Archaeological Field Unit

Archaeological Recording along the A1 Water Pipeline, Sawtry

R Heawood and S Leith
1994

Cambridgeshire County Council
Report No A 26

Commissioned By Fenland Hydrotech Ltd
Archaeological Recording along the A1
Water Pipeline, Sawtry
(TL 1745/8346 - 1799/8074 & TL 1755/8349 - 1826/8015)

R Heawood BA MA PIFA
S Leith BA MA

1994

Editor T Reynolds MA PhD Cantab

Report No A 26

Archaeological Field Unit
Cambridgeshire County Council
Fulbourn Community Centre
Haggis Gap, Fulbourn
Cambridgeshire CB2 5HD
Tel (0223) 881614
Fax (0223) 880946
SUMMARY

In July and August 1993, Cambridgeshire Archaeology conducted an archaeological recording brief, on behalf of Fenland Hydrotech Ltd, along the route of two water pipelines being laid on either side of the A1. These pipelines are being diverted outwards from their existing routes as part of the A1 Widening Scheme, and the sections monitored for this recording brief run from Sawtry (TL 1745/8346 and TL 1755/8349) south to near Odd Quarter Wood (TL 1799/8074 and TL 1826/8015). A small number of modern features were recorded, but also the remains of medieval Ridge and Furrow cultivation, ploughed out and invisible on the surface. This was located where the route passes to the north-east of the scheduled medieval earthworks, now severely plough damaged themselves, at TL 175/813 (Scheduled Ancient Monument 171).
Figure 1 Location of Pipeline Route
INTRODUCTION

During July and August 1993, Fenland Hydrotech Ltd re-routed the existing water pipelines running on either side of the A1 South of Sawtry as part of the A1 Widening Scheme. The sections involved extend from TL 1745/8346 and TL 1755/8349 in the north, to TL 1799/8074 and TL 1826/8015 in the south. Topographically, the routes traverse the lower slopes of a scarp of upland rising out of the fen, in the north dropping down to cross the fringes of a former fenland embayment (Hall 1992). The underlying geology consists of Oxford Clay, but this is covered by clayey Till (boulder clay) with occasional patches of glacial gravels. On the fringes of the fen edge embayment, the clayey Till is in turn covered by a deposit of post-Roman alluvium.

Two main areas of archaeological interest were identified from the county Sites and Monuments Record (SMR) and two recent syntheses relating to this area (Hall 1992, Pelling and Leith 1992). South of Whitehall Farm, the western pipeline runs within 200m of a complex system of medieval earthworks, now partly ploughed out, (SAM 171, Fig 1), so that outlying features or associated field systems might be expected. At the northern end, the point at which the route crosses the fen edge embayment has been considered to be high in archaeological potential; certainly there is existing evidence for Romano-British and medieval settlement to the north (SAM 172, SMR 01567 and 01333a, see below, p3, 4).

ARCHAEOLOGICAL BACKGROUND

In the immediate area of the pipeline, there is no existing evidence for pre-Roman settlement. Hall records a small number of find spots of Neolithic flints and pottery in Wood Walton and Connington parishes some kilometres to the north and east, and notes that Bronze Age finds are less well represented although Sawtry Fen has produced a Bronze Age axe-hammer (Hall 1992 33,38). These find spots tend to be clustered around the Bronze Age fen edge, and even at the low-lying northern end of the pipeline, the Bronze Age fen lay at least 1 km to the east. No Iron Age sites have been identified on the route, although many are known on the boulder clay plateau further south (Hall 1992, 38).

Two Romano-British sites are known in fields north and north-west of Sawtry village (Hall 1992,38), both c 1.5km from the northern end of this section of the pipeline. Two additional sites producing Roman period artefacts lie c 0.8 km to the north, but are rather more complex. On Tort Hill (SAM 172, SMR 01329b, 01567, TL173/842), excavation in 1939 produced Roman pottery and the site was later scheduled as an earthwork 'Roman village'. David Hall argues that most of the earthworks are clearly medieval, so that later paddocks, ponds, and ridge and furrow are superimposed over an earlier Roman site. A ring ditch on the crest of the hill may represent a seventeenth century gun emplacement. To the east, a mixed deposit of Roman and medieval pottery may represent dumping of waste from the Tort Hill site. Overall, it seems that there was little Roman period settlement on the fen edge in this area, with more intensive occupation on the Till of the upland (Hall 1992).

No known archaeological evidence relating to the Saxon period exists for the area of the pipeline, and it has usually been asserted that heavy soils such as those predominating here were regarded as unsuitable for settlement at this time (Hall 1992). Sawtry parish, first recorded as Saltreda ('Salters' stream') in 1086 (Hall 1992), has several medieval remains. Sawtry Abbey, demolished in the sixteenth century, and Sawtry Judith, a grange of the Abbey deserted at the same time, both lie at least 1.6km east of the pipeline route. North of the pipeline route, the earthworks on Tort Hill have already been
referred to, whilst slightly to the east, at TL 1756/8393, is the grave yard of St. Andrews Church, the building itself having been demolished in 1880 (Pelling and Leith 1992).

In addition, an impressive network of medieval ridge and furrow field systems stretches north on either side of the A1 for some 1km beyond the present pipeline, identifiable either as extant earthworks or as cropmarks. Returning to the immediate route of the pipeline, west of the A1, at TL 1765/8185, it runs within 20m of the eastern edge of a field with surviving earthwork ridge and furrow, and at TL 1785/8135, within 100m of field systems visible as cropmarks apparently associated with large scale scheduled medieval earthworks (SAM 171, Pelling and Leith 1992). These earthworks, possibly representing a further grange of Sawtry Abbey, have unfortunately been severely damaged by recent ploughing, except where a small area is protected by the presence of woodland. East of the A1, at TL 1795/8150, the pipeline runs within 60m of ridge and furrow surviving as earthworks.

METHODS

The laying of the pipeline involved the client stripping the topsoil from an easement of 8-10 m width by mechanical excavator. After an interval which varied greatly, a pipetrench was dug, again by mechanical excavator, c 1.0-1.5m deep and 0.5m wide. It was intended to lay the pipe and backfill immediately after opening the trench, so that there was typically no more than 100m of pipetrench available for inspection at any time.

The archaeological monitoring consisted of visits to the site to walk over the surface of the stripped easement and identify any archaeological features or artefacts that might be visible. The sides of the pipetrench were also inspected so that any archaeological features visible in section could be located, and the spoil was inspected for artefacts. The brief draws a distinction between 'occasional' monitoring necessary south of TL 175/827 west of the A1, and TL 177/827 to the east, and 'detailed' monitoring north of these points. Where detailed monitoring was required, visits were planned with the aim of inspecting the sections along the full length of the pipetrench, as well as viewing the easement and spoil. It had been anticipated that there would be at least two gangs working at any time, increasing the length of pipetrench open for observation. In fact, logistical difficulties and the need to carry out tasks such as fencing meant that often no more than 100m of pipeline was open, restricting the proportion of the pipetrench that could be examined in a limited number of visits. However, the surface and spoil were inspected so that coverage 'in plan' was maintained. In both areas of the pipeline, features observed were recorded in plan and section, and those features not obviously modern were excavated.

RESULTS

Intensive monitoring, east of A1 (TL 1755/8349-TL 1775/8270)

When the soil profile here was recorded, a uniform layer of yellowish brown silty clay was observed immediately beneath the topsoil, c 0.3m thick and apparently alluvial in origin. At this point the pipeline route traverses a fen edge embayment, and this deposit appears to be the post-Roman alluvium identified by David Hall (Hall 1992). No features were observed in this silty clay, with the exception of a single darker band, 36m wide. This was of a very similar silty clay, but was dark greyish brown in colour and
showed up very distinctly. It was centred on TL 1775/8300, and was thought to represent a former inlet in the fen.

The yellowish brown silty clay sealed a bluish grey and yellowish brown mottled clay (boulder clay). Distinct features were intermittently present within this mottled clay, around TL 1774/8280. They were filled with strong brownish yellow sands and gravels with widely variable clay content, and c 5% large pebbles. It seems certain that these were natural in origin, and in places they clearly undercut the mottled natural clays.

**Intensive monitoring, west of A1 (TL 1745/8346 - TL 1753/8268)**

In the first field south of Fen Lane, around TL 1750/8335, the present ground surface had been made up with c 0.45m of mixed clay and modern rubble. Beneath was a brown clay silt buried soil c 0.20m thick, probably of recent origin. This overlay grey and yellowish brown mottled clay (boulder clay). No archaeological features were visible.

In the next field, between TL 1752/8326 and TL 1753/8322, a linear feature c 33m long x 0.9m wide was recorded. To the north it came to an indistinct butt-end, whilst to the south it extended into the eastern section of the easement. The fill, of redeposited blue grey and yellowish brown natural clay, was very clean in appearance, with individual lumps of clay still distinct. This seemed certain to be a modern feature.

No other features were visible north of Green End Lane. The soil profile consisted simply of topsoil overlying mottled grey and yellowish brown clay.

**Occasional monitoring, east of A1 (TL 1775/8270 - TL 1826/8015)**

A small number of modern or natural features were recorded. At TL 1785/8228, c 0.4km north of the B1090 Wood Walton Road, the pipeline route crossed a spread of modern rubble 36m in length, containing modern brick, tile, glass, and ceramics. Immediately east of TL 1798/8200 was a sub-circular depression of dimensions c 7 x 12m filled with topsoil and containing recent root material, likely to be a large tree bowl. Just north of the B1090, between TL 1806/8194 and TL 1809/8192, a dark linear feature extended diagonally across the easement, c 45m long x c 0.9m wide. The dark grey/black organic fill and finds of recent wood and root material and a horseshoe suggested that this was a recent hedgeline.

**Occasional monitoring west of A1 (TL 1753/8268 - TL 1799/8074)**

North of Coppingford Road, at TL 1774/8193, the existing oil pipeline was observed as a linear feature with a clean redeposited clay fill. South of Coppingford Road, the route crossed a roughly rectangular spread of modern building rubble with dimensions c 5m x 15m, at TL 1783/8163. A linear feature 10m long x 0.8m wide was visible extending diagonally across the easement immediately west of TL 1787/8140. This was excavated and found to be very shallow, 0.25m deep, with concave sides of gradient c 2 in 1, and a rounded base. A shotgun cartridge found towards the top of the mid grey brown silty clay fill suggests a modern date.

Of much greater interest are a series of parallel linear features recorded extending from south-west to north-east across the easement surface between TL 1782/8170 and TL 1783/8163. These appear to be furrows c 2m wide filled with topsoil, and with the centre of each furrow c 6-8m apart. It seems that some evidence of ridge and furrow cultivation has survived beneath the topsoil here after all undulations on the surface have been completely ploughed-out.
CONCLUSIONS

The small number of probable modern features recorded appear to be of little archaeological significance. The discovery of ploughed out ridge and furrow south of Whitehall Farm is more interesting, as it demonstrates that the medieval field systems in this area were more extensive than the portions surviving today as cropmarks or upstanding earthworks.

There was no firm indication that archaeological features would be present in the immediate area of the pipeline, and few were identified. The observation of pipeline easements and trenches remains problematical. Constraints of time and budget mean that numbers of visits must be limited, and easements often have to be inspected after heavy machinery has been driving over them. Agreements between clients and landowners preclude the mixing of topsoil and subsoil, so that it may not be possible to reach agreement to have the surface of the subsoil cleaned by machine. Nevertheless, in this case, with favourable weather and a pipeline route that had mostly not been subject to alluviation, there is no reason to suppose that major features remained undetected. The overall absence of archaeological features in the easements on either side of the A1 should not, though, be taken as an indication that the area of proposed road widening itself is without archaeology. Here it might be thought more likely that Roman period features and artefacts would be present, closer to Ermine Street, a major Roman highway the route of which is here followed by the present A1.
ACKNOWLEDGEMENTS

The authors would like to thank Fenland Hydrotech Ltd for funding the project, and in particular Stephen Winpenny, John Armstrong, and Alan Kingsley for their cooperation and assistance. Thanks are also due to Tim Malim and Tim Reynolds, Project Managers, and to Scott Kenny (illustrator, Figure 2).

REFERENCES

Cambridgeshire Sites and Monuments Record

Hall, D, 1992  *The Fenland Project, Number 6: The South-Western Cambridgeshire Fenlands*, East Anglian Archaeology Report No 56
