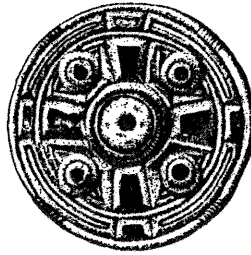


OFFICE COPY.



Archaeological Field Unit

**Roman and Undated Remains along the Bourn-Caldecote Highfields
and Bourn-Cambourne Water Pipelines: Archaeological Recording**

S Kenney

2000

Cambridgeshire County Council

Report No. 184

Commissioned by Cambridge Water Company

**Roman and Undated Remains along the Bourn-Caldecote Highfields and
Bourn-Cambourne Water Pipelines: Archaeological Recording
TL 3370/5990 to TL 3540/5970
TL 3370/5990 to TL 3241/5958**

Scott Kenney

December 2000

Editor: Tim Malim BA, MIFA
Illustrator: Caroline Malim BA, PGCE, MPhil



Report No. 184

©Archaeological Field Unit
Cambridgeshire County Council
Fulbourn Community Centre
Haggis Gap, Fulbourn
Cambridgeshire CB1 5HD
Tel (01223) 881614
Fax (01223) 880946

Arch.Field.Unit@libraries.camcnty.gov.uk
<http://www.camcnty.gov.uk/library/afu/index.htm>

SUMMARY

Between the 3rd and the 24th of May 2000, the Archaeological Field Unit of Cambridgeshire County Council (AFU) carried out observation and subsequent excavation along the route of the new Bourn to Caldecote Highfields water pipeline, Cambridge (TL 3370/5990 to TL 3540/5970). Between the 15th and the 31st of August, the AFU also carried out observation and subsequent excavation along the route of the new Bourn to Cambourne water pipeline, Cambridge (TL 3370/5990 to TL 3241/5958). Both projects were commissioned by Cambridge Water Company.

Observation of the topsoil removal on the Bourn to Caldecote Highfields pipeline revealed a small site which was rapidly investigated, producing a considerable quantity of Roman pottery. Several linear features including a possible roadside ditch were excavated. The smaller linear features were all cut through an earlier spread which contained much Roman pottery and a small quantity of building material. A small pit contained the squashed remains of an almost complete Roman sandy greyware vessel from the third or fourth centuries AD.

Observation on the Bourn to Cambourne pipeline route revealed a single boundary ditch, probably Roman in date.

TABLE OF CONTENTS

1. INTRODUCTION	1
2. GEOLOGY AND TOPOGRAPHY	1
3. HISTORICAL AND ARCHAEOLOGICAL BACKGROUND	3
4. METHODOLOGY	3
5. RESULTS	4
6. DISCUSSION	7
ACKNOWLEDGEMENTS	8
BIBLIOGRAPHY	9
Maps consulted	9
Appendix A Finds quantification	9

LIST OF FIGURES

Figure 1 Site location map	2
Figure 2 Plan and sections of excavated areas	5

**Roman and Undated Remains along the Bourn-Caldecote Highfields and
Bourn-Cambourne Water Pipelines: Archaeological Recording
TL 3370/5990 to TL 3540/5970
TL 3370/5990 to TL 3241/5958**

1 INTRODUCTION

Between the 3rd and the 24th of May 2000, the Archaeological Field Unit of Cambridgeshire County Council (AFU) carried out observation and subsequent excavation along the route of the new Bourn to Caldecote Highfields water pipeline, Cambridge (TL 3370/5990 to TL 3540/5970). Between the 15th and the 31st of August, the AFU also carried out observation and subsequent excavation along the route of the new Bourn to Cambourne water pipeline, Cambridge (TL 3370/5990 to TL 3241/5958).

Both projects were commissioned by Cambridge Water Company. The purpose of the work was to identify, excavate and record any surviving archaeological remains along the route of the pipelines.

The route of the Bourn to Caldecote Highfields pipeline runs adjacent to the south side of the A428, between Bourn Broadway to the west and ending just before the new Childerley Gate roundabout to the east. The route of the Bourn to Cambourne pipeline runs south along the west side of Bourn Broadway, skirts the electricity substation and then curves generally westwards towards Jeavon's Lane at Cambourne.

Although the weather was extremely variable during the first phase of observation, intermittent downpours actually enhanced the visibility of some of the features. The second phase was conducted in similar overcast conditions, but somewhat drier. Consequently the confidence rating to be attached to the results set out below is high.

2 GEOLOGY AND TOPOGRAPHY

The site along the A428 lies on the Pleistocene Boulder Clay, which here overlies the Cretaceous Lower Greensand. Situated on fairly level ground, the area varies between 71m and 72m above Ordnance Datum. The site near Cambourne also lies on Boulder Clay at around 70m above Ordnance Datum.

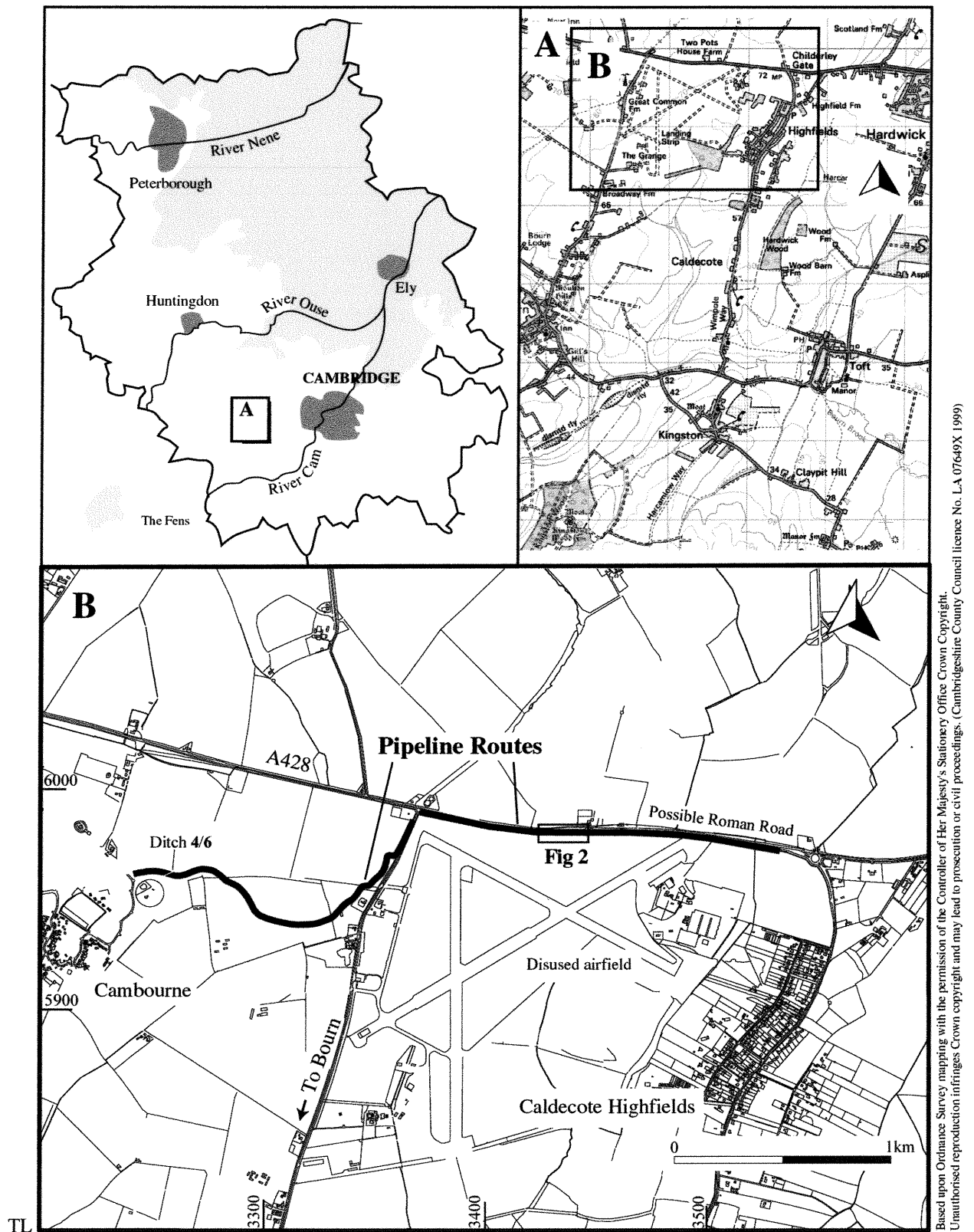


Figure 1 Site location map

3 HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

3.1 Historical Background

The parish of Bourn lies some 11km to the west of Cambridge. The name derives from the brook that bisects the parish north to south (Reaney 1943). Its northern border is formed by the A428 (formerly the A45) Cambridge-St Neots road, and to the south-west it is bounded by Ermine Street, an important Roman road. From Domesday until the seventeenth century, the parish was the most populous in Longstowe hundred, having 76 peasants and *servi* in 1086 and 72 families in 1563. The adjacent parish of Caldecote was probably originally a hamlet of Bourn. In 1942, the flat land on the northern edge of the parish was turned into an airfield during the Second World War (VCH 1978).

3.2 Archaeological Background

An Iron Age gold coin was found at Childerley Gate in 1854 (SMR 03304). 100m to the west of this lie the remains of a moated site, which is thought not to be manorial in origin (SMR 01099). In 1942, during the construction of Bourn Airfield, a stone Roman coffin was found (SMR 03274) which is now preserved in the Museum of Archaeology and Anthropology in Cambridge. Other burials are thought to have been found with it but nothing of them appears to have survived.

The A428 (formerly the A45) is widely thought to be an ancient ridgeway and there is some circumstantial evidence that it was also the route of a Roman road (Fox 1923, Margary 1967, VCH 1973). A trench cut across the A428 at the junction with Bourn Broadway in 1963 failed to reveal any sign of potentially ancient metalling, and although this does not disprove the Roman route hypothesis, it suggests that the course of the modern road may have deviated considerably from the original one.

Recent excavations at the Cambourne development have revealed Iron Age farmsteads, as well as Roman, Saxon and medieval occupation. Evaluation at Papworth Everard to the north-west has revealed Bronze Age or Early Iron Age settlement on the clays.

4 METHODOLOGY

For the first route, Bourn to Caldecote Highfields, the 1.65km long pipeline easement was stripped by JCB, which removed the topsoil across the 8m wide swathe. Part of the easement was unavailable at all times during the investigations due to the sections of pipe that had to be jointed before being laid. These were laid along the northern side of the easement and thus reduced the

available width under scrutiny by approximately 1.5m along the entire length of the route.

Six separate monitoring visits were made at daily intervals during stripping, and on the second visit a number of archaeological features became apparent, concentrated in one section of the easement. No further archaeological features were identified during subsequent visits.

Once identified, features were cleaned, hand excavated, planned and recorded using the AFU's standard recording system. Sections were drawn at a scale of 1:20 and the excavated portions photographed.

For the second route, Bourn to Cambourne, the 1.63km long pipeline easement was stripped by JCB, which removed the topsoil across the 8-12m wide swathe. Part of the easement was unavailable at some times during the investigations due to the sections of pipe that had to be jointed before being laid. These were laid along the northern side of the easement and thus reduced the available width under scrutiny by approximately 1.5m along the entire length of the route.

Four separate monitoring visits were made at irregular intervals during stripping, and on the first visit a single archaeological feature was identified, close to the Cambourne end of the pipeline. No further archaeological features were identified during subsequent visits.

Once identified, the feature was cleaned, hand excavated, planned and recorded using the AFU's standard recording system. The section was drawn at a scale of 1:20 and the excavated portion photographed.

5.1 RESULTS (Bourn to Caldecote Highfields)

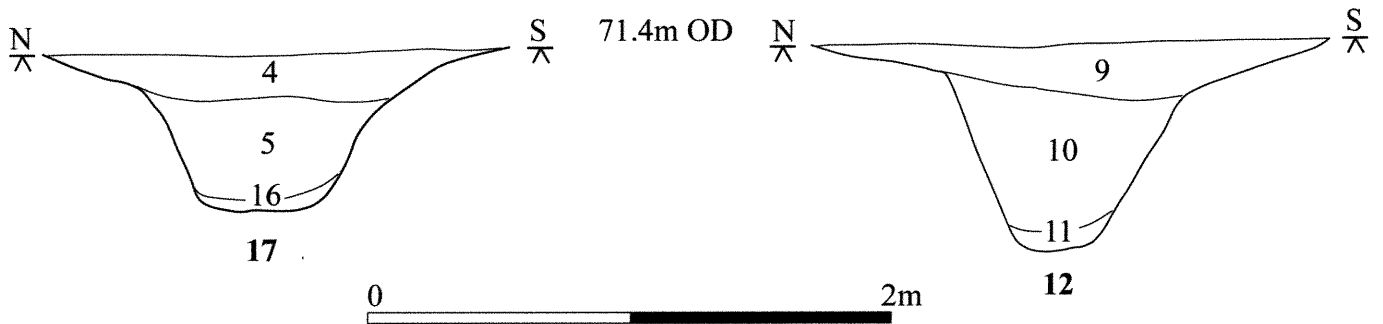
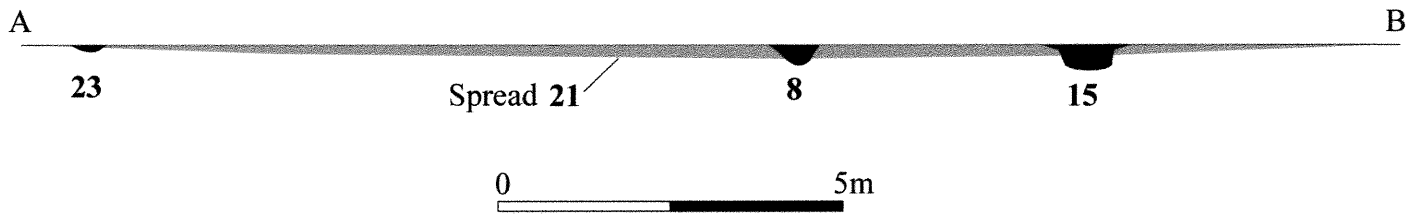
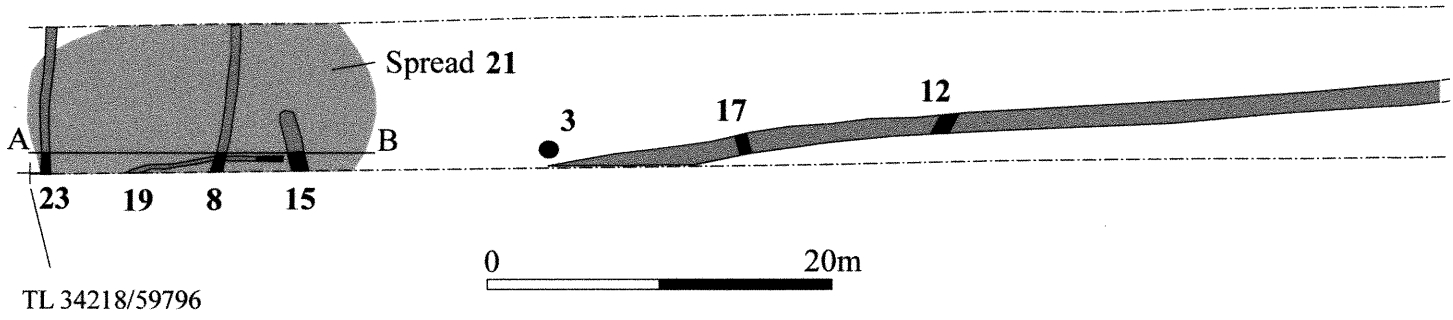
The area where archaeological features were identified contained one major ditch, four minor linears and a single small pit or posthole. All of the smaller linear features cut an earlier spread which contained a significant quantity of Roman pottery. From the west, the features were as follows:

Linear feature **23** was straight, ran N-S and contained a single fill 22. It was 0.42m wide, 0.1m deep and more than 8.0m long. Fill 22 was a very dark grey silty clay with occasional charcoal, burnt clay and chalk flecks. This fill contained pottery which has been spot-dated to the third to fourth centuries AD. Linear feature **23** was cut into spread 21, and 9.5m to the east lay linear **8**.

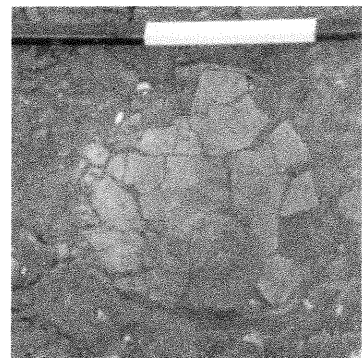
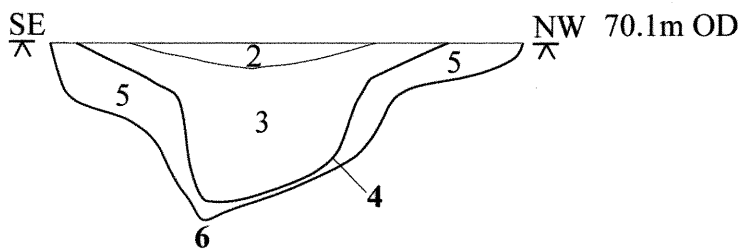
Linear feature **8** was straight, ran roughly N-S and contained two fills, 6 and 7. It was 0.7m wide, 0.3m deep and more than 8.0m long. Fill 6 was a very dark grey silty clay with occasional charcoal, burnt clay and chalk flecks. Fill 7 was a very dark greyish brown silty clay with occasional charcoal flecks. Fill 6 contained pottery which has been spot-dated to the third to fourth centuries AD,



Pipeline Trench



Section of ditch found at Cambourne for comparison



Base of greyware vessel found *in situ* in pit 3
White section of scale in photo is 0.2m long

Figure 2 Plan and sections of excavated areas

animal bone and fired clay fragments. Linear feature 8 cut the fill of a narrower linear feature 19 running approximately perpendicular to it.

Linear feature 19 was slightly curved to the south, ran roughly E-W, butt-ending just before 15 to the east, and contained a single fill 18. It was 0.34m wide, 0.08m deep and more than 9.0m long. The fill was an olive brown silty clay with occasional charcoal flecks. Pottery from this fill has been spot-dated to the third to fourth centuries AD. Linear feature 19 was cut into spread 21.

Linear feature 15 was straight with a butt-end to the north, ran NNW-SSE and contained two fills, 13 and 14. It was 1.2m wide, up to 0.36m deep and more than 4.0m long. Upper fill 13 was a very dark grey silty clay with occasional charcoal flecks. Lower fill 14 was a dark greyish brown silty clay. Pottery from this fill has been spot-dated to the third to fourth centuries AD. Fill 14 also contained fired clay fragments, animal bone and oyster shell. Linear feature 15 was cut into spread 21.

Spread 21 covered the entire width of the easement with limits just beyond 23 to the west and 4m to the east of 15. It was a dark olive brown silty clay up to 0.2m deep, with charcoal, chalk and burnt clay flecks. Pottery from this layer has been spot-dated to the third to fourth centuries AD. The layer also contained fired clay fragments, burnt chalk lumps, animal bone and oyster shell.

Pit 3 lay just to the north of ditch 12/17 and contained a single fill 2. It was subcircular in plan, 0.4m in diameter and had a surviving depth of only 0.08m. The fill, 2, was a greyish-brown silty clay with occasional chalk flecks. Most of the volume of the feature was taken up with a single flattened pottery vessel which has been identified as third to fourth century Roman sandy greyware.

Ditch 12/17 was straight, ran ENE-WSW and contained three fills, 9/4, 10/5 and 11/16. The ditch had a wide, flat-based V profile. It was 0.9-1.0m wide, up to 0.8m deep and more than 8.0m long. Upper fill 9/4 was a very dark greyish brown silty clay with charcoal and chalk flecks. Middle fill 10/5 was an olive brown silty clay with occasional orange clay flecks. Lower fill 11/16 was a yellowish brown sandy clay. No finds were recovered from any of the fills. The ditch did not have any stratigraphic relationships with any of the other features within the area revealed during this investigation.

5.2 RESULTS (Bourn to Cambourne)

The single feature observed in this area was a straight linear ditch which ran obliquely across the easement in a NE-SW orientation. The northern limit was located 200m from the Jeavon's Lane, Cambourne end of the easement.

Ditch 6 was straight, ran ENE-WSW and contained a single fill, 5, an olive silty clay with occasional chalk flecks. The ditch had a wide, stepped and flat-based V

profile. It was 1.8m wide, up to 0.68m deep and more than 22.0m long. This feature had been subsequently recut. The recut ditch, 4, had a similar, although less stepped profile than 6, and contained two fills. Upper fill 2 was a pale olive clay. Lower fill 3 was a dark olive grey silty clay with occasional small stones, and a small patch of concentrated charcoal was seen towards the top of the deposit. No finds were recovered from any of the fills.

6 DISCUSSION

The discovery of Roman remains so close to the modern line of the A428 suggests very strongly that the route was in use during that period, even if the Romans did not formally straighten and metal the road. Strong alignments amongst the linear features, both parallel and perpendicular to this line reinforce the notion that the modern road, with its slight kinks, is following an ancient route.

One of the first things which became immediately apparent when excavating the A428 site was the two distinct phases of occupation. The first is represented by the spread 21, and the latter is characterised by the ditches and smaller linear features; ditch 12/17 probably belongs to this second phase, although it could conceivably be bounding an area within which the spread is located. Pit 3 with its solitary vessel could be associated with either phase.

Judged solely by the ceramic materials recovered from these deposits, there is little to indicate a high status settlement nearby. Pottery from spread 21 includes a cross-section of standard vessel types, including jars, bowls, flagons, mortaria and storage jars. There is also a small quantity of floor and wall tile, along with fragments of fired clay or daub, which would certainly indicate a building in the vicinity. The pottery is from a variety of sources, including locally made greywares and oxidised wares, but also Nene Valley wares and fragments of vessels from Bedfordshire and Hertfordshire. The cleaning layer 20 above spread 21 recovered several fragments of a possible Horningsea ware jar, a local pottery type, and this is probably from the spread itself.

Other features contained less varied assemblages, such as fill 22 of gully 23, from which was recovered only fragments of a thick-walled oxidised ware storage jar. The upper fill of ditch 8 contained probably local greywares and oxidised wares as well as some Harrold ware from Bedfordshire. Pit 3 contained only the crushed remains of what must once have been a complete thin-walled oxidised ware storage jar, which had been flattened in antiquity and further damaged by machine stripping of the easement before it could be excavated.

This solitary vessel, inserted into a hole barely larger than itself, and badly damaged before being seen by the excavator, presents a puzzle. Although largely spread out and crushed, the base of the vessel survived with what was presumed to be some of its original fill intact, and no calcined bone fragments were

recovered from this deposit. Upon cleaning the basal fragments, it was clear that an unidentified, possibly organic residue was burned onto one area of the base, towards the side and spreading slightly up it. This vessel may have been placed in this position as a water container for some reason, or it may have originally contained a cremation which has been entirely lost. Another, more intriguing possibility is that it may have been an empty marker or memorial for someone buried elsewhere. Dr Rebecca Casa-Hatton, who made this suggestion to the author, stressed that this would be a controversial interpretation without further evidence to back it up.

The size, shape and alignment of ditch 12/15 is such that had a metalled road surface been found adjacent to it, the term roadside ditch would have immediately been applied to it. This interpretation might still be valid, even if the road it is referring to was never formally surfaced. Although no datable material was recovered from either section through this ditch, by association it is probably also a Roman feature.

The presence of so much Roman pottery and the smaller linear features, indicates an occupation site must be nearby. Dr Paul Sealey, who did the initial study of the pottery, and Stephen Macaulay, who did a more detailed analysis, both indicated that the assemblage suggested a lower status rural settlement. The fact that the pottery is from a variety of sources lends weight to the hypothesis of the A428 as a Roman route, and coupled with the burials found in 1942, this creates a strong case for a hitherto undiscovered roadside farmstead in the immediate area.

The single ditch located near to the new Cambourne development cannot be absolutely dated, but given the extensive remains found from the Iron Age and Roman periods, it is likely to belong to one of these. The recut at least bears a striking resemblance to the large ditch 12/15 observed adjacent to the A428, and thus might be tentatively assigned a Roman date. Since it was found in isolation, the ditch is probably a field boundary, and the substantial size and recutting suggests persistence of use. It probably relates to outlying field systems belonging to the recently discovered Roman occupation found elsewhere at the Cambourne development.

ACKNOWLEDGEMENTS

The author wishes to thank Cambridge Water for commissioning both phases of the work. Thanks are also due to the site staff-Phil Church, Graeme Clarke and Cristina Sampedro. Tim Malim edited the report and Caroline Malim produced the illustrations. Dr Paul Sealey gave a brief overview of the pottery and Stephen Macaulay produced a more detailed description. Dr Rebecca Casa-Hatton gave insight and advice on Roman burial practices.

BIBLIOGRAPHY

Cambridgeshire Sites and Monuments Record (SMR)

- Elrington, CR, (ed.), 1973 *A History of the County of Cambridge and the Isle of Ely*, Vol V, The University of London Institute for Historical Research
- Fox, C , 1923 *The Archaeology of the Cambridgeshire Region*, Cambridge University Press
- Margary, ID, 1967 *Roman Roads in Britain*, London
- Reaney, PH , 1943 *The Place-Names of Cambridgeshire and the Isle of Ely* English Place-Name Society No 19, Cambridge
- Wilkes, JJ , & Elrington, CR, (eds.), 1978 *A History of the County of Cambridge and the Isle of Ely*, Vol VII, Roman Cambridgeshire, The University of London Institute for Historical Research

Maps consulted

- British Geological Survey, 1:50000, sheet 187 (Drift), Huntingdon, 1975
- Ordnance Survey digital maps TL3359, TL3459 and TL3559, 2000

Appendix A Finds quantification

Context no	Material Type	Artifact category	Weight	Count
2	Ceramic	Pottery	1859	145
6	Ceramic	Pottery	84	11
6	Ceramic	Pottery	16	2
14	Ceramic	Pottery	3	1
14	Ceramic	Pottery	110	10
14	Organic	Animal bone	191	5
14	Other	Shell	21	1
18	Ceramic	Pottery	104	5
20	Ceramic	Pottery	138	11
20	Other	Shell	29	1
21	Ceramic	Pottery	106	9
21	Ceramic	Brick or tile	278	3
21	Ceramic	Pottery	2051	134
21	Lithic	Stone	74	4
21	Organic	Animal bone	36	2
22	Ceramic	Pottery	732	19



Cambridgeshire
County Council

Education, Libraries
and Heritage

The Archaeological Field Unit
Fulbourn Community Centre
Baggis Gap
Fulbourn
Cambridge CB1 5HD
Tel (01223) 331614
Fax (01223) 330946