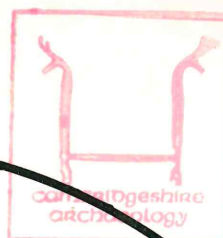


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MERE WAY ROMAN ROAD AT MILTON - MILTON TO HISTON PIPELINE



Cambridgeshire
County Council

Rural Strategy



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MERE WAY ROMAN ROAD AT MILTON - MILTON TO HISTON PIPELINE

R W G Ozanne

1991

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Report no. 39



AN ARCHAEOLOGICAL SURVEY OF A PIPELINE FROM MILTON TO HISTON

By Richard W G Ozanne BA.

ABSTRACT:

This report concerns a watching brief which was carried out in October 1991, in advance of and during the construction of a water main by Cambridge Water Company. This concentrated on the excavation of a section through the Akeman Street Roman road (Margary 23b.)

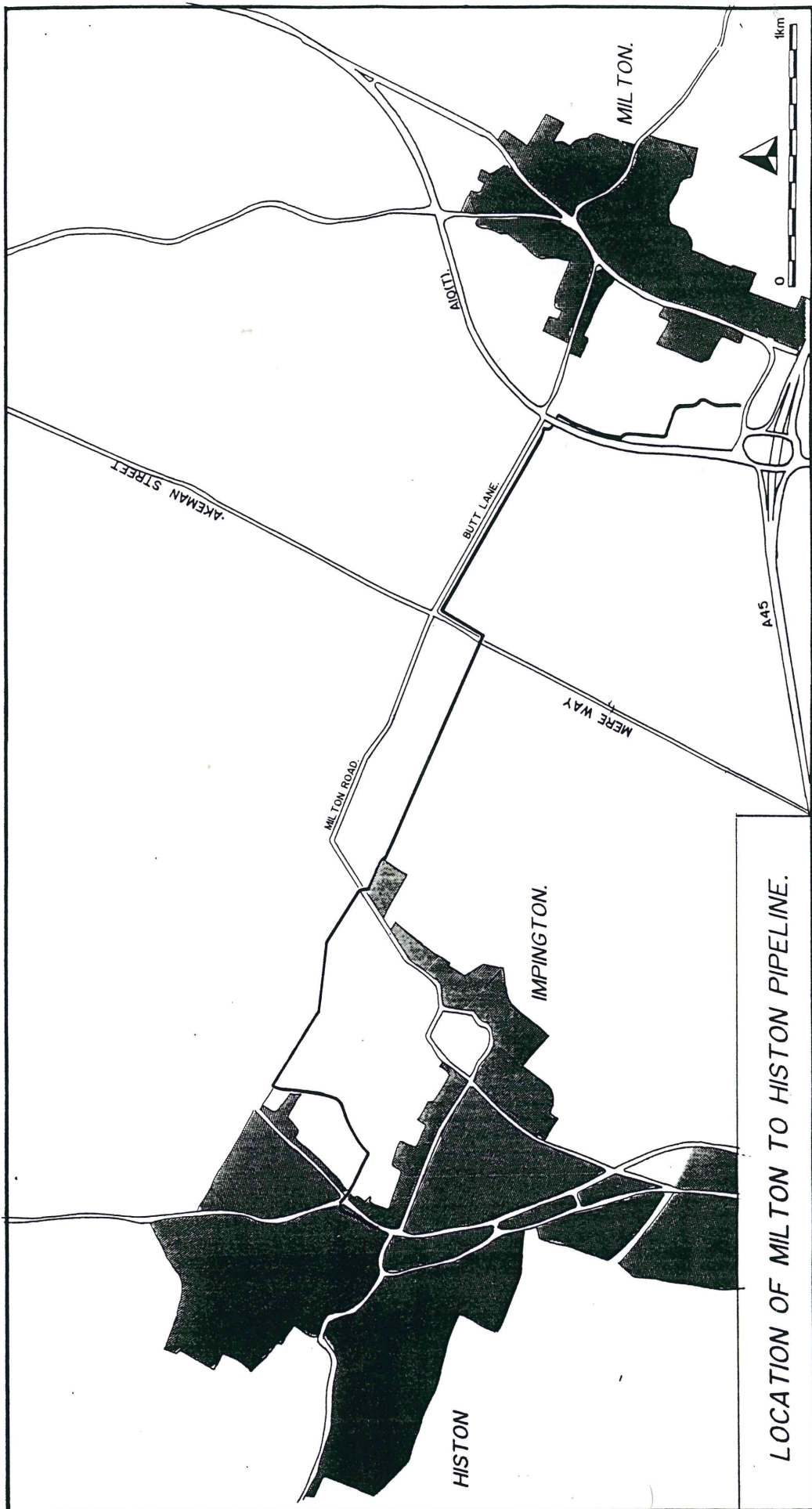
SUMMARY:

An excavation of the Roman road, Akeman Street, was carried out as part of a watching brief in the wake of a new pipeline. The road has shifted course slightly to the west, as a green lane. The flanking ditches of the Roman road were 16m apart between centres, and were 1.2 to 1.4m wide and 60 to 70cm deep. The *agger* was 45cm high and 10m wide, made up of hard-packed clay silt probably quarried from a nearby surface outcrop. This was covered by 15cm of sandy gravel metalling, probably derived from the flanking ditches. Soil samples were taken and tested for surviving pollen which might indicate land use for the surrounding area, but these tests proved negative.

Elsewhere along the pipeline Postmedieval and features were recorded, but no features of archaeological interest were noted during pipeline construction.

0.6-0.7m seems correct according to fig 3
0.4m deep?

1.3m highest part
65cm see page 6 and fig 3



INTRODUCTION:

The route of the pipeline runs north along the A10, from the junction with the A45, then west across the southern fen edge, crossing the Mere Way just south of Mereway Farm, and then on to Histon.

The pipeline crosses one known site: the Roman road known as Mere Way, or Akeman Street. The remainder of the 4.5 kilometer route disturbs a swathe of land 8 meters wide, providing the opportunity to examine a sample area of some 36,000 square metres.

The work was commissioned by Cambridge Water Company, and was carried out by the County Archaeology Section in October 1991. The site finds and archive are held by Cambridgeshire County Council's archaeology office.

BACKGROUND:

Mere Way, or Akeman Street runs north eastwards from Cambridge Castle to the outskirts of the city where it is marked by a hedge line for a mile. From that point, past King's Hedges to Butt Lane, Impington, it survives as Mere Way, an enclosed green lane. North of Butt Lane it is in use as a farm track which runs west of Landbeach to meet with the Roman Car Dyke canal at Goose Hall. From this point the present A10 roughly follows the course of the Roman road. After 1.5 miles it diverges and disappears, reappearing south of Ely. From Ely it is likely that the road continues to Littleport. The road is well documented in Margary's "The Roman Roads of Britain" (1973).

The rest of the pipeline lies across land which is devoid of discernible archaeological traces, apart from the field boundaries which existed before the creation of the new multi-hectare field systems. Previous fieldwalking, in advance of a new refuse tip, which covers almost a quarter of the pipeline route, produced only a few scattered finds. (J.M.Oetgen 1990).

STRATEGY:

The aims of the project were threefold:

Firstly to examine the whole length of the stripped area, in order to locate potential archaeological sites in plan, and to sample excavate features to obtain dating evidence and profiles.

Secondly to hand excavate a section through the Mere Way, in order to investigate the character of the Roman road.

Thirdly to examine the side of the machine trench during pipelaying in order to show any features in section,

Funds were insufficient for fieldwalking in advance of the topsoil stripping. As has been stated almost a quarter of its length had already been fieldwalked in 1990. In fact another quarter was not to be topsoil stripped, lying as it did either under existing development: behind Tesco in Milton, or under playing fields at Histon County Junior School. This means that fieldwalking results could not be obtained from half of the available length of the pipeline, at its western end.

METHODOLOGY AND CONSTRAINTS.

The best method of approaching a watching brief of this nature is to monitor the easement during topsoil stripping. In this way a full picture of the underlying archaeological deposits can be gained, and the time can be available to record it in plan with a degree of accuracy. This also means that the recording can usually be completed before the surface has been irreparably damaged by contractors' vehicles.

Easement Stripping:

Due to funding constraints this strategy had to be modified. The easement was walked immediately after the stripping, when minimal damage had occurred. This had disadvantages: the overburden was removed to a uniform depth of 30 cm. which meant that some areas had not been stripped to a sufficient depth. This might have been avoided by a full watching brief. The effects of weathering may also have served to mask areas of activity. Due to poor clarity in the stripped easement, one kilometer was cleaned with a mechanical excavator to ensure that no features had been missed during initial walking. This revealed little that had not already been observed.

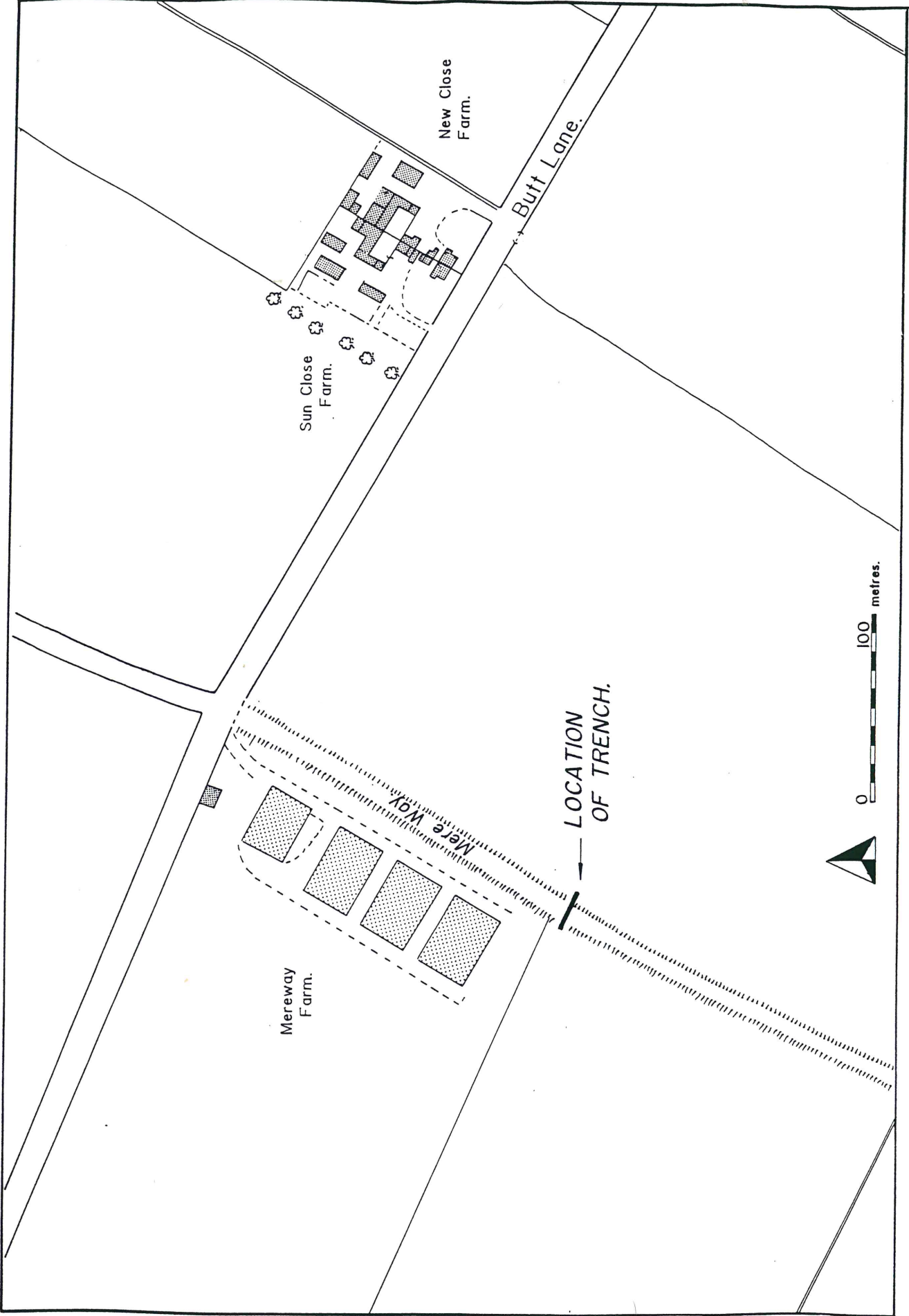
Pipelaying:

It was not possible to monitor the entire pipetrench during pipelaying. The method employed by the contractor was to excavate 120 metres of trench at one time, to a depth of 1.5 m., laying pipes and backfilling almost immediately. This caused a number of difficulties, notably due to the timescale involved. No single length of trench was open for sufficient time to record more than a few potential features, before backfilling took place. There was never a sufficient length of trench open at any one time to warrant continuous monitoring, but liaison with the contractors enabled us to be informed when machining was to take place on highlighted areas and thus we could target our time efficiently.

Mere Way:

A section was excavated through Mere Way in advance of pipelaying. A trench two metres wide was dug by J.C.B. on the southern edge of the contractors' roadway so that their pipe trench, to be inserted on the northern edge, should not be prejudiced. Although this meant, in effect, destroying twice the area of the Roman road that would have been disturbed solely by the pipeline, it was deemed necessary, as the methods employed by the contractors would not have allowed us sufficient time to record the section properly.

The section was cleaned and then drawn and photographed. A soil monolith was taken from the *agger* for pollen analysis, It was hoped that this sample would enable us to create a picture of the surrounding ground cover in the Roman period, and before.

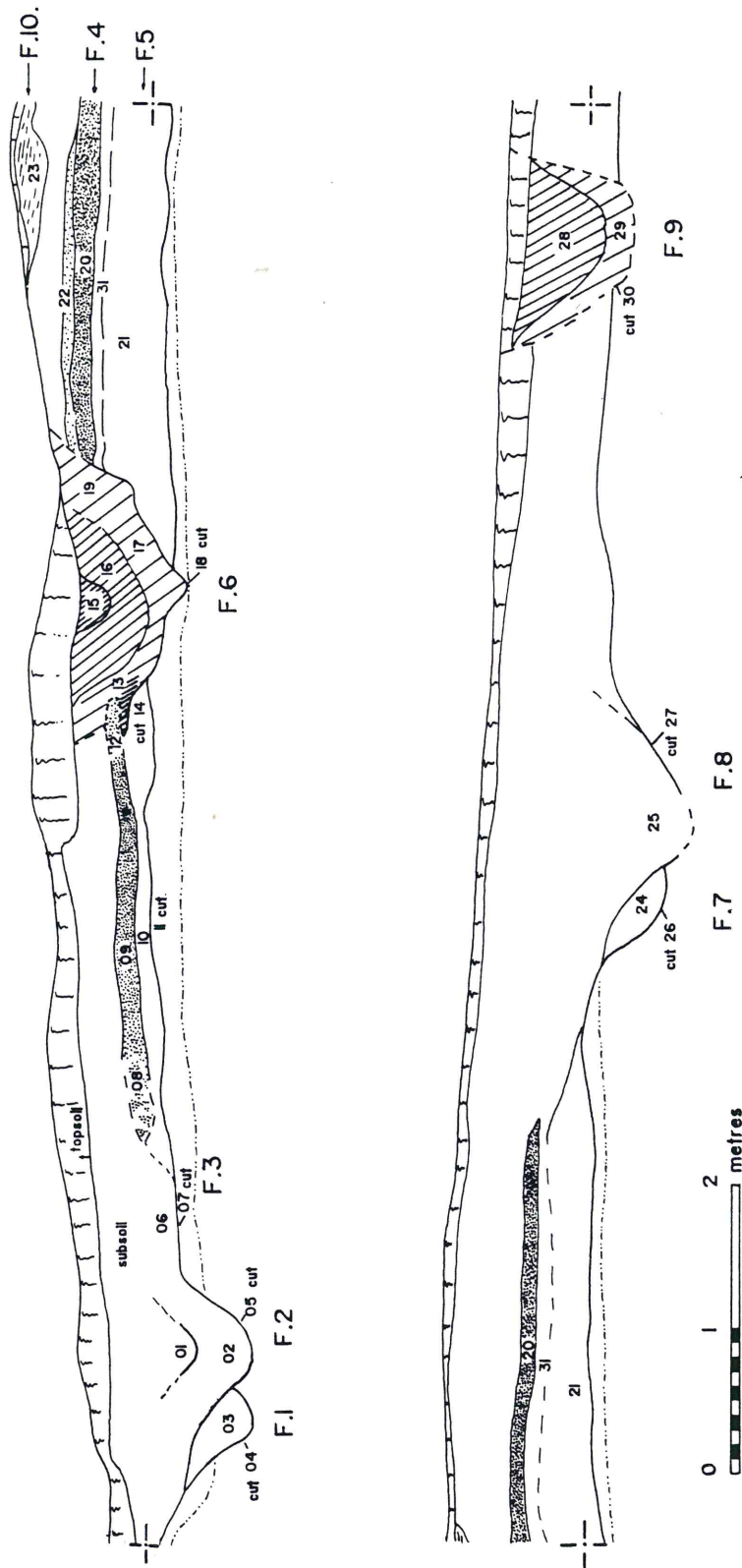


DESCRIPTION

1. Section through Mere Way. (See fig.3.)

The entire road profile appears to survive. The central bank, or *agger*, is between 11 to 12 metres wide and some 65 centimetres high. There are two flanking ditches 1.2 metres wide and 40 centimetres deep. Substantial cobbles, set in gravel, have been reported by a local farmer who scraped soil off the surface when repairing a fence, to insert a post but this may be a later feature.

- 60-70cms deep
see Summary and Fig 3.
- F.1. The remnants of a north-south ditch, (fill 03, cut 04.) cut by F.2. It is a 'U' shaped feature truncated on its western side. The fill is a homogeneous, light yellowish brown, clayey silt. It seems to have silted up naturally. The fill is sealed by a later, similarly shaped feature. (F.2). This seems to represent an earlier roadside ditch.
 - F.2. A north-south ditch, (fills 01, 02, cut 05.) Both fills are of light brown, slightly sandy, clayey, plastic, silt. The upper fill (01), is slightly darker than the lower (02), and contains one piece of oyster shell. The homogeneity of the fill indicates natural silting. This is the eastern roadside ditch of the Roman road,
 - F.3. A level strip between ditch F.2, and the *agger*. (Fill 06, cut 07.) The fill is similar to that in F.2. It seems to have silted up naturally. This is a gap left between the road surface F.4. and the roadside ditch F.2.
 - F.4. The metalled surface of the Roman road. (layers 08, 09, 12, 20, 22.) Towards both edges the surface breaks up, notably more so on the western side, perhaps due to the action of the prevailing wind. The surface is 15 cm. thick on average, and is composed of yellow sandy gravel. This material is the same as the natural gravel underlying the *agger*, and could well have been excavated from the flanking ditches, which cut into the same material. A thin layer of iron pan lies under the metalling, which probably formed while the surface was exposed. A large ditch, F.6. cuts through the surface and the *agger* just east of the centre. Layer 22 is a layer of trampled earth lying directly on the crest of the road surface, possibly the result of resurfacing.
 - F.5. The *agger*. (layers 10, 21, 31.) This is made up of hard packed greyish brown clay silt. It was so compact that it created problems both for the J.C.B. and for the pipeline excavations. The material making up the bank does not closely resemble any of the immediately surrounding subsoil or natural. It is similar to the clays which lie below the natural sands, and may have been quarried from a nearby surface outcrop of that material. layer 31 is a slightly darker layer between the metalling and the rest of the *agger*, which may be the result of pressure on the underlying material through the road surface.
 - F.6. A large north-south ditch filled by very dark grey humic soil. (fills 15, 16, 17, 19, 13 cuts 14, 18.) This may contain two ditches, of similar date. This is in line with the hedge line of the green lane, and is almost certainly the eastern ditch which enclosed the green lane.
 - F.7. The remnants of a north-south ditch, (fill 24, cut 26.) cut by F.8. It is a 'U' shaped feature truncated on its eastern side. The fill is a homogeneous, light yellowish brown, clayey silt. It seems to have silted up naturally. The fill is sealed by a later, similarly shaped feature. (F.8). This seems to represent an earlier roadside ditch.
 - F.8. A north-south ditch, (Fill 25, cut 27.) It is filled by light brown, slightly sandy, clayey, plastic, silt. The homogeneity of the fill indicates natural silting. This is the western roadside ditch of the Roman road,



NORTH FACING SECTION THROUGH MERE WAY.

F.9. A north-south ditch, filled with very dark humic material. this runs along the line of the western hedgeline of the green lane, and is probably the western enclosing ditch. (fills 28, 29, cut 30.)

F.10. A layer of soil with a platy structure, visible just under topsoil near the centre of the green lane. This is almost certainly the result of trample associated with the use of the Medieval trackway. (layer 23.)

2. The easement trench.

The easement can be split conveniently into four main lengths. (See plan).

The first stretch produced no definite features. Half of this length was not sufficiently stripped, and so there was still an overburden of topsoil. The easement was stripped to a depth of 30 cm. and ploughing had disturbed the ground to a point below this depth. Several possible features were investigated but these proved to have no depth.

The second stretch produced twelve faint linear features, and three dark features.

F.11,12,13.

These dark features correspond directly to a set of field boundaries associated with paddocks which were extant thirty years ago. A cursory examination showed the upper fills to be quite modern, producing 20th century glass and china.

F.14 - 25.

These faint features were excavated in section. All of them proved to have land drain pipes at their base. No signs of disturbance were visible in the fills. They did not seem to be in current use.

The third stretch was again largely not stripped to a sufficient depth. No definite features were detected in those areas which had been stripped.

In the fourth stretch, the easement had been extensively damaged by contractors' vehicles. Walking here produced quantities of brick rubble and mortar, with some 18th and 19th century pottery. A large linear feature was seen running along the easement, covering almost half the width of the trench. It was largely within that feature that all the finds were present. It was given a cursory examination, but was not bottomed. The position and alignment suggest a boundary ditch to the field which it borders.

3. The machine trench.

Owing to limited time, attention was concentrated on two areas: First the section through Mere Way and second the area to the rear of houses on Mill Lane Histon. Certain areas which had been insufficiently stripped were examined while work was in progress on our section through the Mere Way.

A length of pipeline trench was examined at the A10 end of Butt Lane. This produced two features. The first was discovered by monitoring the machine work and the second was indicated by the contractors.

F.26. This was a linear feature running north-south. It was filled with dark organic soil. It lies on the line of a boundary which appears on an earlier map. No finds were present. The feature was located 60 m. from the A10, and measured 1.2m wide and 60cm deep. This is a fairly recent boundary.

F.27. This was a much deeper feature measuring some 4m wide. It was not bottomed by the machine trench. It produced a horse jawbone, and one sherd of late Medieval pottery. This feature may be a large drain, or a rubbish pit. It cannot be determined whether or not it was linear, but the tithe map of the area shows a field boundary in approximately that position.

POLLEN ANALYSIS.

Erika Guttman.

At Mere Way Roman road a possible buried soil was detected at the interface of the natural sand and the compacted silt of the *agger*. This 5 cm band had a slightly higher gravel content, and was noticeably more porous than the soils above and below it.

Pollen analysis was undertaken in order to determine whether the local surroundings were forested, under cultivation, under grass, or whether the road was cut through unimproved marshland. The question of whether the nearby pottery kilns at Horningsea were fuelled by wood or by peat was to be addressed after the nature of the available resources was established.

A continuous column of soil was taken from the section in the centre of the road, and four samples of 1cc. of soil were taken through the buried soil and the contiguous *agger* at 1 to 3 cm intervals. The standard pollen preparation methods used at the Cambridge University Quaternary Research Sub-Department are listed in the appendix. Deviations from the list include an additional 2.5 hours of hot HF. and 15 minutes in hot nitric acid to eliminate sulphides.

No pollen was recovered, probably due to oxidation of the soil.

DISCUSSION.

The apparent lack of ancient features outside the Roman road seems to back up the hypothesis that it crossed either an area of woodland or unimproved grassland. Unfortunately due to the current lack of pollen evidence it is not possible to state with any certainty what the local ground cover was.

The majority of features during the watching brief seem to have been field boundaries, and land drains. Most seem to be Post-medieval, and correspond to those visible on a tithe map dating to 1802.

One apparently late Medieval feature was found. F.27. The function of this feature is uncertain. As the topsoil was not stripped from the surface at this point the extent of the feature in plan could not be determined. If it were linear its size suggests that it might be large open drain.

The section through Mere Way was more informative.

At this point we can clearly see the proportions typical of a secondary Roman road. We have the small ditches placed well back from the road, measuring about a metre in width, and perhaps half that in depth. The ditches are just over 21 metres apart centre to centre (62 feet), which appears to be a standard measurement. (Margary I.D. 22.)

The *agger* is of hard packed clayey silt. Usually the material for this bank was quarried from the subsoil along the edge of the road, but no such quarry ditches were detected here. Indeed the material which composes it does not resemble any of the surrounding subsoil, and may have been brought here from some distance away. The *agger* was not built directly onto topsoil, but instead a path was hollowed out for it into the underlying geology. It was highly compacted, which indicates the effort which went into its construction.

The road metalling is of similar composition to the underlying geology, and may well have been quarried out from the side ditches or from the hollow under the *agger*.

The ditches associated with the green lane are a similar distance apart, but are positioned some four metres further west. Obviously, then, the trackway has moved. It is interesting to note that it retains similar dimensions.

With this in mind, there was a worry that the pipeline would entirely destroy the eastern side of the road, passing so closely as it does to the green lane. However, the pipe trench was eventually inserted slightly east of the outer edge of the eastern flanking ditch.

No!
This goes to
an later
hedge boundary
Actual
width
13m
centre of
ditch to
centre
of
ditch

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