



**EAST FIELD
Furfield Quarry
Boughton Monchelsea
Maidstone**

County of Kent

An archaeological post-excavation assessment

March 2006



MUSEUM OF LONDON

Archaeology Service

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Executive summary

This report is intended to inform the reader of the results of the excavation at the East Field, Furfield Quarry Boughton Monchelsea, Kent.

There was some evidence of Prehistoric activity on the site in the form of worked flints that were found residual in later features. There was Romano-British occupation from the Late Iron Age until the middle of the second century AD. The peak was in the middle years of the first century AD and declined quickly after *c* AD 120. The main activity was two ditched enclosures, one with substantial ditches. Buildings included a circular hut, a masonry building and two aisled buildings with large postholes. There was also evidence of iron working and a kiln.

Post-Roman activity on site was limited to a large stone building of 19th century date.

All the stratigraphic records have been analysed for this report and all the finds have been assessed. It is recommended the results of the excavation should be made public in the form of a report in a local journal. Further work, which will require analysis, is highlighted.

The report is written and structured to conform to the standards required of post-excavation analysis work as set out in *Management of Archaeological Projects* (English Heritage, 1991).

Contents

| | | |
|----------|---|-----------|
| 1 | Introduction | 7 |
| 1.1 | Site location | 7 |
| 1.2 | The scope of the project | 7 |
| 1.3 | Circumstances and dates of fieldwork | 7 |
| 1.4 | Organisation of the report | 10 |
| 2 | Historical and archaeological background | 11 |
| 2.1 | Geology and topography | 11 |
| 2.2 | Prehistoric | 11 |
| 2.3 | Roman | 12 |
| 2.4 | Medieval | 12 |
| 2.5 | Post-medieval | 12 |
| 3 | Original research aims | 14 |
| 4 | Site sequence: interim statement on field work | 15 |
| 4.1 | Introduction | 15 |
| 4.2 | Natural and topography | 15 |
| 4.3 | Prehistoric | 15 |
| 4.4 | Romano-British | 15 |
| 4.5 | Post-Medieval | 19 |
| 5 | Quantification and assessment | 27 |
| 5.1 | Post-excavation review | 27 |
| 5.2 | Site archive and assessment | 27 |
| 5.2.1 | <i>The building material (Ian Betts)</i> | 28 |
| 5.2.2 | <i>The pottery (Rupert Featherby)</i> | 31 |
| 5.2.3 | <i>The accessioned finds and bulk glass (Nicola Powell)</i> | 34 |

| | | |
|----------|---|-----------|
| 5.2.4 | <i>Bulk glass</i> | 36 |
| 5.2.5 | <i>Worked flint (Tony Grey)</i> | 37 |
| 5.2.6 | <i>The plant remains (John Giorgi)</i> | 39 |
| 5.2.7 | <i>The animal bone (Alan Pipe)</i> | 50 |
| 5.2.8 | <i>Cremated bone (Natasha Powers)</i> | 56 |
| 5.2.9 | <i>Conservation (Liz Barham)</i> | 61 |
| 5.2.10 | <i>Slag (Lyn Blackmore)</i> | 62 |
| 6 | Potential of the data | 63 |
| 6.1 | Realisation of the original research aims | 63 |
| 6.2 | General discussion of potential | 63 |
| 7 | Significance of the data | 66 |
| 8 | Publication project: aims and objectives | 67 |
| 8.1 | Revised research aims | 67 |
| 8.2 | Prehistoric | 67 |
| 8.3 | Romano-British | 67 |
| 8.4 | Post-medieval | 67 |
| 8.5 | Preliminary publication synopsis | 68 |
| 9 | Publication project: task sequence | 69 |
| 9.1 | Stratigraphic method statement | 69 |
| 9.2 | General finds | 69 |
| 9.3 | Building material method statement | 69 |
| 9.4 | Pottery method statement | 70 |
| 9.5 | Accessioned finds method statement | 70 |
| 9.6 | Worked flint | 70 |
| 9.7 | Botanical method statement | 71 |
| 9.8 | Animal bone method statement | 71 |

| | | |
|-------------|---|-----------|
| 9.9 | Graphics method statement | 71 |
| 9.10 | Conservation method statement | 71 |
| 9.11 | Photographic method statement | 71 |
| 9.12 | Documentary research method statement | 71 |
| 9.13 | Integration of publication text method statement | 71 |
| 9.14 | Project management method statement | 72 |
| 9.15 | Editing and production method statement | 72 |
| 10 | Publication project: resources and programme | 73 |
| 11 | Acknowledgements | 75 |
| 12 | NMR OASIS archaeological report form | 76 |
| 13 | Bibliography | 79 |

Table Of Figures

Front cover: the site under excavation

| | |
|------------------------------------|----|
| Fig 1: Site location | 8 |
| Fig 2: Area of investigation | 9 |
| Fig 3: 1769 Andrews and Dury map | 13 |
| Fig 4: 1870 OS map | 13 |
| Fig 5: All archaeological features | 20 |
| Fig 6: Key to Figs 7–11 | 21 |
| Fig 7: Buildings 1 and 2 | 22 |
| Fig 8: Building 3 | 23 |
| Fig 9: Buildings 4 and 7 | 24 |
| Fig 10: Building 5 | 25 |
| Fig 11: Building 6 | 26 |

Tables

| | |
|--|----|
| Table 1: Iron working evidence | 18 |
| Table 2: Site archive and assessment: stratigraphic | 27 |
| Table 3: Finds & Environmental Archive Summary | 28 |
| Table 4: Building material | 28 |
| Table 5: Date range of assemblage | 31 |
| Table 6: Breakdown by fabric | 33 |
| Table 7: Breakdown by form | 33 |
| Table 8: Summary of accessioned finds by material and period | 34 |
| Table 9: Breakdown of struck/worked flint assemblage | 39 |
| Table 10: Summary of botanical remains by subgroup | 42 |
| Table 11: Charred plant assemblages for analysis | 47 |
| Table 12: Finds and environmental general summary | 51 |
| Table 13: Contents of animal bone archive | 51 |
| Table 14: The animal bones | 52 |
| Table 15: A detailed summary of the animal bones | 54 |
| Table 16: Deposit type and disturbance | 57 |
| Table 17: Identifiable bone by body area | 58 |
| Table 18: Fragmentation | 59 |
| Table 19: Total weight of burnt bone and volume of original sample | 59 |
| Table 20: Summary of conservation work | 61 |

1 Introduction

1.1 Site location

The site lies south of Maidstone towards the area of Boughton Monchelsea. The NGR reference is 578320 151680. The site is bounded to the north by Brishing Road, to the west by Brishing Lane, to the south by a landfill site and to the east by an area of woods known as Hogstrough Shaw. Another area of woods known as Long Shaw divides the site into West field and East field (see Fig 1 and Fig 2).

The excavated area was triangular in shape measuring 212.0m (north-west to south-east) and from 124.0m to 8.0m (north-east to south-west).

1.2 The scope of the project

The current project consists of one excavation area at Furfield Quarry known as the East Field, Brishing Road, Boughton Monchelsea, Kent.

1.3 Circumstances and dates of fieldwork

The site was excavated as a condition of planning consent for residential development (MA/01/1904)

Evaluation by trial trenching took place in August 1996 (KARU 1996), this identified archaeological remains of Iron Age, Romano-British and post-medieval date in an area known as the East Field. This resulted in a specification for archaeological investigation issued by the Heritage Conservation Group of Kent County Council (KCC 2005). The Museum of London Archaeology Service (MoLAS) carried out an excavation from 06th April to 22nd July 2005.

The excavation took the form of a strip, map and record exercise. A tracked excavator removed the topsoil and subsoil. This was stored on the site in the landfill area to the south. Features were planned then investigated. This resulted in a number of features being discarded later if they were found to be non-archaeological. Most archaeological features were fully excavated. Time considerations resulted in larger features, particularly ditches, being sectioned.

Other than a period of wet weather there were no problems encountered on the site.

Following the excavation the site was to be backfilled and levelled, though this had not happened by December 2005.

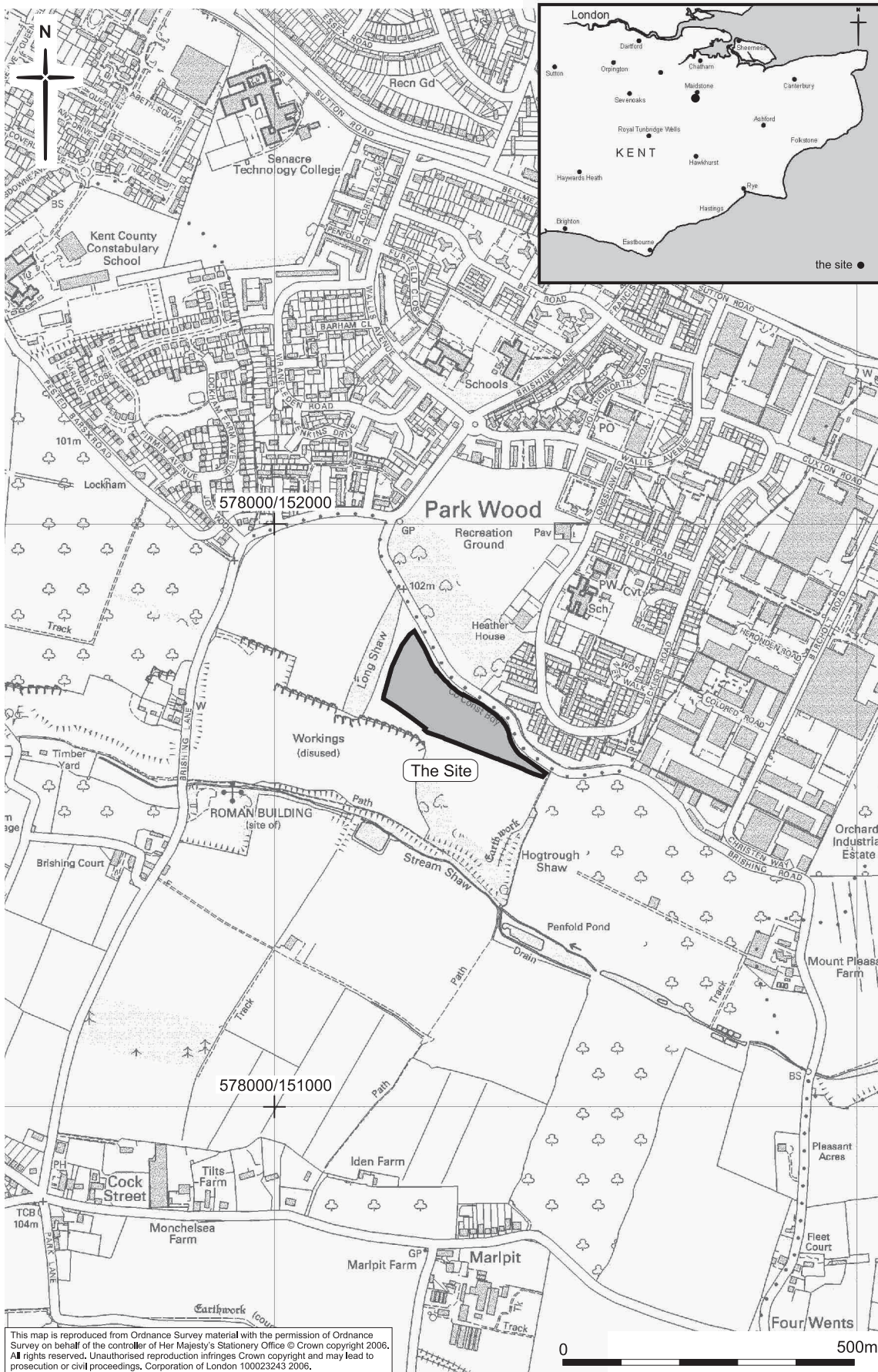


Fig 1 Site location

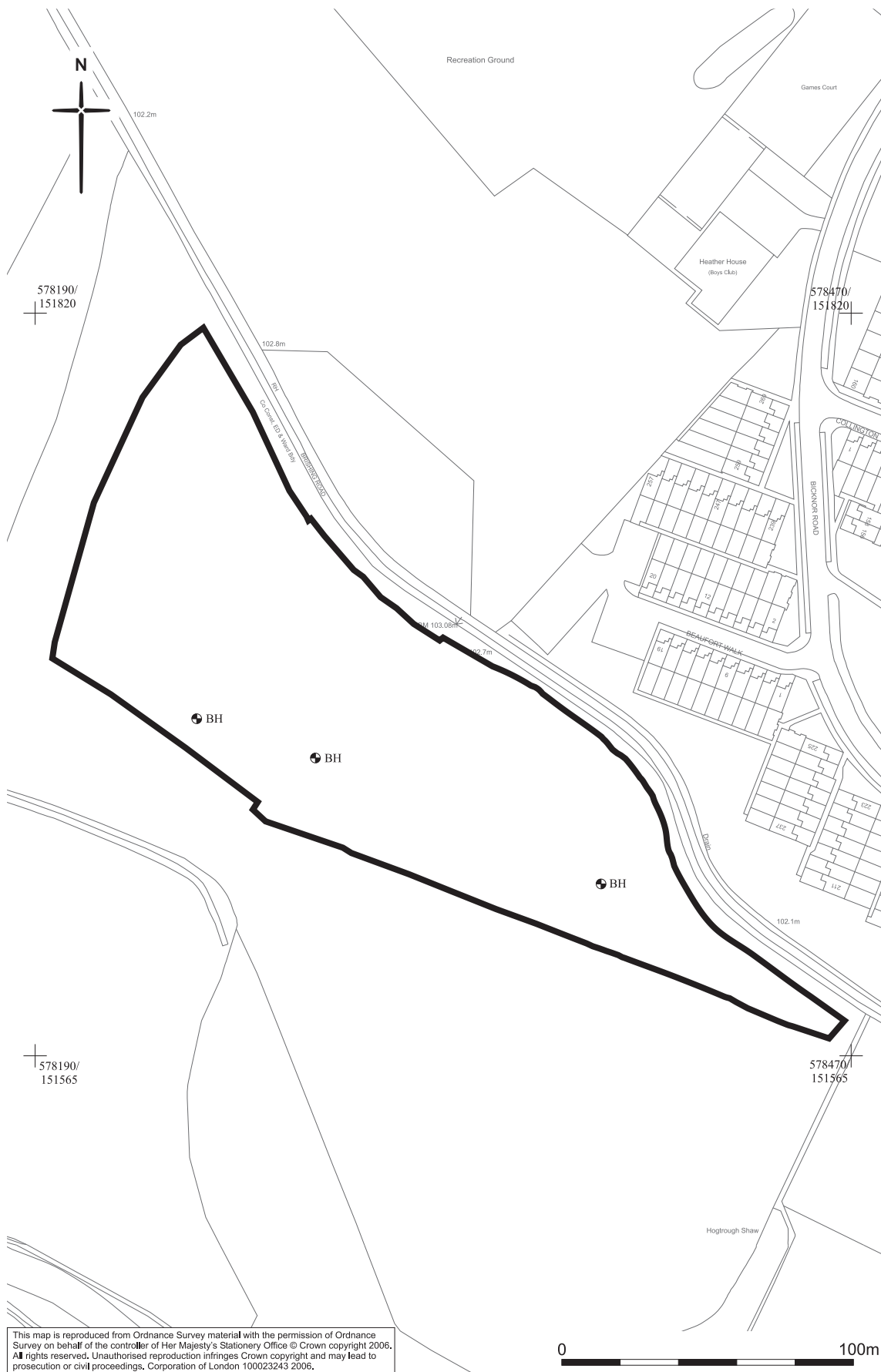


Fig 2 Area of investigation

1.4 Organisation of the report

The *Post-excavation assessment and updated project design report* is defined in the relevant GLAAS guidance paper (Paper VI) as intended to ‘sum up what is already known and what further work will be required to reach the goal of a well-argued presentation of the results of recording and analysis’ (VI/1).

The principle underlying the concept of post-excavation assessment and updated project design were established by English Heritage in the *Management of Archaeological Projects 2* (MAP2), (1991). More recent GLAAS guidance has emphasised the need for this stage to be seen as ‘brief and transitional’, the document acting as a ‘gateway’ to further analysis and eventual publication (EH, GLAAS, 1999 VI/1)

2 Historical and archaeological background

2.1 Geology and topography

The underlying geology is Lower Greensand with Hythe Beds (Geological Survey of Great Britain Sheet 288). The rock from the Hythe Beds has been quarried for building material in the past, and consists of bands of ragstone and softer ‘hassock’ or sandstone.

The site is on the north side of a shallow valley at *c* 100.0m OD. The land falls towards the south where there is the Loose Stream, which is also known as Little Brishing Stream. The southern part of the site was formally a quarry, and has been infilled.

2.2 Prehistoric

Other than a few chance finds the area is not noted for Prehistoric remains. A Neolithic polished flint axe (TQ 75 SE 3) was found *c* 500m to the north-west and several Bronze Age/Iron Age brooches (TQ 75 SE 11) were found *c* 400m to the south.

Along the south-eastern edge of the site, there are the remains of substantial earthworks provisionally dated to the Late Iron Age. The earthworks are oriented approximately north–south, and consist of a bank *c* 1.5 to 2m high with a ditch *c* 1.5 to 2m deep to the east. The bank also runs east–west along the northern side of the Loose stream and is 6–8m high (information from N Elsdon MoLAS). These have not previously been investigated and are probably associated with the ‘Loose oppidum’ based around Quarry Wood, *c* 1.5km to the west. There are other earthworks *c* 800m to the south, and *c* 1.9km to the north-west.

The oppidum¹ at Quarry Wood is a Scheduled Ancient Monument (Kent number 153) and forms an enclosure covering *c* 12 hectares (Kelly 1971, 55). This enclosure lies in a relatively low-lying position on the southern side of the Loose, with poor defensive qualities. Interpretation of its function mainly relies on its form and the distribution of Late Iron Age finds, particularly coins, in the surrounding area. Excavations in 1963–68 produced abraded pottery of Late Iron Age (Belgic) date from the construction of the bank (Kelly 1971, 60). Pottery recovered during quarrying on the northern edge of the enclosure in 1911 (Kelly 1971, 78–79) is from what were probably pits, and appears to be of 1st century BC and (mostly) 1st century AD date (Rodwell 1976, 235).

¹ *Oppidum*: oppida are prehistoric European proto-towns; Cunliffe and Rowley (1976, preface) describe them as ‘large nucleated settlements, defended or undefended ... essentially centres within which certain services were concentrated, for example, exchange, redistribution, manufacture and, no doubt, the legal, administrative and religious systems ...’.

2.3 Roman

The Roman road from Maidstone to Hastings (Margary no 13) is thought to run along the south edge of the site. There is Roman activity along this alignment, with a walled cemetery (TQ 75 SE2) found in 1842 at Pested Bars *c* 700m to the north-west and a substantial bath house (TQ SE 1) found in 1841 *c* 400m to the south-west. A Roman building (TQ 75 SE 20) was suspected of being located in the East Field as fragments of ragstone, Roman brick, tile and pottery were found in 1933 when it was ploughed. There is a report of a Roman building being found at 'Bell Lane' near Furfield Quarry *c* 1965 (Albert Daniels *pers comm*). This is not in the Kent SMR so its location cannot be confirmed, but this report may merit further investigation.

2.4 Medieval

The area was mainly wooded and any open land would have been used for agriculture.

2.5 Post-medieval

The earliest map, the Andrews and Dury '*Topographic map of the County of Kent*' published in 1769, shows the area north of the Loose stream as covered by a large wood (see Fig 3). The 1870 OS map shows this wood, now known as Park Wood, had decreased in size. The area north of the stream was clear with only three patches of woodland remaining. Two of these are Long Shaw and Hogtrough Shaw and the third, Furfield Hole, may suggest some small scale quarrying had taken place (see Fig 4).

Later maps show that the Furfield quarry works removed a large part of the field north of the stream during the early 20th century. During the post-war era, housing has been steadily encroaching the site, with a large housing estate known as Park Wood now located to the north of Brishing Road.

3 Original research aims

The objectives and research aims of the fieldwork were;

(i) to clarify the nature, extent, date, phasing and character of the Iron Age and Romano-British activity

(ii) to reveal, excavate and record any remains associated with the earthworks noted just beyond the south-eastern end of the site.

(iii) to reveal, excavate and record any other archaeological remains surviving within the eastern end of the East Field

(iv) to determine the date, character, extent and function of the probable post-medieval building revealed during the evaluation (KARU 1996)

4 Site sequence: interim statement on field work

4.1 Introduction

After removal of overburden the features revealed within the areas of excavation were planned and the majority of large features were partly excavated (by hand-dug slots) and then recorded. Features deemed to be of special interest were fully excavated.

An overview of all archaeological features recorded on the site is presented on Fig 5 and a key to Figs 7–11 (which detail individual features of interest) is shown on Fig 6.

4.2 Natural and topography

The natural consisted of orange clay with outcrops of sandstone and ragstone. The site was situated on a relatively flat area around a disused quarry.

4.3 Prehistoric

Although Prehistoric flints dating from the later Mesolithic to Neolithic were found on the site, these were residual in later features. The only significant find was an arrowhead and two end scrapers [1367] that were deliberately buried in a later posthole [1368] with the arrow point uppermost. Examples of collection or deposition of earlier material are rare but not unknown, though usually they are of larger objects such as the stone axe found in a Roman building at the Beddington villa site (Howell 2005 61).

The earliest features on site were a series of sinuous ditches. Although these were generally scattered across the whole site, there was a concentration to the north-west. They tended to be quite shallow and did not contain any dateable material. The ditches probably represent Prehistoric enclosures possibly for stock.

4.4 Romano-British

There were two ditched enclosures.

Enclosure 1

This was formed by a ditch that ran NW to SE with returns at either end. It measured *c* 208.0m long and was over 94.0m wide, though the full dimensions are unknown as it continued to the north-east beyond the site limits of the excavation. The surviving ditch was up to 1.0m wide in places and varied in depth from 0.10 to 0.50m. The majority of the pottery recovered from the infilled ditches was dated –75 BC to AD 120. The eastern return appears to have been in filled at a later date, however, as the pottery recovered was dated AD 70–275. This discrepancy could also suggest either that there was an unrecognised pit of a later date in one of the sections excavated across the ditch, or that this is not actually part of enclosure 1.

Enclosure 2

This was a smaller area, but with much more substantial ditches. The ditches were 3.0 to 3.50m wide and up to 1.50m deep; the dimensions could suggest this was a defensive enclosure. The ditch ran from NW to SE, had returns at either end and formed an enclosure that was 123.0m long and over 46.0m wide. Its full dimensions are unknown as it continued to the north beyond the limits of the excavation. This enclosure was dated to AD 120-160. Some of the sections excavated across this ditch showed evidence of a recut that contained slightly later pottery dated to AD 140-200.

At some stage the area enclosed was increased. The original ditch on the south-eastern side was infilled and a new ditch a further 14.0m to the south-east was dug. This ditch was not continuous; a gap towards the north-east may have been an entranceway. The exact date at which the eastern extension was added to the enclosure is not known; the pottery recovered was dated AD 100-120.

There are a number of buildings on the site; the following are probably associated with enclosure 1.

Building 1 (Fig 7)

The remains of a round house were identified (Grp 6); these took the form of eaves and a drip gully [481] for a building *c* 12.0m in diameter. Two large postholes [478] and [479] probably form an entranceway 4.25m wide on the SE side. It is possible all other traces of buildings were lost through later truncation. Dating suggests this building was early Roman, AD 45-100, so it may possibly be associated with enclosure 1.

Building 2 (Fig 7)

A masonry building (Grp 7) with flint foundations measuring *c* 13.20m (NW-SE) x 14.20m (NE-SW) and continuing towards the NE beyond the limit of excavation. There is no obvious dating but it is possibly early Roman in date, as it probably truncates the roundhouse (Grp 6) that was dated AD 45-100, and probably truncates a NE to SW running ditch dated AD 50-120. In both these cases the exact relationship cannot be proved by the archaeology but appears logical. Again this building is probably associated with enclosure 1.

A pennanular ditch [556] (Grp 36) measuring 3.44m in diameter may be the remains of a small building. A large amount of pottery dated AD 40-400 was recovered.

A very truncated ditch [573] (Grp 324) may also be the remains of a pennanular ditch, this was undated but may be Late Iron Age.

The following buildings are associated with enclosure 2.

Building 3 (Fig 8)

A building (Grp 1) with postholes and sill beams measured 11.50m long x 8.40m wide. This building is poorly dated to AD 40-400 but, as it appears to respect the eastern corner of enclosure 2, was probably in use at the same time as the ditch (ie before AD 100-120, when it was infilled).

Building 4 (Fig 9)

A double row of large postholes (Grp 5) formed a structure 31.40m long and 5.50m wide. Although dated by pottery to –75 BC to AD 120, a more likely date may be AD 50-120. Several smaller postholes to the east may also be parts of buildings or associated structures, though no obvious alignments were visible. The shape and size of this building seems a little odd; however, a posthole building of roughly similar dimensions (40m x 7.5m) was found at Crickley Hill, Gloucestershire (Harding 1974, 49 fig 13), though this was dated to the 5th century BC.

Building 5 (Fig 10)

An aisled building (Grp 3) with 8 large postholes on each side and measuring 17.04m long x 7.36m wide. Although there is no evidence of any outer wall, there is a rubble infill in a nearby ditch, which may be the remains of the outer wall. This would make the building around 12.50m wide. The presence of rubble suggests the ditch had been backfilled to support a wall and the building was entered from the NW side. This building was dated AD 120-250 and had been built after the eastern return ditch of enclosure 2 was infilled (AD 100-120).

Building 6 (Fig 11)

An aisled building (Grp 2) with 6 large postholes on each side, with smaller postholes forming the outer walls on three sides. Some of these were definitely angled suggesting they were intended to support inner walls. This building was 17m long x 12.60m wide with access from the NW side. The nave is 7.20m wide and was possibly subdivided as 4 small postholes (168, 154, 96, 88) run its length. Although dated by pottery to –75 BC to AD 120, an early Roman date of AD 50-120 is more likely.

Another Roman feature was a structure with two parallel masonry walls, and there may have been a third located further to the NW. This structure was *c* 5.50m long (E/W) by *c* 5.0m wide (N/S). It was originally thought this structure was a corn drier, with the walls supporting a raised floor allowing hot air to pass beneath. Roman corn driers can be found with a wide range of ground plans and sizes, and it seems likely some of the larger structures were actually for malting grain. The environmental samples do not support the initial interpretation as a corn drier (or malting oven), and there was no definite evidence for a stokehole. The masonry was almost entirely robbed and none of the above ground structure survived. At present the function of this building/structure remains unknown, but the presence a possible kiln/hearth [443] (see below) may be significant.

Several pits contained traces of *in situ* burning and are possibly hearths. Slag/hearth lining was recovered from four pits and hammerscale was found in some of the environmental samples.

| Slag/hearth lining | | |
|--------------------|-----|---------|
| Context | Cut | Feature |
| 913 | 276 | Pit |
| 984 | 498 | Pit |
| 985 | 498 | Pit |
| 1000 | 650 | Pit |

| | | |
|--------------------|------|------------------------------|
| 797 | 798 | Slot in ditch 219 |
| Hammerscale | | |
| 1026 | 478 | Pit |
| 1200 | 00 | 'corndrier' area |
| 1320 | 1319 | Pit |
| 1335 | 1317 | Pit |
| 1358 | 1359 | Slot in ditch 602 |
| 1377 | 1378 | Slot in ditch 600 |
| ?? | 1395 | Pit |
| 1396 | 1395 | Pit |
| 1419 | 1418 | Slot in ditch 618 |
| 1421 | 1420 | Pit in corndrier' area |
| 1423 | 1424 | Slot in ditch 192 |
| 1425 | 1436 | Slot in roundhouse ditch 556 |
| 1447 | 569 | Pit |

Table 1: Iron working evidence

There were no obvious concentrations to suggest where the smelting was taking place. The four pits with slag or hearth lining are widely scattered, as are the other pits or ditch slots that contained hammerscale.

Five features contained burnt human bones (see 5.3.8 below), two of which also included the remains of pottery vessels. All the pits are shallow/highly truncated and contained pyre debris so are not the actual sites of the cremations. The urned cremations probably contain the remains of adults.

A large circular feature (Grp 190) may have been a well, dated AD 50-120, that was truncated by the enclosure 2 ditch.

A pit [498] (Grp 18) contained a large amount of early pottery dated –75 BC to AD 50 and AD 10-50. Burnt clay with wattle impressions, found in this pit, may be from a kiln or hearth. It is possible therefore to exist that the pottery is from a kiln located on the site. Several of the excavated ditch sections also had large amounts of pottery and this may better locate the kiln.

Some distance from this pit another pit [443] (Grp 43) also contained burnt daub and wattle that may be the remains of a kiln. Interestingly this pit was associated with the robbed masonry structure mentioned above.

Scattered across the site are a number of undated postholes that may be fence lines or possibly the remains of other buildings. The extensive truncation has removed any meaningful alignments that would confirm this.

4.5 Post-Medieval

The only feature that appears to be post-Roman in date is a masonry building (Grp 4).

Building 7 (Fig 9)

This building was rectangular with well-built ragstone walls and external buttresses on the NW, SE and SW sides, measuring 18.0m long x 7.50m wide. A small amount of pottery and peg tile recovered was dated 1800-1900 AD. A small amount of Roman pottery and a coin dated 270-73 is intrusive. The buttresses suggest this was a fairly substantial farm building. This building is not on the earliest OS map dated 1870, suggesting by this time it did not exist, the stone having been removed and reused elsewhere.



Fig 5 All archaeological features



Fig 6 Key to Figs 7–11

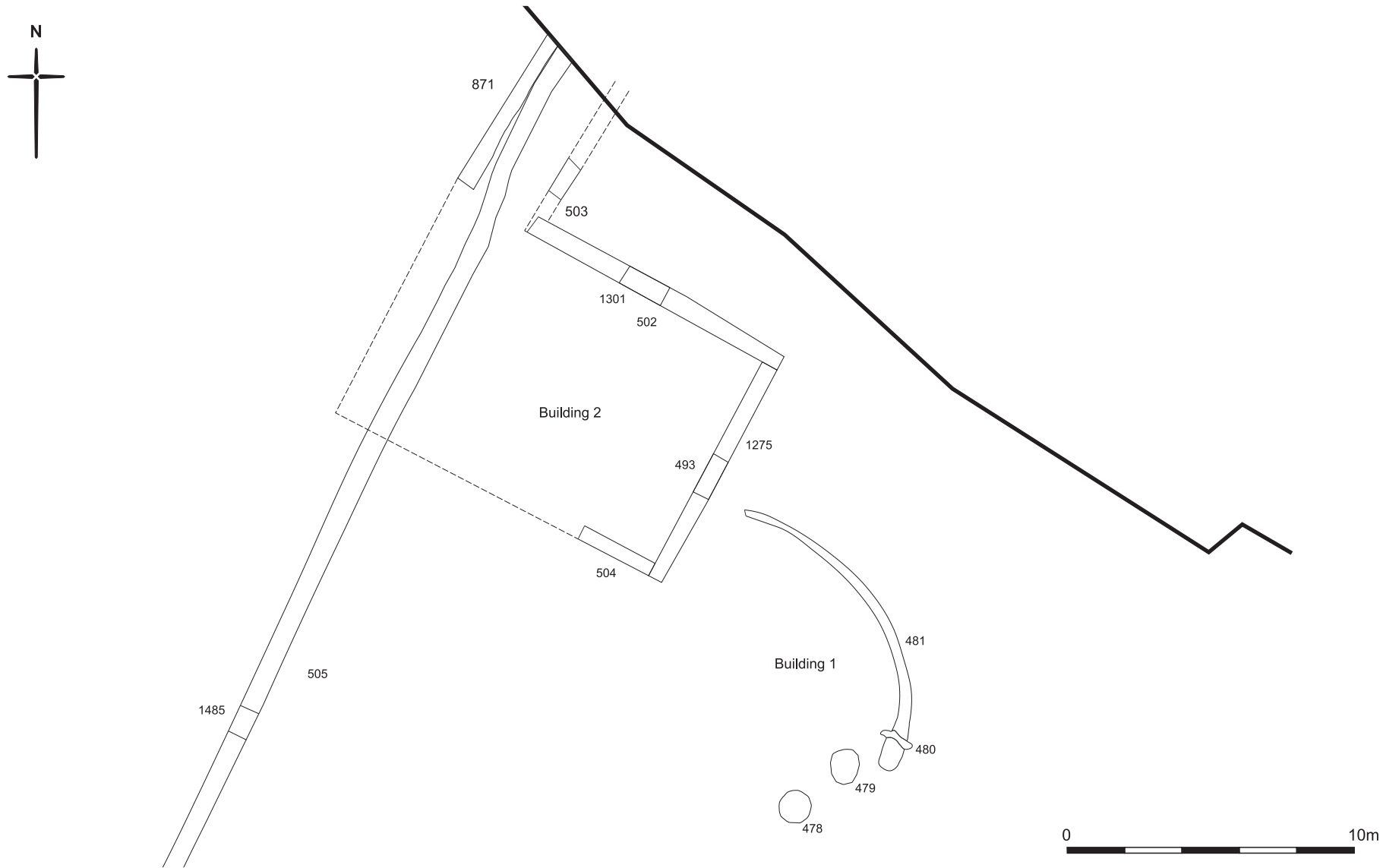


Fig 7 Buildings 1 and 2

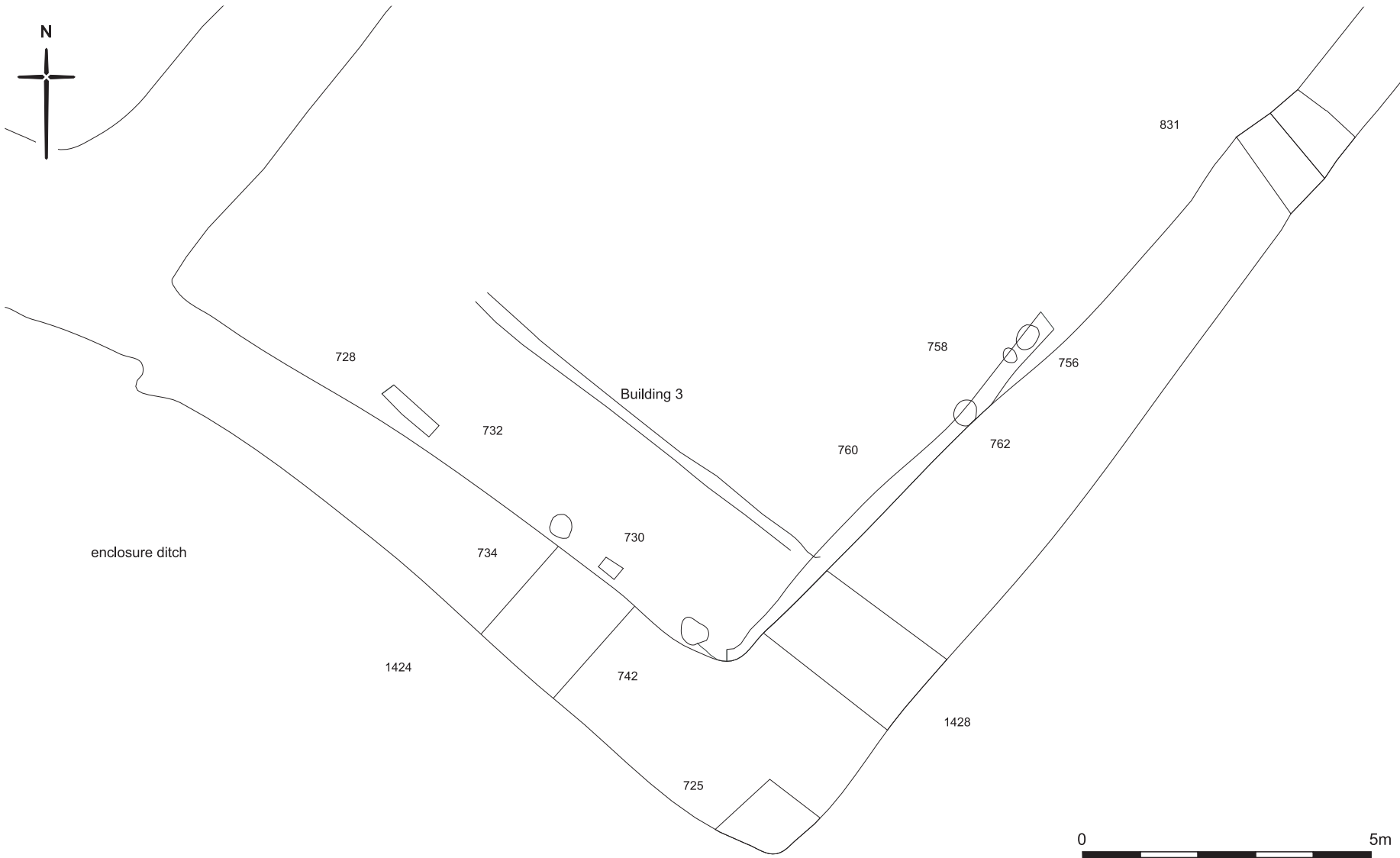


Fig 8 Building 3

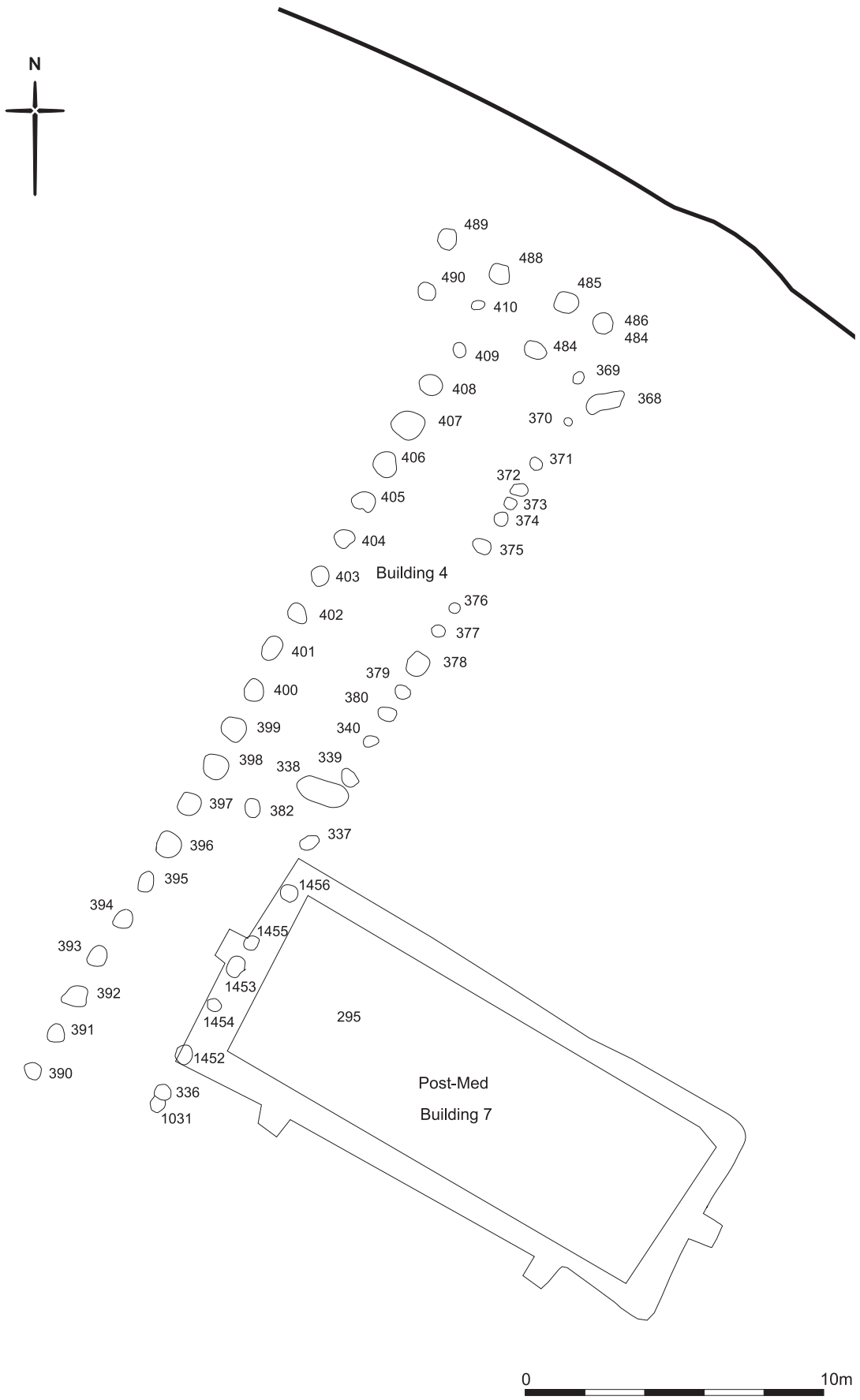


Fig 9 Buildings 4 and 7

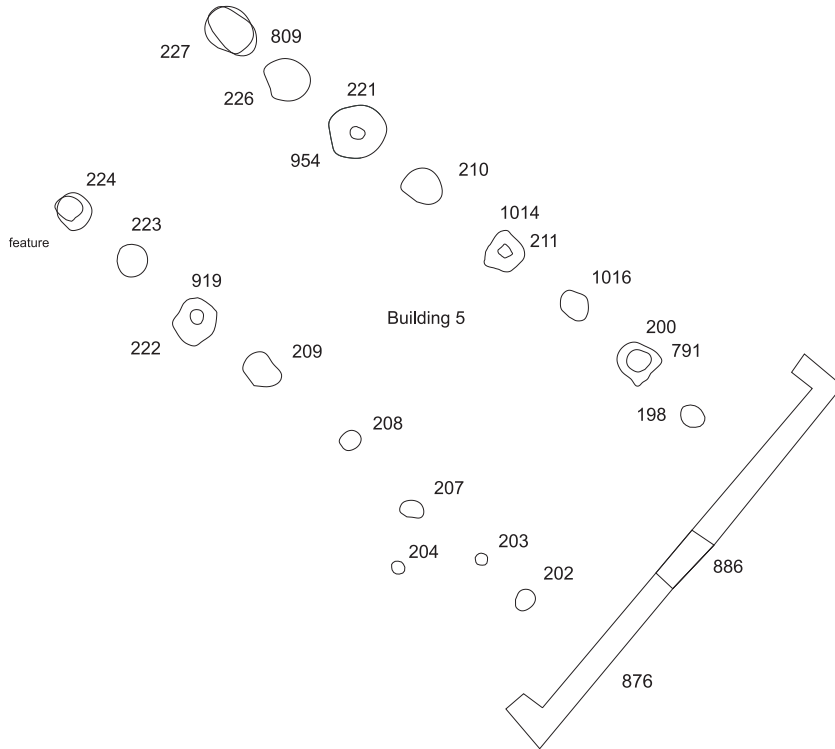


Fig 10 Building 5



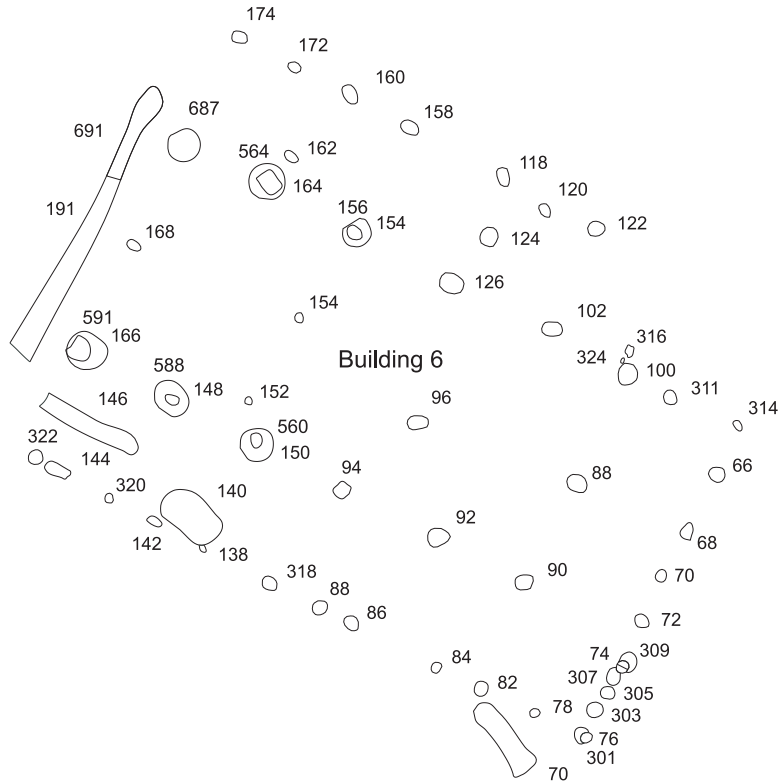


Fig 11 Building 6

5 Quantification and assessment

5.1 Post-excavation review

The following tasks have been completed for the post-excavation analysis:

- site matrix checked
- sub grouping finished
- provisional groups defined
- all plans digitised
- provisional ceramic dating done
- specialist assessments finished

The following tasks need to be carried out during the next step of analysis:

- establish final group structure
- establish land use sequence and diagrams
- cross reference and index photographs
- establish final dating
- specialist work

5.2 Site archive and assessment

| Type | Description | Quantity | Notes |
|-------------|---------------|----------|---|
| Contexts | Excavation | 1325 | |
| Plans | 'A4' 1:20 | 22 | plus a further 12 rough plans |
| Sections | 'A4' | 41 | |
| Matrices | | Yes | Digital and paper copies |
| Photographs | Colour B/W | 174 | Total number of slides (includes duplicate images) |

Table 2: Site archive and assessment: stratigraphic

| | |
|--|--|
| Building material | Six small crates and 1 shoe box of ceramic building material (bulk of material discarded after assessment). Total 37.89kg c 6 shoe boxes to be retained |
| Prehistoric pottery | |
| Roman and Late Iron Age pottery | 4159 sherds 30.014 kgs |
| Post-medieval pottery | |
| Accessioned finds | 2 ceramic, 9 glass, 8 iron, 2 stone, 2 copper alloy, 1 lead alloy bags |
| Bulk glass | 5 bags |
| Flint | 91 pieces (one standard box) |
| Animal Bone | Estimated 804 fragments; total 1.110 kg, 3 archive |

| | |
|-------------------|---------------------|
| | quality 'shoeboxes' |
| Human Bone | |

Table 3: Finds & Environmental Archive Summary

5.2.1 The building material (Ian Betts)

| Material | Count | Count as % of total | Weight (kg) | Weight as % of total |
|------------------|-------|---------------------|-------------|----------------------|
| Stone | 280 | 42.0 | 16.69 | 44.0 |
| Daub | 244 | 37.0 | 4.22 | 11.1 |
| Roman ceramic | 138 | 21.0 | 15.47 | 40.8 |
| Post-med ceramic | 2 | Below 1% | 70.0 | 0.2 |
| Mortar | 2 | Below 1% | 1.44 | 3.8 |
| Total | 666 | | 37.89 | |

Table 4: Building material

5.2.1.1 Introduction/methodology

All building material has been recorded using the standard recording forms used by the Museum of London. This has involved fabric analysis undertaken with a x10 binocular microscope. The information on the recording forms has been added to an Oracle database.

When possible MoL fabric numbers have been given which allows comparison with other sites in Kent. One fabric type could not be matched with any degree of confidence with the existing fabric collection; this has been given new number K1.

5.2.1.2 Pre-historic daub

There are two small (10gm) fragments of orange and brown coloured daub from context [442]. The remainder of the pre-historic daub came from a pit containing what has been provisionally identified as kiln debris ([984], [985], [986], [993], [995]). Many of these have a curved outer surface suggesting they are from some kind of hearth/kiln structure. One fragment ([986]) has a wattle mark suggesting is formed part of a wattle and daub structure, perhaps a fence around the hearth/kiln.

5.2.1.3 Pre-historic stone (building material?)

Found associated with the kiln debris were various fragments of Kentish rag. Some fragments have a slight pinkish tinge, suggesting they may have been burnt. Many others are brown in colour, but this is probably the result of natural weathering rather than the effects of heat. The natural geology of the site is Kentish ragstone and the softer Hassock beds, so it seems reasonable to suppose that all the Kentish ragstone on the site is from rock outcrops or in surface deposits on the site. The weathered nature of much of the Kentish ragstone from the site suggests it came from surface deposits or exposed outcrops, rather than being quarried.

One rectangular shaped block of Kentish ragstone (82mm in breadth by 45–55mm inn thickness) has two smoothed sides and a smoothed top ([986]). It may have been used as a whetstone, or for some other purpose. A very similar stone (68–87mm in breadth

by 54–55mm in thickness) was found in the same context, again with a smoothed edge.

5.2.1.4 Roman stone building material

Stone tesserae

Three square shaped pieces of Kentish ragstone ([1], [685], [887]) may have been used as tesserae.

Rubble

There are a large number of fragments of Kentish ragstone, mostly showing signs of weathering. As discussed above these are probably from surface deposits or exposed rock outcrops. One fragment ([699]) has what appears to be crude cut marks along one face, perhaps a rough attempt at shaping.

5.2.1.5 Roman daub and fired clay

A large amount of daub was found associated with Roman ceramic brick and tile. Most has a very similar fabric comprising a very fine sandy/silty clay with micaceous inclusions. A notable exception are a number of very abraded fragments from contexts [1272] and [1301] which contain common small white calcium carbonate inclusions.

Very few fragments have any sort of feature apart from a crudely smoothed top surface, so their purpose is uncertain. There is evidence, in the form of grey cores, for some fragments having being burnt.

From context [1341] is a fragment of fired clay. It is possible this may be Prehistoric rather than Roman in date.

5.2.1.6 Roman ceramic building material

5.2.1.6.1 FABRICS

Early Roman fabrics

2454, 3018, 3226, K1

Tiles in fabric 3226 have been found on a number of villa sites in north-west Kent as well as in small quantities in London. The kiln producing these tiles, which was presumably located somewhere in north-west Kent, seems to have been in operation around AD 70–100. This agrees well with the dating of the tiles in this fabric from KT-BMS05.

The tiles in fabric 2454 are believed to have been made at Eccles villa around AD50–80, the origin of the silty tiles in fabric 3018 and those in K1 are currently unknown. The evidence from the site suggests the latter are probable also 1st century, or possible early 2nd century, in date.

5.2.1.6.2 FORMS

Tesserae

Fabric types: 3226, K1

There are a number of square shaped blocks of typical tessera size from contexts [8120], [1221], [1254] and [1408]. None have definite signs of wear or of mortar

attached to each of the four sides so their identification as tesserae is not certain. If they are tesserae then they presumably come from a plain red tessellated pavement.

Roofing tile

Fabric types: 2454, 3018, 3226, K1

Both tegulae and imbrices are present. There is only one fragment of roofing tile (an imbrex) in Eccles area fabric 2454 ([1096]). The only other tile from the site in fabric 2454 is a small abraded unidentified tile from context [1440].

Flue tile

Fabric type: 3018

The only direct evidence for a hypocausted building on or near the site came from context [699]. This produced two pieces of combed box-flue tile.

Brick

Fabric types: 3018, 3226, K1

No complete bricks survive, but their thickness: 3018 (35–44mm), 3226 (28–40mm) and fabric K1 (37–45mm) would suggest they are either bessales, pedalis or of lydion type. One markedly thicker brick was found in context [1203] in fabric 3226 (55–60mm). This may be part of a bipedalis or sesquipedalis. These large bricks were principally used to cap columns of pilae bricks in the floor of hypocaust heating systems.

Markings on tiles and bricks

Signature marks

Two tiles have part of a single semi-circular signature mark. Similar signatures have been found on tiles from numerous other sites in Roman Britain.

5.2.1.7 Post-medieval ceramic building material

5.2.1.7.1 FABRICS

Undated fabric

3201

5.2.1.7.2 FORMS

Peg roofing tile

Fabric type: 3201

There is a solitary fragment of peg tile from context [1409]. A possible peg tile, although much abraded, was found in context [1254].

Red brick?

There are what may be either sandy daub or post-medieval brick (fabric 3046) from context [1409]. Both are small, reused, mortar covered fragments of uncertain size.

5.2.1.8 Assessment work outstanding

None.

5.2.2 The pottery (Rupert Featherby)

5.2.2.1 Roman pottery

5.2.2.1.1 SUMMARY/INTRODUCTION

There are 4159 sherds of Roman pottery from 180 contexts, of which 151 are small in size (less than 30 sherds), twenty-two and medium (30 to 100 sherds), six and large (101 to 500 sherds) and one very large (500+), one context, [1410], also contained three sherds of post-Roman pottery, dating AD 1830–1900. The sherds are generally small to medium sized with only a small number of sherds being abraded.

5.2.2.1.2 METHODOLOGY

The pottery was spot-dated using standard MoLSS methods. It was quantified by sherds, estimated number of vessels (ENV), rows and weight and the data entered into the MoLAS/MoLSS Oracle database. Furthermore, because this site dates to the Iron age/Roman transition period estimated vessel equivalents (EVE) have been recorded to allow for wider comparison. As the site is in Kent, the fabric series devised by the Canterbury Archaeology Trust (CAT) has been used where appropriate.

5.2.2.1.3 DISCUSSION

Table 5 below shows the ranges of dates for KT-BMS05. One hundred and forty-six contexts, approximately 80%, date to the Late Iron Age/early Roman period and of these, 71 belong to the Late Iron Age and 75 belong to the early Roman. Twenty-one contexts date to the late 2nd/3rd centuries and thirteen, approximately 10%, contain either unsourced fabrics or single sherds and are therefore less secure for dating purposes.

| Count of Contexts | Late Date | | | | | | | | | | | | | | | Total | |
|-------------------|------------|---|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|-----|
| | Early Date | 0 | 25 | 50 | 70 | 100 | 120 | 140 | 150 | 160 | 175 | 200 | 250 | 275 | 300 | | 400 |
| -100 | 1 | | 3 | | | | | | | | | | | | | 4 | 8 |
| -75 | | 4 | 15 | 6 | 5 | 19 | | | | | | | | | | | 48 |
| -70 | | | | 1 | | | | | | | | | | | | | 1 |
| -50 | | | 1 | 1 | | | | | | | | | | | | | 2 |
| -25 | | 1 | | | | 1 | | | | | | | | | | | 2 |
| 0 | | | 5 | 1 | 1 | 5 | | | | | | | | | | | 12 |
| 10 | | | 1 | | | | | | | | | | | | | | 1 |
| 40 | | | | 1 | 5 | 2 | | | | | | | | | | 1 | 10 |
| 45 | | | | | 4 | | | | | | | | | | | | 4 |
| 50 | | | | 7 | 14 | 12 | | | | | 3 | | | 1 | 5 | | 42 |
| 60 | | | | | 1 | | | | | | | | | | | | 1 |
| 70 | | | | | 16 | 6 | | | | 1 | 1 | | 5 | | 1 | | 30 |
| 100 | | | | | | 2 | | | | | | | | | | | 2 |
| 120 | | | | | | | 1 | 2 | 1 | | 7 | 3 | | | | | 14 |
| 140 | | | | | | | | | | | 1 | | | | | | 1 |
| 150 | | | | | | | | | | | | | | | | 2 | 2 |
| Total | 1 | 5 | 25 | 17 | 46 | 47 | 1 | 2 | 1 | 1 | 12 | 3 | 5 | 1 | 13 | | 180 |

Table 5: Date range of assemblage

5.2.2.2 Fabrics

5.2.2.2.1 IMPORTED WARES

Imported wares represent only 1.6% of the assemblage by sherd count, which is relatively surprising, considering the site's closeness to the Medway harbour. Samian comprises the majority of imported wares at 1.1%, with central Gaulish samian, dating AD 120–250, being the most common. Only four sherds of amphora were identified with the rest of the imported fabrics of Gaulish origin being either central or east Gaulish or colour-coated wares. This 'limited' range of origin for imported fabrics appears to be consistent with other sites within the Medway area (Pollard 1988, 36-9)

5.2.2.2.2 DISCUSSION

Table 6 below shows the breakdown of all fabrics from KT-BMS05. Tempered wares are the most common group at 74.8% by sherd count with oxidised wares being the next most common at 12%. It should be noted that the figure for tempered wares may be artificially high as it includes a range of sandy fabrics but because the CAT codes for the Iron age do not distinguish between an oxidised or reduced fabric, further specification is difficult. The most common tempered fabric is CAT B9.1, a coarse sandy ware with glauconite, at 33.8% by sherd count of this group. CAT B1.1, a fine/coarse grog-tempered ware was the next most common at 27.1%. Furthermore, these two fabrics are also the most common within the whole assemblage, 25.3% and 20.3% respectively, by sherd count. The dominance of CAT B9.1 is expected given the proximity of the site to the Medway Valley, where glauconite tempered wares are common. However, the dominance of grog-tempered over flint tempered wares would indicate ceramic traditions more in common with west Kent rather than east Kent, despite its position on the south-east side of Maidstone (Pollard 1988, 30-46)

Roman wares in general represent a small part of the total assemblage approximately 22% by sherd count, with reduced wares surprising low at 2.5%. This suggests that throughout the period of activity at this site local traditions dominated. Further evidence for this can be seen in the low percentage of black-burnished wares, which was comprised almost exclusively, except for four sherds of black-burnished-style ware, CAT R73.1, of black-burnished ware '2', probably produced in Cooling. Reduced fines wares represented 6.8% of the assemblage by sherd count of which Upchurch wares comprise the greatest part. Even if we remove CAT B21.2, a Late Iron Age fine ware, the percentage still remains at 5.6%. The range of early Roman fabrics, although limited conforms to what is known about assemblages from the 1st and 2nd centuries AD in the area, especially the complete lack of Alice Holt/Surrey, which dates AD 50–160 (Pollard 1988). Late Roman fabrics are peculiarly absent for the assemblage showing that AD 250, activity at this site had completely ceased.

| Fabrics | Sherds | % | ENV | % | EVE | % | Weight | % |
|-----------------------------------|--------|------|-----|------|------|------|--------|------|
| Amphora | 4 | 0.1% | 4 | 0.3% | 0 | 0.0% | 134 | 0.4% |
| Samian | 47 | 1.1% | 30 | 2.5% | 0.58 | 2.8% | 320 | 1.1% |
| Fine wares, Imported | 16 | 0.4% | 5 | 0.4% | 0.31 | 1.5% | 53 | 0.2% |
| Fine wares, Romano-British | 37 | 0.9% | 18 | 1.5% | 0.10 | 0.5% | 86 | 0.3% |
| Black-burnished wares | 51 | 1.2% | 21 | 1.8% | 1.01 | 4.9% | 371 | 1.2% |
| Fine wares, Reduced | 282 | 6.8% | 106 | 8.8% | 1.47 | 7.1% | 907 | 3.0% |

| | | | | | | | | |
|----------------------------|------|--------|------|--------|-------|--------|-------|--------|
| Reduced wares | 104 | 2.5% | 61 | 5.1% | 0.43 | 2.1% | 578 | 1.9% |
| Tempered ware | 3113 | 74.8% | 891 | 74.4% | 15.84 | 76.3% | 26025 | 86.7% |
| Oxidised wares | 500 | 12.0% | 60 | 5.0% | 1.03 | 5.0% | 1529 | 5.1% |
| Miscellaneous wares | 5 | 0.1% | 2 | 0.2% | 0.00 | 0.0% | 11 | 0.0% |
| Total | 4159 | 100.0% | 1198 | 100.0% | 20.77 | 100.0% | 30014 | 100.0% |

Table 6: Breakdown by fabric

5.2.2.3 Forms

A relatively narrow range of vessels has been identified on KT-BMS05. Jars were the most common at 18.9% by sherd count with flagons being the next most common at 9.3% (Table 7). As has been alluded to earlier, amphora represents only a tiny percentage of this assemblage, 0.05%. However, if this site is some sort of rural farmstead then the low quantity of amphorae appears in keeping with other rural sites. One idea, put forward in P.T. Marney's examination of fabrics from Milton Keynes is that olive oil was expensive to buy and difficult to transport, therefore amphora is more commonly found in towns (Marney 1989, 168). It is probable that other less environmentally resilient forms of storage were used to transport the small amounts purchased from towns.

| Forms | Sherds | % | ENV | % | EVE | % | Weight | % |
|-------------------|---------------|----------|------------|----------|------------|----------|---------------|----------|
| Amphora | 2 | 0.0% | 2 | 0.2% | 0.00 | 0.0% | 121 | 0.4% |
| Beakers | 101 | 2.4% | 22 | 1.8% | 2.86 | 13.8% | 949 | 3.2% |
| Bowls | 60 | 1.4% | 26 | 2.2% | 1.50 | 7.2% | 881 | 2.9% |
| Bowl/Dish | 5 | 0.1% | 5 | 0.4% | 0.14 | 0.7% | 37 | 0.1% |
| Cup | 11 | 0.3% | 8 | 0.7% | 0.39 | 1.9% | 125 | 0.4% |
| Dish | 30 | 0.7% | 14 | 1.2% | 0.39 | 1.9% | 222 | 0.7% |
| Flagons | 387 | 9.3% | 14 | 1.2% | 0.57 | 2.7% | 640 | 2.1% |
| Flagon/Jar | 53 | 1.3% | 1 | 0.1% | 0.00 | 0.0% | 526 | 1.8% |
| Jars | 788 | 18.9% | 204 | 17.0% | 13.96 | 67.2% | 11051 | 36.8% |
| Jar/Beaker | 38 | 0.9% | 11 | 0.9% | 0.19 | 0.9% | 145 | 0.5% |
| Jar/Bowl | 39 | 0.9% | 5 | 0.4% | 0.34 | 1.6% | 232 | 0.8% |
| Mortaria | 4 | 0.1% | 3 | 0.3% | 0.22 | 1.1% | 211 | 0.7% |
| Lid | 10 | 0.2% | 4 | 0.3% | 0.21 | 1.0% | 66 | 0.2% |
| Unknown | 2631 | 63.3% | 879 | 73.4% | 0.00 | 0.0% | 14808 | 49.3% |
| Total | 4159 | 100.0% | 1198 | 100.0% | 20.77 | 100.0% | 30014 | 100.0% |

Table 7: Breakdown by form

5.2.2.3.1 DISCUSSION

The assemblage from this excavation contains pottery of domestic function, which given the nature of this site is unsurprising. However, ascribing a function to a site on pottery alone is tenuous but the lack of vessels related to the production of metal objects or the intense production of food would seem to confirm the idea that we are dealing with the domestic waste. Furthermore, the general reasonable condition of the sherds would indicate little exposure to fire or constant wear. The dating of the pottery indicates that there was activity on the site until the middle of the second century AD. Furthermore, it would appear that the peak was in the middle years of the first century AD, which declines quickly after *c* AD 120. The very small late Roman assemblage from this site would suggest that over the third and fourth centuries AD

the focus of activity had moved some distance from this site. It is possible that during the period *c* AD 200+, the site was no longer inhabited and was being used simply as a field with the late Roman pottery unavoidably introduced as part of domestic waste/manure.

5.2.3 The accessioned finds and bulk glass (Nicola Powell)

| Material | Prehistoric | Roman | Post medieval | Unknown | Weight | Comment |
|--------------|-------------|-----------|------------------|----------|--------|-------------------|
| Glass | | 8 | 1 | | 21.5g | Vessel and window |
| Ceramic | 1 | ?1 | | | 25g | |
| Iron | | 4 | 1 | 3 | | |
| Copper alloy | | 1 | 1 | | | |
| Stone | | 1 | | 1 | | |
| Lead alloy | | | 1 | | | Modern |
| Bulk glass | | 1 | 3 | 1 | >20g | |
| Total | 1 | 16 | 7 | 5 | | |

Table 8: Summary of accessioned finds by material and period

5.2.3.1 Introduction/methodology

The finds have been processed in accordance with Museum of London (MoL) standards and the records have been entered onto the Oracle relational database. The finds have been examined briefly for the assessment and the initial identifications confirmed or revised. The finds have also been examined in the light of the available stratigraphic and dating evidence. A summary of the material is given below, and its significance and potential discussed in terms of understanding the function and development of the site itself.

5.2.3.2 Categories by dating and materials

5.2.3.2.1 PREHISTORIC

Ceramic

A piece of ceramic was assessed along with the pottery assemblage, but not considered a vessel and so accessioned <26>. It came from context [702]. It has a straight flat edge that tapers to form a thin body. The fabric suggests a Late Iron Age date and it may be part of an unperforated rectangular plate. It is not clear what these were for, but may have been associated with an oven or kiln.

A spindle whorl <6> was recovered from context [722]. It has been manufactured from a pottery sherd (sand AD50-400). This fabric is also known from Late Iron Age contexts (R Featherby *pers. comm.*).

5.2.3.2.2 ROMAN

The bulk of the accessioned finds appear to be Roman in date.

Glass

Vessel glass dominated the assemblage, with fragments recovered from seven contexts and from one unstratified context. Two small sherds <3> were recovered from [700]. They are too small to identify further than as part of a vessel. Part of the neck and rim of a flask <10> came from an unstratified context. More small fragments of vessel glass <13> and <14> came from contexts [1154] and [1126] respectively. A small sherd of natural blue green glass <15> probably came from the body of a bottle or flask. Two large sherds <16>, from context [1266], probably came from a square or shaped bottle and can be given a 1st or 2nd century date. Two tiny sherds <17>, [1301] and <18>, [1409] can only be given a broad Roman date.

Iron

Four iron objects from the site can be given a Roman date. They consist of a stylus <2>, two incomplete knives, <11> and <24> and a reaping hook <12>. The stylus, from context [700] comprises part of the shaft, with grooved decoration and a circular section. The knives (<7>, [683] and <11>, [887]) are fragmentary. Accession <7> consists of a triangular blade fragment. Accession <11>, from [887], is more complete, in two parts with a triangular-shaped blade. The rod-like handle terminates in a loop and appears to conform to Manning type 11b (1985, p.114, Fig. 28). It can be dated to the 2nd to 3rd century AD.

The reaping hook, from [683], is in two parts with a curving blade edge continuing towards the socket or tang (lost). It is similar to Manning type 3 (1985, p. 53, Fig. 14).

Accession <24>, from [1026], consists of a tapering fragment of the tip of a knife blade, and may be Roman.

Stone

A hone <4> was recovered from context [722]. It is roughly rectangular with a flat surface. It is worn thin in the centre through use.

Copper alloy

A nail <21> was recovered from context [1409]. It is in very good condition, although the tip is lost. It has a globular head and a circular sectioned shaft. This type of nail was in use from the 2nd century until the end of the Roman period.

5.2.3.2.3 POST MEDIEVAL OR MODERN

Glass

A small piece of window glass from [1012] can at this stage only be given a broad date.

Iron

Two pieces of horseshoe <20> came from context [1254]. It is heavily corroded and in poor condition. X-radiography of the arm fragments revealed a rectangular hole. It is post medieval in date.

Probably dating from the post medieval period is an unidentified object <25> from [1411]. It may have come from farm machinery.

Lead alloy

An unidentified object <25>, [1198], appears to be modern (it is stamped with a serial number) and of a modern light fabric, so has probably come from a vehicle or machinery!

Copper alloy

A small rivet <9>, from [1012] is modern in date.

5.2.3.2.4 UNCERTAIN

Iron

A corroded object <5> may be part of a knife blade.

Stone

Accession <22>, from [1409], warrants further study. It comprises a shale or slate rod, with a groove at one end and shaped at the other. Its purpose and use are uncertain, though it may be a writing instrument.

5.2.4 Bulk glass

5.2.4.1.1 ROMAN?

The bulk glass varied widely in date and function. What may be more Roman vessel glass was recovered, notably from context [797], during wet sieving sample 18. A further two sherds from wet sieved sample 64 ([1187]) are undated.

5.2.4.1.2 POST MEDIEVAL

Bottle glass dominates the bulk glass assemblage, and was recovered from contexts [810] and wet sieved from sample 55 ([993]). All is olive green glass and dates from the 17th to 19th century.

Also recovered was window glass from context [877]. It consists of five sherds of natural green glass.

5.2.4.2 *Functional analysis*

The assemblage is too small to attempt any form of functional analysis.

5.2.4.3 *Assessment work outstanding*

Further research is warranted on a few of the objects, namely the stone rod, in order to identify it fully and so attribute it to the Roman or later periods of use of the site.

5.2.4.3.1 LIST OF OBJECTS FOR INVESTIGATIVE CONSERVATION OR CLEANING

The following accessioned find should be subject to investigative conservation:

<2> Stylus fragment, to clarify decoration and conserve.

<11> Loop-handled knife, to clean and conserve.

<12> Reaping hook, to clean and conserve.

<21> Copper alloy nail, clean for illustration.

5.2.4.3.2 LIST OF OBJECTS FOR ILLUSTRATION

The following accessioned finds should be illustrated for publication:

- <2> Stylus fragment
- <6> Spindlewhorl
- <11> Loop-handled knife
- <12> Reaping hook
- <21> Copper alloy nail
- <26> Ceramic unperforated clay plate

5.2.5 *Worked flint (Tony Grey)*

5.2.5.1 *Introduction*

Ninety-one pieces of flint were submitted for analysis from fifty-one contexts (excluding three pieces of field flint from two contexts). The material was identified and recorded according to standard MoLSS practice.

The assemblage consists of seventy-eight pieces of debitage (fifty-five flakes and blade-like flakes, fifteen blades and eight cores and core fragments) and thirteen worked/retouched items. The retouched pieces include six definite scrapers, two arrowheads/points, two knives, a microlith, a retouched flake, a retouched blade segment plus two utilised pieces. The scrapers include a small convex end scraper from context [1149], a ‘thumbnail’ scraper on a primary flake from [1280], a ‘thumbnail’ scraper from [960], an end scraper on a flake from [1075] and two end scrapers on long blades from [1367]. The points include a notched/broken leaf-shaped shouldered arrowhead from [1367] and a retouched blunt-ended arrowhead from [795]. The knives include a backed knife/blade from [1074] and a knife/burin worked on a core from [1088]. The remaining worked pieces include a microlith from [718], a retouched flake from [37] and a blade segment retouched down one side from [1152]. The utilised pieces include a utilised blade end (possibly as a scraper) from [1183] and a retouched flake (possibly as a scraper/burin) from [37]. The breakdown of this assemblage is tabulated in *Table 9* below.

In addition, there are forty-one pieces of burnt flint weighing 218 grams from ten contexts (seven of these from environmental samples) tabulated in an accompanying excel file. A large number of tiny pieces from context [1255] may be merely the result of fragmentation but might possibly represent material for use as pottery temper.

The assemblage is fairly evenly distributed across a large number of contexts though three worked pieces (a leaf-shaped point and two end scrapers on blades) are present from context [1367]. This assemblage appears to be residual in nature. The raw material is variable generally representing secondary/derived flint sources of gravels and nodules with flint colours ranging from ochre to grey and black, frequently mottled and sometimes opaque or chert-like. Many pieces have cortex on them. The quality of the raw material ranges from poor to moderately good. Several pieces are patinated indicating derivation from a chalk-based environment.

The technology is flake and blade based with frequent blade and segment production and working. The presence of ‘thumbnail’ scrapers, small end scrapers on blades and a leaf-shaped arrowhead and a blunt-ended arrowhead suggest an assemblage dating

from later Mesolithic to Neolithic. None of the scrapers are large heavy-duty items. Some of the technology is fairly *ad hoc* with utilised pieces, a knife worked on a core fragment and a microlith worked from a flake's distal end.

| Context | Subgroup | Flakes | Blades, blade-like flakes | Cores, core fragments | Retouched forms | Comments |
|---------|----------|--------|---------------------------|-----------------------|-----------------|--|
| 23 | 11 | 2 | 2 | | | Incl. 2 blade-like flakes |
| 37 | 16 | | | | 1 | Retouched flake |
| 65 | 33 | 1 | | | | Patinated all over |
| 683 | 25 | | 2 | | | Blade-like flakes |
| 692 | 342 | 1 | 2 | | | WS 2 bladelet segments |
| 702 | 304 | 1 | 1 | | | |
| 718 | 329 | | | | 1 | Microlith off flake end |
| 744 | 322 | 1 | | | | |
| 788 | 97 | 1 | | | | |
| 795 | 338 | | | | 1 | Blunt-ended arrowhead |
| 823 | 474 | | 1 | | | Blade segment |
| 830 | 316 | 1 | | | | |
| 906 | 317 | | | 1 | | 2+ platforms, poor flint |
| 941 | 168 | | 1 | | | Distal end of tiny blade |
| 945 | 164 | 1 | | | | |
| 949 | 451 | 1 | | | | Utilised flake |
| 960 | 147 | | | | 1 | Thumbnail scraper |
| 982 | 244 | 8 | 5 | | | Blades/bladelets ends and segments, one notched. |
| 993 | 627 | | 1 | | | Bladelet |
| 1005 | 662 | 1 | | | | |
| 1007 | 106 | | | 1 | | Pyramidal flake core, 2 platforms |
| 1074 | 162 | | | | 1 | Backed blade/knife |
| 1075 | 161 | 1 | | | 1 | End scraper on flake |
| 1088 | 157 | | | | 1 | Knife/burin on small core |
| 1126 | 174 | 1 | | | | |
| 1145 | 181 | | | 2 | | 2 platform core and core frag both flake and blade |
| 1146 | 193 | | 1 | | | Tertiary blade-like flake |
| 1148 | 568 | 3 | 1 | | | Incl. bladelet |
| 1149 | 291 | | | | 1 | Small convex end scraper |
| 1152 | 234 | | | | 1 | Retouched blade segment |
| 1154 | 232 | | 1 | 1 | | Small flake/blade core one platform |
| 1183 | 293 | 2 | 2 | | | Incl. utilised thick blade with cortex and patina |
| 1203 | 294 | 1 | | 1 | | Incl. flake/blade core frag |
| 1221 | 253 | | 1 | | | |
| 1238 | 534 | 8 | | | | WS patina on some |
| 1255 | 523 | 2 | | | | |
| 1266 | 294 | 1 | 2 | 1 | | Incl. 2 blade segments, a shattered core frag |
| 1272 | 596 | 2 | | | | |
| 1280 | 388 | 1 | | | 1 | Thumbnail scraper on primary flake |
| 1282 | 389 | 1 | | | | |
| 1284 | 310 | 1 | | | | |
| 1305 | 603 | 1 | | | | Heavily patinated |
| 1345 | 640 | 2 | | | | |

| | | | | | | |
|------|-----|---|---|---|---|---|
| 1367 | 613 | | | | 3 | Notched/broken leaf-shaped point; 2 end scrapers on long blades |
| 1371 | 382 | 1 | | | | |
| 1373 | 383 | | | 1 | | Shattered core frag |
| 1375 | 348 | 2 | | | | Hard-struck irregular flakes |
| 1377 | 385 | 1 | | | | |
| 1391 | 596 | 2 | | | | |
| 1394 | 615 | 1 | | | | Heavy patina on 2 faces |
| 1397 | 631 | 2 | 2 | | | Incl. 2 distal ends of blades |

Table 9: Breakdown of struck/worked flint assemblage

5.2.6 The plant remains (John Giorgi)

5.2.6.1 Introduction/methodology

Bulk soil samples were collected for the potential recovery of biological remains including botanical material. The aerobic character of the soils at the site limited the potential for survival of botanical material to charred plant remains. The aim of the assessment was to establish the level of preservation, the item frequency and species diversity of any plant material and the potential of these remains for providing information on any economic/human activities in the area. In particular crop husbandry and processing activities and the possible function of the sampled features as well as the spatial and temporal use of different areas across the site. Several interim assessment reports were prepared during the excavations in order to assess the survival potential for biological remains and, if required, to modify the sampling and retrieval strategy (Giorgi 2005; Giorgi 2005a).

A total of 103 soil samples were collected during the excavations from a range of feature types. The best-sampled contexts were pit fills with 43 samples (42% of the total) being collected. Ditch fills (22 samples), other fills (17 samples) and post hole fills (13 samples) were also well sampled while several samples were also collected from the following feature types: hearths (three samples), furnaces (two samples), quarry pit fill, domestic debris and a structural cut fill (the latter three all with single samples).

Almost 60% of the sampled features have been provisionally dated to between the Late Bronze Age and medieval periods, although the majority (45 samples) have been tentatively dated to the Romano-British period. Fourteen samples have been given an Iron Age date. Just two samples have been provisionally dated to the Late Bronze Age/Early Iron Age period while one sample was dated to the medieval (possibly post-medieval) period. Forty-one sampled features were given no provisional date.

The size of the individual samples ranged from one litre to 140 litres, although the majority were between ten and 40 litres. With the exception of two samples from fill [188] (sample <4>) and deposit [1078] (sample <44>), neither of which could be located, all the soil from the samples was processed using a modified Siraf flotation tank with flotation onto a 0.25mm mesh followed by wet-sieving of the residue through a 1mm mesh sieve. The flots and residues were dried with the latter being sorted for botanical remains that had not floated and artefactual remains.

Eighty-eight of the 101 processed samples produced flots which varied in size from 2ml to 1200 ml. The very large flots (exceeding 1000ml) from samples <47>, <50>, <71> and <86> were sub-sampled with only 25% of the flots being scanned while the flot from sample <31>, which measured 500ml, was also sub-sampled and 50% of the flot assessed. The flots were scanned using a binocular microscope. The item frequency and species diversity of all biological remains from all samples was recorded using the following rating system of 1 to 3.

Frequency: 1 = 1-10 items; 2 = 11-50 items; 3 = 50+ items

Diversity: 1 = 1-4 species; 2 = 5-7 species; 3 = 7+ species

5.2.6.2 *The plant remains*

Virtually all the plant remains were preserved by charring. The charred plant remains consisted of fragmented charcoal in all the flots while charred cereal grains, chaff and seeds of other plants were present in variable amounts in 40 of the 88 flots.

All the samples produced variable amounts of mainly very fragmented charcoal (including round wood) with identifiable fragments in 43 samples. Very large amounts of charcoal (over 1000ml) with identifiable fragments were found in four samples from an early Roman fill [145] cut [146] (sample <47>), two pit fills [1255] cut [579] (sample <71>) (Iron Age), [1398] cut 1395 (sample <86>) and a furnace/kiln fill [1124] cut 655 (sample <50>). Of the remaining samples with identifiable charcoal, it was interesting to note the presence of identifiable fragments in early Roman hearth fills [965] (sample <33>) and [966] (sample <41>), both in cut [338].

Charred cereal grains were present in 35 samples with low amounts (up to ten grains) in 23 samples, moderate grain numbers (between 11 and 50) in two samples, and large amounts of grains (exceeding 50 grains) in eight samples. The eight richest grain assemblages were from Late Iron Age/Roman pit fills [99] cut [100] (sample <13>) and [856] cut [259] (sample <28>), early Roman pit fill [1096] cut [220] (sample <49>) and fill [145] cut [146] (sample <47>), early Roman hearth deposits [965] and [966] both cut [338] (samples <33>, <34>) and fills [1386] cut [1387] (sample <79>) and [820] cut [818] (sample <28>), which have yet to be dated. Moderate amounts of grain were present in two Late Iron Age/Roman samples from a ditch fill [797] cut [798] (sample <18> and pit fill [840] cut [258] (sample <26>). The majority of the grains belonged to wheat (*Triticum* spp.), with hulled wheats of emmer (*Triticum dicoccum*) and spelt (*T. spelta*) being the most abundant grains, although there were occasional records of free-threshing wheat (*T. aestivum*). Barley (*Hordeum* spp.) including hulled grains was also well represented in most samples (particularly in sampled fill [1386]) while there were sporadic grains of oats (*Avena* spp.) in some of the samples.

Charred cereal chaff fragments were present in 15 samples with large amounts in two samples from early Roman pit fill [1096] cut [220] (sample <49>), which contained an exceptional amount of mainly spelt chaff (over 1000 fragments), and Roman fill [99] cut [100] (sample <13>). Sample <25> from Roman pit fill [824] cut [262] contained a moderate amount of chaff fragments. Virtually all the chaff was from hulled wheats (glume bases and spikelet bases/forks), particularly spelt, while barley rachis fragments were only noted in one sample.

Charred seeds of other plants were present in 24 samples, mainly in low amounts (17 samples), although there were moderate numbers in five samples and rich assemblages in two samples. The two rich seed assemblages were from early Roman pit fill [1096] cut [220] which consisted of a range of seeds of wild plants (probably arable weeds) while the rich sample from Roman pit fill [990] cut [468] consisted of hundreds of legumes, particularly horse beans (*Vicia faba*). Moderate numbers of seeds of other plants (mainly from weeds) were found in ditch fills [797], [1203], pit fills [820], [856] and an early Roman hearth [965] sample. The Roman pit fill [856] cut [259] sample-included seeds of flax (*Linum usitatissimum*).

The wild plant seeds were mainly from weeds of disturbed (including cultivated) ground and waste places, eg brome (*Bromus* spp.), bedstraw (*Galium* spp.), docks (*Rumex* spp.), scentless mayweed (*Tripleurospermum inodorum*), black bindweed (*Fallopia convolvulus*), and various small seeded legumes and small grass seeds. There were also a few seeds characteristic of wetland habitats eg sedges (*Carex* spp.), spike-rush (*Eleocharis* spp.). One sample included charred hazelnut (*Corylus avellana*) shell fragments.

‘Waterlogged’ plant remains represented by fruits and seeds were present in 50 samples but mainly in only very small amounts (less than ten items). Moderate amounts were present in 13 samples and 3 samples contained only fifty plus seeds. The most common uncharred seeds were goosefoots (*Chenopodium* spp.), oraches (*Atriplex* spp.), knotgrass (*Polygonum aviculare*) and *Polygonum* species, while there were occasional records for elder (*Sambucus nigra*), fumitory (*Fumaria* sp.), and crowfoots (*Ranunculus Batrachium*). The aerobic nature of the soils on the site, however, suggests that these remains are probably intrusive. The presence of varying amounts of rootlets in virtually all the samples (as well as burrowing molluscs – see below) may explain the presence of these seeds in the samples.

5.2.6.3 Other biological remains

Other biological remains in the samples included occasional large mammal bone fragments (some of which had been burnt) in 19 samples, with large amounts only in fill [167] cut [168] (sample <22>). There were also a few small mammal bone fragments in one sample while occasional terrestrial molluscs (including burrowing species) were noted in three samples. A faunal specialist will assess this material.

5.2.6.4 Other finds in the samples

There was a wide range of other finds in the samples, represented by variable amounts of material. Thirty-eight residues contained fragments of daub (abundant in six samples) and pot (abundant in three samples), with fragments of building stone (abundant in three samples) in 20 samples and slag in 15 samples (abundant in eight). Smaller numbers of samples produced iron fragments (seven samples including abundant in one), burnt flint in five samples (abundant in one), and occasional glass and waste flint (three samples each) and clinker fragments in two samples. The appropriate specialists will assess these materials.

Table 10: Summary of botanical remains by subgroup

| Processing and sampling details | | | | | | | | | Assessment results | | | | | | |
|---------------------------------|---------|----------|-------------------------|----------|------------|-----------------|------------------|----------------|--------------------|-----------------------|-------|-------|------|------|--|
| sample | Context | subgroup | Feature type | Period | Date range | Sample size (l) | Residue size (l) | Flot size (ml) | Proc | Charred plant remains | | | | WLG | comments |
| | | | | | | | | | | Grain | Chaff | Seeds | Wood | Seed | |
| | | | | | | | | | | A D | A D | A D | A D | A D | |
| 6 | 75 | 40 | Non-structural cut fill | ? | ? | 10 | 2 | | R | | | | 1 1 | | stone / silt |
| 10 | 87 | 45 | Non-structural cut fill | ? | ? | 30 | 2 | 8 | F | 1 1 | | | 3 1 | | mainly rootlets |
| | | | | | | | | | R | | | | 1 1 | | stone clay |
| 12 | 89 | 46 | Post-hole fill | EROM | 50-120 | 20 | 3 | | R | | | | 1 1 | | stone and silt |
| 7 | 97 | 52 | Post-hole fill | ? | ? | 30 | 5 | 10 | F | | | | 3 1 | 1 1 | mainly roots; occasional id'ble frag charcoal |
| | | | | | | | | | R | | | | 1 1 | | stone/ charcoal |
| 13 | 99 | 54 | Non-structural cut fill | ROM | 50-400 | 30 | 5 | 30 | F | 3 1 | 3 1 | | 3 1 | 1 1 | >grain & chaff+++ (wheat); id'ble charcoal/roots |
| | | | | | | | | | R | 1 1 | | | 1 1 | | burnt stone and clay+ charcoal/seeds |
| 11 | 117 | 61 | Non-structural cut fill | EROM | 50-120 | 5 | 1 | | R | | | | 1 1 | | clay |
| 9 | 153 | 77 | Non-structural cut fill | LIA/EROM | -75-120 | 10 | 2 | | R | | | | 1 1 | | burnt stone /clay |
| 22 | 167 | 89 | Post-hole fill | ? | ? | 10 | 2 | 50 | F | 1 1 | 1 1 | 1 1 | 3 1 | 1 1 | >roots, charcoal; occasional grain/chaff |
| | | | | | | | | | R | | | | 1 1 | | stone occasional bone |
| 1 | 183 | 93 | Pit fill | EROM | 50-100 | 10 | 2 | 18 | F | | | | 2 1 | 3 2 | >waterlogged intrusive material |
| | | | | | | | | | R | | | | 1 1 | | stone and silt. pot and bone (cremation) |
| 2 | 186 | 94 | Pit fill | ? | ? | 10 | 3 | | R | | | | 1 1 | | stone and silt |
| 5 | 298 | 109 | Pit fill | ? | ? | 10 | 2 | | R | | | | 2 1 | | red silt/clay |
| 45 | 1079 | 124 | Pit fill | ? | ? | 30 | 6 | 100 | F | | | | 3 1 | 2 1 | mainly v fragmented charcoal & roots |
| 33 | 965 | 130 | Hearth fill | EROM | 70-100 | 40 | 8 | 150 | F | 3 1 | | 2 1 | 3 1 | 2 1 | c50-100 grains; 20/30 weed seeds; >roots |

| | | | | | | | | | | | | | | | |
|----|------|-----|-------------------------|--------------|---------|----|----|-----|---|-----|-----|-----|-----|-----|---|
| | | | | | | | | | R | | | | 3 1 | | stone silt occasional pot |
| 41 | 966 | 131 | Hearth fill | EROM | 70-100 | 10 | 3 | 35 | F | 3 1 | | 1 1 | 3 1 | 1 1 | c 100 charred grain/fragments wood |
| | | | | | | | | | R | | | | 2 1 | | silt/ stone. occasional burnt stone not kept |
| 37 | 1024 | 135 | Pit fill | LIA/ EROM | -75-100 | 20 | 3 | 30 | F | | | 1 1 | 3 1 | 1 1 | >rootlets |
| | | | | | | | | | R | | | | 1 1 | | stone, clay, gravel |
| 67 | 1226 | 142 | Ditch/drain fill | ? | ? | 15 | 1 | 100 | F | | | | 3 1 | 2 1 | mainly roots/rootlets |
| 40 | 1046 | 158 | Pit fill | ? | ? | 20 | 5 | 50 | F | | | | 3 1 | 1 1 | mainly charcoal (identifiable) |
| | | | | | | | | | R | | | | 3 1 | | burnt earth- 10% kept + stone |
| 69 | 1127 | 176 | Non structural cut fill | ROM | 70-275 | 30 | 8 | 100 | F | | | | 1 1 | 2 1 | mainly(>) rootlets |
| 70 | 455 | 207 | Ditch/drain fill | ? | ? | 30 | 2 | 40 | F | | | | 3 1 | | mainly rootlets |
| 46 | 990 | 215 | Pit fill | ? | ? | 20 | 2 | 300 | F | | | 3 1 | 3 1 | | Horsebeans (50-100);>charcoal (identifiable) |
| | | | | | | | | | R | | | | 2 1 | | stone, silt. |
| 68 | 1247 | 223 | Ditch/drain fill | ? | ? | 70 | 20 | 200 | F | | | | 3 1 | 1 1 | mainly rootlets |
| 74 | 1320 | 226 | Pit fill | ? | ? | 40 | 10 | 100 | F | 1 1 | 1 1 | 1 1 | 3 1 | 1 1 | very fragmented charcoal;>rootlets; occasional grain, chaff, weed seeds |
| 43 | 1026 | 228 | Pit fill | LIA/ EROM | 0-50 | 40 | 10 | 60 | F | | 1 1 | 1 1 | 3 1 | 1 1 | mainly roots; occasional glumes, weed seeds |
| 39 | 1027 | 229 | Post-hole fill | LIA/ EROM | 0-50 | 40 | 8 | 50 | F | | | | 3 1 | | |
| | | | | | | | | | R | | | | 2 1 | | stone, burnt clay |
| 58 | 1154 | 232 | Pit fill | ROM | 120-200 | 30 | 8 | 15 | F | | 1 1 | 1 1 | 3 1 | 2 1 | mainly roots, occasional glumes, weed seeds |
| 38 | 985 | 245 | Pit fill | LIA/ EROM | -75-50 | 40 | 6 | 40 | F | 1 1 | | | 2 1 | 1 1 | mainly roots; occasional grains |
| 54 | 987 | 246 | Pit fill | LIA/ EROM | 10-50 | 30 | 6 | 10 | F | | | 1 1 | 2 1 | 1 1 | mainly rootlets |
| 61 | 1186 | 269 | Non-structural cut fill | ? | ? | 10 | 3 | 40 | F | 1 1 | | | 3 1 | 2 1 | mainly roots, charcoal fragments |
| 52 | 1019 | 290 | Ditch/drain fill | EROM | 50-70 | 40 | 8 | 10 | F | 1 1 | 1 1 | | 3 1 | 1 1 | mainly roots; occasional grains, glumes |
| 60 | 1183 | 294 | Ditch/drain fill | ROM | 120-200 | 40 | 6 | 10 | F | | | | 3 1 | 1 1 | mainly rootlets |
| 66 | 1203 | 294 | Ditch/drain fill | EROM | 120-160 | 40 | 6 | 5 | F | 1 1 | | 2 1 | 2 1 | 1 1 | occasional grain, weed seeds; occasional identifiable charcoal fragments |
| | | | | | | | | | R | 1 1 | | | | | |
| 73 | 1266 | 294 | Ditch/drain fill | EROM | 70-100 | 40 | 8 | 10 | F | | | | 2 1 | 1 1 | |

| | | | | | | | | | | | | | | | |
|-----|------|-----|------------------|----------|----------|-----|----|-----|---|-----|-----|-----|-----|-----|---|
| 90 | 1423 | 300 | Ditch/drain fill | ? | ? | 40 | 10 | 10 | F | | | | 3 1 | 1 1 | mainly silt/sand |
| 14 | 700 | 301 | Ditch/drain fill | EROM | 120-140 | 30 | 10 | 10 | F | | | | 3 1 | | Burnt stone not kept |
| | | | | | | | | | R | | | | 2 1 | | large stones, clay, gravel |
| 24 | 825 | 310 | Pit fill | EROM | 40-100 | 10 | 1 | 5 | F | 1 1 | 1 1 | | 2 1 | | occasional grains, glumes |
| | | | | | | | | | R | | | | 1 1 | | stone / clay / occasional pot. crem? |
| 49 | 1096 | 331 | Pit fill | EROM | 70-100 | 40 | 5 | 30 | F | 3 1 | 3 1 | 3 2 | 3 1 | | very rich charred assemblage;1000's chaff fgs (spelt wheat);100's grains & weed seeds |
| 34 | 953 | 337 | Post-hole fill | EROM | 70-120 | 10 | 2 | 2 | F | 1 1 | | | 1 1 | | |
| 18 | 797 | 338 | Ditch/drain fill | EROM | 50-100 | 30 | 6 | 105 | F | 2 1 | 1 1 | 2 1 | 3 1 | | moderate plant assemblage; >fragments charcoal |
| | | | | | | | | | R | 1 1 | | | 3 1 | | burnt stone(30%) , slag, burnt clay |
| 23 | 835 | 339 | Ditch/drain fill | LIA/EROM | -50-70 | 10 | 3 | 2 | F | 1 1 | 1 1 | | 2 1 | | occasional grain, chaff fragments |
| 16 | 790 | 340 | Post-hole fill | ROM | 120-250 | 10 | 4 | 10 | F | 1 1 | 1 1 | | 1 1 | | no organic; occasional grains, glumes |
| 15 | 692 | 342 | Post-hole fill | EROM | 70-100 | 30 | 4 | 20 | F | 1 1 | | | 2 1 | | no organics; mainly rootlets |
| 48 | 858 | 351 | Post-hole fill | ? | ? | 10 | 2 | 5 | F | | | | 2 1 | | mainly silt/ sand/rootlets |
| 17 | 807 | 353 | Post-hole fill | EROM | 70-120 | 10 | 2 | 5 | F | | | | 3 1 | | mainly rootlets |
| | | | | | | | | | R | | | | 1 1 | | clay/stone |
| 59 | 1167 | 370 | Ditch/drain fill | LIA/ROM | -100-400 | 40 | 8 | 50 | F | | | | 3 1 | | mainly rootlets |
| 78 | 1377 | 385 | Ditch/drain fill | LIA/ROM | -100-400 | 140 | 50 | 10 | F | | | | 2 1 | 2 2 | silt/sand |
| 77 | 1358 | 401 | Ditch/drain fill | ? | ? | 40 | 7 | 40 | F | | | | 2 1 | | mainly silt, sand |
| 102 | 1482 | 412 | Pit fill | ? | ? | 10 | 2 | 150 | F | | | | 3 1 | | virtually all charcoal (identifiable fragments) |
| | | | | | | | | | R | | | | 3 1 | | stone, occasional burnt 100% kept |
| 97 | 1457 | 424 | Pit fill | ? | ? | 10 | 5 | 50 | F | | | | 3 1 | 2 1 | >rootlets;>charcoal (occasional identifiable fragments) |
| 101 | 1479 | 429 | Ditch/drain fill | ? | ? | 100 | 2 | 10 | F | | | | 2 1 | | >rootlets |
| 32 | 912 | 454 | Pit fill | ? | ? | 10 | 2 | 5 | F | | | | 3 1 | | |
| | | | | | | | | | R | | | | 1 1 | | burnt earth |
| 26 | 840 | 472 | Pit fill | LIA/EROM | -100-50 | 10 | 3 | 10 | F | 2 1 | 1 1 | | 2 1 | | occasional grains, glumes |
| | | | | | | | | | R | 1 1 | | | | | burnt earth |
| 27 | 841 | 472 | Pit fill | ? | ? | 10 | 4 | 2 | F | | | | 1 1 | | mainly rootlets |

| | | | | | | | | | | | | | | | |
|----|------|-----|-------------------------|--------------|--------|----|----|------|---|-----|-----|-----|-----|-----|---|
| 28 | 856 | 473 | Pit fill | LIA/ EROM | 0-50 | 20 | 3 | 30 | F | 3 1 | | 2 1 | 3 1 | | >grains (100+); rootlets |
| | | | | | | | | | R | 2 1 | | | 1 1 | | burnt earth/clay deposit |
| 25 | 824 | 475 | Pit fill | LIA/ EROM | -75-50 | 10 | 3 | 10 | F | 1 1 | 2 1 | 1 1 | 2 1 | | occasional grain, glumes, weed seeds |
| 19 | 806 | 481 | Pit fill | LIA/ EROM | -75-50 | 20 | 3 | 50 | F | 1 1 | 1 1 | 1 1 | 3 1 | 1 1 | mainly roots/ charcoal; occasional grain/chaff/weed seeds |
| | | | | | | | | | R | | | | 2 1 | | stone clay, occasional pot |
| 20 | 820 | 482 | Pit fill | ? | ? | 20 | 4 | 30 | F | 3 1 | | 2 1 | 3 1 | | >roots;>grains(c 100),weed seeds |
| 21 | 821 | 482 | Pit fill | ? | ? | 30 | 10 | 10 | F | 1 1 | | | 1 1 | | no organic, finds; mainly roots |
| 29 | 889 | 493 | Non-structural cut fill | ? | ? | 10 | 1 | 2 | F | | | | 2 1 | | |
| | | | | | | | | | R | | | | 1 1 | | burnt earth, occasional stone |
| 30 | 890 | 494 | Non-structural cut fill | ? | ? | 10 | 4 | 35 | F | | | 1 1 | 3 1 | | |
| | | | | | | | | | R | | | | 3 1 | | stone occasional charcoal |
| 31 | 903 | 496 | Non-structural cut fill | ? | ? | 20 | 3 | 500 | F | | | | 3 1 | | virtually all charcoal (identifiable fragments) |
| | | | | | | | | | R | | | | 3 1 | | burnt earth, stone |
| 93 | 1432 | 513 | Ditch/drain fill | LIA/ ROM | 40-400 | 10 | 3 | 5 | F | | | | 1 1 | 1 1 | |
| 94 | 1434 | 514 | Ditch/drain fill | ? | ? | 10 | 2 | 10 | F | | | | 2 1 | 2 1 | >rootlets |
| 95 | 1425 | 515 | Ditch/drain fill | ? | ? | 10 | 9 | 2 | F | | | | 2 1 | 1 1 | rootlets |
| 96 | 1447 | 519 | Pit fill | ? | ? | 30 | 10 | 50 | F | | | | 3 1 | 2 1 | mainly roots, charcoal fragments |
| 71 | 1255 | 523 | Pit fill | ? | ? | 50 | 5 | 1200 | F | | | | 3 1 | | virtually all charcoal(identifiable) |
| | | | | | | | | | R | | | | 3 1 | | stone, occ preh pot, charcoal fragments |
| 35 | 1001 | 545 | Pit fill | ? | ? | 10 | 2 | 350 | F | | | | 3 1 | | virtually all charcoal (identified) |
| | | | | | | | | | R | | | | 2 1 | | occasional charcoal, stone |
| 36 | 1017 | 545 | Pit fill | ? | ? | 10 | 3 | 30 | F | 1 1 | | | 3 1 | 1 1 | |
| | | | | | | | | | R | | | | 3 1 | | stone, frequent charcoal 10% burnt stone kept. |
| 42 | 1065 | 549 | Quarry pit fill | ? | ? | 10 | 2 | 10 | F | | | | 3 1 | 1 1 | no organic or finds; mainly roots |
| 50 | 1124 | 552 | Oven/kiln fill | ? | ? | 20 | 2 | 1200 | F | | | 1 1 | 3 1 | | >charcoal(identifiable); occ weed seeds |
| 65 | 1216 | 552 | Oven/kiln fill | ? | ? | 10 | 3 | 100 | F | | | | 3 1 | 1 1 | 100% burnt clay/daub kept |
| 53 | 1120 | 567 | Pit fill | ? | ? | 40 | 6 | 500 | F | | | | 3 1 | 1 1 | virtually all charcoal (identifiable fragments) |

| | | | | | | | | | | | | | | | |
|-----|------|-----|-------------------------|----------|---------|----|----|------|---|-----|-----|-----|-----|-----|---|
| | | | | | | | | | R | | | | 3 1 | | stone (occ burnt-not kept) frequent charcoal |
| 56 | 1148 | 568 | Pit fill | ? | ? | 3 | 1 | 10 | F | | | | 3 1 | | roots; charcoal (occ identifiable fragments) |
| | | | | | | | | | R | | | | 1 1 | | burnt clay, stone |
| 64 | 1187 | 570 | Non-structural cut fill | ? | ? | 10 | 3 | 50 | F | | | | 3 1 | | mainly roots |
| | | | | | | | | | R | | | | 1 1 | | stone. |
| 92 | 1431 | 580 | Pit fill | LIA/EROM | 40-70 | 40 | 15 | 10 | F | | | | 3 1 | | rootlets, occ identifiable charcoal fragments |
| 55 | 993 | 586 | Hearth fill | LIA/EROM | -75-50 | 40 | 10 | 100 | F | | | 1 1 | 3 1 | 2 1 | mainly rootlets,v frag charc'l,occ hazelnut shell |
| 57 | 1155 | 587 | Ditch/drain fill | ? | ? | 10 | 2 | 30 | F | | | | 1 1 | 1 1 | mainly rootlets |
| | | | | | | | | | R | | | | 3 1 | | silt, stone . |
| 80 | 1391 | 596 | Pit fill | LIA/EROM | -75-70 | 20 | 3 | 70 | F | 1 1 | | 1 1 | 3 1 | 1 1 | >rootlets |
| 76 | 1353 | 606 | Non-structural cut fill | ? | ? | 30 | 3 | 10 | F | | | | 2 1 | 1 1 | mainly rootlets |
| 83 | 1392 | 607 | Non-structural cut fill | LIA/EROM | -75-70 | 20 | 5 | 5 | F | | | | 3 1 | 2 1 | rootlets & v fragmented charcoal |
| 75 | 1335 | 609 | Pit fill | ? | ? | 40 | 10 | 5 | F | | | | 2 1 | 1 1 | Rootlets |
| 79 | 1386 | 614 | Non-structural cut fill | ? | ? | 10 | 3 | 5 | F | 3 1 | | 1 1 | 3 1 | 1 1 | good grain assemblage (c50), occ charred seeds |
| | | | | | | | | | R | 3 1 | | | | | grit, silt, occasional stone |
| 84 | 1394 | 615 | Pit fill | EROM | 40-100 | 20 | 5 | 100 | F | | | | 3 1 | 3 1 | Mainly rootlets |
| 86 | 1398 | 615 | Pit fill | ? | ? | 20 | 3 | 1100 | F | | | | 3 1 | | virtually all charcoal (identifiable) |
| 88 | 1401 | 615 | Pit fill | ? | ? | 40 | 12 | 200 | F | | | | 3 1 | 2 1 | >charcoal(identifiable fragments);>rootlets |
| 98 | 1458 | 623 | Pit fill | ? | ? | 10 | 5 | 100 | F | 1 1 | | 1 1 | 3 1 | 1 1 | >charcoal(identifiable);occ grain/reed seeds |
| | | | | | | | | | R | | | | 3 1 | | grit, stone |
| 47 | 145 | 626 | fill | EROM | 70-100 | 30 | 6 | 1000 | F | 3 1 | | | 3 1 | | > charcoal (identifiable);50-100 grains |
| | | | | | | | | | R | | | | 3 1 | | rocks, gravel charcoal flecks |
| 85 | 1396 | 631 | Pit fill | LIA/EROM | -75-50 | 60 | 25 | 50 | F | | | 1 1 | 2 1 | 1 1 | mainly rootlets |
| 87 | 1397 | 631 | Post-hole fill | LIA/EROM | 0-50 | 40 | 8 | 80 | F | | | | 3 1 | 1 1 | mainly silt sand |
| 89 | 1421 | 632 | Post-hole fill | LIA/EROM | -75-50 | 20 | 6 | 5 | F | | | 1 1 | 3 1 | 1 1 | rootlets, very small charred seeds |
| 100 | 1437 | 633 | Post-hole fill | ROM | 120-250 | 20 | 3 | 40 | F | | 1 1 | | 3 1 | | occasional glumes |

| | | | | | | | | | | | | | | | |
|----|------|-----|-------------------------|----------|---------|----|----|----|---|-----|--|--|-----|-----|--|
| 99 | 1345 | 640 | Structural cut fill | EROM | 50-100 | 40 | 9 | 20 | F | | | | 2 1 | | |
| 82 | 1343 | 641 | Non-structural cut fill | ? | ? | 20 | 8 | 2 | F | | | | 2 1 | | virtually nothing |
| | | | | | | | | | R | | | | 1 1 | | stone |
| 81 | 1200 | 642 | Destruction debris | LIA/EROM | -100-50 | 40 | 20 | 5 | F | 1 1 | | | 2 1 | 1 1 | mainly rootlets |
| 91 | 1491 | 642 | | ? | ? | 30 | 5 | 20 | F | | | | 3 1 | 1 1 | mainly rootlets, occasional charcoal fragments |

Key: WLG = waterlogged plant remains; Proc = process (F = flint; R = residue); A = abundance (1 = 1-10; 2 = 11-50; 3 = 50+ items); D = species diversity (1 = 1-5; 2 = 5 -10; 3 = 10+ species)
LIA = late Iron Age; EROM = early Roman; ROM = Roman

Table 11: Charred plant assemblages for analysis

| sample | Context | subgroup | Feature type | Period | Date range | Sample size (l) | Residue size (l) | Flot size (ml) | Proc | Charred plant remains | | | | comments | | |
|--------|---------|----------|-------------------------|----------|------------|-----------------|------------------|----------------|------|-----------------------|-------|-------|------|----------|---|--|
| | | | | | | | | | | Grain | Chaff | Seeds | Wood | | | |
| | | | | | | | | | | A | D | A | D | A | D | |
| 10 | 87 | 45 | Non-structural cut fill | ? | ? | 30 | 2 | 8 | F | 1 | 1 | | | 3 | 1 | ?barley grain fragments |
| 13 | 99 | 54 | Non-structural cut fill | ROM | 50-400 | 30 | 5 | 30 | F, R | 3 | 1 | 3 | 1 | 3 | 1 | >grain & chaff+++ (wheat including spelt) identifiable charcoal |
| 22 | 167 | 89 | Post-hole fill | ? | ? | 10 | 2 | 50 | F | 1 | 1 | 1 | 1 | 3 | 1 | charcoal; occasional grain/chaff; (emmer) wheat |
| 33 | 965 | 130 | Hearth fill | EROM | 70-100 | 40 | 8 | 150 | F | 3 | 1 | | 2 | 1 | 3 | c50-100 grains (wheat, barley, oat); 20/30 weed seeds (brome, sedges) |
| 41 | 966 | 131 | Hearth fill | EROM | 70-100 | 10 | 3 | 35 | F | 3 | 1 | | 1 | 1 | 3 | c 100 charred grain (emmer/spelt, barley, oat), fragments wood |
| 37 | 1024 | 135 | Pit fill | LIA/EROM | -75-100 | 20 | 3 | 30 | F | | | | 1 | 1 | 3 | |
| 46 | 990 | 215 | Pit fill | ? | ? | 20 | 2 | 300 | F | | | | 3 | 1 | 3 | Horsebeans (50-100);>charcoal (identifiable) |
| 74 | 1320 | 226 | Pit fill | ? | ? | 40 | 10 | 100 | F | 1 | 1 | 1 | 1 | 1 | 3 | very fragmented charcoal; occasional grain & chaff (emmer/spelt wheat), weed seeds |
| 43 | 1026 | 228 | Pit fill | LIA/EROM | 0-50 | 40 | 10 | 60 | F | | 1 | 1 | 1 | 1 | 3 | occasional glumes wheat), weed seeds (grasses) |
| 58 | 1154 | 232 | Pit fill | ROM | 120-200 | 30 | 8 | 15 | F | | 1 | 1 | 1 | 1 | 3 | occasional glumes (spelt) wheat, weed seeds (grass) |

| | | | | | | | | | | | | | | |
|----|------|-----|----------------------------|--------------|---------|----|----|------|------|-----|-----|-----|-----|---|
| 38 | 985 | 245 | Pit fill | LIA/ EROM | -75-50 | 40 | 6 | 40 | F | 1 1 | | | 2 1 | occasional grains |
| 54 | 987 | 246 | Pit fill | LIA/ EROM | 10-50 | 30 | 6 | 10 | F | | | 1 1 | 2 1 | ?brome |
| 61 | 1186 | 269 | Non-structural cut fill | ? | ? | 10 | 3 | 40 | F | 1 1 | | | 3 1 | ?wheat, charcoal fragments |
| 52 | 1019 | 290 | Ditch/drain fill | EROM | 50-70 | 40 | 8 | 10 | F | 1 1 | 1 1 | | 3 1 | occasional grains (spelt) wheat, glumes |
| 66 | 1203 | 294 | Ditch/drain fill | EROM | 120-160 | 40 | 6 | 5 | F, R | 1 1 | | 2 1 | 2 1 | occasional grain (emmer/spelt), weed seeds (oat, brome, legumes); occasional identifiable charcoal fragments |
| 24 | 825 | 310 | Pit fill | EROM | 40-100 | 10 | 1 | 5 | F | 1 1 | 1 1 | | 2 1 | occasional grains & glumes (spelt) wheat |
| 49 | 1096 | 331 | Pit fill | EROM | 70-100 | 40 | 5 | 30 | F | 3 1 | 3 1 | 3 2 | 3 1 | very rich charred assemblage;1000's chaff frags (spelt wheat);100's grains (spelt, emmer/spelt, free-threshing wheat) & weed seeds (brome, dock, grass) |
| 34 | 953 | 337 | Post-hole fill | EROM | 70-120 | 10 | 2 | 2 | F | 1 1 | | | 1 1 | wheat |
| 18 | 797 | 338 | Ditch/drain fill | EROM | 50-100 | 30 | 6 | 105 | F, R | 2 1 | 1 1 | 2 1 | 3 1 | emmer/spelt, barley, brome, dock, sedge, legumes, hazelnut shell; >fragments charcoal |
| 23 | 835 | 339 | Ditch/drain fill | LIA/ EROM | -50-70 | 10 | 3 | 2 | F | 1 1 | 1 1 | | 2 1 | occasional grain & chaff fragments (wheat, barley) |
| 16 | 790 | 340 | Post-hole fill | ROM | 120-250 | 10 | 4 | 10 | F | 1 1 | 1 1 | | 1 1 | occasional grains & glumes (wheat, oat) |
| 15 | 692 | 342 | Post-hole fill | EROM | 70-100 | 30 | 4 | 20 | F | 1 1 | | | 2 1 | oat |
| 26 | 840 | 472 | Pit fill | LIA/ EROM | -100-50 | 10 | 3 | 10 | F, R | 2 1 | 1 1 | | 2 1 | occasional grains & glumes (emmer/spelt, barley) |
| 28 | 856 | 473 | Pit fill | LIA/ EROM | 0-50 | 20 | 3 | 30 | F, R | 3 1 | | 2 1 | 3 1 | >grains (100+) (emmer/spelt, barley; oat), flax, dock, legumes |
| 25 | 824 | 475 | Pit fill | LIA/ EROM | -75-50 | 10 | 3 | 10 | F | 1 1 | 2 1 | 1 1 | 2 1 | occasional grain & glumes (spelt wheat) & weed seeds (spike-rushes, grasses) |
| 19 | 806 | 481 | Pit fill | LIA/ EROM | -75-50 | 20 | 3 | 50 | F | 1 1 | 1 1 | 1 1 | 3 1 | charcoal; occasional grain/chaff/weed seeds (wheat, legumes) |
| 20 | 820 | 482 | Pit fill | ? | ? | 20 | 4 | 30 | F | 3 1 | | 2 1 | 3 1 | >grains(c 100), (emmer, spelt) weed seeds (dock, legumes) |
| 21 | 821 | 482 | Pit fill | ? | ? | 30 | 10 | 10 | F | 1 1 | | | 1 1 | |
| 30 | 890 | 494 | Non-structural cut fill | ? | ? | 10 | 4 | 35 | F | | | 1 1 | 3 1 | |
| 36 | 1017 | 545 | Pit fill | ? | ? | 10 | 3 | 30 | F | 1 1 | | | 3 1 | |
| 50 | 1124 | 552 | Oven/kiln fill | ? | ? | 20 | 2 | 1200 | F | | | 1 1 | 3 1 | >charcoal(identifyable); occ weed seeds |
| 55 | 993 | 586 | Hearth fill | LIA/ EROM | -75-50 | 40 | 10 | 100 | F | | | 1 1 | 3 1 | ,v frag charc'l,occ hazelnut shell |
| 80 | 1391 | 596 | Pit fill | LIA/ EROM | -75-70 | 20 | 3 | 70 | F | 1 1 | | 1 1 | 3 1 | Wheat/barley, cleaver |

| | | | | | | | | | | | | | | |
|-----|------|-----|-------------------------|----------|---------|----|----|------|-----|-----|-----|-----|-----|--|
| 79 | 1386 | 614 | Non-structural cut fill | ? | ? | 10 | 3 | 5 | F,R | 3 1 | | 1 1 | 3 1 | good grain assemblage (c50) (spelt, emmer/spelt, hulled barley), occ charred seeds (grasses) |
| 98 | 1458 | 623 | Pit fill | ? | ? | 10 | 5 | 100 | F | 1 1 | | 1 1 | 3 1 | >charcoal(identifiable);occ grain/reed seeds |
| 47 | 145 | 626 | fill | EROM | 70-100 | 30 | 6 | 1000 | F | 3 1 | | | 3 1 | > charcoal (identifiable);50-100 grains (free-threshing wheat, wheat) |
| 85 | 1396 | 631 | Pit fill | LIA/EROM | -75-50 | 60 | 25 | 50 | F | | | 1 1 | 2 1 | grasses |
| 89 | 1421 | 632 | Post-hole fill | LIA/EROM | -75-50 | 20 | 6 | 5 | F | | | 1 1 | 3 1 | very small charred seeds (grasses) |
| 100 | 1437 | 633 | Post-hole fill | ROM | 120-250 | 20 | 3 | 40 | F | | 1 1 | | 3 1 | occasional glumes (spelt wheat) |
| 81 | 1200 | 642 | Destruction debris | LIA/EROM | -100-50 | 40 | 20 | 5 | F | 1 1 | | | 2 1 | Emmer/spelt wheat |

Key: Proc = process (F = flint; R = residue); A = abundance (1 = 1-10; 2 = 11-50; 3 = 50+ items); D = species diversity (1 = 1-5; 2 = 5 -10; 3 = 10+ species)
 LIA = late Iron Age; EROM = early Roman; ROM = Roman

5.2.7 *The animal bone (Alan Pipe)*

5.2.7.1 *Introduction/methodology*

Animal bone, recovered by hand-collection and wet-sieving, was recorded directly onto the MoLAS/MoLSS Oracle 8 animal bone assessment database. Each context and sample group was described in terms of weight, estimated fragment count, species, carcass-part, fragmentation, preservation, modification, and the recovery of epiphyses, mandibular tooth rows, measurable bones, complete long bones and sub-adult age groups. The assemblage was not recorded as individual fragments or identified to skeletal element. All identifications referred to the MoLSS reference collection. Fragments not identifiable to species level were generally allocated, on the basis of wall thickness, to the approximate categories 'ox-sized' and 'sheep-sized' as appropriate.

5.3.7.2 *Summary*

A total of 1.110 kg, estimated 804 fragments, of animal bone were recovered by hand-collection and wet-sieving from context/sample groups [125], [167], [183], [188], [692], [718], [797], [806], [820], [825], [829], [835], [840], [856], [912], [965], [966], [968], [1007], [1018], [1019], [1024], [1026], [1079], [1096], [1149], [1203], [1266], [1343], [1345], [1421] and [1451].

The animal bone was predominantly in a 'poor' state of preservation, generally with sufficient surface damage to remove tool marks and measurement points. The fragment size generally lay in the range between <25mm and 75mm, with much of the sample less than 25mm in greatest length. The majority of the animal bone consisted of unidentifiable fragments of 'ox-sized' and 'sheep-sized' longbone. The identifiable bones derived largely from ox *Bos taurus* and sheep/goat *Ovis aries/Capra hircus* with smaller contributions of pig *Sus scrofa* and dog *Canis familiaris*. There were no infant or neonate animals and no fish, amphibians, birds, small mammals or wild 'game' species. All the identifiable taxa were represented mainly by teeth and fragments of mandible (lower jaw), that are probably an artefact of generally poor preservation and the robustness of these elements.

Again, probably due to the predominantly poor preservation, there was no evidence for butchery, working or gnawing, although there were frequent longbone fragments showing charring and calcination. Charred longbone fragments were seen in sample [1079] {45}; calcined unidentified, 'ox-sized' and 'sheep-sized' unidentified and longbone fragments were recovered from contexts [183], [188], [692], [797], [820], [825], [840], [856], [912], [1026], [1079], [1343] and [1421].

There were no complete longbones and only one measurable bone; evidence for age at death was provided by only four mandibular tooth rows and six epiphyses.

5.3.7.3 *Assessment work outstanding*

none

Table 12: Finds and environmental general summary

| | |
|-------------|---|
| Animal bone | estimated 804 fragments; total 1.110 kg |
|-------------|---|

Table 13: Contents of animal bone archive

| | Weight (kg) | No. fragments | No. boxes |
|------------------------------|--------------------|----------------------|-------------------------------|
| Animal bone (hand-collected) | 0.797 | 128 | 1 archive quality 'shoebox' |
| Animal bone (wet-sieved) | 0.313 | 676 | 2 archive quality 'shoeboxes' |

Table 14: The animal bones

| CONTEXT | SAMPLE | FEATURE | WT(kg) | FRAGS | PRES | LMAM | MANDIBLES | MEASURABLE | EPIPHYSES | COMPLETE |
|---------|--------|----------|--------|---------|--------|------|-----------|------------|-----------|----------|
| 125 | 0 | posthole | 0.025 | 25-75mm | poor | 10 | 0 | 0 | 0 | 0 |
| 167 | 22 | posthole | 0.075 | 25-75mm | poor | 40 | 0 | 0 | 0 | 0 |
| 183 | 1 | pit | 0.050 | <25mm | poor | 200 | 0 | 0 | 0 | 0 |
| 188 | 3 | pit | 0.125 | <25mm | poor | 250 | 0 | 0 | 0 | 0 |
| 692 | 0 | posthole | 0.020 | 25-75mm | poor | 10 | 0 | 0 | 0 | 0 |
| 718 | 0 | ditch | 0.050 | 25-75mm | poor | 20 | 0 | 0 | 0 | 0 |
| 797 | 18 | ditch | 0.001 | <25mm | poor | 3 | 0 | 0 | 0 | 0 |
| 806 | 19 | pit | 0.001 | <25mm | medium | 5 | 0 | 0 | 0 | 0 |
| 820 | 20 | pit | 0.002 | <25mm | poor | 15 | 0 | 0 | 0 | 0 |
| 825 | 0 | pit | 0.001 | <25mm | poor | 15 | 0 | 0 | 0 | 0 |
| 829 | 0 | ditch | 0.001 | <25mm | poor | 4 | 0 | 0 | 0 | 0 |
| 835 | 0 | ditch | 0.002 | 25-75mm | poor | 15 | 0 | 0 | 0 | 0 |
| 835 | 23 | ditch | 0.001 | <25mm | poor | 2 | 0 | 0 | 0 | 0 |
| 840 | 26 | pit | 0.002 | <25mm | poor | 20 | 0 | 0 | 0 | 0 |
| 856 | 0 | pit | 0.002 | 25-75mm | poor | 1 | 0 | 0 | 0 | 0 |
| 856 | 28 | pit | 0.001 | <25mm | poor | 15 | 0 | 0 | 0 | 0 |
| 912 | 32 | pit | 0.005 | <25mm | poor | 75 | 0 | 0 | 0 | 0 |
| 965 | 0 | hearth | 0.025 | >75mm | medium | 3 | 0 | 0 | 0 | 0 |
| 965 | 33 | hearth | 0.003 | <25mm | medium | 10 | 0 | 0 | 0 | 0 |
| 966 | 0 | hearth | 0.020 | 25-75mm | good | 5 | 0 | 0 | 1 | 0 |
| 968 | 0 | ditch | 0.050 | >75mm | medium | 1 | 0 | 0 | 0 | 0 |
| 1007 | 0 | cut | 0.040 | 25-75mm | medium | 3 | 0 | 0 | 0 | 0 |
| 1018 | 0 | cut | 0.002 | 25-75mm | medium | 2 | 0 | 0 | 0 | 0 |
| 1019 | 0 | ditch | 0.100 | >75mm | medium | 2 | 0 | 0 | 1 | 0 |

| CONTEXT | SAMPLE | FEATURE | WT(kg) | FRAGS | PRES | LMAM | MANDIBLES | MEASURABLE | EPIPHYSES | COMPLETE |
|--------------|--------|----------|--------------|---------|--------|------------|-----------|------------|-----------|----------|
| 1019 | 52 | ditch | 0.003 | 25-75mm | poor | 2 | 0 | 0 | 0 | 0 |
| 1024 | 37 | pit | 0.001 | <25mm | medium | 1 | 0 | 0 | 1 | 0 |
| 1026 | 43 | pit | 0.010 | <25mm | medium | 1 | 0 | 0 | 0 | 0 |
| 1079 | 45 | pit | 0.001 | <25mm | medium | 2 | 0 | 0 | 0 | 0 |
| 1096 | 49 | pit | 0.025 | 25-75mm | medium | 10 | 1 | 0 | 0 | 0 |
| 1149 | 0 | ditch | 0.030 | 25-75mm | good | 3 | 1 | 0 | 0 | 0 |
| 1203 | 0 | ditch | 0.225 | >75mm | medium | 6 | 1 | 0 | 0 | 0 |
| 1203 | 66 | ditch | 0.002 | <25mm | good | 6 | 0 | 0 | 0 | 0 |
| 1266 | 0 | ditch | 0.200 | >75mm | poor | 25 | 1 | 1 | 2 | 0 |
| 1266 | 73 | ditch | 0.001 | 25-75mm | good | 2 | 0 | 0 | 0 | 0 |
| 1343 | 82 | cut | 0.002 | <25mm | medium | 5 | 0 | 0 | 0 | 0 |
| 1345 | 0 | cut | 0.002 | 25-75mm | good | 2 | 0 | 0 | 0 | 0 |
| 1421 | 89 | posthole | 0.002 | <25mm | medium | 12 | 0 | 0 | 1 | 0 |
| 1451 | 0 | posthole | 0.002 | 25-75mm | medium | 1 | 0 | 0 | 0 | 0 |
| TOTAL | | | 1.110 | | | 804 | 4 | 1 | 6 | 0 |

Table 15: A detailed summary of the animal bones

| CONTEXT | SAMPLE | SPECIES | PART | AGE | STATE |
|---------|--------|-------------|--------------|----------|----------|
| 125 | 0 | ox-sized | head | mature | |
| 167 | 22 | ox-sized | vertebra/rib | mature | |
| 183 | 1 | ox-sized | longbone | | calcined |
| 188 | 3 | ox-sized | longbone | | calcined |
| 692 | 0 | ox-sized | longbone | | calcined |
| 718 | 0 | ox-sized | head | mature | |
| 797 | 18 | ox-sized | longbone | | calcined |
| 806 | 19 | sheep-sized | head | mature | |
| 820 | 20 | ox-sized | longbone | | calcined |
| 825 | 0 | ox-sized | longbone | | calcined |
| 829 | 0 | sheep-sized | longbone | | |
| 835 | 0 | ox-sized | head | mature | |
| 835 | 23 | sheep-sized | longbone | | |
| 840 | 26 | ox-sized | longbone | | calcined |
| 856 | 0 | ox-sized | longbone | | calcined |
| 856 | 28 | ox-sized | longbone | | calcined |
| 912 | 32 | ox-sized | longbone | | calcined |
| 965 | 0 | ox | lower limb | mature | |
| 965 | 0 | sheep-sized | vertebra/rib | mature | |
| 965 | 33 | sheep/goat | head | mature | |
| 965 | 33 | sheep/goat | lower limb | mature | |
| 965 | 33 | sheep-sized | vertebra/rib | mature | |
| 966 | 0 | sheep/goat | upper limb | juvenile | |
| 966 | 0 | sheep-sized | vertebra/rib | mature | |
| 968 | 0 | ox-sized | lower limb | mature | |
| 1007 | 0 | ox-sized | longbone | | |
| 1007 | 0 | sheep-sized | longbone | | |
| 1018 | 0 | sheep-sized | vertebra/rib | mature | |
| 1019 | 0 | ox | head | mature | |
| 1019 | 0 | ox | upper limb | mature | |
| 1019 | 52 | ox-sized | longbone | | |
| 1019 | 52 | sheep-sized | longbone | | |
| 1024 | 37 | sheep/goat | foot | mature | |
| 1026 | 43 | sheep-sized | vertebra/rib | mature | calcined |
| 1079 | 45 | ox-sized | longbone | | charred |
| 1096 | 49 | sheep/goat | head | mature | |
| 1149 | 0 | ox | head | mature | |
| 1149 | 0 | pig | head | mature | |
| 1203 | 0 | ox | head | mature | |
| 1203 | 0 | ox | upper limb | mature | |
| 1203 | 0 | sheep | head | mature | |
| 1203 | 66 | sheep-sized | head | mature | |
| 1266 | 0 | ox | head | mature | |

| CONTEXT | SAMPLE | SPECIES | PART | AGE | STATE |
|---------|--------|-------------|------------|--------|----------|
| 1266 | 0 | ox | foot | mature | |
| 1266 | 0 | ox | upper limb | mature | |
| 1266 | 0 | dog | upper limb | mature | |
| 1266 | 0 | sheep/goat | head | mature | |
| 1266 | 0 | pig | head | mature | |
| 1266 | 73 | dog | head | mature | |
| 1266 | 73 | pig | head | mature | |
| 1343 | 82 | ox-sized | longbone | | calcined |
| 1345 | 0 | ox | head | mature | |
| 1421 | 89 | sheep-sized | upper limb | mature | calcined |
| 1421 | 89 | ox-sized | longbone | | calcined |
| 1451 | 0 | sheep-sized | longbone | | |

5.2.8 Cremated bone (Natasha Powers)

5.2.8.1 Introduction

The burnt bone presented for study comprised five samples of varying sizes, including two [183] and [188] that had been found within vessels, or the remains of vessels. The remaining three samples had been taken from oval pits, all of which were very shallow. There were an additional nine contexts containing burnt or calcined animal bone. The author briefly scanned these and they are included in the relevant specialist report.

5.2.8.2 Method

The features containing burnt bone had been subject to 100% sampling on site. All samples had been wet sieved and sorted prior to examination by the author who consequently examined only the burnt bone from the residues. General information about the samples was obtained from the processing data stored on the MoLAS Oracle database. A MoLSS Human Osteologist examined burnt bone samples in accordance with current guidelines (McKinley and Roberts 1993, McKinley 2004).

Each sample was weighed to establish the total weight of burnt bone present in grams. The burnt bone was then passed through a series of graded sieves to separate the fractions greater than 10mm, 4mm and 2mm. No unsorted residue or fragments smaller than 2mm in size were present. Each resulting subdivision was weighed and proportions calculated as a percentage of the total bone present. Identifiable fragments were divided into four body areas and weighed accordingly. Within each body area, those fragments identifiable to a specific skeletal element were noted and also weighed. Fragmentation was determined by noting the largest fragment size and the average (mean) size of fragments within each context to the nearest 5mm. The approximate percentage of each colour of burnt bone was described (Holden *et al* 1995 a and b, McKinley 2004). The minimum number of individuals (MNI) was calculated by number of repeated skeletal elements or parts thereof and any osteological inconsistencies. Age was only estimated if sufficient diagnostic elements were present and were generally limited to a diagnosis of 'adult'. The presence of animal bone and any other intrusive material was also noted.

5.2.8.2.1 PRESERVATION AND DISTURBANCE

There was minimal horizontal disturbance to the feature containing burnt bone, possibly the result of subsequent ploughing. However, as previously stated a number of the features were very shallow compared to the dimensions that might be expected of a cremation burial and urned deposit [188] was heavily truncated (Table 16).

All bone was highly fragmentary, with a bias towards survival of cortical fragments from the robust long bones. The degree of fragmentation meant that, in several cases deposits could not be identified to species level.

| Context | Sample No. | Vessel No. | Pit No. | Deposit type | Truncation/disturbance | Weight of burnt bone (g) |
|---------|------------|------------|---------|--------------|------------------------|--------------------------|
| 183 | 1 | 185 | 184 | Urned | Shallow (0.16m) | 39.5 |
| 188 | 3 | 4 | 189 | Urned | Heavily truncated | 94.5 |
| 825 | 24 | - | 826 | Pit fill | Very shallow (0.12m) | 1.0 |
| 840 | 26 | - | 258 | Pit fill | Very shallow (0.12m) | 1.0 |
| 912 | 32 | - | 243 | Pit fill | Very shallow (0.08m) | 6.0 |

Table 16: Deposit type and disturbance

5.2.8.2.2 MINIMUM NUMBER OF INDIVIDUALS

McKinley (1994 (a)) cautioned against the use of the single repeated skeletal element, as a measure of minimum numbers, as mixing would occur at an often re-used pyre site. In the event no repeated elements or osteological inconsistencies were identified in any samples. Contexts [825] and [840] contained insufficient bone to estimate an MNI and fragmentation prevented species identification. It was not possible to definitively state how many individuals, or parts thereof, were included in the remaining three deposits, but the minimum number for each context was a single individual. An MNI for the site of two (urned) cremation burials is likely, though the human bone from [912] may indicate a highly truncated and un-urned third individual. It is also possible that adjacent pits or vessels could contain parts of the same individual.

5.2.8.2.3 DEMOGRAPHIC DATA

The robust nature and overall proportions of the cortical and vertebral fragments in [183] and [188] suggested that the remains were probably adult in origin. No sexually dimorphic characteristics were observable.

5.2.8.2.4 PYRE TECHNOLOGY AND RITUAL

5.2.8.2.5 OXIDATION

All samples contained bone that was predominantly off-white in colour, with a small percentage of blue-grey present. This reflects the efficiency of the cremation process, the high temperature the individual was subject to and resulting degree of oxidation, with temperatures in excess of 600°C (Holden *et al* 1995 a and b): to cremate a human body requires a minimum temperature of 400°C (McKinley 1994 (a)). No patterns were noticed in the colour of the remains though with such scant samples this might not be expected and one should remain cautious in interpreting the cremation process as entirely even and efficient. Previous work has shown that differences in colour between contexts appear likely to be, at least in part, an artefact of sample size: larger samples increasing the chances of finding differential cremation (Powers *unpublished*). However, such efficiency has been demonstrated by experimental pyre cremations (McKinley 2000) and is not uncommon in archaeological examples.

5.2.8.2.6 TOTAL WEIGHT OF BONE FOR BURIAL

The total weight of burnt bone was between 1.0g and 94.5g (Table 16) far short of the 1600g to 3600g expected from the cremation of an adult individual (McKinley 1989).

The samples seen here remain small even by archaeological standards, where weights in excess of 100g are commonplace, the smallest sample from Spong Hill weighing 117.2g (McKinley 1994 (a)). The samples from Boughton Monchelsea can be seen to represent only partial remains and suggests that the small quantities of bone in [825], [840] and [912] indicate intrusive remains or pyre clearance debris rather than burials per se. Though, as previously stated, [912] might be a highly truncated burial.

5.2.8.2.7 FRAGMENTATION AND DEHYDRATION

An undisturbed modern cremation will result in fragments of around 250mm; movement of hot, brittle bone, during pyre collapse, collection or stoking would lead to further fragmentation (McKinley 1989, 1994 (b), Gejval 1969). Archaeological examples with more than 50% of the fragments over 10mm in size are common with a maximum of 140mm obtained from an undisturbed Roman cremation (McKinley 1994 (b)). Generally, in archaeological contexts, further post-cremation and post-deposition breakage can be seen to have occurred and this is sometimes considerable. This assemblage is no exception with a maximum fragment size of 40mm from urned burial [188] and the greatest proportion of each context generally falling in the >4mm fraction.

Three samples contained human bone that could be identified to body area, each also containing some fragments that could be identified by element (Table 17). The high degree of fragmentation favoured the identification of the robust elements such as the femoral and tibial shafts and the cranial vault, though fragments of the apophyseal joints of the vertebrae were seen, as were small pieces of tooth root. When the results for each context are compared to the expected proportion of bone for each body area, this pattern is reinforced, with only [188] containing elements from all areas of the body. The under-representation of less robust bones, particularly those with a high proportion of trabecular or spongy bone is therefore most likely to result from poor preservation, rather than a deliberate collection bias.

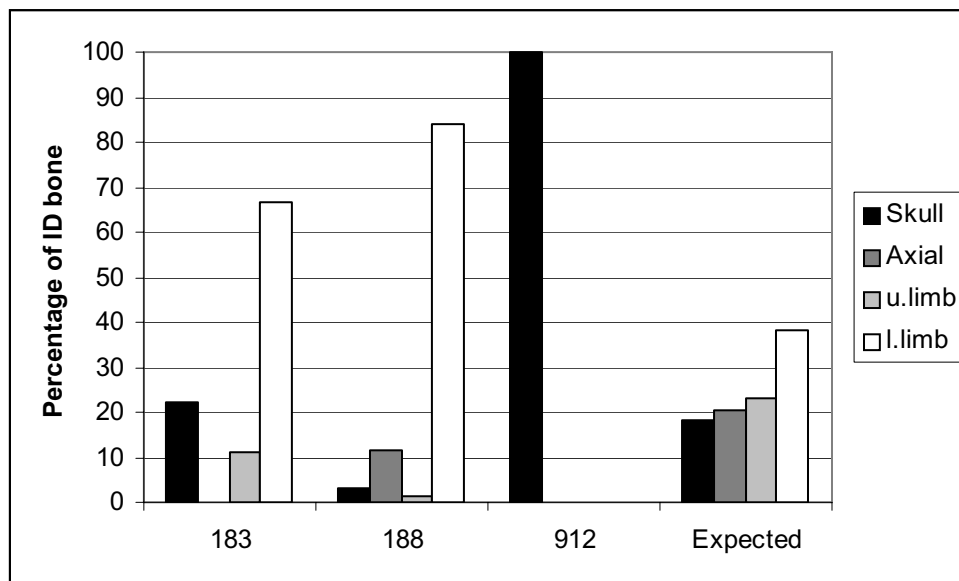


Table 17: Identifiable bone by body area

| Context | Sample No. | Deposit type | Largest fragment (mm) | Mean Fragment size (mm) | >10mm (g) | % Total | >4mm | % Total | >2mm | % Total |
|---------|------------|--------------|-----------------------|-------------------------|-----------|---------|------|---------|------|---------|
| 183 | 1 | Urned | 18 | 5 | 0.5 | 1 | 36.0 | 91 | 3.0 | 8 |
| 188 | 3 | Urned | 40 | 10 | 41.0 | 43 | 49.0 | 52 | 0.5 | 1 |
| 825 | 24 | Pit fill | 9 | 5 | 0.0 | 0 | 0.75 | 75 | 0.25 | 25 |
| 840 | 26 | Pit fill | 16 | 5 | 0.0 | 0 | 0.5 | 50 | 0.5 | 50 |
| 912 | 32 | Pit fill | 10 | 5 | 0.0 | 0 | 5.0 | 83 | 1.0 | 17 |

Table 18: Fragmentation

5.2.8.2.8 PYRE GOODS

Slight green staining presumably resulting from proximity to a copper alloy object was seen on the fragment of the right proximal humerus from [183]. Given the location of this stain on the shoulder, it is tempting to suggest that it may indicate an item of personal ornamentation, such as a brooch, was originally present. No other artefactual remains were seen, though it is possible that some of the unidentified fragments of burnt bone and even charred grains were the remains of foodstuffs used as pyre goods.

5.2.8.2.9 PYRE DEBRIS

Not all features containing cremated bone represent burials; burnt bone may be found with pyre debris or the remains of cleared pyre sites (McKinley 2000). No *in situ* burning of the underlying surfaces was identified, preventing location of pyre sites from being defined. Quantities of charcoal, charred grain and burnt earth had been noted in four samples during processing

Table 19) the presence of burnt earth in [840] and [912] presumably indicating the remains of a fired area of subsoil and perhaps supporting interpretation of these deposits as pyre clearance debris. Only small quantities of charcoal were noted in any of the contexts, perhaps indicating care in the separation of the remains from the pyre debris. Although the burial deposits seem to have included some of the burnt fuel.

| Context | Sample No. | Original sample size (L) | Weight of burnt bone (g) | Comments |
|---------|------------|--------------------------|--------------------------|---|
| 183 | 1 | 10 | 39.5 | Moderate small fragments of charcoal |
| 188 | 3 | - | 94.5 | No info |
| 825 | 24 | 0.5 | 1.0 | Occasional charred grain and moderate charred wood, pot fragments |
| 840 | 26 | 10 | 1.0 | Moderate charred wood and grain, burnt earth |
| 912 | 32 | 10 | 6.0 | Occasional charred wood, burnt earth |

Table 19: Total weight of burnt bone and volume of original sample

5.2.8.2.10 DISCUSSION

Much of the burnt bone recovered from KT-BMS05 was identifiably human in origin, though some of the unidentifiable fragments could, conceivably be animal remains.

With dates spanning the first century, these deposits span the Late Iron Age and early Romano-British periods. From *c* 50BC in south-east England cremation was reintroduced. Such burials, in contrast to those seen here, were often richly furnished with vessels and foodstuffs, though those simpler in style have also been found and have been suggested to relate to a highly stratified society. Cremation burials became more widely adopted during the early Roman period where this was the predominant rite, though mixed cremation and inhumation cemeteries persist (Taylor 2001). Villa sites often have their own cemeteries and these, and early Romano-British rural cemeteries in general, often contain numerous cremation burials. Urned, un-urned and above-ground monuments in the form of small mounds or ring ditches have been inferred elsewhere (*ibid.*). It seems therefore that these deposits, at least two of which are convincing as primary cremation burials, are at the plainest end of the spectrum. It must not be forgotten however, that a simple grave deposit belies a complex and labour intensive funerary rite where cremation has occurred.

Copper alloy staining and the fragmentation of the bone indicate the burning of a probable clothed body with associated personal ornamentation. Contemporary Roman accounts, and archaeological evidence from elsewhere, supports the idea of a clothed and ornamented body cremated with much ceremony (Taylor 2001). It is possible that foodstuffs were also included, suggested by calcined animal bone deposits seen elsewhere on site. These may also be deliberate cremation of whole animals. The cremation process was carried out efficiently and would almost certainly have required attention for several hours to ensure burning was adequately completed (McKinley 1994 (a)). This group of deposits is too small a sample to infer deliberate spatial arrangement and there is insufficient osteological data to examine the demography of the people it represented. Although there is no direct archaeological evidence of cremation structures or sites at KT-BMS05, pyre structures appear to vary little over time and location, with a rectangle of layered timber and brushwood, either placed directly onto the ground or over a shallow pit, with the body and any pyre goods are then placed on top (McKinley 2000). What little evidence survives suggests that bone was largely separated from the pyre debris and fuel remains without any deliberate selection bias of a specific body part. This was then placed in vessels and interred in small pits. Clearance of the pyre site or later disturbance of burials resulted in the small quantities of highly fragmented bone and charred wood in at least two of the pits ([825] and [840]).

5.2.8.3 Summary and conclusions

There were five contexts containing burnt human or probable human bone. All are believed to date from the Late Iron Age or early Romano-British periods, possibly associated with a nearby villa. Contexts [183] and [188] were contained in ceramic vessels. The remaining three samples were found within shallow pits. A total of 142g of burnt bone was recovered, a range of 1.0g to 94.5g per context. All bone was highly fragmentary. A minimum of two (urned) cremation burials is likely, though the human bone from [912] may indicate a third burial. The urned burials contained remains that were probably adult in origin. The colour and fragmentation of all samples indicated even and efficient burning of fleshed remains. Three samples

contained human bone that could be identified with body area and no deliberate selection bias could be inferred. All samples represent only partial individuals. Copper alloy object staining suggests the possibility that an item of personal ornamentation was originally present with this individual. It is possible that charred grains are the remains of foodstuffs. Quantities of charcoal and burnt earth were noted in several samples. As no *in situ* burning was noted, the location of any pyre sites cannot be determined.

5.2.9 Conservation (Liz Barham)

5.2.9.1 Introduction

The following assessment of conservation needs for the accessioned and bulk finds encompasses the requirements for finds analysis, illustration, analytical conservation and long-term curation. Work outlined in this document is needed to produce a stable archive in accordance with MAP2 (English Heritage 1992) and the Museum of London's Standards for archive preparation (Museum of London 1999).

Twenty-four accessioned finds were recovered, quantified by material as follows:

| | Material | No. Accessioned | No. Conserved | No. for Conservation work |
|------------|-----------------|------------------------|----------------------|----------------------------------|
| Inorganics | Copper alloy | 3(1 coin) | 1 | 1 |
| | Silver | 1 (1 coin) | 1 | - |
| | Iron | 8 | - | 3 |
| | Lead alloy | 1 | - | - |
| | Ceramic | 2 | - | - |
| | Glass | 9 | - | - |
| | Stone | 2 | - | - |

Table 20: Summary of conservation work

5.2.9.2 Methodology

Conservation treatments are carried out under the guiding principles of minimum intervention and reversibility. Whenever possible preventative rather than interventive conservation strategies are implemented. Working with archaeologists and finds specialists, procedures aim to obtain and retain the maximum archaeological potential of each object.

Most conservation work on metal artefacts begins with visual examination under a binocular microscope followed by mechanical cleaning using scalpel and other hand tools. Occasionally other mechanical devices such as air abrasive and power pen are used. Mechanical cleaning will reveal detail and a conservation surface beneath often voluminous corrosion products enabling the true shape and purpose of the artefact to be understood.

All conserved objects are packed in archive quality materials and stored in suitable environmental conditions. Records of all conservation work are prepared on paper and on the Museum of London collections management system (Multi MIMSY) and stored at the Museum of London.

The accessioned finds were assessed by visual examination of both the objects and the X-radiographs, closer examination where necessary was carried out using a binocular microscope at high magnification. The accessioned finds were reviewed with reference to the finds assessment and the Roman pot assessment.

5.2.9.3 *Finds analysis/investigative work:*

The following items were identified for further investigative work:

<2> iron stylus fragment, to clarify decoration

<11> iron knife, to clarify form

<12> iron hook, to clarify form

Conservation for illustration

<21> copper alloy object to clean for illustration and treat post-cleaning

15 pots were estimated as worthy of illustration and needing reconstruction prior to illustration.

5.2.9.4 *Preparation for archive deposition:*

The finds are stable and appropriately packed for archive deposition.

5.2.10 *Slag (Lyn Blackmore)*

A small amount of slag was recovered (1078gm). The slag was recorded as far as possible on an Excel spreadsheet and on the Oracle database.

The assemblage includes four pieces of very dense slag, from [913], [984], [985] and [1000], of which that from [984] is a piece of furnace slag that includes fuel impressions; the sparkly 'pyritic' structure this is visible over part of the surface is thought to be due a prolonged cooling period after the smelting process (D Dungworth *pers comm*). The texture of these pieces resembles tap slag and the larger fragment from [913] is layered, as if it represents two or more flows. The largest piece is from [1000], which has one flat surface. This is undiagnostic but within the context of the assemblage it is probably a piece of furnace slag (D Dungworth *pers comm*).

The other finds comprise two fragments of vitrified hearth lining ([797]) and small amounts of highly magnetic spheroidal grains. The latter was recovered from sieved samples ([797], [1026], [1200], [1320], [1335], [1358], [1377], [1395], [1396], [1419], [1421], [1423], [1425], [1447]). These are assumed to be hammerscale, although some appear to be clay-rich and/or solid, not hollow, in which case they could be rolled pellets derived from the hearth. Spheroidal hammerscale would not be unexpected on a smelting site as it is expelled from the bloom during primary smithing (Bayley et al 2001, 14).

As a whole the assemblage indicates an episode of limited smelting on the site. There was not time to consider the project design or the distribution of the slag, but this should be done before any further work is carried out on the material.

6 Potential of the data

6.1 Realisation of the original research aims

(i) to clarify the nature, extent, date, phasing and character of the Iron Age and Romano-British activity

The excavation has revealed there are extensive remains in the East Field, which continue towards the north-east beneath Brishing Lane. Although the remains become fewer towards the north-west it is probable they also exist in the West Field.

There were two Romano-British enclosures, one of which had been extended. Buildings included a round house, a masonry building and two aisled buildings with large postholes. There were several cremation burials, at least two were in urns. There was also evidence of iron smelting and pottery making on the site. There was activity on the site until the middle of the second century AD, with the peak in the middle years of the first century AD, which declined quickly after *c* AD 120. By the third and fourth centuries AD the focus of activity had moved some distance from this site.

(ii) to reveal, excavate and record any remains associated with the earthworks noted just beyond the south-eastern end of the site.

No remains were identified that could be associated with the earthworks but the site is clearly within the area that is enclosed by them.

(iii) to reveal, excavate and record any other archaeological remains surviving within the eastern end of the East Field

There were few remains in the eastern part of the East Field, being some distance from the enclosures that were the main centre of activity.

(iv) to determine the date, character, extent and function of the probable post-medieval building revealed during the evaluation (KARU 1996)

The full plan of the post-medieval building was revealed. It is a well-built ragstone building of late 18th/19th century date and is possibly a farm building.

6.2 General discussion of potential

The site data recovered during the excavation can be used to answer the original research aims. This will be achieved mainly by combining the stratigraphic records, where phasing of the site plans shows the development of the site over time, with the finds and environmental data.

The fairly large flint assemblage is residual in nature, and has the potential to demonstrate what activities were taking place in the vicinity. The nature of the retouched pieces suggests the working of hides and skins (scraping and cutting). As such it should be compared with other published flint material from the area.

The bulk of the activity on the site is Romano-British. Pre-historic daub suggests there was a hearth or kiln structure on the site. It has limited potential for further study, nor can it be used to locate it.

Two aisled Roman buildings were found which could be compared with other regional examples. The dating of the Roman pottery assemblage indicates that there was activity on the site until the middle of the second century AD. Furthermore, it would appear that the peak was in the middle years of the first century AD, which declines quickly after *c* AD 120. The very small late Roman assemblage from this site would suggest that over the third and fourth centuries AD the focus of activity had moved some distance from this site. It is possible that during the period *c* AD 200+, the site was no longer inhabited and was being used simply as a field. However due to its size, the assemblage has limited potential for the refinement of the dating once the spot-date information has been fully integrated with the stratigraphic sequence.

The Roman building material, comprising mainly of roofing tile and brick is presumably from the Roman structures on the site. The combed box-flue tile hints at the presence of a higher status building with a hypocaust heating system. The probable tesserae and large thick bipedalis or sesquipedalis brick may have come from the same building. A number of ceramic fabric types are present, including two (2454, 3226), which have been found on a number of other Kent sites. This suggests the building material was brought from elsewhere rather than being made on the site.

Further analysis of the animal bone will only allow very limited insight into the local meat diet, mainly in terms of carcass-part selection and age at death, of ox, sheep/goat and pig. There is no potential for study of stature, butchery or working. All the calcined bone is either unidentifiable fragments or fragments of 'ox-sized' and 'sheep-sized' longbone; further study will not allow determination of species or skeletal element. The absence of wild species eliminates any potential for interpretation of local environmental characteristics.

The plant remains are of local and possibly regional significance given the presence of rich charred plant assemblages from the site which should enhance our understanding of Roman arable agriculture in this area of Kent; the results will be compared to previous archaeobotanical work in the region. The charcoal and grain samples can suggest what activities were taking place on the site. The samples produced a rich plant assemblage, which may allow comments on the range of cereals being cultivated and used between periods and the possible uses of different areas of the site and the nature of human activities (including crop-processing) being carried out there. The weed seeds from the samples may also allow an investigation into aspects of crop husbandry. It is hoped that further sampling of different features across the site will result in the recovery of further charred plant remains and more information on crop husbandry and processing at the site during the Iron Age and Romano-British periods.

The small amount of human bone recovered also means there is limited potential for further study.

The accessioned finds and the bulk glass have some potential for helping to date certain contexts.

The total lack of medieval finds suggests the site was little used between the Roman and post-medieval periods. The post-medieval activity is limited to one building. Other than for dating, the small amount of finds from this period has limited potential for study of this building. A search of cartographic sources may identify it; currently it is thought to be a farm building.

7 Significance of the data

The discovery of an extensive Romano-British site with ditches and buildings located within the major field works is of major local significance. This site adds further information on the local Roman landscape when placed in context alongside nearby sites, such as the bathhouse at Brising Quarry and the Joy Wood walled cemetery near Pested Bars Road.

The pottery assemblage has some regional significance in understanding the Late Iron Age/early Roman land-use in the area. It also has significance in helping our understanding of the interaction between Late Iron Age tribes, just prior and just after Britain's conquest by Rome. The site should be considered in relation to the Late Iron Age landscape around Maidstone.

The site provides further evidence for the movement of building material in north-east Kent during the early Roman period. The presence of box-flue tiles and large hypocaust bricks and possible tesserae indicate at least one higher status building on or near the site.

The other finds and the animal bone are only of very limited local significance.

The flint assemblage indicates moderate Prehistoric activity predating the Roman period.

8 Publication project: aims and objectives

8.1 Revised research aims

The archive has the potential to address a series of updated research aims (URs). These are partly derived from the original research aims (section 3) and synthesised with the assessments of potential realisation of these various aims (section 6).

8.2 Prehistoric

UR1 What can be deduced about Prehistoric activity in the vicinity of the site?

UR2 How does the flint assemblage compare with other published assemblages?

UR3 Are there other examples of flint deposition in later features?

8.3 Romano-British

UR4 What was the form and character of the Roman settlement?

UR5 What is the duration of the occupation?

UR6 What information does the pottery assemblage provide about the transition period from Late Iron Age to early Roman?

UR7 What information does the pottery assemblage provide regarding the land-uses around the Maidstone area?

UR8 What information does the pottery assemblage provide about the late Roman period?

UR9 How does the form and function of the aisled buildings compare with other regional examples?

UR10 What are the characteristics of the local meat diet?

UR11 What can the environmental data say about the function of the site?

8.4 Post-medieval

UR12 What is the date, form and function of the post-medieval occupation on the site?

8.5 Preliminary publication synopsis

The results of the excavation should be published in a local archaeological journal, such as *Archaeologia Cantiana*. The publication would consist of the following sections.

Synopsis/summary

Introduction – including the circumstances and dates of the fieldwork, details of past fieldwork in the area, the earthworks, acknowledgements

The excavation – geology and topography, Prehistoric, Romano-British, post-medieval periods, with integrated finds and environmental data

Conclusions – overview: the regional significance of the site in the Roman period

Specialist reports – presentation of selective data from the research archive

Bibliography

Illustrations – site location plan, phase plans, selected finds including some of the flints, plus several photos

9 Publication project: task sequence

9.1 Stratigraphic method statement

Task 1: Complete CAD digitising of site plans.

Task 2: Complete stratigraphic analysis and finalise subgrouping of contexts.

Task 3: Group definition and description. These will be defined by stratigraphic and chronological analysis using the subgroup matrix and dating. Each group will comprise a plan derived from the GIS with a textual description.

Task 4: Period definition and description. The chronological periods of activity across the site will be identified from the group matrix. A text summary compiled from the group texts will be produced for each period. Plots for each period will be produced using GIS and hand annotated with conjecture and retained features.

Task 5: Establish land use sequence and diagrams

Task 6: Production of detailed publication synopsis if required

9.2 General finds

Task 7: Finds review stage

9.3 Building material method statement

Task 8: The building material assemblage should be compared with the stratigraphical sequence and all available dating evidence

Task 9: Compare fabric types with other sites in north-west Kent

Task 10: Write publication report

Task 11: Attend Finds Review

Task 12: Checking of pencil illustrations

Task 13: Cut and shaped Kentish ragstone block associated with hearth/kiln structure - [986]

Task 14: Shaped daub from kiln/hearth structure (select best from ([984], [985], [986], [993], [995]))

9.4 Pottery method statement

Task 15: Full integration of spot-date information with stratigraphic sequence on the ORACLE database and checking of discrepancies to finalise phasing. Production of combined reports, interpretation and dating table.

Task 16: Write contributing text to the chronological narrative

Task 17: Research and write text on Late Iron Age/Roman country sites in and around the Maidstone area

Task 18: Research and write text on burial vessels

Task 19: Write Specialist Appendix

Task 20: Preparation of catalogue of 2 burial vessels

Task 21: Preparation of figure list for Finds Review using Oracle and selection, preparation of pottery for Finds Review

Task 22: Attendance at Finds Review

Task 23: Reconstruction of vessels for illustration

Task 24: Illustration of approximately 60 Vessels by Drawing Office

Task 25: Check pencil illustrations

Task 26: Liaison with external specialists

Task 27: Two decorated Samian sherds to be seen by specialists

Task 28: Editing

9.5 Accessioned finds method statement

Task 29: Further analysis of stone rod <22> to establish purpose and date, the unperforated clay plate <26>

Task 30: Write up the accessioned finds and bulk glass for inclusion in the site publication

9.6 Worked flint

Task 31: To research other published assemblages

Task 32: To illustrate (photograph?) eight selected pieces

Task 33: To write report

9.7 Botanical method statement

Task 34: Sorting, identification and quantification of material in 8 rich charred plant assemblages

Task 35: Identification and preparation of report on selected identifiable charcoal samples (external specialist): 2 days

Task 36: Sorting, identification and quantification of material in 7 moderately rich charred plant assemblages

Task 37: Scanning & recording of plant remains in remaining samples

Task 38: Oracle input & tables (including editing)

Task 39: Analysis & preparation of publication text

9.8 Animal bone method statement

Task 40: Recording onto post-assessment database

Task 41: Analysis of data/preparation of report/archive

9.9 Graphics method statement

Task 42: Non-specialist drawings and stratigraphic drawings

9.10 Conservation method statement

Task 43: Analysis/investigative work

9.11 Photographic method statement

Task 44: Prepare site photographs

9.12 Documentary research method statement

Task 45: Cartographic research if required

9.13 Integration of publication text method statement

Task 46: Writing main text and integration of specialist contributions

9.14 Project management method statement

Task 47: Project management

9.15 Editing and production method statement

Task 48: Internal edit and corrections

Task 49: Specialist edit and corrections

Task 50: Copy edit

Task 51: Page layout

Task 52: Proof reading

Task 53: Prepare archive

10 Publication project: resources and programme

The resources required for completion of the publication tasks as described above are as follows:

| Task No. | Done by | Task Description | Time required (person days) |
|----------|------------------|---|-----------------------------|
| 1 | Geomatics | Complete CAD digitising | 1 |
| 2 | Strat author | Stratigraphic analysis | 1 |
| 3 | Strat author | Group definition and description | 3 |
| 4 | Strat author | Period definition and description | 3 |
| 5 | Strat author | Establish land use sequence and diagrams | 2 |
| 6 | Strat author | Detailed publication synopsis | 1 |
| 7 | Finds | Finds review stage | 0.25 |
| 8 | BM specialist | Building material assemblage and strat sequence | 1 |
| 9 | BM specialist | Compare fabric types | 1 |
| 10 | BM specialist | Write publication report | 3 |
| 11 | BM specialist | Finds Review | 0.25 |
| 12 | BM specialist | Checking of pencil illustrations | 0.25 |
| 13 | BM specialist | Kentish ragstone block from hearth/kiln structure | unknown |
| 14 | BM specialist | Shaped daub from kiln/hearth structure | unknown |
| 15 | Finds specialist | Production of combined reports, interpretation and dating table | 4.0 |
| 16 | Finds specialist | Write contributing text to the chronological narrative | 4.0 |
| 17 | Finds specialist | Research and write text on Late Iron Age/Roman local sites | 4.0 |
| 18 | Finds specialist | Research and write text on burial vessels | 0.5 |
| 19 | Finds specialist | Write Specialist Appendix | 2.0 |
| 20 | Finds specialist | Preparation of catalogue of 2 burial vessels | 0.25 |
| 21 | Finds specialist | Preparation of figure list | 1.0 |
| 22 | Finds specialist | Finds Review | 0.5 |
| 23 | Conservator | Reconstruction of vessels | 7.0 |
| 24 | DO | Illustration of approximately 60 Vessels | 10.0 |
| 25 | Finds specialist | Check pencil illustrations | 0.5 |
| 26 | Finds specialist | Liaison with external specialists | 0.5 |
| 27 | Finds | Two decorated Samian sherds | 0.25 |

| | | | |
|----|--------------------|--|------|
| | specialist | | |
| 28 | Finds specialist | Editing | 0.5 |
| 29 | Acc finds | Further analysis of stone rod and clay plate | 0.5 |
| 30 | Acc finds | Write up the accessioned finds and bulk glass for inclusion in the site publication | 2.0 |
| 31 | Flint specialist | To research other published assemblages | 0.5 |
| 32 | DO | Illustrate (photograph?) eight selected pieces | 0.5 |
| 33 | Archaeo Bot | Write report | 1.0 |
| 34 | Archaeo Bot | Sorting, identification and quantification (8 rich assemblages) | 4.0 |
| 35 | Archaeo Bot | Sorting, identification and quantification (7 moderate assemblages) | 2.5 |
| 36 | Archaeo Bot | Identification and preparation of report on selected identifiable charcoal samples (external specialist) | 2.0 |
| 37 | Archaeo Bot | Scanning plant remains (remaining samples) | 2.0 |
| 38 | Archaeo Bot | Oracle input & tables (including editing) | 1.5 |
| 39 | Archaeo Bot | Analysis & preparation of publication text | 2.0 |
| 40 | An bone specialist | Recording onto post-assessment database | 0.75 |
| 41 | An bone specialist | Analysis of data/preparation of report/archive | 0.75 |
| 42 | DO | Non-specialist drawings and stratigraphic drawings | 5.0 |
| 43 | | Analysis/investigative work | 1.0 |
| 44 | Photo | Site photographs | 0.5 |
| 45 | Strat author | Cartographic research | 1.0 |
| 46 | Strat author | Writing main text | 5.0 |
| 47 | PM | Project management | 2.0 |
| 48 | Strat author | Internal edit and corrections | 1.0 |
| 49 | Editor | Specialist edit and corrections | 1.0 |
| 50 | Editor | Copy edit | 1.0 |
| 51 | DO | Page layout | 1.0 |
| 52 | PM | Proof reading | 1.0 |
| 53 | Strat author | Prepare archive | 1.0 |

Financial resources sufficient to cover the work proposed in this document will be sought via a separate document.

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12 NMR OASIS archaeological report form

OASIS ID: molas1-12147

Project details

Project name Furfield Quarry, Brishing Road, Boughton Monchelsea

Short description of the project Excavations at East Field, Furfield Quarry Boughton Monchelsea, Kent found some evidence of Prehistoric activity on the site in the form of worked flints that were found residual in later features. Romano-British occupation was from the Late Iron Age until the middle of the second century AD. The peak was in the middle years of the first century AD and declined quickly after c AD 120. The main activity was two ditched enclosures and buildings that included a circular hut, a masonry building and two aisled buildings with large postholes. There was also evidence of iron working and a kiln. Post-Roman activity on site was limited to a large stone building of 19th century date.

Project dates Start: 06-04-2005 End: 22-07-2005

Previous/future work No / No

Any associated project reference codes KT-BMS05 - Sitecode

Type of project Recording project

Site status None

Current Land use Grassland Heathland 5 - Character undetermined

Monument type DITCHES Roman

Monument type BUILDINGS Roman

Investigation type 'Open-area excavation'

Prompt Planning condition

Project location

Country England

Site location KENT MAIDSTONE BOUGHTON MONCHELSEA
Furfield Quarry, Brishing Road, Boughton
Monchelsea

Study area 21980.00 Square metres

National grid reference TQ 78320 51680 Point

Height OD Min: 100.00m Max: 100.00m

Project creators

Name of Organisation MoLAS

Project brief originator Local Planning Authority (with/without advice from County/District Archaeologist)

Project design originator MoLAS

Project director/manager Stewart Hoad

Project supervisor Kevin Appleton

Sponsor or funding body George Wimpey South London

Project archives

Physical Archive recipient Kent County Council

Digital Archive Kent County Council

recipient

Paper Archive recipient Kent County Council

Project bibliography
1

Publication type Grey literature (unpublished document/manuscript)

Title Furfield Quarry, Brishing Road, Boughton Monchelsea. A post-excavation assessment

Author(s)/Editor(s) Mackinder, T

Date 2006

Issuer or publisher MoLAS

Place of issue or publication London

Description A4, ring bound with illustrations

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