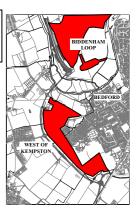


LAND WEST OF BEDFORD

Interim Archaeological Report 5

Over the last year Albion Archaeology has undertaken extensive investigations within the Land West of Bedford development area on behalf of David Wilson Homes and overseen by CgMs Consulting. The investigations are now complete. In total, PJ Construction have stripped c. 60ha on the Biddenham Loop and c. 6ha on Land West of Kempston. Archaeologists have spent c. 4,000 days investigating the site with, at its peak, 35 Albion staff on site.



The archaeological evidence indicates fairly continuous human activity on the Biddenham Loop from the Mesolithic to the early-middle Saxon period. On the Land West of Kempston part of the development evidence was more dispersed but indicated activity during the late Bronze Age, Romano-British and Saxo-Norman periods. This report presents a preliminary summary of results prior to the commencement of the Assessment and Analysis/Publication stages of the project.



Extent of archaeological investigations on the Biddenham Loop, from west with Bedford in background

MESOLITHIC

The earliest evidence for human activity within the Biddenham Loop comprises flint tools the majority of which were recovered from the ploughsoil during flint artefact collection. These are associated with hunter-gather communities. The location of the flint concentrations suggests that human activity was concentrated along the edge of the river terrace.

NEOLITHIC

HENGI-FORM MONUMENTS

Three monuments are sufficiently different to the circular monuments of the early Bronze Age to suggest that they perhaps served a non-funerary function. They have, therefore, been classed as hengi-form monuments.

One of these was at the centre of the wide meander in the River Great Ouse suggesting that it was deliberately built in this



important position to be at the focus of the communities' ceremonial events (see Interim 1 & 2).



Investigation of the central hengi-form monument

Another, where investigation has just been completed, featured two entrances (one later blocked). The profile of its "ditch" suggests it may have held upright timber panels to screen off ceremonies undertaken inside. No doubt, these would have been associated with drinking, singing, dancing and feasting – the small quantities of wood charcoal in the ditches may derive from cooking fires. At a later date, a barrow was constructed within the monument's interior.



Hengi-form monument with barrow ditch inside

SHAFTS

A handful of deep pits have dimensions and forms which clearly distinguish them from the dispersed and clustered pits located elsewhere on the Loop (*see Interim* 3).

They were c. 1.8m deep, dug (almost vertically) through the gravel into the underlying limestone. A number contained animal bone, with one producing antlers from a large deer and an aurochs horn (a type of cattle which was largely extinct by the Bronze Age).

The nature of these pits and their unusual animal bone content indicate that they were dug and backfilled rapidly. They may have been dug as part of a ceremony associated with the discovery of ground water or even to hold a large "totem" post.



Hand excavation of lower fills of a Neolithic shaft

DISPERSED & CLUSTERED PITS

Numerous isolated and a few clusters of small pits were identified. These are the only evidence for settled communities and are rare nationally.

A number contained special assemblages – deliberately broken pottery and unusual flint tools, including polished axe fragments. These represent *structured deposits* – *i.e.* they are not simply rubbish. The items within them were deliberately chosen, and possibly ritually broken, for deposition as an offering to the gods.

It is noteworthy that no small pits have yet been found adjacent to contemporary monuments. This may suggest the deliberate zoning of different types of activities within the landscape.

EARLY BRONZE AGE

BARROWS

The Biddenham Loop is a well known prehistoric monument complex, containing over 30 barrows. The latter are the typical burial monument of the early Bronze Age, although some may originate in the late Neolithic. They comprise a mound or bank within the interior of a circular "ring" ditch.





Barrow with central inhumation burial

Seven barrows have been investigated; all are slightly different in nature, dimensions and position/presence/type of burial (*see previous Interims*). Some of the monuments contained inhumations; others contained cremation burials.



Off-centre inhumation within a barrow

Other barrows contained no burial at all. This is likely to be because they were placed in the mound which has since been ploughed away. This suggests that society was sufficiently structured at this time for individuals, or their relatives, to specify a particular monument type.



Examining one of the barrow ditch fills

The ditch surrounding some barrows had been redug a number of times (see

previous Interims), indicating that the monument was long-lived. This was presumably undertaken to redefine the mound or the monument and may have taken place on the anniversary of the death of the individual for whom it was created.



Barrow after completion of hand excavation

Other barrows had substantial ditches defining a large internal area. Interestingly, the two largest ring ditches contained no evidence for burials. This may suggest that these were placed within the internal mound which has been removed by thousands of years of ploughing.

FLAT GRAVES

In addition to burials associated with monuments, several isolated crouched inhumations have been found. These will require radiocarbon dating to determine if they are contemporary with the barrows. However, if proven to be contemporary this again demonstrates that society was sufficiently structured at this time for there to be distinctions in burial practice between different individuals.



Probable Bronze Age inhumation



MIDDLE BRONZE AGE

The middle Bronze Age represents a transitional period when the landscape changed from one dominated by monuments (*see previous Interims*) to one where land was divided up into parcels which ultimately became fields.

FIELDS

An extensive system of fields has now been identified dating to this period. It largely respects the earlier monuments, suggesting that these were still revered, sacred sites.



Middle Bronze Age field ditches

The ditches varied enormously in size. It is clear that the fields developed over a long period of time – there were a number of examples of lengths of ditch being redug or replaced.



Extremely narrow middle Bronze Age field ditches

Two of the ditches had inhumations placed in them and another the body of a sheep

The ditches contained small quantities of artefacts, including late Neolithic/early Bronze Age flint, along with later Bronze Age, Iron Age and Roman pottery.

However, the relationship between three of the ditches and the late Bronze Age pit alignment proves that the ditches are earlier and, therefore, date to the middle Bronze Age.



Relationship between the field ditches and the pit alignment

In addition, the bones from the burials, as well as providing a wealth of specific information on the individual and animal, will provide excellent material for radiocarbon dating.

LARGE PITS

Approximately 25 large pits were located within the fields in the vicinity of the pit alignment. These were often oval in plan and c. 3m long by c. 2m wide and c. 1.9m deep.



Excavation of the lower fills of one of the large pits

These are similar to features, interpreted as water pits, found in Bronze Age fields elsewhere in the country. Unfortunately, the majority contained few artefacts and



no waterlogged deposits. Therefore radiocarbon dating of any suitable material may be required to prove that they are contemporary with the fields.



Recording one of the large pits

POND

The largest feature found within the Biddenham Loop was adjacent to a field ditch. It probably functioned as a pond or well. It was 10m by 6m and had originally been dug as a circular pit into the limestone. However, it had been redug on a number of occasions with evidence for the insertion of a timber trough.



Lower deposits of pond under investigation

NOTE

The identification of a middle Bronze Age landscape on the Biddenham Loop is one of the most significant discoveries of the investigations. Only a single feature of this period was found within the 19ha of Bovis investigations and evidence for fields during this period is not that common outside the Thames Valley. The establishment of fields represents a significant change from the earlier periods when the landscape was open and dominated by monuments. However, although dramatic, this change did not include the wholesale erasure of the previous landscape because some earlier monuments were incorporated into the new system.

LATER BRONZE AGE

PIT ALIGNMENTS

The investigations have located two pit alignments within the Biddenham Loop.

One of these extends for 1km giving the impression of "cutting off" the land within the meander of the River Great Ouse. One hundred and ten pits were investigated. They were c. 2.5m in diameter and 1.1m deep, and were regularly spaced with a gap of c. 1m between each pit. Their consistency in form and dimensions suggests that they were part of a planned and co-ordinated project. As described above, this pit alignment was dug across the earlier field boundaries, but in a way that meant they continued to function.



The main pit alignment under investigation



The nature of the pit fills demonstrates that none of them had been redug and there was no evidence for an adjacent bank.



Excavation of the second half of a pit in the alignment

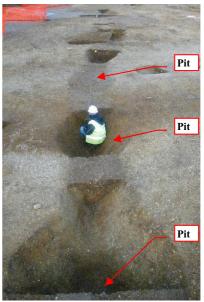
Small quantities of late Bronze Age/early Iron Age pottery have been recovered, along with larger quantities of early-middle Iron Age types mainly from the upper fills. However, on the Bovis and Bedford Western Bypass investigations, the same alignment was truncated by early-middle Iron Age storage pits, demonstrating that it pre-dates this activity.



Main length of the pit alignment within the development

A second and completely unexpected pit alignment has now been found. Only a short length was within the development area. It was situated c. 10m from the present river and appeared to be parallel to it. Therefore, unlike the other pit

alignment it would appear to have been located to reinforce an existing natural boundary. At a later date, it was replaced by a ditch.



Pit alignment later re-dug as a ditch

Although the pit alignments would have been distinctive and durable markers, by their very nature they would not have been an effective physical barrier. This suggests that they may have been symbolic, rather than actual physical, boundaries. It is possible that the very act of construction was their primary significance — a project that would have brought the whole community together.

MIDDLE IRON AGE

SETTLEMENTS

Three farmsteads of this period have been identified during the investigations. These are characterised by the presence of large pits used to store grain.



Cluster of fully excavated storage pits



A number of the pits were infilled with domestic debris including pottery. One contained an iron spearhead tip, another an inhumation and another an animal skeleton.



Animal burial placed in partially infilled storage pit

Only a single building of this period was positively identified. It was a roundhouse – the dominate building type in Britain prior to the Roman Conquest.

ROMANO-BRITISH

All previous investigations within the Biddenham Loop have demonstrated that it was intensively utilised during this period. At least four farmsteads have now been positively identified. Prior to the recent investigations it had been thought that an extensive field system existed within the Loop. However, the majority of these ditches, which were only known from non-intrusive survey, have now been shown to originate in the middle Bronze Age.

FARMSTEAD

The farmstead within the recent investigations comprised an extensive rectangular system of ditched enclosures adjacent to the River Great Ouse. It is therefore comparable to others investigated within the Loop. Like them, although some of the ditches were redug, there were no major changes to the layout. And again, no definite evidence for roundhouses or rectangular buildings was identified.



Enclosure system of the Romano-British farmstead

The major difference with the contemporary farmsteads within the Bovis development was the absence of evidence for a late Iron Age creation date, *i.e.* prior to the Roman Conquest.

Although caution should always be applied when trying to determine the "status" of the inhabitants of such farmsteads, the impression from the evidence recovered is that they were not particularly wealthy. Although a few dumps of imported pottery from the continent were recovered, the majority of the pottery assemblage is characterised by domestic and utilitarian types and forms in locally made coarsewares.

TRACKWAYS AND MAJOR BOUNDARY

Two extensive trackways were created in this period within the Biddenham Loop.

The trackways comprised parallel ditches but no metalling survived. They were traced for over 500m on a roughly north-south alignment. Both stopped when they met a major east-west boundary.



Romano-British trackway defined by two parallel ditches



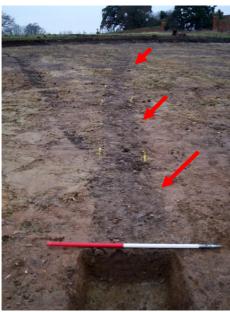
NOTE

What is remarkable about the trackways and the major boundary is that they are clearly associated with the earlier elements in the landscape. For example, the major boundary is parallel to the late Bronze Age pit alignment and the trackways appear to be aligned on elements of the middle Bronze Age fields, e.g. ditches, corners, water pits. This suggests that even though the trackways were mainly on different alignments to the earlier boundaries, the fields were still in existence and being utilised.

This probably explains why, despite there being several Romano-British farmsteads within the Loop, no new field boundaries were established. After all, why chop down, clear and redesign a completely good hedged field system just to establish a new one on a different alignment?

BEDDING TRENCHES

A system of parallel trenches was located on the Land West of Kempston part of the development (*see Interim 3*). They were filled with dark soils containing domestic debris (despite there being no settlement within 300m). It is, therefore, likely that the fills represent the deliberate dumping of compost-type material. Similar trenches from elsewhere have been interpreted as part of vineyards, although fruit hedges is another possibility



One of the Romano-British bedding trenches

BURIALS

Of the handful of burials of this period one was particularly unusual because it comprised a rectangular pit with burnt sides and extensive deposits of cremated human bone and charcoal (*see Interim 4*).

This is a fairly rare *bustum* burial, a type considered to have continental origins. The actual cremation of the deceased took place on a pyre over the pit which is in contrast to the majority of cremations where the body was burnt on a pyre away from the actual grave. After combustion the cremated bone and pyre material falls, or is pushed, back into the pit which is then backfilled.



Rectangular pit under investigation

Two intact vessels were recovered from the burial – a large, locally manufactured jar and a smaller beaker imported from the Nene Valley. Both can be dated to the 4th century indicating when the burial occurred.



Intact pottery vessels within the bustum burial

Nearly a hundred iron nails were found within the pyre debris. They may have been used during the construction of the pyre or have been in wooden planks used as fuel in the pyre.



RITUAL COMPLEX

A small, possible ritual complex was identified. It comprised two square buildings situated within a ditched enclosure. A third, similar building was found within *c*. 5m of these in the adjacent Bovis investigations.



Two possible shrines within a ritual enclosure

No human bone or unusual/"special" artefacts were found. However, similar buildings in the early Romano-British period are often considered to be shrines. It is, therefore, significant that they were located away from all the farmsteads, perhaps suggesting that they served the community rather than an individual family.

NOTE

Although the square building located in the Bovis investigations was interpreted as a shrine, it was believed to be isolated. The recent investigations have now indicated that it was part of a ritual complex. No exact parallels are known in Britain, but the arrangement of buildings within an enclosure is similar to one found at Acy-Romance in France (albeit in association with cremation burials).

EARLY-MIDDLE SAXON

SETTLEMENT

Within a field adjacent to the Romano-British farmstead on the Biddenham Loop a settlement was establish in the early-middle Saxon period.

This comprised 16 sunken-featured buildings (SFBs). The latter comprised a sub-rectangular pit with evidence for posts at either end. They often had single central postholes on the short sides of the sunken area, although other variations were found.



Two-post SFB after 75% hand excavation

For decades the purpose of the sunken "pit-like" area has been debated.
Although it has often been considered to be a small cellar, a recent English Heritage survey has suggested that it is more likely to be a void beneath a suspended timber floor. The void would have created a dry environment for storage above, while allowing the free circulation of air beneath the floor planks.



Six-post SFB after 100% hand excavation

The majority of the SFBs contained large quantities of Saxon pottery, animal bone and other artefacts. The latter include bone combs, spindle whorls and iron pins.



Controlled metal detecting of a Saxon building



DISPERSED BUILDINGS

In addition to the settlement, three isolated sunken-featured buildings, c. 80m apart, were found 1km away on the west side of the Loop. These tended to be larger than those found in the settlement.



One of the dispersed SFBs

Further evidence for activity during this period has been found adjacent to The Bury on Land West of Kempston. Although no buildings were identified, a number of pits containing similar pottery to that within the Biddenham settlement have been found.

NOTE

The discovery of early-middle Saxon settlement and buildings within the Biddenham Loop is one of the most significant results of the investigations. No such evidence was found during the Bovis investigations giving the impression that the Romano-British population had moved to new settlements away from the Biddenham Loop. However, it is unclear if the presence of an early-middle Saxon settlement on the periphery of a Romano-British farmstead represents continuity of population or settlement location.

SAXO-NORMAN

From this period onwards the Biddenham Loop was part of an open field system, as indicated by the presence of furrows, associated with Biddenham village to the north of the development area.

SETTLEMENT PERIPHERY

Evidence for activity on the periphery of a settlement mainly located outside the development area was found on Land West of Kempston. This included small pits, postholes and two crop drying ovens.



Probable Saxo-Norman drying oven

MEDIEVAL

SETTLEMENT PERIPHERY

Again archaeological remains on Land West of Kempston represent peripheral activity for the settlement near The Bury, just outside the development area. There is some evidence to suggest this was one of the manorial settlements within Kempston.



Early medieval pit under excavation with The Bury in the background

POST-MEDIEVAL

SETTLEMENT PERIPHERY

Additional features of this period were found and are again associated with The Bury. A substantial house is known to have existed in the early 16th century. It was completely rebuilt in brick in 1630. It was associated with a bricked garden wall which survives today (see photo above).

TRACKWAY

A cambered gravel trackway with side ditches was located on the Land West of Kempston part of the development.



Although the main track surface is clearly post-medieval in date earlier surfaces have been located and it is possible that the trackway originated in the medieval period.



Post-medieval trackway with The Bury in the background

HONEY HILL FARM

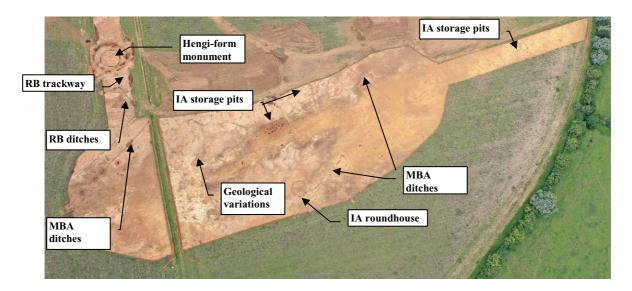
The foundations of a farmhouse on the Biddenham Loop, shown first on maps dated to 1881, were located. A number of large quarry pits were found in the vicinity suggesting both gravel and limestone quarrying.



Foundations of Honey Hill farmhouse

Mike Luke and Ben Barker Albion Archaeology St Mary's Church Bedford MK42 0AS

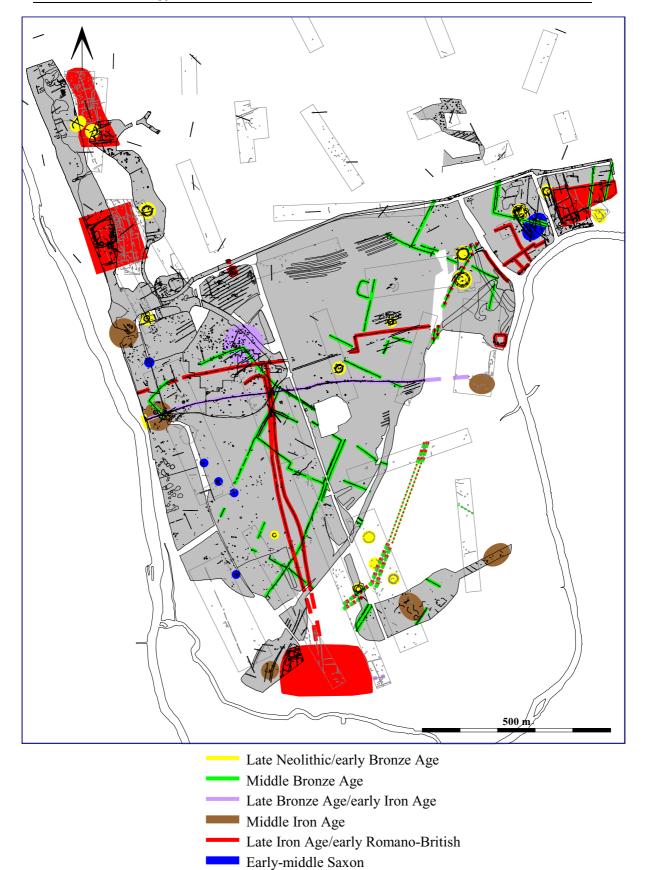
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BIDDENHAM LOOP: Southern balancing pond; the last investigation area KEY: MBA= middle Bronze Age, IA= Iron Age, RB= Romano-British (See below for details of chronological periods)

CHRONOLOGICAL PERIODS USED IN THIS INTERIM These are simply handy shorthand for a specific chronological range.		
Late Neolithic	3,000-2,600 BC	Up to 5,000 years ago
Early Bronze Age	2,600-1,600 BC	Up to 4,600 years ago
Middle/late Bronze Age	1,600-700 BC	Up to 3,600 years ago
Iron Age	700 BC-AD 43	Up to 2,700 years ago
Romano-British	AD 43-410	Up to 2,000 years ago
Early-middle Saxon	AD 410-800	Up to 1,600 years ago
Saxo-Norman	AD 800-1066	Up to 1,200 years ago
Medieval	AD 1066-1500	Up to 1,000 years ago
NOTE. The date rang	ges are approximate and not absolute. They are of	ten disputed between different archaeologists!!





Biddenham Loop: provisional phasing of all investigations including David Wilson Homes, Bedford Western Bypass and Bovis Base map reproduced from the Ordnance Survey Map with the permission of the Controller of Her Majesty's Stationery Office, by Bedfordshire County

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