WORSTED STREET, ROMAN ROAD MOUNT FARM, FULBOURN

Cambridgeshire County Council

WORSTED STREET, ROMAN ROAD MOUNT FARM, FULBOURN

- AN INTERIM REPORT

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Interim Report

Worsted Street Roman Road

Fulbourn Mount Farm

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Abstract

During August 1991 staff of Cambridgeshire County Council Archaeology Section investigated the Roman Road known as Worsted or Wool Street (also Margery 24), a *scheduled ancient monument* (Cambs 26) in advance of roadworks for the dualling of the A11 trunk road. The Roman road and associated ditches were excavated and construction techniques recorded. Three sections (totalling 48.3 square metres) were excavated, two to the west of the A11 and the third to the east (Figure 1). The Roman road and flanking ditches were well preserved west of the A11, showing the agger comprising the pre-Roman soil horizons, a foundation of rammed chalk, and gravel metalling. South-east of the A11 no evidence of a Romanised road was found, and no conclusive evidence of ditches. Along the course of the modern track, the top of the natural chalk was heavily worn and eroded. Although no dating evidence was recovered (except from the imprint of a third century coin outside the southwest ditch), soil samples for palynology, molluscan and micromorphological analysis were collected, and reports will be completed in 1992. Pollen preservation was poor, but preliminary results indicate that the molluscan and micromorphological analyses are likely to produce valuable new evidence for local environment and land-use for the period when the road was built. Limited fieldwalking and an auger survey traced the course of the road to the south-east, and will allow for a more informed speculation about the original destination and purpose of the road. Further post-excavation analysis, and reappraisal of previous work recorded in 1959 are scheduled for 1992 (This proposed work is summarised below).

Preliminary conclusions suggest that a fully Romanised road existed from Cambridge to Worsted Lodge, and that this survives in very good condition. To the south-east of Worsted Lodge a trackway may have been partly Romanised, though this is unproven, and the use of chalk layers for road surfaces may be medieval in date. There is no certain destination for this process of Romanisation of a pre-existing track. Previously supposed destinations at Horseheath or Streetly are now seen, after further investigation, to be relatively insignificant settlements probably not worthy of a Romanised road. It may therefore be speculated that the Roman road was intended to link Cambridge to the Roman Road from Great Chesterford to Caistor-by-Norwich, now the A11 trunk road.

The site archive and finds are deposited in the Cambridgeshire County Council Field Archaeology offices at Fulbourn.

Topography and Geology

The Roman road south-east from Cambridge runs along the top of the chalk ridges of south Cambridgeshire, heading apparently for Haverhill. After leaving Cambridge on the river terraces of the Cam, it ascends the low chalk scarp, turns east on Worts Causeway, and then south-east to run in a straight line past Wandlebury towards Worsted Lodge. Less than three kilometres past Worsted Lodge the road begins to lose its precision and curves gently northwards past Horseheath. Thereafter its course is dubious. From Horseheath onwards the road lies on boulder clay.

Known Archaeology

The Roman road from Cambridge has been the subject of much antiquarian interest, summarised in Dewhurst 1964. The name "Via Devana" derives from its supposed destination, modern Chester (Roman Deva). While there is a series of roads from Cambridge north-west to Leicester and beyond, it now seems unlikely that it was ever of a single design. Similarly, the road was thought to begin in Colchester, but its existence between Colchester and Haverhill is very uncertain. What is very apparent is that the length investigated from Cambridge south-west to Worsted lodge, was a Romanised road.

The course of the road may be briefly described as follows; it originated at Castle Hill (Roman Cambridge) and proceeded south by Bridge, St Andrews, and Regent Streets, along to the west of Hills Road to Worts Causeway where it turned east. After ascending the chalk scarp it bears south east on it's original course (south-east) and proceeds in a straight line to Worsted Lodge (where it crosses both the prehistoric Icknield Way and the later, Romanised version now thought to underlie the A11) and beyond for a few kilometres. Where it approaches the modern Hildersham to Balsham road, the Roman agger becomes intermittent and then disappears, though its course remains traceable for some further distance. It passess Borley Wood, continues south of Streetly Hall, and then to Haverhill, losing its agger and then its straight course. After Haverhill its course becomes increasingly erratic.

Cyril Fox excavated two sections through the road (Fox 1923) and recorded its general construction (Figure 2). It was composed of the layers of buried soil, the chalk, an earthen and then a rammed chalk agger, all sealed by a thick gravel metalling. The total height of the agger was about 1.0 metres, and would then have stood about 2.6 metres wide at the crown of the road.

In 1959 P C Dewhurst watched the digging and laying of a gas main down the length of the road from the outskirts of Cambridge to Haverhill. Dewhurst's record (1964) is very good and provides most of the information on the road now available. In general Dewhurst saw a simplified road construction (Figure 2), consisting of a thick agger of rammed chalk over the old land surface. The chalk was capped with gravel metalling, with a resulting thickness of about 0.60 - 0.90 metres. Dewhurst located the flanking ditches, averaging 13 - 14 metres apart. The width of the surviving Roman metalling was about 2.5 metres. Dewhurst records the road running straight and true, with consistent agger, to Worsted Lodge. There, the agger apparently decreased in thickness, which Dewhurst interpreted as a design to accomodate traffic on the older Icknield way. No trace of the Roman version of the A11 could be seen, presumably destroyed by the turnpiking of the A11 and later roadworks. Beyond Worsted Lodge the agger again runs true, although this is confused by

the fact that the modern track runs first on the north-east edge of the agger, sometimes over the northeast ditch, and then sometimes switches over to the south-west edge of the agger. By approximately 700 metres beyond Worsted Lodge the agger becomes an intermittent feature, and the consistency of construction also wavers. At a point approximately 800 metres from Worsted Lodge Dewhurst found coal sealed in the agger (identified as from the Nottinghamshire coalfields), providing virtually the only dating evidence. Thereafter the road enters what Dewhurst aptly described as the "Transitional Half Mile". Here the agger and side ditches become irregular or intermittent, and thereafter never again appears so convincing, and the course becomes wavy and erratic.

Dewhurst interpreted this as reflecting the cessation of roadworks by teams in the field, working from Cambridge to the south-east. The coal suggests a date after the first century AD. If this was not heading to Colchester (and if Colchester was a terminus, the road would probably have started there) then Dewhurst suggested it was heading to a presumed locally important site near Horseheath. In summary, this road length was not part of a national road network, but rather a local programme based in Cambridge.

The 1991 Excavation

Research Design and Methodology

The 1991 investigations were prompted by the proposal to dual the A11 along its length in Cambridgeshire. The roadworks would destroy some 200 metres of Roman Road, including the postulated intersections of the Roman road with the Icknield Way and the Roman A11 road. It was thus proposed that a field project attempt to assess the relationships between the various roads, examine the construction of the road, and if possible date the road's construction and period of use. In addition, fieldwalking, augering, and low-altitude microlight aerial photography would be employed to try to ascertain the road's course through the Transitional Half Mile and beyond. The fieldwork and post-excavation analysis was funded through English Heritage.

The methodology employed consisted of three elements. First, a total of four small trenches were excavated through the Roman Road near Worsted Lodge. Secondly, a limited programme of fieldwalking, survey and augering was implemented, focussing on the Transitional Half Mile. During the autumn of 1991 microlight flights provided low-altitude and oblique aerial photographs over much of the presumed course of the road from Worsted Lodge to Horseheath.

The intersections of the Roman Road, the Icknield way and the A11 Roman road were unavailable for investigation, as they are under roads in constant use.

Overview of Results - Trench 1

Trench 1 (see Figures 3, 4, 5) was intended to obtain a complete cross section of the Roman road just before modern road disturbance. The ditch on the north-east side could not be sectioned without obstructing farm access, and consequently Trench 4 was placed to excavate this ditch (see Figures 1, 5). The Roman ditch on the south-west side of the road is probably represented by cut [21] with fills 17 and 18 (Figure 4), but unfortunately no secure dating evidence was recovered.

The Roman road in this area appears surprisingly wide, due to a massive amount of recent dumping on the southwest side of the Roman agger (layers 23, 2, 12, and 5 in Fig 4). This episode of dumping corresponds to the construction of the adjacent barns of Mount Farm, in the mid 1980's. This recent dumping overlies three phases of ditch, reprented by 15, 16, [20], and 17/18/[21] (Figure 4), the latter of which may be Roman in date although this is unproven.

The Roman road was found to consist of three basic layers, with only a very thin and discontinuous capping of modern metalling. The Roman gravel metalling (layer 10) was about 0.20m thick and survived to nearly 3.0 metres wide (clear episodes of encroachment by ploughing were recorded in section). This consisted of yellow to yellow-orange slightly clayey gravel, rammed and later worn into an extremely hard layer - excavation had to be done by mechanical digger. Several episodes of deposition or repair were observed in section, but could not be followed when excavating in plan. Below the gravel was a layer of rammed chalk forming the load-bearing foundation of the road (11). This varied from 0.10 to 0.25 m thick, and was placed directly on top of the old ground surface. Within this buried soil both the "A" horizon (24) and the "B" horizon (25) could be clearly distinguished.

The fill and cut of the 1959 gas main observed by P C Dewhurst (22 and [13] respectively) are clearly visible, and suggest that here the agger was probably not sectioned or observed by Dewhurst, as there is a clear area of plough disturbance (12) between the pipe-trench and the surviving road layers.

The buried soil layers were sampled for molluscs, pollen, and micromorphology. Additional bulk samples were taken from layer 24, and from context 30. This is interpreted as a tree hole, being a slightly sinuous "sausage' shaped feature with irregular edges, sealed below layer 25.

Trench 4

The Roman roadside ditch was excavated in trench 4 (see Fig 6). The cut of the Roman ditch [60] was about 0.70m wide and 1.0m deep (from modern ground level). The fill of the ditch (58) was overlain by a number of layers (50-56). Layer 53 was a tarmac road serving a nearby searchlight installation of 1939-45. Layer 54 was the pre-1939 ploughsoil, while 55 (fill of cut feature [61] was probably a tree-throw hole associated wth the adjacent hedge lining the Roman road. Layer 56 appears to fill a hollow in the top of the underlying fill of the ditch. The south-west edge or cut of the ditch is apparently obscured by a feature not recognised in excavation. Fill layer 58 of the Roman ditch was sampled for molluscan analysis. It must be noted that layer 58 is undated by artefacts, and is presumed to be Roman in origin.

Trenches 2 and 3 (Figure 7)

Trench 2 and test pit 3 (on the southwest side of the hedge) were excavated to the south-east of the A11, to investigate the Roman road after it crosses the the presumptively Roman A11 and the course of the prehistoric Icknield Way. Rather surprisingly, no trace of Roman metalling was found (Figure 7, test pit 3 illustrated in archive), in clear contrast to the observation made by Dewhurst to the contrary. Furthermore, the cut and fill [103] in Trench 2 (Figure 7) of the 1959 trench was clearly visible, and indicate that Dewhurst similarly did not see Roman metalling here. Layers 101 and 102 appeared to be relatively modern topsoil and subsoil respectively. Layers 104, 106, 107, 108 and 109 all appeared to be convoluted veins of possibly natural sand. During

excavation layer 111 was believed to be the fill of a flanking Roman ditch, but this could not be substantiated. The surface 105, the top of the natural chalk, was here deeply worn and eroded. This matched the appearance of sections excavated across the Berkshire ridgeway observed by the author (unpublished assessment report, Oxford Archaeological Unit), and is likely here to represent a very long period of wear as an unsurfaced track.

Detailed List of Excavated Features

Trench 1

Key to abbreviations: L=light, M=mid, D=dark,
G=grey, B=brown, Y=yellow, O=orange, R=red
Z=silt, S=sand. L=loam
Poss=possible; occ=occassional; prob=probably; ext=extremely;
excav=excavation; inc=includes, irreg=irregular

Ctx No.	Description	Illustrated:
1	Topsoil/turf, varies 0.01-0.20m thick on S side MGB ZL; gravel	Figure 3,4
2	Tip deposit, up to 0.70m thick, S side road LGB SL, 60-7-% gravel; recent	3,4
3	Deposit, fill of recent pipe trench, S side road GB SL, 30% gravel Recent, cut=[4]	3
4	Cut of recent pipe trench, S side road 0.30x0.30m; Fill=3	3
5	Major tip deposit, S side road, max 0.70m thick DG SZ, inc. newspaper, tee-shirt with "Fame" logo	3
6	Layer, pre-1980 soil horizon L-MGB ZL, 30% gravel, occ chalk Rel 6-12 plough damaged, prob same?	3
7	Layer, recent, NE side road, max 0.14 thick LMG SZ, chalk and brick frags	3
8	Layer, recent, NE side road, max 0.25 thick MG SZ, 10-15% chalk and gravel	3,4
9	Layer, NE side road, max 0.30 thick YB Very SZ, occ flint coarse gravel Overlies Roman metalling, plough disturbed edge with 10	3,4
10	Layer, Roman gravel metalling, max 0.35m thick Y Sgravel (gravel 70%) Ext compact	3,4
11	Layer, Roman, rammed chalk road foundation, max 0.35m thick White chalk, ext hard/compact	3,4
12	Layer, sw side, max 0.40m thick MGB SZ, chalk 40% Overlies 10, 11, Plough damaged edge with 11 Prob same as 6?	3
[13]	Cut of 1959 gas-main trench Sw side road, 0.50 wide, excav, 0.30 deep Overlain by 6, cuts 14, 24, 24, Fill=22	3
14	Layer, SW side, max 0.30m thick LMGB SZ, 50-60% grave Poss plough damaged edge of layers 24+25?	3

15 Layer, recent, fill in ditch, max 0.30 m thick
M-DGB Z, 10% chalk, loose texture
Cut by [20] and [4] 3

16 Layer, fill of later recut ditch, SW side, 0.40m thick
LB ZL-ZC, chalk and gravel 20%
Contains late Post-medieval pottery
Cut of ditch= [20] 3
17 Layer, middle fill of earlier ditch, max 0.35 m thick
LGB ZL chalk and gravel 30-35%
Cut =[21] 3
18 Lowest fill of earlier ditch, max 0.25m thick
LGB ZCL, up to 60% peagrit
Cut of ditch=[21] 3
[20] Cut of later recut of ditch, SW side
Max 1.60x0.40m, very broad shallow U profile
Post-medieval date 2,3
[21] Cut of earlier ditch, SW side
Max 1.70x0.90 m, broad U profile
Undated, Possibly Roman 2,3
22 Layer, fill of 1959 gas-main trench, 0.50m wide
LGB ZL, compact, 70% chalk frags
Cuts 14, 24, 25 2,3
23 Recent, major tip episode on SW side
LGB ZL, 50-60% pea grit
Overlies 2, under 1 3
24 Layer, below 11, max 0.10-0.12m thick
MB ZL, occ pea grit or fine chalk
Cut by [13], damaged by burrows
Probably "A" Horizon of buried soil
Samples: Molluscan, micromorph, pollen 3
25 Layer, below 24, max 0.10-0.12m thick
LMB ZL, infreq chalk flecks
Cut by [13], damaged by burrows
Prob "B" Horizon of buried soils
Samples: Molluscan, micromorph, pollen 3
26 Layer on SW side of ditch [21], max 0.20m thick
LB ZC, freq chalk frags
Cut by [21] 3
27 Layer on SW side of ditch [21], max 0.35m thick
MB ZC, occ chalk frags
Cut by [21] 3
28 Layer on SW side of ditch [21], max 0.35 m thick
MB ZC, occ chalk frags
Below 34 and 27, poss ploughwash
Overlies chalk bedrock 3
30 Layer, fill of irreg feature, >3.0x0.65x0.12m deep
MDB Z< chalk 5%
Cut=[31], sealed below 25
Interp as tree hole, sample:molluscan In archive
[31] Cut of irreg feature, >3.00x0.65x0.12m
Irreg sides and bottom
Fill=30 In archive

32 Fill of irreg feature cut into 11, max 1.50x0.40x0.50mdeep
Y gravel, sand, very like 10
Cut=[33]
Poss a burrow? 4
[33] Cut of irreg feature
Narrow at SW section, "bulbous" terminal (fig 2)
Fill=32, Poss a burrow? 4
34 Modern ploughsoil at SW end of trench, max 0.40m thick
MGB ZL, up to 30% chalk and gravel
Contained a Roman coin (lost) 3
35 Layer on NE side of road
MB ZL, chalk 30-40%
Appears to be a (plough) mixture of 11 and 24 3

Trench 4

50 Modern topsoil, 0.06m thick
LB ZL, fine gravel 6
51 Layer, recent, 0.05m thick
White chalk 6
52 Layer, 0.10m thick
LB ZL,
Post 1939-45, overlies 53 6
53 Layer, road, tarmac
Access road to WWII installation 6
54 Layer, max 0.20m thick
LB ZL, 20-30% gravel
Ploughsoil horizon pre-1939 6
55 Layer, max 0.20m thick
LGB ZCL, occ chalk and gravel
Fill of tree bowl [61] 6
56 Layer, max 0.20m thick, irregular
LYB ZCL Occ chalk and flint
Plough/hillwash, common root disturbance
Cut by tree bowl [59] 6
57 Layer, very chalky, NE side, max 0.15m thick
LYB ZL, chalk 60-70%
Appears cut by [60] ditch
Plough disturbed subsoil and chalk? 6
58 Fill of ditch, max 0.40m thick
LB ZCL, 20% gravel
Fill of ditch [60], no finds 6
[59] Tree hole very irreg shape, >1.20x0.30m deep
Fills = 55 and [61]?
Appears to cut 56, 58 6
[60] Cut of ditch, approx 1.0x0.50m deep
Linear NW-SE, flat bottom, steep sides
Fill=58
Prob NE Roman ditch, but no finds 6
[61] Cut of tree hole seen in section
Fill=55 6
62 Layer, 0.30 m thick
LB ZCL, occ chalk frags
Fill of tree hole [59], below [61] 6

Trench 2

101 Topsoil, max 0.30m thick	
LGB SZ, 30% fine chalk and flint frags	7
102 Subsoil, max 0.25m thick	
Occurs at SW end of Tr 2	
LGB SZ< occ chalk	7
103 Layer, fill of 1959 gas-main trench	
LB SZ 70% chalk	
Ext SW end Tr 2	7
104 Layer, sw end	
DOR S, compact Poss natural ?	7
105 Layer, GW chalk, natural	7
106 Layer, OB S, natural?	7
107 Layer, DOB S, natural?	7
108 Layer, DOB S, natural?	7
109 Layer, YB S, natural?	7
110 Layer White chalk, natural	7
111 Layer DRB S, natural?	7
112 Layer DRB S, natural?	7

Fieldwalking and Auger survey (Figure 9-11)

Following the trench excavations, several days were spent investigating the Roman road from the A11 southeast towards the stretch that Dewhurst called the "Transitional Half Mile". The survey consisted of fieldwalking where possible along both sides of the road, and by augur holes. These surveys confirm that there is a clear bank or agger of the road, continuing until it descends a hill-slope at approximately TL 5584/4996. Before reaching this point the modern track changes from side to side of the agger, with the "off-side" occupied by a double hedge. This confirms the situation observed by Dewhurst, without proving the existence of a Roman agger. Test pits were dug at about TL 5584/4996, where the road drops downhill, and where Dewhurst recorded intermittent traces of chalk foundation upon an embankment of loam, but no traces of deliberate agger were found.

Fieldwalking along both sides of the road up to this point failed to locate any Roman artefacts, although a scatter of post-Medieval pottery represents background noise.

One further day of survey was spent examining the Roman road on both sides of the B1052 Linton to Balsham road, where Dewhurst noted the last appearance of the full agger at TL 5710/4935, and where the road passes adjacent to SMR cropmark sites 09370 and 09371. The results of the fieldwalking were nil. Additional survey information was obtained from low-level micro-light flight aerial photography, providing information regarding the south-eastern course of the Romanisation of the road.

Note: the auger survey proved to be quite slow and generally not very effective at locating the agger of the road. Simple observation while walking the road, and hand-dug test-pits are more effective.

Discussion

Construction of the Roman Road

The construction of the Roman road as observed by Dewhurst has been substantively confirmed (figure 8). The road was laid over the pre-existing soil horizons. The road load-bearing foundation was a thick layer of rammed chalk, originally perhaps 5.0 metres wide and 0.30m thick. This appeared to be all of one phase. Over the chalk a thick layer of gravel metalling (again about 0.30m thick) was laid. This may have been in several phases, as the top surface of the chalk had worn ruts filled with gravel. No dating evidence for the road was obtained.

A flanking ditch along the north-east side of the road was excavated. The ditch corresponds well with that recorded by Dewhurst at various (unknown) points along the road. Fox (1923) did not locate such ditches in his excavations, and the present excavations do not show an unequivocally Roman ditch along the south-west side, though it is likely that cut [21] in Trench 1 is the Roman ditch.

Buried Soil

The method of construction employed for the road resulted in the preservation of the pre-existing soil horizons (layers 24 and 25 in Trench 1). These layers were sampled for soil micromorphology, pollen, and molluscan analysis, to provide information regarding the local environment and land use patterns, (one of the principle aims of the investigation). Pollen preservation was very poor, but preliminary study for micromorphology and molluscs suggests that detailed analysis will be valuable. Detailed analysis will conducted be during 1992.

Roman Road or Romanised Track?

Antiquarian speculation that there was a Roman road from Colchester to Chester, was accepted until recently. The watching brief so admirably recorded by P C Dewhurst has made this hypothesis untenable. Dewhurst's work, combined with the limited excavations reported here, can lead to a re-evaluation of not only this particular "road" but also by implication several others in the area. This has been astutely anticipated by Brian Charge of the Haverhill and District Archaeological Group (1986).

Following Charge (1986, 51) it is useful to define a Roman Road as one with constructed foundations, metalling, laid out in generally straight sections with changes of alignment occuring on high ground. Other roads lacking these criteria will certainly have existed in the Roman period, some of which may have been "Romanised", but the ascription of a date to such tracks is at best difficult.

The road from Cambridge to Worsted Lodge and beyond for about 0.5 kilometres (to TL 575492) observed by Dewhurst and the current investigation, is certainly a fully Roman road. Beyond that point, and continuing until TL 559499, the track may have been partially Romanised (ie by the provision of an agger of some form), but it is equally probable that the intermittent chalk layers recorded are Medieval repairs of a local trackway. The ascription of a Roman date to any of this road work is unsupported by present archaeological evidence.

This raises the question which exercised both Dewhurst and Charge - why was the construction programme apparently stopped and what was the intended southern terminus of the road?

Dewhurst recognised that Colchester was an unsubstantiated terminus, and consequently suggested that the road was a locally sponsored Romanisation of a pre-existing track running towards an important settlement at Horseheath. However, this depends upon the presence of an important settlement at Horseheath, and this must now be regarded as dubious; although a Roman site is located there, available evidence suggests that it was of minor importance. The nearest locally important site along that part of the presumed route is at West Wickham, but this is located three kilometres off the route. It remains possible that the Roman settlement at Wixoe (Suffolk) was the destination.

Charge has suggested that the Romanised road was a "feeder" road between Cambridge and the Roman road presumed to underlay the modern A11 (and thus replacing the prehistoric trackway system known as the Icknield Way). The A11 south west of Worsted Lodge to just north of Great Chesterford and the length continuing towards the north east is almost certainly a Roman foundation (see Figure 12 for the Roman road network).

This is a very persuasive suggestion. The more northerly of the London to East Anglia roads (now under the A11) passed the small town of Cambridge at a distance of about 10 kilometres. When the Roman town of Cambridge (Durolipons ?) prospered in the second century there would have been clear benefits in linking the town to the main road by the provision of a good link road. Thus the fully Roman road to Worsted Lodge.

This does not however explain the continuation of the road beyond Worsted Lodge, or why the continuation was abandoned. It remains possible though unlikely, that the intended destination was Colchester, or the local settlements at West Wickham or Wixoe. Proof of the Romanised or otherwise character of the road beyond Worsted Lodge is still needed to amplify Dewhurst's observations.

Further Work

There are several elements of the excavation requiring further work. Although finds were few (about one box of Medieval and later objects) it is still worthwhile identifying them and incorporating the results into the report. The soil micromorphology analysis by Dr CAI French should be performed (Assessment and costings attached). Similarly, the molluscan and carbonised plant remains should be analysed (P Murphy, assessment report attached).

There are two avenues for further research. First, the archive of P C Dewhurst's 1959 watching brief should be re-evaluated in the light of the results of this project (archive believed to be in the University Museum of Archaeology and Anthropology, Cambridge). Secondly, a rapid search of the records archived in the Cambridgeshire Record Office indicates that a large number of historical and cartographic sources exist which could be used to shed light on the use of Worsted Street and the pre-turnpike "A11" road, and possibly on Roman predecessors. There are also Anglo-Saxon charters with clauses refering to these two roads, which should also be analysed. Lastly it will be necessary to combine the results of the fieldwork and the post-excavation analysis into a final report. Cost estimates for the proposed work are attached below.

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Appendix 1 Soil Micromorphology

Excavations of Wool Street Roman Road (FULMF91) Site Assessment and Sampling of Buried Soil

Dr CAI French MIFA

Site Appraisal
On site examination on August 23, 1991, of the open trench through the Wool Street Roman road revealed a very well preserved buried soil sealed beneath the road make-up which was developed on the chalk sub-soil.

The buried soil is composed of two distinct horizons, an upper more organic silt loam (c. 0.20m thick) or former A horizon material, and a lowre less organic silt loam (c. 0.20m thick) or former B horizon material. It does not appear to have been truncated, nor to be disturbed.

As there are very few well preserved soils asociated with this period in Cambridgesire that have been examined in thin section, this soil profile deserves soil micromorphological analysis. Indeed, the only other early Roman soil profiles that have been examined in the County have been worked on by the present writer, for example at the A47/Ermine Street crossing, and at Haddenham.

Proposal for Future Work
Consequently, a continuous column of soil was removed from the road section in two blocks for future imprgnation and micromorphological analysis. A full costing for this proposed post-excavation work has been submited.

Appendix 2 Molluscs and other Botanical Remains

P Murphy

Wool Street Cambs: FULMF91 - Preliminary Assessment of Samples

Samples were taken as a short column through contexts 24 (0-5, 5-10, 10-15cm) and 25 (0-5, 5-10, 10-15cm) for land mollusc analysis with additional samples from 24 (15kg), 30 (5 kg) and 60 (5kg) for flotation. The molluscan samples, usually 2kg, were wet-sieved over a 0.5mm mesh after air-drying.

24. (Buried Soil). Greyish brown loam, moderately stony with chalk fragments and mainly angular flints up to 40mm; fibrous and woody roots, land molluscs very common (mostly Vallonia, Pupilla and Helicella).

25. (Buried soil). Brown loam merging down to greyish-brown loam, slightly stony in top 5cm with rare flints and chalk fragments up to 15mm; becoming stony below with common chalk and flint fragments up to 50m; fibrous and woody roots common at top, rarer below; rare land molluscs in top 5cm (mostly Vallonia, Pupilla, Helicella), somewhat more common below (including also Pomatias, Discus and Carychium).

24. (Buried soil). Flotatioj sample. Abundant molluscs; some charcoal and cereals.

30. (tree throw hole?). Flotation sample. Abundant molluscs; small mammal bone, charcoal (Pupilla and Vallonia common).

60. (90-95cm depth). (Basal fill of roadside ditch). Flotation sample. Very extensive root contamination, though molluscs present.

The sampes, well sealed beneath the road, are clearly very suitable for land mollusc analysis. Provisionally an open habitat seems to be represented in 24 and the top of 25, with more shaded condition below, but detailed quantitative analysis will be needed to confirm this. Sparse carbonised plant remains will be extracted at the same time and should yield information on local vegetation and crops.

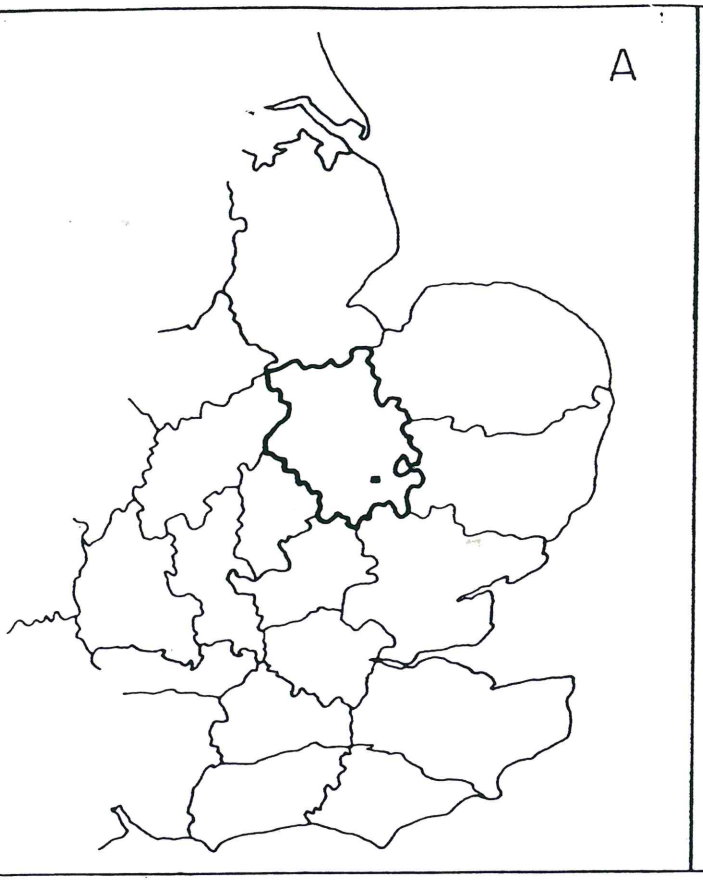
Appendix 3: Assessment for Pollen Analysis; FULMF91

E Guttman

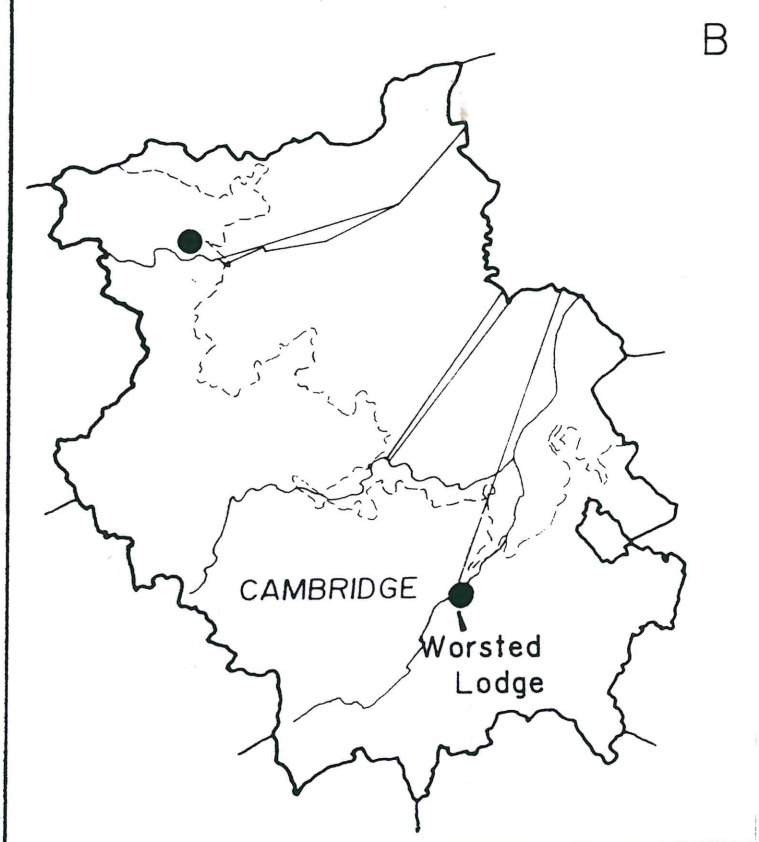
The decision to sample the buried soil at Wool Street was partly due to the paucity of sitres suitable for pollen analysis in the chalklands of Cambridgeshire. The site therefore provided an unusual opportunity to investigate the early Roman landscape in more detail than that provided by molluscan analysis. Furthermore, a series of new questions regarding land use and early farming practice were to be addressed ina research project which would encompass the results from the site.

The buried silt loam beneath the road was fairly oxidised despite the 50cm of compacted chalk and gravel overburden which formed the layers of the agger. The buried B horizon was more compact than the buried A horizon. A monolith of 30cms by 10 cms was extracted from the section immediately adjacent to the micromorphology samples so that the two could later be compared.

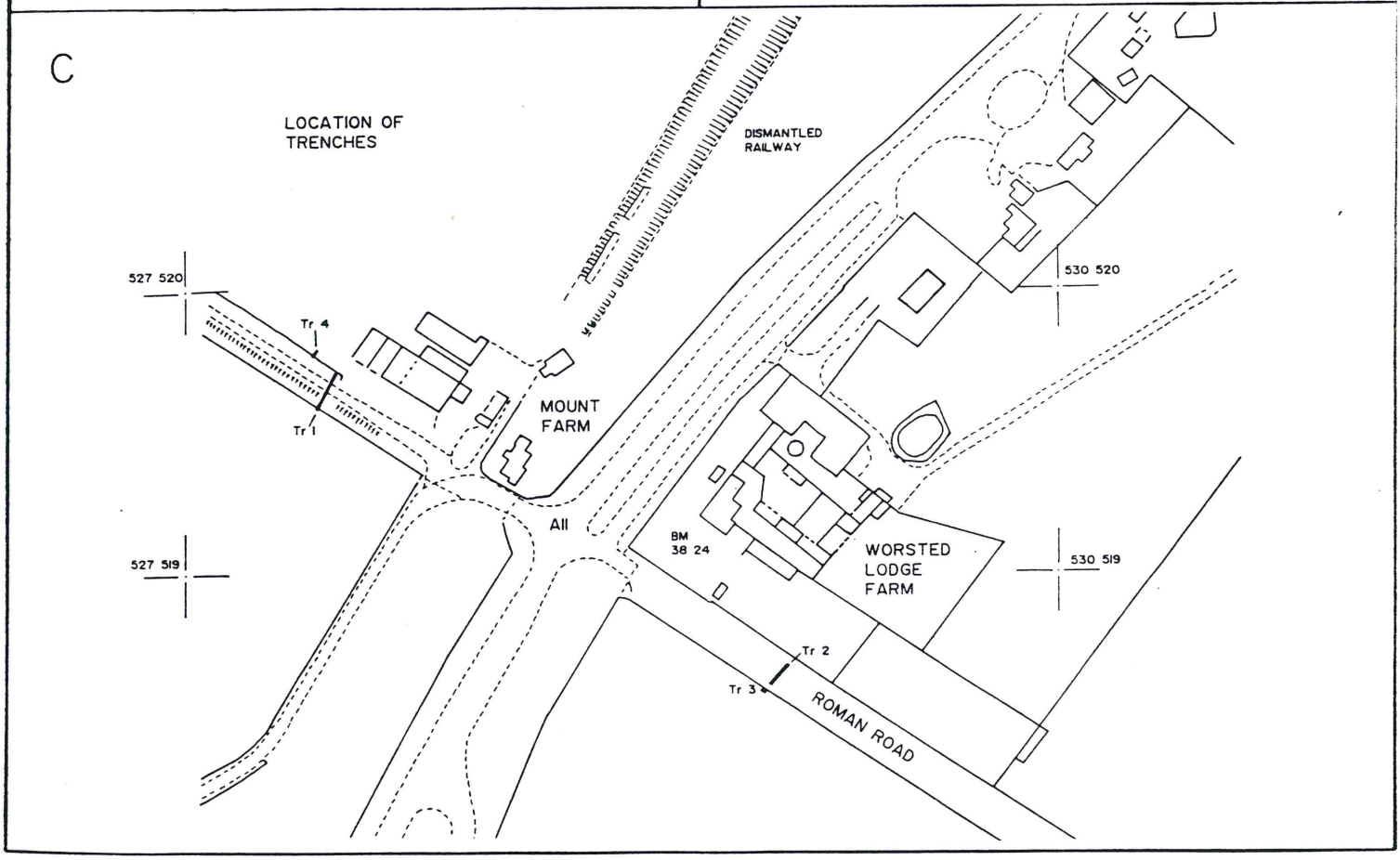
Four sampes from each horizon were processed using the standard methods of the Quaternary Research laboratory at Cambridge University. Unfortunately no pollen was recovered due to the oxidise state of the soil



A



B



C

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Archaeology Section

SITE LOCATION PLAN

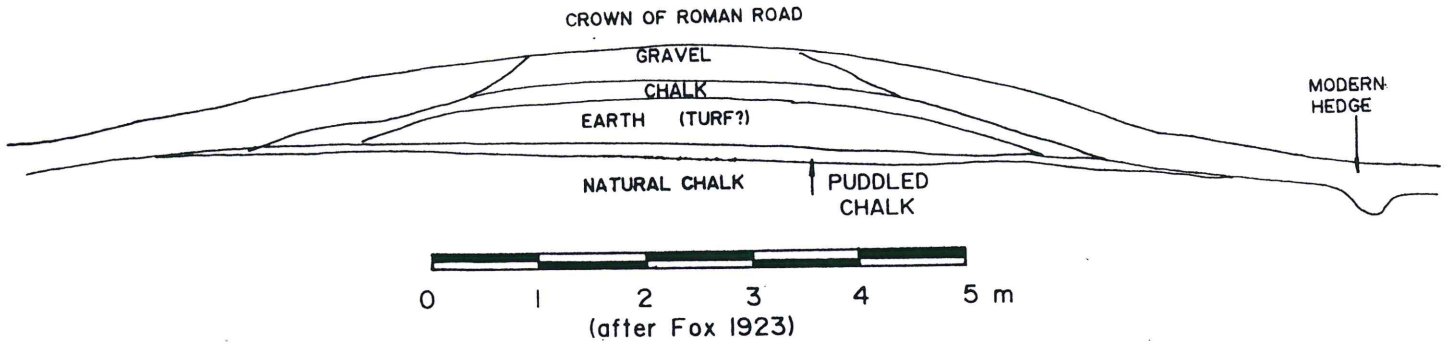
PREPARED BY: GW

DATE: 1/92

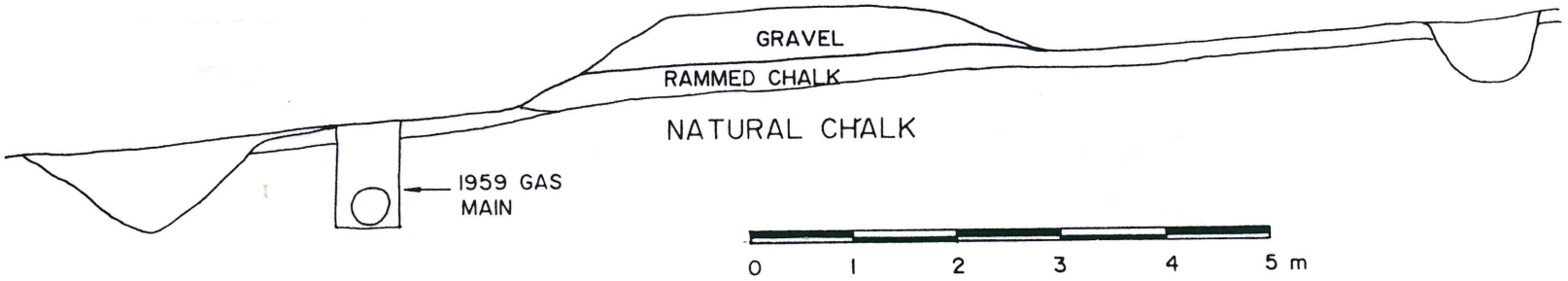
SCALE: 1:2500

PLAN NO: 1

Figure 2



(after Fox 1923)



(after Dewhurst 1959, fig 2)

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Archaeology Section

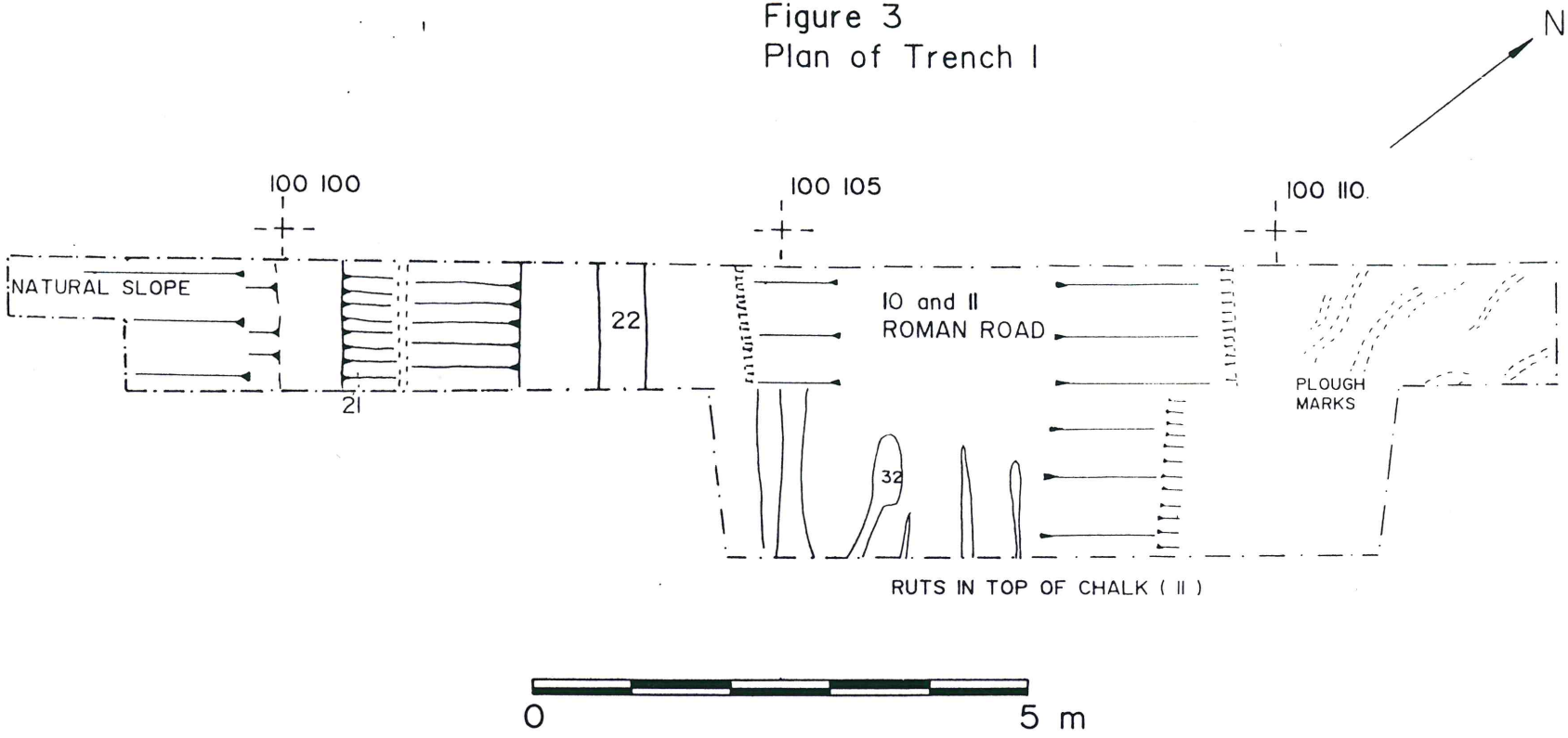
Sections across the Roman Road

PREPARED BY:	DATE:
GW	1/92

SCALE:

PLAN NO: 2

Figure 3
Plan of Trench I



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Plan of Trench I

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PLAN NO: 3

FIG 4

TRENCH 1

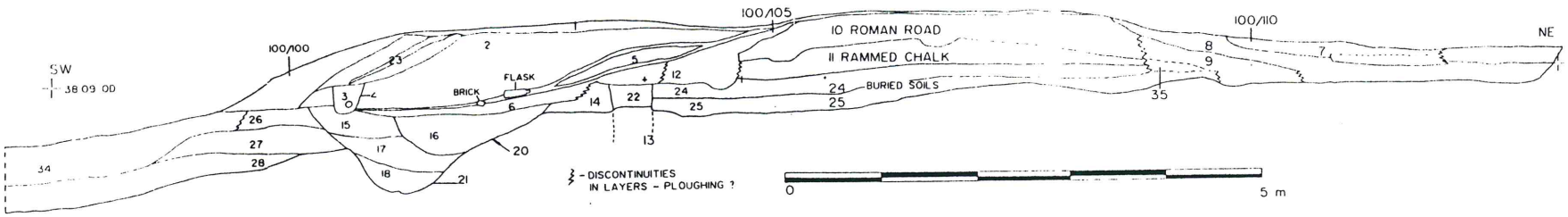
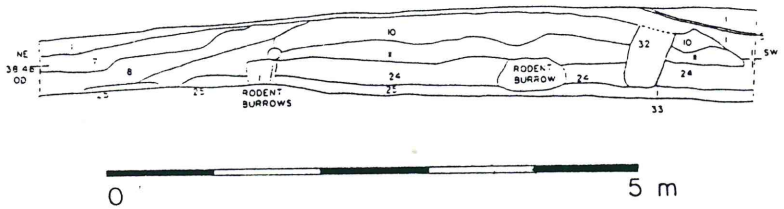


Figure 5
Trench 1



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Department of Property
Archaeology Section

TRENCH 1 SEC

Trench 1 Section Drawings

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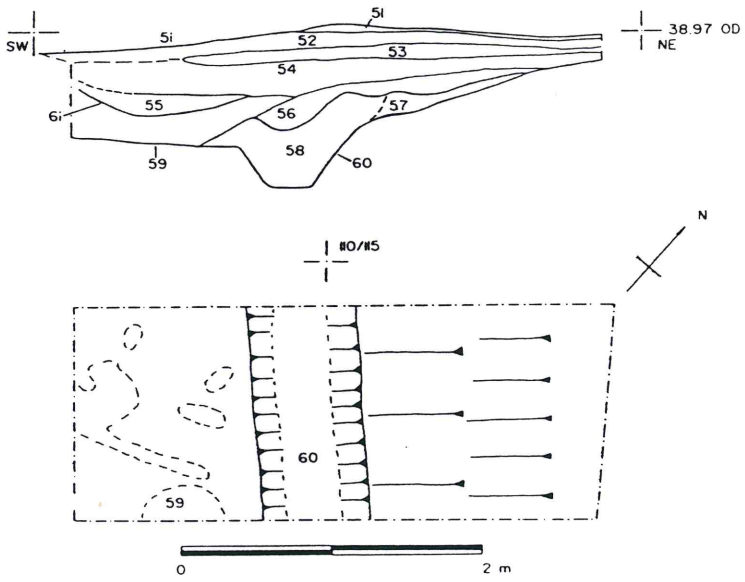
PLAN NO: 4 and 5

Figure 6 Trench 4



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Trench 4
Plan and Section

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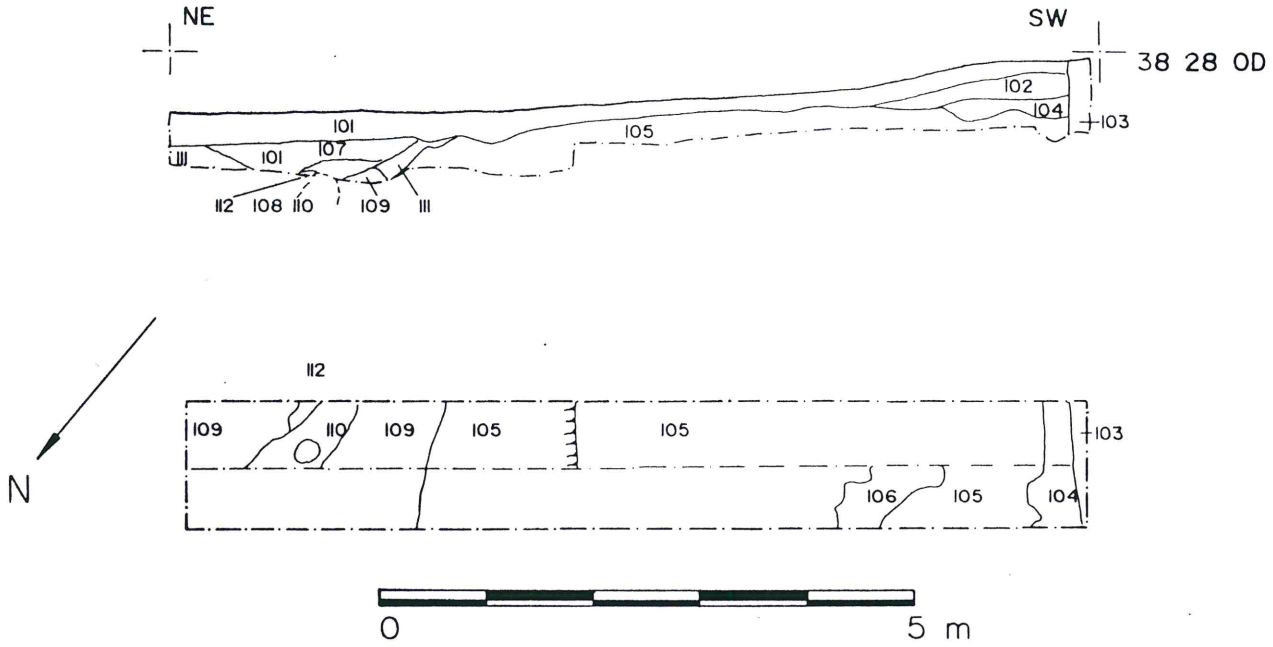
PLAN NO: 6

Figure 7
Trench 2



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Trench 2
Plan and Section

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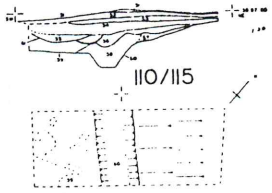
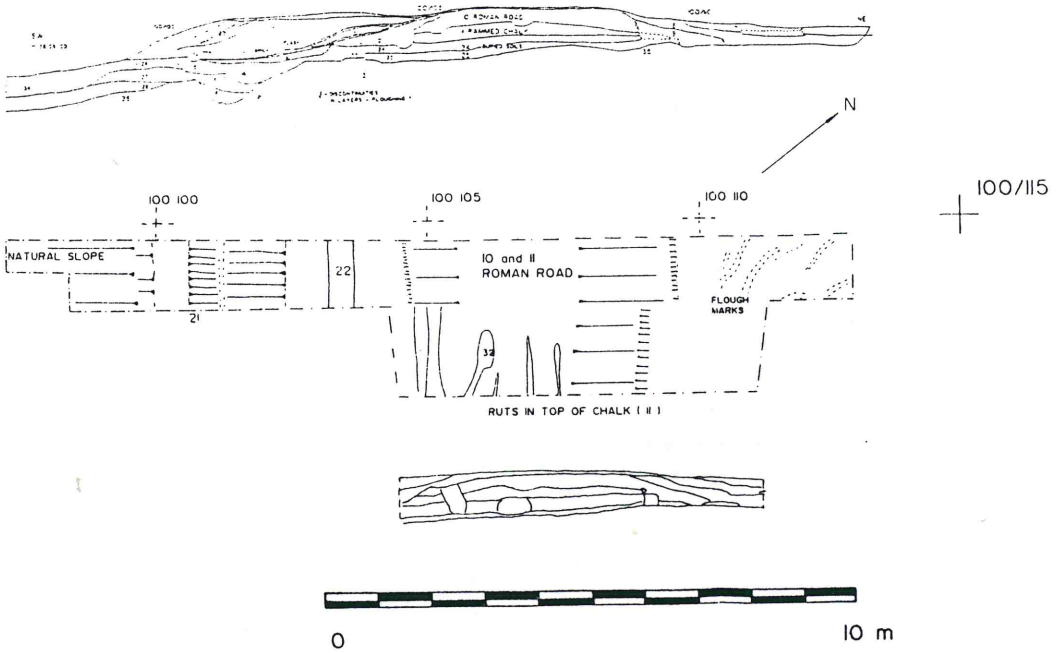
PLAN NO: 7

Figure 8

Site plan Trenches 1 and 4





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Composite Plan, Trenches 1 and 4

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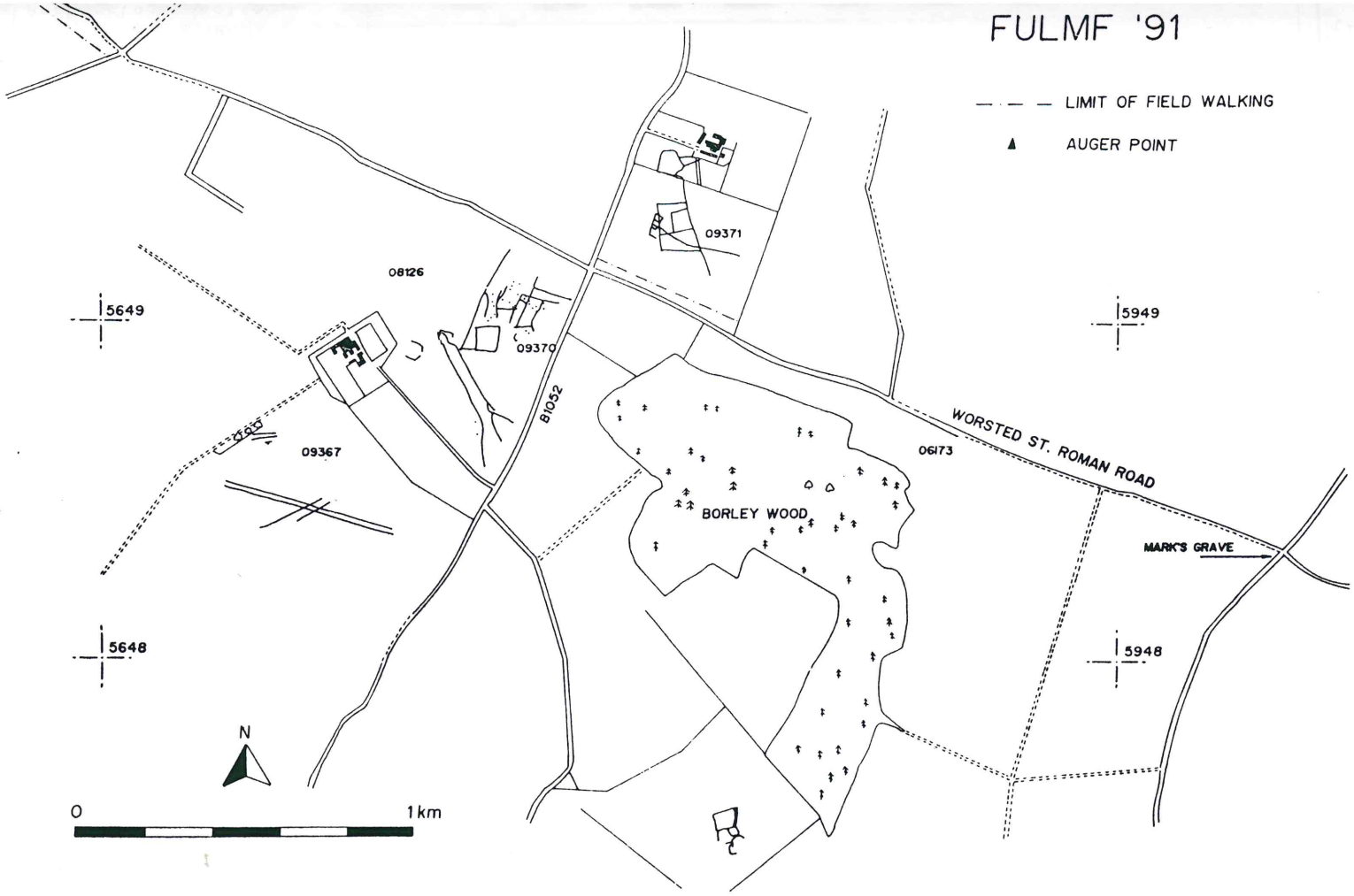
PLAN NO: 8



Based upon Ordnance Survey Map No,(Edit): TL 55 SE
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Archaeology Section

COURSE OF THE ROMAN ROAD

FIELD WALKING AND AUGER SURVEY 1991

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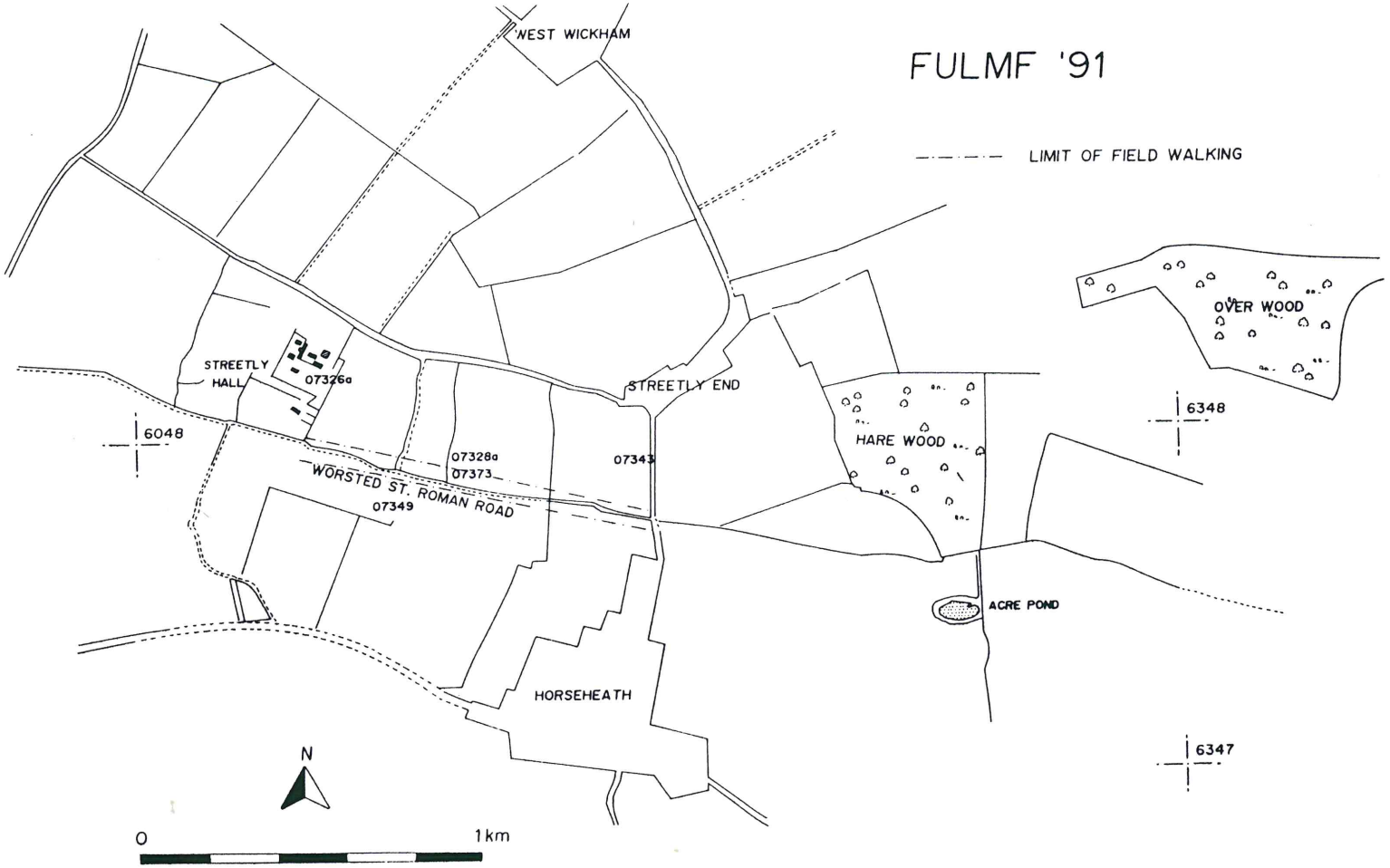

Based upon Ordnance Survey Map No,(Edit): TL 64 NW
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COURSE OF THE ROMAN ROAD

FIELD WALKING AND AUGER SURVEY 1991

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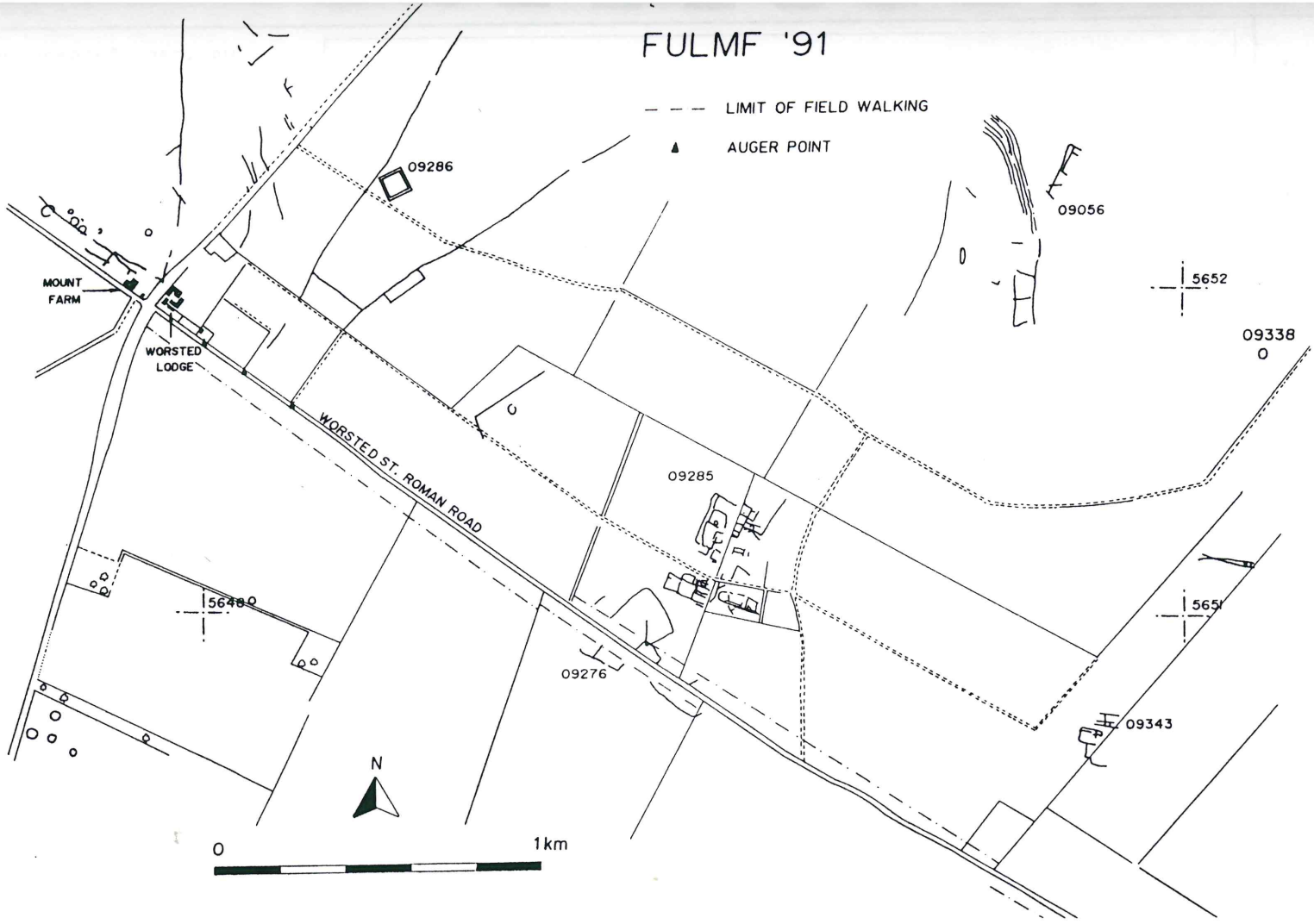
SCALE: 1:20000

PLAN NO: 11



Based upon Ordnance Survey Map No,(Edit): TL 55 SW
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COURSE OF THE ROMAN ROAD

FIELD WALKING AND AUGER SURVEY 1991

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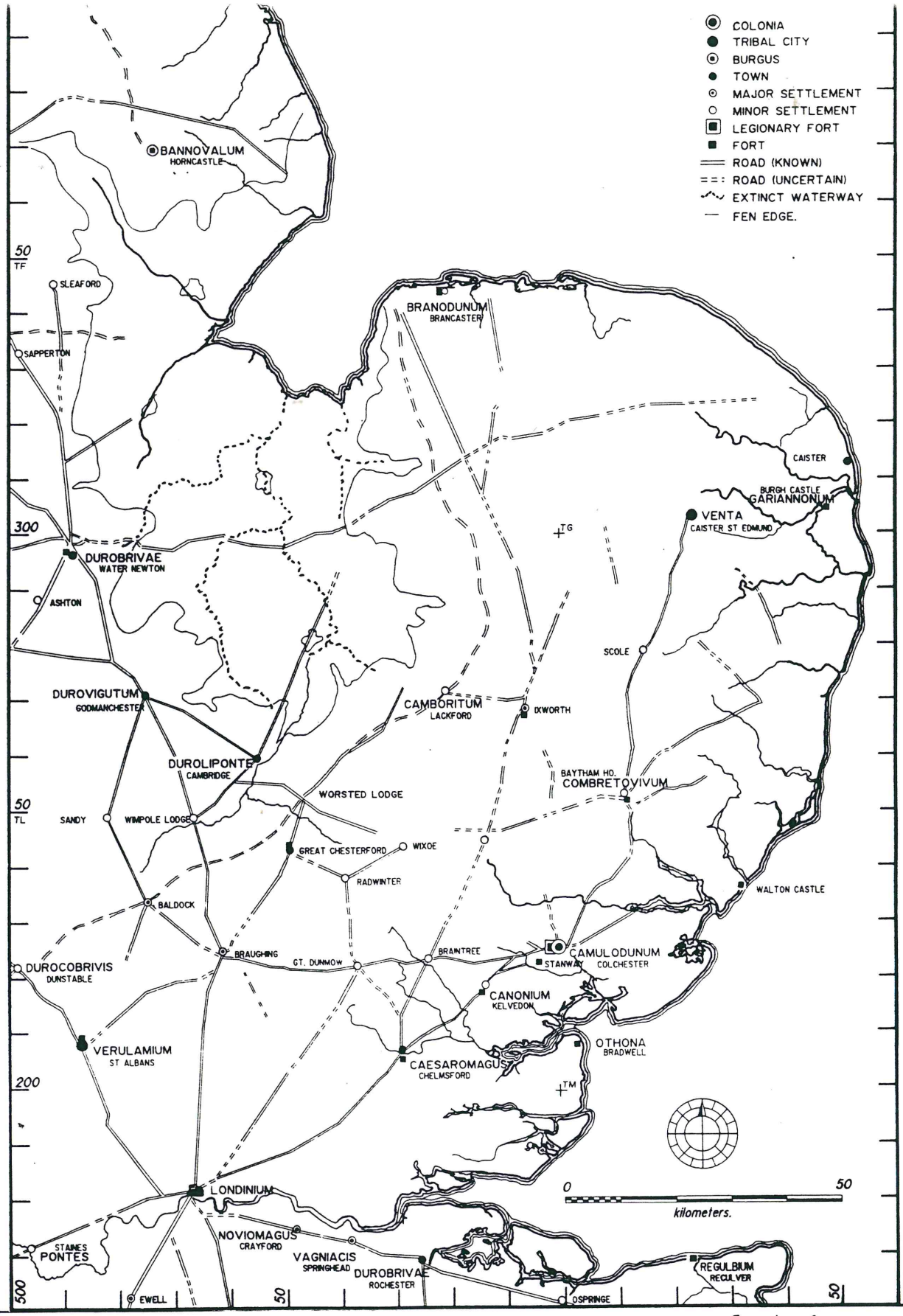
SCALE: 1:20 000

PLAN NO: 9



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Roman roads and towns in East Anglia.
(after OS map of Roman Britain, Margery, Charge)

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PLAN NO:

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