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PASTON RESERVE,
PETERBOROUGH,
CAMBRIDGESHIRE
Archaeological Investigations 1996-7
POST-EXCAVATION
ASSESSMENT AND RESEARCH
DESIGN

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POST-EXCAVATION ASSESSMENT AND RESEARCH DESIGN

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PASTON RESERVE, PETERBOROUGII, CAMBRIDGESHIRE

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SUMMARY

A north-south ditched field boundary, the earliest feature identified, was reused in the definition of a number of small rectangular enclosures. These lay to the south of an east-west running ditch which continued beyond the limits of excavation. Associated with the enclosures was a small number of post-holes and pits and considerable quantities of pottery and building materials, the latter including hypocaust tiles. One piece of painted wall plaster was also recovered. The artefactual evidence could be dated to the later 2nd century, the evidence suggesting that the enclosures were associated with a nearby settlement or farmstead. Subsequently, some of the enclosure ditches were recut, a stone spread was laid out and pits were excavated, the evidence datable by pottery to the 3rd and early 4th century. Further work is recommended to bring the fieldwork to publication.

1: INTRODUCTION

1.1: Background to the project

The focus of the investigations reported here was an area of 46.8ha located at Paston, Peterborough, Cambridgeshire (Fig. 1A-B). The site lies to the north of Paston Parkway, and south of the Car Dyke, a Romano-British waterway (Cambridgeshire Scheduled Ancient Monument No 219). A desk-based assessment of secondary archaeological and historical sources (Rosenberg 1996) was followed by sample geophysical survey (GSB 1996). A preliminary evaluation of the site was undertaken in 1996 by the Cotswold Archaeological Trust (Thomas and Wilkinson 1997, figs. 1-2). Further evaluation trenching was undertaken by BUFAU in October 1997 and was immediately followed by an area excavation. Fieldwork by CAT also involved the excavation of twelve trial trenches, and a bore-hole survey along the line of the Car Dyke. One of the trenches adjoining the Car Dyke may have identified the cut for the dyke. The bore-hole survey identified rich assemblages of plant macro-remains, overlying earlier inorganic sediments (Thomas and Wilkinson 1997)

The work reported here was commissioned by John Samuels Archaeological Consultants on behalf of Manor Estates (Sibson) Limited, in accordance with the guidelines set down in Planning Policy Guidance Note 16 (Department of the Environment, November 1990).

1.2: Aims

The aims of the 1997 evaluation and excavation were as follows:

- 1) to define the extent and possible boundaries of the Romano-British settlement.
- 2) to define the type of the settlement represented, with regard to its position within the social hierarchy.
- 3) to consider the evidence for the possible association of the site with the nearby Car Dyke, and to provide data for comparison with other excavated settlements similarly located in the vicinity.
- 4) to elucidate the settlement origins, and to attempt to identify evidence for continued activity into the sub-Romano-British period.
- 5) to investigate the morphology of the settlement, and its development.

1.3: Methodology

The 1997 excavation examined an area measuring approximately 5,500 square metres which had been previously trenched by CAT, The first stage of the 1997 fieldwork comprised the excavation of a total of six trial-trenches (A-F), each measuring 40m by 1.6m, set out in relation to the CAT trench in an attempt to define the extent of the settlement remains. The topsoil overburden in each trench was removed by machine under archaeological supervision. The exposed subsoil horizon was cleaned, and a sample of the archaeological, or possibly archaeological, features was hand-excavated.

The results of trial trenching warranted an area excavation, the strategy for which was defined in discussions involving John Samuels Archaeological Consultants, BUFAU and the County Archaeology Office.

The area selected for further investigation was stripped of topsoil by a tracked excavator, using a toothless ditching bucket, working under archaeological supervision. The subsoil surface exposed by machining was hand-cleaned and the archaeological features exposed were planned using a total station EDM. The plan provided the basis for the definition of the excavation strategy, following the aims set down in Section 1.2 above. It was decided that the sampling of features by hand-excavation should amount to >50% of pits and post-holes and >25% of the linear features associated with the enclosures. Linear features not associated with the enclosures were to be investigated to a sufficient extent to define their form, function, date, and to determine the stratigraphic sequence.

Recording was by means of pre-printed pro-formas for contexts and features, plans (at 1:50 and 1:100), sections (1:50 and 1:20), and monochrome print and colour slide photography. Soil samples of 20 litres in volume were collected for general biological analysis from a range of datable features. Subject to the permission of the landowner, it is intended to deposit the paper and finds archive in an archive store approved by the Archaeological Adviser to the Local Planning Authority.

1.4: Acknowledgements

The project was sponsored by Manor Estates (Sibson) Limited, through John Samuels Archaeological Consultants. The BUFAU evaluation and excavation was supervised by Gary Coates, with the assistance of Georgina Holt, Catherine Kidd, Simona Losi, John Hovey, and Roy Krackowicz. The project was monitored by Nansi Rosenberg for John Samuels Archaeological Consultants, and by Louise Austin for Cambridgeshire County Council. This report was edited by Peter Ellis, and the illustrations were drawn by Nigel Dodds.

2: RESULTS

2.1: Phasing

The results of excavation could be placed into two phases of Romano-British activity on the basis of the date of the pottery and the principles of archaeological stratigraphy.

Phase 1: Late 2nd to early-3rd century. Phase 2: Late 3rd to mid-4th century.

2.2: Phase 1 (late-2nd to early-3rd century)

The excavated features had been dug into the subsoil (1000). The earliest feature was a north-south aligned ditch (F124) recorded for a length of approximately 40m. It was U-shaped in profile, and measured 0.6m in width and 0.4m in depth. Ditch F124 was cut by an east-west running ditch (F100) which continued beyond the excavation limits in both directions. A parallel ditch (F123) cut the northern terminal of F124.

To the south of F100 at least three rectangular enclosures were defined by ditches F109, F115 (a recutting of ditch F124), F112 and F103, and to the south by ditch F113.

Ditch F100, forming the northern side of the enclosure, varied in profile and depth. In the east of the excavated area the ditch was U-shaped in profile, measuring between 1.7m to 2m in width, and with a maximum depth of 0.5m. In the west of the excavated area the ditch had a more steeply-cut profile, measuring between 0.9m and 1.9m in width, and a maximum of 0.5m in depth.

Ditch F113 was U-shaped in profile with gently sloping sides, measuring between 0.2m and 0.6m in depth, and tapering in width between 2.2m in the west of the excavated area and 0.7m in the extreme east. At its west end F113 formed a corner with ditch F109. A slighter ditch (F110), measuring 0.6m in width and only 0.15m in depth, continued the line of F113 westward. F110 was cut by F109. F113 may have been interrupted by a possible entry gap, measuring 6m in width. The eastern end of the ditch was not traceable within the excavation and may have been truncated by the

plough. A recut of ditch F100 was recorded. This cut the silting of ditches F109, F115, F112 and F103.

Ditch F109 measured between 0.6m to 0.8m in width, and between 0.17m to 0.25m in depth. Ditch F112 was U-shaped in profile, and measured between 0.07 and 0.38m in depth, and a maximum of 2m in width. The narrowing at its southern end suggests truncation by the plough, although an entry gap is possible. Ditch F104 measured 0.6m in width and 0.15m in depth. Its eastern side had been recut by ditch F103 which measured 1m in width and 0.1m in depth. The southern terminals of ditches F103 and F104 were cut by a pit (F107) which measured 1.4m in diameter and a maximum of 0.4m in depth. Ditch F123 to the north had a gently-sloping profile and a rounded base. It measured a maximum of 1.7m in width and 0.44m in depth.

Probably contemporary features were recorded within the enclosures. The westernmost was a pit (F127), measuring a maximum of 0.95m in width and 0.2m in depth. In the centre of the excavated part of the enclosure were several amorphous areas containing a dark brown/grey silty clay deposit (1047) that varied in depth between 0.1 and 0.2m and overlay the subsoil. In the north of this area two pits (F128 and F129) and a 3.5m long linear feature (F130) were excavated (within the CAT trench). To the south was a keyhole-shaped feature (F111), possibly an oven, measuring a maximum of 1.2m in length and 0.6m in width. Further to the east was a slightly curvilinear ditch (F106), recorded for a length of approximately 13m running parallel to the eastern end of F113. It was U-shaped in profile, and measured 0.5m in width and between 0.15m to 0.25m in depth. Two pits or natural hollows (F131 and F132) contained no artefacts. F131 was cut by ditch F100.

Other features comprised three stone-packed post-holes (F119-F121), and a circular pit (F122) in the southwestern corner of the excavated area. The three post-holes may have formed an east-west alignment. The post-holes averaged 0.4m in diameter and between 0.1 and 0.2m in depth. The pit was circular in plan, measuring 2.8m in diameter and a maximum of 0.75m in depth. A further pit (F125), to the north, contained large quantities of pottery. Pit F139, located in the south-east corner of the excavated area, may also belong to Phase 1.

Ditches F123 and F100 were filled with deposits of silty clay and ditch F113 with clayey-silt. Ditches F109, F112 and F103/4 were filled with deposits of sandy or silty clay.

2.3: Phase 2 (late-3rd to early-4th century)

In Phase 2 the northern ditch (F100) was recut (F141), over the entire length of the earlier feature. The recut was V-shaped in profile, and measured between 0.23 and 0.30m in depth. The eastern excavated part of this recut ditch had been further recut.

Ditch F113 had also been recut between ditches F124 and F112. This recut measured a maximum of 0.23m in depth. F112 had also been recut (F143), with a profile varying between U-shape and V-shape, and measuring between 0.2m to 0.3m in depth.

A large oval pit (F102), measuring approximately 8m by 6m in plan, was dug to a maximum depth of 1.4m. A group of five circular pits (F134-138) was located to the north of F141, the recut of F100. A stone spread (F114, F116, F117 & F126) was located in the southeastern corner of the excavated area. This spread, measuring 8m east-west, consisted of angular rubble measuring from 0.05-0.2m in diameter, set within a matrix of grey-black silty clay.

Recut ditches F141 and F145 were filled with dark grey silty clay, flecked with charcoal. Pit F102 was filled with a layer of green-yellow silty clay, sealed by a dark brown-grey silty clay.

2.4: Discussion

The recovery of six flint flakes from the excavation suggests a low level of early prehistoric activity.

The terminal of the earliest feature, ditch F124, appeared to be respected by the later enclosure ditches. The enclosures were the main Phase 1 features identified. They appear to have been laid out in one operation, with subsequent recuttings of the castwest ditches masking the evidence. Ditch F110 appeared to be an addition, suggesting a further enclosure or enclosures to the west. The eastern enclosure defined within the excavation lacked evidence for a south-east corner. This may have been removed by the plough, although F104 and its recut F103 appear to have terminated to the south at F107 which may have marked the position of a post. The eastward continuation of F113 may have been lost by ploughing.

The stone-packed post-holes F119-F121 provide the only convincing structural evidence. The other features appear to represent occasional pit digging, with oven F111 possibly indicating some agro/industrial activity.

Since the extent of the enclosures was not defined it is difficult to be categoric about the site's overall form and function. The Phase I enclosure may be paralleled by a 'ladder enclosure' at Little Paxton, near St. Neots (Jones and Ferris 1994). The Little Paxton enclosure, also of 2nd-3rd century date, comprised two parallel ditches, with interior dividing ditches. The enclosures there contained the fragmentary remains of timber-framed buildings, perhaps barns. Analysis of the animal bone and insect assemblages from the waterlogged ditches indicated that they were located in a pastoral environment, and may have formed a cattle kraal. Applying this evidence to Paston, the north-south ditches may have formed discrete cattle pens.

In Phase 2, some of the Phase 1 ditches were recut, indicating that the enclosure layout remained visible and in use. Stone surface F114 could be interpreted as a threshing-floor, and the large pit F102 could have been dug to dispose of rubbish.

The Phase 1 and 2 features were scaled by ridge and furrow earthworks, also visible as surface features.

3: ASSESSMENT

3.1: Stratigraphic/structural data

As described above the features and deposits on site can be dated to the late 2nd to 4th century. The majority of the sealed features and deposits contain datable pottery. Some of the deposits also contain datable samian fragments. The archaeological features are dominated by ditches with other feature types represented including rubbish pits, post-holes, possible hearths, rubble spreads, and overall deposits of ?organic matter. Further analysis and definition of the stratigraphic sequence would contribute to research aims 2, 3 and 5 (see 1.2 above).

3.2: Artefactual data

3.2.1 Roman pottery by Annette Hancocks

The pottery was counted and sorted into rough fabric groups for case of quantification. Each context was then allocated a spot date based on diagnostic rim forms and other datable evidence. This spot-dating identified securely stratified groups of pottery which are intended for further detailed analysis.

A total of 3437 sherds of Romano-British pottery was recovered from the fieldwork. Almost three quarters derived from well-stratified groups and comprised relatively large and generally unabraded material, although some surfaces had been lost on the colour coats. No preservation bias has been observed. Thirty per cent of the excavated material came from one feature, pit F125.

Eighty four per cent of the total ceramic assemblage was of local production (Lower Nene Valley greywares, colour-coats, shell-tempered ware and mortaria), while most of the remainder comprised material of probable local production. Less than 1% was samian or Black Burnished ware. Two ceramic phases were identified and these have served to define Phases 1 and 2. Good diagnostic and datable rim forms survived to facilitate dating and the recognition of parallels. The pottery can be usefully compared with material from Orton Hall Farm (Mackreth 1996) and from roadside settlements along Ermine St (Ellis *et al* forthcoming).

TABLE 1: Percentage of pottery types within Romano-British assemblage

Pottery	Percentage of total assemblage
LNVGW	1168 (34%)
LNVCC	892 (26%)
Samian	30 (0.9%)
Mortaria	21 (1.2%)
BB1	14 (0.4%)
Other	398 (11.6%)
Shell-tempered wares	914 (26.6%)
TOTAL	3437 (100%)

In Phase 1 the large, relatively unabraded nature of the sherds tends to suggest that the pottery may have been redeposited from nearby. The lack of small, abraded sherds of late 2nd to early 3rd century date suggests that there was little redeposition of material in Phase 2. The proportion of coarsewares versus finewares suggests the function and status of the settlement was relatively lowly. Further, detailed analysis of vessel form/function would help to clarify the status (or any possible change in status) of the Phase 1 and 2 activity.

In view of the good ceramic sequence recovered from across the site further study of the pottery will contribute to research aims 2, 3 and 5 (section 1.2).

3.2.2: Brick and tile (ceramic and non-ceramic) by Annette Hancocks

The brick and tile was assessed by context and quantified by count only. A total of 768 fragments of brick and tile and fired clay/daub was recovered from the fieldwork. Of this material 624 fragments comprised *tegulae*, 56 fragments box flue tile from a hypocaust, and six fragments of *imbrices*. The remainder of the assemblage comprised three stone roof tiles, four fragments of brick and 65 fragments of fired clay/daub. One of the rooftile fragments is of fine siltstone, naturally laminated and split on the cleavage.

A cigar-shaped fire-bar fragment was recognised. In addition, 10 fragments of modern tile were recovered. Very little comparative material has been published from Cambridgeshire although the recent publication of a corpus of relief-patterned tile in Roman Britain may provide some good comparative data (Betts, Black and Gower 1997).

TABLE 2: Quantification of elements of brick and tile assemblage

Brick and tile	Quantity
Box flue	56 (7%)
Brick	4 (0.5%)
Imbrices	6 (0.8%)
Stone tile	3 (0.4%)
Fired clay/Daub	65 (8.5%)
Tile (modern)	10 (1.3%)
Fire bar frag.	1(<1%)
Tegulae	624 (81%)

Further analysis of the material could highlight the status of nearby buildings. The box flue tile and *tegulae* suggest the presence of a villa.

3.2.3 Other finds by Lynne Bevan

Copper alloy objects

A pointed, circular-sectioned length of copper alloy, measuring 74mm in length, was found in pit F125. This object is probably part of a broken pin or the shaft of a toilet implement.

Iron objects

Two fragments of corroded iron were found, one an amorphous lump, and the other a strip measuring 55mm by 14mm. A total of 25 nails was found deriving from F101, F103, F105, F107, F109, F112, F114, F117, F125, F126, F141, F142 and F143. With the exception of five hobnails, which would have originated from footwear (from F109 and F142), the nails are of the ubiquitous and familiar types found in Roman Britain and used for various purposes including woodworking and possibly building.

Glass

A bead fragment of cobalt blue glass, measuring 2mm in length, came from F102, and four fragments of blue-green bottle glass were recovered, one of which came from a plain ribbon handle (F108), and three fragments from a bottle base (F122). Glass bottles were in use throughout the Roman period, but since none of the fragments is diagnostic, closer chronological resolution is not possible.

Ironmaking residues/slag

Some evidence for metalworking came in the form of small fragments from Phase 1 features F100, F110 and F113, and five small fragments of iron smithing slag from Phase 2 contexts F141, F114 and F126.

Stone objects (specialist identifications by Robert Ixer)

Six items of humanly-struck flint were recovered: a rough multi-platformed core of coarse, poor quality, opaque yellowish-grey flint, two retouched flakes, and three unretouched flakes. The flakes were of a translucent brown flint of better quality than the core. None of the items is datable and they signify only a low level of prehistoric activity in the area of the site.

The remaining items of worked stone consisted of two quernstone fragments from F110. One small quern fragment, measuring 50mm in thickness with circular wear patterning on one surface, is of a very coarse quartz conglomerate, probably Millstone Grit, possible sources for which are North Derbyshire, Chesterfield or Sheffield. A larger quern fragment, part of the upper stone of a rotary quern with a maximum outer thickness of 40mm, is of a micaceous sandstone, probably also Millstone Grit, Carboniferous in age, with some feldspar, which probably originated from the Pennines.

A natural flint pebble of perfectly circular form, with a diameter of 38mm and slight surface pitting, was recovered from the Phase 1 pit F125. Although there is no evidence of its having been worked, its form suggests that it could have been used as a ball or plaything.

Wall plaster

A fragment of Roman wall plaster was recovered from F102 measuring 38mm x 19mm with traces of two stripes executed in dark purple-brown and deep red paint. This fragment would have been part of a much larger panel, either composed of geometric banding, which was common throughout the Roman period, or enclosing more complex figurative, foliate, or architectural motifs.

Oyster and snail shells

One complete oyster shell and 18 fragments were found in F101, F105, F108 and F124. The oyster shells are from the common European oyster (Ostrea edulis). The high incidence of fragmentation precludes a count of left and right valves. The presence of oyster shell reflects the popularity of seafood in the Roman diet, and shows that oysters were brought to the site, despite its distance from the sea. However, the small number of shells found could suggest a relatively low level of consumption.

In addition to the marine shell, there were 11 examples of land or common snail (*Helix aspersa*) from F100, F101, F124 and F141. The Roman preference for snails is well-attested, but the utilisation of this common garden inhabitant is more difficult to demonstrate. However, the association of the two snail shells with oyster shells might possibly indicate that the snails were also kitchen waste.

No further work on these finds is suggested, except for the compilation of a brief catalogue of the glass, stone and copper alloy objects.

3.2.4: Animal bone by Umberto Albarella

This is a very small assemblage. Ageable mandibles and measurable bones are too few (Table 3) to provide much information about husbandry strategies. The total weight of the hand-collected animal bone is c, 37.5 Kg. This is distributed in the two phases as follows:

Phase 1: 22.5kg Phase 2: 15kg.

Unstratified and unphased material (approximately 1 box) has been excluded from these figures.

TABLE 3: Animal bone assemblage. Number of countable bones (Davis 1992; Albarella & Davis 1994), ageable mandibles and measurable bones by phase.

PERIOD	COUNTABLE BONES							
	Cattle	Sheep/Goat	Pig	Others	Bird	TOTAL	Fish	Comments
1 - late 2nd / 3rd century AD	72	23	6	16	2	119	 	Includes horse, dog, red deer and chicken
2 - early 3rd - mid 4th century AD	38	11	5	4	-	58	-	Includes horse and dog
TOTAL	1 1 0	34	11	20	2	177]-	

PERIOD	AGEA BLE MAND IBLES				MEASU RABLE BONES					
	Cattle	Sheep/Goat	Pig	TOT AL	Cattle	Sheep/Goat	Pig	Others	Bird	TOTAL
1 - late 2nd / 3rd century AD	4	-	1	5	8	3	2	4	-	17
2 - early 3rd - mid 4th century AD	4	2	1	7	5	3	2	2	-	12
TOTAL	8	2	2	12	13	6	4	6	-	29

The animal bone derives from ditches, pits and gullies and was collected by hand, although the environmental flotation programme of 20 bulk samples also yielded some fragments. Features affected by contamination or residuality have been excluded from this assessment. The material from other contexts should be reliably assigned to either of the two phases, although this phasing will need to be reviewed when the detailed pottery phasing is undertaken.

Numbers of countable bones, ageable mandibles and measurable bones are recorded in Table 5. The counting system was based on a modified version of the method proposed by Davis (1992) and Albarella and Davis (1994). Small numbers of sheep, dog, water vole (*Arvicola terrestris*), small bird and amphibian bones and/or teeth have been found in the sieved assemblage, but these will add very little to the total number of countable bones.

The assemblage is dominated by the most common domestic mammals - cattle, sheep and pig. Cattle is particularly abundant, as is normally the case for Romano-British sites. However, the great predominance of cattle bones is almost certainly due to a recovery bias. Cattle bones are larger and tend to be much over-represented in unsieved assemblages. Horse and dog bones are also relatively common, and a partial skeleton of a neonatal dog has also been found. The only evidence of hunting is provided by a red deer bone; a chopped antler from the same species may derive from a shed specimen. The scarcity of bird bones and the absence of fish bones may also be caused by their small size. However domestic birds were in the Roman period not as common as in later periods and their scarcity is probably due to this as much as to the collection method. No obvious differences in the frequency of species have been noticed in the two phases (Table 3). A gnawed cattle tibia with some peculiar, artificially made holes and a chopped cattle horncore were noted during the assessment. The preservation of the bone surface was on average fairly good in both phases. No obvious differences in the condition of the bones were noted in the two phases. The level of fragmentation was that expected for material deriving from butchery and kitchen refuse. Further fragmentation was probably caused by scavengers; gnawing marks were common throughout and this also suggests that many bones were in secondary deposits.

The assemblage is very small and likely to be affected by a recovery bias. It has thus a limited potential. However, it can contribute to research aim 2. Further analysis and reporting may be justified in view of the scarcity of information concerning the animal economy of Romano-British rural sites.

3.2.5: Charred plant remains by Lisa Moffett

Samples for charred plant remains were taken at the excavators' discretion, mainly from the enclosure ditches. A total of 17 samples was taken from nine deposits. The results of samples from the same deposit have been amalgamated for the purposes of this assessment since there is no archaeological grounds for distinguishing different samples from the same context, giving a total of nine assessed samples.

The samples were processed using water flotation. The floating fraction was decanted

onto a 500µ sieve and the residues were wet sieved onto a 1mm sieve. The residues were initially sorted by eye to check for small finds and any environmental material that had failed to float. The flots were then air dried at room temperature and bagged-up. The flots were scanned by the author using a low power microscope at up to x20 magnification. The aim of the scanning was to rapidly assess the potential of the material for further analysis. Some preliminary identifications were made but these should be regarded as provisional. It is also possible that some items, especially small seeds, may have been overlooked by the scanning process. All of the flots had abundant amounts of modern root material and there were frequent snail shells which may also be modern. The results of the scanning are given in Table 4 below.

TABLE 4: Charred Plant Remains

Phase	Context	Sample number	Context type	Date	Sample size	Flot size	Further analysis needed	Comments
1	1025	1&8	ditch	2 rd C	21 litres	140 ml.	yes	Moderately abundant wheat grains and glume bases of emmer/spelt. Also seeds of Bromus (brome) and a possible legume fragment. Flot mostly modern roots, 23 ml. scanned.
1	1036	14&18	ditch	late 2 nd C-early 3 rd C	23 litres	30 ml.	no	A single wheat grain. Flot mostly modern roots. 100% scanned.
1	1037	2&7	ditch	late 2 nd C-early 3 rd C	18 litres	50 ml.	no	A very few grains of wheat and unidentified cereal. Flot mostly modern roots, 30 ml. scanned.
1	1038	12&13	gully	late 2 nd	17 litres	45 ml.	yes	Moderate amount of wheat grain and spelt or emmer/spelt glume bases, also a seed of <i>Sparganium</i> sp. (bur-reed). Flot mostly modern roots, 100% scanned.
1	1041	19&20	ditch	3 rd C	16 litres	60 ml.	no	A single grain of unidentified cereal. Flot mostly modern roots, 100% scanned.
1	1044	6	ditch	late 2 nd C-early 3 rd C	10 litres	30 ml.	no	A few cereal fragments only. Flot mostly modern roots, 100% scanned.
2	1003	15&16	fill of oval feature	late 3 ^{1d} -early 4 th	23 litres	100 ml.	yes	Abundant grains of wheat and glume bases of spelt and emmer/spelt. Also some seeds of <i>Bromus</i> sp. (brome) and a calyx tip of <i>Agrostemma githago</i> (corncockle). Flot mostly modern roots, 10 ml, scanned.
2	1034	9&17	ditch	early 3 rd -late 4 th C	23 litres	150 ml.	no	A few cereal grain fragments only. Flot mostly modern root, 28 ml. scanned.
2	1042	3&5	ditch	late 3 rd - early 4 th C	19 litres	90 ml.	no	A few grains of wheat and unidentified cereal, a seed of Rumex sp. (dock) and a legume. Flot mostly modern root, 100% scanned.

All of the flots had some cereal remains suggesting the presence of crop-related activities on the site. Only three, however, produced material in sufficient abundance to potentially be interpretable in terms of crop-processing activities. Two of the samples are from Phase 1 deposits, the other is from Phase 2.

The samples are recommended for further analysis as indicated in Table 4. This further analysis will contribute to research aims 2 and 5.

4: UPDATED PROJECT DESIGN

4.1: Introduction

The data provides a useful opportunity to contribute to the study of comparatively low-status rural Romano-British settlements in the region. Glazebrook notes (1997, 37) that work on rural settlement sites in the region has largely been concerned with villas. Further analysis of the Paston data will contribute to the understanding of similar low-status farmsteads, and may also elucidate the settlement economy, another key research aim highlighted by Glazebrook (op cit, 38). However, it should be noted that the animal bone assemblage is too small to provide detailed information concerning husbandry strategies.

The positioning of the Paston enclosure adjoining the Car Dyke also suggests that potential exists for comparison with data from other excavated settlements, such as Werrington (Philips 1970) and Orton Hall Farm (Mackreth 1996), also adjoining the Car Dyke. Much of the Fenland has been identified by Salway and others as forming part of an imperial estate because of the scale of the drainage works undertaken, and the predominance of low-status farmsteads, let to tenants. More recently, Millett (1990, 121-2) has argued that this drainage was undertaken by the local community during an episode of lowering sea levels, leading to the colonisation of new land, as may have occurred at Paston during the later 2nd century. Millett also acknowledges that the Fenland is unusual in its location away from towns of high administrative status, around which villas were often clustered (op cit, 190).

The excavation data provides information concerning changes in settlement layout. Analysis of the securely stratified pottery assemblage will contribute towards the definition of a settlement chronology, an understanding of rubbish disposal patterns, and the position of the enclosures and settlement within the rural hierarchy. Although derived from secondary deposits, further study of the box tile may provide some clues to the nature of the structure from which it originated.

4.2: Updated research design

It is possible to restate, enhance and refocus the research aims as being:

1) to define the changing morphology of the Phase 1 and Phase 2 enclosures.

- 2) to define the type of settlement represented, with regard to its position in the social hierarchy, and to compare the material culture and trading links of the Phase 1 and 2 enclosures.
- 3) to consider the relationship (if any) between the site and the Car Dyke, and to compare the evidence from Paston with data from other settlements adjoining the Dyke.
- 4) to investigate the settlement economy.
- 5) to provide an understanding of the development of the settlement in Phases 1 and 2.

5: PUBLICATION SYNOPSIS

It is proposed to publish the report as part of a volume in the British Archaeological Reports (British Series), entitled Excavations in Cambridgeshire 1997. British Archaeological Reports have agreed to publish the report in principle. The provisional lengths of the individual contributions are given in parenthesis below.

PASTON, PETERBOROUGH, ARCHAEOLOGICAL INVESTIGATIONS 1996-7.

by Gary Coates, Peter Ellis and Annette Hancocks illustrations by Nigel Dodds with contributions by Umberto Albarella, Lynne Bevan and Wendy Smith

<u>Text</u>

Summary (250 words)

Introduction by Gary Coates (500 words)
Aims and methodology. The site and its context. 1 plate

Results by Gary Coates (1500 words)

Description and interpretation of the evidence by phase. 3 plates, 1 table

Finds

Roman pottery by Annette Hancocks (3000 words). 3 tables, 1 plate (with comment on graffito by R. Tomlin, mortaria by K. Hartley, and samian by J. Mills)

Roman brick and tile by Erica Macey (500 words)

Charred plant remains by Wendy Smith (1500 words). 1 table

Other finds by Lynne Bevan (500 words)

Animal bone by Umberto Albarella (1500 words). 1 table

Discussion and conclusion by Gary Coates and Peter Ellis (1500 words)

Figures

- 1 Location
- 2 Simplified plan: features of all phases
- 3 Phase 1 detailed plan
- 4 Sections: Phases 1-2
- 5 Phase 2 plan
- 6 Pottery
- 7 Pottery
- 8 Pottery
- 9 Other finds

TOTAL 10750 words; 6 tables; 9 figures; 5 plates.

6: METHOD STATEMENTS

The task numbers below give the initials of the individual responsible for the completion of the task, and the number of days allocated.

1) Stratigraphic analysis

The site records will be analysed to refine and revise the sequence of activity on the site. (G. Coates: 3 days; P. Ellis: 2 days)

2) Roman pottery (all tasks)

Topsoil or unstratified material will only be summarily examined. The pottery will be sorted by context (including the unstratified and residual/contaminated material) and information on fabric, form, decoration, quantity, weight, estimated vessel equivalents for rims, rim/base diameters and percentage extant recorded. Elements such as abrasion and re-use will be commented upon. The data will then be added to the site database. Samian and mortaria will be sent to the relevant specialist for further detailed analysis. A graffito on a beaker base will require specialist attention. An example of each form noted will be illustrated with the exception of forms previously published. In addition, key groups will be selected for illustration. (Λ. Hancocks: 22 days; R. Tomlin: 0.25 day; J. Mills: 1 day; K. Hartley: 1 day).

3) Tile

The tile fabrics will be identified, and a brief report prepared. (A. Hancocks: 1 day, E. Macey: 3 days)

4) Other finds

A brief catalogue of the stone, glass, and copper alloy objects will be prepared. (L. Bevan: 1.5 days)

5) Animal bone

A report will be prepared outlining the significance of the major faunal assemblages. (U. Albarella: 6 days)

- 6) Charred plant remains
 Appropriate samples will be fully analysed. (L. Moffett: 0.5 day; Wendy Smith: 4 days)
- 7) Library research. (G. Coates: 2 days)
- 8) Preparation of drawing roughs (structural text). (G. Coates: 2 days)
- 9) Preparation of illustrations. (N. Dodds: finds illustrations 7 days; plans and sections 4 days)
- 10) Preparation of first draft of introduction and results. (G. Coates: 2 days)

MONITORING POINT 1) PREPARATION OF RESULTS TEXT AND FIRST DRAFT OF SPECIALISTS REPORTS. (G. Coates and P. Ellis: 1 day)

- 11) Editing/corrections to specialists reports. (P. Ellis: 2 days)
- 12) Preparation of first draft of discussion. (G. Coates: 2 days; P. Ellis 2 days)
- 13) Editing of first draft (BUFAU). (P. Ellis: 2 days)
- 14) Corrections to first draft. (G. Coates: 0.5 day)
- 15) Corrections to illustrations. (N. Dodds: 1 day)

MONITORING POINT 2) COMPLETION OF FIRST DRAFT (EDITED BY BUFAU)

- 16) Submission of text for external refereeing. (P. Ellis: 1 day)
- 17) Preparation of excavation and research archives. (G. Coates: 1 day)
- 18) Final corrections to text/illustrations. (G. Coates: 0.5 days)
- 19) Submission of text to BAR. (P. Ellis: 1 day)
- 20) Corrections to text/proofs. (P. Ellis: 1 day)
- 21) Deposition of archive. (G. Coates: 2 days)

7: REFERENCES

Albarella, U, and Davis, S, 1994. The Saxon and Medieval animal bones excavated 1985-1989 from West Cotton, Northamptonshire, AM Lab Report 17/94

Austin, L. 1996. Design brief for archaeological evaluation at Paston, Peterborough, Cambridgeshire County Council

Betts, I, Black, F. W, and Gower, J, 1997. A Corpus of Relief-Patterned Tiles in Roman Britain. *Journal of Roman Pottery Studies*, 7, 1994.

Davis, S, 1992. A rapid method for recording information about mammal bones from archaeological sites. London, AM Lab Report 19/92

Ellis, P. et. al. forthcoming. Excavations alongside Roman Ermine Street, Cambridgeshire, 1996. The archaeology of the A1 (M) Alconbury to Peterborough road scheme. British Archaeological Reports.

Glazebrook, J (ed), 1997. Research and archaeology: a framework for the Eastern Counties. I Resource Assessment, East Anglian Archaeology, Occasional Paper 3

GSB. 1996. Geophysical survey of land at Paston reserve, Peterborough.

Hall, D, 1987. The Fenland Project, No 2: Fenland Landscapes and Settlement between Peterborough and March, East Anglian Archaeology, 35

Jones, Λ E, 1997. Paston, Peterborough: archaeological specification for further evaluation and excavation, BUF Λ U

Jones, A. E. and Ferris, I. M. 1994. Archaeological excavations at Little Paxton, Diddington, Cambridgeshire, 1992-3: First interim report, The Romano-British period. *Proceedings of the Cambridge Antiquarian Society*, LXXXII, 55-66.

Mackreth, D F, 1988. Excavation of an Iron Age and Roman enclosure at Werrington, Cambs, *Britannia*, 19, 59-151

Millett, M, 1990. The Romanization of Britain, Cambridge

Perrin, R, 1996. The Roman pottery, in D Mackreth, Orton Hall Farm: a Roman and early Anglo-Saxon farmstead, East Anglian Archaeology, 76, 114-189

Philips, C. W,1970. The Fenland in Roman Times. Royal Geographic Society, rcs ser. 5.

Rosenberg, N, 1996. An archaeological assessment in connection with a proposed development at Paston Reserve, Peterborough, Cambs, JSAC Report

Thomas, A, and Wilkinson, K, 1997. Paston Reserve, Peterborough, Cambridgeshire: archaeological evaluation, CAT Report No 97462

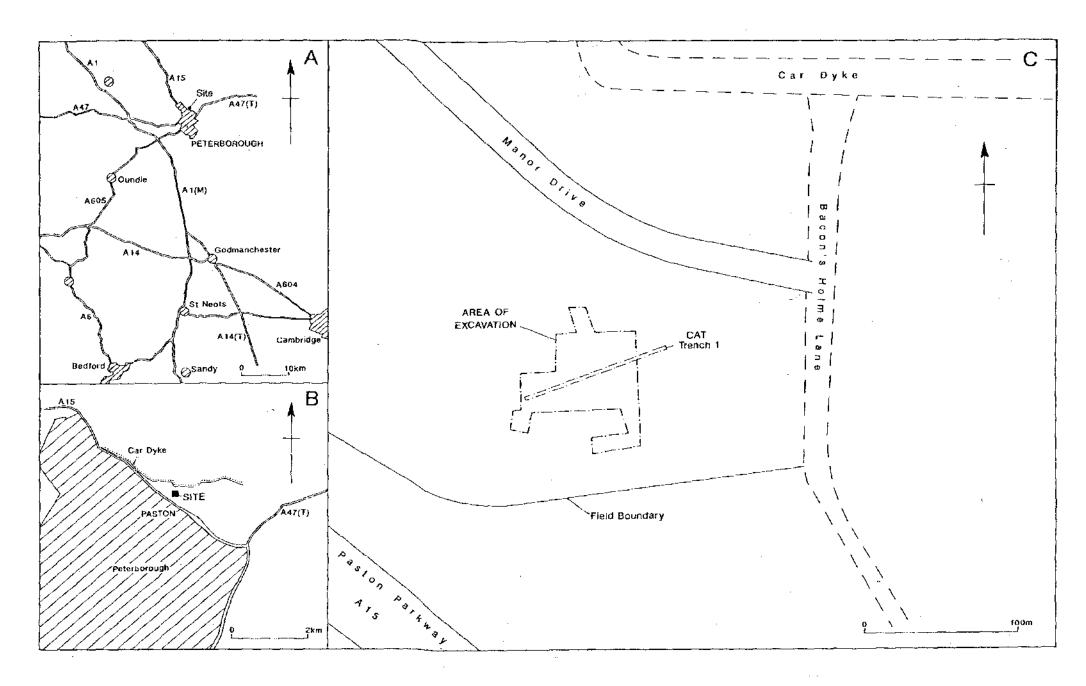


Fig.1

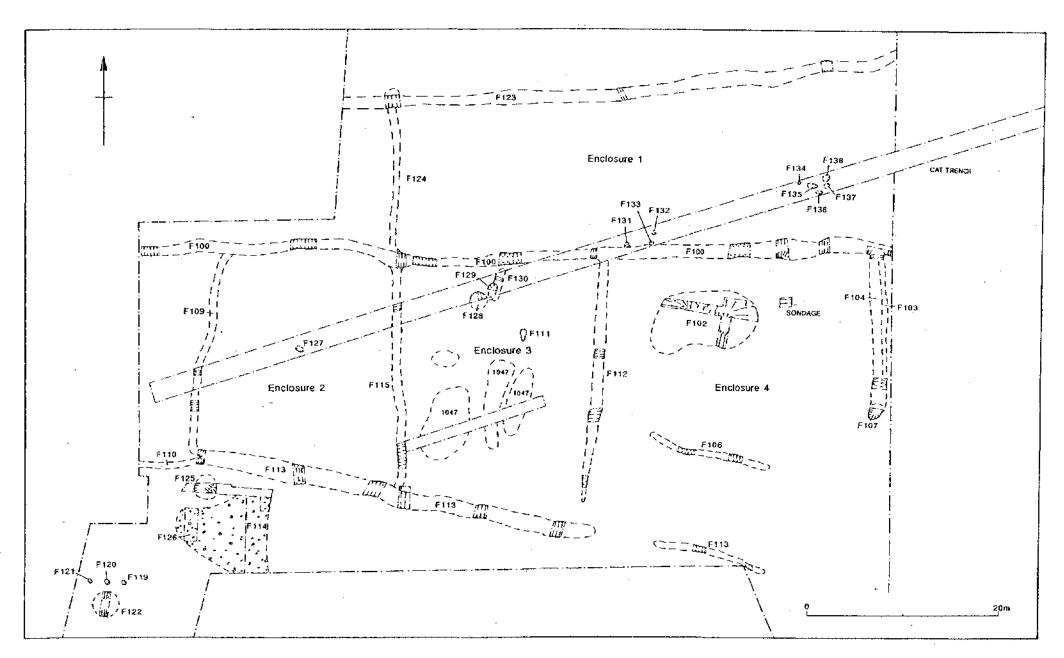


Fig.2