PASTON RESERVE, PETERBOROUGH, CAMBRIDGESHIRE

ARCHAEOLOGICAL EVALUATION

BY

ALAN THOMAS & KEITH WILKINSON FOR

THE LANDOWNERS CONSORTIUM



Cotswold Archaeological Trust

PASTON RESERVE, PETERBOROUGH, CAMBRIDGESHIRE

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SUMMARY

In February 1997 Cotswold Archaeological Trust carried out an archaeological evaluation and bore hole survey on land at Paston Reserve, Peterborough, Cambridgeshire. This followed an archaeological assessment which suggested the existence of archaeological features within the study area.

A total of 12 trenches were excavated. In trench 1 pits and ditches of Romano-British date were examined. These appear to relate to a settlement within the north-western part of the study area. Fragments of *tegula*, *imbrex* and combed box flue point to this settlement containing a structure of some status, which the pottery suggests may be of later 3rd - 4th century date. Trench 5 was situated near the Car Dyke and may have exposed part of the cut for the south bank. It is uncertain whether this could be part of the original cut for the Dyke or belongs to a later phase of re-cutting. The remaining trenches revealed little of archaeological interest.

A bore hole survey was also carried out on the adjacent Car Dyke. Here, 12 hand drilled holes revealed organic deposits containing a rich assemblage of plant macro remains, overlying earlier inorganic sediments. Depending upon its chronology this stratigraphy could be of high archaeological interest.

1. INTRODUCTION

1.1 Introduction

- 1.1.1 In February 1997 Cotswold Archaeological Trust was commissioned by John Samuels Archaeological Consultants, on behalf of Development Land and Planning Consultants Ltd., to carry out an archaeological evaluation and borehole survey on land at Paston Reserve, Peterborough, Cambridgeshire (Fig. 1).
- 1.1.2 The evaluation was carried out in accordance with Planning Policy Guidance 16 (PPG 16), and in compliance with the 'Standard and Guidance for Archaeological Field Evaluations' (IFA, 1994) and a Design Brief for Archaeological Evaluation issued by the Archaeology Section of Cambridgeshire County Council.

1.2 The study area (Fig. 1)

- 1.2.1 The study area comprises 46.8 hectares of land, centred on NGR: TF 19740300, and consists of seven fields under arable and pasture, separated by hedges, drains and roads. It is roughly triangular in shape and is bounded by the Car Dyke to the north, Newborough Road to the east, and the A15, a domestic caravan site and a factory to the south and west. Topographically, the study area gently slopes and undulates between 6.03m OD in the NE corner, 13m OD in the SE corner and 11.5m OD in the SW corner.
- 1.2.2 The site is mapped by the British Geological Survey (BGS) (1/50,000 sheet 158) as lying on 1st and 3rd terrace gravels of the river Nene (Pleistocene). However, only limited deposits of this nature were found in the evaluation trenches

although many rounded flint clasts were noted within the topsoil of the fields. The latter no doubt derive from a nearby Pleistocene terrace gravel. The absence of firm evidence for fluvial gravels on the site can either be put down to inaccurate mapping (perhaps caused by the absence of previous exposures) or the erosion of such formations by agriculture. This Pleistocene gravel is mapped as overlying Upper Jurassic Oxford Clay / Kellaway Beds in the north of the site and Middle Jurassic Cornbrash in the south. Both these formations were noted at the base of the evaluation trenches.

1.3 Archaeological and historical background

- 1.3.1 An archaeological evaluation was carried out in 1990 to the west of the study area. Apart from medieval plough furrows nothing of archaeological interest was observed (JSAC 1996, para. 3.11).
- 1.3.2 The study area is bounded to the north by the Car Dyke, which is a Scheduled Ancient Monument. Traditionally, this forms part of a Romano-British water transport system, although it is perhaps more likely to be part of a water management system.
- 1.3.3 An archaeological assessment of the study area, which included analysis of aerial photographs and the results of a geophysical survey, detailed the existence of a possible Roman settlement in the north-western corner of the site. This is recorded in the Sites and Monuments Record as an area of "dark occupation" which yielded Roman pottery (SMR 08017). The existence of archaeological features in this area was further indicated by the results of a geophysical survey, which recorded a "cluster of archaeological type responses" of no definitive pattern (JSAC 1996, paras. 3.5 and 3.12).

- 1.3.4 The archaeological assessment also identified a possible Roman road (SMR (08372) to the south-east of the study area. It was thought that this could be a minor link road between Fen Causeway Roman road to the south-east and King Street Roman road to the west. The line of this possible road was suggested as continuing through the south-eastern part of the study area (JSAC 1996, 3.6).
- 1.3.5 The archaeological assessment also identified the site of a possible medieval manor house (SMR 02207). Medieval ploughing, in the form of ridge and furrow, was also identified through aerial photographs over most of the study area (JSAC 1996, paras. 3.8-3.9).

1.4 Methodology

- 1.4.1 A specification to carry out an archaeological evaluation of the study area was prepared by John Samuels Archaeological Consultants. This specification entailed the excavation of 12 trenches, totalling 300m. in length, positioned to test the presence/absence of possible archaeological features identified in the archaeological assessment (fig. 2). In addition 12 bore holes were drilled through the south bank of the Car Dyke.
- 1.4.2 The objectives of the evaluation were to determine the location, extent, date, character, condition, significance and quality of any surviving archaeological remains. The objective of the bore hole survey was to determine the organic preservation of the infilling sediments of the Car Dyke.
- 1.4.3 The trenches were excavated under archaeological supervision by a mechanical digger equipped with a toothless grading bucket. All identified features were sampled by hand to meet the aims as stated within the specification, and recorded in accordance with the Cotswold Archaeological Trust Field Recording Manual

(1996). All artefacts recovered were taken to the Trust offices for cataloguing and analysis. Particular attention was given to potentially datable artefacts such as pottery. Samples were taken from two contexts in order to assess the potential for palaeoenvironmental analysis. The samples were passed through flotation apparatus and the results form Appendix IV to this report. The methodology employed and the results of the bore hole survey are both detailed in section 4.

- 1.4.4 The site archive and finds will be deposited with a suitable depository after the completion of post- excavation work.
- 1.4.5 A monitoring visit was made by Louise Austin, Development Control Officer, Archaeology Section, Cambridgeshire County Council on 26th March 1997.

2. EXCAVATION RESULTS

Trench 1 (figs. 3, 4 and 5)

- 2.1 Trench 1 measured 100m x 2m and was positioned to investigate the "dark occupation" recorded in the Sites and Monuments Record (SMR 08017) and geophysical anomalies suggested as archaeological deposits. All features cut through natural deposits and occurred directly beneath the ploughsoil. Several features of archaeological interest were investigated.
- 2.2 At the western end of the trench a N-S aligned ditch [139], which was up to 0.8m wide and 0.26m deep was identified. It contained a fill (138) of dark brown silty clay which produced 2 sherds of Roman pottery and 7 fragments of animal bone, including cow and sheep.

- 2.3 Approximately 10m to the east of ditch [139] was a pit [137], which measured 0.95m x 0.58m across. It was 0.2m deep and contained a fill (136) of black-stained clay with charcoal fragments.
- 2.4 Approximately 9.8m to the east of pit [137] was a N-S aligned ditch [133], which was 0.75m wide and 0.29m deep. It contained a fill (132) of a yellowish-grey silty clay. This ditch had been recut [142] to a depth of 0.62m and a depth of 0.23m. This recut contained a fill (131) of a dark grey-brown silty clay.
- 2.5 Approximately 7.4m to the east of ditch [133] was N-S aligned ditch [130], which was 1.4m wide and 0.19m deep. It contained a fill (129) of a grey-brown silty clay and was cut by pit [128].
- 2.6 Ditch [130] was cut to the east by pit [128]. This pit continued under the southern section and, within the confines of the trench, measured 1.9m across and 0.48m deep. It contained a fill (127) of a mid grey-brown silty clay.
- 2.7 Just to the east of pit [128] was ditch [124]. This ditch was aligned approximately NW-SE and measured 0.9m in width and 0.26m in depth. It contained a fill (123) of a light greyish-brown clayey silt which produced 4 sherds from a jar of 2nd-4th century date. This ditch had been cut to the west by pit [126].
- 2.8 Ditch [124] was cut to the west by pit [126]. Within the confines of the trench this pit measured 1.4m x 0.98m across and was 0.33m deep. It contained a fill (125) of a charcoal flecked mid to dark grey-brown silty clay which produced 6 Roman potsherds and 4 small fragments of animal bone.
- 2.9 Approximately 5.4m to the east of ditch [124] was E-W aligned ditch [103]. This ditch was exposed for a length of 11.5m and incorporated a turn to the south. It

measured up to 1.1m in width and was 0.25m deep. It contained a fill (104) of a dark greyish-black silty clay, which produced 83 sherds of mostly late 3rd-4th century pottery and 25 fragments of ceramic building material which included *tegula*, *imbrex*, flat tile and combed box flue. The latter points to the presence of a building of some status nearby. Seventy-six animal bone fragments were also recovered although most of these were too small and fragmentary to identify to species. However, cow, pig and a bird femur were represented. A soil sample was taken from the fill of the ditch in order to assess the potential for the recovery of environmental material. It produced charcoal fragments, grains of wheat and barley and weed seeds typical of arable habitats. The ditch was cut to the west by feature [122] and to the east by small pit [118].

- 2.10 Ditch [103] cut through a small pit [120], which measured 0.4m in width and 0.05m in depth. It contained a fill (119) of a grey brown silty clay.
- 2.11 Ditch [103] was cut to the west by feature [122]. Aligned approximately NNW-SSE this feature tapered to the NNW and may represent a ditch terminal. It was up to 1.7m wide and was 0.45m deep. It contained a fill (121) of an orange-brown silty clay.
- 2.12 Ditch [103] was cut to the east by small pit [118]. This measured 0.45m across and was just 0.07m deep. It contained a fill (117) of a dark grey-brown silty clay.
- 2.13 Just 0.5m to the north of pit [118] was pit [116]. This measured 0.4m across and was just 0.07m deep. It contained a fill (115) of a grey-brown silty clay.
- 2.14 Approximately 17m to the east of pit [116] was a cluster of 5 pits. Pit [114] measured 0.25m in circumference and 0.09m in depth; pit [112] measured 1.14m x 0.5m across and 0.14m in depth; pit [110] measured 0.8m x 0.35m across and 0.16m in depth; pit [108] measured 0.58m x 0.38m across and 0.09m in depth

and pit [106] measured 0.74m x 0.6m across and 0.16m in depth. All contained fills of very heavily charcoal stained clay with charcoal fragments with the exception of pit [106], which contained a dark grey brown silty clay with approximately 10% charcoal fragments. The fill of pit [110] also produced 3 small fragments of fired clay and that of pit [112] three sherds from a single storage jar of probable 4th century date. A soil sample was also taken from the fill of pit [110] in order to try and interpret the function of this pit complex but it produced mostly just charcoal fragments.

- 2.15 Approximately 9.5m to the east of the pit cluster was pit [140]. This pit was 0.8m wide and 0.08m deep, and contained a fill (141) of a gravelly dark brown clay which produced 2 potsherds of respective Roman and post-medieval date together with 1 possible tegula fragment and 5 post-medieval tile fragments. It also produced 3 fragments of animal bone.
- 2.16 Seven field drains were also apparent. These and all of the above features were covered by the ploughsoil (101), which averaged 0.3m in thickness.

Trench 2

2.17 Trench 2 measured 10m x 2m and was designed to investigate the profile of medieval ridge and furrow ploughing in an area otherwise thought to be devoid of archaeological features. However, the ploughsoil (201), which was approximately 0.3m thick, was extremely disturbed and rutted and there was no indication of any ridge and furrow or archaeological features in the trench bottom or sections.

Trench 3

2.18 Trench 3 measured 10m x 2m and was designed to investigate the proposed location of a headwall for surface water drainage. After the removal of the 0.3m thick ploughsoil (301), a 0.12m deep feature [303] was observed at the northern end of the trench. This contained modern debris such as torch batteries. No features of archaeological interest were observed.

Trench 4

2.19 Trench 4 measured 10m x 2m and was designed to investigate a geophysical anomaly and feature identified by aerial photographic assessment. This anomaly proved to be a field drain [403] aligned E-W. This field drain and the natural clay were covered by the 0.3m thick ploughsoil (401).

Trench 5 (fig. 6)

2.20 Trench 5 measured 10m x 2m and was designed to investigate the proposed location of a headwall for surface water drainage. At a distance of 8.7m from the southern end of the trench a cut [503] was apparent for a 0.68m deep feature, which continued beyond the northern extent of the trench. The nature of this feature is uncertain, although it may represent part of the southern profile of the Car Dyke. The fill (502) of this feature consisted of a yellowish-brown silty clay, but visual examination of the material could not discern whether it was an alluvial deposit derived from flooding, or merely upcast derived from the cleaning of the Dyke. This feature and the natural clay (504) were covered by the 0.2m thick ploughsoil (501).

Trench 6

2.21 Trench 6 measured 10m x 2m and was positioned to investigate a linear feature identified by geophysical survey. This proved to be a ditch [603] with irregular sides up to 2.5m wide and 0.26m deep. The fill of this ditch was a very heavily rooted dark yellowish-brown clay. Numerous small shallow irregular pits and root lines within the main fill indicate that this is part of a hedge boundary. A field drain was also apparent. All of these features and the natural clay/gravel were covered by the 0.3m thick ploughsoil (601).

Trench 7 (fig. 7)

- 2.22 Trench 7 measured 10m x 2m and was designed to investigate the remains of a building shown on 18th and 19th century maps. This appeared as a large amount of surface debris and ferrous response in the geophysical survey.
- 2.23 At the western end of the trench three shallow post holes [703], [705] and [707], aligned approximately NW-SE, were apparent cutting natural deposits. These measured 0.25m, 0.25m and 0.29m in circumference respectively and 0.12m, 0.15m and 0.18m in respective depth. They all contained fills of a greyish-black silty clay.
- 2.24 At the eastern end of the trench was a single course of brick footings [715] for a structure aligned NE-SW. Two walls were apparent. The individual bricks measured approximately 0.23m in length, 0.11m in width and 0.07m in thickness.
- 2.25 To the north of this structure were three post holes [709], [711] and [713]. These measured 0.22m, 0.26m, and 0.3m x 0.25m in diameter respectively and had

respective depths of 0.12m, 0.09m and 0.09m. They all contained fills of a greyish clayey soil which contained crushed brick fragments.

- 2.26 A sewer pipe [716], on the same alignment as structure [715] was also apparent.
- 2.27 All of the above features were covered by the 0.35m thick ploughsoil (701).

Trench 8

2.28 Trench 8 measured 10m x 2m and was positioned to investigate a linear feature identified in the geophysical survey. This proved to be a field drain [804], the pipe for which was approximately 0.3m deeper than the other four drains observed in the trench. These drains and the natural clay/gravel were covered by the 0.35 thick ploughsoil (801).

Trench 9

2.29 Trench 9 measured 10m x 2m and was positioned to determine the profile of the medieval ridge and furrow ploughing in an area otherwise thought to be devoid of archaeological features. However, after the removal of the 0.3m thick ploughsoil (901) to the natural clay/gravel, no ridge and furrow or other archaeological features were identified in the trench base or sections.

Trench 10

2.30 Trench 10 measured 100m x 2m and was positioned to investigate the nature of a linear feature identified in the aerial photography report which appeared to

continue the line of a possible Roman road. However, after the removal of the 0.3m thick ploughsoil (1001) to the natural clay/gravel, no features of archaeological interest were observed.

Trench 11

2.31 Trench 11 measured 10m x 2m and was positioned to confirm the interpretation of a linear feature identified as a land drain in the geophysical survey. However, after the removal of the 0.3m thick ploughsoil (1101) to the natural clay/gravel, no land drain or archaeological feature was identified.

Trench 12

2.32 Trench 12 measured 10m x 2m and was positioned to investigate the area adjacent to the former Manor Farm for remains of medieval activity. However, after the removal of the 0.3m thick ploughsoil (1201), no features of archaeological interest were observed.

3. THE FINDS AND ENVIRONMENTAL REPORTS

3.1 The ceramics (by Jane Timby)

3.1.1 An assemblage of 100 potsherds and 26 pieces of tile of Romano-British date was recovered, mostly dating to the later 3rd-4th century. Most of the sherds came from the fill of ditch [103] and were in relatively good condition with several pieces from the same vessels, indicating little disturbance of deposits. The material appears to be of local origin, notably from the Nene Valley colour-

coated and greyware industries and the shell-tempered wares common in this area throughout the Roman period. The diverse range of Nene Valley colour coated forms from ditch [103] suggests it derives from the later Roman phase of the industry. The tile included fragments of *tegulae*, *imbrices* and box flue indicating a structure of some status in the locality. A full catalogue is presented in Appendix I.

3.2 The animal bone (by Alistair Barber)

3.2.1 Ninety fragments of animal bone were recovered from 4 contexts in trench 1. The vast majority of these came from the fill of ditch [103]. Most of the fragments were too small and fragmentary to identify to species but cow, pig and sheep are all represented, as is a single bird bone. No butchery marks were identified on any of the bone. A full catalogue is presented in Appendix II.

3.3 The environmental evidence (by Julie Jones)

3.3.1 Two bulk samples were taken from the respective fills of ditch [103] and pit [110] in order to determine the preservation of the plant macrofossil remains and to see if any evidence of cultural activity survived. The samples produced small charcoal fragments, several grains of wheat and barley and a number of weed seeds typical of arable habitats. The full report is presented in Appendix IV.

4. BORE HOLE SURVEY OF THE CAR DYKE (by Keith Wilkinson)

4.1 Introduction

- 4.1.1 As part of the evaluation at Paston Reserve, and following paragraph 2.6 of the "Specification for Archaeological works" (henceforth "the brief") (JSAC, 1996), an "auger survey" was carried out of the Car Dyke. Only that part of the Dyke on the northern boundary of the area proposed for development was investigated, and this by a series of 12 bore holes (Fig. 2). The purpose of undertaking the survey was to collect samples for archaeobotanical assessment in order to determine the degree of biological preservation within the Dyke sediments (*ibid.*, 6). The survey also provided an opportunity to examine the character of deposits within the Dyke.
- 4.1.2 The survey was carried out by two CAT officers trained in interpreting bore hole stratigraphy.
- 4.1.3 The brief specified that Peter Murphy, the English Heritage Environmental Archaeology adviser for East Anglia be invited to attend the fieldwork. However, due to his prior work commitments this was unfortunately not possible.
- 4.1.4 This report presents a synthesis of the results. Detailed descriptions of sediments found in each of the bore holes were recorded on pre-forma record sheets and are retained in the archive.

4.2 Methodology

4.2.1 The bore holes (henceforth "BH") were drilled using a 3cm diameter gouge auger to assess the stratigraphy and determine at what depth organic-rich deposits occurred. Gouge augers collect stratified samples - of in this case 50cm length -

that can be rapidly described, but insufficient sediment is retained in the auger chamber to provide sub-samples for assessment of biological macro-fossils. Therefore a 5cm diameter Edelmann auger was used to collect samples from the previously located organic and shell-rich sediments. The use of a 5cm diameter Russian auger (commonly used for investigation of peat bogs), was initially attempted, but had to be abandoned because it could not penetrate the minerogenic deposits overlying the peats / organic silt / clays. The bore holes were placed on the southern bank of the Dyke immediately adjacent to the stream as it was found to be impossible to drill within the stream itself. This was because the sediment was washed out of the auger chamber, while the depth of water precluded entry into the stream even with waders. It was subsequently discovered that the Dyke was subject to regular dredging (Rosenberg pers. comm.), and therefore sediments in the centre are likely to be severely truncated.

- 4.2.2 Each bore hole was drilled to 3m below the local ground surface. The only exception to this was BH 10, where dense clay / silts were located at 2m and further drilling was considered inappropriate (all other bore holes only contained organic deposits in the uppermost 1.5m). Once the stratigraphy had been determined, and if organic-rich sediments had been located, a second hole was drilled with an Edelmann auger and samples of c.0.25L collected from these horizons. Samples were taken continuously at intervals of c.20cm.
- 4.2.3 On completion of the survey the bore holes were located with respect to the site grid and Ordnance Datum (OD), using a Total Station, and where appropriate a surveyors level.
- 4.2.4 The samples taken during the survey were processed at the CAT offices. They were initially soaked in a solution of water and 30% (100 vol.) Hydrogen peroxide (H₂O₂), and then wet sieved through a 500μm mesh. The residue retained was placed in water and submitted to Julie Jones (Dept. of Geography, University of Bristol) for assessment of the included biological remains.

4.3 Results

4.3.1 Stratigraphy

4.3.1.1 Fig. 8 illustrates the sub-surface stratigraphy revealed by coring. The dashed lines on this Figure illustrate the most likely stratigraphic correlation based on purely morphological criteria. This interpretation is further explained in the text below. An immediately obvious observation is that despite the stream within the Dyke flowing from west to east, there is no appreciable drop in OD height in the same direction.

4.3.1.2 Unit A - Compact silt / clavs coarsely laminated with sands

This deposit was only found within BH 10 at a depth of 4m OD and below. It proved extremely difficult to auger through and attempts were therefore abandoned after a 2m depth was reached. The deposit can almost certainly be correlated with Oxford Clay / Kellaway Beds strata which underlie this part of the site, and therefore pre-dates any possible archaeology.

4.3.1.3 Unit B - Blue grey homogenous silt / clay, occasionally interbedded with organic silt / clays or peat

Deposits of this description were found at the base of all bore holes except BH 10. Although the morphology of the unit was variable a few general comments can be made. Firstly, the sediment appeared to lighten downwards from a dark bluish grey (c.2.5 Y 2/0) to a much lighter colour (c.5 Y 6/2). This is no doubt the results of diagenetic processes rather than a property of the sediments as originally deposited. The unit is well sorted and variably laminated indicating formation in a gentle fluvial environment, possibly on a seasonal basis. The most likely explanation for the origin of unit B is as material settling out from suspension within the Dyke. Unit B is therefore the earliest sediment that can definitely be attributed as filling the Dyke, in turn indicating that the Dyke was originally at least 1m deeper than present.

4.3.1.4 Unit C - Shell rich silt / clay marls and tufaceous gravels

Shell-rich deposits were found in the central area of the stretch of Dyke examined (BH 3 - BH 8), and in BH 11 in the extreme east. In BH 7 a tufaceous gravel was noted which, as it indicates the presence of highly calcareous waters during deposition, was grouped with the shell-rich sediments in Fig. 8. Samples from unit C have been examined from BH 3 and BH 6, from which the extracted molluscan assemblage (Table 2) indicates that deposition was in a fluvial environment similar to that of the present day Dyke.

4.3.1.5 Unit D - Peats and organic silt / clays occasionally interbedded with minerogenic silt / clays

These deposits occurred from BH 4 eastwards and at their maximum in BH 7 reached over 1.5m in thickness. Their absence from the transect west of BH 4 indicates a variable distribution probably caused by previous dredging of these areas. The unit comprises organic silt / clays and peats indicative of very slight changes in water levels during accumulation / deposition. This would have occurred in very shallow, still water, when plants could easily colonise. The presence of such organic deposits is therefore indicative of a prior phase of Dyke disuse. Unit D was the main focus of sampling and the variations in biological preservation are discussed further in section 4.4 below.

4.3.1.6 Unit E - Grey brown homogeneous (and occasionally laminated) silt / clays This unit only occurred in BH 3 and areas to the west. The unit has the same stratigraphic position as unit D in these locations, but has few similar properties. It consists of both laminated and homogeneous, well sorted silt / clays which, as with unit B, almost certainly accumulated within the Dyke as a result of gentle fluvial processes. As there was no stratigraphic relationship with unit D (i.e. nowhere do the two units occur in the same bore hole), it is impossible to say if the two were accumulating simultaneously and therefore indicative of local variation in deposition.

4.3.1.7 Unit F - Homogeneous iron stained silt / clays

This unit comprises well sorted silt / clays that have been intensely iron stained, and are also occasionally gleyed. The deposit probably formed from a combination of fluvial processes and elluviation of finer material from unit G above. The iron stains are indicative of previous flood / high water episodes and subsequent drying, while the homogeneous nature of the deposit is probably a result of bioturbation (roots are present in great numbers and earthworms were observed to be active).

4.3.1.8 Unit G - Modern humic topsoil

Unit G is the modern topsoil, which is characterised by a high humic content and evidence of clay depletion (see above). This soil can only have formed in such a position if mean water level in the Dyke was at a lower level, as otherwise biological processes which occur as a part of pedogenesis are inhibited.

4.3.2 Discussion

- 4.3.2.1 The sedimentary profile exposed by the bore hole transect demonstrates considerable facies variation, especially in the spatial distribution of units C-E. These are likely to be the result of differential depositional processes operating at an ultra local scale (e.g. caused by slight meanders in the stream, bedload properties, water depth etc.), erosion (as a result of channel scouring during flood events and dredging), and diagenesis. These processes cannot be reliably reconstructed as part of a simple bore hole survey. However, a number of suggestions can be made, and a simple sequence of "events" suggested.
- 4.3.2.2 The stratigraphy of BH 10 is noticeably different from that of any other bore hole. In particular the presence of compact, sand laminated silt / clays at 4m OD a height at which organic sediments were located in the other bore holes is particularly notable. As discussed above the deposits below 4m OD are undoubtedly of the Oxford Clay / Kellaway Beds and therefore represent a

topographic "high" of geological sediment. It therefore seems highly unlikely that the original Car Dyke passed through this location and that this north-south stretch of Dyke is a relatively recent feature which has not been dug as deep as the Roman original. The absence of organic deposits in the bore hole which may be indicative of a prior abandonment is a further argument for this thesis.

- 4.3.2.3 The organic-rich sediments of unit D are only found in the eastern area of the transect, although it seems highly likely based on vestiges of organic silt / clay found in BH 12 that it once extended further east. These are the deposits that most attention was focused upon in the brief, and yet it is likely that they represent a phase of Dyke abandonment, or at least of poor maintenance. Unfortunately these deposits, as is indeed the case with all others cannot be assigned to any chronological period. Given the fact that few artefacts were found during the trenching (see above), only C¹⁴ dating could positively indicate when the organic sediments accumulated.
- 4.3.2.4 The Dyke appears to have been excavated through the Oxford Clay / Kellaway Beds geology during Roman period (Rosenberg 1996 and references cited therein), at which point it was at least 4-4.5m deep (as reconstructed from the bore hole stratigraphy and relative depth of sediments overlying Roman stratigraphy in the archaeological trenches). The course of the Dyke largely mirrored that of the modern one, although the north south section in the eastern part of the site is likely to have originally been in a different location. Accumulation of fine grained sediments began on a periodic basis filling the base of the Dyke, a process which because of changes in water properties (eg. erosion of calcareous geological strata (e.g. Cornbrash) in the surrounding fields), eventually led to the formation of shell-rich deposits. Subsequently the Dyke was either abandoned, or maintenance work ceased, allowing plants to colonise and in turn causing the formation of organic sediments. This situation seems to have continued until dredging activities made it possible to re-use the Dyke.

	Borehole number	2	2	4	4	5	5	5	6	6	6.	6	7	7	10	11
	Depth metres	0.4-1.1	1.1-1.6	0.5-0.65	0.85-1.10	0.7-1.0	1.0-1.3	1.3-1.5	0 25-0 5	0.5-0 75	0.75-0.96	1.17-1.46	0.44-0.70	0.70-1.00	1.0-2.0	0.25-0.5
	Sample weight (kg)	0.3	0.3	0.575	0.55	0.625	0 625	0.125	0.15	0.1	0.125	0 125	0.375	0 825	0.9	0.75
Aquatic																
Hisma sp	Water plantain										2		4			1
l.emna spp.	Duckweed			3		3	3	2	1			4		3		
Polamogeton spp.	Pondweed		2			-			1				2	3		
Rannevilus subg. Batrachium	Water Crowfoot	5	2	3	3	2	2					1	3		-	_
Bankside / marginals		-	-		-					-	-					-
Berula erecta	Lesser Water-parsnip	-	2					-	-						_	-
('arex spp.	Sedge	3	4	3	3	2	5	5	2	3	3	3	2	3	-	_
Filipendula ulmaria	Meadowsweet	2		-		-	_	_							_	_
Lycopus europaeus	Gipsy wort	-	2	-				1	1					2	-	-
Oenanthe aquatica	Fine-leaved Water-dropwort	1	-	_	3	2	2	-	2	3		1	2	3	_	-
Rammeulus sceleratus	Celery-leaved Crowffot	2	2	_	4	1		2		-		-		2	_	-
Sparganium erectum	Branched Bur-reed	3			-	2			-			-			_	-
Stemm fragments	4.1	-	5		-	-		5	-		4				_	
Woodland / scrub		-	-		-			-		-	30.0			-	_	_
Corms sanguinea	Dogwood	-	-		2	1			-	2			2	2	_	-
('rataeigus monogyna	Hawthron		-		3		2		-	-		2		2	-	
Prums spinosa	Blackthron		-	_	1					-		-			_	-
Rhamnus cathartica	Buckthorn	-	-	-	1	-		-	-	-	-	-			_	-
Rosaceae indet, (thorn)	Rose family		_	-			-			1					_	
Rubus sect Glandulosus	Bramble	1	-	2	2	3	2				1		2	2	_	1
Sambucus nigra	Elder	-	-	-	-	-	-	-	2	-	- 3	2	-		_	-
Solamım ducumara	Bittersweet	-	2	-			-		3	3		*	2	2	-	-
Wood fragments	Billetances	3	3	3	5	5	5	3	3	2	3	3	3	5	-	_
Buds / scales		2	-		2	2	3	2	5	3	2			2	-	-
Leaf fragments			2		2	2	3			,	2	4	2	3	-	-
Grassland			-		-	- 4	,			-	- 4	-		,	_	-
Frunella vulgaris	Selfheal				-										_	
Various	Selinear	-									2	1			_	
	6.1									-						
Atriplex sp.	Orache	-	1													_
Cerastium spp.	Chickweed		1													
Cirsium I Carduus sp.	Thistle											1				
Rumex spp	Dock		2				1									
Poaceae indet	Grasses	1 !	2			-		2								
Umbelliferae indet		1														
Urtica dioica	Common nettle	5	2													
Moss		2									3					
Other remains																
Beetle fragments		3	3	3	4			3			2	3		3		
Caddis fly larvae		2	3			2	2	1					1			
Cladoceran ephyppia	Water flea egg cases	5	2	3	5	5	5	3	2	3	2	3	3	3		3
Leech cocoons			3			3				10		2	2	2		

Scale of abundance:

1=rare (occurring once / 1 seed) 2=occasional (few times / 2-5 seeds) 3=frequent (occurring regularly / 5-20 seeds)
4=very frequent (in every portion of the sample / 20+ seeds) 5= abundant (occurring in the field of view at all times / 40+ seeds)

Since this point the Dyke has been maintained and a soil has developed on the periphery of the stream channel, although it is possible that deposition of fine-grained sediments resumed / continued to the west of BH 4 on a seasonal basis.

4.4 Bio-remains recovered from bulk samples (by Julie Jones)

4.4.1 Botanical

- 4.4.1.1 Fifteen samples were examined from a series of boreholes as part of the evaluation. These were assessed for the preservation of plant macrofossil remains by a rapid scan of organic floats produced during sample processing. The results are shown in Table 1 which indicates presence on a scale of abundance. The plant remains are listed in habitat groups as an aid to interpretation. Habitat information and nomenclature follows Stace (1991). Despite the relatively small size of the samples the range and quantity of material preserved was high.
- 4.4.1.2 The majority of the samples were taken from the peats of unit D (BH 4, 6, 7 and 11), with three samples from BH 5 from organic silts / clays and two from BH 2 which were from silt / clay deposits. There is, however, an overall similarity between the plant macrofossil remains recovered from the boreholes despite the varied nature of the sampled deposits. A single sample from BH 10 (unit A) contained no organic remains.
- 4.4.1.3 All the samples contain an assemblage of both aquatic plants such as duckweed (Lemna sp.), pondweed (Potamogeton sp. and water crowfoot (Ranunculus subg. Batrachium), as well as species which are typical of bankside situations such as fine-leaved water-dropwort (Oenanthe aquatica), gipsywort (Lycopus europaeus), blanched bur-reed (Sparganium sp.) and many species of sedge (Carex spp.). Several of the samples also contain an abundance of stem

fragments thought to be of monocotyledons, such as sedge. These plant remains suggest an open body of water, possibly still or slow-moving with a cover of floating aquatics such as duckweed, with colonisation of the banks of the watercourse by plants such as those mentioned above.

- 4.4.1.4 Fragments of wood occur in all the samples, with leaf fragments, buds and bud scales present in most cases. Further indications of a woodland / scrub element are shown by the remains of, for example, hawthorn (*Crataegus monogyna*), buckthorn (*Rhamnus cathartica*), bramble (*Rubus* sect *Glandulosus*) and elder (*Sambucus nigra*). Buckthorn is typical of open wood or scrub on peat and base rich soils and with hawthorn, elder and bittersweet (*Solanum dulcamara*) could have grown on the damper soils bordering a watercourse, whereas dogwood (*Cornus sanguinea*) is more typical of drier situations. Other plants which are less specific in their habitat requirements such as common nettle (*Urtica dioica*), thistle (*Cirsium / Carduus* sp.) and dock (*Rumex* sp.) could all easily have thrived on the type of habitats described.
- 4.4.1.5 The assessment has shown the high quality of plant macrofossil preservation in the sampled deposits. Clearly larger samples (i.e. not taken using an auger) would allow a greater assemblage to be recovered which would allow a more detailed interpretation of the natural environment of the site. No cultural material survived in the samples and the indications are that this is a natural environment, showing colonisation of the Dyke by a variety of plants, resulting in a build up of organic sediments. This could suggest that the dyke was poorly maintained.

4.4.2 Faunal

4.4.2.1 Mollusc shells were extracted from two samples taken from unit C (BH 3 1.90-2.00m and BH 5 1.46-1.80m), and processed following the methodology of Evans (1972). All shells greater than 500mm were picked from the dried sample

residue and identified to the highest possible taxonomic level given the time constraints over which the project operated. At least 14 species were found (Table 2).

4.4.2.2 Although many more shells were recovered from the sample from BH 6 - due to the larger sample - the mollusc assemblages from the two samples are obviously the same. All species found are fresh water and of catholic environmental preference (Sparks 1961), although *Valvata piscinalis* and *Bithynia tentaculata*, when found together, indicate the presence of moving water. However, as no larger bivalves or compulsive river dwelling gastopods such as *Viviparus* sp. or *Theodoxus fluviatalis* were found the water cannot have been fast moving. The presence of aquatic vegetation is indicated by the presence of *Valvata cristata*, which also prefers moving water.

Species	Authority	BH 3 1 (1.90-2.00m)	BH 5 (1.46-1.80m)
Valvata cristata	Muller	3	5
Valvata piscinalis	Muller		6
Bithynia tentaculata	Linnaeus	2	39
Bithynia	operculae	3	19
Physa fontinalis	Linnaeus		1
Lymnaea palustris	Muller		2
Lymnaea peregra	Muller	1	5
Anisus leucostoma	Millet	1	6
Anisus vortex	Linnaeus		1
Gyraulus laevis	Alder	4	36
Armiger crista	Linnaeus	8	35
Planorbarius corneus	Linnaeus		1
Hippeutis complanatu	s Linnaeus	2	5
Acroluxus lacustris	Linnaeus		5
Pisidium sp.		3	7
Total		26	151

Table 2. Mollusc shells recovered from samples of unit C

- 4.4.2.3 The molluscan assemblages do not indicate the presence of a fluvial environment any different to that of today within the Dyke. However, the fact that mollusc shells are preserved is indicative of a more calcareous sedimentation environment than that present during any other phase of deposition.
- 4.4.2.4 Several other classes of invertebrate were found in the bulk samples assessed for their plant macro-remains. These included egg cases of water fleas, leech cocoons and caddis fly larvae, as well as beetle remains (Table 1).

4.5 An assessment of deposits in the Car Dyke

- 4.5.1 The bore hole hole survey of the Car Dyke and subsequent assessment of the samples demonstrate that organic deposits are both extensive and highly fossiliferous. There is at present no chronology for any deposit filling the dyke, including all the organic remains and therefore further comment on this aspect of archaeological importance is inappropriate at this time.
- 4.5.2 Assessment of the plant remains demonstrates that no cultural material has been deposited in the Dyke in the locations sampled. Therefore the infilling deposits accumulated entirely through "natural" sedimentation processes. However, it should also be stated that without the initial construction of the Dyke there would have been no opportunity for such accumulation (as witnessed by the lack of organic remains in any of the evaluation trenches) in the immediate area of the site. Thus the deposits can be considered to be an indirect result of human action.
- 4.5.3 Many of the organic deposits located by the auger survey occur at, or just above modern water level and immediately adjacent to the stream. Therefore any erosion of the bank, and possibly even further scouring of the stream bed (where further organic deposits may exist despite recent dredging), would lead to the

truncation of the organic deposits. Such sediments are notoriously susceptible to erosion due to their inherent lack of cohesion.

4.5.4 Whether input of water into the Dyke during construction on the site would lead to erosion is presently equivocal. However, it must be stated that there is a risk that this might occur, a risk that will be dependent on how much water is pumped into the Dyke, and at what time in the year this takes place.

5. DISCUSSION AND CONCLUSIONS

5.1 General

5.1.1 It is apparent from the evaluation that features of Romano-British date survive within the northern-western part of the study area. In addition, part of the profile of the south bank of the Car Dyke may lie buried under later deposits.

5.2 The Romano-British settlement

5.2.1 Features of Romano-British date clearly survive in trench 1. These take the form of ditches, pits and possible post holes.

Ditches

- 5.2.2 Six ditches were observed. Of these ditches [139], [133] and [130] are on a N-S alignment; ditch [124] is on a similar but more of a NNE-SSW alignment; and possible ditch terminus [122] may be aligned NNW-SSE. Nevertheless the alignments of all five of these ditches is very similar and corresponds with the approximate E-W alignment of ditch [103]. The ditch alignments, therefore, indicate an area of occupation which is aligned from north to south.
- 5.2.3 Most of the ditches contained fills which are suggestive of natural silting. However, ditch recut [142], and ditches [139] and [103] contained much darker fills. The latter two, especially [103], also contained quantities of pottery and bone indicating deliberate backfill with domestic waste. Fragments of ceramic building material were also recovered from ditch [103].

5.2.4 There is little indication as to whether the ditches are all contemporary or belong to differing occupation periods. However, possible ditch terminal [122] cut through the fill of ditch [103] and the slightly differing alignments of ditches [124] and [130], which are just 2.3m apart, may indicate that they are not contemporary.

Pits

5.2.5 Several pits were observed. The largest of these were [126] and [128]. These are of particular interest as they cut through the respective fills of ditches [124] and [130], indicating another phase of occupation after these ditches had gone out of use. A further pit [137] occurred, within the confines of the trench, in relative isolation. However, it contained a fill of a charcoal stained clay which incorporated charcoal fragments. This was very similar to the fills of a pit cluster, approximately 65m to the east, which incorporated pits [106], [108], [110], [112] and [114].

?Post holes

5.2.6 Three possible post holes [116], [118] and [120] were observed. Feature [120] was cut by ditch [103] and feature [118] cut through the fill of the same ditch [103]. However, these were all very shallow features and their interpretation as post holes is far from certain.

5.3 The Car Dyke

5.3.1 At a distance of 8.7m from the southern end of trench 5 a cut [503] through the natural clay was observed. The nature of this cut is uncertain. However, it may form part of the profile of the south bank of the Car Dyke, later covered by material derived from flooding or upcast from the cleaning of the Dyke.

5.4 Medieval features

- 5.4.1 Trench 12 was specifically designed to test for the survival of any features relating to the medieval manor house recorded in the Sites and Monuments Record (SMR 02207). It is clear that no such deposits survived within this or any of the other trenches. If, as suggested by the SMR, the manor was succeeded by a now demolished farm, it is likely that much of it has been destroyed by the construction and demolition of the farm and the construction of the domestic caravan site to the south.
- 5.4.2 Extensive traces of medieval ploughing, in the form of ridge and furrow, are recorded across the study area from aerial photographs. This ridge and furrow is aligned either approximately N-S or E-W. Faint traces of this ridge and furrow were apparent in the north-western part of the study area, but these were not evident in trench 2 or any other of the trenches, indicating that modern ploughing has removed virtually all traces of medieval ploughing.

5.5 Post-medieval/modern features

5.5.1 Post-medieval structures were identified in the eastern part of trench 7. These consisted of a brick wall for a slight structure and several post holes. In trench 1 pit [140] is probably of post-medieval origin as its fill contained a potsherd of that date.

5.6 Extent, condition and nature of the archaeological remains

5.6.1 It is clear that remains of Romano-British date survive in trench 1. The full extent of these remains is not clear. However, they do not occur further to the

north in trench 2. In addition the construction of a road between trenches 1 and 2 is likely to have seriously damaged any archaeological deposits along its construction route. Also, no archaeological deposits were observed in the evaluation carried out prior to the construction of the APV Baker factory, approximately 160m to the north-west. However, the full extent of this settlement to the south and east is not known.

- 5.6.2 The archaeological deposits in trench 1 have been truncated by medieval and later ploughing and occur cutting natural deposits and directly below the ploughsoil. Nevertheless, their preservation can be classified as very good. In addition, the preservation of artefactual material within the fills of the archaeological features can also be classified as very good. The ceramic and faunal material has the potential to provide important artefactual and economic data. In addition the recovery of cereal grains from the fill of ditch [103] indicates that the site also has the potential to provide data on the local Romano-British economy and environment.
- 5.6.3 Given the faunal and ceramic evidence, particularly from ditch [103], the indications from the evaluation are that the archaeological remains in trench 1 are part of a domestic settlement. Given that ditch [103] incorporates a turn to the south, it is possible that it forms part of an enclosure ditch around this settlement. The occurrence of *tegulae*, *imbrices* and box flue within its fill also suggests that this settlement contained a structure of some status, possibly even a villa. The pottery indicates that this structure is of later 3rd 4th century date. The quantity of charcoal in the pit cluster and the darker nature of the fills of ditches [139] and [142] also suggests that these features are close to the domestic side of the settlement. All of the other ditches found in trench 1 may be part of boundaries or enclosures, either associated with structures within the settlement or the keeping of stock. Current understanding of the nature of Romano-British settlement in the environs of the Car Dyke and the Cambridgeshire Fens is incomplete, and any remains could provide a useful insight into the nature of Romano-British activity in this area (JSAC 96, para 4.2, ii).

- 5.6.4 The exposure of part of the profile of the south bank of the Car Dyke is also of interest. However, it is uncertain whether this is part of the original Romano-British profile of the Dyke or part of a later recut.
- 5.6.5 There was no sign of the Roman road in trench 10. This road is recorded in the Sites and Monuments Record as a linear parchmark to the south-east of the study area and is identified from a single aerial photograph. The aerial photographic survey undertaken as part of the archaeological assessment also identified the continuation of the line of this possible road through the study area. However, this survey identified this continuation as a vehicle track. In light of the evidence from trench 10, this interpretation is probably correct.

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7. BIBLIOGRAPHY

BGS. British Geological Survey (1/50,000 sheet 158).

CAT, 1996. Field Recording Manual. Cotswold Archaeological Trust.

Evans, JG, 1972. Land Snails in Archaeology. Seminar Press, London.

IFA, 1994. Standard and Guidance for Archaeological Field Evaluations.
Institute of Field Archaeologists.

JSAC 1996. An Archaeological Assessment In Connection With A Proposed

Development At Paston Reserve, Peterborough, Cambridgeshire. John Samuels

Archaeological Consultants.

Sparks, BW, 1961. The ecological interpretation of Quaternary non-marine Mollusca. *Proceedings of the Linnean Society* **172**, 71-80.

Stace, C, 1991. New Flora of the British Isles. Cambridge University Press.

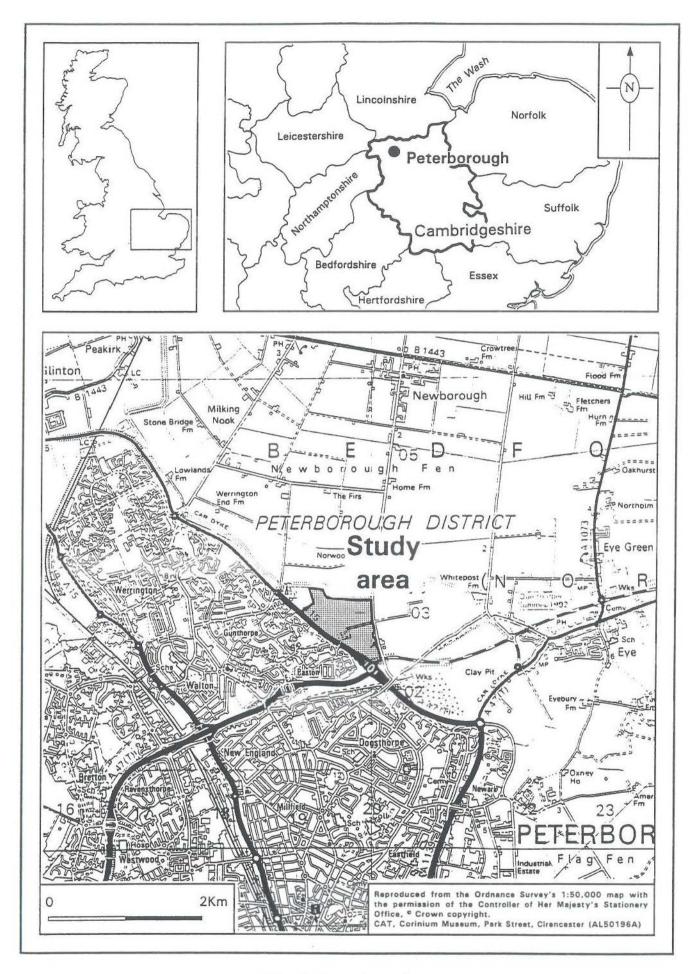
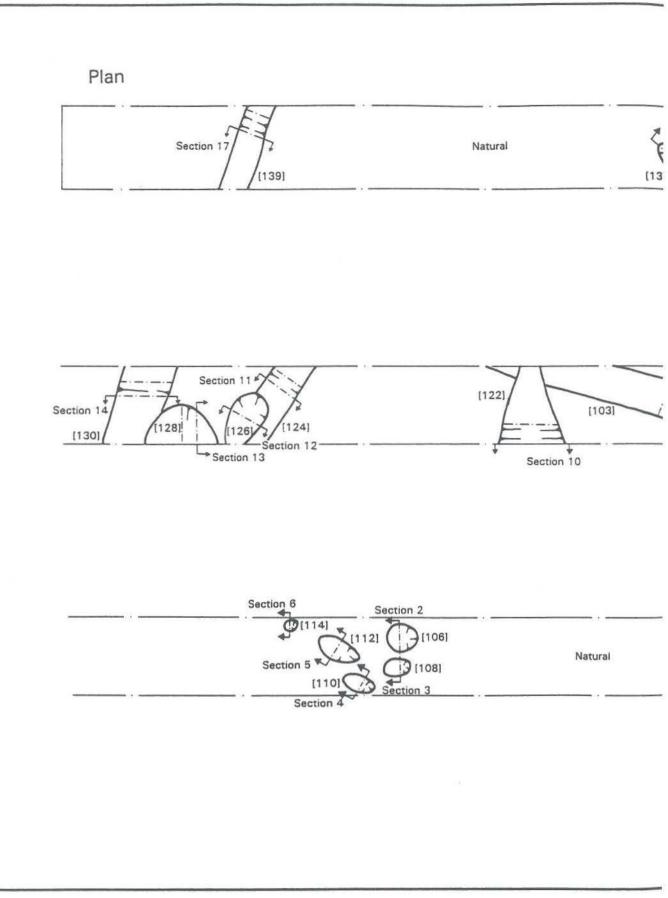


Fig. 1 Location plan



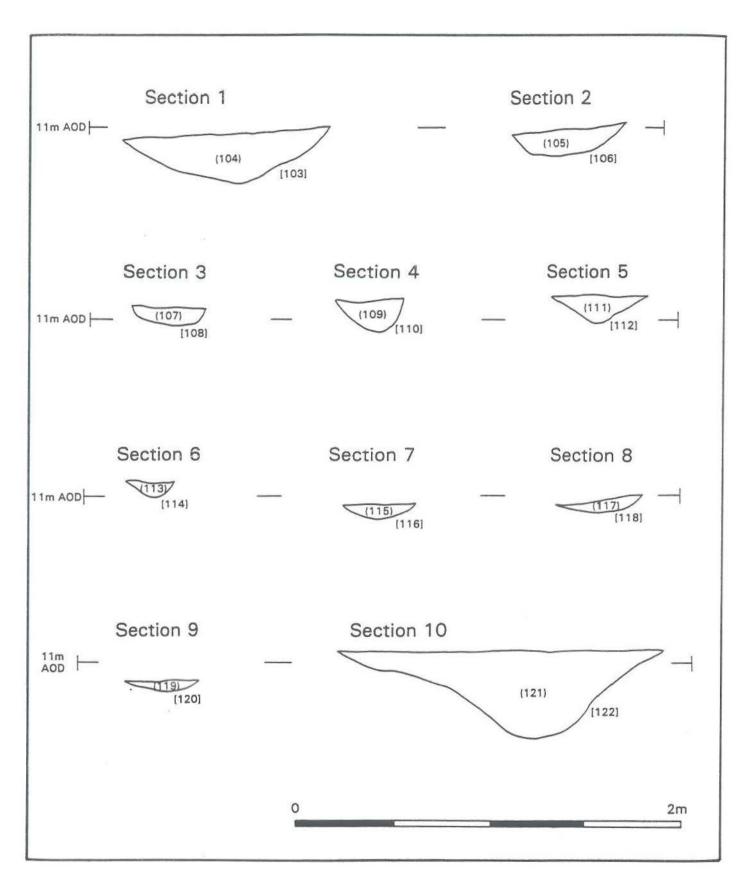


Fig. 4 Trench 1, sections

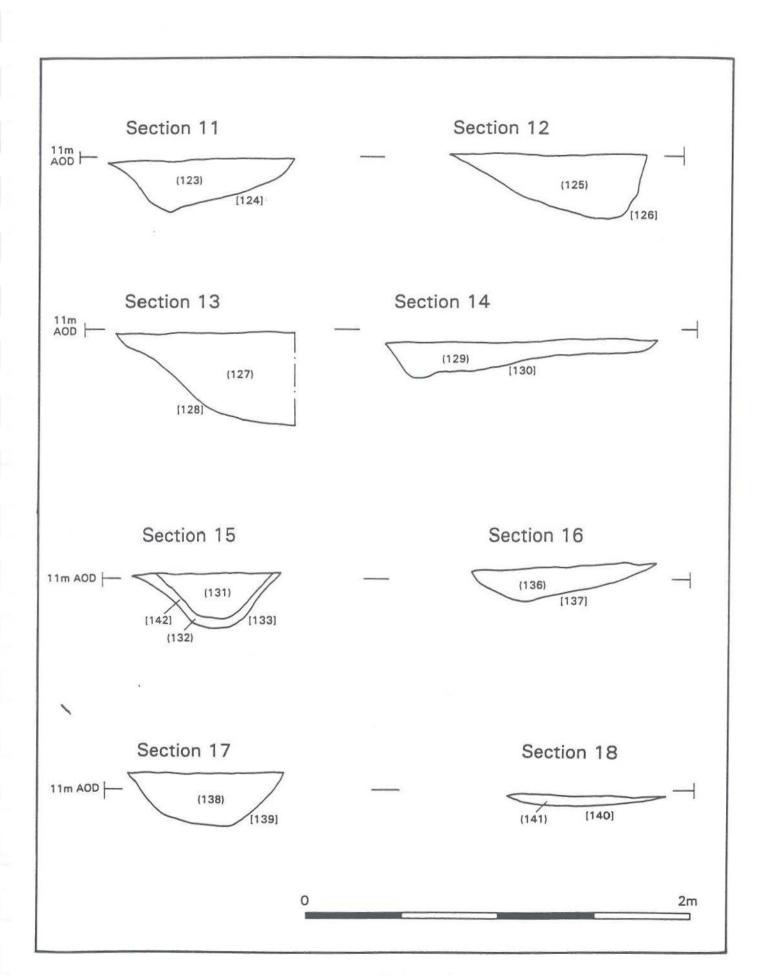


Fig. 5 Trench 1, sections

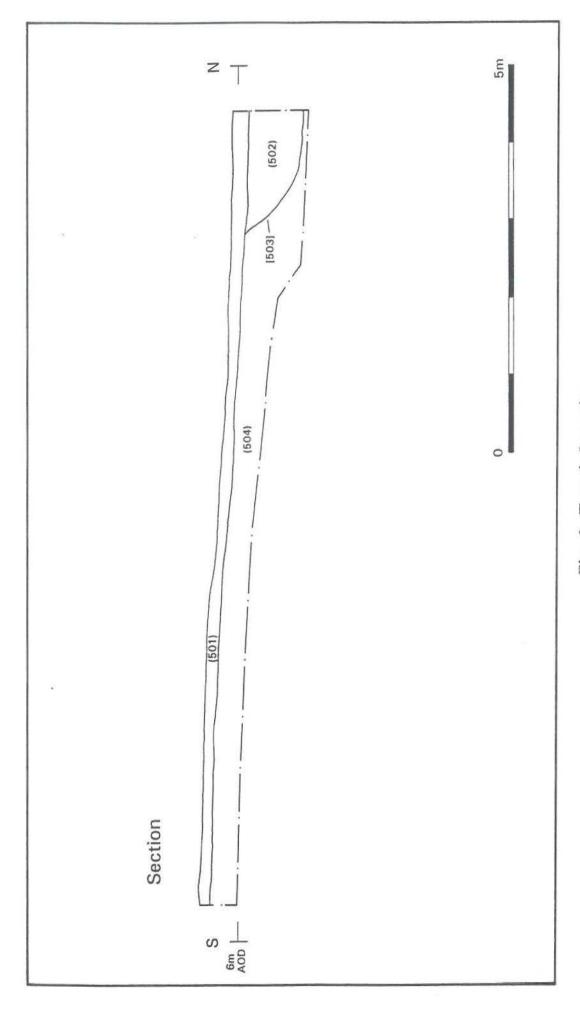


Fig. 6 Trench 5, section

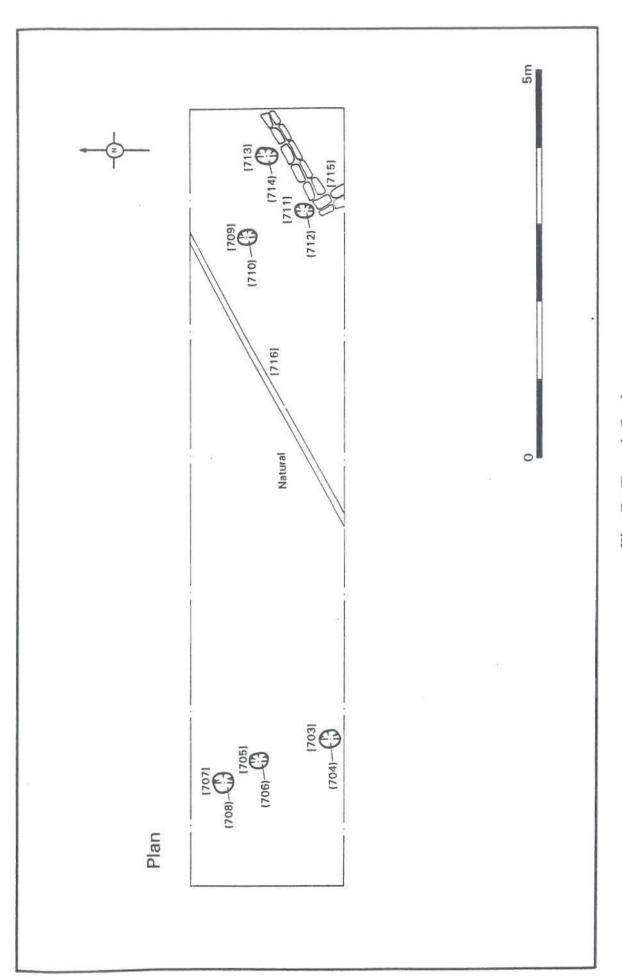


Fig. 7 Trench 7, plan

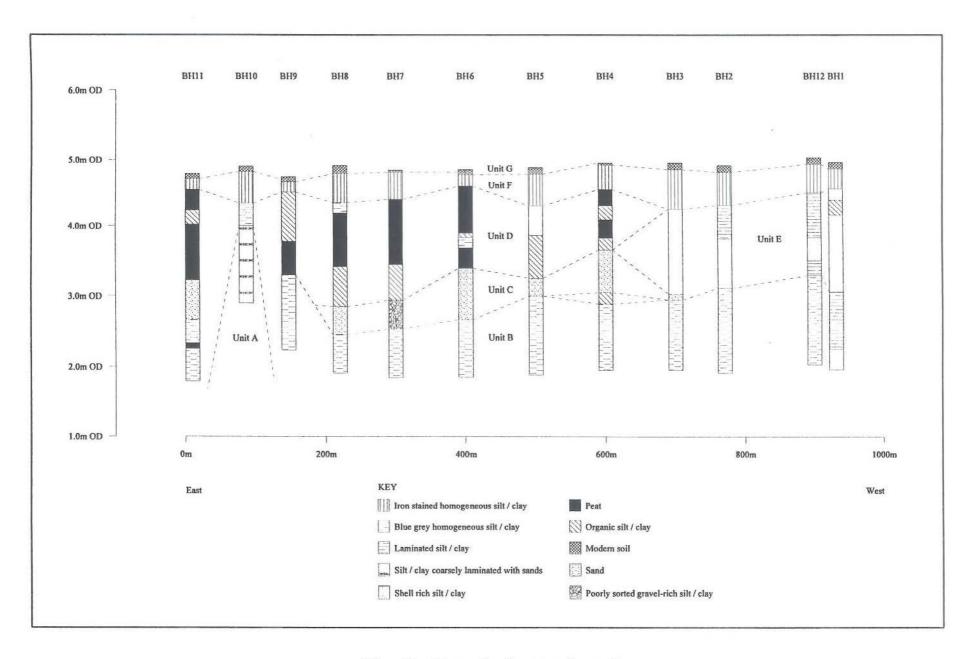


Fig. 8 Bore hole stratigraphy

APPENDIX I

TRENCH DESCRIPTIONS

Note: Stratigraphic descriptions are given from the earliest to the latest deposits. Cut features are designated by square brackets thus [000], all other deposits/layers are in round brackets (000). All features cut through natural deposits and were covered by the ploughsoil.

Trench 1 (100m x 2m)

- (102) was the natural which consisted of a yellow and yellowish-blue clay, with areas of reddish-brown gravel. This was encountered at a depth of approximately 0.3m below current ground level, cut by the features described below and covered by the ploughsoil (101).
- [139] was a N-S aligned ditch, up to 0.8m wide and 0.26m deep. It contained a fill (138) of a dark brown silty clay with a few charcoal flecks and small angular and sub-rounded stones.
- [137] was a pit which measured 0.95m x 0.58m across. It was 0.2m deep and contained a fill (136) of black stained clay and charcoal fragments. Very rare (1%) flecks of fired clay were also observed.
- [133] was a N-S aligned ditch which was 0.75m wide and 0.29m deep. It contained a fill (132) of a yellowish-grey silty clay with rare (1%) small sub-angular and rounded stones. This ditch had been subject to a recut [142], which was 0.62m wide and 0.23m deep. This recut contained a fill (131) of a dark grey-brown silty clay, with very rare (1%) charcoal flecking and small angular stones.
- [130] was a N-S aligned ditch which was 1.4m wide and 0.19m deep. Its E edge was sharply cut, but the W side was on a gentle gradient. It contained a fill (129) of a grey-brown silty clay, with rare charcoal flecks and pebbles. Flecks of fired clay were also noted. This ditch was cut by pit [128].
- [128] was a pit, which within the confines of the trench measured 1.9m across and 0.48m deep. It contained a fill (127) of a mid grey-brown silty clay with rare charcoal flecking and a moderate

- amount of small angular and rounded stones.
- [124] was a ditch aligned approximately NNW-SSE and which measured 0.9m in width and 0.26m in depth. It contained a fill (123) of a light greyish-brown clayey silt with rare charcoal flecks and small rounded and angular stones. It had been cut to the W by pit [126].
- [126] was a pit which measured, within the confines of the trench, 1.4m x 0.98m and was 0.33m deep. It contained a fill (125) of a heavily charcoal flecked mid to dark grey-brown silty clay. Rare flecks of fired clay and small rounded stones were also observed.
- [103] was an E-W aligned ditch which was exposed for a length of 11.5m and incorporated an unexcavated turn to the S [135] along its S side. It measured up to 1.1m in width and was 0.25m deep. It contained a fill (104) of a dark greyish-black charcoal flecked silty clay. This ditch was cut to the E by feature [122] and to the west by small pit [118].
- [120] was a small pit, cut by ditch [103]. It measured 0.4m in width and 0.05m in depth. It contained a fill (119) of a grey brown silty clay.
- [122] was a possible ditch terminal aligned approximately NNW-SSE, tapering to the NNW. It was up to 1.7m wide and was 0.45m deep and contained a fill (121) of a charcoal flecked (10%) orangebrown silty clay.
- [118] was a small pit which measured 0.45m across and was just 0.07m deep. It contained a fill (117) of a dark grey-brown silty clay.
- [116] was a pit which measured 0.4m across and was just 0.07m deep. It contained a fill (115) of grey-brown silty clay.
- [114] was a pit which measured 0.25m across and 0.09m deep. It contained a fill (113) of a heavily charcoal stained clay and charcoal fragments.
- [112] was a pit which measured 1.14m across and 0.5m deep. It contained a fill (111) of a black stained clay and charcoal fragments.
- [110] was a pit which measured 0.8m wide and 0.35m across and 0.16m deep. It contained a fill (109) of a black stained clay and charcoal fragments.

[108] was a pit which measured 0.58m x 0.38m and was 0.09m deep. It contained a fill (107) of a black stained clay and charcoal fragments.

[106] was a pit which measured 0.74m x 0.6m and was 0.16m deep. It contained a fill (105) of a dark grey brown silty clay with approximately 10% charcoal flecking. Charcoal fragments up to 8mm in diameter were also observed.

[140] was an irregular pit which was 0.8m wide and 0.08m deep. It contained a fill (141) of a gravelly dark brown clay.

The natural clay and all of the above features (including 7 field drains) were covered by the ploughsoil (101), which averaged 0.3m in thickness.

Trench 2 (10m x 2m)

The natural (202) consisted of a yellowish-blue clay which was encountered at a depth of approximately 0.3m below present ground level and was covered by the ploughsoil (201).

The natural clay was covered by the ploughsoil, which was approximately 0.3m thick. However, this ploughsoil was extremely rutted, indicating modern disturbance.

Trench 3 (10m x 2m)

The natural (302) consisted of a yellow and yellowish-blue clay which was encountered at a depth of approximately 0.3m below present ground level.

[303] was a slight depression at the northern end of the trench filled with a greyish-brown silty clay approximately 0.12m thick. This produced modern material such as torch batteries. After initial machining it was sampled by hand to the natural clay below. It was then later completely removed by machine.

The natural clay and [303] were covered by the ploughsoil (301), which was approximately 0.3m thick.

Trench 4 (10m x 2m)

The natural (402) consisted of a yellow clay which was encountered at a depth of 0.3m below ground level.

[403] was the cut for a field drain aligned E-W. The pipe was found at a depth of 0.75m below ground level. The fill (404) of this feature consisted of redeposited yellow clay natural and could only barely be distinguished from the undisturbed natural clay.

The natural clay and [403] were covered by the ploughsoil (401), which was approximately 0.3m thick.

Trench 5 (10m x 2m)

The natural (504) consisted of a yellowish-brown clay, which at the southern end of the trench was encountered at 0.15m below present ground level.

[503] was a cut found at a distance of 8.7m from the S end of the trench. It was 0.68m deep and continued beyond the northern extent of the trench. The fill (502) of this feature consisted of a yellowish-brown silty clay. The nature of this feature is uncertain, although it may represent part of the southern profile of the Car Dyke, later covered by upcast from the re-cutting or cleaning of the Dyke.

The natural clay and [503] were covered by the ploughsoil (501), which reached a maximum thickness of 0.2m.

Trench 6 (10m x 2m)

The natural (602) consisted of a yellowish-brown clay with areas of gravel, which was encountered at a depth of 0.3m below ground level.

[603] was a ditch with irregular sides up to 2.5m wide and 0.26m deep. The fill (604) of this ditch was a heavily rooted dark yellowish-brown clay. Numerous small shallow irregular pits and root lines within this fill indicate that this feature is a hedge boundary. The natural clay/gravel, a field drain and [603] were covered by the ploughsoil, which reached a maximum thickness of 0.3m.

Trench 7 (10m x 2m)

The natural (702) consisted of a yellow clay with bluish patches throughout.

- [703] was a post hole which was 0.25m in circumference and 0.12m deep. It contained a fill of a greyish-black silty clay.
- [705] was a posthole which was 0.25m in circumference and 0.15m deep. It contained a fill of a greyishblack silty clay.
- [707] was a posthole which was 0.29m in circumference and 0.29m deep. It contained a fill of a greyishblack silty clay.
- [715] consisted of a single course of brick footings for a structure aligned NE-SW. Two walls were apparent and the bricks measured approximately 0.23m x 0.11m x 0.07m deep.
- [709] was a posthole which was 0.22m in circumference and 0.12m deep. It contained a fill (710) of a greyish clayey soil which contained crushed red brick fragments.
- [711] was a posthole which was 0.26m in circumference and 0.09m deep. It contained a fill (712) of a greyish clayey soil which contained crushed red brick fragments.
- [713] was a posthole which was 0.3m x 0.25m across and 0.09m deep. It contained a fill (714) of a greyish clayey soil which contained crushed red brick fragments.
- [716] a cut containing a sewer pipe on the same alignment as brick structure [715].

The natural clay and the above features were covered by the ploughsoil (701) which was a maximum of 0.35m thick.

Trench 8 (10m x 2m)

The natural (802) consisted of a yellowish-brown clay with areas of gravel, which was encountered at a depth of 0.3m below ground level.

[804] was a cut for a field drain and measured 0.5m across and 0.4m deep (0.7m below ground level).

It contained a fill of a medium-dark brown mottled clay with a pipe at its base.

Four other field drains were noted just below the ploughsoil.

The natural clay/gravel and the field drains were covered by the ploughsoil (801) which was a maximum of 0.35m thick.

Trench 9 (10m x 2m)

The natural (902) consisted of a yellowish-brown clay with patches of light yellow clay and areas of gravel.

The natural clay/gravel was covered by the ploughsoil (901) which was a maximum of 0.3m thick.

Trench 10 (100m x 2m)

The natural (1002) consisted of an orange-brown clay with areas of pale blue clay and gravel, encountered at a depth of approximately 0.3m below ground level.

Two pits (containing modern brick fragments) and a trench containing a cable were observed.

The natural clay/gravel, pits and cable trench were covered by the ploughsoil (1001) which was approximately 0.3m thick.

Trench 11 (10m x 2m)

The natural (1102) consisted of a pale brown clay with areas of gravel, encountered at a depth of 0.3m below ground level.

The natural clay/gravel was covered by the ploughsoil (1101) which was 0.3m thick.

Trench 12 (10m x 2m)

The natural (1202) consisted of a pale brown clay, encountered at a depth of 0.3m below ground level.

The natural clay was covered by the ploughsoil (1201) which was 0.3m thick.

APPENDIX II:

THE CERAMICS (BY JANE TIMBY)

The Pottery

Feature	Context	Туре
[103]	(104)	20 bodysherds Nene Valley colour coated ware including 3 sherds from a single disc-necked flagon, 3 from a. bowl, 1 from a jar and 1 from a flanged bowl/mortaria. 29 bodysherds and 6 adjoining rimsherds from a single large shell-tempered jar. 8 sherds of fine grey ware. 21 bodysherds of black sandy ware with a brown core. Late 3rd-4th century.
[112]	(111)	3 sherds from a shell-tempered ware rim storage jar. Probably 4th century.
[124]	(123)	4 bodysherds from a grey sandy ware rim jar (2nd-4th century).
[126]	(125)	3 bodysherds shell-tempered wares. 1 bodysherd grey sandy ware. 2 bodysherds white sandy wares. Roman.
[139]	(138)	1 sherd rim curved wall dish 1 bodysherd fine black-slipped greyware. Roman (?late 2nd-4th century).
[140]	(141)	bodysherd fine greyware. Roman. bodysherd glazed red earthenware (17th-19th century)

Ceramic Building Material

Feature	Context	Туре	
[103]	(104)	4 joining fragments of a single tegula	
		2 fragments of tegulae	
		2 fragments of imbrices	
		I fragment of flat tile	
		2 fragments of combed box-flue	
		14 small fragments	
[202]	(204)	1.11	
[303]	(304)	1 limestone tempered grey/orange ware (?late medieval).	
		1 base glazed red earthenware	
		3 sherds refined white earthenwares (18th-19th century).	
[804]	(803)	I bodysherd blue and white china (19th century).	
[110]	(109)	3 fragments of non-diagnostic fired clay	
[110]	(107)	5 Hagments of non-diagnostic field clay	
[140]	(141)	1 tile fragment (?tegula)	
2			
(2)	[303]	5 post-medieval tile fragments	
[804]	(803)	1 modern pipe fragment	

APPENDIX III

THE ANIMAL BONE (BY ALISTAIR BARBER)

Feature	Context	Type
[103]	(104)	1 x sus jaw fragment
		1 x bos jaw fragment
		8 x bos horn core fragments
		1 x bird femur, proximal end missing
		62 x unidentified small fragments
		3 x scapula fragments, unidentified to species
[126]	(125)	4 x unidentified small fragments
[140]	(141)	2 x ?humerus fragments; small mammal
		1 x unidentified fragment
[139]	(138)	3 x bos jaw fragments
		2 x ovid scapula fragments
		1 x longbone fragment, unidentified to species
		1 x rib fragment, unidentified to species

APPENDIX IV

THE ENVIRONMENTAL REPORT (BY JULIE JONES)

Two bulk samples were taken from the respective fills of ditch [103] and pit [110] in order to determine the preservation of the plant macrofossil remains and to see if any evidence of cultural activity survived. Limited amounts of these samples were processed and the results are presented in the table below:

The samples produced very small floats which consisted predominantly of modern roots. Small charcoal fragments were present together with several grains of wheat and barley, but no chaff, and a number of weed seeds typical of arable habitats. The assemblage is too small for any interpretation apart from showing the presence of this type of material. It also illustrates that much larger samples would be required should any more work be carried out here to allow meaningful interpretetaions to be made. Samples up to 40 litres are generally recommended.

FEATURE		DITCH [103]	PIT [110]
Sample size (kg.)		8.5	2.5
Cereal grain			
Triticum sp.	Wheat	4	
Hordeum sp.	Barley	Ī	
Weeds			
Anthemis cotula	Stinking Chamomile	Ĭ	
Atriplex sp.	Orache	1	
Carex spp.	Sedge		2
Chenopodium album	Fat-hen	1	
Poaceae indet.	Grass	1	
Charcoal fragments		present	present