted of two principal rooms with a corridor at the north side, perhaps forming an open veranda. The 2002 excavation found surviving tessellated pavements, in both the corridor and the excavated room. The excavation in 2010 found that the building was constructed in two stages. The earlier building was defined by two

surviving walls aligned east to west and north to south constructed of pitched limestone and bonded with lime mortar. Subsequently the building was modified and replaced by a more substantial structure. The north to south aligned wall was substantially re-built with wide and deep foundations, suggesting it supported more than one storey. Four postholes aligned east to west were possibly an internal structure contemporary with this phase of the building.

Painted wall plaster was recovered from two of the internal postholes, suggesting that the house may have had a decorative scheme. In the north-east of the building were the remains of a stone surface abutting the wall indicating it was an internal surface for the later phase of the building. There were a number of postholes within the building. However, they did not form any recognisable pattern. Three postholes cut the stone surface suggesting perhaps, that they were part of a later division. Also within building 1 was a hearth. Loose *tesserae* were recovered from the general area of Building 1, but no evidence survived for *in situ* mosaic floors or tessellated pavements. Areas of *in situ* floor were present in the 2002 excavation and it may be that the *tesserae* are from there.

Building 2

Building 2 was located c5m east of building 1, defined by two walls aligned east to west and north to south, and measuring 15m long by at least 4m wide. The majority of the structure lay beyond the northern limits of excavation, so the function and form of the building remains uncertain.

The walls were laid within a foundation trench 1.15m wide and up to 0.4m deep, which was cut into the buried soil. The southern wall was the best preserved, which had its lower foundation laid in a herringbone pattern with no clear bonding. Above this the surviving upper three courses were of roughly dressed limestone blocks.

Remnants of a flagged floor were present in the east part of the building and appeared to be contemporary with its construction.

The western corner of the building was heavily truncated by medieval ridge and furrow and by a post-medieval stone drain on its east side.

Building 3

Building 3 lay to the east of Building 2, separated by a narrow alley, and also extended beyond the limit of excavation. The building was probably rectangular in plan, aligned east-west and measured 20m long by >5.50m wide. On its western side and parallel to the alleyway was a corridor 1.60m wide, with an internal doorway, with an *in situ* pivot stone, allowing access to the room/s to the east.

The walls were founded into the buried soil. Also cutting the buried soil, were two infant burials which were possibly contemporary to the building.

The walls of the western end and corridor were relatively well preserved and included *in-situ* dressed limestone blocks. The preservation of the building to the east of the corridor was relatively poor, due to the severe damage from modern tree planting.

The length of the building would indicate that it would have contained several conjoining rooms, possibly sub-divided by timber partitions which have left no archaeological trace. Flooring within the building did not survive well, but certain contexts maybe represent floor surfaces. In the east of the building were the disturbed remains of possible limestone flagstones, and in the west of the building was a layer of compacted sandy mortar. These differing floor materials may denote possible separate rooms within the building. A third infant burial was inserted through the mortar layer.

Building 4

To the east of Building 3, a row of six postholes may form the southern side of a post-built structure containing an oven.

The oven was rectangular in plan and was constructed from clay and limestone, and incorporating re-used tile. The limestone and clay was burnt to a pink colouration which suggests that the oven was operated at a relatively low heat.

Droeway

Immediately to the east of building 4 was a droeway defined by two parallel ditches aligned north-east to south-west with evidence of re-cutting. The droeway was 4.0m wide at its north end expanding to 12.0m wide at the south. At the south the droeway ditches were overlain by a fording area for Harper's Brook.

Stone roundhouse 4 and associated features

In the north-east area of the excavation was a small stone-built roundhouse, c4.0m diameter with an entrance facing to the north-west. The wall survived 0.5m thick and 0.4m high as two irregular courses of stone.

The roundhouse had a compacted clay floor and a central hearth. South of the building was an area of compacted stones that was probably a yard and to the east was a stone-lined well. Around the building were four short gullies and at least three pits. The features may have been associated with iron working as a large amount of iron slag was recovered from their fills.

2.3 Phase 3: The aisled barn and related activities (late 2nd-early 3rd centuries)

Building 1 was demolished, but buildings 2-4 remained in use and a crop processing area bounded by a rectangular enclosure was constructed to the south-west. This contained an aisled 'barn' with drying oven; at least two further drying ovens outwith the barn, and a stone-lined cistern with associated gullies. Additional features belonging to this phase are two wells and a boundary ditch.

Rectangular enclosure

The rectangular enclosure was formed on its north and east sides by two linear ditches. The northern ditch was c56m long and survived c0.5m deep. The eastern ditch was at least 30m long and continued south beyond the limits of excavation. It is possible that the south side of the enclosure was defined by a southern ditch beyond the limit of the excavation, or alternatively that the Harper's Brook itself formed the southern boundary of the area. There was no indication of a contemporary western ditch. Entrance to the east part of the enclosure was at the north-east corner. The entrance appears to have been restricted and the pit at the corner may indicate the presence of a controlling gate. Pottery recovered from the ditch fills suggest that they date to the late 2nd to early 3rd centuries AD.

An adult inhumation was placed in the northern terminal of the eastern ditch. It is not clear if this was a deliberate closure event, or an example of the isolated burial using the ditch for convenience.

The enclosure contained a number of features associated with agricultural activities.

Aisled barn and drying oven

In the western part of the enclosure was a rectangular aisled barn, measuring 8m long by 5m wide, defined by four parallel rows of evenly spaced postholes. The middle two rows were relatively substantial for the primary posts supporting the roof; with smaller posts to support the outer walls. The posts were founded upon limestone post pads.

At the western end of the aisled barn were the remains of a drying oven with a long flue aligned east to west; with a stokehole at the east and a circular chamber at the west, and had been repaired on at least one occasion. The barn and oven appear to be contemporary. The oven was heavily damaged by later ploughing and tree planting.

Water cistern and drying oven

Adjacent to the north-east corner of the aisled barn was a flagstone-lined cistern, measuring 3.2m long by 2.2m wide and 0.4m deep. The proximity of the cistern to the aisled barn suggested that water was gathered from the barn eaves. At the south-east corner of the cistern was a vertical slot which may have held a sluice gate to control the outflow of water into a series of interconnecting ditches leading south towards Harper's Brook. When the cistern fell out of use it was backfilled with large stone blocks and clay.

Towards the south and overlying the southern edge of the Late Iron Age ditch, was a large drying oven. Initially the oven was T-shaped with a stokehole at the south. The oven was subsequently modified and enlarged, with an outer wall built around its western and northern sides forming a square-shaped structure. The stokehole was moved to the south-west corner. The oven may have been protected from the prevailing westerly winds by a wooden structure; a hovel or perhaps a lean-to, since to the west of the oven was a beam slot, and at the east was a single posthole.

Pits and ditch terminal

To the south-east of the square drying oven were a group of two pits and the terminal of a ditch. The function of the features was uncertain but it is possible that they formed part of another drying oven located beyond the limits of excavation.

The pottery recovered from the drying ovens and cistern dates to the late 2nd to early 3rd centuries, contemporary with the enclosure ditches. Detailed analysis of the stratigraphy and dating of contexts may further refine their relative dating.

Wells

Immediately south of buildings 2 and 3 were a stone-lined well and associated drainage gullies and a well/spring with a stone surface.

Stone-lined well

To the south of building 2 was a stone-lined well, constructed with four re-used rectangular flat limestone slabs. The well was square in plan, 0.60m wide and 1m deep. The limestone slabs had a tooled groove along each edge and a single slab had a hole drilled through it. When it had fallen out of use the well was backfilled with demolition rubble which contained pottery dated to the 3rd and 4th centuries and was sealed below demolition rubble layer.

A drainage gully with evidence of re-cutting led from the well to the south, suggesting that it functioned as an overflow removing excess water to the south.

Well/spring and associated surface

To the south of building 3 was a well/spring, which may have had a possible ritual status. Initially a circular pit, 1.0m wide and 0.75m deep, lay above the position of a natural spring. At the base of the cut were four sharpened wooden stakes, possibly forming part of a timber structure or platform which would have allowed easier access to the water. The pit was subsequently enlarged and revetted in stone and on the eastern side a level platform was constructed using a large flat stone supported by a re-used column. A silver spoon (SF 286) found beneath the platform may have been

deliberately placed as a votive offering. Pottery dated to the 3rd century was recovered from the silting fill.

Immediately to the south was a limestone surface, 2.40m long and 1.50m wide, constructed of a single layer of flat limestone fragments. This may have been an for standing or storage associated with the well.

2.4 Phase 4: Abandonment and reuse (late 3rd- 4th centuries)

This phase saw general abandonment of the 'villa' complex and general demolition of the stone buildings, surviving as a large spread of demolition rubble within a silt matrix, layer (109), sealing buildings 2 and 3 and the wells (Fig 2). The abandonment also included the crop processing area and possibly the droveway. Following the general demolition an oven was inserted within the western side of building 3. During this phase a series of linear and curvilinear ditches were established within the western area and the south-eastern parts of the site around the possible fording area. The ditches were possibly utilised for stock control.

Oven

After the demolition of building 3 an oven was constructed with a circular chamber and a stone-lined flue. Coins from the rubble backfill of the flue of the oven are datable to the 4th century.

Fording area

At the south-east corner of the excavation was a probable fording area approaching Harper's Brook. A layer of material was laid down to form an area of hard-standing or metalling around the Brook, which included rubble, pebbles, worked architectural stone, and querns. The fording area is probably contemporary with the droveway, but due to its regular maintenance as a consequence of natural flooding the last phase of metalling overlaid the droveway ditches.

A number of intercutting curvilinear gullies were present around the metalled area, which may have functioned both as drainage to control water from the intermittent natural springs to the north away from the approach to the ford, and to indicate the route across. The morphology of the ditches may also suggest that they may have functioned as animal pens or used for temporary stock control, adjacent to the brook.

In the west, and partially overlying building 1, was the north-east corner of an enclosure extending 5m east-west returning to the south for 28m. Two other lengths of sinuous ditches were established over the northern arm of the crop processing enclosure and the west end of the aisled barn. The arrangement of the ditches may indicate a new droveway with entrances approaching the brook. This may indicate that the former droveway approach was becoming too wet to function, and the higher ground to the west was preferred.

2.5 Phase 5: Medieval and later land use

Features relating to this phase comprise a small spread of rubble against the outer south wall of building 1; remnant ridge and furrow cultivation and a series of stone-lined drains on a general north south alignment falling to the south, towards Harper's Brook. A small amount of medieval pottery was recovered from the rubble layer, possibly a result of the deliberate post-Conquest robbing of the villa of useful building stone.

The most recent use of the site was for tree cultivation which caused severe truncation to the archaeological deposits, and in places this has removed some key stratigraphical relationships.

2.6 Quantification of the site archive

Table 2: Quantification of the site archive

Contexts	Plans	Sections	Bulk soil samples	Colour Slides	Black and White	Digital images
711	59	152 (17 sheets)	53	13 films	13 films	601 images

3 FINDS ASSESSMENT

3.1 Worked flint by Yvonne Wolframm-Murray

Fifteen pieces of worked flint were recovered as residual finds from Iron Age, Roman, buried soil and topsoil contexts. The flint comprised ten flakes, three blades, one core, and one end/side scraper.

The condition of the assemblage was good. The flints showed varied post-depositional edge damage, ranging from small edge spalls to battered and crushed edges. Patination was present on the majority of the assemblage ranging from grey-white to mottled white to a complete white colour. Accidental burning of the flint was evident on one flake in the form of thermal fracturing.

The raw material is a vitreous flint of light to mid coloured greys and browns. There is also a small component of a more granular grey 'chert'-like flint. Cortex is present on the dorsal surface on the majority of the assemblage and typically off-white and light to grey and brown in colour with a generally smooth, rolled and weathered surface. The raw material was likely to have been derived from terrace and glacio-fluvial deposits.

A single platform blade core was recovered from the Roman demolition layers of Buildings 2 and 3. The majority of flints recovered consisted of waste flakes and blades. These comprise ten flakes, of which four were broken, and three broken blades. A flake with cortical striking platform and one squat flake were also present in the assemblage. One end/side scraper comprised the only retouched tool in the assemblage. This piece had semi-abrupt to abrupt retouched on the convex distal end and some additional retouch on the lateral edge. Patinated edge damage on the edges may indicate utilisation.

Technological characteristics of the assemblage suggest a broadly Neolithic date with a possible early to mid late component in the form of the cylindrical blade core and the end/side scraper. Just under half of the worked flints were retrieved from a buried soil under the Roman features.

3.2 The Iron Age pottery by Andy Chapman

A small quantity of hand-built Iron Age pottery, 26 sherds, weighing 235g, probably from no more than eight vessels, was recovered from a linear ditch [519], another ditch [20] and a posthole [67].

The majority of the sherds contain quantities of crushed shell, ranging from sparse fine shell, measuring no more than 1mm, to dense large shell, measuring up to 7mm, which occur in a thick-walled vessel that also contains pellets of grog. The vessels have dark

grey cores with brown to grey-black surfaces, with the exception of the thick-walled vessel containing grog, which has an oxidised orange surface.

Table 3: Quantification of Iron Age pottery

Context/feature	Sherds	Weight (g)	Sherd families	Comments (Fabrics)
19/20 ditch	10	20	1	Small 'thumb' pot (Shell, 10)
66/67 posthole	8	20	4	(shell, 8)
513/519 ditch	8	195	3	(Shell, 5: Grog/shell 3)
Total	26	235	8	Shell, 23 sherds Grog/shell, 3 sherds

The sherds from ditch [20] are from a small thumb pot. It has a simple rounded rim and the walls are 3mm thick at the rim and 6mm thick on the base. Only fragments survive, but it appears to have been small and round-bottomed, perhaps 80mm in diameter by c40mm deep.

There are only a few small body sherds from posthole [67].

The largest group is from the linear boundary ditch [519]. This contains part of a flat base and a sherd with a grey-black core and surfaces, with a smoothed outer surface. There are also three sherds from a thick-walled vessel, 13mm thick, with a grey core and inner surface and an oxidised orange outer surface. This vessel also contains both shell and grog inclusions. It is this jar that provides the best dating evidence. The rest of the assemblage could only be broadly attributed to the middle to late Iron Age, but the thick-walled jar is characteristic of late Iron Age assemblages, probably into the early 1st century AD.

3.3 Roman pottery by Jane Timby

Introduction and methodology

The archaeological work carried out at Stanion Roman villa in 2010 resulted in the recovery of 8,476 sherds of pottery weighing c168kg, with an estimated vessel equivalence (EVE) of 14,830.

In general terms the assemblage is in very good condition, reflected in an overall average sherd weight of 19.8g. There are several instances of multiple sherds from single vessels within and probably across contexts. Surface treatments have generally been preserved, although some of the colour-coated wares have lost their surfaces.

The pottery was rapidly sorted into broad fabric groups based on inclusions present, the frequency and grade of the inclusions and the firing colour. Known regional or traded wares were coded following the system advocated for the National Roman reference collection (Tomber and Dore 1998). Local wares were coded following a system developed by the author for other assemblages studied in the region based on colour and main inclusion type (Timby 2005; 2009; forthcoming) to ensure some compatibility.

The sorted assemblage was quantified by sherd count and weight for each recorded context. Rims were recorded to form type and measured for diameter and estimated vessel equivalence (EVE). The resulting data was entered onto an Excel MS spreadsheet a copy of which is deposited with the site archive. A fully quantified summary of the Roman pottery can be found in Appendix 1.1. In the following report

the assemblage is described chronologically with a brief description of the fabrics and associated forms. The pottery is then discussed, first in the context of the site and second within its regional context.

Comment on fabrics and forms

In summary the assemblage recovered from the 2010 excavations is very much dominated by local fabrics, which can broadly be split into four groups: shelly wares, sandy wares, grog-tempered and products of the Lower Nene Valley. A full fabric list has been compiled and will form part of the final report.

Imported samian is moderately well represented accounting for 5.4% count of the overall assemblage but other continental imports are conspicuous by their absence being restricted to four sherds of Central Gaulish black-slipped ware. Amphorae also form a very modest component of the assemblage with the most common types to be found on British Roman sites present, namely Baetican olive oil containers and Gallic wine amphorae. The status of both the imported table wares and the amphorae is reflected in the fact that several of the former were repaired with lead rivets to prolong their use and one of the latter vessels was re-used.

Coarse ware jars dominate the group accounting for 54.3% overall followed by bowls/dishes at 16%. Imported fine wares, probably used as tableware or as display items overall account for 10.3% whilst the local colour-coat 'replacements' account for 10.9% suggesting in very general terms a fairly consistent proportion of fine wares to coarse wares through time although with slightly different emphasis of forms. Overall the assemblage seems quite typical of a domestic villa of this date range.

Site discussion

Ceramic phase 1 (Iron Age)

The earliest occupation on the site appears to date back into the Iron Age although the number of sherds is too limited to date this closely. Most pieces appear to be redeposited finds in later contexts suggesting the earlier focus of activity is beyond the excavated area.

Ceramic phase 2 (late 1st-early 2nd centuries)

The earliest Roman assemblages appear to be those from the western of the two parallel ditches in the north-east corner of the excavated area, which provisionally dates to the later 1st century and a layer within the interior of building 4, adjacent to the oven, for which a Flavio-Trajanic date is likely. The ditch produced 27 sherds weighing 635g, mainly local grog, shelly and sandy wares accompanied by three sherds of South Gaulish samian. The layer produced 59 sherds (1017g) amongst which were six sherds of South Gaulish samian including stamp S1 dated AD 70-100. A posthole within building 1 is also probably of early 2nd century date with two London-ware bowl sherds imitating Drag.30 forms and a sherd of Lezoux samian.

Ceramic phase 3 (2nd century)

The greatest amount of activity appears to date to the 2nd century with some 32 deposits and 26 features dating to this period on the basis of the pottery. The substantial Late Iron Age boundary ditch is stratigraphically early, but also contained Roman pottery, including LNV RE and BWH GR which would suggest that the ditch went out of use by the mid-late 2nd century.

Roundhouse 1 located below building 3 produced a small assemblage with 11 sherds of later 1st or 2nd century date. Ring ditch 2, which also appears stratigraphically early, produced eight sherds amongst which were two LNV CC pieces again intimating a later 2nd century date. The foundation trench of roundhouse 4 produced 40 sherds suggestive of a mid 2nd-century date.

Other features which appear to belong to this phase of activity include a pond sealed beneath building 3 which produced a large assemblage of 520 sherds (9055g). The group is quite diverse comprising 28% grog-tempered ware and 39% sandy ware and 11.5% shelly ware. Of particular note is the quantity of samian present, 11% by sherd count. Another moderately large assemblage was recovered from the western of the two parallel ditches in the north-east corner of the excavated area, truncated by roundhouse 4; 137 sherds comprising 44.5% shelly ware, 21% grog-tempered and 34% sandy with three sherds of samian giving a *terminus post quem* in the mid 2nd century. Smaller assemblages were recovered from two pits in the north-east and south near the drying oven.

The two parallel driveway ditches produced 199 sherds. Most of the pottery came from a single excavated segment; from the bodies of two LNV WH flagons likely to date to the 2nd or early 3rd century. Also present is samian stamp S4 dated AD 70-100. Further LNV WH flagon and a sherd of MAH WH mortaria came from the western driveway ditch, which also produced a 3rd-century coin. This would suggest that a significant proportion of the assemblage may be residual.

Ceramic phase 4 (late 2nd-3rd centuries)

Pottery dating to the later 2nd–3rd centuries is also well presented on the site. Many of these features show an increased presence of LNV CC but earlier material continues to be present. Belonging to this phase are the ditches for the rectangular enclosure of the crop processing area, which produced 745 sherds. Of note is a 3rd-century ridged wall LNV WH mortarium and several sherds from a white grog-tempered jar, several sherds of LNV CC including a bowl, box and beaker and the repaired East Gaulish samian bowl (D4).

Ceramic phase 5 (late 3rd-4th centuries)

The latest features on the site dating to the later 3rd-4th centuries include the animal stock control ditches, cutting abandoned building 1. The ditch contains a very high percentage of early-mid 2nd century material, but also produced 4th-century coins. The well preserved drying ovens truncating the substantial Late Iron Age ditch and the oven in building 3 also contain pottery dating to the 4th century. The southern drying oven produced some 59 sherds of which 66% were LNV CC; whilst the oven in building 3 also had several LNV CC jars and a beaker and a late shelly flanged bowl. Other late features include pits and ditches near the cistern, the stone-lined well south of building 2 and curvilinear ditches around the area of the ford. The buried soil and demolition layers in and around buildings 2 and 3 produced some very large assemblages with some 28% of the whole assemblage coming from five deposits. Whilst they contain a significant quantity of mid to late 2nd century material they also have later wares suggesting later disturbance (medieval robbing for building stone, and modern tree planting) that has created a chronologically mixed assemblage of pottery. Lower Nene Valley colour-coated ware and shelly ware, both later products account for 13% and 14.4% by weight but samian is also still well represented accounting for 5.6% despite the fact it is mainly of later 1st-2nd century date and other early wares such as London-type ware are also well represented.

General discussion

Previous work at the site of the Roman villa identified activity dating to the later 1st century whilst earlier work carried out in 1984 has suggested a mid-1st century AD origin for the occupation (Tingle 2008). The work carried out in 2002 suggested that the villa building was constructed in the later 1st century and abandoned in the late 2nd or 3rd centuries. Fourth-century pottery although present was sparse. The 2002 season of work produced a smaller assemblage of 3150 sherds of pottery (Friendship-Taylor 2008, 108), less than half that from the 2010 work. Appendix 1.2 compares the

assemblages from the two archaeological interventions using the fabric breakdown used in the 2008 report which only quantifies by sherd count. Although quite a crude comparison it is clear that both assemblages are well supplied with samian, 4.9% of the 2002 group, compared with 5.4% in 2010. Other broad concordances can be made in the proportions of grog-tempered wares, and specialist fine wares such as mica-slipped ware and London-type ware, but for the other categories identified there is quite a discrepancy between the two assemblages. Shelly wares, for example only accounted for 8.6% of the 2002 assemblage compared with 18.1% here; Nene Valley colour-coated ware was also less prevalent. The number of named traded wares identified is considerably less for the 2002 group. This would in part seem to be a reflection of the chronology; there appears to be a much larger later component to the 2010 assemblage compared to 2002 although a starting date in the last quarter of the 1st century seems to apply to both assemblages.

Appendix 1.3 compares the Stanion 2010 assemblage with those recently analysed from the nearby sites at Higham Ferrers (Timby 2009); Oundle (Timby 2005) and Victoria Park, Irchester (Timby forthcoming). Despite the apparently high proportion of samian present at Stanion accounting for 5.4% sherd count, 2.7% weight, suggesting a moderately high status occupation, it is notably less than that from Higham Ferrers at c 4% (wt) and Irchester at 4.9% which may be reflecting the difference between a rural focus compared the more urban level of occupation at the latter two locations. Moreover the proportion of decorated samian at Stanion is quite low, another characteristic which appears to have a direct link to site type/status (Willis 2004). There were several incidences of repair to the samian vessels at Stanion, particularly decorated bowls; a similar bias was observed at Higham Ferrers (Timby 2009, 149). A slightly higher incidence of South Gaulish samian at Stanion may reflect its earlier origins.

Although there are odd sherds of continental fine ware and amphorae at all the sites these are generally quite limited in quantity and range. The amphorae are dominated by Dressel 20 olive oil type with small amounts of Gallic wine amphorae from Stanion and Higham Ferrers. In terms of regional imports small quantities of Dorset black burnished ware, Verulamium white ware, Oxfordshire products and Mancetter Hartshill were being marketed in the region but the quantities are small. Similarly most of the sites have more locally produced fine specialist wares such as glazed ware, mica-slipped ware and London-type black wares although no examples of the former have been noted at Stanion to date.

3.4 Other finds by Tora Hylton, Ian Meadows and Donald Mackreth

In total 208 individual or group recorded small finds were recovered, providing a total number of 261 individual objects in eight material types (Table 4). Of that number 225 (83%) were recovered from stratified deposits, while the remaining 36 (17%) were recovered from subsoil deposits or are unstratified.

The majority of individual or group recorded Roman finds, 162, were recovered from stratified deposits, in addition 11 objects which stylistically date to the Roman period were recovered from subsoil and 11 are unstratified.

There are two distinct concentrations of finds, in the occupation/demolition deposits which overly the footprint of buildings 1-3 to the north and in the vicinity of the corn drier to the south. The assemblage is dominated by nails, which make up 42.9% of the total number. Other finds represented include a range of personal and household items, which together with those recovered previously (Tingle 2008), provide an insight into the nature of occupation (Table 5). Excepting the presence of the marble statuette,

which is of intrinsic importance, the assemblage may be compared to assemblages recovered from other rural villa sites in the east Midlands.

Table 4: The small finds quantified by material type

Material	Total
Silver	1
Copper alloy (ex. coins)	49
Iron objects	110
Lead/lead alloy	17
Shale	1
Stone	1
Glass	25
Ceramic	1
Bone/antler	3
Total	208

Table 5: The Roman small finds quantified by functional category

Functional category	Number of finds
<i>Personal possessions</i>	
Costume and jewellery (inc. brooches)	20
Toiletry/surgical equipment	4
Hob nails	10
<i>Equipment and furnishings</i>	
<i>Building equipment</i>	
General ironwork	2
Nails	112
Household equipment	6
Knives	2
Vessel glass	25
<i>Miscellaneous and unidentified</i>	
Copper alloy	20
Iron	28
Lead	11
Stone	1
Bone	2

Personal possessions by Tora Hylton

This category comprises small portable items which would have formed part of a person's attire, either worn as jewellery, as part of their dress, or toiletry items held by an individual for personal use. The finds include seven brooches (reported on by Donald Mackreth, below), two armlets, a bone pin, a range of beads and a small group of items for toilet/pharmaceutical use.

Armlets

There are two copper alloy armlets which represent types commonly found on Roman settlement sites. A complete penannular armlet was recovered from the substantial Late Iron Age ditch, near to the ford. It is cast, with a D-shaped cross-section and the ends terminate in stylised serpent's heads. The features of the head are emphasised by motifs on the head and there is a flat narrow border around the head. The hoop is ornamented with marginal grooves and the space between is partially decorated with a punched motif. The armlet displays signs of excessive wear and measures 65mm in diameter, indicating that it would have been for use by an adult. Serpents are common symbols in the Roman period they signify health, healing, rebirth and the spirits

departed (Johns 1998, 2000); a 2nd-3rd century date for similar armlets has been suggested by Johns (1996, 334).

Part of an armlet with a flat rectangular cross-section 'ribbon-strip type' was recovered from demolition deposits overlying buildings 2/3. It is decorated with close-set punched ring-and-dot motifs and it displays similarities to an example from Butt Road Cemetery (Crummy 1983, fig 45, 1708), which dates to c320-c450 AD.

Pins

Part of a bone pin was located in the fill of the pond west of building 3. It comprises a circular-sectioned shank surmounted by a conical head with three turned grooves below. Typologically it displays similarities to Crummy's Type 2 (1983, fig 18, 162), a form pre dating c200AD. A similar pin was recovered previously from Stanion Villa (Tingle 2008, 118).

Beads

Eight beads were recovered from stratified Roman deposits; one is made from shale/jet and seven are made from glass. The shale/jet bead was located under the floor of building 3. Although incomplete, one side has sheared off, what remains suggest that it would have been biconical in shape. The exterior surface of the bead is extremely abraded and it lacks the lustre and polish common with beads manufactured from jet, therefore it is probably shale.

The glass beads presumably for use on necklaces and armlets are represented by a variety of forms: gadrooned (melon), annular, biconical, oblate and cylinder, in a number of colours; dark blue, natural/green and red in translucent glass; light blue in opaque glass. Four of the beads were recovered from the corridor of building 3, and one each from the well east of roundhouse 4, the well/spring and the yard surface near roundhouse 4.

Mounts

Just one decorative strap-mount was recovered from topsoil deposits. The mount is pelta-shaped with a curved profile and two integral studs protrude from the underside. Mounts of this type are not uncommon, they date to the 2nd/3rd centuries and similar examples have been recovered from Richborough (Wilson 1968, plate XXXVII, 128, 129; plate XXXVIII, 130).

Hobnails

There are 10 hobnails for use on shoes. Typologically they equate to Mannings Type 10 (1985, fig 32) with domed heads. Some have clenched terminals indicating that they have been used.

Toiletry equipment

There is a small group of items which are for toilet or pharmaceutical use. These include a pair of tweezers, two toilet spoons and a scoop-probe.

The tweezers are unstratified and they would have been used, for the removal of unwanted facial and body hair (Crummy 1983, 58). They are manufactured from a copper alloy strip folded in half lengthways. The arms are parallel-sided (length c65mm, width 6mm) and bow out towards the blades which are chamfered. There appears to be some sort of suspension loop surviving at the apex, but ferrous corrosion deposits make identification difficult, therefore they will need to be x-rayed.

Two complete toilet spoons (*ligula*) were recovered from deposits associated with building 3, one from the floor and one from demolition deposits overlying the footprint

of the building. Such items are common finds on Roman sites, for similar examples see those recovered from Stonea (Jackson and Potter 1996, fig 109, 46-52).

The scoop-probe (*cyathiscomele*) was recovered from a gully south of building 2. Although not complete, most of the scoop is missing. Similar examples have been recorded from Colchester, Essex (Crummy 1983, fig 63) and Stonea, Cambridgeshire (Jackson and Potter 1996, fig 109, 44).

The ligulae and scoop-probes are multi-purpose instruments which could have had any number of uses from extracting cosmetics from flasks and small pots (Crummy 1983, 590), and applying cosmetics and ointments to pharmaceutical and medical uses (Jackson and Potter 1986, 157-158).

Equipment and furnishings

With the exception of a large number of nails, there are only two items which may have formed part of or been attached to the villa building. These include a loop-headed strap and a staple. The loop-headed strap was recovered from the floor of building 3. Such items would have been used for attaching rings and fittings. For similar examples, see Manning 1985 (plate 61, R39-46).

Nails

A total of 112 nails were recovered, 105 came from archaeological deposits, while seven came from subsoil. Of the nails recovered from archaeological features, 36% were recovered from deposits associated with buildings 1, 2 and 3. The remaining 64% were recovered from ditches, pits, postholes and other features.

Forty-nine nails (44%) are of indeterminate form, with heads missing etc, the remaining 63 nails retain their heads. Where possible the nails have been classified according to Mannings Typology (1985, fig 32). The majority of the identifiable nail types are represented by Type 1b (77%) which have a flat sub-circular head and were presumably used for furniture or light structural fixings. Other types include large structural nails with triangular-shaped heads (Type 2) possibly for securing major timbers; nails with T-shaped heads (Type 3) and nails lacking a distinct head (Type 5). In addition there is one example of a nail with large domed head measuring c15mm in diameter; nails of this type would have been used for upholstery (Type 8).

Household equipment

There is a small collection of artefacts that would have been for domestic or household use. They include a spoon, a tang/attachment plate, a key, a lock bolt, and 25 pieces of vessel glass.

A complete but damaged pewter spoon was recovered from the rectangular pit south of building 3. A similar example manufactured from silver is known from Colchester (Crummy 1983, fig 73, 2014). Spoons of this type first came into use in the 2nd century and continued in use beyond the 4th century (Lloyd-Morgan 2000, 349).

A square-sectioned tang with an integral triangular attachment plate suitable for a metal bowl/pan and part of a possible handle from a padlock key (cf Manning 1985, plate 43, O74). was recovered from demolition deposits overlying buildings 2/3.

A complete copper alloy lock bolt from a slide lock was recovered from under the floor of building 2. A similar example with crudely executed circular perforations has been recorded at Fishbourne (Cunliffe 1971, fig 50, 137).

Finally a copper alloy stud and a copper alloy nail were recovered from the corridor of building 3. Both have circular convex heads, designed to protrude beyond the surface and therefore they would probably have been used for decorative purposes.

Glass

There are 25 fragments of Roman vessel glass, recovered from 14 individual deposits. The three colours are blue-green, yellow-brown and colourless with a greenish tinge. Fragments of blue-green glass (x 18) which date from the 1st to 3rd centuries dominate the assemblage. Identifiable pieces include bottle rims and bases datable to the 1st - 2nd centuries (Price and Cottam 1998), and the rim of a plain cylindrical cup and two body sherds decorated with a single horizontal trail, a style of decoration used from the 2nd-4th centuries.

Miscellaneous and unidentified

Tools

A range of tools reflecting textile and ?leather working have been recovered previously from Stanion Villa, but this time just two blade fragments from single edged knives and a rubbing stone were recovered from demolition deposits overlying building 2/3 and silting deposits above the ford.

A triangular-shaped stone utilised as a rubbing stone was recovered from the corridor in building 3.

Lead

Eleven pieces of lead were recovered, nine from Roman contexts, two unstratified. Over 1kg of amorphous fragments were recovered from the fill of posthole within the confines of building 1, together with numerous pieces of painted wall plaster (1,400g).

Fragments of lead sheeting (offcuts) were recovered from the buried soil near building 2 and pit within building 3. Finally there are two weights, a biconical weight located in silt deposits above the ford, and a semi-circular weight with flat top and U-shaped iron suspension loop.

Brooches by Donald Mackreth

(as discussed with Ian Meadows)

- SF29 (u/s) A fragment of the head of a trumpet brooch, of possibly poor grade silver. It has been further decorated with two silver studs one of which is now broken/missing. This type of brooch has a west midland distribution and dates to the first half of the 2nd century (DFM pers comm).
- SF36 (u/s) A small Colchester derivative type brooch complete with pin. A common type with a date range of 70-100AD (DFM pers comm).
- SF41 (u/s) A Colchester derivative brooch fragment comprising one wing and part of the bow. The wing preserves part of a simulated spring and rear hook. This type of brooch has a distribution of Norfolk and the western edge of the fens. 60-80/90 AD (DFM pers comm).
- SF114 (30) An enamelled plate brooch, the surface comprising an outer raised edge around a blue enamelled zone, a further raised section and a central oval. It is unclear whether there are S-stamps on the inner margin. This piece would benefit from cleaning to facilitate closer dating. If there were S-stamps it would belong to the later 2nd century to early 3rd century (DFM pers comm).

SF118 (127) An Almgren 101 British type preserving none of the original repousee. Late 2nd to early 3rd century in date (DFM pers comm).

SF173 (175) A Colchester derivative (Harlow type) brooch 50-70/80 AD.

SF239 (u/s) A headstud type brooch from the first half of the 2nd century.

Coin mould by Ian Meadows

A fragment of a coin mould SF262 came from the terminus of a curvilinear ditch near the approach to the ford.

This single valve from a two-part mould for a coin survived as three joining pieces representing nearly the complete coin. The small missing portion comprising 10mm of the circumference indicated the position the casting gate. The piece comprised a fine white sandy clay material shaped into a rough disc 24.5mm across and between 5-3mm thick. There is an impression of a coin in both faces surrounded by a flat raised border 3mm wide and about 0.5mm high. One impression is clearly an impression of the obverse of a coin displaying a radiate crowned head, looking left on the mould, around which a few letters are visible. The only legible group comprise]TRICV[which could only come from coins of Tetricus, in this case Tetricus I (270-3). Coins of Tetricus are frequently found as forgeries both cast from original issues and as crude copies. The other side of the mould is clearly the reverse of a coin displaying a single centrally positioned standing figure but unfortunately it was too poorly defined to identify who/what it was a representation of. None of the reverse legend could be discerned. Moulds of this type are known from a number of sites including Edington in Somerset, Wroxeter in Shropshire and Castor in Cambridgeshire.

The Roman coins by Ian Meadows

The previous excavations of the western part of the site produced fourteen Roman coins, the current excavations produced a further 83 coins, one of which was a worn post-medieval flan, and many were recovered unstratified. A catalogue of coins has been compiled and will form part of the final report. It was striking as a group how corroded and illegible the coins were, perhaps as a consequence of the high level of moisture present in the soils as reflected by the incidence of springs. Of the 83 only 29 (35%) were sufficiently well preserved to allow close dating and only 27 (32%) examples could be identified down to a specific emperor. The coins for which a mint could be identified (8) were produced at London as well as Cyzicus, Trier, Ticinum, Siscia and Rome.

The assemblage contained examples of coins from the late 1st century to the 3rd quarter of the 4th century with 61 (73%) dating to the 3rd or 4th centuries. As is often the case the early coins were generally very worn, suggesting a period of circulation before their loss and so cannot be used to identify precise dates. The later coins with their smaller size and probably shorter circulation life may be of more use. All the coins, with two exceptions, a base silver Antoninianus of Gallienus (253-68) and a Denarius of Domitian (81-96), were copper alloy.

The coins, if used as an indicator of presence on or near the site, suggest that low level activity was present in the 2nd century with a flourish of activity from the mid 3rd century to the later 4th, with a possible hiatus in the late 3rd century.

Clearly, the presence of coins suggests coin use amongst the occupants of the villa and the identification of a coin mould suggests that they were also engaged in producing unofficial coins, perhaps to satisfy a shortfall in the available coin. No products of the mould were identified in the recovered coin assemblage.

3.5 Marble statuette by Martin Henig

The statuette of a nude female figure was carved in fine grained, crystalline marble, white with a bluish tinge which is typical of stone from the Carrara quarries (Dr Susan Walker of the Ashmolean Museum pers comm). Only a part of the figure is preserved, consisting of the torso up to the navel and down to the pudenda. The legs have been sheared off but scars remain showing that while the left thigh was raised, the right was lowered. The subject was evidently crouching, her lower right leg bent back under the thigh. Her buttocks are prominent and well formed with subtly concave cheeks on the side, as a result of muscular action supporting her body. Apart from a very small modern scar all the breaks are old and at waist level especially the break shows signs of exposure to the elements. It is clear that the statuette was highly polished but again exposure may have removed some of the shine. The breakage took place in Antiquity and from its nature it cannot be ruled out that this was the result of (?Christian) iconoclasm (see below).

Dimensions: Height of fragment. 70mm. Width at widest point 80mm; width at waist. 70mm; Depth at waist 45mm; depth at buttocks 60mm.

It is clear that the figure represented Venus squatting and perhaps washing herself, a type which has been attributed to *Doidalsas* who worked in the 3rd century BC, on the uncertain basis of a reference in Pliny's Natural History to a statue of Venus bathing by an artist of that name in the *Porticus Octaviae* (NH XXXVI, 35). Scholars are divided as to whether the original of work represented by the Stanion fragment is by this artist (who may have been Bithynian) or by another, perhaps Pergamene, sculptor (Robertson 1975, 556-7, plate 178a).

The type was popular in Antiquity and famous in the Renaissance and beyond. Amongst examples of various sizes are examples in the Uffizi, Florence, the Museo Nazionale Romano, Rome, the Prado, Madrid and the Louvre, Paris, the last from the *frigidarium* of the baths at Saint-Romain-en-Gal (Haskell and Penny 1975, 321-3 ill. 171; Andrae 2001, 81-82, Abb.40, plates. 32, 33). These measure respectively 780mm, 1070mm, 640mm and 1390mm. By contrast the Stanion statuette when complete can be estimated to have been no more than 260mm in height, and is clearly related to other miniature sculptures in marble which graced private residences and were sometimes also presented to religious establishments.

In Britain figurines of Bacchus have been found at the Spoonley Wood villa, Gloucestershire, standing 420mm mm in height. Nearer in size to the Stanion figure is the Bacchus group from the late (probably post Mithraic) phase at the Walbrook mithraeum at 343mm and an earlier seated Mercury figure from the mithraeum at 254mm (Henig 1993, no 1, plate 1; Shepherd 1998, 189-191, no X59, figs 221, 222 and 169-70, figs 188, 189). The last two and perhaps all three are of Carrara marble. Other marble figurines are attested by fragments from villas at Woodchester in Gloucestershire and Bancroft villa, Milton Keynes amongst other places (Henig 1993, 3-4, nos 2, 4 and 6, plates 2, 3).

Such imports into Britain could have come in as early as the 2nd or 3rd centuries (evidently so in the case of the Mercury statuette from the Walbrook mithraeum, but others are later in date or, if earlier, were employed in 4th-century villas to express the owner's classical education, his culture or even his pagan faith (Stirling 2005). The Walbrook Bacchus group is probably 4th century in date as is, for example, the group of Venus with erotes and a triton from the late Roman villa at Petit Corbin near St Georges-de-Montagne, Aquitaine, a villa which some have linked to Ausonius' villa *Lucaniaca* (Gazda 1981, 125-178; Stirling 2005, 34 fig.7), or the small statue of

Aphrodite (Venus) removing her sandal from the villa of Sidi Bishr, east of Alexandria in Egypt (Hannestad 1994 123-126; Stirling 2005, 100-101 fig 49).

Not enough remains to date the Stanion statuette. The treatment of the eyes or hair might well have been informative. But although it was unstratified, the site certainly saw considerable activity in Late Antiquity as attested by coins, and this is by far the most likely period for it to have been admired and perhaps venerated. Most sculpture in Britain is of native stone, limestone in Northamptonshire, and a work in Italian marble, even a small one would have been both exotic and an expensive rarity. The owner was very likely aware that he or she owned a version of a famous masterpiece from the Greek past. The statuette's subject matter, Venus at her toilet, would have rendered it suitable for the baths if the villa had a bath-suite, but it could equally have graced a niche or formed the centre-piece of a house-shrine. The breaks look fairly deliberate and it is tempting to think that perhaps even as late as the 390s it was broken up as a result of Christian iconoclasm at a time when Christianity was perhaps making headway in Britain. Although from the official point of view such statuary as this would have been regarded as harmless save when it became an object of religious veneration (Stirling 2005, 158-163), that would not have precluded a villa owner from discarding an object which for him (or her) had come to be regarded as hateful or at least as a redundant idol.

3.6 Millstones and querns by Andy Chapman

The site has produced a small collection of stones used for milling. Four of these are in Millstone Grit, including both millstones and querns, while a further two are in finer-grained sandstone that may also be Millstone Grit. There is a single stone in Old Red Sandstone from the Forest of Dean.

There is part of an upper millstone (SF186) in a coarse-grained Millstone Grit. Only the central part survives of a stone in excess of 85mm thick with a central eye 120mm in diameter. The eye is surrounded by a collar, which is only slightly raised with respect to the rest of the stone, but accentuated by a broad encircling groove, 260-310mm diameter. The upper surface of the stone has sparse broad dimples, while the grinding surface has been lost, possibly due to lamination along a thin bed of coarser grit. The stone was in excess of 600mm diameter.

There are two fragments in a finer sandstone, but possibly also Millstone Grit (SF187 and 188), which are from stones up to 120mm thick, with furrowed grinding surfaces. The furrows are spaced at 20mm and 24mm intervals, centre-to-centre. Both stones have diameters of 600-700mm.

The fourth fragment of millstone is from a broken-up bottom stone at least 750mm diameter and 163mm thick. The grinding surface comprises concentric grooves at 15mm centre-to-centre.

Three of these millstones are not particularly large as, at 600-700mm, they are on the border between querns and millstones in terms of diameter, but the thicknesses, 85mm and 120mm, indicate that they are small millstones rather than large querns. Stones of these diameters and thicknesses would not have been hand rotated, and they are most probably from an animal-powered mill. A further millstone, with concentric grooving on the grinding surface is at least 750mm in diameter and 163mm thick, and appears to come from a larger powered stone.

There is part of a flat-topped upper stone from a quern in a fine-grained Millstone Grit. This stone is 420mm in diameter, with a large eye, 75mm diameter, which is surrounded by a recessed collar, 300mm wide; although the eye/collar and the

circumference are some way off being concentric. The concave grinding surface is worn smooth and tapers from 38mm at the circumference to only 8mm thick at the eye. There is also part of a bottom stone from a rotary quern of slightly smaller diameter, 360mm, also in Millstone Grit. Part of a small bi-conical spindle socket survives. The grinding surface is not heavily worn and retains dimpled tooling.

There is a near complete lower stone in Old Red Sandstone from the Forest of Dean. This particular stone is very fine-grained and hard, with only sparse quartz pebbles scattered through the matrix, typically 10-15mm diameter and none larger than 25mm diameter (Shaffrey 2006). This stone had been damaged along part of the circumference in antiquity, and was split into three parts during excavation. The stone is 400mm in diameter and has a bi-conical spindle socket, 16-26mm diameter. The inner part of the domed grinding surface is worn smooth, while dimples survive on the outer part.

Discussion

The small collection of stones from Stanion villa include three examples perhaps 700mm in diameter and up to 120mm thick, which attests to the presence of a powered mill. Most of the millstones are only slightly larger than the querns but there is part of a single larger stone, in excess of 750mm diameter and 163mm thick. An animal-powered mill may have been sufficient to operate all of these, but given the nearby stream the presence of a watermill cannot be excluded. Hand-turned flat-topped rotary querns, typical of the Roman period (Watts 2002, 33-38), were also used. Millstone Grit is the most common stone type, and was used both for millstones and querns, while there was at least one quern in Old Red Sandstone from the Forest of Dean.

A stone mortar

There is about 15% of a shallow stone mortar in fine-grained sandstone, probably local ironstone, from the demolition layer over buildings 2 and 3 (SF50). It was formed on a roughly-squared slab, up to 80mm thick, of which one corner survives. The shallow bowl of the mortar is c450mm in diameter, meeting the edges of the block, and up to c50mm deep, but the centre has been lost. The grinding surface is covered with dense shallow dimples, and is worn through use.

3.7 The metalworking debris by Andy Chapman

A total of 19.92kg of metalworking debris was recovered from 27 contexts. Nearly half of the contexts (13, 48%) produced less than 100g of material, typically just one or two individual pieces of debris derived from secondary deposition. A further eight contexts contained quantities of up to 750g and five contexts contained just over 1kg of material, but these larger groups too are still a product of secondary deposition. Three contexts (629, 643 and 657) produced good primary deposits of material, a total of 14.3kg (72% of the total by weight).

The nature of the debris is consistent throughout in comprising mixed deposits of undiagnostic ferrous slag, probable furnace slags and fragments of tap slag. The overall composition can be characterised by describing the three largest groups.

The fill of roundhouse 1 ring gully, lying beneath building 3, produced 1.90kg of material comprising irregular lumps of furnace slag and a small amount of tap slag. The consistent appearance of the group suggests that it might be the debris derived from cleaning out the interior of a smelting furnace, perhaps before reuse.

The fill of the circular pit south-west of roundhouse 4 produced 1.88kg of material, the bulk of which comprises a complete furnace bottom, circular, 150mm in diameter by up to 40mm thick, weighing 1.45kg. The under surface is smooth and convex, 110mm

diameter at the base, and the upper surface is concave. This is likely to derive from the cleaning out of a smelting furnace for reuse, the under surface was still increasing in diameter, indicating a furnace diameter of at least 200mm.

By far the largest group is the 8.5kg of furnace slag and tap slag from the primary fill of the eastern of the parallel ditches, overlain by roundhouse 4. The group includes smaller irregular fragments of furnace slag and a near complete furnace bottom, 170mm diameter by 50mm thick, with some charcoal fuel impressions on the under surface. There is also a large dense block of tap slag and smaller pieces of tap slag. Of particular interest are two joined cylinders of tap slag, 15-20mm diameter, which had accumulated within successive tapping holes at the base of a furnace. This group of material is consistent with it deriving from the dismantling of a furnace and the associated tapping pit, perhaps before rebuilding.

The ironworking debris recovered from Stanion villa is indicative of iron smelting being carried out on the site at no great distance from the excavated area. A few primary deposits of furnace slag and tap slag derive from the cleaning out and/or the dismantling of what were probably cylindrical shaft furnaces, at least 200mm in diameter. The other deposits are a background scatter of material derived from secondary deposition, and are indicative of the quantities that would have been lying about in the vicinity of the villa building. Smelting was probably being carried out on an industrial scale, and larger primary deposits of slag are likely to lie nearby, beyond the excavated area. The quantities of slag recovered from a large quarry pit, prior to road construction in 1984 to the north-east of the villa, are probably associated with this activity (Tingle 2008, 99-100). In the excavation of the western end of the villa in 2002, 4.0kg of metalworking debris was recovered as secondary deposits, and showed a similar range to the material found in 2010 (Chapman 2008).

While it is possible that some of the undiagnostic slags derived from smithing hearths, there is no specific evidence to indicate that secondary smithing was being carried out on the site, in particular, no smithing hearth-bottoms have been identified within the assemblage.

Of the three primary deposits, the ring ditch lay beneath the easternmost building, building 3, while the pit and ditch lie in the north-eastern corner of the excavated area, with the ditch pre-dating the circular stone structure. These contexts are all dated to the 1st-2nd centuries AD. They indicate that the focus of activity lies within the eastern part of the site, with further evidence lying unexcavated to the immediate north of the excavated area.

A copper-alloy working crucible

Part of the rim and body of a circular crucible (SF67) was recovered from a layer over the metalling of the ford. The fabric is light grey and hard, up to 17mm thick, with the inner and outer surfaces, to a depth of 4mm, laminating with respect to the core. There is a cluster of green copper oxide within the fabric, and inner surface of the crucible is iron-stained. The crucible has a simple rounded rim, slightly thinner than the body, with an internal diameter of 120mm. It was a simple open bowl form, perhaps 50mm deep, but the bottom is missing. While the shape is similar to later medieval crucibles, the size would be appropriate for a Roman date (EH 2001, fig 22). It indicates that the casting of small copper-alloy objects was being undertaken.

3.8 Architectural stone by Ian Meadows

A total of 22 pieces of building stone were recovered from ten contexts (Table 6).

The pieces recovered, all made from fossiliferous limestone, were a mix of drip moulds, presumably from doorways and window embrasures, together with functional pieces such as door pivots and embellishments such as columns/pilasters. The coarse dressing of the column fragment may indicate that it was original coated in plaster that would have adhered better to the rough surface and would have concealed the shape.

Table 6: Quantification of architectural stone

Small Find Number	Description	Comments
SF134	Five joining and one loose piece of fossiliferous oolitic limestone.	The piece as a whole probably formed part (0.5m length) of a cornice or drip mould.
SF160	Six non-joining pieces of scorched fossiliferous limestone.	Part of a single weathered dressed face and one, the largest piece, preserves part of a moulding
SF238	A single piece of fossiliferous oolitic limestone	Near flat face and simple moulding.
SF307	An irregular sub-rectangular block of fossiliferous limestone	Possibly a pivot hole
SF329	A short tapering cylinder of fossiliferous limestone	Small socket for pivot. The small size of the socket might suggest it was an internal door rather than a heavy external door.
SF330	Two joining and two non-joining fragments of fossiliferous oolitic limestone.	Possible capping stone or part of a pilaster.
SF220/222	Two joining fragments of fossiliferous limestone.	Perforated drain cover
SF290	Part of a sarcophagus or trough of fossiliferous limestone.	
SF	A coarsely dressed column of fossiliferous limestone.	It is probable the piece was formerly a square lintel that was been re-used as a column and re dressed

3.9 Building material by Pat Chapman

Ceramic tiles

The assemblage of 358 tile sherds weighs 51.5kg. These are predominantly body sherds with 77 diagnostic roof tiles and box flue tiles, with at least 14 recognisable floor/brick tiles, although quite a few fragments of those could come from one tile. This is a primary demolition or collapse deposit, the sherds are often large with some joins. About a third of the assemblage is made in a shellyware fabric, another large group is made from hard fine sandy fabric in shades of orange with a broad grey core, and the remainder from coarse sandy orange, fine silty pale orange and a few overfired sherds.

The 33 flanged *tegula* roof sherds include one complete but broken example in a shellyware fabric from the fill of the stoke pit of the malting oven within the barn. It is 390mm long by 310mm wide and 20mm thick. Quite a few of the *tegula* sherds have cutaways, the notch on the underside of the tile to fit over the tiles underneath. These notches can vary in form, but these are either angled at the bottom before emerging vertically at the top or are just vertical. A typology devised by Peter Warry (2007) suggests that this type is dateable to between 160-260AD.

There are no complete curved *imbrex* roof tiles in this group of 27 sherds, however, joining sherds have provided measurements for the curve. One *imbrex* is 65mm wide

and 53mm high internally, another is 100mm wide by 65mm high. There are no obvious ridge tiles.

All 17 box flue tile sherds are decorated with a broad comb design, usually curving, including the almost complete rectangular box flue, from the primary fill of the pit at the south-east corner of the cistern. This tile is 255mm long, 150mm broad by 90mm wide and 15mm thick and made in a shellyware fabric.

Some fragments of 14 floor or brick type tiles survive, 38-45mm thick where measurable. The largest tile, at least 58mm by 60mm is 60mm thick, made from a dark brownish-grey fabric with a cow's hoof print on the top (Karen Deighton pers comm)

The fabrics tend to be found in groups, concentrations of either shellyware or sandy wares in particular contexts. There are also particular large groups of tiles in some contexts.

Slate tile

The remains of four slate tiles come from the fill of the stoke pit of the malting oven within the barn. Three are bluish-grey; one sherd might be the bottom edge of a rectangular tile 190mm wide and c25mm thick; another sherd is an almost complete but broken small rectangle, 220mm long by 105mm wide and c18mm thick, which could have been used down the edge of the roof; the other sherd is small but has the remnant of a peghole 6mm in diameter. The fourth slate is dark grey with purple highlights and was originally a triangle, c30mm thick, in excess of 165mm in height, with a base c280mm wide, a type used along the eaves.

One complete dark grey slate tile was recovered from the fill of the well south of building 3. It is a diamond shape, 390mm long by 315mm wide with a maximum thickness of 30mm. There is no perforation surviving, the only place one could be is on the damaged corner, which would mean the tile would have hung on the short axis. It is possible that it might not have been used as a roofing material, but had some other use.

Stone tile

From the demolition layers in buildings 2 and 3 were parts of possibly reused tiles including a small fragment of fossiliferous limestone; a small fragment of fine-grained limestone, 8mm thick and small fragments of scorched sandstone, 17mm thick.

Tufa

A lump of probable tufa, 140mm long, roughly triangular in section 100mm by 100mm but sloping to one end, weighing 1.6kg, comes from the fill of a posthole within building 1. It is unusually heavy, but has frequent tiny holes, clusters of tiny granules and random stones and pebbles in the matrix.

Mortar

Tiny fragments of white mortar, weighing only 17g, comes from the fill of a posthole within building 1 and the fill of the ring gully of roundhouse 1.

Fired clay

There are only 72 fragments of fired clay, weighing 1283g. These are mainly small pieces scattered in small groups throughout 21 contexts. They are either sub-rounded in a fine silty or sandy clay or irregularly-shaped sandy clay. One piece has a wattle impression, a few fragments are cindery and slightly vesicular from exposure to high temperatures, and a few pieces could be debris lining from a structure. It is probable that some pieces were associated with the iron smelting conducted nearby.

3.10 Tesserae by Tora Hylton

In total nearly 7.5kg of stone and ceramic *tesserae* representing c216 individual *tessera* was recovered from 23 individual deposits. None of the pieces were *in situ*, all were recovered as individual or group finds from the fills of postholes, ditches, miscellaneous features or demolition/rubble deposits overlying buildings 1 and 3.

The *tesserae* have been cut from pieces of limestone, sandstone and ceramic tile. Diagnostic features surviving on those manufactured from tile indicate that pieces of box flue, *tegula* and *imbrex* were reused. Two sizes of *tessera* are represented, small (c12 x 12 x 9mm) and large (30 x 30mm–35 x 35mm), providing evidence for the quality of mosaics present. There are 210 large *tesserae*: 92 limestone, 77 tile and 41 burnt limestone/sandstone and 1 yellow sandstone. The five small *tesserae* comprise three in an off-white limestone and two in tile, their presence alludes to a finer quality of mosaic.

Different material was used for each colour as follows:

Red: reused ceramic tile and burnt sandstone

Blue: off white/ blue/grey limestone

White: limestone

Yellow/buff: sandstone

3.11 Painted wall plaster by Tora Hylton

The excavation produced in excess of 150 small individual fragments of painted wall plaster (total 1,450g) recovered from the fills of two postholes within building 1. The plaster is extremely fragmentary and none of the pieces measure more than 100mm square. The condition of the plaster is not good, most fragments display signs of excessive abrasion, but its presence, however fragmentary, denotes a structure of some quality. The surface of the plaster is fairly smooth and well finished, although on some fragments striations from the brush strokes are evident.

The predominant colour is grey; other colours include white, maroon, red and pale pink. Although the pieces are exceedingly fragmentary, the decorative schemes represented attest to single coloured expanses in grey and maroon and combinations of colours in the form of bands and stripes (in grey, white and red) and simple maroon coloured brush strokes on a grey background. The backing of the painted wall plaster appears to be generally uniform, with most of the fragments backed with a hard, coarse pink sandy fabric with grit, chalk and ground tile inclusions. The pieces are generally backed with up to c17mm, although the majority appear to be between 10-12mm of plaster.

3.12 Late Saxon and medieval pottery by Iain Soden

Thirteen sherds of late Saxon and medieval pottery were discovered from demolition rubble, south of building 1 and within building 3, the upper fill of the ditch of the rectangular enclosure and the fill of a curvilinear ditch near the ford area (Table 7). The wares, weighing in total 264g, were all fragmentary, being secondary depositions, and date from the late Saxon and medieval periods.

These have been related where possible to the Northamptonshire County Ceramics Type Series (CTS), which assigns each fabric or type a 3-digit identifying code in addition to a common name where one exists.

The individual products of each context were as follows:
 CTS 100 Early St Neots-type Ware (c900-1100)
 CTS 302 Reduced sandy coarseware (c1100-1400)
 [No type] Early Stamford Ware (c900)

These occur as follows:

Table 7: Quantification of Late Saxon and medieval pottery

Context type	89 building 1	196 building 3	320 rectangular enclosure	473 ditch	Total
	<i>no/wt (g)</i>	<i>no/wt (g)</i>	<i>no/wt (g)</i>	<i>no/wt (g)</i>	<i>no/wt (g)</i>
CTS 100	7/206g	-	2/9g	2/26g	11/243g
CTS 302	-	1/20g	-	-	1/20g
Early Stamford	-	-	1/1g	-	1/1g
Context date	12th century	12th century	14th century	9th-10th centuries	
Total	7/206g	1/20g	3/10g	2/26g	13/264g

Of note are the sherds of St Neots-type ware. Those, in particular, from context (89) include examples from very large, chunky vessels of indeterminate form, in which the ubiquitous shelly inclusions are poorly crushed and ‘arranged’ haphazardly and less reliant upon the plastic memory of the potting process when fired. This usually makes shell lie down and align together as the wheel smoothes the clay in a single direction and tries to ‘unwind’ in the firing process.

In this untidy characteristic the sherds are redolent of Middle-Late Saxon Maxey-type wares, although they are considerably tidier than the wholly haphazard shell temper in hand-made Maxey wares. This technologically challenged characteristic suggests, however, that the pottery might, for the most part, belong to the earlier part of the St Neots-type tradition and be hand-made, finished, at best, on a slow wheel. Unfortunately no early vessel forms are present to corroborate this and a later rim in more mainstream St Neots’ livery dates the context to the post-Conquest, medieval period.

A single orange-bodied sherd in a fine soapy ware may be from the early Stamford tradition (Mahany Fabric A/Kilmurry Fabric E/F) but this is very tentative as it is abraded and its surfaces rubbed smooth.

Together these sherds suggest that the site has been visited occasionally, for removal of suitable building stone for possible use in the nearby settlement of Stanion, probably in the period c900-1100.

4 HUMAN BONE ASSESSMENT

4.1 Adult burial by Sarah Inskip

A male, middle to old-aged, was excavated from the northern terminal of a ditch dated to the 3rd century. The skeleton was highly fragmented due to ploughing. Despite this, it was still possible to observe that the individual suffered from extensive osteoarthritis with eburnation present at the wrist, hips, neck and the foot. All lower molars were lost *ante mortem* and there was evidence of an inflammation on the right tibia. The location of the burial in the ditch away from living areas is unsurprising considering Roman beliefs about the dead and pollution but it is uncertain as to whether the burial represented a deviant or convenient location to bury the deceased.

Methods

Age and Sex

The methods used to estimate age and sex in the individual from Stanion Villa were those outlined in the Standards (Buikstra and Ubelaker 1994) and additional information from the Guidelines to the Standards for Recording Human Remains (Brickley and McKinley 2004). Severe ploughing damage has rendered the use of the normal indicators of age impossible for the Stanion burial. The oscoxae and skull were severely fragmented. Age estimation was therefore based on the evidence for progressive degeneration of the skeleton such as the presence of osteoarthritis, antemortem tooth loss and exostosis.

Preservation and completeness

Preservation was scored according to the amount of cortical bone available for macroscopic analysis (see table 8). For comparability, equivalent Behrensmeyer (1978) scores are also provided in table 8.

Table 8: Skeletal preservation categories

Preservation	% cortical surfaces remaining	Behrensmeyer (1978) weathering scale
Excellent	≥ 95%	Stage 0
Good	60 – 94%	Stage 1
Fair	<60	Stages 2 – 3
Poor	≤25%	Stages 4 – 5

Overall skeletal completeness was scored following the ranges: >75%, 75 – 50%, <50% - 25% and <25%.

Results

Preservation: Good; Completeness: 50 – 75%; Age: Middle – Old; Sex: ?Male

The estimation of sex was limited to the examination of a few pieces of skull fragments. The mastoids, morphology of the mandible and the supraorbital margin all scored 4 (probably male). Sexually dimorphic regions of the oscoxae were not present.

The fact that this individual had substantial osteoarthritis distributed throughout the skeleton is evidence of advancing age. Eburnation (pathognomonic for osteoarthritis) was present in the hip, neck and the right wrist. Many of the other joints had changes that can be attributed to osteoarthritis but do not quite meet the criteria of Rogers and Waldron (1995). Extensive osteoarthritis with eburnation was present on all of the observable cervical vertebrae except the atlas (C1). The apophyseal facets of the cervical vertebrae have been comprehensively remodelled with extensive osteophytosis surrounding the joint margins (Grade 3). Just three mid thoracic

vertebrae were observable, of which two of these had eburnation on the apophyseal facets. The apophyseal facets of the lumbar vertebrae were unobservable.

Further evidence of advanced age comes from the dentition. Although no teeth were found with the individual and the maxilla is fragmented and all but absent, the mandible is still observable. All of the mandibular molars and premolars have been lost prior to death and the alveolar bone is completely healed. Mays (2010, 76) explores how in populations with non-western (processed) diets (arguably more akin to the past), individuals with half or more of their teeth missing are likely to be over 50 years of age.

Muscles and ligaments attach to bone via the periosteum in order to move the body. Use of these muscles results in bony changes at the site of muscle attachment. This is known as exostosis. The older an individual is, the more they will have used their muscles. As such exostosis on the long bone muscle attachments have been shown to be related to age by various MSM studies (eg Weiss 2003). Sk1 has widespread exostosis on the majority of the long bones.

A large oval patch of periostosis was identified on the proximal third/midshaft of the right tibia. Unfortunately the lesion extended on to another fragment of tibia which is now absent. The exact shape and extent of the lesion is therefore not known. New bone growth (woven bone) and remodelled (lamellar) bone were both identified. This suggests that the lesion was active at time of death, but multiple episodes of inflammation may have occurred. Periostosis on the tibia is common for two reasons, but both of which relate to the bones proximity to the surface. It is postulated that some bacteria prefers the cooler area of the anterior tibia created by the proximity of the bone to the surface (Roberts and Manchester 2005, 172). Second, it is a common area for trauma (e.g. knocking the shin) causing damage to the periosteum. It is difficult to speculate whether the origin was infectious or traumatic, but the fact that multiple episodes of bone growth have occurred may suggest an infectious aetiology to the lesion.

Discussion and conclusion

The remains were severely damaged by ploughing; however, it was still possible to see that this individual had a long life. Evidence for this was found through the extensive osteoarthritis and antemortem tooth loss in addition to the wide spread exostosis. Other than osteoarthritis the only other observable pathology was that of a probable non-specific infection on the right tibia. As is common in palaeopathology, it was not possible to identify a cause of death in this individual. Sk1 shared much in common with a male also found in ditch from Washington Road in Suffolk who had extensive exostosis, tooth loss and neck and hand osteoarthritis.

Appearing in the mid-2nd century (Keegan 2002, 3), inhumation became the dominant burial rite in Roman Britain by the end third century (Hope 1999, 5). It is not uncommon for isolated Roman burials or fragments of human bone to occur in ditches (Philpott 1991, 232, Taylor 2010, 93). Similar examples can be found at Thetford (Atkins and O'Connor 2010), Manchester (Gregory 2007; 188), Dunstable (Matthews 1981), and Uffington (Piggot and Piggot 1940). A number of common trends are seen in the Roman period which is evidenced here at Stanion Roman Villa. The first is the position of the body away from the main living areas of the villa. This is thought to relate to Roman ideas about the dead and pollution (Hope 1999, 57). The second is that of interment of bodies at boundaries often which would be ditches. Accordingly, it is not unusual to find a Roman burial in this type of context.

Philpott (1991, 232) expresses that burial in ditches in Rome was reserved for criminals and common in Roman Britain. However, akin to the burial at Washington Street, no evidence for *ante mortem* cut marks was found on any of the bones. The

extensive ploughing damage has also made it impossible to know whether the burial was in an unusual posture (eg prone). Assuming that an individual is an outcast is problematic and Philpott (1991, 232) highlights that burial in this manner may also reflect low status. As such, it is not possible to speculate whether the burial of Sk1 in a ditch represents some kind of deviant burial or just a convenient and safe place to bury the deceased individual.

4.2 The infant burials by Andy Chapman

Three infant burials were recovered from beneath the floors of building 3, while some partial remains came from a soil layer (Table 9).

Burial 1 (Layer 29)

This comprises only parts of the vault of the skull of an infant. The thickness of these fragments would suggest an age near full term, but lacking other bone elements the age cannot be more closely defined.

Burial 2 (183) Grave 185

About half of the skeleton is present with the bones well preserved, although the long bones, apart from the femurs, are broken. The lower legs are missing, as well as parts of the upper limb bones, the upper and the maxilla and mandible, although there are some loose teeth, and the pelvis bones are also missing. The length of the femur suggests an age of 36-38 weeks (Schaefer 2009, 264), which is slightly premature (given a normal gestation period of 40-42 weeks), but well beyond the 28 weeks for a potentially viable foetus.

Burial 3 (502) Grave 552

The skeleton is largely complete and well preserved, although parts of a few long bones are missing as well as most of the pelvis and some parts of the skull, which is crushed and fragmented. The length of the femur and other long bones suggests an age of 40 weeks (Schaefer 2009, 264, 284, 171 & 188), indicating that the individual was full term and died at or around birth.

Burial 4 (550) Grave 552

The skeleton is virtually complete with all but one long bone unbroken, although much of the left pelvis and the shoulder blades are missing and the skull is crushed. The right mandible survives, but no teeth were recovered. This is the largest of the infants with the femur and other long bones at the upper end of the lengths for an age of 40 weeks (Schaefer 2009; 264, 284, 171 & 188), leaving no doubt that this infant died at or around birth, perhaps even slightly after.

Table 9: Metric data for infant burial long bone lengths

Burial	Femur (mm)	Tibia (mm)	Humerus (mm)	Radius (mm)
Burial 1 (layer 29)	--	--	--	--
Burial 2 (183)	66.0	--	--	--
Burial 3 (502)	76.5	66.0	65.5	49.5
Burial 4 (550)	79.5	71.0	68.0	56.0

Discussion

Burials 3 (502) and 4 (550) lay closely adjacent and both are full term, with one slightly larger than the other. It is therefore possible that these may have been twins who died at or shortly after birth, perhaps due to problems during delivery. Burial 2 (183) was premature by some 2-4 weeks and may have been either a still birth or a premature baby who did not survive. The other remains can be placed only at or around full term as only skull fragments survived.

5 ENVIRONMENTAL ASSESSMENT by Karen Deighton

5.1 Animal bone

A total of 61.5kg of animal bone (stored in 13 archive boxes) were collected by hand from a range of contexts during the course of excavation. This material was assessed to determine the taxa present, state of preservation and its potential to provide evidence on the function and economy of the site.

Method

Identifiable bones were noted. Ageable and measurable bone elements were noted. Ageable elements were cheek tooth rows where tooth eruption and wear were observable (Payne 1973, Halstead 1985, Payne and Bull 1982) bones where epiphyseal fusion (Silver 1969) was discernable and neonatal bones (Amorosi 1989). Data for sexing included the morphology of cattle and sheep/goat pelves (Grigson 1982) and the size and morphology of pig mandibular canines (Schmid 1972). Measurements are after von den Driesch (1976).

Results

Fragmentation was moderate to heavy (11% of long bones were whole) and varied with context and was largely the result of old breaks. Surface abrasion was moderate. Canid gnawing was noted on 193 bones attesting to the presence of dogs on site. Evidence for butchery was noted on 18 bones including evidence for chopping, dismembering, filleting and skinning. Evidence for burning was seen in only three contexts, suggesting that this was not a preferred method of disposal. A single example of worked bone was observed from context (150) where the distal end of a cattle metatarsal had been shaped into a wedge.

Taxonomic distribution

Table 10: Taxa by phase

Taxa	Iron Age	Roman	Total
Cattle	24	328	352
Sheep/goat	23	209	232
Pig	6	49	55
Horse	5	57	63
Dog	1	6	7
Cat	-	1	1
Red deer	-	1	1
Roe deer	-	1	1
Chicken	1	3	4
Small bird	1	1	1
Vole	-	1	1
Rodent	-	2	2
Small mammal	-	1	1
Amphibian	-	2	2
Totals	60	662	722

Ageing and metrical data*Table 11: Ageing and metrical data (Iron Age)*

Species	Tooth eruption and wear	Epiphyseal fusion	Neonates/ juveniles	measurements	sexing
Cattle	4	10	2	8	1
Sheep/goat	3	4	-	-	-
Pig	1	1	-	-	1
Horse	-	3	-	-	-
Dog	-	1	-	-	-
Chicken	-	1	-	-	-

Table 12: Ageing and metrical data (Roman)

Species	Tooth eruption and wear	Epiphyseal fusion	Neonates/ juveniles	measurements	sexing
Cattle	36	106	10	40	2
Sheep/goat	20	30	15	20	2
Pig	11	15	-	-	5
Horse	4	23	-	-	-
Dog	2	1	-	3	-
Chicken	-	3	-	-	-
Cat	-	1	-	-	-

Discussion

The taxa identified are those commonly found in the Iron Age and Roman periods. Of the identified fragments found, 8.3% were from Iron Age contexts. For both periods cattle appears to dominate the assemblage followed by sheep/goat. Both species of deer are represented by antler only, which could suggest the collection of shed antlers for craft work rather than hunting; however, with such small numbers this statement remains tentative. The presence of amphibians, voles and rodents could be intrusive as all have burrowing habits.

The mixed nature of the assemblage (both in terms of taxa and bone elements) suggests its origin to have been butchery or kitchen waste. Further work on body part analysis may be able to refine and clarify the last statement.

Conclusion

Assessment has shown a fairly large and reasonably well preserved assemblage that merits further analysis.

5.2 Plant remains

A total of 50 samples were collected by hand from a range of contexts, including ditches, pits, buildings (roundhouse ring ditches and postholes) and drying ovens. This material was assessed to determine:

- the presence, preservation and nature of any ecofacts
- their potential to contribute to the understanding of the site

All samples were processed using a modified siraf tank fitted with a 250 micron mesh and flot sieve. The resulting flots and residues were dried. The flots were then sorted with the aid of a stereoscopic microscope (10x magnification) and residues were

scanned. Identifications for plant macro-fossils were made with the aid of the author's reference collection, Jacomet (2006) and the Scottish Crop Research Institute (SCRI), arable seed identification system website (www.scri.ac.uk). Identifications for molluscs were made with the aid of Cameron and Kerney (1994).

Quantification of the products of the flotation are tabulated by sample and phase in Appendix 2.

Preservation

Preservation of plant remains was largely by charring, with the exception of that from the pond, sample 27, which had been waterlogged. Fragmentation and abrasion were at a low level. The remains from the waterlogged sample had become distorted rendering identifications unreliable.

Discussion

The results suggest that a range of cereal crops were processed and utilised at the site. The cereal taxa present included spelt wheat, hulled and naked barley; all are common crops for the late Iron Age and Roman periods (Monkton 2006), and were found in the previous excavation at Stanion (Carruthers 2008, 126). The increase in disposal of spelt wheat chaff and the use of drying ovens, both found at Stanion, are interpreted as indicators of changes in methods and scale of production.

The origin of charred plant material is varied, for example the low numbers of charred grains and charcoal noted in sample 40 suggest their presence to be "background" (ie material washed or blown into samples from activities taking place elsewhere). Samples with high cereal to chaff and weed ratios (eg samples 5 and 37) may be the result from the accidental burning of storage crops or mishaps during food preparation. Whether these concentrations of burned grain result from single events or are cumulative is problematic.

The wild taxa included sheep sorrel (*Rumex acetocella*), chickweed (*Stella medaria*), fat hen (*Chenopodium album*), nipplewort (*Lapsana sp*) and speedwell (*Veronica sp*). All are common crop weeds, and with the exception of sheep sorrel, annuals.

Molluscs included *Cochliopa lubrica*, *Vallonia excentrica*, *Discus rotundatus*, *Cachyrium sp*, *Vertigo pygmaea* and *Clausiliabidentata*.

Conclusion

Monkton (2006) highlights the importance of the retrieval and analysis of charred plant remains from Iron Age and Roman contexts. The findings from the current works can be added to the corpus of existing work and used to examine new farming methods and increases in production and in comparisons with assemblages from towns in the region to investigate the provisioning of urban areas.

Further analysis would be valuable to enable comparison with similar evidence from excavations locally and nationally and specifically with the previous excavation (Carruthers 2008).

Material from burials can be compared with that from domestic and industrial features, in order to investigate burial practices.

6 SUMMARY OF POTENTIAL AND PROPOSALS FOR ANALYSIS

6.1 Summaries of potential

Worked flint

No further work is proposed.

Iron Age pottery

No further work is proposed.

Roman pottery

No further reporting of the pottery is envisaged. The existing report, allied to that for the 2002 excavation (Friendship-Taylor in Tingle 2008) will be used to inform and refine the provisional stratigraphical chronology set out in this assessment and will be used as the basis for the pottery publication text. A selection of pottery will be illustrated.

Late Saxon and medieval pottery

Due to the small size of the assemblage its potential is limited but suggests that the site was unoccupied in the period c900-1100, apart from the occasional visits for the removal of building stone.

No further work is proposed.

Other finds

The assemblage possesses one or two items of intrinsic interest, namely the marble statuette and the coin mould, but generally the assemblage is of little intrinsic importance. The finds are dominated by structural nails, and the remaining finds typologically represent forms of which similar examples are recorded elsewhere. As a group the potential for analysis, either by group, phase or functional category is limited because the numbers are so small.

Further works

The ironwork/copper alloy is in a good state of preservation, but some pieces are partially covered in corrosion deposits making identification difficult. Therefore c10-15 objects may need to be X-radiographed, to aid identification and reveal technical details not visible to the naked eye.

Coins and coin mould

The coins and coin mould have an intrinsic value and inherent archaeological potential to help refine the site chronology. However, because of the overall small size of the assemblage, and the even smaller number of closely identifiable coins, there is little point in carrying out any statistical analysis of the coins, although in broad trends the 3rd and 4th century spikes in recovered coins correspond with national trends.

No further work is proposed.

Marble statuette

The statuette represents a new type found in Britain. Although due to its fragmentary survival, not enough remains to date the figure, it was suggested in discussion by Martin Henig, that the statuette was of such quality and rarity that it would justify publication as a short note in *BRITANNIA*, The Journal of Romano-British and Kindred Studies.

Millstones and querns

No further work is proposed. Three quern fragments will be included as illustrations.

Metalworking debris

No further work is proposed.

Architectural stone

Given the relatively small number of architectural stonework and their fragmentary condition the assemblage has a limited potential for further work. However, study of the mouldings and function of the pieces may have value in wider consideration of the design and decoration of the buildings. Study of the contexts within which the pieces were found may also help elucidate the process of buildings construction and demolition on the site.

No further work is proposed

Building material

There is nothing further to be done with the fired clay or the stone and slate tiles.

Tesserae and painted wall plaster

The *tesserae* and plaster have the potential to help in the general interpretation of the buildings and discussion of their economic status and style.

No further work is proposed

The human burials

The burials have limited potential. Their deposition and general stratigraphical relationships will be useful in refining the site chronology and they will add to the corpus of known examples of juvenile burial associated with buildings and general disposal of adult burials into ditches.

No further work is proposed.

Animal bone

Preservation was reasonable rendering approximately 80% of the bone identifiable and ageing and metrical data are readily available.

The importance of the assemblage lays in the fact that as a rural site it could provide further comparanda with material from urban sites as the investigation of the supply of meat to towns is an area which has been recognised as requiring investigation. Furthermore it would provide useful comparanda with material from other rural sites and add to the existing corpus of work as studies of the rural economy are also recommended for the region (Monckton 2006-). Comparisons could be made with previous work at Stanion (Deighton in Tingle 2008), Glapthorne Road (Deighton 2005a), Milton Ham (Holmes in Carlyle 2010), Stanwick (Davis 1997) Weekley (Whatrup and Jones 1986-7), Wootton villa (Deighton 2005b), Croughton (Deighton 2003).

Further work would provide information on the economy of the site and the dietary preferences of its occupants. Interphase comparisons to examine changes though time may be possible when phasing is finalised. Intersite comparisons may also be possible to define activity areas.

Plant remains

Assessment has shown a large assemblage of ecofacts with potential for further work and suggests the assemblage maybe of some importance regionally.

Table 13, below lists those samples suggested for full analysis and quantification. Further analysis would provide information on the relative proportions of cereal crops, the ratio of cereal to weed taxa and chaff which in turn would help to illuminate the

function and status of the site (e.g. high ratio of cereal to chaff: weed, indicates a late stage in crop processing and possibly a consumption site (Monkton 2006, 271)). Study of the crop weeds present, may indicate the nature of crop regimes employed (ibid 2006, 261). Inter-phase comparisons maybe possible to allow the study of changes in the arable economy through time. Spatial distributions could be studied to identify specific activity areas. Inter-site comparisons can be made with Glapthorne road, Oundle (Carruthers 2005); crop processing evidence from Stanwick, Northamptonshire and previous work at Stanion villa (Carruthers 2008). The cistern, drying ovens and associated features provides useful physical evidence of the processing methods used and the circumstances of their operation.

Table 13: Suggested samples for full analysis

Phase	Sample	Context
2	2	94/92
	3	97/95
	14	191/201
	18	191/204
	21	212
3	1	25/85
	4	25/85
	5	25/85
	8	25/141
	12	197
	13	199
	19	240/239
4	22	215
	24	249
	37	25/592
	38	25/102
	44	191/204
	52	696/629
	53	703/702

6.2 Review of original aims and objectives

The original aims and objectives were stated in the Specification prepared by CgMs (Dawson 2010):

2.1 The principal objective of the archaeological excavation is to determine and understand the nature, function and character of any important archaeology on the site in its cultural and environmental setting.

2.2 The aims of the excavation are:

- To determine the presence, date, character, integrity, state of preservation and depth of burial of any archaeological deposits*
- To examine the site in its relation to its environment, economy, land use and development from the prehistoric to post medieval periods*
- To examine evidence from the site for palaeoenvironmental and/or economic development.*

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 these objectives.

6.3 Proposed future research aims

The excavation successfully revealed a sequence of archaeological deposits, which provided evidence for the nature, and extent of human activity on the site prior to the construction of the villa building. It was also possible to determine how the building was constructed and its likely status as well as the changing nature of activities within the building when it ceased to function as a residence. The excavation examined ancillary features in particular, an aisled barn, malting ovens and a possible processing tank, from which palaeo-botanical samples were taken.

- *To determine the nature and extent of human activity on the site prior to the construction of the villa buildings*

The excavation revealed a sequence of archaeological deposits pre-dating the construction of the villa building. The primary features appear to be a large east west ditch, three roundhouses and a series of natural springs or 'ponds', into which was introduced a range of cultural and palaeo-environmental material. Samples taken from the ponds have the potential to answer questions concerning agricultural regimes taking place prior to the construction of the villa. The cultural material recovered relates primarily to occupation activity on the site and nearby.

The settlement will be related to the wider Iron Age and Roman landscape and contemporary sites in the locality to contribute to an understanding of settlement patterns and land use in the region.

There is a limited potential for considering the constraints of earlier landscape features with regard to the establishment of the villa. The relationship of the large Iron Age ditch to Harpers Brook is interesting, respecting a significant landscape boundary. At Aldwincle, 9 miles to the east of Stanion, an Iron Age pit alignment was excavated that also mirrored the alignment of Harper's Brook (Jackson 1977).

- *To determine the methods and materials used in the construction of the various buildings*

The site contained multiple buildings of varying date, and constructed using different methodologies, ie the stone-walled villa range; the post-built aisled barn and possible building 4; stone-built circular buildings.

Useful analysis may be possible of the different methods over time and the combination of materials within the same or contemporary structures. For example, in building 1 the lower structure was constructed of stone. It is likely that the substantial walls, 0.7m-1.4m wide, would have supported a second storey, principally of timber frame construction.

- *To determine the form and use of the building and how this may have changed through time*

There is limited potential to answer this question, given that the most substantial structures are only partially visible in plan.

It will be useful to develop from the results of the 2002 (Tingle 2008) and the 2010 excavations. The earlier excavation suggested that the visible form of the building was a 'winged corridor house', Richmond in Rivet (1969). The arrangement of corridor and outer wall suggested that the building was north facing with a veranda. Following the more extensive excavation during 2010 it is clear that the buildings found were part of a larger complex, which lay substantially beyond the northern limit of the excavation,

with ancillary structures such as the aisled barn and drying ovens to the south and east.

By comparison of plan, stratigraphy and artefacts it may be possible to determine the relationship of the buildings found in 2002 and 2010. The impression given is of a prospering farm following contemporary fashion.

Using information from aerial photographs and The Historic Environment Record data, an attempt will be made to determine the full extent and character of the complex.

- *To determine the circumstances of the abandonment of the building and any subsequent re-use of the site*

There is some potential for refining the stratigraphic analysis of construction and demolition. The evidence of activity within the building, after it ceased to function as a residence, was less clear than that for the earlier phases of construction. There were general periods of demolition that caused truncation and mixture of deposits. This was compounded by deliberate robbing for stone and agricultural activity in the medieval and post-medieval periods; and in the recent past by tree planting.

- *To examine ancillary structures, specifically to seek palaeo-botanical evidence for agricultural practices associated with the villa*

Within the aisled barn the drying oven was heavily truncated, however, enough survived in plan to suggest it was of classic T-shape (Rivet 1969). The larger square drying oven was of two phases and may be compared to similar examples, eg Haynes Park, Bedfordshire (Luke and Shotliff 2004).

Palaeo-botanical samples taken from the drying ovens have been processed. The results may not relate to the use of the ovens, and may be redeposited from elsewhere, or are a product of the destruction of the structure.

Overall the samples taken provide evidence for the arable activities taking place. The assemblage of animal bone was recovered from similar phases; therefore further analysis may usefully examine the relationship of arable to pastoral economy of the villa estate. The animal bone assemblage contains a comparable range of species to contemporary sites in the area.

- *To examine evidence for the 'zoning' of functions within the site*

This analysis may include study of comparative examples of ancillary structures, ie aisled barns, cisterns and increasing evidence for ironworking, both regionally and nationally, within the functioning of a 'villa' estate.

Given the partial view of buildings 1-4, which clearly continued to the north beyond the limits of the excavation, the potential for study of the domestic or residential nature of the buildings is limited.

Analysis may be usefully made of the morphology of the site, to draw out artefactual and ecological evidence for specialisation or 'zoning' of functions within the site.

There is good potential for the study of ancillary structures, essentially a view of areas of a working farmyard. The excavation affords a partial view of buildings which might be associated with metalworking.

- *To explain the presence of neonatal burials and the adult burial, within the context of the villa*

A comparison should be made to explain the context, date and circumstances of the burials found on the site. This would also add to the total of such examples known.

- *To provide information on the economic status of Romano-British rural settlement which may indicate subsistence or market economy*

The site contains a series of activities related to specific processes of processing and production, implying a degree of specialisation occurring within the context of a market economy. This is consistent with the later Roman date for much of the activity at this site, by which time a market economy was well established. The presence of coinage is also generally indicative of a market economy.

Whilst ironworking and possibly smithing was also taking place, the volume of waste from these activities is more in accordance with small scale production for local use rather than as an industrial centre.

Full analysis of selected samples and the animal bone assemblage will be undertaken in order to maximise the potential for addressing this objective.

- *To provide information relating to changes of economic status between the Late Iron Age and the Early Romano-British period to assess the extent to which the conquest effected patterns of production*

The site has limited potential to address this question, however, the creation of the 'villa' upon a site with earlier settlement will add to the body of published material.

The creation of the villa suggests that the family occupying the estate had a desire to exhibit this growth in the provision of more grandly appointed domestic buildings.

6.4 Archaeological context

The *Archaeological Resource Assessment and Research Agenda for Roman period in the East Midlands* (Taylor J, in Cooper 2006) identifies the need for further research into the nature of Roman rural settlement and the perceptions, roles and inter-relationship of its inhabitants, and also the need for improved understanding (for all periods) of the character of the rural environment.

These themes are also reflected in the nation-wide papers collected in *Britons and Romans: advancing an archaeological agenda* (James & Millett 2001).

The site at Stanion lies approximately 10km north-west of the Nene valley, an area identified by Taylor as being a regional concentration of sustained aerial survey, fieldwalking and excavation.

The excavations at Stanion represents one of a small number of villa excavations to have taken place within the area during the last 30 years. Further documentary research is therefore required to contextualise the site within its immediate landscape and surrounding region.

The nearest, known comparable site to the Stanion villa is at Great Weldon, 3.5km to the north, where the excavation of a considerable villa complex was carried out between 1953-56, allowing a detailed examination of the various building phases (Smith *et al* 1988-9). The Great Weldon villa was constructed and occupied at

approximately the same time as the site at Stanion. While the beginning of the 3rd century marks the end of the occupation of the excavated wing at Stanion as a high status building, it is a period of re-building at Great Weldon which leads on to further embellishment in the 4th century. A detailed comparison of the two sites could elucidate the causes of such localised divergence. Although the Weldon site report states that specialists examined and reported on the carbonised plant remains, the pottery, the glass, the mortaria, the samian and samian stamps, the skeletal remains, the querns and the coins only the latter report actually appears in the published account of the excavation. A comparison between the specialist reports from Stanion and their unpublished counterparts from Weldon may well elicit new insights into the status and functions of both sites. Comparisons could also be made with the unpublished results from ongoing excavations of the villa and bathhouse at Rushden, 8km to the south-west of Stanion.

The Raunds Area Survey is the most intensive landscape survey to be carried out in this country. The scale of this project has allowed the Stanwick and Redlands Farm villas and their ancillary buildings to be studied in detail. The data from Stanion will reveal whether there are significant differences in the activities present on villas in the Nene valley and those such as Weldon and Stanion on the watershed between the Nene and Welland valleys and highlight the implications of this for our understanding of roman rural settlement.

In order that the site at Stanion is considered in relation to the wider economic landscape, data from at least two other villa sites within the Nene catchment, Piddington and Upper Heyford (both of which are the subject of long term excavation) should be considered as well as a broad-based examination of data from the county sites and monuments record.

6.5 Proposals for further analysis

Creation of an archive that would aid further work; not only to gain better understanding of how the particular villa/farm/industrial complex developed over time, but also to investigate how it functioned and related to the local and wider regional economic landscape.

7 REPORTING AND ARCHIVE

7.1 Provisional publication proposals

Once the assessment report and updated project design has been approved by the planning archaeologist for Northamptonshire, a report following the synopsis outlined in Section 7.2 will be produced. On approval, this will be published online on the Archaeological Data Service (ADS) through OASIS and a copy will be deposited with Northamptonshire SMR. A synthesis of an appropriate length will be published in a forthcoming issue of the county journal *Northamptonshire Archaeology*.

7.2 The report

Introduction

The circumstances leading to the excavation
Topography and geology with Steve Critchley MSc
The archaeological context

The excavation and recording of the villa

Aims and objectives
The late Iron Age boundary ditches
The early Roman roundhouses
The development of the Roman villa
The major buildings
 Building 1, the 2nd-century villa range
 Building 2, the central range
 Building 3, the eastern range
 Building 4, eastern timber range
Industrial activity: Roundhouse 4
Agricultural activity
 The rectangular enclosure
 The aisled barn and associated features
 The malting oven and associated features
Later land use and activity
Discussion

The Finds

Flint	Yvonne Wolfram-Murray BSc PhD
Iron Age pottery	Andy Chapman BSc MifA FSA
Roman pottery	Jane Timby BA PhD FSA MifA
Other finds	Tora Hylton
Brooches	Donald Mackreth
Marble statuette	Martin Henig MA DPhil DLitt FSA
Millstones and querns	Andy Chapman
Metal working debris	Andy Chapman
Architectural stone	Ian Meadows BA
Building material	Pat Chapman BA CMS AlfA
Painted plaster and <i>tesserae</i>	Tora Hylton
Late Saxon and medieval pottery	Iain Soden BA MifA

Faunal and environmental evidence

The animal bone	Mathilda Holmes MA BSc AlfA
The charred plant remains	Val Fryer BA MifA
Adult burial	Sarah Inskip
Infant burials	Andy Chapman

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8 STORAGE AND CURATION

A microfilm copy of the site archive and narrative will be made to English Heritage standards and submitted to the National Archaeological Record. The site archive will comprise all written, drawn, photographic and digital records, all material finds and processed sample residues recovered from the excavation. The site archive will be accompanied by the research archive which will comprise the text, tabulated data, original drawings and all other records generated in the analysis of the site archive. The archive will be held at Northamptonshire Archaeology stores until a suitable repository becomes available.

9 RESOURCES AND PROGRAMMING

9.1 Work completed

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

9.2 Proposed work: tasks and programme

Table 15: Proposed tasks and personnel

Tasks	Personnel
1. Introduction and background	Charlotte Walker
2. Structural site narrative	Anthony Maull, Charlotte Walker and Jason Clarke
3. Other finds	Tora Hylton and Martin Henig
4. Animal bone	Matilda Holmes
5. Charred plant	Val Fryer
6. Illustrations	NA drawing office
7. Integration of specialist reports	Charlotte Walker
8. Report digest and discussion	Anthony Maull, Charlotte Walker and Jason Clarke
9. Editing	Andy Chapman
10. Preparation of research archive	Theodora Anastasiadou-Leigh

Programme

The programme will commence once the Assessment Report and UPD has been approved by the archaeological advisor to Northamptonshire County Council.

Table 16: Post-excavation analysis programme

Task / month	1	2	3	4	5	6
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						

9.3 Key personnel

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

Anthony Maull	Senior Project Officer (NA)
Charlotte Walker BSc AlfA	Senior Post-excavation Supervisor (NA)
Jason Clarke BSc MA AlfA	Project supervisor (NA)
Andy Chapman BA MIfA FSA	Senior Archaeologist (NA)
Tora Hylton	Finds manager (NA)
Matilda Holmes	External specialist
Martin Henig MA, DPhil, DLitt, FSA	External specialist
Theodora Anastasiadou-Leigh BA MA	Archivist

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APPENDIX 1: POTTERY TABLES

1.1 Quantified summary of the Roman pottery assemblage

Fabric	Description	No	% No	Wt (g)	% Wt	EVE	% EVE
IMPORTS							
LGF SA	South Gaulish samian	195	2.3	1600.5	1.0	448	3.0
MON SA	Montans	4	0.0	41.5	0.0	7	0.0
LEZ SA	Central Gaulish samian	236	2.8	2360.5	1.4	536	3.6
MDV SA	Les Martes de Veyre	7	0.1	129	0.1	12	0.1
EGSAM	East Gaulish samian	16	0.2	386	0.2	98	0.7
SAM	unassigned samian	1	0.0	7	0.0	0	0.0
CNG BS	Central Gaulish black slip	4	0.0	11	0.0	33	0.2
BAT AM	Baetican amphorae	123	1.5	12718.3	7.7	17	0.1
GAL AM	Gallic amphorae	4	0.0	263	0.2	0	0.0
REGIONAL							
COL CC	?Colchester colour-coated ware	1	0.0	2	0.0	0	0.0
DOR BB1	Dorset black burnished ware	8	0.1	107	0.1	39	0.3
MAH WH	Mancetter-Hartshill mortaria	28	0.3	4056	2.5	164	1.1
OXF RS	Oxon colour-coated ware	2	0.0	8.5	0.0	0	0.0
OXF WH	Oxon whiteware	1	0.0	22	0.0	0	0.0
VER WH	Verulamium whiteware	8	0.1	248	0.2	100	0.7
VER WHM	Verulamium whiteware mortaria	3	0.0	209	0.1	5	0.0
Nene Valley							
LVN CC	Lower Nene Valley colour-coated ware	766	9.1	10075.5	6.1	1542	10.4
LVN RE	Lower Nene Valley greyware	354	4.2	6071	3.7	626	4.2
LVN REM	Lower Nene Valley greyware mortaria	1	0.0	40	0.0	7	0.0
LVN WH	Lower Nene Valley whiteware	258	3.1	2878.5	1.7	569	3.8
LVN WHM	Lower Nene Valley whiteware mortaria	43	0.5	2452	1.5	104	0.7
UNV WHM	?Upper Nene Valley whiteware	1	0.0	59	0.0	0	0.0
LOCAL grog-tempered							
BOX GR	burnt oxidised/pink grog-tempered	216	2.6	4351.5	2.6	617	4.1
BW GR	black grog-tempered ware	36	0.4	1537	0.9	39	0.3
BWH GR	burnt whiteware grog-tempered	556	6.6	10934	6.6	1114	7.5
BWN GR	brown hm grog-tempered	150	1.8	5797	3.5	141	0.9
BWNSAGR	brown sandy with grog	4	0.0	86	0.1	11	0.1
GY GR	grey grog-tempered	41	0.5	1458	0.9	25	0.2
OX GR	oxidised/pink grog-tempered	195	2.3	5095	3.1	295	2.0
WH GR	white grog-tempered	424	5.0	12101	7.3	725	4.9
GRSH	grog and shell-tempered	22	0.3	1259	0.8	32	0.2
Calcareous							
SHELL	hm and wm shelly ware	1471	17.4	39008	23.7	1983	13.3
BWSH	black ware with sparse shell	15	0.2	347	0.2	59	0.4
BWLI	black ware with sparse limestone	7	0.1	91	0.1	10	0.1
BWSALI	black sandy with sparse limestone	7	0.1	78	0.0	20	0.1
BWMICLI	black micaceous ware with limestone	2	0.0	69	0.0	0	0.0
BWNLI	brown ware with limestone	3	0.0	30	0.0	0	0.0
BUFFSALI	buff sandy with limestone	1	0.0	9	0.0	0	0.0
GYLI	grey with sparse limestone	7	0.1	131	0.1	49	0.3
GYLIGR	grey with sparse limestone and grog	3	0.0	21	0.0	0	0.0
GYFLI	fine grey ware with limestone	2	0.0	25	0.0	5	0.0
OXLI	oxidised with sparse limestone	6	0.1	133	0.1	0	0.0
Sandy							
BOX SY	burnt oxidised sandy ware	52	0.6	536	0.3	44	0.3
BWH SY	burnt whiteware sandy	49	0.6	873	0.5	148	1.0

STANION VILLA ASSESSMENT AND UPD

Fabric	Description	No	% No	Wt (g)	% Wt	EVE	% EVE
BWSY	black sandy ware	600	7.1	8228	5.0	1257	8.4
BWNSY	brown sandy ware	8	0.1	132	0.1	3	0.0
GREY	miscellaneous other grey wares	99	1.2	1036.5	0.6	101	0.7
GYSY	grey sandy wares	1882	22.3	22592.5	13.7	3128	21.0
OXID	oxidised sandy ware	68	0.8	813	0.5	163	1.1
PNK SY	pink sandy ware	13	0.2	75	0.0	27	0.2
WH SY	white sandy ware	57	0.7	745	0.5	109	0.7
micaceous							
BW MIC	black micaceous ware	71	0.8	536	0.3	63	0.4
BOXMIC	burnt oxidised micaceous ware	1	0.0	4	0.0	0	0.0
GYFMIC	fine grey micaceous ware	2	0.0	15	0.0	13	0.1
GWMIC	micaceous grey ware	2	0.0	31	0.0	35	0.2
LON FW	London-type ware	71	0.8	603.5	0.4	109	0.7
OXIDMIC	micaceous oxidised wares	9	0.1	116	0.1	20	0.1
UNKNOWN							
BWMISC	misc black wares	6	0.1	97	0.1	18	0.1
BUFF	buff sandy ware	11	0.1	90	0.1	32	0.2
BWF	black fine ware	1	0.0	14	0.0	7	0.0
CC	misc colour-coated wares	4	0.0	15	0.0	0	0.0
GYF	fine grey ware	15	0.2	184	0.1	54	0.4
MICOX	mica-slipped oxidised ware	48	0.6	519	0.3	0	0.0
OXIDF	fine oxidised wares	66	0.8	309	0.2	22	0.1
WSOXID	white-slipped oxidised ware	56	0.7	730	0.4	109	0.7
WWF	fine white wares	1	0.0	2	0.0	0	0.0
WW	misc whitewares	3	0.0	27	0.0	0	0.0
MISC	miscellaneous unclassified	7	0.1	19	0.0	0	0.0
TOTAL		8434	100	164648	100	14894	100

1.2: Comparison of assemblages from the 2002 and 2010 excavations

Fabric	Stanion 2002		Stanion 2010	
	No	No %	No	No %
Samian	153	4.9	459	5.4
Amphora	251	8.0	127	1.5
Lower Nene Valley colour-coat	161	5.1	766	9.1
Lower Nene Valley grey ware	39	1.2	354	4.2
Various grey wares	1077	34.4	1985	23.5
Mica-slipped ware	15	0.5	48	0.6
London-type ware	23	0.7	67	0.8
Grog wares	625	19.9	1435	17.0
Shelly/calcareous wares	271	8.6	1524	18.1
Oxford mortaria	8	0.3	0	0.0
Oxford colour-coated ware	6	0.2	2	0.0
Other	505	16.1	1667	19.8
Total	3134	100.0	8434	100.0

1.3: Comparison of Stanion with assemblages from Higham Ferrers, Oundle and Irchester (expressed as percentage weight)

Fabric	Description	Stanion % Wt (g)	Higham F % Wt (g)	Oundle % Wt (g)	Irchester % Wt (g)
Samian	South Gaulish samian	1.0	*	*	*
Samian	Central Gaulish samian	1.6	3.9	1.7	4.8
Samian	East Gaulish samian	*	*	0.0	0.0
CNG BS	Central Gaulish black-slipped ware	0.0	*	0.0	0.0
MOS BS	Moselle black slip	0.0	*	0.0	0.0
BAT AM	Baetican amphorae	8.0	*	1.0	5.6
GAL AM	Gallic amphorae	*	*	0.0	0.0
DOR BB1	Dorset black burnished ware	*	*	*	*
HAD OX	Hadham oxidised ware	0.0	*	0.0	0.0
MAH WH	Mancetter-Hartshill mortaria	2.3	*	0.0	0.0
Oxford	all Oxfordshire wares	0.0	*	*	*
VER WH	Verulamium whiteware	0.0	*	*	0.0
VER WHM	Verulamium whiteware mortaria	*	*	1.6	0.0
GROG	all grog-tempered	26.9	19.5	4.5	25.9
LNV CC	Lower Nene Valley colour-coated ware	6.4	12.4	0.0	9.7
LNV WH	Lower Nene Valley whiteware	1.9	2.9	3.3	*
LNV WHM	Lower Nene Valley whiteware mortaria	1.8	4.1	*	*
SHELL	shelly/ calcareous wares oxidised and reduced	25.2	47.6	25.0	28.7
SANDY	sandy wares	25.7	31.9	33.4	39.0
BWFMIC	black fine micaeous ware/ London-type	*	*	0.0	*
MICA	mica-slipped wares	*	*	*	0.0
GLAZE	British glazed ware	0.0	0.0	*	*
Other	other wares	*	*	*	3.0
Total		100.0	100.0	100.0	100.0

* present but less than 1%

APPENDIX 2: PRODUCTS OF ENVIRONMENTAL SAMPLE FLOTATION BY PHASE

2.1: Late Iron Age and Early Roman settlement

Cut/fill	Sample	Feature type	Volume (litres)	Charcoal	Cereal	Chaff	Wild/ weed	molluscs
153/151	9	Roundhouse 2, ring ditch	10	-	183	300	17	93
167	10	Layer	10	-	-	-	-	20
423/422	29	Hearth pit	10	-	-	-	-	-
469	31	Beam slot	10	-	-	-	-	-
492/493	33	Ditch	20	500	-	-	-	1'000
642/641	40	Roundhouse 1, ring ditch	40	10	1	-	-	1,000+
645/643	41	Pit	40	500	5	-	1	1,000+
680/681	46	Ditch	30	300	-	-	-	1,000+
519/518	47	Ditch	40	300	-	-	-	1,000+
518	43	Lower fill of Ditch	40	sterile	-	-	-	-
630/629	51	Roundhouse 1, ring ditch	20	200	-	-	-	-
Totals	11		270					

2.2: Construction of the villa (2nd century)

Cut/fill	Sample	Feature type	Volume	Charcoal	Cereal	Chaff	Wild/ weed	molluscs
94/92	2	Posthole	30	1,000	16	-	-	21
97/95	3	Posthole	10	1,000	147	-	2	34
191/201	14	Oven	20	1,000	400	200	-	-
191/204	18	Oven	20	1,000	600	600	1	-
212	21	Fire pit	20	1,000	-	-	-	-
358	25	Layer building 2	10	1,000	400	1000	12	107
523/529	34	Well	20	40	-	-	-	250
12/14	35	Posthole	10	1,000	600	-	-	-
398/396	42	Spring	40	30	2	-	-	-
Totals	9		180					

2.3: The aisled barn and related activities (late 2nd-3rd centuries)

Cut/fill	Sample	Feature type	Volume (litres)	Charcoal	Cereal	Chaff	Wild/ weed	molluscs
25/85	1	Flue of drying oven	10	1,000	200	12	-	18
25/85	4	Flue	10	1,000	59	5	-	16
25/85	5	Flue	10	1,000	500	20	3	17
25/141	8	Flue	10	10	2	-	-	-
197	12	Fire pit	10	1,000	52	-	-	-
199	13	Fire pit	10	1,000+	137	-	2	-
206/205	15	Ditch	10	10	-	-	-	-
210/209	16	Pit	10	10	-	-	-	30
221/218	17	Water tank	20	-	3	-	-	50
240/239	19	Pit	20	300	24	39	-	54
Totals	10		120					

2.4: Abandonment and reuse (late 3rd-4th centuries)

Cut/fill	Sample	Feature site	Volume (litres)	Charcoal	Cereal	Chaff	Wild/ weed	molluscs
215	22	Flue of drying oven	20	1,000	121	57	6	-
214	23	Flue of corn drier	20	1,000	-	-	1	23
249	24	Fire pit	20	1,000	46	12	1	-
397	27*	Pond	10	10	-	-	-	-
411/409	28	Pond	20	1,000	76	-	20	-
25/592	37	Flue of drying oven	20	1,000	271	49	1	56
25/102	38	Outer flu drying oven	10	200	68	60	1	-
191/204	44	Oven	40	1,000	199	371	4	-
696/695	52	Oven	10	1,000	-	-	-	-
703/702	53	Oven	10	1,000	20	-	3	-
Totals	10		180					

3.5: Burials

Cut/fill	Sample	Feature type	Volume (litres)	Charcoal	Cereal	Chaff	Wild/ weed	molluscs
126	6 & 7	Burial1	20	500	-	-	-	1,000
184	11	Burial 2	30	-	-	-	-	-
502	32	Burial 3	10	1,000	18	3	16	1,000
552/551	36	Burial 4	10	500	6	-	-	500
Totals	5		70					

Table 3.6: Unphased

Cut/fill	Sample	Feature type	Volume (litres)	Charcoal	Cereal	Chaff	Wild/ weed	molluscs
30	20	Demolition layer	10	1,000	-	-	-	10
438/437	30	Alluvium	20	sterile	-	-	-	-
602	39	Topsoil	20	10	13	3	6	500
671*	45	Gully	30	200	43	-	-	71
693	50	Levelling layer	40	1,000	73	1	45	-
Totals	5		120					



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