

# GONVILLE AND CAIUS BOATHOUSE, CAMBRIDGE

## An Archaeological Watching Brief



Richard Newman

CAMBRIDGE ARCHAEOLOGICAL UNIT  
UNIVERSITY OF CAMBRIDGE



**GONVILLE & CAIUS BOATHOUSE,  
CAMBRIDGE**

**An Archaeological Watching Brief**

**Richard Newman**

© **CAMBRIDGE ARCHAEOLOGICAL UNIT**

University of Cambridge

March 2008

Report No. 821

Event Number: **ECB 2866**

## Summary

*Archaeological monitoring was undertaken during the excavation of two boreholes and four trial pits located on a 990m<sup>2</sup> area of land in the northern part of the city of Cambridge on the 15<sup>th</sup> of February 2008. Along with evidence of the foundations of the standing 19<sup>th</sup> century Gonville & Caius Boathouse, a substantial peat deposit was also revealed. This material, which is situated immediately adjacent to the present course of the river Cam and is some 3m deep, appears to be associated with an area of marshland shown on a map of 1830 as lying immediately adjacent to a feature known as the 'Cambridge Sluice'.*

## Contents

<b>Introduction</b>	01
<i>Methodology</i>	01
<i>Landscape and geology</i>	01
<i>Historical and archaeological background</i>	01
<b>Watching brief results</b>	04
<i>Borehole 1</i>	04
<i>Borehole 2</i>	04
<i>Trial Pit 1</i>	05
<i>Trial Pit 2</i>	05
<i>Trial Pit 3</i>	05
<i>Trial Pit 4</i>	07
<b>Discussion</b>	07
<i>The 'Cambridge Sluice'</i>	10
<i>The site in a wider context</i>	10
<b>Conclusion</b>	12
<b>Acknowledgments</b>	12
<b>Bibliography</b>	13
<b>Oasis form</b>	15

## Illustrations

<b>Figure 1:</b> Site location	02
<b>Figure 2:</b> Trial Pit sections	06
<b>Figure 3:</b> Historic map sequence	08

## Introduction

The Cambridge Archaeological Unit (CAU) undertook an archaeological watching brief during a borehole and trial pit evaluation on a 990m<sup>2</sup> area of land located in the northern part of the city of Cambridge on the 15<sup>th</sup> of February 2008. The Proposed Development Area (PDA) is centred on TL 454 594 and is situated within the northern floodplain of the city, immediately adjacent to the present course of the river Cam (see Figure 1). It lies approximately 650m to the north of the King's Ditch, the Medieval boundary of the city, and is currently occupied by the Gonville & Caius Boathouse. This building formed the focus of the present investigation; four trial pits were excavated in order to evaluate its foundations, whilst two boreholes were inserted in order to assess the nature of the underlying deposits (see Figure 1 for their locations). The project followed the specification issued by the CAU (Dickens 2008) and approved by Kasia Gdaniec, Development Control Archaeologist at Cambridgeshire Archaeology Planning and Countryside Advice (CAPCA). It was commissioned by AC Architects, on behalf of Gonville & Caius College, in advance of proposed redevelopment.

### *Methodology*

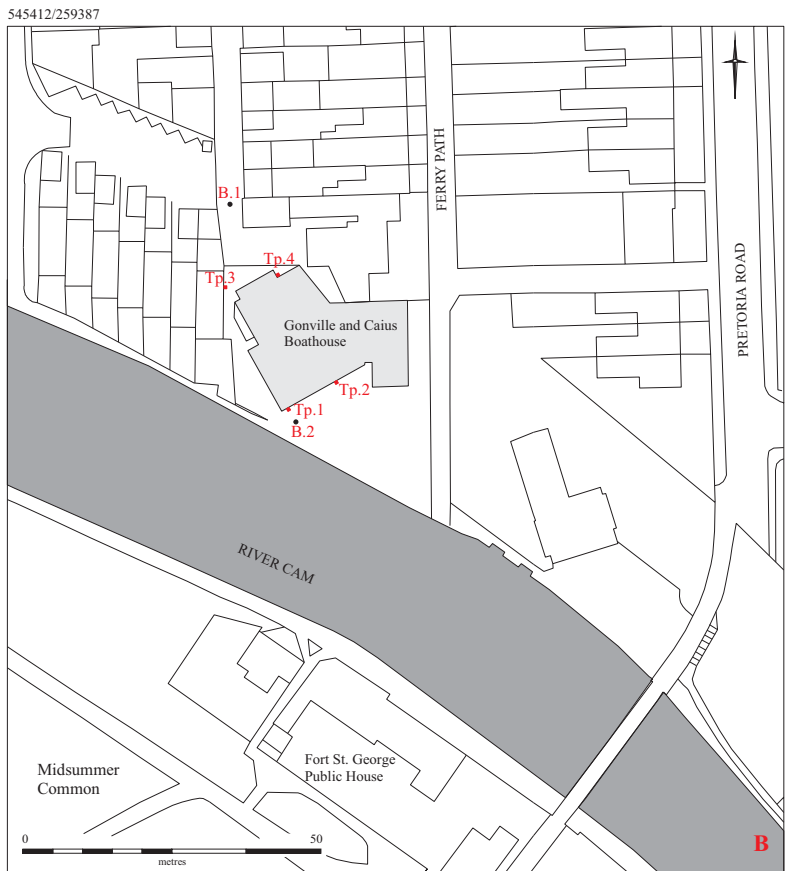
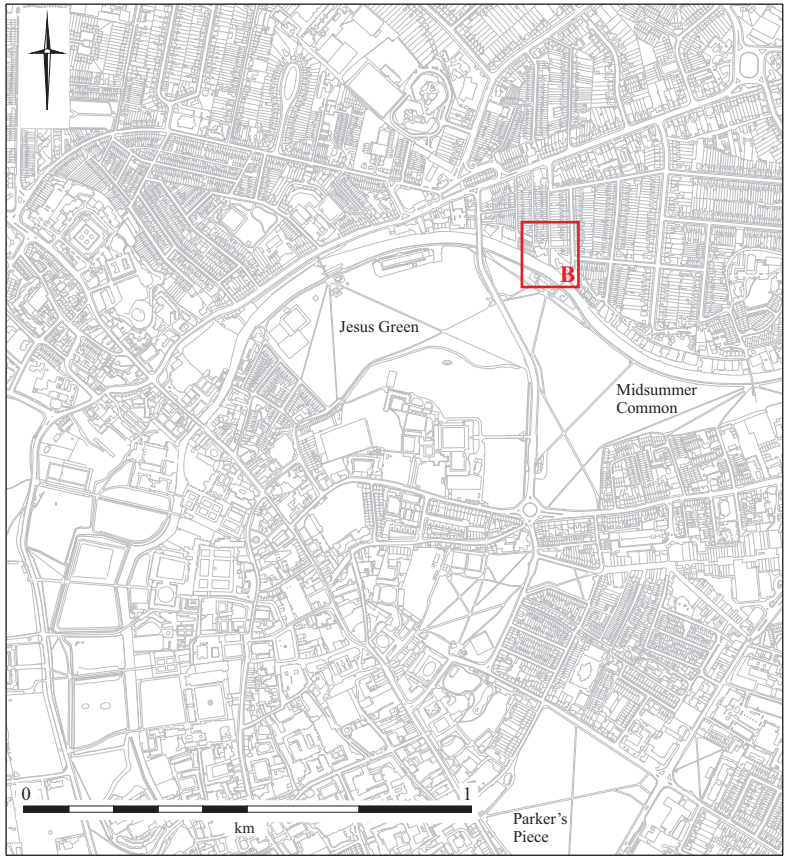
The boreholes were excavated concurrently using two different techniques. Borehole 1 was drilled using a conventional 'A-framed' rig, in which the cored sample is ejected as a loose deposit after each stage of excavation, whilst Borehole 2 was drilled using a much smaller 'tracked' rig, in which the central core is retained in 1m segments within plastic sleeves that are 85mm in diameter. Samples recovered from both boreholes have been submitted to the Soil Property Testing laboratory in Huntingdon for geotechnical analysis. The four trial pits, which ranged between 0.70m and 1.12m deep, were excavated by hand to a depth sufficient to determine the nature and condition of the building's foundations. All of the excavation work was undertaken by the principal contractor, Cowan Drilling Services Ltd., and recorded by the author using the CAU modified version of the MoLAS system (Spence 1994). Base plans were drawn at a scale of 1:20, whilst sections were drawn at a scale of 1:10. Context numbers are indicated within the text by square brackets (*e.g.* [001]), and the photographic archive consists of a series of digital images.

### *Landscape and geology*

The site is located within the northern floodplain of the river Cam, a little over half a kilometre to the northeast of the historic core of the city. Geologically, it is underlain by 1<sup>st</sup> terrace river gravels (British Geological Survey, sheet 188) and its present surface height ranges between 4.70m to 6.55m OD, though this variation may well be primarily the result of modern building activity and disturbance. The boreholes were located 3m and 35m to the north of the present course of the river.

### *Historical and archaeological background*

The historical and archaeological background of Cambridge is reviewed in several published sources (Cam 1934; Lobel 1975; Bryan 1999; Taylor 1999) and will not therefore be reproduced here in full. Nevertheless it is necessary to briefly outline the background of the city in order to place the site securely within its wider context.



Based on the Ordnance Survey 1:2500 map  
 With the permission of the controller of Her Majesty's Stationery Office © Crown Copyright.  
 University of Cambridge Licence No.AL 550833

Figure 1: Site location.

Little is known of the earliest inhabitants of the area. Although there is diffuse evidence of Prehistoric occupation and activity, most notably of Iron Age date, scattered across much of the extent of the lower town no definite or intensive large-scale settlement has yet been identified (Taylor 1999, 15-23). Occupation appears instead to have begun in earnest shortly after the Roman invasion in AD43, with the accepted picture of Cambridge during this period being one of a settlement centred almost exclusively upon the Castle Hill area (*e.g.* Alexander & Pullinger 2000). Recent fieldwork, however, is demonstrating that this interpretation is somewhat limited, with significant settlement having been detected to the east (Dickens 1996; Alexander *et al* 2004; Newman *in prep*), south (Dickens 1999) and west (Evans 1996; Lucas & Whittaker 2001) of the presumed centre. It is therefore clear that the extent of Roman settlement away from the Castle Hill area was greater than has generally been supposed and that the outlying hinterland, within which the current site probably lies, was extensive although it remains poorly understood. Following the withdrawal of the Roman legions in AD410 the level of occupation in the area appears to have decreased; the evidence for Early Saxon activity in and around Cambridge primarily comprises material recovered during the 19<sup>th</sup> century from pagan cemeteries on the outskirts of the city (*c.f.* Fox 1923; Dodwell *et al* 2004; Cessford with Dickens 2004). Whilst it is notable that one of these cemeteries – that discovered at Strange’s Boathouse, on the western bank of the Cam (Fox 1923, 244) – is located less than 500m to the southwest of the present site, very little direct settlement evidence from this period has yet been recovered. However, it is likely that any structures employed at this time would have been relatively ephemeral in nature and therefore highly susceptible to later truncation.

In fact the area appears to have remained merely an “economically viable backwater” up until the mid 10<sup>th</sup> century (Hines 1999, 136). Following this date, however, Cambridge emerged as a significant urban centre, to the extent that by the beginning of the 13<sup>th</sup> century the city acted as the leading inland port in the county (Cam 1934, 43). By this time the settlement was fully established on the eastern side of the river, and is likely to have already been at least partially enclosed by an extensive boundary work that later became known as the ‘King’s Ditch’. During the Medieval period Cambridge’s role as a dominant port gradually declined (Bryan 1999, 97) and the economic wealth of the city became largely centred on the University, which had been founded in 1209. The expansion of this institution had greatly benefited from royal investment, especially from the 15<sup>th</sup> century onwards (*ibid*, 94-6), and its growth was also given significant impetus by the Dissolution of the Monasteries in 1536-40 since many of the disbanded religious houses were subsequently converted into Colleges (*c.f.* Willis & Clark 1886). The influence of these Colleges has been one of the primary factors in shaping the landscape of Cambridge and its immediate surroundings ever since (Bryan 1999, 95). In addition, the most significant modern developments in the city have comprised the arrival of the railway in 1845 and the rapid suburban expansion, largely begun in the 19<sup>th</sup> century and continuing to this day, into what had once been the its surrounding rural hinterland. Much of the area surrounding the present site forms part of this belt of later suburban development (*ibid*, 103-7).

## Watching Brief Results

Due to the restricted scale of the current investigations at the Gonville & Caius Boathouse site, no attempt at phasing has been made and the following observations are presented on a purely area-by-area basis.

### Borehole 1

Borehole 1 was drilled using a conventional 'A-framed' rig, in which the cored sample is ejected as a loose deposit after each stage of excavation; it was inserted to a depth of 10m below the present ground surface, which lies at 6.55m OD, and was located approximately 35m to the north of the river Cam (see Figure 2). It is clear that the archaeological sequence in this area had been heavily disturbed, most probably during the later 19<sup>th</sup> century when the majority of the surrounding buildings were constructed. Given the nature of the two concrete surfaces encountered, and the depth of the make-up deposit that separates them, it appears likely that some form of 'terracing' of the natural slope had been undertaken at this time.

Due to the largely destructive nature of this boring process, the following measurements are perforce approximate. The initial 0.12m consisted of a modern pale creamish grey concrete slab, beneath which lay a 1.28m deep deposit of mid brown sandy silt with occasional sub-angular gravel and CBM fragment inclusions. At 1.4m below the present ground surface a second concrete slab of similar thickness and consistency was encountered, which rested upon a 1.2m deep deposit of relatively loose orangey yellow sandy gravels with occasional to frequent CBM and chalk fragment inclusions. Below this a layer of firm pale brown alluvial clay with occasional to rare shell and gravel inclusions was revealed; this was approximately 0.4m deep and had an irregular and unclear interface with the underlying pale greyish blue Gault Clay. The latter deposit extended continuously for the remainder of the excavated sequence, and natural therefore appears to lie at approximately 3.55m OD in this location.

### Borehole 2

Borehole 2 was drilled using a small 'tracked' rig, in which the central core is retained in 1m segments within plastic sleeves that are 85mm in diameter; it was inserted to a depth of 8m below the present ground surface, which lies at 4.70m OD, and was located approximately 3m to the north of the river Cam (see Figure 2). In this borehole, beneath modern make-up material and a relatively shallow layer of probably redeposited alluvium, an extensive peat deposit was present.

Although every sleeve was of equal length, compaction caused by the nature of the boring process resulted in a degree of distortion proportional to the solidity of each deposit encountered; therefore, every segment will be discussed individually and the degree of its compaction noted. The first metre sample was found to have been reduced to 0.7m upon extraction, of which the upper 0.5m consisted of a relatively loose mid greyish brown clayey silt deposit with occasional gravel and CBM inclusions. This overlay a layer of very mixed mid to pale slightly bluish grey alluvial clay with occasional shell fragment and organic fleck inclusions, which appears likely to have been redeposited. The second metre sample was also reduced to 0.7m, of which the initial 0.35m remained as above; this material then underwent an unclear interface onto a dark brown peat deposit with frequent shell fleck and organic fragment inclusions. The third metre sample was reduced to 0.82m in length and remained consistently peaty throughout, although the deposit grew slightly paler with depth. At around the point of interface between the third and fourth samples a gravel-rich band was encountered that contained frequent charcoal inclusions and was around 0.1m deep. Below this the fourth sample, which was the first to remain a full metre long upon extraction, contained a dark brown waterlogged peat deposit that was remarkably similar to the overlying material. In the fifth sample however, which was reduced to 0.91m in length, the upper



portion comprised a loose dark grey sandy gravel deposit approximately 0.1m thick that overlay pale greyish blue Gault Clay. The latter deposit extended continuously for the remainder of the excavated sequence, and natural therefore appears to lie at approximately 0.60m OD in this location.

### **Trial Pit 1**

Trial Pit 1 was 0.5m by 0.5m in extent and 0.91m deep, and was located against the southeast wall of the Boathouse (see Figure 2). It appears that in this particular location the foundations of the Boathouse were rather minimal, for above relatively shallow gravel and CBM foundation deposit [101] only 0.20m of concrete was present.

The uppermost deposit, [100], comprised a banded layer of black tarmac overlying a compacted bedding deposit of mid orange coarse sandy gravel 0.15m deep. Beneath this modern surface a shallow concrete foundation 0.20m deep was encountered; this had been constructed upon [101], a compacted deposit of mixed sub-rounded sandy gravels 0.75m deep with occasional to frequent CBM (frogged brick) inclusions. It appears likely that this latter material comprised a 'raft-type' foundation employed to underpin this corner of the Boathouse, although it is notable that only a little further to the northeast along the same wall, a much more extensive foundation was noted in Trial Pit 2. The presence of a sharp interface at the base of [101] onto a firm pale bluish grey alluvial layer with occasional shell inclusions, which was determined by auguring to be at least 0.60m+ deep, indicates the presence of a construction cut (numbered as [102]) although no edge to this feature was visible within the trial pit.

### **Trial Pit 2**

Trial Pit 2 was 0.5m by 0.5m in extent and 1.20m deep, and was located against the southeast wall of the Boathouse (see Figure 2). It appears that the foundations of the Boathouse were somewhat more substantial in this area than had been the case in nearby Trial Pit 1. Here, a significant concrete foundation provided support for three 'on-edge' brick spreader courses that formed the footings of the main wall itself.

The uppermost deposit, [200], comprised a banded layer of black tarmac overlying a compacted bedding deposit of mid orange coarse sandy gravel 0.15m deep; this represents part of the same modern surface as [100] in nearby Trial Pit 1. Unlike in this latter location, however, here the surface overlay three 'on-edge' brick spreader courses that in turn sat upon a much more substantial concrete foundation 0.62m deep. This was subsequently backfilled with mid rich brown fine particulate sandy silty clay deposit [201], which contained occasional shell and CBM fragment inclusions. The presence of a sharp interface at the base of this deposit onto [203], a firm pale bluish grey alluvial layer with occasional shell inclusions that was determined by auguring to be at least 0.50m+ deep, indicates the presence of a construction cut (numbered as [202]) although no edge to this feature was visible within the trial pit.

### **Trial Pit 3**

Trial Pit 3 was 0.5m by 0.5m in extent and 0.75m deep, and was located against the east wall of an adjacent block of flats (see Figure 2). It appears that the foundations of these flats, which are clearly late 20<sup>th</sup> century in origin, were somewhat less substantial than those of the preceding Boathouse.

The brick-built wall of this structure was constructed upon a 0.40m deep shutter-formed concrete foundation that was subsequently backfilled with [300], a moderately loose deposit of very mixed mid greyish brown silty clay with occasional to frequent CBM and plastic sheet fragment inclusions. The presence of a sharp interface at the base of this deposit onto [302], a firm mid rich brown fine particulate sandy silty clay deposit with occasional shell inclusions that was determined

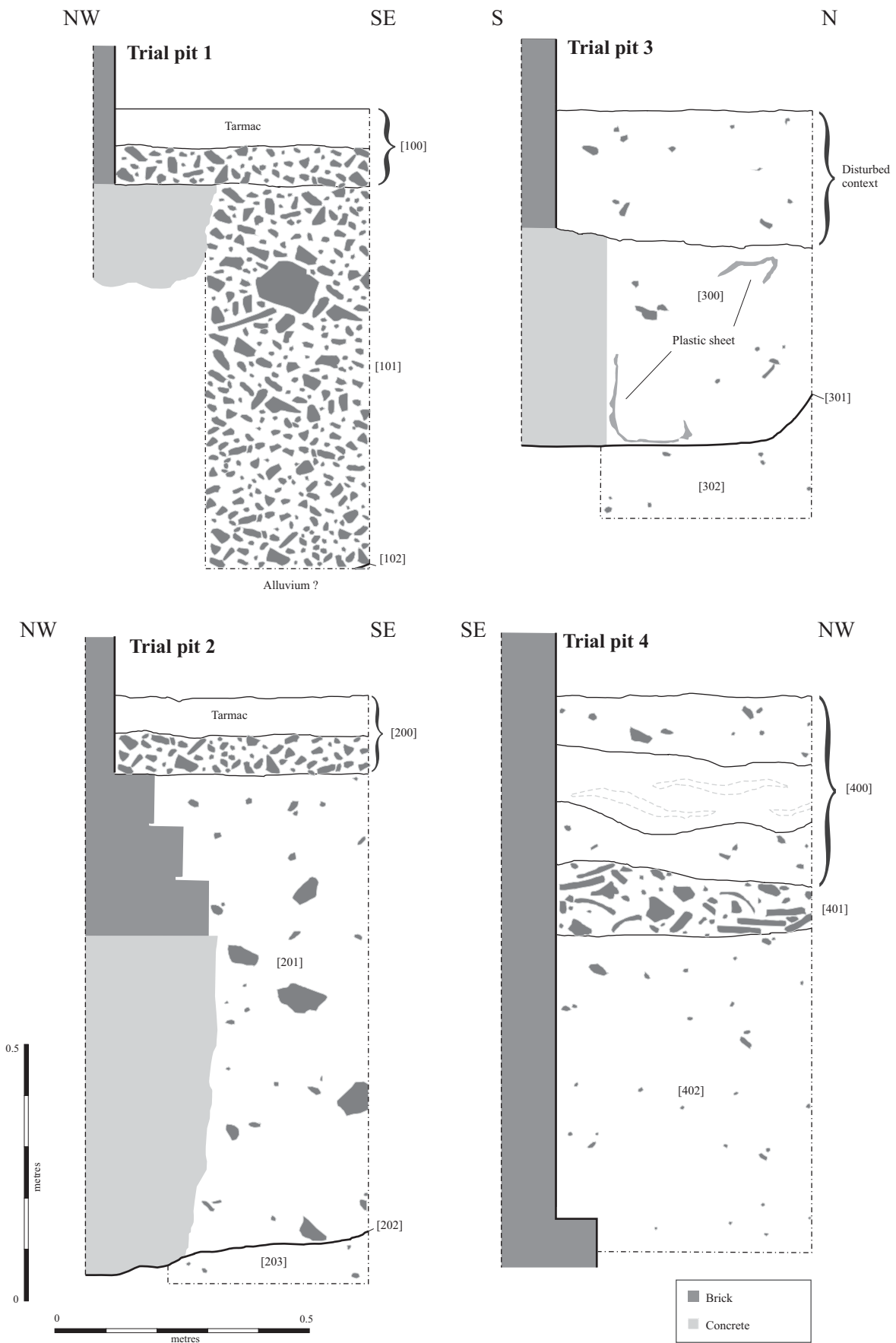


Figure 2: Trial pit sections.

by auguring to be at least 0.50m+ deep, indicates the presence of a construction cut (numbered as [301]) although no edge to this feature was visible within the trial pit.

#### **Trial Pit 4**

Trial Pit 4 was 0.5m by 0.5m in extent and 1.10m deep, and was located against the northwest wall of the Boathouse (see Figure 2). It is clear that more extensive truncation was caused by the Boathouse's foundations in this location than in any of the other trial pits examined. Yet despite this limitation, Trial Pit 4 provided the only corroborative evidence for the date of the building's initial construction (in the form of the pottery recovered from construction backfill [401]).

Unfortunately, this trial pit represented the only location in which the base of the Boathouse's foundation could not be reached as the rear part of the building was clearly cellared. However, the beginning of an 'on-edge' stepped foundation was observed at 1m below the present ground surface. Here, the construction cut had been backfilled with three visible bands of material: the first of these, [400], consisted of a relatively loose mid rich brown sandy silty clay deposit 0.38m deep with occasional dark brown to black ashy silt mottles; the second, [401], of a loosely compacted silt deposit 0.13m deep with frequent CBM inclusions that contained 12 sherds of late 19<sup>th</sup> century English Utilitarian Stoneware weighing 498g; finally the third band, [402], consisted of a relatively firm mid rich brown fine particulate sandy silty clay deposit 0.59m+ deep that contained occasional shell and CBM fragment inclusions. Neither the edge nor the base of the construction cut were revealed, although auguring indicated that it extended approximately below 1.50m from the present ground surface.

#### **Discussion**

There are two key themes that can be observed within the results uncovered during this watching brief. The first of these is the relative shallowness of the Boathouse's foundations (with the obvious exception of the cellared area to the rear of the building), which demonstrates the potential for any earlier structural remains or archaeological features that may be present to survive across much of its footprint. The second is the presence of an extensive peat deposit, potentially some 3m deep, which is located close to the present course of the river. Such material typically forms within a low-energy aquatic environment, such as a still-water pond, rather than in a high-energy environment such as an active river system. The fact that this deposit extends almost to height of the current ground surface indicates that it is of comparatively recent origin and is thus highly unlikely to comprise part of a relict paleochannel. There is therefore the strong likelihood that some level of anthropogenic involvement, such as the management of the river's flow to create a placid still-water environment, was involved in its creation. This in turn implies that the former still-water area has been abandoned and the river subsequently narrowed. Changes such as these, if undertaken within the past four centuries, may be visible within the historic map sequence.

Unfortunately, the PDA lies for the most part outside the area covered by the historic maps of Cambridge as the majority of these were focused almost exclusively upon the University buildings in the centre of the city (*c.f.* Baggs & Bryan 2002). Although the area does appear on the fringes of Hammond's map of 1592, the only surviving copy of this work is too badly degraded for sufficient detail to be discernable. Even more frustratingly, despite Loggan's map of 1688 extending far enough to include the PDA, the specific area of the site is obscured by the legend. Custance's map of 1798 does

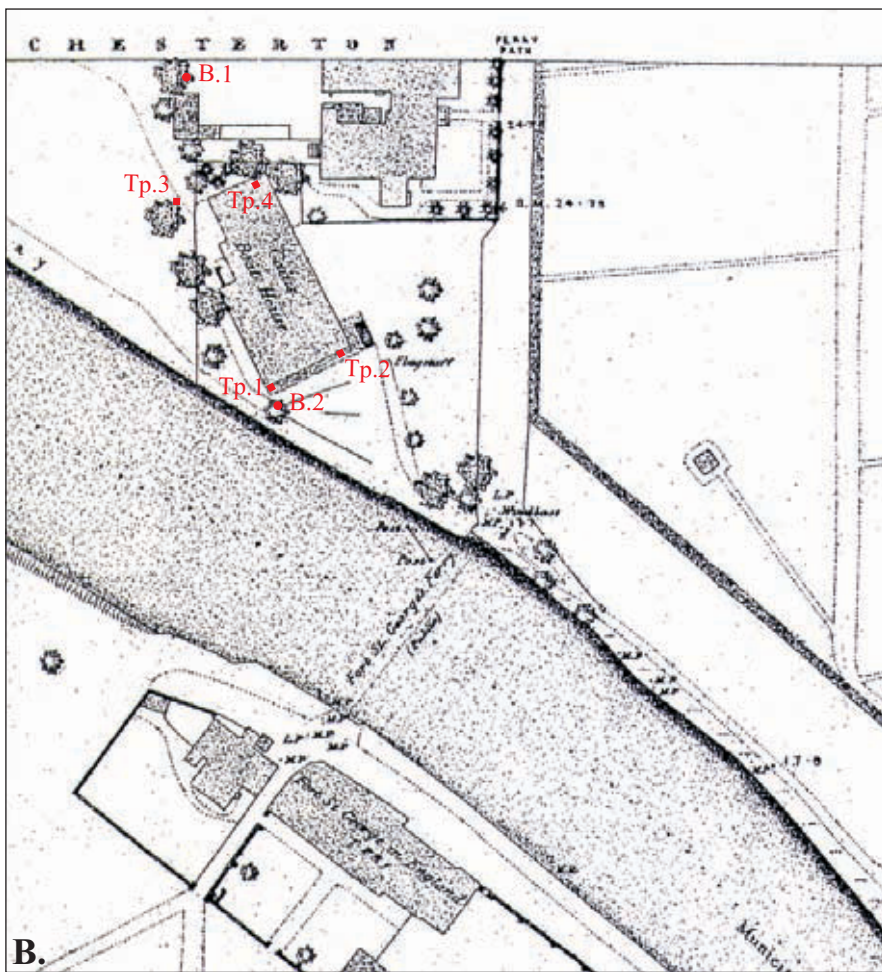


Figure 3: Historic map sequence. A= Baker 1830, B= 1st edition Ordnance Survey (1885).

show the relevant area, however, and reveals it to have lain immediately adjacent to the location of the 'Cambridge Sluice', a feature which appears to have regulated the flow of water that continued down through the city. The sluice is shown in association with a small island upon which several buildings are depicted. These structures are shown in greater detail in Baker's map of 1830 (see Figure 3), where one is labelled as the 'Fort St. George'. This building, which is still extant, was constructed as an inn of 'T' shaped form during the 16<sup>th</sup> century (RCHM(E) 1959, 348), implying that the island upon which it was once situated was already in existence at this time. Indeed whilst it is probable that this island was at least partially natural in origin, it may also have been quite heavily consolidated or augmented at the time of the building's construction. One potential stimulus for the erection of such a structure in this location is to be found in the presence of a ferry service, known as the Fort St. George ferry, which is known to have operated here during the 19<sup>th</sup> century. It is quite possible that this area, situated as it is at the boundary between Midsummer Common and Jesus Green, had already provided a convenient place to cross the river for several centuries, thus making it an attractive location for small-scale out of town development.

At the time Baker's map was compiled, the specific area of the PDA lay in a discrete area of marshy ground immediately to the west of the Cambridge Sluice (see Figure 3). Interestingly the northern boundary of this marshland area appears to align very closely with the maximum width of the river channel directly opposite the Fort St. George Island, which forms by far the widest point in its course. This implies that the area was potentially once part of the 'managed river system' of which the island, along with the sluice itself, was clearly the focus. This would certainly account for the depth and uniformity of the peat deposit encountered in Borehole 2, and suggests that this material may have formed quite rapidly within the placid pond-like conditions created by the effective 'damming' of the river by the sluice. If this was indeed the case, then it would appear that the active role of the Cambridge Sluice had already come to an end by 1830. Such an interpretation is supported by the convergence of several footpaths on the precise location that is known to have later comprised the route of the Fort St. George ferry (see 1<sup>st</sup> OS map, Figure 3); it is thus quite possible that the sluice itself had already been dismantled by this time, and the ferry service established. Perhaps most notably, the preceding route-way across the river became formalised via the construction of Victoria Road and its attendant bridge. Situated a little way upstream from the present site, the introduction of this road stimulated an increase in suburban expansion in the vicinity that resulted in the majority of the housing that is still visible today (*c.f.* Bryan 1999, 103-7). The high degree of disturbance encountered within Borehole 1 is most probably associated with this period of development, as is the construction of the Gonville & Caius Boathouse itself. This building, which appears most likely to have been erected in the period *c.*1870-1880, formed part of a wider scheme of reorganisation or rejuvenation of the riverside area at this time that also included the reconnection of the Fort St. George Island to the mainland. This rejuvenation is likely to have been prompted by the marked decline in river-based trade that occurred following the arrival of railway to the city in 1845.

### *The ‘Cambridge Sluice’*

The origins of the Cambridge Sluice appear likely to lie in the Post-Medieval period, as it is known that the Cam became increasingly silted-up during the 16<sup>th</sup> and 17<sup>th</sup> centuries and regularly overflowed its banks (Taylor 1999, 136). This greatly inhibited any potential development of the inundated areas along much of its length, but the expansion of college buildings onto the Backs – beginning with the acquisitions made by St. John’s and Trinity Colleges in 1610 and 1613 respectively (Bryan 1999, 98) – stimulated increased management and canalisation of the river’s course (*c.f.* Chisholm 2003). This newly acquired impetus can also be allied with the impact of Cornelius Vermuyden’s Fenland drainage scheme, which was completed in 1652; a number of potentially comparable sluices were constructed as part of this work, the most notable being that placed across the Ouse at Salter’s Lode and now known as the Denver Sluice (Chisholm 2007, 179). These factors therefore indicate that the Cambridge Sluice is most likely to have been constructed at some time during the early to mid 17<sup>th</sup> century, and to have been sited so as to take advantage of the narrow inlet created by the island already occupied by the Fort St. George. Of course, it may well be that organised control of the water’s flow in a different form had already been undertaken in this location for some time, and that the island was associated with previous stages of systematic ‘river management activity’; indeed, the central importance of the river to the city’s economic growth could well have necessitated a strict regulation of its flow from a relatively early date.

### *The site in a wider context*

Little is known archaeologically of the area immediately surrounding the Gonville & Caius Boathouse. Although potential ‘waterfront structures’ were observed a little way to the south during construction work undertaken at the George and Dragon pub in the early 1970’s (Webster & Cherry 1974, 199), this excavation remains unpublished and the site’s date and significance are therefore unclear (Dicken’s 2003, 11). A number of other comparable riverside sites have been excavated in Cambridge over the past 15 years, however, although they are again located somewhat to the south of the current PDA. Indeed, with the exception of the southernmost site at Clare College Master’s Garden (Clarke 2002), all of them are situated within the bounds of the Medieval town itself. Details of the most relevant of these excavations are summarised in Table 1 below:

Site Name	River Bank	Distance Back from River	Height of Natural (O.D.)	Depth of Alluvial Sequence	Date ‘Capped’
Gonville & Caius Boathouse	West	3m	0.60m	c.3.60m	?
24 Thompson’s Lane	East	35m	2.97m	2.10m	14 <sup>th</sup> century
St. John’s College (Chapel Court and Master’s Garden)	East	50m	c.4.20m	c.1.30m	13 <sup>th</sup> century
Trinity Hall (New Library Extension)	East	c.5m	3.03m	1.91m	16 <sup>th</sup> century
Clare College (Master’s Garden)	West	c.90m	2.60m	3.40m	19 <sup>th</sup> century

**Table 1:** Comparable riverside excavations in Cambridge (in order of location from north to south).

Perhaps the most notable features observed at many of these sites comprise probable channels or ‘barge-pulls’ that were utilised for the loading and unloading of cargo from small shallow-draughted vessels. One such channel, which was around 4.5m wide and 0.5m deep, was identified during the St. John’s College excavations (Dickens 1996, 18) whilst other potential examples were also seen at 24 Thompson’s Lane (Newman 2008) and during an adjacent 1982 excavation (Firman & Pullinger 1987). Similar features have also been identified at other sites in the region, including Broad Street, Ely (Cessford *et al* 2006) and Ramsey, Cambridgeshire (Spoerry *et al* forthcoming). However, all of these channels are primarily associated with access to and from the river and bear little or no relation to the present site, where the extensive peat deposit appears instead to have been a by-product of the systematic control of the water’s flow. Somewhat more comparable therefore is the site excavated at the Trinity Hall New Library Extension in April 1997 (Alexander 1997). Here, the preceding alluvial sequence was capped at 4.94m OD by a similar, although far shallower, peat horizon that represented the beginning of a much drier phase. This contained 16<sup>th</sup> century pottery and at least four wooden stakes that had been driven into its surface, most probably to assist with the reclamation of the former wetland zone (*ibid*, 6-7). It appears likely that this episode was associated to Trinity College’s acquisition of the land in 1544, when it was thought that the first phase of a riverside revetment wall may have been constructed (*ibid*, 10-12). Subsequently, a significant amount of make-up material containing mainly 17<sup>th</sup> century pottery and domestic refuse was introduced (*ibid*, 8-9). The degree of comparable ‘management’ or control of the river’s course at the present site is unclear. It appears unlikely that a revetment wall on a similar scale to that constructed at Trinity Hall would have been necessary in this location, although some level of deliberate alteration to the river’s width, and potentially also to the form of its banks, does seem probable.

In the more immediate vicinity of the site, a significant peat deposit was encountered at 1.80m below the present ground surface during a trial pit evaluation undertaken across Midsummer Common in July 1995 (Pollard 1995, 2). This material was identified within Trial Pit MC5, which measured 1.8 by 1.8m in extent and was located roughly in the centre of the Common, approximately 70m back from the present course of the river. The peat, which was 1.40m deep, had been overlain by an extensive layer of dark bluish-grey alluvial clay that was found to contain 18<sup>th</sup> century pottery in several of the other trial pits examined; however the peat itself was undated and was only present within Trial Pit MC5 (*ibid*, 4). It therefore appears likely to have comprised part of a discrete ‘pond-like’ feature, which was later sealed during the 18<sup>th</sup> century when the environment of the surrounding floodplain altered. Although the distance of this deposit from the river implies that it has no direct connection to the activities undertaken at the Cambridge Sluice, the date of its capping may perhaps be significant. Further observations made across Midsummer Common and Jesus Green in 2007, during a watching brief associated with the laying of a 33kv replacement cable, revealed evidence of land consolidation immediately adjacent to the river. Numerous dumps of domestic reuse material had been made in this location from the 17<sup>th</sup> century onwards (Davenport *in prep*). Whilst it is notable that the alluvial floodplain sequence in this area was only ‘capped’ by such deposits several centuries later than was the case at comparable riverside sites situated within the bounds of the Medieval town itself (see Table 1), this evidence agrees closely with the date at which a stronger emphasis is known to have been placed on flood-prevention further

upstream. Such activity may well therefore be associated with the establishment of a more active flood defence, in the form of the Cambridge Sluice, in the near vicinity.

## **Conclusion**

Although extremely limited in scale, the results of this project do indicate the potential presence and survival of archaeological deposits within the proposed development area. The depth of the peat deposit encountered within Borehole 2, for example, and its close proximity to the apparent undisturbed alluvium in the base of Trial Pit 1, implies the control of (and potentially also the deliberate widening of) the river channel at this point in its course. Whilst certainty is impossible given the scale and methodology of the current investigation, the near vertical edge to the peat that is implied by the swiftness of this transition suggests the possibility of a revetment wall situated along the edge of the former channel. Should this indeed be the case, the high water-table and excellent organic preservation visible within the cored samples indicates that any in-situ timbers would remain in an excellent state of preservation. Furthermore, the relatively shallow nature of the Boathouse's foundations at the non-cellared riverward end of the building raises the possibility that remnants of any potential pre-Boathouse structures or features may also have survived in this location.

In summary, this area is known to have lain immediately adjacent to the 'Cambridge Sluice', a feature that appears to have controlled much of the water flow into the city during the Post-Medieval period. It therefore appears probable that the extensive peat deposit noted above is associated with the 'pond-like' conditions created by the effective damming of the river by this feature. However, although the sluice itself is most likely to be 16<sup>th</sup> or 17<sup>th</sup> century in origin, the date at which active management of the river channel in this location first began is unclear. Because the river was central to the economic interests of the city throughout the Medieval period, it is possible that some form of control over its flow had already been imposed for several centuries.

## **Acknowledgements**

The project was commissioned by AC Architects, on behalf of Gonville & Caius College, and was managed for the CAU by Alison Dickens. The boreholes and trial pits were excavated by Cowan Drilling Services Ltd., to whom thanks are due for their friendly co-operation, and their monitoring was undertaken by Richard Newman. Andy Hall and Bryan Crossan produced the graphics, whilst Craig Cessford kindly read and commented upon a draft of this text.



## Bibliography

- Alexander, J. & Pullinger, J. 2000. 'Roman Cambridge: Excavations 1954-1980', *Proc. Cambridge Antiq. Soc.* 87, 1-268.
- Alexander, M. 1997. *Excavations for the new library extension, Trinity Hall College, Cambridge*. Cambridge Archaeological Unit Report No. 222.
- Alexander, M., Dodwell, N. and Evans, C. 2004. 'A Roman cemetery in Jesus Lane, Cambridge', *Proc. Cambridge Antiq. Soc.* 93, 67-94.
- Baggs, T. & Bryan, P. 2002. *Cambridge 1574-1904: a portfolio of twelve maps illustrating the changing plan of Cambridge from the sixteenth to the twentieth century*. Cambridge: Cambridgeshire Records Society.
- British Geological Survey, 1976. *Cambridge: Sheet 188*. Southampton: Ordnance Survey.
- Bryan, P. 1999. *Cambridge: the shaping of the city*. Cambridge: privately published.
- Cam, H. M. 1934. 'The Origin of the Borough of Cambridge: A Consideration of Professor Carl Stephenson's Theories', *Proc. Cambridge Antiq. Soc.* 35, 33-53.
- Cessford, C. with Dickens, A. 2005. 'Cambridge Castle Hill: excavations of Saxon, Medieval and Post-Medieval deposits, Saxon execution site and a medieval coinhoard', *Proc. Cambridge Antiq. Soc.* 94, 73-101.
- Cessford, C. Alexander, M. & Dickens, A. 2006. *Between Broad Street and the Great Ouse: Waterfront Archaeology in Ely*. E. Anglian Archaeol. 114.
- Chisholm, M. 2003. 'Conservators of the River Cam, 1702-2002', *Proc. Cambridge Antiq. Soc.* 92, 183-200.
- Chisholm, M. 2007. 'Re-assessing the navigation impact of draining the Fens in the seventeenth century'. *Proc. Cambridge Antiq. Soc.* 92, 175-192.
- Clarke, A. 2002. *An Archaeological Evaluation in the Master's Garden of Clare College*. Cambridge Archaeological Unit Report No. 496.
- Davenport, B. K. in prep. *The Cambridge 33kv reinforcement cable route: an archaeological watching brief*. Cambridge Archaeological Unit Report.
- Dickens, A. 1996. *Archaeological excavations at St. John's College, Cambridge*. Cambridge Archaeological Unit Report No. 175.
- Dickens, A. 1999. *Archaeological Investigations at the New Unilever Cambridge Centre, Union Road, Cambridge*. Cambridge Archaeological Unit Report No. 316.
- Dickens, A. 2003. *Cambridge 33kv reinforcement: an archaeological desktop assessment of the proposed route*. Cambridge Archaeological Unit Report No. 557.
- Dickens, A. 2008. *A method statement for archaeological monitoring of boreholes at Gonville & Caius boathouse, Cambridge*. Unpublished Cambridge Archaeological Unit document.
- Dodwell, N., Lucy, S. and Tipper, J. 2004. 'Anglo-Saxons on the Cambridge backs: the Criminology site settlement and King's Garden Hostel cemetery', *Proc. Cambridge Antiq. Soc.* 93, 95-124.

- Evans, C. 1996. *New Hall College: Prehistoric landuse and Roman hinterland*. Cambridge Archaeological Unit Report No. 190.
- Firman, P. & Pullinger, J. 1987. 'Excavation at Riverside, Thompson's Lane, Cambridge', *Proc. Cambridge Antiq. Soc.* 79, 83-95.
- Fox, C. 1923. *The archaeology of the Cambridge region*. Cambridge: Cambridge University Press.
- Hines, J. 1999. 'The Anglo-Saxon Archaeology of the Cambridge Region and the Middle Anglian Kingdom', *Anglo-Saxon Studies in Archaeol. and Hist.* 10, 135-89.
- Lobel, M. D. 1975. *The Atlas of Historic Towns, Volume 2: Bristol; Cambridge; Coventry; Norwich*. Aldershot: The Scholar Press.
- Lucas, G. & Whittaker, P. 2001. *Vicar's Farm, Cambridge: post-excavation assessment report*. Cambridge Archaeological Unit Report No. 425.
- Newman, R. 2008. *24 Thompson's Lane, Cambridge: an archaeological investigation*. Cambridge Archaeological Unit Report No. 809.
- Newman, R. in prep. *St. John's Triangle, Cambridge: an archaeological excavation*. Cambridge Archaeological Unit Report.
- Pollard, J. 1995. *Archaeological investigations on Midsummer Common, Cambridge*. Cambridge Archaeological Unit Report No. 138.
- RCHM(E) 1959. *An inventory of the historical monuments in the city of Cambridge: part II*. London: Her Majesty's Stationery Office.
- Spence, C. 1994. *Archaeological Site Manual*. London: MoLAS. (3<sup>rd</sup> edition).
- Spoerry, P. Atkins, R. & Macaulay, S. forthcoming. 'Medieval remains within the outer precinct of Ramsey Abbey, Cambridgeshire', submitted to *Med. Archaeol.*
- Taylor, A. 1999. *Cambridge: the hidden history*. Stroud, Tempus.
- Webster, L. & Cherry, J. 1974. 'Medieval Britain in 1973', *Med. Archaeol.* 18, 174-223).
- Willis, R. & Clark, J. W. 1886. *The architectural history of the University of Cambridge and of the Colleges of Cambridge and Eton*. Cambridge: Cambridge University Press.

## OASIS DATA COLLECTION FORM: England

**OASIS ID: cambridg3-39632**

### Project details

Project name An archaeological watching brief at Gonville and Caius College Boathouse

Short description of the project Archaeological monitoring was undertaken during the excavation of two boreholes and four trial pits located on a 990m square area of land in the northern part of the city of Cambridge on the 15th of February 2008. Along with evidence of the foundations of the standing 19th century Gonville and Caius Boathouse, a substantial peat deposit was also revealed. This material, which is situated immediately adjacent to the present course of the river Cam and is some 3m deep, appears to be associated with an area of marshland shown on a map of 1830 as lying immediately adjacent to a feature known as the 'Cambridge Sluice'.

Project dates Start: 15-02-2008 End: 15-02-2008

Previous/future work No / Not known

Any associated project reference codes GCB 08 - Contracting Unit No.

Any associated project reference codes ECB 2866 - HER event no.

Type of project Field evaluation

Site status None

Current Land use Community Service 2 - Leisure and recreational buildings

Methods & techniques 'Test Pits', 'Visual Inspection'

Development type Building refurbishment/repairs/restoration

Prompt Direction from Local Planning Authority - PPG16

Position in the After full determination (eg. As a condition)  
planning process

### Project location

Country England  
Site location CAMBRIDGESHIRE CAMBRIDGE CAMBRIDGE  
Goville and Caius College Boathouse  
Study area 990.00 Square metres  
Site coordinates TL 454 594  
Height OD Min: 0.60m Max: 3.55m

### Project creators

Name of Cambridge Archaeological Unit  
Organisation

Project originator brief Local Authority Archaeologist and/or Planning Authority/advisory body

Project design Christopher Evans  
originator

Project director/manager Christopher Evans

Project supervisor Richard Newman

Type of Landowner  
sponsor/funding body

Name of Gonville and Caius College, Cambridge  
sponsor/funding body

### Project archives

Physical Archive Cambridge Archaeological Unit  
recipient

Physical Archive ID GCB 08

Physical Contents 'Ceramics'

Digital Archive recipient Cambridge Archaeological Unit

Digital Archive ID GCB 08

Digital Contents 'Survey'

Digital available Media 'GIS','Text'

Paper Archive recipient Cambridge Archaeological Unit

Paper Archive ID GCB 08

Paper Contents 'Stratigraphic'

Paper available Media 'Context sheet','Drawing','Photograph','Plan','Report','Section'

### **Project bibliography 1**

Publication type Grey literature (unpublished document/manuscript)

Title Gonville and Caius Boathouse, Cambridge: an archaeological watching brief

Author(s)/Editor(s) Newman, R.

Other bibliographic details CAU Report No. 820

Date 2008

Issuer or publisher Cambridge Archaeological Unit

Place of issue or Cambridge

publication

Description A4 wire bound document, 38 pages long with 10 colour illustrations.

URL <http://ads.ahds.ac.uk>

---

Entered by Richard Newman (rn276@cam.ac.uk)

Entered on 25 March 2008

---

## **OASIS:**

Please e-mail English Heritage for OASIS help and advice

© ADS 1996-2006 Created by Jo Gilham and Jen Mitcham, email Last modified Friday 3 February 2006

Cite only: <http://ads.ahds.ac.uk/oasis/print.cfm> for this page