



Archaeological Field Unit

**Car Dyke Roman Canal  
Waterbeach 1997  
Summary Report**

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1997

**Cambridgeshire County Council**

*Commissioned By Cambridgeshire County Council, English Heritage  
& South Cambridgeshire District Council*

**Car Dyke Roman Canal,  
Waterbeach, Cambridgeshire (TL 496642)**

## **SUMMARY**

During August and September 1997 an archaeological investigation was carried out at Waterbeach, Cambridgeshire, on the Roman Car Dyke Canal, at the point where it connected with the River Cam, near to Clayhithe and the village of Horningsea (Fig 1). The project was jointly funded by Cambridgeshire County Council (Property Department), English Heritage and South Cambridgeshire District Council (Conservation Committee).

The circumstance of the project arose as a result of the County Council's intention to sell the land (including adjacent fields). The area is one of known archaeological potential, however the southernmost section of the Car Dyke Canal, its start and connection with the River Cam, is not protected by *Scheduling* (Protection under the Ancient Monuments and Archaeological Areas Act 1979), nor is there any *covenant* on the land to ensure its future preservation, chiefly by protection from ploughing. In addition, the potential of archaeological remains, other than the Car Dyke Canal itself, was unknown. The surrounding area is a rich archaeological landscape, mostly visible from aerial photographs, however there has been no clear evidence of archaeology in the field in question. Nearby investigations (Robinson & Guttman 1996 - An Archaeological Evaluation of the Proposed Site of the Cambridge Rowing Trust Rowing Lake at Milton and Waterbeach, Cambs - Fig 1) would suggest that archaeology survives in the field, but that it may have been covered by a thick layer of peat or alluvium, thus masking these remains from the air.

The project aims were to:-

- (1) Investigate the relationship of the River Cam and the Car Dyke, with the potential to confirm its function as a canal.
- (2) Determine the extent of plough damage on archaeological features surviving in the land parcel. The field is presently grassland managed for hay, but has been in arable cultivation in the past.
- (3) Record archaeology associated with the Car Dyke and River Cam, including docks etc., industrial (in particular pottery kilns) and storage facilities, as well as any settlement evidence.
- (4) Examine the present water levels and waterlogging of archaeological deposits, with particular reference to the impact of the proposed Rowing Lake from Milton to Waterbeach.
- (5) Investigate the creation of a pocket park which would incorporate significant archaeological remains into displays, interpretation and access.

The key purpose of the Car Dyke project was to ensure the future protection of the site by having a fuller understanding of the archaeological remains, and if these were of a sufficiently high quality to include in any landsale a *covenant* to ensure the site would remain in pasture at the very least. Once the land was sold and no longer owned by the County Council, the opportunity to put such control on sales would have been lost forever.

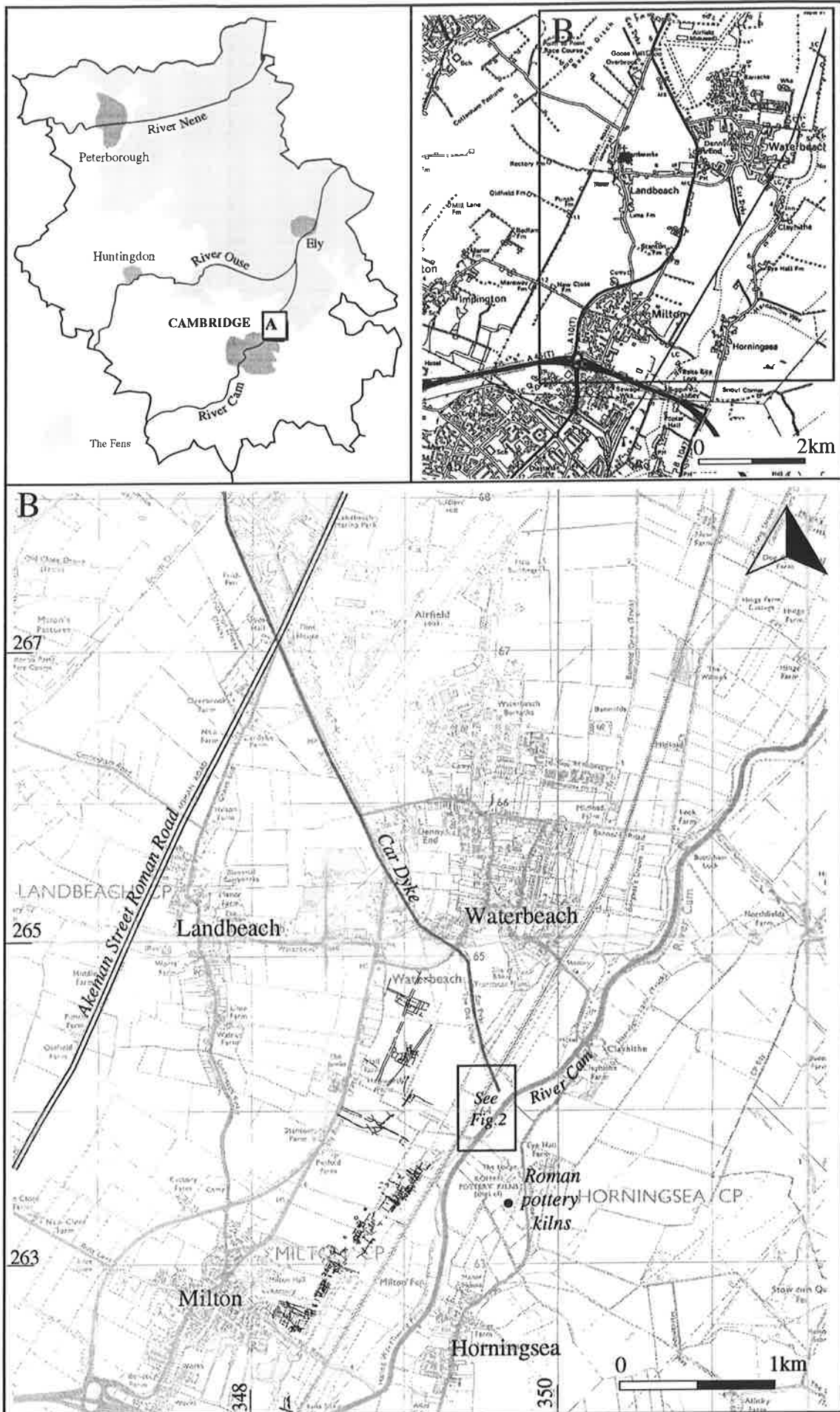
Reynolds 1993). It is likely that any lock would be away from the wider entrance point. It was also indicated that the eastern bank stops before its counterpart on the western side which suggests that there was some form of widening, possible for barge turning etc. Non-intrusive survey techniques could be used to confirm that there is indeed a docking area at that point. The eastern bank appears in the south-east facing section, but did not continue through to the north-west facing section of Trench I.

In addition to the canal, on its western bank, within 20m of the river, a Horningsea-style pottery kiln was discovered. The kiln survived in extremely good condition, with two other kilns nearby. As many as 8 kilns may be present within the field (3 clearly identified and 5 others suggested from surface remains on the banks of the Car Dyke) and this would take the total number of known Horningsea kilns up to 18, 12 of which are on the Waterbeach side of the river. The kiln contained rubbish material dumped once it was abandoned, and included pottery, tile and the fired clay roof or vent tiles, which may have collapsed into the kiln. The fired clay lining and support pilasters survived intact. The basal deposits of its final firing were identified and samples from this layer and the clay lining were taken by the English Heritage Ancient Monuments Laboratory for archaeomagnetic dating. This was to provide independent dating for the supposed mid-2nd century date for these type of kilns. The results of this survey however have been negative. No evidence for a superstructure (bricks or tiles etc.) was recovered and it is likely that the kiln had a turf roof, with clay plates (e.g. roof tiles) covering the flue and vents.

### Trench II & III

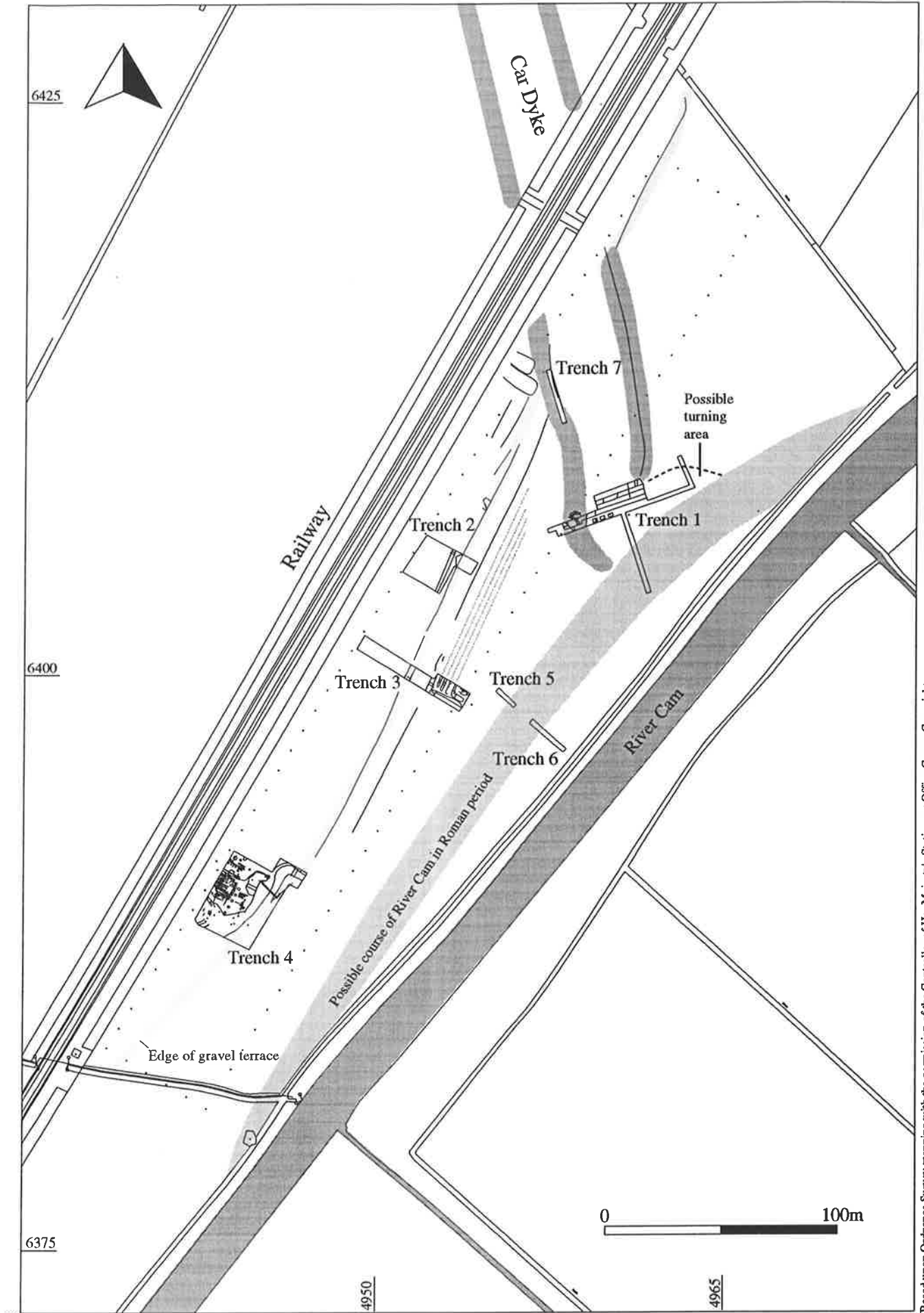
The negative results from geophysical surveys were confirmed by excavation. The geophysical survey indicated a linear feature, which was confirmed as a gravel bank which runs along the edge of the gravel terrace and alluvial flood plain. The bank has been enlarged as a flood defence, and probably doubled as a track. The bank is likely to be of Roman date, and may well be of late Roman date (3rd-4th centuries). The gravel bank *crosses* the Car Dyke banks, but it is not known whether it blocks the canal or is broadly contemporary with it. Clark (1947) discovered gravel causeways blocking the Car Dyke at Cottenham, dating to the late 4th century. A possible theory is that the bank was built up in the 4th century as a defence against rising water levels at a time when the canal may have gone out of use (a time of increased flooding and alluviation would have made its maintenance more difficult). The gravel bank is 1.5m wide and over 0.8m high, although this is mostly formed by a natural rise formed by the geology of the 1st terrace gravels. In front of this bank was a small ditch which contained no pottery. In Trench III a smaller bank was raised, and to the west (not flood side), was a ditch which contained Roman pottery.

Of interest in Trench III was a collection of peat and alluvial filled ditches, which ran both parallel to the gravel terrace (roughly north-south) as well as east-west towards the River Cam, lying beyond the smaller gravel bank. These features were cut into the alluvium of the flood plain. They appear to run for some distance along the site, possibly crossing the Car Dyke. The peat is known to have formed in the medieval or Post-Medieval period and these features are thought to be of at least medieval date. Their function is not known, although they are too closely spaced for drainage. A more probable function is that of a water meadow or cultivation in the flood plain, for which parallels can be found (Eric Wood in *Historical Britain* 1997) and there are references to the presence of water meadows off the Cam in the area (Victoria County History for Cambridgeshire). No artefacts were recovered from any fills to date these features.



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Figure 1 Location plan



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Figure 2 Trench plan



Cambridgeshire  
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Archaeology

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