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**Stratford St Mary-
East Bergholt Pipeline:
Archaeological Monitoring and Excavation
Report no. 97/48
For Tendring Hundred Water Services Ltd**

SSM 001

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Stratford St Mary-East Bergholt Pipeline: Archaeological Monitoring and Excavation

SUMMARY

Tendring Hundred Water Services Ltd notified the Suffolk County Council Archaeological Service (SCCAS) Conservation Team that it planned to lay a new water main between the Stratford St Mary pumping station to the Lattinford Borehole site, a distance of approximately 4.35km.

The pipeline crossed one known archaeological site, and ran close to a second, while in addition, there was the possibility of previously unknown sites being uncovered along the route. As a result of this, the Conservation Team of SCCAS recommended that any archaeological features revealed within the known sites should be excavated and recorded, while the remainder of the trench should be archaeologically monitored.

The monitoring revealed no new areas of archaeological sensitivity. It is possible that much of the human activity in the area has been concentrated around the areas of the present day villages, which the pipeline avoided.

The only archaeological features identified along the pipeline trench were within the area of SSM001, an extensive cropmark site. The majority of the features identified were concentrated in a c.25m length at approximately the highest point of the field. Although the excavation of these cropmarks were at a small scale and very limited, they showed that the archaeological remains, at least at the northern end of the site, have been derived over a much wider period than that indicated on the SMR entry for the site, which suggests a probable Romano-British date for them. No evidence of any settlement within the area of the trench was identified, although the relatively large number of Iron Age pottery sherds recovered from such a small sample of the features suggests there was probably a settlement from this period in the immediate vicinity of the excavation. However, the high residuality of these artefacts demonstrates the amount of disturbance which has been caused by later activity in the area, which suggests that much of the evidence for early settlements could be difficult to identify from the archaeological record, being either very badly damaged or destroyed totally.

A few artefacts were found to indicate that activity in the area continued into the Roman period, including a L.1st-2nd century button and loop fastener, of a type which is usually associated with military sites. Although no evidence was recovered to suggest that such a site existed in the area of SSM001, this find could be connected with activity along the Roman road that ran along the line of the present A12, which is only 900m to the west. In addition, the presence of a number of Romano-British pottery sherds also indicates that there was a settlement dating from this period in the area.

Little appears to have happened in the area after the Roman period until medieval times. At least three phases of activity dating from between the 11th and 14th centuries were represented by ditches, which have been interpreted as field

boundaries, plus a couple of pits. Although these features were much more substantial and better preserved than the earlier remains, evidence that they have also been affected by later farming practices was also identified, in the form of a large number of sherds which had accumulated in a colluvial deposit towards the bottom of the hill.

Finally, and unusually for a rural site, there were very few late medieval or post medieval artefacts recovered, illustrating a decrease in activity in the area after the 13th century.

The work was funded by Tendring Hundred Water Services, and carried out by SCCAS Field Projects Team, supervised by C. Abbott. The SCCAS Field Projects Team would also like to acknowledge the co-operation given by the landowners and occupiers along the pipeline for allowing access which enabled the archaeological work to go ahead.

**Stratford St Mary-East Bergholt Pipeline:
Archaeological Monitoring and Excavation**

INTRODUCTION

Tendring Hundred Water Services Ltd notified the Suffolk County Council Archaeological Service (SCCAS) Conservation Team that it planned to lay a new water main between the Stratford St Mary pumping station to the Lattinford Borehole site.

From west to east, the route ran approximately northeast from Donkey Lane, Stratford St Mary (TM 056345), around the northern limits of East Bergholt to TM 084361, before turning northwest to end at Lattinford Bridge (TM 079368), a distance of approximately 4.35km (fig.1). The first c.1km lay within the parish of Stratford St Mary, with the remainder within the parish of East Bergholt. The lowest part of the pipeline lay below 10m O.D., at Donkey Lane, with the highest area being the plateau around East Bergholt, at c.40m O.D. The underlying geology of the area consists of water deposited sands and gravels, overlain by alluvium in the lower lying areas.

Two known sites are recorded on the Suffolk Sites and Monuments Record (SMR) as lying on the route or in the immediate vicinity of it. The pipeline crossed one known archaeological site, an extensive cropmark site centred at TM 062348 (SMR no. SSM 001), and close to a second, centred around TM 078368, where several finds of Roman artefacts including amphora, samian pottery, and roof tiles have been reported (SMR no's CSM 004, EBG 004 & EBG 006) (fig.1). In addition, there was the possibility of previously unknown sites being uncovered along the route.

Following consultation and comment from the Conservation Team of SCCAS, Tendring Hundred Water Services Ltd agreed to fund the archaeological excavation and recording of any archaeological features revealed within the cropmark complex in Stratford St Mary, and of any features identified around Lattinford Bridge; and to fund the archaeological monitoring of the length of the trench, and the investigation of any archaeological structures or deposits identified as a result of this.

THE MONITORING

The topsoil, which varied between 0.15m deep within the pasture areas, to 0.3m deep in the arable fields, was removed from a c.10m wide strip along the route by a 360-degree tracked excavator using a toothless bucket, by contractors working for Tendring Hundred Water Services Ltd.

Work started during the second week of April 1997, and during the soil stripping phase of the project nine monitoring visits were made, during which the freshly stripped areas were walked, and examined for any concentrations of features or finds.

The natural underlying geology along the trench varied considerably, between silty clay alluvial deposits in the lower lying areas, to sandy gravels in the higher areas, while in the field adjacent to Stutton Brook, to the south of Lattinford Bridge, there was a high organic content to the silty clay, which had an almost peaty consistency in places.

Along the majority of the route, the only finds were fragments of brick, and metal objects, all of which appeared to have originated either from modern machinery, or were modern horse shoes. No new sites, either in the form of features or finds concentrations, were identified.

At the Lattinford Bridge end, the route was altered slightly so that the pipeline ran along the eastern, rather than the western side of the field boundary which marks the edge of the area identified as having the highest potential for Roman remains, in order to reduce the likelihood of disturbing any archaeological features. The new route lay c.1.5m lower than the ground surface on the opposite side of the hedge, due to a lynchett which had built up along the field boundary which lay at the base of a slight rise to the west. No features were identified along this stretch of the route, possibly due to the nature of the subsoil in this area, which had a high organic, almost peaty, component, indicating that the field was likely to be damp or waterlogged at certain times of year. It is probable that conditions have always been similar, which would have precluded settlement in the area, with it being left as open meadowland for grazing. No finds were recovered either; if any artefacts were being ploughed up from any features in the field to the west of the pipeline, they would eventually accumulate in the lynchett at the bottom of the hill.

The pipeline trench through the area of SSM 001, which at the time of the archaeological investigations was laid to pasture, appeared to avoid the most heavily concentrated area of cropmarks, which are located in the southern half of the field (fig.2). However, during a monitoring visit on 9 April 1997, within a c.25m length of the pipe trench, on a gravel island at approximately the highest point of the field, which sloped gently downwards in all directions from this point, a concentration of features, mainly ditches, with some scattered features to the north, were identified. Following consultation between the SCCAS Conservation Team and Tendring Hundred Water Services Ltd, it was decided that further archaeological investigation of these features should be carried out, and the contingency was released. As a result of this, a limited archaeological excavation took place between 14 & 16 April 1997, supervised by C. Abbott of SCCAS Field Projects Team.

THE EXCAVATION - SSM 001

Description

The surface of the trench was cleaned manually around the identified features, to aid their definition and that of any other potential features in the immediate vicinity. The features were then sampled to recover dating evidence and to provide sections with which to illustrate their dimensions, and where possible their relationships to each other.

A metal detector search was also carried out in and around the excavation area to recover ferrous and non-ferrous finds.

Features and small finds were allocated 'observed phenomena' numbers within a unique continuous numbering system (Appendix II).

Trench plans were drawn at a scale of 1:50 for portions of the trenches where features were identified, with 0m located where the trench turned to the north east at the corner of field number O.S.2881, and measuring approximately south along the pipeline (fig.2). Sections were recorded at 1:20 (see figures 5 & 6).

All categories of artefact recovered from the features were retained and are listed in Appendices IV-VI.

A full photographic archive, both colour slide and monochrome print, was made, and is held in the SCCAS Photographic Archive at Shire Hall, Bury St Edmunds, where the rest of the site archive, consisting of the artefacts, original drawings and texts, is housed.

In addition to the archaeological fieldwork, the opportunity was taken to have the aerial photographs of the site computer rectified, and a rapid map search was carried out at the Suffolk Record Office, Ipswich (Appendices III & VII).

Results

The features identified during the excavation could be divided into two classes, ditches and pits.

Ditches

Five ditches were identified; 0002, 0006, 0007, 0011 & 0036. Stratigraphically, 0036 was the most recent, followed by 0006, 0002 and 0007. Although 0011 predated 0006, its relationship to 0002 could not be determined, due to the position of 0006.

0002 was orientated approximately northnorthwest-southsoutheast, and measured c.2.5-3.3m wide, with a depth of c.1.0m (fig.5). It had asymmetrically sloping sides going to a wide flat base, and was filled with light-mid grey-brown stony sand. Two sherds each of Iron Age pottery, L.3rd-4th century pottery and 4th century pottery were recovered from the fill. It cut 0007, and was cut by 0006; however its relationship to 0011 could not be determined.

0006 was orientated approximately north-south, and measured c.1.0m wide, and 0.4m deep (fig.5) with an asymmetrical 'U' shaped profile; its fill was made up of a mid brown stony sand. One sherd of a medieval coarseware, plus a small amount of fired clay, possibly daub, and some burnt flints, were recovered from the fill. Ditch 0006 cut ditches 0002, 0007 and 0011, and was cut by 0036.

0007 was orientated approximately east-west, and measured c.2.8m wide and 0.9m deep (fig.5). It had sloping sides going to a narrow slot with a flat base, and was filled with mid brown-grey stony sand. Four sherds of Iron Age pottery, and four sherds of 11th-12th century pottery, plus some fired clay/daub and struck flints, were recovered from its fill. 0007 was cut by 0006 and 0002.

0011 was orientated approximately northwest-southeast, and measured c.0.5m wide and 0.4m deep (fig.5). It had steeply sloping sides going to a narrow flat base, and was filled with mid-brown sand and gravel. Five sherds of Early Iron Age pottery, and one burnt flint, were recovered from the fill. 0011 was cut by 0006, but its relationship to 0002 could not be determined (0051, fig.5).

0036 was orientated approximately parallel to 0007, although it appeared to be diverging away from this ditch at the western end of its exposure within the trench. It measured between 2.8 and 3.5m wide, with a maximum depth of c.1.1m (fig.5), with a wide 'U' shaped profile. No dateable artefacts were recovered, only fragments of animal bone and some burnt flints. 0036 cut ditch 0006 and pit 0010.

Pits

Fourteen pits were identified, eleven (0003, 0005, 0008, 0009, 0010, 0034, 0035, 0042, 0043, 0044 & 0047) located between ditches 0007 and 0036, two (0031 & 0032) c.10m north of the main concentration of features (fig.3), and one (0045) located towards the bottom of the hill, c.1.5m south along the trench (fig.4).

0003 was a small oval pit, which measured c.0.55m wide and 0.15m deep, with a wide 'U'-shaped profile (fig.6). It was filled with a mid brown stony sand, from which one sherd of Early Iron Age pottery was recovered, plus one burnt flint.

0005 was sub-rectangular, and measured c.0.6m wide and 0.4m deep, with steeply sloping sides going to a rounded base (fig.6). It was filled with mid brown, very stony sand, from which three sherds of Iron Age pottery were recovered.

0008 was a small circular pit/posthole, immediately adjacent to 0005, which measured c.0.25m wide and 0.15m deep, with steeply sloping sides going to a rounded base (fig.6). It was filled with mid brown stony sand. No artefacts were recovered from it.

0009 was a large sub-circular pit, adjacent to the western edge of the trench, and measured c.1.4m wide and a maximum of 0.75m deep, with steeply sloping sides going to a flattish base, in the centre of which was a small depression (fig.6). It was filled with mid brown stony sand. Two sherds of pottery were recovered, one Iron Age and one Early Medieval piece, as well as a fragment of fired clay or daub.

0010 was only partially exposed within the trench, and was cut by ditch 0036. It measured at least 3m wide, and c. 0.35m deep, with gently sloping sides. It was filled with a mid brown stony sand, from which two sherds of Romano-British pottery and one sherd of a Medieval coarseware were recovered, as well as struck flints, burnt flints, and a small iron nail.

0031 was sub-circular, and measured c.1.3m wide and 0.45m deep, with a wide 'U' shaped profile (fig.6). It was filled with brown and grey silty sand, with an area of burnt sand towards the centre of the feature, and appeared to be partially lined with a layer of dirty gravel. A large number of burnt flints were recovered from its fill, but no dateable artefacts. Pit 0031 cut pit 0032.

0032 was oval, and measured c.0.6m wide and a maximum of 0.3m deep, with asymmetrically sloping sides going to a rounded base (fig.6). It was filled with dirty orange and brown sand, and was cut by pit 0031. One sherd of Iron Age pottery, and two sherds of Romano-British pottery were recovered from it.

0034, 0042 and 0047 were all sub-circular pits, which measured 0.9 -1.0m diameter, and 0.4-0.6m deep, with steeply sloping sides going to flat bases (fig.6). All three were filled with light-mid orange brown sands and gravels. 0047 was cut by both 0034 and 0042. Artefacts were only recovered from 0034 - a sherd of Iron Age pottery and a burnt flint.

0035 was oval, and measured c.0.55m wide and 0.35m deep, with steeply sloping sides going to a rounded base (fig.6). It was filled with mid brown sands and gravels. No artefacts were recovered.

0043 and 0044 were sub-circular, c.0.65m wide and 0.15-0.2m deep, with gently sloping sides going to rounded bases (fig.6). They were filled with mid brown stony sand, from which no artefacts were recovered.

0045 was sub-circular, and measured c.2.3m wide and 0.45m deep, with gently sloping sides going to a wide flat base (fig.6). It was filled with mid brown-grey sand, with an area of burnt black sand in the upper central part of the feature. One sherd of Early Medieval ware, and three sherds of medieval coarseware were recovered, as well as some burnt flints and four fragments of very abraded soft brick.

Approximately 2m to the south of 0045 another potential feature was identified. However when a slot trench (0046, fig.4) was excavated across it, it was found to be a variation in the colluvial deposit which had collected at the bottom of the hill. As to be expected with such a deposit, a large number of artefacts, in particular 154 sherds of 11th-13th century pottery, were recovered from it.

THE FINDS (S. Anderson, SCCAS)

Introduction

A summary of finds quantities from this excavation is presented in the table below.

Find type	No.	Wt./kg
Pottery	204	2.559
Animal bone	4	0.050
Ceramic Building Materials	5	0.114
Fired clay	4	0.026
Slag	1	0.019
Worked flint	20	0.022
Burnt flint	51	1.142
Iron (Fe)	14	-
Lead (Pb)	5	-
Copper alloy (Ae)	12	-

Table 1: Finds quantities.

All small finds were unstratified. Finds have been divided into categories by function.

1. Objects of personal adornment or dress

Belt accessories

1. Ae. Domed stud head. Diameter 14mm. SF No. 0027. PMed
2. Ae. Folded sheet strap end? Trapezoid, with 'arms' extending from each outer corner. 38x28x8mm. SF No. 0029.

Fasteners

3. Ae. Button and loop fastener. Class III: teardrop type (Wild 1970, Fig.1). These objects are usually associated with military sites. 26mm long, teardrop 15mm diameter. Context 0041. Roman, L.1st-2nd c.
4. Ae/Sn? Button? Solid plano-convex button with ?tin skin and Ae pin with small washer. Could be cufflink? Diameter 12mm. Context 0041. PMed.

Footwear

5. Fe. Large oval iron ring from patten with attachment terminals. Length 190+mm, ring width 85mm. Context 0014. PMed, 18thc.?

2. Household objects

Pottery

A total of 204 sherds of pottery weighing 2.559kg was collected. Quantification by fabric is shown in Table 2.

The number of different rim sherds in this assemblage was 16 and the EVE was 1.87 for 15 measurable rims. The average percentage of rim was 12.5%, with a minimum of 5% and a maximum of 28%.

Methodology

Quantification was carried out using both sherd count and weight. A full quantification by fabric, sherd type, etc. is available in the archive, as are the full fabric descriptions. Recording uses a system of letters for fabric codes (similar to that employed in London and Lincoln), together with number codes to enable ease of sorting in database format. Medieval pottery dating is based on rim forms similar to a known series from Essex (Drury 1993).

Fabric Name	Code	Fabric No.	No.	Weight/g	%
Iron Age Flint Tempered	IAFT	0.41	15	148	
Iron Age Fine Flint	IAFF	0.411	6	83	
Iron Age Quartz Tempered	IAQT	0.42	2	9	
Iron Age Organic Tempered	IAOT	0.43	1	21	
Total IA			24	261	10.2
Romano-British Greywares	RBGW	1.10	3	18	
Romano-British Grey Micaceous	RBGM	1.21	1	2	
Oxfordshire Red Colour-coated	OXRC	1.47	2	9	
Romano-British Shelly Wares	RBSH	1.90	2	19	
Total Roman			8	48	1.9
Early Medieval Ware	EMW	3.10	79	425	
Early Medieval Ware Gritty	EMWG	3.11	11	147	
Early Medieval Ware Shelly	EMWS	3.14	65	1228	
Total Early Medieval			155	1800	70.3
Medieval Coarsewares	MCW	3.20	17	450	
Total Medieval Coarsewares			17	450	17.6
Grand Total			204	2559	

Table 2: Pottery quantification by fabric

Iron Age pottery

Material dated to the Iron Age consisted largely of sherds tempered with coarse fragments of crushed burnt flint. Two sherds were quartz tempered and were probably of later Iron Age date, and there was one organic tempered sherd with rough parallel incised line decoration of uncertain date. Sherds containing finer flint tempering were generally burnished and were identified as fragments of sharp-shouldered vessels similar to the Darmsden series (Cunliffe 1968). This material has been dated to the Late Bronze Age - Early Iron Age transition, as early as the 9th century BC (Martin, forthcoming), although it continued evolving up to the Middle Iron Age.

Roman pottery

Very little Roman material was found, and most sherds were heavily abraded. The assemblage included a rim from a large storage vessel in a shelly fabric (L.3rd-4th century), and two pieces of Oxfordshire red colour-coated vessel (4th century). The other sherds were indeterminate greywares.

Early Medieval Wares (EMW)

Fragments of EMW were found in a number of contexts, but were concentrated on 0046. The fabrics were generally sandy, although some had superficial shell which was often leached out. Most were reddish brown in colour, but a few were reduced grey or black. Forms were typical of the early Medieval tradition of large cooking and storage jars with flared thickened rims, often with piecrust decoration. Other decoration included incised wavy lines around the shoulder and/or rim of the vessel.

Medieval coarsewares (MCW)

A few sherds of medieval coarsewares were collected, and these were in forms and fabrics typical of the Suffolk-Essex border. Most of the dateable sherds belonged to the first half of the medieval period, and there were no examples of glazed wares.

The pottery by feature

Pottery was only found in twelve features on the site. These are listed in table 3, together with suggested spot dates.

The earliest features appear to be the small pits, particularly 0003 and 0034 which contained EIA pottery, and 0005 which contained early and mid-late Iron Age sherds. Ditch 0006 is probably medieval, although no pottery was found in the main part of the feature, only from the south end (0004).

Ditch 0002 may be of 4th century date, although the few fragments of OXRC were abraded. However, it cuts ditch 0007 which contained L.11th-12th century pottery in one section. It is therefore likely that there is a high degree of residuality in these features, and dating of them has to remain uncertain with the available evidence. The stratigraphical relationship between ditch 0002 and ditch 0011, which contained EIA material, is unclear, although the pottery suggests that 0002 cuts 0011.

<u>Feature</u>	<u>Diagnostic sherds</u>	<u>Spotdate</u>
Ditch 0002	OXRC, RBSH	L.3rd-4th c.
Pit 0003	IAFT	EIA
Pit 0005	IAFT, IAQT	M-LIA
Ditch 0006 (0004)	MCW?	L.12th-14th c.
Ditch 0007	EMW	L.11th-12th c.
Pit 0009	EMW	L.11th-12th c.
Pit 0010	MCW Rim	M-L.13th c.
Ditch 0011	IAFT	EIA
Pit 0032	RBGW	Roman
Pit 0034	IAFT	EIA
Pit 0045	MCW	L.12th-14th c.
Slot trench 0046	EMW/MCW	L.12th-E.13th c.

Table 3. Suggested spotdates for features

Pit 0010 contained mid-late 13th century pottery, and pit 0009 was probably of late medieval or early post-medieval date (roof tile was present). Ditch 0036 contained only undateable finds but cut 0010 and is therefore likely to be of post-13th century date.

The pottery from pit 0045 and spread 0046 suggests occupation in the NE part of the site during the early medieval period.

Discussion

The pottery suggests a relatively high level of activity in the Early Iron Age, although presumably much of the structural evidence for this period has been heavily disturbed by later features, resulting in a high degree of residuality of EIA sherds. Scattered sherds of later Iron Age and Late Roman date suggest that there was occupation in the vicinity, but not directly on the excavated area. The next major use of the site occurred in the Early Medieval period (11th-12th century), after which it declined again.

3. Buildings and services

Structural ironwork

6. Fe. Small bent nail. Length 30+mm. Context 0010.
7. Fe. Nail? (or part of other 0016?). Length 50mm. SF No. 0016.
8. Fe. Nail. Square section? Length 80+mm. SF No. 0018.
9. Fe. Nail. Fragmentary. SF No. 0019.
10. Fe. Nail. Shaft only, square section. Length 49mm. SF No. 0022.
11. Fe. Nail? ?Rectangular section. Possibly a chisel. Length 50+mm, shaft c.15 x c. 8mm. SF No. 0012.

Windows

12. Pb. Window lead. Small circular fragment of solder from came with small piece of glass in situ. 17x13x4mm. Context 0001.

Ceramic building materials

Four fragments of very abraded soft brick were found in 0045. One other fragment of fired clay or daub was identified in 0009. The date of these fragments is uncertain but is most likely to be late medieval.

Fired clay was found in three contexts (0001, 0004, 0007), but its use was indeterminate.

4. Horse furniture

13. Fe. Buckle? Large D-shaped buckle frame. Possibly part of horse tack? 80x72mm. Context 0017.
14. Ae. Pendant mount? Domed circular mount with attachment loop on edge (broken). Diameter 14mm. SF No. 0029.

5. Metalworking waste

Lead

Four lead spills were collected, probably from medieval or later plumbing activity.

15. Irregular spill. 30x15x4mm. SF No. 0020.
16. L-shaped spill. 25x7mm. SF No. 0021.

17. Spill? Rough semi-circle, broken at one edge. Diameter 20mm? SF No. 0025.
18. Waste? Tapered fragment of ?Pb with triangular section. 20mm long. SF No. 0027.

Copper alloy

There was possible evidence for copper alloy working in the form of a small bar ?ingot and some cut sheet fragments. A piece of copper alloy or possibly lead slag was also found (0001).

19. Bar. Hammered surface? Ingot? 41x7x3mm. Context 0001.
20. Waste? Sheet fragment, some edges cut. 33x16mm. SF No. 0024.
21. Waste? Irregular sheet fragment. 19x14mm. SF No. 0028.

6. Miscellaneous fittings

22. Ae. Small cast washer. Diameter 15mm. Context 0001. PMed.
23. Fe. Hook? Possible window catch or fire hook, or other fitting. Long thick wire hook. Length 150mm, diameter c.10mm. SF No. 0015. PMed.
24. Ae. Rectangular plate with one soldered side (other side lost?). Two rivet holes near one end, both ends broken. Inside has raised corrugations with triangular sections - very regular, possibly for gripping a strap? 46+ x14x7mm. Context 0041. PMed.
25. Fe. Mount? Large irregular triangular plate. 77x74x4mm. SF No. 0013. PMed.

7. Miscellaneous tools

26. Fe. Fragment of blade or strap? 39+ x17x3mm. Context 0001. Med/PMed.
27. Fe. Curved blade? tapered section (c.f. Margeson 1993, 194). Part of a small sickle or possibly horseshoe fragment. 63x20x10mm. Context 0041.

8. Objects of uncertain use

Copper alloy

28. Ae. Rectangular sheet. X-ray needed. 32x17x1mm. SF No. 0026.
29. Ae? Half a ring with folded inner side and irregular outer edges. Possibly a fitting, washer, or waste? Diameter 33+mm. Context 0041.

Iron

30. Fe. Lump. Cross-section appears tapered. X-ray needed. 18x6mm. Context 0041.
31. Fe. Not identifiable without X-ray. SF No. 0016.

9. Flint

Worked flints were found in two features (0007 and 0010). All were unpatinated flakes.

Burnt flints were collected from ten features, and the large number in pit 0031 may indicate that the function of this feature was related to cooking.

10. Biological evidence

Only two animal bones were found (one of which was broken into three pieces). Both were heavily decayed and not identifiable.

Summary and discussion

The artefactual evidence from this site consisted largely of Early Medieval pottery which was concentrated in a single feature to the north-east of the trench. There was also a relatively large amount of Iron Age pottery of both early and late periods, and some Roman sherds which may be contemporary with the fill of one large ditch but could equally be residual. Other finds included worked and burnt flints, some of which occurred in almost every feature, and a small amount of fired clay. Only two animal bones were collected.

The majority of small finds were post medieval. They consisted of some dress accessories, including an iron ring from a wooden patten, metalworking waste, miscellaneous mounts and fittings, and a number of nails. Some objects may have been related to equestrian activity, and two iron objects may have been blade tools. One Roman button-and-loop fastener was found, presumably a casual loss, although these objects are particularly associated with 2nd century military sites. Unusually, for a rural site, there were very few late medieval or post medieval dress accessories, which is further evidence for a decrease in activity after the 13th century.

AERIAL PHOTOGRAPHS

The cropmark site SSM 001 has been known from air photos since the late 1950's. These show a very complex site, with both archaeological and geological features appearing. Only oblique photos have been taken, so the excavation provided an opportunity to have the cropmarks computer rectified, in order to get an accurate plan of them. It was hoped that this would allow some or all of the features excavated to be located on the cropmark plot, and provide dates for some sections of the complex. The rectification was carried out by Air Photo Services, and their full report (No. R117) can be found in Appendix III.

The rectified plot clearly shows the gravel island (in white) surrounded by deeper soil deposits of colluvium and alluvial origin (shaded), with the majority of the cropmarks showing clearly on the gravel areas (fig.2).

Only a couple of features marked on the rectified plot actually cross the line of the trench (A, B, fig.2); although other features do not have to be extended far in order to intersect it (B, fig.2). The other remaining cropmarks across the pipeline have been interpreted as deeper soil deposits. No evidence of the features at A and B were identified during the monitoring and subsequent excavation of these cropmarks. This could have been due to the dry dusty conditions at the time of the excavation, which, combined with the use of the stripped area as an access route for vehicles along the pipeline, could have obscured some features, especially if they had a similar fill to the surrounding geology. Another possibility is that they could have been identified, either rightly or wrongly, as natural variations in the local geology.

To the southeast of the trench, two short lengths of ditches, which appear to be approximately parallel, are marked on the cropmark plot (D, fig.2). If these are assumed to continue without changing direction, when extrapolated across the trench line they cross at the points where ditches 0007 and 0036 were identified and excavated. Why these ditches did not show as cropmarks in the area of the trench could be due to a number of factors, including geological and vegetational.

Further comparisons between the results of the excavation and the air photo plot indicates that ditch 0002 appears to have been plotted as a narrow band of deeper soil (E, fig.2), which intersects the pipeline where 0002 was recorded.

To the north of the field, a long sinuous double ditched feature (C, fig.2), which has been interpreted as a trackway, should have been recorded within the trench. However, on the plot it appears to stop where it meets an area of deeper soil. The excavations showed that there was a considerable depth of colluvial deposits at the northern end of the trench, which were partially investigated by slot trench 0046. It is likely that, if the double ditched feature did continue across the trench, that it was masked by the colluvium. If this is the case, it would also indicate that this feature predates the colluvium, i.e. is pre-medieval in date.

Ditches 0006 & 0011 are much smaller and shallower than the other ditches identified during the archaeological investigations on this site, which is probably why there is no sign of these features on the cropmark plot.

R. Palmer says in his report on the rectification of these cropmarks that it was one of the most confusing areas that he has interpreted, with both archaeological and possible archaeological deposits and ditches showing via the same tonal differences in crops. For this reason, he interpreted as archaeological those features that appeared to have the most uniform width, as natural features more often tend to be of less regular form. As a result of this, he states that 'the map thus shows a minimal view of the archaeological features, but one which I believe to be reasonably correct in the archaeological-to-natural distinctions that have been indicated'. If the cropmarks and the excavation results have been correctly amalgamated, they show that some of the features marked as possibly archaeological will be geological, and *vice versa*.

When compared to the results of the rapid map search (Appendix VII), it is interesting to note that the aerial photographs only identified one of the pre-existing field boundaries identified from the early maps, that dividing the field to the east in two, which disappeared between 1837 and 1902. None of the other boundaries can be identified from the cropmark plot.

INTERPRETATION

None of the features investigated revealed evidence of settlement within the line of the pipeline itself, although the relatively large amounts of pottery and other finds recovered from such limited excavations suggests that there were settlements in the immediate vicinity, as there were too many finds to be attributed solely to the practice of manuring the fields.

Of the pits, it is difficult to ascertain whether they had any particular function, other than for pit *0031*. The high number of burnt flints recovered from this feature, plus the burnt sand within its fill, suggests that it could have been a cooking pit.

The ditches, in particular the three largest, *0002*, *0007* and *0036*, are all likely to be marking boundaries, probably field boundaries, although the smaller ditches *0006* and *0011* appear to be rather small and shallow for this function.

Despite the limited scale of the archaeological investigations, some phasing for the features recorded can be worked out, using a combination of stratigraphical and pottery/finds evidence. However, because there appears to be a fairly high degree of residuality of finds in the features, those features which are phased solely on the pottery evidence have the potential to belong to a much later phase.

From the pottery evidence, the oldest features on the site are likely to be pits *0003*, *0005* and *0034*, dating from the Iron Age. In addition, although the relationship between ditches *0002* & *0011* could not be determined stratigraphically, the pottery recovered from them indicates that *0011* probably predates *0002*, and is also Iron Age in origin.

The second phase of activity in the area is only represented by one feature, pit *0032*, which contained two sherds of Romano-British pottery. However, other residual sherds from this period were also recovered during the excavations, plus a Roman button-and-loop fastener. Roman activity in the area is to be expected, as the Roman road from Colchester to Coddendam (Margary no.3c), which runs approximately along the line of the present A12, is only c.900m to the west.

Stratigraphically, Phase III is represented by ditch *0007*, which from the finds recovered dates from the 11th-12th centuries. Pottery from the same period was also recovered from pit *0009*, resulting in it being included within this phase.

Ditch *0002*, which cuts ditch *0007*, makes up the fourth phase of activity on the site. However, the only datable artefacts to be recovered from this feature were residual sherds of 3rd-4th century pottery.

Phase V is represented by ditch *0006*, which cuts ditch *0002*, and which pottery evidence indicates dates from the 12th-14th century; while ditch *0036*, which in turn cuts ditch *0006*, makes up the sixth and final phase, which due to the lack of artefacts is undated. However, it is not marked on the earliest survey of the area, which was drawn up in 1733 (SRO ref V5/5/3.1, Map 1, Appendix VII).

Of the remaining datable features, pit *0010* is stratigraphically earlier than the phase VI ditch *0036*. Pottery recovered from this pit indicates that it dates from the mid-late 13th century, so it could either predate the phase V ditch *0006*, or it could be contemporary with *0006*.

Pit *0045*, at the northern end of the trench, produced a few sherds of 12th-13th century pottery, which could also indicate that it was slightly earlier or contemporary with ditch *0006*.

Of the remaining undated pits, other than local relationships with other pits, i.e. *0047* predating *0034*, and *0031* post-dating *0032*, no phasing can be assigned to them, and they have the potential to date from anywhere between the Iron Age and medieval periods.

The finds distribution, with a high number of residual pottery sherds recovered from later features, indicates the amount of disturbance to pre-existing features caused by later activity. For example, a number of Iron Age and Romano-British features appear to have been disturbed by the construction of the medieval ditches, while the quantity of medieval pottery recovered from the slot trench *0046* across the colluvial deposits towards the base of the hill indicates the amount of disturbance caused by later farming practices.

A number of iron finds, (SF nos 0012-0019) were recovered from the northern end of the investigation area (fig.4). The map search indicated that they all lay along the line of a boundary that was extant on the 1902 2nd edition Ordnance Survey map (Appendix VII). There was no sign of any ditch in the area, although it could easily be masked by recent colluvial build up.

CONCLUSION

The archaeological monitoring along the majority of route revealed no new areas of archaeological sensitivity. It is possible that much of the human activity in the area has been concentrated around the areas of the present day villages, which the pipeline avoided.

The only archaeological features identified within the pipeline trench were within the area of SSM001, an extensive cropmark site. The majority of the features identified were concentrated in a c.25m length at approximately the highest point of the field. Although the excavation of these cropmarks were at a small scale and very limited, they showed that the archaeological remains, at least at the northern end of the site, have been derived over a much wider period than that indicated on the SMR entry for the site, which suggests a probable Romano-British date for them. No evidence of any settlement within the area of the trench was identified, although the relatively large number of Iron Age pottery sherds recovered from such a small sample of the features suggests there was probably a settlement from this period in the immediate vicinity of the excavation. However, the high residuality of these artefacts demonstrates the amount of disturbance which has been caused by later activity in the area, which suggests that much of the evidence for early settlements could be difficult to identify from the archaeological record, being either very badly damaged or destroyed totally.

A few artefacts were found to indicate that activity in the area continued into the Roman period, including a L. 1st-2nd century button and loop fastener, of a type which is usually associated with military sites. Although no evidence was recovered to suggest that such a site existed in the area of SSM001, this find could be connected with activity along the Roman road that ran along the line of the present A12, which is only 900m to the west. In addition, the presence of a number of Romano-British pottery sherds also indicates that there was a settlement dating from this period in the area.

Little appears to have happened in the area after the Roman period until medieval times. At least three phases of activity dating from between the 11th and 14th centuries were represented by ditches, which have been interpreted as field boundaries, plus a couple of pits. Although these features were much more substantial and better preserved than the earlier remains, evidence that they have also been affected by later farming practices was also identified, in the form of a large number of sherds which had accumulated in a colluvial deposit towards the bottom of the hill.

Finally, and unusually for a rural site, there were very few late medieval or post medieval artefacts recovered, illustrating a decrease in activity in the area after the 13th century.

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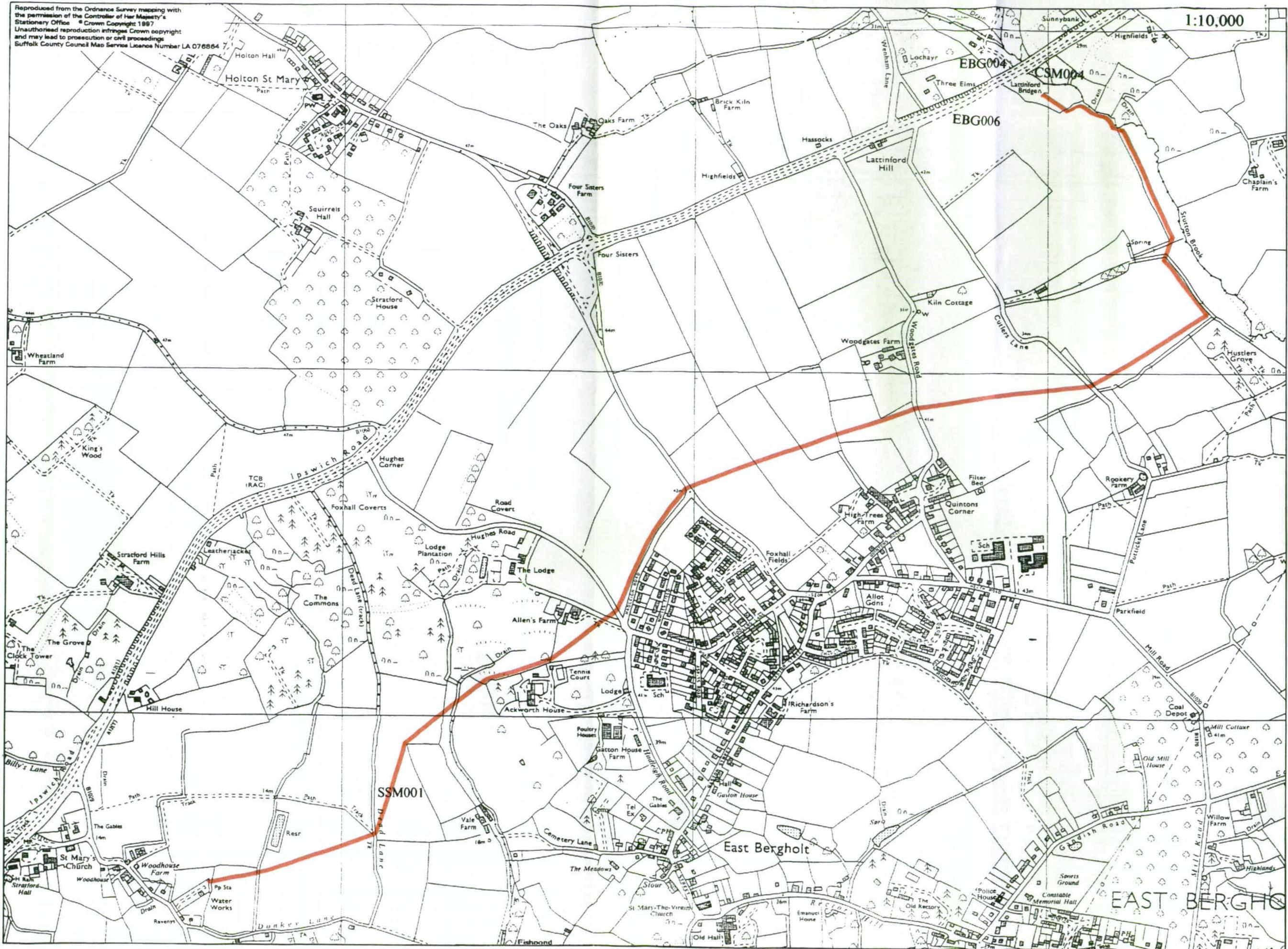


Figure 1 Pipeline location map showing SMR information

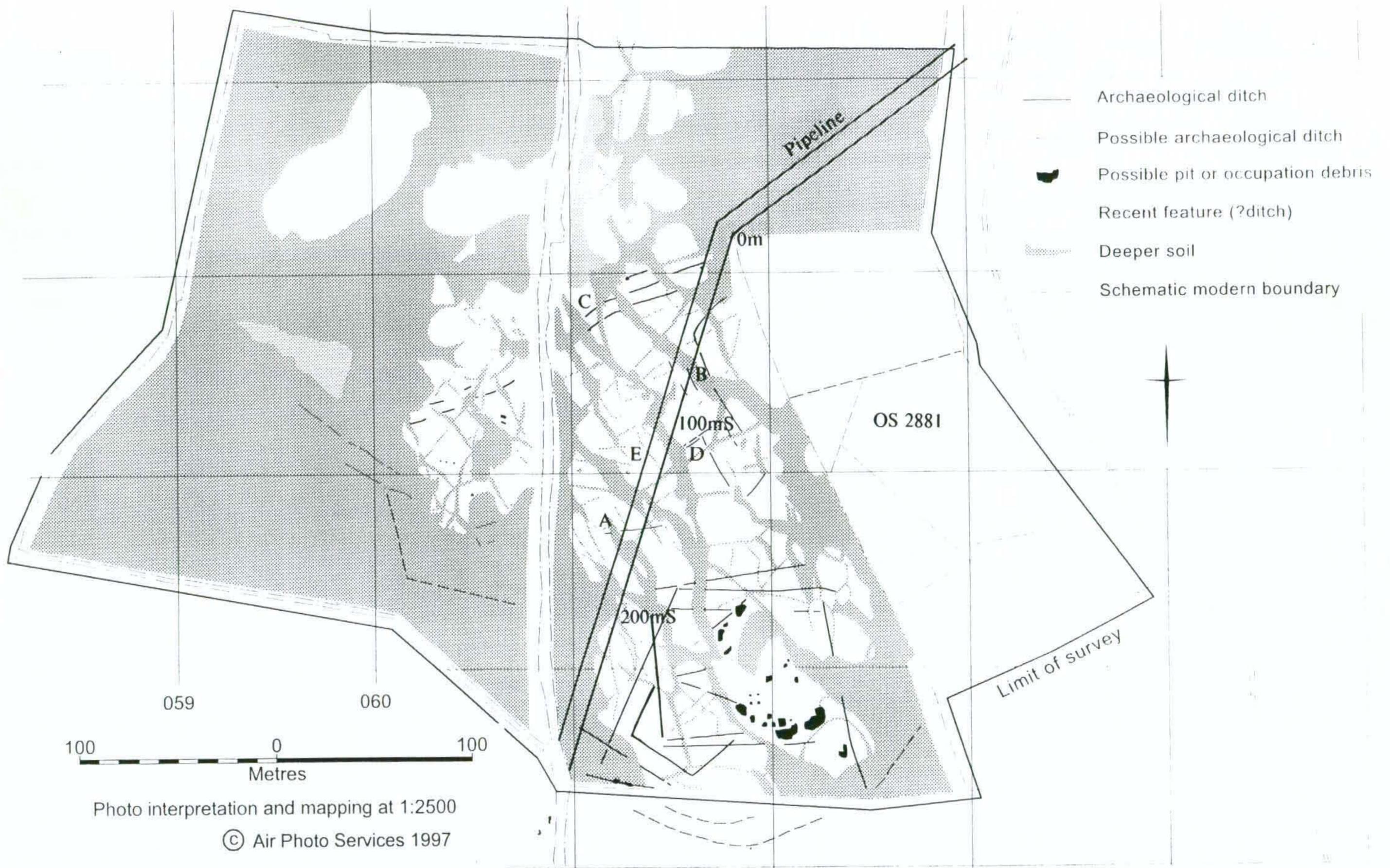


Figure 2 SSM 001. Features mapped from aerial photographs, with pipeline location.

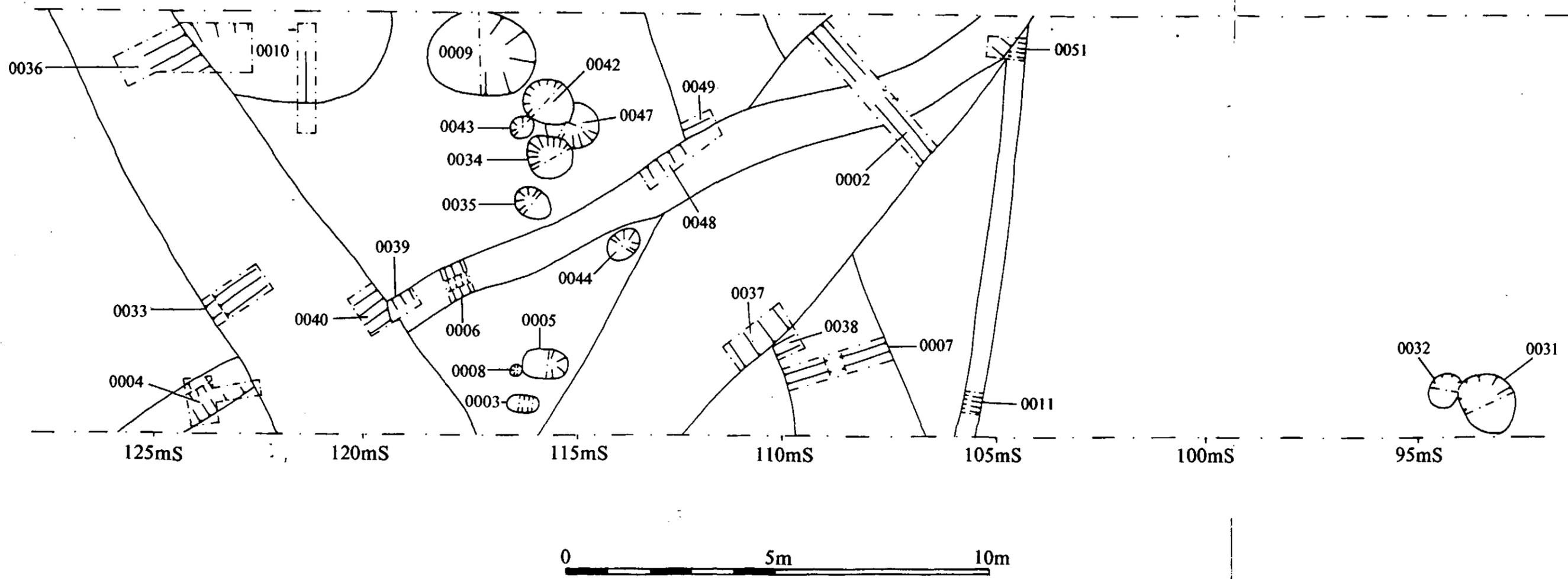


Figure 3 Plan of features between 92mS & 127mS

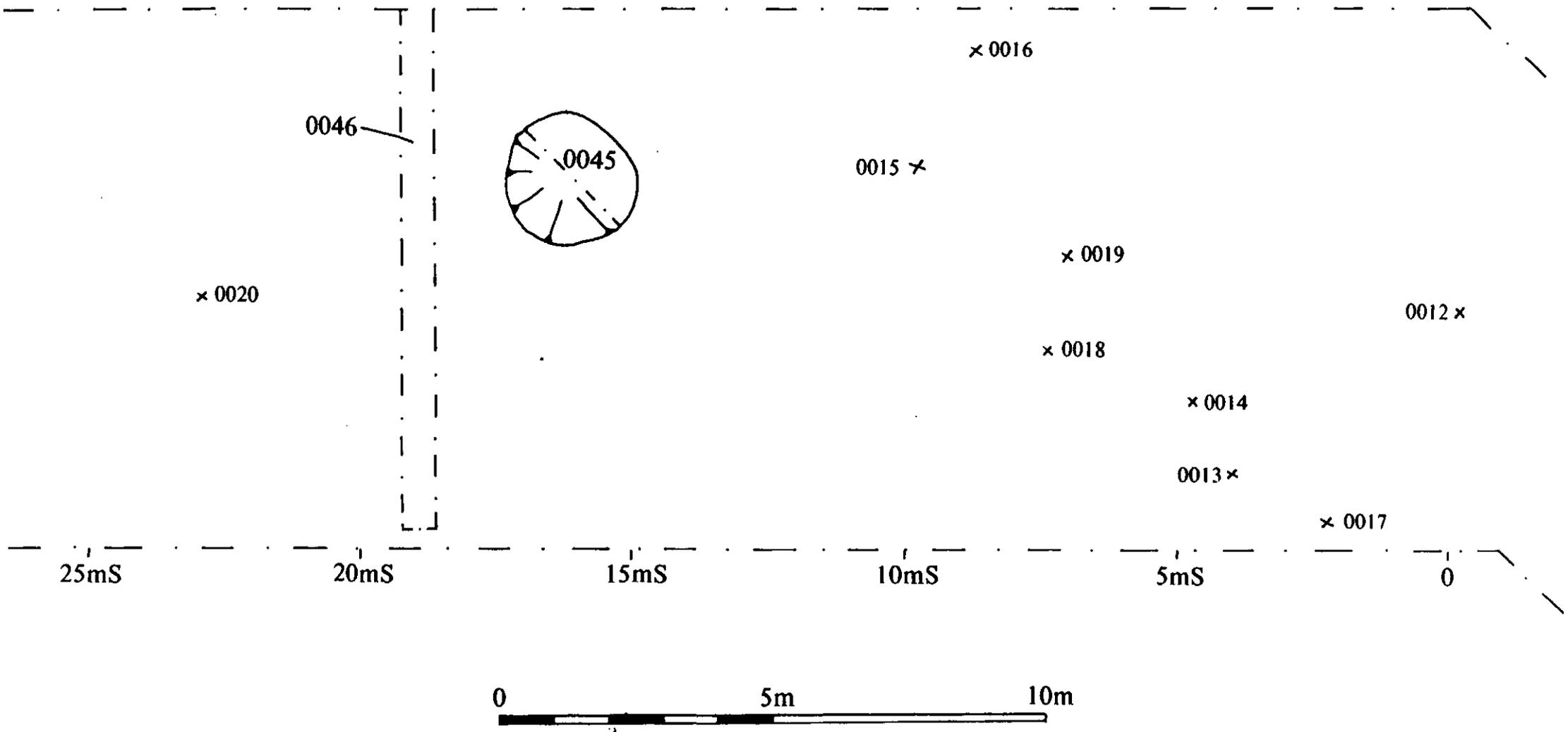
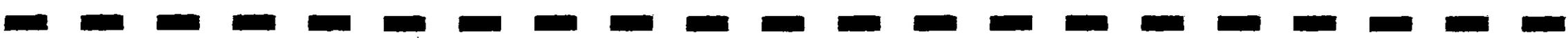


Figure 4 Plan of features between 0 & 25mS

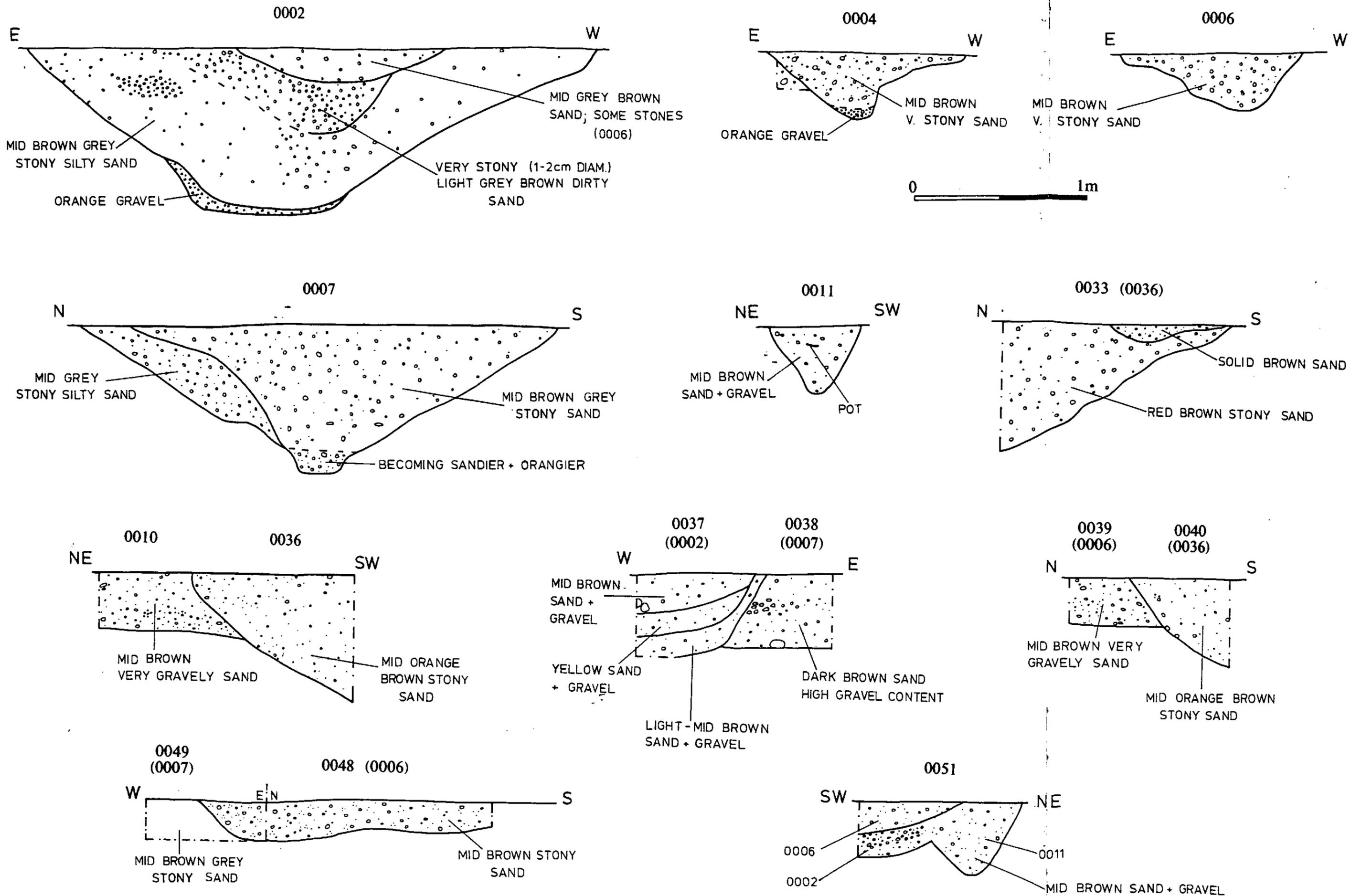


Figure 5 Section drawings - ditches

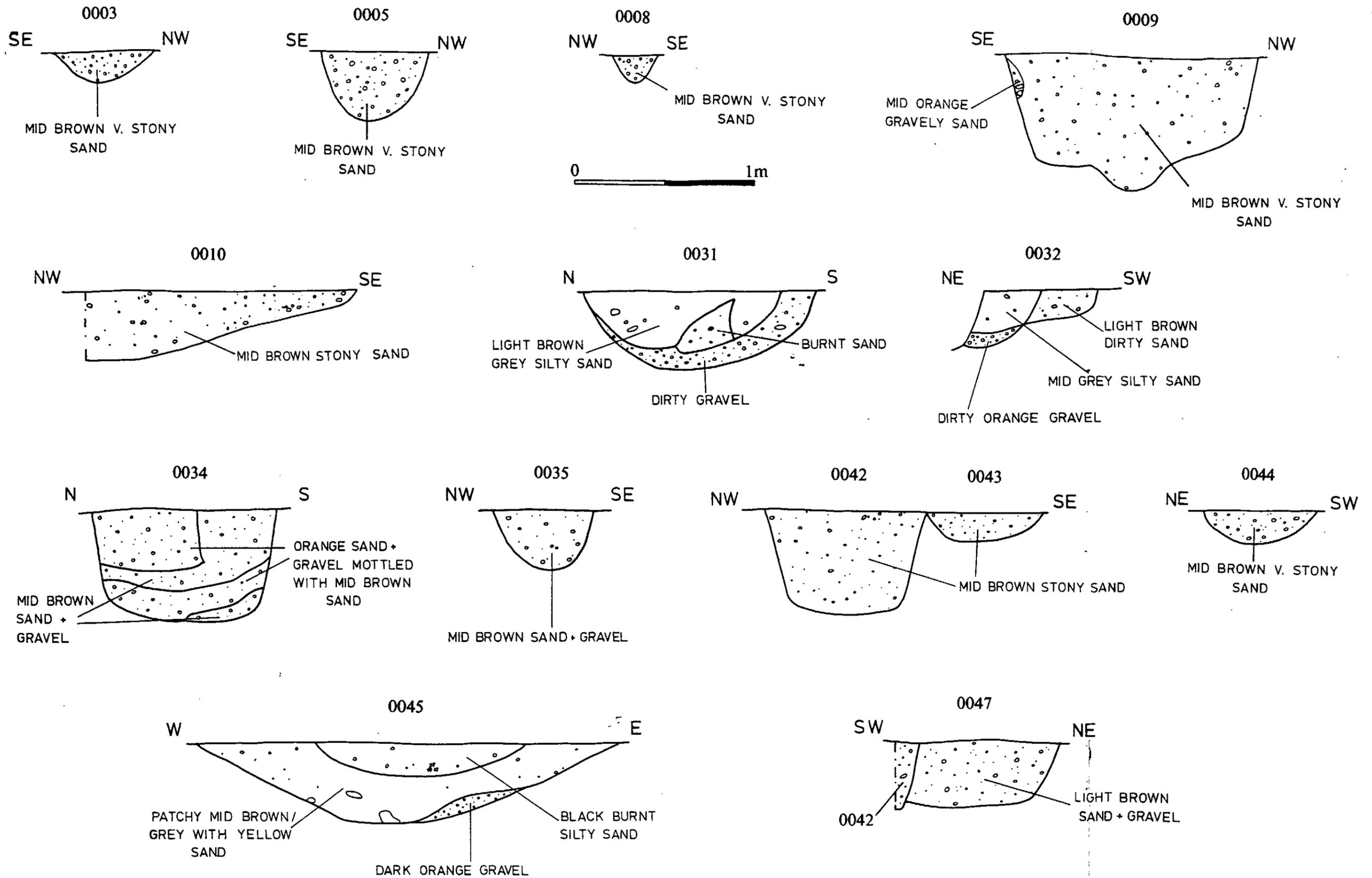
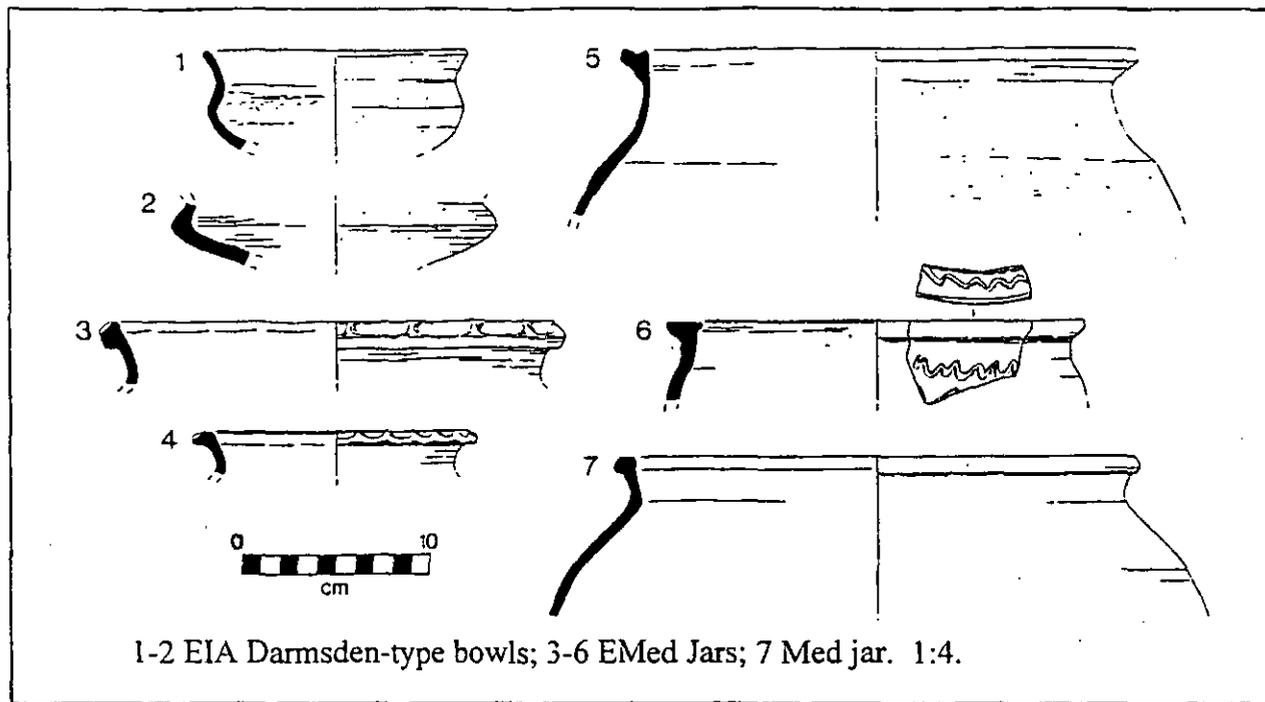


Figure 6 Section drawings - pits

a) Pottery



1. Darmsden-type carinated bowl. IAFF. Burnished. LBA/EIA. Context 0007.
2. Darmsden-type sharp-shouldered bowl. IAFF. Burnished. LBA/EIA. Context 0030.
3. Essex-type jar. EMWS (mainly sand with superficial leached-out shell, purple-buff surfaces and grey core). Thumbled rim. 11th-12th c. Context 0046.
4. Essex-type jar. EMWS (fabric as 3, black). Thumbled rim. 11th-12th c. Context 0046.
5. Jar. EMWS (fabric as 3 with mica, red surfaces and grey core). Rim is more uneven than drawing suggests, although wheelmade, and in some parts is more like a flanged type. Body is handmade. 11th-12th c.? Context 0046.
6. Jar. EMWS (fabric as 5, red surfaces and grey core). T-shaped rim with incised wavy line decoration. 11th-12th c. Context 0046.
7. Jar. MCW (sandy fabric, buff surfaces with grey core). L. 12th-13th c. Context 0046.

b) Metal artefacts

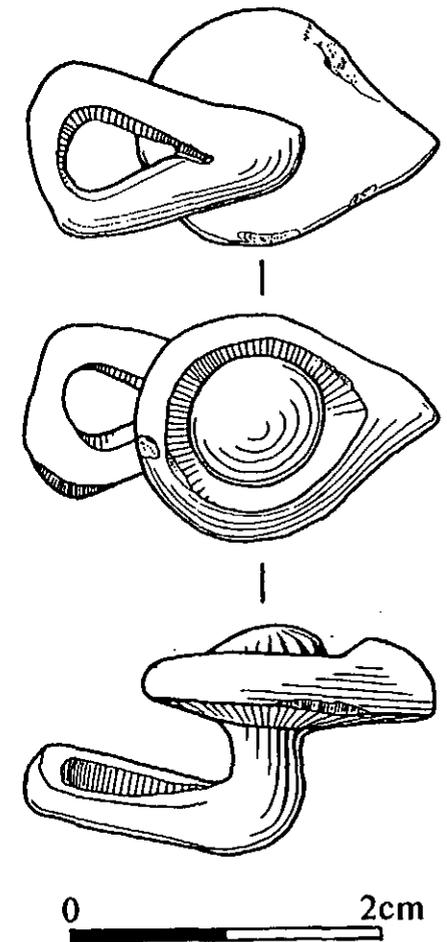


Figure 7 Finds drawings

APPENDIX I

SUFFOLK COUNTY COUNCIL

ARCHAEOLOGICAL SERVICE - CONSERVATION TEAM

Brief and Specification for an Archaeological Monitoring and Excavation

EAST BERGHOLT TO STRATFORD ST MARY PIPELINE

1. Background

- 1.1 The Essex and Suffolk Water Company intend to lay a new supply pipe from the Lattinford Bridge borehole to Stratford waterworks. They have been advised that the route crosses various archaeological sites. The whole route should be subject to general archaeological monitoring and excavation of any exposed archaeological deposits.
- 1.2 The archaeological background has been detailed in earlier documents submitted to the company.

2. Brief for Archaeological Work

- 2.1 To provide a record of archaeological deposits which will be damaged or removed by any development.
- 2.2 Following topsoil stripping of the approved route undertake archaeological monitoring of the route by visual examination of the exposed surfaces and sections.
- 2.3 In areas of defined archaeological deposits (see 1.2) monitor the machine work as it happens.
- 2.4 Identify significant archaeological deposits exposed by topsoil stripping.
- 2.5 Arrange for archaeological excavation of archaeological deposits which will be damaged or destroyed by vehicles tracking over the area or by the insertion of the pipe trench.
- 2.6 In areas identified under 2.3 or 2.4 monitor the excavation of the pipe trench.

3. Specification for the Archaeological Excavation

The excavation methodology is to be agreed in detail before the project commences, certain minimum criteria will be required:

- 3.1 Fully excavate all features which are, or could be interpreted as, structural.
- 3.2 All other features should be sufficiently examined to establish, where possible, their date and function. For guidance:
 - a. A minimum of 50% of the fills of the general features should be excavated.
 - b. Between 10% and 20% of the fills of substantial linear features (ditches etc) should be excavated, the samples should be representative of the available length of the feature and should take into account any variations in the shape or fill of the feature and any concentrations of artefacts. Any variations from this recommendation will need to be agreed with the Conservation Team.

- 3.3 Collect and prepare environmental samples (by sieving or flotation as appropriate). A general policy on environmental remains, including sampling strategy and processing, is to be agreed with the Regional Environmentalist before the commencement of site work.
- 3.4 A finds recovery policy is to be agreed before the project commences. It is anticipated that at least 50% of all occupation deposits will be sieved. Use of a metal detector will form an essential part of finds recovery.
- 3.5 All finds will be collected and processed. No discard policy will be considered until the whole body of finds has been evaluated.
- 3.6 All ceramic, bone and stone artefacts to be cleaned and processed concurrently with the excavation to allow immediate evaluation and input in decision making.
- 3.7 Metal artefacts to be stored and managed on site in accordance with *UK Institute of Conservators Guidelines*, and evaluated for significant dating and cultural implications before despatch to a conservation laboratory within 4 weeks of excavation.
- 3.8 Plans of the archaeological features on the site should be drawn at 1:20 or 1:50, depending on the complexity of the data to be recorded. Sections should be drawn at 1:10 or 1:20 again depending on the complexity to be recorded. Any variations from this will need to be agreed with the Conservation Team.
- 3.9 A photographic record of the work is to be made, consisting of both monochrome photographs and colour transparencies.

4. General Management

- 4.1 A timetable for all stages of the project must be agreed before the first stage of work commences, including monitoring by the Conservation Team of Suffolk County Council Archaeological Service.
- 4.2 The composition of the project staff must be detailed and agreed (this is to include any subcontractors).
- 4.3 A general Health and Safety Policy must be provided, with detailed risk assessment and management strategy for this particular site.
- 4.4 No initial survey to detect public utility or other services has taken place. The responsibility for this rests with the archaeological contractor.
- 4.5 The Institute of Field Archaeologist *Standard and Guidance for Archaeological Excavations* should be used for additional guidance in the execution of the project and in drawing up the report.

5. Report Requirements

- 5.1 An archive of all records and finds to be prepared consistent with the principle of *Management of Archaeological Projects*, English Heritage 1991 (particularly Appendix 3 and Appendix 4).
- 5.2 The data recording methods and conventions used must be consistent with, and approved by, the County Sites and Monuments Record.
- 5.3 The objective account of the archaeological evidence must be clearly distinguished from its archaeological interpretation.

- 5.4 An opinion as to the potential and necessity for further analysis of the excavation data beyond the archive stage, and the suggested requirement for publication. Further analysis will not be embarked upon until the primary fieldwork results are assessed and the need for further work is established. Analysis and publication can be neither developed in detail or costed at this stage.
- 5.5 An important element of the report will be a description of the methodology.
- 5.6 Finds should be appropriately conserved and stored in accordance with *UK Institute of Conservators Guidelines*. The finds, as an indissoluble part of the site archive, should be deposited with the County SMR if the landowner can be persuaded to agree to this. If this is not possible for all or any part of the finds archive, then provision must be made for additional recording (e.g. photography, illustration, analysis) as appropriate.
- 5.7 The site archive is to be deposited with the County Sites and Monuments Record within 12 months of the completion of work. It will then become publicly accessible.
- 5.8 Where positive conclusions are drawn from a project (whether it be evaluation or excavation) a summary report, in the established format, suitable for inclusion in the annual 'Archaeology in Suffolk' section of the *Proceedings of the Suffolk Institute for Archaeology*, should be prepared and included in the project report.
- 5.9 County Sites and Monuments Record sheets should be completed, as per the county SMR manual, for all sites where archaeological finds and/or features are located.

Specification by: R Carr

Suffolk County Council
Archaeological Service Conservation Team
Environment and Transport Department
Shire Hall,
Bury St Edmunds,
Suffolk IP33 2AR

Date:

Reference: /eberghol08

This brief and specification remains valid for 12 months from the above date. If work is not carried out in full within that time this document will lapse; the authority should be notified and a revised brief and specification may be issued.

List of O.P. numbers - SSM001

	O.P.	Component	Identifier	Modidate	Soil Type	Description	Cuts	Cut by	Finds	Phase
1	0001		finds			unstratified finds from field 4 (cropmark complex)			Y	
2	0002	0002	ditch		dark brown sand & gravel	Large 'V'-shaped ditch running approx. N-S; relationship to 0011 unclear	0007	0006	Y	IV
3	0003		pit		dark brown sand & gravel	small, oval pit, close to SE edge of pipe trench			Y	I
4	0004	0006?	ditch		dark brown sand & gravel	ditch running approx. NNE-SSW ; very shallow adjacent to 0033, it either butt ends adjacent to 0033, or is shallow continuation of 0006 & is cut by 0033			Y	V
5	0005		pit		dark brown sand & gravel, occasional charcoal fragments	sub-circular pit to NW of 0003			Y	I
6	0006	0006	ditch		dark brown sand & gravel, occasional charcoal	small ditch running approx. NNE-SSW - wide 'V'-shaped section	0002, 0007, 0011	0033	Y	V
7	0007	0007	ditch		dark brown sand & gravel	large 'V'-shaped ditch running approx. E-W		0002, 0006	Y	III
8	0008		posthole		dark brown sand & gravel, occasional charcoal	small posthole immediately to W of 0005				
9	0009		pit		dark brown sand & gravel	pit adjacent to NW edge of trench			Y	III
10	0010		pit		dark brown sand & gravel	pit adjacent to NW edge of trench		0036		
11	0011	0011	ditch		dark brown sand & gravel	small narrow ditch running NW-SE across trench, relationship to 0002 unclear		0006		I
12	0012		find			metal detector find			Y	
13	0013		find			metal detector find			Y	
14	0014		find			metal detector find			Y	
15	0015		find			metal detector find			Y	
16	0016		find			metal detector find			Y	
17	0017		find			metal detector find			Y	
18	0018		find			metal detector find			Y	
19	0019		find			metal detector find			Y	
20	0020		find			metal detector find			Y	
21	0021		find			metal detector find			Y	

List of O.P. numbers - SSM001

	O.P.	Component	Identifier	Modidate	Soil Type	Description	Cuts	Cut by	Finds	Phase
22	0022		find			metal detector find			Y	
23	0023		find			metal detector find			Y	
24	0024		find			metal detector find			Y	
25	0025		find			metal detector find			Y	
26	0026		find			metal detector find			Y	
27	0027		find			metal detector find			Y	
28	0028		find			metal detector find			Y	
29	0029		find			metal detector find			Y	
30	0030		find			metal detector find			Y	
31	0031		pit		dark brown sandy gravel, with lenses of black material	pit immediately adjacent to 0032 & SE edge - relationship unclear			Y	
32	0032		pit		orange brown sandy gravel	pit immediately adjacent to 0031 - relationship unclear			Y	II
33	0033	0036	ditch		dark orange brown sand & gravel	large 'V' shaped ditch running approx. E-W across trench	0006		Y	VI
34	0034		pit		mid brown sand & gravel with patches of yellow sand		0047		Y	I
35	0035		pit		mid brown sand & gravel	small pit or posthole S of 0034				
36	0036	0036	ditch		orange brown sand & gravel	large ditch running approx. E-W - steep sides, wide flat base	0010		Y	VI
37	0037	0002	ditch			section through ditch 0002 to determine relationship with 0007	0038		Y	IV
38	0038	0007	ditch			section through ditch 0007 to determine relationship with 0002		0037	Y	III
39	0039	0006	ditch		dark brown sand & gravel, more stones than 0040	ditch running approx. N-S		0040	Y	V

List of O.P. numbers - SSM001

	O.P.	Component	Identifier	Modidate	Soil Type	Description	Cuts	Cut by	Finds	Phase
40	0040	0036	ditch		orange brown sand & gravel	ditch running approx. E-W	0039		Y	VI
41	0041	0001	finds			unstratified finds from SW end (first 60m) of pipe trench in field 4			Y	
42	0042		pit			circular pit W of 0034	0047			
43	0043		pit			small shallow pit or posthole south of 0042				
44	0044		pit			small pit/posthole between junction of 0006 & 0002				
45	0045		pit			Pit at NE end of field 4, 15m from field boundary			Y	
46	0046		slot trench			slot trench across dark spread & colluvium at NE end of trench, 18m from field boundary			Y	
47	0047		pit		light brown sand and gravel	pit cut by 0034 & 0042		0034, 0042		
48	0048	0006	ditch			section through ditch 0006 to determine relationship with 0007	0049		Y	V
49	0049	0007	ditch			section through ditch 0007 to determine relationship with 0006		0048	Y	III
50	0050		slot trench			slot trench to determine extent of 0009 & 0010 - neither extended into it				
51	0051		section			Section to determine relationship between 0011, 0002 & 0006 - 0006 cuts 0002 & 0011; relationship between 0011 & 0002 unclear				

**Appendix III
Aerial Photographic Assessment**

**STRATFORD ST MARY, TM061348,
SUFFOLK:
AERIAL PHOTOGRAPH INTERPRETATION AND MAPPING**

by R Palmer MA MIFA
© Air Photo Services 1997 (Report No: R117)

INTRODUCTION

This interpretation of aerial photographs was commissioned to examine and map an area of some 14 hectares (centred TM 061348) in order to identify and accurately map archaeological and natural features and thus provide a guide for field evaluation. Mapping was to be at 1:2500.

PHOTO INTERPRETATION AND MAPPING

Photographs examined

A cover search was obtained from the Cambridge University collection of Aerial Photographs (CUCAP) and other photographs were provided by Suffolk County Council. All photographs were obliques taken during the course of specialist archaeological reconnaissance.

Initial examination of the photographs showed there to be one series in CUCAP that recorded the features via good and clear cropmarks and had been taken from a sufficient height to include sufficient control information for mapping. The printing of the library copies could be improved on, and an enlargement was made of one photograph (BPY 29). This was used as the principal photograph to map this area, against which information on the others was compared.

Photographs examined are listed at the end of this note.

Base maps

A base map at a scale of 1:2500 was provided by Suffolk County Council.

Photo interpretation and mapping

All photographs were examined by eye and under slight (1.5x) magnification, viewing them as stereoscopic pairs where possible. Interpretations were marked on an overlay following procedures described by Palmer & Cox (1993). Rectification was computer assisted and carried out using AERIAL 4.2 software (Haigh 1993)

AERIAL computes values for error of control point match between the photos and the map. In the rectification prepared for this assessment these were less than $\pm 2.6\text{m}$. This was an unusually high value that could not be reduced. It is likely to be due to the use of 'soft' control points, such as the junctions of hedged boundaries, and some minor changes in field boundaries. Rectified output forms the basis of the final digital plan.

COMMENTARY

This site must qualify as one of the most confusing that I have interpreted. The area is densely covered by what I take to be slight soil-filled periglacial hollows which show as a network of dark- or light-toned bands and patches. Among these, and showing via the same tonal differences in crops, are ditches of archaeological, and possible archaeological, origin.

The 1:2500 mapping covers three fields, the West, Central and East. Aerial photographers have concentrated their attention on the Central field, with the West and East being recorded by default rather than choice.

For the purpose of this interpretation I took as archaeological those features that appeared to have the most uniform width (natural features more often tend to be of less regular form). The map thus shows a minimal view of the archaeological features, but one which I believe to be reasonably correct in the archaeological-to-natural distinctions that have been indicated. Essentially there are superimposed ditched rectilinear ?enclosures in the southern part of the Central field, with possible ditched features between those and a sinuous ditched ?track to the north. This track continues in the West field. In the area of the rectilinear features there are a number of distinctly dark (or light, depending on the state of the crop) pits and splodges. These may indicate former cut pits or occupation debris - or they may be a response to different mineral content in the soils.

Visibility in much of the West field may be masked by deeper soil. Most of the features recorded are on (probably) slightly higher areas with thinner soils. On most photographs, the East field has been under unresponsive crop and it has never been photographed other than by default. However, on some dates differences in crop growth are visible and have allowed the addition - as sketched information only - of a number of what appear to be recent field divisions and also (unmapped) some patches of thinner soil and natural features.

REFERENCES

- Haigh, J.G.B., 1993. A new issue of AERIAL - Version 4.20. *AARGnews* 7, 22-25.
- Palmer, R. and Cox, C., 1993. *Uses of aerial photography in archaeological evaluations. IFA Technical Paper 12.*

Aerial photographs examined

Source: Cambridge University Collection of Aerial Photographs

Oblique photographs

ZL 9-13, 84-85	3 July 1959
ADJ 89-90	15 June 1961
ADR 92	11 July 1961
AFJ 58-59	14 June 1962
AIV 91-92	6 June 1964
AOS 65	1 July 1966
AYL 44-46	1 July 1969
BPY 29-31	19 June 1974
BUZ 80-81	24 July 1975

Source: Suffolk County Council

Oblique photographs

TM0634/3/402	7 July 1975	(RCHME)
JF 8	28 July 1978	(Suffolk Archaeological Unit)
McMasters 26-27	7 July 1979	(Mrs McMasters)
McMasters 118	15 July 1990	(Mrs McMasters)

Most informative photographs

BPY 29-31 (enlargement made of BPY 29)

SSM 001 - BULK FINDS BY O.P. NUMBER

OP No.	Pottery		Bone		CBM		Fired clay		Slag	Flint		Burnt flint		Iron		Miscellaneous	Pot date	Modidate
	Kg	No.	Kg	No.	Kg	No.	Kg	No.	Kg	No.	Kg	No.	Kg	No.				
0001	0.022	3					0.004	1	0.019					0.69	11	8 Ae objects, 5 Pb objects	EIA	PMed
0002	0.041	5															L.3rd-4th c.	
0003	0.006	1										0.024	1				EIA	
0004	0.005	1					0.001	1									Med+	
0005	0.023	3															M-LIA	
0006												0.01	1					Preh?
0007	0.133	7					0.021	2		0.021	5						L.11th-12th c.	
0009	0.008	2			0.008	1											L.11th-12th c.	LMed??
0010	0.024	3								0.001	3	0.018	3	0.003	1		M-L.-13th c.	
0011	0.058	5										0.009	1				EIA	
0023	0.013	7															Med	
0030	0.023	3															EIA?	
0031												0.643	26					Preh?
0032	0.014	3															RB	
0033			0.028	1														
0034	0.002	1										0.002	1				EIA?	
0036												0.004	2					
0037	0.021	1															IA?	
0038	0.005	1															IA?	
0039												0.077	4					Preh?
0040			0.022	3								0.005	1					Preh?
0041														0.033	2	4 Ae objects		PMed
0045	0.093	4			0.106	4						0.023	2				12th-13th c.	LMed?
0046	2.068	154										0.324	8			5+ frags charcoal	L.12th-E.13th c.	
0049												0.003	1					Preh?
Total	2.559	204	0.05	4	0.114	5	0.026	4	0.019	0.022	8	1.142	51	0.726	14			

POTTERY ANALYSIS - SSM 001

	Context	OP No.	Fabric	Fabric No	Sherd	Form	Rim Form	No.	Weight/g	Abrasion	Date
1	0001	0001	IAFT	0.41	BD			3	22		EIA
2	0001	0023	EMW	3.1	BSB			4	7		11th-12th c.
3	0001	0023	MCW	3.2	BD			3	6		L.12th-14th c.
4	0001	0030	IAFF	0.411	BD			3	23		EIA
5											
6	0002	0002	IAFT	0.41	BD			1	13		EIA
7		0002	OXRC	1.47	BD			2	9	Y	4th c.
8		0002	RBSH	1.9	BDR	4	13	2	19		L.3rd-4th c.
9		0037	IAOT?	0.43	BD			1	21		M-LIA?
10											
11	0003	0003	IAFT	0.41	BD			1	6		EIA
12											
13	0005	0005	IAFT	0.41	BD			2	19		EIA
14	0005	0005	IAQT	0.42	BD			1	4	Y	M-LIA
15											
16	0006	0004	MCW?	3.2	BD			1	5	Y	L.12th-14th c.
17											
18	0007	0007	IAFT	0.41	BD			2	28	Y	EIA
19	0007	0007	IAFF	0.411	RM	BL		1	54	Y	EIA
20	0007	0007	EMW	3.1	BD			4	51		11th-12th c.
21	0007	0038	IAQT?	0.42	RM		UPP	1	5		LIA?
22											
23	0009	0009	IAFF	0.411	BD			1	4		EIA
24	0009	0009	EMW	3.1	BD			1	4		11th-12th c.
25											
26	0010	0010	RBGW?	1.1	RM		2?	1	6	Y	RB
27	0010	0010	RBGM?	1.21	BD			1	2	Y	RB
28	0010	0010	MCW	3.2	RM		H1	1	16		M-L.13th c.?
29											
30	0011	0011	IAFT	0.41	BD			4	50		EIA
31	0011	0011	IAFT	0.41	BS			1	8		EIA
32											
33	0032	0032	IAFF	0.411	BD			1	2		EIA
34	0032	0032	RBGW	1.1	BD			2	12		RB
35											

POTTERY ANALYSIS - SSM 001

	Context	OP No.	Fabric	Fabric No	Sherd	Form	Rim Form	No.	Weight/g	Abrasion	Date
36	0034	0034	IAFT	0.41	BD			1	2		EIA
37											
38	0045	0045	EMW	3.1	BD			1	43		11th-12th c.
39	0045	0045	MCW	3.2	BD			1	26		L.12th-14th c.
40	0045	0045	MCW	3.2	BD			2	24		L.12th-14th c.
41											
42	0046	0046	EMW	3.1	BD			61	72		11th-12th c.
43	0046	0046	EMW	3.1	BS			5	174		11th-12th c.
44	0046	0046	EMW	3.1	RM	JR	B4	2	64		L.12th-E.13th c.
45	0046	0046	EMW	3.1	RM	JR	FTB	1	10		11th-12th c.
46	0046	0046	EMWG	3.11	BD			10	120		11th-12th c.
47	0046	0046	EMWG	3.11	BS			1	27		11th-12th c.
48	0046	0046	EMWS	3.14	BD			25	422		11th-12th c.
49	0046	0046	EMWS	3.14	BS			4	108		11th-12th c.
50	0046	0046	EMWS	3.14	BBR	JR	B2?	31	566		11th-12th c.
51	0046	0046	EMWS	3.14	RM	JR	INP	1	33		11th-12th c.
52	0046	0046	EMWS	3.14	RM	JR	B2	1	35		11th-12th c.
53	0046	0046	EMWS	3.14	RM	JR	INP	1	28		11th-12th c.
54	0046	0046	EMWS	3.14	RM	JR	EV	1	21		11th-12th c.
55	0046	0046	EMWS	3.14	RM	LJR	B2?	1	15		L.12th c.?
56	0046	0046	MCW	3.2	RM	JR	B2?	1	75		L.12th-13th c.
57	0046	0046	MCW	3.2	RM	JR	H1	1	28		M-L.13th c.
58	0046	0046	MCW	3.2	BDR	JR	B2?	7	270		L.12th-13th c.

SMALL FINDS LIST - SSM 001

OP	Material	Category	Find type	Description	Period	Date
0001	Fe	Misc tool?	Blade tool	Fragment of blade or strap?	Med/PMed	
0001	Ae	Metalworking debris		Bar. Hammered surface?		
0001	Ae	Misc fitting	Washer	Small cast washer.	PMed	
0001	Pb	Building	Window lead	Small circular fragment of solder from came. Small piece of glass in situ.		
0010	Fe	Building	Nail	Small bent nail.		
0012	Fe	Building?	Nail?	?Rectangular section. Possibly chisel.		
0013	Fe	Misc fitting?	Mount?	Large irregular triangular plate.	PMed	
0014	Fe	Dress accessory	Patten	Large oval patten with attachment terminals.	PMed	
0015	Fe	Misc fitting	Hook?	Possible window catch or fire hook, or other fitting. Long thick wire hook.	PMed	
0016	Fe	Unknown		Need X-ray.		
0016	Fe	Building	Nail?	Or part of other 0016?		
0017	Fe	Horse furniture?	Buckle?	Large D-shaped buckle frame?		
0018	Fe	Building	Nail.	Square section?		
0019	Fe	Building	Nail.	Fragmentary.		
0020	Pb	Metalworking debris	Spill	Irregular spill.		
0021	Pb	Metalworking debris	Spill	L-shaped spill.		
0022	Fe	Building	Nail.	Shaft only, square section.		
0024	Ae	Metalworking debris? Waste?		Sheet fragment, some edges cut.		
0025	Pb	Metalworking debris? Spill?		Rough semi-circle, broken at one edge.		
0026	Ae	Unknown		Rectangular sheet. X-ray needed.		
0027	Ae	Dress accessory?	Stud	Domed stud head.	PMed	
0027	Pb	Metalworking debris? Waste?		Tapered fragment of ?Pb with triangular section.		
0028	Ae	Metalworking debris? Waste?		Irregular sheet fragment.		
0029	Ae	Dress accessory?	Strap end?	Folded sheet strap end? Trapezoid, with 'arms' extending from each outer corner.		

SMALL FINDS LIST - SSM 001

OP	Material	Category	Find type	Description	Period	Date
0029	Ae	Horse furniture?	Mount?	Domed circular mount with attachment loop on edge (broken).		
0041	Ae	Dress accessory	Fastener	Button and loop fastener. Class III: teardrop type	RB	L.1st-2nd c.
0041	Ae	Misc fitting		Rectangular plate with one soldered side (other side lost?). Two rivet holes near one end, both ends broken. Inside has raised corrugations with triangular sections - very regular, Grip? PMed?		
0041	Ae/Sn?	Dress accessory?	Button?	Solid plano-convex button with ?tin skin and Ae pin with small washer. Could be cufflink?	PMed.	
0041	Ae?	Unknown		Half a ring with folded inner side and irregular outer edges. Possibly a fitting, washer, or waste?		
0041	Fe	Unknown		Lump. Cross-section appears tapered.		
0041	Fe	Misc tool?		Curved blade? Or possibly horseshoe fragment. Tapered section		

APPENDIX VII

MAP SEARCH

The Suffolk Record Office (SRO) in Ipswich was visited on 14 August 1997, in order to examine all the immediately available maps of this area.

The object of the map search was to identify any structures or field boundaries which may once have existed in the area, and which may have been identified either by the aerial photographs or during the course of the excavations, or which could be related to deposits revealed during the archaeological work.

Early maps of the region, the earliest being Speeds map of 1610, are at too small a scale to show any details of field layouts, etc.

The earliest useful map of the area is a survey carried out in 1731, and drawn up in 1733, by William Brasier, which shows the lands owned by individual landowners in East Bergholt and Stratford St Mary (SRO ref. V5/5/3.1). The area to the east of Overhall Green Lane, now called Dead Lane, which includes SSM 001, was owned by Thomas Grey, Gent (Map no. 84). The major difference between the field layouts in 1731 and now is that the field containing SSM 001 was divided into three, and the field to the east into two (map 1).

By the production of the Tithe Map in 1837 (SRO ref. P461/243), the only change was the amalgamation of the two fields numbered 2 & 3 on the 1731 survey (map 2).

The next map held in the Record Office was the 25" 2nd edition Ordnance Survey map of 1902 (Sheet number 87/3). By this time, the boundary dividing the field to the east in two had disappeared (map 2).

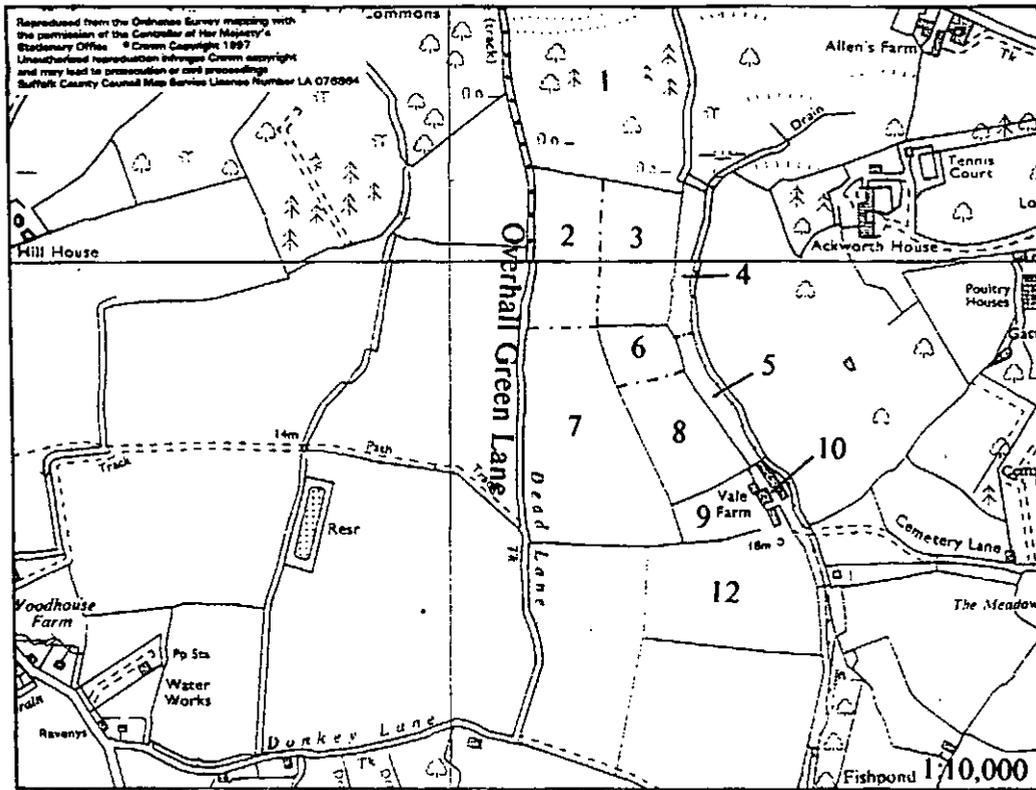
The final map studied was the 6" provisional Ordnance Survey map of 1967 (Sheet TM 03 SE), by which time the fields had assumed their present layout.

The fields on the 1731 survey, and in the 1839 Apportionment which accompanies the Tithe map, are all named (see table below).

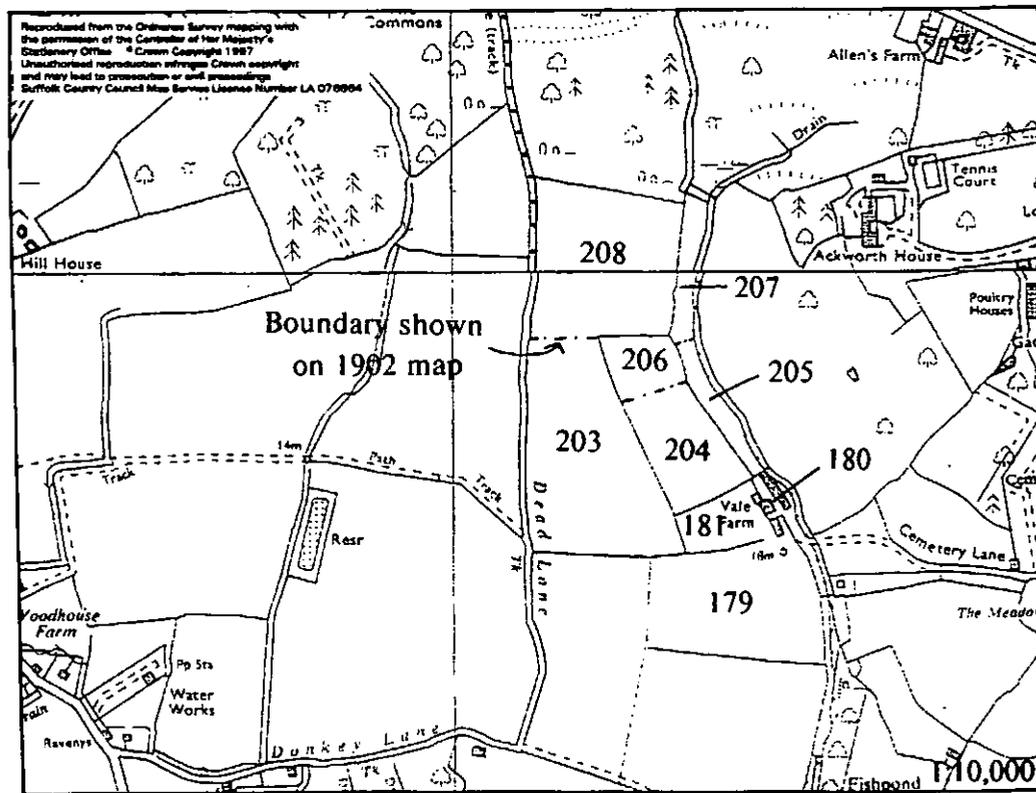
1731 No.	1731 Name	Tithe No.	Tithe Name
1	Foxhill Field	-	-
2	Upper 4 Acres	208	Nine Acres
3	Lower 4 Acres	"	"
4	Long Fenn	207	Further Fenn
5	Long Fenn	205	Home Fenn
6	Middle Pittle	206	Two Acres
7	Stony Field	203	Stoney Fields
8	None Such Field	204	None Such
9	Barn Pittle	181	Home Field
10	Buildings	180	House, Garden, Yards, etc
12	Stratford Hill	179	Stratford Hill

For the most part, the names of the fields do not provided any information as to any possible historical background of the area, being generally descriptions of their size or location. However, the one possible exception to this is the field which contains the majority of the cropmarks, recorded as field number 7 on the 1731 survey, and number 203 on the Tithe map, and which is called Stony/Stoney Field on both. In Suffolk, this is often a reference to an earlier settlement or occupation site. It could be that the possible pits/occupation debris shown on the air photo plot could be the remains of structures, which could have lead to the name Stony Field being adopted.

It is interesting to note that the aerial photographs only identified one of the pre-existing field boundaries identified from the early maps, that dividing the field to the east in two, which disappeared between 1837 and 1902. None of the other boundaries can be identified.



Map 1 – showing 1731 field layout from survey by W. Brasier (SRO V5/5/3.1)



Map 2 – showing 1837 Tithe Map (SRO P461/243) & 1902 O.S. map field layouts