



Archaeological Field Unit

**Flood Defences on Land off Whitmore Way,
Waterbeach, Cambridgeshire: An Archaeological
Watching Brief**

Rob Atkins

April 2005

Cambridgeshire County Council

Report No. 794

Commissioned by *Environment Agency*

**Flood Defences on Land off Whitmore Way, Waterbeach, Cambridgeshire: An
Archaeological Watching Brief**

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SUMMARY

Between the 15th February and 9th March 2005 the Archaeological Field Unit of Cambridgeshire County Council conducted an intermittent watching brief on land to the south and east of Whitmore Row, Waterbeach, Cambridgeshire (TL 4990/6500) during construction of flood defences. The work was commissioned by The Environment Agency.

The site was adjacent to Waterbeach Abbey, a Scheduled Ancient Monument (SAM 52) and considered a monument of national importance.

The watching brief identified no medieval features within the excavated areas, implying that the work was outside the area of the medieval abbey. This abbey was abandoned within 50 years of construction due to repeated flooding. The watching brief area was on even lower lying land to the abbey and several modern drainage ditches ran across the site. Three of these drainage ditches were found in the watching brief.

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Drawing Conventions

Sections

Limit of Excavation -----
Cut -----
Cut - Conjectured -----
Soil Horizon -----
Soil Horizon - Conjectured -----
Intrusion/Truncation -----
Top of Natural -----
Top Surface -----
Break in Section -----
Cut Number 118
Deposit Number 117
Ordnance Datum 18.45m ODN

Plans

Limit of Excavation -----
Deposit - Conjectured -----
Natural Features -----
Intrusion/Truncation -----
Sondages/Machine Strip -----
Illustrated Section ----- S.14
Cut Number 118

**Flood Defences on Land off Whitmore Way, Waterbeach, Cambridgeshire:
An Archaeological Watching Brief
TL 4990/6500**

1 INTRODUCTION

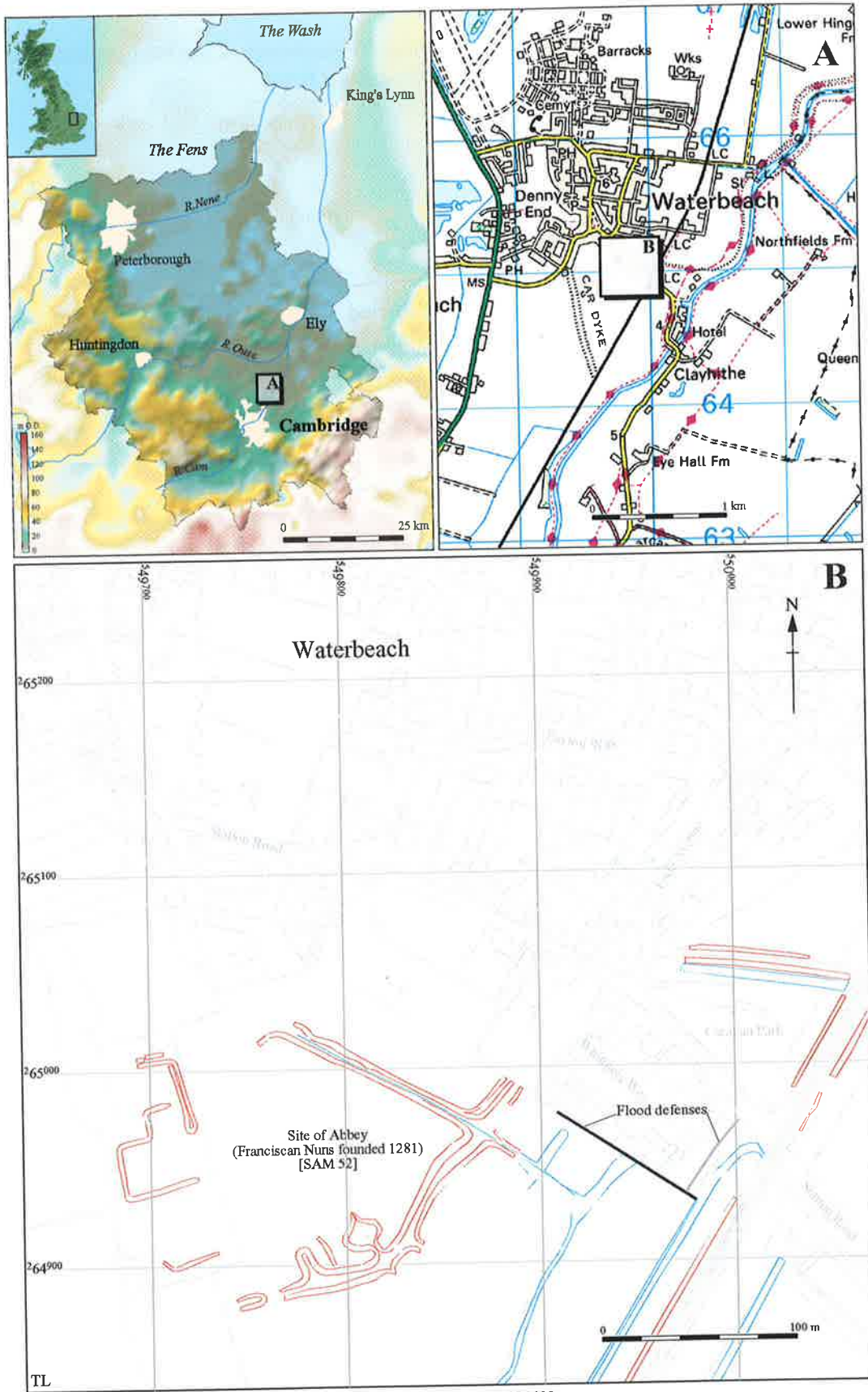
An archaeological watching brief was carried out on land off Whitmore Way, Waterbeach, Cambridgeshire (TL 4990/6500) to fulfil requirements of a planning application (S/1270/04/F) to construct flood defences. The watching brief was carried out by the Archaeological Field Unit of Cambridgeshire County Council on eight separate days between 15th February and 9th March 2005.

In the fifteen years since houses were built at Whitmore Way they have been flooded seven times. To alleviate this problem the Environment Agency proposed to construct flood defences. Due to the site's location adjacent to Waterbeach Abbey, a Scheduled Ancient Monument (SAM 52), the Environment Agency applied for Scheduled Monument Consent for the works (under Ancient Monuments and Archaeological Areas Act 1979 – Section 2). The Department for Culture, Media and Sport gave scheduled monument consent dated 26th January 2005 (letter reference HSD 9/2/6970). This consent under point 3 acknowledged that appropriate arrangements for archaeological monitoring are covered by arrangements negotiated by the applicant with Cambridgeshire County Council Archaeological Field Unit. The consent stipulated (point 3 d) that any ground disturbance shall be carried out under archaeological supervision.

The archaeological brief for the site was dated 14th September 2004 (Gdaniec 2004). The archaeological objectives for the watching brief were recorded in the specification for the site (Clarke and Macaulay 2004). This stipulated that the watching brief will ensure that any archaeological features exposed during ground works are recorded and interpreted to an acceptable standard.

2 GEOLOGY AND TOPOGRAPHY

The site is approximately 400m to the west of the River Cam on Gault Clay deposits with alluvium Gault Clay adjacent to the east (BGS 1969). Work on the site has shown that there was a thin c. 0.5m thick natural clay layer directly below the subsoil across most of the site. Below this clay layer are natural sands and gravels up to 2.4m thick which seals another clay layer about 3.2 to 3.4m below the ground level at about 0mOD. The water table appears to be 'perched' and sits on the upper natural clay layer just below the subsoil (Environmental Agency pers. comm.).



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Figure 1 Location of evaluation trench (black) with drainage ditches (blue) and earthworks (red)

The site is on relatively flat ground at 3.68m OD on the north-western side to 3.28mOD on the eastern side.

3 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

The prehistoric, Roman and medieval fen edge has been recorded adjacent to the east of the site (Hall 1996, 122 and 125). The site is directly to the north-east of Waterbeach Abbey (SAM 52; SMR MCB 6471). The abbey was founded in 1281 for Franciscan Nuns (poor Clares) but the first sisters did not arrive to 1294 after buildings had been constructed. The Waterbeach site was never satisfactory. The papal letter approving the original foundation provides for enclosure against inundation, and allows for the removal of the community elsewhere, if necessary (Cra'ster 1966, 75-6). Due to these flooding problems, in 1339 permission was granted for the community to be transferred to Denny Abbey and some of the nuns went there in 1342. Others remained at Waterbeach in open rebellion and about 20 sisters were forcibly removed to Denny by royal and papal authority although 4 or 5 were still at Waterbeach in 1351. In 1359 the Abbey buildings were desolate and all burials were removed to Denny.

The flooding in fields around the Waterbeach settlement was a continual problem. The Rev. William Cole, the well known 18th century antiquarian was curate for the parish and land which he owned in the parish was frequently flooded (Beeton et al 1995, 13). Nothing more is known of what became of the ruins of Waterbeach, but in the mid 19th century, W.K. Clay in his history of Waterbeach reported that big stones were occasionally found in the field and dug up for road mending (quoted in Cra'ster 1966, 76).

The Ministry of Public Building and Works undertook a trial excavation in 1963 on the western part of the abbey more than 200m to the west of the present watching brief. The excavations in 1963 revealed some footings of buildings but no definite plan. Some earthworks up to 2m high of the Abbey survive and there is a 2m wide moat on the eastern side.

4 METHODOLOGY AND RESULTS

The flood defences were built as an L-shaped, 127m long flood defence wall to the rear of properties along the southern and eastern boundary (Fig. 2). The southern boundary of Whitmore Way is the northern boundary of the Abbey SAM.



Figure 2 Evaluation trench and section

Geological test pits were first dug along the boundaries of the site at about 15m intervals. These test pits were dug to a depth of about 3.5m (for the natural geology sequence see section 2. Geology and Topography above). One test pit was placed within a modern existing ditch earthwork (ditch 18 below), all the other test pits did not find any archaeological deposits.

Sheeting was piled driven along this southern and eastern boundary. The sheeting was up to 3.5m deep in the western end and 2.5m deep at the eastern end. On either side of this sheeting a 360° mechanical excavator with a 0.6m wide bucket removed topsoil and subsoil down to the natural clay. Concrete was then poured into the trench to create foundations for the decorative brick wall which sits on top of the steel sheet piling.

The work along the southern boundary was monitored and a plan and section of the trench was drawn (Fig. 3). Within the trench there was a topsoil deposit up to 1m thick deposit with some modern rubble within it. This layer was presumably an attempt by the former Whitmore Row developers to raise the height of the land.

There was probably no archaeological features pre-dating the 19th century. Within the fill of pit 13 there was a late post-medieval drain fragment – probably sewer pipe. There were two large modern boundary/drainage ditches (18 and 20) which corresponded with existing earthworks to the south (Fig. 2). Ditch 18 was 3m wide and more than 0.5m deep and in its fill there was 20th century bottle and window glass recovered. Ditch 18 is not on either the 1st Edition OS map or the modern OS map (Fig. 1) but as it is relatively minor it may have been deemed too small and perhaps omitted. Directly to the west of 18 and probably running parallel to it was an undated ditch (16). This was presumably a related earlier boundary/drainage ditch.

There are two drainage ditches (Fig.1) running north to south into the eastern part of the development (one is marked drain). The western drain is ditch 20. The modern day OS map showed that water drained into this ditch to the south of the site. Ditch 20 was very wide *c.* 6m across and more than 0.5m deep and modern artefacts were recovered from its fill. There was also a modern service trench 11 was 0.5m wide and at the western end of the trench and had vertical edges (Fig 3).

The only medieval find was an unstratified early medieval Ely ware type pottery sherd dating to *c.*1200-1350 (Dr Paul Spoerry pers. comm.). There was also a 19th century marble from unstratified context.

5 DISCUSSION AND CONCLUSIONS

The watching brief found that there were no medieval features within the flood defences trench implying that the work was outside of the medieval abbey.

The earthworks (which are still clearly visible) of the abbey are to the south-west and west of the watching brief (Fig. 1) and they probably represent the limit of the abbey.

Documentary evidence has shown that the abbey had been abandoned within 50 years of construction due to repeated flooding. The site was never built on again. The watching brief area was on even lower lying land to the abbey and several modern drainage ditches ran across the site (are on 1890 1st Ordnance Survey map and modern OS map (Fig.1). Three of these drainage ditches were found in the watching brief.

ACKNOWLEDGEMENTS

The author would like to thank the Environmental Agency for funding the archaeological work and to Jackson Civil Engineering who helped on site and supplied earthwork maps. The project was managed by Stephen Macaulay. The watching brief was carried out by Rob Atkins, Glen Bailey and Steve Hickling. Dr. Paul Spoerry assessed the finds. The brief for archaeological works was written by Kasia Gdaniec, County Archaeology and Countryside Advice.

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