



# Northamptonshire Archaeology

Archaeological Strip, Map and Record of the New Water  
and Sewer pipeline from Broughton Road North to  
College Road North, Aston Clinton, Buckinghamshire  
October-November 2012 and March 2013



## Northamptonshire Archaeology

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**OASIS REPORT FORM**

<b>PROJECT DETAILS</b>		<b>Oasis No:</b>	
Project title	Archaeological Strip, Map and record of the new water and sewer pipeline from Broughton Road North to College Road North, Aston Clinton, Buckinghamshire October to November 2012 and March 2013		
Short description	In October to November 2012 and March 2013, an archaeological strip, map and record was carried out by Northamptonshire Archaeology, on behalf of Prospect Archaeology, on the laying of new water and sewer pipelines at Aston Clinton. The pipeline extended approximately 3km and had an easement corridor of 30m. The works identified enclosures dating from the middle to late Iron Age. A sub-square mortuary enclosure was probably constructed in the mid to late 1st century AD. Although no central burial survived there were two associated cremation burials, as possible satellites, radiocarbon dated to the mid 1st to early 2nd century AD. The final phase of activity was a sub-square enclosure, with pits and postholes, constructed in the early 2nd century AD, with activity continuing into the 4th century AD. Along the easement were two trackways dating from the 2nd century AD as well as contemporary and undated ditches.		
Project type	Excavation		
Previous work	Trial trench evaluation		
Current land use	Arable		
Monument type and period	Iron Age and Roman		
Significant finds	Pottery, animal bone, coins, brooch		
<b>PROJECT LOCATION</b>			
County	Buckinghamshire		
Site address	College Road North, Aston Clinton		
Easting Northing	SP 845 133 to SP 877 135		
Area	3km		
Height aOD	85mAOD		
<b>PROJECT CREATORS</b>			
Organisation	Northamptonshire Archaeology (NA)		
Project brief originator	Buckinghamshire County Council		
Project Design originator	Prospect Archaeology		
Director/Supervisor	Jason Clarke (NA)		
Project Manager	Adam Yates (NA) Nansi Rosenberg (PA)		
Sponsor or funding body	Thames Water		
<b>PROJECT DATE</b>			
Start date	22/10//2012		
End date	20/03/2013		
<b>ARCHIVES</b>	<b>Location (Accession no.)</b>	<b>Contents</b>	
Physical	AYBCM.2012.87	tile, pottery, animal bone	
Paper		Site records (1 archive box)	
Digital		Client report PDF. Survey Data, Photographs	
<b>BIBLIOGRAPHY</b>			
Title	Archaeological Strip, Map and record of the new water and sewer pipeline from Broughton Road North to College Road North, Aston Clinton, Buckinghamshire October to November 2012 and March 2013		
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# ARCHAEOLOGICAL STRIP, MAP AND RECORD OF THE NEW WATER AND SEWER PIPELINE, FROM BROUGHTON ROAD NORTH TO COLLEGE ROAD NORTH, ASTON CLINTON, BUCKINGHAMSHIRE OCTOBER TO NOVEMBER 2012 AND MARCH 2013

## **Abstract**

*In October to November 2012 and March 2013, an archaeological strip, map and record was carried out by Northamptonshire Archaeology, on behalf of Prospect Archaeology, on the laying of new water and sewer pipelines at Aston Clinton. The pipeline extended to approximately 3km and had an easement corridor of 30m. The works identified enclosures dating from the middle to late Iron Age. A sub-square mortuary enclosure was probably constructed in the mid to late 1st century AD. Although no central burial survived there were two associated cremation burials, as possible satellites, radiocarbon dated to the mid 1st to early 2nd century AD. The final phase of activity was a sub-square enclosure, with pits and postholes, constructed in the early 2nd century AD, with activity continuing into the 4th century AD. Along the easement were two trackways dating from the 2nd century AD as well as contemporary and undated ditches.*

## **1 INTRODUCTION**

In October to November 2012 and March 2013, an archaeological strip, map and record was carried out by Northamptonshire Archaeology (NA) on the laying of new water and sewer pipelines from Broughton Lane to College Road North, Aston Clinton, Buckinghamshire, to serve the new Arla dairy at College Road North. Initial works were monitored in conjunction with Iain Soden Heritage Services Ltd. The pipeline extended to approximately 3km and had an easement corridor of 30m (NGR: SP 845 133 to SP 877 135, Fig 1). The work was commissioned by Prospect Archaeology Ltd, on behalf of Thames Water, and the monitoring was undertaken by Sandy Kidd and W B Boismier of Buckinghamshire County Council (BCC) on behalf of Aylesbury Vale District Council (AVDC). Throughout the fieldwork process weather conditions were very poor, resulting in difficult working conditions for the field teams, particularly given the nature of the geology.

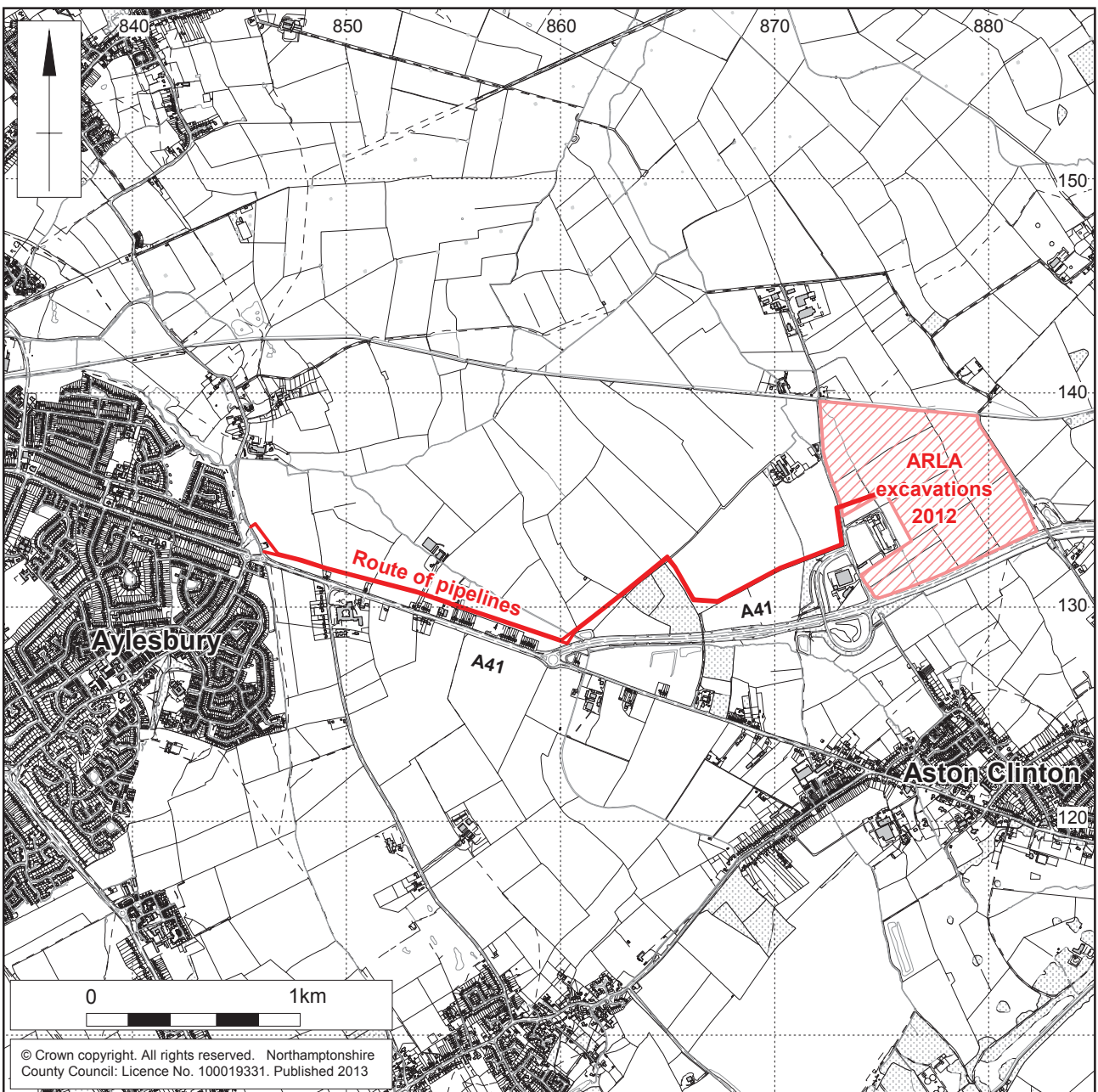
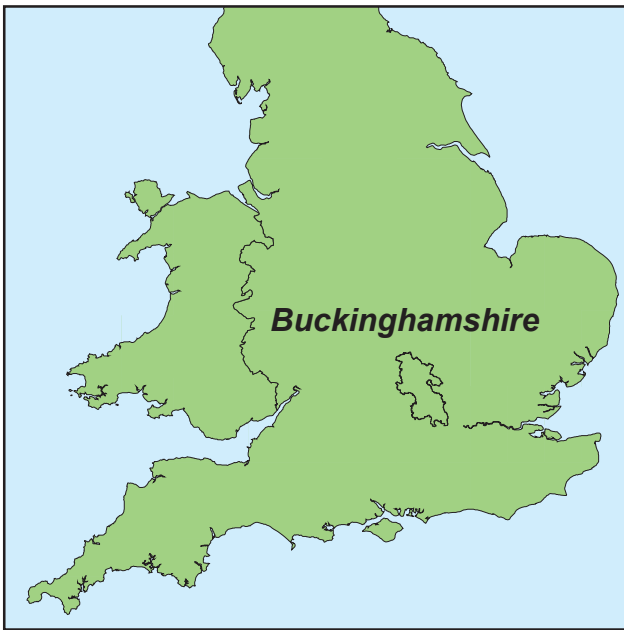
The scope of works was outlined and detailed in the Written Scheme of Investigation prepared by Nansi Rosenberg of Prospect Archaeology (Rosenberg 2012) and was approved by the local planning authority. The objectives of the strip, map and record were to determine the presence of any archaeological features or deposits within the pipeline easement and to date and characterise their extent, depth of burial and state of preservation and to provide a permanent record of past activity along the pipeline route.

## **2 BACKGROUND**

### **2.1 Location and geology**

#### ***Location***

The site comprised pasture and arable fields and is located from Broughton Lane to College Road North, Aston Clinton, Buckinghamshire, to serve the new Arla Foods dairy at College Road North. The pipeline extends to approximately 3km and had an easement corridor of 30m.



Scale 1:30,000

Site Location Fig 1



## **Geology**

The area is underlain by a series of fossiliferous marine sediments belonging to the Lower Cretaceous Gault Formation. Superficial geology comprises deep deposits of calcareous marls of glacial date, probably Late Devensian.

## **2.2 Historical and archaeological background**

The development area and its environs have been subject to previous archaeological investigation comprising a Heritage Assessment (Prospect Archaeology 2010). Archaeological work was also undertaken in advance of the construction of the Aston Clinton bypass, and comprised fieldwalking (Farley and CMAG 1989) and excavation (RPS 2005). The following archaeological background is taken from both bodies of work augmented by data from Buckinghamshire's Historic Environment Record (BHER).

### ***Prehistoric***

There had been human activity in the area since at least the Mesolithic period. Fieldwalking within the site in advance of the construction of the Aston Clinton bypass collected a total of 17 prehistoric worked flints. These included a transept axe dated to the Mesolithic period (Prospect Archaeology 2010).

Excavation at The Woodlands Roundabout, 2km to the west, in advance of the construction of the Aston Clinton Bypass, found evidence of late Bronze Age to early Iron Age activity, including pits and postholes (Site A; RPS 2005). A four-post structure may have been an excarnation platform. The area was abandoned by the middle Iron Age.

About 1.4km to the east of the site, excavation at the RPS Site B, also carried out in advance of the Aston Clinton Bypass, found a number of Bronze Age cremations (RPS 2005). Subsequent early Iron Age occupation comprised at least one roundhouse and four-post grain storage structures.

Within Aylesbury itself, 3km to the west, the outcrop of Portlandian limestone underlying the historic core of the town was occupied by a hillfort during the middle Iron Age.

### ***Late Iron Age/Roman period***

By the middle/late Iron Age at the latest there is ample evidence suggesting that large tracts of the Buckinghamshire landscape had been cleared of woodland and an open grassland environment predominated (Kidd 2007). During the late Iron Age a large number of sites were either extensively modified or occupied for the first time, perhaps indicating a fundamental shift in settlement organisation together with an expansion into previously unoccupied areas. Certainly, the settlement and agricultural exploitation of the claylands, as at Aston Clinton, was much more prevalent in this period than previously thought. Sites based on the heavy clay soils appear to have predominantly specialised in a pastoral economy, more suited to this geology than arable farming (Kidd 2007).

At RPS Site B there was a shift in settlement and a re-organisation of the landscape during the late Iron Age/early Romano-British period with the creation of regular ditched plots flanking a trackway aligned north-west to south-east. The site straddled the route of the Lower Ickneild Way, a track which is thought to have prehistoric origins, but there did not seem to be any evidence for that. The site remained broadly unchanged until the middle Roman period, suggesting a continuity of settlement. Finds from later features suggest the presence of a Romanised building in the vicinity, possibly to the west of the site.

The north-west/south-east alignment of the trackway and flanking plots appears to have been mirrored at other sites of a similar date particularly at Coldharbour Farm (Bonner *et al* 1997). More generally there appears to be an underlying trend where landscape elements are orientated in this alignment including the enclosure at Watermead

Roundabout (Dalwood and Hawkins 1988) and the Romano-British enclosures at Weedon Hill (Wessex Archaeology 2007). In the case of the RPS Site B, the course of the trackway seems to have been fossilised in the modern parish boundary (RPS 2005). Bull (1993) noticed this phenomenon across Buckinghamshire and surrounding counties and posited that a bi-axial landscape of roads and trackways was created in the Iron Age.

At the Arla Foods dairy site at College Road, Aston Clinton (Simmonds, and Walker, 2013) there was an area of late Iron Age/ Romano-British settlement located on a slight ridge of ground situated adjacent to ponds and marshy ground. There seemed to have been a short-lived attempt at cultivation, perhaps a vineyard, in the Late Iron Age/ early Roman period, but this was quickly abandoned. Activity was subsequently focussed on the slight ridge and comprised multiple enclosures arranged around a series of ponds. A possible rectangular timber building was constructed in the 1st or 2nd centuries AD and a possible roundhouse was built in the 2nd century. Both buildings had fallen out of use by the 3rd or 4th centuries.

A number of burials and cremations dated to the 1st and 2nd centuries and included three examples of decapitation.

Evidence for high status sites close to Aston Clinton includes the site at Berton, located on the more favourable Portlandian limestone ridge to the west (Fig 1). The layout of the site appeared to be fairly typical in that it comprised enclosures and roundhouses, although only small areas have been investigated. The orientation of the settlement at this site was also on a broad north-west/south-east axis. Finds from the site included Gallo-Belgic and Central Gaulish pottery imported in the Tiberio-Claudian period (14-54 AD) via *Camulodunum* (Colchester), suggesting that the site was of more than usual importance. During the Roman period the settlement appears to have evolved into a villa.

To the south of Berton and west of Aston Clinton a possible late Iron Age, La Tene III style cremation in an amphora was found at Vetches Farm, similar to others found at the oppidum sites at St Albans and Colchester and indicative of a high status burial. The remains of a possible late Iron Age settlement were found 400m to the east at Quaintways Farm, where significant quantities of 'Belgic' pottery were found, along with a possible 'fire bar'.

The course of the Roman road of Akeman Street, between Verulamium (St Albans) and Bicester, follows the current A41. It was identified during the Woodland Roundabout excavations (RPS 2005). A series of quarry pits, found mainly on the southern side of the road, were evidence of the continued maintenance and repair of the road throughout the Roman period. Settlement appears to have concentrated close to the newly created road networks, perhaps evidenced by the planned settlement at Berryfields (north-west Aylesbury). Although there appears to have been some form of settlement in the area of the Iron Age hillfort in Aylesbury, the focus of settlement in the area appears to have shifted to Fleet Marston, situated on the western side of Aylesbury on Akeman Street (Zeepvat and Radford 2007).

Within the south-western corner of the site, fieldwalking undertaken in 1991 collected a few sherds of Roman pottery but it was not thought sufficient to suggest a settlement or other intensive Roman activity had taken place in this part of the site. The geophysical survey identified a probable archaeological site, of uncertain date, straddling the boundary between two fields in the southern part of the site, Fields 8 and 9. It comprised a small group of ditches which defined parts of several rectilinear plots or enclosures.

### ***Saxon/medieval and later***

Ridge-and-furrow cultivation systems, of medieval or later date were visible on aerial photographs confirming that the site lay within the medieval open fields and was mainly under arable cultivation. Ridge-and-furrow was detected in two fields during the

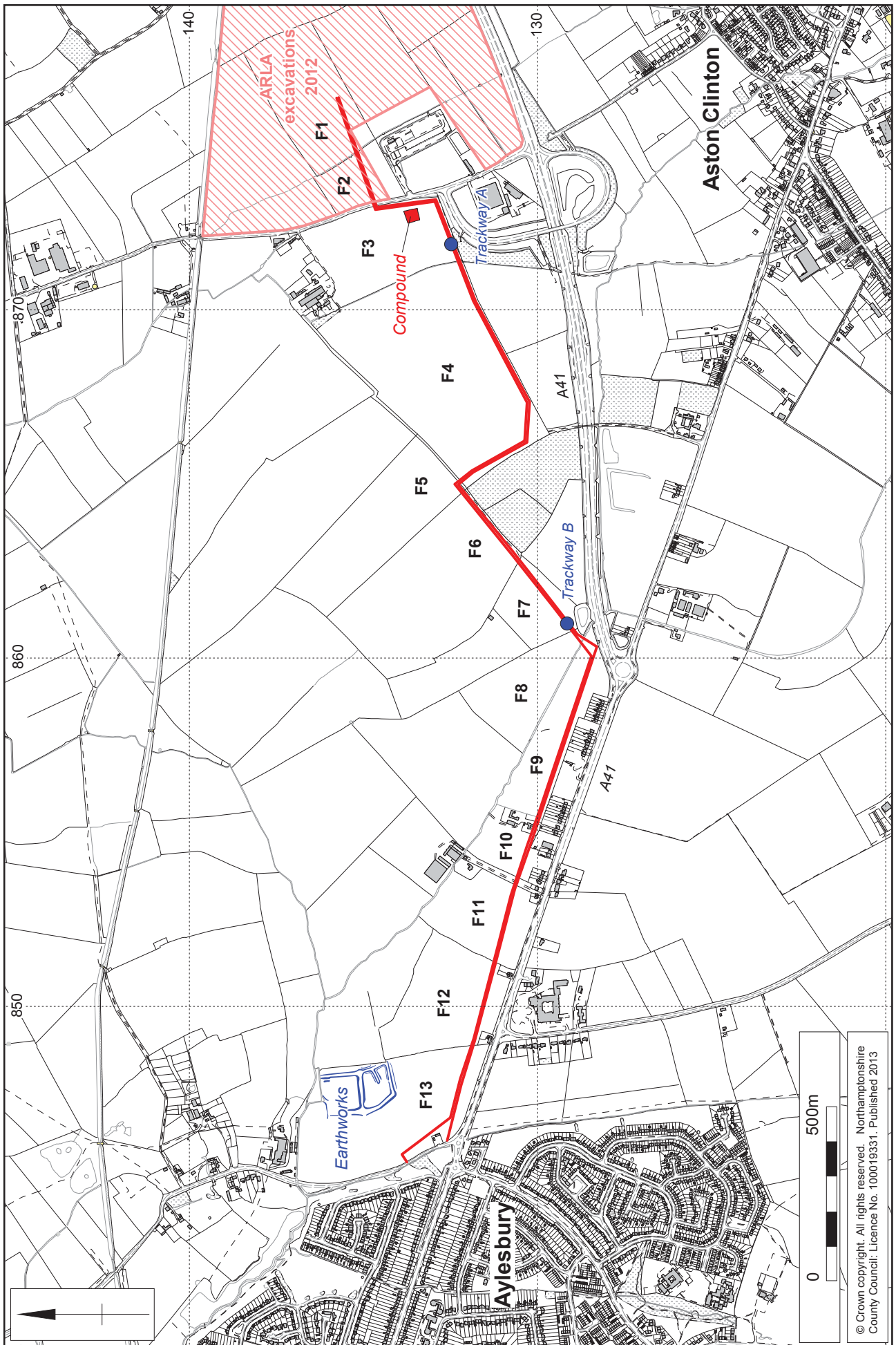
geophysical survey. Trial trenching identified what was thought to have been a ditch marking the parish boundary (Walker and Maull 2011). Historic maps show that the site had been largely undeveloped with the exception of small field buildings through the post-medieval period. The Aylesbury Arm of the Grand Union Canal was constructed to the north of the site in the early 19th century. The parish boundary is aligned north-west to south-east through the centre of the site.

### **3 METHODOLOGY**

The area was excavated in accordance with a specification for a programme of archaeological excavation works prepared by Nansi Rosenberg of Prospect Archaeology (Rosenberg 2012) and approved by Sandy Kidd (Senior Planning Archaeologist, Buckinghamshire County Archaeology Service).

A 360° tracked mechanical excavator fitted with a 2m-wide ditching bucket was used to remove overburden to archaeological levels or the natural substrate, whichever was encountered first. The area was cleaned sufficiently to enable the identification and definition of archaeological features. A hand-drawn plan of all archaeological features was made at scale 1:100 and was related to the Ordnance Survey National Grid. Archaeological deposits were examined by hand excavation to determine their nature. Recording followed standard NA procedures as described in the *Fieldwork Manual* (NA 2011). Deposits were described on *pro-forma* sheets to include measured and descriptive details of the context, its relationships, interpretation and a checklist of associated finds. Context sheets were cross-referenced to scale plans, section drawings and photographs. Photography was with 35mm black and white film and digital images. Sections were drawn at scale 1:10 or 1:20, as appropriate and related to Ordnance Survey datum. Spoil heaps and features were scanned with a metal detector to maximise the recovery of metal objects.

All works were conducted in accordance with the Institute for Archaeologists' *Code of Conduct* (IfA 2010) and *Standard and guidance for archaeological excavation* (IfA 2008).

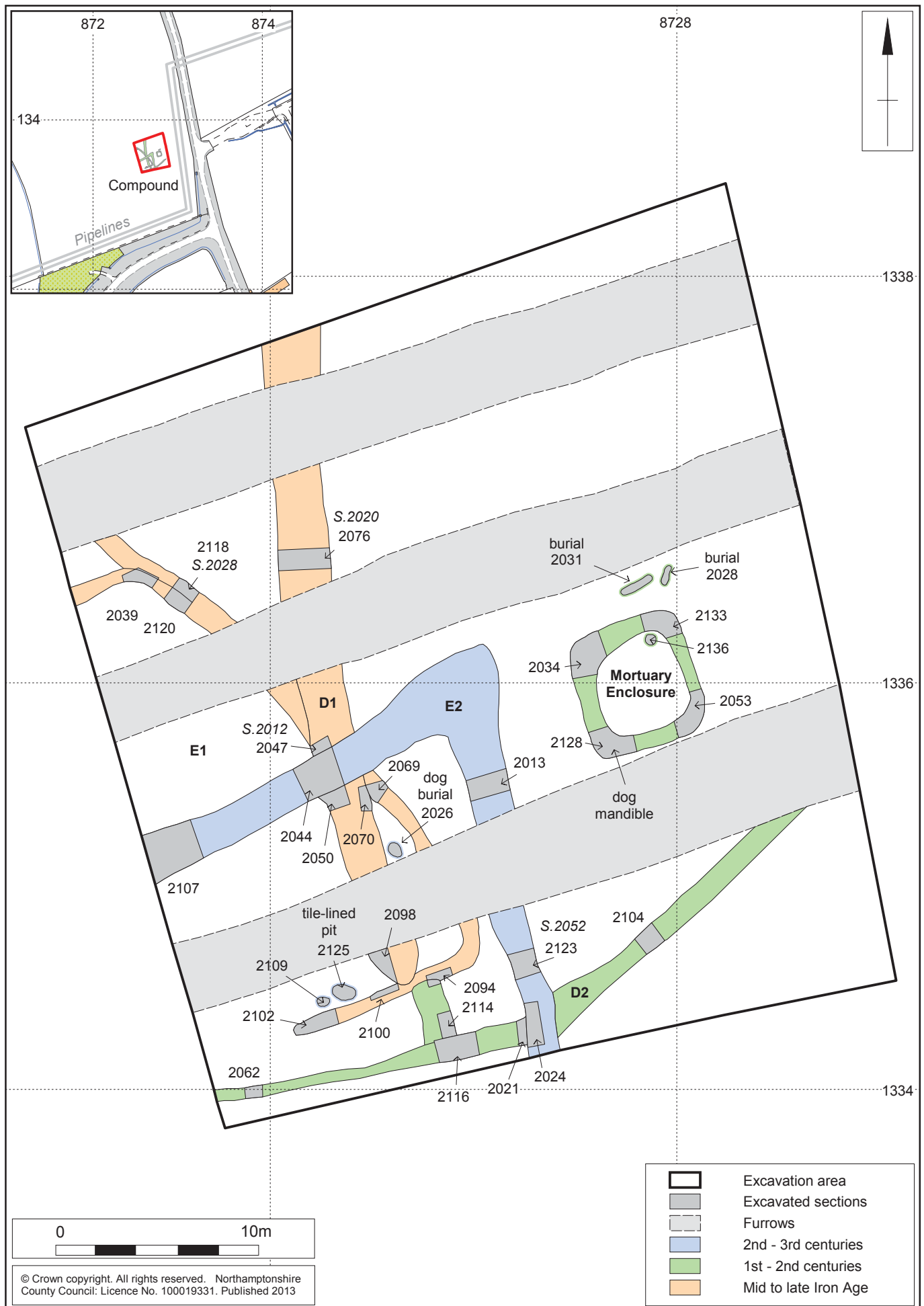


Scale 1:15,000 (A4)

Route of the pipeline, showing field numbers

Fig 2





Scale 1:250 (A4)

Field 3, Compound Area Fig 3



## 4 THE EXCAVATED EVIDENCE

### 4.1 General stratigraphy

The underlying geology of clay was encountered between 0.20-0.60m below the modern ground surface. This occurred as light-mid grey or brownish-yellow sandy clay with occasional angular to sub-angular pebbles. The subsoil was light grey-brown sandy clay and the topsoil was mid greyish-brown sandy clay, both soils contained occasional flint pebbles.

No archaeology was present in Fields 9-13. Archaeological features cut into the natural geology.

*Table 1: Summary of chronology*

Period (Date)	Features
Middle/late Iron Age	Enclosure E1
Late Iron Age (1st century BC-mid 1st century AD)	Ditch D1
Early Roman (late 1st to early 2nd century AD)	Pit 2114 Ditch D2 Mortuary Enclosure Cremation burials
Middle Roman (early 2nd to 3rd centuries AD)	Enclosure E2

### 4.2 Late Iron Age settlement

#### Field 3 (Compound Area)

##### *Enclosure 1 (E1)*

Settlement activity within the compound area began in the middle Iron Age with the construction of a ditched enclosure, possibly with internal divisions. The southern arm ditch 2102/2094 was 0.70m wide, 0.30m deep and 9.50m long, terminating to the west. Towards the northern end of the eastern arm, ditch 2118 continued to the north-west and ditch 2120 turned westward, perhaps forming an internal division within the enclosure, ditch 2039. The ditch fills of mid grey silty clay (2038) (2068) (2093) (2101) (2119) contained middle to late Iron Age pottery.

##### *Ditch 1 (D1)*

Enclosure 1 was superseded by a more substantial ditch, 2076/2047/2050/2098, aligned north to south, in excess of 32m long with a terminal at its southern end. It was 1.90m wide by 0.90m deep with a broad U-shaped profile (Figs 7 and 8 Section 2020). The primary fill (2075)/(2046)/(2049) and upper fills (2072-74)/(2045)/(2048)/(2097) of light to dark grey-brown silty clay were derived from natural in-washing. Domestic waste, comprising Iron Age and late 1st century AD pottery, part of an early Romano-British grinding stone and cattle bone were present in the upper fills (2072)/(2045)/(2097). It is possible that the Iron Age pottery is residual, as this feature cuts Iron enclosure E1.

The function of the ditch is uncertain as only part of its alignment was present within the excavated area but it may represent either a boundary system or part of an enclosure, the majority of which would have lain outside the excavation area. The presence of both Iron Age pottery and late 1st century pottery AD in the upper fill suggests the ditch was constructed in the late Iron Age but the upper fills were still accumulating into the mid to late 1st century AD.

### 4.3 Roman settlement (late 1st to 3rd centuries AD)

#### Field 3 (Compound Area)

##### *Mortuary enclosure and associated cremation burials*

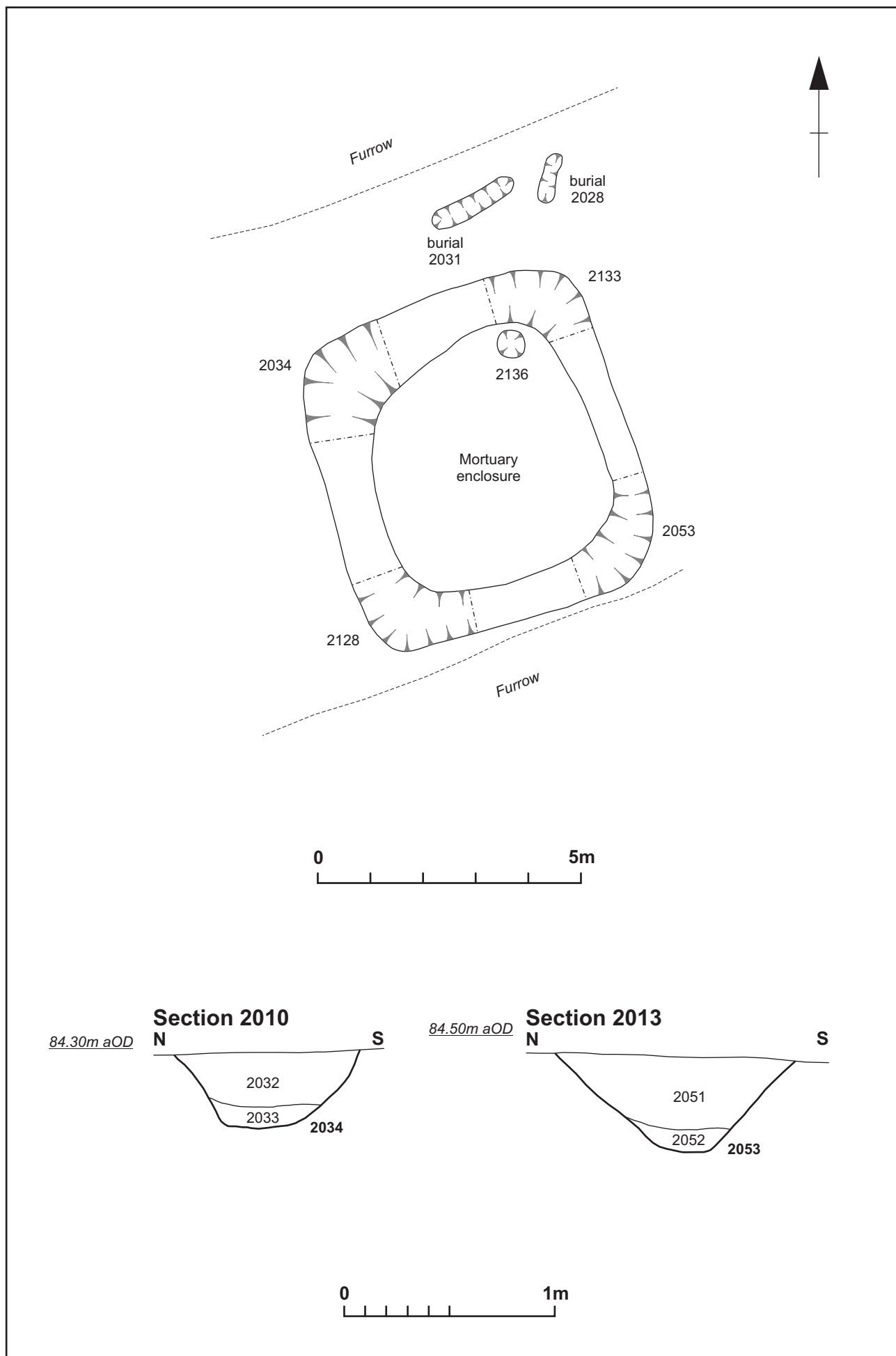
In the eastern part of the site there was a sub-square enclosure, 4.60m long and 4.50m wide, defined by an uninterrupted ditch, 2034/2053/2128/2133, 0.90-1.25m wide and 0.35-0.40m deep with a U-shaped profile (Fig 3-5). The primary fill of mid grey silty clay contained no finds (2033) (2052), the upper fill of dark grey silty clay contained 2nd to 3rd century AD pottery, cattle bone and the remains of a small dog, similar to the dog buried within Enclosure 2. Within the north-east corner of the enclosure was a single sub-circular posthole 2130, 0.20m in diameter and 0.15m deep. Other areas of decolouration within the enclosure were present; these were investigated and found to be variations in the geology or vegetation disturbance.

It is suggested that the enclosure was probably constructed in the mid to late 1st century AD, perhaps predating the nearby cremation burials, although the 2nd to 3rd century pottery from the upper fill suggests it remained open into the 3rd century AD. The enclosure probably functioned as a mortuary enclosure, enclosing a central burial which had subsequently been lost.



Romano-British mortuary enclosure, before-excavation, looking south Fig 4

Two cremation burials lay to the north of the enclosure (Figs 3 and 5). An elongated pit 2031, 1.65m long by 0.49m wide and 0.20m deep, had a primary fill of dark grey clay which contained 837g of cremated bone, the partial remains of an adult, possibly male, who had traces of some osteoarthritic changes in their neck, mixed with a substantial quantity of oak and some hazel charcoal from the pyre (2030). A radiocarbon date of 20-130 Cal AD (Beta-35323, 1920 $\pm$ 30 BP, 95% confidence) was obtained from the hazel charcoal. The cremated bone and charcoal were mixed evenly throughout the pit fill, which was overlain by an upper fill of mid black-grey sandy clay (2029).



A further similarly elongated pit, 2028, located 0.5m to the east, was 1.0m long and 0.20m wide and 0.10m deep. The fill of dark black-grey sandy clay (2027) contained 191g of cremated bone as the very partial remains of an adult, analysis indicates the person had some trauma or infection to their chest during their lifetime. A quantity of oak charcoal from the pyre, and more unusually elm which may have been part of a coffin or pyre platform was also recovered. A radiocarbon date of 0-130 Cal AD (Beta 353229, 1940+/-30 BP, 95% confidence) was obtained from the oak charcoal. The pit had been severely truncated by a modern plastic field drain.

Both deposits of cremated bone were under weight, at 837g and 191g, and therefore represent incomplete recovery of bone from the pyre; and in the case of the 191g of bone for burial 2028 this represent only a token recovery, even allowing for some loss of bone through the disturbance of one end of the pit by a modern plastic field drain. The presence of elements from all areas of the skeleton suggests that some effort went in the recovery of the remains from the pyre, although as these were mixed with pyre debris, bones were not being recovered individually.

#### *Pit*

To the south, there was a sub-rectangular pit 2114, 1.10m long, 0.70m wide with a U-shaped profile (Fig 3). Its primary fill (2113) of dark grey silty clay contained no finds, the upper fill (2112) of dark grey clay contained late 1st to 2nd century AD pottery, cattle, sheep and pig bones.

#### *Ditch 2 (D2)*

To the south was a ditch 2116/2062 (Fig 3, D2) It had an average width of 0.50m and 0.25m deep, and both its primary (2115) (2060) and upper fill (2061) of mid-dark grey-brown sandy clay were derived from natural in-washing. To the east the ditch changed direction to a north-east to south-west alignment, 2104. Pottery dating to the 2nd century AD and cattle bone were recovered from the ditches primary fill. The ditch may have functioned as drainage, possibly to drain water from the mortuary structure.

#### *Posthole*

Located 0.50m to the west of pit [2125] was a sub-circular posthole [2109], 0.60m diameter and 0.33m deep with a U-shaped profile. It was filled with dark grey silty clay which contained 2nd century AD pottery.

#### *Enclosure 2 (E2)*

The final phase of Roman activity was the construction of a possible rectangular enclosure, although only the north-east corner lay within in the excavated area 2107/2044/2013/2123 (Fig 3). The northern arm was defined by ditch 2107/2044, 1.30m wide and 0.55m deep with a U-shaped profile. The primary fill (2106)/(2043) of mid brown-grey silty clay contained 2nd to 3rd century AD pottery, tile and cattle bone. The upper fill of mid grey-brown silty clay (2105) contained no finds. The ditch was re-cut on its northern side 2042, 1.05m wide and 0.54m wide with a broad U-shaped profile, its fill of dark brown-grey contained 2nd to 4th century AD pottery, tile, sheep and cattle bone.

The eastern arm was defined by ditch 2013/2123/2024, 1.80m wide and 0.80m deep. The primary fill (2011) (2122) (2023) of dark grey silty clay contained 2nd to 3rd century AD pottery, horse, pig and cattle bone, the upper fill (2012) (2123) (2022) of dark brown-grey silty clay contained 2nd to 4th century AD pottery, tile, cattle and sheep bone. The eastern boundary continued for 19m to the south of the excavation area, where it probably continued.

*Dog burial*

Within the north-east area of Enclosure 2 was a sub-circular pit 2111 (Fig 3), 0.67m in diameter and 0.08m deep (Fig 3). Its fill of mid grey-black silty clay contained a near-complete dog skeleton. The dog was straight-limbed, non-chondrodystrophic toy/midget morphotype and may have been used either as household pet or to eradicate rodent vermin. The remains of another small dog had come from fill of the mortuary enclosure ditch and may have been near contemporary.

*Tile lined pit*

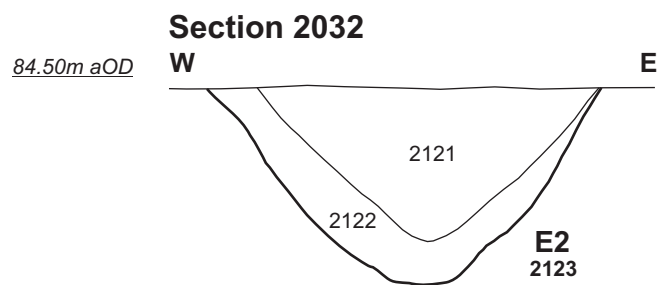
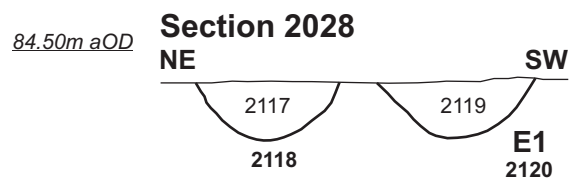
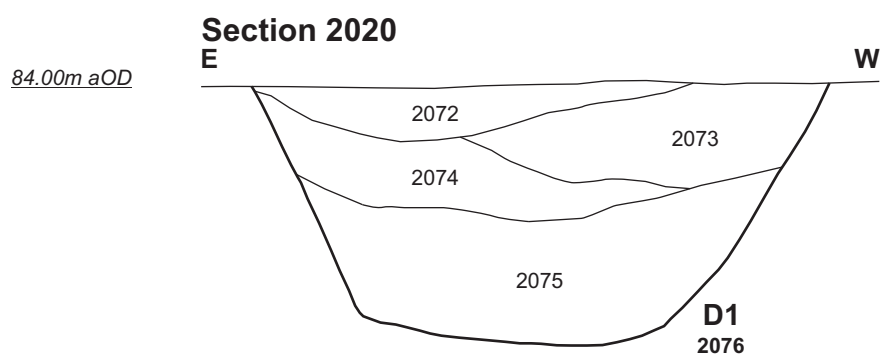
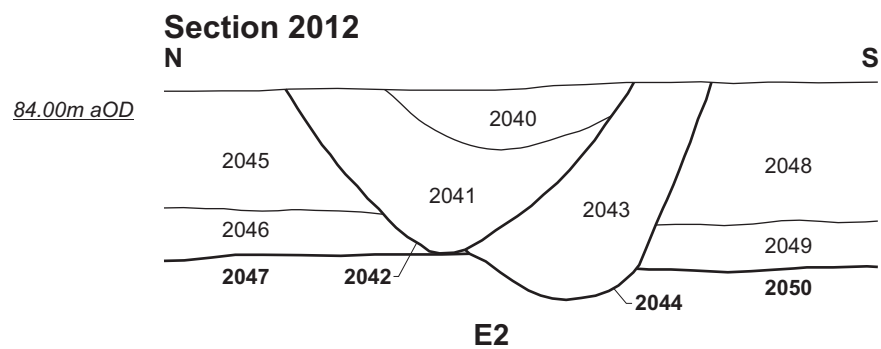
Located within Enclosure 3 was sub-circular pit 2125 (Figs 3 and 6), 1.29m long, 1.10m wide and 0.14m deep. Placed on the base of the pit were large broken sherds of floor tile, *tegulae*, along with a *pedalis* tile, usually used as the base and cap for hypercaust tile columns (2126). The upper fill of dark grey-black silty clay (2124) contained 2nd to 3rd century pottery and floor tile. The tiles may have been re-used as a post-pad, although no other similar features were present within the excavation area and no structures were identified.



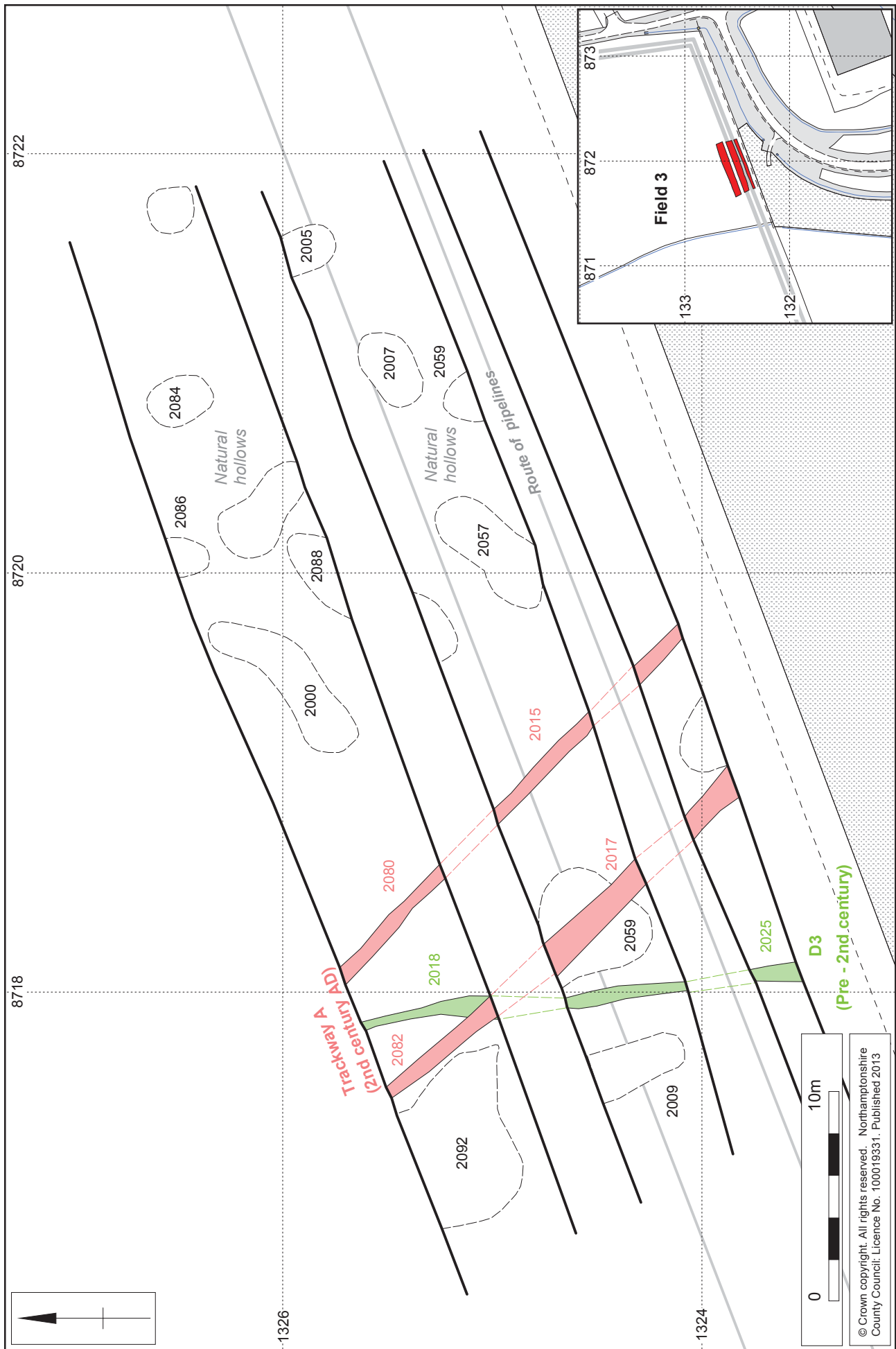
Tile-lined pit 2125, within Enclosure 2

Fig 6









Scale 1:250

Field 3, Trackway A Fig 9

### Field 3

#### *Ditch 3 (D3)*

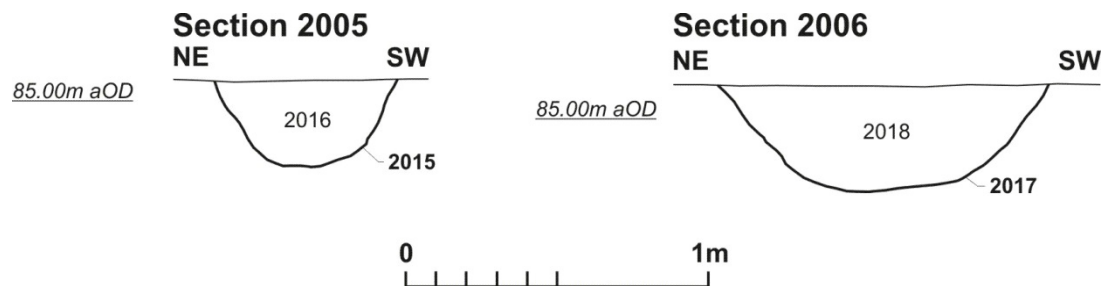
Ditch 2025/2080 (Fig 9) was aligned north to south, 1.0m wide and 0.20m deep with a shallow U-shaped profile. Its homogenous fill of dark grey-brown silty clay was derived from natural in-washing and contained no finds (2026)/(2079). The ditch was recorded within the 30m pipeline easement and continued north and south beyond limits of excavation. No dating evidence was recovered from the ditch but it predates the 2nd century AD trackway A and may have been part of a prehistoric field system which was redefined in the Romano-British period.

#### *Trackway A*

Located to the east of the compound area was a trackway (Figs 9 and 10). It was defined by parallel ditches aligned north-west to south-east and set 6m apart. It was recorded over a length of 30m, within the constraints of the pipeline easement, but probably continued to the north-west and south-east.

The eastern side of the trackway was defined by a single ditch 2015/2078, 0.60m wide and 0.20m deep, with a shallow U-shaped profile. Its homogenous fill of dark grey-brown sandy clay (2016)/(2077) was derived from in washing.

The western side of the trackway was defined by a single ditch 2017/2082, 1m wide and 0.40m deep, with a U-shaped profile. Its homogenous fill of mid grey-brown sandy clay (2018)/(2081) contained 2nd century AD pottery.

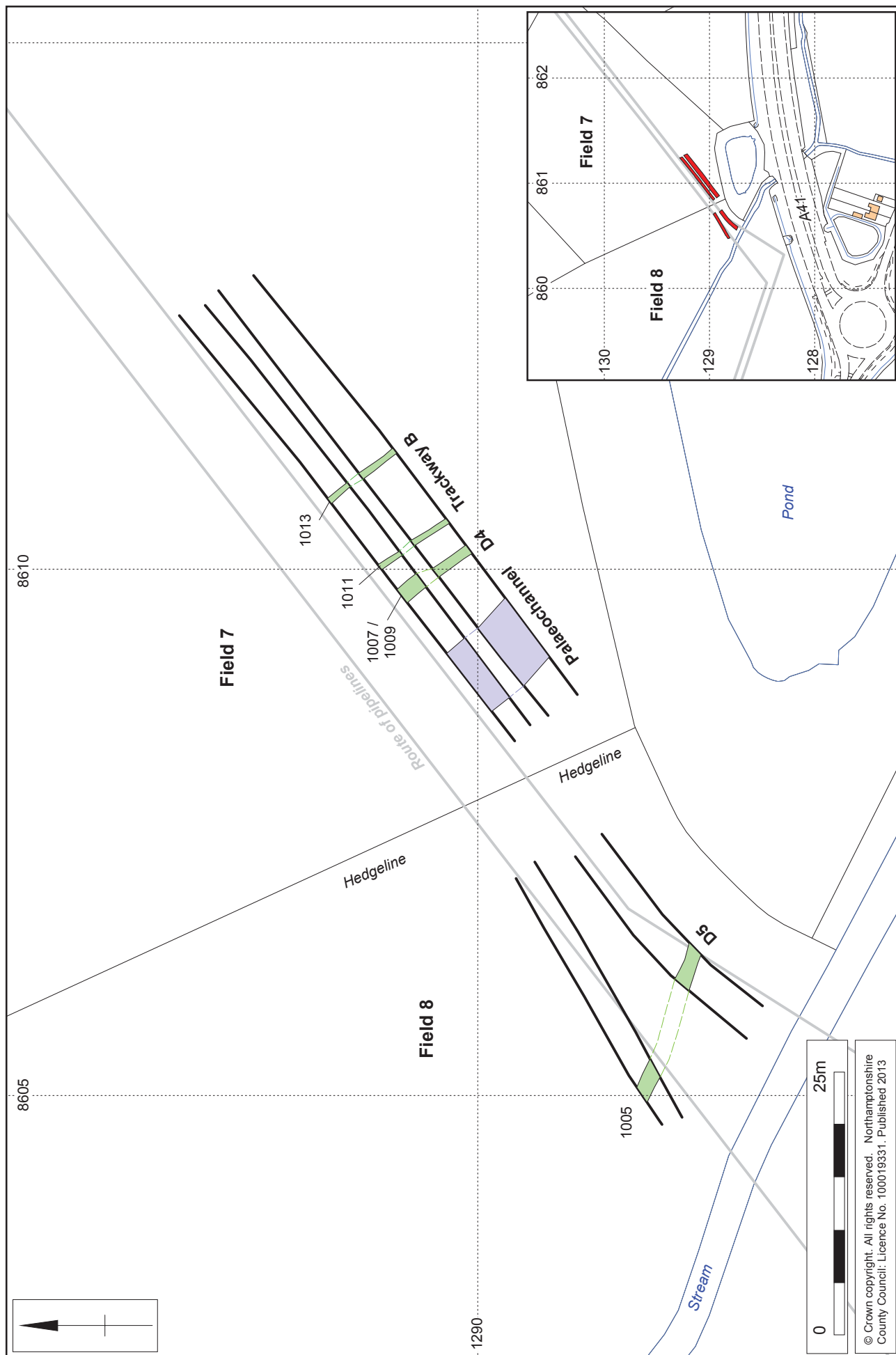


Sections of Trackway A ditches

Fig 10

#### *Natural hollows*

A number of irregular sub-circular shaped features were present within Field 3 (Fig 9). When excavated the shallow irregular nature of their profile confirmed them to be natural hollows.



Scale 1:500

Fields 7 and 8, Trackway B Fig 11

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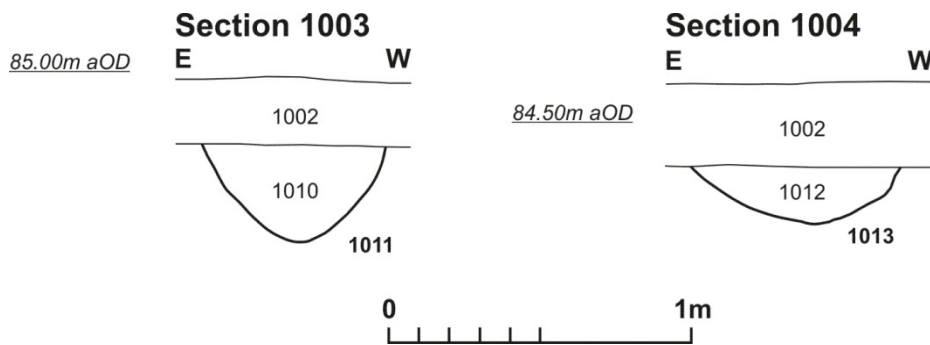
## Fields 7 and 8

### Trackway B

Located on a gravel terrace in Field 7 was a trackway (Figs 10 and 12). It was defined by parallel ditches, aligned north-west to south-east and 10m apart. It was recorded over a length of 30m, within the extents of the pipeline easement and continued to the north-east and south-west.

The eastern side of the trackway was defined by a single ditch 1013, 0.70m wide and 0.19m deep, with a U-shaped profile. Its homogenous fill of sandy clay (1012) was derived from in-washing with the deliberate deposition of late 1st to early 2nd century AD century pottery.

The western side of the trackway was defined by a single ditch 1011, 0.60m wide and 0.40m deep, with a U-shaped profile. Its homogenous fill of sandy clay (1010) was derived from in-washing with the deliberate deposition of cow bone.



Sections of Trackway B

Fig 12

### Ditch 4 (D4)

Located 2m to the west of the trackway and also aligned north-west to south-east alignment was a ditch 1009 (Fig 11). It was recorded over a length of 30m, within the extent of the pipeline easement, it was 0.36m wide and 0.10m wide with a shallow U-shaped profile and its fill of sandy clay 1008, contained no finds. It was re-cut on its eastern side 1007, 0.75m wide and 0.38m deep, with a U-shaped profile. Its sandy clay fill was derived from in-washing with the deliberate deposition of late 1st to 2nd century AD pottery. The ditch may have acted as a drain for the trackway in case of flooding from the nearby watercourse and its re-cut suggests at least one phase of maintenance.

Trackways A and B may have been contemporary and part of a regional trackway system linking seasonal pastures and rural settlements. However, although both were certainly in use during the 2nd century AD and possibly earlier, the dating is not secure enough to be definite proof.

### Palaeochannel

To the south-west and aligned parallel to the Roman features was a palaeochannel (Fig 12). It was located 10m to the west of ditch 1007/1009 and was probably contemporary to the Roman features as late 1st to 2nd century AD century pottery was recovered from the base of its fill. The channel may have been the earlier location of the existing canalised watercourse to the south.

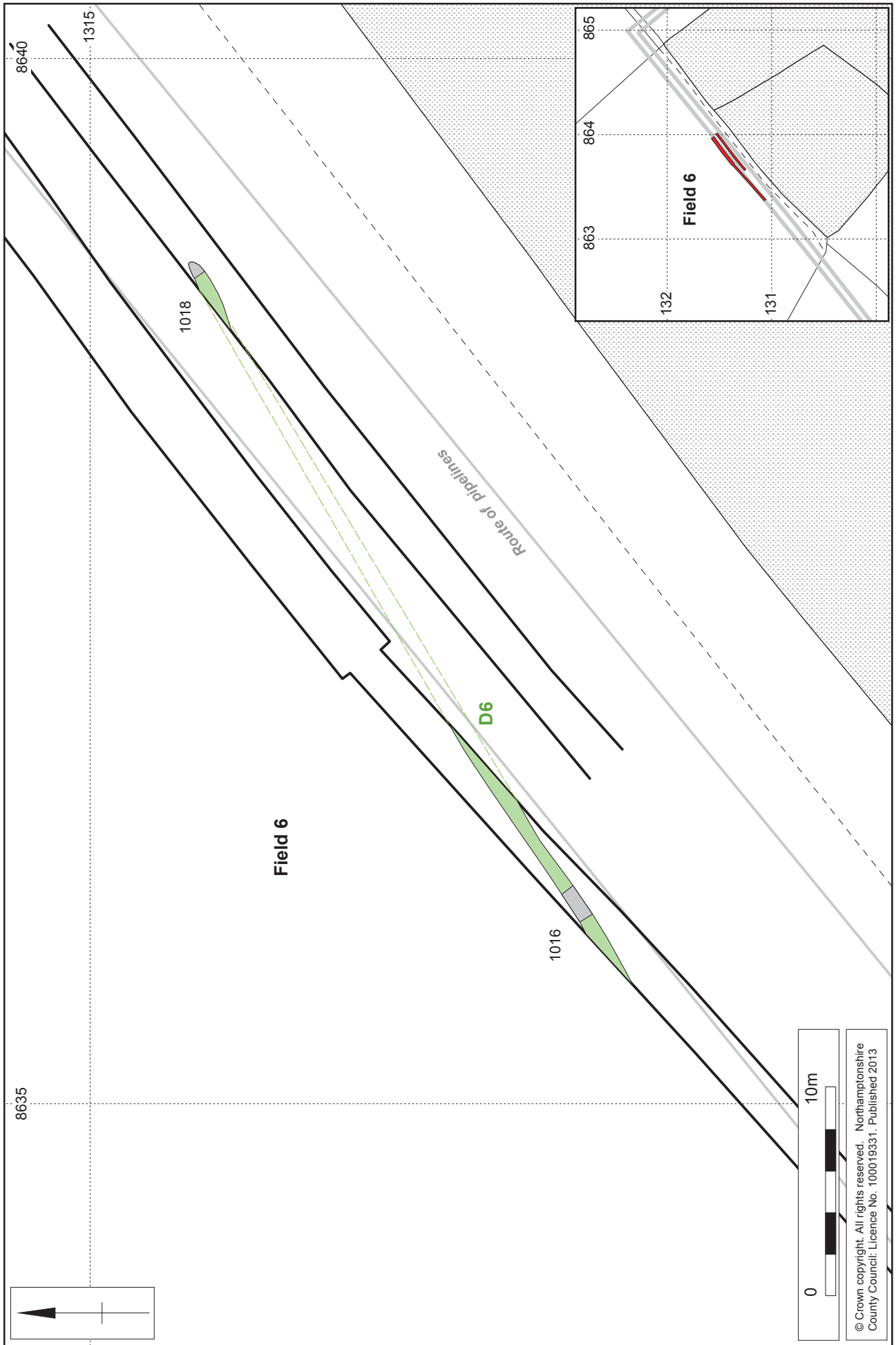
*Ditch (D5)*

In Field 8 there was a ditch 1005 (Figs 12 and 13), aligned north-west to south-east. It was 1.0m wide and 0.30m deep with a shallow U-shaped profile and a fill of mid blue-grey sandy clay, containing 2nd century AD pottery. The ditch continued beyond the limits of excavation and was probably a boundary to a field system contemporary with Trackway B and ditch 1007/1009 to the north-east within Field 7.



Ditch 1005 (D5) in Field 8, looking north-west

Fig 13



Scale 1:250

Field 6 Fig 14

## Field 6

### *Ditch 6 (D6)*

Located in the eastern part of Field 6 was an undated ditch 1016/1018 (Fig 12), 0.60m wide and 0.25m deep with a U-shaped profile. It was aligned north-east to south-west, terminating at the north-east. Its homogenous fill of mid grey-brown silty clay (1015) (1017) contained no find finds.

## 4.4 Medieval cultivation

Remnant furrows, aligned east to west, from a medieval ridge and furrow cultivation system were present across the compound site (Field 3). The furrows were spaced 6-9m apart and were 3-5m wide, although they were highly truncated by subsequent agricultural activity. A fragment of post-medieval roof tile was recovered from a furrow.

## 5 THE FINDS

### 5.1 Iron Age and Roman pottery by Rob Perrin

The majority of the pottery assemblage is from a number of enclosures and a possible mortuary structure. Other pottery was recovered from ditches found during the easement of the pipeline further to the west. The assemblage comprises some 480 sherds, weighing almost 8.2kg and with a rim estimated vessel equivalent of just over 6.5. Pottery was recovered from 38 different contexts, mainly the fills of ditches, together with those of some pits and gullies, but only the fills (2121)/(2122) of one ditch (2123) contained a substantial amount (almost 2kg).

### *Fabrics*

The main fabric categories are grog-tempered wares, reduced grey wares, various oxidised wares and shell-gritted ware. Other wares present are flint-gritted, black burnished ware (BB1), Lower Nene Valley colour-coated ware (LNVCC), Oxfordshire colour-coated (OXCC) and white (OXWH) wares, South (SGS) and Central (CGS) Gaulish samian ware and Southern Spanish amphora. Table 2 shows the fabric proportions:

*Table 2: Pottery quantification by fabrics*

Fabric	Sherds	%	Weight (g)	%	EVE	%
Flint	14	3	346	4.3	-	-
Shell	35	7.3	1198	14.6	74	11.3
Greys	148	31	2532	31	333	50.7
Grog	103	21.5	1866	22.8	81	12.3
Pink, buff, cream	61	12.7	626	7.6	43	6.5
Reddish-brown	4	<1	46	<1	-	-
Reddish-yellow	56	11.6	558	6.8	29	4.4
SGS	3	<1	45	<1	-	-
CGS	1	-	2	-	-	-
BB1	5	1	152	1.9	20	3
LNVCC	21	4.4	106	1.3	38	5.8
OXCC	22	4.5	248	3	32	4.9
OXWH	6	1.25	404	5	7	1
Amphora	1	-	52	-	-	-
<b>Total</b>	<b>480</b>		<b>8181</b>		<b>657</b>	

The grog-tempered ware occurs in a variety of colours - brown, buff, pink and reddish yellow and most of the sherds, especially the thicker ones, have a grey core; the most common colour is pink with a grey core. The hardness of the sherds also varies. The different colours in both the grog-tempered and reduced grey wares are likely to be the

result of both oxidising or reducing firing conditions, and subsequent usage. The reduced grey wares also vary in colour - from light grey through to dark grey – and some have different coloured cores. The fabrics vary from coarse to fine.

While separate buff, cream and pink oxidised wares occur, these colours often merge on certain vessels, and some have grey cores. The reddish-yellow and reddish brown wares can also have a grey-coloured core. The fabric texture of all of the oxidised wares varies from coarse to fine.

The colour of the flint-gritted ware varies from buff, to brown to dark brown and the flint occurs as either large or small fragments and some may have been crushed. The colour of the shell-gritted ware varies from dark brown through to buff and reddish yellow, occasionally with a grey core.

### Forms

A rough count during processing, based mainly on separate rims and recognisable vessels, and including samian ware, noted some 88 vessels (Table 3). The miscellaneous vessels comprise a closed vessel with no internal slip in CGS, a Dressel 20 amphora, a possible box in LNVCC and a flange, possibly from a bowl form, in reddish yellow ware. Jars account for half of the vessels with bowls and dishes providing another quarter.

*Table 3: Roman pottery assemblage by principal fabric type*

Fabric/Form	J	B	D	B/D	Bkr	Cup	Fl	Mort	Misc	total	%
Shell	10	1	-	-	-	-	-	-	-	11	12.5
Greys	18	4	4	1	1	-	-	-	-	28	31.8
Grog	8	-	-	-	-	-	1?	-	-	9	10.2
Pink, buff, cream	3	2	1	-	-	-	1	-	-	7	8
Reddish-yellow	4	-	1	-	-	-	3	-	1	9	10.2
SGS	-	-	1	-	-	1	-	-	-	2	2.3
CGS	-	-	-	-	-	-	-	-	1	1	1
BB1	-	2	2	-	-	-	-	-	-	4	4.5
LVCC	-	-	-	-	1	-	-	-	1	2	2.3
OXCC	1	1	2	-	2	-	-	2	-	8	9
OXWH	-	-	-	-	-	-	-	6	-	6	6.8
S Spanish	-	-	-	-	-	-	-	-	1	1	1
<b>Total</b>	<b>44</b>	<b>10</b>	<b>11</b>	<b>1</b>	<b>4</b>	<b>1</b>	<b>5</b>	<b>8</b>	<b>4</b>	<b>88</b>	
%	50	11.4	12.5	1	4.5	1	5.7	9	4.5		

Forms: J=jar, B=bowl, D=dish, B/D=bowl/dish, Bkr=Beaker, FL=Flagon, Mort=Mortaria

It is not surprising that all but one of the grog-tempered vessels are jars. Many of the jars are globular in shape and neckless. They occur with various rim forms, particularly curved and bead, and also vary in size, including some large enough to be storage jars. The one possible grog-tempered flagon comprises a rim sherd in a pink-buff ware with a grey core.

The grey jars have a similar range of sizes and rim forms to those in grog-tempered ware, with the addition of undercut and narrow-mouthed rims. The four bowls have flanged rims and the four dishes plain rims; the beaker is an indented type but no rims survives. The shell-gritted ware jars have curved, undercut, lid-seated and triangular rims, and include the base from a large storage jar. The bowl is a flanged type.

Vessels in buff ware comprise a small carinated bowl with a grooved rim, a short-necked globular jar with a curved rim and a possible imitation of a samian ware form Dr 31 dish.



A jar with a short neck and a squared rim occurs in cream ware and there is a jar with an undercut rim in a pink ware with a grey core. The flange from a probable imitation of a samian ware form Dr 38 bowl and the handle from a flagon occur in a pink buff ware. The four jars in reddish yellow ware have different rims – curved, squared, undercut and, possibly, narrow-mouthed. The dish has curved sides and a bead rim while a flange is from a vessel of uncertain form.

The four vessels in BB1 comprise two flanged bowls and two plain-rimmed dishes; one of the latter is a large vessel with burnished intersecting arc decoration. The SGS comprises forms Dr 18/31? and Dr 27 and the other vessel in LNVCC is an indented beaker with a funnel neck and bead rim. The eight OXCC vessels are all from different forms – an indented beaker with a funnel neck and plain rim, a sherd from another beaker with rouletted decoration, a probable imitation of a samian ware form Dr 38 bowl, probable imitations of samian ware dish forms Dr 31 and Dr 36, a jar and two mortaria, One similar to Young (1977) form C100. Of the six OXWH mortaria, one is Young form M20, one probably another M20 and one a possible M6.

### **Sources**

Sherds of Lower Nene Valley colour-coated ware (LNVCC), Dorset black-burnished ware (BB1) and Oxfordshire colour-coated and white wares (OXCC, OXWH) represent regionally traded pottery while the Southern Spanish amphora is a continental import as is the Gaulish samian ware.

No local kiln or other pottery production sites are known, but Aston Clinton is at the junction of two Roman roads, Akeman Street and the Icknield Way, so would presumably have been well placed to receive goods from further afield. The nearest known kiln site, producing late grey wares, is at Berkhamstead, 10 kilometres to the south-east (Swan 1984, 138). Grogged wares were being produced in the Milton Keynes area, some 20 kilometres to the north, in the mid 1st century (Bletchley and Walton: Swan 1984, 134) and it is likely that some of the grog-tempered wares from the site were locally produced. Pink grogged ware is common on sites in the Milton Keynes area and one probable source has been identified in the Stowe area (Booth 1999, Booth and Green 1989; Marney 1989; Taylor 2004). The hardness of the fabric of some of the vessels may, however, suggest an additional source. Some of the shell-gritted pottery, such as the flanged bowl, may be products of the kilns at Harrold in Bedfordshire (Brown 1994). Oxidised and grey wares were produced in the Milton Keynes area and in more distant kiln sites in South Northamptonshire and at Gerrards Cross, Fulmer, Luton, Toddington (Swan 1984, 133-4), Verulamium and Oxford. The flint gritted pottery is likely to have been locally produced.

### **Date**

The flint-tempered wares indicate activity in the early to mid Iron Age. Some of the grog-tempered and shell-gritted wares are probably of the Late Iron Age/1st century date. Soft pink grog-tempered ware appears to have had a long duration from the 2nd century in its core usage area (Booth and Green 1989, 82; Taylor 2004, 60) but Aston Clinton is in the outer zone where only the later types would be expected (Taylor, *ibid.*, 63-4, fig 3). While some of the vessels are perhaps later storage jar types, the other forms seem earlier. The other shell-gritted pottery jars cannot be dated closely but the flanged bowl is most common in the 4th century. The grey ware jars can be dated to the later 1st century and throughout the second century, while the dishes in grey ware with plain rims are most likely to be of mid 2nd to 3rd century date. The grey ware and BB1 flanged bowls are a later second to 4th century type and the grey ware indented beaker is probably third century in date. The BB1 plain-rimmed dish with burnished intersecting arc decoration is a later 2nd to 4th century type. The Young C100 mortarium is of 4th century date and types M6 and M20 are dated AD100-170 and AD 240-300, respectively. The buff ware

small carinated bowl with a grooved rim is a late first to 2nd century type and many of the other vessels in oxidised fabrics probably also fit within this date range. The OXCC and LNVCC beakers and the OXCC samian ware imitations are probably 4th century in date while the LNVCC possible box would be dated to the 3rd century. The samian ware and amphora forms span the late 1st to 2nd centuries.

Overall, the assemblage suggests that occupation of the area may have begun in the early to mid Iron Age and that there was fairly continuous activity from the late Iron Age and throughout the Roman period.

### ***Assemblage characteristics***

The impression is that the activity on the site was basically utilitarian agricultural and domestic and not of a particularly high status in terms of the amounts of fine wares and imported regional and continental wares. The relatively high number of mortaria is interesting. A grey ware dish, reminiscent of BB1 types, has three cuts across the junction of wall and base which may represent an owner's mark.

## **5.2 Ceramic building material** by Pat Chapman

### ***Roman tile***

This assemblage of 55 tile sherds, weighing 12kg, includes roof, box flue and floor tiles (Table 4). The sherds are generally small and some are abraded, the big floor tile sherds are broken but join. The assemblage is dominated by the material from pit 2125, which comprises 20 sherds weighing 10.6kg.

Five different fabrics were noted, Fabrics 1 and 2 accounting for nearly all the tile. Within these two fabrics there are variations in colour caused by their place in the kiln or exposure to high temperatures. Fabric 1, with 23 sherds, is a very hard fine sandy clay pale or bright orange to orange-brown or brown with an occasional core and occasional tiny calcareous and grog inclusions. Fabric 2, with 28 sherds, is a very hard fine silty orange to red clay, some mauve to black. These two fabrics are very similar to those of the tiles from the excavation by Northamptonshire Archaeology at Aston Clinton, College Road (Chapman 2013). Fabric 3, only two sherds, is hard coarse sandy orange-red and red clay with one red and one grey core. The two slightly softer fabrics comprise one sherd in fabric 4, fine sandy orange and one sherd in fabric 5, a silty pink clay.

The roof tiles comprise eight *tegulae* with three possible *imbrices*. The *tegula* bodies are 20-22mm thick, one has a straight finger mark across the body; two flanges are flat-topped, one rises to a point and the remainder are fragmentary. The three possible *imbrex* tiles, 16-19mm thick, have a remnant apex with an angle indicating a very broad curve, possibly indicating at least one ridge tile.

There are eight flue tile sherds, 15-22mm thick, all with straight broad combing, one on two adjacent sides and in two instances enclosing wide flat triangles.

The two floor tiles from fill (2126) pit 2125 are large broken sherds. One tile is 45mm thick and the one complete side, 290mm wide, suggests that this is a *pedalis* tile, the type often used as the base and cap for the hypocaust tile columns. The other tile is 32mm thick with a minimum length/width of 210mm. The remaining sherd is a small fragment, 35mm thick, from gully 2021.

The body sherds vary from 20-30mm thick. One sherd has part of a swirl across the body, perhaps indicating it may be from a roof tile.

The tile from pit 2125 comprises 20 sherds, nearly half of the total assemblage, and about 89% by weight, mainly due to the two floor tiles. The other tile sherds are generally bigger than those from the other contexts. They are also notable in having traces of white cement adhering to most surfaces, including the broken edges, but not the upper surfaces. The concentration of tile in one pit suggests that dumping the material was a single event. As these sherds were the only ones with cement adhering to them, this suggests that they came from one place or building and had possibly been reused.

The small size of the remaining tile sherds and the general scatter through the contexts suggests that demolition or removal of this material had taken place some time previously from a building of either high status or pretensions.

*Table 4: Quantification of ceramic tile*

Context/feature	No	Wt (g)	Comment
2001, topsoil	1	70	<i>Tegula</i> flange very abraded – F1
2019 / gully 2021	3	340	Flue tile F2; floor tile F1; body F1
2022 / ditch 2024	3	230	<i>Tegula</i> ; flue tile ; body – all F2
2032 / ditch 2034	2	174	<i>Imbrex</i> possibly - F1; body – F2
2041 / ditch 2044	10	870	<i>Tegulae</i> x 2-F2; flue tile x 3-F1; body x 5-F1
2043 / ditch 2044	5	36	Flue tile – F4; 4 fragments – 3-F1, 1-F5
2045 / ditch 2047	1	35	Flue tile – F1
2065 / posthole 2067	1	9	Fragment – F2
2106 / enc ditch 2107	2	815	<i>Tegula</i> ; body – F2, F3
2121 / ditch 2123	2	56	Fragments - F1
2122 / ditch 2123	3	130	Body - F2
2126 / pit 2125	1 (6 join)	4368	Floor tile, 290mm wide, 45mm thick – F2
	1 (12 join)	2522	Floor tile, min 210mm wide, 32mm thick – F2
	18	3755	<i>Tegula</i> fragments x 3-F2; <i>imbrex</i> x 2 – F2; flue tile – F3; body sherds x 12 – F1x4; F2x8
2011 / ditch 2013	1	45	Body – F1
2014 spread	1	183	Body – F2
<b>Totals</b>	<b>55</b>	<b>11918</b>	

### ***Fired clay***

One piece of fired clay was found, from fill (2121) of ditch 2123. It is 110x70x30mm, weighs 112g, and is composed of hard white fine silty clay, with traces of orange and grey. There are faint traces of grass impressions on one side, the other side appears to have been combed, as if to push the clay into place. A structural purpose is suggested, but there are no other pieces.

### ***Post-medieval roof tile***

Three small sherds of roof tile, weighing 150g, come from the top of furrow. All three are made from hard orange sandy clay. One sherd is plain with a partially black stained surface, the other sherd has a deep yellow glaze, each is 14mm thick. The remaining sherd is just a fragment.

### 5.3 Grinding stone by Andy Chapman

From the fill (2072) of ditch 2076 (D1) there is a large rectangular block of Hertfordshire puddingstone (SF12). The block is roughly rectangular, up to 230mm wide by 270mm long and 100mm thick. All edges are damaged, but the width is probably only a little short of its original value, while the length is probably only a little over a half of its original value; and the stone may have measured c420mm long. This estimate is based on the curvature of the upper surface, with the stone concave along its length but flat across its width, with the surface worn smooth through use.

Hertfordshire puddingstone was widely used to make small rotary querns in the early Roman period, but in this instance the block has been fashioned as a small grinding stone, suitable for use with a hand-held rubbing stone. There is no evidence that it represents the reuse of a former quern. It is not dissimilar to a saddle quern, apart from lacking the distinctive saddle-shaped profile, but within a Roman context it is more likely to have been used for grinding something other than grain.

### 5.4 Other finds by Ian Meadows

#### ***Coins***

A small assemblage of seven coins were recovered during from the excavations through manual recovery and metal detecting. Four derived from stratified deposits, three were from the topsoil. These dated from the 2nd century AD to the 4th century AD, with the majority being 3rd or 4th century in date. All were made of copper and many were highly corroded or worn.

A copper sestertius from the topsoil of 2nd century date was 29mm in diameter. Part of the obverse bust can be discerned comprising curling hair, beard and a pointed nose. Based on the form of the beards, it could be Marcus Aurelius (161-180).

A 3rd century copper radiate 20mm diameter, a 3rd century radiate was recovered from the fill (2019) of ditch 2021. The obverse is poorly preserved although a radiate crown can be discerned and the reverse is currently illegible. It is possible the surfaces were original coated in a white metal but the piece is highly corroded.

A softly struck contemporary copy of a 4th century coin on a very irregular flan up to 20mm across was recovered from the fill (2011) of ditch 2013. It bears the distinctive 4th-century bust on the obverse and a standing figure on the reverse. Of the obverse legend only VSAVG could be discerned.

A corroded 4th century copper alloy coin, 17mm diameter, was recovered from the fill (2019) of ditch 2021. The obverse bore the distinctive 4th century bust type; nothing could be seen on the reverse owing to the presence of corrosion products. Although partly visible the obverse legend could not be read.

A highly corroded copper alloy coin of early 4th century date, 14mm in diameter, from layer (2014). The obverse is barely legible as a bust however on the reverse the lower part of two soldiers and two standards can be discerned indicating the coin is a GLORIA EXERCITUS issue (330-5). No legend or mint mark could be seen.

A copper alloy minim9mm diameter, with elements of a radiate 3rd century coin on its obverse and a standing/dancing figure on the reverse, the die for both faces was larger than the flan was recovered from the topsoil.

A copper alloy coin 12mm diameter, bearing a 4th-century bust on one face and illegible on the reverse was recovered from the topsoil. No inscription survived.



Roman coins (2nd to 4th century AD) (Scale 10mm divisions) Fig 15

### **Brooch**

A late La Tene three coil style brooch (Fig 16) dating to the 1st century AD was recovered from the fill (2019) of ditch 2021. This plain example was near complete although the end of the pin was missing.



Late La Tene three coil style brooch from ditch 2021 (Scale 50mm) Fig 16

### **Iron**

The head of an iron stud of oval shape 30 x 26mm across and slightly domed was recovered from layer (2014). On the concave underside there was a trace of the centrally positioned rectangular tang (9 x 6mm).

An iron rod with a generally square cross section, 74mm long and 5mm across, was recovered from the fill (2032) of the mortuary enclosure ditch 2034. For part of its length it appears to swell to about 10mm across but this may be entirely the result of corrosion products. The piece is likely to be the shank of a nail although it could possibly be a stylus if the swelling is not the result of corrosion.

### **Copper alloy**

A small lobed fragment of thin copper alloy sheet (13 x 12mm) of uncertain function/origin was recovered from the topsoil.



## 6 FAUNAL AND ENVIROMENTAL EVIDENCE

### 6.1 Animal bone by Philip Armitage

This report presents the results of an analysis of a small assemblage of animal bones recovered from Roman contexts at the site, with the majority of specimens from ditch deposits (19 contexts) and the remainder from pits (3), gullies (2), a layer and a driveway.

#### ***Numbers of identified specimens present (NISP) and species represented***

The hand-collected assemblage from the combined deposits totalled 234 specimens of which 131 (56%) are identified to species and anatomy (Table 5) and 103 (44%) remain as unidentified fragments (Table 6). Apart from 64 elements from the skeletal remains of a small dog (2110 fill of pit 2111) (Table 11) there are only two other identified specimens from the sieved samples: 1 dog mandible (2127 fill of ditch 2128) and 1 common frog humerus (2132 fill of ditch 2133). Owing to the very high degree of fragmentation/pulverisation of the unidentifiable fraction from each of the sieved samples a precise quantification of this material is unfeasible, but is estimated at well over 208 fragments.

Five mammalian and one amphibian species are represented: horse *Equus caballus* (domestic); cattle *Bos* (domestic); sheep *Ovis* (domestic); pig *Sus* (domestic); dog *Canis* (domestic); common frog *Rana temporaria*. No bones of bird, fish or reptile are present.

*Table 5: Summaries of anatomical distribution of the species represented*

<b>Bone type</b>	<b>horse</b>	<b>cattle</b>	<b>sheep</b>	<b>pig</b>	<b>dog</b>	<b>Totals</b>
horn core	-	3	-	-	-	3
skull	-	1	1	1	-	3
premaxilla	-	1	-	-	-	1
maxilla	-	-	-	1	-	1
mandible	-	3	6	-	1	10
incisor	-	-	-	1	-	1
upper cheekteeth	1	-	1	-	-	2
lower cheekteeth	1	1	-	-	-	2
atlas	-	1	-	-	-	1
cervical	-	3	-	-	-	3
thoracic	-	1	-	1	-	2
lumbar	-	2	-	-	-	2
rib	-	10	2	2	-	14
scapula	-	4	-	-	-	4
humerus	-	2	2	-	-	4
radius	-	4	3	-	-	7
carpal	-	1	-	-	-	1
metacarpus	-	2	-	1	-	3
innominate	-	1	2	-	-	3
femur	-	4	1	-	-	5
tibia	-	4	4	-	-	8
calcaneum	-	-	-	1	-	1
astragalus	-	2	-	-	-	2
tarsal	1	-	-	-	-	1
os centrotarsale	-	1	-	-	-	1
metatarsus	-	5	2	-	-	7
metapodial	2	1	-	-	-	3
phalanx II	-	2	-	1	-	3
long bone shaft frag	-	16	17	-	-	33
<b>Totals</b>	<b>5</b>	<b>75</b>	<b>41</b>	<b>9</b>	<b>1</b>	<b>131</b>

*Table 6: Summary counts of unidentified bone fragments*

cattle-sized fragments	19
sheep/goat-sized fragments	12
indet.scrappy fragments mammal bones	41
very small/extremely scrappy frags	31
<b>Totals</b>	<b>103</b>

**Methodology**

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

Excel spreadsheets showing the complete sets of recorded anatomies for each of the species by context are held in the site archive.

**Description and preservation***Taphonomy and condition of the bone*

The general condition/state of preservation of the hand-collected bones is assessed as mostly fair (moderate) to good but with relatively high numbers of fragment material. Clear evidence of chopping is restricted to four cattle bones (listed below) and therefore the assemblage offers limited insight into butchering techniques. The chopped horn core from 2011 however possibly represents waste from horn working. Seven cattle long-bone shafts (listed below) exhibit spiral fracturing indicating these bones had been smashed open to extract the marrow. There are two dog-gnawed elements: a sheep/goat tibia shaft (2011 fill of ditch 2013) and a cattle innominate bone (2131 fill of ditch 2133). A cattle metatarsal bone from 2019 fill of gully 2021 has an irregular edged circular hole bored in the proximal articular surface. It is unclear whether this modification had been anything to do with butchery practice or is evidence of bone-working.

*Table 7: Cattle bones showing evidence of chopping*

Context/feature	Element(s)	Evidence
2011/ ditch 2013	rib	blade chopped transversely
2022/ ditch 2024	horn core	chopped through the base
2045/ ditch 2047	astragalus	axial chop
2048/ ditch 2050	tibia	repeated superficial chop marks

*Table 8: Cattle long-bone shaft pieces showing evidence of spiral fracturing/breakage*

Context/feature	NISP
2042/ ditch 2044	5
2048/ ditch 2050	1
2121/ ditch 2123	1

Apart from a single burnt/calced sheep/goat long-bone shaft from 2019 fill of gully 2021 the only other examples of burnt material are eight extremely small calced fragments from two sieved samples: 4 from 2127 ditch 2128 and 4 from 2132 ditch 2133.

*Anatomical (body part) distribution and Articulating/Associated Bone Group (ABG)*

In general, all body parts are well represented by the disarticulated anatomical distributions of the food animals (Table 5) which is indicative of the disposal of waste from local slaughtering, butchering and consumption of the cattle, sheep and pigs. The presence of the partial skeleton (ABG) of a small dog (2110<37> fill of pit 2111) (see Table 12) is noteworthy and this animal may originally have been disposed of as a complete carcass but owing to post-depositional processes and disturbances there was a loss of certain elements, with the surviving elements very much broken/fragmented.

*Descriptions of the species identified*

**Horse** - An upper second premolar tooth (2101 fill of gully 2102) is just coming into wear, indicating it came from a young horse aged 4 1/2 to 5 years at time of death.

**Cattle** - Using eruption and wear patterns in the lower cheek teeth (criteria of Simonds 1854 and Bond & O'Connor 1999: 346) two cattle mandibles were aged as follows:

*Table 9: Eruption and wear patterns in the lower cheek teeth of cattle*

Context/feature	Wear stage	Suggested age
2045/ ditch 2047	A3	5 to 8 years
2051/ ditch 2044	E	elderly, over 8 years

In the cattle mandible from 2045 the third cusp of the lower third molar is absent/not developed, a congenital condition often seen in many Roman cattle jawbones.

Stature in one of the cattle was determined from the greatest length measurement (GL = 239 mm) taken on its radius (2072 fill of ditch 2076) employing the methodology of Matolsci 1970: withers height was calculated at 1.03 m. This small animal contrasts to a much larger, more robust ox represented by a radius from 2106 fill of ditch 2107, whose proximal breadth (Bp = 88.1 mm) approaches the size of the radius of the massive oxen (Bp = 91 mm) recorded at Vindolanda by Hodgson (1977:20).

**Sheep** - Using the eruption/tooth wear criteria of Payne (1973) the ages of four sheep mandibles were determined as follows:

*Table 10: Eruption and tooth wear in sheep*

Context/feature	Wear stage	Suggested age
2034/ ditch	C	6 to 12 months
2041/ ditch 2044	H	6 to 8 years
2045/ ditch 2047	F	3 to 4 years
2127/ ditch 2128	G	4 to 6 years

**Pig** - A pig metacarpal bone III from ditch cut 2034 has moderate exostoses of the lateral and medial surfaces of the shaft.

**Dog** - Two very small dogs are represented among the sieved samples: 1 mandible from 2127 fill of ditch 2128 and a part-complete skeleton (ABG) from 2110 fill of pit 2111. The later animal was of the straight limbed, non-chondrodystrophic toy/midget morphotype (as defined by Baxter 2010a) comparing with specimen THZ 1441 from Thistleton, Rutland, and differing from the bowed legged dwarf hounds from Aston Clinton site AYBCM.2011.223 and York Road, Leicestershire (Table 12).

Table 11: Associated bone group (ABG) of a small adult lapdog

Bone element	Right		Light
mandible	1	-	1
canine	-	1	-
teeth	-	16	-
indet.vertebral frag	-	1	-
humerus	1	-	1
radius	1	-	-
innominate	1	-	-
femur	1	-	-
tibia	-	-	1
metapodial	-	12	-
phalanx I	-	8	-
phalanx II	-	9	-
phalanx III	-	9	-
<b>Totals</b>	<b>5</b>	<b>56</b>	<b>3</b>

Table 12: Comparative measurements of small dogs

Measurements (mm)/ Specimens (a)	New water main AYBCM.2012.87 (2110) pit 2111	Aston Clinton AYBCM.2011.223 (9191) pit 9194	Thistleton Rutland THZ 1441	York Rd Leics
<b>Mandible:</b>				
1st molar - length	16.2	16.9	16.0	19.7
1st molar - breadth	6.4	6.6	6.2	8.0
<b>Postcranials:</b>				
humerus -distal breadth (width) Bd	18.8	no data	20.2	22.8
humerus -min.shaft width SD	6.6	no data	6.7	8.6
radius - distal breadth (width) Bd	12.8	13.8	no data	16.5
radius - min.shaft width SD	6.5	7.6	no data	10.0
femur - distal breadth (width) Bd	16.5	18.9	no data	21.7
tibia - min.shaft width SD	7.1	no data	no data	9.8
withers height (mm)	no data	240mm	320mm	270mm
<b>type</b>	<b>toy/midget</b>	<b>dwarf hound</b>	<b>toy/midget</b>	<b>dwarf hound</b>

**(a) Specimens:**

AYBCM.2012.87 - New Watermain, Aston Clinton (Armitage)

AYBCM.2011.223 - Aston Clinton (Armitage 2012)

THZ 1441 - Thistleton, Rutland (Baxter 2010)

York Rd, Leicester - (Baxter 2006 &amp; 2010a)

**(b) Type (after classification of Baxter)**

toy/midget: non-chondrodystrophic midget dog - straight limbed

dwarf hound: chondrodystrophic dwarf hound - bowed legs

### ***Conclusions and Discussion***

Although it would be unwise to draw too many conclusions from such a small assemblage, it seems the animal bone evidence points to the existence of a local pastoral economy based primarily on cattle and sheep, with pigs of secondary importance. The presence of a young horse at the site may indicate local horse breeding. Horses would have been important to the livestock enterprise, and played an invaluable role during the movement of cattle and sheep between grazing areas and paddocks. Of particular interest is the presence of two small dogs, which may have been household pets or perhaps employed in eradicating rodent vermin.

## **6.2 Human bone** by Sarah Inskip

The human skeletal material from the two cremation burials was examined following the Institutes for Archaeology's *Guidelines to the Standards for Recording Human Remains* (Brickley and McKinley 2004) and English Heritage's *Human Bones from Archaeological sites: A Guideline for Producing Assessment Documents and Reports* (Mays, Brickley and Dodwell 2002). The material was received washed and dried. Large fragments of extraneous material were recorded including fragments of stone and animal bone.

### ***Weight and fragmentation***

Many modern cremation studies have established that between 1-3kg of bone should be expected from a complete adult cremation (McKinley 1997, 68, Mays 2010, Trotter and Hixon 1974). Results also demonstrated that individuals over 3 years can produce around 0.5kg of material. In order to assess completeness of the cremated deposits, the bone was weighed to the nearest 1g.

The degree of bone fragmentation dictates how much will be identifiable; the smaller the bone fragment, the less likely it is to have distinguishing features. In addition, the degree of fragmentation may imply whether the remains were processed in anyway after cremation. To assess fragmentation, the cremated deposits were passed through 10 mm, 5mm and 2mm sieves. Each sieved fraction was recorded and weighed. The material was subsequently sorted into elemental groups; skull, long bones, axial skeleton and unidentifiable and then weighed. The largest fragment was measured to the nearest 1mm using sliding digital callipers.

As it is not uncommon to find multiple individuals in a single cremated deposit, attention was paid to unique skeletal landmarks that appear once in the human body (e.g. axis dens). Obvious differences in the age of remains were also noted (e.g. a deciduous tooth with a fused sternal clavicle end will likely represent two individuals).

### ***Pyre conditions***

The colour of cremated bone is indicative of pyre conditions with white bone produced by temperatures in excess of 650°C (Mays 2010, 322) with ample oxygen. Conditions below this result in bone fragments of varying shades of grey, blue and brown fragments. Black bone is produced by poor oxygen levels and temperatures around or below 350°C (Mays 2010, 322). Variation in pyre conditions over the body may be detected through variation in fragment colour throughout the skeleton. As such, the colour of each cremated deposit was recorded as a whole and also by elemental group.

### ***Results***

Table 13 presents the colour, total weight, sieved fraction weights and longest fragment size for the two cremated deposits. Like the three cremated deposits previous excavated in Aston Clinton (Inskip n.d), based on the weight data from various studies, both cremated deposits appear underweight, and therefore incomplete for an adult individual.



*Table 13: Weight (g) and colour of the two cremated deposits from Aston Clinton*

<b>Sieve Fraction sizes</b>	<b>Fill 2030 Pit 2031</b>	<b>Fill 2027 Pit 2028</b>
10mm	240g	42g
5mm	410g	89g
2mm	187g	60g
<b>Total weight</b>	837g	191g
<b>Longest fragment</b>	50mm	53mm
<b>Colour</b>	20% white 60% grey-blue 20% black	75% white 20% grey-blue 5% black

Table 14 demonstrates that all areas of the skeleton were represented in both deposits. In reference to the deposit 2030, even teeth and the small bones of the hands and feet were recovered (see Table 15). While there appears to be a deficit of elements from the axial skeleton, the bones which make up this area largely consist of spongy bone that is prone to disintegration over time and on excavation (McKinley 1997). This suggests that significant effort was made to recover most of remains from the pyre. Considering the proportions of the skeleton that each elemental group constitute, there does not appear to be any bias in the recovery of skeletal elements from the pyre in either deposit.

*Table 14: Skeletal elements by weight (g)*

<b>Skeletal element</b>	<b>Fill 2030 Pit 2031</b>	<b>Fill 2027 Pit 2028</b>
Skull	112g	25g
Limbs	345g	63g
Hands/feet	16g	3g
Axial	18g	13g
Unidentified	340g	117g

### **Pyre conditions**

Cremated deposit 2030, pit 2031 is largely grey in colouration (Table 13) with some white and a few fragments of black bone. Cremated deposit 2027, pit 2028, is more uniform in colour with a far higher percentage of white bone. Based on the research outlined in the methods, this suggests that a temperature above 350°C was reached within the pyre for both cremations. Due to the percentage difference in white bone between the two cremated deposits, it appears that the temperatures and oxygen levels in 2027 were higher and possibly closer 650°C than the material in 2030. It is also possible that the cremation continued for longer in the case of 2027. In both deposits, bone colouration did not differ between areas of the skeleton, suggesting an even burning. While with just two deposits it is problematic to speculate whether there was or was not a standard method of cremation, colour variation also existed between the three cremated deposits previously excavated at Aston Clinton (Inskip n.d.). This may suggest variation in the cremation process but insufficient research on cremated bone colour in the Romano-British period exists either regionally or nationally to comment further.

Table 15: Identifiable skeletal elements

Deposit	Skull	Upper limb	Lower limb	Axial	Hands feet
<b>Cremation burial 2030/ 2031</b>	Molar roots, right petrous pyramid, right temporal, mandible (lingual spine), frontal, mandible, maxilla, Left temporal, parietals, occipital, upper left molar, premolar, lower molar	Ulna shaft, clavicle, radius shaft, humerus shaft, proximal radius (fused) Radius (distal shaft), distal humerus	Tibia crest, femur shaft, fibula, patella	Os coxae Ribs, vertebrae, thoracic vertebra, lumbar vertebrae, Cervical verts	Metatarsal 1, inter ph manual, lunate, metacarpal head, distal ph manual pollical, hamate, scaphoid, pedal prox phalange, pisiform
<b>Cremation burial 2027/2028</b>	Occipital, parietal, temporal (PP), left temp	Left ulna (brachialis attachment)	Tibia	ribs	Distal phalanx man x3,metatarsal head, proximal hallical phalanx

### Identifying information

The destructive nature of the cremation process means that estimating age and sex is far more problematic than when dealing with unburnt bone. Regardless it is possible to get broad estimates from looking at the stage of skeletal development and other indicators of age. In deposit 2030 a number of teeth were identified. All were adult and had completed roots. This includes a premolar, which is developmentally complete at around 12 years of age (Gustafson and Koch 1974). All of the bones were fused including the manual phalanges, which fuse at 14 years of age and the proximal radius which commences fusion at 11.5 years (Scheuer and Black 2000). The vertebral annular rings, which were fused, indicate a minimum age of 17 years (Scheuer and Black 2000). The presence of osteoarthritic changes on the apophyseal facets of cervical vertebra likely suggests that the individual was adult. While there were no definite sex indicators, the size of some of the bones and the teeth may imply that the individual was male, but this remains tentative at best.

There was less information for the individual in deposit 2027. Again the manual phalanges were fused implying an age over 14 years. It was not possible to make an assessment of sex in this individual. Some remodelled new bone growth was identified on the pleural surface of a rib fragment which may suggest the individual suffered from some form of chest infection or trauma.

### Discussion

The aim of this report was to analyse the human skeletal remains to obtain information on the individual and the cremation process. Based on skeletal development, both individuals interred at Aston Clinton appear to be adult at the time of death. The size of the remains in context 2030 suggests that the individual was probably male. Both deposits also had traces of pathology common to the Romano-British period. Individual in context 2030 had some osteoarthritic changes in the neck, while the individual in 2027 had lesions indicative of either a healed inter-thoracic infection or trauma. Both conditions identified in the nearby Aston Clinton inhumations (Inskip n.d.). Animal bones, both mammal and bird, were identified in both deposits. It is common in the Roman period for animals to be made as provisions for the afterlife (Jupp and

Gittings 1999) or as some sort of social reflection of a person, although it is also possible that the inclusion may have been fortuitous.

Great variation in cremated deposit weight is observed across England during the Romano-British period. In the case of the remains reported here, both deposits appeared to not contain enough remains to represent a complete individual. Indeed the other three cremations from Aston Clinton also appeared underweight. Importantly McKinley suggests that all cremation burials are in fact 'token' (1997). It is very rare for the entire body to be collected from the pyre. Incomplete deposition therefore may have occurred on initial burial, although it should be remembered that context 2030 was disturbed. McKinley (1997,71) indicates that if a certain quantity of bone, or group of bones had to be collected from the pyre, greater uniformity in quantity or bone type would be seen in cremated deposits.

Cremation was the dominant burial rite in Roman Britain up until the 3rd century when it began to fall out of favour. There are many small clusters of Romano-British cremations all across Buckinghamshire, including at Brickhill farm (Allen 1979), Thornborough (Johnson 1975), Wellwick farm (Zeepvat 2003) and many more locations (see Zeepvat and Radford n.d.), making the cremations at Aston Clinton not unusual for the period. There is, however, a great variation in the way individuals are treated and then buried between these sites. This raises the question over the uniformity of the cremation process regionally and temporally. At present there has been little research to assess how funerary rites relate to location, the individual buried or the time period. Focus is strongly on grave goods rather than demographic or pyre conditions. Given the number of excavated burials, exploring how rites relate to age, sex, pathology or location has huge research potential for the Buckinghamshire area.

### **6.3 Charred plant materials** by Val Fryer

Samples for the retrieval of the plant macrofossil assemblages were taken from cremation deposits, pit and ditch fills, and from the mortuary structure ditches, and nine were submitted for assessment.

The samples were bulk floated by NA and the flots were collected in a 300 micron mesh sieve. The dried flots were scanned under a binocular microscope at magnifications up to x 16 and the plant macrofossils and other remains noted are listed in Table 15. Nomenclature within the table follows Stace (1997) for the plant macrofossils and Kerney and Cameron (1979) and Macan (1977) for the mollusc shells. All plant remains were charred. Modern roots, seeds and arthropod remains were also recorded.

#### **Results**

With the exception of charcoal/charred wood fragments, which were present throughout, plant macrofossils were exceedingly scarce. Sample 33, from cremation 2031, included a single barley (*Hordeum* sp.) grain and other indeterminate grain fragments were noted within samples 36 (pit 2109), 37 (pit 2111), 38 (pit 2125) and 39 (mortuary structure ditch 2128). Individual seeds of common grassland herbs including brome (*Bromus* sp.) and an indeterminate small grass (Poaceae) were noted within samples 35 (enclosure ditch 2107) and 38, and the latter also included a single spike-rush (*Eleocharis* sp.) nutlet. Other plant macrofossils also occurred infrequently, although occasional small pieces of charred root or stem were recorded.

The fragments of black porous and tarry material were all probable residues of the combustion of organic remains (including those within the cremations) at very high temperatures. Other remains were scarce, but did include occasional pieces of bone and a small ferrous fragment.

Shells of common terrestrial and marsh/freshwater molluscs were present within all nine assemblages. Although some retained excellent coloration and detailed surface structuring, probably suggesting that they were intrusive within the feature fills, others were very bleached and abraded and were almost certainly contemporary with the contexts from which the samples were taken. Of the terrestrial species, taxa commonly found within areas of short-turfed open grassland were predominant. However, the presence of shells of marsh and freshwater species, particularly those associated with small bodies of water prone to seasonal drying, almost certainly indicated that the site was occasionally flooded, with the ditches remaining damp or wet for extended periods of time.

***Conclusions and recommendations for further work***

In summary, the recovered assemblages are small (0.1 litres in volume or less) and very limited in composition. Given that many of the features are associated with a mortuary compound this is, perhaps, not surprising, as such structures were often removed from centres of human activity and were infrequently accessed. The few plant remains which are recorded are probably derived from either the cremation deposits, or from scattered or wind-dispersed detritus. The composition of the mollusc assemblages suggests that while the structures, ditches and pits were situated within an area of predominantly open grassland, the entire site was damp or prone to seasonal flooding.

Table 16: The charred plant remains

Sample No.	32	33	34	35	36	37	38	39	40
Context No.	2027	2030	2043	2106	2108	2110	2124	2127	2132
Feature No.	2028	2031	2044	2107	2109	2111	2125	2128	2133
Feature type	Crem	Crem	Ditch	E.Ditch	Pit	Pit	Pit	S.Ditch	S.Ditch
<b>Cereals</b>									
<i>Hordeum</i> sp. (grains)	-	x	-	-	-	-	-	-	-
Cereal indet. (grains)	-	-	-	-	xfg	xfg	x	xcffg	-
<b>Herbs</b>									
<i>Bromus</i> sp.	-	-	-	-	-	-	x	-	-
<i>Galium</i> sp.	-	-	-	-	-	-	xcf	-	-
<i>Plantago lanceolata</i> L.	-	-	-	-	-	-	xcf	-	-
Small Poaceae indet.	-	-	-	x	-	-	-	-	-
<b>Wetland plants</b>									
<i>Eleocharis</i> sp.	-	-	-	-	-	-	x	-	-
<b>Other plant macrofossils</b>									
Charcoal <2mm	xxxx	xxxx	x	xxx	xxx	xxx	xxxx	x	xx
Charcoal >2mm	xx	xxx	-	x	x	x	xx	-	x
Charcoal >5mm	x	x	-	-	-	-	-	-	-
Charcoal >10mm	-	x	-	-	-	-	-	-	-
Charred root/stem	x	-	-	-	x	-	x	-	-
Indet.seeds	x	-	-	-	x	x	-	-	-
<b>Other remains</b>									
Black porous 'cokey' material	x	x	-	x	-	-	x	-	-
Black tarry material	x	x	-	x	-	-	-	-	-
Bone	-	xb	-	x	-	xx	-	x	-
Burnt/fired clay	-	-	-	-	-	-	x	-	-
Ferrous fragment	-	-	-	-	-	-	-	x	-
Small coal frags.	x	-	-	-	x	-	x	-	-
Small mammal/amphibian bones	-	-	-	x	-	x	-	-	-
<b>Mollusc shells</b>									
<b>Woodland/shade loving species</b>									
<i>Aegopinella</i> sp.	xcf	-	-	-	-	-	-	-	-
<i>Carychium</i> sp.	x	-	-	x	x	-	-	xx	x
<i>Oxychilus</i> sp.	-	-	x	-	-	-	-	-	-
<i>Trichia striolata</i>	-	x	-	-	-	-	-	-	-
<i>Vitrea</i> sp.	x	-	-	-	-	-	-	-	-
Zonitidae indet.	-	-	-	-	x	x	x	-	-
<b>Open country species</b>									
<i>Helicella itala</i>	x	-	-	-	xx	-	-	-	x
Helicidae indet.	-	-	-	-	x	-	-	-	-
<i>Pupilla muscorum</i>	xx	xx	x	-	xx	-	x	xxx	xxxx



Sample No.	32	33	34	35	36	37	38	39	40
Context No.	2027	2030	2043	2106	2108	2110	2124	2127	2132
Feature No.	2028	2031	2044	2107	2109	2111	2125	2128	2133
Feature type	Crem	Crem	Ditch	E.Ditch	Pit	Pit	Pit	S.Ditch	S.Ditch
<i>Vallonia</i> sp.	x	xx	x	x	xxx	x	xx	xxx	xxx
<i>V. costata</i>	x	x	x	x	x	x	x	x	xx
<i>V. pulchella</i>	xcf	xcf	-	-	x	-	-	-	-
<i>Vertigo pygmaea</i>	x	x	-	-	x	-	x	x	xx
<b>Catholic species</b>									
<i>Cochlicopa</i> sp.	-	-	-	x	x	-	x	x	xx
<i>Nesovitrea hammonis</i>	xcf	-	-	-	-	-	-	-	-
<i>Trichia hispida</i> group	x	x	x	xx	xxx	x	xx	xxx	xxx
<b>Marsh and freshwater obligate species</b>									
<i>Anisus leucostoma</i>	x	x	xxx	x	-	x	x	xxx	xxxx
<i>Aplexa hypnorum</i>	-	-	-	-	-	-	-	x	x
<i>Bithynia</i> sp.	-	-	-	xcf	-	-	-	-	-
<i>Lymnaea</i> sp.	x	x	x	x	x	x	x	x	x
<i>L. truncatula</i>	-	-	-	-	-	-	x	-	-
<i>Planorbis</i> sp.	-	-	-	-	-	-	-	x	-
<i>P. planorbis</i>	-	-	-	xx	-	-	-	x	x
<i>Succinea</i> sp.	-	-	x	x	-	-	-	x	-
<i>Valvata cristata</i>	-	-	-	-	-	-	x	-	-
<b>Sample volume (litres)</b>	<b>30</b>	<b>10</b>	<b>10</b>	<b>40</b>	<b>40</b>	<b>30</b>	<b>40</b>	<b>40</b>	<b>40</b>
<b>Volume of flot (litres)</b>	<b>&lt;0.1</b>	<b>0.1</b>	<b>&lt;0.1</b>	<b>&lt;0.1</b>	<b>&lt;0.1</b>	<b>&lt;0.1</b>	<b>&lt;0.1</b>	<b>&lt;0.1</b>	<b>&lt;0.1</b>
<b>% flot sorted</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

**Key to Table**

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

fg = fragment cf = compare b = burnt

Crem. = cremation E.Ditch = enclosure ditch S.Ditch = structural ditch

**6.4 Charcoal by Dana Challinor**

Wood charcoal was recovered from six samples (Table 17). Of particular interest were two early Romano-British cremation burials associated with a mortuary structure, which produced good quantities of identifiable charcoal. For comparison, samples from two pits 2109 and 2125, a ditch 2044 and the enclosure ditch 2107 were also examined, but these contained very scarce and poor material remains.

**Methodology**

For the smaller samples, 100% of the identifiable (>2mm in transverse section) charcoal was recorded, and for the richer samples a random selection of 50 fragments was analysed. This was considered adequate to show patterns of dominance and taxonomic composition, although rare minor components may not have been detected. The charcoal was fractured and sorted into groups based on the anatomical features observed in transverse section at X10 to X45 magnifications. Representative fragments from each group were then selected for further examination using a Meiji incident-light

microscope at up to X400 magnification. Identifications were made with reference to Schweingruber (1990), Hather (2000) and modern reference material. Observations on maturity were made as appropriate. Classification and nomenclature follow Stace (1997).

### Results

Seven taxa were positively identified and all were consistent with native taxa (Table 17): *Ulmus* sp. (elm), *Quercus* sp. (oak), *Corylus avellana* (hazel), *Prunus spinosa* (blackthorn), Maloideae (hawthorn group), *Acer campestre* (field maple) and *Fraxinus excelsior* (ash). The *Prunus* and *Acer* were identified to species level on the basis of ray width. The paucity of material in the non-cremation deposits precluded any examination of quantification or dominance and a key (x) has been used to demonstrate presence of taxa. The cremation deposits were significantly richer in material and in fragment size allowing patterns of composition to be identified, with dominance (X) assigned to taxa representing more than 65% of the assemblage.

The condition of the charcoal was variable, with poor preservation of material in the ditch and pit samples. There was some moderate vitrification noted in the *Fraxinus* (ash) in sample 38, and the *Quercus* (oak) in sample 33. The oak charcoal in sample 32 had characteristically split along the rays, leaving many fragments of thin slivers from which it was not possible to determine maturity. However, no tyloses were observed and in a few fragments it was possible to attribute this absence to the presence of sapwood. No complete roundwood stems were recorded, although there were some fragments with moderate to strong ring curvature (noted in Table 17 as 'r'). There was a large quantity of burnt bone, including teeth fragments, in sample 33.

Table 17: Results of the charcoal analysis

Species (common name)	Feature type	Ditch	Enclosure ditch	Pit		Cremation burial	
		2044	2107	2109	2125	2028	2031
		2043	2106	2108	2124	2027	2030
		Sample 34	35	36	38	32	33
<i>Ulmus</i> sp.	(elm)	-	-	-	-	xr	-
<i>Quercus</i> sp.	(Oak)	-	x	x	-	Xs	Xrs
<i>Corylus avellana</i>	(hazel)	-	-	-	-	x	-
<i>Alnus/Corylus</i>	(alder/hazel)	-	x	-	-	-	-
<i>Prunus spinosa</i>	(blackthorn)	-	-	-	x	-	-
Maloideae	(hawthorn group)	x	-	-	x	xr	-
<i>Acer campestre</i>	(field maple)	-	x	-	-	-	-
<i>Fraxinus excelsior</i>	(ash)	-	-	-	x	-	-
Indeterminate	bark	-	-	x	-	-	-
Indeterminate	-	x	-	x	-	-	-

x=present; X=dominant; s=sapwood, r=roundwood

### Discussion

The cremation assemblages were both dominated by oak, though there is some variation between the burials. The sample examined from cremation 2031 was composed exclusively of oak, while 2028 contained four taxa. The use of oak in cremation burials is common, as it provides a high calorific fuel and strong support for the pyre structure (Gale 1997). The minor components of hazel and hawthorn type charcoal in cremation 2028 are appropriate for the type of brushwood infilling that would have formed part of the pyre structure and/or kindling. There are comparable oak-dominated examples from early Romano-British cremation burials at Toddington (Challinor, forthcoming) and Dunstable (Austin 2010), as well as further afield in Kent (Challinor 2006) and West Sussex (Gale 1997). The pit and ditch samples from Aston

Clinton were too poor to provide a useful comparative dataset, but domestic-type assemblages tend to be characterised by mixed assemblages and/or higher diversity than exhibited in cremation contexts. Of course, the pit and ditch assemblages might actually derive from cremation-related activities; either way the low quantities suggest that they are more likely to represent wind-blown or dispersed material rather than deliberate dumps of pyre or domestic debris.

The presence of elm in cremation 2028 is particularly unusual. Elm is not considered a good firewood as it burns reluctantly and smoulders, although the heartwood emits relatively good heat when enclosed (eg in stoves). It seems unlikely, therefore, to have been selected for use as fuel for a cremation, particularly since the dominance of a single taxon in charcoal assemblages suggests preferential selection. Moreover, the elm represented almost 25% of the examined charcoal which is not indicative of a minor or accidental firewood component. Elm charcoal recovered from an early Romano-British 'bustum' burial at Latton Lands, Wiltshire, was interpreted as the possible remains of a coffin or platform on the pyre (Challinor 2010) and it is reasonable to suggest that something similar may be represented here.

## 6.5 The radiocarbon determinations

*Table 18: The radiocarbon determinations*

Laboratory & Sample No.	Context	Sample details	C13/C12	Conventional Radiocarbon Age BP	Cal AD intercept 68% confidence 95% confidence
Beta-353229 ACP2027	Fill 2027 Cremation burial 2028	Charcoal <i>Corylus</i> (hazel) <0.1g	-26.2	1940+/-30	70 Cal AD 30-40 & 50-80 Cal AD <b>0-130 Cal AD</b>
Beta-353231 ACP2030	Fill 2030 Cremation burial 2031	Charcoal <i>Quercus</i> (oak) 0.3g	-24.4	1920+/-30	80 Cal AD 60-90, 100-120 Cal AD <b>20-130 Cal AD</b>

Laboratory: Beta Analytic, Miami, Florida, USA  
Calibration: INTCAL09 Radiocarbon Age Calibration

## 7 DISCUSSION

The fieldwork carried out along the pipeline comprised a strip, map and record and area excavation and has added new sites to the archaeological record. The features examined can be only partially understood as no complete site plan has been obtained.

The most substantial area examined was at the compound area in Field 3 which recorded activity from the middle Iron Age to the 4th century AD whereas other sites along the pipeline were defined by single ditches or trackways dating from the 2nd century AD.

### Iron Age

Middle/late Iron Age settlement activity was recorded at the compound area with the construction of a shallow ditched sub-square enclosure with internal divisions. The area was extensively modified when the enclosure went out of use within the middle to late Iron Age and was replaced by a substantial ditch. The ditch may have formed a boundary to a ditched enclosure or landscape boundary. The ditch was wider and deeper, indicating intensification in the development of the landscape during this period with possibly a fundamental shift in settlement organisation with the expansion of existing areas and onto areas that were previously viewed as marginal land. This coincides with the development of the wider regional landscape at this time, by the middle/late Iron Age at the latest there is ample evidence suggesting that large tracts of the Buckinghamshire landscape had been cleared of woodland and an open grassland environment predominated (Kidd 2007). Activity on the site appears to have continued through to the late Iron Age with late Iron Age pottery and a la Tene brooch recovered from the upper fills of the ditches.

Other middle/late Iron Age sites within the wider landscape included pits and two conjoining ovoid enclosures, along with cultivation ditches, one kilometre to the east at the Arla dairy site (Simmonds and Walker 2013) and at Alyesbury three kilometres to the west the outcrop of Portlandian limestone underlying the historic core of the town was occupied by a hillfort. Sites recorded along the route of the A41 Aston Clinton bypass recorded activity within the wider landscape from the late Bronze Age continuing to the Saxon period. (RPS Sites A, B and D)

### Romano-British

There was a re-organisation of the landscape during the late 1st to early 2nd century AD at the compound site (Field 3) with the construction of a ditched enclosure. Its full extent was not present within the excavation area but it was probably sub-rectangular shaped and used to contain livestock. A small number of internal features were present within the enclosure including a dog burial, an isolated pit, posthole and a tile-lined pit. The re-use of *pedalis, tegulae* tile within the pit suggests that there was substantial building within the vicinity that was either destroyed or re-modelled during the 2nd century AD.

The enclosure is contemporary with the more extensively investigated Arla Foods dairy site 1km to the east, where enclosures, burials and structures dating from the 1st-4th centuries AD. Although the area was on slightly higher ground it appears to have had similar problems with seasonal flooding and water management issues.

To the east of the enclosure was a mortuary enclosure. It took the form of sub-square enclosure 4.50m wide, defined by an uninterrupted U-shaped ditch. Pottery dating to the 2nd to 3rd centuries recovered from the ditch suggests it remained open into the 3rd century AD. No burials were present within the enclosure but two satellite cremation burials, containing the cremated remains of adults were located to its north.

These are radiocarbon dated to the mid-1st to early 2nd centuries AD, suggesting that the mortuary enclosure was constructed mid to late 1st century AD

Within the wider landscape were two trackways located to the south-west of the enclosures. They would have been used to move people, livestock and goods from the major road system into the rural environment and move livestock between seasonal pastures. The north-west to south-east alignment of the trackways is mirrored at other sites of a similar date such as Coldharbour Farm (Bonner *et al* 1997), Watermead roundabout (Dalwood and Hawkins 1988) and RPS site B, at these sites the trackways flanked regular ditched enclosures, this may be the case with Trackway A possibly flanking the Roman enclosure at the compound site. Trackway B was located a gravel terrace above a former watercourse active at the same time. Both trackways were orientated towards the Roman road of Akeman Street to the south-east suggesting they may have linked with the principal Roman road, part of the regional road and communication network.

The archaeological sites recorded along the route of the pipeline and within the compound area mirror those within the wider region demonstrating that the agricultural exploitation of the claylands was much more prevalent in the Iron Age and Romano-British period than previously thought. The sites along the pipeline appear to indicate a pastoral economy, based on cattle and sheep, with pig's secondary, possibly exploiting the land on a seasonal basis. The environmental evidence supports this, showing the area at the compound site was open grassland and the presence of mollusc shells of marsh and freshwater species, particularly those associated with small bodies of water prone to seasonal drying, indicated that the site was situated within an area that was damp or prone to seasonal flooding.

The area appears to have been abandoned during the 3rd century AD, possibly due to the marginal nature of the ground. It appears it was not re-occupied until the medieval period when the area was put under the plough with the open field system.



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## APPENDIX: CONTEXT INDEX

<b>Context</b>	<b>Context type Feature &amp; type</b>	<b>Description</b>	<b>Dimensions</b>	<b>Artefacts/ Samples</b>
1001	Topsoil	Mid brown sandy clay	0.19m thick	
1002	Subsoil	Mid orange-brown sandy clay	0.18m thick	
1003	Natural	Dark orange-brown clay		
(1004)	Fill of 1405	Mid grey-blue sandy clay	0.3m thick	Roman pottery
[1005]	Boundary Ditch	Linear, NW-SE moderate break of slope concave sides, flat base, Fill (1004)	1.0m wide 0.3m deep	
(1006)	Fill of [1007]	Mid grey-blue sandy clay	0.38m deep	Roman pottery
[1007]	Re-cut of Ditch	Linear, N-S, sharp slope with concave sides and flat base. Fill (1006)	0.75m wide 0.38m deep	
(1008)	Fill of [1009]	Mid brown-grey sandy clay	0.1m thick	
[1009]	Cut of Ditch	Linear, N-S, E side truncated, W side sharp break of slope to concave side and flat base. Fill (1009)	0.36m wide 0.1m deep	
(1010)	Fill of [1011]	Dark grey-brown sandy clay	0.4m deep	Animal bone, Shell
[1011]	Cut of Drove way (E side)	Linear, N-S, sharp break of slope to concave sides and flat base	0.6m wide 0.4m deep	
(1012)	Fill of [1013]	Mid blue-grey sandy clay	0.19m deep	Roman pottery
[1013]	Cut of E boundary drove way	Linear, N-S, moderate break of slope to concave sides and flat base. Fill (1012)	0.7m wide 0.19m deep	
(1014)	Fill of [1015]	Light grey sandy silt	0.5m deep	Roman pottery
[1015]	Cut of Palaeochannel	Linear, N-S, flat base. Fill (1014)	0.5m deep	
(1016)	Fill of (1017)	Mid Grey-brown sandy clay	0.25m deep	
[1017]	Cut of ditch	Linear, NE-SW, moderate break of slope to concave sided and flat base. Fill (1016)	0.6m wide 0.25m deep	
(1018)	Fill of [1019]	Mid Grey-brown silty clay	0.07m deep	
[1019]	Cut of ditch	Linear, E-W, shallow truncated U-shaped, flat base. Fill (1018)	0.57m wide 0.07m deep	
(1020)	Fill of [1021]	Mid Grey-brown silty clay	0.26m deep	
[1021]	Cut of ditch	Linear (terminus), N-S, steep U shaped, flat base. Fill (1020).	0.64m wide 0.26m deep	
(1022)	Fill of [1023]	Mid Grey-brown orange silty clay	0.37m deep	
[1023]	Cut of Tree Bowl	Sub-circular, irregular edge and base. Fill (1022)	0.81m wide 0.37m deep	
(1024)	Fill of [1025]	Mid Grey-brown silty clay	0.32m deep	

<b>Context</b>	<b>Context type Feature &amp; type</b>	<b>Description</b>	<b>Dimensions</b>	<b>Artefacts/ Samples</b>
[1025]	Cut of ditch	Linear, N-S, steep sided, V-shaped, base sloped to S. Fill (1024)	0.61m wide 0.32m deep	
(1026)	Fill of [1027]			
[1027]	Cut of ditch	Fill (1026).		

<b>Context</b>	<b>Context type Feature &amp; type</b>	<b>Description</b>	<b>Dimensions</b>	<b>Artefacts/ Samples</b>
2000 (structure group)	Mortuary Structure	Square feature defined by V-shaped ditches [2053] [2034] + cremation pits [2028] [2031]		
2001	Topsoil	Dark Grey clay loam	0.3-0.4m thick	
2002	Subsoil	Mid Grey clay loam	0.15m thick	
2003	Natural	Light Grey chalky clay		
2004	Layer	Mid Grey chalky clay		
[2005]	Cut of natural hollow	Apsidal, N-S, shallow sloped sides, irregular base. Fill (2006)	0.18m deep	
(2006)	Fill of [2005]	Mid Dark Grey chalky clay		
[2007]	Cut of natural hollow	Oval, E-W, shallow sloped sides, flat base. Fill (2008)	1.9m wide 0.22m deep	
(2008)	Fill of [2007]	Mid dark Grey chalky clay		Roman pottery
[2009]	Cut of natural hollow	Linear, N-S, shallow sloped sides, flat but irregular W end. Fill (2010)	1.4m wide 0.17m deep	
(2010)	Fill of [2009]	Mid dark Grey chalky clay		
(2011)	Fill of [2013]	Dark Grey silty clay	0.56m deep	Roman Pottery, Animal bone
(2012)	Fill of [2013]	Dark Grey silty clay	0.24m deep	
[2013]	Cut of ditch	Linear, N-S, steep V-shaped, narrow + flat base. Fills (2012) (2011)	1.84m wide 0.80m deep	
(2014)	Layer, spread of material	Dark Grey silty clay	0.08m deep	Small Find 10, Roman pottery, Animal bone
[2015]	Cut of ditch	Linear, NW-SE, sloped sides. Fill (2016)	0.6m wide 0.27m deep	
(2016)	Fill of [2015]	Mid dark grey chalky clay		
[2017]	Cut of ditch	Linear, NE-SW, sloped sides 45 degrees, flat with slight concave base	1.10m wide 0.37m deep	
(2018)	Fill of [2017]	Mid dark grey-brown chalky clay		
(2019)	Fill of [2021]	Mid grey silty clay	1.55m wide 0.20m deep	Roman pottery, Animal bone. Small finds 5, 9 and 3



<b>Context</b>	<b>Context type Feature &amp; type</b>	<b>Description</b>	<b>Dimensions</b>	<b>Artefacts/ Samples</b>
(2020)	Fill of [2021]	Mid Grey silty clay	0.72m wide 0.06m deep	
[2021]	Cut of Gully	Linear, E-W, edge slope 35 degrees, V shaped, flat base sloping to W. Fills (2019) and (2020)	1.55m wide 0.26m deep	
(2022)	Fill of [2024]	Dark Grey silty clay	2.2m wide 0.42m deep	Roman pottery, Animal bone
(2023)	Fill of [2024]	Dark Grey silty clay	0.80m wide 0.09m deep	
[2024]	Cut of ditch	Linear, N-S, steep sides V shaped, flat base sloping to N. Fills (2022) (2023)	2.2m wide 0.51m deep	
[2025]	Cut of ditch	Linear (slightly sinuous) N-S, shallow sloped sides, concave base. Fill (2026)	0.3m wide 0.1m deep	
(2026)	Fill of [2025]	Mid Grey silty chalky clay		
(2027)	Fill of Cremation	Dark black-grey silty clay	0.20m wide 0.10m deep	Cremated bone. Sample 32
[2028]	Cut of Cremation	Circular, steep (50 degrees) sided, rounded base. Fill (2027)	0.20m wide 0.10m deep	
(2029)	Fill of Cremation	Light white-grey clay	1.65m wide 0.05m deep	
(2030)	Fill of Cremation	Dark black silty clay	1.65m wide 0.15m deep	Cremated bone. Sample 33
[2031]	Cut of Cremation, loc. to N of 2000	Sub-rectangular, E-W, E side slope 30 degrees, W side slope 20 degrees, flat base. Fills (2030) (2029)	1.65m wide 0.20m deep	
(2032)	Fill of [2034]	Dark Grey silty clay	0.88m wide 0.26m deep	Roman pottery, animal bone, Shell. Small Find 11.
(2033)	Fill of [2034]	Mid Grey silty clay	0.56m wide 0.10m deep	
[2034]	Cut of Ditch within group 2000	NE Corner of Square linear, steep (45-50 degrees) sides, flat base sloping down to N and E. Fills (2032) (2033)	0.88m wide 0.36m deep	
(2035)	Fill of [2037]	Dark Grey silty clay	0.64m wide 0.27m deep	
(2036)	Fill of [2037]	Mid Grey silty clay	0.28m wide 0.08m deep	
[2037]	Cut of ditch	Linear, NW-SE, half-excavated – SW edge U-Shaped sloping at 35-40 degrees, uneven base. Fills (2036) (2035)	0.64m wide 0.35m deep	
(2038)	Fill of [2039]	Mid grey silty clay	0.26m wide 0.04m deep	

<b>Context</b>	<b>Context type Feature &amp; type</b>	<b>Description</b>	<b>Dimensions</b>	<b>Artefacts/ Samples</b>
[2039]	Cut of Gulley	Linear, E-W, v. shallow edges slope at 15-20 degrees, flat base. Fill (2038)	0.26m wide 0.04m deep	
(2040)	Fill of [2043]	Mid grey silty clay	0.82m wide 0.20m deep	
(2041)	Fill of [2043]	Dark grey silty clay	1.05m wide 0.54m deep	Roman Pottery, Title, animal bone
[2042]	Cut of ditch	Linear, E-W, straight sides sloping at 40-50 degrees, slight curved base. Fills (2041) (2040)	1.05m wide 0.54m deep	
(2043)	Fill of [2044]	Mid/Dark grey silty clay	0.80m wide 0.72m deep	Iron Age pottery, animal bone
[2044]	Cut of ditch	Linear, E-W, Straight sides sloping approx. 40-50 degrees, slight curve to base. Fill (2043)	0.80m wide 0.72m deep	
(2045)	Fill of [2047]	Dark grey silty clay	1.30m wide 0.38m deep	Iron Age Pottery, animal bone
(2046)	Fill of [2047]	Light/mid chalky grey chalky clay	1.10m wide 0.16m deep	
[2047]	Cut of ditch	Linear, NW-SE, straight sides sloping 40-50 degrees, flat but uneven base. Fills (2046) (2045)	1.30m wide 0.54m deep	
(2048)	Fill of [2050]	Dark grey silty clay	1.80m wide 0.48m deep	Iron Age Pottery, animal bone
(2049)	Fill of [2050]	Light/Mid chalky grey silty chalky clay	1.05m wide 0.17m deep	
[2050]	Cut of enclosure ditch	Linear, N-S, straight sides measure approx. 50 degrees, flat but uneven base. Fills (2049) (2048)	1.80m wide 0.67m deep	
(2051)	Fill of [2053]	Dark Grey silty clay	1.12m wide 0.36m deep	Roman pottery
(2052)	Fill of [2053]	Mid Grey silty clay	0.39m wide 0.11m deep	
[2053]	Cut of ditch within group 2000	Corner of Square linear, U shaped sides measuring 45-50 degrees, flat base sloping down to E and N. Fills (2052) (2051)	1.12m wide 0.47m deep	
(2054)	Fill of [2055]	Light Grey silt clay	5.50m wide 0.16m deep	
[2055]	Cut of natural hollow	Circular, E-W, E side steep (40 degrees) W side shallow (10 degrees), flat base. Fill (2054)	5.50m wide 0.16m deep	
(2056)	Fill of [2057]	Light grey/white silty clay	5.70m wide 0.17m deep	

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[2057]	Cut of natural hollow	Circular, E-W, E side steep (35 degrees) W side shallow (20 degrees), flat base. Fill (2056)	5.70m wide 0.17m deep	
(2058)	Fill of [2059]	Light grey/white silty clay	2.50m wide 0.20m deep	
[2059]	Cut of natural hollow	Circular, E-W, E side 30 degrees, W side 25 degrees. Rounded base. Fill (2058)	2.50m wide 0.20m deep	
(2060)	Fill of [2062]	Dark Blackish-Grey silty clay		Roman Pottery, animal bone
(2061)	Fill of [2062]	Mid Blackish-Grey silty clay		
[2062]	Cut of Ditch	Linear, E-W, steep edged V shaped, Flat base sloping down to E. Fills (2061) (2060)		
(2063)	Fill of [2064]	Dark Grey silty clay	0.80m wide 0.08m deep	Roman pottery
[2064]	Cut of Gully	Linear, N-S, Shallow U shaped, Flat base sloping to S. Fill (2063)	0.80m wide 0.08m deep	
(2065)	Fill of [2067]	Dark Grey silty clay		Roman pottery
(2066)	Fill of [2067]	Mid Grey silty clay		
[2067]	Cut of Posthole	Circular, steep edged (75-80 degrees) rounded base. Fills (2066) (2065)	0.2m deep	
(2068)	Fill of [2069]	Light/mid chalky grey chalky clay	0.8m wide 0.23m deep	Iron Age pottery
[2069]	Cut of Ditch	Linear, NW-SE, NE slopes 35 degrees, SW slope 40 degrees, rounded base. Fill (2068)	0.8m wide 0.23m deep	
(2070)	Fill of [2071]	Light/Mid chalky grey silty chalky clay		
[2071]	Cut of Ditch	Linear, N-S, E side slope 35 degrees, W side hits limit of excavation. Fill (2070)		
(2072)	Fill of [2076]	Very dark grey silty clay	1.03m wide 0.20m deep	Roman Pottery, animal bone, grinding stone Small Find 12
(2073)	Fill of [2076]	Mid-Dark grey-green silty clay	1.16m wide 0.36m deep	
(2074)	Fill of [2076]	Light chalky grey-white silty chalk	1.70m wide 0.48m deep	
(2075)	Fill of [2076]	Dark grey silty clay	1.48m wide 0.42m deep	
[2076]	Cut of Enclosure Ditch	Linear, N-S, straight sides (approx. 50-60 degrees), flattened base. Fills (2075) (2074) (2073) (2072)	1.91m wide 0.86m deep	

<b>Context</b>	<b>Context type Feature &amp; type</b>	<b>Description</b>	<b>Dimensions</b>	<b>Artefacts/ Samples</b>
(2077)	Fill of [2078]	Mid grey silty clay	0.57m wide 0.11m deep	
[2078]	Cut of ditch	Linear, NW-SE, shallow U shaped, flat base sloping down to NE. Fill (2077)	0.57m wide 0.11m deep	
(2079)	Fill of [2080]	Mid/Dark grey brown silty clay	1.02m wide 0.20m deep	
[2080]	Cut of gully	Linear, N-S, slightly uneven sides measuring 40-50 degrees, flat but uneven base. Fill (2079)	1.02m wide 0.20m deep	
(2081)	Fill of [2082]	Dark grey-brown silty clay	0.9m wide 0.36m deep	Roman pottery
[2082]	Cut of ditch	Linear, NW-SE, straight sides approx. 40-50 degrees, slight curved base. Fill (2081)	0.90m wide 0.36m deep	
(2083)	Fill of [2084]	Light mid grey-white silt clay	2.40m wide 0.20m deep	
[2084]	Cut of natural hollow	Circular, Steep sided, flat base. Fill (2083)	2.40m wide 0.20m deep	
(2085)	Fill of [2086]	Dark grey-brown clay loam	1.90m wide 0.20m deep	
[2086]	Cut of natural hollow	Sub-circular, N-S, shallow (sides 45 degrees) Flat base. Fill (2085)	1.90m wide 0.20m deep	
(2087)	Fill of [2088]	Dark grey-brown clay loam	2.50m wide 0.25m deep	
[2088]	Cut of natural hollow	Sub-circular, N-S, shallow (sides 45 degrees) Flat base. Fill (2087)	2.50m wide 0.25m deep	
(2089)	Fill of [2090]	Dark grey-brown clay-loam	2.30m wide 0.20m deep	
[2090]	Cut of natural hollow	Sub-circular, E-W, shallow (edges 45 degrees) Flat base. Fill (2089)	2.30m wide 0.20m deep	
(2091)	Fill of [2092]	Light grey-white silty clay	7.50m wide 0.20m deep	
[2092]	Cut of natural hollow	Circular, W side slopes at 25 degrees, E side cut by [2026]. Fill (2091)	7.50m wide 0.20m deep	
(2093)	Fill of [2094]	Dark Brown/Black silty clay-loam	0.50m wide 0.26m deep	
[2094]	Cut of gully	Linear, E-W, V-shaped, curved base. Fill (2093)	0.50m wide 0.26m deep	
(2095)	Fill of [2096]	Mid brown with grey mottling silty loam	0.33m deep	Iron Age pottery, animal bone
[2096]	Cut of ditch	Linear, N-S, gently sloping sides with broad base. Fill (2095)	0.33m deep	

<b>Context</b>	<b>Context type Feature &amp; type</b>	<b>Description</b>	<b>Dimensions</b>	<b>Artefacts/ Samples</b>
(2097)	Fill of [2098]	Dark Grey silty clay	1.55m wide 0.47m deep	Iron Age pottery, animal bone
[2098]	Cut of ditch	Linear, N-S, U shaped with eroded upper edges, flat base. Fill (2097)	1.55m wide 0.47m deep	
(2099)	Fill of [2100]	Mid grey silty clay	0.45m wide 0.15m deep	
[2100]	Cut of gully	Linear, SE-NW, V-shaped, curved base. Fill (2099)	0.15m deep	
(2101)	Fill of [2102]	Dark grey with light patches silty clay	0.71m wide 0.31m deep	Roman Pottery, animal bone
[2102]	Cut of gully	Linear, W-E, U shaped with sides steeper at top, flat base. Fill (2101)	0.71m wide 0.31m deep	
(2103)	Fill of [2104]	Dark brown/black silty clay loam	0.90m wide 0.20m deep	Roman Pottery, animal bone
[2104]	Cut of ditch	Linear, SW-NE, gently sloping sides with broad curved base. Fill (2103)	0.90m wide 0.20m deep	
(2105)	Fill of [2107]	Mid grey silt clay	1.15m wide 0.11m deep	
(2106)	Fill of [2107]	Dark grey-black silty clay	1.85m wide 0.50m deep	Roman pottery, animal bone. Sample 35.
[2107]	Cut of ditch	Linear, E-W, straight sides sloping at approx. 40-50 degrees, flat but uneven base. Fills (2106) (2105)	1.85m wide 0.50m deep	
(2108)	Fill of [2109]	Dark Grey silty clay	0.59m wide 0.33m deep	Roman pottery. Sample 36.
[2109]	Cut of pit	Circular, N-S, steep curved sides, U shaped, base small flat central point. Fill (2108)	0.59m wide 0.33m deep	
(2110)	Fill of [2111]	Black silty loam	0.67m wide 0.08m deep	Roman pottery, animal bone. Sample 37.
[2111]	Cut of pit (fully excavated)	Circular, E-W, Steep sides with broad flat base. Fill (2110)	0.67m wide 0.08m deep	
(2112)	Fill of [2114]	Dark grey with white mottling heavy clay	0.70m wide 0.10m deep	Roman Pottery, animal bone
(2113)	Fill of [2114]	Dark Grey heavy clay	0.70m wide 0.20m deep	
[2114]	Cut of Pit	U-shaped with steep sides, flat base. Fill (2113) (2112)	0.70m wide 0.30m deep	
(2115)	Fill of [2116]	Mid Grey with white mottling clay	0.60m wide 0.30m deep	
[2116]	Cut of enclosure gully	Linear E-W, V shaped, narrow base. Fill (2115)	0.60m wide 0.30m deep	

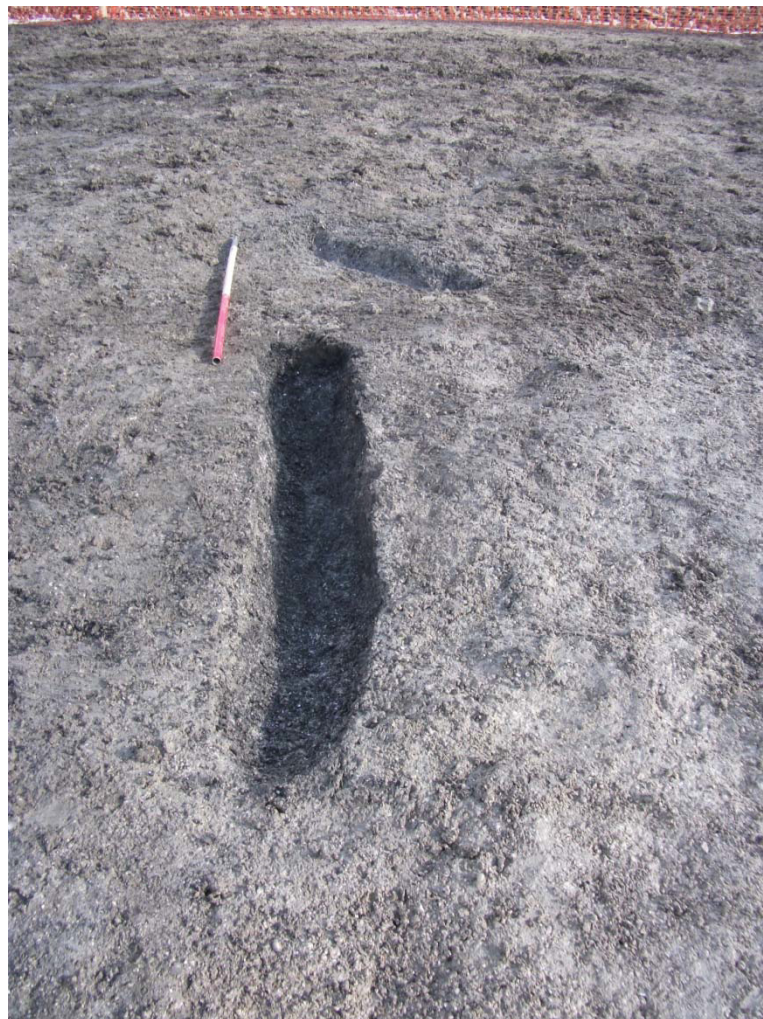


<b>Context</b>	<b>Context type Feature &amp; type</b>	<b>Description</b>	<b>Dimensions</b>	<b>Artefacts/ Samples</b>
(2117)	Fill of [2118]	Dark brown silty clay	0.47m wide 0.18m deep	
[2118]	Cut of gully	Linear, SW-NE, U-Shaped, curved base. Fill (2117)	0.47m wide 0.18m deep	
(2119)	Fill of [2120]	Dark Brown silty clay	0.50m wide 0.19m deep	
[2120]	Cut of gully	Linear, SE-NW, U-shaped, curved base. Fill (2119)	0.50m wide 0.19m deep	
(2121)	Fill of [2123]	Black silty clay	1.30m wide 0.53m deep	Roman Pottery, Bone, Daub, Brick/Tile. Small Finds 13, 14, 15 and 16.
(2122)	Fill of [2123]	Mid grey silty clay	1.30m wide 0.22m deep	Roman Pottery, Animal Bone
[2123]	Cut of Ditch	Linear, N-S, U shaped with eroded upper edges, curved base. Fills (2122) (2121)	1.30m wide 0.65m deep	
(2124)	Fill of [2125]	Dark Grey silty clay	1.19m wide 0.14m deep	Roman Pottery, Brick/Tile. Sample 38.
[2125]	Cut of pit	Circular, shallow sides with gentle slope, flat base. Fills (2126) (2124)	1.19m wide 0.14m deep	
(2126)	Fill of [2125]	Brownish-yellow silty clay with dark grey mottling	0.64m wide	Tile. .
(2127)	Fill of [2128]	V. Dark grey silty clay	1.42m wide 0.37m deep	Roman Pottery, Animal Bone Sample 39
[2128]	Cut of ditch	Corner of Linear ditch, N-S and E-W, straight sides (approx. 40-50 degrees), slightly curved base. Fill (2127)	1.42m wide 0.37m deep	
(2129)	Fill of [2130]	Light Greyish-brown clay with charcoal flecks		
[2130]	Cut of pit	Circular, U-shaped, Bowl-like base. Fill (2129)	0.20m dia 0.15m deep	
(2131)	Fill of [2133]	Black silty clay/loam	1.10m wide 0.20m deep	Roman Pottery, Animal Bone
(2132)	Fill of [2133]	Mid/Dark brown silty clay/loam	0.80m wide 0.14m deep	Sample 40
[2133]	Cut of 2000 ditch	Linear, N-S and E-W, gently sloping sides, V shaped. Broad curved base. Fills (2132) (2131)	1.25m wide 0.40m deep	



Northamptonshire County Council

# Northamptonshire Archaeology



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