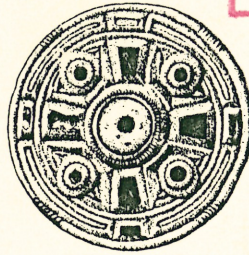




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Late Saxon and Medieval Activity, and Ditch Systems, between School Lane and Blackhorse Lane, Swavesey

Paul Spoerry

1996

Cambridgeshire County Council

Report No. 130

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**Late Saxon and Medieval Activity, and Ditch Systems,
between School Lane and Blackhorse Lane, Swavesey**

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November 1996

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Report No 130

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SUMMARY

Dense occupation of late Saxon to medieval date was identified in the northeastern corner of the field, and included pitting and evidence for timber structures of more than one phase. In part this overlay deliberate dumping which seems to have provided an extension to the gravel terrace. This latter was found to occupy only the northeastern corner of the field, rather than spreading across it as indicated on the Geological Survey map. The gravel terrace, and adjacent dumping on which occupation was located, represent a sharp contrast with the lower lying and probably periodically flooded basin across the rest of the field. The ditches (seen in aerial photographs) formed a, presumably, long-lived drainage system with perhaps five phases of differing ditch cuts and, in one phase, a bank. This was probably constructed to keep episodic flooding at bay.

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**Late Saxon and Medieval Activity, and Ditch Systems, between
School Lane and Blackhorse Lane, Swavesey
(TL 358/687)**

1 INTRODUCTION

In July 1996 the second phase of a three phase archaeological evaluation was carried out in advance of residential development by the Archaeological Field Unit (AFU) of Cambridgeshire County Council. The work was funded by McLean Homes (East Anglia) Ltd. A specification was drawn up in consultation with the County Archaeology Office (Development Control).

The Phase 2 development area covers 3.1ha to the northwest of Phase 1, located west of Barwell's factory at the end of Blackhorse Lane (centred on TL 358/687). About 20% of the area was, however, under tyre dumps at the start of the evaluation; mostly towards the northern edge of the site (see Plate 1). On inspection it became evident that large parts of the site had further tyres and waste rubber in or below topsoil level. Unidentified chemical contaminants were recognised in the northwestern corner of the site.

2 GEOLOGY, TOPOGRAPHY AND LAND USE

The site lies on the junction between first and second terrace river gravels, and Ampthill Clay (British Geological Survey 1985). The gravels on which Swavesey is situated form the end of a spur leading out into the Ouse valley and the edge of the Fen, where there is a covering of alluvium. The gravels overlie Ampthill clay which constitutes the main part of the spur of higher ground. Trenching exposed these gravels in the northeastern corner of the site, and alluvium of varying thickness across much of the rest of the field, overlying green and blue clay. Ampthill clay in this area is supposedly dark brown and black and it is debatable whether this was found here, or whether the clay observed represents a previously unidentified pocket of boulder clay. The absence of gravels across most of the field is at odds with the Geological Survey map data, which suggests that the gravel capping should peter-out in an arc towards the southwestern corner of the field. It is, in fact, only present in the northeastern corner of the field.

The alluvium appears deeper towards the south and east of the site. The micro-topography of a former stream, now canalised as a field drain between Phase 1 and 2, may be the cause of this.

Swavesey lies 3km to the north-east of the A14 trunk road, approximately 14km to the northwest of Cambridge, and 13km southeast of Huntingdon. The site is generally flat and lies 200m to the west of the village core at an average height of around 5m OD. Local knowledge suggests that an area on the eastern side of the site was once a pond. Trenching did indeed indicate that recent rubbish deposition has infilled a former low lying wet area here.

ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

The site lies close to an area of dense activity and high archaeological potential. This extends from the medieval through into the late medieval periods and was associated with the planned and defended town of Swavesey (which Phase 3 of the development is almost wholly within). The layout of the settlement appears to have been formalised in the 13th century. The town had over 1000 inhabitants by 1278 (Ravensdale 1984). The dry land access to this Fenland port was along the present High Street, and it is known that suburban development around Cowfen Green, that predates the High Street, was in existence by perhaps the 14th century (e.g. Ryders Farm).

Lying, as it does, adjacent to the western edge of the medieval town defences the site has significant archaeological potential, both for study of medieval suburban development, and also for investigation of the infield land use immediately outside the formal town boundaries. The proximity of ridge and furrow systems to the southwest may provide a context for the latter.



Plate 1 Aerial view of the site (bottom, centre) showing tyre stacks in northern part of field and trenching underway. Note the Phase 3 area under adjacent factory units, the area of the planned medieval town (which corresponds closely to the main modern settlement), and the open area of castle earthworks to the north, beyond which is the parish church and priory site on the end of the gravel spur (photo by Ben Robinson).

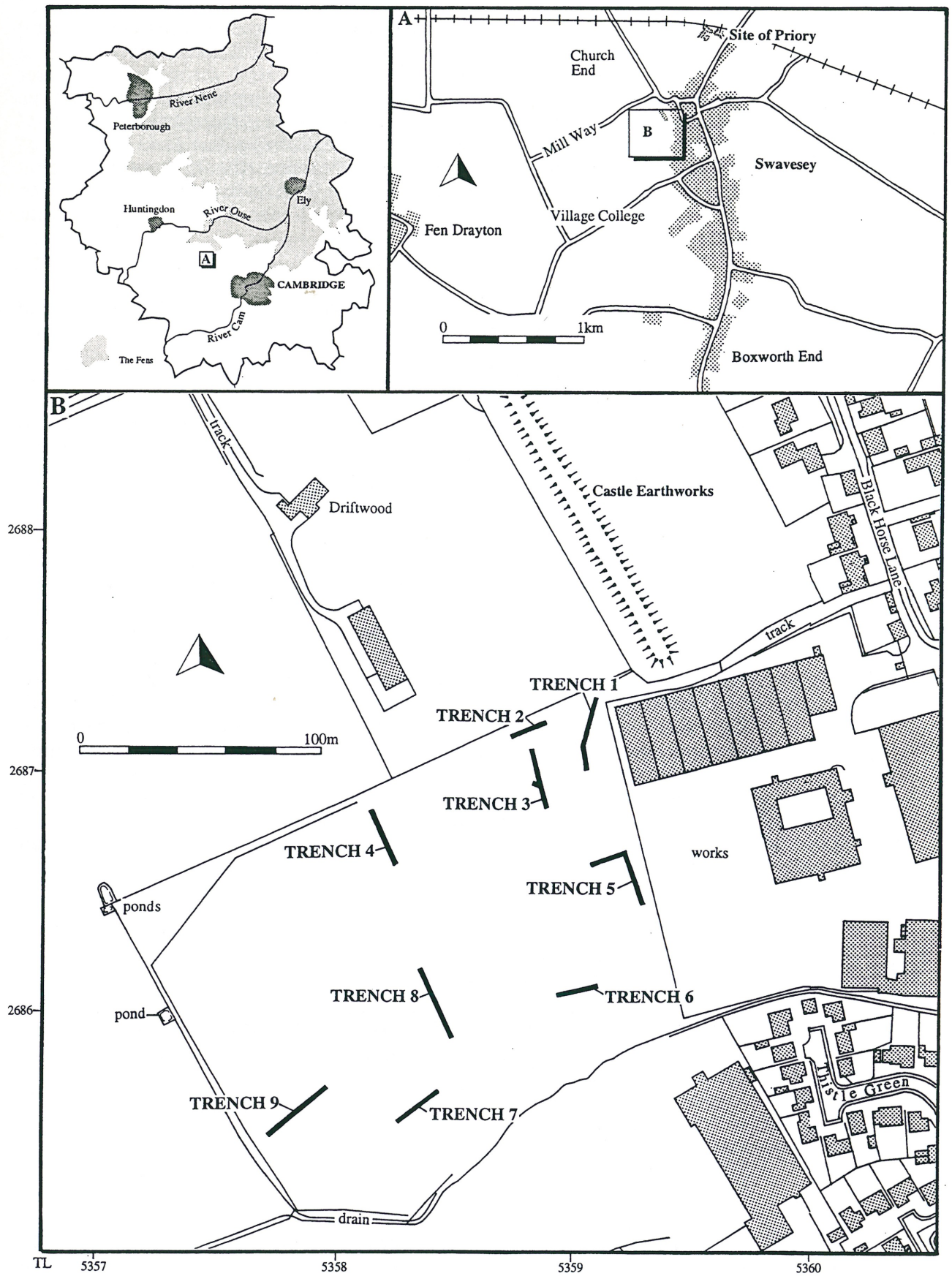


Figure 1 Location of site and trenches

The site appears to be located on the edge of the gravel promontory or island on which most of Swavesey stands. This would have represented a favourable settlement site within the fen edge zone throughout the later prehistoric periods. Huge concentrations of later prehistoric remains have been found on the valley/fen edge at, for example, Over (which is the next promontory east from Swavesey). These illustrate the need for serious consideration of activity in the area long before the 13th century town foundation. The site is also close to known Roman-British field systems to the north and west, and Roman artefactual material is recorded from locations only 300m away.

Two phases of archaeological work have recently been carried out on the site of the Castle, immediately to the north east of the development site.

In 1990 evaluation trenching by the Cambridge Archaeological Unit (Evans 1990) identified pre-Roman Iron Age enclosure systems oriented northwest-southeast, together with pits, post-holes and a kiln in the field immediately to the northeast of this area. A further set of ditches and pits, this time the former aligned roughly east-west, belonged to a second phase. These were medieval features, probably of the 11th-13th centuries.

In 1994 geophysical survey by Toyama University and the CAU (Maekawa, Sakai, Uno and Kaner 1995) concentrated on the same field. Resistivity survey results suggested that in addition to the Iron Age ditch alignments there are indications of one or possibly two, sets of aisled buildings. These are of Saxon form but aligned with the Iron Age systems.

The first phase of the present development, at School Lane, Swavesey (NGR TL 359/685) found no traces of medieval settlement. This, considered with the nearby remains of medieval cultivation (ridge and furrow), suggests that the site consisted of fields throughout the period. Deposits containing medieval pottery were found, however, in the southwest corner of the site adjacent to School Lane itself, and may indicate occupation in the immediate vicinity. Later features include the filled-in remains of a large L-shaped pond, known to have existed in 1887, the purpose of which is uncertain (Sutherland and Hatton 1996).

An aerial photographic survey carried out by Rog Palmer of Air Photo Services in 1995 (Appendix E) identified that recent land-use over the last 50 years on the site of the Phase 2 development had been successively; rough pasture, a sports field and as a dump for tyres (on the north side). Earthworks representing former ditch lines, now levelled, were identifiable in the air photos taken before 1962, when the site was rough pasture. The in-filled remains of these were expected to survive in the field below the surface.

4 METHODOLOGY

Nine trenches were machine excavated across the site using a 1.6m wide toothless ditching bucket (unless otherwise stated all trenches were 1.6m wide). The trenches were arranged to evaluate the available open areas and assess visible anomalies across the site wherever possible (Fig. 1). In particular, trenches were located to test the extension of archaeological remains from the adjacent sites known to the northeast, and to section the

post-medieval ditch systems known from aerial photograph information (Appendix E).

The topsoil, recent make-up and a variety of alluvial horizons were carefully removed in each trench to reveal any identifiable anomalies. Areas of archaeological interest were then excavated by hand, photographed, and recorded on plan and in section.

5 RESULTS

Trenches 1-4 encountered terrace gravels. Trenches 5-9 revealed mixed (Amphill) clays on which alluvium had accumulated. The alluvium, sealed beneath topsoil and in some cases a former ploughsoil and recent rubble and gravel dump layers, was at thickest (c 0.4m) in Trench 6.

Non-topsoil trench spoil was 'fieldwalked' after a period of weathering. No significant finds were associated with the alluvium spoil.

5.1 Trench 1 (Figure 2)

Trench 1 was c 32m long and located in the extreme northeastern corner of the site. It ran for about 22.5m in a southwesterly direction, before turning abruptly southwards for a final 9.5m. It was located to test for archaeological remains adjacent to the areas of known medieval, and probable Iron Age, occupation. The medieval town ditch is believed to pass on a northwest-southeast alignment within a few metres of the northern end of the trench. Thus the immediately 'suburban' zone was being sampled.

5.1.1 Topsoil and overburden

Topsoil was quite shallow – up to 0.2m, but often rather less. Below the dark and easily recognisable topsoil 101 was a dark olive brown deposit 178 which probably represents a relict cultivation soil. This contained variable quantities of flint gravel, which appeared most prominent in the northern part of the trench at the lower boundary, between 178 and 113. The topsoil and 178 extended throughout the trench.

The lower boundary of 178 was very diffuse where it overlay another layer, 113. This latter was an olive brown sandy clay containing rather less flint gravel than 178 and extending across the northern two thirds of the trench. It was up to 0.18m thick at the northern end, but thinned out to 0.15m after about 10m and to 0.1m after another 12m. The darker fills of large and small archaeological features were visible through 113, but they were rather diffuse and their edges proved difficult to define until the latter was removed. 113 did not extend southwards more than perhaps 1m beyond the bend in the trench. Once 113 was removed by hand, feature definition was much improved.

5.1.2 Group of features at the northern end of Trench 1

A group of perhaps two pits, six postholes, two stakeholes and a clay deposit were located within the first 2.6m of the trench at the northern end. They were all sealed by 113, and certainly at least pit fill 104, posthole fills 102 and 106 and possible pit fill 135 were visible through the latter. Unexcavated probable posthole fill 135 was cut by pit 105 which was in turn cut by posthole 103.

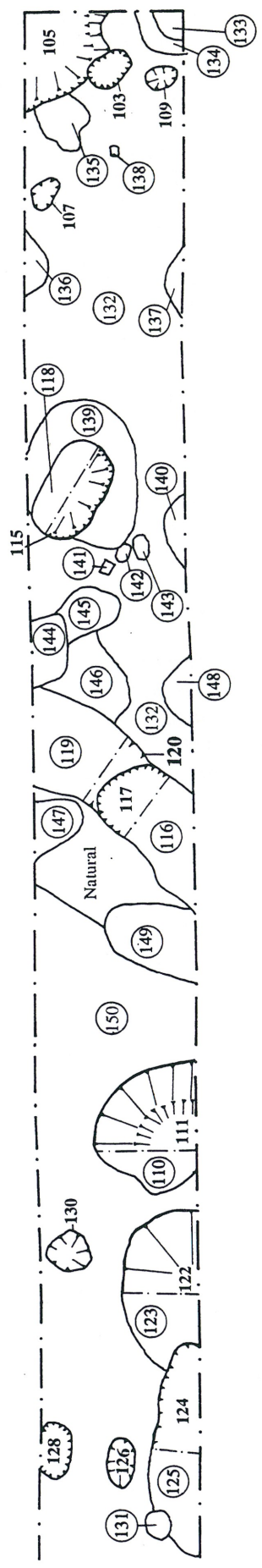
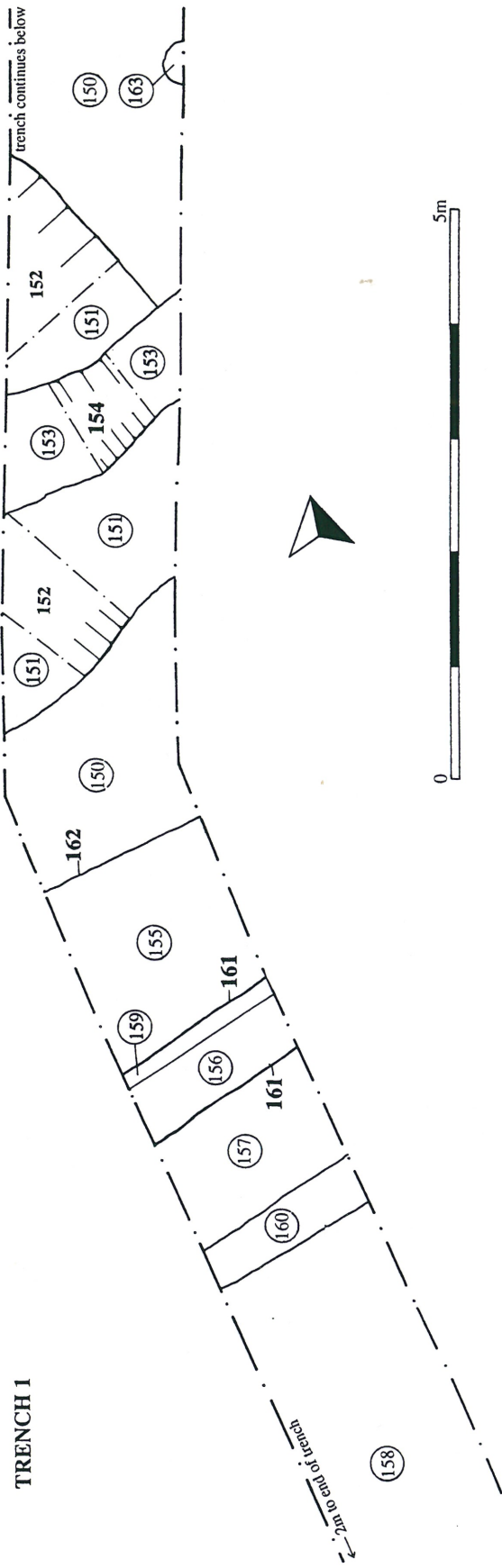


Figure 2 Plan of Trench 1 showing concentration of archaeological features towards the northern end, with ditch system separating possibly two episodes of activity on top of dump or make-up deposits.

Pit **105** was in the northwestern corner of the trench, with perhaps a little more than one quarter of its extent revealed. It was not bottomed but at a depth of 0.4m was found to contain one fill, 104, an olive brown clayey sand containing flint gravel. Bone, charcoal and pottery, including a complete profile of an inturned St Neots type ware bowl, dating to the period 1000-1200 (Plates 4 and 5), and other sherds representative of the period 1150-1350 were recovered. It may be that the group together provides a late 12th century date, but the possibility of an earlier origin, with later contamination, cannot be ruled out.

Posthole **103** cut pit **105**. It was 0.15m deep with a flat bottom and vertical sides. Sub-rectangular in shape, it measured 0.31m x 0.39m and contained one fill 102, an olive brown clayey sand.

Posthole **107** was 0.28m deep with vertical sides and a flat base. It was sub-oval in shape, up to 0.28m in diameter and contained one fill 106, an olive brown clayey sand which contained pottery dating between 1000-1200.

Stakehole **109** was 0.28m deep, sub-oval in shape, up to 0.28m in diameter and contained one fill 108, an olive brown clayey sand.

135 was the fill of an unexcavated feature, probably a posthole, that was cut by pit **105**. 135 was a dark greyish brown sandy clay silt containing flecks of charcoal, chalk and yellow clay.

136 and 137 were unexcavated features, either pits or postholes, that were only partially revealed within the trench. The former was dark greyish brown, the latter olive brown, both were sandy clay silt containing flecks of charcoal.

All of these features appeared to be cut into a large volume of re-deposited material, 132. This was a 70% to 30% mix of olive yellow clay and very dark greyish brown sandy clay. It was at least 0.3m deep in places (e.g. in the section of **105**). Below this deposit natural gravel was observed, its relationship with natural at its southern end was removed by ditch cuts **117** and **120**. No dateable finds were recovered from 132.

5.1.3 Pits north of linear complex 120

Again these features were observable, but diffuse, through 113. After removal of 113, recording and some excavation took place.

Oval pit **115** was excavated and found to be 0.65m deep containing one fill, 118, which was a very dark greyish brown clay sand, with 10% flint gravel and burnt clay, plus pottery of the period 1100-1200, bone, mortar and burnt wood. An environmental sample from this fill produced a diverse bone assemblage from birds, small mammals, large mammals and fish, together with small amounts of poorly preserved, non-charred cereal grains. This pit was cut within a larger sub-oval pit **114** which was cut deeper than **115**. The fills of this were not excavated

Adjacent to the edge of **114** were two oval and one sub-square stakeholes (142, 143 and 141 respectively). 143 had a maximum diameter of about 0.24m whilst the others were both less than 0.2m across

Close by were two further discrete features, 140 and 148, both probably pits and both running under the section. These were not excavated.

All of these features were cut into deposit 132, which overlay the natural gravel.

5.1.4 Linear complex 120

A group of three unexcavated, intercutting pits were located 0.4m south of 114. From surface observation it seemed that the earliest was 146, which was cut by 145 and ditch 120. These were, in turn cut, or overlain by, 144.

Ditch 120, was a shallow, flat-bottomed linear feature, aligned northwest-southeast, about 0.12m deep and 0.62m across. It had one fill, 119, a very dark greyish brown sandy clay silt flecked with light olive brown clay, charcoal and daub, containing a small amount of pottery dating to the period 1000-1150.

120 was cut by a deeper linear 117, the butt-end of which was excavated revealing two fills, 116 and 121. The upper fill, 116, a very dark greyish brown sandy clay silt, contained pottery dating to 900-1150 and 1200-1400, suggesting that a good late Saxon to Saxo-Norman group had been re-deposited alongside some later material. It may be that the large, earlier group derives from 119. The lower fill, 121, was described as an equal mix of light olive brown sandy clay and olive brown clay. It contained animal bone and a little pottery of mixed date, as described for 116.

Soil samples were processed from 116 and 121 and both produced non-charred cereal grains and fruit seeds. The survival was poor and the quantity low. The absence of charred weed seeds and chaff fragments suggests that crop-processing was not occurring close by and that the assemblage derives from domestic waste (Appendix B).

The unexcavated butt-ends of two further ditches, or elongate pits, 147 and 149, were located immediately to the west of 120.

5.1.5 Make-up or dump deposit 150

This deposit appeared to overlie natural on its northern side. The natural probably has a gradual slope along a northwest-southeast axis, which was adopted as the line of ditches 117 and 120, less than a metre to the north. It is possible, however, that 150 actually lay in a gradually sloping cut, although this is not the favoured interpretation. The deposit was described as 60/40 mix of light olive brown clay and very dark greyish brown sandy clay with frequent small gravel and occasional charcoal and shell. It was, thus, very like the other make-up or dump layer 132. A small amount of pottery dating to the period 1200-1400 was recovered from the surface of 150.

5.1.6 Large pit

A sub-circular pit, 111, at least 1.2m across and 0.55m deep contained two fills. The upper fill, 110, a silty clay, was 0.45m deep and contained tip lines where pockets of lighter material were visible, contrasting with the very dark greyish brown colour of the rest of the deposit. The pottery from this fill dates to the period 1100-1200. Below this was a basal fill, 112, a 0.1m thick quartz sand and flint gravel mix, of light olive brown to yellowish brown colour which may indicate the presence of cess.

5.1.7 Shallow pits, and posthole group

Two very shallow pits, probably heavily truncated, were half-sectioned. 122, a 1.45m long oval, at least 0.77m wide, was only 0.08m deep and had one fill, 123, which contained 155g pottery and a little animal bone. The pottery assemblage suggested a date of around 1200-1400. 124 cut 122. It was even

shallower, at 0.04m, and an elongate oval in shape (1.96m by at least 0.38m). Its fill, 125, contained a little pottery dating to the period 900-1150.

Adjacent to these shallow pits were a group of postholes. 130 was rather shallow at 0.06m, as was 126 at 0.11m. 128 survived to a depth of 0.29m, was sub-rectangular with vertical sides and a flat base. It contained one fill, 129, a dark greyish brown silty sand which produced one sherd of pottery. Two probable postholes were left unexcavated.

5.1.8 Large intrusion and recent linear

Two sides of the cut of a large feature, 152 (cutting 150) were revealed. Part-sections taken through its fill, 151, a very dark greyish brown sandy silty clay contained moderate quantities of stones and occasional charcoal flecks. This fill produced 186g of pottery and 46g of animal bone. This feature is much larger than the portion revealed in the trench. It probably has a rectangular shape in plan and slopes down to 0.2m deep in the centre of the part revealed. The pottery assemblage contains much late Saxon or Saxo-Norman material, but this is present with some late sherds. Thus the assemblage probably dates to 1350-1450, but with a significant residual component.

A sinuous linear 154, cutting 152, was part-excavated and contained one fill, 153, a very dark grey silty sandy clay with a spongy or fibrous feel, caused by an unidentified organic component. No finds were recovered, apart from charcoal flecks and small stones. It may be fairly recent in origin.

5.1.9 Dump deposits at southern end of trench.

The southernmost 10m of the trench were not hand excavated. Cleaning revealed a confusing sequence of dumping in the topsoil and two probable linears. A machine section through these deposits was excavated to clarify the sequence.

The earliest deposits in the sequence were 158 at the southern end and 155 at the northern end. The latter, a dark greyish olive brown sandy clay, lay over the dump deposit 150. The former, a very dark greyish brown sandy clay, contained late Saxon and medieval pottery (the latest dating to 1200-1400) was overlain by 160 and 157, which were believed to be upcast or dump deposits. These may have been truncated on their southern edge by a very recent cut 161. Although 157 was described as a very dark greyish brown sandy silt clay, and was therefore subtly different to 155, it seems likely that it represented a continuation of the latter, with the two parts divided by the cutting of ditch 161. This had a slightly irregular profile which was not 'bottomed' and contained two fills, 156 and 159. The lower fill, 159, was a loose mix of yellowish brown sand and gravel and probably represents redeposited natural. The upper fill, 156, was an olive brown silty sandy clay and could represent infilling with material similar to the deposits into which the ditch was cut (155 and 157). It produced one piece of modern pottery. This whole sequence was sealed by the topsoil base layer, 178, described earlier. Very recently this latter, and 157 and 160, have been truncated on their southern edge by a large modern disturbance which resulted in the deposition of 179, a loose mix of topsoil and building debris which lies above 158.

5.2 Trench 2

Trench 2 was c 28.5m long and ran parallel to the site's north boundary. Its precise location was dictated by the presence of the tyre dumps immediately

to the south. It was sited to test for the presence of features similar to those recorded by Evans (1990) 50m to the northeast. Several features were noted, all apparently cut into natural gravels, although the presence of material from ditch-cleaning and service trenching meant this was difficult to confirm.

Two very shallow parallel linear features (*c* 1.8m wide) filled with subsoil, 202, ran northwest–southeast. These possible furrow bases produced no dateable artefacts.

Late medieval and post-medieval pottery was recovered from cleaning over a third shallow linear feature 204, (*c* 2.2m wide, but only 0.13m deep) which ran northwest–southeast. A section across this feature revealed one fill, 203, an olive brown sandy silty clay with dark yellowish-brown mottles

Another shallow feature 206, a narrow gully, around 0.3-0.5m wide and only 0.1m deep, produced both medieval and post-medieval pottery from its single fill, 205 another olive brown sandy silty clay.

At the western end of the trench a layer of mixed, re-deposited, light olive brown sandy clay silt and dark grey silty clay (207) was observed extending 2m east into the excavated area

5.3 Trench 3 by Scott Kenney

Trench 3, 25m in length, was excavated between tyre stacks, roughly at right-angles to the site's north boundary and the adjacent Trench 2. As shown in Figure 3, it was located to confirm one of the possible ditch lines identified by the aerial photographic survey (Palmer 1995 and Appendix E). 0.8m of overburden was removed by machine to reveal the archaeological features cut into blue to mid brown clay.

A single feature, a ditch with five recuts, crossed the trench roughly halfway along its length, aligned almost exactly east–west. Each recut contained a single fill, and extended beyond the edge of the trench. Recuts 308 and 310 were observed for 4m of the length of their southern sides (Fig. 4), where an extension to Trench 3 was excavated.

The most recent recut, 304, was 0.56m wide and 0.18m deep, with a concave, rounded profile. It contained a single fill, 303, a dark grey silty clay, with frequent strong brown mottles, from which no finds were recovered. It cut the fill of recut 306.

Recut 306 was 0.26m deep, and originally more than 0.65m wide, with a very similar profile to 304. It contained a single fill, 305, a dark grey silty clay with moderate strong brown mottles and occasional small stones. No finds were recovered. It cut the fill of recuts 308 and 316.

Recut 316 was 0.28m deep and originally more than 0.85m wide, with steep, straight sides and a flat base. It contained a single fill, 311, a dark grey silty clay with frequent strong brown mottles and occasional tiny flecks of calcareous material. There were no finds from this fill. It cut the upper fill of ditch 313.

Recut 308 was 0.62m deep, and originally more than 0.82m wide, with a 45° concave northern side, a steep, stepped southern side, and a narrow, flat base. It contained a single fill, 307, a bluish dark grey clay with moderate strong

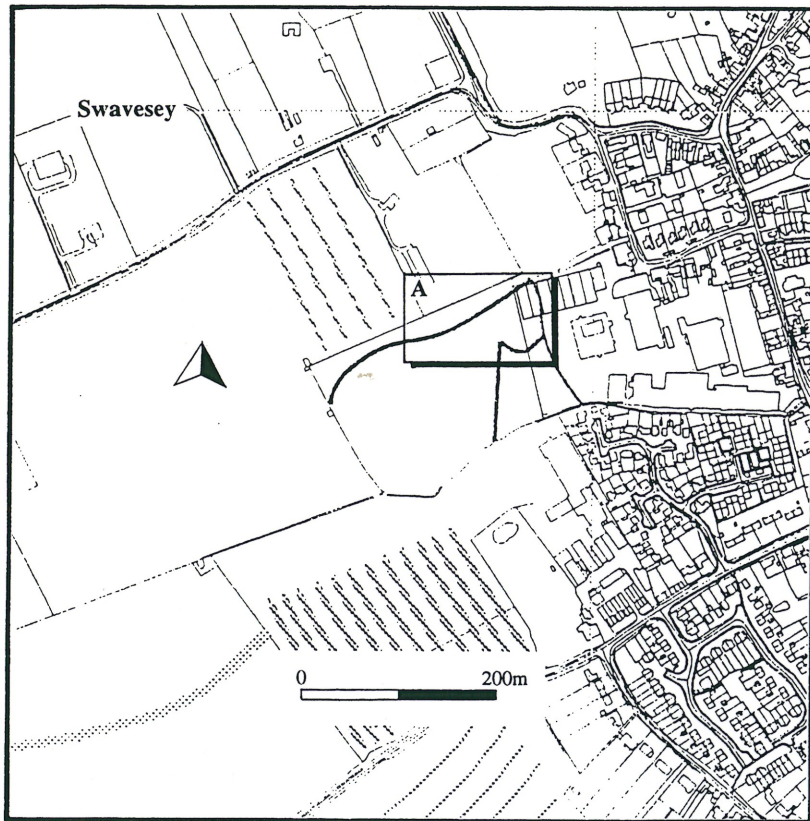


Figure 3a Ditch system observed from aerial photographs (reproduced from Air Photo Services report (Appendix E))

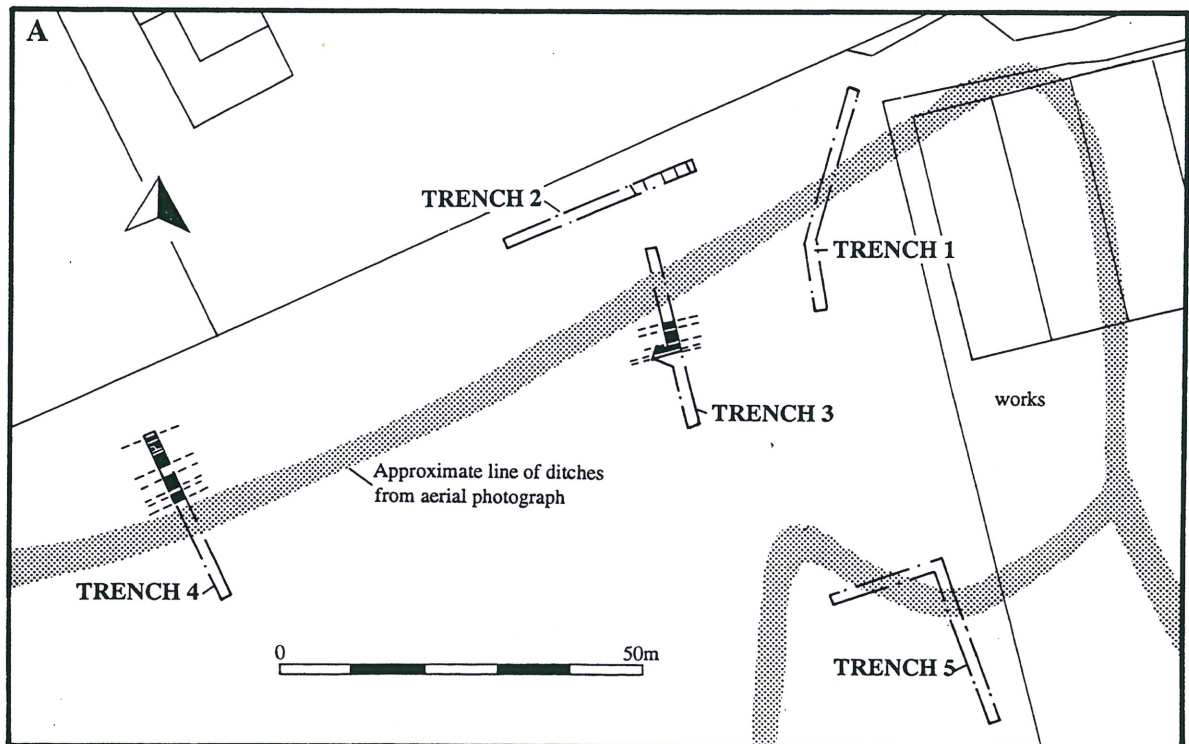


Figure 3b Evidence for ditch lines from Trenches 3 and 4.

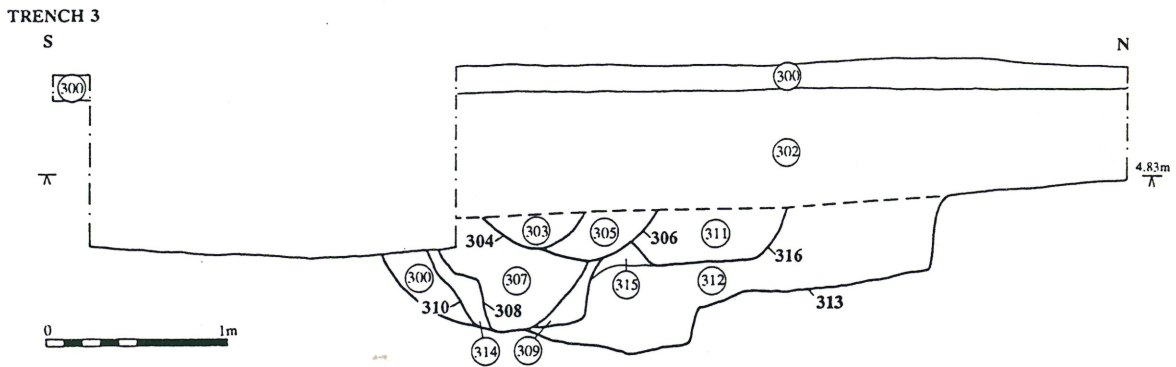


Figure 4 Section through Ditch 313 and multiple recuts in Trench 3.

brown mottles and very occasional small stones. No finds were recovered. It cut the fill of recut 310.

Recut 310 was originally more than 0.96m wide and 0.45m deep, with steep, flattish sides, flaring out slightly, and a flat base. It contained a single fill, 309, a grey sandy silty clay with very frequent strong brown mottles and very occasional small stones and calcareous flecks. No finds were recovered from the fill and it cut the upper fill of ditch 313.

Ditch 313 was 3.1m wide, 0.8m deep, and at least 4.0m long, with a stepped northern side with a broad shelf, a somewhat irregular concave southern side, and a narrow, flat base. It contained a two fills, 315 and 312. Only a small part of the upper fill, 315, survived, and may not be representative of the original context. It was a 50/50 mix of dark grey and strong brown sandy clays with occasional small stones and calcareous flecks. The lower fill, 312, was a dark grey sandy silty clay with frequent strong brown mottles and occasional small stones and calcareous flecks. No finds were recovered from either fill.

Three pieces of pottery, dating to the late Saxon, medieval and post-medieval periods, and a fragment of animal bone were recovered during cleaning over these features.

5.4 Trench 4 by Scott Kenney (Figures 3 and 5 and Plates 2 and 3)

Trench 4, excavated between tyre stacks, was 25m long and ran at right-angles to the site's northern boundary. As with Trench 3, it was located to test for presence of the main east northeast–west-southwest ditch line identified in the aerial photographic survey (Palmer op. cit.). Up to 1m of overburden, including modern dumping, was removed by machine to reveal the archaeological features cut into blue grey to mid brown clay.

Five parallel linear features running northeast–southwest, ranging from 0.8m to 1.6m in width, were revealed. One butted within the trench, the remainder extended beyond the edges. Another was sealed by the upcast from the neighbouring feature. No finds were recovered from any of these features.

At the northern end of the trench, three of the ditches shared the same upper fill. The northernmost of these, 417, was approximately 1m wide and 0.5m

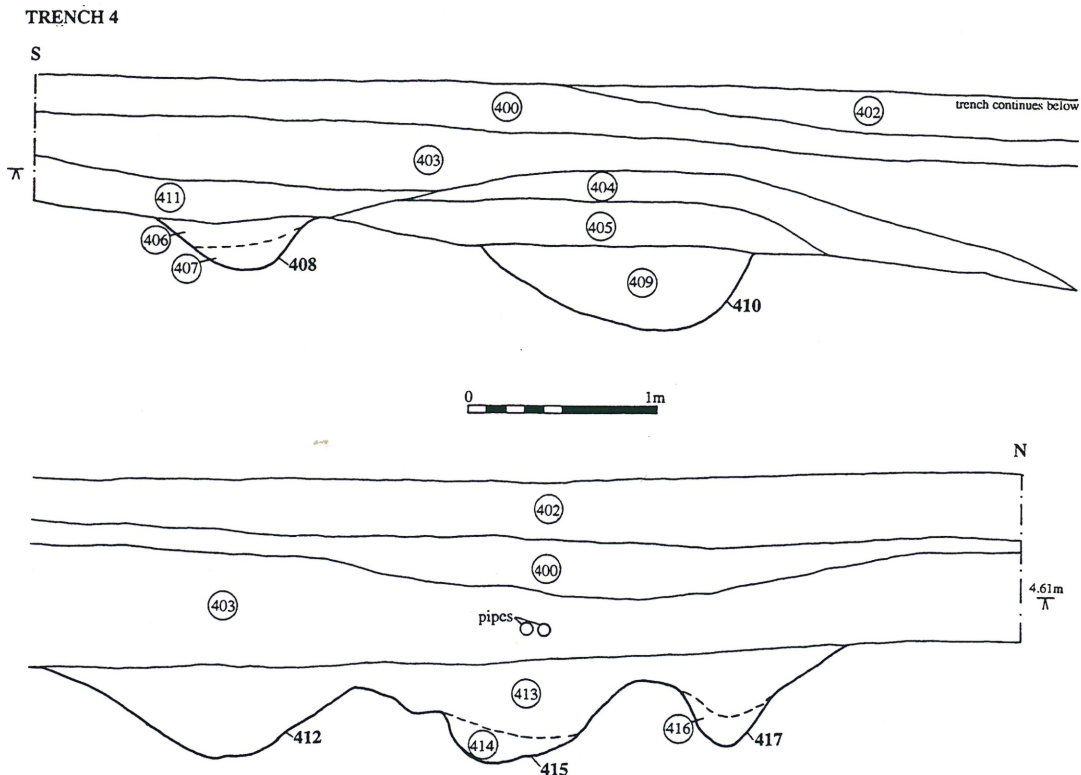


Figure 5 Section through five ditches and bank in Trench 4

deep. The middle one, **415**, was approximately 1.4m wide, 0.52m deep and butt-ended 0.8m to the east. The southernmost one, **412**, was approximately 1.7m wide and 0.5m deep. Their profiles were broadly similar, with slightly convex sides merging into concave bases, only **415** having a somewhat irregular southern side. These three shared an upper fill, **413**, a bluish dark grey silty clay with strong brown mottles increasing in frequency with depth and very occasional small stones. Both **417** and **415** contained a lower fill, **416** and **414** respectively. These primary fills were identical, dark greyish brown silty clays with frequent strong brown mottles, slightly darker than those in **413**, and also very occasional small stones.

Above these three ditches, the buried topsoil, **400**, had acquired a yellowish red coloration (5YR 5/8), and with evidence of matted organic fibres, perhaps wetland grasses. This phenomenon is known locally as 'bear's muck' and is commonly observed in the upper fills of Fenland ditches.

To the south of these, a possible bank overlay the next ditch, and was itself overlain by an alluvial deposit to the south.

The alluvium, **411**, was a brown silty clay, up to 0.2m thick and extending at least 15m to the end of the trench, with moderate strong brown mottles and small stones. It overlay **404**, the upper layer of the possible bank.

The upper bank layer, **404**, was 3.6m wide and up to 0.26m thick. It was a dark grey sandy silty clay with moderate strong brown mottles and frequent calcareous flecks and lumps. It overlay **405**, 2.7m wide and 0.25m thick, a brown silty clay with frequent strong brown mottles and small stones. This in turn overlay the fill of ditch **410**.

Ditch 410 was 1.4m wide and 0.45m deep, with concave sides and base. It contained a single fill, 409, a dark grey silty clay with frequent strong brown mottles and occasional small stones.

South of this, and sealed by alluvium, 411, was ditch 408. It was 0.8m wide and 0.28m deep, with a profile very similar to 410. There were two fills, 406 and 407. The upper fill, 406, was a bluish dark grey sandy clay with frequent strong brown mottles and occasional small stones. The lower fill, 407, was a dark grey silty sandy clay with very frequent strong brown mottles.

5.5 Trench 5

Trench 5, an L-shaped trench, total length 39m, was excavated parallel to the site's eastern boundary. As shown in Figure 3, it was sited to record a section through a probable linear ditch, identified from aerial photographs (Palmer 1995).

Below a very recent topsoil, 500, with rubber and metallic refuse, further modern dumping, 503, extended to a depth of 0.26m. Below this was a 0.3m deep dark olive brown sandy clay 504, with small stones and some iron staining. This sealed a very thin (0.01m) black 'greasy' organic layer 502, which contained animal bone and one large sherd of abraded medieval shelly pottery, dating to the period around 1150-1400.

Under 502 was an alluvial deposit, an olive silty clay, 505. Three large, abraded sherds of medieval pottery (c 1200-1500) were recovered from the alluvium which sealed natural clays. No features, with the exception of patches of root disturbance, were observed in this deposit.

Investigation of a machine-excavated sondage through the alluvium revealed that the latter was 0.32m deep and that it sealed another probably water-lain deposit. This was an 0.56m deep olive silty clay, 506, with dark olive grey and light olive brown mottles. Below this was a dark olive grey sandy clay, with olive yellow mottles. This is believed to be the upper layer of the base geology, Amphill Clay.

5.6 Trench 6

No features were revealed along the 18m length of this trench. The topsoil and alluvial sequence were studied in a machine-excavated sondage and were found to consist of 0.26m of modern build-up over 0.2m of topsoil. The alluvium, a dark yellowish-brown clay with rare small stones, was about 0.55m deep and it sealed a blue-grey 'gleyed' natural clay.

5.7 Trench 7

This trench, 21m in length, revealed up to 0.3m of topsoil over two alluvial deposits but no archaeological features. The upper deposit was the dark yellowish-brown clay, as observed in Trench 6, and was here 0.18m-0.24m deep. The lower was a yellowish brown sandy clay containing common small stones. It was up to 0.32m deep and sealed natural clay.



Plates 2 and 3 Composite photographic section through sequence of ditch sections excavated in Trench 4. Upper: southern part showing 408, 410 and bank over 410; lower: northern part showing (L to R) 412, 415 (unexcavated and present as dark stain on base) and 417, which all share upper fill 413. Compare this with drawn section, Figure 5.

5.8 Trench 8

This trench in the centre of the site, 32m in length, revealed 0.3m of topsoil over alluvium, but no archaeological features.

5.9 Trench 9

This trench was 32m long, and was excavated perpendicular to the site's western boundary.

A single irregular, ovoid post hole, **903**, c 0.40m long and 0.2m deep, was revealed towards the eastern end of the trench. It contained one fill, 902, an olive brown coarse sandy clay with very occasional small angular stones. No finds were recovered.

903 was sealed by about 0.17m of alluvium under 0.3m of topsoil. It was cut into a second, coarser alluvial layer comparable to the lower layer recorded in Trench 7. Here the sandy clay was around 0.45m deep and at its base it merged into the underlying natural clay.

6 INTERPRETATION

6.1 Trench 1

A highly significant concentration of archaeological remains were identified in Trench 1. The remains include refuse and, possibly, cess pits, and postholes from wooden structures cut into both the natural gravel and also into a large amount of make-up deposited on top of the gravel, and to the southwest of the gravel. Many of the features appear to pre-date the 13th century formalisation of the town plan and defences (Ravensdale 1984). The location suggests the dumping may have been an attempt to create additional dry land on the edge of the gravel terrace and beside the fields or semi-wetland adjacent to the gravel terrace. The occupation features appear to be more densely packed to the north of linear complex **120** where they are cut into dump deposit 132, which overlies natural. The ditches have been cut at the junction of the make-up and the probable edge of the gravel terrace and have removed any relationship at this junction. To the south of the dumping the natural gravel appears in a strip about 0.7m wide and it is then covered, or cut by, by the second dump layer 150. Pottery dates suggest that this layer was deposited in the period 1200-1400. 132 produced no direct dating evidence but is, in fact, cut by several features with pre-1200 pottery dates. Whether these deposits represent dumping on open ground, or dumping in quarried areas on the edge of the terrace, is not certain. Their function as make-up for occupation activities and structures, is not, however, in doubt. The separate dates for the two dumping episodes is undoubtedly of significance.

Linear complex **120** seems to represent a drainage or boundary system aligned approximately northwest-southeast, with re-cutting suggesting extended use. Unexcavated butt-ends 149 and 147, next to the butt-end of ditch **117**, may well indicate the presence of an entrance or access-way through this system. Postholes in the areas on both sides of this alignment point to either the presence of more than one property or a zone containing buildings or, more probably, the possibility of two phases of use, as

suggested for the dump deposits themselves. The ditch alignment could therefore represent the southern edge of the first phase of use, with further less-dense activity and structures being built 'outside' at a later date. The ditches undoubtedly represent a boundary related to the edge, or use of the edge, of the first dumping phase and the presence of a second set of probable butt-ends points to re-definition of this boundary over time.

No evidence for the ditch alignments observed in Trenches 3 and 4 was recorded, suggesting that, if they were to continue eastwards, as predicted from the aerial photographs (Fig. 3), they would have run to the south of Trench 1. It may well be, however, that these ditches have been truncated by the disturbance at, or beyond, the southern end of the trench. This disturbance was probably associated with the construction of the concrete raft immediately to the east of Trench 1.

6.2 Trench 2

Two shallow features recorded roughly perpendicular to the field boundaries could be relict furrow bases from fairly recent post-medieval agriculture. Two other linear features, aligned more towards northwest-southeast, are, however, a shallow gully and ditch-base, dating to the same general period on the basis of pottery evidence. These have no obvious function. Dumping above these features relates to service runs and ditch cleaning along the field edge.

6.3 Trenches 3, 4 and 5

There seems no doubt that the sequence of five recuts of one ditch in Trench 3, and five parallel linear features in Trench 4 are, in general terms, both representative of the in-filled ditch identified on the aerial photographic assessment. Figure 3 shows, however, that the alignment suggested by the re-plotted photographic evidence is not very accurate and that all phases of this system actually ran further north at the western end of the field and further south towards the eastern end.

It is difficult to establish which of the three more northerly ditches in Trench 4 was in use most recently. It may well be that the habit of off-setting the recuts meant that all three were open at once, this would explain why they appear to share an upper fill. The sequence in Trench 3, is easier to understand as successive recuts were within earlier ditch lines and fills. Even though this group was later truncated it is apparent that successive re-cuts produced a smaller and smaller feature, starting off over 3m wide and 0.8m or more deep, and ending with a ditch not much more than 0.5m wide and only about 0.18m deep. In Trench 4 the earliest ditch cut was **410** or **408**. The former was 1.4m wide, the latter 0.8m wide. **410** was then covered by a bank which may respect the line of **408**, thus placing that ditch later in the sequence. This bank was no doubt built to restrict the inundation associated with the deposition of the alluvium, **403**, in this trench. **403** appears to be the upper alluvial layer recorded in all the trenches to the south. The dating of these events is uncertain, but it may relate to the period of over-exploitation of the upland soils in the 13th – 14th centuries, which resulted in much alluviation along the Ouse system (as elsewhere).

The absence of any evidence for the expected ditch in Trench 5 is surprising (see Figure 3). This area was, however, rather low-lying and is only raised up to the level of the rest of the field by very recent dumping. It was also

known as a wet area, or pond, within living memory and it seems possible that the 'ditch' here may not have been as well-defined as the aerial photographic survey suggested. If it was already a low-lying area, then the ditch system could have fed into this pond negating the need for a ditch cut at this point.

6.4 Other Trenches and Alluvium

The evidence from the other trenches is interesting in that it seems the alluvium is present across almost the whole field. This is at odds with the geological survey data which shows gravels extending across most of this area. Geological survey data is not always completely accurate and the apparent error here is worth noting. The alluvial profiles suggest that the upper layer of alluvium covered the whole of the rest of the field, but it was deepest towards the south and east, perhaps close to an old stream line now canalised along the field edge. This deposit was blocked from spreading northwards by the bank in Trench 4, which suggests water/flood management was taking place, perhaps in the later medieval period. The lower alluvium only appears as a definite deposit in the southwestern part of the field and again may fill the lower part of a natural stream basin. The only feature, a posthole, identified in Trench 9 is thus probably medieval in date and may be part of a fence line located in seasonally inundated pasture land.

The alluvium was removed in 0.1m spits by machine in small areas of each trench. This ensured that subtle changes in the deposit were observed, and that any horizons containing archaeological features and finds scatters, or preserved organic deposits, were identified. No such features or changes were recorded other than a sandy alluvium below the fine-grained upper deposit. Spoil heaps were systematically sifted in several areas to ensure that artefact scatters had not been missed. None were found.

7 CONCLUSIONS

7.1 Trench 1 and related evidence

A zone within the northeastern corner of the site, extending for at least 30m southwards and possibly twice as far, and up to 30m west across the site appeared to be covered with a dense complex of archaeological remains dating from the late Saxon to medieval periods. Large areas of make-up probably date to the late Saxon to Saxo-Norman period, and to the 13th and 14th centuries. These were cut into by a number of phases of activity (including features at least 0.6m deep) and continued until the 14th century, with one large feature being a little later in date. The features were sealed by between 0.4m and 0.6m of overburden and topsoil, the former perhaps representing a relict cultivation horizon.

The remains suggest initial occupation in the late Saxon to Saxo-Norman period, before the creation of the town ditch circuit in the 13th century (Ravensdale 1984). The proximity of the castle earthworks, to the north and northeast, and the evidence for Saxon to medieval activity in that zone, illustrated by earlier fieldwork (Evans 1991 and Maekawa *et al* 1995), provide a context for these findings. However, the presence of such dense activity is nonetheless surprising. It seems that there was deliberate massive dumping on the western edge of the gravel spur on which later, medieval

Swavesey was located. The new strip of 'dry land' thus produced was then occupied and used for the construction of buildings. The implications of this are significant. If this new land was needed for new building, then it seems logical that the gravel terrace itself was not available because it was being used for other purposes, e.g. agriculture. It may have been in the control of an individual or institution who did not wish to change that use, or it might have already been built upon. The new area was therefore marginal to existing occupation. The implication is that the area of land from Trench 1 eastwards for an unknown distance and northwards for up to 300m (through the area later used for the Castle which was probably built in the 12th century), was an area of settlement in the late Saxon to Saxo-Norman periods. This is a wholly new consideration in the understanding of Swavesey. The late dumping in a similar position fits the expected 'immediately suburban' nature of the location after the town plan was confirmed in the 13th century (according to Ravensdale *op. cit.*). The indications that structures were built in a marginal location, when the town itself must still have contained much open land is, however, surprising.

This phase of work produced no remains that can be aligned with the pre-Roman Iron Age ditch systems recorded by Evans (1990), or the alignment of ditches which orientate with a possible Saxon hall, identified in 1995 (Maekawa *et al* 1995). The dating of the features observed in both pieces of work is open to scrutiny. The survey results were interpreted solely on building form and Evans' trenching was self-admittedly (and understandably) only very briefly investigated. Evans also identified two north-northwest-south-southeast orientated Saxo-Norman ditches at the southern end of his evaluation area. These lie within 50m of Trench 1 and suggest continuity of activity of this date across a swathe of land that includes the northern part of the Phase 3 development.

Artefacts and features dating to the 13th and 14th centuries are present in Trench 1, as might be expected so close to the planned town of that date. Again, however, the use of such a peripheral area implies the partially developed townscape within the defences that might be expected, may not be a true reflection of medieval occupation in, at least, the southwest quarter of the settlement.

Most forms of construction associated with residential development are likely to cause serious damage to these remains. It is therefore suggested that development is excluded from this zone, or provision is made to record the features in advance of their disturbance.

It is almost certain that the activity revealed in Trench 1 extends into the northwest corner of the Phase 3 development area. The rest of the Phase 3 area, lying within the urban area as defined by the town ditch, can be expected to reveal occupation evidence of later date over at least part of its area. The degree of disturbance to archaeological remains caused by previous construction, and therefore their quality and extent, cannot yet be assessed.

The pottery assemblage from Trench 1 is large for the amount of excavation carried out (Appendix A), although much derives from large dump contexts and is almost certainly residual. There is, however, much inherent potential in an assemblage from this site, provided groups from primary contexts can be recovered in some numbers. The opportunity to unravel the local ceramic assemblage over the Saxon to medieval transition may well present itself if enough material were excavated.

Macro-flora data (Appendix B) was not particularly good, the absence of charring restricting survival. This may be particular to the four deposits studied which are too few to represent a good sample. The fact that they do not show evidence for crop processing does not necessarily mean that all deposits within the edge of settlement zone will show similar traits, although the fact that seed survival was poor in these groups must suggest that other non-charred groups are unlikely to be any better preserved.

The bone assemblage (Appendix C), although not particularly large, is well-preserved and offers much diagnostic opportunity. The amount of small bones from mammals, birds and fish that were recovered from Sample 3 (118) suggests that, if enough similar groups were excavated, then a substantial opportunity for analysis would present itself.

7.2 The ditch systems (Trenches 3, 4 and 5)

The final phases of a drainage ditch system were identified in the aerial photographic survey (Appendix E). This system appears to have involved four re-cutting episodes of the initial ditch. The re-cutting was mostly within the earlier silted up feature at the eastern end (Trench 3), but on varying, roughly parallel, alignments towards the west (Trench 4). The first phase ditch seems to have been about 3m wide and stepped in Trench 3, but perhaps just less than 2m wide and rounded in profile in Trench 4. One phase, perhaps the second, is present in Trench 4 as a small ditch and a much larger bank immediately to the north. The explanation of these remains is difficult, but it seems that the bank must have been placed to prevent inundation from the Ouse river floodplain. No dating evidence is available for any part of this sequence. The absence of a continuation of the ditch system through Trench 5 may be explained by the recent existence here of a low-lying area known locally as a 'pond'. The aerial photograph interpretation may have simplified the presence of a ditch becoming subsumed into a larger, low-lying, water-filled feature. Alternatively undocumented clearance or excavation to make this 'pond' may have removed all traces of the ditch. It seems likely that this ditch will indeed be observed if another section across it were taken at some distance away from Trench 5. Such an opportunity will be available if evaluation on Phase 3 goes ahead.

It is probable that dating evidence for this sequence will only be made available through the fortuitous recovery of artefacts or organic materials within the sequence. The sections so far recorded suggest that such an opportunity may be unlikely along most of the length of these features. Locations where the ditches encounter the area of known occupation, and where they link up with the 'Town Ditch' may well, however, provide such information. This might be in the form of artefacts deriving from localised refuse disposal and also through the recording of intercutting at a vital interface in the system. The important zones for further recording of the ditch system are around Trench 1 and in the Phase 3 Development area.

In both Trenches 3 and 4 the ditch system is covered with between 0.6m and 1m of topsoil and recent make-up. The only exception is the bank in Trench 4, the top of which is only 0.4m below the 1996 ground surface. Any wholesale stripping of topsoil might expose this feature, the extent and alignment of which may be significant. Otherwise it seems likely that topsoiling, or removal of recent make-up, will not damage these deposits. Monitoring of building works through a 'watching brief' may, however, be appropriate and the bank, if exposed, should certainly be recorded.

7.3 The alluvial sequence

It seems likely that the alluvial sequence will remain undated until recorded in association with archaeological deposits at the edge of the gravel spur around Trench 1 and in the Phase 3 development area. From previous work it is known that the last phase of major alluviation in the Fenland river systems is post-Roman in date (Murphy 1994), with episodes in both the middle Saxon and late medieval periods being proposed for the event. The detail of the sequence here varies across the field, but this seems to be a factor of the micro-topography of a former stream channel. If wholesale stripping of the field occurred and large areas of alluvium were exposed and cut into, then some monitoring of this work might answer general questions regarding the sequence.



Plates 4 and 5 Two views of a Developed St Neots type ware vessel recovered from probable pit 105. This bowl has the characteristic inturned rim which first appears in the early tenth century, but the deep profile and large size may suggest that the vessel is more likely to date to the period 1000-1200, rather than any earlier. It is heavily sooted externally indicating a cooking function, an interpretation which is supported by the burning internally in the base, which is almost certainly a food residue.

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BIBLIOGRAPHY

- British Geological Survey, 1985, *One Inch series reprint, Sheet 187*.
- Evans, C., 1990 *Archaeological Investigations at Swavesey, Cambridgeshire, 1990*, Cambridge Archaeological Unit Report.
- Haigh, D., 1984, 'Excavation of the town ditch at Swavesey, 1984', *CAS Vol LXXIII*, 45-53.
- Maekawa, K., Sakai, H., Uno, T. and Kaner, S., 1995, *Swavesey, Geophysical Survey at Blackhorse Lane, 1994; Interim Report*, Faculty of Humanities, Toyama University and the Cambridge Archaeology Unit, University of Cambridge.
- Murphy, P., 1994, *Environmental Archaeology in East Anglia: A Review*, University of East Anglia unpub. text.
- Ordnance Survey, 1887, *1:2500 map of Swavesey, County Series First Edition*.
- Palmer, R., 1995, 'School Lane, Swavesey, Cambridgeshire: Aerial Photographic Assessment', in T. Sutherland and A. Hatton, 1996, *Medieval Features Outside the Town Defences at Swavesey*.
- Ravensdale, J.R., 1984, 'Swavesey, Cambridgeshire: A Fortified Medieval Planned Market Town' in *PCAS vol.LXXII*, 55.58.
- Sutherland, T. and Hatton, A., 1996, *Medieval Features Outside the Town Defences at Swavesey*, Cambs. C.C., Archaeological Field Unit Report No. 124.

POTTERY ASSESSMENT

by Paul Spoerry BTech, PhD

436 sherds were recovered from the evaluations at Swavesey in 1996, 400 of which (about 92%) derive from Trench 1. The Trench 1 assemblage is dominated by late Saxon to Saxo-Norman sherds of St Neots and Thetford-type wares, along with medieval pottery that derives from either Ely or Colne or, more probably, both locations.

Definitely pre-1200 pottery constitutes 222 sherds out of 400 in Trench 1, much of this being residual alongside later material. In contexts with definitely post-1200 date ranges there are 169 of these earlier sherds. It thus seems that the contexts definitely given pre-1200 date-ranges have in many cases involved the re-working of earlier deposits.

One fill of a pit or ditch terminal (104) produced a almost complete, deep, St Neots type ware bowl of a type that is late in the assemblage typology with a date-range of 1000-1200. This was found alongside glazed Ely ware, a type not expected to exist much before 1200 at earliest. If the deposition of both is contemporary, which seems highly likely, then the implications are that the dating of either type may need revising. This may also suggest that the degree of residuality is less than identified above, but it is unlikely to affect interpretation greatly.

The assemblage contains many small sherds, probably associated with re-working of deposits, however 104, and several other key contexts, produced substantial pieces of vessel suggesting that survival in some features will be very good.

The Trench 1 assemblage is very large. Significant opportunities to recover very good material culture evidence would be provided by work on any further excavation assemblage. In particular the opportunity to study a stratified sequence that included St Neots type ware and medieval Fen Edge pottery (Colne, Ely) would greatly increase our understanding of the ceramic sequence of the region.

The Trench 2 assemblage suggests that late medieval and early post-medieval dumping occurred close by.

Table A.1 Pottery Spot dates

Context	Date Range	Fabric Types	No sherds	Comments
101	1100-1400	NEOT	59	Cleaning context. Mostly a mix of Saxo-Norman and medieval material, but nothing later than 1400
		SHW	7	
		STAM	4	
		THET	16	
		HEDI	4	
		ESMIC	1	
		MEL	4	
		MEL/CON	70	
		GRIM	3	
		UNK	1	
102	900-1150	NEOT	10	
		THET	2	
104	1150-1300	NEOT	13	Half a bowl. This cannot be resid. Suggests St Neots runs on post-1200? Jug handle, glazed
		MEL	2	
106	1000-1200	THET	1	
		NEOT	1	Residual late Saxon and medieval 50:50 mix
110	1200-1400	NEOT	7	
		THET	4	
		MEL	3	
		MEL/CON	8	Residual late Saxon and medieval 50:50 mix
113	1200-1400	NEOT	9	
		SHW	2	
		THET	2	
		GRIM	1	
		MEL/CON	7	
		MEL	1	Some residual late Saxon to Saxo-Norman (LS-SN)
116	1200-1400	NEOT	12	
		THET	5	
		SHW	2	
		CONA	3	
		STAM	2	
		MEL/CON	10	
118	1100-1200	NEOT	14	All very abraded and small; could all be residual!
		THET	5	
		MEL/CON	6	
		UNK	1	
		THET	6	
119	1000-1150	NEOT/SHW	1	Residual LS-SN
121	1200-1400	NEOT	1	
		MEL/CON	1	
123	1200-1400	NEOT	3	
		THET	1	
		MEL	1	
		CON	5	

125	900-1150	THET	1	
		NEOT	1	
129	900-1150	THET	1	
136	1200-1400	NEOT	1	
		THET	2	
		SHW	1	
		MEL/CON	1	
140	1100-1200	THET	1	
		SHW	3	
145	900-1150	NEOT	5	
		THET	1	
147	900-1150	THET	1	
148	100-1400	MEL/CON	2	
149	1200-1400	MEL/CON	5	
150	1200-1400	NEOT	2	
		THET	2	
		MEL	3	
151	1350-1450	CONA	1	Mix of LS-SN, medieval and a little late med. The latter dates the assemblage, but most is residual
		MEL/CON	7	
		MEL	2	
		HEDI	1	
		THET	6	
		NEOT	9	
		STAM	2	
		ESMIC	1	
156	1780+	BNCHN	1	
157	1200-1400	MEL	2	
158	1200-1400	NEOT	3	Residual LS-SN; some uncertainty dividing up Colne products from Thetford type
		SHW	1	
		MEL	2	
		THET	1	
		CONA/THET	3	
179	1200-1400	NEOT	2	Residual LS-SN
		THET	1	
		MEL	1	
		MEL/CON	1	
201	1450-1600	OSW	1	Flanged bowl rim
202	1450-1600	MEL/CON	2	
		DEST	1	
		OSW	2	
203	1600-1800	PMR	6	Residual medieval
		CONA	1	
		OSW	1	
		MEL/CON	2	
		UNK	1	
205	1600-1750	PMR	2	
		MEL	1	
		BORD	1	
208	1600-1800	PMR	1	
301	1600-1700	PMBL	1	Various dates
		OSW	1	
		NEOT	1	

501	1600-1700	MEL	1
		PMR	2
		PMBL	1
		MEL	1
		SHW	1
502	1000-1400	MEL	1
505	1200-1500	SHW	1
		MEL/CONB	3

Pottery Fabric Codes

Code	Name
BNCHN	Bone China
BORD	Surrey-Hants Border ware
CON	Colne wares
CONA	Colne Fabric A
CONB	Colne Fabric B
DEST	Developed Stamford ware
ESMIC	Essex Micaceous wares
GRIM	Grimston ware
HEDI	Sible Hedingham fineware
MEL	Medieval Ely ware
NEOT	St Neots type ware
OSW	Orange Sandy ware
PMBL	Post-medieval Black glazed wares
PMR	Post-medieval Redware
SHW	Shelly ware
STAM	Stamford ware
THET	Thetford type wares
UNK	Unknown

ENVIRONMENTAL ASSESSMENT (macroscopic plant remains)

by Duncan Schlee, BA, MSc

Four samples, each of 10l, were taken for the recovery of charred plant remains and any other environmental or economic indicators. These were processed using a standard Sirraf-type flotation machine. Heavy residues and floating fractions were sorted and significant inclusions collected.

Sample no.	Context no.	Feature no.	Contents
1	116	117	Pottery Large mammal bone fragments Burnt bone fragments Wood charcoal Rubus fruticosus (not charred) Leguminosae indet. (not charred) Triticum aestivum. (Bread wheat) Avena sativa. (Oats)
2	121	117	Pottery Bird? bone. Small mammal bones Large mammal bone fragment Fish? bone fragment Sambucus nigra (not charred) Triticum aestivum. (Bread wheat) Avena sativa. (Oats)
3	118	115	Wood charcoal Pottery Bird bone Burnt bone Small mammal bones Large mammal bone fragments Fish bones Triticum aestivum. (Bread wheat) Avena sativa. (Oats)
4	902	903	Wood charcoal

The majority of the bone consists of small, weathered fragments of larger bones and are of little or no diagnostic value. Sample 3 however, contains a relatively large and diverse assemblage in comparison with the other samples.

Preservation of charred and non charred seeds is poor. Cereal grains were generally puffed, distorted, and fragmented. The absence of charred weed seeds or chaff fragments suggests that no crop processing occurred on the site.

The uncharred bramble (*Rubus fruticosus*) and elderberry (*Sambucus nigra*) probably indicate these plants were growing nearby but may also be present as a result of their use as food.

The overall impression is of general domestic debris and food waste either being intentionally disposed of within the features, or more likely (given the low numbers and poor state of preservation of the bones), general occupation debris occurring within the soil that filled these features.

No further analysis of these samples is necessary.

FAUNAL ASSESSMENT by Lorrain Higbee, BSc, MSc

An assessment of the faunal remains from SWA SL 96

Although the assemblage is rather small (554g) several domestic species are represented. Cattle and sheep/goat bones are the commonest element, whilst pig, dog and horse bones are rarer. Most of these species are represented by loose teeth and foot bones only. Butchery marks were only recorded on a few long bones of cattle and sheep/goat. These took the form of heavy chops through approximately the mid shaft of long bones and in the case of cattle, through the articular surfaces. One cattle mandible had been chopped diagonally through the third premolar, near the front of the jaw and again through the third molar at the back of the jaw. The majority of these butchery marks are consistent with primary carcass dismemberment, whilst the mid shaft breaks are probably the result of splitting the carcass into more manageable joints of meat. Only one pathological abnormality was recorded. This occurred on the articular surface of a sheep/goat mandibular hinge. The hinge has split into two separate surfaces with a deep groove in between. No exostosis (new bone growth) was evident around this abnormality, the cause of which is uncertain.

The potential of the assemblage is limited to brief observations unless substantially increased by further excavation. Since, bone preservation is quite good, further bone recovery is almost certain.

FINDS QUANTIFICATION

SWAVESEY, SCHOOL LANE 1996: Phase II - Finds Types By Context																
Trench/ Location	Context	Pottery Weight	Pottery Count	Tile & Brick	Clay Pipe	Metals Fe	Stone	Worked Stone	Quern	Flint Weight	Flint Count	Glass	Animal Bone	Shell	Charcoal/ Coal	Total Weight by Context
1	101	891	169			2	138		114	9	1		22			1176
1	102	53	11										1			54
1	104	1016	17				309						87			1412
1	106	25	3										1			26
1	110	97	21										1			98
1	113	119	21													119
1	116	170	35													170
1	118	89	27													110
1	119	39	9										21			110
1	121	5	2										8			39
1	123	155	10										5			13
1	125	14	2													160
1	129	3	1													14
1	136	16	4													3
1	140	20	4													16
1	145	23	6													20
1	147	28	1													23
1	148	7	2													28
1	149	26	5													7
1	150	30	7													34
1	151	186	26													30
1	155															238
1	156	9	1	19		23										11
1	157	15	2			12										11
1	158	50	9													54
1	179	12	4													62
2	201	23	1			5										50
2	202	24	5													15
2	203	240	10		1	6										243
2	205	73	4	148	4											139
2	208	81	1									11				286
2	209			833				45		7	1				2	426
3	301	65	4													572
5	501	108	6	76		2		225	10			37		3		885
5	502	29	1													105
5	505	41	3													421
	Total Weights by Finds Type	3782	434 sherds	1076	5	50	447	270	124	16	2 flints	48	1566	9	3	7396

AERIAL PHOTOGRAPHIC ASSESSMENT

SCHOOL LANE, SWAVESEY,

CAMBRIDGESHIRE:

Rog Palmer MA MIFA

INTRODUCTION

This assessment of aerial photographs was commissioned to examine an area of some 11 hectares on the north side of School Lane, Swavesey, Cambridgeshire (centred TL359687) in order to identify and accurately map archaeological features. Mapping was to be at 1:10000.

ARCHAEOLOGICAL AND NATURAL FEATURES FROM AERIAL PHOTOGRAPHS

Sub-surface archaeological features – including ditches, pits, walls or foundations, and banks – may be recorded from the air in different ways in different seasons. In spring and summer features of natural and anthropogenic origin may show through their effect on crops growing above them. Such indications tend to be at their most visible in ripe cereal crops, generally in June or July in this part of Britain, although their appearance cannot accurately be predicted and their absence cannot be taken to imply evidence of archaeological absence. In winter months, when the soil is bare or crop cover is thin (when viewed from above) features may show by virtue of their different soils. Upstanding remains are also best recorded in winter months when vegetation is sparse and the low angle of the sun helps pick out slight differences of height and slope.

All archaeological features mapped for this assessment are earthwork remains. These include features that may be part of the castle earthwork system plus the remains of former medieval cultivation. Mapping for this assessment shows this cultivation in the range of forms that it initially took and also indicates, to some extent, its present-day condition.

None of the photographs examined were suitable for any interpretation of crop or soil marked information due mainly to the recent landuse of the fields within the assessment area.

PHOTO INTERPRETATION AND MAPPING

Photographs from the Cambridge University Collection of Aerial Photographs (CUCAP) and those held by Cambridgeshire County Council Record Office were examined. All prints were taken during routine vertical surveys. The CUCAP index shows that specialist archaeological reconnaissance had taken place in the area on several dates but no oblique photographs of the assessment area result from those flights. Two flights by Air Photo Services have approached within one kilometre of Swavesey (a distance within which observation of the assessment area would have been expected) but no photographs were taken. In June 1995 a flight made by the

writer with the Royal Commission on the Historical Monuments for England examined the assessment area specifically but nothing of archaeological potential was seen and no photographs were taken.

Photographs consulted are listed in the Appendix to this report.

All photographs were examined by eye and using up to 4x magnification. Pairs of photographs were also examined using a 1.5x magnification stereoscope. Features identified were marked on overlays to the prints and checked with photographs of other dates and sketched on to a working copy of the map before being schematically drawn on to the digital base map provided.

COMMENTARY

An area extending some 500 metres to the west, east and south of the assessment area was examined. Two areas to the north, the castle earthworks (TL359691) and the priory (TL363693) were the subject of an earlier assessment by Air Photo Services for the Cambridge Archaeological Unit (Evans 1990). Mapping for that assessment was more detailed, at 1:2500, and has not been reduced for inclusion in this report. There is no direct evidence that features from those two sites would have extended into the current assessment area. However, early photographs show quite deep hollows crossing field C (see figure 2 for identification: centred TL35856870) which may have been linked to the southern part of the castle earthworks to assist, possibly, with water management. There is no evidence for these features on post-1969 photographs. They were presumably filled and levelled during the making of the playing field area.

Within the area examined there were no traces of archaeological crop- or soil-marked features. Particular attention was paid to the field centred TL355693 which shows an SMR reference to probable aerial photograph features (SMR 09126: 'enc, field system, cropmarks'). Soil-marked information was apparent in this field on some of the photographs examined but does not look at all archaeological and may result from slightly deeper soil in natural hollows or now-removed boundaries. Without examination of the relevant photograph (unknown) it is not possible to comment further on the veracity of the SMR identification.

Traces of the medieval fields of Swavesey can be seen on all sides of the modern village although the photographs examined show them in the process of degradation by modern land use. There was considerably more earthwork ridge and furrow on photographs of earlier date but much of this is now below recent buildings. No attempt has been made to show this buried cultivation in Figure 1. No evidence for this ridge and furrow cultivation was visible within the assessment area although it is probable that it did once cover that land. Fields on the west and east sides of A and B (see Figure 2) showed north-to-south(\pm) aligned ridge and furrow and it is probable that this continued across A and B. Earthwork remains of what were probably local hand-dug quarries also showed east and west of A and B and there may be similar disturbance in the area of the pond in A although there was no evidence for this on the photographs examined.



- Ditches (now levelled)
- Headland
- ~~~~~ Ridge and furrow
- ~~~~~ Traces of ridge and furrow
- Narrow ridge and furrow
- ==== Dug strips ?

Figure 1: Swavesey, School Lane.
 Archaeological features identified on aerial photographs

The built-up parts of the assessment area have never offered clear visibility from the air (see 'Land use' below). Other land parcels were usually down to pasture and showed no indications of sites in relief. Nor were they photographed at times of extreme drought when parch-marked detail may be identified.

Medieval and recent land use in and around the assessment area may effectively mask and traces of earlier features. While no direct evidence has been found for the presence, or even the likelihood, of earlier settlement in this part of Swavesey it is possible that sub-surface features or occupation layers may be found when topsoil is removed. Recent study of clay lands in the area to the west of Cambridge and in Northamptonshire has shown that an unexpected number of early sites have been masked by medieval cultivation. Levelling of that ridge and furrow by recent agriculture has lowered the ground surface sufficiently so that buried ditches can affect crop development and thus enable their recording from the air.

LAND USE

During the years that the assessment area has been photographed from the air use of the land has not undergone much change, the unbuilt areas being mainly pasture and the extent of construction gradually increasing. The following table indicates the main uses of fields A, B and C (Figure 2) during this period.

<i>Year</i>	<i>Field A</i>	<i>Field B</i>	<i>Field C</i>
1946	Orchard + smallholding	Pasture	Rough pasture
1956	Orchard + smallholding	Arable	Rough pasture
1962	Orchard + smallholding	Pasture	Rough pasture
1969	Pasture, garden in SE	Pasture	Pasture + dump on N side
1970	Pasture, garden in SE	Pasture	Pasture + dump on N side
1977	Pasture, garden in SE	?Arable	Sports field + dump on N side
1982	Pasture, garden in SE	Rough pasture	Sports field + dump on N side
1987	Rough pasture	Rough pasture	Sports field + dump on N side
1988	Rough pasture	Rough pasture	Pasture + dump on N side

Field A may show sub-surface damage due to tree root spread, particularly on its west side. Field B has always been pasture, in the form of managed grass. Field C changed from an area of rough pasture in which earthworks survived to a levelled playing field (football pitch) area with the north side of the field reserved for dumps of some kind. In later years the playing field was abandoned but the dumps were still in place at the latest date of photography.

The field immediately east of C, now covered by buildings, was more open in the early years – with buildings at its east side and allotments/smallholdings extending to field C. In 1962 the building began its western expansion which continued in 1969. None of the photographs examined showed any evidence of archaeological features in, or on, the visible surfaces.



Figure 2: Swavesey, School Lane.
Landuse. Key for land parcels



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