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**JOHN MOORE HERITAGE SERVICES**

*Chilton*

**AN ARCHAEOLOGICAL INVESTIGATION**

**AT**

**THE BLUE CAR PARK EXTENSION,**

**RUTHERFORD APPLETON LABORATORY,  
CHILTON, OXFORDSHIRE**

**SP 4760 8600**

*On behalf of*

**Rutherford Appleton Laboratory**

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## **ABSTRACT**

*Evidence for prehistoric and Romano-British occupation was uncovered during an evaluation by John Moore Heritage Services prior to development works at Harwell. Subsequent area excavation identified a range of features dating between the first century BC and the late fourth century AD. Major boundary ditches associated with a sub-rectangular enclosure appear to have developed during the late Iron Age and, with some modification, maintained their significance into the early Roman period.*

*By the late Roman period there are signs of a break with the earlier organisation of the settlement, with the principal focus of activity shifting away from the enclosure and a slighting of the boundary ditches. Although the settlement appears to have flourished well into the fourth century it remained relatively small scale, with little evidence for any marked status differentiation. There was no indication that the occupation continued beyond the end of the fourth century AD.*

## **1 INTRODUCTION**

### **1.1 Origin of the Project**

In response to an archaeological condition appended to a planning application for the construction of a synchrotron light source at the Rutherford Appleton Laboratory, John Moore Heritage Services was commissioned to carry out an evaluation in advance of the construction work. The evaluation revealed the presence of archaeological features in two areas (Gray Jones 2002, A and B), which were considered to be of regional importance. In line with PPG 16 and Policy HE 19 of the Vale of White Horse District Local Plan a recording strategy and excavation were required to ensure the preservation by record of the site. The fieldwork, analysis and reporting of the results were to comply with an approved WSI (Written Scheme of Investigation) reflecting the requirements of a project brief supplied by the County Archaeological Services (CAS). This report covers the fieldwork undertaken in Area B.

### **1.2 Archaeological Background**

The earlier evaluation of Area A had produced a probable Bronze Age flint artefact, which was recovered from a posthole or small pit. Other flints of both the Mesolithic period and of the general Mesolithic to Bronze Age date range were found in the vicinity, which also produced pottery sherds of broadly Bronze Age date range. Another possible posthole or small pit contained a sherd of Roman pottery.

Features dating to the Roman period were discovered in the evaluation of Area B. These included two possible enclosure ditches, a number of other ditches and a series of pits and post-holes. The pottery recovered from these features suggested that Area B had been the site of a small farmstead, with occupation spanning the entire Roman period, from the middle of the first century AD to the fourth century AD. Pottery of the late second century AD was strongly represented, perhaps indicating that the main period of occupation occurred at that time (Gray Jones, April 2002).

### 1.3 The Site

The site is located on the Harwell Campus at approximately 122 metres above Ordnance Datum and was to be developed as a car park (Figure 1). The car park measured approximately 0.54 hectares in extent and was centred on SU 4785 8640. The site had been under set-aside at the time of the evaluation, which showed the geology to consist of Lower Chalk. Approximately 0.18 hectares was also excavated to the south of the car park for a drainage lagoon. A further area of 0.13 hectares extending to the east of the car park was recorded at a later date in advance of construction of a tennis court (Figure 1).

### 1.4 Project Objectives

The aim of the project was to preserve by record those archaeological features and deposits that were least likely to be disturbed by the development and sample excavate those at risk of destruction by the ground works associated with the car park and drainage lagoon. This was to be achieved by: implementing a full-scale recording strategy to deal with all significant remains at risk. In any areas of low significance, selective recording or sampling on a reduced scale would be undertaken. Provision was also made for a watching brief where appropriate. The research priorities identified in the WSI were as follows:

- To determine the form and function of the remains and, if possible, the economy of the settlement.
- 
- To investigate the development of the settlement through the Roman period.
- 
- To recover evidence relating to the development, duration and character of all of the periods represented.
- 
- To identify any earlier activity on the site and its bearing on developments during the Roman period.
- 
- To explore the relationship of the Roman settlement to others in the immediate area.

### 1.5 Methods

The methods adopted for the work in Area B are fully detailed in the WSI. In summary these involved a machine strip down to the top of chalk, which was the level of surviving archaeological deposits, under archaeological supervision. This was followed by hand cleaning of the exposed surfaces to define archaeological features prior to planning. In the car park area, where services or tree planting would disturb archaeological remains, all threatened features were recorded and excavated. Sample excavation was undertaken in the area of the drainage lagoon and in the south-western half of the tennis court area, where the ground level was to be reduced.

The site for the car park was stripped in sections, with areas being released to the contractor on completion of the recording. The area of the drainage lagoon was

stripped towards the end of the car park works and after hand cleaning of the exposed surfaces the following sampling strategy was applied:

- 25% or up to 10 metres of all linear features.
- All post-holes and 50%, by volume, of all pits.
- Full excavation of burials.
- Full excavation of kilns, hearths, etc.

## **2 DRAINAGE LAGOON EXCAVATION RESULTS**

### **2.1 Introduction**

The area of the drainage lagoon measured 0.18 hectares and lay directly to the south of the car park (Figure 2). In view of the threat posed by the ground works in this area, all of the archaeological features were recorded and excavated on the basis of the agreed sampling strategy.

### **2.2 The Late Iron Age to early Roman Periods (50 BC to early first century AD)**

#### ***Linear features***

In the south-eastern part of the excavated area three linear features all shared a broadly similar east to west alignment (Figure 2). The earliest of these was a ditch (306/310), which was up to 0.95 metres wide and 0.28 metres deep, with moderately steep sides and a rounded base (Figure 3). The ditch was traced for some 37 metres before terminating at a tree throw. The fill was composed of a firm grey-brown silty clay with chalk inclusions (305).

Ditch 306/310 was cut by a second ditch (308) running on a similar, but convergent alignment (Figure 2). This feature measured 0.58 metres wide and 0.26 metres in depth (Figure 3) and was traced to the west as far as the boundary ditch (302) where it was obscured by later cobbling. The ditch was traced for a distance of at least 60 metres. It was filled with a grey-brown silty clay (307), which produced a single sherd of pottery dating to the late Iron Age or early Roman period.

The eastern extents of ditches 306/310 and 304 lay beyond the limit of excavation (Figure 2). The eastern extent of ditch 308 was not established, but it may have been entirely truncated by a possible early Roman ditch (302). There was no direct relationship between ditches 306/310 and 304, but both pre-date the possible early Roman ditch (302).

The second group of linear features lay at the western end of the excavated area and consisted of two narrow ditches (292 and 290) running on a north to south alignment (Figure 2). Ditch 292 was at least 0.5 metres wide and 0.35 metres deep, with fairly steep sides and a rounded base. The feature was cut on its western side by ditch 290, which had a similar profile (Figure 4). Both were filled with a similar brown-grey silty clay deposit (289 and 291). The fill of ditch 290 (context 289) contained 16 sherds of late Iron Age pottery. Both features were clearly defined near the southern limit of excavation, but further to the north they were heavily truncated by ditch 297.

### ***Curvilinear features***

Two segments of a curvilinear gully (213 and 215) lay a short distance to the east of ditches 292 and 290 (Figure 2). These varied in width between 0.55 and 0.65 metres and in depth between 0.10 and 0.18 metres. The opposing terminals of the two segments were separated by a metre of undisturbed natural chalk, which held a small stake hole (317). The fill of the gullies consisted of a firm red-brown silty clay, (212 and 214), with frequent chalk inclusions and occasional natural ironstone. A single sherd of possible late Iron Age pottery was recovered from context 212.

### ***Pits***

Two intercutting pits (225 and 216) were situated immediately to the west of ditches 292 and 290 (Figure 2). The earliest pit (225) was heavily truncated by a late Iron Age pit (216) and a second pit (227) that produced four sherds of middle to late first century AD pottery (Figure 3). The remaining fill of 225 produced a single pottery sherd of late Iron Age date. Pit 216 was approximately 1.75 metres in diameter and up to 0.75 metres deep. Twelve sherds of late Iron Age pottery were recovered from both the primary and secondary fills (218 and 223). The upper fill contained a deposit of occupation debris (222), which included 100 sherds of late Iron Age pottery and a small assemblage of animal bone.

## **2.3 The Early Roman Period (AD 43 to the early second century AD)**

Features dated to this period consist of several linear features and three isolated pits. The distribution of these features largely corresponds to that of the late Iron Age features.

### ***Linear ditch boundaries***

A ditch running through the centre of the site (302) followed an east to west alignment (Figure 2), cutting ditches 304 and 308 (Figure 3). This ditch was more substantial than the earlier ditches, measuring up to 0.85 metres in depth and up to 2.90 metres in width. It had steep sides sloping to an uneven rounded base and was filled with a brown-grey silty clay (301 and 300) containing occasional flecks of charcoal.

Ditch 302 had been recut by a second ditch (Figure 3, cut 299). This second ditch was filled with a similar material and was up to 1.10 metres wide and 0.55 metres deep, with smooth steep sides gradually sloping to a flat base. The pottery recovered from these ditches is only broadly dated to the Roman period. However, both features were overlain by a cobbled surface (311), and this produced pottery dated between the middle of the first and the middle of the second centuries AD. The surface consisted of compacted chalk with flint cobbling. This was almost certainly laid as a metalled surface for a trackway over the silted-up ditches, an interpretation supported by the discovery of wheel ruts in the surface.

The single linear feature (297/244) was situated at the western end of the excavated area (Figure 2) and cut the Iron Age ditches (Figure 4, cuts 292 and 290). The ditch was at least 2.20 metres wide and approximately 0.70 metres deep. The sides were stepped and near vertical, shelving into an irregular base. The single fill (296) consisted of a mid grey-brown silty clay with charcoal flecks which contained 154 sherds of middle to late first century AD pottery.



### ***Pits***

Two small pits (Figures 2 and 3, cuts 227 and 230) were located immediately west of ditch (297/244). Of these, 227 measured 0.60 metres in diameter and 0.58 metres in depth and produced three sherds of Iron Age pottery from the basal fill (228), and four sherds of middle first to late first century AD pottery from the upper fill (229). Pit 230 measured 1.10 metres in diameter and 0.32 metres in depth. The single fill (231) produced a single sherd of pottery dated broadly to the Roman period.

A third pit (313) was situated in the middle of the excavated area between ditches 299 and 308 (Figure 2). This feature measured 0.90 metres in diameter and 0.40 metres in depth. The fill (312) contained 13 sherds of middle to late first century AD pottery.

## **2.4 The Middle Roman Period (early second century to the middle third century AD)**

### ***Linear features***

Gully 251/266 was located in the eastern part of the excavated area and followed an east to west alignment, approximately 15 metres to the north of the early Roman ditches 302 and 299 (Figures 2 and 4). This narrow feature was between 0.30 and 0.50 metres wide and about 0.2 metres deep. It was filled with a brown-grey silty clay (252) that contained two sherds of early to late second century AD pottery, animal bone and residual worked flint.

The second linear feature (295) lay in the western part of the site and followed a north to south course (Figure 2), cutting the western edge of the early Roman ditch (Figure 4, cut 297). This ditch was 2.10 metres wide and 0.60 metres deep, with moderately steep sides sloping into a concave base. The primary fill (294) consisted of mid grey-brown silt clay with occasional inclusions of small chalk pieces, flecks of charcoal, ceramic building material and worked flint. The secondary fill was similar with frequent charcoal flecking and occasional ceramic building material, worked flint, and iron nails. A relatively large pottery assemblage was recovered from the fills, mostly consisting of 43 sherds dating to the middle of the second century AD.

## **2.5 The Late Roman Period (middle third century to late fourth century AD)**

### ***Corn drier***

The T-shaped corn drying oven (315) was located in the southern part of the excavated area some 5.0 metres south of the early Roman ditch (Figure 2, cut 299) (see Plan X, Section X, and photo?). The principal axis of the drier was aligned east to west with the main flue measuring approximately 1.80 metres in length and the cross arms 1.45 metres (Figure 5). The internal width of the cross arms was approximately 0.22 metres while that of the main flue varied between 0.43 and 0.35 metres. The drier had been cut into the natural chalk to a depth of between 0.30 and 0.36 metres. Throughout the main flue the chalk sides were blackened with soot and the surrounding chalk had been burnt and heated to a pink colour. This was particularly prominent just beyond the base the eastern end of the flue, where the fire had been located. The main flue was filled with a friable grey-brown silty clay (314) incorporating chalk fragments, flecks of charcoal, animal bone, burnt oyster shell, pottery and ceramic building material. The small pottery assemblage from the flue consisted of 19 sherds dating between the middle third and late fourth centuries AD.

### ***Human burials***

A single inhumation was found on the site at the western end of the excavated area. The grave comprised an east to west orientated rectangular cut (Figure 2, 237). It was approximately 1.9 metres by 0.70 metres in plan and 0.52 metres deep, with a rounded east end. The cut had vertical sides except for the east end, where the side was stepped at a depth of 0.30 metres. The step held a post hole (241), possibly for a grave marker. The post hole was approximately 0.25 metres in diameter and was filled with a light brown silt incorporating burnt flint. It was cut through the primary grave fill (238), which consisted of a loose pale grey clayey silt containing small fragments of chalk, burnt and un-burnt animal bone and 17 sherds of Roman pottery. The remains (242) were those of a juvenile placed in a supine position with the head to the west. The body had evidently been interred in a coffin and numerous coffin nails were found above and below the body. Although the bone was generally well preserved, only the skull and lower limbs were present.

### ***Pits***

A single pit (240) cut centrally into the top of grave 237 was approximately 0.45 metres in diameter and 0.15 metres deep and was filled with a loose dark grey clayey silt (239) containing charcoal, a single small fragment of burnt bone and 41 sherds of third to fourth century AD pottery. The second pit (281) lay just to the west of grave (237). This was a circular, shallow feature filled with a grey-brown silty clay flecked with charcoal (282) which produced eight sherds of middle third to late fourth century AD pottery.

Two features were recorded in section at the western end of the site. One was a possible pit or linear feature only partly in the trench (287), which cut a small posthole (284). Both features produced pottery that was in use until the late fourth century AD.

## **2.6 Features of Broadly Roman Date**

### ***Linear features***

At the eastern end of the excavated area, ditch 257 followed the same alignment as the possible early Roman boundary ditches 302 and 299 (Figure 2). The ditch was approximately 0.80 to 1.20 metres wide and varied along its length from a steep 'V' shape profile to a more rounded profile at its eastern end. The depth varied accordingly from 0.55 metres at the western end to 0.30 metres at the eastern end. The secondary silts (255) produced fragments of animal bone and fired clay along with a single sherd of pottery broadly dating to the Roman period.

A large 'V' shaped ditch (274) measuring 2.2 metres in width and 0.84 metres in depth was recorded at the eastern end of the site (Figures 2 and 4). It followed a north to south alignment, terminating against ditch 276. No dateable finds were recovered from ditch 274, but since it cuts ditch 251/266 it must post-date the second century AD.

## 2.7 Undated Features

Just to the north of ditch 257 (Figure 2), three intercutting ditches were excavated (276, 280 and 278) at the southern extremity of ditch 274 (Figure 4). Ditch 276 was approximately 1.00 metre wide and 0.50 metres deep and appeared to run parallel to ditch 280 which was only 0.4 metres wide and 0.25 metres deep. Both of the ditches (276 and 280) had been largely truncated by ditch 278 which measured 1.75 metres in width and 0.4 metres in depth. None of these features produced dating evidence.

A single section of a curvilinear gully (249) was found immediately south of the early Roman ditches 302 and 299 (Figure 2). The gully was 3.80 metres long and 0.80 metres wide with near vertical sides sloping into a flat base some 0.18 metres deep. The feature was filled with a grey-brown silty clay (250), which produced a small animal bone assemblage.

A near circular pit measuring 1.55 metres in diameter and up to 0.24 metres deep (236) was located in the western part of the excavated area (Figure 2). The pit was filled with a red-brown silty clay (235) containing a small animal bone assemblage.

## 3 CAR PARK RECORDING AREA RESULTS

### 3.1 Excavated Features

Only limited excavation was carried out in the area stripped for the car park, although all of the archaeological features revealed were recorded in detail and surface finds recovered. Excavation was limited to small areas where the ground works would destroy or threaten the integrity of archaeological remains. The total area subject to archaeological recording was approximately 0.54 hectares.

#### *Human burials*

Two un-urned cremations (106 and 083) were found within the stripped area to the east of ditch 003/004 which produced surface finds of late Roman pottery (Figure 2). Both were fully excavated as they could not have been preserved *in situ*. The cremations had been placed in small, roughly circular, shallow graves approximately 0.30 metres in diameter and up to 0.10 metres deep. The grave fills comprised 75% burnt bone and charcoal in a matrix of brown-grey silty clay. Each cremation was accompanied by a small pot along with a substantial numbers of iron hobnails. These were found throughout the grave fills and within the pots. The vessel from cremation 106 was an indented beaker in a fabric that suggests a source outside the region, possibly Wiltshire. In Oxfordshire, however, vessels of this form are dated to the middle of the third century AD. The vessel from grave 083 was missing the rim, but appears to have been a bag shaped beaker of second or third century AD date.

### 3.2 Unexcavated Features

Many of the unexcavated features produced pottery assemblages from superficial contexts, much of it almost certainly residual. The features mentioned in the following section are discussed in order of date based on the surface material, not on securely stratified assemblages.

A number of features recorded and planned in the stripped area (Figure 2) produced pottery sherds dated to the late Iron Age or early Roman period (018, 021, 040, 042, 054, 055, 056, 064, 086, 094, 096, 119, 129, 141, 142, 144, 147, 151, 158, and 167). In the main these consisted of irregular spreads of material, varying in size, which probably represent the upper fills of pits or other features. One such feature (018) in the eastern part of the stripped area may have been the remains of a metallised surface. A single linear feature (158) in the northwest of the area was orientated approximately north-west to south-east and was visible for a distance of about 11 metres.

Unexcavated features which produced pottery of the early Roman period included a linear feature (001) which followed an east to west alignment some 50 metres to the north of ditches 302 and 299 (Figure 2). It extended beyond the eastern limit of the stripped area while its western limit appeared to be obscured by later features.

Six discrete spreads of material containing middle Roman pottery were observed in the stripped area (Figure 2; 028, 068, 124, 130, 137 and 086). These ranged in size from 0.50 X 1.00 metres to 2.00 X 2.50 metres in plan and almost certainly represent the upper fills of negative features.

A number of features observed in the stripped area could only be dated broadly to the Roman period (Figure 2; 06, 019, 022, 026, 031, 036, 037, 043, 050, 051, 052, 053, 057, 061, 071, 090, 097, 099, 100, 114, 127, 128, 133, 136, 138, 143, 152, 179, 182, 184 and 183). These were all irregular patches of material again representing discrete or linear features.

A more structural feature of broadly Roman date was located in the eastern part of the stripped area. This had a flint lining or flint walls (Figure 2, 044) around the east and west sides which were approximately 0.30 metres thick. The interior of the structure was filled with a red-brown silty clay deposit (043) containing 2 sherds of generically Roman pottery, animal bone, small flecks of charcoal, and ceramic building material. Against the southern side of the structure there was a spread of material (046), while on the north-eastern side there was large pit-like feature (045).

## 4 THE TENNIS COURT AREA EXCAVATIONS

### 4.1 Excavated features

#### *Enclosure Ditch*

The area of the tennis court lay adjacent to the north-eastern edge of the car park (Figure 2) and measured some 160 sq m. The principal feature in this area was an angular ditch, which was excavated at two locations (cuts 320 and 324). These showed that the ditch had an irregular 'V' shaped profile and measured approximately 1.00 metres in width and 0.60 metres in depth. Neither section produced dateable finds. The ditch formed one side of a rectangular enclosure completed by ditches 274, 050 and 03/04 recorded in the drainage lagoon and car park areas. Although the dating is tentative, the pottery from the upper fill (context 01) of a continuation of the northern ditch in the car park area suggests that the enclosure was in use during the early Roman period. Based on similarly superficial dating evidence, it appears that the enclosure ditches may have been largely silted-up by the late Roman period.

To the north-east of the enclosure ditch (320/324), a series of irregular, shallow hollows were interpreted as tree throw casts. These follow a north-west to south-east alignment and almost certainly mark the position of a former hedge.

## 5 FINDS REPORTS

### 5.1 The late Iron Age and Roman Pottery by *Edward Biddulph*

#### *Introduction*

A total of 1441 sherds, weighing 15 kilograms, were recovered from the site. This number includes 63 sherds (weighing 434 grams) from the evaluation. The assemblage spans the late Iron Age and Roman periods, although it includes a large number of grey wares, which can only be dated broadly to a period of 400 years. The overall condition of the pottery is variable with large, well-preserved sherds being the exception amongst the many small and abraded pieces. In general the surfaces were well preserved, although some were very worn.

The assemblage was recorded using the standard system devised by Oxford Archaeology for later prehistoric and Roman sites (Booth, nd). Fabric identifications have been supplemented by codes (shown below in bold) from the National Roman Fabric Reference Collection (Tomber and Dore 1998) along with full fabric descriptions. Vessel types are cross-referenced to Young's corpus of Oxfordshire pottery (1977) where possible. Quantification is by sherd count, weight, vessel count based on rims (MV) and rim equivalence (RE). This latter measure is an estimate of the proportion that each rim fragment represents out of the total vessel circumference.

#### *The Fabrics*

- E30: 'Belgic'-type sand-tempered fabrics
- E40: 'Belgic'-type shell-tempered fabrics
- E50: 'Belgic'-type limestone-tempered fabrics
- E60: 'Belgic'-type flint-tempered fabrics
- E80: 'Belgic'-type grog-tempered fabrics
- S20: **(LGF SA)**: La Graufesenque South Gaulish samian ware
- S30: **(LEZ SA 2)**: Lezoux Central Gaulish samian ware
- S40: East Gaulish samian ware
- F51: **(OXF RS)**: Oxfordshire red/brown colour-coated ware
- F52: **(LNV CC)**: Nene Valley colour-coated ware
- F60: Unsourced red/brown colour-coated wares
- M22: **(OXF WH)**: Oxfordshire white ware mortaria
- M31: **(OXF WS)**: Oxfordshire white-slipped oxidised ware mortaria
- M41: **(OXF RS)**: Oxfordshire red colour-coated ware mortaria
- W10: General fine white ware
- W11: **(OXF PA)**: Oxfordshire parchment ware
- W12: **(OXF WH)**: Oxfordshire fine white ware
- W20: General sandy white wares
- W21: **(VER WH)**: Verulamium region white ware
- W22: Oxfordshire sandy white ware (cf Young 1977, 93, fabric 2)
- Q20: General white-slipped oxidised ware
- Q21: **(OXF WS)**: Oxfordshire white-slipped oxidised ware
- Q30: General white-slipped fine grey wares
- O: Indeterminate oxidised fabrics
- O10: General fine sand oxidised wares
- O11: Fine Oxfordshire oxidised ware
- O20: General coarse sand oxidised wares

- O21: Sandy Oxfordshire oxidised ware  
O30: Fine/medium sand oxidised wares. ?Wiltshire source  
O37: Fine, sandy oxidised ware, occasional iron and grog inclusions  
O80: Very coarsely tempered oxidised wares  
R: Indeterminate reduced fabrics  
R10: General fine sand reduced wares  
R11: (**OXF FR**). Oxfordshire fine reduced ware (cf Young 1977, 203, fabric 4)  
R20: General coarse sand reduced wares  
R30: General fine/medium sand reduced wares  
R37: Fine sand reduced ware, occasional iron and grog inclusions, light grey core and smooth or burnished surfaces (cf Booth 1997a, 115-9)  
R38: As R37, but with coarser grog inclusions (cf Booth 1997a, 115-9)  
R90: Very coarse reduced fabric, usually grog-tempered (cf Young 1977, 202, fabric 1)  
R94: Hard-fired grey ware with sand, grog and organic inclusions. ?Savernake ware  
R95: (**SAV GT**). Savernake ware  
B10: Handmade, black-burnished ware  
B11: (**DOR BB 1**). Standard Dorset black-burnished ware 1  
B30: Wheel-thrown black-burnished fabrics  
C10: General shell-tempered wares  
C11: Late Roman shell-tempered ware

Late Iron Age pottery accounts for approximately 20% of the assemblage by weight. The fabric is predominantly grog-tempered, although there is some variation within the E80 fabric group in terms of additional inclusions, typically sand. Flint-tempered (F60) and sand-tempered (E30) pottery also form important components. The former is not recorded within late Iron Age groups in the region. For example, at Abingdon, and at Harwell it may more properly belong to the early Iron Age or Bronze Age. However, stylistically, most pieces have greater affinity with the so-called 'Belgic' material, and the presence of E60 may better reflect local manufacture and limited distribution.

The use of grog-tempered pottery continued into the early Roman period, but rapidly gave way to sand-tempered reduced wares. By any measure, reduced wares dominate the assemblage, collectively accounting for a little over 50% by weight. Sandy grey wares (R30) are the most prolific single fabric group. The fabric is likely to derive mostly from sources within Oxfordshire and possibly local to Harwell, although arrivals from more distant sources are attested by certain vessel types (see below). The small proportion of fine grey wares in the assemblage includes a distinctive dark-surfaced ware (R11), which was manufactured at Dorchester and Sandford (Young 1977, 203). This fabric occurs mainly in later first and second century AD contexts, a date range entirely consistent with the period of its production. Other reduced wares reached the site from further afield. Dorset-made black-burnished ware (B11) occurs commonly across the region, including Harwell, from the middle second century AD onwards. Savernake ware, a coarse, grog-tempered fabric, arrived from Wiltshire between the later first and earlier part of the second century AD.

Fabric	Sherds	% Sherds	Weight (grams)	% wt	MV	% MV	RE	% RE
E30	79	5	734	5	3	3	0.32	3
E40	2	<1	10	<1	-	-	-	-
E50	1	<1	26	<1	-	-	-	-
E60	39	3	391	3	2	2	0.08	1
E80	226	16	2240	15	12	10	1.16	9
S20	1	<1	3	<1	-	-	-	-
S30	4	<1	19	<1	-	-	-	-
S40	2	<1	40	<1	-	-	-	-
F51	60	4	610	4	12	10	0.87	7
F52	2	<1	20	<1	-	-	-	-
F60	4	<1	17	<1	-	-	-	-
M22	3	<1	31	<1	-	-	-	-
M31	5	<1	103	1	1	1	0.06	<1
M41	1	<1	5	<1	-	-	-	-
O	1	<1	1	<1	-	-	-	-
O10	25	2	78	1	1	1	0.03	<1
O11	19	1	84	1	-	-	-	-
O20	19	1	117	1	1	1	0.08	1
O21	7	<1	29	<1	1	1	0.11	1
O30	31	2	241	2	1	1	0.8	6
O37	1	<1	7	<1	-	-	-	-
O38	2	<1	21	<1	-	-	-	-
O80	5	<1	110	1	-	-	-	-
Q20	1	<1	7	<1	-	-	-	-
Q21	2	<1	7	<1	-	-	-	-
Q30	16	1	125	1	-	-	-	-
W10	6	<1	41	<1	-	-	-	-
W11	1	<1	3	<1	-	-	-	-
W12	3	<1	23	<1	1	1	1	8
W20	1	<1	26	<1	-	-	-	-
W21	4	<1	45	<1	-	-	-	-
W22	41	3	477	3	1	1	0.08	1
R	8	1	10	<1	-	-	-	-
R10	71	5	522	3	11	10	1.16	9
R11	48	3	436	3	4	3	0.4	3
R20	67	5	1162	8	5	4	0.49	4
R30	554	38	5585	37	48	42	4.82	38
R37	2	<1	14	<1	-	-	-	-
R90	20	1	810	5	2	2	0.24	2
R94	2	<1	36	<1	-	-	-	-
R95	7	<1	251	2	2	2	0.21	2
B10	10	1	115	1	2	2	0.15	1
B11	13	1	115	1	3	3	0.24	2
B30	11	1	249	2	1	1	0.2	2
C10	5	<1	23	<1	1	1	0.03	<1
C11	9	1	164	1	-	-	-	-
<b>TOTAL</b>	<b>1441</b>	<b>-</b>	<b>15183</b>	<b>-</b>	<b>115</b>	<b>-</b>	<b>12.53</b>	

Table 1: Quantification of Fabrics

Like the grey wares, oxidised wares were largely derived from local sources. Production of fabrics O11 and O21 is known around Oxford, but may have occurred at Dorchester (Young 1977, 185). Vessels in a thin-walled fabric with abundant sand (O30) were recovered from the cremation burials 106 and 83. The fabric is unlike Oxfordshire products, and a Wiltshire source may be appropriate. The white and white-slipped wares can be attributed mainly to Oxfordshire potters. Verulamium region white ware (W21) is a rare occurrence in the region. At the 'small town' at Asthall, just 8 sherds were retrieved (Booth 1997a, 114). The fabric arrived at Harwell during the later 1st century AD.

Of the regionally-traded fine wares, Oxfordshire red colour-coated ware (F51) was ubiquitous. Production began in the middle third century AD, continuing to the late fourth or early fifth century (Young 1977, 123-4). However, the ware may not have occurred in quantity at Harwell until the fourth century AD. Diagnostic vessels found on the site were current throughout the period of manufacture, or were among the latest types to be produced (namely Young bowl forms C71, C78 and C83). A number of oxidised sherds with an almost black slip (assigned to F60) could not be sourced, but probably represent differentially fired Oxfordshire red colour-coated ware. The Nene Valley industry supplied a small number of colour-coated ware (F52) vessels. Samian from all the three of the major production centres in Gaul is represented at the site.

### *Vessels*

Jars dominate the pottery assemblage. Medium-mouthed jars (CD), invariably simple oval-bodied or necked vessels, form the largest group in the class, taking a 32% share by RE. These were available in sandy reduced wares, including R11 and R30. Narrow-necked jars (CC), such as flasks, were also common at 14% (Figure 6, 1). Versions in grey and white wares were recovered. Both jar types had currency throughout the Roman period. Also accounting for 14%, high-shouldered, necked, jars (CE), in contrast, are characteristic of the late Iron Age and early Roman period, and examples in 'Belgic'-type wares, as well as post-conquest grey wares, were found at the site (Figure 6, 2 and 3). One vessel (from ditch 295), made in Savernake ware, arrived from Wiltshire during the first half of the second century AD. Globular jars (CG) and storage jars (CN) each account for 4% of the class (Figure 6, 4). The former was recovered from early Roman features. So-called cooking jars (CK) were commonly produced in shell-tempered and black-burnished fabrics and deposited after the middle third century AD. Almost 30% of jars by RE is represented by rims broken at the neck that could not be identified as specific, diagnostic, types.

Beakers make a significant contribution to the assemblage. Vessel types are represented in generally equal proportions. Butt-beakers (EA), bag-shaped beakers (EC), globular beakers (ED), and 'jar' beakers (EH) each account for 6% of the class by RE. The largest proportion (47%) consists of a single indented beaker (EE) in fabric O30, which was deposited during the late third or early fourth century AD in cremation burial 106. A fine grey ware body sherd with barbotine dot decoration from ditch 295 suggests that poppy-headed beakers were used at the site. As with jars, a large proportion of the rims (34% of beakers by RE) could not be identified as specific types. The vast majority of bowls were deposited during the late Roman period (middle to late third century AD onwards). Curving-sided (HC) and necked



bowls (HD) are the commonest of identified types; coarse reduced ware examples were available, but Oxfordshire colour-coated ware (F51) versions were popular.

Dishes comprise plain, bead, or flanged-rimmed vessels, either straight (JA) or curving-sided (JB). These were available in grey ware or black-burnished fabrics from the middle second century AD onwards, with the production of bead-rimmed dishes terminating during the second half of the third century (Figure 6, 6-8)\*. A series of perforations, probably for the purpose of repair, in a plain-rimmed dish from feature 295 had been made after the vessel was fired, presumably during use. Flagons and mortaria are present. Of the latter, just a single vessel in fabric O31, is represented by a rim, but body sherds indicate that the class was more common on site. A single lid was recovered (Figure 6, 9). This class is normally scarce within the region.

Feature 295 yielded a relatively large group, totalling 209 sherds (2444 grams; 2.05 RE) from two fills. The association of high-shouldered jars, typically of early Roman date, and dishes suggests a date for deposition within the first half of the second century AD, possibly towards the end of that range. Pottery in fabrics O11, Q20, and W22 was also recovered.

Fabric	Vessel class								Total RE
	Flagons (B)	Jars (C)	Jar/bowls (D)	Beakers (E)	Bowls (H)	Dishes (J)	Mortaria (K)	Lids (L)	
B10	-	-	-	0.05	-	0.1	-	-	0.15
B11	-	0.03	-	-	-	0.21	-	-	0.24
B30	-	-	-	-	-	0.2	-	-	0.2
C10	-	0.03	-	-	-	-	-	-	0.03
E30	-	0.32	-	-	-	-	-	-	0.32
E60	-	0.08	-	-	-	-	-	-	0.08
E80	-	0.89	0.12	-	0.15	-	-	-	1.16
F51	-	-	-	-	0.87	-	-	-	0.87
M31	-	-	-	-	-	-	0.06	-	0.06
O10	-	-	-	-	0.03	-	-	-	0.03
O20	0.08	-	-	-	-	-	-	-	0.08
O21	-	0.11	-	-	-	-	-	-	0.11
O30	-	-	-	0.8	-	-	-	-	0.8
R10	-	0.72	0.05	0.1	-	0.29	-	-	1.16
R11	-	0.22	-	0.1	0.08	-	-	-	0.4
R20	-	0.31	-	0.1	-	0.08	-	-	0.49
R30	-	3.64	0.23	0.64	0.09	0.16	-	0.06	4.82
R90	-	0.15	-	-	0.09	-	-	-	0.24
R95	-	0.21	-	-	-	-	-	-	0.1
W12	1	-	-	-	-	-	-	-	1
W22	-	0.08	-	-	-	-	-	-	0.08
<b>Total RE</b>	<b>1.08</b>	<b>6.79</b>	<b>0.4</b>	<b>1.69</b>	<b>1.31</b>	<b>1.04</b>	<b>0.06</b>	<b>0.06</b>	<b>12.53</b>
<b>% RE</b>	<b>9</b>	<b>54</b>	<b>3</b>	<b>13</b>	<b>10</b>	<b>8</b>	<b>&lt;1</b>	<b>&lt;1</b>	<b>-</b>

Table 2: Quantification of Vessel Class by Rim-Equivalence (RE)

**Discussion**

Occupation of the site, as indicated by pottery deposition, emerged during the late Iron Age. The date of commencement cannot be known with certainty: the narrow range of diagnostic pieces provides only a poor chronology for pre-conquest activities. However, the dominance of grog-tempered ware in this period appears to place activity well beyond the middle/late Iron Age transition, where an overlap of ceramic traditions might be expected to occur. Booth (1997b, 78) offers a date range for 'Belgic'-type E wares of *c* AD20-100, and the pottery from Harwell is entirely consistent with a date within the first half of the 1st century AD. In the two or three decades following the Roman conquest, grog-tempered pottery, while persistent, declines in importance, while that of sand-tempered, wheel-thrown ceramic traditions (primarily R wares) increases.

Fabric	Late Iron Age	Early Roman	Mid Roman	Late Roman	Total RE
E30	-	0.32	-	-	0.32
E60	-	-	0.05	0.03	0.08
E80	0.72	0.11	0.08	0.18	1.09
F51	-	-	0.01	0.86	0.87
M31	-	-	-	0.06	0.06
W12	-	-	-	1.0	1.0
W22	-	-	0.08	-	0.08
O10	-	-	-	0.03	0.03
O20	-	-	-	0.08	0.08
O21	-	-	-	0.11	0.11
O30	-	-	-	0.8	0.8
R10	-	0.22	0.84	0.05	1.11
R11	-	-	0.32	0.08	0.4
R20	-	-	0.41	0.08	0.49
R30	-	2	0.88	1.3	4.18
R90	-	-	0.15	0.09	0.24
R95	-	-	0.21	-	0.21
B10	-	-	-	0.15	0.15
B11	-	-	-	0.12	0.12
B30	-	-	-	0.2	0.2
<b>Total RE</b>	<b>0.72</b>	<b>2.65</b>	<b>3.03</b>	<b>5.22</b>	<b>11.62</b>
<b>% RE</b>	<b>6</b>	<b>23</b>	<b>26</b>	<b>45</b>	<b>-</b>

**Table 3: Quantification of Pottery from Dated Contexts**

A wider range of wares is apparent in the middle Roman period (early/middle second to middle third century AD), as the settlement at Harwell benefited from wider trade links and a burgeoning local manufacturing base. The E wares present in this phase must be residual. Overall, the level of pottery deposition remained reasonably constant, suggesting little expansion in the scale of settlement activities. In sharp contrast, almost half of the assemblage assigned to periods was deposited during the late Roman period (middle 3rd to late fourth centuries AD). Given the expansion of the Oxfordshire pottery industry around AD 240, this apparent increase is unlikely to be due solely to increased levels of site activity, but rather the introduction of intrinsically better dated pottery. However, even with the addition of pottery dated very broadly to 400 years, early and middle Roman pottery deposition remained at lower levels than in the late Roman period. The ending of occupation, like the beginning, cannot be known with certainty from the pottery. However, red colour-

coated ware bowl type C78 (Young 1977, 166), from ditch 107, is among the latest of Oxfordshire products, suggesting that site activity continued at least into the second half of the fourth century AD.

Pottery indicators can be used to suggest site status. Booth (1991) offers fine and specialist wares (ware groups S, F, M, W and O, plus *amphorae*) as a useful means of differentiation between sites. Within the region, 5% or less of a 1st/2nd century assemblage by sherd count at low status rural sites can be attributed to fine and specialist wares (Henig and Booth 2000, 173). Such wares account for almost 7% during the same period at Harwell (87 out of 1312 sherds), which can be equated with lesser nucleated sites (or 'small towns'), such as Asthall and Alchester, or the villa at Roughground Farm (*ibid*, table 6.11). Differences between some rural sites and 'small towns' may be less marked during the 3rd/4th century, given the expansion of fine ware and mortaria production in Oxfordshire. However, now at 16% by sherd count (103 out of 660 sherds), the Harwell assemblage remains comparable with Asthall, although also with lesser rural sites, such as Wally Corner and Old Shifford (*ibid*). Ultimately, the position is much more equivocal, as factors other than status, for example proximity to source, may be in part responsible for the level of fine and specialist wares. White and oxidised wares are strongly represented throughout the assemblage, while mortaria, decorated samian (just 1 sherd being recovered), and *amphorae* are poorly represented or entirely absent.

Two cremation burials were uncovered at the site. Both contained single ceramic vessels in fabric O30. Burial 106 yielded an indented beaker (Figure 6, 10). The exact form is not known in the repertoire of Oxfordshire potters, which, along with the fabric itself, suggests a source outside the region, possibly Wiltshire. However, the dating is uncertain. In general indented beakers, such as those produced in the Nene Valley (Perrin 1999, 93) did not emerge until the late second century AD, with production continuing to the early fourth century. In Oxfordshire, such vessels (e.g. Young 1977 types O23 and O24) date from the middle third century AD. The beaker from cremation 106 is therefore likely to fall within the somewhat wide late second to early fourth century AD date range, with the emphasis towards the latter part. A beaker was also recovered from burial 83. No rim survived, but a bag-shaped beaker, typically second or third century AD date, is likely to be represented. Despite the uncertain chronology, on fabric grounds the cremation burials may be contemporaneous. This may also be suggested by the close spatial relationship of the burials.

## **5.2 Fired clay and Ceramic Building Material** by Edward Biddulph

A total of 26 fragments of fired clay, weighing 662 grams, was recovered from the site. Most, if not all of the items were found in Roman contexts. The assemblage largely comprises amorphous, indeterminate pieces in sand-tempered fabrics. A fragment of a ceramic disc or plate (Figure 6) was recovered from cobble deposit (context 311). Pottery retrieved from the deposit provided a date for deposition between the later first century and the earlier second centuries AD. The object is sub-circular in shape, approximately 200 mm in diameter and 25 mm thick. The fabric is sand-tempered, with occasional flints (invariably over 10 mm long). The upper and lower surfaces of the plate are flat, with frequent linear voids visible, presumably denoting burnt out vegetable material, such as straw.

The ceramic disc or plate adds to the growing number encountered in the region. For example, several plate or slab-like objects have been found at Standlake (Barclay *et al* 1995, 138), Abingdon (Booth 1998, 37) and Farmoor (Sanders 1979, 54), all dating to the Roman period. Dimensions vary, but generally fall within a range of 20 to 40 mm thick. Function is uncertain; indeed, variable sizes may relate to different uses. The objects may have served as 'hot plates' during cooking, or as covers for storage jars and the like (*ibid.*), although further analysis of these enigmatic objects is required before the issue of function can be resolved.

Context	Type	Number	Weight (grams)
1	Fired clay	1	4
6	Fired clay	3	4
9	Ceramic building material	1	16
19	Ceramic building material	1	24
28	Fired clay	4	124
86	Fired clay	2	45
117	Fired clay	1	7
127	Fired clay	1	5
132	Fired clay	4	35
152	Ceramic building material	1	10
154	Ceramic building material	1	35
162	Fired clay	2	10
202	Fired clay	3	9
203/205	Fired clay	1	29
238	Fired clay	2	10
285	Ceramic building material	1	11
285	Fired clay	1	34
293	Ceramic building material	8	87
294	Fired clay	1	55
296	Ceramic building material	11	170
311	Fired clay	2	705
<b>Totals</b>	-	<b>52</b>	<b>1429</b>

**Table 4: Catalogue of fired clay and ceramic building material**

Some 24 fragments (weighing 353 grams) of ceramic building material were recovered. These comprise small, undiagnostic pieces, although tile fragments are likely to be found among them. The material was collected from early and late Roman contexts.

### 5.3 The Flint by Kate Cramp

#### *Introduction*

A total of 31 struck flints were recovered from 15 contexts (Table 5), the majority containing a single piece. The largest quantity of flint work occurred in context 262 (8 pieces). Slight concentrations of material were recorded in contexts 222 and 285 (four pieces) and context 289 (3 pieces). In general, however, the material forms a thin, scattered distribution with few notable foci of activity.

Category	Context															Total
	212	222	228	232	246	260	261	262	267	285	289	293	294	296	305	
Flake	1	4	1	-	-	-	1	6	1	-	1	1	1	-	1	18
Blade	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1
Irregular waste	-	-	-	-	-	1	-	-	-	2	2	-	-	-	-	5
Chip	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1
Single platform flake core	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1
Multi-platform flake core	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-	2
Core on a flake	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1
Retouched flake	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1
Denticulated scraper	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1
<b>Totals</b>	<b>1</b>	<b>4</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>8</b>	<b>1</b>	<b>4</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>31</b>

Table 5: Flint by type and by context

#### *Methodology*

All the struck flints within the assemblage were individually examined and catalogued according to broad debitage or tool type. Dating was attempted throughout the analysis. The general technological appearance of both individual pieces and the assemblage as a whole was described, particularly where such information contributed to the dating and characterisation of the assemblage. Details of the condition, degree of cortication, type of raw material along with evidence of burning, breakage and utilisation were recorded consistently. Cores and core fragments were classified according to the organisation and types of removals exhibited, and were individually weighed. The data were entered directly on to an MS Access database and are fully catalogued in Table 7, Appendix 1.

#### *Condition*

Despite the likelihood that most of the flints are residual elements within later features, the assemblage is in a good condition implying limited post-depositional movement. A total of 16 pieces are fresh and a further eight pieces exhibit minimal damage usually consisting of modern excavation accidents. A moderate degree of damage, occurring as a more general surface wear caused by the effects of longer-term processes of re-deposition, was noted on seven pieces. These were recovered from context 222 (two pieces), context 285 (three pieces) and contexts 246 and 262 (one piece each). The largest assemblage from the site (context 262) contained a low proportion of fresh material (three of eight pieces), which probably reflects the mixed, residual condition of the flint work from this feature.

The degree of cortication observed on the flints varies considerably across the assemblage. A total of 23 flints possess a cortication that ranges from a light or

moderate incipient speckling (15 pieces) to a dense white discoloration of the surface (eight pieces).

All eight flints from context 262 exhibit a moderate or heavy degree of cortication, which is probably the product of localised soil conditions within the feature. With this exception, the distribution of corticated pieces across the site is less patterned and often involves a combination of corticated and un-corticated pieces within the same context.

### ***Raw material***

Good quality, chalk flint nodules of reasonable size are available locally to the site and, unsurprisingly, it appears that these formed the main source of raw material for the production of the tools and debitage within the assemblage. The nodules are characterised by a thick white cortex and a dark brown interior. The outer surface of the cortex is often slightly stained and abraded, implying the exploitation of slightly weathered surface deposits rather than of mined chalk flint nodules.

### ***Technology and dating***

The assemblage is composed mainly of un-retouched flakes (Table 5). The majority are squat and irregular in form and have unprepared, plain platforms, traits consistent with technological practices spanning the later Neolithic through to late prehistory. The propensity for flake production rather than blade production represented by the assemblage is also consistent with this date. Whilst blades are most prolific in the Mesolithic and early Neolithic periods (Pitts and Jacobi 1979; Ford 1987, 79), it is conceivable that the large tertiary blade from context 246 represents a specialised flake of later date and is not necessarily therefore an anomalous earlier element (Figure 7, 1). Five pieces of irregular waste were also recorded; several of these probably represent core fragments that have shattered down thermal flaws.

The assemblage contains two retouched pieces. Context 232 contained a denticulated scraper, which has been manufactured on an elongated preparatory flake with abrupt, ragged retouch to the proximal end forming an obliquely slanted working edge (Figure 7, 2). Areas of macroscopically visible rounding on the retouched edge indicate that the scraper has been used. The tool probably dates broadly to the Bronze Age, although it was found in the upper fill of a shallow pit (233) and is quite likely to be a residual element. Context 262 produced a minimally retouched flake consisting of a large, angular secondary flake with a short length of inverse retouch to the distal edge and direct retouch to the right-hand edge (Figure 7, 3).

The assemblage contained four complete cores with an average weight of 55 grams. All were apparently directed at the production of flakes rather than blades, which supports a later prehistoric date for the material (Pitts and Jacobi 1979; Ford 1987). The multi-platform flake core (88 grams) from context 294 bears numerous incipient cones of percussion and was probably reduced using a hard-hammer technique (Figure 7, 4). A second multi-platform flake core was recovered from context 285. This core has been approached using two main platforms, located at opposite ends. Context 285 produced a small single platform flake core (32 grams), which has been reduced using the cortical platform of a nodule of gravel flint. The core on a flake (56 grams) from context 262 consists of a large, thick preparatory flake that has been knapped down to yield a series of smaller flakes. However, the stratigraphic integrity of the cores is

doubtful, with two coming from a palaeo-ploughsoil (context 285) and a third example from a colluvial ditch fill (context 262).

### **Discussion**

Morphologically and technologically, the assemblage contains elements reminiscent of a later Neolithic or Bronze Age industry. However, while this is supported by the presence of a denticulated scraper, which can be attributed to the Bronze Age, much of the material seems likely to be residual. A later element may be indicated by use of a hard-hammer technique for the reduction of the core from context 294, making interpretation more complicated. In general the assemblage is perhaps best viewed as a low-density, off-site scatter representing one or more episodes of later prehistoric activity.

### **5.4 Charred Plant Remains with a Note on the Land Snails by Mark Robinson**

Eighteen samples with a combined volume of 322 litres were received. These were recovered from a range of excavated archaeological contexts and were floated using a 0.25 mm mesh to extract charred plant remains. The dried flots were sorted and the results are given in Table 6. Charred remains other than charcoal were absent. Four samples contained charcoal including Sample 1 from context 239, a possible cremation. Only two taxa were present, *Corylus avellana* (hazel) and *Quercus* sp. (oak). Both taxa were present in Sample 1 and both were abundant in Sample 2 from context 282.

It was noticed that many of the flots contained high concentrations of land snail shells. Detailed analysis of them is thought unnecessary, though scanning the flots gave some useful results. *Vallonia costata* was particularly abundant, but other shells that were well represented included *Pomatias elegans*, *Pupilla muscorum*, *Vallonia excentrica*, *Aegopinella nitidula*, *Helicella itala*, *Trichia hispida* and *Cepaea* sp. Most of these species, including *V. costata*, are characteristic of dry open habitats. *A. nitidula* requires more shaded conditions and *P. elegans* burrows in leaf litter or loose shaded soil. These two species might be found together in a hedge bottom and such assemblages would be appropriate if there were hedges alongside some of the archaeological features.

Context	239	282	293	314
Sample	1	2	11	17
Sample Volume (litres)	2	10	20	20
<b>Charcoal</b>				
<i>Corylus avellana</i> (hazel)	+	+++	+	-
<i>Quercus</i> sp. (oak)	++	++++	+	+

Key: present +; some ++; much +++; very much ++++

**Table 6: Charred Plant Remains**

## 5 DISCUSSION

The earliest direct evidence for settlement on the site dates to the late Iron Age. The most securely dated are the two linear features at the western end of the lagoon area (290 and 292) and the group of pits nearby (216, 225 and 230). The two ditches 306/310 and 308 are also of this period although the dating is less certain. Both 306/310 and 308 are cut by the major boundary ditches 302 and 299. Given that these are dated by the cobble surface laid down after the later, recut ditch (299) had silted-up, it is entirely possible that the boundary was originally established in the late Iron Age.

Conclusively dated early Roman features consist of a ditch (297, a single pit (227) in the extreme south-western part of the drainage lagoon site and a third pit close to ditch 308 (pit 313). Although the dating rests on superficial finds from the car park area, it seems quite likely that the ditches uncovered in the tennis court also belong to the early Roman period. These appear to be part of the alignment of ditches running north to south in the car park area, together forming an enclosed settlement. The southern side of the enclosure follows the alignment of the major boundary (302/299), perhaps indicating a degree of continuity in the organisation of the settlement between the late Iron Age and the early Roman period.

The pattern of settlement during the middle Roman phase is elusive. The few features dated to this period include ditch 295 and ditch 251/266 which follows the east to west alignment of the earlier boundaries. The pottery analysis indicates that the site had access to a greater range of wares during the middle Roman period, possibly indicating wider trade links and a burgeoning local manufacturing base. However, the scale of the settlement does not appear to increase, nor are there any indications of marked status differentiation. Two cremation burials also belong to the middle Roman period. One of these may be later in date, unusually late for this type of funerary practice.

During the later Roman period most of the earlier boundary ditches appear to have been slighted, with a possible shift of settlement focus to the north-western part of the site. It is possible that the large linear feature (003/004) running on a north-eastwards from the corner of the enclosure belongs to this period, perhaps forming a layout of boundaries extending northwards beyond the site. Other evidence for settlement includes the corn drier, the single inhumation and features (159) and (160) which might indicate the presence of a building. The late Roman period accounts for over half of the pottery deposited on the site, suggesting that the site continued to flourish into the second half of the fourth century AD.

Placing the settlement at Harwell in the context of the wider late Iron Age and Roman landscape is difficult while the extent of the site and the proportion and location of the excavated area with regard to the whole settlement remains unknown. In addition few other sites have been found in the area. With these limitations in mind however some attempt can be made. During the first and second centuries AD the pottery indicators of site status suggest that the Harwell settlement is equated with lesser nucleated sites, or 'small towns', such as Asthall and Alchester (however only parts of these sites have been excavated) or the villa at Roughground Farm, and continues to remain comparable with the part of Asthall investigated and lesser rural sites such as Wally



Corner and Old Shifford during the third and fourth centuries. Within the nearer vicinity, findspots of Roman and Iron Age pottery along with a supposed Romano-British cemetery have been located at Hagbourne Hill some 2.2 km to north-west while a further findspot of Roman pottery has been made just 400 metres to the south at Upper Farm. Iron Age and Romano-British field systems are known 1 km to the south-west, while horse skeletons associated with Roman pottery have been found on an old ground surface under a mound 1.6 km to the south-west.

The site lies between the late Iron Age 'valley fort' at Dyke hills, Dorchester-on-Thames and the early Iron Age hillfort at Alfred's Castle, Ashbury that was enlarged in the late Iron Age period, whether as a stock enclosure or for domestic occupation is unclear (Henig and Booth, 2000). For the Roman period major settlements and potential markets existed at Wantage (7.5 km away), Abingdon (11 km) and the walled town of Dorchester (13 km).

Whether the site was a farmstead or something more than this is unclear given the small amount investigated. However it appears to have flourished throughout the period from the late Iron Age through into the second half of the fourth century AD. The settlement appears to have replaced a middle Iron Age site that existed some 200 metres to the east (Moore and Parsons, forthcoming).

Of some significance was the discovery during explosive ordnance clearance of several Roman coins. It was reported that the coins had been found some 400 metres to the south of the site, close to Upper Farm (see above). The location of the discovery is in a slight valley, close to where a spring may have been, raising the possibility that the coins were votive offerings. The pottery found in this area may be associated with a place of special significance, which in turn may be linked to the Rutherford Appleton Laboratory Blue Car Park site.

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## APPENDIX 1

Table 7: Catalogue of Worked Flint

Context	Category	Burnt	Broken	Utilised	Total	Weight (grams)	Comments / description
212	Flake	-	-	Yes	1	-	Small, regularly shaped tertiary flake with use-wear right-hand side. Rough platform edge abrasion.
222	Flake	-	-	No	1	-	Frost-shattered and irregular secondary flake. Lightly rolled, worn condition.
222	Flake	-	-	Yes	1	-	Side-trimming flake with use-wear on distal edge. Chalk flint.
222	Flake	-	-	Possibly	1	-	Small tertiary flake.
222	Flake	-	-	No	1	-	Lightly rolled secondary flake with areas of modern damage to edges. Gravel flint.
228	Flake	-	-	No	1	-	Side-trimming flake. Chalk flint. <12>
232	Denticulated scraper	1	-	Yes	1	-	Elongated preparatory flake with abrupt, ragged retouch to proximal end. Chalk flint. In two pieces - modern break, reglued. Broadly Bronze Age? (Modern notch). <9>
246	Blade	-	-	Possibly	1	-	Large, broad, tertiary blade with relatively heavy modern damage to edges. Mesolithic - Neolithic.
260	Irregular waste	-	-	No	1	-	Angular piece of irregular waste in very fresh condition. Possible core fragment.
261	Flake	-	-	No	1	-	Broad preparatory flake in very fresh condition. Surface chalk flint?
262	Flake	-	-	No	1	-	Preparatory flake.
262	Flake	-	-	Yes	1	-	Side-trimming flake. Use-wear right-hand side, cortex left-hand side.
262	Flake	-	-	No	1	-	Squat side-trimming flake. Chalk flint.
262	Flake	-	-	No	1	-	Angular secondary flake. Lightly rolled condition.
262	Flake	-	-	Possibly	1	-	Squat side-trimming flake.
262	Flake	-	-	Possibly	1	-	Small, regularly shaped, tertiary flake. Slight platform edge abrasion.
262	Retouched flake	-	-	Possibly	1	-	Large, angular, secondary flake. Discontinuous inverse retouch to centre of distal edge; direct retouch to right-hand side.
262	Core on a flake	-	-	No	1	56	Thick flake, apparently later reduced as core to yield a small number of flakes.
267	Flake	-	-	Yes	1	-	Distal-trimming flake with use-wear right-hand side.
285	Irregular waste	1	1	No	1	-	Lightly burnt. Possible core fragment that has shattered down a thermal fracture. Chalk flint.
285	Irregular	-	-	No	1	-	Possible flake core fragment?
285	Single platform flake core	-	1	No	1	32	Small core with a series of flake removals taken from upper, cortical platform. Lightly rolled condition, with modern damage. Probably gravel flint.
285	Multi-platform flake core	-	-	No	1	44	Flake removals taken from two opposed platforms. Perhaps Neolithic or Bronze Age. Surface chalk flint?

Table 7: Catalogue of Worked Flint (continued)

Context	Category	Burnt	Broken	Utilised	Total	Weight (grams)	Comments / description
289	Flake	-	-	No	1	-	Angular distal-trimming flake with limited areas of modern damage to edges. Chalk flint.
289	Irregular waste	-	1	No	1	-	Naturally / mechanically struck?
289	Irregular waste	-	-	No	1	-	Large piece of ?irregular waste. A couple of flake scars noted. Chalk flint.
293	Flake	-	-	No	1	-	Undiagnostic preparatory flake.
294	Flake	-	-	No	1	-	Preparatory flake.
294	Multi-platform flake core	-	-	No	1	88	Probably hard-hammer reduced with negligible platform edge abrasion. Surface chalk flint?
296	Chip	-	1	No	1	-	<13>
305	Flake	-	-	Yes	1	-	?Hard-hammer secondary flake with use-wear to both lateral margins. Apparently struck from an opposed platform flake core.

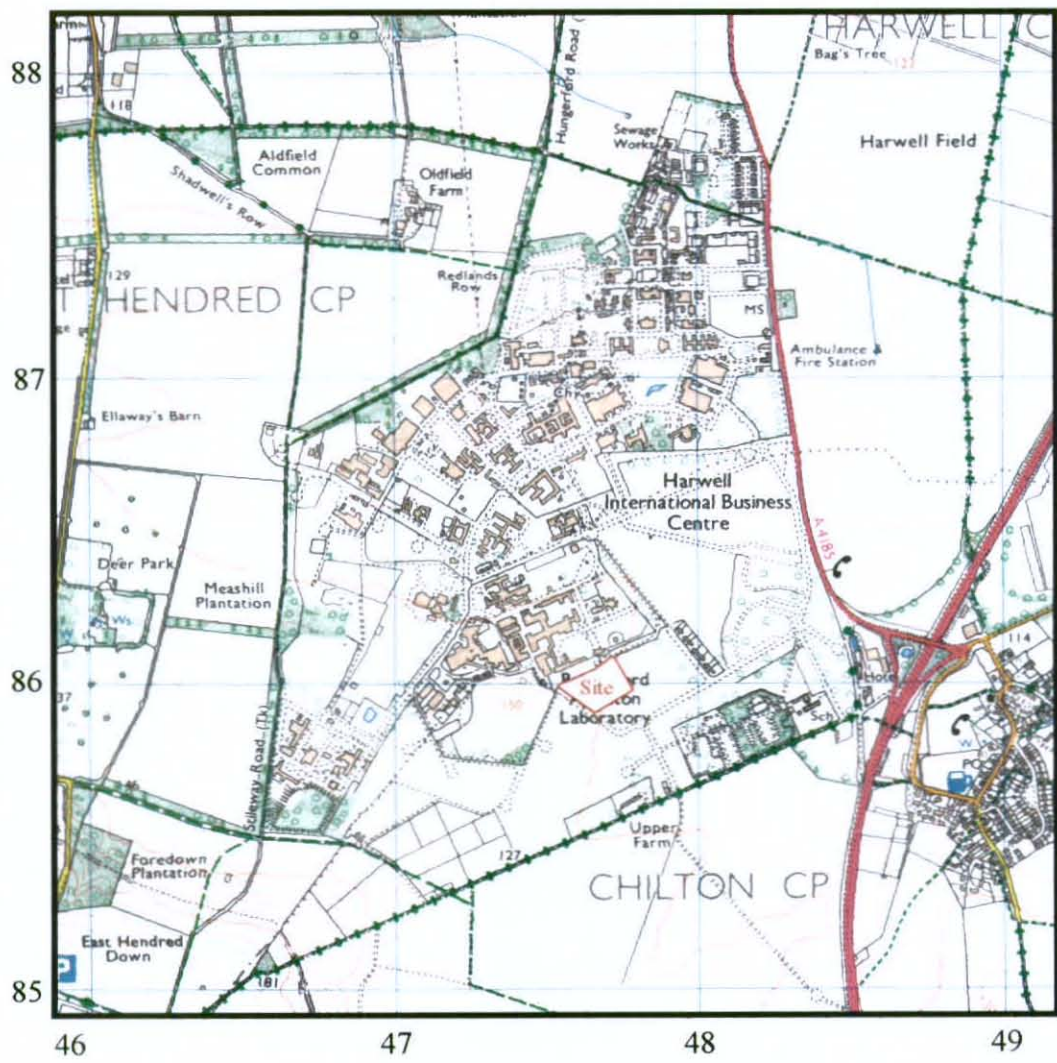


Figure 1. Site Location

Scale: 1:25,000





Figure 2: post-excavation plan

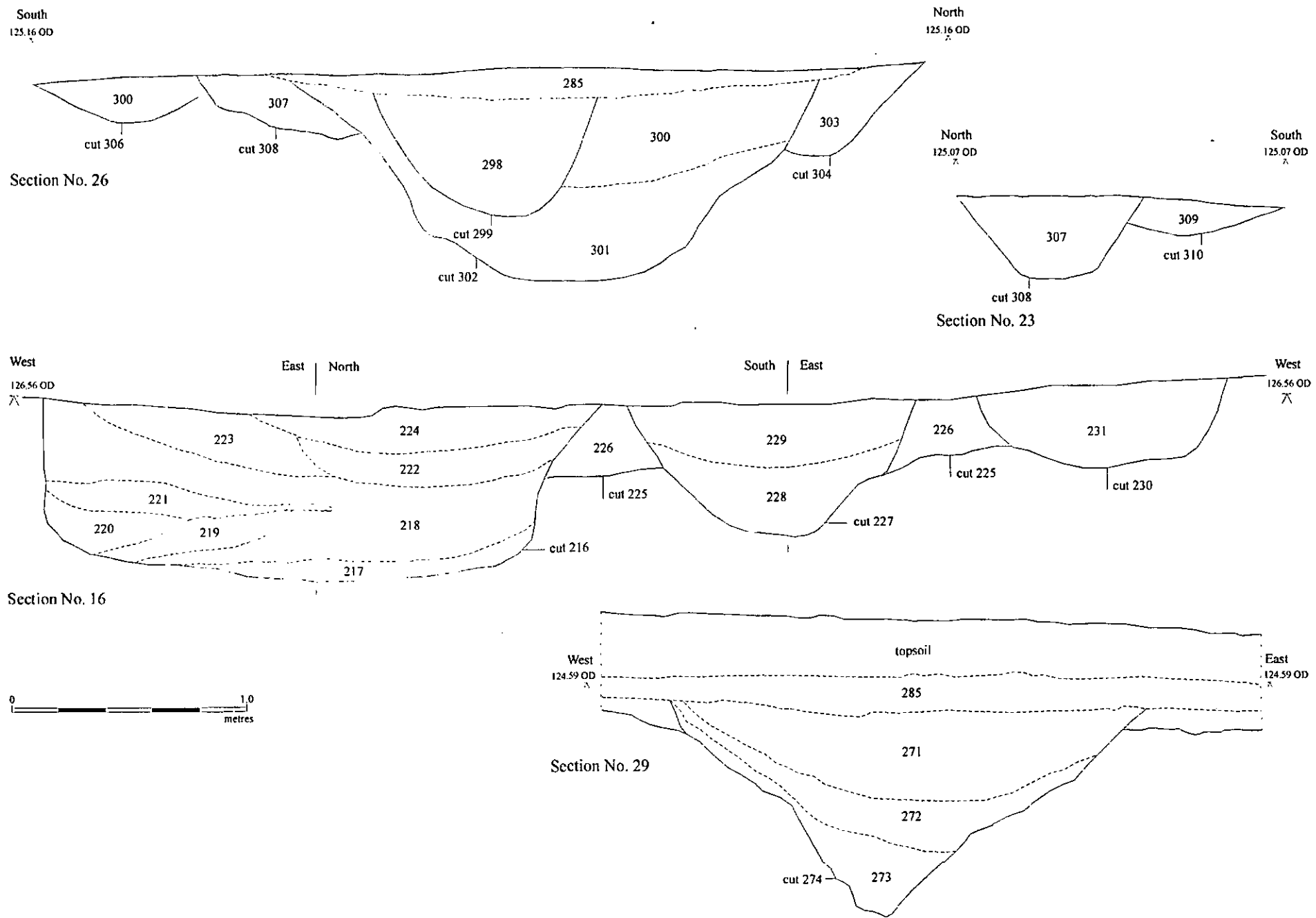
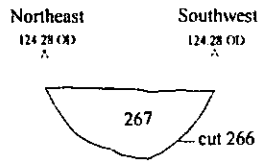
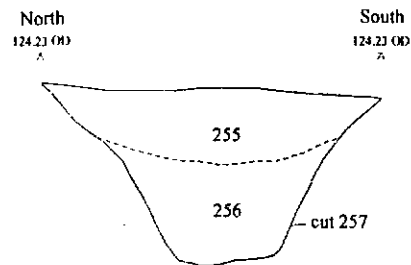


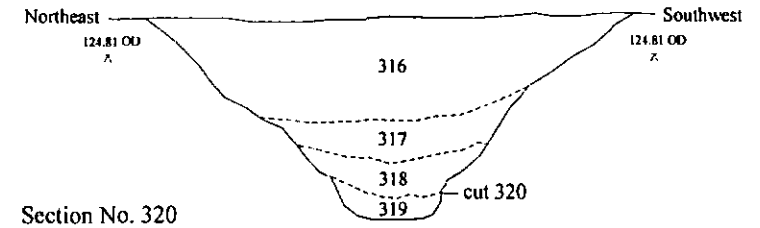
Figure 3: sections 16, 23, 26 and 29



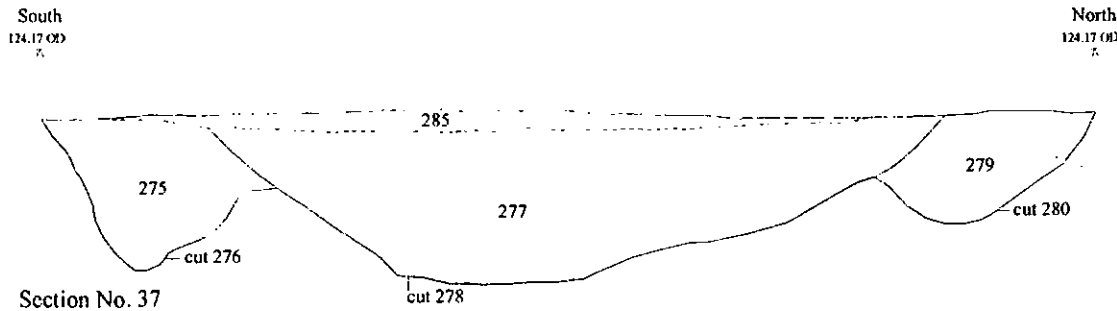
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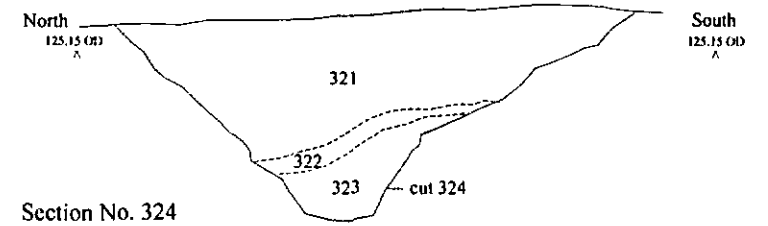
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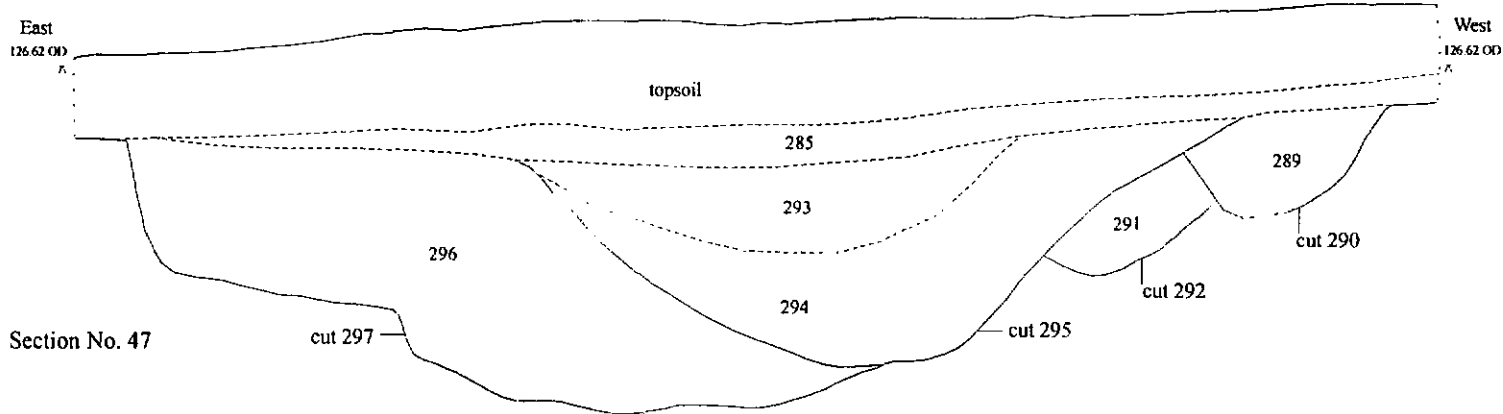
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Section No. 37



Section No. 324



Section No. 47

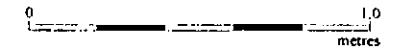
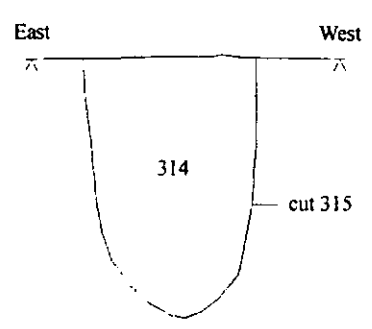
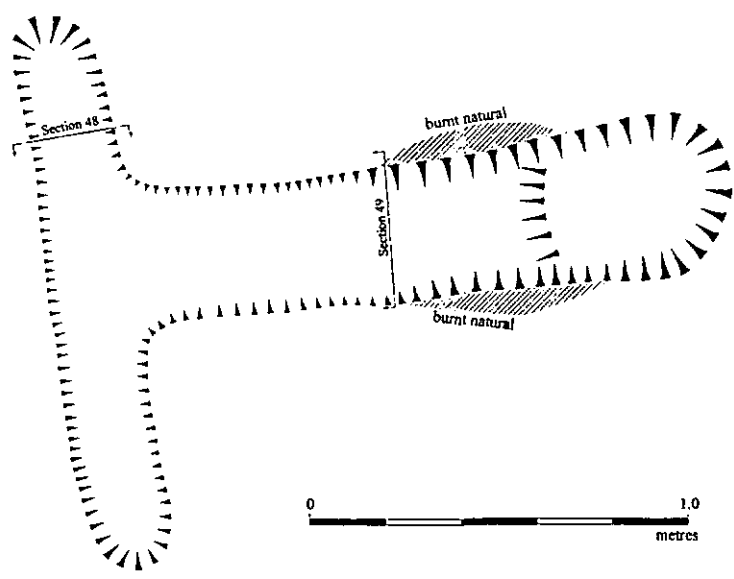
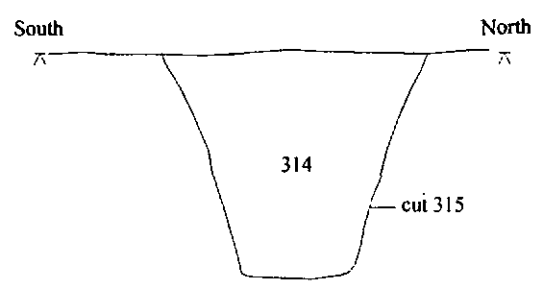


Figure 4: sections 34, 37, 39, 47, 320 and 324





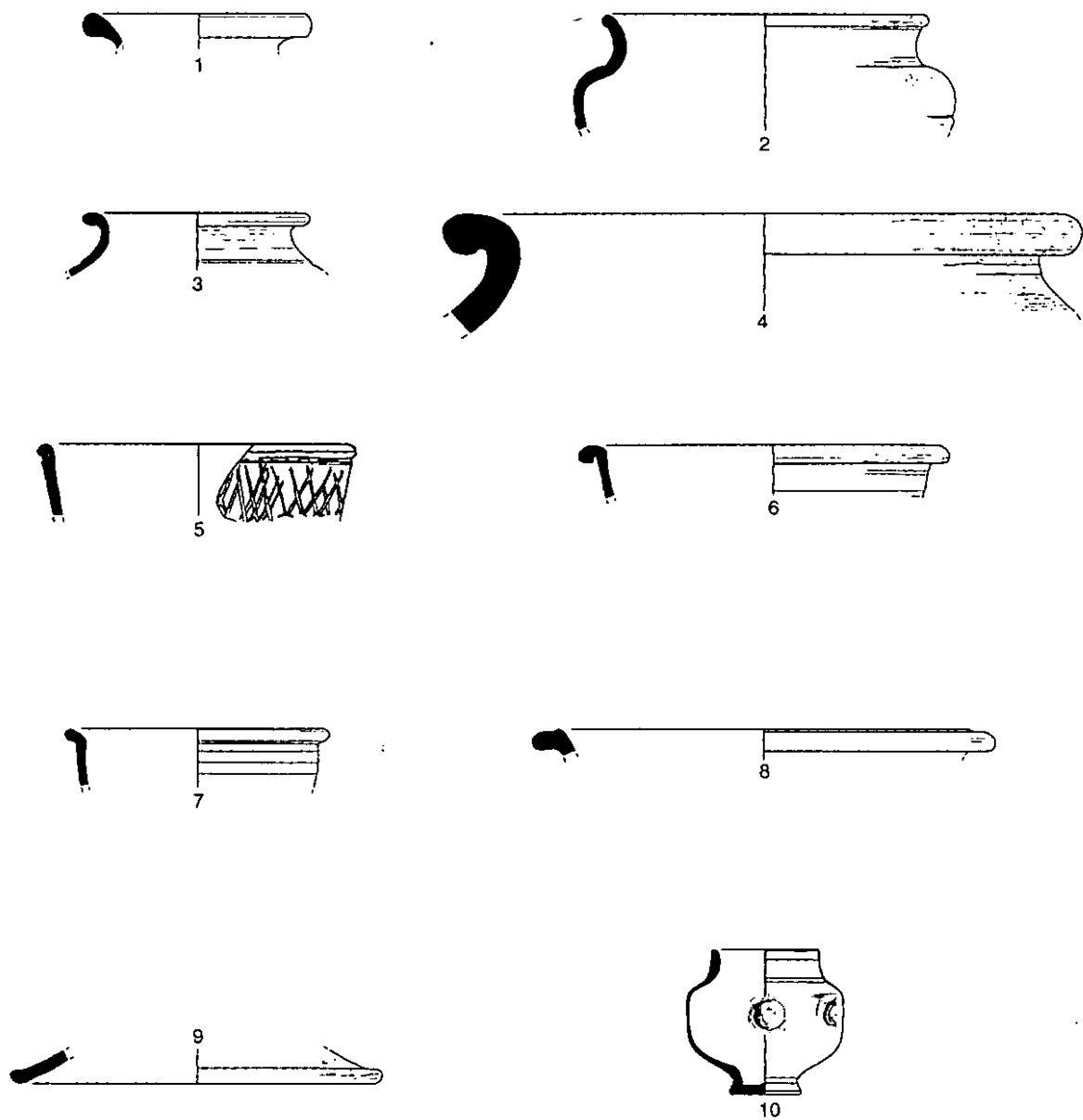
Section 48



Section 49



Figure 5: plan and sections of corn drier

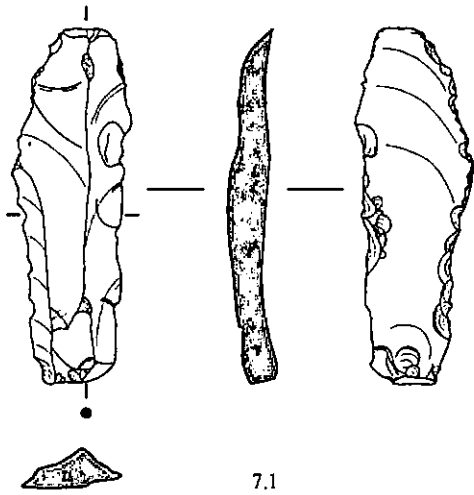


ceramic disc

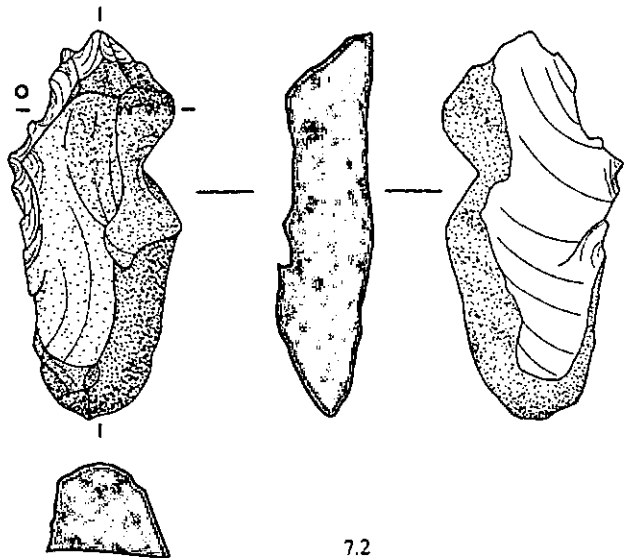
0 250mm

1:4

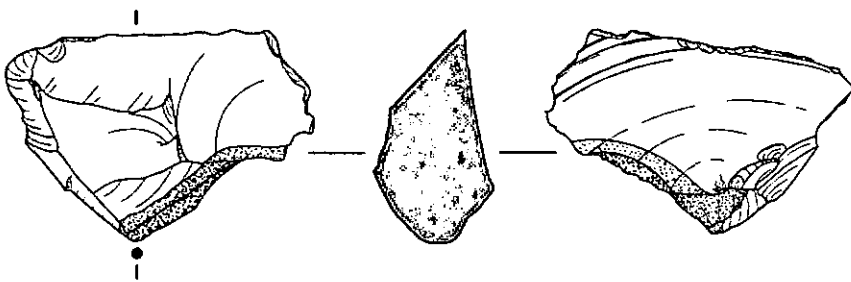
Figure 6: Roman pottery



7.1

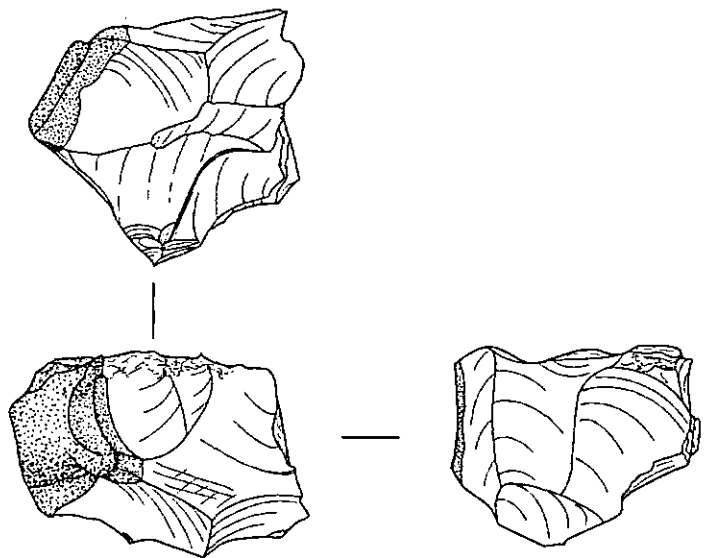


7.2



7.3

0 50 mm



7.4

Figure 7: worked flint