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CAM ARC Report Number 968

An Iron Age and Roman Settlement at Broughton Manor Farm, Milton Keynes, Buckinghamshire

Post-Excavation Assessment and Updated Project Design

Rob Atkins and Gareth Rees

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Cambridgeshire County Council
Environment & Community Services

Commissioned by JJ Gallaghers Broughton Ltd

AFU Report Number 968

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Post-Excavation Assessment and Updated Project Design

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Site Code: 2006. 194
Date of works: 28th August 2006 and March 23rd 2007
Grid Ref: SP 902 393

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CAM ARC OASIS Report Form ***OASIS Number:*** ***HF to assign***

PROJECT DETAILS				
Project name	Excavations adjacent to Broughton Manor Farm, to the south of A5130, Broughton, Milton Keynes			
Short description	A total area of *c.*6.2 hectares was excavated concentrating on two related occupation areas *c.*200m apart (Areas 1 and 2). Areas 1 and 2 were occupied respectively from the Middle Iron Age (*c.*4th century BC or later) to the Late Roman period (late 4th century AD) and the Late Iron Age (*c.*1st century BC) to the Middle Roman period (later 2nd century AD). There was also a minor earlier prehistoric component within Area 1 comprising four or five small pits dating to the Early Neolithic, Early and late Bronze periods as well as late medieval/early post medieval furrows across both areas. The settlement was about average status in all periods. It is likely to have started as pits and linear ditches and grew into a farmstead by the late Iron Age. In the very late Iron Age/Early Roman period it grew in size to represent possibly around three extended families and then declined in size in the Middle Roman period. Of significance was a ritual area within Area 1. There were *c.*43 Late Iron Age and Roman cremations of the Aylesford-Swarling type dating from *c.* AD0–AD150. This is the largest cremation assemblage so far found in Buckinghamshire. This 'religious' area continued to be respected/visited long after disuse when, for example, a Middle Roman shrine was placed adjacent to the former main cremation enclosure.			
Project dates	Start	28/08/2006	End	23/03/2007
Previous work	Allen, M. R. 2002 Proposed Development at Broughton, near Milton Keynes, Buckinghamshire: Programme of Archaeological Field Investigation: Stage 1 (Fieldwalking) Pre-Construction Archaeology (Lincoln) (unpublished) Grant, J., Keir, W., Wilkins, B., and Roberts, B., 2003 *Broughton Manor Farm, Broughton, Milton Keynes An Archaeological Investigation Stage 3 – Evaluation* Archaeological Solutions report No. 1407 (unpublished) Muldowney, L., 2006 Iron Age and Romano-British Remains at Broughton Manor Farm, Milton Keynes, Buckinghamshire CAM ARC report No.923 (unpublished)		Future work	No
Associated project reference codes	2006.194			
Type of project	Excavation			
Site status	None			
Current land use (list all that apply)	Housing and industrial estate in the process of being built on derelict land			
Planned development	Housing and industrial estate			
Monument types / period (list all that apply)	Agriculture and subsistence (IA and Roman) Domestic (IA and Roman) Religious ritual and funerary (IA and Roman)			
Significant finds: Artefact type / period (list all that apply)	Agriculture and subsistence, armour and weapons, container, currency, dress and personal accessories, ecofacts, fixtures and fittings, food preparation and consumption, furnishings and furniture, heating and lighting, manufacture and processing, measurement, medicine and pharmacy, religion or ritual and tools and equipment (All Iron Age and Roman)			
PROJECT LOCATION				
County	Buckinghamshire	Parish	Broughton (Milton Keynes)	
HER for region	Milton Keynes			
Site address (including postcode)	N/A			
Study area (sq.m or ha)	6.5 hectares and evaluation trenches around			
National grid reference	SP 9020 3930			

Height OD	Min OD	61.4m OD	Max OD	65.6m OD
PROJECT ORIGINATORS				
Organisation	CAM ARC			
Project brief originator	Nick Crank			
Project design originator	Jenny Emmett			
Director/supervisor	Rob Atkins/Gareth Rees			
Project manager	James Drummond-Murray			
Sponsor or funding body	JJ Gallaghers Broughton Ltd			
ARCHIVES	**Location and accession number**		**Content (e.g. pottery, animal bone, database, context sheets etc)**	
Physical	Aylesbury Museum		Metal objects, flints, worked stone, pottery, CBM and fired clay, glass, human and animal bone, charred grain, insects, pollen, worked wood	
Paper	Aylesbury Museum		Back ground info, HER records, site record archive, Coin assessment report, assessment of the small finds, lithic report, worked stone report, prehistoric pottery report, late pre-Roman Iron Age and Romano-British pottery report, samian report, post-Roman pottery report, CBM and fired clay report, glass report, pot with adhesive and residue within glass vessel report, human bone report, animal bone report, charred grain report, insects report, pollen report and worked wood report.	
Digital	CAM ARC		Archive reports, data bases, photos, plans, sections	
BIBLIOGRAPHY				
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Author(s)	Rob Atkins and Gareth Rees			
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Date	February 2008			

Summary

Archaeological excavations by CAM ARC took place between the 28th August 2006 and March 23rd 2007 at Broughton Manor Farm, Milton Keynes. A total area of *c.*6.2 hectares (of the proposed 48 hectare development area) was excavated concentrating on two related occupation areas *c.*200m apart (Areas 1 and 2). Areas 1 and 2 were occupied respectively from the Middle Iron Age (*c.*4th century BC or later) to the Late Roman period (late 4th century AD) and the Late Iron Age (*c.*1st century BC) to the Middle Roman period (later 2nd century AD). There was also earlier prehistoric activity within Area 1 comprising up to five small pits probably dating to the Neolithic and the Bronze Age periods.

The first datable Middle Iron Age activity on the site was a few scattered pits and possible linear north to south ditches. In the Late Iron Age period there was a farmstead which was partly enclosed. There was a main area of occupation within an area *c.*150m by 80m comprising three enclosures, one of which was settlement related with an internal ring-ditch, some linear boundary ditches, two unenclosed ring-ditches, two '4-post' structures and, two cremations. Sparse pits were encountered directly to the south and west of these features. About 150m to the east of this main area was a small shallow sub-rectangular enclosure, possibly agriculture related. Within Area 2 there were two unenclosed structures as well as a possible cremation dating to this period.

In the very Late Iron Age period the settlement in both areas shifted slightly in location and they also grew in size. Area 1 was perhaps inhabited by two extended families and in Area 2 by another family. Separate drove-ways and boundary ditches defined both areas of occupation. Within these drove-ways/boundary ditches, both sites had areas for structures (and related features), enclosures/paddocks (mostly for pastoral farming), boundaries, wells/watering holes and pits. In addition, Area 1 also had a ritual area. Throughout the life of both occupation areas, the external boundaries of both remained largely the same but there was re-planning of the internal layout with realignment and rebuilding of these features, with for example stone buildings being introduced in Area 1 for the first time in the Middle Roman period. Of significance was the ritual area and this comprised a cremation cemetery which showed relatively rich burial customs of the Aylesford-Swarling type dating from *c.* AD0–AD150. This is the largest cremation assemblage so far found in Buckinghamshire, with up to *c.*43 Late Iron Age and Roman cremations uncovered. The cremations respected an east to west droveway and were interred either to the north or south along this droveway within three separate enclosures or unenclosed. This 'religious' area continued to be respected/visited long after disuse when a Roman shrine was placed adjacent to the former main cremation enclosure. This enclosure was recut into the Late Roman period.

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1 Introduction

An archaeological excavation by CAM ARC, Cambridgeshire County Council (formerly Archaeological Field Unit) was undertaken between 28th August 2006 and March 23rd 2007. The work was commissioned by JJ Gallaghers Broughton Ltd with Wardell Armstrong acting as the consultants.

JJ Gallaghers Broughton Ltd were given permission by Milton Keynes Unitary Authority to develop a 48-hectare area at Broughton Manor, Milton Keynes (Fig. 1; SP 902 393). As part of this development a staged programme of archaeological works has been undertaken – desk-based assessment (Wardell Armstrong); field walking (Pre-Construct Archaeology), geophysics (Pre-Construct Archaeology), trial trench evaluation (Archaeological Solutions) and further evaluation leading to two excavation areas (CAM ARC).

Excavation Area 1, a *c.* 4.7 ha area, was excavated from August 2006 to January 2007 and Area 2, a c.1.5 ha area to the south, between January and March 2007 (Figs. 2 and 3). Both excavation areas are near the base of a north to south valley. They lie above the flood plain to the north of the Broughton Brook, which meanders along the bottom of the valley (Fig. 5). The geology and topography varied on site depending on the location. Area 1, the northern half, was fairly flat, measuring *c*. 65.6m OD near the A5130. The southern side of the excavation gradually sloped down and was *c*. 64m OD on the south side of Area 1. The ground between the two areas then flattened out and rose slightly so Area 2 was at 64.9m OD at the north falling to 61.4m to the south with the ground continuing to fall gently outside the excavation area for *c*.30m before meeting the Broughton Brook.

Within Area 1 the natural geology comprised a layer of Quaternary River Terrace sand and gravels between 1.5m and 2.5m deep. This deposit was generally described as a medium dense, brown sand with a limited amount of flint and chalk gravel (Wardell Armstrong 1999). Within Area 2 this layer included clay and became a 'head'. Near the Broughton Brook there was a thin layer of alluvium overlaying the head comprising a soft to firm, brown mottled grey, sandy clay with occasional gravel. The entire site was underlain by Jurassic Oxford Clay, which was generally recorded as a firm to stiff, grey clay with fossil fragments (Wardell Armstrong 1999).

2 Archaeological and Historical Background

2.1 Desk-based assessment

The information presented below utilises the Wardell Armstrong desk-based assessment for the area and their Environmental Statement (Wardell Armstrong 2003a; Wardell Armstrong 2003b). This assessment concentrated on two parishes, Broughton and the Milton Keynes parish as the development site lies at the boundary between these two parishes (Fig. 4). This has given a *c*.1km coverage around the site. It is important to note that recent evaluations and excavations to the north of A5130 by the Oxford Unit have not been included on this map nor has an ASC excavation near Broughton Church.

Only one entry was recorded within the proposed development site, a possible ring ditch identified as a cropmark in an aerial photograph (SP 490300 239390). This possible cropmark was evaluated by Archaeological Solutions in 2003 and was not found and so has been removed from the data in Fig. 4. Overall there is a higher density of records to the west of the proposed development site than in its immediate vicinity to the east. This pattern is probably a reflection of where archaeological research has been undertaken rather than the actual distribution of sites, with considerably more fieldwork having been carried out on the urban fringe of Milton Keynes than in the underdeveloped rural parish of Broughton. Most of the above findings were due to this lack of archaeological fieldwork and this was also true of Broughton Manor Farm. Prior to the application to develop here, there was no record of an Iron Age/ Roman settlement on the site.

2.1.1 Mesolithic (Fig. 4)

There is limited evidence of the Mesolithic (*c*.10,000 – 5,000 BC), comprising a few flint artefacts near Milton Keynes village, thought to represent an occupation site (SP 488180 238640), and flint finds spots at Cotton Valley (SP 488600 240910) and by the Open University campus (SP 489000 237320).

2.1.2 Neolithic and Bronze Age (Fig. 4)

In the Neolithic (*c*.5,000 -2,000BC) evidence of features and artefacts are more widespread within the three Mesolithic sites above. These sites appear to have continued to form a focus for activity, especially as ritual and burial sites, into the Bronze Age (*c*.2, 000- 700 BC). At the site near Milton Keynes village (SP 488189 238640), a bell barrow, cremation and flint flake have been recorded. At Oakgrove there was a possible ring ditch which may be a continuation of the bell barrow site (SP 487910 238958; MK 1226). At Cotton Valley (SP 488600 240910) there is a ring ditch, two cremations and urn, a possible hearth and flint objects of Neolithic and or Bronze Age including an axehead. Just

north-east of the Open university (SP 488680 237890) a Late Bronze Age bracelet was found. Worked flint has been found near the university area including a tranchet axe at SP 488800 237400 and flakes and a scraper at three other nearby locations. Two other axes have been found - a possible Bronze Age axe at (SP 489150 237190; MK 1358), a copper or bronze axe at SP 489500 238500; MK 5663). A few other flint artefacts were found as single find spots in the Milton Keynes parish (not recorded).

At Monkston Park (SP 488500 238300) in the Late Bronze Age a gold coil ended bracelet and torc hoard was placed within a ceramic vessel on the crest of a valley slope (Bull and Davis 2006, 52). No definite contemporary features were uncovered elsewhere at Monkston Park although 28 pieces of struck flint was recovered - all but possibly one in residual contexts (Bull and Davis 2006, 7).

2.1.3 Iron Age (Fig. 4)

Four Iron Age settlements have been located (Hartigan's Gravel Pit, Oakgrove, Cotton Valley and Monkston Park), while isolated finds in other parts of Milton Keynes parish suggest that further settlements may exist. Hartigans and Monkston Park are the only settlements where large scale excavation has taken place (Williams 1993; Bull and Davis 2006). There was a relatively small excavation at Cotton Valley, a trial trench evaluation at Oakgrove and some finds spots at other locations which may represent further settlements or just casual losses (see below).

Hartigans (SP 488200 238800) started in the Early Iron Age with two linear ditches dating before 450 BC (Williams 1993, 179) and continued into the Middle Iron Age with round houses and enclosures. In the Late Iron Age period at Hartigans (SP 488120 238920) there was a pit alignment and other features. The boundaries to the Hartigans site have not been found and it may have continued to the north-east. Less than 300m away to the north-east of the Hartigan excavation, a trial trench evaluation at Oakgrove (SP 487860 238780-238940) found a Late Iron Age settlement cut into river terrace deposits (MK 1221-1225). This comprised a rectilinear enclosure, another enclosure, a hut circle and, a well.

A limited excavation took place before construction of a sewage works at Cotton Valley (SP 488500 240800). The excavation found a Late Iron Age/Early Roman settlement site within alluvium deposits comprising an enclosure, some pits and a Late Iron Age/Roman cremation of a child within a vessel (MK 619-23).

A major excavation at Monkston Park (SP 488500 238300) found a settlement cut into river terrace gravels. The settlement at Monkston Park started in the Late Iron Age period (*c.*100BC) with a field system but there was limited domestic or agricultural activity found in this

period (Bull and Davis 2006, 9). The cremation cemetery may have started in the first quarter of the 1st century AD or possibly earlier.

At Milton Hill Late Iron Age pottery has been found (SP 489400 237700). Nearby at Kent's Hill (SP489050 237780) a Late Iron Age coin found. It is probable that these two find spots relate to a former Iron Age settlement here, which continued into the Roman period (see below). Other finds spots have been located to west of Milton Hill.

2.1.4 Roman (Fig. 4)

Most of the archaeological work on the Roman sites (compared with the Iron Age settlements) within the two parishes in the study area have been small scale evaluations or find spots, the exception being at Monkston Park. Despite the lack of a large number of excavations, the Roman evidence is fairly evenly distributed across the study area, occurring about 1km apart on average (except where little work has been done in Broughton parish).

At Monkston Park, 2km to the south-west, the Late Iron Age settlement continued into the Roman period. The level of activity intensified with a more complex series of field divisions and enclosures in the Early Roman period in the area of the Late Iron Age settlement. In addition a new area of settlement started in this period 200m to the south. In the Middle Roman period the settlement consolidated and shifted and in the Late Roman period there was a markedly intensified activity in the 3rd and 4th centuries focused within the enclosed and partially enclosed spaces.

At Hartigans, 2km to the west (SP488200 238800) there was a rectilinear enclosure dating from the 3rd to the 4th centuries within the 1970's excavations. In 1989 further work, comprising evaluation trenches, provided evidence for continued Later Iron Age and Early Roman occupation or activity until the middle 2nd century AD. This had shifted 100m to the west and north-west of the Iron Age settlement (Williams 1993, 192).

0.5km to the north-west of the Broughton Manor site there was a Roman settlement, north of Broughton church (SP 489310 240270). A watching brief on a pipeline found a 3rd century Roman ditch, tile (including flue tile), pottery and a coin. 0.85kg of pottery including Samian came from a 15m stretch of the ditch.

1.5km to the north-east there was a Roman field system of several different phases dating from the 2nd to the 5th century at Old Covert (SP 491500 240400; Petchley 1978). Rescue excavation before gravel extraction found a trackway running north-west to south-east. Rectangular enclosures of varying sizes led off on each side of this trackway and represented closes and paddocks.

At Cotton Valley, 2km to the north-west, the Late Iron Age settlement (see above) continued into the Early Roman period (SP 488500 240800) and finds included a cremation.

There is a large concentration of artefacts 2km to the south of the site at Milton Hill in an area *c.*200m by 200m, which is very likely to represent artefacts from a settlement. In this map, therefore only one grid co-ordinate has been given despite the many different entries over the area in the HER consisting of several find spots or scatters 100m or so around the grid point SP 489400 237650. These comprised Roman pottery (some late), coins, brooch, pin, quern and oyster shell. Elsewhere in the Kents Hill/Milton Hill district the find spots are more scattered and comprised very few artefacts and it is uncertain if these finds are just casual loses. A coin has been found 2.5km to the south at SP 489200 237400, and three 4th century coins 1.5km to the south (SP 490600 238200). 2.5km to the south a coin and bracelet have been found at SP 489800 237300 and nearby a building component at SP 490300 237400.

Other Roman finds spots have been found to the north-west of the Broughton Manor excavation including a puddingstone quern which was recorded as Iron Age in the HER but will be Roman in date (at SP 489000 239000).

2.1.5 Saxon to modern times

Broughton Manor Farm was presumably within the field system of the Saxon and medieval settlement at Broughton. Both Broughton and Milton Keynes villages are 0.5km to the north-west and 1km to the west respectively of the development site. Outside the area of the two villages there has been a few post-Roman to Tudor finds spots but they are fairly evenly distributed across the study area and appear to represent the accidental loss of possessions (not recorded).

Broughton is a derivation of the Old English brōc tūn, simply meaning farm or settlement by the brook. The medieval manor of Broughton appears to have been predominantly arable, though a small amount of meadow and a mill (belonging to the home farm of the manor) are recorded, both presumably situated along the brook. Arable farming continued at Broughton into the late medieval and early post medieval period. 16th century records show that the Broughton manor produced wheat, barley, oats and root crops, and was prone to flooding. The glebe terrier of the 25th July 1605 indicates that an open field system still existed at that time, referring to allotments of meadow and arable land dispersed between the fields of the village. Within the development area, aerial photographs show that it was covered in well-preserved ridge and furrow earthworks, demonstrating the medieval/early post-medieval arable cultivation.

The development site is first mapped in a survey of the lands of the Backwell estate by Nathaniel Kent in 1779. The whole of the area is described as pasture or meadow, and field boundaries (including those that survive today) are illustrated as formed by hedges and/or ditches. The excavation areas lie within three fields (Upper Poach Furlong, Poach Furlong and David's Close). By the 1880 first edition Ordnance Survey the Broughton Manor Farm buildings (then called King's Head Farm) had been build adjacent to the site although the field boundaries on the site remained until modern times when arable farming returned.

2.2 Stage 1: Fieldwalking

Stage 1 was carried out by Pre-Construct Archaeology and consisted of a fieldwalking survey with four modern fields which made up the 48 hectare development area (Fields 1-4) divided into 15m transects (Allen 2002). This work found low background scatters of prehistoric flint as well as three areas of were Romano-British finds consisting of thirty-two sherds of pottery and six fragments of tile. There were two main concentrations of Roman finds with sixteen sherds of pottery and five fragments of tile, which were recovered from the northern part of the site (Field 3; CAMARC excavation Area 1). One prehistoric sherd was also found here. The report stated that stone-built structures are likely to have existed nearby. Ten sherds and one tile fragment were found in an area measuring *c.*130m by 130m at the centre of the site (north-western corner of Field 2b; CAMARC excavation Area 2). The report stated that these finds are likely to reflect sub-surface activity and recommended selective detailed gradiometer survey to test these concentrations. Almost the entire artefact assemblage recovered was abraded leading to the suggestion that the site had been ploughed.

2.3 Stage 2: Geophysics

A fluxgate gradiometer survey was undertaken by Pre-Construct Geophysics with a total of 4.4ha covered (Masters 2003). The drift geology at Broughton comprises river terrace gravels (Masters 2003, 2, while the underlying solid geology is Oxford Clay (Soil survey of England and Wales 1983). The magnetic susceptibility of this type of geology is average to poor producing variable results (Clark 1990, 92; English Heritage 1995, 10, table 3).

The survey concentrated on the two main concentrations of Roman finds noted in fieldwalking, the area of the putative round barrow/ring-ditch as well as five minor areas on the east and western parts of the site. One area sampled the findspot of three Roman pottery sherds, the others sampling a 'blank' area.

The magnetometer survey of the area generally reflected the distribution of the fieldwalking finds. In the northern area where the main fieldwalking concentration was found (next to the A5130) there

was a complex of anomalies representing a possible rectangular building, possible enclosures and pit-type features.

In the second fieldwalking area in the centre of the site no significant anomalies were detected, except for a bipolar anomaly towards the centre, possibly indicating the remains of a recent feature. Faint linear anomalies were orientated north – south, probably, says Masters (2005, 5), denoting the remains of ridge and furrow.

Over the ring-ditch and the 'blank' areas no anomalies were encountered in the survey.

2.4 Stage 3: Evaluation

Between 18th August and 16th September 2003 Archaeological Solutions (AS) undertook an evaluation at Broughton Manor Farm (Grant *et al* 2003), following on from Stage 2.

The specification stipulated that there would be 2700m² of trial trenching (Emmett 2003). Fifty-eight trenches each measuring 30m by 1.6m were excavated. They were sited so as to examine the areas of archaeological potential highlighted by the previous phases of archaeological investigation. Forty-seven archaeological trenches were positioned in the area of the main fieldwalking/geophysical anomalies. Ten trenches forming a rough square, to the east of Area 2, were placed in the area of the putative ring-ditch and a single trench over the bipolar anomaly partly within the north-eastern part of Area 2 (Fig. 1).

The evaluation report suggested the presence of a significant Roman farmstead of the 1st to 2nd centuries AD in the northern part of the site that may have contracted in the 3rd and 4th centuries AD. A single Bronze Age pit or ditch terminal was recorded. This pottery was reassessed for this post-excavation assessment and the report found over 10% of the evaluation assemblage comprised hand made Middle or Late Iron Age pottery sherds and 1% Bronze Age (Percival, Appendix 6).

AS said that the evaluation had defined the limits to the Roman settlement on the east and south (and probably the west) sides. In reality the subsequent excavation found the southern limits had not been found. The evaluation only found four postholes (encountered between 0.04m and 0.29m deep) across the 47 trenches. The evaluation did not record ridge and furrow across the site.

Evaluation trenches were excavated up to 0.3m through the natural subsoil. The evaluation site archive records provided important information, which was not included in the evaluation report. Probable ritual deposits such as antler bones and deer heads were mentioned in

context sheets but not in the report. Likewise waterlogged deposits found in the evaluation were only recorded on context sheets and no mention was made of the high water table. No environmental samples were reported on.

AS evaluated a separate evaluation directly to the west of the development area within Broughton Manor Business Park (Wilkins and Grant 2003; Fig. 1). This evaluation found a Middle Iron Age pit and two Roman ditches.

2.5 Additional Evaluation

During the subsequent excavation of the development site by CAM ARC, it was clear that there was far more archaeology present than the AS evaluation indicated including the southern limits of the site not being found. After meetings with the consultants, Milton Keynes Development Control archaeologists and clients a new strategy was adopted. Wardell Armstrong wrote, "A much greater level of archaeology than expected was found. The foundation of the identified Romano-British settlement was found to originate in the Middle Iron Age, with occupation continuing at a significant level into the 4th century (AD), before abandonment. A series of drove-ways were laid out in the Late Iron Age, around which the settlement appears to have been replanned – significantly, including a substantial 1st century cemetery seemingly associated with a small shrine. The Late Iron Age roundhouses were succeeded by a Roman farmstead with stone-built structures and wells. Evidence for pottery manufacture on site was also found." (Emmett 2007, section 2.3.7).

As a consequence:

1) Extra resources were provided for the main excavation area which was extended to the south
2) Further areas were evaluated to the south of the main excavation area

This evaluation was carried out between the 4th and the 13th December 2006 and this ran concurrently with the open area excavation of the northern half of the site (Muldowney 2006). This evaluation sought to establish the character, date, extent and preservation of any archaeological remains seen continuing into this area from north and centred upon a cluster of Romano-British pottery retrieved from field walking (Allen 2002).

Three trenches were excavated on the line of a proposed road corridor and a further thirteen trenches were subsequently excavated to investigate the finds cluster. Archaeological remains were recorded in all trenches varying in density across the area. The central trenches had moderate to dense remains with activity petering out to the east

and west. No firm boundaries to the site were established to the south, east or west. The majority of the finds recovered suggest a Late Iron Age to Early Roman date for the activity in this area, with some evidence for an earlier Bronze Age presence. This correlates with the evidence from the excavation to the north and suggests that this area forms the continuation of that settlement.

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3 Aims and Objectives of the Excavation

3.1 Introduction

The AS evaluation (above) understated the extent and importance of the site and this therefore affected the original aims and objectives of the excavation which were recorded in section 3 of the excavation specification (Emmett 2005). After the additional evaluation by CAM ARC (see 2.5 above) this area was subjected to an additional open area excavation of about 1.5ha (Area 2). The 2005 specification was updated to take into account the ongoing excavation as well as the additional excavation area (Emmett 2007).

The overall aims of the project were to provide a permanent record of the archaeological resource of the site, to achieve an understanding of the archaeology found and to disseminate the conclusions through publication at an appropriate level. The project report will also seek to increase understanding of rural settlement in later prehistory and the Roman period within the Milton Keynes region.

3.2 Specific Objectives

The specific research aims for Broughton Manor Farm were tied into the regional research framework for East Anglia, the region closest to the site for which an agenda has been developed (an agenda for the south-east, which includes Buckinghamshire, is in progress) (Emmett 2007, section 3.3; Brown and Glazebrook 2000). There are resource assessments being developed for Buckinghamshire itself and the draft reports by period are on line and the relevant assessments are referred to in Section 6 below (Biddulph 2007; Kidd 2007 and Zeepvat and Radford 2007).

The specification said that following completion of fieldwork a detailed post-excavation assessment will be carried out incorporating a research agenda to address specific topics relating to the site including:

3.2.1 What was the scale and nature of the settlement near Broughton Manor

Farm when established, and how did it evolve over time?

3.2.2 What was the nature of occupation at the time of abandonment, and is there any evidence for the cause of abandonment?

3.2.3 What was the nature of agriculture practice at the site? Is there any evidence for agriculture related activities such as malting and storage?

3.2.4 What can we learn from ecofacural and environmental data about diet, lifestyle etc. of the inhabitants?

3.2.5 How does the cemetery relate to the different phases of settlement? What sector(s) of society are buried there?

3.2.6 How does the cemetery compare with and add to our knowledge of contemporary ritual and funeral practice locally and regionally? What does this imply for the Iron Age/ Roman transitional period in the area?

3.2.7 Can we learn anything about the status and connections/influence of the settlement? What about local networks, e.g. relationship with Magiovinium, or other villa estates?

3.2.8 How does the site compare with contemporary sites within the region?

3.2.9 Can the site contribute to regional research aims regarding land division and usage patterns during the Romano-British period?

4 Summary of Results

4.1 Phase 1: Neolithic (*c.* 5th to middle 3rd millennium BC) - Late Bronze Age (up to *c.*700 BC) (Fig. 6)

Within the western part of Area 1 in an area of *c.*100m by *c.*50m there were a few sparse pits uncovered dating from the Early Neolithic to before the Iron Age. No other features of these periods were found in the rest of Area 1 or from Area 2.

The two intercutting pits **696**/**698** within the south-western corner of the excavation, were irregular in shape, up to 1.47m in length and 0.22m deep and they covered an area of *c.*2m by *c.*1m. Flint dating to the Late Mesolithic or Early Neolithic was recovered. The flint from pit **696** mainly comprised knapping waste and produced an assemblage of 19 pieces, some evidently coming from the same nodule, although no refitting pieces were identified. Pit **698** had 17 flints mostly comprising flakes and broken blades. Sixteen pottery sherds were recovered from both these pits comprising small pieces of up to five plain bowls and these were dated as Earlier Neolithic (*c.*3600-2900 BC).

Posthole/small pit (**896**) was 0.42m in diameter and 0.44m deep and within its fill it had two sherds from a Neolithic/Early Bronze Age grog tempered vessel (2600-1800BC). Residual Early Bronze Age and Late Bronze Age pottery was recovered from Large Iron Age quarry pit (**M4505**), which implies that this pit probably disturbed some earlier features. A later Bronze Age or earlier Iron Age pit was found in AS evaluation trench 6 (**1139**), it was 0.74m by 0.5m and 0.3m deep containing a few sherds of undecorated pottery (1,000-800BC) as well as some animal bone. A burnt layer (1142) in this AS evaluation trench produced residual Bronze Age pottery.

Small amounts of ?Neolithic and Bronze Age flintwork (*c.*4,000-700BC) were also found scattered throughout both the excavation areas indicating activity across the whole area at this time. Hunting tools included an axe, arrowheads and blades. Other tools include flint scrapers for skinning the animals.

4.2 Phase 2: Middle to Late Iron Age (c.4th century BC to *c.* early 1st cent AD) (Figs. 6 and 11)

Iron Age features were found predominantly within Area 1 but within the northern side of Area 2 there were two groups of postholes, a cremation and a pit. In Area 1 activity seems to have started in the Middle Iron Age in the 4th century BC or later and may have taken the form of scattered pits and possibly linear north to south ditches. The 'settlement' evidence found in Area 1 possibly started later in the Late

Iron Age period and seems to have been a farmstead. It was a partly enclosed site consisting of at least one extended family within Area 1. It is uncertain if the two posthole groups in Area 2 represent part of another extended family or whether these were structures built by the occupants of Area 1. Between the two areas there was a field system which ran from Area 1 towards Area 2.

4.2.1 Area 1 (Fig. 6)

Middle to Late Iron Age remains were encountered mostly within the western parts of Area 1 in an area of *c.*200m by *c.*80m and these were settlement related but features, seemingly agricultural comprising a possible sub-rectangular enclosure was found at the eastern part of Area 1 and a few pits in between. The settlement area went beyond the excavation into the land occupied by Broughton Manor Business Park and Broughton Manor Preparatory School so its full extent remains unknown. The excavations showed that this occupation was tightly concentrated in this western area with all features in close proximity to each other and may have been a farmstead/extended farmstead in this period.

Area 1, Phase 2 comprised at least two sub-phases. The earliest Iron Age features comprised probable Middle Iron Age pits **777** and **F1113** from AS evaluation trench 24. Pottery from both these pits were pre-Belgic in date. There may be other features within this sub-phase – stratigraphically there were only two relationships in Phase 2 with linear roughly north to south ditches (**M4506** and **M4514**) cut by later enclosures **M4504** and **M4508** respectively. These two linear ditches were of different size and nature and they are probably not related.

Linear ditches M4506 and M4514 (? Field boundaries)

Ditch **M4506** seems to consist of a shallow ditch of at least four separate parts. It ran from the north baulk and the first two ditch segments were on the same roughly north to south alignment. The southern two segments were more irregular and may not be related to the former. Only Iron Age pottery were recovered of Pre-Belgic date. A much larger ditch **M4514** was *c.* 50m to the east of **M4506** and was a larger north to south, up to 0.7m wide and 0.5m deep. It also ran from the north baulk for about 40m before butt ending and contained one residual Roman sherd.

***Enclosure M4508* (Farmstead)**

The main enclosure (**M4508**) was in the centre of the Iron Age features in the western part of the site but only the southern part was within the excavation area. It comprised a large sub-rectangular or sub-square enclosure. The southern side of the enclosure was 42m long with a *c.*3m wide entranceway near the centre. The eastern and western sides were more than 22m and 5m long respectively. The enclosure ditch was between 2.50m and 2.9m wide and 0.80m and

1.22m deep. Only the eastern side ditch may have been recut (**M4511**). Pottery recovered from the enclosure ditch **M4508** was a mixture of Late Iron Age pottery and LPRIA (both hand made and wheel thrown) from the excavation and the AS evaluation and the lack of any Roman pottery implies this LPRIA pottery was Late Iron Age in date.

Within this enclosure, directly to the north-west of the entranceway, were the remains of a ring gully about 12m in diameter, about half this ring ditch survived within the excavation area up to 0.13m in depth (**M4507**). Only one undated posthole was found in the interior of the ring gully. Directly to the west of the ring gully was an undated possible cremation (**956**) where 62g of human bone was found in a small pit. Within the enclosure **M4508** in the eastern side was an undated north to south ditch and adjacent posthole which may be part of this phase.

East-west ditch (**M4509**) cut down along the middle of the southern side of the former enclosure ditch (**M4508**) including through the entrance way. Although it respected the former alignment of **M4508** it implies the farmstead may have gone out of use. All pottery from this ditch was Iron Age or LPRIA except a single medieval sherd which was presumably intrusive. Later Phase 3 Drove-ways cut **M4509**.

Features to the south and west of M4508

Directly to the west and south-west of this main enclosure were a group of enclosed and unenclosed features, some of which seem to have ritual significance. These features were relatively spread out and there was only one stratigraphic relationship with enclosure **M4504** cutting the segmented ditch **M4506** (see above). Enclosure **M4504**, of uncertain function, was an irregular sub-square shape, roughly 18m by up to 17m in size comprising two inverted 'L' ditches with a 3.3m gap on its northern side and c.8m wide on its south side. Its ditches were also inconsistently sized with thin and thick ditch sections between 0.55m and up to 1.76m wide and 0.35m and 0.76m deep but backfilled with moderate amounts of pottery. Within the enclosure's north-western side there was a large irregular sub-square pit possibly dug for quarrying, c.4m by 5m in size and 0.7m deep with a moderate amount of pottery all pre-Roman except a single sherd dated as MC1 (**M4505**). Probably related to enclosure **M4504** was '4 post' structure (**M4501**) which ran *c.*1m to the north and parallel to the enclosure's north-western ditch. This '4 post' structure (**M4501**) was externally 2.7m² in size with deep postholes between 0.39m and 0.45m deep. This structure seems to have gone out of use in the very Late Iron Age as 3 pottery sherds from three of the postholes were LPRIA in date.

Another '4 post' structure (**M4502**) was 17m to the north of **M4501**. Archaeological evidence from other sites has shown that '4-post' structures are likely to either represent platforms for laying out the dead or platforms for drying crops. **M4502** was also square in shape

with an external measurements of 2.7m². There was an undated possible human cremation (**712**) roughly mid-way between the two '4 post' structures (**M4501** and **M4502**) which may imply that at least one of the '4 post' structures was for laying out the dead.

To the east of '4 post' structure (**M4502**) and directly to the west of enclosure **M4508** was the possible fragmentary remains of a ring gully (**M4503**) but this only survived as a shallow arc and so its function is not certain. Spaced across the area, all the way to the west and south baulks are a sparse number of pits, mostly undated, although 10 pits contained some dating evidence. Only one pit in this area was dated as Phase 3 Early Roman and so the large majority of the undated pits were likely to be of this Middle/Late Iron Age phase.

Nine pits (**655**, **661**, **676**, **793**, **842**, **894**, **898**, **936**, **1013**), scattered across this area were dated to this period by at least one pottery sherd from their fills. Other nearby undated pits were probably from this phase.

Features to the east of enclosure M4508

Less than 10m to the east of **M4508** was an undated ring gully **M4534** which was stratigraphically cut by Later Iron Age and Roman features. About half the ring gully survived to give a diameter of *c*.13m, its ditches were up to 0.4m wide and 0.16m deep. Two undated postholes may have been the remains of the internal structure.

A shallow sub-rectangular enclosure (**M4605**) 27m by 15m was uncovered in the far eastern side of the site. The enclosure was sub-divided by a single ditch. A single sherd of pottery and stratagraphic relationships dated this enclosure. Only three pits were dated to this phase on the eastern side of the site (**163**, **1500** and **2533**) and they were spaced over a large area and only contained collectively a few sherds of pottery.

Shallow ditches including **761**, **1165** and possibly **M4591,** 100m+ to the east of the main settlement, were dated by single sherds of pottery. Other ditches in this area of the south seem to date to this Phase in this area as the Phase 3/4 droveway cut them. The ditches are not equally spaced and all were shallow in depth.

4.2.2 Area 2 (Fig. 11)

Evidence of Iron Age activity in Area 2 was present only in the most northerly part of the excavated area. Two separate groups of postholes may represent structures. **M5071** was c.2.5m square and consisted of eight postholes in two roughly parallel rows. The postholes were generally c. 0.1m deep and c. 0.3m wide which implies that more postholes may have been lost through truncation. **M5072** consisted of

five postholes orientated NE by SW with outlier posts 2m to 3m away from the central posts. These formed a structure c.13m long by c.4m wide. The postholes were on average 0.76m wide by 0.24m deep. This implies that most posts of this structure will have survived later truncations. These features were dated by Iron Age pottery present in one posthole, no other finds being present. These structures may have formed part of an unenclosed settlement in this part of the site. There was also an undated, possible unurned cremation (**3159**) to the south-west of **M5071** and a pit (**3165**) to the south.

4.3 Phase 3: Late Pre- Roman Iron Age (c. early 1st century AD to late 1st century AD) (Figs. 7 and 12)

Late Iron Age occupation was found across both excavation areas. Drove-ways and boundary ditches largely defined the settlement in both areas in this period. Area 1 may represent a small dispersed settlement whilst Area 2, 200m to the south, was probably within the drove-way system extending from Area 1 but seems to have been inhabited by a separate extended family. Arable farming may have taken place between the two areas as evaluation trenches and the northern part of excavation Area 2 have found few archaeological features continuing from the Iron Age and contained very few artefacts.

4.3.1 Area 1 (Fig. 7)

Overview of Area 1

In the very Late Iron Age period, the Phase 2 settlement was abandoned and the settlement replanned and moved slightly to the east. This new occupation area was defined by new drove-ways with features within it. The slightly trapezoidal shape of the settlement seemingly tapering to a point to the north, indicates that the majority of the Late Iron Age settlement was likely to have been within the excavation area. Small parts of the settlement continued beyond the extreme western areas (within the present school) and the northern parts of the site (under and beyond the A5130). Arable/pastoral fields are likely to be to the south of Area 1. The drove-ways themselves were presumably primarily for herding livestock. Within the drove-ways the site was divided into different areas of activity and occupation (domestic, farming and ritual).

Drove-ways and boundaries of the site

The boundaries of the site were defined by two probable adjacent/linked drove-ways, on the western (**M4510**/**M4512**/**M4559**) and southern sides (**M4517**/**M4520**) as well as a north to south boundary ditch (**M4574**) which defined the eastern boundary of the site.

The fact that there were no Late Iron Age/ Early Roman enclosures to the west of ditches (**M4510**/**M4512**/**M4559**) in either the excavation area or in the AS evaluation at Broughton Manor Business Park (Wilkins and Grant 2003; Fig. 1) does imply they were boundaries. 'Drove-way' ditch **M4512** was a 'U' shaped loop narrowing to a pedestrian entranceway on the northern side near the excavation baulk. At the extreme southern end the 'drove-way' had widened to accompany six or seven cremations (**M4515**), which were in their own divided off area (by a linear north to south ditch (**M4510**)). It is possible that ditch **M4537** and **M4512** were a funnelled drove-way linking to **M4559** but this possible joining is conjecture. It should be noted that these ditches should have run through AS evaluation trench 8 within the Broughton Manor Business Park but no features were recorded within this trench.

The southern drove-way evolved over Phase 3 in two sub-phases, perhaps starting as a drove-way between parallel ditches (**M4517** and **M4521**). This drove-way did not originally run along the site east to west as the southern ditch side (**M4521**) butt-ended half way along. At some point in the middle 1st century, **M4521** was abandoned. It was partly realigned as **M4520** and was linked to the construction of burial enclosure **M4523** (the four cremations **M4522** are discussed below).

The eastern boundary ditch (**M4574**) of the site was maintained throughout the phase and stratigraphically cut one enclosure (**M4572**).

Structures

The remains of at least four ring ditches probably representing former round houses (**M4556**, **M4568**, **M4570** and **M4571**), and a few associated postholes were uncovered. The three northernmost round houses (**M4568**, **M4570** and **M4571)** were equally spaced in a line running north-west to south-east and were *c*.21m apart. Perpendicular to the middle ring ditch (**M4571**) and 32m to the south was the fourth ring ditch (**M4556**) within the middle of the site.

Enclosures and boundary ditches

Enclosures and boundary ditches respected the ring ditches within the settlement. The central ring ditch **M4556** was nearly butted up to by enclosure **M4540** directly to the west of it. The enclosures formed arying sized 'C' shaped features **M4537**, **M4539** and **M4540**, which were nearly joined together and were between 17m and 40m long. Within **M4539**, the remains of a pottery kiln were found (**2304**) which was oval in shape (1.8m by 0.75m). This kiln was largely taken apart after disuse and the remains of it deposited within the backfill of adjacent ditch of enclosure **M4540**, adjacent to the east of it (see Lyons Appendicies 7 and 10).

The north-eastern part of the site had north to south linear ditches including an internal drove-way formed by ditch (**M4587**) and the western side of enclosure (**M4572**). This drove-way stopped between ring ditches (**M4570** and **M4571**). Only part of enclosure (**M4572**) was within the excavation area so its full extent was uncertain but it had at least one internal division (**M4573**). To the south of ring ditch (**M4571**), and probably abutting up to it, was north to south ditch **M4567** which abutted up to sub- square enclosures **M4588** and **M4589**. Fragments of other ditches including **1085** and at least one pit date to this phase.

On the north-west side of the settlement two boundary ditches including **M4560**, led from droveway **M4559** at right angles and may represent a field.

Ritual Area

From the start of the new Phase 3 settlement, people were buried, with their associated features (burial enclosures, 'four-post' structures etc.), well away from the domestic use on site. Cremations were located on either side of the east to west drove-way **M4517**. During the *c.*100 years of use there was a clear progression in where people were buried in the ritual area. In all there were about 43 Late Iron Age or Roman cremations (some of the cremations were buried in Phase 4; Tables 1-5).

Seven or eight cremations may date to the pre-conquest period (Tables 1 and 2). Six or seven cremations (**M4515**) were within an enclosure at the southern limit of a drove-way (**M4512**; see above) in an area *c.*9m by 4m. At the eastern corner of droveway/boundary ditch **M4517** (*c.* 110m to the east of **M4515**), a single cremation (**461**) was dated by pottery to pre-conquest period and an adjacent undated cremation (**635**) may also date to this period (Table 2).

The remaining cremations mostly date to the Roman period or are presently undated. A sub-square enclosure *c.*20m square with a 2.25m wideentranceway on its eastern side (**M4523**), had four internal cremations (**M4522**) which seem to date to the very Early Roman period although one cremation may be Late Iron Age in date ((**522**); Table 3). The largest enclosure, adjacent to the east of the probable Late Iron Age cremations (**M4510**/**4512**) was a much more substantial enclosure sub-rectangular in shape and measuring *c.*20m by *c.*12m. Here the majority of the site's cremations (23) were placed (**M4518**) and they date from the mid 1st century AD to the mid 2nd century AD (Table 4). The early cremations with this enclosure are contemporary with cremations within **M4523** (Table 4). Within enclosure **M4518** there seems to be a clear progression with the earliest cremations, on the whole, on the western side and the latest on the eastern side (see Phase 4). A north to south ditch directly to the east of **M4518** may have acted as an internal drove-way. East to west ditch **M4526,** and fence lines **M4531** and **M4535** may date from this period.

A further seven features containing cremated bone were identified to the east of these enclosures which date or may date to this Phase (as well as a shrine which is probably dating to Phase 4/5; Table 5)). Two undated cremations (**331** and **568**) were directly to the north while undated cremation **1560** was to the east of ditch **M4517**. Three cremations (**M4524**) were grouped to the south of **M4517** and were all dated between the middle and late 1st century AD. Cremated bone was found within the south-western posthole (**1582**;Table 5) of 'four-poster' structure **M4532** which was 40m to the north-east of **M4518.** The four-poster measured 2.5m by 1.5m in size. A further 'four-poster' structure (**M4538**) was 10m to the north-east, it was 2.25m² in size and there were six further postholes in the vicinity mostly directly to the east within an area of 4.5m² and these may be related to this structure. Both 'four-post' structures were likely to have been platforms for laying out the dead.

Cut No (burial No)	Truncation and size of feature surviving	Date Small Finds (AD)	Date Pottery	Grave goods	Vessel	cremated bone (g)	Notes
308 (B3)	Very: 0.15m² x 0.05m	10-50	EC1-MC1	?Colchester brooch (SF 262); Gallic brooch (SF263)	Jar RW (Grog)	9	mixed deposit cremation
315 (B3)	Very: 1m x 0.9mx 0.12m	10-50	EC1-MC1	Colchester brooch (SF 264)	Cup RW (Grog) Jar RW (Grog) + 3 residual	107	Bone in backfill as well as pot. Sub adult/adult
326 (B5)	Very: 0.15m² x 0.08m		MC1-LC1	-	Jar RW (Grog)	51	Cremation (Adult) within vessel
341 (B4)	None: 0.7mx 0.8mx 0.21m	10-50	EC1-MC1	Colchester brooch (SF 288); Brooch (SF 289); Colchester brooch (SF 861)	Wjar RW (Grog); Wjar vRW (Grog); Wjar SGW (Proto) + 2 residual	1041	Vessels on top of cremated bone (adult female). Also unburnt animal bone joint adjacent
437 (B6)	Very: 0.28mx 0.22mx 0.09m	10-50; Roman	-	Brooch (SF 344); Rosette or Langton Down brooch (SE 345); ?brooch (SF 872)	- (no pot)	207	Cremated bone only (older juvenile/young sub/adult)
447 (B8)	Moderate: 0.8mx 0.6mx 0.12m	10-50	MC1	Colchester brooch SF 441 in base of vessel 445 under cremated bone	Jar RW (Grog); Jar RW (Grog); Jar RW (Grog); Jar RW (Grog) +?4 residual	(**1054**) *c*.45g; *c*.999g from vessel 445	Cremated bone largely within vessel (adult female)
457 (B7)	None: 0.9.5mx 0.8mx 0.32m	10-50; Early Rom	MC1	Colchester brooch SF 358 (cont 449); Colchester brooch SF 359 (cont 449); Brooch SF 862 (cont 455); Brooch SF 360 (cont 455) + 2 residual	Beaker NOG WH 3; Beaker NOG WH 3; Urn RW (GROG); JAR SGW (Proto); Cup SRW (Grog); Jar SRW (Grog)	(**1091**)899g; 177g; 15g from vessel SF 516	Vessels on two areas of burnt bone (adult ?female). Articulated animal bone ?burnt). Evidence of burnt wood plank

Table 1: *Probable Late Iron Age cremations within enclosure (**M4515**)*

Cut No (Burial No)	Truncation	Date Small Finds (AD)	Date Pottery	Grave goods (non vessel)	Vessel	weight of cremated bone (g)	Notes
461 (B42)	Very: 0.5mx 0.35mx 0.1m	-	EC1-MC1	-	Urn RW (Grog)	15	Cremation within vessel (subadult/adult)
635 (B41)	Very: 0.2m² x 0.1m	-	-	-	-	604	Cremated bone only (adult ?female)

Table 2: *Probable Late Iron Age cremations **461** and **635** to north of droveway*

Cut No (Burial No)	Truncation	Date Small Finds	Date Pot	Grave goods (non vessel)	Vessel	weight of cremated bone (g)	Notes
522 (B34)	Little: 0.76mx 0.66mx 0.12m	LIA/Rom	Early-MC1	Bow brooch (SF 496);?ferrule from spear (SF 497)	Beaker FSGW (Mica); Beaker RW (Grog); Plat SRW (Grog); Plat SRW (Grog); Plat SRW (Grog); Plat SRW (Grog); Flagon OW (Grog) + 1 residual	(**868**g) 31g general fill; 880g from pot 449 and 3g from pot 450	Vessels on top of cremated bone (adult ?male). Small finds and other cremated bone (largely) in one pot. Only small piece of flagon has that arrived by plough? Some burnt animal?
540 (B33)	Little: 1.47mx 1.2mx 0.25m	Roman	MC1	?finger-ring (SF 519)	Flagon CGFW; Beaker NOG WH3; Cup RW (Grog); Plat RW (Grog) + 1 residual	1141g	Vessels on top of cremated bone (adult). Cremation mixed with pig bone? Evidence of planks at top of Cremation. Burnt and unburnt animal bone including cremated Pig
550 (B35)	Little: 1.3mx 1.16m 0.34m	?Early Roman	MC1	Box?; ?lock of box SF 512; Ring or armlet fragment SF 484;; Colchester brooch SF 739; brooch SF 863; turned bone fittings (SFs 489, 745 and 897)	Cup RW (Grog); Flagon VOW(4); Plat RW (Grog); Plat RW (Grog); Plat RW (Grog); WJAR RW (Grog); WJAR SRW (Grog); NMJ or flask RW (Grog); Flagon VOW(4) + 2 residual	(Human = **849**g + animal) Two areas of bone – 858g (cont 551), 176g (cont 552);	Vessels on top of cremated bone (subadult + immature +?adult). Some burnt and unburnt animal bone. Rodent bones from flagon
565	Very: 0.5m² x *c.* 0.10m	-	LC1	-	JAR SRW (Grog); JAR SGW (Proto)	52g	Cremated bone (adult) in centre of pit. Only base of pot survived (away from cremated bone). Likely there had been other vessels. Some burnt animal bone

Table 3: *Early Roman cremations **M4522** within enclosure **M4523***

Cut No (Burial No)	Truncation	Date Small Finds	Date Pottery	Grave goods (non vessel)	Vessel	cremated bone (g)	Notes
304 (B10)	Part: 0.7m²x 0.15m	-	?70AD	-	Dish SASG (Samian); Flagon VOW (4) + 3 residual	492+8	cremated bone underneath vessels (Middle age/mature adult and infant). Some animal burnt and unburnt.
306 (B9)	None 0.75mx 0.6mx 0.17m	-	MC1-LC1	Box; Multiple nails (SF 272 and 855) 2 Pg rivets (from Samian SF265)	Beaker Fine BSRW (Mica); Beaker SRW (Grog); Dish SASG (Samian) + 2 residual	(**864**g) *c.*421g; *c.*453g	Vessels on top of bone (Middle age adult). Primary layer containing cremation bone and nails (was cremated bone only boxed? Some animal burnt and unburnt.
312 (B12)	None 0.75m² x 0.25m	Roman	EC2	Box; Multiple Nails and hobnails (SFs 795, 796, 852 and 853)	Dish SACG (Samian); Beaker SGW (Proto); Flagon VOW (4)	2800	Vessels on top of cremated bone (adult)
328 (B13)	Very: 0.5m²x 0.1m	-	C2	-	Beaker (FGW (Mica) + 1 residual	1	?one vessel on top of cremated bone (?infant). Very disturbed (old plough breaks)
335 (B11)	None: 0.74mx 0.62mx 0.2m	?R	70-110	Multiple Nails including a ?hobnail SFs 502, 749, 750, 858 and 860	Bowl CNG CC1; Dish SASG (Samian); Flagon VOW (4)	1262	Vessels on top of cremated bone (adult). Unburnt ?bird bones.
382 (B31)	Very: 0.45mx 0.4mx 0.02m	-	MC1-LC1	-	JAR/Beaker NOG RE	60	Cremation was within vessel (adult)
383 (B27)	Moderate: 0.45m²x 0.12m	-	MC1-LC1	-	Flagon (VER WH)	623	cremation was placed within flagon - difficult to achieve! (young middle age/adult)

387 (B15)	Very: 0.8mx 0.7mx 0.08m	-	MC1	-	Cup RW (Grog) + 1 residual	28	Cremation (adult) within base of cup
390 (B21)	Moderate:0.6mx 0.35mx 0.16m	-	45-70	-	Dish SASG (Samian); Jar SGW (Proto) +1 residual	481	Cremated bone (adult) all within Jar 462- plough damage
395 (B23)	Little: 0.74mx 0.44mx 0.15m	-	MC1-LC1	Several Nails SFs 754 and 848	JAR RW (Grog); WJAR SGW (Proto); WJAR SGW (3n) +3 residual	(**577**g human and some animal bone) 27g in general fill; 437g and 133g within vessels 464 and 463	<223>=layer charcoal under vessel. Two vessels both contained some cremated bone (adult); a little plough damage. Infant cranial fragments mixed into cremated animal bone?
400 (B20)	None: 0.88mx 0.62mx 0.4m	MC1-2nd	120-150	Nail SF 896; spoon (SF 417)	Beaker (KOLCC); Dish SACG (Samian); Beaker SGW; Flagon VOW (4) + 1 residual	(**1950g**) c. 87g from sample 33; c. 1200g from sample 36; c. 751g from vessel 465	Vessels on top of cremated bone. Also substantial amount of cremated in one vessel. Young adult (female). Some burnt animal bone
404 (B30)	Little: 1mx 0.63mx 0.18m	Mid 1st-2nd	120-150	Box with strap-rings and lock: Box Rings/iron split-spike loops, nails (SFs 303, 305-318, 332, 740-741, 755, 783, 784, 792-3, 797-798, 859, 888); stud (SF 321); Cu and Fe box fittings (SF 322); hinge or scroll end (SF319) spoon (SF 417) within vessel SF416; Glass vessel (SF 304)	Dish SGW (Samian)(SF 416); Beaker SGW (Gritty) (SF 419); Beaker SGW (28) (SF 418)	(**357g**) 77g (sample 32), 42g with vessel SF416, 21g within vessel SF 418 and 217g within vessel SF 419	Cremated bone carefully heaped up within Samian dish and within both beakers (adult). Some burnt and unburnt animal bone
407 (B18)	Very: 0.8mx 0.5mx 0.1m	-	-	-	-	11	A little cremated bone only (older subadult/adult)
410 (B14)	Little: 1.15mx 0.9mx 0.23m	?	55-80	?Brooch (SF 898);	Beaker SGW (Fine); Cup SASG (Samian); Cup SASG (Samian); Flagon VOW (4); Cup VGW (Fine)	(**1043**); 879 packed into beaker	Cremation mostly within beaker (adult ?male). Burnt animal bone- large articulated side of meat
412 (B29)	Very: 0.15m²x 0.04m	-	-	-	-	51	cremated bone only (adult)
430 (B22)	Very: 0.19mx 0.18mx 0.08m	-	-	-	-	131	cremated bone only (older subadult/adult)
440 (B24)	Little: 0.55mx 0.43mx 0.15m	43-80/5	80-100	Nauheim derivative brooch (SF 346)	Dish SASG (Samian); Bowl VGW (Fine)	725; 1g from within vessel SF 466	cremated bone underneath vessel s(adult female)
459 (B25)	Very: 0.3m²x 0.05m	-	MC1	-	- + 1 residual	19	Cremated bone only (adult)
464 (B16)	None: 1mx 0.8mx 0.4m	Mid 1st-2nd	55-60	Box with strap-rings. Box ring and split-spike loop SF 390; ?Nail SF 388;?Brooch and stud SF 385;	Dish CNG TR; Dish NOG RE; Flagon NOG WH 4; Cup SASG (Samian); Cup SASG (Samian);	769+18	Vessels above cremated bone (adult ?female + immature). Animal burnt and unburnt - + bird bone

				brooch and stud SF391; Rearhook brooch SF392; brooch SF 900; 1 bead (SF 736 and 883)	Dish SASG (Samian); dish OW (Grog); dish SGW (Proto); WJAR SRW (Grog) and WJAR SRW (Grog) + 3 residual		
473 (B28)	None: 0.45mx 0.5mx 0.23m	43-80/5	70-110	Nauheim derivative brooch; ? 2 lamp hooks SF 499; ring fragment (SF 874); 2 glass beads (SFs 500 and 501)	Dish SASG (Samian) SF 396; Njar SGW (28) SF 398; Mjar SRW (Grog) SF 397 + 2 residual	228	HSR all in pot 397 (juvenile)
479 (B26)	Very: 0.38mx 0.35mx 0.15m	-	MC1 – LC1	-	JAR SGW (proto) JAR SGW (proto)	329	cremated bone within vessel SF 399 (adult ?female)
486 (B19)	Moderate: 0.9mx 0.68mx 0.15m	43-60/5	MC1	Hod Hill Brooch SF 873; several nails (SFs 410, 757, 854, 856); glass bead (SF 440)	Beaker/Jar FSGW (Mica); Flagon CNG CC1 + 3 residual	1500+16	cremated bone underneath vessels (young adult and infant)
490 (B17)	Very: 0.9mx 0.8mx 0.14m	-	MC1 ? ?LIA	-	JAR RW (Grog); Urn SGW (Proto); Flagon VOW (4) + 4 residual	116	Cremated bones (adult) within vessel SF 420 and ?also in general soil (more likely bone scattered from vessel after plough damage?) Also ?unburnt animal

Table 4: Roman cremations **M4525** within enclosure **M4518**

Cut No (Burial No)	Master No	Truncation	Date Small Finds (AD)	Date Pottery	Grave goods (non vessel)	Vessel	Cremated bone (g)	Notes
331 (B39)	-	Not?: 0.7mx 0.39mx 0.08m	-	-	-	-	756	Un-urned cremated bone only (young adult +?infant)
508 (B44)	4524	None: 0.94mx 0.55mx 0.23m	-	45-70 AD	Wooden box/planked container Large area where clothes etc had been?	Flagon MOW (Grog); Dish SASG (Samian); MJAR VGW (Fine) + 1 residual	1300	Vessels above cremated bone (middle age/mature adult) within wooden box/planked container. Burnt and unburnt animal bone
518 (B43)	4524	A little: 0.41mx 0.36m x 0.15m	-	MC1-LC1	-	JAR SGW (proto)	879	Single vessel on top of cremated bone and bone also within vessel (adult +?immature)
538 (B45)	4524	little: 0.35m²x 0.18m	-	70-80 AD	Box	Cup SASG (Samian); Dish SASG (Samian)	416g	decayed wooden box. Cremated bone (adult) at base and two Samian vessels on top. Plough damage
568 (B40)	-	Some: 0.55mx 0.47mx 0.2m	?Roman	MC1-LC1	Box? Tiny scraps ?box fitting	WJAR GW (Grog)	190	Crem bone (adult and infant). Pottery scattered. ?Burnt plank from ?box. Burnt animal bone
1428 (B36)	4529	Moderate: 0.4m²x 0.1m	Roman	2nd century	Hob-nails (SF 542)	Beaker KOLCC; Beaker KOLCC; JAR STW (Grog) + 4 residual	35g in vessel	Three vessels within pit in center of wooded shrine. Adult human bone
1582 (B37)		None?: 0.51mx 0.28mx 0.29m	-	-	-	-	39	Bone within post of four-poster structure (adult and Immature)
1560 (B38)	-	?a little: 0.38mx 0.35mx 0.23m	-	-	-	-	1601	cremated bone only (adult ?male)

Table 5: Other Roman cremations

4.3.2 Area 2 (Fig.12)

Evidence from this area tended to date from the end of this period, the middle to late 1st century AD. Activity was present across the whole of the excavated area but concentrated in the north and west. It was in this period that the landscape showed the first evidence of deliberate planning. A settlement area demarcated by two parallel ditches lay to the north of a large enclosure on a roughly WNW to ESE alignment. These were associated with a drove-way and the first phase of quarrying. Pollen evidence indicates that the area had been cleared of trees at this time and that the settlement was set in an open meadow environment. Evidence from cereal and weed seeds indicate that there may have been small scale cultivation near by but that the majority of cereals were being imported and then processed on or near the site. Faunal remains show that cattle were the most dominant animal in this period.

Drove-way

The primary activity of this phase was a curvilinear drove-way (**M5019** and **M5022**) 4m wide that entered the site from the west and ran for 42m WNW – ESE before curving slightly to the south. This orientation may indicate that it was following a pre-existing track since subsequent fields were laid out roughly in line with the topography. The course and location of this drove-way were maintained and respected into the early Roman period.

The settlement area

The northern boundary of the site was set out in this period (**M5001**) 52m north of the drove-way. This was a regular 'U' shaped linear ditch up to 1m deep. It followed an unbroken course from the western to eastern baulk where upon it turned southwards.

Ditch **M5015** was 20m south of **M5001** and ran roughly parallel with it. It was formed by two lengths of ditch with 'U' shaped profiles up to 0.6m deep. The western section began just within the western baulk and ran for 39m before terminating and forming an entrance 3.3m wide with the eastern section. The western terminus of the eastern section had 2 more fills than the rest of the course of the ditch indicating possible deliberate backfilling in order to widen the entrance. This ditch then continued for 38m into the eastern baulk.

Ditches **M5001** and **M5015** demarcated a 30m wide area in which up to three post-built structures were constructed although it is not known if they were contemporary. Structures **M5011**, **M5012** and **M5013** appeared to be aligned ENE – WSW but this may have been a product of later truncation by furrows on this alignment. The structures have no coherent form and are 11m – 13m apart.

M5011 was a rectangular structure 5.2m long by 2.1m wide consisting of 12 postholes. The postholes were shallow, surviving between 0.04m and 0.20m deep indicating that more posts may have existed in this area before truncation. **M5012** was 5.2m long by 1.85m wide and consisted of 9 postholes. These survived only to depths of less than 0.20m and only an incomplete plan is likely to have survived. Structure **M5013** was more substantial. It was 5.26m long and 2.1m wide and consisted of 11 postholes. These postholes survived to depths of 0.20m - 0.30m. The average width of these postholes (0.45m) implies a larger structure than **M5011** and **M5012**. The structure covered an area of c. 4m squared. Each of these structures only partially survived truncation by agriculture but judging by the concentration of postholes in this area it is likely that several structures existed from the late pre-Roman Iron Age to the middle second century.

Associated with these structures was a large pit 8m long, 4.5m wide and 1.5m deep (**M3522**). The sides were steep and vertical in places although access may have been via the south west where the angle was less steep. The pit was re-cut at least once during its life and may represent a quarry pit and/or well.

Enclosures

20m south of **M5015** the northern arm of a rectilinear enclosure ditch (**M5021**) continued ESE from the western baulk. It ran for c.35m before turning SSW for 18m where upon its profile became so shallow that it could be traced no further. This ditch re-cut drove-way ditch **M5022**, but may have continued to function as the southern arm of the drove-way. The profile of the ditch was a regular 'U' shape up to 0.7m deep. The southern half of the enclosure may have been truncated by ploughing although a small section around the south eastern corner survived 45m south of **M5015**.

Two sets of three postholes, **M5023** and **M5070**, may represent fenced internal divisions within the enclosures of this phase. **M5070** ran on a NE –SW course perpendicular to the entrance of **M5015**, these posts were 0.5m wide and 0.1m deep. Samples from **M5070** produced remains of cereals, chaff and weed seeds strongly suggesting that grain processing was taking place in the nearby settlement area. **M5023** were 0.2m wide and 0.05m deep.

To the south west of the site curvi-linear ditch **M5050** ran for 21m from south to north. This ditch bowed out to the east and may have formed a funnelled entrance 4.25m wide to enclosure **M5021** with **M5031**. **M5031** ran 7.9m from east to west then turned sharply and ran 14.7m north west before being truncated. **M5050** contained a fragment of rotary quern. This is the only direct evidence of grain processing in this area and may allude to a processing area to the west of this ditch.

Ditches **M5034** and **M3886** are the only other features in this area that shared an alignment with **M5021**. **M5034** was a shallow ditch running for 19m from under the eastern baulk. **M3886** was a ditch 1m wide parallel to the north-south segment of **M5021**. These may represent boundaries of paddocks extending to the east beyond the excavated area.

Pits

28m south of **M5021** a series of intercutting pits were dug (**M5024**). The total area they covered was over 15m squared and the pits were up to 0.74m deep. The earliest of these pits contained a Roman-style copper alloy shield boss dating to the middle 1st century A.D. Samples from these pits contained cereals, chaff, weed seeds and charcoal indicating that some agricultural activity was continuing in this area. These pits were almost certainly used as watering holes for cattle within enclosure **M5021** but may also have initially been dug for gravel. About 6m to the west of **M5050** pit **M4246** was dug. A further 2 pits were dug 12m south of this. These may have been for quarrying although refuse disposal is also likely given the possible proximity of a structure. At the east of the site 12m west of **M3886**, was a single isolated pit **M3859**.This was 1.3m wide and 0.38m deep. It contained a kiln bar, charcoal and a coke like substance. This may have been a refuse pit relating to activity under the eastern baulk.

4.4 Phase 4: Early Roman (late 1st century AD to middle 2nd century AD) (Figs. 8 and 13)

This phase marked a continuation of some features from Phase 3 within both areas of occupation. Although the shortest of the five main phases on site it was probably the most intensive with a substantial number of new features constructed in both areas of occupation. It is not a coincidence that Early Roman pottery (part Phase 3 and the whole of Phase 4) dating before the middle of the 2nd century comprised nearly half of all pottery found on the excavation (Lyons Appendix 7).

4.4.1 Area 1

About half of the Phase 3 features within Area 1 continued into the 2nd century. The drove-ways remained largely unchanged, the round houses continued and, even when they were abandoned, the new structures were built closely. The new enclosure system saw the most change whilst the ritual area was screened off and was the area where least change/new features were constructed. At full analysis stage this phase will be sub-divided but for this PXA the text has been written as a single phase.

Drove-ways and site boundaries

The main drove-ways were kept in use with Phase 3 drove-way **M4512** recut on its external side (**M4513**). The Phase 3 east to west droveway was recut (**M4519**). The eastern Phase 3 boundary **M4574** may have continued into the early 2nd century but then the boundary seems to have moved to the west (**M4584**).

Structures/domestic enclosures

The four roundhouses (**M4556**, **M4568**, **M4570** and **M4571**) may have continued in use into at least the early 2nd century. By the middle of the 2nd century within the central northern part of the site, there were four possible new houses established within small sub-rounded/sub-rectangular enclosures **M4585**, **M4577-9**, **M4580** and **M4581**. Three of these enclosures have entranceways on their western sides while the more irregular enclosure (**M4585**) seeming to have an entranceway on its southern side. The four enclosures ranged in size from 14m by 10m to 22m by 14m. Two enclosures (**M4581** and **M4585**) had a few internal postholes which may have been part of the former houses although no evidence for internal postholes surviving in the other two enclosures.

Enclosures

The 'C' shape Phase 3 enclosures and the boundary ditches and internal drove-way had gone out of use by the end of the 1st century although enclosures (**M4588** and **M4589**) to the north-east of the central ring ditch (**M4556**) continued some time into the 2nd century. Directly to the west, east and south of the new Phase 4 'domestic enclosures' there were new enclosures and boundary ditches constructed. The enclosures were mostly sub-square or sub-rectangular in shape. **M4575** on the eastern side was 16m by at least 14m in size and unlike most of the other enclosures, was shallow with ditches less than 0.4m deep. Enclosure **M4572** to the north seems to have continued into the early 2nd century.

On the north-western side there may have been a large irregular field covering an area *c*.80m by 50m (**M4549** and recut **M4550**). For part of the area there is an internal parallel ditch (**M4553**). There seems to have been a pedestrian entrance way on its eastern side and drove-way entrance on the north-western side. There was an internal ditch partition **M4561** and a large watering hole (**3100**), which was sub-rectangular 4.4m by 2.5m and 0.53m deep. Butting up to this field to the south was a probable sub-square enclosure **M4545**.

On the southern side there were two conjoined sub-rectangular enclosures (**M4592** and **M4599**/**M4601**/**M4603**). **M4592** was the most regular, it was placed on the south-eastern corner of drove-way **M4517** and measured 44m by 24m. **M4592** was internally divided on the north side **M4595** and recut on its south-eastern side **M4597**/**8**). Directly to

the north, enclosure **M4599**/**M4601**/**M4603** was c.28m by c.28m in size and boundary ditches **M4601** and **M4603** joined up with the southern (**M4517**) leaving a 4m wide entrance way and the eastern drove-way (**M4574**) of the site thereby dividing the interior of that part of the settlement. There were at least four internal pits within **M4599**.

Ritual area

The ritual area was screened off by linear ditch **M4541**, which joined up with enclosure **M4592**. These were both deep ditches - presumably to stop cattle from wandering over the sacred area. In the ritual area, the Phase 3 cremation area **M4525** continued in use into the 2nd century with five cremations in this period (Table 4). There was far less people being buried within this phase (compared to Phase 3) and the last cremation was probably buried before 150AD. In addition, an inhumation burial (**M4530**) directly to the north of main cremation area may have been buried within a posthole structure. Pottery sherds from a couple of the postholes were 2nd century in date. Directly to the east of this inhumation was a posthole structure (**M4533**) of unknown function. There were 15 postholes roughly around a hearth in an area 8.5m by 5.75m but formed no clear pattern.

In the ritual area, a shrine complex was built in the 2nd century (**M4527-9**). The enclosure ditch surrounding the shrine cut the eastern ditch of the main Late Iron Age/Early Roman cremation enclosure (**M4518**). The shrine complex consisted of an irregular enclosure measuring *c.*15m by 10m which had a northern entrance way (**M4527**). There were two internal wooden structures (**M4528-9**) including a small shrine facing the entranceway. This consisted of a small slot structure 3.5m by 3.25m in shape and a central cremation (**1428**). The cremation and pottery recovered from the slot were 2nd century in date. Within the enclosure, an undated posthole structure was found directly to the north of the shrine (**M4528**), which was pentagonal in shape. The angle of the four postholes found, each 2.25m apart, implies there would have been a fifth posthole (projected as being within a former ditch). Abutting up to the shrine complex was a north to south ditch M4536, which linked up to burial **M4530**.

Burial and ditch fragment to the west side of the settlement

On the extreme western side of the site there was an isolated east to west inhumation burial (**443**). A 2nd century pottery sherd was recovered from its backfill. A small north to south ditch fragment was the only other feature to lay outside the western boundaries of the site.

4.4.2. Area 2 (Fig. 13)

In this area the early Roman period saw a significant expansion of the planned settlement with a laying-out of enclosures and drove-ways of uniform sizes across the area. The northern boundaries were closely

related to those of the previous phase and this suggests that they, at least in part, survived into Phase 4. This period saw a decrease in agricultural evidence and the laying out of paddocks and small enclosures across the area. Faunal remains showed that the amount of cattle, sheep and goats increased significantly at this time. Two sub-phases can be identified in this period. Both share a similar alignment and may demonstrate the gradual construction of this landscape.

The primary enclosure

The earliest activity in the Roman period was a north - south boundary (**M5035**) that ran for at least 80m from the eastern end of **M5001**. This survived primarily in the form of 6 tree/hedge pits. Its alignment was preserved in the courses of later ditches. The southern segment of **M5035** was a 35m long segment of ditch. A new enclosure system in the south-western part of the site consisted of **M4252** and **M5032**, which were closely associated with **M5033**. Ditch **M5033** ran east to west from the western baulk for 32m. This boundary may have continued east in the form of a hedge or tree line that may have joined **M5035**. Linked to **M5035** was a paddock, **M5009**, 12m wide and was formed by two parallel ditches. The eastern ditch was later re-cut suggesting a continuation of activity in this area during the later phases. Pit group **M5024** continued in use in this period and the individual pits will be assigned into their relevant phase at full report stage.

The settlement area

Shortly after the laying out of these boundaries the large-scale construction of enclosures and paddocks began. The northern boundary was ditch (**M5003**) and its eastern terminus joined **M5001.** It seems likely that this earlier ditch (**M5001**) may have continued its function in this phase, possibly as a shallow earthwork and that **M5003** was complimentary to it rather than a replacement.

Just south of the northern boundary and aligned with it was a four-post structure (**M5014**), 1.8m x 1.6m and the posts were 0.1m deep. It is likely that the Phase 3 structures and the well constructed in the middle to late first century were still in use at this time.

The most northerly enclosure was demarcated to the south by **M5010**. This may have formed an entrance 4m wide with the eastern section of **M5015**, which may have still been partly open at this time. It seems likely that the space between **M5001** and **M5003** and that between **M5015** and **M5010** was maintained due to the presence of a bank of up-cast. The position of **M5003** and **M5010** in this phase would have been constrained by the structures on one side and the banks on the other.

The drove-way and the central enclosure

Ditches **M5018** and **M5020** were re-cuts of drove-way ditches **M5019** and **M5021** respectively and they formed a drove-way 7m wide. Presumably this drove-way was used for herding and access to and from the central enclosed area. In the centre of this enclosure a series of shallow pits between 1m and 2m wide were dug (**M5030**). They contained cereals, weed seeds and charcoal as well as pottery, bone and a relatively large amount of fired clay.

Other enclosures

M5004 and **M5005** formed an enclosure in the north east of the site. Both of these ditches kinked to the west after 13m of southerly progress, probably to avoid the remains of **M5035**. **M5004** butted up to **M5003** and continued for 45m before terminating. Its terminus formed a 2.8m wide entrance to the enclosure created with **M5005** to the east, and a 3.3m wide entrance to the central enclosure with **M5028** to the west. **M5005** was the main eastern boundary of this settlement. Within enclosure **M5004**/**M5005** there were two large pits (**3215** and **3201**). They were both 2.3m long by 1.5m wide. These may have been small waterholes for animals in this enclosure.

The eastern boundary continued to the south in the form of ditch **M5028** which ran south for 50m before turning west and merging into the previous boundary phase **M5033**. On the south side there was a 2m wide entrance which was in-line with the western side of the internal drove-way formed by **M5020**, **M5026** and **M5027**. This entrance was surrounded by 11 small pits or gullies suggesting that this entrance saw a large amount of activity, including re-cutting and deliberate backfilling, whereas the rest of the ditch did not.

Aligned with this boundary (**M5028**) to the north were several fragmentary enclosures c. 17m wide. Their position just within the southern boundary suggests that they were pens or stockades. The eastern enclosure (**M5027**) was 17m wide by 33m long. **M5027** formed a passage with **M5028**, 3m wide to the east and 1.6m wide to the south. To the west this led to a drove-way 7.2m – 9.6m wide, formed with **M5026**. **M5025** and **M5029** formed more pens/stockades to the west of drove-way **M5026**. **M5025** formed an enclosure was 20m by 12m and **M5029** was 16m squared.

The southern occupation area

The system of shallow ditched stockades continued to the south-west with **M5016** and consisted of three separate ditches. Two west – east segments were 8m and 5.2m long with a 3.8m wide gap between them which may have been an entrance leading to the north. To the west of **M5016** was a small enclosure **M5047**. This was 14.8m north to south. At the south there was an entrance at least 6m wide. Within this enclosure there was a possible oven (**4230**). Between **M5047** and

M5016 there was a group of 5 small pits (**M5062**). Three of these pits contained the highly truncated remains of ceramic vessels that appeared to have been buried whole and upright. Even though these had the characteristics of cremations, environmental analysis provided no evidence of charred bone remains. The fourth pit in this group yielded a high quantity of charred remains and chaff but no vessel. This evidence implies that these vessels may have been a foundation deposit for a structure. The fifth pit was larger than the others (0.95m wide x 0.39m deep) and contained charcoal, roof tile and a sherd of pottery with a quatrefoil stamp.

To the east of this enclosure, **M5049** formed a drove-way 10m wide with **M5028** to the north. **M5049** consisted of a line of 14 stake holes that indicate a fenced boundary. These stakes ran for 21m although their depth of 0.13m indicates that they may have continued further. 17m to the east the drove may have turned south and continued as **M5009**.

Activity to the east of the enclosure

Activity to the east of **M5028** consisted of a group of irregular curvi-linear gullies that were cut on a roughly north – south alignment (**M5038**). These were up to 1.4m wide and 0.5m deep but their function is unclear. In the far south-east corner abutting the eastern segment of **M5009** three ditches formed enclosure **M5067**. This enclosure was 15.2m by 15.2m and within this enclosure were a series of pits **M5069**. Of eight pits, four were 'L' shaped in plan. Each of these had a deeper section, possibly a post-hole, with in it. Analysis of the deposits from these four pits provided evidence of burning but very little for charred organic remains. These pits may have been low temperature furnaces used for smoking or drying produce but their function cannot be suitably resolved.

4.5 Phase 5: Middle Roman (middle 2nd to 3rd century AD) (Figs. 9 and 14)

Area 1 continued in use throughout the Middle to Late Roman period although Area 2 was seemingly abandoned by the end of the 2nd century. In Area 1 there may have been a relative decline in the 3rd century as seen by the reduction in size of the settlement and fewer artefacts and animal bonerecovered (for example, far fewer 3rd/4th century pottery sherds found on site compared with sherds of the 1st/2nd centuries). Despite that, there was still significant activity in this part of the site and stone was used for construction for the first time. Within the settlement the alignment of the new structures, fence lines and boundaries change in this phase and demonstrate that Area 1 was replanned in this period.

4.5.1. Area 1 (Fig. 9)

Drove-ways and site boundaries

The southern boundaries of the settlement contracted in this period with the northern segment ditch (**M4517**) of the east to west drove-way becoming the southern boundary of the settlement. The southern segment of this drove-way was abandoned. No Phase 5 features were identified to the south or west of the new site boundaries. This may mean the field boundaries between Areas 1 and 2 were abandoned in this period. The western drove-ways (**M4513**) may also have gone out of use in this period although the eastern boundary in the form of ditch **M4584** seems to have been maintained into at least the later 2nd century and perhaps into the early 3rd century.

Structures/domestic enclosures

Some of the individual houses occupied in Phase 4 (**M4577-9**, **M4580** and **M4581**) may have continued into the late 2nd or even 3rd century. At some point in this phase a large rectangular stone building was constructed in the northern central part of the site (**M4565**). Foundations survived within part of the structure which shows it had an internal length of *c*.15m. Attached to the western side of the building there was a lean-to, which housed a figure of eight oven (**2927**/**2981**) which was 2.9m in length and up to 1.1m wide. A complete quern stone was recovered from its backfill. There was a posthole entranceway on its eastern side of the stone building comprising two rows of postholes running roughly east to west for *c*.18m long and had an external width of up to *c*. 4.1m. Associated with this building, running parallel 7.5m to the east of it for *c*. 40m from the posthole entranceway, was a north to south fence line (**M4567**).

Also part of this building complex was a stone lined well 2.7m in diameter (**2147**). It was *c*.21m to the south-west of the building. The well was built over an existing spring and was constructed to a depth of more than 3m. The stone for its construction was largely limestone but also contained a reused part of a millstone.

Later, there were some structural changes to the building complex. A new entrance way was probably built into the building between a newly built wall and a ditch. This wall seems to have led off from the south-eastern side of the building curving to the northwest before butt-ending. The wall survived in parts for *c*.9m cutting one of the fence posts **M4567**. It was 0.6m wide and noticeably narrower than foundations for the main building. The northern entranceway was perhaps delineated by a boundary ditch (**M4583**), which seems to have cut the former posthole entranceway.

Enclosures

A few of the enclosures from Phase 4 may have continued for a time into Phase 5 including **M4575**, although the majority had been abandoned by the middle or late 2nd century. In their place there was a new field system, with a series of probable paddocks in the centre covering an area *c*.50m by *c*.40m. These were constructed on the western side of the settlement area (**M4542-4**, **M4546-8**, **M4552**, **M4555** etc.). The field system was based on relatively small sub-rectangular plots (possibly around eight in number) formed by five roughly parallel north to south ditches and three east to west ditches establishing a co-axial ditched system. Three of these boundary ditches continued from the area of possible paddocks to the north and east (**M4543** and **M4546-8**). A segmented fence line (**M4554** and **M4563**) on the western side of ditch **M4546**, and the fence line M4567 on the eastern side ran on the same alignment and was part of this field system. A large watering hole is probably related to this field system (**3126**) and was found directly to the west of the fence line **M4567**. It was c.8m by 5.5m and 1.84m deep although the sides were gentle for the first 1m+ before becoming vertically sided.

To the north of the structure **M4565,** near the north baulk of the site, there was another watering hole (**3120**), oval in shape, 4.4m long and more than 0.5m deep. This seems to suggest that pastoral farming also took place on the north side of the settlement. Some domestic rubbish (presumably from the house), including the remains of more than 16 nails, was recovered.

On the southern side Enclosures **M4592**/**M4595** seem to have continued into the start of Phase 5 only. Later, they were replaced by enclosure ditches (**M4594** and **M4596-7**). These possibly related to the co-axial ditch system on the west side of the settlement. Boundary ditches **M4543** and **M4600** seem to have formed a drove way from the western side to these southern enclosures.

Ritual area

In the ritual area, the only activity consisted of a shrine complex built in probably the earlier 2nd century (see Phase 4 description) and continued into Phase 5 (**M4527-9**) and related ditch **M4536**.

On the edge of the ritual area there was a human inhumation burial (**296**) and an adjacent horse burial (**1603**). Both burials cut Phase 4 ditch **M4541**, which had screened off the ritual area (see above).

4.5.2. Area 2 (Fig. 14)

By the middle Roman period it appears that many of the early ditches had fallen into disuse. The northern boundary was maintained on the

same alignment but enclosure **M5004**/**M5005** was cut across by a new enclosure **M5006**. The southern limits of the site moved north possibly reflecting an increase in flood plain activity to the south near the brook. It is possible that the early Roman paddocks were still in use at this time but they were not cleaned to as great a depth. Cattle still dominated the faunal remains at this time although their numbers were less due to the decrease in the size of the settlement.

The northern area

The northern boundary in this phase was re-cut along the line of the earliest boundary ditch **M5001**. This suggests that **M5001** had silted up completely by this time. **M5000** was not cut as deep or as wide as its precursor. It was up to 1.8m wide and 0.57m deep. It maintained a 'U' shaped profile all along its course for 82m and its fills were relatively uniform secondary deposits. This boundary continued south in the form of **M5002**. This ditch had similar dimensions and when initially dug it may have joined **M5000**. Environmental samples from **M5000** produced no charred remains.

To the south of this boundary an 'L' shaped ditched enclosure was constructed. **M5008** formed the southern and eastern arms and **M5006** formed the northern and western arms. The western part of the enclosure was 24m wide and 34m long and was accessed by an entrance 1m wide to the east. The eastern part was 16.4m wide and over 56m in length. This part of the enclosure was accessed from the north by an entrance c.2m wide. There may have been fenced boundaries within these enclosures but no evidence of them remains. Ditch **M5008** was 26m long from north to south and 30.8m from west to east. Between its northern terminus and ditch **M5000** there was a gap of 8.8m although it is possible that the partially backfilled remains of quarry pit **M3522** may have also been used to extend this boundary northwards. **M5008** was a steep sided 'U' shaped ditch all along its course with only a single fill. Environmental samples from this ditch provided a large quantity of cereals, chaff, weed seeds and charcoal indicating that cereal processing continued near by.

M5006 was formed from three segments. The north - south segment was 11.2m long and 0.31m deep. Its southern terminus had been re-cut by a pit 1.4m wide and 0.7m deep. The corner segment was 4.5m north – south before turning east for a further 4.5m. The east – west segment continues for 22.4m before going under the eastern baulk. This segment was cut along the line of **M5015** and was up to 1.2m wide and 0.5m deep. **M5006** also provided evidence of cereals from the re-cut terminal of the north – south segment.

The southern area

The southern boundary of this phase was partially re-cut along the course of **M5028** in the south west but diverged from this course in the south east. The boundary (**M5045**) consisted of four segments of ditch.

The western segment was 19.2m long and cut through the hearth and enclosure of the previous phase. The boundary continued west 10.4m north of the terminus of the first segment. This segment continued for 32m before turning south east for 9.2m. The third segment was curvi-linear, 14.4m long and had a gap of 4.4m to the north west and 7.6m to the east. The eastern segment zigzagged in three linear sections for 34m before proceeding under the southern baulk. In general **M5045** was c.1.16m wide and up to 0.55m deep. It maintained a broad shallow 'U' shape and a single fill for its entire course in each of the segments.

The course of **M5045** implies that it was following the line of the high water mark of the flood plain of the Brook to the south in this period. This may indicate increased rainfall in this period that may have caused the area of land in use to contract northwards. This is evidenced by a layer of alluvium down slope towards the brook.

The only other features that date to this phase are several pits. Two pits (**M3854**) were cut in the corner of the early Roman enclosure ditch **M5029**. Three pits **M4242** occupied a similar position on the intersection of **M5031** and **M5016**. These pits may have been used to re-enforce the position of these enclosures when the majority of the ditches had silted up. This may indicate that the earlier field layout continued to function to some extent.

Towards the end of this period a series of shallow gravel quarry pits (**M5040**) were cut over the east – west length of **M5008**. These were up to 3m wide and 0.55m deep. They contained one to three fills suggesting that some of the pits may have been backfilled quite soon after excavation. Environmental samples provided evidence of cereals, chaff and weed seeds implying that agriculture continued whilst these pits were being dug.

The evidence that the 'L' shaped enclosure was cut by these pits suggests that it was not in use for long and that the need to extract gravel from this particular vein was more important than the function that this enclosure performed. Gravel extraction may have been in reaction to the increased flood level of the brook and the gravel may have been used to level-up damp marshy ground.

4.6 Phase 6: Late Roman (later 3rd to latter half 4th century) (Fig. 10)

The last occupation site phase took place within Area 1 only and continued into the later half of the 4th century. There were two stone structures (**M4566** and **M4551**) and associated structures as well as a few enclosures and boundary ditches. The Phase 5 southern boundary of the site was maintained in this period and possibly the western boundary of the site re-dug.

Building complex M4566 and associated features

In the 4th century AD, the large Middle Roman house (**M4565**), was replaced by a slightly larger stone building built on a marginally different alignment (**M4566**). It was sub-rectangular in shape, with an internal measurement of *c.*16/17m by 12/13m in size with four large internal post pads each more than 1m in diameter. There may have been at least two rooms as the southern three postpads were on the same alignment whereas the northern postpad was slightly displaced. The northern postpad is directly half way between the two north to south wall foundations (giving a projected internal width of 12m while the southern internal width may have been c.13m wide.

A stone pathway running north-east to south-west led into the structure from the north-east. The pathway survived for 6.8m, mostly because it had sunk into former Phase 5 boundary ditch **M4583**. Its surface comprised fragments of quern stones as well as limestones. The Phase 5 stone well (**2147**) to the south-west of this structure continued in use in this period. A coin dated 364-378AD was found from near the top of the well's backfill. Probably associated with the building complex was a possible timber granary (Dr David Neal pers comm.), which lay to the south-east of the main building (**M4576**). It comprised four east to west slots roughly equal distance apart in an area c.11m by c.11m. Some of the slots were burnt black. A shallow ditch ran around the northern and western sides of the structure. A second structure or possibly an enclosure (**M4569**) was directly adjacent to the south of a stone pathway. It consisted of an arc of a curvilinear gully but the remainder did not survive. Directly to the west of the building was a north to south boundary ditch which butt-ended next to building **M4566**. A large watering hole (**2969**) was directly to the north of the building, which measured 3.6m by 2.15m and was 0.55m deep. This may imply that there were pastoral farming occurring to the north of the building. The watering hole was backfilled with some domestic rubbish, presumably from building **M4566**, including an iron candlestick, probable part of a box corner, knife and more than 27 nails.

Structure M4551

A second stone structure lay 50m to the south with three large stone pads (**M4551**), between 3.5m and 4.5m apart aligned in a row over 12m in length, survived overlaying the Phase 5 field system. None of the external wall foundations survived.

Enclosure M4593 and related features

To the east of structure **M4551** and running parallel to it, were two north to south boundary ditches (**M4602** and **M4604**) seemingly leading to a sub-rounded enclosure (**M4593**) to the south which had a

c.23m diameter. Within the enclosure there was a large pit or watering hole (**2365**) 2.4m in diameter and 0.74m deep. This enclosure seems to have been linked to a 'L' shaped boundary ditch (**M4606**) directly to the west and south. Pottery within the ditch was middle to late 4th century. On the east side of **M4606** there was a stone spread (**1677**), which was 3m by 2m and 0.2m deep. The function was unknown but there was large numbers of stones, some were burnt, and comprised sandstones, limestones, occasional cobbles, mudstone and many quern fragments as well as other artefacts especially roof tile, pottery and animal bone.

Ditches within western area

Five ditches dated by 4th century pottery were uncovered on the western part of the site (**1077**, **M4557**, **M4564**, **2126** and **3124**). All the ditches were fairly shallow and probably represented field boundaries which only survived in a fragmentary state.

Ritual area

The shrine enclosure ditch (**M4527**) was re-dug in the 4th century implying that the community still respected the dead. Within the ritual area there was a large watering hole or ritual 'pond' (**1302**) built directly to the north of the main cremation area **M4525**. This was *c*.6.8m in diameter and 1.6m deep, and was backfilled with a moderate quantity of artefacts included a coin dated 378-395AD.

4.7 Phase 7: Medieval - post-Medieval

Within both excavation areas, furrows survived on average about 8.5m apart (Figs. 2 and 3). In Area 1 the furrows ran roughly north to south (**M4607**) whereas in Area 2 the furrows ran from north east to south west and curved gradually southwards. They survived to widths of up to 2m and to depths of up to 0.4m. Within Area 1 the furrows shallowed out to the west and east while within Area 2 the furrows became shallower and thinner towards the southern end of site probably reflecting the presence of thicker soil in the areas where alluvium had accumulated. There were many artefacts recovered from the furrows, mostly by metal detecting, which largely dated to the early post-medieval period *(c*.17th century).

5 Assessment of Archaeological Potential

5.1 Stratigraphic and Structural Data

The stratigraphic data varied in complexity from Area 1 and Area 2. Area 1 had areas of sparse archaeological features cutting the natural subsoil and other parts of this site where there was a complex mass of intercutting features. On the whole Area 2 had relatively simple stratigraphy with few physical relationships. Likewise, concerning structural data, Area 1 not unnaturally due to the greater longevity of use, had far more structural remains than Area 2.

During assessment master numbers (**M**) were assigned to major features in both excavation areas in order to facilitate phasing and interpretation. The pottery assessments were useful during the creation of preliminary phasing, based on a combination of stratigraphic relationships and finds. This provisional site phasing was generally distributed to the other specialists prior to assessment. A full stratigraphic matrix of Area 2 has been achieved but due to time pressures this has not yet been done for Area 1. It is anticipated that this will take place in early 2008 and after this stage any further inconsistencies in the site phasing will be removed. Once this has been done, specialists will be asked to produce full reports. It is likely that even at this analytical stage, phasing may change once specialists have provided their final reports and radiocarbon dates obtained.

5.1.1 The Excavation Record

The site record for both areas has been checked for internal consistency and preliminary interpretation, and has been fully cross-referenced. Drawn records have been fully checked and cross-referenced with the context record. The drawn record has also been combined with electronic survey data to produce a definitive site plan using ProCAD and Adobe Illustrator software. The photographic record has been labelled and fully cross-referenced with the context record. All site records are held currently at the CAM ARC headquarters at Bar Hill. Some of the artefacts are currently held by the relevant specialists and stored under the Buckinghamshire museum site code 2006. 194. Records and artefacts from the AS 2003 evaluation trenches have been referred to where relevant in this document and will be fully incorporated at full report stage.

The site data is of sufficient quality to address all of the project's Research Objectives and form the basis of further analysis and targeted publication of the key features, finds and environmental assemblages.

Type	Area 1	Area 2 (including CAM ARC evaluation)
Context register sheets	69	38
Context numbers assigned	*c*. 2700	*c*.1400
Level record sheets	21	17
Plan registers	16	9
Plans at 1:50	202	93
Plans at 1:10	45	1
Plans at 1:20	14	0
Section register sheets	8	8
Sections at 1:10 or 1:20	306	284
Photo register sheets	39	22
Black and white films	20	11
Colour Print	6	9
Colour slide	13	2
Digital photographs	*c*.700	*c*.300
Small finds register sheets	22	6
* No. Small Find numbers	844	61
Environmental Register sheets	25	11
Environmental baulk samples	296	101

Table 6: *Quantification of written and drawn record*

* In some cases one number has been assigned to multiple nails

5.1.2 Range and Variety

There was a wide range of features in both excavation areas and these cut features comprised beam slots, cremations, ditches, furrows, graves, ovens or hearths, pits, post-holes, 'tree-throws', water-holes or wells, and other features. There was a difference in numbers and type of features from the two areas with Area 1 having a greater date range when features were dug and more features (including different types) uncovered. Area 2 did not, for example have wells, beam slot structures, stone structures or graves.

Some feature types appeared to vary between the different periods of use present on the site. There were, for example, cremations from the Iron Age and Early Roman period but probably no cremations after the middle 2nd century AD. Even in some of the more mundane features such as pits (there were *c*.350 recorded in the excavations), their numbers found on site reduced in the Middle and Late Roman periods. In contrast a large number of ditches (boundary and enclosures) were found in all periods from the Middle to Late Iron Age. Structural features were found in both areas from the Middle to Late Iron Age periods through to the Middle Roman (Area 2) and Late Roman (Area 1). The type of structures varied from post-holes only in Area 2 to post-holes, ring gullies, slot structures and stone structures within Area 1. Ritual deposits were found almost exclusively within Area 1.

Deposits mostly comprised feature fills, although a thin layer of alluvium was present in the extreme southern part of Area 2, sealing a few features. The fills varied dramatically from silts or sandy silts with gravel within Area 1 to more clayey deposits within Area 2. A few peaty deposits were found within deep features in Area 1. In both areas there were a small minority of deposits which were organic or partly organic in nature.

5.1.3 Condition

The survival of archaeological features on the site was, on the whole moderate. The most damage occurred through horizontal truncation, and this largely the result of medieval and post-medieval ploughing. Most of the stone features have been heavily robbed sometime in the post-Roman period. The overall result is that no floor levels have survived on site but some foundation levels of structures were seen. In all, a good number of post-holes, slots and foundation trenches have survived to give an overall impression where buildings were, even if their plans were at best partial. About half the cremations have been damaged to a lesser or greater extent. This was due to most cremations originally being buried in shallow holes partly within the sub-soil. In contrast deeper negative features such as pits or ditches and watering holes survived relatively well. There is some difficulty with the phasing of ditches where there was dense intercutting of features on site. Unfortunately, these areas of dense archaeology were found especially in areas where there was a very high water table. This made excavation difficult in these areas with two pumps being used continuously on site to manage the work.

5.2 Documentary Evidence

The documentary evidence supplied in the Wardell Armstrong desk-based assessment helps in the understanding of post-medieval land use on the site (Wardell Armstrong 2003a and 2003b; see section 2.1.5 above).

5.3 Survey Data

All of the excavated areas were located onto the Ordnance Survey with either the aid of a Leica TCR705 Total Station Theodolite or a GPS system. All survey data is stored in digital format with the archive.

5.4 Artefact Assemblage Summaries

The following section comprises summaries of the reports contained within the appendices including recommendations for further work:

5.4.1 Coin Assessment (Appendix 2)

The coin group includes 122 Roman examples (1st to end of the 4th century), with a further 14 coins being post-medieval or modern and two jetons. Most of the coins were recovered from topsoil, within the central northern part of Area 1 where domestic structures had been located from the 1st century AD to the later 4th century. Two possible coin blanks could be evidence for coin production in the area.

Recommendations

With a few exceptions, most of the numismatic material needs no cleaning prior to full identification. Twenty-eight examples require cleaning and/or x-ray. All of the group should be catalogued and placed into archaeological context, when chronological meaning may become apparent. The modern examples require minimum of work.

5.4.2 Assessment of the Small Finds (Appendix 3)

More than 540 small find objects were recovered, one Bronze Age object and the remainder Late Iron Age to modern date. Of particular interest was the small finds recovered from Late Iron Age and Early Roman cremations. Several brooches show that some burials date to the first half if the 1st century AD and others to the second half. The post-conquest burials include artefact types introduced at the conquest and indicative of incomers or of Britons who had adopted a Romanised lifestyle.

Some Roman objects were found from other features from within the site but mostly they were recovered as unstratified objects. Most of these artefacts were normal domestic items but also a few from other uses ranging from military including a shield boss, to others which may have religious dimension.

The remaining items fall into two broad groups, one late medieval and early post-medieval in date, the other late post-medieval to modern, most deriving from subsoil and topsoil.

Recommendations

1) To facilitate accurate description and illustration, as well as in the interests of their long-term preservation, the majority of the copper-alloy and silver objects, together with some of the lead objects, should be cleaned and stabilised by a professional conservator. A large proportion of the stratified iron objects and some pieces from the subsoil and topsoil should be X-rayed.

2) A report on the objects should form part of the published site report and should relate the assemblage to others from similar sites in the region and across Britain. This is envisaged as being divided into three parts: the material from the burials, the other pre-medieval material, and the medieval and later items (omitting the late post-medieval to modern pieces).

3) After conservation or X-ray, a minimum of 117 items should be drawn for the published report. This figure will probably be increased at report stage once conservation/X-ray has allowed a more detailed analysis of the objects, particularly the ironwork from the cremations. Objects certain to require illustration are indicated in Appendix 1 of this assessment with a 'y' in the relevant column, the others are marked '?'.

5.4.3 The Lithic Report (Appendix 4)

A total of ninety-two worked flints were recovered during the evaluation and excavations commencing in the Mesolithic and continuing into the Bronze Age. As this was only a moderate assemblage a full report has been written at this stage. The majority of the assemblage was residual or unstratified, however, there were three intercutting pits, contained small sub-assemblages of struck flints dating to the Mesolithic or Neolithic periods. The majority of the 92 worked flints consisted of knapping waste although tools, including retouched pieces and a polished axe, comprised a proportionally very high 26% of the assemblage, indicating that lithic tool use was an important aspect of the prehistoric activities conducted at the site.

Recommendations

No further work is recommended except that that 14 flints should be illustrated.

5.4.4 The Worked Stone (Appendix 5)

A total of 49 items of worked or utilised stone items were recovered during excavations at Broughton. There was a fairly large assemblage of up to 33 different rotary querns found, six whetstones and seven other objects comprising a large rubber, a fragment of roof stone and various floor stones and other slabs. The most significant component was the group of rotary querns and these vary from small bun shaped stones of as little as 260mm diameter to a moderate sized mechanically operated millstone of at least 700mm diameter. Millstone Grit and Old Red Sandstone make up two thirds of the assemblage (22 specimens) and Puddingstone a further five querns. Other materials account for four querns while Lava and Lodsworth Greensand are each represented by a single specimen.

Recommendations for further work

A report should be prepared describing the worked stone assemblage as a whole. A catalogue of the illustrated and most interesting items should accompany this and a full database of all items should be included in the archive. A discussion should be prepared which is likely to focus on the lithological, typological and chronological analysis of the rotary querns and what these tell us about the site and the wider area. This discussion will also cover the whetstones and other items.

In order to enable this discussion to be most useful, seven items have been recommended for thin section analysis. These include a quern of unknown sandstone lithology and two rotary querns that are of a type of Old Red Sandstone possibly from the Mendips - if this is the case, they would be the most north-easterly site currently known. A total of up to 18 items have been recommended for illustration.

5.4.5 The Prehistoric Pottery (Appendix 6)

Prehistoric pottery totalling 577 sherds were recovered from both the evaluation and the excavation. The pottery includes 83 sherds dating to either the Neolithic and Bronze Age. The assemblage is principally of Iron Age date (3rd to 1st century BC) with smaller quantities of late pre Roman Iron Age (LPRIA 1st century BC to 1st century AD).

Recommendations

- A short paragraph is required discussing the disposition, chronology and regional affinities of the earlier Neolithic pottery. Three sherds have been selected for illustration and will require an illustrated sherd catalogue description (This work will take a maximum of half a day).

- The exact dating of the possible later Neolithic to earlier Bronze Age pottery from Broughton is uncertain as both are of indistinct or incomplete form. Limited further analysis of the pottery might be undertaken to establish a date for the vessels. (This work will take a maximum of a quarter of a day).

- A short publication text is required including full fabric and form descriptions and a discussion of dating and regional affinities. A full illustrated sherd catalogue will be required for the seven sherds selected. Completion of the publication text and illustrated sherd catalogue will require a further one days work.

5.4.6 Late Pre Roman Iron Age and Romano-British Pottery (Appendix 7)

A total of 13 303 sherds, weighing 235.864kg of Late Pre Roman Iron Age, Early Roman and Romano-British pottery was recovered from the CAM ARC excavations and the 2003 AS evaluation. The pottery spans a period of at least 500 years; however the majority of the pottery found is Early Roman in date.

This assemblage from the CAM ARC excavation is a large, well recorded and stratified group of material that is of national importance to the study of Roman pottery. It is one of the largest group of recorded Romano-British pottery so far excavated in the Milton Keynes area and it has excellent potential for furthering our understanding of ceramic use from the transition between the Late Iron Age and Early Roman periods, also the Romano-British era within the tribal area of the Catuvellauni.

The assemblage includes the remains of the largest Aylesford-Swarling-type cremation cemetery found in Buckinghamshire. Also recovered was a large stratified assemblage of the pottery that was in every day use within the associated settlements in both areas of excavation. Therefore this assemblage has the potential to examine the use of ceramics within the cremation cemetery over a period of at least 150 years, to compare the difference in ceramic use between deposits associated with death and living, also to compare these results to other published regional and national groups.

Recommendations

- Select sherds that may have been produced in the Broughton kilns for thin section analysis and compare the results to the kiln bars (see CBM assessment report).
- Re-examine the cremation vessels and finalise fabric and decorative details.
- Identify which cremation vessels are cinerary and which are accessory within the burial.
- Confirm which cremation vessels have been used/repaired/ritually altered.
- Calculate the volume of the surviving flagons within the cremation burial, as the amount of liquid they contained may be significant.
- Compare these cremations to other published examples in the region and other sites of national importance such as King Harry Lane, St. Albans (Stead and Rigby 1989) and Baldock (Stead and Rigby 1986).
- Write a full catalogue for each cremation group.
- Integrate the updated pottery catalogue with the phased site data (including AS evaluation material).

- Write a publication text interpreting the national and regional importance of this assemblage and answering the stated research aims.
- A total of 170 vessels have been selected for illustration, this includes most of the cremation vessels and typical well dated examples from the habitation assemblage.

5.4.7 The Samian Pottery (Appendix 8)

A total of 243 sherds of samian weighing 7074g was collected from 113 evaluation and excavation contexts. Of great interest were 17 samian vessels found within 13 different cremation groups. The samian vessels from the cremation groups are an important assemblage especially because they are so well preserved and have not suffered from post-depositional damage. They have high potential to add to the current knowledge of Roman cremation cemetery assemblages in the region and to contribute to the study of Early Roman funerary ritual and the treatment of grave-goods.

Recommendations

- Identification of the stamp dies (within the Leeds Index) on the cremation vessels will narrow down the dates of the vessels. (This will involve some time on my part to prepare and send the rubbings of the stamps and/or photographs to the specialist – I am working on Brenda Dickinson or her appointed heir –, and integrating the identifications into the report and catalogue.
- Condition of the vessels — breakage, mending and use wear needs detailed recording, analysis and discussion. (discuss with excavator - need to look at individual grave plans and photos to compile information about how they were lying in the groups)
- All breakage and mending needs illustration or photo or both (a good example of how this can be illustrated is shown in Fig 20 on p 23 of Going 1988 EAA 41).
- Compare with other local and regional material
- Update report and catalogue
- No further work will be required on the samian from the non-cremation features

5.4.8 Post Roman Pottery (Appendix 9)

The evaluation and excavation produced a small post-Roman pottery assemblage of seven sherds, weighing 0.071kg. A few of the sherds were recovered from the early post-medieval furrows.

No further work is recommended on this collection.

5.4.9 CBM and Fired Clay *(Appendix 10)*

This was a relatively small fragmentary assemblage of ceramic building material, including baked clay and tile remains, mostly recovered from stratified deposits. Tile/brick comprised 313 fragments weighing 40.955kg and there were 1319 fragments of baked clay comprisi weighing 23.561kg.

The large majority of the tile/tile brick was Roman in origin with identified fragments comprising 39 pieces of tegula, 84 roof tile, 49 imbrex, 1 flue and 25 bonding tiles. The ceramic building material is associated with the settlement activity on site (ditches, pits and post-holes) and not with the Late Iron Age and Early Roman cremation cemeteries. The baked clay assemblage spans the Iron Age to Early Roman, also the Romano-British, eras and consists of many fragments including the remains one in situ oven or kiln and three dumps of pottery kiln(s) superstructure and furniture. Predominantly Romano-British, the quantity and type of tile found would suggest it has been robbed from its original situation and has been brought to this site for re-use. Perhaps to roof small structures, to build walls or as hard-core for paths and foundations. Several re-used post-Roman bricks were also recovered from a later feature.

Recommendations

- Integrate the CBM databases with the phased site plan and updated context record.
- Analyse and describe the CBM assemblages from the features identified as significant in the appropriate level of detail.
- Thin section the kiln bar fabric and compare this with possible kiln products.
- Compare this assemblage to other significant assemblages in the region.
- Produce a final document suitable for publication addressing the research agenda for this site, including catalogues of the baked clay objects for illustration (either by hand or by photography).

5.4.10 Glass (Appendix 11)

A total of twenty-two fragments of glass and four glass beads were recovered from the cremations and the settlement part of the excavations. From the cremations, a single glass vessel unguent bottle was recovered as was all the beads (found in three cremations). The remainder of the glass, predominantly Roman in date, was found associated with settlement activity.

Recommendations

Exploration of parallels is recommended for all beads recovered from cremations, SF's 440, 500, 501, 736 and 883 and unguent vessel SF 304, as it would add to the published record in this region. Parallels for SF 694, the grozed vessel shard should also be sought.

All glass beads, SF's 440, 500, 501, 736 and 883 and unguent vessel SF 304 should be illustrated along with SF 694, the grozed vessel shard.

It is estimated that further analysis will take approximately two days.

5.4.11 Analysis of Adhesive on Cremation Pottery Vessel and Powder Residue in Glass Vessel (Appendix 12)

Analysis of a pottery mend on a vessel within cremation **355** found birch tar had been used as an adhesive. Initial analysis of powder residue found within cremation **404** has so far proved negative.

Recommendations for further work

There are two recommendations for further work:

1) ICP analysis on the powder from glass vessel within cremation **404** will give full details of the minerals found. This will hopefully allow an update to this report and any comparisons found elsewhere.
2) The report on the birch tar should be extended to find comparisons.

Total time would be 1.5 days plus analysis.

5.4.12 Coal, Burnt Oil Shale, Shell and Slag (Appendix 13)

Only single pieces of coal and burnt oil shale were found in Roman contexts and they may represent former fuel. Only two pieces of slag were uncovered both smithy hearth bottoms, one from a Roman context and the other from a furrow and these could represent small scale iron working.

A small collection of 122 shells were recovered and they survived on the whole in good condition. Of the 122 shells, 120 were oyster and 2 were mussels. A total of 42 features produced shells. 37 of these were in Area 1 and 5 in Area 2. Only one ditch section and its recut produced a moderate assemblage. The modest quantity recovered shows that shells were a marginal part of their diet.

No further work is recommended on this collection

5.5 Environmental Remains

5.5.1 Human Remains (Appendix 14)

Almost 27kg of cremated human bone was recovered from 46 features across the site and provisional dating of the deposits suggests that these funerary contexts date from the Middle Iron Age to the Middle Roman period. In addition three Roman inhumations were also found. This assemblage is one of the largest, best-preserved and well-recorded assemblages of cremation burials in the region. The assemblage is also significant in that it is associated with a contemporary settlement and field systems, meaning that detailed integrated analysis will provide an opportunity to understand this community, its attitudes to, and relationship with, the dead.

Initial analysis shows that adults of both sexes and immature individuals were cremated and afforded burial. Seven, possibly eight double burials were identified. Lesions characteristic of degenerative joint disease were observed on skeletal elements in the spine of 3 individuals and elbow of another.

Recommendations for further work

It is recommended that the bone from both the 5mm and 10mm residues is sorted by body part (e.g. skull, lower limb, upper limb and axial) so that any deliberate selection/exclusion of elements can be identified so that the burials can be compared more profitably with cemeteries were similar analysis has been undertaken e.g. Monkston Park. Through this more detailed analysis it may also be possible to determine and/or refine the ages and sexes of some of the individuals.

Radiocarbon dates should be obtained from some unurned cremation burials.

Following the final analysis of the human bone, and once phasing of the burials has been obtained, a detailed osteological report and a discussion of funerary behaviour, fully integrating data from the other associated material categories (pottery, metalwork, faunal remains etc.) can be produced.

5.5.2 Animal Bone (Appendix 15)

The total weight of the hand-collected bone is 213 Kg. This assessment is based on approximately 33% by weight of the total hand-collected bone from phased contexts. From the third assessed Areas 1 and 2 produced 269 and 135 countable bones respectively with an estimate that there will be 807 and 405 countable bones after full analysis. The assemblage is heavily biased in favour of the

domestic mammals, with cattle, sheep/goat, pig, horse, dog and domestic fowl all represented. Cattle are the main species in all periods although sheep/goat displays a relative increase in Phases 6 and 7 (Mid-Late Roman). Pig is always a minor taxon. Horse remains are frequent throughout – including partial skeletons. Domestic fowl is present in Phases 5 and 7. The only wild mammal fragment seen is a worked red deer bone.

Recommendations

*A*ll the bone recovered should be fully recorded. This is a fairly large and highly significant assemblage of animal bones from the Iron Age and Romano-British periods, which can be usefully compared with other assemblages recovered from Milton Keynes and other sites in Buckinghamshire. The assemblage should be sufficiently large to identify temporal differences in the composition and characteristics of domestic stock and animal husbandry practices.

5.5.3 Charred Plant Macrofossils and Other Remains (Appendix 16)

During excavation, approximately 397 samples for the retrieval of the plant macrofossil assemblages were taken from across the excavated areas. These were sub-sampled and 10 litres were bulk floated by CAM ARC. The dried flots were initially evaluated by CAM ARC, and thirty four were recommended as containing a sufficient density of material for further assessment. A further eight samples from waterlogged deposits were sent directly to the author. Preservation was moderately good, although a large number of the charred grains were severely puffed and distorted, possibly as a result of combustion at very high temperatures.

Cereal grains/chaff and seeds of common weeds were present at varying densities in all samples studied but mostly in very low numbers. The recovered assemblages are all extremely small and, with rare exceptions, most are probably derived from scattered waste rather than primary deposits of burnt refuse. In addition to this, there appears to be a very low number of domestic type assemblages (which typically contain high densities of grain, charcoal/fuel residues, bone, eggshell and other dietary refuse), particularly from the Iron Age and Early Roman phases of occupation. The reason for this is not known at present, although it is possible that it is an accident of the archaeology, with primary refuse deposits not being located/sampled during the current work. Equally, it may be evidence that the site was kept scrupulously clean, although it is perhaps more likely that it indicates that the occupants were following a largely pastoral regime, and possibly only utilising the site on a seasonal basis. Similar evidence has now been noted at a number of other near contemporary sites within eastern England, where it is assumed that the cereal requirements of the occupants were met by imported batches of pre-processed grain.

Recommendations

Of the thirty-four assemblages studied, only four contain a sufficient density of material (i.e. 200+ specimens) for potential quantification.

Two samples will have further buckets processing – samples 353 and 176.

This will take up to 3 days

5.5.4 Insect Remains (Appendix 17)

Eight samples were analysed from six different waterlogged Roman deposits on site from Area 1. Six of the samples produced small to moderate assemblages of well preserved insect remains. These assemblages suggest an open landscape, used for pastoral purposes and vegetated by grasses and other herbaceous species associated with this type of low growing vegetation. Evidence of human habitation or deliberate dumping is absent and the assemblages accumulated from autochthonous sources.

Recommendations

Further, full analysis of four of these eight samples is strongly recommended - they have the potential to provide an extremely informative environmental data set for this site. Two other samples are relatively small and it may be appropriate to do part analysis on these two.

5.5.5 Pollen (Appendix 18)

Pollen was taken from seven waterlogged features, four from Area 1 and three from Area 2. The features sampled ranged from a Middle Iron Age ditch, an Early Roman ditch, a Middle Roman ditch and four Roman wells/watering holes. The pollen recovered varied from good survival to barren. Area 1 samples were by far the most informative with three samples moderate to good pollen results (counts over 100) and one poor whereas two of the three samples from Area 2 were barren and the third one was poor. Although counts of over 100 can give some indication of environment it should be emphasised that counts over 300 are needed to be statistically acceptable.

The assessment have shown that pollen from the different features within the Broughton site have similarities – it was a grass-dominated spectra, and a paucity of arboreal pollen suggesting a post-clearance environment. Some samples indicated an open meadowland, there is varying evidence of arable fields nearby (from cereal pollen) and even

a little hazel scrub. In all, there is a variety of pollen recovered especially herbs, some trees/shrubs and even a little aquatic.

Recommendations

It is recommended that there is further analysis on four of the samples. Three of these produced pollen counts of over 125 (one Early Roman and two Late Roman) and reaching 300 counts will be achievable. The other four features produced counts of less than 70 but further analysis of the Middle Iron Age sample is recommended although it is likely it will not reach the 300 thresholds.

5.5.6 Worked Wood (Appendix 19)

The worked wood assemblage comprised 32 discreet items of waterlogged wood were submitted for analysis. The wood came from five deep Roman waterlogged features comprising two ditches, a pit and two wells. The collection comprised a well preserved assemblage with secondary evidence of woodworking debris with ash, hazel and oak being used. There was also some tool-faceting possibly either straps or hoops although they could also be some form of architectural finishing. There is some evidence of possible coppice oak roundwood which may be produced while harvesting coppice for wattle or fencing. In all, a limited range of tree species represented in the collection all of which would expect to have been found locally.

Recommendations

The assemblage is too small to allow any further analysis of woodworking technology or woodland reconstruction and further scientific decay analysis is not required. None of the material is of sufficient interest to warrant conservation and retention. It is recommended that the two artefacts are photographed and illustrated to provide a full record of these items.

6 Updated Research Aims and Objectives

6.1 Introduction

This assessment presents the potential of the Broughton Manor Farm site. There were nine specific research aims laid out in the final specification for the site based on the regional research aims for East Anglia (see section 3.2 above; Emmett 2007). The Buckinghamshire draft frameworks for the Neolithic and Bronze Age, Iron Age and

Roman periods have also been used (Biddulph 2007; Kidd 2007; Zeepvat and Radford 2007).

The post-excavation analysis will produce both an accessible research archive and a publication that will succinctly interpret the main elements of the Broughton Manor Farm excavations. The specific research aims are described and justified using the criteria specified in Map 2 at A5.3.1 (English Heritage 1991).

Two sections (6.6 and 6.7) specifically concerning the cremation groups, have been answered in far greater detail than normal for a PXA and the text for both sections has been written to a level that it is towards full publication stage. This was because the relatively large cremation group found on the site during the excavation stood out as probably being extremely unusual and possibly of national importance. To assess if these thoughts were right, and to decide what the best way forward for the full report stage, a reasonable amount of research had to be undertaken.

6.2 What was the scale and nature of the settlement near Broughton Manor Farm when established, and how did it evolve over time?

The excavations within Area 1 and Area 2 have substantially answered this question. Prior to the Iron Age, activity was limited to a few pits dating from Early Neolithic to Late Bronze Age periods, with no one period represented by more than two pits. From these pits there were small amounts of pottery and in two there was evidence of flint working. Indeed the majority of the 92 worked flints recovered from the site consisted of knapping waste, including decortication flakes, chips and cores, all of which indicated the on-site working of flint. A Neolithic axe found may imply former tree felling had taken place and a miniature Bronze Age dirk found in the subsoil may denote ritual activity.

The main archaeological interest was centred on an extensive rural settlement, which was occupied from the Middle Iron Age (*c*. 4th century BC or later) to the end of the Roman period (AD *c*. 400). About 6.2 hectares was excavated comprising probably the majority of the settlement area.

6.2.1 Phase 2: Middle Iron Age to Late Iron Age c.4th century BC to c. early 1st century AD

In Area 1, the definite Middle Iron Age features consisted of only a handful of pits and linear ditches (including one pit found in the AS evaluation to the west of the site at Broughton Manor Business Park

(Wilkins and Grant 2003). The report on the hand made Iron Age pottery from the site may show two possible contiguous phases of activity spanning the Middle/later Iron Age from around the 4th century BC or later and into the late pre Roman Iron Age, the late 1st century BC to 1st century AD (Percival, Appendix 6). The main settlement features such as enclosures and structures have Later Iron Age pottery within their backfill dating to c. 1st century BC/AD. There was relatively few hand made Middle and Late Iron Age pottery sherds from both Areas 1 and 2 – the assemblage only consists of 434 sherds (minimum 34 vessels) but this does not include wheel thrown Late Pre-Roman Iron Age pottery some of which will be pre-conquest in date).

The farmstead features within the excavation are likely to have been founded in the 1st century BC and they were located in the centre and western parts of Area 1 in an area of *c.*200m by *c.*80m. The settlement continued into the area presently occupied by Broughton Manor Business Park and Broughton Manor Preparatory School, and so its full extent remains unknown. The excavations showed that occupation was tightly concentrated in this area with all features in close proximity to each other. The farmstead comprised a large sub-rectangular or sub-square enclosure with a *c.*3m wide entranceway in the centre of its southern side. Within this enclosure, to the north-west of the entranceway, were the remains of a ring ditch and a cremation. Directly to the west and south-west of the farmstead were other features comprising two '4 -post' structures, a few pits, and the fragmentary remains of another ring ditch as well as another human cremation. Archaeological evidence from other sites has shown that '4-post' structures either represent platforms for laying out the dead or platforms for drying crops. This latter cremation was found mid-way between these structures and it may imply that at least one of the structures was for laying out the dead. Directly adjacent to the southernmost '4-post' structure was a linear north to south ditch, which was cut by an irregular enclosure within which was a large internal pit possibly for quarrying. The function of this enclosure is currently uncertain. There were sparse pits to the west, south and east of the farmstead and associated features as well as a shallow sub-rectangular enclosure of probable agricultural nature.

In Area 2 an open settlement in the north of the area consisted of two structures of 8 and 5 postholes respectively as well as one cremation and a pit. This settlement provided no other evidence of domestic activity suggesting that it was only very short lived and was almost certainly abandoned by the 1st century BC/AD. It is possible that it was related to the settlement in Area 1 and perhaps was abandoned in favour of this settlement shortly after its construction or alternatively there may have been two areas of occupation (Areas 1 and 2) from the Middle/Late Iron Age and this continued into the Early and Middle Roman period.

6.2.2 Phase 3: Late Iron Age/Early Roman (Early 1st AD to c. late 1st AD)

Late Iron Age occupation was found across both excavation areas. Drove-ways and boundary ditches largely defined the settlement limits in both areas in this period. Area 1 may represent a small-dispersed settlement whilst Area 2, 200m to the south, was probably within the drove-way system extending from Area 1 but seems to have been inhabited by a separate extended family.

Within Area 1, the archaeology not only continued into both the land presently occupied by Broughton Manor Business Park and Broughton Manor Preparatory School, but also to the north under the A5130. The main eastern and western boundaries of the settlement were found in the excavation. Dispersed farming may have taken place between the two excavation areas as few archaeological features were found here in the evaluation trenches and within the northern part of excavation Area 2. For Area 2, the eastern, southern and western boundaries were not found. Broughton Brook possibly formed the southern and south-western boundaries and contour surveys show there was a fall in the ground to the west and north-west c.30m from the excavation, which may form the boundaries here.

In Area 1, the settlement shifted to the east in this phase. In this new phase, Area 1 was divided into areas of activity and occupation within the drove-way and boundary system. These features comprised the remains of at least four round houses, as well as enclosures presumably for pastoral farming, boundary ditches including at least one internal drove-way and a ritual area. Of major interest were the *c.*43 cremations recovered mostly within a tight knit area (*c.*40m by 30m) encompassing three separate enclosures as well as unenclosed cremations spaced along the main east to west drove-way. Within Area 2 there was evidence of deliberate formalised planning during two main sub-phases of construction and there were separate areas for structures, enclosures and paddocks.

6.2.3 Phase 4: Early Roman continued (c . late 1st to mid 2nd century)

This phase marked a continuation of some features from Phase 3 within both areas of occupation. Although the shortest timespan of the five main phases on site, it was probably the most intensive with a substantial number of new features constructed in both areas.

By the middle of the 2nd century, within the central northern part of Area 1, there were four possible new houses established within small sub-rounded/sub-rectangular enclosures. Directly to the west, east and south of the new Phase 4 ‘houses’ there were new enclosures and boundary ditches constructed. The enclosures were mostly sub-square or sub-rectangular in shape with some being relatively deep implying they may have been for pastoral use. The ritual area was again

screened off from the rest of the site by boundary ditches and drove-ways within the south-western quadrant of the site. Only one of the cremation enclosures continued in use into the 2nd century and even within here there seems to have been less people being buried within this phase and the last cremation was probably before AD 150. An inhumation burial directly to the north of main cremation area may have been within a posthole structure. To the east of this inhumation was a posthole structure of unknown function with a burnt fire/hearth near the centre.

Within Area 2 the 'domestic area' area remained relatively unchanged although the boundaries around it were partially re-dug. An enclosure was dug to the east of the settlement in the corner of each of these enclosures was a pit probably for watering animals. The settlement expanded, particularly to the south-east where several small enclosures were constructed. South of this, a new enclosure was constructed with internal domestic features including an oven.

6.2.4 Phase 5: Middle to Late Roman period (mid 2nd century to end 3rd cent)

Area 1 continued in use throughout the Middle to Late Roman period although Area 2 was seemingly abandoned by the end of the 2nd century. In Area 1 there may have been a relative decline in the 3rd century as seen by the reduction in size of the settlement with the northern ditch of the east to west drove-way becoming the southern boundary of the settlement. The western drove-way also went out of use in this period although the eastern boundary seems to have been maintained. There was a reduction in numbers of artefacts recovered, for example, far fewer 3rd/4th century pottery sherds were found on site compared with sherds of the 1st/2nd centuries.

Despite that, there was still significant activity in this part of the site and stone was used for construction for the first time on site with. A large rectangular stone building (17m long and had an external width of about 11m) was constructed in the northern central part of the site. Attached to the western side of the building there was a lean-to, which housed an oven. There was a posthole entranceway on its eastern side of the stone building. Associated with this structure was a north to south fence line, which ran for 40m from the posthole entranceway. Also part of this building complex was a stone lined well a few metres to the west, which was built over an existing spring and was constructed to a depth of more than 3m.

A new field system, possibly paddocks, was constructed to the west of the stone building based on relatively small sub-rectangular plots formed by a co-axial ditched system. Boundary ditches led off from these possible paddocks. On the southern side there was a fragmentary enclosure. In the ritual area a wooden shrine was built within an enclosure measuring *c.*15m by 10m. It was built adjacent to

the east of the main Late Iron Age/Early Roman cremation enclosure, implying that this area continued to be the main ritual focus.

Within Area 2 the settlement density in this area contracted considerably in by the middle to late 2nd century, although the total area covered may have remained about the same. In the settlement area probably only a single 'house' and the granary remained and these were enclosed in a new 'L' shaped enclosure. The only other activity was re-digging of a series of small pits.

6.2.5 Phase 6: Late Roman (4th century)

The last site phase was confined to Area 1 only. Occupation comprised a 4th century stone farmstead, associates structures and a few enclosures and boundary ditches. The Middle Roman house was replaced by a large stone building (*c.*20m by 14m in size) with four large internal post pads each more than 1m in diameter. A cobbled pathway led into the structure from the north-east. The stone well to the south-west of this structure continued in use in this period. Also possibly associated with the complex on the eastern side was a rounded enclosure and a possible timber granary (Dr David Neal pers comm.).

A second structure lay 50m to the south with three stone pads in a row over 12m in length overlaying the Phase 5 field system. To the east of this structure there were two north to south boundary ditches seemingly leading to a sub-rounded enclosure to the south. Other features included a large 4th century pond/or watering hole within the ritual area.

6.3 What was the nature of occupation at the time of abandonment, and is there any evidence for the cause of abandonment?

The site had two areas of occupation, which were abandoned at different periods – Area 2 by *c.*200AD and Area 1 *c.*400AD. For Area 2, the community had already dwindled by the middle 2nd century. This is associated with the construction of small fenced enclosures rather than ditches and a significant decrease in the domestic animal population. This is significant as cattle and sheep husbandry appears to have been the primary function of the settlement.

Excavation of nearby sites have shown a general pattern that rural settlements in Buckinghamshire tended to expand in the late first to second centuries rather than contract and diminish. While this continues into the 3rd century on some sites, others did not and were abandoned or had major fires in this period (see section 6.9 below). It has also been suggested that the quality of agricultural land may be a significant factor in determining which settlements (in Milton Keynes) survived and prospered under Roman rule (Williams 1993, 215).

In Area 1, we know from the coin and pottery dating that the site continued to *c*.AD 400 - at or near the 'end' of the Roman period (one of the two coins dating to the AD 380's is clipped). There was seemingly no evidence of Saxon occupation with only one possible Early Saxon artefact recovered. The Late Roman phase provided possible evidence of a slow decline of the site. The fill within the stone lined well had a coin of 364-378 AD. The pollen evidence points to a steady infilling of the well over time with a sequence of different agricultural practices recognised (Boreham Appendix 18). Ruderal weeds and grassland herbs recovered from the well imply that the area was either poorly maintained or largely abandoned by the Late Roman period (Fryer Appendix 16).

There was no evidence for any deliberate source of abandonment such as fire damage. This may be because the excavation only found the lowest foundations of stone structures. Presumably subsequent robbing to below the ground level removed any physical evidence of why the site ended. A few nearby sites have been quickly assessed (Bancroft, Monkston Park and Wavendon Gate) and none have a definite deliberate cause of abandonment with only Bancroft and possibly Monkston Park limping on into the 5th century (Williams and Zeepvat 1994, 175; Bull and Davis 2006, 50; Williams *et al* 1996, 91).

6.4 What was the nature of agricultural practice at the site? Is there any evidence for agriculture related activities such as malting and storage?

The questions can, in part, be answered, through environmental evidence (pollen, insects and charred grains), animal bone and the type of features found on the site. The environmental material demonstrates that the site and the area around had been largely cleared of trees by the Late Iron Age. A polished Neolithic flint axe was recovered residually in a Roman ditch and may actually have been hafted for use as an adze may imply the clearance was in at least the Neolithic period. There is very little evidence from other nearby sites on the date of land clearances but evidence from molluscs from barrows in the Ouse and Ouzel valleys imply open landscape in the Bronze Age period (Green 1974).

The evidence for agricultural use is for mixed farming from the Middle Iron Age but pastoral farming was especially important close to the settlement. The earliest phase of occupation was well away from the river (similar to Wavendon Gate) and access to these springs uncovered at Broughton was probably one of the reasons the site was occupied from the Middle Iron Age period. The present Broughton Brook would have been used by the settlement in Area 2. Watering holes and cattle enclosures were especially common on both areas. This is seen by the dominance of cattle bone recovered (see 6.10 below).

The environmental analysis of the charred grain concluded that the occupants were following a largely pastoral regime, and possibly only utilising the site for cereals on a seasonal basis. Similar evidence has now been noted at a number of other near-contemporary sites within eastern England, where it is assumed that the cereal requirements of the occupants were met by imported batches of pre-processed grain (Fryer Appendix 16). Even in the Late Roman period, when a possible granary was located near to the stone buildings, plant macrofossil evidence for crop processing/storage/utilisation is still scarce.

Pollen does indicate some cultivation was taking place in the vicinity but mostly took the form of pastoral meadowland (see Boreham Appendix 18). The insect evidence supports the site's use mostly for pastoral farming with dung beetles and other insects indicating grazing animals nearby as well as evidence for meadows (Tetlow Appendix 17). The evidence of many quern stones and a milling stone (up to 33 different Roman querns) shows that there was some processing of crops on the site although no malting ovens, corn driers or storage pits were found. The querns and even the millstone may have been for domestic use only as most farms had a mill.

6.5 What can we learn from ecofactual and environmental data about diet, lifestyle etc. of the inhabitants?

The environmental assemblages recovered from Broughton will be able to inform us, in part, about the diet of the former inhabitants. Unfortunately, the charred grain information was limited with only small assemblages recovered. A few of the assemblages had domestic type deposits in low numbers with some grain, bone, eggshell etc. recovered. Overall, the assemblages point to a diet based on cereals, which is not too varied with little evidence of exotics. The preliminary evidence from waterlogged deposits has not produced evidence for vegetables and fruit.

The animal bone assemblage shows a range of domestic animals with cattle, sheep/goat, pig, horse, dog and domestic fowl are all represented. The dominance is for cattle and to a less extent sheep/goat. All other species were relatively few with, for example, pig being a minor taxon in all periods. Bird evidence only started from the Early Roman period in small numbers. The only wild mammal fragment was from a worked red deer bone.

6.6 How does the cemetery relate to the different phases of settlement? What sector(s) of society are buried there?

The first part of the question can be answered in detail as the cremations were largely either buried in dated enclosures or datable deposits. The few undated outlying cremations were found within parts of the site which have been broadly dated such as cremation **956** was placed within a Middle to Late Iron Age enclosure.

The second part of the question supposes that the quality/quantity (or lack of) artefacts buried with a cremation relates to his/her position in their former life. If there is a correlation between the two then the question will be answered to a certain extent. In addition, the answering of this question may have been helped by the fact that the sex and age of some of the people cremated has been determined.

In all, there are 46 separate pits with human cremation deposits – 45 are within Area 1 and one within Area 2 (see Tables 3-7 at end of frameworks for description of each of the 43 Late Iron Age or Roman cremations and associated artefacts). The overall pattern of burials comprised three separate adjacent cemetery enclosures, small cremation groups (with two or three cremations) or single isolated cremations. The vast majority of these cremations were placed away from domestic features (which were further to the north). The cremations were adjacent to, and respected, an east to west drove-way, which dates from the very Late Iron Age and continues into the Middle Roman period. Interim assessment of the cremations seem to point to there being areas of Iron Age cremations, as well as areas of Roman cremations. There were two or even three groups of Roman cremations which were contemporary. Nina Crummy has argued (see Appendix 3) that there may have been a Late Iron Age people and later an Early Roman incoming population.

Two undated deposits of cremated bone are thought to date from the Middle or Late Iron Age in Area 1 and one from Area 2. The Area 1 cremations were placed within the Phase 2 Middle/Late Iron Age area of the site.

There were around seven or eight late Iron Age cremations. Six or seven cremations were within an enclosure (**M4515**) at the southern limit of a drove way in an area *c*.9m by 4m. These cremations were dated to the pre-conquest period by metal artefacts (See Crummy) and the pottery was all dated *c*. mid 1st century AD (See Lyons Appendix 3). A single cremation, directly to the north of the drove-way, 115m to the east of the enclosure was dated by pottery. An adjacent undated cremation (**635**) may also date to this period.

The large majority of the cremations are Roman in date. Directly to the south-east of the Late Iron Age enclosure was a sub-square enclosure (**M4523**) with four internal cremations which seem to date to the Early

Roman period although one cremation may be Late Iron Age in date (**522**). These cremations have no samian vessels and are probably not contemporary with any of the cremations in **M4510**/**4512**. The largest enclosure, adjacent to the east of the probable Late Iron Age cremations (**M4510**/**4512**) was a much more substantial enclosure sub-rectangular in shape and measuring *c.*20m by *c.*12m. Here the majority of the site's cremations (23) were placed (**M4518**) and they date from the mid 1st century AD to the mid 2nd century AD. The early cremations within this enclosure are contemporary are with cremations within **M4523**. Within enclosure **M4518** there seems to be a clear progression with the earliest cremations, on the whole, on the western side and the latest on the eastern side. This enclosure has a mixture of unurned and urned cremations. The majority of the samian (14 vessels) came from this enclosure.

A further small sub-rounded enclosure with an entranceway and a central unurned cremation deposit (**M4527**) lay immediately to the east of this larger enclosure and post-dates it. This has provisionally been dated to at least the early 2nd century and possibly represents a shrine (see below). A further nine features containing cremated bone were identified to the east of these enclosures; four were immediately to the north of the main east to west drove-way and two of these were dated as Late Iron Age and the other Early Roman. All these were single vessel cremations (none with samian vessels or grave goods). Three cremations (**M4524**) were grouped to the south of the drove-way and were late 1st century AD in date and two of these three cremations had samian vessels within the deposits (but no non-pottery artefacts). One cremation was associated with a '4-post' structure in the centre of the site and one seemingly isolated to the east of Area 1 – neither had grave goods. The cremation in Area 2 is also undated.

In addition to these 46 cremations there are 3 isolated inhumation burials within Area 1. Inhumation burial **1194**, was possibly laid within a posthole structure directly to the north of the main Broughton cremation cemetery (**M4530**). This therefore is important as this burial may be related to this cemetery complex or the Middle Roman shrine. More than 50m to the east, a grave possibly associated with a horse burial, cut a Phase 4 Roman boundary ditch (**M4541**). A third burial near to the western boundaries of the site has a single C1-C2 pottery sherd within its backfill. Overall, in comparison with the relatively large numbers of very Late Iron Age/Early Roman cremations there were few Middle or Late Roman burials and this is discussed in section 6.7 below.

It is likely that the Broughton cremations relate to the settlement directly and have not been brought in from other nearby settlements (see section 6.7 below). Archaeological excavations from nearby settlements have found at least one cremation - Monkston Park (2km to the south-west) had 18 cremations, an evaluation at Cotton Valley (2km to the north-west) found a cremation and recent work on an

settlement *c*.1km to the north-west of the Broughton site have found some cremation burials (*pers. comm*. Nick Crank). Other Milton Keynes settlement sites further away have regularly found cremations, for example, Bancroft, *Magniovinium*, Wavendon Gate and Willen (Table 2). The very personal nature of the Broughton cemetery enclosures and cremations which relate to the drove-way suggests that the people were probably from the Broughton site.

The vast majority of the Broughton cremations were found within Area 1 but it is uncertain if these only relate to Area 1 settlement or also the Area 2 site. It is possible that cremations to the north of the east to west drove-way relate to Area 1 and cremations to the south to Area 2. It is still important to note that within both excavation areas the respective settlement continues outside the excavation areas especially within land occupied by Broughton Farm and the Preparatory School and it is possible that further cremations/inhumations may have lain here. Archaeologically, the evidence points to ritual activity maintaining within one area of the site over a long period of time. It is likely that this ritual area was completely excavated – the Late Iron Age/Roman cremations were all concentrated by the east to west drove-way which was completely stripped in the machining (apart from the far eastern area which was beyond this ritual activity).

In all, at least 43 of the cremations are likely to date within the very Late Iron Age to middle Roman period (c.100-150 years), mostly before the early/middle 2nd century (there was a decrease in the number of cremations after the late 1st century; Table 7).

Middle to Late Iron Age?	Very Late Iron Age	Roman Mid to Late C1	AD 100-150	Uncertain MC1 Roman to *c*.AD 150	Uncertain very Late IA to *c*.AD 150
3	8/9	20/21	5	7	2

Table 7: *Provisional date for cremations based on pottery/small finds and location of cremations*

Analysis of the human bone shows that there were probably 7 double burials and even a possible triple burial (see Dodwell Appendix 14). It is clear therefore we are talking of over 50 people who ranged in age from infants (a few) to mature people and of either sex. It seems that at least 40 of these were buried in the very Late Iron Age to end of 1st century period (around 70 years). This is a relatively large number of inhabitants to die over a relatively short time scale. It seems to back up the archaeological evidence that we are dealing with more than a single farmstead. At the same time there does not seem to be enough burials to represent all the people to die from three extended families. Archaeologically, the evidence seems to point to a single extended family in Area 2 and perhaps two further ones within Area 1 then there

may be around 30 people at any one time in the settlement in the Late Iron Age/Early Roman period?

Overall, the Late Iron Age and Roman cremations were buried with differing amounts of pottery vessels (from none to ten) and varying amounts of other artefacts, perhaps denoting that some people within the community were more prosperous than others. Of great interest was the fact that the artefacts on site were, on the whole, considerably lower status than the artefacts from the cemeteries itself. This can be seen that the amount of samian from non-cemetery features was fewer than 2% of Roman pottery whereas samian vessels made up 19% of the cremation vessels (19 of the 104 vessels recovered from cremation pits). This imbalance between vessels within cremations and general site finds is true of imported and regional pottery wares. Several of the samian pottery vessels had evidence of mending after been broken (lead rivets) and also birch bark tar was used on a bowl with gold mica-dusting in a samian form (DR30). This implies that while the site could afford imports they didn't replace them after they had broken. The artefacts within the cremations have also produced evidence for some wealth (over 20 brooches, spoons and other artefacts; see Tables 3-7) and even literacy (a possible scroll end; Crummy Appendix 3). Overall, therefore, there seems to have been a deliberate policy, within at least some of the burials, for people from this rural community to be buried with their best personal items. This is especially relevant as on this important occasion the pottery would also have played a practical role within the funeral service and probably contained the remains of the funeral feast.

An analysis of Essex burials suggests that status of sites can be distinguished on ceramic grounds, reflecting cultural differences in life (Biddulph 2005, 23). Biddulph states that jars and beakers are characteristic of settlement cemeteries, while cups are more typical of high-status burials. Flagons and samian are common between them. If this reasoning is true and also is valid beyond Essex, then some of the Broughton burials may have been reasonably high status as eight cremations had cups - comprising six Late Iron Age and Early Roman cremations which had cups in either fine ware or grog tempers, one of which also had a samian cup and two other cremations had samian cups. Types of vessels used are not only due to status, but also chronological and it was probably important that absence of the tazza, etc. here suggest that these were later burials.

For the full excavation report there are many questions to be asked about the cremations (and inhumations). C14 dates will be of interest for dating some of these deposits (see section 6.7 below).

6.7 How does the cemetery compare with and add to our knowledge of contemporary ritual and funeral practice locally and regionally? What

does this imply for the Iron Age/ Roman transitional period in the area?

The potential for answering this question is high and the Broughton material will greatly add to our knowledge of cremation rites locally and regionally. The Late Iron Age sees significant changes related to the incorporation of Buckinghamshire into the territory of the Catuvellauni – this principally seen in the burial record (Kidd 2007, 8). The Broughton cremation burials especially are probably the most significant assemblage related to a settlement found within Buckinghamshire (see below).

6.7.1 Possible Middle Iron Age burials

For the whole of Buckinghamshire, no cremations can yet be assigned to the Early or Middle Iron Age (Kidd 2007, 12). Kidd further comments with the proviso that this may change with more routine radiocarbon dating of isolated unurned cremations. Within Broughton there may be three undated cremations dating to the Middle or Middle/Late Iron Age period. In Area 1 there is a single unurned cremation (**712**) between two four post structures in the Middle/late Iron Age, 40m to the west of the main Late Iron Age/Roman cremation area. A second cremation (**956**) lay directly to the east of the roundhouse in the Middle Iron Age/Late Iron Age farmstead (**M4508**) and also needs a C14 date. There is also a single probable Iron Age cremation (**3159**) in Area 2 consisting of an isolated unurned feature *c*.17m south west of the Iron Age structures. If these three cremations were contemporary with the Middle/Late Iron Age settlement this would be significant. The two 'four-post' structures suggest an excarnation practice but has left no definite burials on site. None of the three inhumations are prehistoric. Middle Iron Age burials across the Eastern counties are very rare and when found they tend to be inhumations e.g. at Great Houghton, Northampton a crouched burial from within a pit was C14 dated centred on cal BC 390 (Chapman 2000/1, 31).

6.7.2 Late Iron Age/Early Roman burials (Tables 3-7)

For the Late Iron Age/Roman period, the Broughton assemblage is by far the largest burial assemblage yet found within the Buckinghamshire/Milton Keynes area with the exception of Willen, which had *c.*40 cremations (Table 8). The Broughton cremations are also the best surviving of those site assemblages within the county which had more than 10 cremations (least truncated by ploughing/machining and/or plundered of metal objects by nighthawk metal detectorists). The most comparative cemetery in the area in terms of numbers, Willen, was unfortunately both severely truncated and heavily metal detected making direct comparisons difficult. Overall, it is likely the Broughton assemblage is the most complete cremation

burial assemblage of the population of a settlement site in the county. Through the analysis of the cremations and their related deposits, the Broughton population can be analysed (see section 6.6 above; Table 8).

Site	Type	Cremations	Inhumations	Published or SMR Records
Ashton Clinton	Excavation	Small Numbers	-	RPS 2005
Bancroft	Large Excavations	17 (Early to Late 1st AD)	1 isolated late Roman and a group of 8 (4th to 5th centuries)	Williams and Zeepvat 1994
Billingsfield	Evaluation	3	-	Cox 1997
Bledlow-Cum-Saunderton	Small Excavation	2 (Belgic)	4 (?Roman)	Collard and Parkhouse 1993
Bourne End	?	-	2 lead coffins	SMR CAS0564
Broughton	***Large Excavation***	***c*. 46 (Late IA to Early/middle Roman)**	**3 Roman C1-C2?+**	**-**
Caldecotte (MK117)	Excavation	1 (2nd century)	1 (undated)	Zeepvat *et al* 1994
Cotton Valley	Evaluation	1 (early Roman)	-	SMR (MK 619-23)
Dorton	Very small excavation	1 (late 1st BC or early 1st AD)	-	Farley 1983
Fenny Lock	Large Excavation	1 Roman urned and an undated pit	4+ (later Roman)	Ford and Taylor 2001
Gayhurst Quarry	Large Excavation	-	5 + (Late Roman)	Chapman 2007
Great Brickhill	Evaluation Trench	2 (c. AD 100-150)		Allen 1997
Lea, Denham	?	-	8 (?3 rd Century)	Coleman *et al* 2004
Magiovinium Site 17	Large Excavation	-	31 (3rd/4th century)	Neal 1987
Magiovinium Site 18	Large Excavation	21 (Early Roman)	-	Neal 1987
Magniovinium	Evaluation	-	1 (uncertain date)	Hunn et al 1995
Monkston Park	Large Excavation	18 (LIA/Early Roman)	-	Bull and Davis 2006
North Marston	1	1 (?Late Roman)	1 lead coffin	Farley 1973; SMR CAS0853
Princes Risborough	Very Small Excavation	-	3 (Late Roman)	Appleton and Armour Chelu 2004
Radnage	-	1 (Early Roman)	-	Skilbeck 1923
Stoke Hammond	Excavation	Small (including late 2nd to 3rd)	-	Network Archaeology 2006
Thornborough (Barrows)	-	2 Barrows (2nd century)	-	Liversidge 1953-4
Thornborough	Large Excavation	Between 7 and 9 (Mid to late 1st cent AD)	1 (? 2nd century AD)	Johnson 1975
Wards Combe, Ivinghoe	Evaluation Trench	3 (LIA and Roman)	-	Dunnett 1972
Wavendon Gate,	Large Excavation	21 (LIA/Early Roman)	1 (244-440 AD)	Williams *et al* 1996
Wellwick Farm	-	1 (c.AD 135-155)		Zeepvat 2003
Weston Turville	-	1 (2nd cent)	-	Waugh 1962
West Wycombe	Excavation	-	13 (4th century)	Farley and Wright 1979
Willen	Large Excavation	c.40	1	-

Table 8: Known cremations/inhumations probably dating to the Late Iron Age/Roman periods in Buckinghamshire (including Milton Keynes)

Table 8 was drawn up through using published sources and their references, especially the Records of Buckinghamshire journals, and the draft Iron Age and Roman frameworks for the county (Kidd 2007; Zeepvat and Radford 2007). The Buckinghamshire or Milton Keynes SMRs have not yet been used. More burials will almost certainly come to light when a complete SMR search has been completed.

The table demonstrates that the only cremation cemeteries with more than nine cremations in the county were all from Milton Keynes, where so far six settlement sites have produced at least 17 cremations each. This may be partly due to the absence of such burials (so far at least) from the extreme south of the county – perhaps reflecting a shifting frontier with the Atrebates (Kidd 2007, 12). Taking this into account, and that Milton Keynes has been excavated more than any other single authority in Buckinghamshire, the cremation results are still more than would be expected. In all, over 80% of the cremations within the county have been found within the Milton Keynes authority area. It is possible that the Milton Keynes area, at the extreme northern boundaries of the Catevallauni, had a different burial policy than elsewhere within Buckinghamshire. Maybe the people within this part of the Catavellauni territory (presumably controlled by the hill fort at Danesborough and later from *Magiovinium*) had a policy/tendency for burying their dead.

Table 2 also clearly shows that within Milton Keynes itself, and very likely the rest of Buckinghamshire as well, cremations dominated in the Late Iron Age/Roman period with no definite inhumations in this period. Some neighbouring counties have different burial evidence in this period. There are only a few Aylesford-Swarling style cremations known from Northamptonshire with, for example, four urned burials at Irchester (Hall and Nickerson 1967) and two Early Roman cremations from Pineham, Northampton (pers. comm. Andy Chapman) but in contrast there were some Late Iron Age inhumations at Towcester (Walker 1992). Cambridgeshire had a mixed cremation and inhumation rite but it varies from site to site. For example, a Middle Iron Age to Early Roman cemetery with a shrine at Duxford comprised 27 individuals, only two of which were cremations (Roberts 2003). In contrast at neighbouring Hinxton there were eight Late Iron Age cremations in pits, five of them surrounded by ring-ditches (Hill et al 1999). For Bedfordshire there seems to have been mostly a cremation rite in the late Iron Age/Early Roman period (Simco 1984, 60). Cremation cemeteries include Biddenham Loop, Harlington, Kempston, Maulden, Salford and Toddington but the number of cremations per site were few. The excavator of the Early Roman (late 1st to early 2nd century) Harlington site said the status of the cemetery was difficult to assess as there were few contemporary cemeteries to provide detailed comparisons (Dawson 2001, 37). At Harlington there were *c*. 37 vessels (including *c*. 12 samian vessels) from up to 13 cremations in an unenclosed area 15m across (Dawson 2001, 23-26).

Essex has similar number of burials to Buckinghamshire with over 300 Roman graves and more than 700 vessels represented (Biddulph 2005, 24). Only Colchester within this Essex group has a relatively large number of burials (Biddulph 2005, table 1). The Aylesford-Swarling tradition did not reach north Suffolk and Norfolk, presumably due to the strength of the Iceni (*pers. comm*. Alice Lyons)

In contrast to Buckinghamshire, Cambridgeshire, Essex and Northamptonshire with relatively few burials recovered, Hertfordshire has a few large Late Iron Age/Early Roman cemeteries including Baldock (Stead and Rigby 1986), Clothall Common (more than 200 Late Iron Age/Roman bodies) and King Harry's Lane (472 bodies). The 472 Late Iron Age into Early Roman burials were dated from *c*.15BC to pre-AD 60 and all but 17 were cremations (Stead and Rigby 1989).

Overall, the unusualness of the Milton Keynes area for the relatively large number of Late Iron Age/Early Roman cremations can be seen in that the relatively small numbers of cremations on most sites are not unusual for the Catevallauni tribal area as a whole. Lavender (1991), writing about a site of a burial enclosure in Maldon, Essex, said the relatively small burial number size is a feature of Late Iron Age burials of the Aylesford-Swarling type, and large cemeteries of the size of King Harry Lane, St Albans (Stead and Rigby 1989) are atypical.

The Late Iron Age cremations from Broughton only date from the very end of that period and were probably linked to ideas and cultural links, reflected by the introduction of wheel made pottery. Drove-ways were only introduced at Broughton in the Late Iron Age and they are fundamental to the re-planning of the settlement in this period. It is probably not a coincidence that 43 of the 45 cremations in Area 1 at Broughton respect the main east to west drove-way. The cremation cemetery at Bancroft villa seems to be respecting drove-way ditch 591 (Williams and Zeepvat 1994, fig.30). At Wavendon Gate cremations were found in the north-west corner of the eastern bay of enclosure 275 (Williams et al 1996, 42). Within an enclosure leading from an Early Roman drove-way at Fenny Lock there were just 2 cremations (one Roman urned and another undated) and four+ inhumations (one dated to the later Roman period) – these 6 burials were found dispersed within an area *c*.50m by *c*.30m (Ford and Taylor 2001, fig. 9).

Excavations have found few enclosure ditches around Belgic cemeteries (Collard and Parkhouse 1993, 74). Broughton is therefore an interesting addition with up to two separate enclosures with entirely pre-2nd century AD cremations and one further enclosure with cremations spanning the 1st and 2nd centuries AD. Baldock, Hertfordshire (Stead and Rigby 1986), Owlesbury, Hampshire (Collis 1968), Maldon Essex (Lavender 1991), Wards Coombe (Dunnett 1972), Stoke Hammond (Network Archaeology 2006) and Thornborough (Johnson 1975), Buckinghamshire are among the few

other examples with burial enclosures of this period. The Thornbourgh enclosure had seven to nine cremations and was situated adjacent to the north of a house and directly to the south of a road.

There were four cremation groups with associated pots (21 cremations in all) at Magiovinium site 18, to the rear of individual properties on either side of the Watling road; perhaps representing separate family plots (Neal 1987, 27-28). The first group (660) had three pits, the second (661) appears to have six pits, the 3rd group (662) comprised 11 cremations and the fourth was a single cremation. This was probably an understatement of numbers, as the limits of the four cremation areas were not found.

Nina Crummy argues that the evidence provided by the metal objects (especially brooches) at Broughton suggests that there may have been an Iron Age population and later there was a new influx of Early Roman settlers who are buried with their artefacts (these match those of the early colonists at Colchester). The artefacts from Monkston Park and Bancroft may be different from Broughton – these are characteristic of native British populations exhibiting a gradual assimilation into a Romanised lifestyle (See Crummy Appendix 3).

None of the burials at Broughton could be classed as very wealthy although several of the cremations at Broughton had relatively high status ceramic vessels and artefacts (see 6.6 above). It has been suggested that very wealthy Late Iron Age people were interned as Welwyn style burials such as at Dorton, Buckinghamshire where the cremation was accompanied with a mirror, 3 amphora, 2 flagons and a cup in a wooden box (Farley 1983) while very wealthy Early Roman people in Buckinghamshire have been buried in mounds in this period following an Essex tradition (Zeepvat and Radford 2007). Such mounds have been found in Buckinghamshire at Thornborough (Liversidge 1953-4), ?Weston Turville (Waugh 1962) and Newport Pagnel (Zeepvat 1991). Buckinghamshire does not have the large high status sites such as the King Harry's Lane cemetery in St Albans (Stead and Rigby 1989). At the same time the Broughton cemetery seems to have been of higher status than some other sites. For example, the Willen cremation site, as a whole, seems to have been of low status (Zeepvat and Radford 2007).

There were several different cremation burial rites being used on the Broughton site. Most involved Catuvellauni funerary traditions of afterlife beliefs with food, drink and personal possessions being placed with the cremated bone. This rite continued into the Early Roman period. This can be seen in one of the Early Roman cremations where there were two possible lamp hooks. The inclusion of lamps was due to needing to respect spirits, which could cause damage if neglected and could not find their way (Taylor 2001, 88). The majority of cremations at Broughton were based on a single rite, which involved digging a hole, placing the cremated bone in first, sometimes with

brooches and animal bones, occasionally with other objects such as a bead, bracelet, glass vessel or probable bone scroll. Up to ten pottery vessels were then placed on top of these bones and artefacts before the hole was backfilled with earth. In others the cremated bone was deposited within pottery vessels. A few cremations were simply deposited in a hole with no grave goods. The cremations and artefacts were sometimes placed within wooden boxes, (eight were found) some with metal fittings. All these types are seen elsewhere – the tradition of box or casket burials is well recorded in Buckinghamshire (Zeepvat and Radford 2007). Examples of box or casket burials have been recorded at Boulton Grounds (Johnson 1975), Western Turville (Waugh 1962), Wellick Farm (Zeepvat 2003) and Radnage (Skilbeck 1923). Work on pyre remains in Colchester and other parts of Essex have shown that most people were buried with shoes/boots on (pers comm. Nina Crummy). Unfortunately pyre remains did not survive at Broughton and the only evidence of shoes/boots was from the few cremations with hobnails.

6.7.3 Middle and Roman burials

Table 2 shows that there are less than 100 burials thought to relate to the Middle to Late Roman period recorded in Buckinghamshire, including the Milton Keynes area, (compared with over 200 Late Iron Age/Early Roman human remains). In terms of late Roman inhumations there have been two sites, which have had more than ten burials. Thirty-one 3rd/4th century dispersed inhumations were found over a wide area from Magiovinium site 17 (Neal 1987). The second largest number of inhumation burials have been found at West Wycombe, where only 13 4th century burials were recorded (Farley and Wright 1979).

Overall, in comparison with the relatively large numbers of very Late Iron Age/Early Roman cremations (within the Milton Keynes area in particular) there have been few Middle or Late Roman burials. This interesting phenomena occurs on other nearby sites to Broughton (Bancroft, Wavendon Gate, Willen etc.). The question is where are the people being buried? A few seem to have been placed respecting old ritual sites - at Gayhurst quarry, Newport Pagnell where there were at least five late Roman burials including a decapitation burial dug into the top of a Bronze Age burial mound (Chapman 2007). Excavations at Magniovinium have not found any significant burial grounds – only a dispersed cemetery (Neal 1987). Considering that there have been some very large excavations within Buckinghamshire, these numbers are relatively few and cannot account for the true population figures in these Middle to Late Roman periods. The answer is that it is likely that people were being disposed of in a way that left no trace of remains but there seems to be some evidence that even though they didn't bury

their dead on the whole, they still respected and even venerated their ancestors (see below).

In terms of dates, the cremation cemetery at Broughton seems to have gone out of use by *c*. AD 150 but this 'religious' area continued to be respected/visited long after disuse when, for example, a Middle Roman shrine was placed adjacent to the former main cremation enclosure. The pottery recovered from the enclosure ditch implies it may have continually dug out into the 4th century. The respecting of former burial grounds with shrines can be seen at nearby Bancroft where the Roman Temple was founded in the late 1st century adjacent to the then disused Late Iron Age/Early Roman cremation cemetery (Williams and Zeepvat 1994, fig.5). At nearby Wavendon Gate, there is evidence for a shrine within this farmstead, which may be attributable to the sky-god Taranis that post-dated the cremation cemetery. This shrine was essentially a water-filled pit overlooked by a wooden wheel-icon (Williams *et al* 1996). It could be that most local sites had their own shrines but little evidence for these shrines has survived.

6.8 Can we learn anything about the status and connections/influence of the settlement? What about local networks, e.g. relationship with *Magiovinium*, or other villa estates?

The questions can be partly answered by the study of the artefacts and environmental data recovered. Broughton seems to be relatively average status rural settlement (see discussion of pottery and metal work in sections 6.6 and 6.7), which had links to the nearby market at *Magiovinium*.

There were remains of pottery making found in both Area 1 and 2 in the Early Roman period. The closeness of Broughton to *Magiovinium* may have been significant, as other pottery kilns have been found on nearby farmsteads. "It is therefore not surprising that a number of pottery kilns (Caldecotte**,** Simpson, Walton and now Wavendon) should cluster around the market represented by the *Magiovinium* site" (Woodfield 1977; quote updated by Williams *et al* 1996, 41).

There was little evidence for copper and iron working with the only slag found on site comprising one Roman smithy hearth bottom, copper-alloy slag within a single crucible and fragments of iron bars found from one context (also no hammer scale from within any environmental samples). It was more likely the Broughton site had to buy most of its metal objects from the town. Two probable coin blanks found by metal detecting at Broughton imply there was some coin forging taking place on site. Broughton follows the local pattern of most lowly rural sites in Buckinghamshire where most have found little or no metal-working evidence - in contrast several villas (Bancroft, Great Missenden and Stanton Low) have produced much more evidence of smithing and or bloomery slag evidence (Zeepvat and Radford 2007).

The evidence is for a mainly pastoral farming at Broughton (see section 6.4), and the remains of cattle animal bones which dominated the faunal assemblage especially up to the Middle Roman period, may imply there was commercial breeding of animals on site presumably for *Magniovinium*. Cattle ranching have been suggested for the Middle/Late Iron Age period down the Ouzel valley (Kidd 2007).

There were artefacts from Broughton with military connections including an Early Roman shield boss (probably for parades) found within Area 2 and an Early Roman military *armilla* from Area 1. The site's inhabitants therefore may have had military connections and there could be a link to a probable auxiliary fort at Magiovinium which seems to date from Nero's time (Woodfield 1977).

6.9 How does the site compare with contemporary sites within the region?

6.9.1 Period

The limited evidence of Mesolithic to Bronze Age activity at Broughton mirrors many later prehistoric sites within Buckinghamshire and Milton Keynes. These sites have produced evidence for earlier activity but this is usually restricted to small numbers of struck flint, or occasional features such as isolated pits – the association said Kidd on these sites were presumably merely coincidental (Kidd 2007, 3).

The Broughton site is typical of many sites in the Milton Keynes area in starting in the Middle to Late Iron Age. During the later prehistoric period settlements are more numerous, substantial and permanent (Kidd 2007, 5). The results of archaeological work in Milton Keynes over the last 30 years suggest that by the Middle Iron Age period, although the very heavy clays were still mainly avoided, the other land was being extensively utilised. Later, an expanding population and new agricultural practices based on new types of wheat and a more sophisticated heavy metal plough meant that good land was in short supply and more marginal tracts were being exploited by the Late Iron Age/'Belgic' period (Williams 1993, 213). Broughton conforms to the above Williams assessment - whereas Area 1 was built on terrace gravels in the Middle Iron Age period, the majority of Area 2, on more clayey Head material, was probably for the first time extensively occupied during the Belgic period.

Many Iron Age settlements at Milton Keynes continued into the Early Roman period (this is true of large scale excavated sites at Bancroft, Wavendon Gate as well as sites within the study area at Cotton Valley, Hartigans, Monkston Park etc.). Nina Crummy has questioned whether

there may have been new incoming Early Roman settlers at Broughton (Crummy Appendix 3) and so comparisons with other sites will be vital.

The demise of Broughton Area 2 in *c*. AD 200 and the reasons need to be assessed (see section 6.3) to understand whether this happened elsewhere. The Fenny Lock site, Milton Keynes, will be of interest - there appears there may be a similar c.200m gap between two areas of occupation with area C abandoned in the 2nd/3rd centuries while area A continued to the end of the Roman period (areas A and C, Ford and Taylor 2001). Woodfield (1989, 264) has identified the late 2nd century AD as a period of regional upheaval. It may be significant that the stone defences of Towcester were built in the period AD 170-5 and nearby villas of Mileoak and Wood Burton both suffered major fires (Woodfield 1995, 133-142). The demise of Area 1 in *c*.AD 400 and comparison has been covered in section 6.3.

6.9.2 Landscape

Middle Iron Age open settlement and stock enclosures have been found on other Milton Keynes and Buckinghamshire sites (Kidd 2007, 5). At Bancroft there is a Middle Iron Age open settlement (Williams and Zeepvat 1994); Kingsmead South there was a Middle Iron Age open settlement with 10 roundhouses (A Taylor 2006). Stoke Hamilton has an Early/Middle Iron Age open settlement (Moore et al forthcoming). Tattenhoe Park has between 21-30 roundhouses, four posters and six- poster of Middle to Late Iron Age date (E Taylor 2006). Wavendon has a Middle/Late IA settlement with 'banjo' enclosure, roundhouses and stock enclosures. Other probable stock management enclosures have been found at Aston Clinton ByPass site B (RPS 2005); Coldharbour Farm, Aylesbury (Bonner and Parkhouse 1997); Stoke Hammond ByPass Northern Link Road (Edgeworth 2006); Stoke Hammond ByPass Site A (Moore et al forthcoming); Pennyland (Williams 1993) and Wavendon Gate (Williams 1993).

By the Late Iron Age there were changes started with creation of large rectilinear ditched enclosures, interpreted as paddocks or closes Bancroft (Williams and Zeepvat 1994); Coldharbour Farm (Bonner and Parkhurst 1997) and perhaps Bierton (Allen 1979). Ring gullies continued at Broughton into the middle 2nd century. This is true of other nearby rural sites such as Fenny lock where pennanular hut gullies went out of use at the end of the 2nd century (Ford and Taylor 2001, 79-123). The main Middle Roman and Late Roman aisled structures at Broughton can be compared with other sites such as at Wymbush (Zeepvat 1988).

The Broughton site, in terms of status, seems to have been comparable with Wavendon Gate (Williams et al 1996) and Monkston Park (Bull and Davis 2006). The lack of villas in the vicinity to Broughton (the nearest is Bancroft) is startling and these villas are

themselves not overtly rich on the whole. Zeepvat (1991) notes, in general, the wealth of the villas around *Magiovinium* did not match the same standards of wealth as displayed in the Chilterns, reflecting the lesser status and wealth of the town compared to *Verulamium*.

6.9.3 Land use

There is a significant number of studied animal bone reports published - more than 20 in the later prehistoric period where more than 75 fragments have been identified to species (Kidd 2007, 6). Broughton is dominated by cattle – estimated *c*.70+% of the Middle and Late Iron Age assemblage. Elsewhere, cattle were the most common species in all but four of the assemblages with the frequency between 30 and 70% (Kidd 2007, 7). Sheep/goat is very low at Broughton *c*.10% and this is amongst the lowest of all comparative numbers (varying from 10% to 60% with most between 25% to 35%). Pig, at Broughton, was a very minor taxon (unlike some other sites) but horse is relatively frequent. This may be important as horse normally occurs at low frequencies but there are six sites between 10% and 26%, all of Middle/Late Iron Age date and all in the Milton Keynes area, hinting perhaps that the Ouzel Valley was used for horse as well as cattle ranching (Kidd 2007, 6).

Soil samples from Iron Age contexts in Broughton produced very little in the way of charred grains (pollen produced none). This is similar to several other sites (Coldharbour Farm; Stoke Hammond ByPass N. Link; Stoke Hammond ByPass Site ABC; Furzton), which had very low levels, and these may imply they were not producer sites – these sites probably had a primarily pastoral function (Kidd 2007, 7). The dominance of pastoral farming at Broughton in the Roman period is also mirrored at some sites including Monkston Park (Bull and Davis 2006).

6.10 Can the site contribute to regional research aims regarding land division and usage patterns during the Romano-British period?

The Broughton site will be able to add to our knowledge of Roman land division and usage patterns as relatively clear plans on site survived in each of the phases. Artefacts and ecofacts will help us understand the use of these features and as noted in 6.4, 6.5 and 6.9 etc. The environmental material from features survived well on the whole. Features such as enclosures, fence lines, watering holes, ritual etc. were excavated within both areas of occupation. In each of the site phases a comparison between features to environmental material and other artefacts will be analysed.

The full extent of the field system around both Area 1 and 2 settlement areas was not excavated and so the outlying parts of the Broughton sites are not understood in detail but sparse ditches within trial trenches in this area (as well as environmental evidence) implies there were probably boundary fields, sometimes used for arable but also (?mainly) for pastoral farming.

Of particular importance at Broughton is that from at least the Early and Middle Roman periods there were two adjacent areas (Area 1 and 2) of occupation and land usage, which can be compared not only between themselves but also with other sites excavated in and around Milton Keynes. Both areas are linked by drove-ways but the different landholders were seemingly also independent with their own houses, enclosures and field systems. Section 6.2 describes the different features recovered in each phase on site and so this section will not repeat this description.

7 Methods Statements

The assessment and updated research objectives have identified the key areas for future analysis and wider dissemination through publication. The Iron Age and Roman settlement at Broughton merits publication as a monograph report and this may be in the style of the reports by the former Milton Keynes Archaeological Unit as several nearby sites are comparative such as at Bancroft, Caldecotte and Wavendon Gate.

The Iron Age and Roman settlement remains will be analysed to the same level of detail of the above reports, although, due to the significance of the cremation cemetery, this aspect of the site will be subject to regional comparisons. In terms of drawings, most of the pottery vessels and objects from the cremation features will be drawn but significant other artefacts from other areas of the site will be drawn.

8 Report Writing, Archiving and Publication

8.1 Report Writing

Tasks associated with report writing, illustration and specialists reports are identified in Table * (Tasks 1-*).

8.2 Archiving

Excavated material and records will be deposited with Aylesbury Museum, Buckinghamshire under the Site Code 2006.194 and the county HER code ECB *****. A digital archive will be deposited with ADS. CCC requries transfer of ownership prior to deposition. During analysis and report preparation, CAM ARC will hold all material and reserves the right to send material for specialist analysis.

The archive will be prepared in accordance with the Buckinghamshire County Museum's 'Procedures for deposit of archaeological archives' version 1.4 dated September 2003.

8.3 Publication

It is proposed that the results of the project should be published in ***, under the title *Broughton: a Middle Iron Age to Late Roman Settlement* by Rob Atkins and Gareth Rees and other contributors

8.3.1 Report Structure

Front matter (listings, acknowledgements, list of contributors *etc.)*
(*c.* 10 pages)

Chapter 1 Introduction
(*c. 5* text pages, *c.* 5 figures, *c.* 2 plates)

I. Introduction
II. Geology and Topography
III. Archaeological and Historical Background
IV. Methodologies

Chapter 2 Mesolithic to Bronze Age
(*c.* 5 text pages, *c.*3 figures)

I. The Archaeological Sequence
II. The Finds

Chapter 3 Iron Age and Roman Settlement
(*c.* 40 text pages, *c.*15 Tables, c.30 figures and c.20 plates)

I. Introduction
II. Middle To Late Iron Age Area 1
III. Middle To Late Iron Age Area 2
IV. Late Iron Age Area 1 including Cremation Finds
V. Late Iron Age Area 2
VI. Early Roman Area 1 including Cremation Finds
VII. Early Roman Area 2
VIII. Middle Roman Area 1
IX. Middle Roman Area 2
X. Late Roman Area 1

XI. Late Roman Area 2

Chapter 4 The Iron Age and Roman Finds
(*c.* 35 text pages, *c. 35* tables, *c*.20 figures, *c*. 5 plates)

I. Roman Coins, by Adrian Popescu
II. Metal Objects, by Nina Crummy
III. The Worked Stone by Ruth Shaffrey
IV. The Hand Made Iron Age Pottery by Sarah Percival
V. Late Pre Roman Iron Age and Romano-British Pottery by Alice Lyons
VI. Samian, by Cathy Tester
VII. CBM and Fired Clay by Alice Lyons
VIII. Thin section analysis by Alan Vince
IX. Adhesive and powder analysis by Dana Goodburn-Brown
X. Glass by Steve Wadeson

Chapter 5 The Zooarchaeological and Botanical Evidence
(*c*. 20 text pages, *c*. 20 tables, *c*.5 figures, *c*. 2 plates)

I. Human Bone, by Natasha Dodwell
II. Animal Bone, by Ian L. Baxter
III. Charred Plant Macrofossils and Other Remains, by Val Fryer
IV. Insects, by Emma Tetlow
V. Pollen by Steve Boreham
VI. Worked Wood by Michael Bamford

Chapter 6 Post Roman
(*c.* 5 text pages and *c*.3 figures)

I. Medieval Furrows and other features
II. The Finds

Chapter 7 Discussion and Conclusions
(*c*. 15 text pages, *c*. 3 figures)

Back Matter (bibliography, index, *etc*.)

(*c*. 10 pages)

8.3.2 Volume Summary

Total front matter (pages)	10
Total text pages	125
Total figures	71
Total plates	29
Total tables	70
Back material	10
Volume Total	**205**

9 Resources and Programming

In order to realise the site's full potential, to meet the projects research aims, the following resources and programming are required to complete the analysis and report writing phases.

9.1 Staffing

9.1.1 Project Team

Name	Initials	Project Role	Employer
Rob Atkins	RA	Project Officer	CAM ARC
Ian Baxter	IB	Animal Bone	Freelance
Crane Begg	CB	Report illustration	CAM ARC
Barry Bishop	BB	Flint	Freelance
Steve Boreham	SB	Pollen	Cambridge University
Nina Crummy	NC	Small finds	Freelance
Natasha Dodwell	ND	Human Bone	Freelance
James Drummond Murray	JDM	Project Manager	CAM ARC
Val Fryer	VF	Charred Grain	Freelance
Dana Goodburn-Brown	D G-B	Adhesive and powder	Freelance
Emma Hogarth	EH	Conservator	Colchester Borough Museums
Alice Lyons	AL	Roman pottery/ Fired clay	CAM ARC
Sarah Percival	SP	Prehistoric pottery	NPS
Adrian Popescu	AP	Coins	Freelance
Elizabeth Popescu	EP	Editor/publications management	CAM ARC
Gareth Rees	GR	Supervisor	CAM ARC
Ruth Shaffrey	RS	Worked stone	Oxford Archaeology
Cathy Tester	CT	Samian	Suffolk Archaeology unit
Emma Tetlow	ET	Insects	Freelance
Alan Vince	AV	Thin section	Freelance
Steve Wadeson	SW	Glass	CAM ARC
Illustrator	ILL		CAM ARC

Table 9: *Project team*

9.2 Task Identification

Task	Task	Staff	No. of

No.			Days
Stratigraphic analysis and report preparation			
1	Submit samples for C14 dating	RA	
2	Submit samples for thin sectioning	RA	
3	Produce publication synopsis	RA	
4	Discuss issues raised through assessment with post-excavation team	RA/GR etc.	
5	Write period/group text Areas 1 and 2	RA/GR	
6	Compile archive report for archaeological sequence	RA/GR	
7	Disseminate final phasing to specialists	RA	
8	Review results of specialist analyses	RA/GR	
9	Collate results of specialist analyses	RA/GR	
10	Project management and liaison with specialists *etc.*	JDM/RA	
11	Collate and review results of previous work from the local/regional area	RA/GR	
12	Write background text	RA	
13	Write discussion and conclusions	RA/GR	
14	Collate front matter for publication (lists, captions etc.)	RA	
15	Collate back matter for publication (bibliography, appendices *etc.)*	RA	
16	Internal edit	JDM/EP	
17	Incorporate internal edits	RA/GR	
18	Final edit	JDM/EP	
19	Produce monograph summary	RA/GR	
20	Submit for refereeing	RA	
21	Post-refereeing revisions	RA/GR	
22	Archiving	GR	
Total			
Illustration tasks			
23	Compile list of illustrations/liaison with illustrators	CB/RA/GR	
24	Produce plans/sections/location drawings	ILL	
25	Publication figure preparation	ILL	
26	Finds illustration (pottery, metal finds, flint)	ILL	
27	Select and check finds illustrations	RA/GR	
28	Project management	CB/RA/GR/JDM	
Total			
Finds Analysis			
Coin			
29	Discuss final grouping and phasing with post-excavation team	AP/RA	0.25
30	Weighing, identification, cataloguing and report	AP	3
Total			**3.25**
Metalwork			
31	Meeting with post-ex-team		1
32	Discuss final grouping and phasing with post-excavation team		0.25
33	Catalogue and report on objects	NC	14.75
Total			**16**
Conservation			
34	Cleaning and stabilisation	EH	15
35	X-radiography 38 plates	EH	3

Total			**18**
Lithics			
36	Discuss issues raised through assessment with post-excavation team	BB	0.25
37	Review drawings and any updates to report	BB	0.75
Total			**1**
Worked stones			
38	Discuss issues raised through assessment with post-excavation team	RS	0.5
39	Full publication standard catalogue of illustrated items	RS	0.5
40	Catalogue of other items for Volume 2	RS	0.5
41	Lithological analysis including 7 thin sections	RS	7
42	Report and review illustrations	RS	4.5
Total			**13**
Prehistoric pottery			
43	Discuss issues raised through assessment with post-excavation team	SP	0.25
44	Analysis and reporting on the pottery	SP	1.5
45	Illustrated sherd catalogue and checking drawings	SP	0.25
Total			**2**
Late Pre Roman Iron Age and Romano-British Pottery			
46	Meeting with post-ex-team		1
47	Full publication standard catalogue of illustrated items	AL	2
48	Review illustrations	AL	0.5
49	Liase with thin section specialist	AL/AV	0.5
50	Report	AL	21
Total			**25**
Samian			
51	Meeting with post-ex-team	CT	1
52	Identification of the stamp dies	CT	
53	Further analysis of pottery mends	CT	
54	Comparisons of other local and regional material	CT	
55	Review illustrations	CT	
Total			
CBM and fired clay			
56	Discuss issues raised through assessment with post-excavation team	AL	0.25
57	Liase with thin section specialist	AL/AV	0.25
58	Report and review illustrations/photographs	AL	4.5
Total			**5**
Glass			
59	Discuss issues raised through assessment with post-excavation team	SW	0.25
60	Liase with Nina Crummy	SW	0.25
61	Update report	SW	1.5
Total			**2**
Analysis of adhesive and powder			
62	Discuss issues raised through assessment with post-excavation team	D G-B	0.25
63	Further analysis of powder	D G-B	0.25
64	Update report	D G-B	1.5
Total			**2**
Zooarchaeological and botanical analysis			

Human bone			
65	Meeting with post-ex-team	ND	1
66	Sorting bone into body part & final analysis	ND	10
67	Final text for publication	ND	10
Total			**21**
Animal bone			
68	Meeting with post-ex-team	IB	1
69	Bone recording (mammals, birds and amphibians): 10 days	IB	10
70	Data processing and analysis	IB	6
71	Report	IB	5
Total			**22**
Charred grain			
72	Discuss issues raised through assessment with post-excavation team	VF	0.25
73	Further analysis	VF	2
74	Report	VF	1.75
Total			**4**
Insects			
75	Discuss issues raised through assessment with post-excavation team	ET	0.5
76	Further analysis	ET	7
77	Report	ET	3.5
Total			**11**
Pollen			
78	Discuss issues raised through assessment with post-excavation team		0.25
79	Further analysis	SB	4.75
80	Report	SB	2
Total			**7**
5 Radiocarbon dates –task 81			
Cattle burial			
Human burial within possible posthole structure **M4530**			
?Middle Iron Age cremation **3159** in Area 2			
?Middle Iron Age cremation **712** in Area 1			
?Middle Iron Age cremation **956** in Area 1			
Thin sections			
82	Discuss issues raised through assessment with post-excavation team		0.25
83	Analysis and report on kiln bars, natural clay and Roman pottery	AV	11.75
Total			**12**

Table 10: *Full publication tasks*

9.3 Project Timetable

The aim is for the specialists reports to be completed by the end of 2008 and a first publication draft by the beginning of the 2009 financial year.

Acknowledgements

CAM ARC is grateful to JJ Gallaghers Broughton Ltd, especially Darren Mace, who commissioned and funded the archaeological work. Wardell Armstrong (particularly Jenny Emmett) helped in the smooth running of the project,. Expert machining of the site took place by LOC.

Helpful advice was given by Nick Crank, Archaeological Officer, Design and Conservation (Milton Keynes Council) who monitored the excavation on behalf of Milton Keynes Council. Archaeological Solutions gave the whole of their 2003 evaluation archive.

The project was managed by James Drummond-Murray. Rob Atkins directed the fieldwork with Tom Phillips supervising Area 1 and Gareth Rees Area 2. In addition, Tom Lyons, Alex Pickstone, Gareth Rees and Helen Stocks also supervised parts of Area 1. There was a team of site assistants consisting of Ben Brogan, Louise Bush, Greg Crees, Tom Eley, Chris Faine, James Fairbairn, Claire Martin, Gemma Tully, Sarah Henley and Daniel Wheeler. Archaeological Services and Consultancy also kindly supplied staff comprising Zoe Clarke, Lizzie Gill, Theresa Hawtin, Chris Swain, Calli and Steve Rouse and Nigel Wilson. The plans were illustrated by Crane Begg, Sêverine Bézie and Louise Bush. The report was edited by Liz Popescu.

Steve Critchley and Nick Richardson (LOC) made a significant contribution to the understanding of the site through the recovery of a substantial quantity of metal objects. Steve Wadeson and Rachel Fosberry respectively supervised the post excavation artefact programme and the ecofact material from the site.

Thanks are also extended to all the specialists who wrote reports or commented on artefacts/environmental matters: Michael Bamford, Ian Baxter, Barry Bishop, Steve Boreham, Nina Crummy, Natasha Dodwell, Carole Fletcher, Val Fryer, Dana Goodburn-Brown, Alice Lyons, Sarah Percival, Adrian Popescu, Ruth Shaffrey, Cathy Tester, Emma Tetlow, Steve Wadeson.

Bibliography

Allen, D., 1979 'Two Roman Cremation Burials from Great Brickhill', *Rec. Buckinghamshire* 21, 29-34

Allen, M. R. 2002 *Proposed Development at Broughton, near Milton Keynes, Buckinghamshire: Programme of Archaeological Field Investigation: Stage 1*

(Fieldwalking), Pre-Construction Archaeology (Lincoln) Report (unpublished)

Appleton, C., and Armour Chelu, R., 2004 'A Romano-British Burial at Princes Risborough', *Rec. Buckinghamshire* 44, 111-115

Biddulph, E., 2005 'Last orders: choosing pottery for funerals in Roman Essex', *Oxford J of Archaeol.* 24 (1), 23-45

Biddulph, K., 2007 'Neolithic to Early Bronze Age Buckinghamshire: a resource assessment'. Available: http://www.buckscc.gov.uk/bcc/get/assets/docs/Neo_EBA_Bucks_RA.pdf. Accessed December 2007

Bonner, D., and Parkhouse, J., 1997 'Investigations at the Prehistoric Site at Coldharbour Farm, Aylesbury in 1996', *Rec. Buckinghamshire* 39, 73-139

Brown, N and Glazebrook, J.(eds.)., 2000 *Research and Archaeology: a Framework for the Eastern Counties, 2. research agenda and strategy,* E. Anglian Archaeol. Occas. Pap. 8

Bull, R., and Davis, S., 2006 *Excavation of a Late Iron Age to Romano-British landscape at Monkston Park, Milton Keynes,* Museum of London Archaeological Service Archaeol. Study Series 16

Chapman, A., 2000/1 'Excavation of an Iron Age Settlement and a Middle Saxon Cemetery, Great Houghton, Northamptonshire 1996', *Northamptonshire Archaeol.* 29, 1-42

Chapman, A., 2007 *In Press* 'Gayhurst barrow cemetery', in *Rec. Buckinghamshire* 47 part II

Coleman, L., Harvard, T., Collard, M., Cox, S., and McSloy, E 2004 Denham, The lea *South Midlands Archaeol.* 34, 14-17

Collard, M., and Parkhouse, J., 1993 'A Belgic/Romano-British cemetery at Bledlow-Cum-Saunderton', *Rec. Buckinghamshire* 1993, 35 66-75

Collis, J.R., 1968 'Excavations at Owslebury, Hampshire, an interim report', *Antiq. J.* 48, 18-31

Cox, P., 1997 An Archaeological Evaluation of a proposed Housing development Site at Billingsfield, Aylesbury, Buckinghamshire (NGR SP792153), AC Archaeology Report No. 0997/5/0 (unpublished)

Dawson, M., 2001 'Harlington Roman Cemetery', *Bedfordshire Archaeol. 24, 20-39*

Dunnett, B, R, K., 1972 'Report on the trial excavations at Wards Coombe, Ivinghoe 1971', *Rec. Buckinghamshire* 19, part 2 141-155

Edgeworth, M., 2006 'Changes in the Landscape: Archaeological Investigation of an Iron Age Enclosure on the Stoke Hammond ByPass', *Rec. Buckinghamshire* 46, 119-148

Emmett, J., 2003 *Broughton Manor Farm, Broughton, Milton Keynes, SP900395: Archaeological Field Investigation Stage 2 – Evaluation: Written Scheme of Investigations,* Wardell Armstrong Report (unpublished)

Emmett, J., 2005 *Broughton Manor Farm, Broughton, Milton Keynes, SP900395: Archaeological Field Investigation Stage 4 – Open Area Excavation: Written Scheme of Investigations,* Wardell Armstrong Report (unpublished)

Emmett, J., 2007 *Broughton Manor Farm, Broughton, Milton Keynes, SP900395: Archaeological Field Investigation Stage 4a – Additional Open Area Excavation: Written Scheme of Investigations* Wardell Armstrong Report (unpublished)

English heritage 1991 Management of Archaeological Projects

English Heritage 1995 Geophysical Survey in Archaeological Field Evaluation, Research and Professional Services Guideline No.1

Farley, M., 1973 'A Roman Burial at North Marston', *Rec. Buckinghamshire* 19, part 3, 329-335

Farley, M., 1983 'A mirror burial at Dorton, Buckinghamshire',

Proc. of the Prehist. Soc. 9, 269-302

Farley, M., and Wright, R ., 1979 'An Early Romamano-British Inhumation Cemetery at West Wycombe', Bucks' *Rec. Buckinghamshire* 21, 81-97

Grant, J., Keir, W., Wilkins, B., and Roberts, B., 2003 *Broughton Manor Farm, Broughton, Milton Keynes An Archaeological Investigation Stage 3 – Evaluation,* Archaeological Solutions Report No. 1407 (unpublished)

Green, H. S., 1974 'Early Bronze Age burial, territory and population in Milton Keynes, Buckinghamshire, and the Great Ouse Valley', *Archaeol. J.* 131, 75-139

Hall, D., and Nickerson, N., 1967 'Excavations at Irchrester, 1962-3', *Archaeol. J.* 124, 65-99

Hill, J. D., Evans, C., and Alexander, M., 1999 'Hinxton Rings Late Iron Age Cemetery, Cambridgeshire', *Proc. Prehist. Soc*. 65

Hunn, A., Lawson, J., and Parkhouse, J., 1995 'Investigations at Magniovinium 1990-91:The Little Brickhill and Fenny Stratford By-Passes', *Rec. Buckinghamshire* 37, 3-66

Johnson, A. E., 1975 'Excavations at Bourton Grounds, Thornborough 1972-3', *Rec. Buckinghamshire* 20 part 1, 3-55

Kidd, S., 2007 *Buckinghamshire Later Bronze Age and Iron Age Historic Environment Resource Assessment (2nd draft). Available: http://www.buckscc.gov.uk/bcc/get/assets/docs/Buck_Iron_Age.pdf. Accessed December 2007*

Lavender, N. J., 1991 'A Late Iron Age burial enclosure at Malden Hall Farm, Essex: excavations 1989', *Proc. Prehist. Soc.* 57.2, 203-9

Liversidge, J., 1953-4 'The Thornborough Barrow', *Rec. Buckinghamshire* 16, 29-32

Masters, P 2003 *Fluxgate Gradiometer Survey: on Land at Broughton, near Milton Keynes, Buckinghamshire – Stage 2,* Pre-Construct Geophysics Report (unpublished)

Moore, R., Byard, A., Mounce, S., and Thorpe, S.,	Forthcoming	*A4146 Stoke Hammond and Linslade Westwern ByPass, Archaeological Excavations*
Muldowney, L.,	2006	*Iron Age and Romano-British Remains at Broughton Manor Farm, Milton Keynes, Buckinghamshire,* CAM ARC Report No. 923 (unpublished)
Neal, D.S.,	1987	*'Excavations at Magiovinium, Buckinghamshire 1978-80', Rec. Buckinghamshire* 29, 1-124
Network Archaeology	2006	*A4146 Stoke Hammond and Linslade bypass: post excavation assessment,* Network Archaeology Report (unpublished)
Petchley, M. R.,	1978	'A Roman Field System at Broughton, Buckinghamshire', *Rec. Buckinghamshire* 20, part 4 637-645
Roberts, J.,	2003	*Hinxton Road, Duxford Post-excavation Assessment and Updated Project Design,* Cambridgeshire County Coun. Archaeol. Field Unit Report No. PXA44 (unpublished)
RPS.,	2005	*Archaeological Investigations for the A41 Aston Clinton ByPass, Buckinghamshire,* RPS Report (unpublished)
Simco, A.,	1984	*Survey of Bedfordshire The Roman Period* Bedfordshire County Council/Royal Commission on historic Monuments (England)
Skilbeck, C.O.,	1923	'Notes on the discovery of a Roman Burial at Radnage, Bucks', *Antiq. J.* III, 334-337
Stead, I. M., and Rigby, V.,	1986	*Baldock: The Excavation of a Roman and Pre-Roman Settlement 1968-72,* Britannia Monogr. Ser. 7
Stead, I. M., and Rigby, V.,	1989	*Verulamium: The King Harry lane Site,* English Heritage Archaeol. Rep. 12
Taylor, A.,	2001	*Burial practice in Early England* (Stroud:Tempus)

Taylor, A.,	2006	*Kingsmead South, Milton Keynes, Buckinghamshire,* TVAS Post-excavation Assessment Report(unpublished)
Taylor, E.,	2006	'Milton Keynes, Tattenhoe Park', *South Midlands Archaeol.* 36, 14-16
Walker, G.,	1992	*Towcester Retail Development, Northamptonshire: Report on the results of an archaeological evaluation,* Cotswold Archaeological Trust Report (unpublished)
Wardell Armstrong	1999	*Site Investigation report dated May 1999,* Wardell Armstrong Report (unpublished)
Wardell Armstrong	2003 a	*Site Investigation at Broughton Manor, Milton Keynes Desk Study and Site Investigation Report,* Wardell Armstrong Report *(unpublished)*
Wardell Armstrong	2003 b	*Broughton Manor Farm Environmental Statement Volume 1,* Wardell Armstrong Report *(unpublished)*
Waugh, H.,	1962	'The Romano-British burial at Weston Turville', *Rec. Buckinghamshire,* 17 part 2 107-114
Wilkins, B and Grant, J.,	2003	*Broughton Manor Business Park, Milton Keynes; An Archaeological Evaluation,* Archaeological Solutions Report No.1421
Williams, R. J.,	1993	*Pennyland and Hartigans Two Iron Age and Saxon sites in Milton Keynes,* Buckinghamshire Archaeol. Soc. Monogr. Ser. 4
Williams, R. J., and Zeepvat, R. J.,	1994	*Bancroft: a Late BronzeAge?Iron Age settlement, Roman villa and temple-mausoleum: Vol 1, Excavations and building materials; Vol 2, Finds and environmental evidence,* Buckinghamshire Archaeol. Monogr. Ser. 7
Williams, R, J., Hart, P. J., and Williams, A. T. L.,	1996	*Wavendon Gate: A Late Iron Age and Roman settlement in Milton Keynes,* Buckinghamshire Archaeol. Soc. Monogr. Ser. 10

Woodfield, C.,	1977	'A Roman military site at Magiovinium', *Rec. Buckinghamshire* 20.3, 384-99
Woodfield, C.,	1989	'A Roman site at Stanton low, on the Great Ouse, Buckinghamshire', *Archaeol. J.* 146, 135-278
Woodfield, C.,	1995	'Town defences in the western territory of Catuvellauni', in Brown, A.E., (ed.), *Roman small towns in Eastern England and beyond* Oxbow Monogr. 52, 129-146
Zeepvat, R. J.,	1988	'Another Roman building at Wymbush?', *Rec. Buckinghamshire* 30, 111-16
Zeepvat, R.J.,	1991	*Roman Milton Keynes* Milton Keynes Archaeological Unit (Milton Keynes)
Zeepvat, R.J.,	2003	'A Romano-British Cremation Burial from Wellick Farm, Wendover', *Rec. Buckinghamshire* 43, 47-59
Zeepvat, R. J., and Radford, D.,	2007	Roman Buckinghamshire – draft. Available: http:// www.buckscc.gov.uk/bcc/get/assets/docs/archaeology/Roman%20buckinghamshire2nd%2Draft.pdf. Accessed: December 2007
Zeepvat, P.J., Roberts, J.S., and King, N. A.,	1994	Caldecotte: Excavation and Fieldwork, 1966-91, Buckinghamshire Archaeol. Monogr. Ser. 9

Drawing Conventions

Plans

Limit of Excavation

Evaluation Trench

Deposit - Conjectured

Natural Features

Sondages/Machine Strip

Test Pit

Intrusion/Truncation

Undercut — Cut

Illustrated Section S.14

Archaeological Deposit	Modern	Cremation
Archaeological Feature	Cobble Surface	Nail
Excavated Slot	Root	Human Remains
Wall	Stone	Animal Bones
Structure	Grave	Ridge and Furrow
Wood	Querstone	Waterlogged
Wood Lining	Burnt Stone	Field Drain
Tile	Burnt Clay	Cut Number 118
Pottery	Copper	

Sections

Limit of Excavation

Cut

Cut-Conjectured

Deposit Horizon

Deposit Horizon - Conjectured

Intrusion/Truncation

Top Surface/Top of Natural

Break in Section/
Limit of Section Drawing

Cut Number 118

Ordnance Datum 18.45m OD

Deposit Number 117

Inclusions

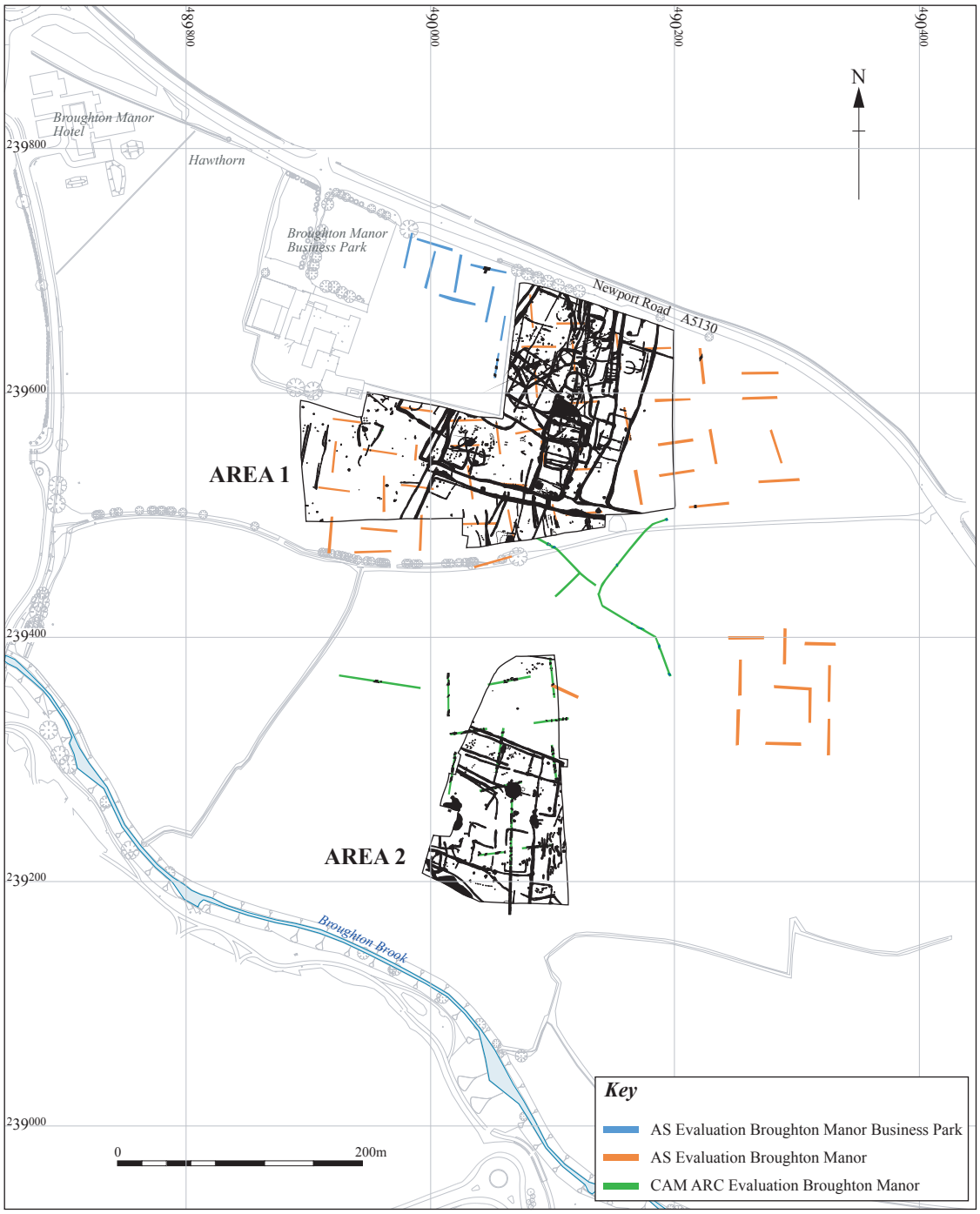


Figure 1: Location of excavation (black) with evaluation trenches

Figure 2: Excavation plan of Area 1

Figure 3: Excavation plan of Area 2

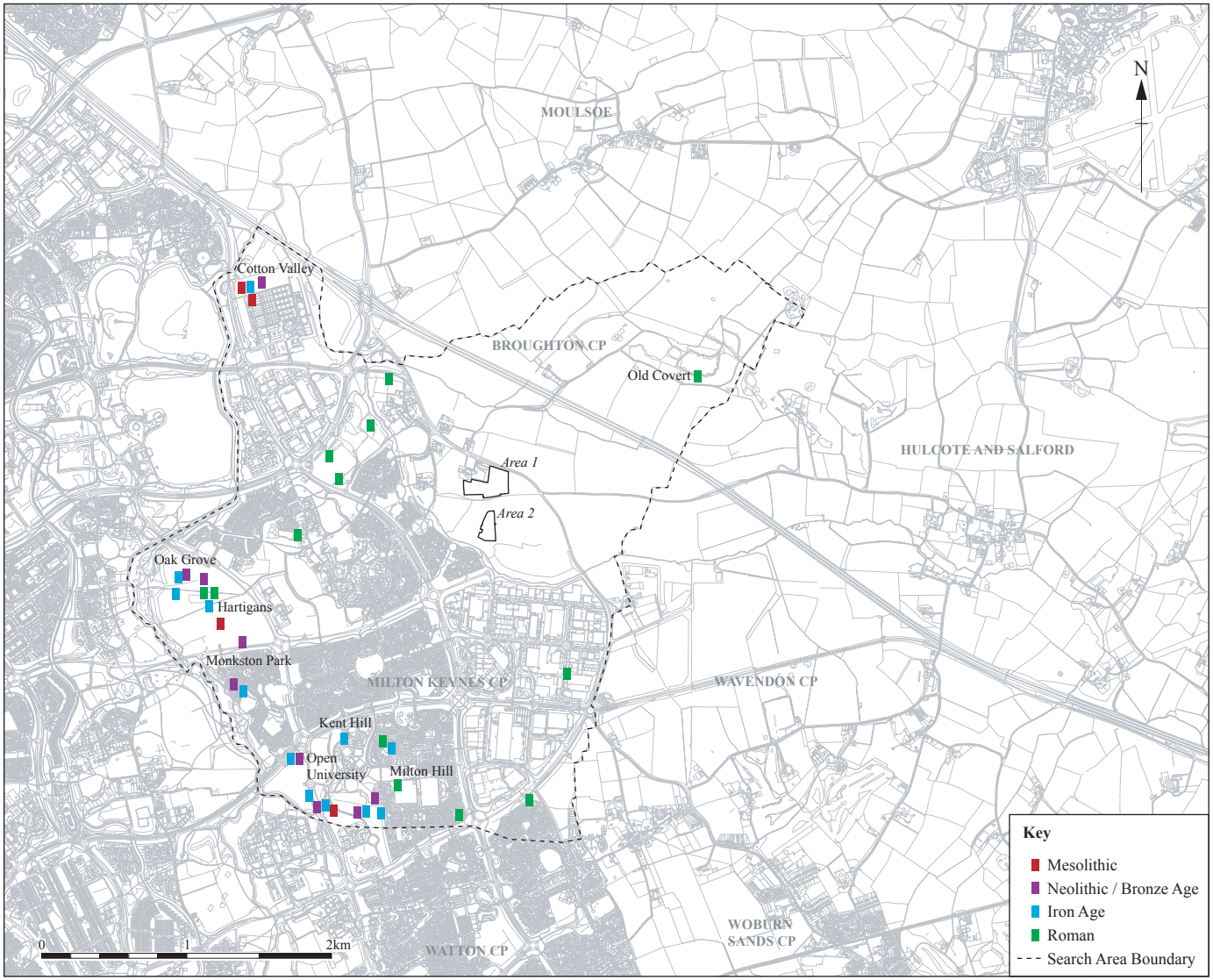


Figure 4: HER data within Milton Keynes and Broughton CP

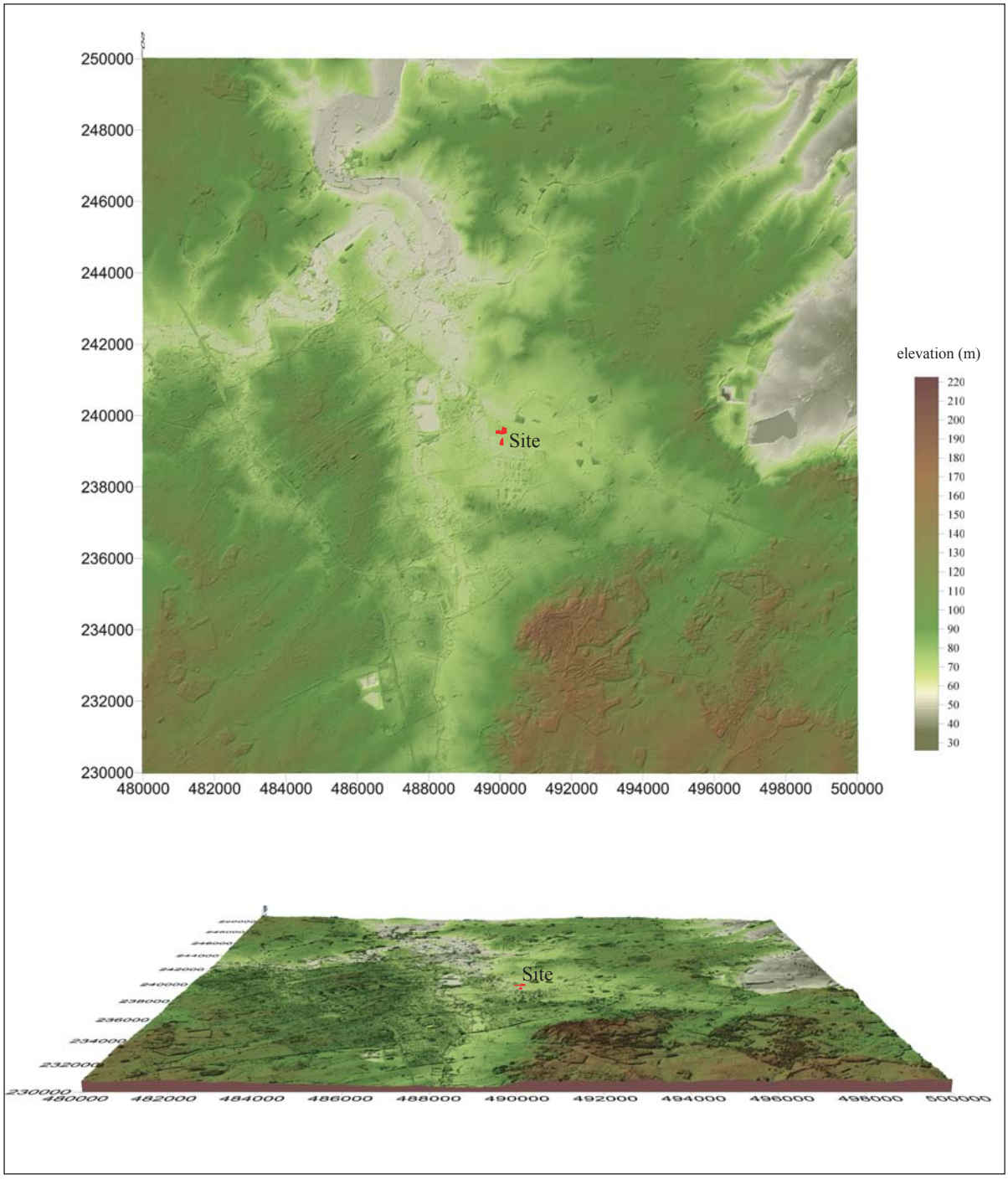


Figure 5: Terrain model

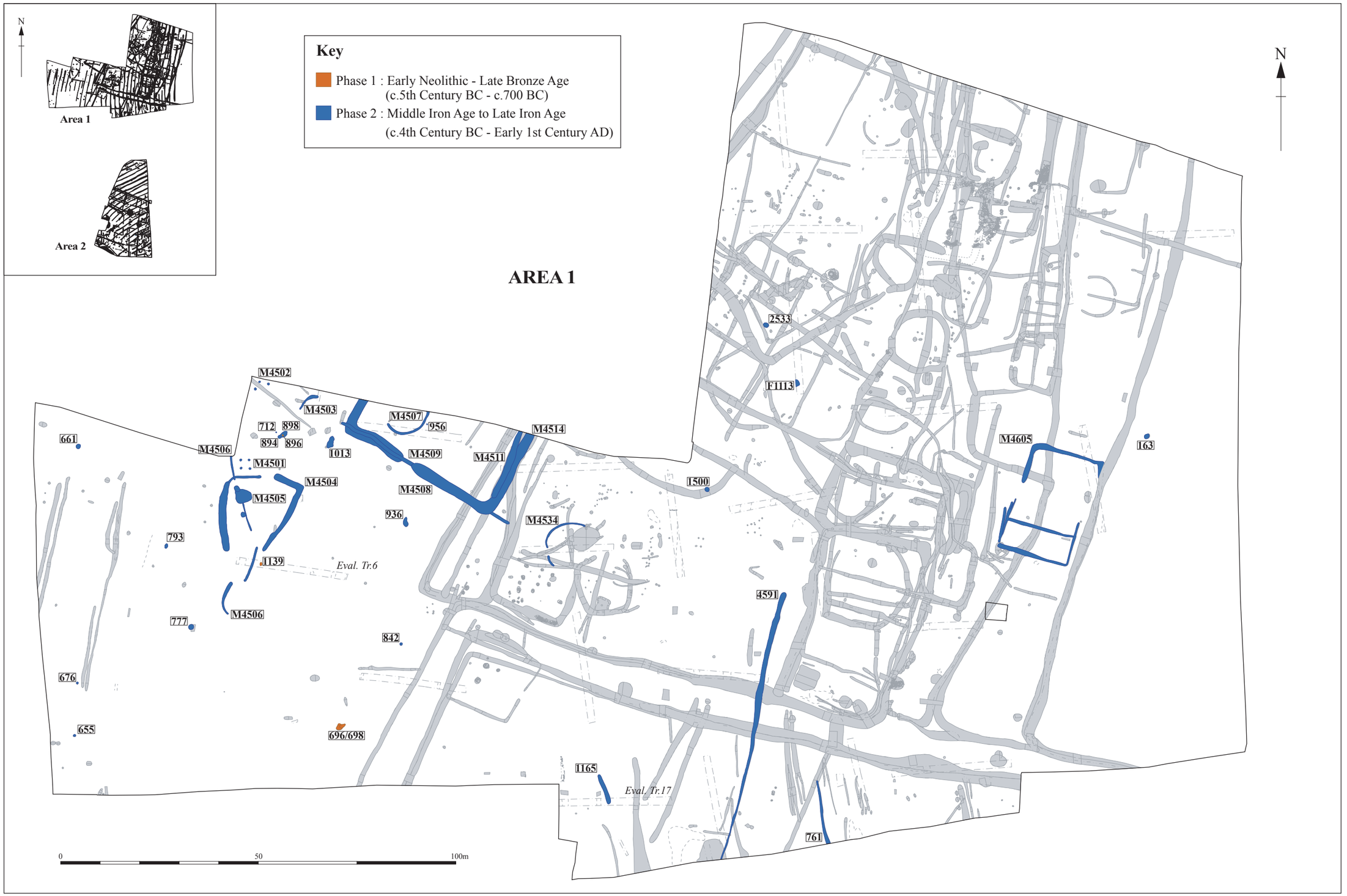


Figure 6: Area 1: Phases 1 and 2

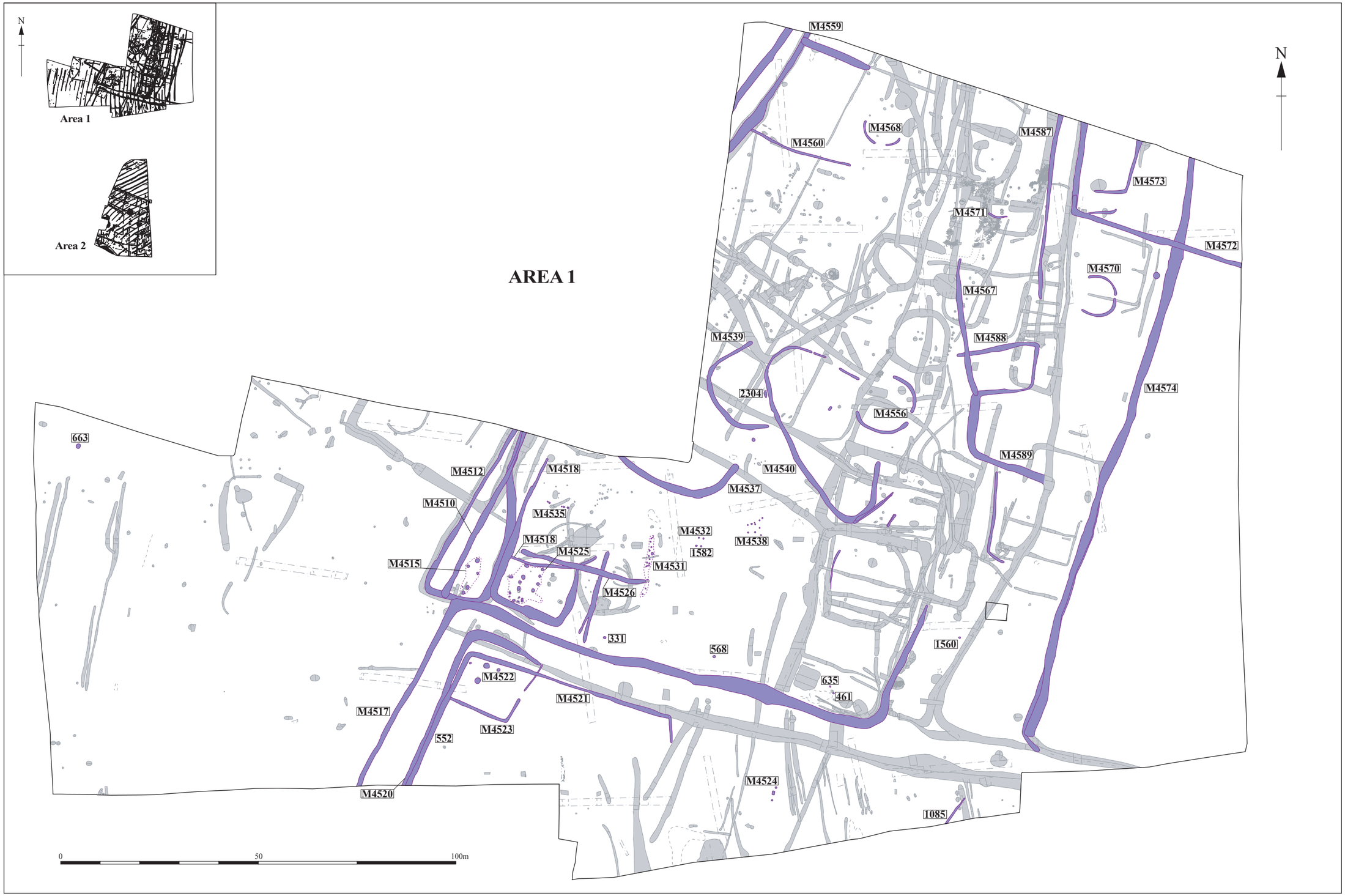


Figure 7: Area 1: Phase 3 (Late Iron Age c. early 1st century AD to early Roman c. late/end 1st century AD)

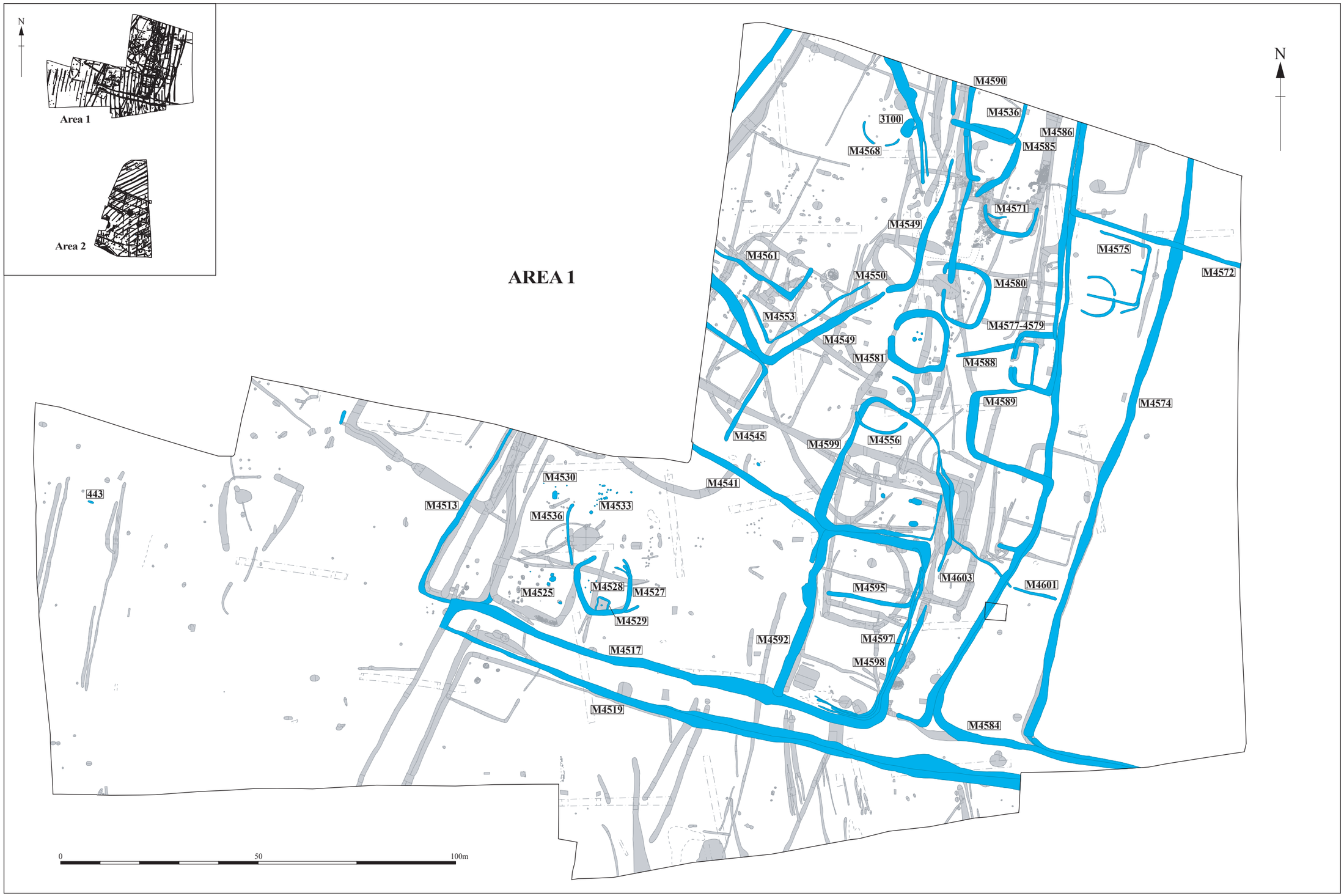


Figure 8: Area 1: Phase 4 (c. late/end 1st century AD to middle 2nd century AD)

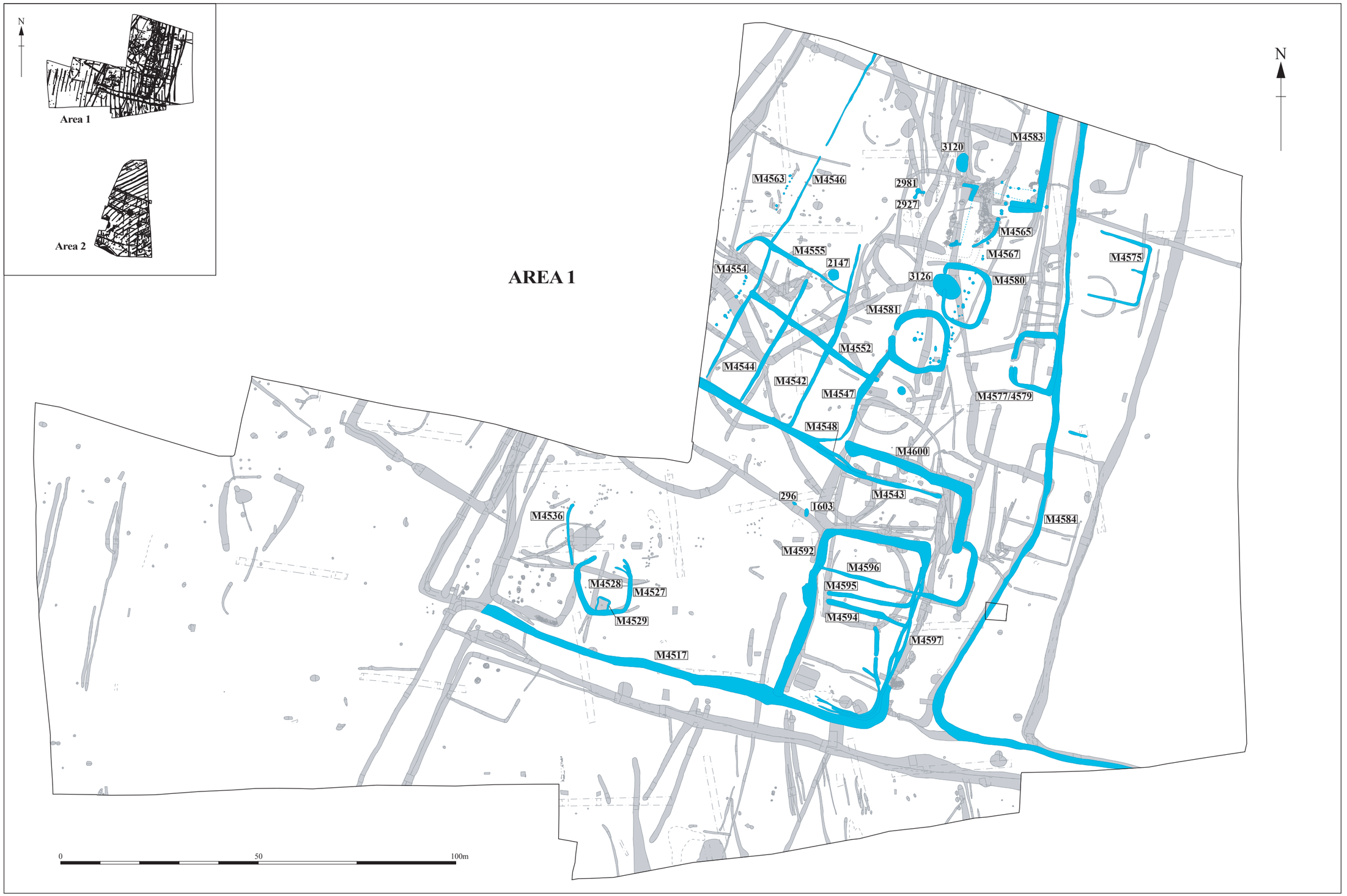
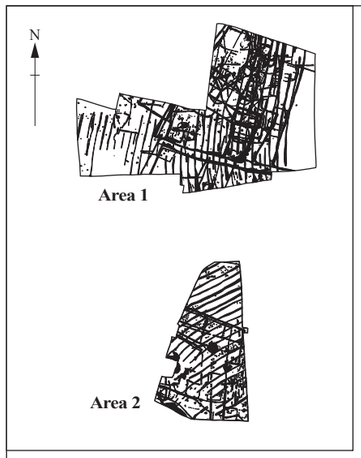


Figure 9: Area 1: Phase 5 (middle 2nd century to later 3rd century)

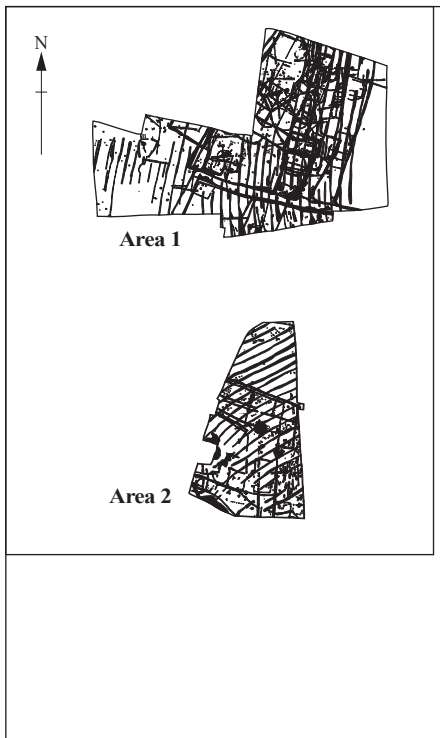


AREA 1

Figure 10: Area 1: Phase 6 (later 3rd century to later half 4th century)

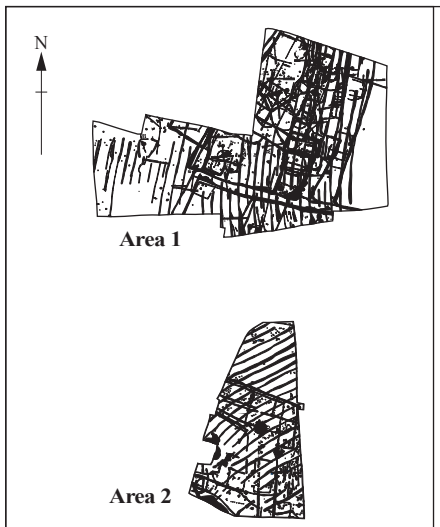
Figure 11: Area 2: Phase 2 (late Iron Age)

Figure 12: Area 2: Phase 3 (late Iron Age c.early 1st century AD to early Roman c. late/end 1st Century AD)



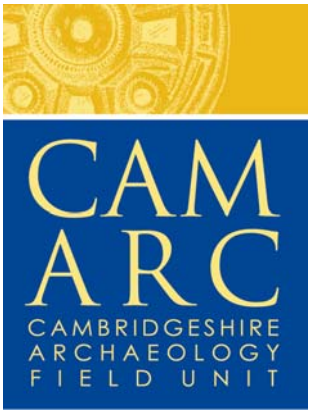
AREA 2

Figure 13: Area 2: Phase 4 (c. late/end 1st century AD to middle 2nd century AD)



AREA 2

Figure 14: Area 2: Phase 5 (middle 2nd century to late 2nd century)



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