A Roman settlement at Manton Lane, Bedford: report on the archaeological investigations

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SUMMARY

This report summarises the results so far of an ongoing investigation into a Roman settlement at Manton Lane, Bedford. Evidence indicates that the site contains masonry buildings with painted walls, glazed windows, and at least one room with an underfloor heating system (hypocaust). In addition, the presence of stucco work -a rare type of decorative moulding found at only a small number of Roman sites in Britain - suggests that the site may be of unusually high status. It is hoped that future work will help to determine the layout and extent of the settlement and provide further insight into the status of its inhabitants.

INTRODUCTION

This article summarises all known archaeological investigations undertaken up to the end of 2014 at a Roman settlement that straddles Manton Lane in Bedford (NGR TL 0414 5099). The site lies c. 625m from the River Great Ouse, at one of the closest points above the flood plain. The extent of the site is unknown, but it probably underlies the eastern part of Bedford Modern School and the northern part of Edith Cavell Lower School (Fig. 1).

The site lies at *c*. 48m OD on a south-facing slope which rises to *c*. 60m OD at Manton Heights Care Centre, a promontory that provides a viewpoint overlooking the Great Ouse Valley. The underlying geology is mudstone with some localised sandstone (British Geological Survey South Sheet, 5th Edition, 2007). The drift geology is boulder clay and morainic drift (British Geological Survey South Sheet, 1st Edition Quaternary, 1977).

Medieval ridge and furrow earthworks have been identified around Manton Lane. However, prior to 2010 there was no recorded evidence for other archaeological remains in the immediate vicinity.

SUMMARY OF ARCHAEOLOGICAL INVESTIGATIONS

The various archaeological investigations undertaken at the site are summarised below, with a synthesis of the results in the concluding discussion.

EDITH CAVELL LOWER SCHOOL

During summer 2010, Iron Age and Roman artefacts were discovered during the construction of a disabilityaccess ramp at Edith Cavell Lower School, to the south of Manton Lane. Fortunately, the site foreman, Mike Butcher, recognised the significance of the finds, which led to the involvement of two local Roman historians, Steven Cockings and Elizabeth Sayer. The site was regularly monitored for archaeological remains, and the resulting finds were rescued and recorded.

Pottery and Other Artefacts

The recovery of Neolithic and Bronze Age worked flints shows longstanding human occupation on this spur of land, but the earliest pottery fragments are those of a handmade pot dating to c. 350-100BC. Other examples examined by Anna Slowiskowski included sherds of fine ware imported from the continent, especially Gaul, during the 1st century AD - a La Tene III pedestal urn from the Tiberio-Claudian period (AD14–56), a Gallic terra rubra cup (form 56c, manufactured between AD20 and 65), a North Gaulish white-ware butt beaker (c. AD15-65), and a South Gaulish terra sigillata dish (La Graufesenque fabric, c. AD40-100). Evidence of later occupancy is suggested by a piece of late Mayen ware (lid-seated jar, 'Eifelkeramik' form 27). This coarse pottery was produced in the Eifel region of Germany, including Trier and Mayen, and was the only ware exported to south-east England in any quantity between AD300 and 450 (Tyers 1999, 151-2).

The metalwork recovered includes an iron chisel. X-ray analysis of the internal stress lines suggests that this was for fashioning wood rather than metalworking. A coin of Claudius Gothicus (AD268–270) was also recovered.

Excavation revealed at least one plastered, wattle-anddaub Romano-British structure, with both cornbrash and flagstone floors. A fragment of hypocaust flue tile was also found; although probably translocated, this at least suggests that a Roman underfloor heating system existed within the overall settlement at Manton Lane.

RANC CARE HOMES PIPE TRENCH EASEMENT INVESTIGATIONS

During spring 2011, Steven Cockings and Elizabeth Sayer monitored the digging of a 3m-wide pipe trench to the north of Manton Lane, which was related to the construction of a new care centre c. 200m to the north. Planning permission for this had been granted in November 2009, prior to the discoveries at Edith Cavell Lower School, and the only archaeological condition attached to the permission was for the preservation of ridge and furrow earthworks within the land adjacent to Manton Lane.

Examination of the trench led to the discovery of a masonry wall, with limestone blocks laid in a herringbone pattern, surrounded by Roman pottery and tile. The



Figure 1: Site location

Historic Environment Team (HET) of Bedford Borough Council advised that, if the wall proved to be of Roman origin, these remains could be of regional significance. Accordingly, the HET negotiated a hiatus in the construction schedule with the developer's contractor, Lawrence Baker Ltd, so that an archaeological investigation could be undertaken. Albion Archaeology was then commissioned by Bedford Borough Council to verify the nature and significance of the remains.

Albion Archaeology 2011 investigations

Archaeological excavation was undertaken between 2nd and 6th June 2011 and focussed on two $c. 2m \times 3m$ test pits over the masonry wall, restricted to the width of the trench easement. A report was produced (Albion Archaeology 2013) which is available in Bedford's Historic Environment Record (HER) and online via OASIS (ref. albionar1-102039). The following summary is derived from this report, although some of the original interpretations have changed in the light of subsequent work.

Masonry wall

The wall was exposed on a north-south alignment in both test pits. The majority of the surviving masonry comprised c. 0.8m-wide foundations, constructed in roughly hewn limestone. To the north (Fig. 2: TP 2011a), these consisted of a single pitched course of c.300 mm × 200 mm stones, overlain by a tightly packed horizontal course of $c. 200 \text{mm} \times 100 \text{mm}$ stones. The latter was most clearly visible when the pipe trench was unexpectedly widened (Pl. 1). However, the foundations to the south (Fig. 2: TP 2011b) consisted of two pitched courses of c. $400 \text{mm} \times 300 \text{mm}$ stones, and a third, narrower pitched course c. $300 \text{mm} \times 200 \text{mm}$ (the equivalent of that to the north). All three courses were in herringbone style (Pl. 2), with the upper course inset on the eastern side by 0.1m from the lower courses. The deeper foundations appear to have been constructed where the wall crossed an earlier feature, possibly a large ditch (see below). Above the pitched foundations was a tightly packed course of stones similar to, but not as coherent as, that observed to the north. Resting on this, but surviving in only a few places, was a mortared course of faced, squared stones, associated with a rubble and mortar core.

The wall foundation in the northern test pit had a rectangular arrangement of limestone, $c. 0.3 \times 0.25$ m, added to its western side (Pl. 3). This was clearly secondary as it abutted the wall. It may have functioned as a buttress, although other interpretations are possible,



Figure 2: Simplest interpretation of geophysical survey, and main features within service trench

especially as it was located within the presumed interior of the building.

A layer containing limestone fragments, mortar and some ceramic building material was found on the western side of the wall in both test pits, more visibly in the northern one (Pl. 3). During the investigation it was interpreted as a demolition layer because it occurred at the same height as the upper wall foundations. However, it is conceivable that it was associated with the construction of the wall, or represents make-up material for a floor (especially as no floors were identified, even though they might have been expected to survive below demolition material). Although this layer was not recorded as extending as far as the wall, this was probably due to truncation by a medieval furrow.

As is often the case with masonry walls, no securely associated datable artefacts were found within it, the one possible exception being a single sherd of Roman pottery from cleaning of the wall foundations. However, the style of construction and the predominance of Roman artefacts in the adjacent deposits are both indicative of a Roman date. Given the substantial nature of its foundations, and



Plate 1: Shallow wall foundations visible when the pipe trench was widened, looking west (1m scale)



Plate 2: The wall and its deep foundations within TP 2011b, looking west (1m scale)

the adjacent construction/make-up layer, it is likely to have been part of a building rather than a boundary wall. The investigation demonstrated that most of the squared stone courses above the foundations had been robbed, although it is unknown when this took place.

Ditch

Although the large possible ditch below the wall was not the focus of the investigation, and was not examined in detail, it appeared to be over 2m wide and 1m deep. Its upper fills contained Roman pottery sherds, including a fragment of an Oxfordshire red-slipped-ware mortarium (found subsequently to Albion Archaeology's investigation). There was also window glass and a number of stone roof tiles, at least one complete with its nail hole intact.

Other features

Two undated narrow gullies were identified within the sides of the easement trench to the north of the wall. They were parallel, c. 1.4m apart and on a north-east to southwest alignment. They were speculatively interpreted as wheel ruts.



Plate 3: The wall with possible buttress (to left) and rubble layer (to right) within TP 2011a, looking south (1m scale)

Possibly of more significance is another gully, c. 2m to the north. It was c. 1m wide and 0.4m deep, with a concave profile, and its east–west alignment meant that it was perpendicular to the wall. It may have been associated with the return of the wall, although, as recorded, it did not have the characteristics of a wall foundation or a robber trench. All three gullies were filled with deposits that yielded mortar and limestone fragments.

Immediately north of the east–west gully was a large undated feature which was interpreted as a clay quarry. It appeared to be c. 10m wide, and its upper fills contained limestone fragments and mortar.

A variety of Roman building material was recovered from these features, including roof and flue tile, wall plaster (some with red paint) and mortar. A possible piece of tufa has subsequently been identified. The Roman pottery comprises mainly local wares (predominantly Harrold-type shell-tempered ware), but with some regional imports from the Nene Valley, Hertfordshire and Oxfordshire. Small quantities of post-Roman finds were also recovered.

CONTINUED OBSERVATION

Prior to its demolition by developers, Steven Cockings and Elizabeth Sayer organised the excavation of the remainder of the wall within the pipe trench. This section was c. 9m in length and appeared to extend in both directions outside the easement.

Also recorded within the side of the trench, c. 27.5m from Manton Lane and at a depth of 1.25m, was a yellow mortared surface at least 0.3m thick, although its full extent could not be investigated with the resources available. A continuous metalled surface of small flat stones appeared to be set into this. The surface terminated c. 30m from Manton Lane, where a series of limestone blocks with the appearance of a wall, again around 0.8m wide

and arranged in a herringbone pattern, ran east-west. A single piece of unabraided painted wall plaster, coloured terracotta with a maroon stripe, was recovered from this part of the trench.

Further deposits related to the trench

Continued monitoring of the pipe trench recovered additional quantities of charcoal, pottery, roof and flue tile, mortar, and a quern fragment of Niedermendig lava imported from the Eifel Region of Germany, similar to that found on the other side of Bedford at Newnham (Ingham *et al.* 2016, 64). Several sherds of mortaria were present, some with grits still intact; these include fragments of both Oxfordshire white ware and red-slipped ware. Other finds include a variety of animal bones, Roman window glass, lead slag, possible bronze furniture fittings, and five Roman coins dating from the 260s to 370s AD.

Numerous fragments of Roman pots were recovered, the most complete being a Nene Valley colour-coated beaker (form 57, cf. Howe *et al.* 1980), most likely dating to the mid-3rd century. This was found at a depth of 1.8m, alongside a deposit of waterlogged wood and beneath some flat limestone slabs c. 21.5m from Manton Lane. The wood, which included a semi-circular split log, may have been part of a drainage system to help cope with the spring water that inundated this part of the trench, or it was perhaps a reinforcing pile sunk into the waterlogged earth to enable the construction of a masonry feature above it.

Also found were numerous pieces of ironwork, including nails of various sizes. Three were found embedded in fragments of carbonised wood, one beneath a Roman roof tile. This was charred underneath, perhaps indicating that part of the complex may have been damaged by fire.

Other significant discoveries were isolated *pilae*. Subsequently, a section of possibly *in-situ* contiguous horizontal Roman *bipedales* (2ft square Roman tiles, 2 inches thick) was found at a depth of 1.5m, c. 20m north of Manton Lane. This location coincides with the area initially interpreted as a possible quarry. These tiles can be used to form the floor of a room such as a plunge pool in a bath house, though too little was revealed of them to confirm their function here. One of the *bipdales* has the imprint of a child's studded sandal with the exaggerated, wide fore-section common to men's and boys' shoes of the mid-3rd century, but which ceased to be popular around AD300 (Goldman 2001).

Stucco work and multicoloured painted wall plaster

A particularly significant find was stucco work. Such plaster decoration is rarely found in Roman Britain, and the recovered pieces have been identified by Roger Ling as free-style bas relief stucco work. They were retrieved from a deposit of painted wall plaster in the side of the pipe trench, c. 15m north of Manton Lane. As observed, this deposit was c. 1m wide and c. 0.1–0.2m thick, and rested on the natural geology just south of the possible quarry. This feature may have been produced by the deliberate stripping in antiquity of the decorative features of a building prior to the reuse of its stone.

Over 110 fragments of multicoloured painted plaster, consisting of stripes and other patterns, were excavated from a small section of this deposit, the largest being $90\text{mm} \times 50\text{mm}$. There were at least thirteen colours, including black, blue, cream, green, grey (dark and light), lilac, mauve, orange, pink, red, terracotta, and yellow. The blue has been identified as azurite (Pieta Greaves pers. comm.). This multicoloured paint work, as well as the stucco, was applied to a second layer of plaster covering an earlier layer with a plain white decorative scheme, which may suggest at least one phase of embellishment. More than sixty fragments of plain white painted plaster were also recovered from the same deposit.

Nearly seventy fragments of white painted interior and exterior wall plaster were discovered in the easement trench to the north of this deposit, the largest being 70mm \times 40mm. This included fine pinkish plaster with hydraulic properties (Ling 2006, 199), which may suggest that part of the structure was waterproofed.

GEOPHSICAL SURVEYS

Several geophysical surveys, both magnetic gradiometry and earth resistance, were undertaken to the east of the trench easement. These were carried out by a range of individuals and organisations (listed in the acknowledgments).

The first survey identified anomalies interpreted as possibly representing a modestly sized Roman villa (Martin 2011), although the layout of the walls was ambiguous. In an attempt to clarify the situation, a second survey was undertaken early in 2012. This identified a series of rectilinear high-resistance anomalies in the central part of the area, which were interpreted as wall remains (Stratascan 2012). However, the precise layout of any actual building was again difficult to determine, in part because of the strong responses given by furrows. Stratascan therefore carried out a further survey in October 2012. The earth resistance data were collected at a greater frequency and the examined area was extended to the north, but the results were again unclear. Possible wall lines were identified, together with a large rectangular area of high resistance which was interpreted as probable building debris (Stratascan 2013). In addition, a large low-resistance anomaly with rounded edges was located to the northwest, while on the eastern edge of the survey area was another section of high-resistance anomalies (Fig. 2).

In summary, the results of the various geophysical surveys have proved somewhat ambiguous and have not provided a consistent and clear layout of any buildings. Therefore, the plan shown in Figure 2 is a simplified and very much conjectural layout, based on the combined results of the geophysical surveys. It suggests a $c. 38m \times 12m$ building of at least four rooms, with a possible entrance porch / room to the south.

Test pitting 2013

To investigate the Roman remains/deposits further, and to check the results of the geophysical surveys, a number of test pits were opened, the recovered soil all being finesieved. These were directed by Mike Luke and undertaken primarily by volunteers (overseen by staff from Albion Archaeology), with overall arrangements organised by Steven Cockings and Elizabeth Sayer.

Resources permitted the excavation of three $2m \times 2m$ test pits (TP) in and around the postulated 'building', between 17th and 26th August 2013 (Fig. 2; Pl. 4). Their precise position was adjusted in the field on the basis of high-resistance readings identified by members of the Leighton Buzzard and District Archaeological and Historical Society on the day they were opened. The HET had expressed concerns about possible damage to the ridge and furrow earthworks, so only TP1 was dug over a ridge: the others were within furrows.

The sequence of medieval to modern deposits within each test pit proved similar. Below the turf and modern topsoil was a layer interpreted as soil build-up associated with medieval/post-medieval ploughing. It was thickest in TP 1 and shallower in TPs 2 and 3. Sealed below this ploughsoil, Roman features/deposits were identified in all three test pits. The results are summarised in Table 1.

Archaeological features

No walls or obvious internal floors of a Roman building were located. However, the nature of the mortar



Plate 4: General view looking north with TP 2 in foreground and work being undertaken around TP3 in background

| Test pit | 1 | 2 | 3 |
|--------------------------------------|---|------------------------------|--|
| Min. depth to Roman deposits | 0.45m | 0.25m | 0.27m |
| Roman features/ deposits | The north side of a large pit was partially visible. Its base was c. 1.1m below ground level. | Compact gravel surface | Mortar layer (presumed to have derived from a nearby masonry wall) |
| Min. depth to probable geology | 0.7m | 0.65m | 0.5m |

Table 1: Summary of the results within the 2013 test pits

layer within TP 3 strongly suggests that it derived from a nearby masonry wall, and was perhaps deposited during the robbing of building stone (Pl. 5). It increased in thickness to the north, in the direction of a possible wall identified by the geophysical surveys (Fig. 2). A compact gravel surface in TP 2 sloped down slightly to the south, suggesting that it probably represents an external 'yard' surface rather than the internal floor that might have been expected, given its position within the postulated 'building'.



Plate 5: Mortar layer within TP 3, looking north (1m scale)



Plate 6: Pit or terrace within TP 1, looking north (1m scale)

The pit within TP 1 (Pl. 6) may have been part of the feature seen in the pipe trench that was originally interpreted as a clay quarry. However, it may equally have been part of a terrace that had been cut into the hillside: the base of the pit was strikingly level and did not stop at any visible change in geology, as would have been expected with a quarry.

Finds

The finds assemblage from the test pits has been catalogued, but has not yet been studied in detail. However, suitable items have been x-rayed and undergone x-ray fluorescence analysis (XRF). The following is a provisional summary.

Pre-Roman finds comprise worked Neolithic and Bronze Age flint flakes and a small quantity of pottery of predominantly late Iron Age date (c.50BC-AD50). However, fragments of early Iron Age vessels (c.600-400BC) were also identified.

The Roman pottery assemblage contains 2nd-century continental fine wares, including Central Gaulish samian (standard Lezoux fabric *c*. AD100–200) and fine decorated Trier black-slipped ware ('Moselkeramik', *c*. AD180–250). Later Roman regional imports are 3rd- to 4th-century colour-coated wares from the Nene Valley and Oxfordshire, the most complete being a Nene Valley colour-coated flanged bowl (form 79) of a type produced in the 4th century AD.

A lead patch for a pottery vessel was also found. Prized samian vessels that had been broken were often carefully riveted together, especially when the import of pottery from Central Gaul declined during this period. A probable workshop for the repair of such pottery was operating in the latter half of the 2nd century at Kempston Church End (Wild 2013, 271), only 4km away.

Building material comprises ceramic roof tile (*tegulae* and *imbrices*) and combed flue tile, possible *tesserae*, mortar fragments, limestone roof/floor tiles, and a piece of wall plaster. Other objects from the Roman period include a copper alloy coin (AE4) of the Emperor Constans (Trier mint, AD347–348), a copper alloy earring, and part of a late 3rd- to 4th-century conical beaker in clear colourless glass. Ferrous smelting slag was also recovered, including fayalite (Pieta Greaves pers. comm.), the most common mineral in ancient ironworking, while pieces of fuel ash slag and a small quantity of coal and clinker were also identified. Fragments of oyster shell and animal bone associated with datable Roman artefacts are considered to be of a similar date.

The site is believed to have reverted to agriculture in the post-Roman period, and certainly by medieval times, based on the presence of ridge and furrow earthworks. The masonry remains may have been robbed for building stone in the Saxon period: eleven sherds of early–middle Saxon pottery were recovered, and the remains are unlikely still to have been standing when the site was ploughed.

PRELIMINARY OBSERVATIONS FROM THE 2014 INVESTIGATIONS

Bedford Modern School

In May 2014, the first geophysical survey to be carried out west of the easement trench revealed a highresistance anomaly in the grounds of Bedford Modern School. This is adjacent to the masonry debris found in the area of the possible quarry, in association with what may have been *in-situ* subfloor tiles.

In June 2014, the school's Archaeological Society excavated a $2m \times 2m$ test pit some 35m to the west of the easement trench. These produced a substantial amount of Roman pottery as well as other finds, further extending the known debris scatter (Croker 2015). Additional test pits were excavated in 2015, but the results of those were not revealed in time to be incorporated within this report.

Manton Lane field

Between 2nd and 10th August 2014, the same team as in 2013 excavated Test Pits 4 to 10. These were mainly $2m \times 2m$, though TP 4 was enlarged to $4m \times 4m$ when it was found to contain a substantial Roman surface, possibly a stone courtyard. Four Roman coins , the latest dating to AD402, suggest occupancy up to the very end of the Roman period. Roman pottery, roof tiles, animal bones and two hobnails were also recovered, with four more hobnails found in TP 5. Beneath this yard was a robbed-out wall trench with a rough north-west to southeast alignment, which appears to have been demolished during the Roman period to make way for the later metalled surface.

In TPs 6, 7 and 9 in the eastern part of the site, excavation revealed that the high-resistivity geophysical survey readings appeared to be natural clay deposits rather than archaeological remains, although TP 8 contained a slightly curving ditch. This was about 0.5m wide and deep, and contained a single piece of Roman pottery. Excavation of TP 10 suggests that the low-resistance area upslope to the north was created by spring water that permeated the topsoil as it spread out across the surface of the clay, and is not the result of a manmade structure.

A potentially significant find was a piece of irregularly shaped bronze weighing 205g recovered during the investigation of TP 5. Examination has suggested that this is composed of molten coins, including sesterces - it may have been a bag of coins that was accidentally melted in the intensity of a fire, or they may have been deliberately formed into a crude ingot prior to their reuse in the manufacture of other bronze objects (Sam Moorhead pers. comm.). If the latter, this would suggest that recycling took place after the sestertius ceased to be legal tender in the 260s AD. This is consistent with the results of XRF analysis at the University of Manchester, which suggests that it has a similar chemical composition to mid-3rdcentury sestertii. Surviving finds of molten coins and their formation into ingots are rare in Roman Britain, although a possible comparator may be Bays Meadow, Droitwich (Alex Smith pers. comm.).

DISCUSSION

The present level of information about the Roman site at Manton Lane provides a broad impression of its nature and possible status. On current evidence, the initial focus of activity may have been concentrated to the south of Manton Lane within the Edith Cavell Lower School. The presence of fine wares from the continent could indicate a high-status early settlement, as such imports are uncommon on rural sites in Bedfordshire in the 1st century AD. Finds from north of Manton Lane are predominately late Roman, however, which could suggest a transfer of the centre of occupation slightly higher upslope. NATURE OF THE BUILDINGS AND OTHER SIGNIFICANT FEATURES

The site is thought to have contained at least three masonry walls: the one seen within the trench easement adjacent to Manton Lane; one further up the trench at c. 30m from Manton Lane (associated with a metalled floor); and the one suggested by the mortar layer in TP 3. Unfortunately, it has not been possible to determine the layout of any buildings within the site, although if the geophysical surveys are to be believed, these walls may be on slightly different alignments.

The use of stone walls for buildings is rare within Roman settlements in the Bedford area, as most had wattle and daub structures. They have only been seen locally at Kempston Church End (Dawson 2004, 53–3; Luke forthcoming) and at Newnham, on the eastern edge of Bedford (Ingham *et al.* 2016), where they were accompanied by quantities of ceramic roof tiles (Wells 2004, 504–7; Slowikowski 2016). Several types of clay and stone tiles have been found at Manton Lane, suggesting either multiple roofs or episodes of rebuilding.

Painted plaster and window glass

The presence of window glass and multicoloured and patterned painted plaster at Manton Lane indicates that some rooms were highly decorated and had glazed windows. Painted plaster and window glass have also been found within the Kempston Church End settlement (Wells *et al.* 2004, 371–2) and at Newnham (Bayley *et al.* 2016; Cool 2016). The painted plaster at Manton Lane exhibits a wide range of colours, the most lavish being blue azurite.

The glass found at Manton Lane is from at least two window panes , and has been identified as a type which, in Britain, is primarily associated with a few high-status residences of the mid- to late-4th century (Jennifer Price pers. comm.). Initial chemical analysis suggests that it is High Iron, Magnesium and Titanium (HIMT) glass, whose strontium and lead isotope composition represents a single source from Egypt, which was introduced around AD330.

Hypocaust

There is evidence at Manton Lane, in the form of box flue fragments and *pila* tiles, to indicate the presence of at least one hypocaust. Possibly *in-situ bipedales* were also found — this type of floor tile is known to have been used in buildings such as bath houses, although the ones at Manton Lane were only examined during salvage conditions within a feature previously interpreted as a quarry. The recovery at Manton Lane of fine pinkish plaster with hydraulic properties may additionally suggest that there was a water management system. A bath house is known to have existed at the Newnham settlement (Ingham *et al.* 2016), and it is likely that there was also one at Kempston Church End, although at present there is only sufficient evidence to suggest the presence of rooms with hypocausts (Wells 2004, 508).

Stucco work

The presence of stucco work marks out Manton Lane as one of only five Roman sites in Britain where such material has been found (Roger Ling pers. comm.), although its rarity may in part be due to its delicate nature, which militates against its survival in the archaeological record. These sites include Fishbourne Roman palace (Cunliffe 1971, 142), which, along with St. Albans and Colchester, yielded only architectural mouldings.

The presence of stucco 'indicates a lavish dwelling, perhaps superior to most nearby town houses' (Neal 1990, 46). Neal comments (1990, 172) that 'free-style' stucco is only known elsewhere from the villa at Gorhambury, with the other examples forming part of repeating, moulded patterns. The free-style stucco work from Manton Lane is in fine bas relief decorative style, rather than mimicking marble human statuary, as at Gorhambury. The Manton Lane example seems to have been freely modelled by hand and to form part of a vegetal or similar motif, and is an example of hand-modelled stucco relief of a type that was fashionable in Italy from the late 1st century BC to the early 3rd century AD. Such stucco relief is extremely rare outside Italy, with only two or three sets of fragments known from elsewhere in the north-western provinces (Roger Ling pers. comm.).

Stucco is particularly suitable for decorating the internal surfaces of vaults, especially in bath houses. While the surface of the Manton Lane material has been painted white using lead carbonate, the underlying fabric is pink, suggesting the inclusion of crushed terracotta to enhance its hydraulic properties (Roger Ling pers. comm).

Tesserae

Notwithstanding the evidence for substantial walls, roofs, and internal embellishment, only two possible *tesserae* have been found on the Edith Cavell portion of the site, although several more candidates have been identified north of Manton Lane. This is in common with most other Roman sites in the county: no such material has been recovered from Kempston Church End; only one possible *tessera* was found at Newnham (Ingham *et al.* 2016, 32); and just a small number were recovered from the possible villa at Colworth (Wessex Archaeology 2009) and from the aisled building at Shefford (Luke *et al.* 2010, 331). Only Totternhoe in the south of the county has produced substantial tessellated floors (Matthews *et al.* 1992, 53–5).

Ditch

Of the other archaeological features seen at Manton Lane, the most significant may be the large ditch underlying the masonry wall in the trench easement. It is possible that this represents the northern boundary of the late Iron Age settlement found within Edith Cavell Lower School, with expansion of the Roman settlement leading to the construction of a masonry building over part of its original course.

STATUS

It is never easy to determine the precise 'status' of Roman settlements on the basis of limited excavation evidence. Only a small area has been examined at Manton Lane, yet this has yielded high-status archaeological embellishments in the form of stucco work, probable late Roman HIMT window glass, and multicoloured wall plaster.

Current evidence suggests that Roman villas are largely absent from Bedfordshire (Ingham *et al.* 2016, 65–6). The only one whose presence has been confirmed through extensive excavation is at Totternhoe (Matthews *et al.* 1992), *c.* 30km to the south, although another one is suggested at Colworth, *c.* 11km to the

north (Wessex Archaeology 2009). This contrasts with Northamptonshire and the Milton Keynes area, which have numerous examples (Meade 2010). There are, however, abundant Roman rural farmsteads surrounding Bedford (*e.g.* Luke *et al.* 2008; Timby *et al.* 2007).

It therefore seems clear that the Manton Lane settlement had a higher status than that of most of its contemporaries in the surrounding area — its form appears to have more in common with that of the nearby settlements at Newham (Ingham *et al.* 2016) and Kempston Church End (Dawson 2004, 38–63; Luke 2016, 208–41). However, it is now recognised that the mere presence of masonry walls and hypocausts does not necessarily indicate the presence of a villa, *i.e.* a complex of highly 'Romanised' buildings where the owners of large and wealthy agricultural estates lived. For example, the bath house and other building at Newnham (Ingham *et al.* 2016) and the aisled building at Shefford (Luke *et al.* 2010) are believed to have been associated with estate centres rather than villas.

It is certainly possible that Manton Lane represents a villa, or some other type of high-status establishment like an estate centre. Its high status is particularly suggested by the presence of stucco, which is rarely found in Roman Britain, and whose quality of workmanship is especially good (Roger Ling pers. comm.). It is hoped that future work will help further our understanding of the extent, layout, and function of the complex of Roman buildings at Manton Lane, as well as the status of its inhabitants, and their role within the local and wider Romano-British community.

ACKNOWLEDGMENTS

The initial debt of thanks is to Mike Butcher who, as foreman of building works at Edith Cavell Lower School, first identified and reported the presence of Iron Age and Roman artefacts. Appreciation is also expressed to both Edith Cavell Lower School and Bedford Modern School for permitting the surveying of their grounds, and for allowing excavation work to be carried out.

Without the cooperation of Ranc Care Homes (the landowner for part of the site) it would not have been possible to undertake the geophysical surveys and test pitting of Manton Lane field. The assistance of their financial director, Nik Hingston, is particularly acknowledged, not least because he participated in the excavations. It is also important to acknowledge the co-operation of their developers, Lawrence Baker Ltd, and their sub-contractors.

The Albion Archaeology investigations of 2011 were managed by Jeremy Oetgen and supervised by James Newboult, assisted by Ian Turner, Slawomir Utrata, and Adrian Woolmer. Finds were processed and identified by Jackie Wells, assisted by Holly Duncan.

The first geophysical survey, in May 2011, was undertaken by Professor W.E. Martin of the University of Hertfordshire, with the support of members of the Upper Nene Archaeological Society and volunteers from the Colchester Roman Society. A subsequent magnetometer survey was undertaken in August 2011 by Dr Kris Lockyear of the Institute of Archaeology at University College London. Steven Cockings commissioned further surveys in 2012 by Stratascan, which were carried out by Richard Fleming, Glenn Rose and Alex Pilditch (February 2012) and by Thomas Desalle and Ellen Shaw (October 2012). Additional geophysical surveys have since been performed by members of the Leighton Buzzard & District Archaeological & Historical Society, led by Bernard Jones and processed by Richard Greaves.

The support and encouragement of Bedford Borough Councillors Colleen Atkins and Louise King is also gratefully acknowledged, especially their help in securing funding towards surveys undertaken by commercial geophysical contractors, and for the cataloguing of finds. Other support has been provided by the Bedford Architectural, Archaeological and Local History Society and the Manshead Archaeological Society, in addition to Heather Baily, Peter Budek, Richard Fuller MP, Patrick Hall, Mayor Dave Hodgson, Councillor Doug McMurdo, and Bryan Scott.

The 2013 test pitting was co-ordinated by Steven Cockings, with archaeological direction given by Mike Luke and administrative support by Elizabeth Sayer. As a community project, it was mainly undertaken by volunteers from the Bedford area, although many came from further afield.

The authors would particularly like to acknowledge the practical and technical support provided free of charge by Albion Archaeology. They supplied at least one professional archaeologist every day during fieldwork, with others helping out in their own time.

The test pits were excavated by Charles Baily, James Biggs, Isabelle Biggs, Simon Binns, Marion Boardman, Mike Butcher, Philippa Callcut, Steven Cockings, Michael Croker, Oliver Croker, Katie Dalmon, Archie Gillespie, Pauline Hey, Chris Hilliard, Nik Hingston, Carol Hingston, Andrew Johnson, Bernard Jones, Louise King, Harry King, Ed King, Jeff Langdon, Helen Leicester, Judy Meade, James Reah, Bob Ricketts, Elizabeth Sayer, Thomas Warner, Jenny Wright and members of Bedford Modern School Archaeological Society. Samuel Cockings undertook filming during the fieldwork.

Professional archaeologists who attended included: Ben Carroll, Hester Cooper-Reade, Gary Edmondson, David Ingham, Marcin Koziminski, Joan Lightning, Helen Parslow, Mark Phillips, Kathy Pilkinton, Slawomir Utrata, (all Albion Archaeology), Susannah Oliver (The Higgins, Bedford) and Julian Watters (Portable Antiquities Scheme).

The washing of finds on site was co-ordinated by Helen Leicester. They were subsequently catalogued and bagged by Jackie Wells and Holly Duncan (Albion Archaeology).

Further diagnostic input was provided by Professor Stuart Campbell (University of Manchester), Roy and Liz Friendship-Taylor (Upper Nene Archaeological Society), Lee Joyce (West Essex Archaeology Group), Professor Roger Ling (University of Manchester), Dr Sam Moorhead (British Museum), Professor Jennifer Price (University of Durham), Dr Alex Smith (University of Reading), Dr Isobel Thompson (Hertfordshire HER), Simon West (Verulamium Museum) and Dr Sally Worrell (Portable Antiquities Scheme).

Special thanks are also given to Pieta Greaves and the Birmingham Museums Trust for their generous xrf-ing of the painted wall plaster and xrf-ing and x-raying of the metal finds. Funding for the production of this article has been provided by Albion Archaeology, Bedford Borough Council, Bedfordshire Archaeological Council and Charles Wells Brewery Ltd.

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