CHIPPENHAM PARK AND FEN RIVER PIPELINE 1991

Cambridgeshire County Council
Rural Strategy
CHIPPENHAM PARK AND FEN RIVER PIPELINE
ARCHAEOLOGICAL ASSESSMENT
1991

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Report No. 40  Detail from 1712 Survey of Chippenham (Cambridgeshire Record Office)
ABSTRACT

A watching brief was maintained while a waterpipe was being laid as a support pipeline for Chippenham park and the Fen river as part of the NRA's Lodes Granta Groundwater development scheme (Fig.1). Although the pipeline went through a known Bronze Age barrow field and a post-medieval estate, no archaeological features were observed apart from a linear feature adjacent to the post-medieval canal.

1.0 INTRODUCTION

During the construction of a support pipeline for Chippenham park and the fen river by the National Rivers Authority (NRA), an archaeological watching brief was maintained in compliance with the County’s Archaeological Policy (2.0). The work was completed by the author on behalf of Cambridgeshire County Council Archaeology Section and financed by the NRA.

An initial desktop evaluation by the County Archaeology Office revealed that the proposed 5km pipeline would go through two known archaeologically sensitive areas:

- A Bronze Age barrow field at the southern end of the pipeline (Fig.2)
- A Post Medieval park (Fig.1)

These would be subjected to a constant watching and recording brief with limited excavation where necessary.
LOCATION OF PIPELINE THROUGH THE CHIPPENHAM BARROW CEMETERY

Cambridgeshire County Council
Department of Property Archaeology Section

Based upon Ordnance Survey Map No. [Edit!]
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2.0 COUNTY ARCHAEOLOGICAL POLICY

The need for effective management of the county's archaeological resource is clearly recognised by Cambridgeshire County Council. It is the Council's policy to safeguard nationally important ancient monuments and other significant archaeological sites.

Pipelines over 500 metres in length require archaeological monitoring with provision for excavation where necessary. For pipelines under 500 metres in length the County Archaeology office needs to be consulted and a desktop evaluation completed followed by archaeological works if any sites are detected.

Other important statements include the necessity to excavate and record sites with minimal loss of information 'where there is no over-riding case for preservation of an archaeological site'.

Archaeological planning in Cambridgeshire is essentially based on the County Sites and Monuments Record (SMR). This consists of over 11,630 recorded entries, varying from find spots of individual artifacts to extensive monuments and archaeological landscapes. 250 of these are currently deemed worthy of statutory protection and are now designated as scheduled ancient monuments by the Secretary of State for the Environment.

In Cambridgeshire the majority of archaeological sites and monuments only survive below the ground. These can sometimes be identified from aerial photographs, in which they show up as variations in overlying crops. However, there are many sites which do not show up in this way and whose existence is, therefore, probably not recognised. It is accepted that the SMR holds only a fraction of the surviving archaeological remains in Cambridgeshire. Previously unknown sites are continually being discovered. For this reason the lack of recorded evidence cannot be taken as proof that a particular area is archaeologically sterile.
3.0 BACKGROUND

AREA 1 (Fig.2) - Here the pipeline went through a Bronze Age barrow field. Excavations on most of the barrows were completed by C.S. Leaf in the 1930s' (Leaf, 1934, 1939). Further excavations were carried out by Martin in 1973 (Martin, 1977) prior to the construction of the Newmarket bypass. The cemetery has since been continually ploughed with the result that little visible survives on the surface.

Although the pipeline did not go through the site of any of the barrows, it passes between the sites of three barrows which could reveal previously unknown associated features and burials.

SMR No. 07476 07448a TL/670-666: A Bronze Axe, TL/6715/6666: A Bronze Age bowl barrow 30m in diameter and 1m high (before excavation). Excavated in April 1973 in advance of destruction by roadworks for the Newmarket bypass. It was found to be a natural tumulus which had served as a focus for five inhumation graves and a cremation cut into the summit. Only the largest grave (11) contained grave goods: jet bead, pottery vessel, animal bone and worked flint tools.

" 07448b TL/6727/6677: A Bronze Age? mound Excavated in April 1973 in advance of roadworks for the Newmarket bypass; this feature was found to be a natural tumulus. No inhumations or features were recorded.

" 07448c TL/6721/6697: An unexcavated Bronze Age bowl barrow crossed by a farm track.

" 07448d TL/6730/6695: A Bronze Age? bowl barrow?, 34m in diameter and 0.10m high in 1991. Presently, the site is unexcavated and in a ploughed field.

" 07448e TL/6742/6693: A Bronze Age bowl barrow, 45m in diameter and 0.10m high in 1991. Presently, the site is unexcavated and in a ploughed field.

" 07448f TL/6755/6702: A Bronze Age? bowl-barrow?, 40m in diameter and 0.70m in 1977 but is now indistinguishable from surrounding field. Presently, the site is unexcavated and in a ploughed field.
AREA 2 (FIG.1) - This area was also of potential interest due to its proximity to the Post-Medieval canal and parkland landscape. The creation of the parkland in the late 17th century resulted in the destruction of part of the main village. This should have had the effect of preserving traces of the medieval houses and trackways.

The construction of a service trench in 1988 on the east side of the house disturbed the burial of a woman with a small iron knife (SMR No.09768). The skeleton had been removed prior to an inspection by Dr. G.W.ait of the County Archaeology Office, although he was able to determine an east/west orientation. A skeletal analysis completed by Corinne Duhig (Appx.A).

4.0 STRATEGY

This assessment was completed using a variety of methods. Initially, the Sites and Monuments Record (SMR) was searched for all recorded sites and find spots on or adjacent to the proposed pipeline. These areas were then subjected to a detailed machine watching brief during the initial topsoiling of the easement. On the remainder of the pipeline, where no sites were known, a watching brief on a more ad hoc basis was observed, allowing the contractors to open between 500-1000 metres before walking along the exposed easement. This method has a major disadvantage, namely being that in the intervening period between checks the contractors use the easement as a roadway for their vehicles. This largely obscures any small archaeological features, postholes, small pits, ditches and gullies. A combination of walking the easement and checking the spoilheaps for artefact scatters proved to be an efficient method, through which no major archaeological features/sites were missed.

Where any possible features and/or artefacts scatters were noted very limited work was completed to assess the nature, period and validity of the site. Recommendations, based upon this work, could then be made as to whether further work was required.

5.0 RESULTS

5.1a RESULTS (FIG.1) - The northern end of the pipeline (outfalls 1,2,3a,3b) crossed land on which there was no known sites and where we would not expect to find any, being fenland. Here the easement was stripped to a depth of 50 cms below the topsoil, which was still within the peat deposits, although occasionally high outcrops of the underlying geology (chalk) appeared. It is on such "islands" that archaeological sites/features could be expected to be found. However, no archaeological features were recorded within this stretch.

5.1b - Within the central section of the pipeline there were no recorded sites, although being on the fen edge sites would have been expected. Here again the excavated level was approximately 50 cms below the topsoil. Similarly, after walking the exposed easement there were no archaeological features or find scatters, only the underlying geology (compact light-mid orange/brown sandy silty/clay) with frequent ploughmarks cut into it.

5.2 MAP 1 (FIG.2) - This area being a known archaeological site, a Bronze Age barrow cemetery was subject to a detailed watching brief during the initial topsoiling of the easement. After removing approximately 50 cms of topsoil, to the natural geology (mid orange sands and gravel/clay with underlying/undulating chalk) it could be seen that there were no archaeological feature present. Cut into the natural geology were frequent panbusting marks, 10-15 cms wide. Within the area of the Barrow field a series of machine cut sondages (A,B & C) were excavated to ensure that features were not being masked by subsoil (FIG.2). This proved not to be the case.
5.3 MAP 2 (FIG.1) - Within the confines of the estate parkland the pipetrench (outfall 4) was dug directly, without an easement, to minimise the damage to the grass. As there were cattle in the field the trench had to be backfilled each night. As much as possible of this stretch of pipeline was subject to a detailed watching brief.

Work began in the park approximately 20 metres from the canal. Appearing to run parallel to the canal a square cut linear feature, showed in both sections 1.5 metres from the start of the pipetrench. The feature was sealed by 0.50 - 0.70 metres of topsoil and cut 1.5 metres deep into the natural chalk geology. It was filled by a mid-dark brown silty loam, with a lens, 20cms deep, of burnt material 60cms from the top of the cut. A fragment of burnt bone was retrieved from this layer.

6.0 DISCUSSION

6.1 This pipeline did minimal damage to the archaeological heritage and provided further knowledge into an important landscape and how it is being affected by agriculture.

6.2 Within the barrow cemetery the pipeline showed that there were no surviving archaeological remains on the pipeline route. Further to this it clearly demonstrated that as modern agriculture is cutting deeply into the natural geology, similar damage must be occurring over the barrow sites, a fact clearly highlighted by the loss in height, some 50 cms, since they were last recorded in 1973. This suggests there is the need for further work on the site to assess the state of preservation of the remaining unexcavated barrows.
REFERENCES

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APPENDIX A: SKELETAL ANALYSIS BY CORINNE DUHIG

(SMR No.09768)

Most of the bones of the axial skeleton of this individual are represented, if only by fragments, but the left arm, lower left leg, and the hands and feet are absent. The skull vault is badly broken, the facial area has not been preserved, but the mandible is almost complete. Parts of the vault are in poor condition, being heavily eroded.

This is the skeleton of a woman, as indicated by all aspects of the pelvis and the skull except for a prominent nuchal area. Considerable age is shown by the complete fusion of all vault sutures and the degenerative changes in the skeleton: rarefaction of the sacro-iliac joint, and total loss of mandibular teeth with subsequent resorption of the alveolar margin. The xiphoid process of the sternum has fused to the body, another indicator of advanced age. However, the vertebrae do not show the porosity and osteophytosis development of degenerative arthritis which would be expected in an aged person; a life without heavy manual labour is suggested.