PROPOSED COLLEGE OF WEST ANGLIA,

MARCH, CAMBRIDGESHIRE

An Archaeological Evaluation

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An archaeological evaluation was undertaken by Cambridge Archaeological Unit on behalf of CgMs for The College of West Anglia, in March, Cambridgeshire (TL 4206 9633), during November 2007. The evaluation comprised four components, 5x5m test pits, fieldwalking, 1x1m test pits, and trial trenching. The programme of work was designed to determine the presence/absence and character (including the degree of preservation and chronological range) of archaeological remains within the proposed development area.

The results of the 5x5m test pits provided a model of the palaeotopography and confirmed that c.85% of the Proposed Development Area (PDA) was deep fen and of little archaeological potential. Further work concentrated on an area of 'high ground' in the east of the PDA where fieldwalking confirmed the presence of a previously recorded Neolithic / Bronze Age flint scatter. With the exception of an undated ditch, exposed in two of the trial trenches, no further archaeological remains were encountered.

Introduction

An archaeological evaluation was undertaken by Cambridge Archaeological Unit (CAU) on the proposed site for a new campus for The College of West Anglia. The Proposed Development Area (PDA), centred on TL 4206 9633, is located approximately 1km to the south-west of the historic centre of March. The site comprises 15 ha of agricultural land situated immediately to the west of the A141 between Burrowmoor Road and Gaul Road (Figure 1).

The eastern boundary of the PDA is situated at c.1.7m OD, the current land surface slopes gently to the west, reaching c.1.2m below OD at its lowest point on the western boundary. The underlying geology over the majority of the site comprises Jurassic clay bedrock overlain by alluvial and inter-tidal deposits of the Barroway Drove Beds. Towards the eastern extent of the PDA the Jurassic clay bedrock is overlain by glacial till (boulder clay).

The project was undertaken on behalf of CgMs for The College of West Anglia. The work was carried out in November 2007.

Archaeological background

The PDA is located on the interface between the western edge of the 'island' of March and the deep fen deposits of the Barroway Drove Beds. The fen deposits to the west of March are dominated by two major palaeochannels or 'roddens', representing the former course of the Nene (Hall 1987). The area between the high ground of March and the main palaeochannels is occupied by a dense pattern of roddens representing smaller tributaries, a number of which fall within the PDA.

A long history of Fenland prehistory research has highlighted the considerable archaeological potential of the fen edge interface and its importance as a historic environment resource. Whilst much of the March island fen edge is characterised by heavy clay soils often regarded as undesirable to prehistoric communities, it has recently been argued that such areas should not be dismissed on this basis (Evans 2002). Evidence of prehistoric fen edge activity on March island is largely restricted to flint scatters and spot finds many of which were identified through the Fenland Survey (Hall 1987). Some 100m to the north of the PDA, two flint scatters comprising Mesolithic and to a lesser degree, Neolithic material, have been identified near Gaul Road (CHER MCB 6333). Immediately adjacent to and extending into the south-east corner of the PDA, a Bronze Age flint scatter is recorded at Cherryholt (CHER MCB 6067), a site which has also yielded a Bronze Axe and pebble hammer (CHER MCB 7185, 7186).

Away from the fen edge, no significant prehistoric sites have been recorded on March island, although four barrows are known from Stonea island to the south-east (Hall 1987). This may be a reflection of the fact that built up areas largely cover the well-drained gravel belt running north to south, logically the area of preference for prehistoric occupation. However, glimpses of Bronze Age occupation are provided by spot finds and the limited evidence from more recent archaeological work in and around March. Within the town of March, finds recovered during the 19th century







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543180/293860

Figure 1. Location map

from near March station include a Bronze Age pottery vessel (Hall 1987) and a recent archaeological evaluation has identified ditches and postholes of possible 'early prehistoric' date (Casa-Hatton and Macaulay 2001). Immediately to the north at Estover, a pit containing Beaker pottery associated with an overall flint scatter was encountered during the excavation of Roman remains at the site (James and Potter 1996). Excavations in fields to the south of Estover in 1962 also revealed a series of small ditches associated with 'pre-Roman' pottery (*ibid*.).

Two Early Iron Age sites were identified on March island by the Fenland survey, with activity in the Late Iron Age also being represented by a number of coin hoards (Hall 1987). The site of a major Late Iron Age camp is located on Stonea island just to the south-east of March island.

Methodology

The project was undertaken in accordance with a project design specification (Evans 2007) produced in response to a brief for archaeological evaluation written by K. Gdaniec (2007) of Cambridgeshire County Council. The evaluation of the PDA comprised four phases of work; 5x5m test pits, fieldwalking, 1x1m test pits, and trial trenching (Figure 2). The work was carried out in full accordance with the IFA's *Standard Guidance for Archaeological Field Evaluations*.

5x5m test pits

A programme of thirteen, 5x5m test pits arranged on a 100m grid across the PDA was undertaken in order to compliment existing borehole data and model the palaeotopographic landscape. The test pits were excavated using a 360° tracked excavator fitted with a toothless bucket. The sides of the test pits were stepped where necessary and all recording was undertaken from the trench edge. The depositional sequence, including depth of deposits, of each test pit was recorded and a digital photographic record maintained.

Fieldwalking

Based on the results of the 5x5m test pits and the location of the previously recorded Cherryholt flint scatter (MCB 6067), an area in the east of the PDA was identified as being of increased archaeological potential. The area was walked from south to north in 20m transects, collecting artefacts at 10m intervals. The ground conditions were good at the time of survey, the field having recently been prepared for cultivation.

Having identified a concentration of worked flint in the south-east corner of the fieldwalking survey area, this area was the subject of intensive fieldwalking. Total collection of artefacts within 10m squares was undertaken in order to more accurately define the flint scatter.



Figure 2. Site plan

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1x1m test pits

A series of 38, 1x1m test pits arranged on a 25m grid were machine excavated across the area of increased archaeological potential. This tighter arrangement of test pits was undertaken in order to identify potential buried soil horizons and to determine the degree of survival and distribution of artefacts within the topsoil and any buried soils.

The sampling strategy comprised the hand sorting of a 90 litre sample of topsoil from each test pit with the recovery of all finds. Where buried soil was identified and survived to a sufficient depth, a further 90 litre sample of this deposit was hand sorted.

Trial trenching

A total of seven trenches were excavated within the east of the PDA in order to evaluate the area of 'high ground'. The trial trenches were excavated using a 360° tracked excavator fitted with a 2.1m toothless bucket under direct archaeological supervision at all times.

The trenches were located using an advanced Global Positioning System (GPS) with Ordnance Datum (OD) heights obtained. Potential archaeological features, were planned at a scale of 1:50 and subsequently sample excavated. All potential features were hand excavated and archaeological finds retained. A written record of archaeological features and environmental sequences was created using the CAU recording system (a modification of the MoLAS system) and sections drawn at an appropriate scale.

Results

5x5m test pit results

Test pits 1, 3, 4, 6, 9, 12 and 13, in the west of the PDA, were excavated to a depth of between 3m and 4m, depending on groundwater levels. None of the test pits were 'bottomed'; the borehole data from this area indicates that the interface between the base of the peat and the underlying clay deposits occurs at up to 5m below ground level. The deposits encountered in these test pits largely comprised the silty clays of the Barroway Drove Beds with the underlying fibrous peat only occasionally being exposed at the base of the test pit.

Test pits 3, 5, 7 and 10 revealed a full environmental sequence, exposing the interface between the base of the peat and the underlying clay at a depth of between 2.3m and 2.85m. A further test pit (5A) was excavated in this area, under the supervision of Dr. S. Boreham in order to closely examine the deposits and take a sequence of environmental samples (Appendix C).

Test pits 8 and 11 exposed natural boulder clay, overlain by topsoil at a maximum depth of 0.5m.

No archaeological features or buried soil horizons were encountered during the 5x5m test pit programme.

Discussion

The programme of test pits revealed two distinct landscape zones. The first was a large expanse of deep fen deposits (Area A), well in excess of 4m deep in places, beyond the former fen edge and occupying the west of the PDA. The second was an area of 'high ground', in the east of the PDA, comprising an area of boulder clay forming the fen edge (Area B).

The deep fen deposits in Area A covered an area of 12.8ha, some 85% of the PDA, an area which produced no evidence of archaeological features or buried soil horizons. Previous work (eg. Evans et al. 2005) in comparable areas of deep fen indicates a low potential for significant archaeological remains at such depths. Consequently, further work in this area was not considered appropriate.

In the east of the PDA, Area B marks the very edge of March island, with the former land surface falling away gradually to the west. This area of 'high ground', 2.2ha in area, coincides with the location of the previously recorded flint scatter and was considered to be of increased archaeological potential.

Fieldwalking results (Appendix A)

The programme of fieldwalking in Area B, yielded 79 unburnt worked flints, two burnt worked flints and 25 unworked burnt flints. All post-medieval and modern material (largely comprising abraded pottery sherds and ceramic building material) collected during fieldwalking, was discarded.

The flint scatter was largely confined to the south-east corner of Area B (Figure 3), with a marked decline in density of flint moving away from this area. The field walking yielded both systematically manufactured Neolithic flint working waste and one tool, and expediently manufactured Bronze Age flint working waste and occasional tools. The expediently produced Bronze Age material could potentially be Early, Middle or Late Bronze Age. However, a number of cores are comparable to material from Early Bronze Age assemblages, suggesting that a component of the Bronze Age material is potentially Early Bronze Age.

Discussion

The flint distribution reflects the results of fieldwalking at Cherryholt undertaken as part of the Fenland Survey (Hall 1987). According to the Fenland Survey results (*ibid.*) the greater part of the flint scatter is contained within the field immediately to the east of the PDA, with only the edge of the scatter extending into the PDA. The current evaluation confirmed that the scatter extends in to the south-east corner of the PDA.



Figure 3. Flint distruibutions from fieldwalking and test pits

The presence of material dating from the Late Mesolithic/Early Neolithic through to the Bronze Age indicates the repeated exploitation of the higher ground on the edge of the Fen. The character of the flint indicates that flint was both manufactured and utilised at the site during the Neolithic and the Bronze Age.

1x1m test pit results

The more intensive programme of 1x1m test pits excavated in Area B revealed between 0.3m and 0.45m of topsoil, directly overlying the boulder clay, over the eastern part of the area. To the west, the boulder clay falls away gradually, revealing thin fen edge deposits between 60m and 80m from the eastern boundary of the PDA. Remnants of a buried land surface, a light grey sandy silty clay, generally less than 0.1m thick, was also recorded in eleven of the test pits.

Where possible the buried soil was hand sorted, however, in some instances the horizon was truncated to the extent that sampling was not feasible. None of the test pits yielded any artefacts from the buried soil horizon. The hand sorting of 90 litre topsoil samples yielded a small assemblage of worked flint from six of the test pits

Discussion

The 1x1m test pit results indicate that where the depth of overlying deposits was sufficient to protect it from ploughing, a buried soil horizon does survive. Broadly speaking the buried soil survives along the former fen edge, where the former land surface falls away gradually to the west.

Although the buried soil horizon yielded no archaeological finds, sampling of topsoil provided an insight into distribution of worked and burnt flint within the plough zone (Figure 3). The flint assemblage from the test pits was largely chronologically non-diagnostic although Late Mesolithic / Early Neolithic and Neolithic material is present. While the artefact densities were too low to produce a detailed distribution plot, the test pits which produced archaeological finds are clustered towards the eastern boundary of the PDA with the highest density from the south-east corner; a distribution which reflects the results of the fieldwalking.

Trial trenching results (Figure 4)

A total of seven trial trenches were excavated in order to evaluate the area of 'high ground' formed by the boulder clay in Area B. The trenches were located specifically in order to evaluate any potential sub-surface remains associated with the recorded flint scatter, and to investigate the sequence of fen edge deposits and any potential buried soil horizons. The location of Trench 6 was also positioned with regard to one of the small roddens within the PDA.

Of the seven trial trenches excavated, two were found to be completely devoid of archaeological features. In the remaining trenches, two silt-filled hollows, possibly of natural origin, were recorded as well as a linear ditch of unknown date which was



Figure 4. Archaeological features from Area B trenching

encountered in Trenches 1 and 3. A series of shallow topsoil-filled linear features were also excavated and are considered to be the result of relatively recent agricultural practices.

Trenches 4 and 6 also provided an opportunity to examine and record a section of the fen edge environmental sequence.

Undated ditches

A linear ditch (**F.2**), aligned north to south was exposed in Trench 1 and again in Trench 3, 20m to the north. In Trench 1, the ditch [06] measured 1.2m wide by 0,4m deep, with a shallow U-shaped profile. It contained a firm mid grey silty clay primary fill [03], which yielded one residual Neolithic flint core. This was overlain by a loose brown, peaty silt fill [05], effectively plough soil deposited in the depression left by the incomplete silting up of the ditch. In Trench 3, the ditch [09] displayed a rounded V-shaped profile and measured 1.13m by 0.57m deep. It contained three fills, a blue grey slightly silty clay primary fill [12], 0.15m thick, a light grey silty clay secondary fill [13], up to 0.42m thick and a dark brown peaty clay tertiary fill [14], 0.22m thick. None of these fills yielded any dating evidence or archaeological finds. A bulk environmental sample taken from fill [03] yielded small amounts of charcoal and two partly charred wild plant seeds (Appendix B).

All other linear features were investigated and the majority found to be agricultural field drains, relatively recent in origin. A number of shallow ditches were also exposed across the site. The features were no more than 0.6m wide by 0.2m deep and contained a single, loose, peaty topsoil fill. Although no dating evidence was recovered, the nature of the fill and the regularity of the features would suggest that they are relatively modern and probably result from agricultural practices.

Other undated features

A large irregular hollow or pit (**F.3**, [08]), measuring 5m in length by 1.5m across and 0.45m in depth, was exposed in Trench 5. The feature had a flat base with moderate to steep sides and contained two fills. The basal fill comprised a sterile, mid brown clayey silt [11] up to 0.42m thick. This was partially overlain by a firm dark grey silty clay fill [7], deposited against the eastern edge of the feature, which contained frequent thin layers of charcoal. Neither of the fills yielded any archaeological finds or dating evidence. A bulk environmental sample taken from fill [11] yielded a high percentage of charcoal as well as hazelnut and rye grain remains. Whilst hazelnut is common in features of prehistoric date, the presence of rye grain indicates a probable post-Roman conquest date for this feature (Appendix B). Although the presence of charcoal and plant remains suggests that the feature is potentially archaeological, the material may equally have been naturally washed in. As such the feature remains of uncertain origin.

A silt-filled hollow (**F.4**, [15]) was encountered in Trench 4. The feature was irregular in both profile and plan, measuring approximately 2.5m in length by 0.85m across and up to 0.37m in depth. It contained a single, brown clayey silt fill with occasional small

degraded stones in its matrix. The homogenous fill produced no artefactual or environmental evidence and the feature was considered to be natural in origin.

The fen edge sequence (Figure 4)

In Trenches 4 and 6 the level of the boulder clay gradually fell away revealing an overlying sequence of fen edge deposits similar to that seen in the 5x5m test pits. Where the sequence was deep enough not to have been disturbed by ploughing, the boulder clay was overlain by a mottled mid grey clayey sandy silt [20] with occasional concentrations of charcoal. The deposit is interpreted as the remnants of a buried soil. This was overlain by a desiccated, fibrous brown peat [19] equivalent to the early Holocene (Mesolithic to Neolithic) basal peat recorded in the test pits. Situated above the peat was a mid brownish grey silty clay deposit, interpreted as the Bronze Age inter-tidal mud flat deposit of the Barroway Drove Beds. A number of areas of disturbance caused by tree throws were noted as well as the presence of bog oaks towards the western extent of the trenches, however, no archaeological features were exposed. The deposits thinned towards the eastern half of the trenches where the sequence comprised modern plough soil over natural boulder clay.

Discussion

The only convincing archaeological feature encountered during the trial trenching programme was $\mathbf{F.2}$, a north-south aligned linear ditch. The feature remains undated, a single flint core recovered from the ditch fills clearly being residual. Although the ditch was located in the area of the recorded Neolithic / Bronze Age flint scatter there is no evidence to suggest that it is contemporary or that the surface finds derive from this context. Furthermore, early Ordnance Survey maps show the eastern field boundary slightly to the west of its current location, which is determined by the course of the March by-pass. Although the location does not correspond exactly, it is possible that $\mathbf{F.2}$ is associated with the post-medieval field boundary. All other recorded features are of uncertain or natural origin, or the result of comparatively recent agricultural practices.

Trenches 4 and 6 provided an opportunity to record the fen edge sequence as the 'high ground' falls away giving way to an expanse of deep fen deposits. The sequence was consistent, the only variations being caused by root disturbance and tree throws. Although a buried soil horizon was recorded, no evidence of archaeological activity was encountered. No clear evidence of the rodden was encountered in Trench 6, although the depth of deposits at the western end, which was excavated to a depth of 1.5m without exposing natural clay, indicates its probable course.

Conclusion

The programme of evaluation at March, whilst confirming the presence of the Bronze Age flint scatter and effectively modelling the palaeotopography of the area, has not revealed any significant archaeological remains. The flint scatter occupies a limited area of 'high ground' (Area B) which falls just within the eastern boundary of the PDA. The remainder of the PDA is characterised by extensive deep fen deposits (Area A). The fieldwalking results are broadly comparable with those of the Fenland Survey (Hall 1987) indicating a fairly self-contained flint scatter in the south-east of the PDA. However, the results of the fieldwalking also indicate a Neolithic component to the assemblage which was not identified by the Fenland Survey.

The results of the trial trenching provided little indication of the specific context from which the Neolithic / Bronze Age material derived. Although an undated ditch was recorded, there is little evidence to suggest it is contemporary. The fact that the evaluation failed to reveal any sub-surface remains associated with the flint scatter may, in itself, be indicative of the context from which the material derives. Whilst the heavy clay soils would not be the preferred choice for prehistoric occupation, the fen edge was undoubtedly an important natural resource and potential focus of task-related activity.

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Appendix A

Flint assessment - Emma Beadsmoore

A total of 118 (<2268g) flints were recovered from the evaluation of the site; 106 (<2019g) were collected during field walking, 10 (195g) were retrieved from the test stations and 2 (54g) were from the trenches. Twenty seven (418g) flints recovered from the field walking are burnt, two (<3g) of which are also worked, the remainder are chronologically non-diagnostic burnt chunks. The rest of the flint recovered from the three evaluation strategies are worked and unburnt. The field walking flint is listed by type and context in Table 1, whilst the material recovered from the test pits is in Table 2.

Field walking

The field walking identified a flint scatter in the south-eastern corner of the site. Of the limited amount of material recovered outside the scatter, only four flints are chronologically diagnostic; three are likely to be the product of expedient Bronze Age flake production/core reduction strategies, whilst the fourth is a systematically reduced Neolithic single platform core. The flint from the scatter also included the products of systematic flake production/core reduction; narrow flakes were recovered from IV.G.6 and IV.G.8, whilst blades were collected from II.E.9, IV.B.7, and a single platform core, systematically reduced to manufacture narrow flakes and blades was from IV.F.7. This small group of material provides evidence for Late Mesolithic/earlier Neolithic flint working at the site.

Further evidence for Neolithic flake production was provided by flakes recovered from II.E.6, III.A.10, IV.A.7, IV.B.6, IV.B.8, IV.G.6, IV.G.7 and a blade from IV.G.7. Whilst exhausted Neolithic cores were recovered from IV.A.4, IV.A.6 and IV.F.3. Occasional utilised products of the Neolithic flint working were also collected; a retouched flake from III.A.10, however, the evidence for Neolithic activity focused predominantly on flint working rather than tool use. A scraper was recovered from IV.B.7 that is invasively retouched almost all the way round the edge, which is a characteristic of Late Neolithic/Early Bronze Age scrapers.

Amongst the systematically manufactured Neolithic waste flakes, cores and tools, evidence for expedient flint working was also recovered. Expedient flake production/core reduction with no concern over the form of the removals or the use life of the core is a feature of Bronze Age flint use. Probable evidence for Bronze Age flint working is provided by flakes from III.A.10, IV.A.1, IV.A.6, IV.A.7, IV.B.6, IV.B.7, IV.B.8, IV.B.8, IV.G.6, IV.G.7, IV.G.8, IV.G.9, two from IV.A.4, and discarded, often partially worked cores, two were collected from III.A.10. Two potentially Neolithic patinated cores had been freshly and expediently reworked, probably during the Bronze Age, indicating that the earlier component of the flint scatter was sometimes utilised as raw material for the later activity; the cores were recovered from II.E.7 and IV.F.3. Occasional utilised products of the Bronze Age flint working were also collected; a miscellaneous scraper was recovered from II.E.3, whilst III.A.9 yielded a retouched flake.

Table 1: Fieldwalking flint

	Туре	e													I
Collection _point	chip/chunk	primary flake	secondary flake	tertiary flake	secondary blade	tertiary blade	irregular core	single platform core	opposed platform core	multiple platform core	end and side scraper	miscellaneous scraper	miscellaneous retouched flake	unworked burnt chips/chunk	Totals
I.C.4			1				1								2
II.A.6														2	2
II.C.8	1			1											2
II.C.9	1														1
II.E.1								1							1
II.E.2	1													1	2
II.E.3												1			1
II.E.6			1												1
II.E.7							1								1
II.E.9						1									1
III.A.10			2				2						1		5
III.A.9													1		1
IV.A.1				2				1							3
IV.A.2				1											1
IV.A.4			2				1			1					4
IV.A.5														3	3
IV.A.6			1						1						2
IV.A.7			1	1										1	3
IV.A.8	1													2	3
IV.A.9								1							1
IV.B.3													1		1
IV.B.5		1	1												2
IV.B.6			1	1				1						3	6
IV.B.7			1			1	2				1				5
IV.B.8			4	2			1			1				3	11
IV.F.3			1				1	1	1					1	5
IV.F.5	1						1								2
IV.F.7								1							1
IV.G.1							1								1
IV.G.2			2	1			1								4
IV.G.3			1				1							1	3
IV.G.4			1				2	1						1	5
IV.G.5	1														1
IV.G.6			2				3							1	6
IV.G.7	1		1	1	1		1								5
IV.G.8			2											4	6
IV.G.9			2											-	2.
Sub totals	7	1	27	10	1	2	19	7	2	2	1	1	3	23	106

The field walking yielded both systematically manufactured Neolithic flint working waste and one tool, and expediently manufactured Bronze Age flint working waste and occasional tools. The expediently produced Bronze Age material could potentially be Early, Middle of Late Bronze Age. However, cores recovered from IV.A.4, IV.A.9, IV.B.7, IV.B.8, IV.G.2, IV.G.3, IV.G.4 and IV.G.6 are comparable to cores from Early Bronze Age assemblages, suggesting that a component of the Bronze Age material is potentially Early Bronze Age.

Test pits

The test stations yielded 10 flints that are listed by type and test station in Table 2 Evidence for Late Mesolithic/Early Neolithic activity is provided by a flake from Test Station 33 and a retouched flake from Test Station 38. Whilst evidence for Neolithic activity was supplied by a flake from Test Station 27 and a discoidal core from Test Station 12. The remaining material is chronologically non diagnostic.





Trenches

Two flints were recovered from the evaluation trenches, both from Trench 1; a Neolithic discoidal core and a potentially later, Bronze Age flake.

The flint recovered from the evaluation provides evidence for prehistoric activity at the site. The presence of material dating from the Late Mesolithic/Early Neolithic through to the Bronze Age indicates the repeated exploitation of the higher ground on the edge of the Fen. The character of the flint indicates that flint was both manufactured and utilised at the site during the Neolithic and the Bronze Age.

Appendix B

Assessment of environmental samples- Anne de Vareilles

The two bulk soil samples taken on site were processed using an Ankara-type flotation machine at the Cambridge Archaeological Unit. The flots were collected in 300μ m aperture meshes and the remaining heavy residues washed over a 1mm mesh. The flots were dried indoors and scanned for the presence of charred plant macro remains and other ecofacts.

Sorting and identification of macro remains was carried out under a low power binocular microscope. Identifications were made using the reference collection of the George Pitt-Rivers Laboratory, McDonald Institute, University of Cambridge. Floral nomenclature follows Stace (1997). All environmental remains are listed in table 3.

All plant remains preserved through carbonisation. Intrusive rootlets present in both samples are indicative of bioturbation through which ecofacts may have been lost and/or displaced. Molluscs were not present.

Sample number		<1>	<2>
Context		[011]	[005]
Feature		3	2
Feature type		Pit	Ditch
Phase / Date		?	?
Sample volume – litres		13	13
Flot fraction examined		1/1	1/1
Cereal grains			
Secale cereale	Rye grain	1	
Secale / Triticum	Rye or Wheat grain	1	
Wild Plant Seeds			
Corylus avellana	Hazel-nut shell fragment	8	
<i>Stellaria</i> sp.	Stitchworts	1	
Indeterminate wild seed			2
Charcoal			
>4 mm		++	-
2 – 4 mm		b	++
<2 mm		d	a
Poaceae/Carex culm node	Grass or Sedge stem frag.		1
Modern rootlets		d	d

Table 3

Key: '- 1 or 2, '+' <10, '++' 10-25, 'a' 25-50, 'b' 50-100, 'c' 100-500, 'd' >500 items.

F.3 [011]

Context [011] included high quantities of charcoal. It was noticed that some remained in the heavy residue though they are not quantified here. An unusual assemblage of rye (*Secale cereale*) and hazel-

nut (*Corylus avellana*) was found in the flot. Hazel-nuts are commonly found in Bronze Age and earlier contexts, whereas rye is rarely found before the Roman period in the British Isles (Greig 1991).

F.2 [005]

The sample contained some charcoal and two, only partly charred, wild plant seeds.

Very few plant macro-remains were found other than charcoal. The assemblages may be of mixed origins and have been disturbed through bioturbation.

Appendix C

The fen edge environmental sequence - Steve Boreham

The PDA is situated at a fen-edge location on the west side of the north-south trending March-Wimblington ridge.

Geotechnical borehole investigations and archaeological trial pits across the site revealed a general sequence of bedrock Jurassic clay, often overlain by a thin pebbly clay of periglacial (late glacial) origin. This was overlain by up to *c*. 3m of basal peat (with 'bog oaks') of probably early Holocene (Mesolithic and Neolithic) age. Above this was a variable thickness (1-3m) of silty clay interpreted as the Bronze Age intertidal mudflat and saltmarsh silts of the Barroway Drove Beds. Occasionally, sandy inter-tidal creek deposits partially replace the mudflat silts. In most places the base of the ploughsoil reaches the top of the mudflat silts, but where it does not a thin lens of upper Iron Age Nordelph Peat can be seen. This upper peat unit appears very oxidised and poorly preserved.

Closer to the ridge the peat and silt sequences thin, and glacial till (boulder clay) lies above the bedrock Jurassic clay. The March-Wimblington ridge itself rises above 0m O.D. and comprises a channel form some 20m deep filled by till and other glacial sediments, and capped by the March Gravel, a fluvial deposit dating from the Devensian (last glacial) period.

The following sequence was described from a 4x4m sondage (MWAC 5A) sunk at TL 40297 96495 between CAU Test Pits 2 and 5. The surface of the plough soil at the test location was 0.59m below OD.

MWAC 5A sequence described bottom-up

320-365cm	plough soil
305-320cm	brown lens of oxidised organic
190-305cm	as above
162-190cm	grey silty clay
133-162cm	dark brown peat with rootlets and wood fragments
120-133cm	brown wood peat
76-120cm	chocolate brown organic material with wood fragments
68-76cm	light brown silty organic material
60-68cm	grey-brown sandy silt
48-60cm	dark brown organic silty peat with wood
31-48cm	grey-brown silty organic material with wood fragments
0-31cm	grey-black silt with a little sand
below 0cm	grey bedrock clay

The sequence was sampled from 0-190cm

References

Casa-Hatton, R. and Macauley, S. 2001. *Prehistoric Field Systems at Northern Office, March. An Archaeological Evaluation* Cambridge County Council Archaeological Field Unit Report No. A179

Evans, C. 2002. 'Metalwork and 'Cold Claylands': Pre-Iron Age Occupation on the Isle of Ely', Lane, T. and Coles, J. (eds.) *Through Wet and Dry, Essays in Honour of David Hall,* Lincolnshire Archaeology and Heritage Reports Series No. 5, WARP Occasional Paper 17. pp33-53

Evans, C., Brudenell, M., Knight, M., Patten, R. 2005. *Must Farm. Archaeological and Palaeo-Environmental Investigations*. CAU Report No. 613

Evans, C. 2007. Proposed College of West Anglia, March. Project Specification for Archaeological Evaluation, Cambridge Archaeological Unit

Gdaniec, K. 2007. *Brief for Archaeological Evaluation*, Cambridgeshire Archaeology Planning and Countryside Advice

Greig, J.R. 1991. The British Isles. In Van Zest, W., Wasylikowa, K. and K-E. Behre (eds.), *Progress in Old World Palaeoethnobotany*. Brookfield and Rotterdam: A.A. Balkema, 299-334

Hall, D. 1987. *The Fenland Project, Number 2: Cambridgeshire Survey, Peterborough to March*, East Anglian Archaeology 35

James, S. T. and Potter, T.W. 1996. 'Excavations at Estover, March, 1985', Jackson, R.P.J. and Potter, T.W. (eds.) *Excavations at Stonea, Cambridgeshire, 1980-85*, The Trustees of the British Museum. pp27-42

Stace, C. 1997. *New Flora of the British Isles*. Cambridge: Cambridge University Press

OASIS DATA COLLECTION FORM: England

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Printable version

OASIS ID: cambridg3-35064

Project details	
Project name	Proposed College of West Anglia, March, Cambridgeshire: An Archaeological Evaluation
Short description of the project	An archaeological evaluation was undertaken by Cambridge Archaeological Unit on behalf of CgMs for College of West Anglia, in March, Cambridgeshire (TL 4206 9633), during November 2007. The evaluation comprised four components, 5x5m test pits, fieldwalking, 1x1m test pits, and trial trenching. The results of the 5x5m test pits provided a model of the palaeotopography and confirmed that c. 85% of the Project Development Area (PDA) was deep fen and of little archaeological potential. Further work concentrated on an area of 'high ground' in the east of the PDA where fieldwalking confirmed the presence of a previously recorded Bronze Age / later prehistoric flint scatter. With the exception of an undated ditch, exposed in two of the trial trenches, no further archaeological remains were encountered.
Project dates	Start: 31-10-2007 End: 24-11-2007
Previous/future work	No / No
Any associated project reference codes	CWA 07 - Sitecode
Any associated project reference codes	ECB 2778 - HER event no.
Type of project	Field evaluation
Site status	None
Site status	None
Current Land use	Cultivated Land 3 - Operations to a depth more than 0.25m
Current Land use	Cultivated Land 3 - Operations to a depth more than 0.25m
Monument type	DITCH Uncertain
Significant Finds	LITHIC SCATTER Neolithic
Significant Finds	LITHIC SCATTER Bronze Age
Methods & techniques	'Targeted Trenches', 'Test Pits', 'Fieldwalking'
Development type	Public building (e.g. school, church, hospital, medical centre, law courts etc.)
Prompt	Direction from Local Planning Authority - PPG16
Position in the planning process	Pre-application

Project location

Country	England
Site location	CAMBRIDGESHIRE FENLAND MARCH Proposed College of West Anglia, March, Cambridgeshire
Study area	15.00 Hectares
Site coordinates	TL 4206 9633 52.5458748560 0.09522202233280 52 32 45 N 000 05 42 E Point
Height OD	Min: -1.20m Max: 1.70m

http://ads.ahds.ac.uk/oasis/print.cfm

OASIS FORM - Print view

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Name of Organisation	Cambridge Archaeological Unit
Project brief originator	Local Authority Archaeologist and/or Planning Authority/advisory body
Project design originator	Christopher Evans
Project director/manager	Robin Standring
Project supervisor	Jonathan Tabor
Type of sponsor/funding body	Developer

Name of College of West Anglia sponsor/funding body

Project archives

Physical Archive recipient	Cambridge Archaeological Unit
Physical Archive ID	CWA 07
Physical Contents	'Worked stone/lithics'
Digital Archive recipient	Cambridge Archaeological Unit
Digital Archive ID	CWA 07
Digital Contents	'Environmental','Worked stone/lithics'
Digital Media available	'Images raster / digital photography','Spreadsheets','Survey','Text'
Paper Archive recipient	Cambridge Archaeological Unit
Paper Archive ID	CWA 07
Paper Contents	'Environmental', 'Worked stone/lithics'
Paper Media available	'Context sheet','Drawing','Report','Section','Survey ','Unpublished Text','Map','Plan'

Project bibliography 1

	Grey literature (unpublished document/manuscript)
Publication type	
Title	Archaeological Desk Based Assessment: Land West of Isle of Ely Way, March, Cambridgeshire
Author(s)/Editor(s)	Chadwick, P
Author(s)/Editor(s)	Dicks, S
Date	2006
Issuer or publisher	CgMs Consulting
Place of issue or publication	London

Project bibliography 2

http://ads.ahds.ac.uk/oasis/print.cfm

OASIS FORM - Print view

Publication type	Grey literature (unpublished document/manuscript)
Title	Proposed College of West Anglia, March, Cambridgeshire, An Archaeological Evaluation
Author(s)/Editor(s)	Tabor, J
Date	2007
Issuer or publisher	Cambridge Archaeological Unit
Place of issue or publication	Cambridge
Description	A4 wire bound with plastic laminate front
Entered by	Jonathan Tabor (taborjonathan@hotmail.com)
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