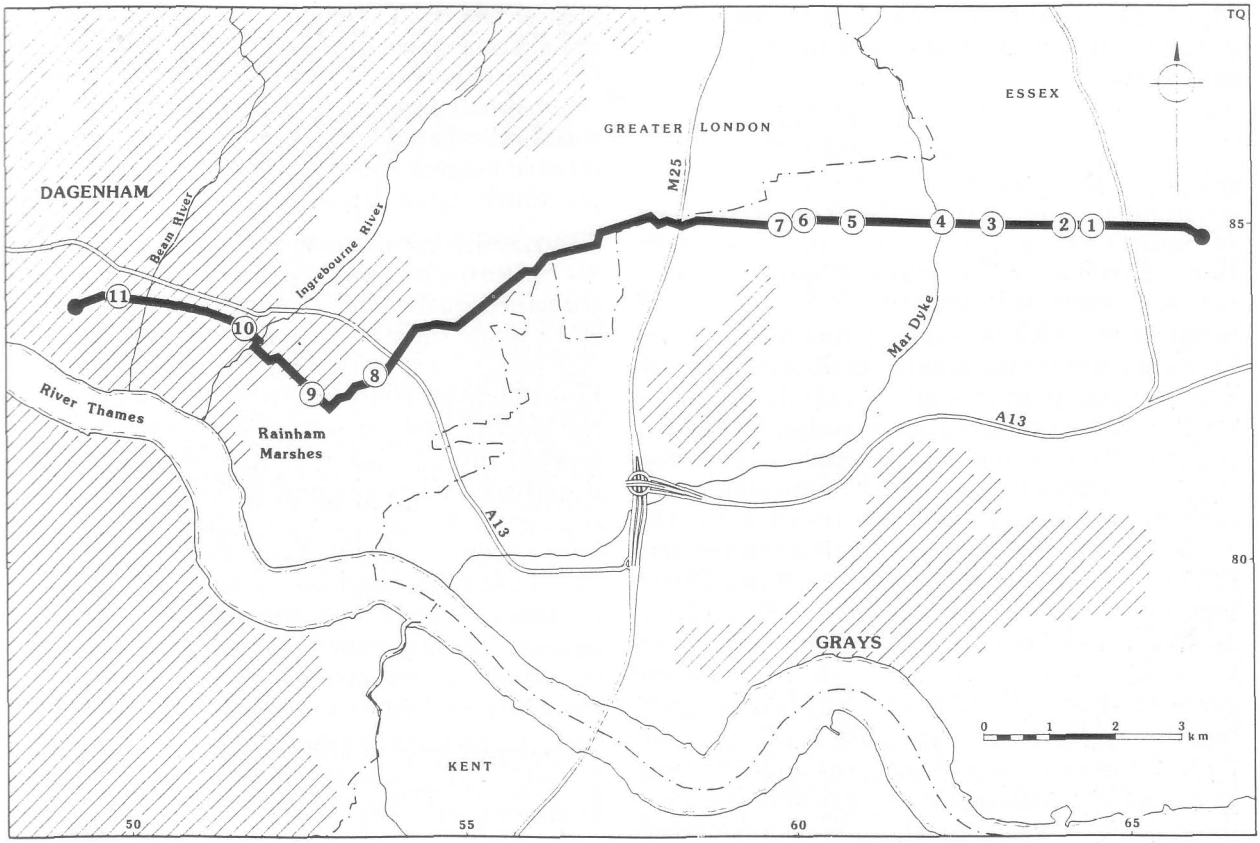

Fig. 1: Horndon-Barking Pipeline: route of the pipeline showing the major concentrations of archaeological and palaeo-environmental material. 1. undated ditch; 2. Conway's Farm; 3. Stringcock Fen; 4. Mardyke; 5. Grove's Cottages; 6. Grove's Farm; 7. the Wilderness; 8-10. Rainham Marshes peat deposits; 11. Barking Power Station.

Prehistory in the pipeline

Vaughan Birbeck
Ian Barnes

IN 1990 Wessex Archaeology was contracted by Pencol Engineering Consultants, on behalf of Barking Power Ltd, to undertake an archaeological desktop assessment, and to coordinate subsequent field assessment, of the route of the 24 inch Horndon to Barking natural gas transmission pipeline.

The pipeline was to run for 18km, from an existing gas pipeline at Horndon (TQ 6610 8380) in Essex, to Barking in Greater London, to supply the new Barking Power Station (TQ 4920 8274). It followed a roughly east-west route, initially for 14km as far as Rainham through open farmland on the fenland and gravel terrace and, thereafter, on the Rainham Marshes beside the Thames, through a mainly industrial landscape.

The desktop assessment, submitted in January 1991, highlighted a zone potentially of high archaeological interest between Dagenham and South Ockendon. Accordingly a project design for field evaluation was prepared allowing for mitigation measures to be taken in advance of construction. The fieldwork, co-ordinated and monitored by Wessex Archaeology, was undertaken by the Passmore Edwards Museum and Geophysical Surveys of Bradford Ltd during September and October 1992.

As part of the evaluation 2.5km of the route was augered to investigate peat deposits in the Rainham Marshes. A further 2.8km on the gravel terrace to the west of South Ockendon, where a number of

sites had previously been identified close to the pipeline route, were fieldwalked and geophysically surveyed.

The auger survey in the Rainham Marshes (Fig. 1, sites 8-10) confirmed that the underlying peat deposits (TQ 5100 8265 to 5255 8160) are of palaeoenvironmental interest. Fieldwalking to the west of South Ockendon identified small concentrations of artefacts to the south of Spring Farm (TQ 5420 8215), south of Warwick Lane (TQ 5550 8285) and north of Warwick Wood (TQ 5575 8315); at all three locations very small amounts of Romano-British and medieval pottery and tile were recovered. A small number of anomalies, forming incoherent patterns, was picked up by the geophysical survey; they coincided with two of the fieldwalking concentrations, Spring Farm and Warwick Lane. The evidence recovered suggested activity in the general vicinity rather then the presence of an archaeological site on the direct route of the pipeline. However, in view of the significant number of known sites in the general area of the route and the general archaeological background identified during the evaluation, a watching brief was conducted during all topsoil stripping and trenching as part of the construction programme. This was undertaken by teams from both Wessex Archaeology and the Passmore Edwards Museum between May and September 1993.

A total of 800 man hours was spent conducting this work. Any features identified during topsoil stripping were recorded and those threatened by imminent trenching excavated. A contingency was in place for an increase in team size in order to conduct an excavation should a previously unsuspected major site be uncovered. This contingency was never required, no major finds were made but a number of isolated discoveries were recorded.

Along the Essex section of the route[1] Late Bronze Age/Early Iron Age activity was recorded in the form of two ditches north of Thurrock and several intercutting ditches to the east of the Mar Dyke. A further possible prehistoric find was identified at The Wilderness (TQ 5978 8403) where a human cremation burial of a female adult was found in a shallow pit.

The peat deposits identified during the auger survey were further recorded during the watching brief. Within the alluvial deposits encountered west of the A13(T) New Road (TQ 5390 8190; Fig. 1, site 8) four major bands of peat were identified, frequently associated with relict tributary or braiding channels. In general the peats could be dated to the Middle-Late Bronze Age, largely through their relative heights above sea level in comparison to previously dated deposits.

Silty clay deposits examined over the county boundary beside the Mar Dyke (TQ 6210 8400; Fig. 1, site 4) contained quantities of worked and burnt flint and a single sherd of Late Bronze Age/Early Iron Age pottery was recovered. The only evidence of human activity recovered from the peat deposits in the Greater London section was a single piece of worked timber; a short length of hazel or alder roundwood recovered near Barking power station (TQ 4970 8285; Fig. 1, site 11). It had been chopped with a diagonal, slightly faceted cut at one end and may have been coppiced, though is not straight enough to suggest well managed or regularly cut coppice. It may have been a stake or round member of a trackway but could have been cut and used elsewhere, ending up in the peat as brushwood.

A moderate level of archaeological activity along the pipeline route is indicated by the results of the archaeological work. The positions of some of the archaeological features and deposits recorded suggest that they may be contemporaneous and directly associated with known sites or cropmarks in the vicinity.

Topsoil finds collected during the watching brief along the route to the east of the A13(T) New Road (Fig. 1, site 8) trunk road show no more than slight concentrations which could be caused by variations in ground or weather conditions at the time the collections were made. Small collections of worked flint, which may broadly be assigned to the later Neolithic-Bronze Age, were recovered along most of the route, though the greater part of the collection was retrieved from the terrace gravel.

On completion of the fieldwork a detailed report covering the watching brief was prepared by Wessex Archaeology for Barking Power Ltd. and for the Sites and Monuments Records of both Greater London and Essex. In due course the archive for the length of the pipeline in Greater London will be deposited with the Passmore Edwards Museum and that for the Essex section with Thurrock Museum.

1. V. Birbeck and I. Barnes forthcoming 'Archaeological assessment and monitoring of the construction of the Horndon, Essex to Barking, Greater London, Gas Transmission Pipeline 1991-93: the Essex Section' *Essex Archaeol Hist* 26.