Prehistoric, Saxon, and Medieval Features at a Quarry in Hinxton
1992
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On behalf of
Mineral Resources Ltd.
PREHISTORIC, SAXON AND MEDIEVAL FEATURES AT A QUARRY IN HINXTON.

TL 487 466

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PREHISTORIC, SAXON AND MEDIEVAL FEATURES AT A QUARRY IN HINXTON (TL 487 466).

SUMMARY

An archaeological watching brief was undertaken at the Hinxton gravel borrow pit between April and July 1992. Two areas were investigated. In area 1 several stone implements probably related to neolithic land use were found. In addition to this a rectilinear ditch (001), excavated in 1991 (G.Wait 1991) was further identified. In area 2 late Saxon or Norman ditches and a large pit-like feature of a later date were recorded. Four other ditches identified as later boundary ditches that survived into the post-medieval period were also trenched.

INTRODUCTION

Following an assessment excavation by G. Wait (Wait G. 1991) on 8 hectares of farmed land, an active watching brief was maintained from 21st April to July 1992, on behalf of Mineral Resources Ltd. This evaluation was conducted in conjunction with the gravel quarrying after the topsoil was stripped but prior to the more major excavation reaching the relevant areas.

GEOLOGY

The area (see fig 1) is located on first-second terrace gravels in the valley of the River Cam, to the north of Hinxton village and due east of Duxford. The underlying solid geology is middle chalk.

SOILS

The soils in this area are in the Moulton series, described by the soil survey as well drained, stony (locally very stony) brown sandy loams. The soil is categorised as grade 3a agricultural land.

TOPOGRAPHY

The topography of the area is essentially flat. Variations in elevation of 80 cm east-west peaking in the centre of the area at 25.87m and a slight rise from 25.75m to 26.69m to the south were observed across the field. A probable paleo-channel of the Cam is located immediately to the west of the area (see fig 2).

KNOWN ARCHAEOLOGY

Trial excavations by Dr.G.Wait in 1991 revealed a series of rectilinear features thought to be part of a Roman farmstead and its associated garden plots, paddocks and infields (Wait 1992). Scatters of artefacts were sparse and many of the features recognised by aerial photography were unidentifiable.

A plan of the parish of Hinxton in 1833 (see fig 5) shows that the site was farmed in strips as part of Whittlesford Bridge Field, with field boundaries that still exist as cropmarks. Several references on the Sites and Monuments Record for Cambridgeshire also occur nearby:

2
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<td>TL486/465</td>
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**METHODOLOGY**

Following Dr G. Wait's Archaeological assessment a watching brief was carried out, on behalf of Mineral Resources Ltd from 21st April - 24th July. Approximately 8 hectares of top-soil and sub-soil was removed by the contractors with the use of 4 metre wide mechanical grader. Archaeological features could be seen once the sub-soil had been stripped to the natural gravels, the depth of which varied throughout the site. Any features uncovered were planned and added to information gathered in the 1991 excavation. Excavation of most features was undertaken by hand, although seven trenches 10 metres in length, 1.75 metres wide were excavated by machine and the spoil sorted by hand in order to find dating evidence. The recording method used was the County Council's standard single context system. Plans and sections were drawn of each feature which were also photographed before and after excavation. Due to the nature of the work it was necessary to excavate all archaeology found within the gravel pit before it was destroyed by quarrying.
RESULTS
Two areas of archaeological interest were uncovered (fig 2), with reference to aerial photographs and observed cropmarks. Eighteen features were identified within these two areas.

AREA 1
Area 1 was situated to the east of cropmark site 09738 (fig 2) in the north western end of the gravel pit. Whilst clearing the topsoil from the area, several scatters of tile were collected but were unstratified. Removal of the subsoil showed a rectilinear ditch 001 and two features 002 and 003 (fig 3).

The ditch formed an enclosure and had a V shaped profile. A 1 metre section placed across its width contained very little apart from a few pieces of Bovid rib. After planning the feature it could be seen that it was a continuation of ditch 005 from Dr G Wait's previous excavation in 1991. The cleaning layer of the ditch produced three flints, a Bronze Age scraper and two possible Neolithic flakes. These have no relationship to the date of its construction but are of some interest. A late Neolithic transverse arrow head, was found on the spoil heap next to area 2, along with the other lithics found suggest some form of occupation (See Appendix).

Pit 002 a large circular anomaly was half sectioned and seen to be a shallow tree root bowl.

Pit 003 an irregular patch of lighter silty chalk close to ditch 001, was sectioned across the middle. The pale grey fill contained burnt flint, animal bone and a limited amount of early coarse pottery of no specific date.

AREA 2 DITCHES
11 ditches were identified in this area (fig 4). This includes a complex of north/south orientated ditches which had been recut several times during their period of use. At the northern end the ditches were cut by a later east/west orientated linear ditch 015.

A similar east/west orientated ditch 003 could be seen running west from the Roman settlement 08822 which has been unaffected by the quarrying.

The large rectilinear boundary ditch 017 abuts 003 at its western-most point.

The ditch complex 005 (fig 6), enclosed by the recut rectilinear feature 017, was investigated in order to confirm dating and phasing. Three sections were cut across the linear ditch 005 which ran north/south. It was later found to have an irregular U shaped profile suggesting that it was allowed to fill-in without repeat cleaning. The ditch contained a few fragments of animal bone and two sherds of abraded pottery. A possible recut was noticed in section, similar and probably contemporary to parallel ditch 012.

Ditch 012 (fig 6) also orientated on north/south axis and had a broad U shaped profile. At the ditch's southern terminus it had been cut by the later ditch 017. One fill was found containing many fragments of a large late Saxon/early Norman bowl. Excavation revealed a chalk lining covering its base, which may have been deliberately laid to seal the ditches on the naturally draining gravels.

Ditch 015 ran east/west across the site, from settlement site 08822. It cut through the ditch complex 005,006 and 012 into the western-most limit of the quarry. Two sections were cut across its width, section 1 revealed a broad U shaped profile with straight sloping sides in which there was a rich charcoal deposit. This ditch produced
sherds of medieval pottery (11th.-12th. Centuries). A further quarter section was excavated where ditches 015 and 006 crossed at 90º. It was discovered that ditch 015 cuts linear ditch 006 and therefore post dates 006.

Six machine-dug sections were placed across the boundary ditch (017) to obtain materials for dating. The rectilinear feature 017 and linear ditch 003 are marked on the map of the parish of Hinxton as field boundary ditches during 1833.

The section of trench 4 from the 1991 assessment excavation shows two other possible ditches on the same alignment as the modern field boundary 017, which needed to be investigated (001 and 018).

Section 4 (fig 7) shows a broad V shaped profile of ditch 011 where it splits away from the main ditch 001 half way along its north/south axis. Only a few artefacts were associated with it, one small abraded sherd of pottery, with a similar fabric to that found within ditch 015 Segment No 2, and a few fragments of animal bone. This ditch is considered to be contemporary with the parallel ditch complex 005. Ditch 001, which appears to be the initial phase of the boundary ditch, cuts 011 therefore post dating it.

The large U shaped ditch contained four fills, the first two caused by rapid slumping of the edges, and the second two by a gradual build up of sandy silts. Again only a small amount of animal bone was retrieved from within the top fills.

Ditch 018, a shallow broad U shaped ditch, yielded no finds, but had a similar fill to ditch 001 (1.2) and could be contemporary.

Ditch 017 (fig 7), the post medieval boundary ditch, which was cut along the same alignment as ditches 001 and 018, was seen in section. The ditch had a U shaped profile, which had been filled quickly after its construction. Little in the way of artefacts was recovered, apart from a piece of modern Victorian brick found within the top fill. In section 4, ditch 017 could be seen cutting through both ditches 001 and 018 confirming that it was the latest in the series of boundary ditches.

A contemporary ditch to 017 is 003 (fig 8), which ran east/west from the settlement site (08822). A section was excavated revealing straight sides with a shallow broad U shaped profile. No artefacts were associated with it, but it can be seen on the parish boundary map of Hinxton, as a boundary ditch on land then owned by a Mr W.W. Nash Esq.

OTHER FEATURES

A further total of 5 pits and a short linear feature were discovered during excavation. The linear feature 002 measuring 4.5 metres x 0.60 metres was aligned in a north/south orientation parallel to ditch 012. This was sectioned, and found to have a broad shallow U shaped profile, with a wide flat base, probably a narrow beam slot.

Pit 004 was half sectioned and later interpreted to be a shallow tree root bowl.

Pit 010 was also half sectioned. The sides were steeply sloping with a flat base. The fill contained charcoal inclusions but no artefacts were associated with it.

Pit 016 had gently sloping sides with an undulating base. The feature, which continued into the limit of investigation, had an irregular linear shape and is considered to be the terminus of a large ditch. No artefacts were retrieved from the fills.

Two further pits were identified but left unexcavated due to time scale.
The most notable feature was an irregular pit 009 (fig 9) which contained two areas of red and black powdery material. After the initial cleaning a possible flue vent became apparent, which ran west away from the pit's northern edge. A half section was excavated, two main areas of burnt clay were exposed. In the northern end was a patch of red powdery brick material. Opposite was a patch of dark brown burnt clay. Samples of both these areas were taken for later analysis.

The sides of 009 were steeply sloping with a flat base, this appeared to be lined with regular flint nodules and a thick covering of coarse clay. Two post holes were excavated, one where the flue joins the pit, the other in the eastern edge. Three other possible post holes were noted in the edge of the pit but these were not as obvious. Several fragments of burnt flint were recovered suggesting that the feature was used at high temperatures. Within the fill was noticed a seam of flux or possible smelting slag, which will be analysed. The feature could be a smelter, kiln or corn dryer, with the former most likely.

CONCLUSIONS

AREA 1

Several unstratified stone implements were recovered from the site, suggesting prehistoric land-use, probably related to extensive Neolithic features recently excavated at Duxford (C. Evans 1990).

The plan of the rectilinear enclosure ditch 001 corresponds with features seen on the 1991 site plans (fig 3). This ditch is the same as features 005 and possibly 009 excavated in 1991 (Wait G. 1991).

AREA 2

Phase one. This is series of ditches (fig 4, shown in green) tentatively dated to the Saxo-Norman period. Ditch 015 appears to have been constructed directly after the filling-in of phase one.

Phase two (fig 4, shown in brown) A group of pits and a ditch. One of these is the pit (009) containing burnt clay and other carbonised material. It is undatable, as it produced only 3 sherds of pottery, one of which has a thin light orange glaze over smooth orange fabric, of medieval or later date. Several possible alternative uses have been suggested. One is that the pit is a kiln, alternatively there is some resemblance to the feature excavated by Dr. Wait in 1991 (G. Wait 1991) and tentatively identified by him as a corn-drier.

Phase three (fig 4, shown in red) The 1833 Parish Inclosure map of Hinxton shows the boundary ditches 001, 017, 018 and 003 marking the limits of fields owned by Mr W.W. Nash Esq. These ditches are therefore post-medieval features, which may have existed in medieval times previously.

Acknowledgements.

The authors would like to thank Mineral Resources Ltd. for their assistance and support of the project, Dr G. Wait, Alison Taylor, Tim Malim and Tim Reynolds for their advice and guidance. Crane Begg drew the flint artefacts.

Bibliography.

Evans, C. 1990 The Duxford Archaeological Assessment, Cambridge Archaeology Unit.

**Appendix.**

The lithics from Hinxton by Tim Reynolds.

Area 1. 001 produced a Bronze Age round scraper made on a tertiary flake and two late Neolithic/early Bronze Age flake-blades (all with plain platforms) from a cleaning layer. All were made of flint.

003 yielded a small quantity of burnt flint, which had shattered, it may have been worked prior to this.

Area 2. A petit tranchet derivative arrowhead with bifacial working on the tang was recovered from the spoil heap next to area 2. This piece is most likely to date from the late Neolithic/early Bronze Age.

The flint collection is very small and does not suggest any intensity of occupation in the area, nor does it support any suggestion of activity areas nearby. It is best explained as a residual collection of background materials, which fortunately contains artefacts distinctive enough to allow dating, however, as none of the pieces came from sealed archaeological contexts, these dating should not be used to refer to any specific features.
Fig. 1 Hinxton Location Map
Fig. 2  Hinxton Borrow Pit Assessment Area
Fig. 6  Ditch 005 and 012  Section and Plan

Fig. 7  Ditch 001, 011 and 017 Sections

Fig. 8  Feature 003 Section

Fig. 9  Feature 009 Section
Fig. 10 Flint artefacts from Hinxton Borrow Pit 1. Petit Tranchet Arrowhead derivative. 2. Scraper. 3. Naturally backed Bladelet. All shown at 1:1
Fig.3 PLAN OF AREA 1

KEY
- SHOWS 1991 EXCAVATIONS
- SHOWS 1992 EXCAVATIONS

0 20m

N