

# Prehistoric settlement and Roman quarrying at Milton Landfill, Milton Cambridgeshire



## Post-Excavation Assessment



August 2011

**Client: WRG Ltd.**

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## **Prehistoric settlement and Roman quarrying at Milton Landfill, Milton, Cambridgeshire**

*Post-excavation Assessment and Updated Project Design*

*By Tom Phillips BA AlFA*

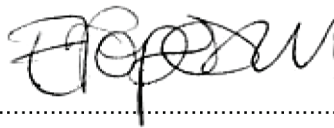
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## Summary

*Between August 2007 and August 2009 Oxford Archaeology East (formerly CAM ARC, Cambridgeshire County Council's Archaeological Field Unit) undertook three separate stages of open area excavation at Milton Landfill, north of Cambridge, on behalf of WRG Ltd. The three separate excavations formed one contiguous area, approximately 1.8ha in size. Each excavation took place as a new block of land or 'cell' was required for landfill.*

*The excavations revealed evidence for early land use in the form of several early prehistoric flints found in later features. The earliest evidence of settlement on the site was limited to a single waterhole of Early Bronze Age date, and a pit which the waterhole truncated. Activity increased in the later part of the Bronze Age with evidence of land division in the form of an 'L' shaped arrangement of ditches, a post-built roundhouse and two enigmatic post alignments.*

*More extensive settlement occurred from the beginning of the Iron Age, comprising a scattered and seemingly unenclosed agricultural community. The main settlement features were a series of large waterholes distributed across the site, dating to the Early and Middle Iron Age. Accompanying these were the remains of post-built structures such as further roundhouses and granaries and small groups of pits associated with the settlement features. This occupation activity spans a large part of the Iron Age and may indicate the exploitation of an area of land by one or more extended family groups.*

*In the early Roman period occupation had ceased. Instead, widespread quarrying took place, but only within a specific area where the gravel was of a higher quality. The quarry pits were dense but relatively shallow, probably due to the water table at the time of quarrying. The most obvious use for the gravel would be surfacing of the Roman road, Akeman Street, which bounds the western side of the excavation area.*

*Following the Roman period there was no land use on the site until the medieval period; the pre-enclosure system of ridge and furrow was evident across the excavation area.*

## 1 INTRODUCTION

### 1.1 Project Background

- 1.1.1 The excavation was undertaken by Oxford Archaeology East (formerly CAM ARC, Cambridgeshire County Council's Archaeological Field Unit) on behalf of WRG Ltd. The work was carried out in advance of the opening of new blocks of land or 'cells' for use as landfill. As only one new cell was required at a time the excavation was carried out in three stages. The first stage, cell 18a, took place between 3rd August - 26th October 2007, and was approximately 1ha in size. The second stage, the south of cell 18b, took place between 30th April - 6th June 2008, and was approximately 0.5ha in size. The third stage, the north of cell 18b, took place between 6th - 13th August 2009, and was approximately 0.3ha in size. The three excavation areas formed one contiguous block, approximately 1.8ha in size.
- 1.1.2 The excavation area was located in the south-west of the Milton Landfill site, to the west of Milton village, with the A14 situated 0.5km to the south and Butt Lane 0.5km to the north (Fig. 1).

### 1.2 Geology and Topography

- 1.2.1 The solid geology underlying the site is a Gault formation with sporadic capping of Quaternary third terrace gravel and sand deposits of the River Cam (Worssam & Taylor 1969, BGS 1974). The soils are a mixture of clayey silts and silty clays of the Evesham 3 and Milton Soils Associations. To the east of the village, near the river, a network of channels drains Milton former fen. The water table was encountered approximately 0.5m below the machine excavated level. The water was sealed within the sand and gravels, which acted as an aquifer, with the Gault clay below acting as an impermeable barrier. These conditions were favourable for the survival of waterlogged wood in some features.
- 1.2.2 The site was very flat and showed little variety in the topography. The machined level was 11.6m OD in the far south of the site and 11.3m in the extreme north.

### 1.3 Archaeological and Historical Background

- 1.3.1 These investigations are the most recent in a series of evaluations and excavations carried out by Oxford Archaeology East at Milton Landfill since 1994 (all of the previous undertaken when part of Cambridgeshire County Council). These are highly significant in relation to the subject site as all are part of the same landscape and must be considered together (Fig. 2). The same is true of recent excavations at the Milton Park and Ride site, located directly to the east. The following background information is chronological but is separated out by site where possible. Cambridgeshire Historic Environment Records (CHER) are also referenced in the text and in Fig. 3.

#### *Prehistoric*

- 1.3.2 Until recently prehistoric activity within the parish was virtually unknown, the distribution of finds, including stray artefacts and cropmark features visible on aerial photographs, showing a bias towards the higher and better-drained gravel terraces to the north, east and south. In addition, traditional non-intrusive surveys, including fieldwalking, aerial

photographic reconnaissance and geophysical perspectives, had failed to produce significant results.

- 1.3.3 However, the archaeological investigations carried out at Milton Landfill have revealed prehistoric activity spread over approximately 40 hectares (Fig. 2).
- 1.3.4 **MILEW 94 – 95** were the earliest excavations undertaken at the landfill (Reynolds 1994; CHER 11669 and 11669a). These encompassed an area of approximately 4ha located 350m to the east of the subject site. This part of the landscape was first occupied in the Iron Age when settlement was characterised by several roundhouses and ditched fields.
- 1.3.5 **MILEW 96** was a small excavation of approximately 0.3ha, located directly to the south of Butt Lane, 400m to the north of the current site. The earliest evidence of land use came in the form of residual struck and burnt flint dating to the Late Mesolithic-Early Neolithic period which pointed to the presence of temporary campsites and associated activities (e.g. cooking) peripheral to possible areas of more intense occupation (Connor 1997; CHER CB15698). There was also evidence for ritual activity, as indicated by the presence of at least one cremation burial. This area was permanently settled from the Middle Bronze Age, reaching its peak of intensity during the Middle to Late Iron Age, as evidenced by the discovery of a roundhouse, fence lines, four-post structures, pits and a hearth, all suggesting that a range of domestic and, possibly, agricultural activities had taken place here.
- 1.3.6 **MILEW 98** was located less than 100m to the north of the current site, approximately 0.25ha in size. Further Middle Iron Age activity was present in the form of small timber structures, inter-cutting pits, and, most significantly, a series of parallel ditches interpreted as drainage or irrigation features, lazy beds or planting trenches (Connor 1999; CHER CB15708). This is evidence of a specific form of agriculture presumably associated with the settlement uncovered in the current works.
- 1.3.7 **MILEW 97** overlaps with the current site, its western half located just within the south-east corner of the site. Further timber structures were found along with pits, a quarry, ditches, a possible trackway and a buried soil (Connor 1998; CHER CB15707). A small quantity of Middle Bronze Age pottery was retrieved from the buried soil hinting at an earlier phase of occupation.
- 1.3.8 **MILPAR 07** was an excavation of 0.8ha which took place in advance of the new Park & Ride site (Phillips 2009; CHER 3123). It was located directly to the south of Butt Lane, only 400m east of MILEW 96. A later Iron Age settlement was uncovered, consisting of ditched fields, a roundhouse, waterholes, pits, post-built structures and a trackway. A log ladder was recovered from one of the waterholes and subsequently radiocarbon dated to between 400 – 200BC. In the latest Iron Age phase a large rectangular enclosure was constructed.
- 1.3.9 The prehistoric evidence from Milton Landfill and the Park & Ride indicates fairly intense settlement over a wide area. The form of the evidence shows many similarities across this area with the same features (timber structures, rubbish pits, waterholes) appearing repeatedly.
- 1.3.10 Other archaeological investigations in the Milton area have confirmed prehistoric occupation on the gravel terraces. At Coles Lane, 1km to the east, excavations have uncovered Bronze Age pits and ditches spanning the 2nd millennium BC (Lucas 1998; CHER CB14682). Recent evaluation at the former EDF energy site, Ely Road, just over 1.5 km to the east, has revealed evidence of Late Iron Age field systems and settlement (Rees 2008; CHER 2981). At Arbury, work has been conducted at the site of the well-

known defensive Late Iron Age ringwork at Arbury Camp, 1.8km to the south-west (Evans 1991a; 1991b), and evidence of Iron Age field systems pre-dating phases of villa building have been uncovered at Kings Hedges School, Cameron Road (Lisboa 1995; CHER 05421b).

- 1.3.11 At Limes Farm, Landbeach, approximately 2.5km to the north-east, sample excavations in a 25ha area of dense cropmarks have indicated that occupation begun in the Middle Iron Age, if not earlier, with features including a multi-phase circular timber structure of uncertain function, pits, and a complex of inter-cutting ditches and ditched enclosures (Connor and Sealey 2003; CHER 08312a, 08314). More marginal activity continued throughout the Late Iron Age and beyond.
- 1.3.12 Slightly further afield is Greenhouse Farm along Newmarket Road in Cambridge, 4.5km to the south-east of the site. Part of an extensive Middle – Late Iron Age settlement was discovered (Hinman 1997). It was characterised by enclosure ditches and a vast number of rubbish pits, approximately 200. Significantly, a large and well-preserved ceramic assemblage was recovered (Braddock and Hill 1999)

### **Roman**

- 1.3.13 The Roman remains in the area to the north of Cambridge are relatively well documented. As with the previous period, until recently activity appeared to be largely confined to the gravel terraces. The main feature of the Roman landscape is represented by the stretch of Akeman Street between Cambridge and Littleport to the north (Margary Route 23b), also called Mere Way along the boundary between the parishes of Milton and Impington to the west. The Roman road forms the western boundary to the subject site. Recent work within the parish has offered the opportunity to excavate segments along its route (Ozanne 1991; CHER 07610; Evans 1991b; CHER 10087). Six 1st-2nd century cremations have also been found adjacent to the road during work at Kings Hedges Farm (Ette 1991; CHER CB15687). Occupation off the Roman road has long been known, with particular reference to Arbury, to the south, where villa buildings and other remains have been the subject of investigations since the 1950s (Friend 1955; Alexander *et al.* 1967). More recent interventions in the same area (Kings Hedges School, Cameron Road) have revealed two phases of the Roman villa dating to the later 4th century and associated features (Lisboa 1995; CHER 05421b; Clarke 2005; MCB16897). Trial trenching carried out on the site of the proposed Rowing Lake, some 2km to the east, has revealed two Romano-British inhumation cemeteries, a Horningsea Ware pottery production site and evidence for cereal processing and animal husbandry in association with a cropmark settlement (Robinson & Guttman 1996; CHER MCB16009). Later investigations have revealed pits on the edge of the first gravel terrace and linear drainage ditches across the floodplain. The evidence has also suggested that fen conditions developed during or after the Roman period (Simmonds 2003). The agricultural settlement identified at the former EDF Energy site to the east, which began in the Late Iron Age, continued in to the Roman period (Rees 2008; CHER 2981). A cremation burial dating to the 2nd century was also discovered.
- 1.3.14 The various investigations at Milton landfill have proved continuity of use in this part of the landscape from the Iron Age to Roman periods.
- 1.3.15 **MILEW 94 – 95** uncovered a large Roman site. Remains of a farming settlement (a possible villa), industrial and religious activity and a Romano-British ditched barrow (burial mound) were found on the site of the earlier Iron Age roundhouses and fields



(Reynolds 1994; CHER11669 and 11669A; Reynolds 1995, 1997; CHER 11669, CB15701, CB15712). The barrow contained fifteen inhumations and three boxed cremations, dating from the 2nd to the 4th century. The cremations appeared to post-date the inhumations. Furthermore, all the burials contemporary with the mound belonged to adult males whereas the later ones represented females.

- 1.3.16 **MILEW 97** provided evidence of Roman activity in the form of gravel extraction, possibly associated with the construction of Akeman Street/Mere Way, and by a series of parallel ditches which may have represented the maintenance of an earlier, Iron Age trackway (Connor 1998; CHER CB15707).
- 1.3.17 **MILPAR 07** contained a single Roman square enclosure which cut across the previous Iron Age rectangular enclosure, suggesting the Iron Age settlement had faded from the landscape. The nucleus of the Roman settlement had either moved north or shrunk in size (Phillips 2009; CHER 3123).
- 1.3.18 To the north of the landfill a significant quantity of Roman artefacts spread across an area of 10ha located between the park and ride site and Akeman Street/Mere Way to the west included Roman Samian and Horningsea ware (CHER 05273A), a Roman bronze jug handle, Late Iron Age and Roman coins, two bow brooches and a finger ring (CHER 08778, 08779, MCB16262 and MCB16263). It is possible that these finds were originally associated with the postulated villa site uncovered further to the south (Reynolds 1994). A scatter of Roman pottery was found during field walking in 1970 to the north-east (CHER 05538).

### ***Anglo-Saxon and Medieval***

- 1.3.19 Anglo-Saxon Milton remains elusive and very few artefacts of this period are known in the area. A bronze wrist clasp generically assigned to the Anglo-Saxon period was found during the **MILEW 98** excavation (Connor 1999). To the south, at Kings Hedges School, Cameron Road, Arbury, a recent investigation has revealed a few Anglo-Saxon features and medieval destruction layers (Lisboa 1995; CHER 05421b). More significantly, test pitting on the site of the proposed Rowing Lake, some 2km to the east, has revealed two scatters of Early Saxon artefacts consistent with domestic activity. One of these scatters was found in association with post-built structures, the other with a possible sunken-featured building and ditches which represented re-cuts of former Romano-British linear features (Robinson & Guttman 1996; CHER MCB16009).
- 1.3.20 A possible Anglo-Saxon origin for Milton is suggested by toponomastic evidence. The place is first recorded in c. 975 as *Middletune* meaning 'the middle farm', possibly due to its location between Impington and Fen Ditton. The current topographic name has been established since the late 13th century (Reaney 1943, 182).
- 1.3.21 Historic sources recount that the manor of Milton originally belonged to the canons of St Paul's London (AD 971) and later to Ely Abbey (AD 984). It was seized by Picot the sheriff after the Norman Conquest, although the abbey's rights were soon recognized again. The manor was subsequently held at a knight's fee of the Bishop of Ely whose successors remained the chief tenants into the 17th century. Remains of a moat (The Hall) possibly associated with the early manor house still survived north of Fen End (formerly Hall End) in the 20th century. Presently, the site is only visible as a soil discolouration on aerial photographs (CHER 05865). The manorial site was transferred close to the church probably in the middle of the 16th century by William Cook and

refurbished by Samuel Knight in the 1770s. The extant Milton Hall (LB 50662, Grade II) was built by his son in 1794 (Wright & Lewis 1989, 179 ff.).

- 1.3.22 Documentary sources attest the existence of a church at Milton by the 12th century. The extant parish church of All Saints (LB 50663, Grade II\*) retains medieval features in the Norman chancel arch and east nave wall. Repair work and rebuilding were carried out during the 19th century. A recent evaluation in the church nave has revealed a series of medieval features, as well as building debris, nails, tiles and occasional fragments of bone (Prosser 1999; Prosser & Hattersley 2001/CHER 05460).
- 1.3.23 Butt Lane, which runs west-north-west to east-south-east to the north of the landfill probably followed the alignment of an established medieval boundary or headland which would have originally separated several fields. Previous work at the landfill site has confirmed the presence of ridge and furrow (Connor 1998; CHER CB15707, 1999; CHER CB15708). Scatters of pottery to the north (CHER 05273B) and to the south (Milton landfill, Oetgen 1990; CHER 10211 and 10211A and D) are consistent with manuring, indicating that the land was probably under cultivation and lay some distance away from any settlement.

#### ***Post Medieval and Modern***

- 1.3.24 The more recent history of the study area can be reconstructed from cartographic evidence. The Enclosure Map of 1802 shows the present route of Butt Lane that was created at this time by extending the original village lane westwards, towards Impington. It has been suggested that Butt Lane was probably superimposed over an established medieval boundary or headland, which would have originally separated the 'Middle Field' to the north and the 'South Field' to the south.
- 1.3.25 By the time of the first edition of the Ordnance Survey (OS Map of 1887-1889) the site was divided into fields which were similar in appearance to those still in existence when the site became landfill.

## **1.4 Acknowledgements**

- 1.4.1 The author would like to thank WRG Ltd. who commissioned and funded the archaeological works. The project was managed by James Drummond-Murray and was monitored by Andy Thomas of Cambridgeshire County Council. The author directed the fieldwork in 2007 and 2008, Nick Gilmour in 2009. The site was excavated by Lawrence Billington, Pete Boardman, Dave Brown, Zoë Ui Choileáin, Tom Eley, Chris Faine, James Fairbairn, Nick Gilmour, Steve Graham, Dave Lamb, Jonathan Lay, Ross Lilley, Tom Lyons, Chris Montague, Lucy Offord, Nick Overton, Gareth Rees, Sue Turnball and Rachelle Wood. A number of specialists contributed to this report; Mike Bamforth, Steve Boreham, Lisa Brown, Matt Brudenell, Chris Faine, Rachel Fosberry, Alice Lyons and Paul Middleton.



## 2 SUMMARY OF RESULTS

### 2.1 Introduction

- 2.1.1 At present the archaeology of the site has been divided into periods; principally Bronze Age, Iron Age, Roman and medieval, and then into broad feature groupings. For example, the Iron Age settlement is characterised by waterholes (pond-like features, excavated to collect water), post built structures and groups of pits. Assessment suggests there was limited evidence of settlement during the Bronze Age, more intense occupation during the Iron Age, mainly the Early and Middle Iron Age, and extensive gravel quarrying in the Early Roman period. While a provisional phased sequence could be attempted it is believed a summary and comparison of data within each feature group would be more beneficial at this stage. Full analysis of the artefact assemblages along with radiocarbon dates will set these elements into a dated sequence.
- 2.1.2 Contexts have been grouped together where several interventions have been excavated through a single feature, for example two opposing quarters of the same waterhole, or multiple interventions within a ditch. Pits have also been grouped together when located close to each other and where dating evidence is similar. Features which have not been grouped and retain their original cut number have been given a different convention in Figs. 4 – 9.

### 2.2 Period 1: Neolithic (c. 3500 – 2000 BC)

- 2.2.1 A small assemblage of 47 flints was recovered from the excavations. It is likely to be almost entirely residual. The assemblage consists predominantly of waste flakes, but diagnostic material included three Neolithic scrapers and six blades of Mesolithic/Early Neolithic date.

### 2.3 Period 2: Bronze Age (c. 2000 – 800 BC)

#### *Early Bronze Age*

- 2.3.1 The earliest evidence of occupation on the site occurred during the Early Bronze Age. A single waterhole, **1650**, was located in the northern half of the site (Fig. 4), along with a single shallow pit, **1753**, which the waterhole truncated. Waterhole **1650** (summarised in Table 1) was a wide and relatively shallow feature. It contained a large assemblage of waterlogged wood, a fragment of which was radiocarbon dated to between 1700 – 1520 cal. BC (95% confidence, SUERC-28027, 3340 ± 35BP). The assemblage was almost exclusively timber and large debris, some of which had been formed into a crude lining (Plate 1). However, there was also instances of more sophisticated revetment where pegs had been driven in vertically to support planks (Plate 2).
- 2.3.2 Pit **1753** measured 2.75m wide and 0.34m deep, with a small assemblage of animal bone (364g) retrieved from the fill. There were no other features associated with the waterhole and pit. This may be due to the intensive Roman quarrying directly to the north and west. Subtle or shallow features such as postholes or further pits may have been obliterated by this later activity.

Water hole	Diameter (m)	Depth (m)	Pottery (g)	Animal bone (g)	Other artefacts	Calibrated radiocarbon date (95% confidence)
1650	5.5	1.04	114	10332	Large assemblage of waterlogged worked wood inc. evidence of in-situ revetment	1700 – 1520 cal. BC

Table 1: Summary of Bronze Age waterhole

### **Middle - Late Bronze Age**

2.3.3 The Middle – Late Bronze Age phase comprises the only significant section of field system on the site, along with several structures. Unfortunately there was a paucity of datable finds for all these features and therefore assigning a date of any kind was problematic.

#### *Ditches*

2.3.4 The most substantial boundary ditch on site was (**1444**), was located to the west of the site (Plate 3; Fig. 9, section 210). It was orientated north-east to south-west and extended for approximately 65m from the western baulk. Two earlier Iron Age waterholes, **1579** and **1464**, were cut through the line of the ditch. Where waterhole **1464** truncated the ditch, it did not re-appear on the northern side, suggesting it truncated the ditch terminus. A single sherd of pottery was retrieved from the primary fill of the ditch, a grog-tempered sherd of Early – Middle Bronze Age date. Ditch **1444** formed an 'L' shape with ditch **1863** suggesting the two may have been contemporary although any relationship had been truncated by Early Iron Age waterhole **1464**. Post alignment **234** also appeared to be perpendicular to ditch **1444**. The lack of other major ditches increases the importance of ditch **1444**, which may have been a land division between two distinct areas or settlements. Although the dating for this ditch was poor, the combination of the earlier Iron Age waterholes truncating it and the recognised, well dated tradition for the construction of Middle Bronze Age field systems in the region, provides strong evidence for a date.

Ditch	Function	Width (m)	Depth (m)	Pottery (g)	Animal bone (g)	Other artefacts
<b>1444</b>	Boundary	0.58 – 2.66	0.36 – 0.76	7	1055	Fired clay and flint
<b>1863</b>	Boundary	0.39 – 0.8	0.13 – 0.3		6	

Table 2: Summary of Middle – Late Bronze Age ditches

#### *Structures*

2.3.5 A single structure, roundhouse **797**, has been dated as Middle – Late Bronze Age, given its form, near total lack of artefacts compared to the Iron Age structures and its close proximity to the central group of Iron Age waterholes, which logically it should be earlier than. Roundhouse **797** is summarised in Table 3.

Structure	Function	Number of postholes	Pottery (g)	Animal bone (g)	Other artefacts
797	Roundhouse	36		4	Flint

Table 3: Summary of Middle – Late Bronze Age structure

2.3.6 Roundhouse **797** was the best preserved roundhouse on the site in terms of the number of postholes surviving (Plate 4). It comprised a group of 36 postholes, located in the centre of the southern part of the site, to the east of post alignment **731** and to the south-west of post alignment **234**. The layout and number of postholes suggests there was more than one phase of construction with one circular structure being superceded by one or more buildings. The postholes varied in size, measuring between 0.12 and 0.4m wide and between 0.05 and 0.26m deep (Fig. 9, section 129). The overall diameter was approximately 16m. There was no dating evidence recovered from the structure and no evidence for internal or associated features such as hearths or beamslots. It may be worth noting that some of the discarded timber in the nearby, later waterholes, such as SF 16 from waterhole **304** and SF 18 from **917**, both of which had multiple mortice joints, are the sort of structural timbers that could have been used in roundhouse **797**. The postholes appeared to be densest and best preserved to the south-east of the structure, where the entrance may have lain.

*Post alignments*

2.3.7 There were two posthole alignments on the site, tentatively dated as Bronze Age, which should be considered separately from any structures. They are summarised in Table 4.

Post alignment	Function	Number of postholes	Pottery (g)	Animal bone (g)	Other artefacts
234	Boundary?	22	18	88	Fired clay (daub, 25g), flint (tertiary flake, undated)
731	Boundary?	16			

Table 4: Summary of posthole alignments

2.3.8 The first, **234**, was located towards the eastern baulk. It consisted of 22 very closely spaced postholes, aligned north-west to south-east (Plate 5). There was no more than 0.1m separating some of the postholes. They varied in size, measuring between 0.2 and 0.62m wide and between 0.06 and 0.29m deep. Four of the postholes contained individual sherds of pottery. While two were dated as Early – Middle Iron Age, one was dated Early – Middle Bronze Age and a fourth was dated as Neolithic/Bronze Age.

2.3.9 Post alignment **731** was located close to the western baulk, 50m west of **234**. It consisted of 16 very closely spaced postholes, aligned north-east to south-west, although not quite perpendicular to **234**. On average the postholes were approximately 0.3 – 0.4m apart. They varied in size, measuring between 0.18 and 0.3m wide and between 0.06 and 0.23m deep (Fig. 9, section 113).

2.3.10 The exact function of these post alignments is unclear at present. The postholes were too close together for it to have formed part of a typical fence line. Instead, it appeared that the posts would themselves have formed a boundary between two areas or possibly a screen. It is impossible to say the two post alignments were contemporary but given that these were unique features to the site and were located in roughly the

same part of the site it would seem likely. They may have been contemporary with roundhouse **797** as they seem to have screened it to the north and west.

- 2.3.11 The reasoning behind dating the post alignments as Bronze Age is that similar features have been identified on other sites in the region. For example, at Barleycroft Farm, Bluntisham, a Late Bronze Age complex of post alignments was discovered. The complex comprised approximately 950 posts in nine distinct lines of between 77.5 and 129m long, with intervals between the posts varying from 0.5 – 1.1m, on east to west and north to south axes, some intercutting (Evans and Knight 2001). At Broom, Bedfordshire, a Middle Bronze Age post alignment more comparable to the Milton example was discovered (Cooper and Edmonds 2007: 85). The alignment was 24m in length, orientated north-west to south-east, and consisted of nineteen postholes, set, on average, just over 1m apart, with diameters ranging from 0.25 – 0.4m and depths from 0.1 – 0.3m.

*Background Bronze Age activity*

- 2.3.12 A small assemblage of Bronze Age pottery was recovered from other features, comprising 33 sherds (253g) of grog-tempered Early-Middle Bronze Age type, including at least one Beaker sherd, and 30 sherds (294g) of particularly coarse flint-tempered ware, which may be Middle or Late Bronze Age. On the whole this assemblage consists of residual sherds in later features including Iron Age waterholes, pits and postholes.

**2.4 Period 3: Iron Age (c. 800 BC – AD 43)**

*Waterholes*

- 2.4.1 Following the limited Bronze Age land use, there is evidence for more intense occupation from the Iron Age, particularly the Early and Middle Iron Age, not only in the number of features but by the quantities of artefacts within them. The dominating group of features on the site during the Iron Age were a series of waterholes. There were eight locations where waterholes were constructed, spread fairly evenly across the area (Fig. 5). On average there appeared to be between 35 – 50m separating the waterholes. Within each location waterholes were often re-cut and spanned more than one phase of occupation, so that in total there were 19 waterholes. The waterholes are summarised in Table 5.

Water hole	Diameter (m)	Depth (m)	Pottery (g)	Animal bone (g)	Other finds	Calibrated radiocarbon date (95% confidence)
<b>39</b>	5.5	1.06		4608		
<b>132</b>	2.6	1	372	7031	SF 64 – sawn antler, waterlogged wood	
<b>137</b>	1.6	0.6		56	SF 59 – quern stone fragment	
<b>143</b>	0.8	0.35		40		
<b>180</b>	6.7	1.38	2339	9592	SF1 - loom weight fragment, SF 54 - antler with hole	



- 2.4.4 Within some other waterholes with large artefact assemblages, the majority of the assemblages came again from the upper fills. These were dumps of rubbish often dark and humic in appearance consisting of pottery, animal bone, charcoal and some fired clay, thrown into the silted up waterholes when they had gone out of use. Such dumps were found in features **509**, **1463** and **1580**. In waterholes **1463** and **1580** these were discrete layers which sealed the tops of the features and should be considered as later events. Layer 1522 sealed the top of waterhole **1463** and layer 1594 sealed the top of waterhole **1580**. In waterhole **1463** the dumped material could be seen in the subsoil during machining suggesting that these were once middens. These dumps and midden-like deposits of domestic debris attest to the fact that people were living very close by.
- 2.4.5 Two of the waterholes contained log ladders. Waterhole **917** contained log ladder SF 43 (Plates 6 and 7), radiocarbon dated to between 800 – 510 cal. BC (95% confidence, SUERC-16334, 2510 ± 35 BP). Waterhole **1463** contained log ladder SF 69, which was lying almost vertically against the cut of the waterhole (Plate 8; Fig. 9, section 196). It was radiocarbon dated to 400 – 600 cal. BC (95% confidence, SUERC-28026, 2430 ± 30 BP).

### Structures

- 2.4.6 There were several Iron Age post-built structures on the site, evident from the large number of postholes (Fig. 6). The nature of such structures meant that some postholes had been truncated away, only the deeper ones surviving. This tended to leave a reduced number of postholes located close to each other but with no clear pattern. However, some groups of postholes did form coherent plans making it easier to interpret what the structures were. The structures are summarised in Table 6.

Structure	Function	Number of postholes	Pottery (g)	Animal bone (g)	Other artefacts
<b>61</b>	Fence line / windbreak?	3			
<b>290</b>	Unknown	3			
<b>317</b>	Possible roundhouse	16	22		
<b>335</b>	Shelter / windbreak	10	5		
<b>395</b>	Possible roundhouse	6	27	9	Fired clay (10g)
<b>433</b>	4-post structure and associated postholes	6			
<b>484</b>	4-post structure	4	56	38	
<b>550</b>	Fence line / windbreak?	3	181		
<b>669</b>	Fence line / windbreak?	3			Fired clay (1g)
<b>1839</b>	Fence line / windbreak?	5	25	1	Fired clay (1g)

Table 6: Summary of structures

- 2.4.7 There were two possible post-built roundhouses, **317** and **395**. Both of these structures were truncated with only some of the postholes surviving but the two groupings suggest the presence of former buildings. Only small finds assemblages were associated with both.
- 2.4.8 There was one definite four-post structure, **484**, located in the south of the site. The four postholes formed a square shape. Such structures are common on prehistoric sites



and are often interpreted as granaries with a raised floor, although they could have been used to store and keep dry a range of foodstuffs or materials. The postholes measured between 0.42 and 0.46m wide and between 0.18 and 0.27m deep (Fig. 9, section 70). Three of the postholes contained pottery. Structure **433** may also have been a four-post structure, but more rectangular in shape.

- 2.4.9 Structures **61**, **550**, **669** and **1839** all consisted of postholes in a linear arrangement. Structures **550** and **669** consisted of three postholes each, **1839** consisted of five although two were slightly offset from the other three. These may represent the remains of fence lines or alternatively they may be some form of windbreak or shelter, close to which activities would have taken place.
- 2.4.10 The majority of the post-built structures were located in the south of the site although this may be a result of the dense Roman quarrying in the north of the site which may have truncated away any postholes.

#### *Ditches*

- 2.4.11 Ditches were rare on the site during the Iron Age considering the amount of settlement evidence. They are illustrated in Fig. 7 and summarised in Table 7.

Ditch	Function	Width (m)	Depth (m)	Pottery (g)	Animal bone (g)	Other finds
<b>445</b>	Boundary	0.25	0.18			
<b>522</b>	Boundary	0.5 – 1	0.09 – 0.36	87	207	Flint
<b>617</b>	Boundary	0.6	0.09			
<b>714</b>	Drainage?	0.72 – 1.97	0.08 – 0.54	16	422	Burnt flint and stones
<b>1402</b>	Boundary	0.5 – 1.25	0.15 – 0.16	15		
<b>1556</b>	Boundary	0.48 – 1.43	0.05 – 0.11			
<b>1558</b>	Boundary	1.1	0.1			

*Table 7: Summary of Iron Age ditches*

- 2.4.12 Ditch **714** was located in the centre of the site and may have been deliberately positioned to extend into waterhole **894**. The ditch became deeper as it reached the waterhole suggesting it may have been a drainage feature.
- 2.4.13 Ditch **522** was narrow and shallow but extended further than any other ditch on site. It was orientated north-north-east to south-south-west and covered 160m from the southern baulk to the north of the site where it had been truncated away by the effect of the Roman quarrying. It truncated waterhole **509** when it had completely silted up and was on a different alignment to ditch **1444**. It shared more in common with the alignment of Akeman Street to the west suggesting the ditch was constructed when the road was at least an established route, possibly in the Late Iron Age. Ditches **617**, **1556** and **1558** may have been associated as they were either parallel or perpendicular to ditch **522**.

*Pit Groups*

2.4.14 Numerous pits were associated with the Iron Age settlement activity, some of which appeared spatially to be clustered into groups. The pit groups are summarised in Table 8.

Pit group	Function	Number of pits	Pottery (g)	Animal bone (g)	Other finds
28	Unknown	5		3	
33	Unknown	4		1352	SF 54 – Perforated antler
313	Unknown	3	34	81	
354	Unknown	3	9	1	SF 3 – Neolithic blade
431	Unknown	2	92	309	Heat cracked stone
457	Quarrying?	4			
472	Unknown	3	36	299	SF 53 – Neolithic blade
491	Unknown	5	505	134	SF 57 – quern stone fragment
500	Rubbish	3	3489	486	
502	Rubbish	4	2392	974	
608	Unknown	2	26	2	
785	Quarrying?	3			
951	Unknown	2			Heat cracked stone
1411	Rubbish	2	1976	3793	SF 66 – sawn antler, flint, burnt stone, CBM (9g), fired clay (9g)
1612	Rubbish	2	2993	143	Fired clay (1g)

*Table 8: Summary of pit groups*

2.4.15 Most of the pit groups were located close to the possible structures and/or waterholes, suggesting they had a domestic function, close to where people were living. For example pit groups **500**, **502** and **608** were in the same area as waterhole **566/509**, 4-post structure **484** and fenceline/windbreak **550**. Pit group **472** was located close to possible roundhouse **317**. Some pits have been interpreted as groups of rubbish pits as a result of the large dumps of pottery, bone and burnt material recovered from them although this may have been a secondary function, once the pits had gone out of use. As with the midden-like deposits in some of the waterholes the quantities of occupation waste in some pits certainly supports the idea of people living close by.

2.4.16 Many of the pits were of a similar size. Pit group **472** was typical, the three pits measured between 0.94 and 2.6m wide and between 0.3 and 0.84m deep.

*Other Iron Age features*

2.4.17 There were also isolated pits (approximately 30), isolated postholes (approximately 9) and tree bole group **52**, which were contemporary to the Iron Age settlement. Those containing finds are summarised in Table 9, and they are illustrated in Fig. 7.



Cut number	Feature type	Function	Pottery (g)	Animal bone (g)	Other finds
25	Pit	Unknown	6	115	
44	Pit	Unknown	448	643	Burnt stone
52	Group of 4 tree boles	Natural	445	1225	
90	Pit	Rubbish?	999	4911	Fired clay (318g), flint (44g)
526	Layer	Unknown	324	183	SF 56, fragment of a quern stone
591	Pit	Unknown	45	34	
597	Pit	Unknown	804	105	
706	Pit	?	19g (2 sherds. E-MBA – residual?)	304	
1837	Pit	Small shaft-like well	611	1617	

Table 9: Summary of isolated Iron Age features

## 2.5 Period 4: Roman (AD 43 – AD 410)

### Quarrying

- 2.5.1 Unlike the surrounding sites, there was no evidence for settlement during the Roman period on this particular block of land. Instead, part of the site with a band of fine gravel running across it, was intensively quarried (Fig. 8). This band was approximately 60m north to south and extended north-west to south-east across the excavation area. It was exploited right to its edges but not beyond, suggesting a certain level of prospecting must have taken place to know exactly where the higher quality gravel was located.
- 2.5.2 Approximately 300 pits were excavated on site (grouped as **62**), roughly half of the total number. The pits were circular or sub-circular, many were small in diameter measuring less than 1m wide. Others were much bigger, measuring up to 2.5m wide. The majority were shallow, measuring no more than 0.5m deep. There were a few exceptions to this such as quarry **429** which measured 5m wide and 1.27m deep, and quarry **1696** which measured 9.5m wide and 1.02m deep. The shallow depth of most pits meant not all of the gravel was extracted. Instead another pit would be excavated directly along side giving the impression of many intercutting shallow pits. The reason for not fully extracting the gravel may be because of a high water table. Below a certain level, albeit a shallow one, incoming water would have made quarrying too difficult.
- 2.5.3 Finds from the quarry pits were relatively sparse. There was a total of 2195g of pottery retrieved and 2397g of animal bone. Most of the pottery was residual (311 sherds, 1964g was pre-Roman where as only 27 sherds, 231g was Roman), not surprising considering the pits were excavated and rapidly backfilled with topsoil that would have contained pottery from earlier settlement and land use.
- 2.5.4 The most obvious use for the gravel extracted would be to surface the Roman road Akeman Street which formed the western boundary of the excavation area.

### *Roman ditch*

- 2.5.5 A single ditch of Roman date, **953**, was orientated north-west to south-east in the centre of the site. It extended for 75m from the eastern baulk to near the western baulk where its course was lost in a group of quarry pits. The ditch measured between 0.6 and 2.24m wide and between 0.36 and 0.8m deep. It contained 12g of animal bone and 26g of pottery along its length. The ditch appeared to truncate the quarry pits suggesting the land may have been given over to agriculture by the time the ditch was constructed. It may have been a field boundary, roughly, although not perfectly, perpendicular to the Roman road.

## **2.6 Period 5: Medieval / post-medieval**

- 2.6.1 Following the Roman period there is no evidence of land use on the site until the medieval / post-medieval period when the land became used for agriculture with the pre-enclosure system of ridge and furrow in operation. The furrows on the site (group **35**) were orientated north-west to south-east and were on average approximately 6m apart. Fourteen were excavated, measuring between 0.2 and 3.5m wide and between 0.1 and 0.3m deep. The furrows were aligned perpendicular to the Roman road which survived as a trackway, headland or boundary, as indeed it does today.

## **2.7 Natural features**

- 2.7.1 Eleven undated natural features were excavated (group **85**), consisting mainly of tree boles and natural hollows.

### 3 FACTUAL DATA AND ASSESSMENT OF ARCHAEOLOGICAL POTENTIAL

#### 3.1 Stratigraphic and Structural Data

##### *The Excavation Record*

3.1.1 All hand written records have been collated and checked for internal consistency, and the site records have been transcribed onto an MS Access Database. Quantities of records are laid out in the table below.

<b>Type</b>	<b>2007 Excavation</b>	<b>2008 Excavation</b>	<b>2009 Excavation</b>	<b>Total</b>
Context register	30	11	3	44
Context numbers	1215	454	114	1783
Plan registers	2	1	1	4
Section register	5	3	1	9
Sample register	20	11	2	33
Context sheets	1168	444	113	1725
Plans at 1:100	17	0	0	17
Plans at 1:50	23	32	16	71
Plans at 1:20	2	1	0	3
Plans at 1:10	7	0	0	7
Sections 1:20	99	43	10	152
Sections 1:10	66	41	3	110
Black and White prints	8 x 36	7 x 36	1 x 36	16 x 36
Colour slides	10 x 36	7 x 36	1 x 36	18 x 36
Digital photographs	535	301	43	879
Total station survey	N	N	N	-
GPS survey	N	N	N	-

*Table 10: Quantification of written archive*

##### *Finds Quantification*

3.1.2 All finds have been washed, quantified and bagged. The catalogue of all finds is on an MS Access Database. Total quantities of each material type per feature type are listed in Table 11.

Finds	Waterholes	Iron Age pits	Postholes	Ditches	Quarry pits
Ceramic (vessel) (kg)	34.360	18.010	0.338	0.245	2.282
Animal Bone (kg)	62.897	33.861	0.473	1.790	2.397
Fired Clay (kg)	0.499	0.344	0.037	0.001	0.044
Flint (kg)	0.828	0.316	0.017	0.236	0.120
Shell				0.002	0.237
Slag	0.164			0.012	0.025

Table 11: Quantification of finds by feature type

### Environmental Quantification

3.1.3 Environmental bulk samples were collected from a representative cross section of feature types and locations. Bulk samples were taken to analyse the preservation of micro- and macro-botanical remains. Pollen samples were also collected. They are summarised in Table 12.

Sample type	Waterholes	Iron Age pits	Postholes	Ditches	Quarry pits
Flotation	25	50	19	11	16
Pollen	12	4	0	0	2
Monolith	7	0	0	0	0

Table 12: Quantification of samples by feature type

### Range and Variety

3.1.4 Features on the site consisted of waterholes, pits, postholes, ditches and tree boles. The majority of the features were Iron Age in date apart from the dense area of quarrying which was Roman. Table 13 below refers to excavated features only. This is an accurate representation of the number of features on site apart from the Roman quarry pits, of which approximately 50% were excavated.

Feature Type	No of Features
Waterhole	19
Posthole	144
Pit	422
Ditches (excluding segments)	8
Tree bole	5

Table 13: Quantification of excavated features

### Condition

3.1.5 Preservation of buried features was good across the majority of the excavation area. However, there were two parts where preservation had been affected. Part of the south-eastern corner of the site overlapped with the 1997 excavation area (MILEW 97) meaning this portion had already been stripped. In addition, the easternmost part of the current site, a 20m strip running the entirety of the the eastern baulk had originally been

stripped in 2004 and left open for 3 years which would have caused some deterioration and erosion of the ground due to the action of frosts and heavy rains. This then had to be carefully stripped again to remove vegetation that had begun to take hold. The MILEW 97 area in particular had therefore been stripped three times and left open for three years. The remains of MILEW 97 consisted mainly of post-built structures, the majority of which did not survive this process.

- 3.1.6 The sheer density of Roman quarry pits in the north of the site caused a depression in the ground level. This caused severe truncation of earlier features.

## 3.2 Associated Research

### *Primary and Published Sources*

- 3.2.1 Excavations and related research at Milton Landfill have the potential to identify significant surviving remains of a prehistoric agricultural landscape within the Milton area. Research into the historic development of the site's environs is therefore required to:

- identify traces of such past landscape use;
- record and interpret such evidence, within its wider landscape setting;
- tentatively identify and characterise the prehistoric and Roman landscape, linking to similar patterns elsewhere and informing on local land-use.

## 3.3 Artefact Summaries

### *Pottery (Appendix B.1)*

#### *Summary*

- 3.3.1 A total of 4497 sherds (52534g) of prehistoric pottery was recovered from the site. The vast majority of the assemblage dates to the later part of the Early Iron Age, c. 600-300 BC, but some proportion may belong to a Middle Iron Age tradition which, however, at this site is not well-represented by distinctive forms. A tiny impressed ware sherd could be either Neolithic or Bronze Age. A small group of Bronze Age date includes 33 sherds (253g) of grog-tempered pottery of Early-Middle Bronze Age type, including at least one Beaker sherd, and 30 sherds (294g) of particularly coarse flint-tempered ware (fabric F10) may be Middle or Late Bronze Age.
- 3.3.2 A small collection of wheel-turned Late Iron Age and Roman pottery (39 sherds, 554g) was recovered from the site. Domestic occupation of the site appears to have ceased in the Early Roman period and the main evidence of activity during this period related to gravel quarrying. Most of the Roman pottery was contained in the fills of these shallow features, generally amounting to only one-three sherds in each feature. Almost every sherd was highly abraded although the average sherd size as relatively high at 14g. The wall thickness of body sherds suggested that most belonged to large vessels such as cooking and storage jars rather than 'table wares'. Quarry **429** produced the largest group of eight sherds and Quarry **1696** contained the only sherd of samian ware from the excavation.

*Statement of Potential*

- 3.3.3 The Iron Age pottery assemblage is significant for the region in that few well provenanced contemporary assemblages have been recovered from this part of Cambridgeshire. Despite its generally fragmentary state, there is a good range of fabrics, identifiable forms, surface treatments and decoration to consider as part of a more detailed analysis. The waterhole assemblages are particularly useful because of their relatively large size in some cases, and in that the stratigraphic sequences of fills and recuts provide an opportunity to examine the development of ceramic styles and changes over time. It must be borne in mind that there is an issue of residuality to tease out during an analysis of the sequence.
- 3.3.4 Further analysis of the very small earlier prehistoric assemblages and the late Iron Age and Roman pottery would add very little to local, regional or national picture.

***Waterlogged Wood (Appendix B.2)***

*Summary*

- 3.3.5 A total of 248 discrete items of waterlogged wood were recorded in addition to seven bulk assemblages of roundwood and debris which were also assessed. The items included 2 log ladders, a possible mallet, a peg or trenail, two staves and a structural timber with mortice joint holes.

*Statement of Potential*

- 3.3.6 The artefacts and possible artefacts are worthy of individual study. Other examples of log ladders, especially contemporary ones, should be compared to those from the landfill. The potential in the remainder of the material lies in consideration of the assemblage as a whole.

***Lithics (Appendix B.3)***

*Summary*

- 3.3.7 A total of 47 lithic items were recovered from 40 contexts during the excavations at Milton Landfill. These are predominantly waste flakes, but diagnostic material includes three Neolithic scrapers and six blades of Mesolithic/Early Neolithic date. No more than three items were recovered from any single context and cannot, therefore, be used to reliably date any of the features from which they were recovered.
- 3.3.8 A total of 40 pieces of burnt, unworked flint (1102g) was recovered from 18 contexts. This did not occur in significant amounts in any single context.

*Statement of Potential*

- 3.3.9 The lithics from the site are likely to be entirely residual and demonstrate a human presence somewhere in the area of the excavations during the late Mesolithic/Neolithic period. The nature of this activity, and the precise definition of its date and duration, is extremely difficult to assess due to the small size of the assemblage.

### ***Ceramic Building Material (Appendix B.4)***

#### *Summary*

- 3.3.10 A small abraded assemblage of 95 burnt clay pieces, weighing 1153g, with an average fragment weight of only 12g was recovered from twenty-five features. Seven individual fabrics could be identified, but all are consistent with local clay exploitation. Most of the material comprises undiagnostic daub fragments as well as two possible triangular loom weight fragments.
- 3.3.11 The earliest feature from which a burnt clay fragment was recovered was Bronze Age, with most material recovered from Iron Age deposits but also Romano-British layers. One intrusive medieval or post-medieval tile fragment was also recovered.

#### *Statement of Potential*

- 3.3.12 This is a small abraded assemblage of primarily Iron Age locally produced undiagnostic daub. Seven fabrics were identified, all sand tempered with differing mixes of small angular flint, chalk and clay pellets with evidence for some organic material, such as straw and charcoal surviving. This assemblage is typical of the burnt clay assemblages found in this area and settlement type.

### ***Small Finds (Appendix B.5)***

#### *Summary*

- 3.3.13 The assemblage consists of sixteen objects in a variety of materials, ranging in date from Early Iron Age to late post-medieval or modern. These included two antler objects, Iron Age loomweights and part of a Roman copper-alloy armlet.

#### *Statement of Potential*

- 3.3.14 The Early and Middle Iron Age objects form a valuable addition to material of this period from the region. They provide information about the environment, farming practices and technology of the site and should form part of any published report. They should be set in their local and regional contexts, with reference to more widely spread examples of similar objects and technologies where appropriate.
- 3.3.15 The Roman objects should also be briefly described in any published report in order to flag up the presence of material of this date in the area.

## **3.4 Environmental Summaries**

### ***Faunal Remains (Appendix C.1)***

#### *Summary*

- 3.4.1 The total weight of the hand-collected bone was 103.7kg. Cattle were the most prevalent taxon in both the Iron Age and Romano-British assemblages. Sheep/Goat remains were the next most numerous species in both phases in roughly equal proportions. Pig remains were scarce in both phases, being outnumbered by horse remains in the Iron Age sample. Interestingly almost no other species were noted in the



assessed sample, with the only instances being a portion of red deer antler and a fragmentary dog mandible.

*Statement of Potential*

- 3.4.2 This is a medium to large sized assemblage largely from the Iron Age and Romano-British periods with good potential for comparison with numerous contemporary sites in the immediate area. The assemblage is large enough to identify changes in the composition and characteristics of domestic stock over time.

***Environmental Remains (Appendix C.2)***

*Summary*

- 3.4.3 One hundred and fifty-seven samples were taken from across the excavated area and one hundred and thirteen were submitted for an initial appraisal of the plant macrofossil assemblages.
- 3.4.4 Charred plant remains other than charcoal were extremely rare. Fifty-two of the non-waterlogged samples contained some charcoal. Only five of samples contained charred plant remains. A total of six charred cereal grains were recovered. Preservation of the grains was poor. Charred seeds of weed plants are also rare and are largely confined to the waterlogged samples.
- 3.4.5 Forty-five of the samples contained waterlogged remains. Five of these samples (from the basal and lower fills within five of the waterholes), were identified as having high archaeobotanical potential and were submitted to Val Fryer for full assessment. Somewhat interestingly, the features appear to range in date from the Early Bronze Age (waterhole **1650**) to the Middle Iron Age (waterhole **566**), and yet there is little variation in the composition of the plant macrofossil assemblages, possibly indicating that the nature of the local landscape remained comparatively static over a considerable period of time. The results suggest that areas of rough grassland appear to have been locally predominant, although the presence of segetal and annual weeds, charred cereal remains and charcoal/charred wood fragments does, perhaps, indicate that some adjacent land was under cultivation and domestic and/or agricultural activities were occurring in the near vicinity. The features themselves appear to have been sufficiently wet or water-filled to sustain a limited range of wetland and aquatic plants, with the abundance of duckweed seeds suggesting that the water within the pits was generally quite stagnant. The presence of tree/shrub macrofossils within the assemblages possibly indicates that the areas immediately surrounding the features were slightly overgrown with woody shrubs and thorny plants, although there is insufficient material to suggest that the wells were actually fenced off or segregated from the surrounding landscape.

*Statement of Potential*

- 3.4.6 Although the list of species noted within the assemblages is relatively comprehensive, it is considered very unlikely that quantification/analysis would add any further data to that already recorded regarding the features and their place within the local landscape. Therefore, no further work is recommended at this stage.



### ***Pollen (Appendix C.3)***

#### *Summary*

- 3.4.7 Four sediment samples were selected for pollen assessment. One of these, sample 46, was barren. Of the others, sample 81, fill 722 of waterhole **917** was the most interesting. It was dominated by hazel, with a clear mixed-oak woodland signal and no indication of agricultural activity. Such a pollen assemblage represents an area of managed hazel coppice woodland. If this were the case, the absence of arable indicators suggest that this area of hazel scrub was sufficiently large to exclude or dilute other pollen signals.
- 3.4.8 The two other samples provided evidence of differing landscapes. Sample 49 from waterhole **566** indicated a post-clearance grassland landscape, with little sign of soil disturbance, or arable activity while sample 86 from waterhole **894** represented a post-clearance grassland landscape, with abundant evidence of soil disturbance and arable activity.

#### *Statement of Potential*

- 3.4.9 This pollen assessment provides evidence for three separate landscapes. The hazel woodland signal is intriguing, but its significance can only be determined with reference to the specific position of the context and the feature which it came from, within the landscape. Post-clearance landscapes without arable activity hint at a degree of 'abandonment' not often encountered in Bronze Age or later Iron Age/Roman samples. Grassland and meadow environments with arable activity, but without residual mixed oak woodland, often occur in the later Iron Age/Roman period. These samples have produced a useful insight into the range of archaeological environments at Milton Landfill although no further work is recommended at this stage.

### ***Phosphates (Appendix C.4)***

#### *Summary*

- 3.4.10 Ten samples selected from a series of pit/waterhole features and a single ditch fill sample were presented for analysis. No control sample was available to establish expected background levels of phosphate. All phosphate levels are expressed in terms of mg. phosphorus per 100 g. soil.
- 3.4.11 The range of values, from 42mg.P to 180mg.P is wide, although in the absence of control samples, it is hard to assess how significantly enhanced the highest levels are.
- 3.4.12 Most obvious are the contrasting values obtained from features interpreted as waterholes, e.g. context 76, waterhole **39** (P value: 42) and context 726, waterhole **921** (P value: 180). Other, relatively high readings were obtained from context 532, waterhole **705** (P value: 132) and context 648, waterhole **566** (P value: 132). Such values would be consistent with animal use, although caution is required if comparison is made with the apparently domestic assemblage contributing to the enhanced phosphate content of context 501, pit **502** (P value: 126).
- 3.4.13 The small number of samples does not allow for firm conclusions, but the high value of the sample from context 726 is particularly noteworthy and suggests a different usage from context 76, as would be consistent with an animal waterhole as compared to human domestic use.

## 4 RESEARCH AIMS AND OBJECTIVES

### 4.1 National Research Objectives

4.1.1 The excavation has shown that the area of Milton Landfill had been used or occupied by people in the Bronze Age, Iron Age, Roman and Medieval periods for settlement, gravel extraction and agricultural activities. It is thought that the results of the excavation have the potential to make a contribution towards a number of national research aims.

4.1.2 *Contribute toward an understanding of Iron Age landscapes*

The excavation of this site, in conjunction with the results from excavations of sites in the vicinity suggest that the landscape saw some low level Bronze Age use, which intensified during the Iron Age. How the landscape and its use continued / changed between these periods has been identified as a research priority.

4.1.3 *Contribution toward an understanding of settlement hierarchies and interaction*

The collection of artefacts, ecofacts and structural evidence from sites with well understood depositional processes and with good and consistent sampling techniques has been identified as a critical factor in the study of settlement hierarchies and interaction. This project presented the opportunity to collect data from more than one activity site which may be temporarily associated, and therefore provide the potential to contribute toward this research aim.

4.1.4 *Contribute towards understanding of rural settlement patterns*

Settlement patterns have been identified as being key to the understanding of the economic, social and political structures of rural England. This project has the potential to contribute towards identifying settlement patterns, specifically during the Iron Age.

4.1.5 *Contribute towards an understanding of patterns of agriculture*

Research into past agriculture has often been ignored and has therefore been highlighted as a key national research priority. Work at Milton landfill has the potential to contribute to the study of past agriculture and its relationship to settlement in the prehistoric period.

### 4.2 Regional Research Objectives

4.2.1 The Milton Landfill project has the potential to contribute towards several of the research priorities highlighted in the framework for a regional research agenda and strategy for the Eastern Counties (Brown and Glazebrook 2000).

4.2.2 *Contribute toward a better understanding of Iron Age chronology*

The regional research agenda has cited chronology as a gap in knowledge for the region during the Iron Age and has recommended that several techniques should be

applied in order to establish a chronology. These include scientific dating techniques, and the investigation of pottery sequences and datable pottery assemblages. During this project a well preserved and stratified Early/Middle Iron Age pottery assemblage was recovered. The assemblage, along with other datable artefacts such as the log ladders, may contribute to research into the chronological sequence for this period.

#### 4.2.3 *Contribute towards an understanding of the development of the agrarian economy in the Iron Age*

The increase in agricultural production has been identified as being the most important development in the Iron Age of the region. Evidence for the nature of the Iron Age agrarian economy has been cited as very high priority. At an individual site level this excavation has the potential to increase current understanding of the pattern of exploitation and settlement of the southern Cambridgeshire gravels and clays in these periods. In addition, this work may contribute to the understanding of how the landscape changed to accommodate the expanding agricultural economy. Particularly valuable data can be gathered from the collection of charred grain deposits and animal bones from datable deposits.

#### 4.2.4 *Contribute towards an understanding of settlement chronology and dynamics*

The relatively large number of Late Iron Age settlements (dating to after 150 BC) in the region, in comparison to those of the earlier Iron Age, suggests that population increased and/or there was a discontinuity of settlement between the earlier and Late Iron Age. Also, it is thought that the Late Iron Age is the period when the Roman settlement pattern was established on the gravels, and that sites founded in the earlier Iron Age exhibit less evidence of Romanisation than sites founded in the Late Iron Age. Do the results from Milton Landfill support or differ from these assumptions?

### **4.3 Local Research Objectives**

#### 4.3.1 The Milton Landfill project provided an opportunity to study a block of land set within a well known archaeological landscape in south central Cambridgeshire, potentially contributing to the following research aims

#### 4.3.2 *Contribute towards an understanding of the site in a wider landscape setting.*

Study the results of the current excavation in relation to others in the local area, in particular the previous excavations at the landfill site and the excavation at Milton Park and Ride.

#### 4.3.3 *Continuity and change in local settlement patterns*

Seen in its entirety the landfill site offers evidence for settlement and land use dating from the Bronze Age through to the medieval period. Is there continuity between these periods or does the form and location of settlement change?

#### 4.3.4 *Contribute towards the establishment of local pottery sequences*

The Iron Age pottery from the current excavation is a well preserved and stratified assemblage and offers the opportunity to compare it to other significant assemblages such as Lime's Farm, Landbeach and Greenhouse Farm, Cambridge.

#### 4.3.5 *Iron Age log ladders*

A number of contemporary log ladders have been found in the county and further afield, including one locally at Milton Park and Ride. These should be studied as a means of comparison to the two at Milton Landfill.

### 4.4 **Site specific Research Objectives**

#### 4.4.1 *Establish the date, development and phasing of the remains, in particular the Iron Age settlement*

Stratigraphic relationships, the ceramic assemblage and the C14 dates will be studied to establish the site development. This should be tied in to the results of previous phases of work which have also found evidence for land use and occupation in the later prehistoric and Roman periods.

#### 4.4.2 *Establish the phasing of the waterholes*

Waterholes were the dominant feature on the site. An important consideration is how many of these were open and in use at any one time. This has a major bearing on what constitutes an individual settlement (see 4.4.3 below).

#### 4.4.3 *Defining settlement form on the site*

What constitutes settlement on the site? Should each waterhole and associated post built structures and groups of pits be seen as evidence for an individual settlement during a specific period of time, for example a generation, or do the remains represent fairly intensive use of an area of land over a relatively short time period?

#### 4.4.4 *Consider the function of the post alignments*

The post alignments are an unusual feature. Similar Bronze Age examples elsewhere need to be identified to compare with the two at Milton Landfill and aid in interpretation.

#### 4.4.5 *Consider the change in land use between the Iron Age and Roman periods*

The Iron Age settlement on the site gave way to Roman quarrying. Why did settlement not continue into the Roman period? The MILEW 94 – 95 excavations 350m to the east did provide evidence of settlement continuity from the Iron Age into the Roman period, why did this not occur to the west?

## 5 METHODS STATEMENTS

### 5.1 Stratigraphic Analysis

- 5.1.1 The environmental, finds and context data will be analysed within an *MS Access* database. Contexts will be assigned phase and group numbers dependant on dating evidence found within them, stratigraphic and spacial distribution.

### 5.2 Illustration

- 5.2.1 The site plans have been digitised in AutoCad, relevant sections will also be digitised and, where necessary, finds will be drawn by hand. These will be used to provide a series of plans showing different phases of activity on the site and other relevant illustrations.

### 5.3 Associated Research

- 5.3.1 Primary and published sources will be consulted from the HER record, aerial photographs and comparable sites locally and nationally.

### 5.4 Artefactual Analysis

- 5.4.1 The pottery will be sent to the relevant specialist for further analysis, the results of which will be incorporated into the final report. The analysis will include an investigation of raw material sources for the fabrics, seriation of the waterhole groups in order to trace form and fabric development during the Iron Age period and to research more thoroughly the local and regional affinities of the assemblage. It is recommended that c. 30-40 sherds be drawn.

### 5.5 Ecofactual Analysis

- 5.5.1 The faunal remains will be examined further by the relevant specialist. The analysis will include full recording of the assemblage.

### 5.6 Radiocarbon dating

- 5.6.1 In order to achieve some of the stated research aims, four radiocarbon dates have been obtained. These include log ladder SF 43 and three other worked wood artefacts from three further waterholes. These will aid in establishing the development of the site.

## 6 REPORT WRITING, ARCHIVING AND PUBLICATION

### 6.1 Report Writing

Tasks associated with report writing are identified in Table 15 (Tasks 18 - 28).

### 6.2 Archiving

6.2.1 Excavated material and records will be deposited with, and curated by, Cambridgeshire County Council in appropriate county stores under the Site Code MIL LAN 07 and the county HER code ECB 2637. A digital archive will be deposited with ADS. CCC requires transfer of ownership prior to deposition. During analysis and report preparation, OA East will hold all material and reserves the right to send material for specialist analysis.

6.2.2 The archive will be prepared in accordance with current OA East guidelines, which are based on current national guidelines.

### 6.3 Publication

6.3.1 It is proposed that the results of the project should be published in PCAS, in an article which combines the prehistoric aspects from these excavations along with those from previous excavations at Milton landfill and Milton Park and Ride. The Roman evidence from Milton Landfill will be dealt with separately in a volume on Roman Cambridgeshire (Wallis, in prep.). Both of these publications will be financed separately.

## 7 RESOURCES AND PROGRAMMING

### 7.1 Staffing and Equipment

Name	Initials	Project Role	Establishment
Michael Bamforth	MB	Wood specialist	L-P Archaeology
Steve Boreham	SB	Pollen analysis specialist	freelance
Lisa Brown	LBR	Pottery specialist	OA South
Louise Bush	LB	Illustrator	OA East
James Drummond-Murray	JDM	Project Manager	OA East
Chris Faine	CF	Animal bone specialist	OA East
Rachel Fosberry	RF	Environmental supervisor	OA East
Gillian Greer	GG	Illustrator	OA East
Tom Phillips	TP	Project Officer	OA East
Elizabeth Popescu	EP	Editor/Publications Manager	OA East
Stephen Wadeson	SW	Roman pottery specialist	OA East
Radiocarbon dating	SUERC	C14 dates	SUERC

Table 14: Project Team

### 7.2 Task Identification

Task No.	Task	Staff	No. Days
<b>Project Management</b>			
1	Project management	JDM	2
2	Team meetings	JDM/TP	1
3	Liaison with relevant staff and specialists, distribution of relevant information and materials	JDM/TP	1
<b>Stratigraphic analysis</b>			
4	Update database and digital plans/sections to reflect any changes	TP	1
5	Finalise site phasing	TP	1
6	Add final phasing to database	TP	1
7	Compile group and phase text	TP	4
8	Compile overall stratigraphic text and site narrative to form the basis of the full/archive report	TP	4
9	Review, collate and standardise results of all final specialist reports and integrate with stratigraphic text and project results	TP	2
<b>Illustration</b>			
10	Digitise selected sections	LB	0.5
11	Prepare draft phase plans, sections and other report figures	LB	2
12	Select photographs for inclusion in the report	TP	0.5
<b>Associated research</b>			
13	Reassessment of the HER record	TP	0.5

Task No.	Task	Staff	No. Days
14	Examination of relevant published archaeological sources	TP	1
15	Examination of relevant unpublished archaeological sources	TP	1
<b>Artefact studies</b>			
16	Complete prehistoric pottery catalogue and report	LBR	5
<b>Environmental Remains</b>			
17	Complete animal bone catalogue and report	CF	7
<b>Report Writing</b>			
18	Integrate associated research	TP	1
19	Write historical and archaeological background text	TP	
20	Edit phase and group text	TP	1
21	Compile list of illustrations/liaise with illustrators	TP	1
22	Write discussion and conclusions	TP	2
23	Prepare report figures	LB	4
24	Collate/edit captions, bibliography, appendices etc	TP	1
25	Produce draft report	TP	0.5
26	Internal edit	EP	1
27	Incorporate internal edits	TP	1
28	Final edit	EP	1
<b>Archiving</b>			
29	Compile paper archive	TP	0.5
30	Archive/delete digital photographs	TP	0.5
31	Compile/check material archive	TP	0.5
<b>Report production</b>			
32	Produce final report and illustrations	LB	0.5
33	Distribute report	TP	0.5

Table 15: Task list



## APPENDIX A. CONTEXT SUMMARY

Context	Cut	Category	Feature Type	Width (m)	Depth (m)	Group	Period
1		layer	topsoil		0.4	0	
2		layer	subsoil		0.4	0	
24	25	fill	pit	0.85	0.26	25	3
25	25	cut	pit	0.85	0.26	25	3
26	180	fill	waterhole	3.05	0.4	180	3
27	28	fill	pit	0.5	0.16	28	3
28		cut	pit	0.5	0.16	28	3
29	30	fill	pit	0.6	0.13	28	3
30		cut	pit	0.6	0.13	28	3
31	32	fill	pit	0.6	0.16	28	3
32		cut	pit	0.6	0.16	28	3
33		cut	pit		0.47	33	3
34	33	fill	pit		0.47	33	3
35		cut	furrow			35	5
36	35	fill	furrow			35	5
37	180	fill	waterhole	1.6	0.4	180	3
38	180	fill	waterhole		0.1	180	3
39		cut	waterhole	4.1	1.06	39	3
40	41	fill	pit	0.4	0.15	44	3
41		cut	pit	0.4	0.15	44	3
42	44	fill	pit	1.24	2.6	44	3
43	44	fill	pit	1.6	0.53	44	3
44		cut	pit	1.6	0.53	44	3
45	49	fill	waterhole	1.8	0.16	39	3
46	49	fill	waterhole	2.27	0.15	39	3
47	49	fill	waterhole	2	0.28	39	3
48	49	fill	waterhole	1.44	0.2	39	3
49		cut	waterhole	4.1	0.16	39	3
50	52	fill	tree bowl	1.45	0.32	52	3
51	52	fill	tree bowl	2	0.55	52	3
52		cut	tree bowl	2	0.55	52	3
53	180	fill	waterhole	2.3	0.72	180	3
54		cut	pit	0.9	0.28	33	3
55	54	fill	pit	0.9	0.28	33	3
56		cut	pit	1.2	0.28	33	3
57	56	fill	pit	1.2	0.28	33	3
58		cut	pit	1	0.28	33	3
59	58	fill	pit	1	0.28	33	3
60	61	fill	posthole	0.48	0.09	61	3
61		cut	posthole	0.48	0.09	61	3
62		cut	pit	1	0.2	62	4
63	62	fill	pit	1	0.2	62	4
64		cut	pit	1.5	0.4	62	4
65	64	fill	pit	1.5	0.4	62	4

Context	Cut	Category	Feature Type	Width (m)	Depth (m)	Group	Period
66	68	fill	pit	0.5	0.2	28	3
67	68	fill	pit	1.1	0.25	28	3
68		cut	pit	1.1	0.25	28	3
69	70	fill	posthole	0.25	0.12	61	3
70		cut	posthole	0.25	0.12	61	3
71	72	fill	posthole	0.3	0.36	61	3
72		cut	posthole	0.3	0.26	61	3
73	39	fill	waterhole	1.32	1.06	39	3
74	39	fill	waterhole	1.44	1.06	39	3
75	39	fill	waterhole	0.38	1.04	39	3
76	39	fill	waterhole	1.26	1	39	3
77	39	fill	waterhole	2.48	0.86	39	3
78	39	fill	waterhole	2.2	0.6	39	3
79	39	fill	waterhole	1.9	0.36	39	3
80	39	fill	waterhole	1.86	0.33	39	3
81	39	fill	waterhole	1.5	0.6	39	3
82	39	fill	waterhole	2.6	0.3	39	3
83	39	fill	waterhole	1.6	0.26	39	3
84	85	fill	tree bowl	0.7	0.2	85	1
85		cut	tree bowl	0.7	0.2	85	1
86	87	fill	pit	0.3	0.12	28	3
87		cut	pit	0.3	0.12	28	3
88	90	fill	pit	2.7	0.28	90	3
89	90	fill	pit	2	0.06	90	3
90		cut	pit	3.04	0.9	90	3
91	180	fill	waterhole	2.2	0.44	180	3
92	180	fill	waterhole	2.1	0.45	180	3
93	39	fill	waterhole	2.76	0.7	39	3
94	96	fill	pit	1.3	0.36	62	4
95	96	fill	pit	1.2	0.36	62	4
96		cut	pit	1.4	0.36	62	4
97	49	fill	waterhole	0.78	0.24	39	3
98	49	fill	waterhole	1	1.28	39	3
99	49	fill	waterhole	1.46	0.41	39	3
100	49	fill	waterhole	0.86	0.04	39	3
101	49	fill	waterhole	1.96	0.14	39	3
102	104	fill	tree bowl	0.9	0.12	52	3
103	104	fill	tree bowl	2.7	0.31	52	3
104		cut	tree bowl	2.7	0.31	52	3
105	132	fill	pit	1	0.2	132	3
106	107	fill	pit		0.11	62	4
107		cut	pit		0.11	62	4
108	109	fill	pit	1.3	0.2	62	4
109		cut	pit	1.3	0.2	62	4
110	111	fill	pit	0.9	0.21	62	4
111		cut	pit	1.4	0.23	62	4
112	113	fill	pit	1.7	0.57	62	4
113		cut	pit	1.7	0.57	62	4

Context	Cut	Category	Feature Type	Width (m)	Depth (m)	Group	Period
114	180	fill	waterhole	1.8	0.2	180	3
115	111	fill	pit	0.7	0.23	62	4
116	117	fill	pit	1	0.65	62	4
117		cut	pit	1	0.65	62	4
118	119	fill	tree bowl	2.2	0.31	52	3
119		cut	tree bowl	2.2	0.31	52	3
120	121	fill	pit	1.2	0.36	62	4
121		cut	pit	1.2	0.36	62	4
122	123	fill	pit	1.2	0.4	62	4
123		cut	pit	1.2	0.4	62	4
124	125	fill	pit	0.5	0.22	62	4
125		cut	pit	0.5	0.22	62	4
126	132	fill	pit	1.5	0.3	132	3
127	132	fill	pit	2.6	0.5	132	3
128	132	fill	pit	0.4	0.1	132	3
129	132	fill	pit	0.6	0.2	132	3
130	132	fill	pit	0.3	0.08	132	3
131	132	fill	pit	0.6	0.08	132	3
132		cut	pit	2.6	1	132	3
133	137	fill	waterhole	1.5	0.45	137	3
134	137	fill	waterhole	0.6	0.25	137	3
135	137	fill	waterhole	1.2	0.2	137	3
136	137	fill	waterhole	0.3	0.05	137	3
137		cut	waterhole	1.6	0.6	137	3
138	140	fill	pit	0.5	0.2	140	3
139	140	fill	pit	0.6	0.05	140	3
140		cut	pit	0.6	0.25	140	3
141	143	fill	waterhole	0.5	0.2	180	3
142	143	fill	waterhole	0.8	0.15	180	3
143		cut	waterhole	0.8	0.35	143	3
144	145	fill	pit	1.54	0.22	62	4
145		cut	pit	1.54	0.22	62	4
146	147	fill	pit	1.1	0.24	62	4
147		cut	pit	1.1	0.24	62	4
148	149	fill	pit	2.7	0.28	62	4
149		cut	pit	2.7	0.28	62	4
150	151	fill	pit	1.8	0.18	62	4
151		cut	pit	1.8	0.18	62	4
152	153	fill	tree bowl	2	0.18	52	3
153		cut	tree bowl	2	0.18	52	3
154	155	fill	pit	0.95	0.1	62	4
155		cut	pit	0.95	0.1	62	4
156	159	fill	pit	0.75	0.43	62	4
157	159	fill	pit	0.22	0.18	62	4
158	159	fill	pit	0.65	0.22	62	4
159		cut	pit	0.75	0.5	62	4
160	163	fill	pit	0.5	0.27	62	4
161	163	fill	pit	0.4	0.15	62	4

Context	Cut	Category	Feature Type	Width (m)	Depth (m)	Group	Period
162	163	fill	pit	0.95	0.15	62	4
163		cut	pit	1.05	0.42	62	4
164	165	fill	pit	1	0.28	62	4
165		cut	pit	1	0.28	62	4
166	90	fill	pit	2.8	0.24	90	3
167	90	fill	pit	2.5	0.2	90	3
168	90	fill	pit	1	0.26	90	3
169	90	fill	pit	1.5	0.25	90	3
170	90	fill	pit	0.7	0.34	90	3
180		cut	waterhole	6.7	1.38	180	3
181	182	fill	pit	0.65	0.16	62	4
182		cut	pit	0.65	0.16	62	4
183	185	fill	pit	0.7	0.2	62	4
184	185	fill	pit	0.1	0.2	62	4
185		cut	pit	0.8	0.2	62	4
186	187	fill	pit	0.7	0.2	62	4
187		cut	pit	0.7	0.2	62	4
188	189	fill	pit	0.7	0.1	62	4
189		cut	pit	0.7	0.1	62	4
190	191	fill	pit	0.9	0.1	62	4
191		cut	pit	0.9	0.1	62	4
192	193	fill	pit	0.8	0.14	62	4
193		cut	pit	0.8	0.14	62	4
194	195	fill	pit	0.7	0.06	62	4
195		cut	pit	0.8	0.06	62	4
196	180	fill	waterhole		0.2	180	3
197		master number	posthole			0	
198	199	fill	pit	1.88	0.34	62	4
199		cut	pit	1.88	0.34	62	4
200	201	fill	pit	1.46	0.22	62	4
201		cut	pit	1.46	0.22	62	4
202	203	fill	pit			62	4
203		cut	pit			62	4
204	205	fill	pit	1.8	0.26	62	4
205		cut	pit	1.12	0.26	62	4
206	207	fill	pit	0.98	0.39	62	4
207		cut	pit	0.98	0.39	62	4
208	209	fill	pit	0.4	0.48	62	4
209		cut	pit	0.4	0.48	62	4
210	211	fill	pit	1.7	0.59	62	4
211		cut	pit	1.8	0.59	62	4
212	213	fill	pit	1.5	0.71	62	4
213		cut	pit	1.5	0.71	62	4
214	215	fill	pit	0.64	0.22	62	4
215		cut	pit	0.64	0.22	62	4
216	217	fill	pit	0.2	0.26	62	4
217		cut	pit	0.2	0.26	62	4

Context	Cut	Category	Feature Type	Width (m)	Depth (m)	Group	Period
218	219	fill	pit	0.8	0.27	62	4
219		cut	pit	0.8	0.27	62	4
220	221	fill	pit	0.8	0.34	62	4
221		cut	pit	0.8	0.34	62	4
222	223	fill	pit	0.74	0.22	62	4
223		cut	pit	0.74	0.22	62	4
224	225	fill	pit	0.64	0.2	62	4
225		cut	pit	0.64	0.2	62	4
226	227	fill	pit	1.1	0.25	62	4
227		cut	pit	1.1	0.25	62	4
228	180	fill	waterhole			180	3
229	230	fill	pit	1.6	0.5	62	4
230		cut	pit	1.6	0.5	62	4
231	232	fill	pit	1.9	0.3	62	4
232		cut	pit	1.9	0.3	62	4
233	234	fill	posthole	0.37	0.16	234	3
234		cut	posthole	0.37	0.16	234	3
235	236	fill	posthole	0.26	0.09	234	3
236		cut	posthole	0.26	0.09	234	3
237	238	fill	posthole	0.24	0.18	234	3
238		cut	posthole	0.24	0.18	234	3
239	240	fill	posthole	0.31	0.19	234	3
240		cut	posthole	0.31	0.19	234	3
241	242	fill	posthole	0.62	0.29	234	3
242		cut	posthole	0.62	0.29	234	3
243	244	fill	posthole	0.2	0.12	234	3
244		cut	posthole	0.2	0.12	234	3
245	246	fill	posthole	0.49	0.23	234	3
246		cut	posthole	0.49	0.23	234	3
247	248	fill	posthole	0.4	0.25	234	3
248		cut	posthole	0.4	0.25	234	3
249	250	fill	posthole	0.34	0.17	234	3
250		cut	posthole	0.34	0.17	234	3
251	252	fill	posthole	0.26	0.19	234	3
252		cut	posthole	0.26	0.19	234	3
253	254	fill	posthole	0.4	0.16	234	3
254		cut	posthole	0.4	0.16	234	3
255	256	fill	posthole	0.2	0.12	234	3
256		cut	posthole	0.2	0.12	234	3
257	258	fill	posthole	0.2	0.1	234	3
258		cut	posthole	0.2	0.1	234	3
259	260	fill	posthole	0.25	0.11	234	3
260		cut	posthole	0.25	0.11	234	3
261	262	fill	posthole	0.22	0.14	234	3
262		cut	posthole	0.22	0.14	234	3
263	264	fill	posthole	0.28	0.08	234	3
264		cut	posthole	0.28	0.08	234	3
265	266	fill	posthole	0.3	0.13	234	3

Context	Cut	Category	Feature Type	Width (m)	Depth (m)	Group	Period
266		cut	posthole	0.3	0.13	234	3
267	268	fill	posthole	0.28	0.09	234	3
268		cut	posthole	0.28	0.09	234	3
269	270	fill	posthole	0.28	0.06	234	3
270		cut	posthole	0.28	0.06	234	3
271	272	fill	posthole	0.2	0.09	234	3
272		cut	posthole	0.2	0.09	234	3
273	274	fill	posthole	0.22	0.12	234	3
274		cut	posthole	0.22	0.12	234	3
275	276	fill	posthole	0.46	0.21	234	3
276		cut	posthole	0.46	0.21	234	3
277	204	fill	pit	1.12	0.12	62	4
278	205	fill	pit	0.66	0.26	62	4
279	280	fill	pit	1.7	0.5	62	4
280		cut	pit	1.7	0.5	62	4
281	180	fill	waterhole		0.42	180	3
282	180	fill	waterhole		0.4	180	3
283	180	fill	waterhole		0.4	180	3
284	285	fill	pit	1.4	0.2	62	4
285		cut	pit	2.4	0.2	62	4
286	287	fill	pit	0.55	0.06	62	4
287		cut	pit	0.55	0.06	62	4
288	180	fill	waterhole	1.9	0.7	180	3
289	290	fill	posthole	0.32	0.15	290	3
290		cut	posthole	0.32	0.15	290	3
291	292	fill	posthole	0.3	0.1	290	3
292		cut	posthole	0.3	0.1	290	3
293	294	fill	posthole	0.2	0.04	290	3
294		cut	posthole	0.2	0.04	290	3
295	296	fill	ditch	0.54	0.19	296	6
296		cut	ditch	0.54	0.19	296	6
297	298	fill	pit	2.5	0.4	62	4
298		cut	pit	2.5	0.4	62	4
299	300	fill	pit	2.5	0.4	62	4
300		cut	pit	2.5	0.4	62	4
301	304	fill	pit	3.5	0.35	301	3
302	304	fill	waterhole	2.8	0.02	302	3
303	304	fill	waterhole	2.8	0.08	304	3
304		cut	waterhole	3.5	0.4	304	3
305	306	fill	pit		0.35	306	3
306		cut	pit	0.08	0.35	306	3
307	313	fill	pit	0.92	0.09	313	3
308	313	fill	pit	0.92	0.5	313	3
309	314	fill	pit	1.2	0.36	313	3
310	315	fill	pit	0.75	0.28	313	3
311	315	fill	pit	3	0.14	313	3
312	315	fill	pit	0.82	0.56	313	3
313		cut	pit	0.52	0.59	313	3

Context	Cut	Category	Feature Type	Width (m)	Depth (m)	Group	Period
314		cut	pit	1.2	0.36	313	3
315		cut	pit	0.82	0.56	313	3
316	317	fill	posthole	0.7	0.22	317	3
317		cut	posthole	0.7	0.22	317	3
318	319	fill	posthole	0.4	0.06	317	3
319		cut	posthole	0.4	0.06	317	3
320	321	fill	posthole	0.41	0.25	317	3
321		cut	posthole	0.41	0.25	317	3
322		fill	posthole	0.4	0.18	317	3
323		cut	posthole	0.4	0.18	317	3
324	325	fill	posthole	0.7	0.14	317	3
325		cut	posthole	0.7	0.14	317	3
326	327	fill	posthole	0.3	0.09	317	3
327		cut	posthole	0.3	0.09	317	3
328	329	fill	posthole	0.52	0.19	317	3
329		cut	posthole	0.52	0.19	317	3
330	331	fill	posthole	0.5	0.04	317	3
331		cut	posthole	0.5	0.04	317	3
332	333	fill	posthole	0.45	0.18	317	3
333		cut	posthole	0.45	0.18	317	3
334	335	fill	posthole	0.34	0.16	335	3
335		cut	posthole	0.34	0.16	335	3
336	337	fill	posthole	0.45	0.14	317	3
337		cut	posthole	0.45	0.14	317	3
338	339	fill	natural		0.17	85	
339		cut	natural	1.1	0.19	85	
340	341	fill	posthole	0.4	0.12	317	3
341		cut	posthole	0.4	0.12	317	3
342	343	fill	posthole	0.5	0.2	317	3
343		cut	posthole	0.5	0.2	317	3
344	345	fill	posthole	0.42	0.18	317	3
345		cut	posthole	0.42	0.18	317	3
346	347	fill	posthole	0.42	0.18	317	3
347		cut	posthole	0.42	0.18	317	3
348	349	fill	posthole	0.5	0.14	317	3
349		cut	posthole	0.5	0.14	317	3
350	351	fill	posthole	0.3	0.1	317	3
351		cut	posthole	0.3	0.1	317	3
352	354	fill	pit	2.3	0.77	354	3
353	354	fill	pit	0.9	0.42	354	3
354		cut	pit	2.3	0.77	354	3
355	356	fill	natural	0.35	0.25	85	
356		cut	natural	0.35	0.25	85	
357	358	fill	furrow	0.9	0.2	35	5
358		cut	furrow	0.9	0.2	35	5
359	367	fill	waterhole	2.7	0.3	367	3
360	367	fill	waterhole	2.15	0.2	367	3
361	367	fill	waterhole	0.9	0.2	367	3



Context	Cut	Category	Feature Type	Width (m)	Depth (m)	Group	Period
362	367	fill	waterhole	2.15	0.2	367	3
363	367	fill	waterhole	2.25	0.1	367	3
364	367	fill	waterhole	1.3	0.3	367	3
365	367	fill	waterhole	1.05	0.35	367	3
366	367	fill	waterhole	0.3	0.1	367	3
367		cut	waterhole	2.7	1.1	367	3
368	369	fill	pit	1.7	0.32	369	3
369		cut	pit	1.7	1.22	369	3
370	371	fill	pit	0.94	0.38	371	3
371		cut	pit	1.3	0.86	371	3
372	367	fill	waterhole	0.4	0.2	367	3
373	369	fill	pit	1.3	0.26	369	3
374	369	fill	pit	1	0.46	369	3
375	369	fill	pit	1.3	0.32	369	3
376	369	fill	pit	0.9	0.1	369	3
377	369	fill	pit	0.4	0.12	369	3
378	371	fill	pit	0.54	0.3	371	3
379	371	fill	pit	0.4	0.3	371	3
380	371	fill	pit	0.6	0.4	371	3
382	383	fill	pit	3.1	0.65	354	3
383		cut	pit	3.1	0.65	354	3
384	385	fill	pit	1.7	0.75	354	3
385		cut	pit	1.7	0.75	354	3
386	387	fill	pit	1	0.3	354	3
387		cut	pit	1	0.3	354	3
388		cut	pit	4.08	0.58	388	3
389	388	fill	pit	3.8	0.24	388	3
390	388	fill	pit	0.7	0.19	388	3
391	388	fill	pit	3.88	0.42	388	3
392		cut	waterhole	1.56	0.18	304	3
393	392	fill	waterhole	1.56	0.18	304	3
394	395	fill	posthole	0.51	0.4	395	3
395		cut	posthole	0.51	0.4	395	3
396	397	fill	posthole	0.26	0.22	395	3
397		cut	posthole	0.26	0.22	395	3
398	399	fill	posthole	0.35	0.2	395	3
399		cut	posthole	0.35	0.2	395	3
400	402	fill	posthole	0.3	0.22	395	3
401	402	fill	posthole	0.3	0.02	395	3
402		cut	posthole	0.3	0.25	395	3
403	404	fill	posthole	0.3	0.4	395	3
404		cut	posthole	0.3	0.4	395	3
405	406	fill	posthole	0.3	0.2	395	3
406		cut	posthole	0.3	0.2	395	3
407	409	fill	pit	0.85	0.25	395	3
408	409	fill	pit	0.6	0.15	395	3
409		cut	pit	1	0.25	395	3
410	411	fill	posthole	0.3	0.17	335	3

Context	Cut	Category	Feature Type	Width (m)	Depth (m)	Group	Period
411		cut	posthole	0.3	0.17	335	3
412	413	fill	stake hole	0.2	0.04	335	3
413		cut	stake hole	0.2	0.04	335	3
414	415	fill	posthole	0.4	0.18	335	3
415		cut	posthole	0.4	0.18	335	3
416	417	fill	stake hole	0.2	0.1	335	3
417		cut	stake hole	0.2	0.1	335	3
418	419	fill	posthole	0.5	0.14	335	3
419		cut	posthole	0.5	0.14	335	3
420	421	fill	stake hole	0.2	0.1	335	3
421		cut	stake hole	0.2	0.1	335	3
422	423	fill	posthole	0.3	0.08	335	3
423		cut	posthole	0.3	0.08	335	3
424	425	fill	posthole	0.5	0.08	335	3
425		cut	posthole	0.5	0.08	335	3
426	429	fill	pit	1.5	0.39	429	4
427	429	fill	pit	1.5	0.52	429	4
428	429	fill	pit	1.5	0.4	429	4
429		cut	pit	0.45	1.27	429	4
430	431	fill	pit	1.42	0.22	431	3
431		cut	pit	1.42	0.22	431	3
432	433	fill	posthole	0.25	0.1	433	3
433		cut	posthole	0.25	0.1	433	3
434	435	fill	posthole	0.3	0.1	433	3
435		cut	posthole	0.3	0.1	433	3
436	437	fill	posthole	0.3	0.1	433	3
437		cut	posthole	0.3	0.1	433	3
438	439	fill	posthole	0.3	0.15	433	3
439		cut	posthole	0.3	0.15	433	3
440	441	fill	posthole	0.5	0.2	433	3
441		cut	posthole	0.5	0.2	433	3
442	443	fill	posthole	0.3	0.15	433	3
443		cut	posthole	0.3	0.15	433	3
444	445	fill	ditch	0.25	0.18	445	3
445		cut	ditch	0.25	0.18	445	3
446	447	fill	posthole	0.4	0.12	395	3
447		cut	posthole	0.4	0.12	395	3
448	449	fill	posthole	0.2	0.06	395	3
449		cut	posthole	0.2	0.06	395	3
450	451	fill	posthole	0.45	0.16	335	3
451		cut	posthole	0.45	0.16	335	3
452	452	fill	pit	1.44	0.25	431	3
453		fill	pit	0.8	0.26	431	3
454	455	fill	pit	1.41	0.5	431	3
455		cut	pit	1.66	0.51	431	3
456	457	fill	pit	1.22	0.36	457	3
457		cut	pit	1.22	0.36	457	3
458	459	fill	pit	1.4	0.25	457	3

Context	Cut	Category	Feature Type	Width (m)	Depth (m)	Group	Period
459		cut	pit	1.4	0.25	457	3
460	461	fill	pit	0.87	0.27	457	3
461		cut	pit	0.87	0.27	457	3
462	463	fill	pit	1.96	0.26	457	3
463		cut	pit	1.96	0.26	457	3
464		cut	waterhole	1	0.82	304	3
465	464	fill	waterhole	2.94	0.22	304	3
466	464	fill	waterhole	3.68	0.39	304	3
467	464	fill	waterhole	4.94	0.72	304	3
468	472	fill	pit	1.86	0.49	472	3
469	472	fill	pit	1.04	0.16	472	3
470	472	fill	pit	2.16	0.2	472	3
471	472	fill	pit	2	0.2	472	3
472		cut	pit	2.16	0.84	472	3
473	474	fill	pit	0.94	0.27	472	3
474		cut	pit	0.94	0.27	472	3
475	476	fill	pit	2.6	0.3	472	3
476		cut	pit	2.6	0.3	472	3
477	464	fill	waterhole	2.2	0.22	304	3
478	464	fill	waterhole	2.56	0.57	304	3
479	480	fill	modern ditch	0.54	0.2	296	6
480		cut	modern ditch	0.54	0.2	296	6
481	388	fill	pit	2.72	0.57	388	3
482	388	fill	pit	2.92	0.58	388	3
483	484	fill	posthole	0.43	0.27	484	3
484		cut	posthole	0.43	0.27	484	3
485	486	fill	posthole	0.42	0.18	484	3
486		cut	posthole	0.42	0.18	484	3
487	488	fill	posthole	0.42	0.25	484	3
488		cut	posthole	0.42	0.25	484	3
489	490	fill	posthole	0.46	0.22	484	3
490		cut	posthole	0.46	0.22	484	3
491		cut	pit	1.1	0.4	491	3
492	491	fill	pit	1.1	0.35	491	3
493		cut	pit	0.7	0.25	491	3
494	493	fill	pit	0.7	0.25	491	3
495		cut	pit	1.2	0.6	491	3
496	495	fill	pit	1.2	0.6	491	3
497	491	fill	pit	0.6	0.05	491	3
498	500	fill	pit			500	3
499	500	fill	pit			500	3
500		cut	pit	2.8	0.38	500	3
501	502	fill	pit	2.1	0.36	502	3
502		cut	pit	2.66	0.56	502	3
503		layer	natural	5	0.25	85	
504	505	fill	furrow	2.7	0.22	35	5
505		cut	furrow	2.7	0.22	35	5
506	509	fill	waterhole	3.3	0.66	509	3

Context	Cut	Category	Feature Type	Width (m)	Depth (m)	Group	Period
507	509	fill	waterhole	3.3	0.8	509	3
508	630	fill	waterhole	2.7	1	566	3
509		cut	waterhole			509	3
510	512	fill	pit	1.6	0.2	500	3
511	512	fill	pit	1.9	0.3	500	3
512		cut	pit	1.9	0.3	500	3
513	515	fill	pit	1.2	0.18	500	3
514	515	fill	pit	0.8	0.16	500	3
515		cut	pit	1.2	0.35	500	3
516	502	fill	pit	2.66	0.2	502	3
517	518	fill	pit	1.44	0.22	502	3
518		cut	pit	1.44	0.22	502	3
519	464	fill	waterhole	2.08	0.74	304	3
520	464	fill	waterhole	1.8	0.8	304	3
521	522	fill	ditch		0.16	522	3
522		cut	ditch	0.5	0.16	522	3
523	524	fill	ditch		0.24	522	3
524		cut	ditch	0.8	0.24	522	3
525		cut	pit	1	0.8	491	3
526		layer	spread	2.2	0.4	526	3
527	528	fill	field drain	0.3	0.18	296	6
528		cut	field drain	0.3	0.18	296	6
529	530	fill	furrow	1	0.24	35	5
530		cut	furrow	1	0.24	35	5
531	705	fill	pit	8.8	0.26	301	3
532	705	fill	waterhole	0.9	0.04	302	3
533	705	fill	waterhole	9.6	0.4	304	3
534	536	fill	furrow	3.5	0.12	35	5
535	705	fill	pit	3.5	0.62	301	3
536		cut	furrow	3.5	0.12	35	5
537	705	fill	waterhole	2.1	0.1	304	3
538	705	fill	waterhole	1.4	0.3	304	3
539	540	fill	posthole		0.12	540	3
540		cut	posthole	0.25	0.12	540	3
541	464	fill	waterhole	2.54	0.85	304	3
542	464	fill	waterhole	0.8	0.48	304	3
543	620	fill	waterhole	1.2	0.45	620	3
544	620	fill	waterhole	0.8	0.7	620	3
545	464	fill	waterhole	1.34	0.24	304	3
546	464	fill	waterhole	0.84	0.44	304	3
547	464	fill	waterhole	1.2	0.65	304	3
548	464	fill	waterhole	1.62	0.83	304	3
549	550	fill	posthole	0.42	0.2	550	3
550		cut	posthole	0.42	0.2	550	3
551	552	fill	posthole	0.32	0.17	550	3
552		cut	posthole	0.32	0.17	550	3
553	554	fill	posthole	0.34	0.13	550	3
554		cut	posthole	0.34	0.13	550	3

Context	Cut	Category	Feature Type	Width (m)	Depth (m)	Group	Period
555	556	fill	pit	0.68	0.2	550	3
556		cut	pit	0.68	0.2	550	3
557	558	fill	pit	0.7	0.17	550	3
558		cut	pit	0.7	0.17	550	3
559	525	fill	pit	1	0.55	491	3
560	620	fill	waterhole	0.4	0.12	620	3
561	620	fill	waterhole	0.38	0.3	620	3
562	620	fill	waterhole	0.8		620	3
563	620	fill	waterhole	0.9	0.6	620	3
564	565	fill	ditch	0.8	0.33	522	3
565		cut	ditch	0.8	0.33	522	3
566		cut	waterhole	6.5	1.14	566	3
567	568	fill	animal burrow?	0.18	0.1	571	3
568		cut	animal burrow?	0.18	0.1	571	3
569	571	fill	ditch	0.26	0.12	571	3
570	571	fill	ditch			571	3
571		cut	ditch	0.7	0.22	571	3
572	571	fill	ditch	0.49	0.1	571	3
573	574	fill	stake hole/animal burrow	0.1	0.06	571	3
574		cut	stake hole/animal burrow?	0.1	0.06	571	3
575	576	fill	stake hole/animal burrow?	0.04	0.26	571	3
576		cut	stake hole/animal burrow?	0.04	0.26	571	3
577	705	fill	waterhole	1.96	0.02	302	3
578	705	fill	waterhole	2.2	0.02	302	3
579	705	fill	waterhole	1.12	0.1	302	3
580	705	fill	waterhole	1.14	0.07	302	3
581	705	fill	waterhole	1.74	0.05	302	3
582	583	fill	pit	2.7	0.15	502	3
583	582	cut	pit	2.2	0.15	502	3
584	585	fill	gully	0.36	0.12	502	3
585		cut	gully	0.36	0.12	502	3
586	587	fill	pit	1.2	0.22	502	3
587		cut	pit	1.2	0.22	502	3
588	589	fill	posthole	0.4	0.2	589	3
589		cut	posthole	0.4	0.2	589	3
590	591	fill	pit	1.2	0.1	591	3
591		cut	pit	1.2	0.1	591	3
592	593	fill	pit	2	0.35	491	3
593		cut	pit	2.1	0.6	491	3
594	597	fill	pit		0.2	597	3
595	597	fill	pit		0.15	597	3
596	597	fill	pit		0.3	597	3
597		cut	pit	2	0.3	597	3
598	599	fill	natural	0.28	0.12	85	
599		cut	natural	0.28	0.12	85	

Context	Cut	Category	Feature Type	Width (m)	Depth (m)	Group	Period
600	601	fill	natural hollow	0.6	0.2	85	
601		cut	natural hollow	0.6	0.2	85	
602	603	fill	natural hollow	0.35	0.1	85	
603		cut	natural hollow	0.35	0.1	85	
604	605	fill	stake hole/animal burrow?	0.12	0.1	571	3
605		cut	stake hole/animal burrow?	0.12	0.1	571	3
606	608	fill	pit	0.61	0.08	608	3
607	608	fill	pit	0.61	0.16	608	3
608		cut	pit	0.61	0.24	608	3
609	630	fill	waterhole	1.5	0.2	566	3
610	612	fill	pit	0.56	0.2	608	3
611	612	fill	pit	0.8	0.52	608	3
612		cut	pit	2.5	0.52	608	3
613	614	fill	posthole	0.4	0.3	614	3
614		cut	posthole	0.4	0.3	614	3
615	618	fill	posthole	0.4	0.12	618	3
616	617	fill	gully	0.6	0.09	617	3
617		cut	gully	0.6	0.09	617	3
618		cut	posthole	0.4	0.12	618	3
619	620	fill	waterhole	0.7	0.4	620	3
620		cut	waterhole	1.34	1.22	620	3
621	525	fill	pit	0.7	0.3	491	3
622	525	fill	pit	1.04	0.7	491	3
623	620	fill	waterhole	1	0.58	620	3
624	625	fill	ditch	1	0.36	522	3
625		cut	ditch	1	0.36	522	3
626	627	fill	pit	0.52	0.36	627	3
627		cut	pit	1.05	0.48	627	3
628	612	fill	pit	0.98	0.5	608	3
629	627	fill	pit	1.05	0.48	627	3
630		cut	waterhole	6.5	1.12	566	3
631	566	fill	waterhole	0.8	0.2	566	3
632	566	fill	waterhole	0.8	0.2	566	3
633	566	fill	waterhole	0.8	0.15	566	3
634	566	fill	waterhole	0.7	0.1	566	3
635	566	fill	waterhole	0.5	0.1	566	3
636	566	fill	waterhole	0.6	0.2	566	3
637	566	fill	waterhole	0.5	0.3	566	3
638	566	fill	waterhole	0.5	0.2	566	3
639	566	fill	waterhole	0.5	0.1	566	3
640	566	fill	waterhole	1	0.15	566	3
641	566	fill	waterhole	1.2	0.4	566	3
642	509	fill	waterhole	0.4	0.1	509	3
643	509	fill	waterhole	1	0.2	509	3
644	509	fill	waterhole	2.6	0.6	509	3
645	566	fill	waterhole	0.5	0.05	566	3

Context	Cut	Category	Feature Type	Width (m)	Depth (m)	Group	Period
646	566	fill	waterhole	0.6	0.15	566	3
647	566	fill	waterhole	0.5	0.2	566	3
648	566	fill	waterhole	0.5	0.2	566	3
649	566	fill	waterhole	0.6	0.05	566	3
650	509	fill	waterhole	0.5	0.2	509	3
651		cut	furrow	0.2	0.1	35	5
652	651	fill	furrow	0.2	0.1	35	5
653	509	fill	waterhole	0.6	0.04	509	3
654	509	fill	waterhole	1	0.54	509	3
655	630	fill	waterhole	1.9	0.34	566	3
656	658	fill	pit	0.89	0.57	658	3
657	658	fill	pit	1.14	0.68	658	3
658		cut	pit	1.14	0.68	658	3
659	660	fill	ditch	0.5	0.1	522	3
660		cut	ditch	0.5	0.1	522	3
661	509	fill	waterhole	0.84	0.44	509	3
662	593	fill	pit	2.08	0.45	491	3
663	593	fill	pit	0.82	0.52	491	3
664	593	fill	pit	0.68	0.56	491	3
665	593	fill	pit	1.78	0.6	491	3
666	593	fill	pit	0.7	0.58	491	3
667	705	fill	waterhole			304	3
668	669	fill	posthole	0.3	0.15	669	3
669		cut	posthole	0.3	0.15	669	3
670	671	fill	posthole	0.3	0.1	669	3
671		cut	posthole	0.3	0.1	669	3
672	673	fill	posthole	0.32	0.12	669	3
673		cut	posthole	0.32	0.12	669	3
674		cut	pit	1.3	0.46	491	3
675	674	fill	pit	1	0.46	491	3
676	674	fill	pit	1	0.32	491	
677	678	fill	pit	0.3	0.23	678	3
678		cut	pit	0.3	0.23	678	3
679	680	fill	pit	0.55	0.3	680	3
680		cut	pit	0.55	0.3	680	3
681	464	fill	waterhole	1.5	0.1	304	3
682	683	fill	posthole	0.2	0.11	683	
683		cut	posthole	0.2	0.11	683	
684	509	fill	waterhole			509	3
685	705	fill	waterhole			304	3
686	620	fill	waterhole		0.2	620	3
687	620	fill	waterhole		0.4	620	3
688	630	fill	waterhole	1.5	0.2	566	3
689	705	fill	waterhole			304	3
690	705	fill	waterhole	2	0.03	304	3
691	705	fill	waterhole	1.76	0.12	304	3
692	705	fill	waterhole	0.55	0.06	304	3
700	701	fill	posthole	0.22	0.04	701	3



Context	Cut	Category	Feature Type	Width (m)	Depth (m)	Group	Period
701		cut	posthole	0.47	0.18	701	3
702	701	fill	posthole	0.47	0.18	701	3
703	704	fill	natural	1.26	0.36	85	
704		cut	natural	1.26	0.36	85	
705	304	cut	waterhole	13.7	0.94	304	3
706		cut	pit	2.7	0.34	706	3
707	706	fill	pit	2.7	0.34	706	3
708	709	fill	pit	1.4	0.8	706	3
709		cut	pit	1.4	0.8	706	3
710	711	fill	pit	0.55	0.24	711	3
711		cut	pit	0.55	0.24	711	3
712	714	fill	ditch	1.4	0.32	714	3
713	714	fill	ditch	0.9	0.54	714	3
714		cut	ditch	1.4	0.54	714	3
715	716	fill	furrow	1.82	0.2	35	5
716		cut	furrow	1.82	0.2	35	5
717	705	fill	pit	8.1	0.21	301	3
718	705	fill	waterhole	2.82	0.16	304	3
719	705	fill	waterhole	2.18	0.12	304	3
720	928	fill	waterhole	0.64	0.28	928	3
721	705	fill	waterhole	1.18	0.26	304	3
722	917	fill	waterhole	3.66	0.4	917	3
723	921	fill	waterhole	1.5	0.22	921	3
724	921	fill	waterhole	0.82		921	3
725	921	fill	waterhole	0.9	0.09	921	3
726	921	fill	waterhole	1.3	0.1	921	3
727	728	fill	pit	1.1	0.3	728	3
728		cut	pit	1.1	0.3	728	3
729		master number	postholes			0	
730	731	fill	posthole	0.25	0.2	731	3
731		cut	posthole	0.25	0.2	731	3
732		fill	posthole	0.2	0.1	731	3
733		cut	posthole	0.2	0.1	731	3
734	735	fill	posthole	0.2	0.1	731	3
735		cut	posthole	0.2	0.1	731	3
736	737	fill	posthole	0.2	0.13	731	3
737		cut	posthole	0.2	0.13	731	3
738	739	fill	ditch	0.9	0.28	522	3
739		cut	ditch	0.9	0.28	522	3
741	705	fill	waterhole	3.5	0.1	302	3
742	743	fill	posthole	0.18	0.17	731	3
743		cut	posthole	0.18	0.17	731	3
744	745	fill	posthole	0.2	0.15	731	3
745		cut	posthole	0.2	0.15	731	3
746	747	fill	posthole	0.3	0.22	731	3
747		cut	posthole	0.3	0.22	731	3
748	749	fill	posthole	0.28	0.17	731	3

Context	Cut	Category	Feature Type	Width (m)	Depth (m)	Group	Period
749		cut	posthole	0.28	0.17	731	3
750	751	fill	posthole	0.26	0.16	731	3
751		cut	posthole	0.26	0.16	731	3
752	753	fill	posthole	0.28	0.23	731	3
753		cut	posthole	0.28	0.23	731	3
754	753	fill	posthole	0.28	0.23	731	3
755	705	fill	waterhole	3	0.1	302	3
756	757	fill	pit	1	0.4	757	3
757		cut	pit	1	0.4	757	3
758	705	fill (surface finds)	pit			301	3
759	705	fill (surface finds)	waterhole			304	3
760	761	fill	posthole	0.23	0.15	731	3
761		cut	posthole	0.23	0.15	731	3
762	763	fill	posthole	0.22	0.14	731	3
763		cut	posthole	0.22	0.14	731	3
764	765	fill	posthole	0.28	0.21	731	3
765		cut	posthole	0.28	0.21	731	3
766	767	fill	posthole	0.18	0.12	731	3
767		cut	posthole	0.18	0.12	731	3
768	769	fill	posthole	0.23	0.06	731	3
769		cut	posthole	0.23	0.06	731	3
770	771	fill	posthole	0.22	0.15	731	3
771		cut	posthole	0.22	0.15	731	3
772	773	fill	posthole	0.22	0.12	731	3
773		cut	posthole	0.22	0.12	731	3
774	775	fill	posthole	0.18	0.07	731	3
775		cut	posthole	0.18	0.07	731	3
776	777	fill	ditch	0.68	0.21	522	3
777		cut	ditch	0.68	0.21	522	3
778	780	fill	ditch	1.64	0.36	714	3
779	780	fill	ditch	0.68	0.47	714	3
780		cut	ditch	1.97	0.47	714	3
781	785	fill	pit	1.5	0.2	785	3
782	785	fill	pit	1.52	0.3	785	3
783	785	fill	pit	0.5	0.31	785	3
784	785	fill	pit	1.1	0.13	785	3
785		cut	pit	1.9	0.32	785	3
786	789	fill	pit	1.25	0.29	785	3
787	789	fill	pit	0.95	0.22	785	3
788	789	fill	pit	0.35	0.19	785	3
789		cut	pit	2.3	0.29	785	3
790	780	fill	ditch	0.36	0.38	714	3
791	780	fill	ditch	0.68	0.47	714	3
792	793	fill	posthole	0.85	0.32	797	3
793		cut	posthole	0.85	0.32	797	3
794	795	fill	posthole	0.75	0.45	797	3

Context	Cut	Category	Feature Type	Width (m)	Depth (m)	Group	Period
795		cut	posthole	0.75	0.45	797	3
796	797	fill	posthole	0.37	0.22	797	3
797		cut	posthole	0.37	0.22	797	3
798	799	fill	posthole	0.15	0.09	797	3
799		cut	posthole	0.15	0.09	797	3
800	801	fill	posthole	0.19	0.09	797	3
801		cut	posthole	0.19	0.09	797	3
802	803	fill	posthole	0.19	0.09	797	3
803		cut	posthole	0.19	0.09	797	3
804	805	fill	posthole	0.25	0.12	797	3
805		cut	posthole	0.25	0.12	797	3
806	807	fill	posthole	0.4	0.16	797	3
807		cut	posthole	0.4	0.16	797	3
808	809	fill	posthole	0.35	0.11	797	3
809		cut	posthole	0.35	0.11	797	3
810	811	fill	posthole	0.28	0.15	797	3
811		cut	posthole	0.28	0.15	797	3
812	813	fill	posthole	0.25	0.12	797	3
813		cut	posthole	0.25	0.12	797	3
814	815	fill	posthole	0.35	0.24	797	3
815		cut	posthole	0.35	0.24	797	3
816	817	fill	posthole	0.25	0.18	797	3
817		cut	posthole	0.25	0.18	797	3
818	819	fill	posthole	0.35	0.19	797	3
819		cut	posthole	0.35	0.19	797	3
820	821	fill	posthole	0.4	0.23	797	3
821		cut	posthole	0.4	0.23	797	3
822	823	fill	posthole	0.36	0.26	797	3
823		cut	posthole	0.36	0.26	797	3
824	825	fill	posthole	0.23	0.1	797	3
825		cut	posthole	0.23	0.1	797	3
826	827	fill	posthole	0.25	0.14	797	3
827		cut	posthole	0.25	0.14	797	3
828	829	fill	posthole	0.12	0.08	797	3
829		cut	posthole	0.12	0.08	797	3
830	831	fill	posthole	0.2	0.16	797	3
831		cut	posthole	0.2	0.16	797	3
832	833	fill	posthole	0.23	0.15	797	3
833		cut	posthole	0.23	0.15	797	3
834	835	fill	posthole	0.18	0.22	797	3
835		cut	posthole	0.18	0.22	797	3
836	837	fill	posthole	0.2	0.08	797	3
837		cut	posthole	0.2	0.08	797	3
838	839	fill	posthole	0.25	0.16	797	3
839		cut	posthole	0.25	0.16	797	3
840	841	fill	posthole	0.4	0.25	797	3
841		cut	posthole	0.4	0.25	797	3
842	843	fill	posthole	0.15	0.1	797	3

Context	Cut	Category	Feature Type	Width (m)	Depth (m)	Group	Period
843		cut	posthole	0.15	0.1	797	3
844	845	fill	posthole	0.21	0.06	797	3
845		cut	posthole	0.21	0.06	797	3
846	847	fill	posthole	0.23	0.15	797	3
847		cut	posthole	0.23	0.15	797	3
848	849	fill	posthole	0.2	0.07	797	3
849		cut	posthole	0.2	0.07	797	3
850	851	fill	posthole	0.2	0.2	797	3
851		cut	posthole	0.2	0.2	797	3
852	853	fill	posthole	0.3	0.06	797	3
853		cut	posthole	0.3	0.06	797	3
854	855	fill	posthole	0.3	0.1	797	3
855		cut	posthole	0.3	0.1	797	3
856	857	fill	posthole	0.2	0.05	797	3
857		cut	posthole	0.2	0.05	797	3
858	859	fill	posthole	0.25	0.09	797	3
859		cut	posthole	0.25	0.09	797	3
860	861	fill	posthole	0.2	0.13	797	3
861		cut	posthole	0.2	0.13	797	3
862	863	fill	posthole	0.3	0.08	797	3
863		cut	posthole	0.3	0.08	797	3
864	865	fill	posthole	0.25	0.19	797	3
865		cut	posthole	0.25	0.19	797	3
866	867	fill	posthole	0.15	0.06	797	3
867		cut	posthole	0.15	0.06	797	3
868	869	fill	pit	0.6	0.12	785	3
869		cut	pit	0.6	0.12	785	3
870	871	fill	field drain	0.24	0.15	296	6
871		cut	field drain	0.24	0.15	296	6
872	885	fill	waterhole	2.88	0.3	367	3
873	885	fill	waterhole	4.6	0.56	367	3
874	885	fill	waterhole	3.66	0.32	367	3
875	885	fill	waterhole	2.7	0.24	367	3
876	885	fill	waterhole	0.88	0.06	367	3
877	885	fill	waterhole	1.9	0.22	367	3
878	885	fill	waterhole	2.7	0.18	367	3
879	885	fill	waterhole	2.88	0.3	367	3
880	885	fill	waterhole	2.12	0.32	367	3
881	885	fill	waterhole	1.36	0.2	367	3
882	885	fill	waterhole	0.7	0.1	367	3
883	885	fill	waterhole	1.6	0.12	367	3
884	885	fill	waterhole	1.38	0.12	367	3
885		cut	waterhole	5.54	1.45	367	3
886	887	fill	ditch	0.56	0.34	522	3
887		cut	ditch	0.56	0.34	522	3
888	894	fill	pit	2.6	0.36	888	3
889	894	fill	pit	2.6	0.5	888	3
890	894	fill	waterhole	1.18	0.24	894	3

Context	Cut	Category	Feature Type	Width (m)	Depth (m)	Group	Period
891	894	fill	waterhole	1.26	0.6	894	3
892	894	fill	waterhole	0.72	0.76	894	3
893	894	fill	waterhole	0.62	0.6	894	3
894		cut	waterhole	6.5	1.12	894	3
895	896	fill	ditch	1.1	0.46	714	3
896		cut	ditch	1.1	0.46	714	3
897		timber	waterhole			917	3
898		cut	pit	4.6	1	898	3
899	898	fill	pit	2.26	0.3	898	3
900	898	fill	pit	2.7	0.28	898	3
901	898	fill	pit	3.32	0.22	898	3
902	898	fill	pit	1.36	0.32	898	3
903	898	fill	pit	3	0.22	898	3
904	898	fill	pit	0.56	0.24	898	3
905	898	fill	pit	1.1	0.24	898	3
906	898	fill	pit	2.6	0.32	898	3
907	898	fill	pit	0.1	0.15	898	3
908	898	fill	pit	0.12	0.08	898	3
909	898	fill	pit	0.25	0.1	898	3
910	912	fill	pit		0.16	912	3
911	912	fill	pit		0.21	912	3
912		cut	pit		0.21	912	3
913	914	fill	furrow	0.4	0.2	35	5
914		cut	furrow	0.4	0.2	35	5
915		timber	waterhole			917	3
916		timber	waterhole			917	3
917		cut	waterhole	2.4	0.7	917	3
918	919	fill	ditch	1	0.4	714	3
919		cut	ditch	1	0.4	714	3
920		timber	waterhole			917	3
921		cut	waterhole	2.7	0.52	921	3
922	925	fill	pit	0.41	0.08	925	3
923	925	fill	pit	0.66	0.12	925	3
924	925	fill	pit	0.94	0.2	925	3
925		cut	pit	0.96	0.22	925	3
926	928	fill	waterhole	2.1	0.42	928	3
927	928	fill	waterhole	1.12	0.6	928	3
928		cut	waterhole	3.54	0.68	928	3
929		timber	waterhole			917	3
930	931	fill	ditch	1	0.29	522	3
931		cut	ditch	1	0.29	522	3
932	933	fill	furrow	1.74	0.26	35	5
933		cut	furrow	1.7	0.26	35	5
934	935	fill	pit	6.1	0.4	888	3
935		cut	waterhole	6.5	1.36	894	3
936	935	fill	pit	4	0.32	888	3
937	935	fill	waterhole	1.04	0.18	894	3
938	935	fill	waterhole	1.78	0.46	894	3

Context	Cut	Category	Feature Type	Width (m)	Depth (m)	Group	Period
939	935	fill	waterhole	1.7	0.42	894	3
940	935	fill	waterhole	2.68	0.42	894	3
941	935	fill	waterhole	1.4	0.48	894	3
942	935	fill	waterhole	0.9	0.22	894	3
943	935	fill	waterhole	0.42	0.04	894	3
944	935	fill	waterhole	4	0.22	894	3
945	935	fill	waterhole	4.3	0.24	894	3
946	935	fill	waterhole	1.16	0.3	894	3
947	948	fill	furrow	1.22	0.36	35	5
948		cut	furrow	1.2	0.28	35	5
949		timber	waterhole			917	3
950	951	fill	pit	0.37	0.13	951	3
951		cut	pit	0.37	0.13	951	3
952	953	fill	ditch	2.24	0.36	953	4
953		cut	ditch	2.24	0.36	953	4
954	955	fill	pit	1.84	0.3	62	4
955		cut	pit	1.84	0.3	62	4
956		cut	furrow	1.3	0.3	35	5
957		cut	pit	1.25	0.35	62	4
958		cut	pit	0.9	0.34	62	4
959		cut	pit	1.8	0.37	62	4
960		cut	pit	0.8	0.37	62	4
961		cut	pit	1.6	0.54	62	4
962		cut	pit	1.1	0.5	62	4
963		cut	pit	0.6	0.18	62	4
964		cut	pit	1.7	0.5	62	4
965		cut	pit	1.8	0.5	62	4
966		cut	pit	1.5	0.46	62	4
967	966	fill	pit	1.5	0.46	62	4
968	969	fill	pit	0.6	0.1	62	4
969		cut	pit	0.6	0.1	62	4
970	971	fill	pit	0.8	0.25	62	4
971		cut	pit	0.8	0.25	62	4
972	973	fill	pit	1	0.7	62	4
973		cut	pit	1	0.7	62	4
974	975	fill	ditch	1.65	0.5	953	4
975		cut	ditch	1.65	0.5	953	4
976		cut	pit	3.5	0.66	62	4
977	976	fill	pit	1.6	0.58	62	4
978	976	fill	pit	2.42	0.65	62	4
979	976	fill	pit	2.71	0.6	62	4
980	976	fill	pit	0.72	0.23	62	4
981	976	fill	pit	1.3	0.58	62	4
982	976	fill	pit	1.3	0.3	62	4
983	976	fill	pit	1.7	0.23	62	4
984		cut	pit	1.2	0.6	62	4
985	986	fill	pit	0.9	0.3	62	4
986		cut	pit	0.9	0.3	62	4

Context	Cut	Category	Feature Type	Width (m)	Depth (m)	Group	Period
987	989	fill	pit	1.9	0.32	62	4
988	989	fill	pit	1.3	0.1	62	4
989		cut	pit	1.87	0.44	62	4
990	991	fill	pit	0.46	0.28	62	4
991		cut	pit	0.46	0.28	62	4
992	993	fill	pit	1.6	0.16	62	4
993		cut	pit	1.6	0.16	62	4
994	956	fill	furrow	1.3	0.3	35	5
995	984	fill	pit	0.5	0.6	62	4
996	984	fill	pit	0.82	0.5	62	4
997	984	fill	pit	0.86	0.38	62	4
998	984	fill	pit	0.78	0.3	62	4
999	1000	fill	pit	1.95	0.5	62	4
1000		cut	pit	1.95	0.5	62	4
1001	1002	fill	pit	1.4	0.24	62	4
1002		cut	pit	1.4	0.24	62	4
1003	1004	fill	pit	1.4	0.24	62	4
1004		cut	pit	1.4	0.24	62	4
1005	1006	fill	pit	1.85	0.12	62	4
1006		cut	pit	1.85	0.12	62	4
1007		cut	pit		0.18	62	4
1008		cut	pit	2	0.5	62	4
1009		cut	pit	1.04	0.56	62	4
1010		cut	pit	1.3	0.3	62	4
1011		cut	pit	1.24	0.36	62	4
1012		cut	pit	1.4	0.2	62	4
1013		cut	pit	0.9	0.25	62	4
1014		cut	pit	0.75	0.23	62	4
1015		cut	pit	0.35	0.2	62	4
1016	1007	fill	pit		0.18	62	4
1017	1008	fill	pit		0.3	62	4
1018	1008	fill	pit		0.46	62	4
1019	1008	fill	pit		0.1	62	4
1020	1009	fill	pit	1.04	0.4	62	4
1021	1010	fill	pit	0.74	0.3	62	4
1022	1011	fill	pit	1.24	0.36	62	4
1023	1024	fill	pit	0.7	0.13	62	4
1024		cut	pit	0.7	0.13	62	4
1025	1026	fill	pit	0.44	0.12	62	4
1026		cut	pit	0.44	0.12	62	4
1027	1028	fill	pit	0.96	0.14	62	4
1028		cut	pit	0.96	0.14	62	4
1029	1030	fill	pit	1.96	0.11	62	4
1030		cut	pit	1.96	0.11	62	4
1031	1032	fill	pit	1.16	0.18	62	4
1032		cut	pit	1.16	0.18	62	4
1033	1009	fill	pit	0.84	0.28	62	4
1034	1010	fill	pit	1	0.3	62	4



Context	Cut	Category	Feature Type	Width (m)	Depth (m)	Group	Period
1035	1036	fill	pit	1.5	0.3	62	4
1036		cut	pit	1.5	0.3	62	4
1037	1038	fill	pit	1.28	0.27	62	4
1038		cut	pit	1.28	0.27	62	4
1039	1041	fill	pit	1	0.13	62	4
1040	1041	fill	pit	2.18	0.27	62	4
1041		cut	pit	2.18	0.27	62	4
1042	1043	fill	furrow	1.03	0.26	35	5
1043		cut	furrow	1.03	0.26	35	5
1044	1045	fill	pit	1	0.3	62	4
1045		cut	pit	1	0.3	62	4
1046	1047	fill	pit	0.5	0.2	62	4
1047		cut	pit	0.5	0.2	62	4
1048	1049	fill	pit	1.5	0.32	62	4
1049		cut	pit	1.5	0.32	62	4
1050	1051	fill	pit	1	0.3	62	4
1051		cut	pit	1	0.3	62	4
1052	1053	fill	pit	1.2	0.38	62	4
1053		cut	pit	1.2	0.38	62	4
1054	1055	fill	pit	0.8	0.38	62	4
1055		cut	pit	0.8	0.38	62	4
1056	1057	fill	pit	1.18	0.33	62	4
1057		cut	pit	1.18	0.33	62	4
1058	1059	fill	pit	1.36	0.41	62	4
1059		cut	pit	1.36	0.41	62	4
1060	1061	fill	pit	2.02	0.2	62	4
1061		cut	pit	2.02	0.2	62	4
1062	1063	fill	pit	0.9	0.1	62	4
1063		cut	pit	0.9	0.1	62	4
1064		cut	pit	0.65	0.26	62	4
1065	1064	fill	pit	0.65	0.26	62	4
1066		cut	pit	0.7	0.26	62	4
1067	1066	fill	pit	0.7	0.26	62	4
1068		cut	pit	1.9	0.48	62	4
1069	1068	fill	pit	1.9	0.48	62	4
1070		cut	pit	0.8	0.46	62	4
1071	1070	fill	pit	0.8	0.46	62	4
1072		cut	pit	2.14	0.5	62	4
1073	1072	fill	pit	2.14	0.5	62	4
1074		cut	pit	2.44	0.56	62	4
1075	1074	fill	pit	2.44	0.56	62	4
1076		cut	pit	0.8	0.3	62	4
1077	1076	fill	pit	0.8	0.3	62	4
1078	1080	fill	pit	2.35	0.24	62	4
1079	1080	fill	pit	0.55	0.2	62	4
1080		cut	pit	2.35	0.36	62	4
1081	1082	fill	pit	1.7	0.28	62	4
1082		cut	pit	1.7	0.28	62	4

Context	Cut	Category	Feature Type	Width (m)	Depth (m)	Group	Period
1083	1084	fill	pit	1.8	0.2	62	4
1084		cut	pit	1.8	0.2	62	4
1085	1086	fill	pit			62	4
1086		cut	pit	0.79	0.26	62	4
1087	1088	fill	pit			62	4
1088		cut	pit	0.78	0.24	62	4
1089	1090	fill	pit			62	4
1090		cut	pit	1.26	0.32	62	4
1091	1092	fill	pit			62	4
1092		cut	pit	0.5	0.28	62	4
1093	1094	fill	pit			62	4
1094		cut	pit	1.14	0.4	62	4
1095	1096	fill	pit			62	4
1096		cut	pit	0.6	0.26	62	4
1097	1098	fill	pit	1.1	0.29	62	4
1098		cut	pit	1.1	0.29	62	4
1099	1100	fill	pit	0.4	0.25	62	4
1100		cut	pit	0.4	0.25	62	4
1101	1102	fill	pit		0.3	62	4
1102		cut	pit		0.3	62	4
1103	1104	fill	pit		0.17	62	4
1104		cut	pit		0.17	62	4
1105	1106	fill	pit	1.6	0.26	62	4
1106		cut	pit	1.6	0.26	62	4
1107		cut	waterhole	6.7	3.3	180	3
1108		cut	pit	1.75	0.66	132	3
1109		cut	pit	1.6	0.63	62	4
1110	1109	fill	pit	0.96	0.22	62	4
1111		cut	pit	1.5	0.64	62	4
1112	1111	fill	pit	1.4	0.3	62	4
1113		cut	pit	2.6	0.88	62	4
1116	1215	fill	pit	1.3	0.45	62	4
1117		fill	pit	0.7	0.34	62	4
1118	1109	fill	pit	0.8	0.32	62	4
1119	1120	fill	pit	1.08	0.56	62	4
1120		cut	pit	1.08	0.56	62	4
1121	1122	fill	pit	1.7	0.62	62	4
1122		cut	pit	1.7	0.62	62	4
1123	1124	fill	pit	2.84	0.75	62	4
1124		cut	pit	2.84	0.75	62	4
1125	1126	fill	pit	0.9	0.6	62	4
1126		cut	pit	0.9	0.6	62	4
1127	1128	fill	pit	1.4	0.42	62	4
1128		cut	pit	1.4	0.42	62	4
1129	1130	fill	pit	1	0.55	62	4
1130		cut	pit	1	0.55	62	4
1131	1132	fill	pit	1.34	0.61	62	4
1132		cut	pit	1.34	0.61	62	4

Context	Cut	Category	Feature Type	Width (m)	Depth (m)	Group	Period
1133	1134	fill	pit	1.66	0.34	62	4
1134		cut	pit	1.66	0.34	62	4
1135	1135	fill	pit	1.1	0.11	62	4
1136		cut	pit	1.1	0.11	62	4
1137	1138	fill	pit	1.45	0.64	62	4
1138		cut	pit	1.45	0.64	62	4
1140	1141	fill	natural	1.3	0.23	62	4
1141		cut	natural	1.4	0.23	62	4
1142	1144	fill	natural	1.9	0.3	62	4
1143	1144	fill	pit	0.2	0.25	62	4
1144		cut	natural	2.1	0.35	62	4
1145	1146	fill	pit	1.9	0.4	62	4
1146		cut	pit	1.9	0.4	62	4
1147	1148	fill	pit		0.27	62	4
1148		cut	pit	1.2	0.26	62	4
1149	1150	fill	field drain			296	6
1150		cut	field drain			296	6
1151	1154	fill	pit			62	4
1152	1154	fill	pit			62	4
1153	1154	fill	pit			62	4
1154		cut	pit			62	4
1155	1156	fill	pit			62	4
1156		cut	pit			62	4
1157	1160	fill	pit			62	4
1158	1160	fill	pit			62	4
1159	1160	fill	pit			62	4
1160		cut	pit			62	4
1161	1166	fill	pit			62	4
1162	1166	fill	pit			62	4
1163	1166	fill	pit			62	4
1164	1166	fill	pit			62	4
1165	1166	fill	pit			62	4
1166		cut	pit			62	4
1167	1168	fill	pit	2	0.2	62	4
1168		cut	pit	2	0.2	62	4
1169	1170	fill	pit	1	0.2	62	4
1170		cut	pit	1	0.2	62	4
1171	1172	fill	pit	1.3	0.29	62	4
1172		cut	pit	1.3	0.29	62	4
1173	1174	fill	pit	0.3	0.09	62	4
1174		cut	pit	0.6	0.22	62	4
1175		layer	pit	3.25	0.48	132	3
1176	1107	fill	waterhole	1.87	0.51	180	3
1177	1107	fill	waterhole	1.25	0.22	180	3
1178	1107	fill	waterhole	1.4	0.42	180	3
1179	1107	fill	waterhole	1.52	0.45	180	3
1180	1108	fill	pit	1.5	0.28	132	3
1181	1108	fill	pit	1.14	0.25	132	3

Context	Cut	Category	Feature Type	Width (m)	Depth (m)	Group	Period
1182	1108	fill	pit		0.22	132	3
1183	1107	fill	waterhole	0.82	0.32	180	3
1184	1107	fill	waterhole	0.87	0.1	180	3
1185	1107	fill	waterhole		0.4	180	3
1186	1107	fill	waterhole	2.07	0.45	180	3
1187	1107	fill	waterhole	2.4	0.7	180	3
1189	1191	fill	pit	1.6	0.28	62	4
1190	1191	fill	pit	1.6	0.4	62	4
1191		cut	pit	1.6	0.4	62	4
1192	1174	fill	pit	0.6	0.12	62	4
1193	1109	fill	pit	1.56	0.5	62	4
1194	1111	fill	pit	1.34	0.46	62	4
1195	1113	fill	pit			62	4
1196	1113	fill	pit	1	0.55	62	4
1197	1113	fill	pit	0.7	0.2	62	4
1198	1113	fill	pit	1.1	0.44	62	4
1199	1113	layer		1.3	0.25	62	4
1200	1215	fill	pit	1.2	0.2	62	4
1201	630	fill	waterhole	1.2	0.4	566	3
1202	957	fill	pit	1.25	0.35	62	4
1203	958	fill	pit	0.9	0.34	62	4
1204	959	fill	pit	1.8	0.37	62	4
1205	960	fill	pit	0.8	0.37	62	4
1206	961	fill	pit	1.6	0.54	62	4
1207	962	fill	pit	1.1	0.5	62	4
1208	963	fill	pit	0.6	0.18	62	4
1209	964	fill	pit	1.7	0.5	62	4
1210	965	fill	pit	1.8	0.5	62	4
1211	1012	fill	pit	1.4	0.2	62	4
1212	1013	fill	pit	0.9	0.25	62	4
1213	1014	fill	pit	0.75	0.23	62	4
1214	1015	fill	pit	0.35	0.2	62	4
1215	0	cut	pit	1.22	0.42	62	4
1302	1304	fill	pit			62	4
1303	1304	fill	pit			62	4
1304	0	cut	pit	1.35	0.59	62	4
1305	1306	fill	pit	2.5	0.45	62	4
1306	0	cut	pit	2.5	0.45	62	4
1307	1308	fill	pit	0.9	0.1	85	1
1308	0	cut	pit	0.9	0.1	85	1
1309	1311	fill	pit	0.8	0.1	62	4
1310	1311	fill	pit	1.1	0.41	62	4
1311	0	cut	pit	1.1	0.41	62	4
1312	1313	fill	pit	1.45	0.5	62	4
1313	0	cut	pit	1.45	0.5	62	4
1314	1315	fill	pit	1.2	0.4	62	4
1315	0	cut	pit	1.2	0.4	62	4
1316	1317	fill	pit	1.2	0.4	62	4

Context	Cut	Category	Feature Type	Width (m)	Depth (m)	Group	Period
1317	0	cut	pit	1.2	0.4	62	4
1318	1319	fill	pit	1.3	0.18	62	4
1319	0	cut	pit	1.3	0.18	62	4
1320	1322	fill	pit	1.8	0.2	62	4
1321	1322	fill	pit	2.1	0.25	62	4
1322	0	cut	pit	2.1	0.45	62	4
1323	1324	fill	pit		0.3	62	4
1324	0	cut	pit		0.3	62	4
1325	1326	fill	pit	0.9	0.11	62	4
1326	0	cut	pit	0.9	0.11	62	4
1327	1328	fill	pit			62	4
1328	0	cut	pit	0.8	0.37	62	4
1329	1330	fill	pit			62	4
1330	0	cut	pit		0.45	62	4
1331	1332	fill	pit	1.4	0.24	62	4
1332	0	cut	pit	1.4	0.24	62	4
1333	1334	fill	pit	0.9	0.19	62	4
1334	0	cut	pit	0.9	0.19	62	4
1335	0	fill	pit	1.6	0.3	62	4
1336	0	cut	pit	1.6	0.3	62	4
1337	1338	fill	pit	1.34	0.2	62	4
1338	0	cut	pit	1.34	0.2	62	4
1339	1340	fill	pit	2.38	0.2	62	4
1340	0	cut	pit	2.38	0.2	62	4
1341	1342	fill	pit	1.4	0.28	62	4
1342	0	cut	pit	1.4	0.28	62	4
1343	1344	fill	pit	0.62	0.3	62	4
1344	0	cut	pit	0.62	0.3	62	4
1345	1346	fill	pit			62	4
1346	0	cut	pit	1.65	0.36	62	4
1347	1349	fill	pit			62	4
1348	1349	fill	pit			62	4
1349	0	cut	pit			62	4
1350	1351	fill	pit			62	4
1351	0	cut	pit	2.7	0.17	62	4
1352	0	fill	pit	1.6	0.35	62	4
1353	0	cut	pit	1.6	0.3	62	4
1354	1355	fill	pit			62	4
1355	0	cut	pit	1.1	0.26	62	4
1356	1357	fill	pit	1.11	0.12	62	4
1357	0	cut	pit	1.11	0.12	62	4
1358	1359	fill	pit	0.72	0.2	62	4
1359	0	cut	pit	0.72	0.2	62	4
1360	1361	fill	pit	2.28	0.5	62	4
1361	0	cut	pit	2.28	0.5	62	4
1362	1363	fill	pit	0.65	0.38	62	4
1363	0	cut	pit	0.65	0.38	62	4
1364	1365	fill	pit	0.62	0.3	62	4

Context	Cut	Category	Feature Type	Width (m)	Depth (m)	Group	Period
1365	0	cut	pit	0.62	0.3	62	4
1366	1367	fill	pit	0.78	0.4	62	4
1367	0	cut	pit	0.78	0.4	62	4
1368	1369	fill	pit	0.9	0.38	62	4
1369	0	cut	pit	0.9	0.38	62	4
1370	0	fill	pit	1.1	0.44	62	4
1371	0	cut	pit	1.1	0.44	62	4
1372	1373	fill	pit	0.86	0.4	62	4
1373	0	cut	pit	0.86	0.4	62	4
1374	1375	fill	pit	1.24	0.2	62	4
1375	0	cut	pit	1.24	0.2	62	4
1376	1377	fill	pit	1.2	0.18	62	4
1377	0	cut	pit	1.2	0.18	62	4
1378	1369	fill	pit	0.36	0.11	62	4
1379	1405	fill	pit			62	4
1380	1381	fill	pit	0.6	0.2	62	4
1381	0	cut	pit	0.6	0.2	62	4
1382	1383	fill	pit	1.2	0.5	62	4
1383	0	cut	pit	1.2	0.5	62	4
1384	1385	fill	pit	1	0.35	62	4
1385	0	cut	pit	1	0.35	62	4
1386	0	fill	pit			62	4
1387	0	fill	pit			62	4
1388	0	cut	pit	1.96	0.37	62	4
1389	1390	fill	pit			62	4
1390	0	cut	pit	1.34	0.35	62	4
1391	1392	fill	pit			62	4
1392	0	cut	pit	0.78	0.3	62	4
1393	1394	fill	pit			62	4
1394	0	cut	pit	0.7	0.28	62	4
1395	1396	fill	pit			62	4
1396	0	cut	pit			62	4
1397	0	fill	pit	0.7	0.21	62	4
1398	0	cut	pit			62	4
1399	1400	fill	pit	1		62	4
1400	0	cut	pit	1		62	4
1401	1402	fill	ditch			1402	3
1402	0	cut	ditch	1.25	0.16	1402	3
1403	1404	fill	ditch	0.5	0.15	1402	3
1404	0	cut	ditch	0.5	0.15	1402	3
1405	0	cut	pit	1.7	0.5	62	4
1406	0	cut	pit	1.5	0.45	62	4
1407	1411	fill	pit			1411	3
1408	1411	fill	pit			1411	3
1409	1411	fill	pit			1411	3
1410	1411	fill	pit			1411	3
1411	0	cut	pit	1.4	0.96	1411	3
1412	0	fill	pit	2.55	0.36	62	4

Context	Cut	Category	Feature Type	Width (m)	Depth (m)	Group	Period
1413	0	cut	pit	2.55	0.56	62	4
1414	0	fill	pit	2.1	0.36	62	4
1415	0	cut	pit	2.1	0.45	62	4
1416	1413	fill	pit	0.14	0.3	62	4
1417	0	fill	pit	1.2	0.26	62	4
1418	1419	fill	ditch			714	3
1419	0	cut	ditch	0.72	0.08	714	3
1420	1421	fill	ditch			522	3
1421	0	cut	ditch	0.9	0.09	522	3
1422	1413	fill	pit	1.1	0.18	62	4
1423	1413	fill	pit	0.3	0.1	62	4
1424	1415	fill	pit	1.4	0.15	62	4
1425	1415	fill	pit	0.9	0.16	62	4
1426	1415	fill	pit	0.5	0.21	62	4
1427	1415	fill	pit	0.4	0.07	62	4
1428	1429	fill	pit			1411	3
1429	0	cut	pit	1.28	0.27	1411	3
1430	1406	fill	pit	0.5	0.45	62	4
1431	1432	fill	pit	0.5	0.5	62	4
1432	0	cut	pit	0.5	0.5	62	4
1433	1434	fill	pit			62	4
1434	0	cut	pit			62	4
1435	1436	fill	pit			62	4
1436	0	cut	pit	1.25	0.08	62	4
1437	1438	fill	pit			85	1
1438	0	cut	pit	1.5	0.05	85	1
1439	1440	fill	pit			85	1
1440	0	cut	pit	1.03	0.05	85	1
1441	0	fill	pit	1.2	0.3	62	4
1442	0	cut	pit	1.2	0.3	62	4
1443	1444	fill	ditch	1.45	0.4	1444	3
1444	0	cut	ditch	1.45	0.4	1444	3
1445	0	fill	pit	2.08	0.3	62	4
1446	0	fill	pit	1.4	0.38	62	4
1447	0	cut	pit	2.08	0.46	62	4
1448	0	fill	pit	1.6	0.32	62	4
1449	0	fill	pit	0.6	0.3	62	4
1450	0	fill	pit	0.97	0.2	62	4
1451	0	cut	pit	1.6	0.46	62	4
1452	1454	fill	pit	0.72	0.12	62	4
1453	1454	fill	pit	0.74	0.18	62	4
1454	0	cut	pit	0.82	0.28	62	4
1455	1456	fill	pit	0.25	0.22	62	4
1456	0	cut	pit	0.25	0.22	62	4
1457	1458	fill	pit	0.7	0.3	62	4
1458	0	cut	pit	0.7	0.3	62	4
1459	1460	fill	pit	1.2	0.45	62	4
1460	0	cut	pit	1.2	0.45	62	4



Context	Cut	Category	Feature Type	Width (m)	Depth (m)	Group	Period
1461	1462	fill	pit	0.36	0.17	62	4
1462	0	cut	pit	0.36	0.17	62	4
1463	0	cut	waterhole	3.5	1.2	1463	3
1464	0	cut	waterhole	5.85	1.2	1464	3
1465	1466	fill	ditch	1.55	0.24	953	4
1466	0	cut	ditch	1.55	0.8	953	4
1467	1470	fill	pit			1470	3
1468	1470	fill	pit			1470	3
1469	1470	fill	pit			1470	3
1470	0	cut	pit	1.05	0.58	1470	3
1471	1463	fill	waterhole	1.8	0.32	1463	3
1472	1463	fill	waterhole	1	0.3	1463	3
1473	1463	fill	waterhole	0.5	0.34	1463	3
1474	1463	fill	waterhole	0.8	0.1	1463	3
1475	1463	fill	waterhole	2.1	1.1	1463	3
1476	1463	fill	waterhole	0.1	0.5	1463	3
1477	1463	fill	waterhole	0.25	0.2	1463	3
1478	1464	fill	waterhole	2	0.1	1464	3
1479	1464	fill	waterhole	2	0.1	1464	3
1480	1464	fill	waterhole	2	0.1	1464	3
1481	1464	fill	waterhole	2.6	0.2	1464	3
1482	1464	fill	waterhole	3	0.4	1464	3
1483	1464	fill	waterhole	3.2	0.5	1464	3
1484	1466	fill	ditch	1.04	0.25	953	4
1485	1466	fill	ditch	0.42	0.16	953	4
1486	1466	fill	ditch	0.54	0.15	953	4
1487	1488	fill	pit	1.14	0.4	62	4
1488	0	cut	pit	1.14	0.4	62	4
1489	1490	fill	ditch	1.84	0.4	1444	3
1490	0	cut	ditch	1.84	0.4	1444	3
1491	1492	fill	ditch	0.95	0.35	1444	3
1492	0	cut	ditch	1.84	0.75	1444	3
1493	1494	fill	pit			62	4
1494	0	cut	pit	1.85	0.39	62	4
1495	1496	fill	pit			62	4
1496	0	cut	pit	2.1	0.56	62	4
1497	1500	fill	ditch			1444	3
1498	1500	fill	ditch			1444	3
1499	1500	fill	ditch		0.14	1444	3
1500	0	cut	ditch	1.74	0.76	1444	3
1501	1502	fill	pit		0.15	62	4
1502	0	cut	pit	0.56	0.15	62	4
1503	1504	fill	pit			62	4
1504	0	cut	pit	1	0.22	62	4
1505	1506	fill	pit			62	4
1506	0	cut	pit	1	0.19	62	4
1507	1508	fill	pit			62	4
1508	0	cut	pit	2.45	0.4	62	4

Context	Cut	Category	Feature Type	Width (m)	Depth (m)	Group	Period
1509	1510	fill	pit	2.3	0.36	62	4
1510	0	cut	pit	2.3	0.36	62	4
1511	1512	fill	pit	0.4	0.2	62	4
1512	0	cut	pit	0.4	0.2	62	4
1513	1515	fill	ditch	1.46	0.55	1444	3
1514	1515	fill	ditch	0.4	0.14	1444	3
1515	0	cut	ditch	1.46	0.66	1444	3
1516	1518	fill	ditch	0.52	0.26	1444	3
1517	1518	fill	ditch	0.5	0.1	1444	3
1518	0	cut	ditch	0.58	0.36	1444	3
1519	1519	cut	waterhole	5.85	1.27	1464	3
1520	1519	fill	waterhole			1464	3
1521	1519	fill	waterhole			1464	3
1522	1519	fill	pit			1522	3
1523	1519	fill	pit			1522	3
1524	1519	fill	pit			1522	3
1525	1519	fill	pit			1522	3
1526	1527	fill	posthole			1522	3
1527	1527	cut	posthole	0.26	0.17	1522	3
1528	1531	fill	ditch			1444	3
1529	1531	fill	ditch			1444	3
1530	1531	fill	ditch			1444	3
1531	1531	cut	ditch	2.66	0.74	1444	3
1532	1533	fill	ditch			1402	3
1533	1533	cut	ditch	0.8	0.1	1402	3
1534	1535	fill	pit			62	4
1535	1535	cut	pit	2.1	0.36	62	4
1536	1537	fill	ditch			953	4
1537	1537	cut	ditch	0.94	0.44	953	4
1538	1539	fill	ditch			953	4
1539	1539	cut	ditch	0.6		953	4
1540	1543	fill	pit			62	4
1541	1543	fill	pit			62	4
1542	1543	fill	pit			62	4
1543	1543	cut	pit	1.6	0.3	62	4
1544	1546	fill	pit			62	4
1545	1546	fill	pit			62	4
1546	1546	cut	pit	1.1	0.36	62	4
1547	1548	fill	pit			62	4
1548	1548	cut	pit	0.66	0.34	62	4
1549	1550	fill	pit			62	4
1550	1550	cut	pit	1.7	0.6	62	4
1551	1552	fill	pit			62	4
1552	1552	cut	pit	1.14	0.4	62	4
1553	1554	fill	pit			62	4
1554	1554	cut	pit	0.32	0.4	62	4
1555	1556	fill	ditch	1.3	0.11	1556	3
1556	1556	cut	ditch	1.3	0.11	1556	3

Context	Cut	Category	Feature Type	Width (m)	Depth (m)	Group	Period
1557	1558	fill	ditch	1.1	0.1	1558	3
1558	1558	cut	ditch	1.1	0.1	1558	3
1559	1560	fill	pit			62	4
1560	1560	cut	pit	1.4	0.4	62	4
1562	1565	fill	ditch			953	4
1563	1565	fill	ditch			953	4
1564	1565	fill	ditch			953	4
1565	1565	cut	ditch	1.2	0.5	953	4
1566	1568	fill	pit			62	4
1567	1568	fill	pit			62	4
1568	1568	cut	pit	2.4	0.35	62	4
1570	1571	fill	pit			62	4
1571	1571	cut	pit	0.56	0.38	62	4
1572	1573	fill	ditch			1556	3
1573	1573	cut	ditch	0.48	0.05	1556	3
1574	1576	fill	pit			62	4
1575	1576	fill	pit			62	4
1576	1576	cut	pit	2.4	0.34	62	4
1577	1578	fill	pit			62	4
1578	1578	cut	pit	1.3	0.28	62	4
1579	1579	cut	waterhole	4.6	1.38	1579	3
1580	1580	cut	waterhole	1.2	0.8	1580	3
1581	1582	fill	pit	1.5	0.26	62	4
1582	1582	cut	pit	1.5	0.26	62	4
1583	1584	fill	pit			62	4
1584	1584	cut	pit	0.5	0.18	62	4
1585	1586	fill	pit			62	4
1586	1586	cut	pit	0.65	0.25	62	4
1587	1580	fill	waterhole			1580	3
1588	1580	fill	waterhole			1580	3
1589	1579	fill	waterhole			1579	3
1590	1579	fill	waterhole			1579	3
1591	1579	fill	waterhole			1579	3
1592	1579	fill	waterhole			1579	3
1593	1579	fill	waterhole			1579	3
1594	0	layer				1594	3
1595	1754	fill	posthole			1754	
1596	1612	fill	pit			1612	3
1597	0	layer				1594	3
1598	1603	fill	waterhole			1579	3
1599	1603	fill	waterhole			1579	3
1600	1603	fill	waterhole			1579	3
1601	1603	fill	waterhole			1579	3
1602	1603	fill	waterhole			1579	3
1603	1603	cut	waterhole	4.6	1.3	1579	3
1604	1606	fill	waterhole			1580	3
1605	1606	fill	waterhole			1580	3
1606	1606	cut	waterhole	1.4	1.1	1580	3

Context	Cut	Category	Feature Type	Width (m)	Depth (m)	Group	Period
1607	1608	fill	pit			62	4
1608	1608	cut	pit	0.65	0.17	62	4
1609	1610	fill	pit			62	4
1610	1610	cut	pit	1.53	0.34	62	4
1611	1603	fill	waterhole			1579	3
1612	1612	cut	pit	2.5	0.45	1612	3
1613	1615	fill	ditch			953	4
1614	1615	fill	ditch			953	4
1615	1615	cut	ditch	1.4	0.42	953	4
1616	1619	fill	pit			62	4
1617	1619	fill	pit			62	4
1618	1619	fill	pit			62	4
1619	1619	cut	pit	0.8	0.38	62	4
1620	1622	fill	pit			62	4
1621	1622	fill	pit			62	4
1622	1622	cut	pit	0.8	0.38	62	4
1623	1622	fill	pit			62	4
1624	1625	fill	pit			62	4
1625	1625	cut	pit	1.6	0.28	62	4
1626	1627	fill	pit			62	4
1627	1627	cut	pit	1	0.1	62	4
1628	1629	fill	pit			62	4
1629	1629	cut	pit	2.4	0.3	62	4
1630	1632	fill	pit			62	4
1631	1632	fill	pit			62	4
1632	1632	cut	pit	1.9	0.22	62	4
1633	1634	fill	pit			62	4
1634	1634	cut	pit	3.5	0.33	62	4
1635	1636	fill	pit			62	4
1636	1636	cut	pit	1.84	0.32	62	4
1637	1638	fill	pit			62	4
1638	1638	cut	pit	0.64	0.36	62	4
1639	1640	fill	ditch			522	3
1640	1640	cut	ditch	0.75	0.13	522	3
1641	1641	cut	pit	0.5	0.1	1612	3
1642	1641	fill	pit			1612	3
1643	1644	fill	pit			62	4
1644	1644	cut	pit	1.7	0.46	62	4
1645	1646	fill	pit			62	4
1646	1646	cut	pit			62	4
1647	1648	fill	pit			62	4
1648	1648	cut	pit	2.5	0.24	62	4
1649	1650	fill	waterhole			1650	2
1650	1650	cut	waterhole	5.5	1.04	1650	2
1651	1653	fill	pit			62	4
1652	1653	fill	pit			62	4
1653	1653	cut	pit	2.7	0.64	62	4
1654	1655	fill	pit			62	4

Context	Cut	Category	Feature Type	Width (m)	Depth (m)	Group	Period
1655	1655	cut	pit	2.64	0.3	62	4
1656	1657	fill	pit			62	4
1657	1657	cut	pit	1.82	0.46	62	4
1658	1650	fill	waterhole			1650	2
1659	1650	fill	waterhole			1650	2
1660	1650	fill	waterhole			1650	2
1661	1650	fill	waterhole			1650	2
1662	1650	fill	waterhole			1650	2
1663	1650	fill	waterhole			1650	2
1664	1650	fill	waterhole			1650	2
1665	1650	fill	waterhole			1650	2
1666	1696	fill	pit			1696	4
1667	1696	fill	pit			1696	4
1668	1669	fill	pit			62	4
1669	1669	cut	pit	1.3	0.32	62	4
1670	1672	fill	pit			62	4
1671	1672	fill	pit			62	4
1672	1672	cut	pit	2.3	0.52	62	4
1673	1674	fill	pit			62	4
1674	1674	cut	pit	3.32	0.36	62	4
1675	1676	fill	pit			62	4
1676	1676	cut	pit	0.9	0.1	62	4
1677	1678	fill	pit			62	4
1678	1678	cut	pit	1.5	0.3	62	4
1679	1680	fill	pit			62	4
1680	1680	cut	pit	0.8	0.7	62	4
1681	1684	fill	pit			62	4
1682	1684	fill	pit			62	4
1683	1684	fill	pit			62	4
1684	1684	cut	pit	1.7	0.7	62	4
1685	1689	fill	pit			62	4
1686	1689	fill	pit			62	4
1687	1689	fill	pit			62	4
1688	1689	fill	pit			62	4
1689	1689	cut	pit	2.6	0.7	62	4
1690	1692	fill	pit			62	4
1691	1692	fill	pit			62	4
1692	1692	cut	pit	3.2	0.5	62	4
1693	1696	fill	pit			1696	4
1694	1696	fill	pit			1696	4
1695	1696	fill	pit			1696	4
1696	1696	cut	pit	9.5	1.02	1696	4
1697	1697	cut	waterhole	5.5	1	1650	2
1698	1698	cut	pit	0.75	0.24	62	4
1699	1701	fill	pit			62	4
1700	1701	fill	pit			62	4
1701	1701	cut	pit	2.12	0.4	62	4
1702	1705	fill	pit			62	4

Context	Cut	Category	Feature Type	Width (m)	Depth (m)	Group	Period
1703	1705	fill	pit			62	4
1704	1705	fill	pit			62	4
1705	1705	cut	pit	3	0.6	62	4
1706	1698	fill	pit			62	4
1707	1697	fill	waterhole			1650	2
1708	1697	fill	waterhole			1650	2
1709	1697	fill	waterhole			1650	2
1710	1697	fill	waterhole			1650	2
1711	1697	fill	waterhole			1650	2
1712		fill	waterhole	1.8	0.32	1463	3
1713		fill	waterhole	1.8	0.32	1463	3
1714	1715	fill	pit			62	4
1715	1715	cut	pit	2.25	0.1	62	4
1716	1717	fill	pit			62	4
1717	1717	cut	pit	2.3	0.5	62	4
1718	1719	fill	pit			62	4
1719	1719	cut	pit	3.3	0.6	62	4
1720	1721	fill	pit			62	4
1721	1721	cut	pit	1.3	0.5	62	4
1722	1723	fill	pit			62	4
1723	1723	cut	pit	2.1	0.45	62	4
1724	1726	fill	pit			62	4
1725	1726	fill	pit			62	4
1726	1726	cut	pit	3.2	0.6	62	4
1727	1728	fill	pit			62	4
1728	1728	cut	pit	2.1	0.4	62	4
1729	1730	fill	pit			62	4
1730	1730	cut	pit	1.5	0.36	62	4
1731	1732	fill	pit			62	4
1732	1732	cut	pit	1.3	0.35	62	4
1733	1734	fill	pit			62	4
1734	1734	cut	pit	1.35	0.32	62	4
1735	1736	fill	pit			62	4
1736	1736	cut	pit	2	0.34	62	4
1737	1738	fill	pit			62	4
1738	1738	cut	pit	0.9	0.38	62	4
1739	1743	fill	pit			62	4
1740	1743	fill	pit			62	4
1741	1743	fill	pit			62	4
1742	1743	fill	pit			62	4
1743	1743	cut	pit	2.1	0.6	62	4
1744	1745	fill	pit			62	4
1745	1745	cut	pit	1.4	0.44	62	4
1746	1747	fill	pit			62	4
1747	1747	cut	pit	1.08	0.48	62	4
1748	1749	fill	pit			62	4
1749	1749	cut	pit	1.84	0.6	62	4
1750	1751	fill	posthole			951	3

Context	Cut	Category	Feature Type	Width (m)	Depth (m)	Group	Period
1751	1751	cut	posthole	0.45	0.18	951	3
1752	1753	fill	pit			1753	2
1753	1753	cut	pit	2.75	0.34	1753	2
1754	1754	cut	posthole	0.17	0.53	1754	
1800	1801	fill	pit	0.75	0.28	62	4
1801	0	cut	pit	0.75	0.28	62	4
1802	1806	fill	pit		0.4	62	4
1803	1806	fill	pit			62	4
1804	1806	lens	pit	3.5	0.8	62	4
1805	1806	lens	pit		0.8	62	4
1806	0	cut	pit	3.5	0.8	62	4
1807	1811	fill	pit		0.32	62	4
1808	1811	lens	pit		0.18	62	4
1809	0	lens	pit		0.18	62	4
1810	1811	lens	pit		0.18	62	4
1811	0	cut	pit			62	4
1812		cut	pit	0.7	0.2	1812	3
1813	1812	fill	pit	0.7	0.1	1812	3
1814	1812	fill	pit	0.6	0.1	1812	3
1815	1812	fill	pit	0.6	0.1	1812	3
1816	1817	fill	pit	0.2	0.25	62	4
1817	0	cut	pit	0.2	0.25	62	4
1818	1819	fill	pit	2.6	0.2	62	4
1819	0	cut	pit	2.6	0.2	62	4
1820	1823	fill	pit	1.9	0.4	62	4
1821	1823	fill	pit	1	0.3	62	4
1822	1823	fill	pit	1.1	0.3	62	4
1823	0	cut	pit	1.9	0.75	62	4
1824	1829	fill	pit	0.8	0.12	62	4
1825	1829	fill	pit	1.5	0.28	62	4
1826	1829	fill	pit	1.65	0.28	62	4
1827	1829	fill	pit	0.8	0.15	62	4
1828	1829	fill	pit	1.2	0.4	62	4
1829	0	cut	pit	2	1	62	4
1830	1831	fill	pit	0.6	0.3	62	4
1831	0	cut	pit	0.6	0.3	62	4
1832	1833	fill	pit	0.5	0.2	62	4
1833	0	cut	pit	0.5	0.2	62	4
1834	1835	fill	pit		0.47	62	4
1835	0	cut	pit	1.65	0.47	62	4
1836	1837	fill	pit	0.7	0.8	1837	3
1837	0	cut	pit	0.7	0.8	1837	3
1838	1839	fill	posthole	0.28	0.14	1839	3
1839	0	cut	posthole	0.28	0.14	1839	3
1840	1842	fill	posthole	0.25	0.25	1839	3
1841	1842	fill	posthole	0.25	0.25	1839	3
1842	0	cut	posthole	0.25	0.25	1839	3
1843	1845	fill	posthole	0.3	0.23	1839	3



Context	Cut	Category	Feature Type	Width (m)	Depth (m)	Group	Period
1844	1845	fill	posthole	0.41	0.3	1839	3
1845	0	cut	posthole	0.41	0.3	1839	3
1846	1847	fill	pit	0.33	0.11	1839	3
1847	0	cut	posthole	0.33	0.11	1839	3
1848	1850	fill	posthole	0.3	0.14	1839	3
1849	1850	fill	posthole	0.3	0.2	1839	3
1850	0	cut	posthole	0.3	0.2	1839	3
1851	1852	fill	pit	2.02	0.44	62	4
1852	0	cut	pit	2.02	0.44	62	4
1853	1856	fill	pit		0.5	62	4
1854	1856	fill	pit		0.06	62	4
1855	1856	fill	pit		0.1	62	4
1856	0	cut	pit	0.64	0.58	62	4
1857	1859	fill	pit	1.42	0.3	62	4
1858	1859	fill	pit		0.14	62	4
1859	0	cut	pit	1.42	0.42	62	4
1860	1861	fill	pit		0.14	62	4
1861	0	cut	pit	0.44	0.14	62	4
1862	1863	fill	ditch	0.39	0.13	1863	2
1863	0	cut	ditch	0.39	0.13	1863	2
1864	1865	fill	ditch	0.76	0.22	1863	2
1865	0	cut	ditch	0.76	0.22	1863	2
1866	1867	fill	ditch	0.8	0.23	1863	2
1867	0	cut	ditch	0.8	0.23	1863	2
1868	1869	fill	ditch	0.76	0.3	1863	2
1869	0	cut	ditch	0.76	0.3	1863	2
1870	1871	fill	furrow	1.85	0.18	35	5
1871	0	cut	furrow	1.85	0.18	35	5
1872	1883	fill	pit	3.4	0.3	62	4
1873	1875	fill	pit	1	0.5	62	4
1874	1875	fill	pit	0.4	0.15	62	4
1875	0	cut	pit	1	0.65	62	4
1876	1880	fill	pit	1.9	0.25	62	4
1877	1880	fill	pit	1.8	0.5	62	4
1878	1880	fill	pit	0.4	0.4	62	4
1879	1880	fill	pit	1	0.2	62	4
1880	0	cut	pit	2	0.8	62	4
1881	1882	fill	pit	1	0.4	62	4
1882	0	cut	pit	1	0.4	62	4
1883	0	cut	pit	3.4	0.3	62	4
1884	1885	fill	pit	0.3	0.28	62	4
1885	0	cut	pit	0.3	0.28	62	4
1886	1887	fill	pit	0.6	0.3	62	4
1887	0	cut	pit	0.6	0.3	62	4
1888	1889	fill	pit	1.7	0.42	62	4
1889	0	cut	pit	1.7	0.42	62	4
1890	1892	fill	pit	1.2	0.4	62	4
1891	1892	fill	pit	0.88	0.12	62	4

Context	Cut	Category	Feature Type	Width (m)	Depth (m)	Group	Period
1892	0	cut	pit	1.2	0.52	62	4
1893	1894	fill	pit	0.6	0.44	62	4
1894	0	cut	pit	0.6	0.44	62	4
1895	1896	fill	pit	0.9	0.46	62	4
1896	0	cut	pit	0.9	0.46	62	4
1897	1898	fill	pit	2.1	0.58	62	4
1898	0	cut	pit	2.1	0.58	62	4
1899	1900	fill	ditch	0.52	0.1	35	5
1900	0	cut	ditch	0.52	0.1	35	5
1901	1904	fill	pit		0.4	62	4
1902	1904	fill	pit		0.48	62	4
1903	1904	fill	pit		0.68	62	4
1904	0	cut	pit	0.5	0.66	62	4
1905	1909	fill	pit		0.2	62	4
1906	1909	fill	pit		0.48	62	4
1907	1909	fill	pit		0.54	62	4
1908	1909	fill	pit	0.26		62	4
1909	0	cut	pit	1	0.79	62	4
1910	1912	fill	pit	0.6	0.37	62	4
1911	1912	fill	pit	1.3	0.34	62	4
1912	0	cut	pit	0.6	0.7	62	4
1913	0	fill	pit	0.5	0.62	62	4
1914	0	cut	pit	0.5	0.62	62	4

## APPENDIX B. FINDS REPORTS

### B.1 Pottery

*By Lisa Brown and Matt Brudenell*

#### **Introduction and methodology**

- B.1.1 A total of 4497 sherds (52534g) of prehistoric pottery was recovered from the site. The vast majority of the assemblage dates to the later part of the Early Iron Age, c. 600-300 BC, but some proportion may belong to a Middle Iron Age tradition which, however, at this site is not well-represented by distinctive forms. A tiny impressed ware sherd could be either Neolithic or Bronze Age. A small group of Bronze Age date includes 33 sherds (253 g) of grog-tempered pottery of Early-Middle Bronze Age type, including at least one Beaker sherd, and 30 sherds (294g) of particularly coarse flint-tempered ware (fabric F10) may be Middle or Late Bronze Age.

#### **Methodology**

- B.1.2 The pottery was recorded on an Access Database. Fabrics were identified with the aid of a binocular microscope at 20x and 10x magnification and classified using an alphanumeric dominant inclusion code, following the recommended guidelines of the Prehistoric Ceramics Research Group (PCRG 1997). Characteristics such as inclusion size, sorting and evidence for clay preparation were not generally discernible in the case of the small fragments recovered from environmental samples, so these were not recorded.
- B.1.3 Sherds were recorded within context, counted and weighed and a record made of their fabric, form, surface treatment, decoration and degree of abrasion based on three broad categories: (3) high (surface survival minimum, breaks heavily eroded); (2) moderate (surface somewhat preserved but clearly worn); (1) slight (little indication of wear apparent). The presence of residues was recorded but burnt organic residue was present on the inner surfaces of only sherds dated broadly to the prehistoric period.

#### **Condition**

- B.1.4 The condition of the pottery assemblage was variable, but generally moderate to poor. The average sherd weight was just under 12g. In general terms, an abrasion factor of 3 suggests complex taphonomic history, involving, at the very least, a period of fragmentation, movement and weathering prior to final deposition, but degrees of abrasion are linked to friability of fabric as well. The respective discrepancies between percentages by count and weight for sherds of abrasion factors 1 and 3 demonstrate that the most abraded sherds were generally very small (average sherd weight 5g) and the freshest sherds were generally very large (average sherd weight 42g). The latter were all recovered from waterholes, whereas the more abraded material came from a wide range of features and deposits (Table 16).

Abrasion	Count	Wt. (g)	% count	% Wt	Deposit Type
1	150	6251	3	12	Pits; waterholes
2	2078	33804	46	64	Pits; waterholes; ditches; postholes; layers; subsoil
3	2310	12351	51	24	Pits; waterholes; ditches, gulls; postholes; quarries; layers; subsoil

Table 16: Abrasion factor

- B.1.5 Although shelly fabrics can be particularly prone to disintegration, the high average sherd weight of this ware group (see Table 17) is explained by the large vessel forms (jars as opposed to bowls) manufactured from these clays.

### Fabrics

- B.1.6 Twenty-three fabrics within six major ware groups were identified. Two ware groups were very uncommon, Bronze Age Group C (calcareous inclusions) represented by only 10 sherds (18 g) and V (organic inclusions) by 117 sherds/1028g). Fabrics containing calcined flint were by a large margin the most common, with sandy and shelly fabrics, the next most abundant, together representing only just over a quarter of the total.

Fabric	No. Sherds	Wt (g)	TOTAL	% no/wt	Average Sherd Weight
<b>FLINT</b>			<b>3103 / 36100 g</b>	<b>69 / 69</b>	<b>12 g</b>
F-	124	289			
F1	391	7603			
F2	1374	17387			
F3	133	1068			
F4	467	4678			
F5	161	1276			
F6	251	2276			
F7	166	1151			
F8	1	9			
F9	5	69			
F10	30	294			
<b>SHELL</b>			<b>470 / 7959 g</b>	<b>11 / 15</b>	<b>17 g</b>
S1	202	2901			
S2	62	1383			
S3	14	523			
S4	80	1878			
S5	112	1274			
<b>QUARTZ SAND</b>			<b>694 / 6523 g</b>	<b>15 / 12</b>	<b>9</b>
Q1	366	3581			
Q2	209	1959			
Q3	18	162			
Q4	101	821			
<b>ORGANIC</b>			<b>185 / 1529 g</b>	<b>4 / 3</b>	<b>8</b>
V1	113	1283			
V2	72	246			
<b>CALCAREOUS</b>			<b>10 / 158 g</b>	<b>0.2 / 0.4</b>	<b>16</b>
C1	10	158			
<b>GROG</b>			<b>35 / 265 g</b>	<b>0.8 / 0.6</b>	<b>8</b>
G1	35	265			
<b>TOTAL</b>	<b>4497</b>	<b>52534</b>			

Table 17: Fabric quantification

F: Predominantly flint inclusions

- B.1.7 F1. Moderate to common mainly angular, poorly sorted, mainly white calcined flint <8 mm in a fine sandy, slightly micaceous fabric. May also contain sparse rounded chalk pieces.
- B.1.8 F2. Sparse to common poorly sorted sub-angular and angular white and grey calcined flint, some burnt red, mainly <6-7 mm, in a highly sanded fabric, sometimes additionally incorporating powdery red and ovoid black ferrous matter and small chalk pieces.
- B.1.9 F3. Soapy soft fabric with little sand content, incorporating sparse to moderate, poorly sorted calcined flint inclusions 2-8 mm. Surfaces tend to be wiped.
- B.1.10 F4. Fine sandy fabric incorporating poorly sorted sparse to moderate calcined flint pieces which may range from 1-5 mm within a single sherd.
- B.1.11 F5. Crumbly, soft, friable slightly sanded fabric (possibly glauconitic) incorporating sparse burnt grey and red flint pieces <6 mm.
- B.1.12 F6. Soapy, silty fabric (very fine sand) containing sparse crushed flint pieces, mainly <3 mm.
- B.1.13 F7. Fine silt grade sandy fabric incorporating small, well-sorted, angular white flint pieces < 3 mm.
- B.1.14 F8. Coarse, rounded quartz sand fabric with rare to sparse, poorly sorted flint pieces (unburnt) < 6 mm. May be a late Iron Age or Roman fabric.
- B.1.15 F9. Finely sanded fabric containing abundant well-sorted angular crushed white flint <4 mm.
- B.1.16 F10. Slightly sandy, soapy fabric incorporating very coarse burnt flint pieces up to 10 mm mainly 3-6 mm), along with occasional chalk lumps and red powdery ferrous material. May be Late Bronze Age.

S: Predominantly shell inclusions

- B.1.17 S1. Soapy, non-sandy fabric with abundant platey fossil shell, probably of Jurassic origin, <8 mm in size. Other inclusions uncommon.
- B.1.18 S2. Lightly sanded fabric containing common platey fossil shell < 8 mm
- B.1.19 S3. Sandy fabric incorporating moderate to common platey shell < 10 mm (Mainly 2-6 mm)
- B.1.20 S4. Sandy fabric containing sparse to moderate platey shell < 8 mm, much of it <4 mm.
- B.1.21 S5. Soapy, smooth fabric incorporating sparse platey shell < 6 mm along with shiny black angular clay minerals (see Vince AVAC Report 2008/51)

Q: Predominantly quartz sand

- B.1.22 Q1. Common rounded fine quartz sand fabric, non-glauconitic, may contain rare inclusions of flint, shell or chalk 3 mm.
- B.1.23 Q2. Abundant rounded quartz sand with sparse to moderate glauconite pellets.

B.1.24 Q3. Abundant, coarse, rounded quartz sand with rare small inclusions of flint and angular black mineral.

B.1.25 Q4. Very fine, silty quartz sand, other visible inclusions rare.

V: Predominantly organic inclusions

B.1.26 V1. Soapy, smooth fabric with moderate to common voids indicating leached plant material, may have rare flint or shell inclusions.

B.1.27 V2. Slightly sandy, fine grade, with sparse to moderate voids indicating a combination of leached shell and plant material.

G: Predominantly grog inclusions

B.1.28 Finely sanded, soft slightly soapy clay containing a moderate density of grey/black grog pieces, occasionally in combination with other (accidental) inclusions of flint or calcareous material.

C: Predominantly calcareous inclusions

B.1.29 C1. Soapy, smooth fabric with sparse to moderate angular limestone inclusions.

### ***Bronze Age fabrics***

B.1.30 Fabric F10, which incorporates inclusions of very large, angular burnt flint pieces, is probably a Middle or Late Bronze Age ware, but only one vessel part (a carinated body sherd) was recovered, the remainder of the 30 small sherds in this fabric being non-diagnostic of form. The carinated sherd came from waterhole **509** (507) and body sherds were recovered from waterholes **304**, **894** and **1463**, pits **986**, **1032**, **1057**, **1411** and **1429**, and furrow **530**.

B.1.31 The grog-tempered pottery (G) is also of Bronze Age date and includes a small fragment (10g) belonging to a Late Neolithic/Early Bronze Age Beaker with incised linear decoration. This came from fill 581 of waterhole **304**, where it was associated with Early Iron Age pottery and therefore residual. Non-diagnostic grog-tempered pottery in quantities of only 1-3 sherds was recovered as residual material from several Iron Age features but also from four pits (**706**, **894**, **955**, **1057**), posthole **248** (part of post alignment **234**) and ditch 1531 (part of boundary **1444**) which, considering an absence of later pottery, may have been constructed during the Bronze Age. Grog-tempered sherds in pits **1057** and Iron Age pit **986** were accompanied by a single sherd in fabric F10, and that in pit **935** by two sherds in fabric F10 and the only sherds in limestone-tempered ware C1, allowing a probable Bronze Age date for that fabric as well.

### ***Iron Age Fabrics***

B.1.32 The Iron Age fabric range was diverse, including clays with burnt flint, shell, sand glauconite and organic inclusions. However, flint-tempered wares dominated by a wide margin, representing just under 70% of the total by sherd count and weight. Chalk and ferrous inclusions occurred rarely and generally as a (probably) incidental component of sandy fabrics. The current evidence suggests that the use of burnt flint temper in

Cambridgeshire Iron Age pottery ceased sometime around the transition to the Middle Iron Age, its frequency declining in relation to shell and sand at about the 4th century BC. The predominance of flint-tempered wares suggests that the assemblage dates mainly to the end of the Early Iron Age. However, the quantities of sand-tempered and shell-tempered wares that do not include burnt flint are not insignificant, suggesting that activity on the site may have continued into the early part of the Middle Iron Age (350 BC or thereabouts).

### ***Form and Decoration***

#### *Bronze Age Forms*

- B.1.33 A single very small sherd weighing only 1g bears impressed decoration of the sort that could be either Neolithic impressed ware or a Bronze Age food vessel. The sherd is so small that it could be assigned only broadly to the group of quartz sand-tempered, but it may have incorporated other inclusions. It was residual in the fill of quarry **123** (122). A Late Neolithic/Early Bronze Age Beaker sherd has referred to above. An applied boss on a R4 type rim (slightly inturned rim) in fabric S1 from waterhole **1579** (1598) probably belongs to a Middle Bronze Age urn, although the remainder of sherds in this waterhole are sandy and shell-tempered and could date to the Middle Iron Age. However, there were no assemblages that of classic Middle Iron Age character.

#### *Iron Age Forms*

- B.1.34 The range of prehistoric vessels was otherwise confined to forms attributable to the later part of the Early Iron Age, with some possibly continuing into the latest phases of that period or into the Middle Iron Age.
- B.1.35 The forms identified are as follows:

##### Bowls:

- BA Bowl with pronounced shoulder or girth, either carinated or rounded
- BA1 Carinated bowl with upright rim, generally elongated
- BA2 Carinated bowl with elongated flaring rim
- BA3 Bowl with elongated upright or flaring rim and rounded shoulder
- BB Angular tripartite bowl (sometimes red-finished)

##### Jars:

- JA Bipartite jar with 'hammerhead' expanded rim
- JB Shouldered jar with upright rim, often 'hollowed'
- JB1 Shouldered jar with upright rim, fingerail/tip decorated rim/shoulder
- JB2/3 Shouldered jar with upright rim, undecorated but sometimes expanded to a T-shape
- JB4 Slack shouldered jar with short neck
- JC Barrel-shaped jar with short rim



FABRIC	F 1	F 2	F 3	F4	F 5	F 6	F 7	F10	S 1	S 2	S 4	S 5	Q1	Q2	Q4	V1	V2	
<b>FORM</b>																		
<b>Bowls:</b>																		<b>56</b>
BA		1		2		10	6	1					5		5			30
BA1														1			1	2
BA2	1	1	1	1		2	3					1	6	1				17
BA3		1				2	1						1					5
BB				1			1											2
<b>Jars:</b>																		<b>30</b>
JA												1						1
JB				1						1								2
JB1	1	4		4	1				1			1	2					14
JB2/3	4	4		2						1	2	2		3	1	1		20
JB4	1				1													2
JC		1																1
<b>Lug</b>														1				<b>1</b>
<b>TOTAL FORMS</b>	<b>7</b>	<b>12</b>	<b>1</b>	<b>11</b>	<b>2</b>	<b>14</b>	<b>11</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>5</b>	<b>14</b>	<b>6</b>	<b>6</b>	<b>1</b>	<b>1</b>	<b>97</b>

Table 18: Form/fabric correlation

#### Bowls:

B.1.36 Early Iron Age bowls dominated the assemblage of diagnostic sherds by a notable margin. No complete vessels or profiles were found and most sherds were very fragmentary, often lacking a rim. However, forms BA1 and BA2 were classifiable by the presence of a carination and/or an elongated upright or slightly flaring rim. Most were produced in fine versions of flint-tempered wares, but sandy clays Q1 and Q4 were also used in the manufacture of these forms. Many examples are burnished but decoration of these finely finished bowls is uncommon, confined to horizontal grooves below the rim, resembling Cunliffe's Darmsden-Linton style (Cunliffe 2005). Sherds bearing this device were found in fabrics Q1 Q4, F4 and F6 and were recovered from the following deposits (those from the quarries clearly residual):

Waterhole 464 (465) fabric Q4

Waterhole 509 (643) fabric F4

Waterhole 917 (722) SF62 - fabric F6

Waterhole 705 (741) fabric Q4; (581) two examples, fabrics Q4, F4

Quarry 1134 (1133) fabric Q1

Quarry 1632 (1630) fabric Q4

B.1.37 On of the more crudely finished bowls of this form decoration was confined to fingertip/nail impressions on the rim and/or shoulder and there was a preference for the slightly coarser fabric varieties (F4 and Q1) with no correlation with fineware Q4 evident.

B.1.38 Form BA3, also an Early Iron Age form, by the survival of a more rounded girth and flaring rims. These again were most common in flint-tempered fabrics but one example,

from pit **90**, was in fine sandy ware Q1. Waterhole **304** (context 581) produced fragments of two different round-bodied bowls in fabric F6. These were decorated with a shallow-tooled curvilinear motif.

- B.1.39 Only two examples of bowl form (BB) were recovered, both in relatively fine flint-tempered wares, from waterhole **509** (507) and pit **597** (594). The bowl from the waterhole is red-finished (haematite-coated) in fabric F7 - the sole example exhibiting this treatment. The sherd from pit **597**, in fabric F4, is decorated with an incised diagonal linear motif decoration resembling Cunliffe's Chinnor-Wandlebury style, conventionally dated to the 5th-3rd century BC. Quarry **64** (65) produced a residual fragment of a bowl with similar decoration in fabric Q4. This fabric closely resembles the very fine clays used to manufacture the scratched-cordoned bowls of the Wessex region from the 6th century BC, and is clearly in the same tradition, but not likely to be an import as the ware was a relatively common component of the Milton Landfill assemblage. One small sherd in this fabric, a residual sherd in Roman quarry **1145** (1146), was decorated with very lightly applied fine combing.
- B.1.40 Judged on the basis of their size and fabric, a number of burnished or well-smoothed pedestal and footring bases belonged to bowls. These date to sometime after the period 600 BC, and are most commonly associated with the 5th and 4th century BC, corresponding to the probable date of the classifiable bowl forms.

#### Jars:

- B.1.41 Altogether 30 individual jars were identified, based on rim or rim and body profiles. As with the bowls, no complete profiles were present in the assemblage. Jars were produced in a somewhat wider range of fabrics than bowls, including shell-tempered wares which, with a single exception, were not used to make bowls.
- B.1.42 Possibly the earliest jar form is a 'hammerhead' rim vessel in soapy shell-tempered fabric S5. This came from waterhole **304** (581) and could date to the transition of the Late Bronze Age/Early Iron Age, 800-600BC. The most common forms, easily accommodated within the Early Iron Age, are forms JB1, with finger impressed decoration, and JB2/3, with plain, undecorated upright rims. Too few of these vessels had surviving shoulders to correlate rim forms to shoulder profiles, but both angular and rounded shoulder fragments survived in flint-tempered shell-tempered and sandy fabrics. Two examples of a jar with a less pronounced rim (JB4) from waterholes **180** and **509** were represented in flint-tempered wares, and these could date to a late stage of the Early Iron Age. A single ovoid jar (JC1) in fabric F2 could be even later, nudging into the early part of the Middle Iron Age, although the fabric does contain burnt flint. Apart from fingertip/nail impression, no decorative devices were associated with jar forms.

#### *Residues*

- B.1.43 Survival of residues was rare. Limescale was observed on two body sherds in Early Iron Age fabrics S5 and F9 and charred organic matter on sherds belonging to 10 individual vessels. Most of these were flint-tempered body sherds but one sherd belonged to a fingertip decorated jar in shell-tempered ware S5.

#### *Modified sherds*

- B.1.44 A complete spindle whorl (SF52) made from a modified base in sandy ware Q3 was found in waterhole **509** (506) and half of another in fabric F7 was recovered from quarry

**215** (214). This was very common practice in both the Iron Age and Roman periods. The base of a very large shell-tempered jar from waterhole **304** (755) had also been deliberately trimmed for some other function, also a phenomenon well-recognised for the Iron Age. A sherd in fineware Q4 had been perforated post-firing. Perforations of this type could have been made to accommodate a repair, or to allow suspension of the vessel, fastening of a lid or to strain off liquid.

### **Provenance**

- B.1.45 Much of the pottery (48% by sherd count / 62% by weight) came from waterholes, particularly from dumps of material in the upper fills of these partially silted up features, presumably when they had gone out of use. The two most substantial groups of Early Iron Age pottery came from waterholes **705** (contexts 531-533, 579-581, 717, 741, 755, 758-759); **509** (contexts 506-507, 642-644, 684); and **304** (contexts 302, 532, 577-581, 741, 755). A discrete layer of pottery (302) within the upper fills of waterhole 304 appeared to have been deliberately laid over an area of approximately 10m<sup>2</sup> in one corner of the waterhole, perhaps as a closing deposit which decommissioned the feature.
- B.1.46 Most of the pottery recovered from the Roman quarries (90% by count / 80% by weight) was residual prehistoric material, suggesting that, apart from the quarrying activity, Roman occupation of this particular was not intensive.

- B.1.47 Pottery from features was present in the following proportions:

Waterholes: 2162 sherds / 32942 g

Pits: 1311 sherds / 12659 g

Roman quarries: 364 sherds / 2723 g

Tree bowls: 226 sherds / 1285 g

Postholes: 169 sherds / 1280 g

Layers: 98 sherds / 618 g

Ditches: 83 sherds / 247 g

Furrows: 75 sherds / 489 g

Subsoil: 57 sherds / 290 g

Gully: 2 sherds / 11 g

- B.1.48 Here only the most productive deposits are summarised:

### *Central water-hole complex **304/367/917/921***

- B.1.49 Fill 722 contained the complete profile of a fineware jar with a furrowed neck and everted rim. The jar is made in a hard sandy fabric and is carefully burnished. Although it appears very similar to Late Iron Age forms, the jar is in fact of Early Iron Age date, and finds parallel with an example from Linton (Fell 1953) and pottery from Landwade Road Fordham. Fill 741/755/302/532/577-581 (group 302) contained a large assemblage of Early Iron Age pottery dating to c.600-350 BC (14252g). The assemblage included fragments from a wide range of coarseware jars, with a smaller

number of fineware bowls. The assemblage was characterised by a variety of fabrics, most containing crushed burnt flint. Sandy wares and shell tempered wares were also present in significant numbers, and a few sherds contain chalk or other calcareous grits. Diagnostic coarsewares included a number of fingertipped shoulder sherds, three flanged T-shaped rims (JB2/3) and a large tall-necked jar with fingertipped shoulder. The finewares included a range of thin-walled round-bodied bowl with flared rims. These bowls of S-profile are typically of the latter stages of the Early Iron Age, and the presence of short-pedestal base in 741 may suggest a date centred on the 5th or 4th century BC. Fragments of at least three bowls were decorated at the neck with grooved horizontal lines, and one from 581 displayed a poorly executed double-chevron on the shoulder. This form of decoration is typical of vessels belonging to Cunliffe's Chinnor-Wandlebury style-zone, although the manner of its execution is atypical of this style.

- B.1.50 The upper fill of the central waterhole complex contained a higher proportion of dense sandy wares, which are more typical of the Middle or Later Iron Age. However, no diagnostic sherds were recovered.
- B.1.51 The features cutting the central waterhole complex yielded a small number of mainly undiagnostic body sherds. However, collectively the assemblage was dominated by shelly wares and sherds with dense sandy fabrics. These sherds cannot be closely dated, but are characteristic of the middle/late Iron Age assemblages in Cambridgeshire, and should carry a date between 350/300BC - AD 50.

#### *Waterhole 566*

- B.1.52 This waterhole contained 66 sherds (1013g) of pottery, slightly different in character to the groups from the central waterhole complex. Most came from the north-west quadrant of the feature, in the capping fill 508. This assemblage seems to represent a discrete dump of ceramics, containing mainly relatively large sherds. The group comprised sherds from a range of different coarsewares jars, most of which appear to be wide mouthed-vessels. The forms include a variety of round shouldered jars, some with tall-necks and pinched-rims. However, one or two vessels displayed shack profiles more commonly associated with the middle/late Iron Age. A T-shaped rim in fabric Q4 was also recovered, and one sherd in fabric Q1 had a perforation produced after firing. There were no decorated sherds. The main distinction between this assemblage and that from the central waterhole complex is the frequency of different fabric groups, and the absence of marked/angular shouldered jars. Whilst flint-tempered sherds characterise the pottery in the central waterhole complex, there is a slightly higher frequency of shelly wares from waterhole **566**. This may be chronologically significant, and when combined with the absence of angular shoulders, could imply a later date of the 4th century BC.

#### *Pit 90*

- B.1.53 This pit contained 59 sherds (958g) of pottery, which is either contemporary with waterholes **180** and **566** or slightly later. The partial profiles of two jars in shell-tempered ware were of slack-shouldered form, and therefore possibly of Middle Iron Age date. However, flint-tempered sherds were still present, and the partial profile of a flared, sandy bowl (BA3) was similar to late Early Iron Age examples from Trumpington Park and Ride site. Two other Early Iron Age bowls were also present, including a carinated form in organic-tempered ware.

### *Waterhole 180*

- B.1.54 This waterhole produced 175 sherds (2339g) of pottery similar in character to that from waterhole **566**. The range and frequency of fabrics was broadly comparable, with a higher percentage of shelly and sandy wares than seen in the assemblage from the large central waterhole complex, but still a considerable number of flint-tempered wares. However, this group can be distinguished from that from waterhole **566** by a notably greater number of burnished fineware sherds. Most of these probably belonged to S-profile bowls with flared rims. Two fineware pedestal bases in fabric F6 were present, together with a fineware bowl with incised chevrons in fine sandy ware Q4. A coarseware jar in fabric F4 displayed a round, finger-tipped shoulder. Fingertip decoration was also present on a small rim sherd in shell-tempered ware.

### *Waterhole 1463*

- B.1.55 This waterhole contained 54 sherds (1154g), an assemblage similar in character to those from waterholes **180** and **566**. A range of fabrics included flint-tempered, shelly and sandy wares. The group was dominated by shouldered coarseware jars, some with tall hollowed necks. Only two decorated sherds were present, both being fingertipped shoulder sherds. Fill 1721 contained an unusual lug handle, paralleled at the Trumpington Park and Ride site. The only partial profile in the assemblage was from fill 1473, and comprised a round shouldered bowl/jar with upright neck and rounded-direct rim.

### *Waterhole 1579*

- B.1.56 This waterhole contained a small assemblage of pottery dominated by sand and shell tempered fabrics. No diagnostic pieces were recovered, but the absence of flint fabrics suggests a Middle Iron Age date for this assemblage. Of interest is the rim of a probable Middle Bronze Age vessel from fill 1598. The sherd is shell tempered and decorated with a raised boss immediately below the lip. Recut **1580** contained a single fragment of Late Iron Age pottery with a slightly rippled neck. The sherd is thin-walled, slightly abraded, but probably wheel turned. The other sherds from the recut are undiagnostic.

### *The Late Iron Age and Early Roman pottery*

- B.1.57 A small collection of wheel-turned Late Iron Age and Roman pottery (39 sherds, 554g) was recovered from the site. Domestic occupation of the site appears to have ceased in the Early Roman period and the main evidence of activity during this period related to gravel quarrying, probably for the surfacing of the stretch of Akeman Street that ran adjacent to the site. Most of the Roman pottery was contained in the fills of these shallow features, generally amounting to only one-three sherds in each feature. Almost every sherd was highly abraded although the average sherd size was relatively high at 14g. The wall thickness of body sherds suggested that most belonged to large vessels such as cooking and storage jars rather than 'table wares'.
- B.1.58 Quarry **429** produced the largest group of eight sherds and quarry **1696** contained the only sherd of samian ware from the excavation. This quarry also produced a rim of a

large storage jar in coarse grey ware with a 'silvered' slip, resembling products of the Alice Holt kilns.

- B.1.59 The Roman pottery assemblage was of uncertain date, represented as it was for the most part by body sherds in coarse grey wares, but there was no material clearly post-dating the first century AD. Roman pottery was found in the following features:
- B.1.60 Waterhole **509** (644); Waterhole **1579** (1593); Pit **1806** (1803); Quarries : Quarry **213** (212); Quarry **429** (428); Quarry **431** (430); Quarry **1072** (1073); Quarry **1049** (1048); Quarry **1113** (1198); Quarry **1124** (1123); Quarry **1138** (1137); Quarry **1156** (1155); Quarry **1166** (1161);
- B.1.61 Quarry **1344** (1343); Quarry **1535** (1534); Quarry **1550** (1549); Pit **1576** (1574); Quarry **1696** (1667); Quarry **1674** (1673); Ditch **1565** (1564).

### ***Statement of Potential***

- B.1.62 The Iron Age pottery assemblage is significant for the region in that few well provenanced contemporary assemblages have been recovered from this part of Cambridgeshire. Despite its generally fragmentary state, there is a good range of fabrics, identifiable forms, surface treatments and decoration to consider as part of a more detailed analysis. The waterhole assemblages are particularly useful because of their relatively large size in some cases, and in that the stratigraphic sequences of fills and recuts provide an opportunity to examine the development of ceramic styles and changes over time. It must be borne in mind that there is an issue of residuality to tease out during an analysis of the sequence.
- B.1.63 Further analysis of the very small earlier prehistoric assemblages and the Late Iron Age and Roman pottery would add very little to the local, regional or national picture.

### ***Recommendations for Analysis***

- B.1.64 The pottery has been fully recorded during assessment but further analysis is recommended to address a number of issues. These include an investigation of raw material sources for the fabrics, seriation of the waterhole groups in order to trace form and fabric development during the Iron Age period and to research more thoroughly the local and regional affinities of the assemblage.
- B.1.65 It is recommended that c. 30-40 sherds be drawn. They should be selected as representative of the style range and of secure feature groups.



## B.2 Waterlogged Wood

*By Mike Bamforth*

### ***Introduction and methodology***

- B.2.1 This document aims to assess the potential of the waterlogged wood assemblage in terms of woodworking technology, woodland reconstruction, species identification, dendrochronology and decay analysis together with conservation and retention.
- B.2.2 Site visits were made by Michael Bamforth on 20th September 2007 and 5th June 2008 to provide advice on the sub-sampling strategy for the waterlogged wood. A further visit was made to site on 6th June 2008 to record the material from waterhole **1650** on site. The majority of the waterlogged wood was recorded off site at the offices of OAE between September 2007 and August 2008.
- B.2.3 A total of 248 discrete items of waterlogged wood have been recorded. In addition to recording the discrete items, seven bulk assemblages of roundwood and debris were also assessed.
- B.2.4 The waterlogged wood assemblage as a whole is relatively large and provisionally assigned to two periods: Roman and Earlier Iron Age.
- B.2.5 In addition to being a multiphase assemblage, the material is spread across a broad range of contexts, with material recovered from 15 separate features.

### ***Provenance***

- B.2.6 Waterlogged wood was recovered from many of the deeper cut features.

### ***Features containing waterlogged wood***

Feature	Provisional date	Feature type	Context	Frequency of wood
<b>90</b>	Roman	Quarry	(166)	1
<b>180</b>	Middle Iron Age	Waterhole	(091)	1
			(092)	2
<b>132</b>	Middle Iron Age	Waterhole	(105)	1
			(130)	1
			(131)	2
<b>137</b>	Middle Iron Age	Waterhole	(134)	1
<b>464</b>	Middle Iron Age	Waterhole	(681)	6
<b>566</b>	Middle Iron Age	Waterhole	(633)	4
<b>630</b>	Middle Iron Age	Waterhole	(609)	3
			(688)	2
<b>705</b>	Middle Iron Age	Waterhole	(667)	1
			(685)	8
<b>898</b>	Roman	Quarry	(906)	3
				1
<b>917</b>	Middle Iron Age	Waterhole	(722)	61
			(897)	13
			(915)	20
			(916)	12
			(920)	6
			(929)	30



Feature	Provisional date	Feature type	Context	Frequency of wood
			(949)	11
<b>921</b>	Middle Iron Age	Waterhole	(723)	21
<b>928</b>	Middle Iron Age	Waterhole	(720)	1
<b>935</b>	Middle Iron Age	Waterhole	(945)	1
			(946)	2
<b>1080</b>	Roman	Quarry	(1179)	1
<b>1107</b>	Middle Iron Age	Waterhole	(1176)	1
<b>1464</b>	Middle Iron Age	Waterhole	(1480)	1
<b>1650</b>	Middle Iron Age	Waterhole	(1664)	25
<b>1696</b>	Middle Iron Age	Waterhole	(1667)	1
			(509)	4
			<b>total</b>	<b>248</b>

Table 19: Features containing waterlogged wood

- B.2.7 A total of six items were recovered from the basal fills of three quarry pits, provisionally dated as Roman.
- B.2.8 The majority of the material was recovered from the basal fills of watering holes, provisionally dated between the Early Bronze Age and the Earlier Iron Age (EIA). The assemblage was focused around features **917** and **1650**, from which 153 and 25 items respectively were recovered.
- B.2.9 A broad range of material was recovered from **917**, including log ladder SF 43 and large quantities of woodworking debris and roundwood.
- B.2.10 The assemblage from **1650** is distinctly different, being almost exclusively timber and large debris that had been formed into a crude lining.
- B.2.11 Table 19 deals with the 248 discrete items that were individually recorded. In addition to the discrete items, seven bulk collections of material were also assessed, and are considered separately to the main assemblage:
- (context 681) sample <44>: All discrete items recorded. Approximately 20 small, broken items were not recorded due to extreme fragmentation.
- (92): 16 pieces of small diameter roundwood – possibly a withy tie (Corkhill 1979).
- (609): The material collected had completely dried out. Approximately 25 pieces of debris and roundwood were too decayed to record or identify to species.
- (722) 19 items of debris and 83 items of roundwood assessed as an assemblage.
- (723)<58>: All discrete items were recorded. Approximately 25 broken and fragmented unidentifiable items were too decayed to record.
- (915): All discrete items were recorded. Approximately 10 broken and fragmented unidentifiable items were too decayed to record.
- (920) Bag of 19 fragments of debris, assessed as an assemblage.

### **Methodology**

- B.2.12 This document has been produced in accordance with English Heritage guidelines for the treatment of waterlogged wood (Brunning 1996) and recommendations made by the Society of Museum Archaeologists (1993) for the retention of waterlogged wood.

- B.2.13 All discretely numbered items and those displaying evidence of modification or woodland management were assigned a unique wood number and recorded individually using the pro forma 'wood recording sheet' developed by Fenland Archaeological Trust for the post-excavation recording of waterlogged wood. All records were then entered into a database.
- B.2.14 Bulk collections or samples of natural wood were assessed as a whole.
- B.2.15 Every effort was made to refit broken or fragmented items. However, due to the nature of the material, the possibility remains that some complete yet broken items may have been processed as fragments rather than as discrete items.
- B.2.16 The metric measurements were taken with hand tools including rulers and tapes, the toolmarks were measured using a profile gauge.
- B.2.17 The system of categorisation and interrogation of waterlogged wood developed by Taylor (1998 & 2001) has been adopted within this report.
- B.2.18 Oak and ash were identified to species by observing the visible macroscopic features with a hand lens. Items not positively identified via macroscopic observation were sub-sampled to allow microscopic identification as necessary.
- B.2.19 When material was recorded by the specialist on site, it was sub-sampled as appropriate for species identification, decay analysis and dendrochronology, prior to being discarded.

***Range and Variation***

WOOD TYPE	FREQUENCY	% OF ASSEMBLAGE
Artefact	6	2.42
Debris	104	41.94
Root	3	1.21
Roundwood	112	45.16
Timber	23	9.27
<b>total</b>	<b>248</b>	<b>100.00</b>

*Table 20: Frequency of wood categories*

- B.2.20 The assemblage represents a moderate number of discrete items spread across the full range of wood types (Table 20). Although the assemblage contains a high percentage of items described as artefacts, the majority of these are only provisionally assigned to this category.
- B.2.21 The largest single category of material is represented by the roundwood. Within the roundwood assemblage there are 13 items of natural roundwood and 99 items of roundwood. There are 26 worked items and 70 items that show evidence of coppicing.
- B.2.22 The assemblage contains moderate quantities of debris associated with the production, shaping and finishing of timbers. There is a moderate quantity of both timber debris (off cuts) associated with the reduction of large timbers and woodchips.
- B.2.23 Within this report, any item suitable for building or structural purposes (whether logs or converted) has been assigned to the category of timber (Corkhill 1979).

- B.2.24 Timber represents a fairly low percentage of the material in this assemblage. However, the majority of the timber present has been worked, with large split items and several different types of joint represented.
- B.2.25 Several toolmarks have been recorded and a single item shows signs of beaver tooth marks.

**Condition of material**

- B.2.26 Where the preservation varied within a discrete item, the best preserved section was scored for condition. Items that were set vertically in the ground often displayed better preservation lower down and a relatively poorer preservation higher up.

	MUSEUM CONSERVATION	TECHNOLOGY ANALYSIS	WOODLAND MANAGEMENT	DENDRO-CHRONOLOGY	SPECIES IDENTIFICATION
5	+	+	+	+	+
4	-	+	+	+	+
3	-	+/-	+	+	+
2	-	+/-	+/-	+/-	+
1	-	-	-	-	+/-
0	-	-	-	-	-

Table 21: Condition scale used in this report

- B.2.27 The condition scale developed by the Humber Wetlands Project (Van de Noort *et al.* 1995 Table 15.1), will be used throughout this report. The condition scale is based primarily on the clarity of surface data. Material is allocated a score dependent on the types of analysis that can be carried out, given the state of preservation. The condition score reflects the possibility of a given type of analysis but does not take in to account the suitability of the item for a given process.

CONDITION SCORE	FREQUENCY	% OF ASSEMBLAGE
5	1	0.40
4	143	57.66
3	95	38.31
2	8	3.23
1	1	0.40
0	0	0.00

Table 22: Condition of material

- B.2.28 The vast majority of the material (95.97%) scores a 3 or 4, representing a moderate to well preserved assemblage.
- B.2.29 The moderate to good preservation will allow technological analysis, an assessment of possible woodland management practices and species identification throughout the majority of the assemblage.

### Statement of Potential

- B.2.30 A complete catalogue of the recorded material can be found at the end of this report.
- B.2.31 The artefacts and possible artefacts are worthy of individual study (Table 23). The potential in the remainder of the material lies in consideration of the assemblage as a whole.

#### Artefacts

Wood No.	Context	Feature	Small find No.	Description	
W0001	(949)	[917]	SF. 43		Log Ladder
W0033	(685)	[705]	SF. 33	Possible	Mallet
W0118	(688)	[630]		Possible	Peg / trenail
W0194	(1480)	[1464]	SF. 69		Log Ladder
W0064	(685)	[705]	SF. 09	Possible	Stave
W0249	(946)	[935]	SF. 49	Possible	Stave

Table 23: Wood artefacts

- B.2.32 Two log ladders were recovered during the excavations. SF 43 is unconverted and has two surviving steps, a radiocarbon sample returned a result of 2510 +/- 35 BP. SF 69 is also unconverted and has a single surviving step. These items will add to the growing corpus of prehistoric log ladders found in the region.
- B.2.33 The possible staves, trenail and mallet will require further examination to determine if they are finished artefacts, or merely interesting pieces of timber. Where parallels can be found in the literature this will clarify the situation.

#### Debris

- B.2.34 It has been shown that the study of debris as an assemblage can be of merit in, terms of understanding the types of woodworking being undertaken at a site, plotting the location of woodworking activities and contributing to the understanding of site formation processes (Taylor 1998).

Debris type	Frequency	% of debris assemblage
Bark	6	5.77
Roundwood debris	16	15.38
Timber debris	21	20.19
Woodchips	35	33.65
Unclassified debris	26	25.00
<i>total</i>	<i>104</i>	<i>100.00</i>

Table 24: Types of debris

- B.2.35 Woodworking debris is often primary waste (Taylor 1998). Plotting the presence and nature of woodworking debris by feature has the potential to elucidate both site formation processes and possibly identify areas of woodworking activity across the site. Iron Age debris is rare and as such, a brief analysis of the woodchips will add to the corpus of data (Brunning 1996).

#### Root

- B.2.36 None of the root was growing in situ. Two of the items were worked. As such, the root should in this case be considered alongside the timber.

B.2.37 The lack of material growing in situ shows low levels of evidence for later disturbance and intrusion by roots.

#### *Roundwood*

B.2.38 From the 112 items classed as roundwood, 13 are described as natural. Woodworking is limited to the shaping of points. Several items were set vertically as stakes. A statistical analysis of the roundwood assemblage will allow comparisons with prehistoric roundwood of known function and will also shed light on the prevalence of coppicing.

#### *Timber*

B.2.39 The woodworking is typical of prehistoric assemblages, with splitting and trimming representing the major forms of conversion. Several notches, mortise joints and an open mortise were recorded. There is some evidence for wet rot and weathering in antiquity within the timber assemblage.

B.2.40 The majority of the timber (16 items) was recovered from waterhole **1650** and formed part of a crude revetment or lining, with both planks and stakes being utilised.

B.2.41 Small finds 16 and 18, from waterholes **705** and **921** respectively are both of note, each displaying multiple mortise holes. The presence of these large, multiply jointed, similar timbers suggests they originally formed part of a structure.

B.2.42 The timber assemblage will characterise the types of woodworking practiced. It will also further the understanding of known and possible structures on the site.

#### *Toolmarks*

B.2.43 A total of seven complete and partial toolmarks were recorded from the artefact, timber and roundwood assemblages. A brief analysis of this data will allow the minimum number of tools represented to be identified, as well as identifying any trends that exist within the dataset.

#### *Charring*

B.2.44 A total of three items are charred to some degree.

### ***New Research Questions and Potential of Data***

#### *Woodworking Technology*

B.2.45 Further analysis of the timber and debris assemblage will clarify the types of woodworking activity being undertaken at the site. Defining the types of woodworking used on the shoring timbers within waterhole **1650** will lead to a greater understanding of this structure. Similarly, if parallels can be found for the other structural timbers recovered from the site, it may be possible to suggest their original use.

#### *Woodland reconstruction*

B.2.46 The prevalence of coppicing as a woodland management technique can be traced via evidence of this practice in the roundwood assemblage.

*Species identification*

- B.2.47 A total of 95 items that were not identified to species have been sub-sampled for species identification. Total species identification of all these samples is neither cost effective or necessary. It is suggested that all the non-oak possible artefacts (6 items) and timber (3 items) are identified to species. Identifying 15% of the non-oak debris and roundwood assemblages will confirm whether these are formed of the usual wet loving trees found in the region (willow, alder, poplar etc.).

*Dendrochronology*

- B.2.48 Five items, all from waterhole **1650** have a moderate to good potential for dendrochronology. All have been retained and could be sub-sampled for dendrochronology should more detailed dating evidence be required.

*Decay analysis*

- B.2.49 A study of surface condition in terms of potential data collection has been carried out as part of this document. Many sub-samples have been collected and could be used for decay analysis in terms of physical structure if required.

*Conservation and retention*

- B.2.50 Although this is an interesting assemblage as a whole, none of the items are of enough interest as discrete pieces to require conservation and retention.

***Recommendations***

- B.2.51 The possible artefacts should be re-examined. All items assigned as artefacts should then be drawn, photographed and described in detail to enable them to be considered alongside other examples in the literature. The non-oak items should be identified to species.
- B.2.52 The debris assemblage should be characterised and compared with other assemblages where possible. Particular attention should be paid to the spatial distribution and the nature of the woodworking represented. A sample of 15% of the non-oak material should be identified to species.
- B.2.53 The roundwood assemblage should be characterised and compared to roundwood assemblages of known function, with the aim of defining the levels of coppicing present within the assemblage and the species selection. The latter will be achieved via a 15% identification to species of the non-oak material. The possible withy tie from (92), waterhole **180**, should be identified to species.
- B.2.54 The woodworking present within the timber assemblage should be characterised, and the raw material selection defined, with the particular aim of better understanding the structure within waterhole **1650** and the site formation processes within waterholes **1650** and **917**. The non-oak items should be identified to species. The only material that is of some interest as individual items are the mortised timbers (SF 16 and 18). The jointing of these items is interesting and an outline illustration would be desirable.
- B.2.55 A report summarising the above should be produced, with a general discussion of the structures, woodworking, raw material selection and evidence for woodland management practices.



# Wood Catalogue

## Artefacts

WOOD NO	CONTEXT	FEATURE	SMALL FIND	FUNCTION		WOOD WORK TYPE	SPLIT TYPE	WOODWORKING NOTES	BARK / SAPWOOD / HEARTWOOD	LENGTH (mm)	WIDTH (mm)	THICKNESS (mm)	DIAMETER (mm)
W0001	(949)	[917]	SF. 43	Log Ladder		TR		1 end / all dir to blunt point. 2 x steps.	BSH	1165			111
W0033	(685)	[705]	SF. 33	Mallet	Possible	TR		Poss both ends trimmed flat	SH	500	265	75	
W0118	(688)	[630]		Peg / trenail	Possible	SP HEWN	Rad	Hewn inside (curved) and outside (flat)	SH	170			20
W0194	(1480)	[1464]	SF. 69	Log Ladder		TR HEWN		RW, 1 end flat with bevelled edge. 1 end hewn from all directions, thinning.	BSH	570			92
W0064	(685)	[705]	SF. 09	Stave	Possible	TR		1 end / all dir, fairly blunt. 1 x step: 150mm high x 65mm deep. 1 x SB c. 40mm, poss trimmed.	H	245	83	19	
W0249	(946)	[935]	SF. 49	Stave	Possible	SP	Rad		H	245	92	11	





## Debris – Bark

WOOD NO	CONTEXT	FEATURE	CONDITION SCORE	LENGTH (mm)	BREADTH (mm)	THICKNESS (mm)
W0048	(929)	[917]	4	65	45	10
W0049	(929)	[917]	4	62	23	9
W0231	(633)	[566]	4	43	25	9
W0240	(131)	[132]	4	85	50	9
W0242	(091)	[180]	4	78	50	11
W0243	(131)	[132]	4	85	38	10



## Debris – Roundwood Debris

WOOD NO	CONTEXT	FEATURE	SPECIES	COPICING EVIDENCE	BARK / SAPWOOD / HEARTWOOD	CONDITION SCORE	WOODWORKING TYPE	WOODWORKING NOTES	SPLIT TYPE	LENGTH (mm)	BREADTH (mm)	THICKNESS (mm)	ORIGINAL DIAMETER (mm)
W0037	(929)	[917]	Quercus sp.	Straight and even	SH	4	SP		Rad 1/3	99	46	15	
W0050	(609)	[630]	Quercus sp.		SH	3	SP TR	1 end / 1 dir	Rad 1/2	649	38	22	38
W0057	(916)	[917]	Quercus sp.	Straight stem	SH	3	SP		Rad 1/2	245	56	29	
W0088	(915)	[917]			SH	4	SP TR	1 end / 1 dir	Rad 1/2	140	39	16	39
W0090	(915)	[917]	Quercus sp.		SH	3	SP		Rad 1/2	186	34	19	
W0102	(723)	[921]			SH	3	SP		Rad 1/2	90	71	38	
W0121	(897)	[917]		Straight	BSH	4	SP		Rad 1/2	180	40	25	40
W0129	(906)	[898]		Straight and even	SH	4	SP		Rad 1/2	120	39	20	39
W0221	(722)	[917]		Straight and even	BSH	4	SP		Rad 1/2	112	29	18	
W0223	(722)	[917]	Quercus sp.		SH	4	SP		Rad 1/2	120	46	22	
W0224	(722)	[917]	Quercus sp.		SH	4	SP		Rad 1/2	44	32	12	
W0225	(722)	[917]			SH	4	SP		Rad 1/2	49	26	11	
W0226	(722)	[917]	Quercus sp.	Straight and even	SH	3	SP		Rad 1/2	142	44	20	44
W0228	(722)	[917]	Quercus sp.		SH	3	SP		Rad 1/2	54	39	23	39
W0245	(130)	[132]		Straight and even	SH	4	SP TR	1 end / 1 dir	Rad 1/2	104	21	9	
W0247	(609)	[630]	Quercus sp.		SH	4	SP		Rad 1/2	65	26	13	26



## Debris – Timber debris

WOOD NO	SMALL FIND	CONTEXT	FEATURE	SPECIES	DAMAGE	DAMAGE NOTES	BARK / SAPWOOD / HEARTWOOD	CONDITION SCORE	WOODWORKING TYPE	WOODWORKING NOTED	SPLIT TYPE	CHARRING NOTES	LENGTH (mm)	BREADTH (mm)	THICKNESS (mm)	ORIGINAL DIAMETER (mm)
W0004		(929)	[917]				H	3	SP	Split fades out at both ends.	Tan		475	81	21	
W0005	SF. 37	(920)	[917]		Ancient	Looks broken across split	SH	3	SP	Scrappy split	Rad 1/2		775	115	58	
W0007	SF. 26	(685)	[705]		Ancient	Looks exposed. Light wet rot on split surface.	BSH	3	TR	1 end / 1 dir. Scrappy split.	Rad 1/3		625	98	59	
W0012	SF. 47	(949)	[917]	Fraxinus excelsior			SH	4	SP	1 end / 2 dir. Split from outside	Tan (mod)		960	68	38	
W0016	SF. 32	(916)	[917]	Quercus sp.	Ancient	Looks lightly exposed / tumbled	H	3	SP	Square	Rad 1/8 (mod)		396	51	41	
W0024	SF. 42	(949)	[917]	Quercus sp.	Ancient	looks a bit knocked about in antiquity	H	3	SP		Rad (mod)		430	91	59	
W0133		(929)	[917]	Quercus sp.			H	4	SP		Tan (mod)		246	76	16	
W0098	<58>	(723)	[921]	Quercus sp.	Modern	Fragmented	H	3	SP		Rad 1/8 (mod)		136	79	60	
W0100	<58>	(723)	[921]		Modern	Fragmented	H	3	SP		Rad (mod)		60	42	29	
W0101	<58>	(723)	[921]				H	3	SP		Rad (mod)		50	50	29	
W0060	SF. 51	(722)	[917]				H	4	SP	Split fades out	Tan		485	42	39	



WOOD NO	SMALL FIND	CONTEXT	FEATURE	SPECIES	DAMAGE	DAMAGE NOTES	BARK / SAPWOOD / HEARTWOOD	CONDITION SCORE	WOODWORKING TYPE	WOODWORKING NOTED	SPLIT TYPE	CHARRING NOTES	LENGTH (mm)	BREADTH (mm)	THICKNESS (mm)	ORIGINAL DIAMETER (mm)
W0201	SF. 77	(1664)	[1650]	Quercus sp.			H	3	SP TR	1 end / 1 dir. SB's and top are all degraded.	Rad 1/4		930	240	220	>480
W0197	SF. 73	(1664)	[1650]	Quercus sp.			H	3	SP TR	1 end / flat. 1 end / 1 dir. SB's removed	Rad 1/4		1100	550	500	>500
W0061	SF. 41	(722)	[917]	Quercus sp.			H	2	SP		Tan		590	85	42	
W0062	SF. 38	(920)	[917]	Quercus sp.			H	3	SP		Rad (mod)		145	76	36	
W0207	SF. 83	(1664)	[1650]	Quercus sp.	Ancient	Rotted out SB	H	3	SP TR	1 end / 1 dir	Rad 1/8		960	240	220	
W0069	SF. 13	(897)	[917]	Quercus sp.			H	3	SP		Rad (mod)	Moderate at one end	248	69	33	
W0074	SF. 27	(915)	[917]	Quercus sp.			H	2	SP		Rad 1/3		245	40	28	
W0077		(092)	[180]	Quercus sp.	Ancient	Looks exposed in antiquity	H	3	SP	Split fades out	Rad (mod)		391	58	46	
W0078		(092)	[180]	Quercus sp.	Ancient	Looks exposed in antiquity	H	3	SP		Tan		391	61	38	
W0087		(915)	[917]				H	3	SP TR	1 end / 1 dir	Tan		194	56	38	



## Debris – Woodchips

WOOD NO	SMALL FIND	CONTEXT	FEATURE	SPECIES	COPPICING EVIDENCE	BARK / SAPWOOD / HEARTWOOD	CONDITION SCORE	WOODCHIP TYPE	WOODWORKING TYPE	WOODWORKING NOTES	LENGTH (mm)	BREADTH (mm)	THICKNESS (mm)
W0003		(929)	[917]	Quercus sp.		BSH	4	Tan	SP	Split from outside with both ends fading out.	285	48	25
W0020	SF. 42	(949)	[917]			BSH	3	Tan	SP	Split from outside	180	129	21
W0021	SF. 42	(949)	[917]	Quercus sp.		H	4	Rad	SP		73	72	27
W0036		(929)	[917]			SH	4	OffRW	SP	From outside	115	89	15
W0038		(929)	[917]	Quercus sp.		BSH	4	OffRW	SP	From outside, fading	75	34	14
W0039		(929)	[917]	Quercus sp.		H	3	Tan	SP		99	35	20
W0042		(929)	[917]	Quercus sp.		H	4	Tan	SP		75	22	11
W0044		(929)	[917]	Quercus sp.		H	4	Tan	SP		75	224	12
W0045		(929)	[917]	Quercus sp.		H	4	Tan	SP TR	1 end / 1 dir	79	32	12
W0047		(929)	[917]	Quercus sp.		H	4	Tan	SP		245	75	15
W0051		(916)	[917]			SH	4	Tan	SP		178	58	10
W0052		(916)	[917]			H	3	Tan	SP TR	1 end / 1 dir	109	56	23
W0053		(916)	[917]			H	2	Tan	SP		125	48	15
W0054		(916)	[917]	Fraxinus excelsior		H	4	Tan	SP TR	1 end / 1 dir	86	49	13
W0055		(916)	[917]	Quercus sp.		H	3	Tan	SP		35	32	4
W0056		(916)	[917]	Quercus sp.		H	3	Tan	SP		35	32	12
W0075	SF. 20	(915)	[917]	Quercus sp.		H	3	Rad	SP		210	36	11
W0084	<44>	(681)	[464]			H	3	Tan	SP		125	62	16



WOOD NO	SMALL FIND	CONTEXT	FEATURE	SPECIES	COPPICING EVIDENCE	BARK / SAPWOOD / HEARTWOOD	CONDITION SCORE	WOODCHIP TYPE	WOODWORKING TYPE	WOODWORKING NOTES	LENGTH (mm)	BREADTH (mm)	THICKNESS (mm)
W0085	<44>	(681)	[464]			H	2	Tan	SP		128	41	22
W0115	<58>	(723)	[921]			S	4	Tan	SP		43	29	8
W0123		(897)	[917]	Quercus sp.		H	3	Rad	SP		175	38	22
W0125		(897)	[917]			SH	4	OffRW	SP	From outside	55	29	9
W0130		(906)	[898]	Quercus sp.	Straight	BSH	4	OffRW	SP	From outside	95	39	10
W0132		(929)	[917]			SH	4	Tan	SP	From outside	190	79	20
W0134		(929)	[917]			SH	4	OffRW	SP	From outside	140	50	23
W0135		(929)	[917]			H	4	Tan	SP		40	36	5
W0142		(929)	[917]			BSH	4	OffRW	SP	From outside	60	50	30
W0143		(929)	[917]			BSH	4	OffRW	SP	From outside	125	40	10
W0188		(722)	[917]	Quercus sp.	Straight and even	SH	4	OffRW	SP	From outside	155	35	25
W0190		(722)	[917]	Quercus sp.		H	3	Rad	SP		85	40	15
W0192		(722)	[917]	Quercus sp.		BSH	3	OffRW	SP	From outside	155	34	23
W0193		(722)	[917]	Quercus sp.		BSH	4	OffRW	SP	From outside	185	46	32
W0227		(722)	[917]	Quercus sp.		H	3	Rad	SP		105	62	23
W0229		(722)	[917]	Quercus sp.		H	3	Rad	SP		50	42	12
W0230		(166)	[090]	Quercus sp.		H	3	Rad	SP		64	25	12



## Debris – Unclassified

WOOD NO	SMALL FIND	CONTEXT	FEATURE	SPECIES	DAMAGE	DAMAGE NOTES	BARK / SAPWOOD / HEARTWOOD	CONDITION CODE	WOODWORKING TYPE	WOODWORKING NOTES	SPLIT TYPE	CHARRING NOTES	FUNCTION	LENGTH (mm)	BREADTH (mm)	THICKNESS (mm)
W0025	SF. 42	(949)	[917]	Quercus sp.	Ancient	Degraded all over	H	3	SP, TR	1 end trimmed	Rad (mod)			234	140	125
W0026	SF. 42	(949)	[917]		Ancient	Bark beetle (c. 2mm tracks)	BS	3	?	Unclear whether the centre has rotted out or been worked out				420	25	20
W0131		(906)	[898]	Quercus sp.	Ancient	Exposed	SH	3	SP	Removed knot	Tan			125	110	50
W0136		(929)	[917]	Quercus sp.			H	4	SP		Rad / Tan / SQ		Splitting debris	111	40	22
W0137		(929)	[917]	Quercus sp.			H	4	SP		Rad / Tan / SQ		Splitting debris	174	34	23
W0138		(929)	[917]	Quercus sp.			H	4	SP		Rad / Tan / SQ		Splitting debris	75	22	15
W0139		(929)	[917]	Quercus sp.			H	4	SP		Rad / Tan / SQ		Splitting debris	78	25	15
W0140		(929)	[917]				H	4	SP		Unclassified			105	35	23
W0141		(929)	[917]				H	4	SP		Unclassified			85	34	20
W0120		(897)	[917]				H	4	SP		Tan (mod) SQ			230	61	39
W0124		(897)	[917]	Quercus sp.			H	3	SP		Tan			120	80	43





WOOD NO	SMALL FIND	CONTEXT	FEATURE	SPECIES	DAMAGE	DAMAGE NOTES	BARK / SAPWOOD / HEARTWOOD	CONDITION CODE	WOODWORKING TYPE	WOODWORKING NOTES	SPLIT TYPE	CHARRING NOTES	FUNCTION	LENGTH (mm)	BREADTH (mm)	THICKNESS (mm)
W0126		(897)	[917]	Quercus sp.	Ancient	Exposed	SH	2	SP		Unclassified			230	85	52
W0128		(897)	[917]	Quercus sp.			H	3	SP		Unclassified			130	120	50
W0187		(722)	[917]	Quercus sp.			SH	3	SP		Unclassified			185	56	20
W0191		(722)	[917]	Quercus sp.			BSH	3	?SP					195	55	35
W0040		(929)	[917]	Quercus sp.			H	4	SP		Rad / Tan / SQ		Splitting debris	111	36	24
W0041		(929)	[917]	Quercus sp.			H	4	SP		Rad / Tan / SQ		Splitting debris	80	15	14
W0043		(929)	[917]	Quercus sp.			H	4	SP		Rad / Tan / SQ		Splitting debris	85	25	14
W0046		(929)	[917]	Quercus sp.			H	4	SP		Rad / Tan / SQ			163	36	26
W0205	SF. 81	(1664)	[1650]	Quercus sp.	Ancient	Worn on outside	H	3	SP	Amorphous lump	Rad			288	130	98
W0206	SF. 82	(1664)	[1650]	Quercus sp.			H	3	BEAV	Amorphous lump. 2 beavered ends	Rad			180	80	40
W0086		(915)	[917]				H	3	SP		Rad			190	49	23
W0208	SF. 84	(1664)	[1650]	Quercus sp.	Ancient	Possibly slightly exposed	H	3				Lightly on 1 side c. 3mm		420	380	200



WOOD NO	SMALL FIND	CONTEXT	FEATURE	SPECIES	DAMAGE	DAMAGE NOTES	BARK / SAPWOOD / HEARTWOOD	CONDITION CODE	WOODWORKING TYPE	WOODWORKING NOTES	SPLIT TYPE	CHARRING NOTES	FUNCTION	LENGTH (mm)	BREADTH (mm)	THICKNESS (mm)
W0209	SF. 85	(1664)	[1650]	Quercus sp.	Ancient	Looks exposed, weathered and ?wet rot	H	3	TR	1 x SB trimmed / 1 dir. Small facets.				900	200	180
W0215	SF. 91	(1664)	[1650]				BSH	3		Possibly split		Heavily, 1 end burnt away		420	145	35
W0246		(1176)	[1107]	Quercus sp.			H	4	SP		Rad / Tan / SQ		Splitting debris	143	24	16

### Root

WOOD NO	SMALL FIND	CONTEXT	FEATURE	NOTES	DAMAGE	DAMAGE NOTES	BARK / SAPWOOD / HEARTWOOD	CONDITION SCORE	WOODWORKING TYPE	WOODWORKING NOTES	SPLIT TYPE	LENGTH (mm)	BREADTH (mm)	THICKNESS (mm)
W0010	SF. 40	(929)	[917]	Very gnarly	Ancient	?wet rot	BSH	3	SP	Split from outside.	Tan	370	180	55
W0022	SF. 42	(949)	[917]				SH	2				300	85	60
W0032	SF. 07	(667)	[705]	Tree bowl? Gnarly / burrs	Ancient	Looks exposed.	BSH	3	SP		Rad 1/2	830	220	110



## Roundwood

WOOD NO	SMALL FIND	CONTEXT	FEATURE	SPECIES	COPPING EVIDENCE	DAMAGE NOTES	BARK / SAPWOOD / HEARTWOOD	CONDITION SCORE	WOODWORKING TYPE	WOODWORKING NOTES	LENGTH (mm)	DIAMETER – LONG AXIS (mm)	DIAMETER – SHORT AXIS (mm)	UNDISTORTED DIAMETER (mm)
W0006	SF. 37	(920)	[917]		Straight		BSH	4			98	26	21	
W0008	SF. 31	(916)	[917]	Quercus sp.		Looks exposed, slight ?wet rot on one face.	SH	3			546	88	59	
W0011	SF. 44	(929)	[917]	Quercus sp.	Straight and even with slight curve and flair		BSH	4	TR	1 end / 1 dir	676	59	43	
W0013	SF. 36	(920)	[917]	Quercus sp.	Straight and even with slight curve and flair		BSH	4	TR	Proximal end / 1 dir	803	28	26	
W0015	SF. 34	(916)	[917]		Straight and even.		BSH	4	TR	Proximal end / 1 dir	491	25	22	
W0017		(685)	[705]		Straight and even		SH	3	TR	1 end / 3 dir to tapered point.	269	67	58	
W0018		(685)	[705]		Straight and even		SH	4	TR	1 end / 3 of 4 dir to tapered break.	309	41	39	
W0023	SF. 42	(949)	[917]		Straight and even with curve.		BSH	4	TR	Proximal end / 1 dir	255	32	29	
W0027	SF. 17	(685)	[705]		Straight and even		BSH	4			1050	53	49	
W0028	SF. 23	(915)	[917]	Quercus sp.	Straight and even		SH	3	TR	Proximal end / 1 dir to broken end	495			51



WOOD NO	SMALL FIND	CONTEXT	FEATURE	SPECIES	COPPICING EVIDENCE	DAMAGE NOTES	BARK / SAPWOOD / HEARTWOOD	CONDITION SCORE	WOODWORKING TYPE	WOODWORKING NOTES	LENGTH (mm)	DIAMETER – LONG AXIS (mm)	DIAMETER – SHORT AXIS (mm)	UNDISTORTED DIAMETER (mm)
W0029	SF. 25	(723)	[921]			Centre rotted out	BSH	4	TR AXE D	Proximal end / all dir almost flat. Part of outer face hacked about.	390			185
W0034	SF. 45	(949)	[917]		Straight and even with curve and flair.		BSH	4	TR	Distal end / 1 dir	1312	68	61	
W0035	SF. 46	(949)	[917]				SH	3		Unclear whether the centre has rotted out or been worked out	605			
W0058		(916)	[917]		Straight and even		BSH	4			104	21	20	
W0059		(916)	[917]		Straight and even		BSH	4			101	12	9	
W0063	SF. 36	(920)	[917]		Straight and even		SH	4	TR	1 end / 1 dir to tapered point	315			45
W0065	SF. 14	(897)	[917]		Straight and even with slight curve and flair		SH	4	TR	Proximal end / 1 dir	689	31	26	
W0066	SF. 15	(897)	[917]		Straight and even with flair		SH	4	TR	Proximal end / 1 dir	791	36	29	
W0067	SF. 12		[898]	Quercus sp.	Straight and even	1 end snapped in antiquity	SH	4	TR SN	1 end possibly squared up. 1 end snapped in antiquity	312			30
W0068	SF. 11	(897)	[917]	Quercus sp.	Straight and even with slight curve	Trowel damage	SH	4	TR	1 end / all dir to tapered point	290			43
W0070	SF. 21	(915)	[917]		Straight and even with curve and flair		SH	4			399	41	37	
W0072	SF. 29	(915)	[917]	Quercus sp.	Straight and even		BSH	4	TR	1 end / 1 dir	239			29
W0073	SF. 28	(915)	[917]	Quercus sp.	Straight and even with flair		BSH	4	TR	1 end / 2 dir	275			39



WOOD NO	SMALL FIND	CONTEXT	FEATURE	SPECIES	COPPICING EVIDENCE	DAMAGE NOTES	BARK / SAPWOOD / HEARTWOOD	CONDITION SCORE	WOODWORKING TYPE	WOODWORKING NOTES	LENGTH (mm)	DIAMETER – LONG AXIS (mm)	DIAMETER – SHORT AXIS (mm)	UNDISTORTED DIAMETER (mm)
W0076	SF. 22	(915)	[917]	Quercus sp.	Straight and even		SH	4			795	35	32	
W0080	<44>	(681)	[464]	Quercus sp.	Straight and even	Looks exposed in antiquity	SH	3			295	59	38	
W0081	<44>	(681)	[464]		Straight and even	Looks exposed in antiquity	SH	3			230			45
W0082	<44>	(681)	[464]	Quercus sp.			SH	3			75	48	42	
W0089		(915)	[917]	Quercus sp.			BSH	4	TR	1 SB / 1 dir	200	33	26	
W0091		(915)	[917]	Too decayed			H	1			245	51	36	
W0092		(915)	[917]	Quercus sp.			BSH	3			145	36	20	
W0093		(915)	[917]				BSH	3			150			29
W0094		(915)	[917]				BSH	3			100	26	21	
W0095		(915)	[917]	Quercus sp.			BSH	3			142			40
W0096		(915)	[917]	Quercus sp.			BSH	3			110			50
W0097		(915)	[917]				BSH	4	Torn	1 SB torn off	445			21
W0099	<58>	(723)	[921]		Straight and even		SH	3			160			59
W0103	<58>	(723)	[921]				SH	3			570			30
W0104	<58>	(723)	[921]	Quercus sp.			SH	3			190	29	23	
W0105	<58>	(723)	[921]				SH	3			255	26	19	



WOOD NO	SMALL FIND	CONTEXT	FEATURE	SPECIES	COPPICING EVIDENCE	DAMAGE NOTES	BARK / SAPWOOD / HEARTWOOD	CONDITION SCORE	WOODWORKING TYPE	WOODWORKING NOTES	LENGTH (mm)	DIAMETER – LONG AXIS (mm)	DIAMETER – SHORT AXIS (mm)	UNDISTORTED DIAMETER (mm)
W0106	<58>	(723)	[921]	Quercus sp.			BSH	4			110	33	29	
W0107	<58>	(723)	[921]				SH	3			110			21
W0108	<58>	(723)	[921]				SH	3			60			16
W0109	<58>	(723)	[921]				SH	4			85			10
W0110	<58>	(723)	[921]				SH	3			80			12
W0111	<58>	(723)	[921]	Quercus sp.			SH	3			160			40
W0112	<58>	(723)	[921]				SH	3			120			65
W0113	<58>	(723)	[921]	Quercus sp.			SH	3			89			42
W0114	<58>	(723)	[921]				SH	2			230			75
W0116		(509)			Straight and even with curve and flair		BSH	4	TR	Proximal end / 1 dir	265	35	28	
W0122		(897)	[917]		Straight		SH	4			140	30	25	
W0127		(897)	[917]		Straight and even		BSH	4	TR	1 end / 1 dir	240	23	20	
W0144		(722)	[917]		Straight and even		BSH	4			<300	24	19	
W0145		(722)	[917]		Straight and even		BSH	4			<300	24	19	
W0146		(722)	[917]		Straight and even		BSH	4			<300	26	22	
W0147		(722)	[917]		Straight and even		BSH	4			<300			20
W0148		(722)	[917]		Straight and even		BSH	4			<300	25	19	
W0149		(722)	[917]		Straight and even		BSH	4			<300	23	20	
W0150		(722)	[917]		Straight and even		BSH	4			<300			20
W0151		(722)	[917]		Straight and even		BSH	4			<300	25	20	
W0152		(722)	[917]		Straight and even		BSH	4			<300	24	20	
W0153		(722)	[917]		Straight and even		BSH	4			<300	29	25	



WOOD NO	SMALL FIND	CONTEXT	FEATURE	SPECIES	COPPING EVIDENCE	DAMAGE NOTES	BARK / SAPWOOD / HEARTWOOD	CONDITION SCORE	WOODWORKING TYPE	WOODWORKING NOTES	LENGTH (mm)	DIAMETER – LONG AXIS (mm)	DIAMETER – SHORT AXIS (mm)	UNDISTORTED DIAMETER (mm)
W0154		(722)	[917]		Straight and even		BSH	4			<300	22	16	
W0155		(722)	[917]		Straight and even		BSH	4			<300			20
W0156		(722)	[917]		Straight and even		BSH	4			<300			20
W0157		(722)	[917]		Straight and even		BSH	4			<300	26	21	
W0158		(722)	[917]		Straight and even		BSH	4			<300	30	25	
W0159		(722)	[917]		Straight and even		BSH	4			<300	26	19	
W0160		(722)	[917]		Straight and even		BSH	4			<300	26	21	
W0161		(722)	[917]		Straight and even		BSH	4			<300	25	16	
W0162		(722)	[917]		Straight and even		BSH	4			<300	25	20	
W0163		(722)	[917]		Straight and even		BSH	4			<300	29	25	
W0164		(722)	[917]		Straight and even		BSH	4			<300	25	18	
W0165		(722)	[917]		Straight and even		BSH	4			<300	26	20	
W0166		(722)	[917]		Straight and even		BSH	4			<300	25	21	
W0167		(722)	[917]		Straight and even		BSH	4			<300	20	16	
W0168		(722)	[917]		Straight and even		BSH	4			<300	26	17	
W0169		(722)	[917]		Straight and even		BSH	4			<300	30	22	
W0170		(722)	[917]		Straight and even		BSH	4			<300	24	18	
W0171		(722)	[917]		Straight and even		BSH	4			<300			24
W0172		(722)	[917]		Straight and even		BSH	4			<300	31	26	
W0173		(722)	[917]		Straight and even		BSH	4			<300	29	26	
W0174		(722)	[917]		Straight and even		BSH	4			<300			23
W0175		(722)	[917]		Straight and even		BSH	4			<300			20
W0176		(722)	[917]		Straight and even		BSH	4			<300	26	24	
W0177		(722)	[917]		Straight and even		BSH	4			<300	23	19	
W0178		(722)	[917]		Straight and even		BSH	4			<300			25





WOOD NO	SMALL FIND	CONTEXT	FEATURE	SPECIES	COPPICING EVIDENCE	DAMAGE NOTES	BARK / SAPWOOD / HEARTWOOD	CONDITION SCORE	WOODWORKING TYPE	WOODWORKING NOTES	LENGTH (mm)	DIAMETER – LONG AXIS (mm)	DIAMETER – SHORT AXIS (mm)	UNDISTORTED DIAMETER (mm)
W0179		(722)	[917]		Straight and even		BSH	4			<300	20	18	
W0180		(722)	[917]		Straight and even		BSH	4			<300	20	16	
W0181		(722)	[917]		Straight and even		BSH	4	TR	Proximal end / 1 dir	190	25	24	
W0189		(722)	[917]	Quercus sp.	Straight and even with curve and flair		SH	4			265	48	32	
W0218	SF. 94	(1664)	[1650]		Pronounced curve		SH	4	TR	1 end / all dir to tapered point	480			64
W0222		(722)	[917]	Quercus sp.			BSH	4	TR	Proximal end / 1 dir	128	29	21	
W0234		(633)	[566]		Straight and even		BSH	4			95	23	19	
W0235		(633)	[566]				BSH	4			135	22	14	
W0237		(509)			Straight and even with slight curve and flair		BSH	3	TR	Proximal end / 1 dir	215	32	26	
W0238		(509)					BSH	4			106			12
W0239		(688)	[630]				SH	3	TR	1 end / 1 dir	100			29
W0244		(1179)	[1080]	Quercus sp.			SH	3			65			53
W0251		(920)	[917]		Straight and even		BSH	4	TR	Both ends / 1 dir	310	22	16	



## Timber

WOOD NO	SMALL FIND	CONTEXT	FEATURE	SPECIES	TOOL MARK NOTES	DAMAGE NOTES	BARK / SAPWOOD / HEARTWOOD	WOODWORKING TYPE	WOODWORKING NOTES	SPLIT TYPE	LENGTH (mm)	BREADTH (mm)	THICKNESS (mm)	DIAMETER – LONG AXIS (mm)	DIAMETER – SHORT AXIS (mm)	DIAMETER – UNDISTORTED (mm)	ORIGINAL DIAMETER (mm)
W0002	SF. 24	(685)	[705]	Quercus sp.		1 end vandalised with road iron. Looks exposed in antiquity.	SH	SP TR	Split from outside with part of the split surface lightly hewn and one end fading out. Unfinished notch. 2 x Trimmed SB.	Tan	2880	142	58				
W0009	SF. 48	(945)	[935]	Quercus sp.		Both ends broken	H	SP HEW	A thin split with one face hewn smooth and the end shaped towards a point,	Rad	255	151	32				>300
W0014	SF. 50	(946)	[935]	Quercus sp.		Fragmented. Approx 10 frags that could not be reconstructed	H	SP, TR	Faces lightly hewn. Notch on edge.	Rad	1032	166	34				
W0019	SF. 19	(720)	[928]	Quercus sp.		Ends and split faces look weathered and exposed	H	SP AXED	Large irregular split. One side fresh split, 1 end tr flat, frequent axe marks on outer surfaces. Several facets on inner surface.	Tan	1135	510	235				



WOOD NO	SMALL FIND	CONTEXT	FEATURE	SPECIES	TOOL MARK NOTES	DAMAGE NOTES	BARK / SAPWOOD / HEARTWOOD	WOODWORKING TYPE	WOODWORKING NOTES	SPLIT TYPE	LENGTH (mm)	BREADTH (mm)	THICKNESS (mm)	DIAMETER - LONG AXIS (mm)	DIAMETER - SHORT AXIS (mm)	DIAMETER - UNDISTORTED (mm)	ORIGINAL DIAMETER (mm)
W0030	SF. 18	(723)	[921]			Looks exposed. One mortice poss broken in antiquity	SH	TR	1 end / 1 dir. 2 x mortice. 1 broken mortice		865			180	165		
W0031	SF. 16	(685)	[705]	Quercus sp.			SH	TR	1 end / almost flat. 4 x mortice, one broken, one with sighting hole?		2210			152	123		
W0195	SF. 70	(1667)	[1696]	Quercus sp.			H	SP		Tan SQ	950	252	20				
W0196	SF. 72	(1664)	[1650]	Quercus sp.			SH	TR HEWN	1 end / 2 dir. Both sidebranches of the fork are trimmed to length. One is hewn on the inside - open mortice joint.		1165						165
W0198	SF. 74	(1664)	[1650]	Quercus sp.			H	SP TR	Both ends / flat	Rad (SQ)	575	84	10				
W0199	SF. 75	(1664)	[1650]	Quercus sp.			H	SP HEWN	Hewn all over into rough dowel. 1 end / all dir to tapered point.	Rad 1/8	454	78	52				
W0200	SF. 76	(1664)	[1650]	Quercus sp.	49:2 - drawn on sheet		SH	SP TR	1 end / 1 dir	Rad	780	260	115				>580
W0202	SF. 78	(1664)	[1650]	Quercus sp.			H	SP TR	1 end / 1 dir	Rad	765	270	61				



WOOD NO	SMALL FIND	CONTEXT	FEATURE	SPECIES	TOOL MARK NOTES	DAMAGE NOTES	BARK / SAPWOOD / HEARTWOOD	WOODWORKING TYPE	WOODWORKING NOTES	SPLIT TYPE	LENGTH (mm)	BREADTH (mm)	THICKNESS (mm)	DIAMETER – LONG AXIS (mm)	DIAMETER – SHORT AXIS (mm)	DIAMETER – UNDISTORTED (mm)	ORIGINAL DIAMETER (mm)
W0203	SF. 79	(1664)	[1650]	Quercus sp.		Upper surface looks exposed	H	SP		Rad	525	155	72				>310
W0204	SF. 80	(1664)	[1650]	Quercus sp.	52: 8 - drawn on sheet	All surfaces a bit degraded and weathered. One end heavy ?wet rot.	H	SP TR	Outside tan split away. 1 end / flat.	Rad 1/16 (mod)	803	264	115				
W0210	SF. 86	(1664)	[1650]				H	SP TR	Square. 1 end / 1 dir to tapered point	Tan SQ	534	85	49				
W0211	SF. 87	(1664)	[1650]	Quercus sp.			H	SP	Split fading to tapered point	Rad / Tan / SQ	435	46	15				
W0212	SF. 88	(1664)	[1650]				H	SP		Tan	410	310	30				
W0213	SF. 89	(1664)	[1650]	Quercus sp.			H	SP	Split fading to tapered point	Tan SQ	465	82	38				
W0214	SF. 90	(1664)	[1650]	Quercus sp.			H	SP		Tan SQ	410	100	33				
W0216	SF. 92	(1664)	[1650]	Quercus sp.			H	SP TR	1 end / all dir to tapered point	Rad 1/8 (mod)	460	81	62				



WOOD NO	SMALL FIND	CONTEXT	FEATURE	SPECIES	TOOL MARK NOTES	DAMAGE NOTES	BARK / SAPWOOD / HEARTWOOD	WOODWORKING TYPE	WOODWORKING NOTES	SPLIT TYPE	LENGTH (mm)	BREADTH (mm)	THICKNESS (mm)	DIAMETER – LONG AXIS (mm)	DIAMETER – SHORT AXIS (mm)	DIAMETER – UNDISTORTED (mm)	ORIGINAL DIAMETER (mm)
W0217	SF. 93	(1664)	[1650]	Quercus sp.	65: 14 - drawn on sheet		H	SP TR HE	Tan modified inside and out. Split faces show some hewing. 1 end / 1 dir	Rad	380	620	35				>640
W0219	SF. 95	(1664)	[1650]	Quercus sp.			H	SP TR	1 end / all dir to tapered point	Rad / Tan / SQ	765	60	75				
W0220	SF. 96	(1664)	[1650]	Quercus sp.			H	SP TR	1 end / all dir to tapered point	Rad / Tan / SQ	670	65	55				

## B.3 Lithics

*By David Mullin*

### **Introduction**

- B.3.1 A total of 47 lithic items were recovered from 40 contexts during the excavations at Milton Landfill. These are predominantly waste flakes, but diagnostic material included three Neolithic scrapers and six blades of Mesolithic/Early Neolithic date.

### **Methods**

- B.3.2 The flint was catalogued according to a broad debitage, core or tool type. Information about burning and breaks was recorded and where identifiable raw material type was also noted. Where possible dating was attempted.
- B.3.3 Cores were classified according to the number and position of their platforms, following Clark (1960) and core maintenance pieces were classified to the following criteria. Core rejuvenation flakes are pieces representing the removal of the top or bottom of a core in order to improve the flaking angle of the platform. Core trimming flakes are flakes which remove a substantial part of a core in order to aid working by removing an imperfection in the core, a miss-hit or other impediment to flaking. The nature of any remnant flake scars on the dorsal surface of core trimming flakes was noted.
- B.3.4 Flakes were classified following Saville (1990, 155), which allows an identification of the stage in the core reduction process to which the flake belongs. Terminations such as hinge fractures were noted. Chips are defined as pieces measuring less than 10mm by 10mm. Flakes having a proportions length to breadth ratio of greater than 2:1 were classified as blade-like, those with a greater length to breadth ratio being classified as blades. Mid-sections of blades with no bulb of percussion were classified as blade shatter (Andrefsky 1998, 81-3).
- B.3.5 Retouched pieces were classified according to standard morphological descriptions (Bamford 1985, Healy 1988, Bradley 1999, Butler 2005).
- B.3.6 No attempt was made at refitting or use-wear analysis.

### **Results**

#### *Burnt, unworked flint*

- B.3.7 A total of 40 pieces of burnt, unworked flint (1102g) was recovered from 18 contexts. This did not occur in significant amounts in any single context.

#### *Raw materials*

- B.3.8 A variety of raw materials were exploited at the site, including locally occurring gravel flint, alongside good quality chalk flint. The scraper from context 685, waterhole **304** is of particularly good quality flint. A single piece from context 792, posthole **793** is of an unusual speckled light grey flint.

#### *Technology and Dating*

- B.3.9 The majority of the material recovered from the excavations consists of waste flakes. This is not diagnostic of date and could be from any period from the Mesolithic to

Bronze Age. No more than three items were recovered from any single context and cannot, therefore, be used to reliably date any of the features from which they were recovered.

- B.3.10 The scrapers are diagnostically of Neolithic date, as is the knife from context 352, pit **354**, whilst the narrow blades and uni-polar cores may be late Mesolithic or early Neolithic.

### **Discussion**

- B.3.11 The lithics from the site are likely to be entirely residual and demonstrate a human presence somewhere in the area of the excavations during the late Mesolithic/Neolithic period. The nature of this activity, and the precise definition of its date and duration, is extremely difficult to assess due to the small size of the assemblage.

### **Recommendations**

- B.3.12 A short note, which considers the wider context of the finds, should be prepared for the publication report and the scrapers illustrated.

<b>Context</b>	<b>Description</b>	<b>Raw Material</b>	<b>Date</b>
26	Secondary flake	Dark brown flint	
112	Burnt flint		
112	Broken narrow blade	Dark grey flint	Mesolithic/Early Neolithic
112	Tertiary flake	Black flint	
114	Narrow blade	Light grey flint	Mesolithic
167	Side scraper	?Gravel flint	Neolithic
167	Miscellaneous retouched flake	Dark grey flint	
169	Secondary flake	Black flint	
241	Tertiary flake, some utilisation	Light brown flint	
297	Tertiary flake, utilisation	?gravel flint	
352	Knife	?gravel flint	Neolithic
466	Uni-polar core	?gravel flint	Mesolithic/Early Neolithic
468	Narrow blade with retouch along both margins	Dark brown flint	Neolithic
533	Secondary flake	Black flint	
564	Uni-polar core	Dark brown flint	Mesolithic/Early Neolithic
579	Secondary flake	Dark brown flint	
580	Tertiary flake	Light grey flint	
581	Secondary flake	Light grey flint	
648	Chip	Brown flint	
685	Large end and side scraper	Black flint	Neolithic
722	Secondary flake, utilisation along two margins	Black flint	
738	Chip, light grey flint		
741	Core trimming flake	Dark brown flint	
758	Secondary flake	Black flint	
792	Tertiary flake	Speckled light grey flint	
891	End and side scraper	Light brown flint	Neolithic



Context	Description	Raw Material	Date
972	Core trimming flake	Light brown flint	
1095	Broken narrow blade	Dark brown flint	Mesolithic/Early Neolithic
1102	Narrow blade with utilisation	Dark brown flint	Neolithic
1189	Miscellaneous retouched flake	Dark brown flint	
1119	Core trimming flake	Light grey flint	
1179	Tertiary flake	Black flint	
1143	?core rejuvenation flake	Black flint	
1347	Secondary flake	Gravel flint	
1408	Secondary flake	Dark grey flint	
1408	Tertiary flake	Dark grey flint	
1497	Tertiary flake	Black flint	
1513	Small retouched flake	Grey flint	?Mesolithic
1520	Secondary flake with subsequent retouch	Dark brown flint	
1530	Secondary flake with subsequent retouch	?Gravel flint	
1574	Narrow blade	Gravel flint	Mesolithic/Early Neolithic
1594	Core fragment	Black flint	
1656	Blade	Dark brown flint	?Neolithic
1664	Primary flake	Black flint	
1664	Primary flake	Black flint	
1664	Core trimming flake	Light grey flint	
99999	Secondary flake, utilised	?Gravel flint	

Table 25: Flint catalogue

## B.4 Fired clay

*By Alice Lyons*

### **Introduction**

- B.4.1 A small abraded assemblage of 95 burnt clay pieces, weighing 1153g, with an average fragment weight of only 12g was recovered from twenty-five features at Milton. Seven individual fabrics could be identified (Table 26), but all are consistent with local clay exploitation. Most of the material comprises undiagnostic daub fragments.
- B.4.2 The earliest feature from which a burnt clay fragment was recovered was Bronze Age (Table 27), with most material recovered from Iron Age deposits but also Romano-British layers. One intrusive medieval or post-medieval tile fragment was also recovered. Burnt clay was found in almost every type of feature, quite frequently as a residual contaminant within disuse fills and often as tiny fragments only.
- B.4.3 As burnt clay only survives in a semi-permanent state once it has been heated to over 700 °C (or fired), it usually represents the remains of houses that have burnt down or of hearths, ovens and kilns that have been regularly heated. It sometimes bears the impressions of withies that formed the superstructures of these buildings (Rigby and Foster 1986, 184, fig. 80) and helped to maintain their shape and reduce shrinkage during construction. The withes, made of twigs, then either rotted, or have been burnt, away. The fragments that comprise the Milton assemblage, however, do not appear to have been retrieved from their primary site of use, rather as residual pieces; furthermore the burnt clay is too fragmentary to establish from which structures they would have originated.
- B.4.4 Sometimes objects, such as loom weights (where they have been fired in a burning structure) also survive. Indeed, two fragments from Iron Age-type triangular loom weights used to weight the weft of the loom have been identified (both Fabric 1) and are potential evidence for textile manufacture. Triangular loom weights of this type are commonly found on Iron Age sites (Hylton and Williams 1996, 140; Duncan and Mackreth 2005, 126) in this region.

### **Methodology**

- B.4.5 The burnt clay was counted and weighed to the nearest whole gram and any complete dimensions measured (mm). Where possible 'withie' impression and smoothed surfaces were recorded. Levels of abrasion and any evidence of re-use or burning were also noted. If the burnt clay could be identified the form was recorded. This information was recorded on an Excel spreadsheet. The burnt clay catalogue was integrated with the site data and a final report prepared.
- B.4.6 This follows guidelines laid down by Archaeological Ceramic Building Materials Group (ACBMG 2002). The terminology used follows Brodrigg (1987).

### **The Fabrics (Table 26)**

- B.4.7 Seven individual burnt clay fabrics were identified, all consistent with local clay exploitation and daub production. The most common combination of ingredients (Fabric 1) is a sand-flint mix, the second most frequent was a similar but more chalk-rich version (Fabric 5), while the third most often found (Fabric 2) is again similar but contains both chalk and clay pellets (or grog) in addition to the sand and flint inclusions.

Era	Fabric Number	Fabric Description	Form	Fragment Count	Fragment Weight (g)
IA/RB	1	Clay mixed primarily with abundant sand and common small angular flint, also occasional charcoal. The fabric is generally dark (burnt) orange with a hard grainy texture	Daub and possible triangular loom weights	34	459
IA/RB	2	Clay mixed primarily with abundant sand and common small angular flint, also common rounded chalk and occasional clay pellets (possibly grog). This fabric is mid orange, sometimes with a grey core and a hard quite smooth texture	Daub	13	292
IA/RB	3	Clay mixed primarily with abundant sand and common clay pellets (possibly grog). This fabric is pale orange brown, sometimes with a grey core and a hard but powdery smooth texture	Daub	10	16
IA/RB	4	Clay mixed with abundant sand and no other visible inclusions. Colour varies from pale to dark orange and from soft to harsh texture (may depend on amount of burning)	Daub	12	17
IA/RB	5	Clay mixed with abundant sand and common medium rounded chalk, with occasional small angular flint and sparse vegetable (?straw) inclusions. Generally pale brown with a hard powdery texture	Daub	22	339
MED/P MED	6	Clay mixed with abundant sand and common voids which may be where chopped straw has been burnt away. Pale hard fabric	Tile	1	8
IA/RB	7	Clay mixed with abundant sand and common charcoal. This fabric is dark (burnt) orange with a harsh texture	Daub	3	22
<b>Total</b>				<b>95</b>	<b>1153</b>

*Table 26: The Fabrics described and quantified*

B.4.8 It is likely that different clay mixes were used for different purposes, for example chalk mixes (such as Fabrics 5 and 2) would have been more friable when heated (as the chalk burnt away) and may therefore have been primarily used to construct domestic dwellings which were not expected to be heated to high temperatures. A chalk mix burnt daub has been recorded in the remains of Iron Age round houses at Love's Farm, St Neots (Lyons in prep), which supports this view.

B.4.9 Differences in clay mixes would also have occurred through time and between each individual producer.

#### ***The Burnt Clay by Period***

B.4.10 Unfortunately burnt clay (one removed from its primary site of use) is not presently closely datable. It can be analysed, however, by the period features from which it was recovered (Table 27).

Period	Phase	Feature	Cut	Type	Fragment Count	Fragment Weight (g)
<b>2 – Bronze Age</b>		waterhole	[1650]	Daub	1	191
<b>Period total</b>					1	191

<b>3 – Iron Age</b>	3	Pit	[0033]	Daub	3	14
	3.1	Ditch	[1531]	Daub	1	1
		Pit	[1612]	Daub	1	1
		posthole	[0238]	Daub	1	23
		waterhole	[0049]	Daub	13	33
	3.2	Pit	[1411]	Loom weight	2	15
		posthole	[0395]	Loom weight	2	9
		posthole	[1842]	Daub	1	1
		waterhole	[0180]	Daub	17	121
		waterhole	[0566]	Daub	1	1
		waterhole	[0630]	Daub	3	51
		waterhole	[0705]	Daub	7	40
	3.3	Pit	[0090]	Daub	10	300
		Pit	[0000]	Daub	1	2
		posthole	[0671]	Daub	3	1
		waterhole	[0509]	Daub	9	135
	3.4	Layer	(1594)	Daub	3	22
<b>Period total</b>					78	770

<b>4 - Romano-British</b>	Pit	[1144]	Daub	3	9	
	Quarry pit	[0986]	Daub	1	4	
	Quarry pit	[1156]	Daub	1	1	
	Quarry pit	[1657]	Daub	3	2	
	Quarry pit	[1728]	Daub	3	23	
<b>Period total</b>					11	39

<b>5 – Medieval</b>	Furrow	[0530]	Daub	1	3	
	Furrow	[1871]	Daub	4	150	
<b>Period total</b>					5	153

Table 27: The burnt clay quantified by period, phase, feature and type

B.4.11 When the assemblage is broken down by period (Table 27) it can clearly be seen that the majority of this material was recovered from Iron Age deposits, commonly redeposited (probably as rubbish or as part of the top soil) in waterholes. It is possible, however, that the several pieces retrieved from postholes may have been more directly associated with the construction of domestic dwellings.

B.4.12 When the distribution of fabrics by period is analysed (Table 28) it is apparent that not only was burnt clay most commonly used in the Iron Age (Period 3) on this site but that Fabric 1 was the most common (sand and flint) mix used.

	Period 2	Period 3	Period 4	Period 5	Fabric Total
<b>Fabric 1</b>	0	401g	28g	30g	459g
<b>Fabric 2</b>	191g	101g	0	0	292g
<b>Fabric 3</b>	0	7g	9g	0	16g
<b>Fabric 4</b>	0	14g	2g	1g	17g
<b>Fabric 5</b>	0	217g	1g	122g	339g
<b>Fabric 6</b>	0	8g	0	0	8g
<b>Fabric 7</b>	0	22g	0	0	22g
<b>Period Total</b>	191g	770g	39g	153g	1153g

*Table 28. The burnt clay by fabric and period*

**Conclusion**

- B.4.13 This is a small abraded assemblage of primarily Iron Age locally produced undiagnostic daub, although two possible triangular loom weight pieces were also found.
- B.4.14 Seven fabrics were identified, all sand tempered with differing mixes of small angular flint, chalk and clay pellets with evidence for some organic material, such as straw and charcoal surviving.
- B.4.15 This assemblage is typical of the burnt clay assemblages found in this area and settlement type.

## B.5 Small Finds

*By Nina Crummy*

### **Introduction**

B.5.1 The assemblage consists of sixteen objects in a variety of materials, ranging in date from Early Iron Age to late post-medieval or modern.

### **Condition**

B.5.2 The objects are generally in a stable condition. The majority of the copper-alloy and lead objects are only lightly covered by corrosion products while corrosion on the ironwork is rather more advanced. The non-metal objects are all stable.

B.5.3 Objects of all materials are packed to a high standard of storage in crystal boxes or polythene bags, supported by pads of foam. The metalwork is stored in airtight Stewart boxes with silica gel, which is monitored at regular intervals. The non-metal is stored in an archive quality cardboard box.

### **The Assemblage**

B.5.4 The objects are catalogued in B.6.10, where they are listed by material and broadly by period. The assemblage breaks down by material thus:

antler	4
stone	1
fired clay	3
copper alloy	4
lead	1
iron	3
<b>Total</b>	<b>16</b>

*Table 29: The small finds by material*

B.5.5 The equal balance (4:4) between metal and non-metal objects is typical of sites where the stratified archaeological levels date chiefly to the prehistoric periods. This general rule is supported here by the high proportion of the metal objects from unstratified contexts.

B.5.6 The antler objects consist of two discarded red deer burrs, with the tines and most of the beam removed (SFs 58 and 64), a plaque with a large perforation (SF 54), and a handle, possibly from a tanged awl (SF 66). The utilisation of antler in the Iron Age is well-attested on many sites, e.g. Danebury, Maiden Castle, Meare. The discarded burrs here point to the collection of shed antlers rather than the use of antlers cut from the skulls of hunted deer. Sawing or chopping off the beam and tines, which are the most suitable parts for working into finished objects, remained the standard method of dealing with the material into the medieval period (MacGregor et al. 1999, fig. 868).

B.5.7 The single stone object is a small and well-worn sandstone hone (SF 55), made from a locally-found pebble. All the items of fired clay are fragments of loomweights. One is of uncertain form (SF 2), but it is thinner than would be expected for a triangular weight

and its one surviving edge is rounded. It was probably block-shaped and comparable to a group of small more or less rectangular loomweights from Willington in Derbyshire dating to the Late Bronze Age/Early Iron Age (Elsdon 1979, figs 82-3). Rectangular weights have also been found at Runnymede Bridge in Surrey and The Breiddin hillfort, Powys, in contexts of similar date (*ibid.*, 198). The other two are corner fragments from Middle or Late Iron Age triangular loomweights, but they are made from very different fabrics, one a low-fired sandy clay (SF 60), the other a hard-fired clay with little or no sand (SF 1). The latter retains part of a perforation across the corner. The form is long-lived and occurs widely on Iron Age habitation sites, surviving in use into the earliest decades of the Roman period. The difference in the two fabrics present on this site suggests a difference in date, with the hard-fired fragment probably most likely to be the latest. The loomweights represent the use of the warp-weighted loom and they also imply that the Iron Age community at Milton kept flocks of sheep with at least some individuals allowed to reach maturity so that their wool could be gathered, rather than slaughtering them young for their meat.

- B.5.8 One of the copper-alloy objects is part of a late Roman armlet (SF 97), and a small unidentifiable fragment came from a Roman quarry pit (SF 6). A double buckle that may come from a shoe or boot dates to the late medieval or early post-medieval period (SF 5), and a button to the late post-medieval or modern period (SF 67). A lead weight or plumb-bob from an unstratified context is probably of post-medieval or modern date (SF 68), as is a fragment of iron sheet (SF 99). The remaining two iron objects are both nails, one a head and the other a shaft fragment (SF 70 and 98); both come from the fill of Roman pits.

#### ***Research potential and Recommendations***

- B.5.9 The Early and Middle Iron Age objects form a valuable addition to material of this period from the region. They provide information about the environment, farming practices and technology of the site and should form part of any published report. They should be set in their local and regional contexts, with reference to more widely spread examples of similar objects and technologies where appropriate. The Roman objects should also briefly described in any published report in order to flag up the presence of material of this date in the area.

#### ***Summary Catalogue***

- B.5.10 The objects are listed below by material and broadly by period.

SF 66. (1410), fill of Iron Age pit **1411**. Handle made from a fragment of an antler tine, with each end highly polished from use-wear. Comparatively little polish on the surface. The lower end has split across a hole for a short tang, removing part of the surface. Length 85 mm, maximum diameter 29 mm. Probably for an awl rather than a knife.

SF 54. (53), fill of Iron Age waterhole **180**. Plaque taken from the base of a large red deer antler, with a large hole cut close to one end. A line of four chop marks lie close to the hole and towards one edge, and the hole has cut through a single chop mark set near the centre of the fragment. The narrower end has been partly cut through and partly broken, one corner at the wider end has been trimmed to a smooth curve and the adjacent sides are also trimmed for part of their lengths. All the other edges are rough, as is the underside. Maximum dimensions 108 by 65 mm.

SF 58. (759), fill of Iron Age waterhole **304**. The base of a shed red deer antler, with the



brow tine sawn off and the bez tine chopped through from all sides. There are three further chop marks in the angle above the bez tine. The beam is broken and the burr is chipped. Length 107 mm, maximum diameter of burr 65 mm.

SF 64. (1175), fill of Iron Age waterhole **132**. The base of a shed red deer antler, with the beam broken and split and the brow tine chopped off. There are several chop marks below the brow tine. Length 107 mm, maximum diameter of burr 53 mm.

SF 55. (507), fill of Iron Age waterhole **509**. Small thin rectangular hone of micaceous sandstone, very worn on all faces. Length 61 mm, width 30mm, thickness from 5 to 8mm.

SF 2. (88), fill of Iron Age pit **90**. Fragment from a fired clay loomweight, probably of rectangular form, with part of a straight rounded edge surviving. The fabric is a sandy clay with some flint grit and flint pebbles, patchily fired from black to orange-brown. Length 81 mm, width 65 mm, 56 mm thick; weight 241 gm.

SF 1. (26), fill of Iron Age waterhole **180**. Corner fragment from a fired clay triangular loomweight, broken across a perforation. The fabric is clay with some flecks of haematite and flint grit, hard-fired to a patchy grey and buff. Length 50 mm, width 41 mm, thickness 52 mm (complete); weight 79 gm.

SF 60. (297), fill of Roman pit **298**. Corner fragment from a fired clay triangular loomweight, with characteristically flattened apex. The fabric is a sandy clay with some flint grit, fired orange-brown. Length 45 mm, width 63 mm, minimum thickness (incomplete) 40 mm; weight 79 gm.

SF 97. (1803) fill of Roman pit **1806**. Bent fragment of a circular-section copper-alloy armband with transverse grooves producing a beaded effect. Length 45 mm, section diameter 3 mm. Roman, probably 3rd or 4th century AD.

SF 6. (-), from an unexcavated Roman pit. Curved copper-alloy strip fragment, tapering at one end to a narrow circular-section shaft. Length 17 mm, maximum width 8 mm.

SF 5. (99999). Unstratified. Copper-alloy double-oval buckle, missing the tongue; possibly from a shoe or boot. Length 24 mm, width 19 mm. Late medieval or early post-medieval.

SF 67. (99999). Unstratified. Large flat copper-alloy button with wire attachment loop inserted into the back. There are traces of white-metal plating on both faces, although it has largely been worn off the upper surface. Diameter 32 mm, length 14 mm. Post-medieval to modern.

SF 68. (99999). Unstratified. Lead barrel-shaped weight or plumb-bob. Length 32 mm, maximum diameter 19 mm. Post-medieval to modern.

SF 99. (0). Unstratified. Curved iron sheet fragment, possibly from a pipe. Length 49 mm, width 37 mm. Post-medieval to modern.

SF 70. (1667), fill of Roman pit **1696**. Convex iron nail head, with only a short stump of the shank remaining on the underside. Diameter 25 mm, length 15 mm.

SF 98. (1818), fill of Roman pit **1819**. Iron nail shank fragment, square in section. Length 56mm.

## APPENDIX C. ENVIRONMENTAL REPORTS

### C.1 Faunal Remains

*By Chris Faine*

#### **The assemblage**

- C.1.1 **Recovery:** the bones forming this assessment were collected by hand. No identifiable material was recovered from environmental samples.
- C.1.2 **Residuality and contamination:** no information regarding residuality or contamination was available at the time of writing.
- C.1.3 **Context:** Faunal material was recovered from a variety of features including pits and linear features dating from the Early Iron Age to medieval periods, with the majority being obtained from Early-Middle Iron Age and Romano-British features.
- C.1.4 **Preservation:** the preservation of the assemblage is generally good, despite the generally waterlogged condition of the site.
- C.1.5 **Storage and quantity:** the hand collected animal bone is stored in 21 long bone boxes measuring 38x25.5x13cm. The bones are washed and bagged by context. The total weight of the hand-collected bone is 103.7kg.

#### **Assessment**

- C.1.6 A sample of 33% of the phased hand collected bone has been used as the basis for this assessment. All “countable” bones were recorded on a specially written MS Access database. The overall species distribution in terms of fragments (NISP) is shown in Table 30. The numbers of ageable mandibles and epiphyses are recorded in Tables 31 and 32. Available measurements and sexable bones are recorded in Tables 33 and 34. The counting system is based on a modified version of the system suggested by Davis (1992) and used by Albarella and Davis (1994). Completeness was assessed in terms of diagnostic zones (Dobney & Reilly, 1988). Ageing was assessed via tooth wear (Grant, 1982).
- C.1.7 Cattle were the most prevalent taxon in both the Iron Age and Romano-British assemblages. Sheep/goat remains were the next most numerous species in both phases in roughly equal proportions. Pig remains were scarce in both phases, being outnumbered by horse remains in the Iron Age sample. Interestingly almost no other species were noted in the assessed sample, with the only instances being and portion of red deer antler from context 53 (waterhole **180**) and a fragmentary dog mandible from context 508 (waterhole **566**). The vast majority of the main domesticate remains are from adult animals, with neonatal sheep/goat remains being recovered from contexts 992 (pit **993**) and 1605 (waterhole **1580**). Roughly equal numbers of ageable mandibles were recovered from both phases (see Table 31), with the greater numbers of ageable cattle epiphyses being attributable to the larger fragment count and the more robust nature of cattle remains relative to smaller species (see Table 32). The larger number of identifiable cattle fragments is also reflected in the greater number of available measurements (see table 33).

### Potential and recommendations

C.1.8 This is a medium to large sized assemblage largely from the Iron Age and Romano-British periods with good potential for comparison with numerous contemporary sites in the immediate area (Baxter, 2003, 2008 & Faine, forthcoming). The assemblage is large enough to identify changes in the composition and characteristics of domestic stock over time, although the potential metrical data from the Romano-British sample is limited. It is recommended the assemblage is fully recorded once full phasing is available.

PHASE	COUNTABLE BONES						Comments
	Cattle	Sheep/ Goat	Pig	Horse	Others	Total	
Early-Middle Iron Age Assessment	93	62	9	12	2	177	Contains neonatal sheep/goat, plus dog and red deer
<i>Early-Middle Iron Age Estimated</i>	279	186	27	36	6	534	
Romano-British Assessment	134	55	6	3	0	198	Contains neonatal sheep/goat
<i>Romano-British Estimated</i>	402	165	18	9	0	594	
<b>Total Assessment</b>	<b>227</b>	<b>117</b>	<b>15</b>	<b>15</b>	<b>2</b>	<b>376</b>	
<b>Total Estimated</b>	<b>681</b>	<b>350</b>	<b>45</b>	<b>45</b>	<b>6</b>	<b>1127</b>	

Table 30: Number of countable bones

PHASE	AGEABLE MANDIBLES				
	Cattle	Sheep/ Goat	Pig	Horse	Total
Early-Middle Iron Age Assessment	7	10	4	2	23
<i>Early-Middle Iron Age Estimated</i>	21	30	12	6	69
Romano-British Assessment	8	3	1	0	12
<i>Romano-British Estimated</i>	24	9	3	0	36
<b>Total Assessment</b>	<b>15</b>	<b>13</b>	<b>5</b>	<b>2</b>	<b>35</b>
<b>Total Estimated</b>	<b>45</b>	<b>39</b>	<b>15</b>	<b>6</b>	<b>105</b>

Table 31: Number of ageable mandibles

PHASE	AGEABLE EPIPHYSES				
	Cattle	Sheep/ Goat	Pig	Horse	Total
Early-Middle Iron Age Assessment	73	36	5	10	124
<i>Early-Middle Iron Age Estimated</i>	219	108	15	30	372
Romano-British Assessment	41	25	1	1	68
<i>Romano-British Estimated</i>	123	75	3	3	207
<b>Total Assessment</b>	<b>114</b>	<b>61</b>	<b>6</b>	<b>11</b>	<b>192</b>
<b>Total Estimated</b>	<b>342</b>	<b>183</b>	<b>17</b>	<b>33</b>	<b>579</b>

Table 32: Number of ageable epiphyses

PHASE	AVAILABLE MEASUREMENTS				
	Cattle	Sheep/Goat	Pig	Horse	Total
Early-Middle Iron Age Assessment	32	23	1	6	62
<i>Early-Middle Iron Age Estimated</i>	96	69	3	18	186
Romano-British Assessment	15	1	0	0	16
<i>Romano-British Estimated</i>	45	3	0	0	48
<b>Total Assessment</b>	<b>47</b>	<b>24</b>	<b>1</b>	<b>6</b>	<b>78</b>
<b>Total Estimated</b>	<b>141</b>	<b>72</b>	<b>3</b>	<b>18</b>	<b>234</b>

Table 33: Number of available measurements

PHASE	SEXABLE BONES			
	Cattle	Sheep/Goat	Pig	Total
Early-Middle Iron Age Assessment	7	3	2	12
<i>Early-Middle Iron Age Estimated</i>	21	9	6	36
Romano-British Assessment	6	0	0	6
<i>Romano-British Estimated</i>	18	0	0	18
<b>Total Assessment</b>	<b>13</b>	<b>3</b>	<b>2</b>	<b>18</b>
<b>Total Estimated</b>	<b>39</b>	<b>9</b>	<b>6</b>	<b>54</b>

Table 34: Number of sexable bones

## C.2 Environmental samples

*By Rachel Fosberry and Val Fryer*

### **Introduction and methods**

- C.2.1 Excavations at Milton Landfill site, undertaken between 2007 and 2009, recorded a number of features of probable Bronze Age to Early/Middle Iron Age date. One hundred and fifty-seven samples were taken from across the excavated area and one hundred and thirteen were submitted for an initial appraisal of the plant macrofossil assemblages. Features sampled include secure archaeological contexts within postholes, pits, ditches, an oven/hearth, a well, quarry pits and waterholes, dating primarily from the Iron Age period.
- C.2.2 Initially, ten litres of each of the bulk samples were processed by OAE by tank flotation in order to assess their archaeobotanical potential and for the recovery of charred plant remains, dating evidence and any other artefactual evidence that might be present. The flot was collected in a 0.3mm nylon mesh and the residue was washed through a 0.5mm sieve. Both flot and residue were allowed to air dry. The dried residue was passed through 5mm and 2mm sieves and a magnet was dragged through each resulting fraction prior to sorting for artefacts. Any artefacts present were noted and reintegrated with the hand-excavated finds. The flot was examined under a binocular microscope at x16 magnification and the presence of any plant remains or other artefacts are noted in Table 35.
- C.2.3 Forty-five of the samples contained waterlogged remains. Five of these samples (from the basal and lower fills within a series of waterholes or sumps), were identified as having high archaeobotanical potential and were submitted to Val Fryer for full assessment. The samples were bulk floated by OAE and the flots were collected in a 300 micron mesh sieve. All flots were dried prior to scanning although a 1 litre sub-sample from sample 40 was also processed with the flot being stored in water prior to sorting. Both the dried flots and the wet retents were scanned under a binocular microscope at magnifications up to x 16 and the plant macrofossils noted are listed in Table 36. Nomenclature within the table follows Stace (1997). Most plant remains were preserved in a waterlogged/de-watered state although a small number of charred seeds/grains (denoted within the table by a lower case 'c' suffix) were also recorded along with fragments of charcoal/charred wood.
- C.2.4 Six monolith samples and a further twenty spot samples were also taken for pollen analysis. Five samples were selected for pollen analysis. These samples are discussed in Appendix C.3
- C.2.5 Ten samples were taken for phosphate analysis and are discussed in Appendix C.4
- C.2.6 Waterlogged wood was abundant and is discussed in Appendix B.2.

### **Quantification**

- C.2.7 For the purpose of this initial assessment, items such as seeds, cereal grains and small animal bones have been scanned and recorded qualitatively according to the following categories:

# = 1-10, ## = 11-50, ### = 51+ specimens

C.2.8 Items that cannot be easily quantified such as charcoal, magnetic residues and fragmented bone have been scored for abundance:

+ = rare, ++ = moderate, +++ = abundant

C.2.9 Key to Table 36:

x = 1 – 10 specimens    xx = 11 – 50 specimens    xxx = 51 – 100 specimens    xxxx = 100+ specimens  
 c = charred    cf = compare

Sample No.	Context No.	Cut No.	Feature Type	Comments	Preservation	Cereals	Weed Seeds	Charcoal <2mm	Charcoal > 2mm	Small Bones
1	22	23	posthole		Charred			+	+	
3	73	39	pit		waterlogged		+			
5	129	132	pit	Related to samples 6 and 7; waterlogged layer in prehistoric pit EIA? Layer contaminated in situ wooden structure	waterlogged		+++			
6	130	132	pit	Related samples 5, 7; waterlogged layer from large prehistoric pit	waterlogged		++			
7	131	132	pit	Related to samples 5 and 6; waterlogged layer from large prehistoric pit	waterlogged		++			
8	134	137	pit	waterlogged layer from large prehistoric pit	waterlogged		++			
9	91	180	pit	wet/waterlogged layer contains wood, some natural some possibly worked. Also contains bone and IA pot (NB pot is very fragile) take phosphate	waterlogged		++			
11	169	90	pit	very silty waterlogged fill. Lower fill of large pit. Noticed bits of twig in it.	waterlogged		++			
12	196	180	pit	Related to samples 9 and 10. Brownish-grey sandy-clay. Contains wood and pot.	waterlogged		+			
13	112	113	pit	Dark, moist pit fill.	Charred			+	+	
14	237	238	posthole	part of a fence-line	Charred			+	++	
15	241	242	posthole	part of a fence-line	Charred			+	+	
16	249	250	posthole	part of a fence-line	Charred			+	+	
17	253	254	posthole	part of a fence-line	Charred			+++	+	
18	265	266	posthole	Part of fence-line.	Charred	+		++	+	+
19	286	287	posthole	part of a fence-line	None					
22	352	354	pit	pit contained worked flint blade SF 3	None					
23	361	367	pit	Pit contained prehistoric pot. Dark layer.	Charred			+		
24	364	367	pit	very dark nice looking lower fill of prehistoric pit	Charred			+	+	
26	394	395	posthole	posthole contained some prehistoric pot, some charcoal silty possible waterlogged lower fill of large quarry pit; take phosphate sample	Charred			+++	++	++
27	375	369	pit	fill of pit. Had charcoal randomly distributed throughout.	Charred			+		
29	430	431	pit	p/h. one piece of prehistoric pot, some charcoal	None					
30	400	402	pit	p/h charcoal present, possibly potsherds?	None					
32	489	490	pit	dark silty fill from a pit close to lots of p/h's; take phosphate sample	None					
33	470	472	pit	dark fill of pit, loads of IA pot. Take phosphate sample.	Charred			+++	+++	
34	501	502	pit	dark gravel rich fill contains lots of pot, bone, and charcoal. Is a distinct spread within a large pit. Take phosphate sample.	Charred	+		+++	+++	++
35	532	705	pit	basefill of large pit/watering hole. Contains wood (possibly cut?).	waterlogged			++		
36	563	525	pit	dark fill of pit, lots of degraded pot	waterlogged			++		
37	592	593	pit	fill of pit containing large amount of pot and bone	Charred	+		+++	++	
38	507	509	pit	dark fill of large IA pit. Take phosphate sample	Charred			++	++	
39	648	566	pit	dark, waterlogged fill of big IA pit	waterlogged		+++			
40	636	566	pit	basal waterlogged fill of large IA pit.	waterlogged					
41	633	566	pit	Related to 35; residue from potsherd from same layer as sample 35 (532).						
42	580			base fill of pit, humidic/silty with wood throughout and SF 8	waterlogged					
43	681	464	pit	calibration of wood found at base of pit						
44	681	464	pit	charcoal in pit	None					
45	679	680	pit	pollen sample from big IA pit						
46	506	509	pit	pollen sample from big IA pit						
47	507	509	pit	pollen sample from big IA pit						
48	508	630	pit	pollen sample from big IA pit						
49	655	509	pit	pollen sample from big IA pit						
50	648	566	pit	pollen sample from big IA pit						
51	645	566	pit	fill of shallow pit containing degraded bone, charcoal, possibly degraded pot	None					
52	707	706	pit	clay fill from base of pit possibly containing charcoal	Charred			+		
53	708	706	pit	fill from base of large pit/watering hole contains bone, pot, and wood (probably rooting?)	waterlogged			+		
54	563	620	pit	fill from base of large pit/watering hole	waterlogged		++			
55	563	620	pit							



Sample No.	Context No.	Cut No.	Feature Type	Comments	Preservation	Cereals	Weed Seeds	Charcoal <2mm	Charcoal > 2mm	Small Bones
56	713	714	ditch	lower fill of ditch, truncated by upper context; take phosphate sample	None					
57	723	705	pit	contains pits of preserved wood, mainly round wood, no pot, very wet and difficult to see what was being sampled	waterlogged		+++			
58	723	705	pit	retrieved pieces of wood frm context, none of it worked, wet so difficult to see what was coming from where						
60	740		pit	basal fill of big probably IA pit from machine slot, dark and waterlogged	waterlogged		++			
61		705	pit	monolith from big IA pit with wood						
62	730	731	posthole	p/h's morphology macrobotanical	Charred			+		
63	736	737	posthole	p/h's morphology macrobotanical	Charred			+	+	
64	748	749	posthole	p/h's morphology macrobotanical	Charred			+	+	
65	762	763	posthole	p/h's morphology macrobotanical	None					
66		885	pit	monolith from pit cutting [705]; basal fills only						
67	792	793	posthole	large p/h from M.729	None					
68	794	795	posthole	large p/h from M.729	Charred			+		
69	814	815	posthole	p/h from M.729	None					
70	864	865	posthole	p/h from M.729	None					
71	846	847	posthole	p/h from M.729	None					
72	906	898	pit	dark fill contained wood	waterlogged		+++			
73	906	898	pit	pollen sample from dark pit fill						
74	891	894	pit	fill of pit, no dating evidence	None					
75	723	705	pit	wood and bone but no pot found; grey but has lots of gravel	waterlogged		+++			
76	722	917	pit	waterlogged dark fill from base of pit contained lots of wood. Take phosphate sample	waterlogged					
77	726	921	waterhole	waterlogged fill from base of water-hole; take phosphate sample			++			
78	924	925	waterhole	waterlogged sandy fill from base of waterhole	waterlogged					
79	720	928	waterhole	waterlogged fill from base of waterhole	waterlogged					
80	726	921	waterhole	waterlogged fill from base of waterhole	waterlogged					
81	722	917	waterhole	waterlogged fill from base of waterhole	waterlogged					
82	720	928	waterhole	waterlogged fill from base of waterhole	waterlogged					
83	723	921	waterhole	waterlogged fill from base of waterhole	waterlogged					
84	945	935	pit	related to samples 85 to 88; contained waterlogged wood	Charred		+	+		
85	946	935	pit	contained waterlogged wood	waterlogged	+	+++	+	+	
86	945	935	pit	contained waterlogged wood	waterlogged					
87	946	935	pit	contained waterlogged wood	waterlogged					
88	939	935	pit	pit fill, no datable finds, Take phosphate sample	Charred			+		
89	952	953	ditch	ditch fill seems pretty sterile one small piece of IA pot from fill	Charred			+		
90	972	973	pit	pit fill could be gravel extraction pit? IA but 1 sherd Roman pot?	Charred			+		
91	1005	1006	pit	single fill of quarry pit, shallow contained 2 sherds of IA pot	None					
92	1048	1049	pit	patch of fill from quarry pit with loads of small funny looking snails; might be aquatic snails	None					
93	1093	1094	pit	pit fill from quarry pit	Charred			+		
94	1189	1191	pit	pit fill from quarry pit	Charred			+		
95	1178		pit	bottom fill of large of waterhole	waterlogged		+++			
96	1125	1126	pit	primary silting layer of base of pit	Charred			+		
97	1118	1109	pit	same as sample 96	Charred			+		
98	1347	1349	pit	Bone badly preserved in fill, no other finds within the context.	Charred			+		
100	1354	1355	pit	Pottery found within the fill.	Charred				+	
101	1379		pit	Dark fill of pit, containing pottery.	Charred				+	
102	1384	1385	pit	Burnt fill of small pit, contains burnt clay within it.	Charred			+	++	
103	1403	1404	ditch	Fill of narrow boundary ditch, fairly sterile with no finds.	Charred			+		
104	1408	1411	pit	Fill containing pottery and bone.	Charred			+	+	
105	1409	1411	pit	Water logged fill containing pottery and bone.	waterlogged					
106	1410	1411	pit	Basal fill of pit, water logged containing pottery, bone and wood.	waterlogged			+	+	
107	1417	1413	pit	Clay base of feature, no excavated finds within context.	None					
108	1412	1413	pit	upper fill of feature, no excavated finds.	None					
109	1424	1415	pit	Clay base of feature, no finds.	None					
110	1433	1434	pit	Possible quarry pit-no excavated finds.	Charred			+		
111	1443	1444	ditch	Sample from near base of ditch-possible charred remains.	waterlogged					
112	1471	1463	pit	Upper fill of potential waterhole containing large amounts of pottery.	Charred			+++	++	
113	1473	1463	pit	Sand/gravel fill of waterhole.	Charred			+	+	
114	1484	1466	ditch	Fill of ditch containing no excavated finds.	none					
115	1467	1470	pit	Organic material within the fill.	Charred			+	+	

Sample No.	Context No.	Cut No.	Feature Type	Comments	Preservation	Cereals	Weed Seeds	Charcoal <2mm	Charcoal > 2mm	Small Bones
116	1468	1470	pit	Organic material within fill.	waterlogged		+	++	++	
117	1469	1470	pit	Organic fill.	waterlogged					
118	1475	1463	pit	Water logged basal fills next to log ladder at the base of the pit.	waterlogged					
119	1489	1490	ditch	Fill of recut of ditch containing possible charred remains.	None					
120	1497	1500	ditch	Light grey silt fill of boundary ditch containing large quantities of molluscs, close to the base of the feature.	None					
121	1477	1463	pit	Waterlogged fill next to log ladder.	waterlogged		+			
122	1522	1519	pit	Organic fill within pit.	Charred			+		
123	1520	1519	pit	base fill of potential waterhole- material water logged.	waterlogged		+			
124	1520	1519	pit	Base fill of potential watering hole-water logged material.	waterlogged					
125	1529	1531	ditch	Dark fill of ditch containing molluscs.	None					
126	1564	1565	ditch	Last upper fill to ditch, one sherd of pottery within this fill.	waterlogged		+			
127	1563	1565	ditch	Primary lower fill of ditch containing no finds.	waterlogged					
128	1604	1606	pit	Main fill of recut-damp but not water logged.	Charred			+++	++	
129	1589	1579	pit	Primary fill of Iron Age Ditch, water logged.	waterlogged		++			
130	1593	1579	pit	Predominant fill of Iron Age ditch.	None					
131	1594	1579	pit	Sealing layer of Iron Age Ditch-contains most Iron Age pot.	Charred			+	+	
132	1628	1629	pit	Fill consists of very dark compact clay. Fill contains some bone and fragments of pottery (including degraded pottery vessel).	Charred			++	+	
133	1630	1632	pit	Dark silt clay containing degraded pottery. pollen						
134	1605	1606	pit	Basal fill of pit containing organic material.Pollen						
135	1600	1603	pit	Basal fill of pit, water logged. Monolith						
136	1635	1636	pit	Fill of pit containing no finds.	None					
137	1633	1634	pit	Fill of pit containing no finds.	Charred			+	+	
138	1664	1650	well	Water logged fill with heavy clay content. Context contains preserved wood, potential shoring for watering hole/well? Loam sand silt directly below water logged fill 138. Water logged most probably basal fill.	waterlogged		+++	+		
139	1665	1650	well		waterlogged		++			
140	1706	1698	hearth/o ven	Fill of oven, pottery within this context.	waterlogged		+	++	+	
141	1699	1701	pit	Fill of pit containing bone.	None					
142	1702	1705	pit	Fill of pit containing no finds.	None					
143	1703	1705	pit	Fill of pit containing pottery.	None					
144	1667	1696	pit	Waterlogged fill of large quarry pit-Roman.	waterlogged		++	+++		
145	1695	1696	pit	Primary fill of large quarry-possibly water logged.	waterlogged		+++			
146	1667	1696	pit	Pollen sample from large quarry.						
147	1695	1696	pit	pollen sample from large quarry pit, primary fill.						
148	1750	1751	posthole	Fill of posthole containing no finds.	None					
149	1604	1697	well	Dark humic blue brown clay material at base of feature becoming mid brown grey clay material towards the top of the feature.	None					
150	1803	1806	pit	dark pit fill	Charred			++	+	
151	1813	1812	hearth	burnt clay - top fill of possible hearth. Not sure if in-situ	Charred			++	+++	
152	1814	1812	hearth	reddish clay fill of possible hearth	Charred		+	++	++	
153	1815	1812	hearth	basal fill of possible hearth	Charred			++	+	
154	1834	1835	pit	mid grey fill of pit	Charred			+	+	
155	1836	1837	pit	dark black fill of pit - lots of bone	Charred			+++	+++	
156	1846	1847	posthole	no finds. Part of possible pit alignment, moderate charcoal flecks	Charred	+		+++	+++	

Table 35: Results of initial assessment

Sample No.	40	72	75	79	138
Context No.	636	906	723	720	1664
Feature No.	566	898	921	928	1650
<b>Cereals</b>					
<i>Triticum sp. (grain)</i>	xc				
<i>T. spelta L (glume bases)</i>		xc			
<b>Dry land herbs</b>					
<i>Aethusa cynapium L.</i>			x		
Apiaceae indet.				x	
<i>Atriplex sp.</i>	x	x	xcf		xx
<i>Bromus sp.</i>		xc			
<i>Carduus sp.</i>	x	x	x	x	x
<i>Chenopodium album L.</i>	x		x	x	
<i>C. polyspermum L.</i>	xcf				xcf
Chenopodiaceae indet.		x	x	x	
<i>Cirsium sp.</i>	x	x	x	x	x
<i>Galeopsis sp.</i>		x			
<i>Galium aparine L.</i>		xc			
<i>Hyoscyamus niger L.</i>	x		x	x	



Sample No.	40	72	75	79	138
Context No.	636	906	723	720	1664
Feature No.	566	898	921	928	1650
<i>Lamium</i> sp.	xx	x			
<i>Lapsana communis</i> L.					x
<i>Leontodon</i> sp.					x
<i>Linum catharticum</i> L.			x	x	
<i>Mentha</i> sp.			x		
<i>Papaver dubium</i> L.	xcf		xcf		xcf
<i>Persicaria maculosa/lapathifolia</i>		x	x	x	
<i>P. lapathifolia</i> L.			x	x	
<i>Plantago major</i> L.	xcf				
Small Poaceae indet.	xx			x	
<i>Polygonum aviculare</i> L.	xx	xx	xx	x	xx
<i>Potentilla</i> sp.			x		x
<i>P. anserina</i> L.	xx	x	x	x	xx
<i>Prunella vulgaris</i> L.		x	x	x	x
<i>Ranunculus</i> sp.				x	x
<i>R. acris/repens/bulbosus</i>	x	xx	xx	xx	xxx
<i>R. parviflorus</i> L.		x	x		xx
<i>Rumex</i> sp.	xx	xxx xcf	xxx	x	xx
<i>Silene</i> sp.		x			x
<i>Sinapis</i> sp.			x		
<i>Solanum</i> sp.		x			x
<i>Sonchus asper</i> (L.)Hill	x	xx	x		xxx
<i>S. oleraceus</i> L.				x	
<i>Stellaria graminea</i> L.			x	x	
<i>S. media</i> (L.)Vill	xx	x	xx	xx	xx
<i>Taraxacum</i> L.			x		
<i>Torilis japonica</i> (DC)Houtt			x		
<i>Urtica dioica</i> L.	x	xx	xxx	xx	xx
<i>U. urens</i> L.	x	x		x	
<b>Wetland/aquatic plants</b>					
<i>Alisma plantago-aquatica</i> L.		x			
<i>Aphanes arvensis</i> L.	x	x			
<i>Barbarea</i> sp.	x	x		x	
<i>Carex</i> sp.	x	x	xx	x	x
<i>Filipendula ulmaria</i> L.				x	
<i>Juncus</i> sp.	x				
<i>Lemna</i> sp.	x	x	xxx	xxx	x
<i>Lepidium</i> sp.	x			x	
<i>Lycopus europaeus</i> L.			xx		x
<i>Montia fontana</i> L.					x
<i>Oenanthe aquatica</i> (L.)Poiret				x	
<i>Persicaria minor</i> (Hudson)Opiz				x	
<i>Ranunculus flammula</i> L.		xcf			
<i>R. subg. Batrachium</i> (DC)A.Gray		x	xx	xx	x
<b>Tree/shrub macrofossils</b>					
<i>Cornus</i> sp.			xcf		
<i>Corylus avellana</i> L.	x	x		x	
<i>Crateagus monogyna</i> Jacq.		xcf			
<i>Prunus spinosa</i> L.				x	
<i>Rubus</i> sect. <i>Glandulosus</i> Wimmer & Grab	x	x	x	x	xxx
<b>Other plant macrofossils</b>					
Charcoal <2mm	xxxx	xxx	xx	xx	xxx
Charcoal >2mm	xxx	xx	x		x
Charcoal >10mm	x	x			
Waterlogged root/stem	xxxx	xxxx	xxxx	xxxx	xxxx
Indet.buds		x	x		
Indet.culm nodes	x				
Indet.moss	x	x		x	
Indet.seeds	x	x			
Indet.thorns (Rosa type)	x				x
Indet.twig frags.	x	x	x	x	x
Wood frags.<5mm		xxx			xxx
Wood frags. >5mm		x	x	x	x

Sample No.	40	72	75	79	138
Context No.	636	906	723	720	1664
Feature No.	566	898	921	928	1650
<b>Molluscs</b>					
<b>Open country species</b>					
Helicidae indet.			x		
<i>Vallonia</i> sp.			x		
<b>Catholic species</b>					
<i>Cochlicopa</i> sp.			x		
<b>Marsh species</b>					
<i>Lymnaea</i> sp.	x				
<b>Freshwater obligate species</b>					
<i>Anisus leucostoma</i>				x	x
<i>Armiger crista</i>				x	
<b>Other remains</b>					
Bone				x	
Caddis larval cases		x		x	xx
Cladoceran ephippia	xxxx	x	x	xxxx	x
Ostracods	xx	x		x	x
Waterlogged arthropod remains	xx	xx	xx	xx	x
<b>Sample volume (litres)</b>	<b>11</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>
<b>Volume of flot (litres)</b>	<b>0.2</b>	<b>0.1</b>	<b>&lt;0.1</b>	<b>&lt;0.1</b>	<b>&lt;0.1</b>
<b>% flot sorted</b>	<b>50%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Table 36. Results of assessment of five selected samples

## Results

C.2.10 Preservation of plant remains is predominantly waterlogging. Charred plant remains other than charcoal were extremely rare.

### Charred plant remains

C.2.11 Fifty-two of the non-waterlogged samples contained some charcoal. Samples that contained significant quantities of charcoal include 151 and 152 from Iron Age hearth **1812**, three samples from Iron Age postholes; sample 17 (posthole **254**), sample 26 (posthole **395**) and sample 156 (posthole **1847**) (perhaps suggesting the post was burnt in situ), three from Iron Age waterholes; samples 34 and 38 (waterhole **509**) and sample 35 (waterhole **705**) and a single sample from an Iron Age pit; sample 155 (pit **1837**). Each of these samples obviously relates to a burning event.

C.2.12 Only five of samples contained charred plant remains. A total of six charred cereal grains were recovered. Preservation of the grains was poor. Charred seeds of weed plants are also rare and are largely confined to the waterlogged samples.

### Waterlogged plant remains

C.2.13 Seeds of dry land herbs and wetland/aquatic plants were recorded, mostly at a low to moderate density, in all five assemblages studied along with a small number of tree/shrub macrofossils. Preservation was moderately good, although some macrofossils within the dried flots had become distorted during the drying process and were, as a consequence, difficult to identify.

C.2.14 Charred cereal remains were exceedingly scarce. A single elongated wheat grain, probably of emmer (*T. dicoccum*) or spelt (*T. spelta*) type was noted within the assemblage from sample 40, whilst Iron Age pit **898** (sample 72) contained at least two spelt glume bases. Seeds of common segetal and ruderal weeds and grassland herbs occurred most frequently. Weeds commonly found within cropped fields or as annual contaminants of disturbed ground included orache (*Atriplex* sp.), fat hen (*Chenopodium*

*album*), long-headed poppy (*Papaver dubium*), knotgrass (*Polygonum aviculare*) and stinging nettles (*Urtica dioica*). Ruderal weeds and species commonly found within rough grassland areas included musk thistle (*Carduus sp.*), thistle (*Cirsium sp.*), silver weed (*Potentilla anserina*), self-heal (*Prunella vulgaris*), meadow/creeping/bulbous buttercup (*Ranunculus acris/repens/bulbosus*), small-flowered buttercup (*R. parviflorus*), dock (*Rumex sp.*), milk-thistle (*Sonchus asper*) and stitchwort (*Stellaria media*). A limited range of wetland taxa were also represented including *Barbarea sp.* (winter-cress), sedge (*Carex sp.*), duckweed (*Lemna sp.*), gipsy-wort (*Lycopus europaeus*) and water crowfoot (*Ranunculus subg. Batrachium*). Tree/shrub macrofossils were present, but at a very low density. Material recorded included hazel (*Corylus avellana*) nutshell fragments, a sloe (*Prunus spinosa*) fruit stone and bramble (*Rubus sect. Glandulosus*) 'pips'. Although all five assemblages were largely composed of waterlogged root/stem fragments, pieces of charcoal/charred wood were present throughout and were particularly abundant within the assemblages from samples 40, 72 and 138. Other plant macrofossils included indeterminate buds, moss fronds, thorns, twigs and wood fragments.

Molluscan remains were scarce, but small assemblages of shells of both terrestrial and freshwater obligate taxa were noted within four of the five assemblages. Other recorded remains included caddis larval cases, Cladoceran ephippia (water-flea eggs), ostracods and waterlogged arthropod remains.

### **Discussion**

- C.2.15 The five samples selected for full assessment are from the lower or basal fills within a series of five waterholes or sumps, all of which were presumably dug to either collect ground water (possibly for stock use) or to act as soak-aways. Somewhat interestingly, the features appear to range in date from the Early Bronze Age (waterhole **1650** – sample 138, with a C14 determination of 1700 – 1520 BC ) to the Middle Iron Age (waterhole **566** – sample 40, with a C14 date of 600 – 400 BC), and yet there is little variation in the composition of the plant macrofossil assemblages, possibly indicating that the nature of the local landscape remained comparatively static over a considerable period of time. Areas of rough grassland appear to have been locally predominant, although the presence of segetal and annual weeds, charred cereal remains and charcoal/charred wood fragments does, perhaps, indicate that some adjacent land was under cultivation and domestic and/or agricultural activities were occurring in the near vicinity. The features themselves appear to have been sufficiently wet or water-filled to sustain a limited range of wetland and aquatic plants, with the abundance of duckweed seeds suggesting that the water within the pits was generally quite stagnant. The presence of tree/shrub macrofossils within the assemblages possibly indicates that the areas immediately surrounding the features were slightly overgrown with woody shrubs and thorny plants, although there is insufficient material to suggest that the wells were actually fenced off or segregated from the surrounding landscape.

### **Further Work and Methods Statement**

- C.2.16 In summary, although the dates of the sampled features vary considerably, rough grassland conditions are indicated within all the assemblages studied, possibly suggesting that the area was established as pasture at an early date and continued to be used as such over many years. That tree/shrub macrofossils are relatively scarce within the assemblages may indicate that this area of grassland was managed, although the features themselves appear to have been partly shaded and surrounded

by marginal wetland plants. Although some land in the near vicinity of the features may have been cultivated, there is nothing to indicate that such activity was of major local significance throughout the period that the wells were in use.

- C.2.17 Although the list of species noted within the assemblages is relatively comprehensive, it is considered very unlikely that quantification/analysis would add any further data to that already recorded regarding the features and their place within the local landscape. Therefore, no further work is recommended at this stage. However, a written summary of this assessment should be included within any publication of data from the site.

### C.3 Pollen analysis of sediments

By Dr. Steve Boreham

#### **Introduction**

- C.3.1 This report presents the results of assessment pollen analyses from four sediment samples (sample <46> context 506, <49> 655, <81> 722 & <86> 946) taken at Milton Landfill.
- C.3.2 The four samples were prepared using the standard hydrofluoric acid technique, and counted for pollen using a high-power stereo microscope. The percentage pollen data from these 4 samples is presented in Table 37.

#### **Pollen analyses**

- C.3.3 Unfortunately, sample 46 (context 506, waterhole **509**) was barren. The pollen concentration of the three remaining samples ranged between 48,283 and 100,390 grains per ml. Pollen counting was somewhat hampered by the presence of finely divided organic debris and poor preservation of some fossil pollen grains (palynomorphs). Assessment pollen counts were made from a single slide for these samples. The pollen sums achieved were all above 100 grains, but do not exceed the statistically desirable total of 300 pollen grains main sum. As a consequence caution must be employed during the interpretation of these results.

#### **Sample 49, context 655, waterhole 566**

- C.3.4 This sample produced a pollen spectrum dominated by grass (*Poaceae*) (59.4%) with relatively large proportions (9.9%) of lettuce family (*Asteraceae* (*Lactuceae*)) and (5.0%) thistle family (*Asteraceae* (*Asteroidea/Cardueae*)) pollen. Arboreal taxa comprised birch (*Betula*) (1.0%), oak (*Quercus*) (2.0%) and alder (*Alnus*) (4.0%). Spores of the polypody fern (*Polypodium*) were present (1.0%), and other fern spores together accounted for 13.9%. Elevated proportions of fern spores and *Asteraceae*, which are both resistant to destructive soil processes, indicate that this pollen spectrum has been somewhat modified by post-depositional oxidation.

#### **Sample 81, context 722, waterhole 917**

- C.3.5 This sample produced a pollen signal dominated by hazel (*Corylus*) (43.1%), with grass (*Poaceae*) (23.9%), and a range of herbs including sedges (*Cyperaceae*), meadowsweet (*Filipendula*) and pollen of the lily family (probably from bluebells (*Hyacinthoides*)) (*Liliaceae*) (all 1.8%). Apart from hazel, arboreal taxa comprised oak (*Quercus*) (9.2%), alder (*Alnus*) (6.4%), juniper (*Juniperus*) (2.8%) and pine (*Pinus*) (1.8%). Spores of the polypody fern (*Polypodium*) were present (1.8%), and other fern spores reached 4.6%. The emergent aquatic, reedmace (*Typha latifolia*) was present at 2.8% in this sample.

#### **Sample 86, context 946, waterhole 935**

- C.3.6 This sample produced a pollen signal dominated by grass (*Poaceae*) (51.4%), with a range of herbs including the lettuce family (*Asteraceae* (*Lactuceae*)) (6.7%), cereals (2.9%), and potential arable weeds such as the cabbage family (*Brassicaceae*) (2.9%) and the fat hen family (*Chenopodiaceae*) (8.6%), and the disturbed ground indicator strapwort plantain (*Plantago lanceolata*) (7.6%). The only arboreal taxon detected was

hazel (*Corylus*) (8.6%). Spores of the polypody fern (*Polypodium*) were present (1.0%), and other fern spores reached 4.8%. The emergent aquatic, bur-reed (*Sparganium*) was present at 2.9% in this sample.

### **Discussion & Conclusions**

- C.3.7 Sample 49 (655) appears to represent a post-clearance grassland landscape, with little sign of soil disturbance, or arable activity. This pastoral farmland appears to have had few trees, although the presence of *Polypodium* suggests some mature trees, perhaps oaks, in what may have been a relatively well-drained 'parkland' environment. However, caution must be exercised because the abundance of spores and *Asteraceae* pollen indicate that the sediment had been subjected to oxidation.
- C.3.8 Without doubt, the most interesting analysis was from sample 81 (722). This sample was dominated by hazel, with a clear mixed-oak woodland signal and no indication of agricultural activity. Such a pollen assemblage could be interpreted in two ways. The first is that this is in fact a Mesolithic (early Holocene) pollen signature, dating from approximately 9000 calendar years BP, when hazel woodland spread across Britain following the last glacial period. The second explanation is that this represents an area of managed hazel coppice woodland at some later point in time, possibly even post-clearance. If this were the case, the absence of arable indicators suggest that this area of hazel scrub was sufficiently large to exclude or dilute other pollen signals.
- C.3.9 Sample 86 (946) seems to represent a post-clearance grassland landscape, with abundant evidence of soil disturbance and arable activity. A range of herb taxa interpreted as arable weeds is present. It seems that hazel scrub is present nearby, and that some riparian (bank-side) habitats are present.
- C.3.10 This pollen assessment provides evidence for three separate landscapes. The hazel woodland signal is intriguing, but its significance can only be determined with reference to the specific position of the context and the feature which it came from, within the landscape. Post-clearance landscapes without arable activity hint at a degree of 'abandonment' not often encountered in Bronze Age or later Iron Age/Roman samples. Grassland and meadow environments with arable activity, but without residual mixed oak woodland, often occur in the later Iron Age/Roman period. These samples have produced a useful insight into the range of archaeological environments at Milton Landfill although no further work is recommended at this stage.

Context	506	655	722	946
Sample	46	49	81	86
<b>Trees &amp; Shrubs</b>				
<i>Betula</i>		1.0	0.0	0.0
<i>Pinus</i>		0.0	1.8	0.0
<i>Quercus</i>		2.0	9.2	0.0
<i>Alnus</i>		4.0	6.4	0.0
<i>Corylus</i>		0.0	43.1	8.6
<i>Juniperus</i>		0.0	2.8	0.0
<b>Herbs</b>				
Poaceae		59.4	23.9	51.4
Cereals		0.0	0.0	2.9
Cyperaceae		1.0	1.8	0.0
Asteraceae (Asteroidea/Cardueae) undif.		5.0	0.0	1.0
Asteraceae (Lactuceae) undif.		9.9	0.0	6.7
<i>Centaurea nigra</i> type		0.0	0.0	1.9
<i>Cirsium</i> type		1.0	0.0	0.0
Caryophyllaceae		0.0	0.0	1.0
Chenopodiaceae		0.0	0.0	8.6
Brassicaceae		1.0	0.0	2.9
<i>Filipendula</i>		1.0	1.8	1.0
<i>Plantago lanceolata</i>	Barren	0.0	0.0	7.6
<i>Ranunculus</i> type		0.0	0.9	0.0
<i>Veronica</i> type		0.0	0.0	1.0
Liliaceae		0.0	1.8	0.0
<b>Lower plants</b>				
<i>Polypodium</i>		1.0	1.8	1.0
Pteropsida (monolete) undif.		9.9	4.6	3.8
Pteropsida (trilete) undif.		4.0	0.0	1.0
<b>Aquatics</b>				
<i>Sparganium</i> type		0.0	0.0	2.9
<i>Typha latifolia</i>		0.0	2.8	0.0
Sum trees		6.9	17.4	0.0
Sum shrubs		0.0	45.9	8.6
Sum herbs		78.2	30.3	85.7
Sum spores		14.9	6.4	5.7
Main Sum	-	101	109	105
Concentration (grains per ml)	<10517	48283	88181	100390

Table 37: Pollen analysis results



## C.4 Phosphate samples

*By Paul Middleton*

### **Introduction**

- C.4.1 Ten samples selected from a series of pit/waterhole features and a single ditch fill sample were presented for assessment. No control sample was available to establish expected background levels of phosphate.
- C.4.2 The bulk samples were air dried, ground and sieved to 2mm mesh and processed under laboratory conditions. The prepared and weighed samples were treated to assess total phosphate levels, using a hydrochloric acid digestion method, adapted from Dick and Tabatabai (1977). The phosphate content of the processed samples was established colorimetrically by the standard molybdenum blue method, described by Murphy and Riley (1962). Quantification was achieved by reference to a standard curve.
- C.4.3 All phosphate levels are expressed in terms of mg. phosphorus per 100 g. soil.

### **Results**

- C.4.4 The results are presented in Table 38, below.
- C.4.5 The range of values, from 42mg.P to 180mg.P is wide, although in the absence of control samples, it is hard to assess how significantly enhanced the highest levels are.
- C.4.6 Most obvious is the contrasting values obtained from features interpreted as waterholes e.g. Context 76 (P value: 42) and Context 726 (P value: 180). Other, relatively high readings were obtained from Context 532 (P value: 132) and Context 648 (P value: 132). Such values would be consistent with animal use, although caution is required if comparison is made with the apparently domestic assemblage contributing to the enhanced phosphate content of pit Context 501 (P value: 126).
- C.4.7 The small number of samples does not allow for firm conclusions, but the high value of the sample from Context 726 is particularly noteworthy and suggests a different usage from Context 76, as would be consistent with an animal watering hole as compared to human domestic use.

### **Acknowledgements**

- C.4.8 My grateful thanks to Richard Baker for his invaluable assistance in the preparation and analysis of the samples.



Sample No.	Context No.	Cut No.	Feature type	Phosphate Mg.P per 100g. soil	Context details
2	76	39	waterhole	42	Basal fill of large waterhole
9	91	180	waterhole	118	Lower fill of waterhole
27	375	369	pit	94	Lower fill of large quarry pit
33	470	472	pit	112	Organic lower fill
34	501	502	pit	126	Upper fill containing IA pot
35	532	304	waterhole	132	Upper fill of large waterhole, composed of laid pot
39	648	566	waterhole	132	Fill of waterhole
56	713	714	ditch	100	Lower ditch fill
76	722	917	waterhole	82	Organic, basal fill of waterhole, Log ladder
77	726	921	waterhole	180	Basal fill
88	939	894	waterhole	108	Fill of waterhole

*Table 38: Phosphate samples*

## APPENDIX D. RADIOCARBON CERTIFICATES



### Scottish Universities Environmental Research Centre

Director: Professor A B MacKenzie Director of Research: Professor R M Ellam

Rankine Avenue, Scottish Enterprise Technology Park,  
East Kilbride, Glasgow G75 0QF, Scotland, UK

Tel: +44 (0)1355 223332 Fax: +44 (0)1355 229898 [www.glasgow.ac.uk/suerc](http://www.glasgow.ac.uk/suerc)

## RADIOCARBON DATING CERTIFICATE

21 December 2007

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<b>Laboratory Code</b>	SUERC-16334 (GU-15931)
<b>Submitter</b>	Rachel Fosberry Oxford Archaeology East 15 Trafalgar Way Bar Hill Cambridgeshire CB23 8SQ
<b>Site Reference</b>	Milton Landfill Site
<b>Sample Reference</b>	MIL LAN 07 (Context 949, SF 43 – log ladder)
<b>Material</b>	Wood : Oak
<b><math>\delta^{13}\text{C}</math> relative to VPDB</b>	-26.0 ‰
<b>Radiocarbon Age BP</b>	2510 $\pm$ 35

- N.B**
- 1 The above  $^{14}\text{C}$  age is quoted in conventional years BP (before 1950 AD). The error, which is expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.
  - 2 The calibrated age ranges are determined from the University of Oxford Radiocarbon Accelerator Unit calibration program (OxCal3).
  - 3 Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Facility and should be quoted as such in any reports within the scientific literature. Any questions directed to the Radiocarbon Laboratory should also quote the GU coding given in parentheses after the SUERC code. The contact details for the laboratory are email [g.cook@suerc.gla.ac.uk](mailto:g.cook@suerc.gla.ac.uk) or Telephone 01355 270136 direct line.

Conventional age and calibration age ranges calculated by :-

Date :-

Checked and signed off by :-

Date :-



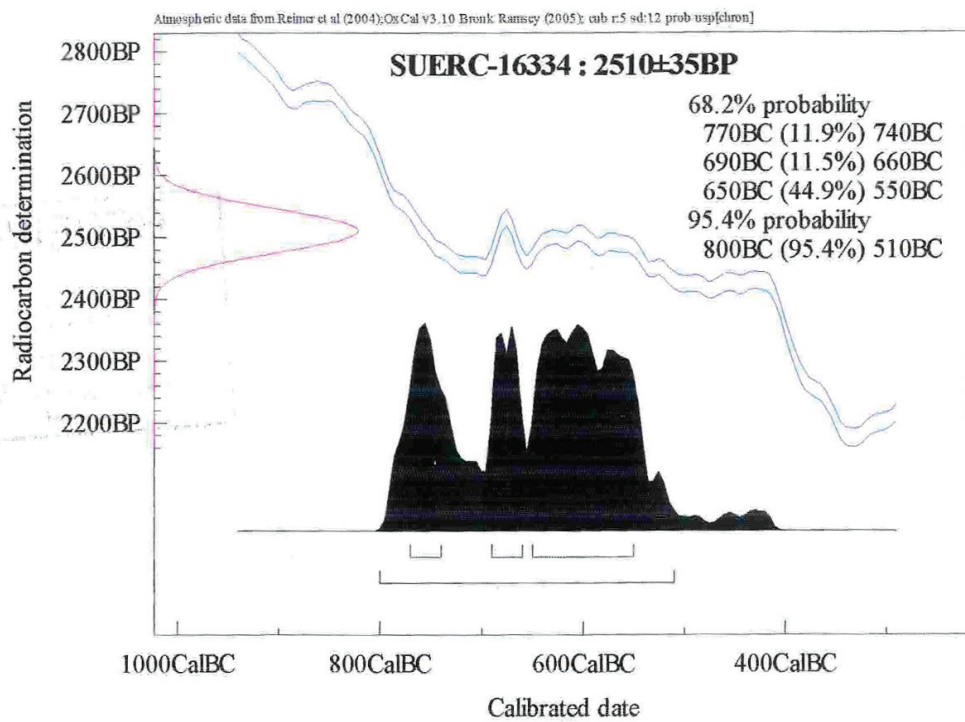
The University of Glasgow, charity number SC004401



The University of Edinburgh is a charitable body, registered in Scotland, with registration number SC005336

### Calibration plot

#### Calibration Plot



## RADIOCARBON DATING CERTIFICATE

9 March 2010

**Laboratory Code** SUERC-28022 (GU-20936)

**Submitter** Rachel Fosberry  
Oxford Archaeology East  
15 Trafalgar Way  
Bar Hill  
Cambridgeshire CB23 8SQ

**Site Reference** Milton Landfill Site  
**Sample Reference** MIL LAN 07 (688)

**Material** Wood : Species unidentified

**$\delta^{13}\text{C}$  relative to VPDB** -29.2 ‰

**Radiocarbon Age BP** 2440  $\pm$  35

- N.B**
- 1 The above  $^{14}\text{C}$  age is quoted in conventional years BP (before 1950 AD). The error, which is expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.
  - 2 The calibrated age ranges are determined from the University of Oxford Radiocarbon Accelerator Unit calibration program (OxCal3).
  - 3 Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Facility and should be quoted as such in any reports within the scientific literature. Any questions directed to the Radiocarbon Laboratory should also quote the GU coding given in parentheses after the SUERC code. The contact details for the laboratory are email [g.cook@suerc.gla.ac.uk](mailto:g.cook@suerc.gla.ac.uk) or Telephone 01355 270136 direct line.

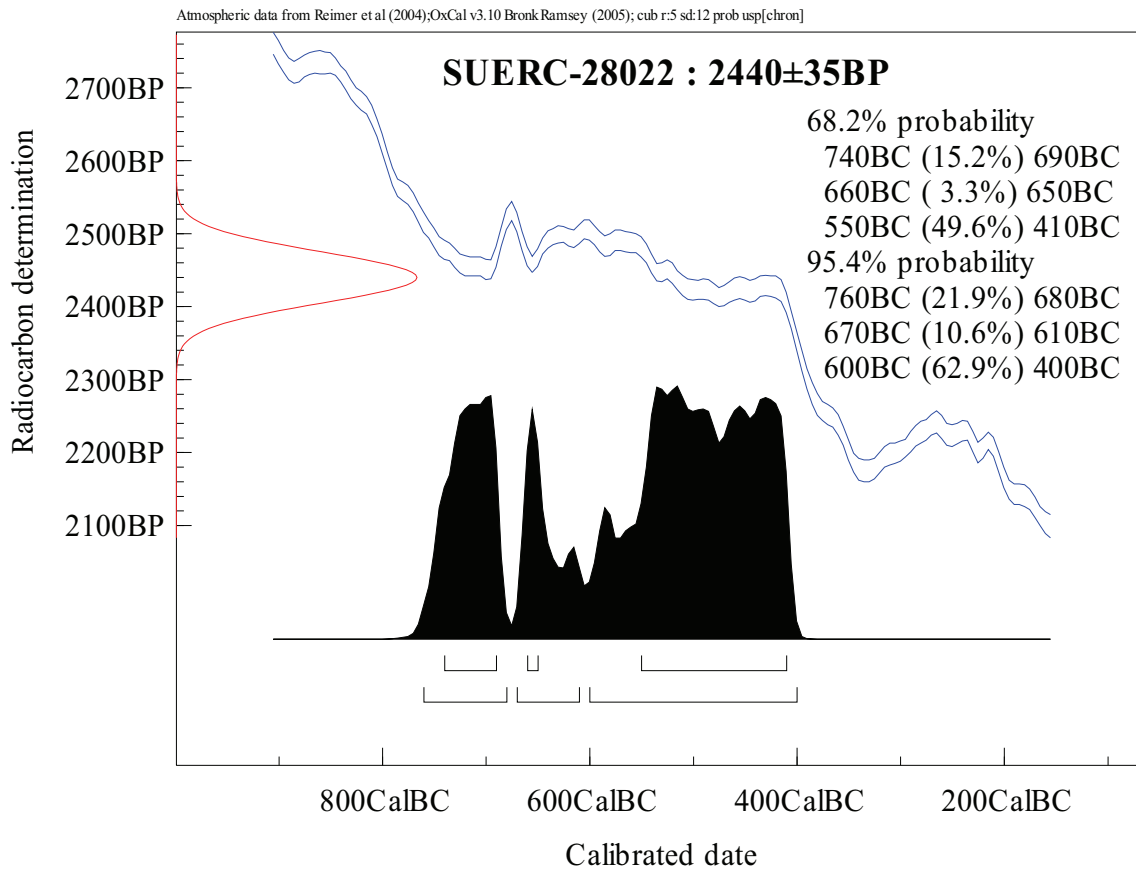
Conventional age and calibration age ranges calculated by :-

Date :-

Checked and signed off by :-

Date :-

Calibration Plot



## RADIOCARBON DATING CERTIFICATE

9 March 2010

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<b>Laboratory Code</b>	SUERC-28026 (GU-20937)
<b>Submitter</b>	Rachel Fosberry Oxford Archaeology East 15 Trafalgar Way Bar Hill Cambridgeshire CB23 8SQ
<b>Site Reference</b> <b>Sample Reference</b>	Milton Landfill Site MIL LAN 07 SF 69 – log ladder in waterhole <b>1463</b>
<b>Material</b>	Wood : Species unidentified
<b><math>\delta^{13}\text{C}</math> relative to VPDB</b>	-26.4 ‰
<b>Radiocarbon Age BP</b>	2430 ± 30

- N.B**
- 1 The above  $^{14}\text{C}$  age is quoted in conventional years BP (before 1950 AD). The error, which is expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.
  - 2 The calibrated age ranges are determined from the University of Oxford Radiocarbon Accelerator Unit calibration program (OxCal3).
  - 3 Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Facility and should be quoted as such in any reports within the scientific literature. Any questions directed to the Radiocarbon Laboratory should also quote the GU coding given in parentheses after the SUERC code. The contact details for the laboratory are email [g.cook@suerc.gla.ac.uk](mailto:g.cook@suerc.gla.ac.uk) or Telephone 01355 270136 direct line.

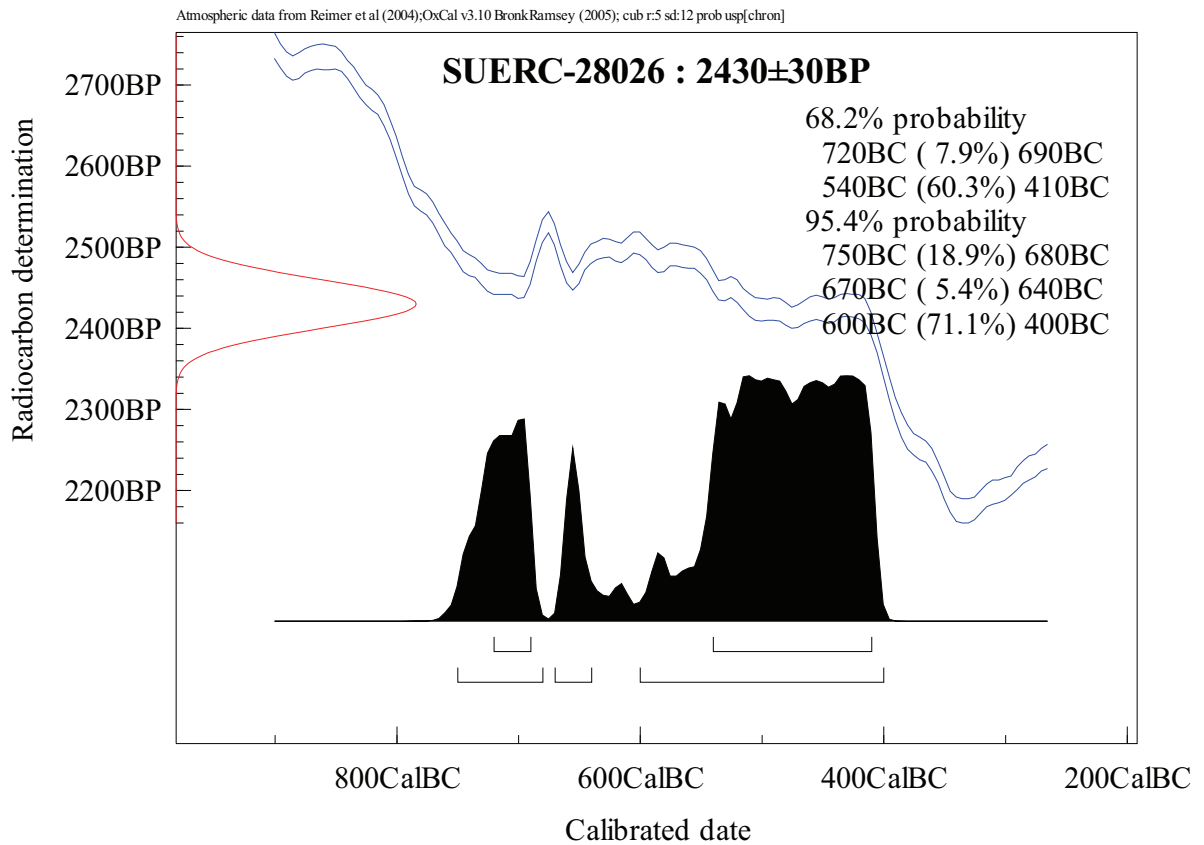
Conventional age and calibration age ranges calculated by :-

Date :-

Checked and signed off by :-

Date :-

### Calibration Plot



## RADIOCARBON DATING CERTIFICATE

9 March 2010

**Laboratory Code** SUERC-28027 (GU-20938)

**Submitter** Rachel Fosberry  
Oxford Archaeology East  
15 Trafalgar Way  
Bar Hill  
Cambridgeshire CB23 8SQ

**Site Reference** Milton Landfill Site  
**Sample Reference** MIL LAN 07 (1664) SF 76

**Material** Wood : Quercus sp.

**$\delta^{13}\text{C}$  relative to VPDB** -26.6 ‰

**Radiocarbon Age BP** 3340  $\pm$  35

- N.B**
- 1 The above  $^{14}\text{C}$  age is quoted in conventional years BP (before 1950 AD). The error, which is expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.
  - 2 The calibrated age ranges are determined from the University of Oxford Radiocarbon Accelerator Unit calibration program (OxCal3).
  - 3 Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Facility and should be quoted as such in any reports within the scientific literature. Any questions directed to the Radiocarbon Laboratory should also quote the GU coding given in parentheses after the SUERC code. The contact details for the laboratory are email [g.cook@suerc.gla.ac.uk](mailto:g.cook@suerc.gla.ac.uk) or Telephone 01355 270136 direct line.

Conventional age and calibration age ranges calculated by :-

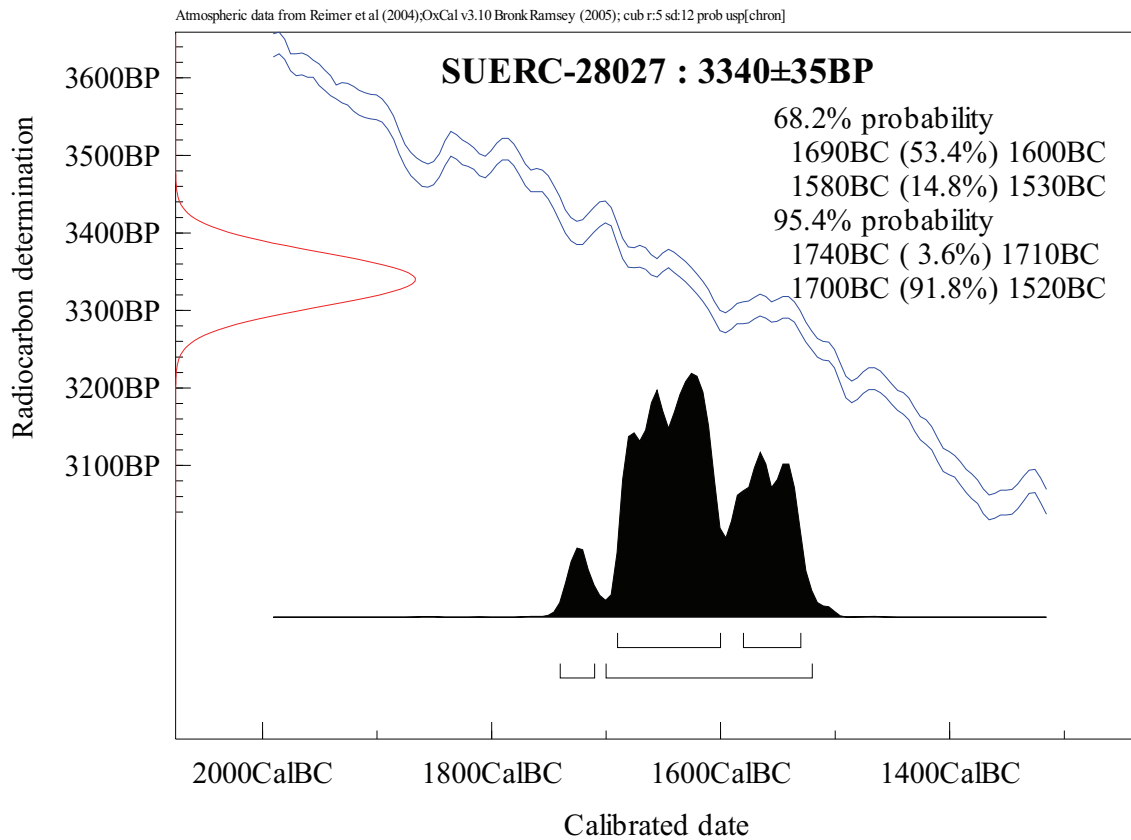
Date :-

Checked and signed off by :-

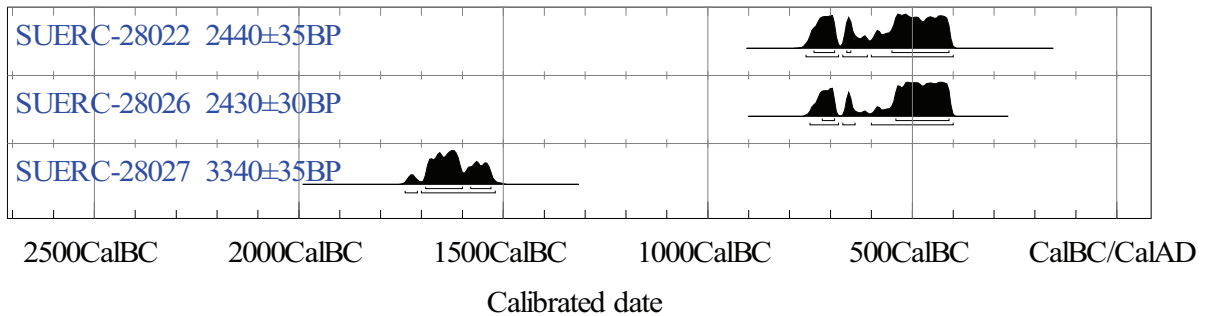
Date :-



### Calibration Plot



Atmospheric data from Reimer et al (2004);OxCal v3.10 Bronk Ramsey (2005); cub r:5 sd:12 prob usp[chron]



## APPENDIX E. BIBLIOGRAPHY

- ACBMG, 2002, Ceramic building material, minimum standards for recovery, curation, analysis and publication, [www.geocities.com/acbmg1](http://www.geocities.com/acbmg1)
- Albarella, U. and Davis, S.J.M., 1994, *The Saxon and Medieval animal bones excavated from West Cotton, Northamptonshire*. London: English Heritage AML Report 17/94.
- Alexander, J., Trump, D. & Farrar, R., 1967, *Excavations in Cambridge 1964-1967: A Preliminary Report on Excavations at Mount Pleasant and Arbury Road*. Cambridge Board of Extra Mural Studies
- Bamford, H., 1985, *Briar Hill: excavation 1974-1978, Northampton: Northampton Development Corporation*. Archaeological Monograph 3.
- Bamforth, M., 2007, *Waterlogged wood assessment report, Milton Park & Ride, Cambridge*. L – P : Archaeology. Unpublished archive report LP0613L.
- Baxter, I.L., 2003, 'The mammal and bird bones'. In: Hinman, M., *A Late Iron Age Farmstead and Romano-British Site at Haddon, Peterborough*. Archaeological Field Unit Monograph No. 2. / BAR (British Series) 358. Oxford. pp. 119-132.
- Baxter, I.L., 2008, *Genome Campus, Hinxton, Cambridgeshire: The mammal, bird, amphibian and fish bones*. Unpublished report for OA East.
- Braddock, P. and Hill, J.D., 1999, *The Early and Later Iron Age Pottery from Greenhouse Farm*. Unpublished report for the Cambridge County Council Archaeological Field Unit
- Bradley, P., 1999, 'The worked flint'. In A. Barclay and C. Halpin. Eds. *Excavations at Barrow Hills, Radley, Oxfordshire: Oxford Archaeological Unit*. Thames Valley Landscapes Monograph 11, 211-227.
- Brodribb, G., 1987, *Roman brick and tile*. Gloucester
- Brunning, R., 1996, *Guidelines on the recording, sampling and curation of waterlogged wood*. English Heritage.
- British Geological Society, 1974, *Cambridge. Solid and Drift Edition*. Sheet 188
- Brown, N., and Glazebrook, J., 2000, *Research and Archaeology: A Framework for the Eastern Counties. 2. Research Agenda and Strategy*. EAA Occ. Pap. 8, Norwich
- Butler, C., 2005, *Prehistoric flintwork*. Stroud: Tempus.
- Clarke, R., 2005, *A Roman Ditch and Other Features at Kings Hedges School, Cambridge: Evaluation Report*. CCC AFU Rep. No. 837
- Connor, A., 1997, *Late Neolithic, Bronze Age and Late Iron Age occupation at Butt Lane, Milton: A Training Excavation*. CCC AFU Rep. No. 135
- Connor, A., 1998, *Bronze Age, Iron Age and Roman Remains at Butt Lane, Milton, Area A: Summer 1997 Training Excavation*. CCC AFU Rep. No. 145
- Connor, A., 1999, *Iron Age Settlement and Agriculture at Butt Lane, Milton: Training Excavation 1998*. CCC AFU Rep. No. 157
- Connor, A. & Sealey, P., 2003, *Iron Age Settlement and Ritual: An Archaeological Training Excavation at Limes Farm, Landbeach*. AFU Rep. No. 210
- Cooper, A. & Edmonds, M., 2007, *Past and Present. Excavations at Broom, Bedfordshire 1996-2005*. Cambridge Archaeological Unit. Oxbow Books, Oxford.

- Corkhill, T., 1979, *A Glossary of Wood*. Stobart and Son, London.
- Davis, S.J.M., 1992, *A rapid method for recording information about mammal bones from archaeological sites*. London: English Heritage AML Report 19/92.
- Dick, W.A. & Tabatabai, M.A., 1977, 'An alkaline oxidation method for the determination of total phosphorus in soils', *Journal of Soil Science of America*, 41, 511 – 514
- Duncan, H.B., and Mackreth, D. F., 2005, 'Spinning and weaving' in Dawson, M., *An Iron age Settlement at Salford, Bedfordshire*. Bedfordshire Archaeology Monograph 6
- Elsdon, S. M., 1975, 'Baked clay objects: Iron Age' in H. Wheeler, 'Excavation at Willington, Derbyshire, 1970-72', *Derbyshire Archaeological Journal* 99, 58-220
- Ette, J., 1991, *Kings Hedges Farm, Milton: An Archaeological Assessment and Roman Cremation, 1991*. CCC AFU Rep. No. 037
- Evans, C., 1991a, *Archaeological Investigations at Arbury Camp, 1990*. CAU Report
- Evans, C., 1991b, *Arbury East. The Archaeology of the Arbury Environs, Part II: The Unex Lands and Gypsy Ditches Site*. CAU Rep. 011
- Evans, C. and Knight, M., 2001, 'The community of builders: the Barleycroft post alignments', in J. Bruck, *Bronze Age Landscapes: Tradition and Transformation*, 83 – 98.
- Faine, C., (forthcoming), 'Animal Bone'. In A. Connor & R. Mortimer, *Prehistoric and Romano-British Occupation along the Fordham Bypass, Fordham, Cambridgeshire, 2004*. East Anglian Archaeology.
- Frend, W.H.C., 1955, 'A Romano-British Settlement at Arbury Road, Cambridge', *Proceedings of the Cambridge Antiquarian Society* 48: 10-43
- Garrow, D., Beadsmoore, E. and Knight, M., 2006, 'Pit clusters and the temporality of occupation: an earlier Neolithic site at Kilverstone, Thetford, Norfolk'. *Proceedings of the Prehistoric Society* 72.
- Harding, P., 1990, 'The worked flint'. In J. C. Richards. Ed. *The Stonehenge Environs Project*, London: English Heritage.
- Healy, F., 1988, The Anglo-Saxon cemetery at Spong Hill, North Elmham. Part VI: Occupation in the seventh to second millennia BC, Gressenhall: Norfolk Archaeological Unit. *East Anglian Archaeology* 39.
- Hinman, M., 1997, *A Middle Iron Age settlement at Greenhouse Farm, Newmarket Road, Fen Ditton. An archaeological excavation*. Unpublished summary held by OA East
- Humphrey, J. and Young, R., 1999, 'Flint use in England after the Bronze Age: time for a re-evaluation'. *Proceedings of the Prehistoric Society* 65, 231-242.
- Hylton, T., and Williams, R.J., 1996, 'Clay Weights' in Williams, R.J., Hart, P. J., and Williams, T. L., *Wavedon Gate: A Late Iron Age and Roman Settlement in Milton Keynes*. Buckinghamshire Archaeological Society Monograph Series 10.
- Inizan, M.-L., Roche, H. and Tixier, J., 1992, *Technology of knapped stone*. France: C.R.E.P.
- Lisboa, I., 1995, Excavations at Kings Hedges Primary School, Cambridge, Cambridgeshire, Tempus Reparatum Interim Report
- Lucas, G., 1998, Archaeological Excavations at Milton Recreation Ground, Milton, Cambridgeshire. CAU Rep. No. 262
- Lyons, A.L., In prep., 'Ceramic Building Materials' in Hinman, M., *Loves Farm*. EAA

- MacGregor, A., Mainman, A.J. and Rogers, N.S.H., 1999, 'Bone, antler, ivory and horn from Anglo-Scandinavian and medieval York', *The Archaeology of York: the Small Finds 17/12* (York)
- Murphy, J., & Riley, J.P., 1962, 'A modified single solution method for the determination of phosphate in natural waters', *Analytica Chimica* 27, 31 – 36
- Onhuma, K. and Bergman, C. A., 1982, 'Experimental studies in the determination of flake mode'. *Bulletin of the Institute of Archaeology*, London 19: 161-171.
- Ozanne, R.W.G., 1991, *Mere Way Roman Road at Milton-Milton to Histon Pipeline*. CCC AFU Rep. No. 039
- Phillips, T., 2009, *A Later Iron Age and Roman farmstead and a medieval windmill at Milton Park and Ride, Milton, Cambridgeshire*. Oxford Archaeology Rep. No. 1098
- Pitts, M. W. and Jacobi, R. M., 1979, 'Some aspects of change in flaked stone industries of the Mesolithic and Neolithic in Southern Britain', *Journal of Archaeological Science* 6: 163-177.
- Prosser, L. 1999, *All Saints Church, Milton, Cambridgeshire: Archaeological Observation and Recording*. Hertfordshire Archaeological Trust Rep. No. 0554
- Prosser, L. & Hattersley, C., 2001, *All Saints Church, Milton, Cambridgeshire: Archaeological Observation and Recording*. Hertfordshire Archaeological Trust Rep. No. 0899
- Reaney, P.H. 1943, *The Place-Names of Cambridgeshire and the Isle of Ely*. English place-Name Society XIX, CUP
- Rees, G., 2008, *Iron Age, Roman and Medieval settlement on land at Ely Road, Milton; an archaeological evaluation*. OA East Rep no. 1053
- Reynolds, T., 1994, *Iron-Age/Romano-British Settlement at Milton: An Archaeological Rescue Project*. CCC AFU Rep. No. 104
- Reynolds, T., 1995, *Milton East Waste Evaluation Report*. CCC AFU Rep. A48
- Reynolds, T., 1997, *MILEW I-IV Report Draft No. 1*. CCC AFU Report
- Rigby, V., And Foster, J., 1986, 'Building-materials' in Stead, I. M., and Rigby, V., *Baldock: The Excavation of Roman and Pre-Roman Settlement, 1968-72*. Britannia Monograph Series 7.
- Robinson, B. & Guttman, E.B., 1996, *An Archaeological Evaluation of the proposed Site of the Cambridge Rowing Trust rowing lake at Milton and Waterbeach, Cambridgeshire*. CCC AFU Rep. No. 120
- Saville, A., 1980, 'On the measurement of struck flakes and flake tools'. *Lithics* 1: 16-20.
- Simmonds, A., 2003, *Cambridge Rowing Lake, Milton, Landbeach, Waterbeach, Cambridgeshire: Archaeological Investigation Report*. Oxford Archaeology
- Society of Museum Archaeologists, 1993, *Selection, Retention and Dispersal of Archaeological Collections: guidelines for use in England, Wales and Northern Ireland*. First Edition.
- Stace, C., 1997, *New Flora of the British Isles*. Second edition. Cambridge University Press
- Taylor, M., 1998, Wood and Bark from the enclosure ditch. In: F. Pryor, 1998, *Etton: excavations at a Neolithic causewayed enclosure near Maxey, Cambridgeshire, 1982-87*. English Heritage Archaeology Report 18, London, pp 115-59.
- Taylor, M., 2001, The Wood. In: F. Pryor, 2001, *The Flag Fen Basin: Archaeology and Environment of a Fenland Landscape*. English Heritage Archaeological Reports, London, UK, pp 167-228.

Van de Noort, R., Ellis, S., Taylor, M. & Weir, D., 1995, 'Preservation of Archaeological sites' in R. Van de Noort & S. Ellis, *Wetland Heritage of Holderness - an archaeological survey*. 1st Edition. Humber Wetlands Project.

Wallis, H., in prep., *Romano-British Cambridgeshire: recent excavations*, East Anglian Archaeology

Worssam, B.C., and Taylor, J.H., 1969, *Geology of the Country Around Cambridge*. British Geological Society

Wright, A.P.M. & Lewis, C.P. (eds.) 1989, *A History of the County of Cambridge and the Isle of Ely, Vol. IX*. Oxford University Press

## APPENDIX F. OASIS REPORT FORM

All fields are required unless they are not applicable.

### Project Details

OASIS Number	oxfordar3-75200		
Project Name	Excavations at Milton landfill		
Project Dates (fieldwork) Start	03-08-2007	Finish	13-08-2009
Previous Work (by OA East)	Yes	Future Work	Unknown

### Project Reference Codes

Site Code	MILLAN 07	Planning App. No.	
HER No.	ECB 2637	Related HER/OASIS No.	CB15698, CB15707-8, 11669

### Type of Project/Techniques Used

Prompt: Direction from Local Planning Authority - PPG16

### Please select all techniques used:

<input type="checkbox"/> Field Observation (periodic visits)	<input type="checkbox"/> Part Excavation	<input type="checkbox"/> Salvage Record
<input type="checkbox"/> Full Excavation (100%)	<input type="checkbox"/> Part Survey	<input type="checkbox"/> Systematic Field Walking
<input type="checkbox"/> Full Survey	<input type="checkbox"/> Recorded Observation	<input type="checkbox"/> Systematic Metal Detector Survey
<input type="checkbox"/> Geophysical Survey	<input type="checkbox"/> Remote Operated Vehicle Survey	<input type="checkbox"/> Test Pit Survey
<input checked="" type="checkbox"/> Open-Area Excavation	<input type="checkbox"/> Salvage Excavation	<input type="checkbox"/> Watching Brief

### Monument Types/Significant Finds & Their Periods

List feature types using the [NMR Monument Type Thesaurus](#) and significant finds using the [MDA Object type Thesaurus](#) together with their respective periods. If no features/finds were found, please state "none".

Monument	Period	Object	Period
settlement	Iron Age -800 to 43	pottery	Iron Age -800 to 43
water hole	Iron Age -800 to 43	animal bone	Iron Age -800 to 43
quarrying	Roman 43 to 410	log ladders	Iron Age -800 to 43

### Project Location

County	Cambridgeshire	Site Address (including postcode if possible)	
District	South Cambridgeshire	Milton Landfill Site, Butt Lane, Milton, CB4 6DQ	
Parish	Milton		
HER	Cambridgeshire		
Study Area	1.8ha	National Grid Reference	TL 4608 6268

### Project Originators

Organisation	OA EAST
Project Brief Originator	Andy Thomas
Project Design Originator	James Drummond-Murray
Project Manager	James Drummond-Murray
Supervisor	Tom Phillips

### Project Archives

Physical Archive	Digital Archive	Paper Archive
Cambs. County Store	OA East	Cambs. County Store
MILLAN 07	MILLAN 07	MILLAN 07

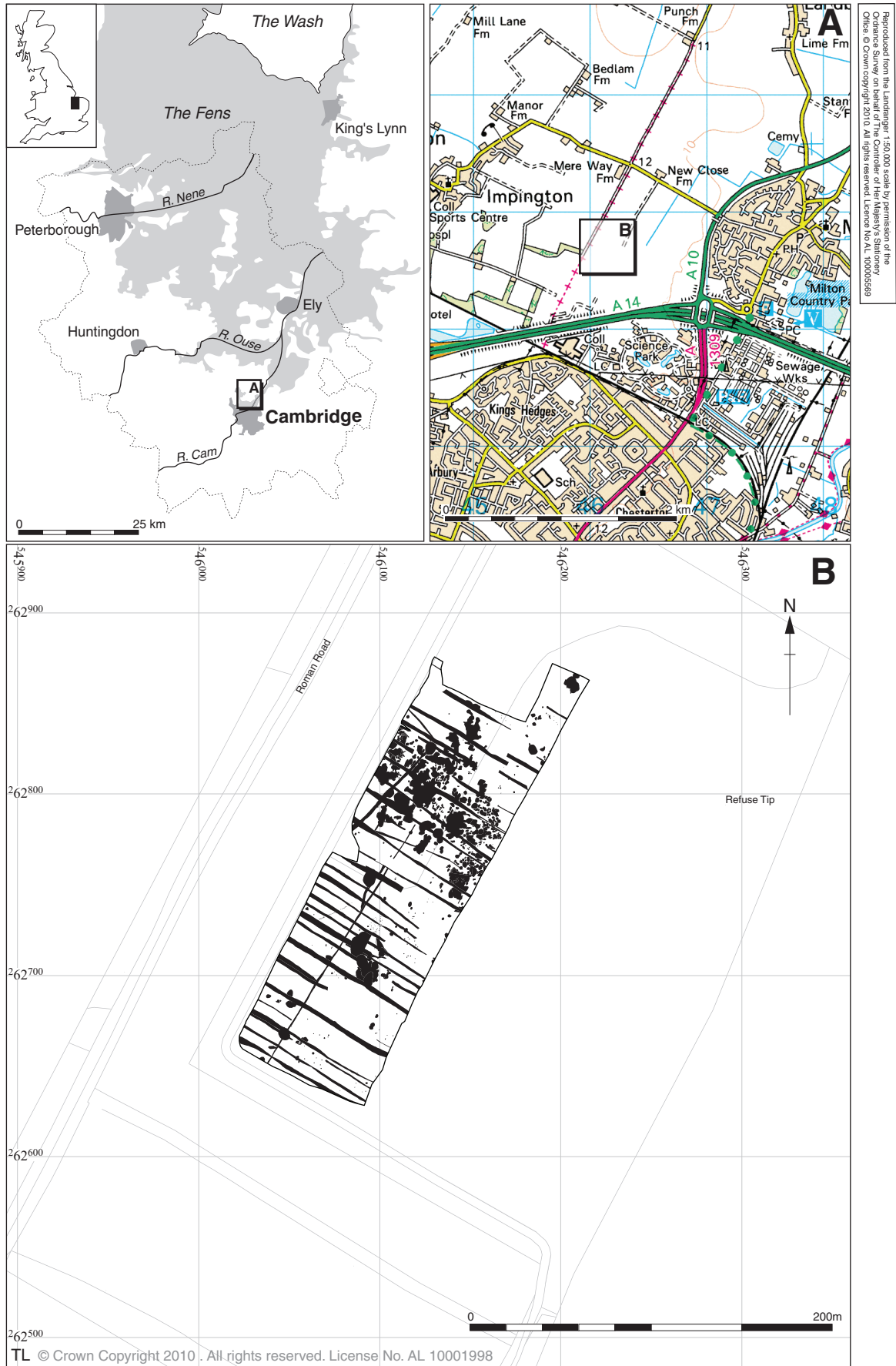
### Archive Contents/Media

	Physical Contents	Digital Contents	Paper Contents
Animal Bones	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Ceramics	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Environmental	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Glass	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Human Bones	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Industrial	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leather	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Metal	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stratigraphic		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Survey		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Textiles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wood	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Worked Bone	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Worked Stone/Lithic	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
None	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Digital Media	Paper Media
<input checked="" type="checkbox"/> Database	<input type="checkbox"/> Aerial Photos
<input type="checkbox"/> GIS	<input checked="" type="checkbox"/> Context Sheet
<input type="checkbox"/> Geophysics	<input checked="" type="checkbox"/> Correspondence
<input checked="" type="checkbox"/> Images	<input type="checkbox"/> Diary
<input checked="" type="checkbox"/> Illustrations	<input checked="" type="checkbox"/> Drawing
<input type="checkbox"/> Moving Image	<input type="checkbox"/> Manuscript
<input checked="" type="checkbox"/> Spreadsheets	<input checked="" type="checkbox"/> Map
<input type="checkbox"/> Survey	<input checked="" type="checkbox"/> Matrices
<input checked="" type="checkbox"/> Text	<input type="checkbox"/> Microfilm
<input type="checkbox"/> Virtual Reality	<input type="checkbox"/> Misc.
	<input checked="" type="checkbox"/> Research/Notes
	<input checked="" type="checkbox"/> Photos
	<input checked="" type="checkbox"/> Plans
	<input checked="" type="checkbox"/> Report
	<input checked="" type="checkbox"/> Sections
	<input type="checkbox"/> Survey

**Notes:**





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Figure 1: Location of excavation





Figure 2: Areas of excavation at Milton Landfill including previous phases of work

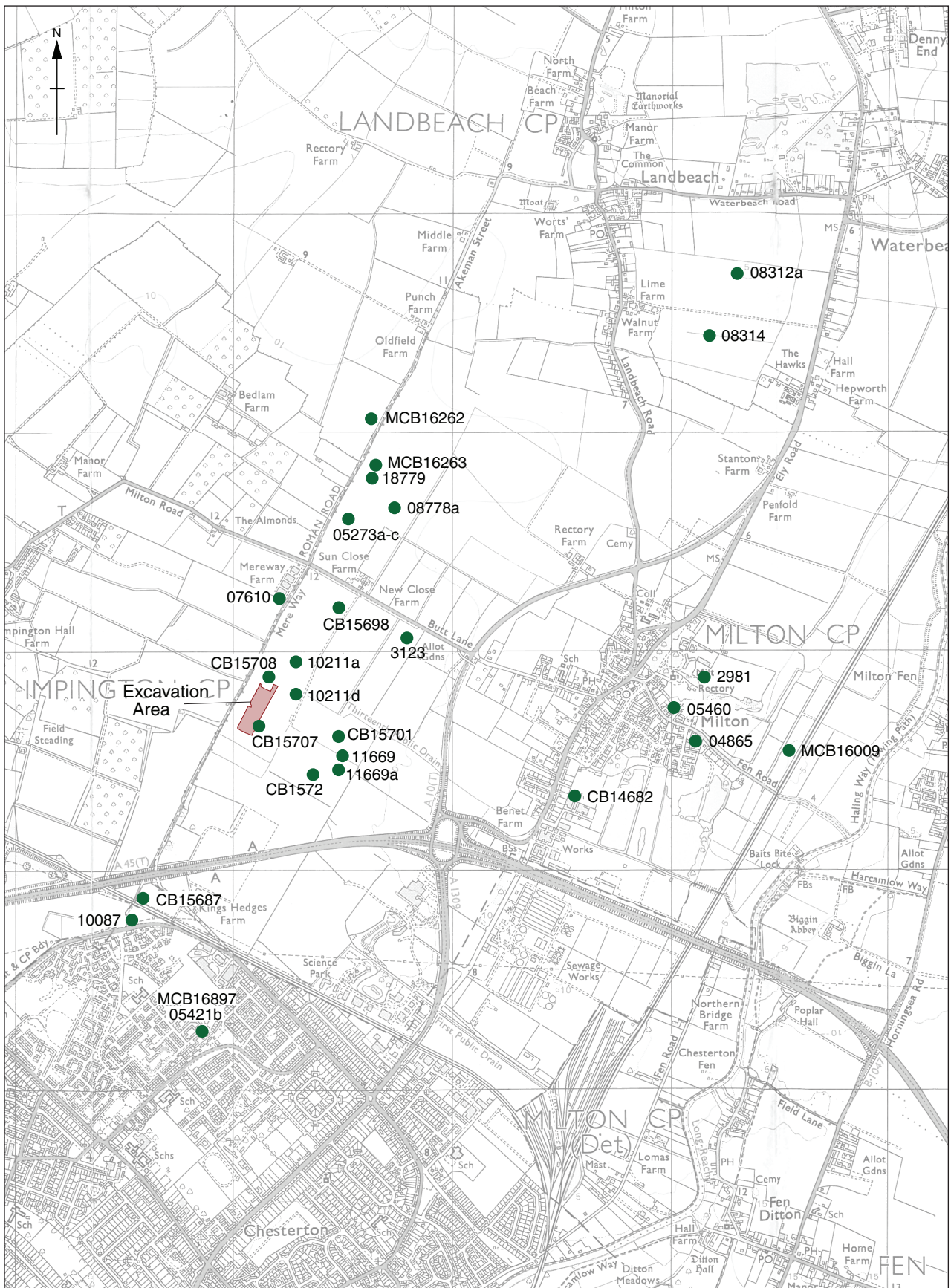


Figure 3: HER entries

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Figure 4: Bronze Age features



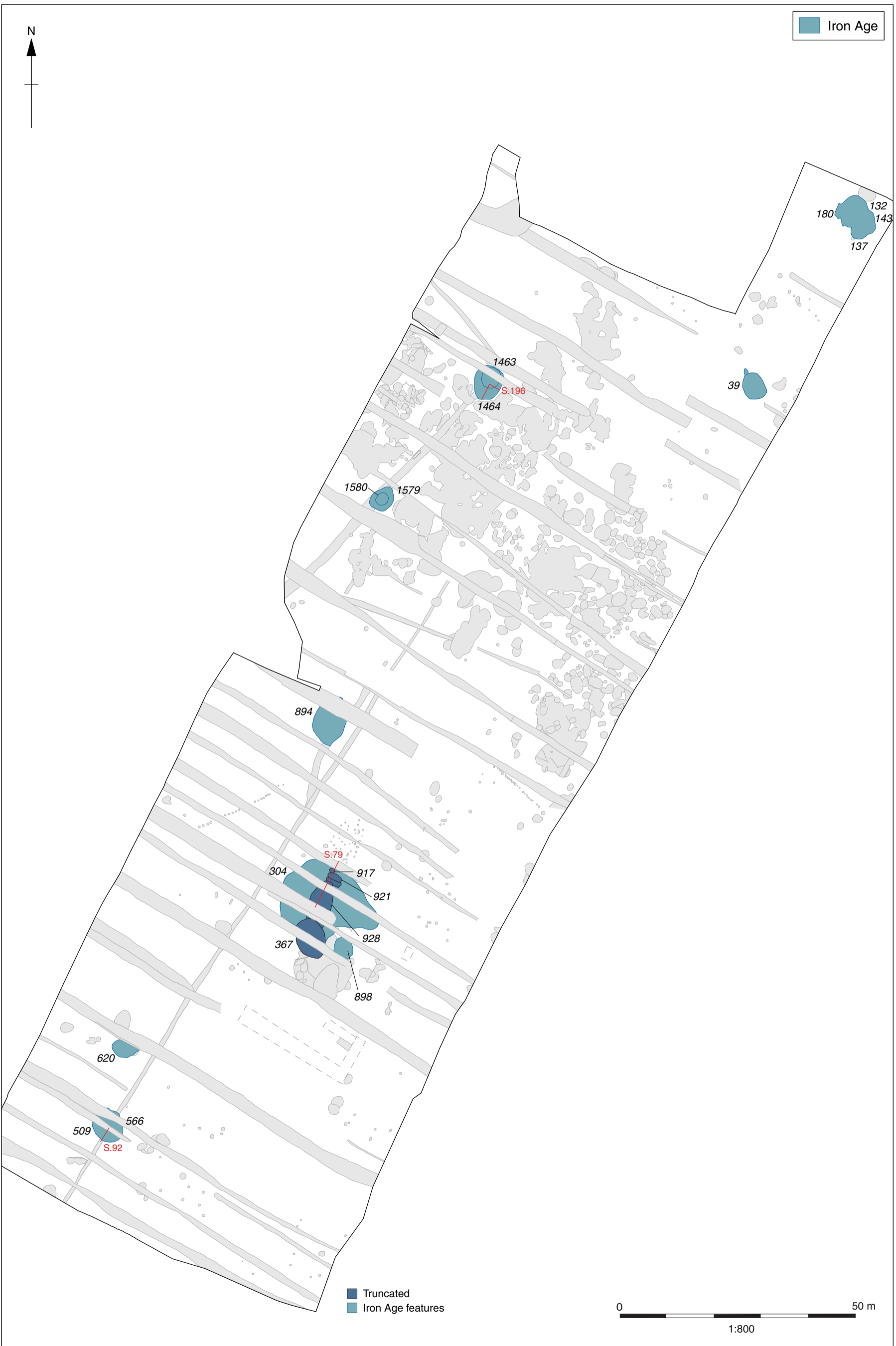


Figure 5: Distribution of Iron Age waterholes



Figure 6: Iron Age post-built structures

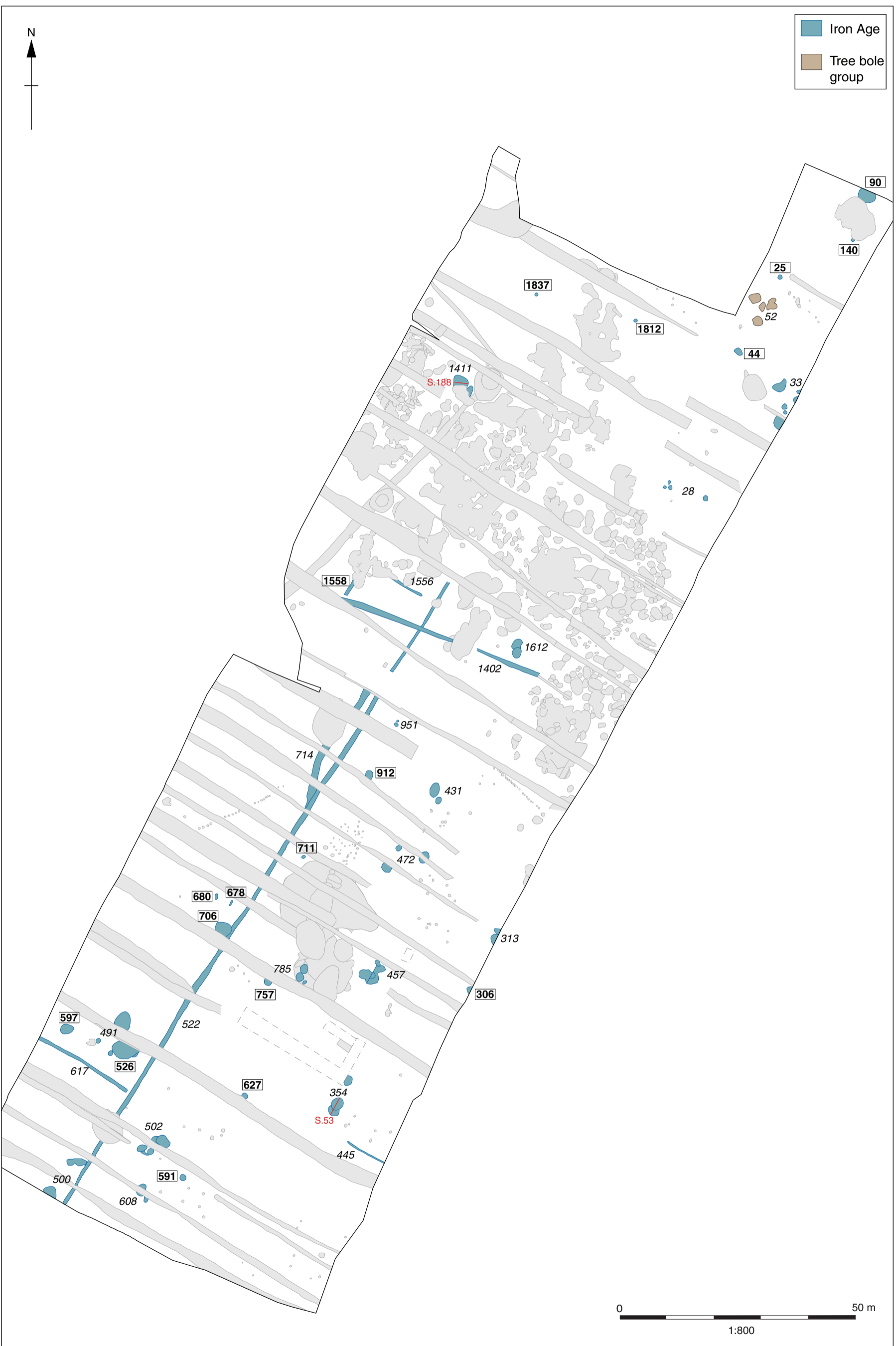


Figure 7: Iron Age ditches and pit groups

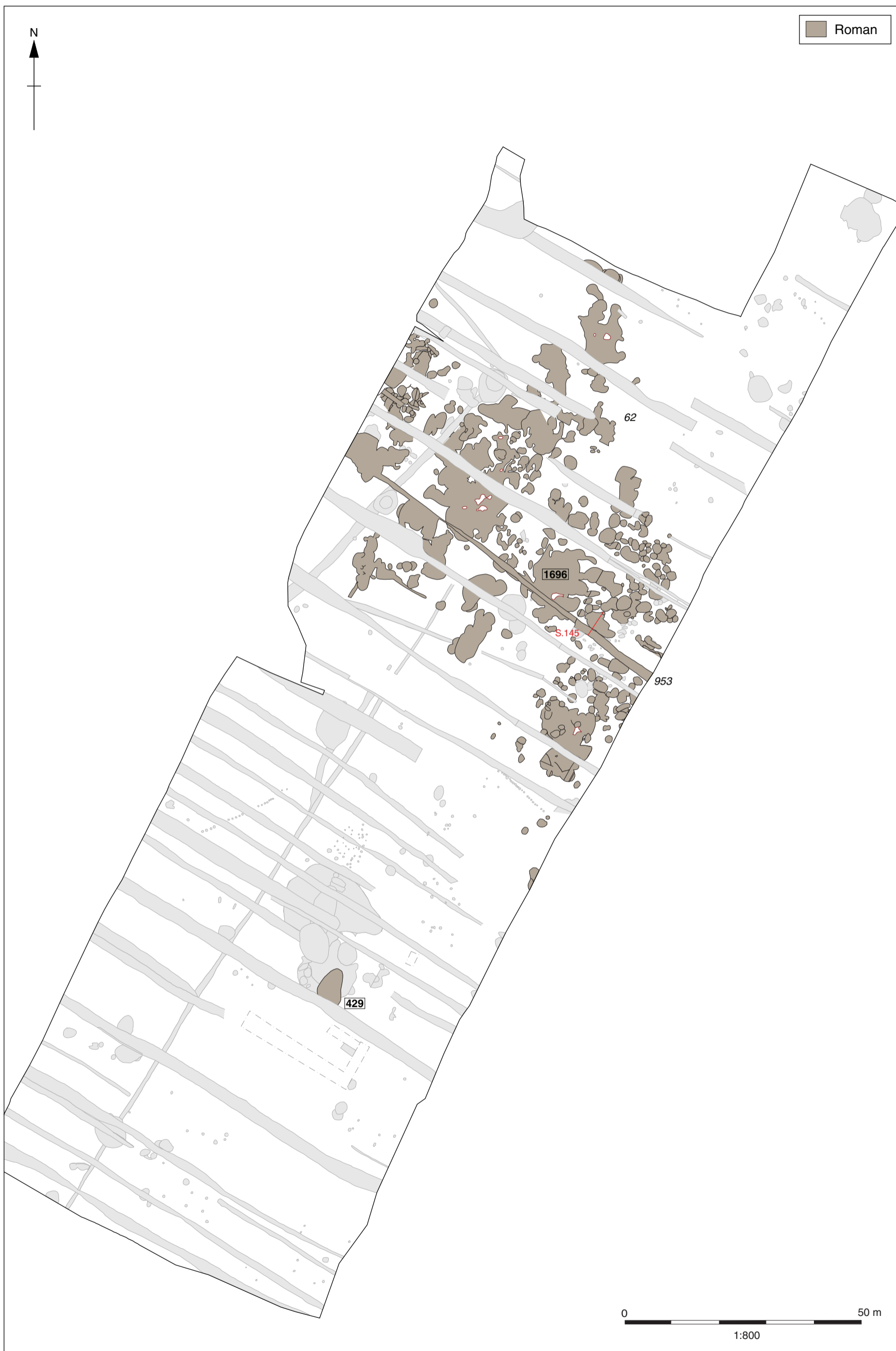


Figure 8: Roman quarry pits and ditch

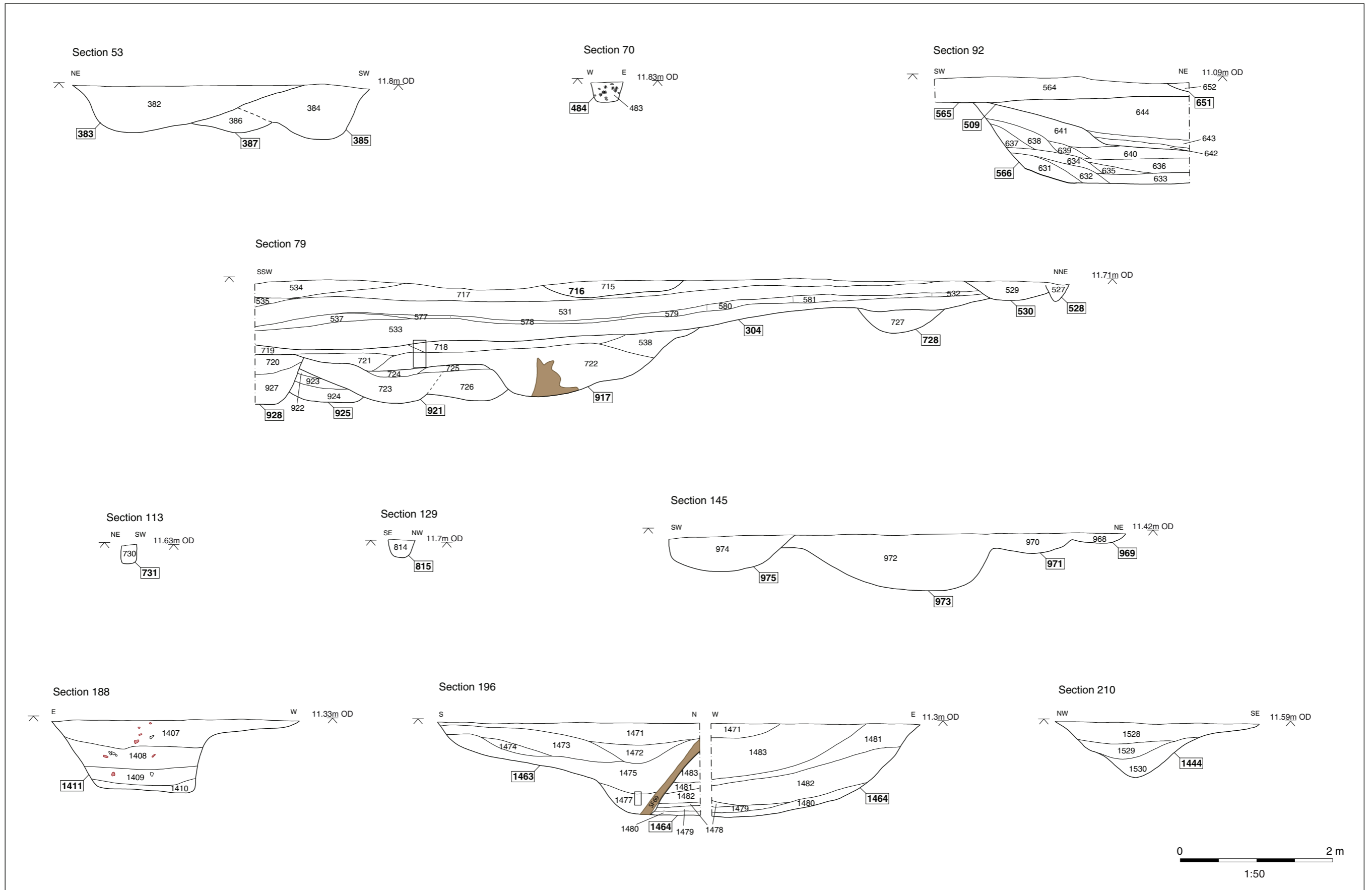


Figure 9: Selected sections. Scale 1:50





Plate 1: Bronze Age waterhole 1650, looking south (2m scale)



Plate 2: Example of revetment in waterhole 1650 (0.5m scale)





Plate 3: Bronze Age boundary ditch **1444**, looking N (2m scale)

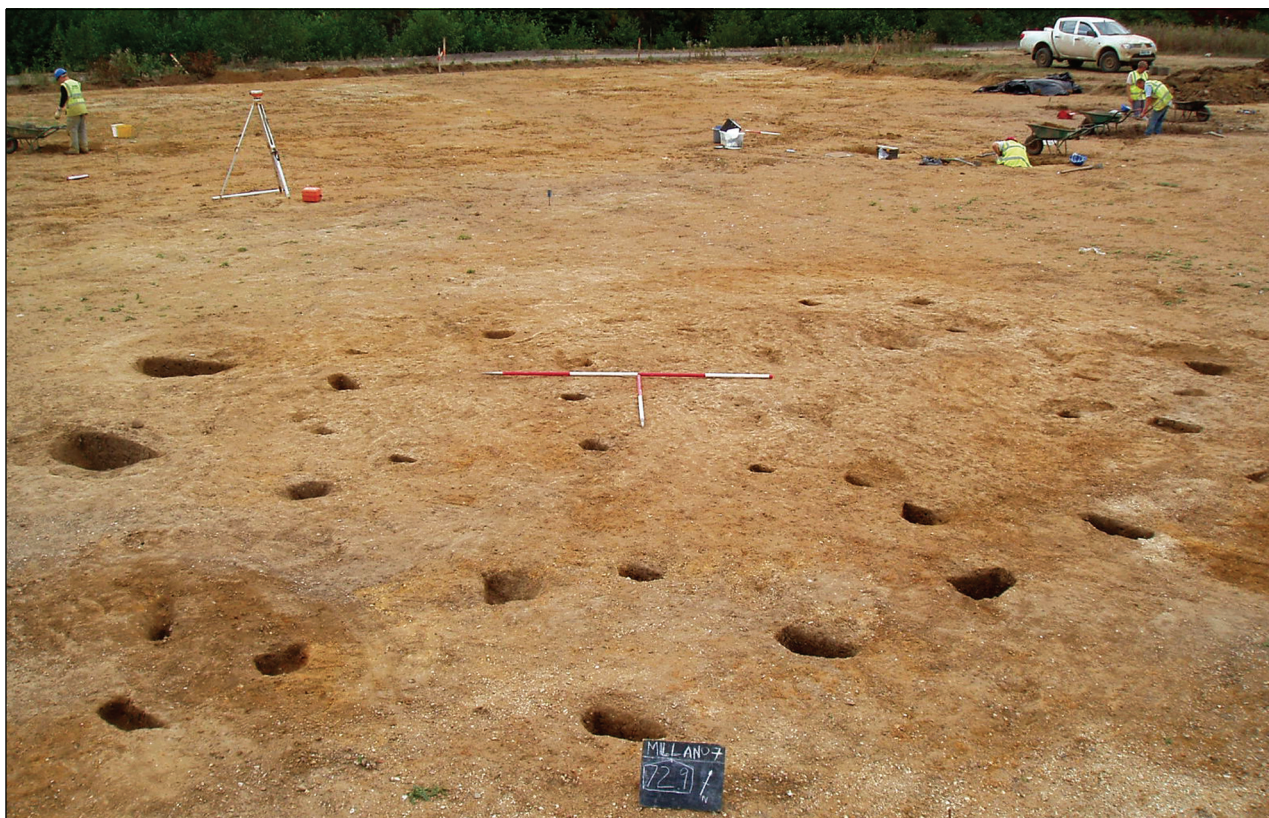


Plate 4: Bronze Age post-built roundhouse **797**, looking NW





Plate 5: Bronze Age post alignment **234**, looking W (2m)



Plate 7: Log ladder SF43 in waterhole **917** (1m)



Plate 6: Base of Early Iron Age waterhole **304** and smaller waterhole **917** to the right, looking west (2m scale)



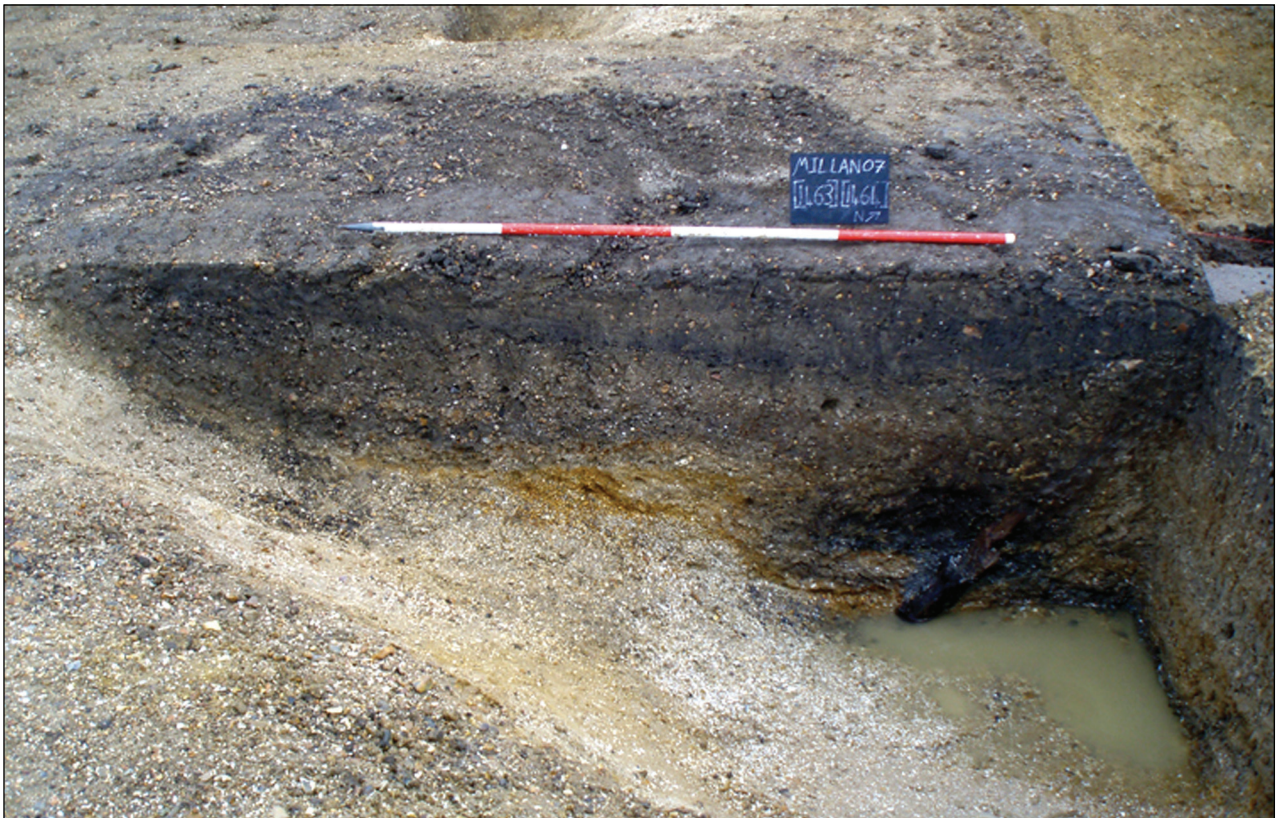


Plate 8: Early Iron Age waterhole **1464** and re-cut **1463**, looking west, with log ladder (SF69) resting against side of re-cut (2m)



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