
**ARCHAEOLOGICAL EVALUATION AT
BURWELL LODGE BRIDGE,
BURWELL FEN, BURWELL,
CAMBRIDGESHIRE
(BFBL 12)**

Work Undertaken For
The National Trust

June 2012

Report Compiled by
Mark Peachey BA (Hons)

National Grid Reference: TL 563 690
Cambs.C.C.HER Event No ECB3775
OASIS ID No: archaeo11-128073
Planning Application: 11/00886/FUL

Report No: **43/12**

**ARCHAEOLOGICAL
PROJECT
SERVICES**



**Quality Control
Archaeological Evaluation at
Burwell Lode Bridge,
Burwell Fen,
Burwell
Cambridgeshire
(BFBL 12)**

Project Coordinator	Dale Trimble
Site Supervisor	Mark Peachey
Finds Processing	Denise Buckley
CAD Illustration	Mark Peachey
Photographic Reproduction	Mark Peachey
Post-excavation Analyst	Mark Peachey

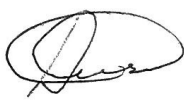

Checked by Project Manager	Approved by Senior Archaeologist
 Dale Trimble	 Tom Lane
Date: 15 June 2012	Date: 15 June 2012

Table of Contents

List of Figures

List of Plates

1.	SUMMARY	1
2.	INTRODUCTION.....	1
2.1	DEFINITION OF AN EVALUATION	1
2.2	PLANNING BACKGROUND.....	1
2.3	TOPOGRAPHY AND GEOLOGY.....	1
2.4	ARCHAEOLOGICAL SETTING	1
3.	AIMS AND OBJECTIVES	2
4.	METHODS	2
5.	RESULTS	3
6.	DISCUSSION	4
7.	CONCLUSION	4
8.	ACKNOWLEDGEMENTS	5
9.	PERSONNEL	5
10.	BIBLIOGRAPHY	5
11.	ABBREVIATIONS	5

Appendices

1. Specification for Archaeological Evaluation
2. Context descriptions
3. The Finds *by Tom Lane*
4. Glossary
5. The Archive

List of Figures

- Figure 1 General location plan
- Figure 2 Site location plan
- Figure 3 Trench Location Plan
- Figure 4 Trench Plans
- Figure 5 Sections

List of Plates

- Plate 1 Area of Trench 1 prior to machining looking north
- Plate 2 Machining Trench 3 looking northeast
- Plate 3 Trench 2 looking north
- Plate 4 Trench 3 representative section (east) looking south showing buried soil (305)
- Plate 5 Trench 2, Section 5, marling pit [206] cutting buried soil (209), looking east
- Plate 6 Trench 2, ditch [203], Section 3 looking east

1. SUMMARY

An archaeological evaluation comprising three trial trenches was undertaken in advance of construction of a bridge across Burwell Lode, Burwell Fen, Cambridgeshire. The trenches were located within the footprints of a proposed new ditch and pond. The development forms part of the Wicken Fen Vision Strategy, a scheme to enclose an area of c139 hectares of land as part of a National Trust scheme to rewet Adventurer's Fen.

The site had a high archaeological potential. Artefacts characteristic of Mesolithic and Neolithic activity have been discovered north of Burwell Lode and recent trial trenching in the immediate vicinity identified peat filled palaeochannels and Mesolithic flint work characteristic of sporadic occupation of the area.

The evaluation revealed patchy buried soils beneath peat. Sampling of these revealed several Mesolithic flints suggesting nearby flintworking.

Finds comprised struck flint of Mesolithic date with a single flake which may be Early Neolithic.

2. INTRODUCTION

2.1 Definition of an Evaluation

An archaeological evaluation is defined as 'a limited programme of non-intrusive and/or intrusive fieldwork which determines the presence or absence of archaeological features, structures, deposits, artefacts or ecofacts within a specified area or site. If such archaeological remains are present Field Evaluation defines their character and extent, quality and preservation, and it enables an assessment of their worth in a local, regional, national or international context as appropriate' (IfA 2008).

2.2 Planning Background

Due to the high archaeological potential of the site, a condition was placed on planning consent (11/00886/FUL) by East Cambridgeshire District Council requiring a scheme of archaeological work to be undertaken at the site. The first phase of this work was an archaeological evaluation to assess the nature and potential of the site. The archaeological evaluation was carried out between 21st and 23rd May 2012 in accordance with a specification prepared by APS and approved by Cambridgeshire Archaeology (CA).

2.3 Topography and Geology

Burwell lies 6km northwest of Newmarket and 15km northeast of Cambridge in southern Cambridgeshire (Fig 1). The site of the proposed development is located south of the present footbridge over Burwell Lode, at the edge of Adventurers' Fen, centred on NGR TL 563 690 (Fig 2).

The area lies within a low lying flat, open river plain at surface heights of 0m OD to -1.20m OD where peats have developed on a substrate of Gault Clay. Small knolls of sand and gravels comprising First River Terrace deposits are scattered around Adventurers' Fen and adjacent areas (Hodge *et al.* 1984).

2.4 Archaeological Setting

The Fenland has long been recognised as an important archaeological landscape, containing superimposed evidence of settlement, ritual and agricultural remains dating from the prehistoric period onwards.

The Fenland Project identified a series of five closely spaced Mesolithic and Neolithic lithic sites on a sandy ridge 2km to the southwest of the site in Swaffham Prior Fen. This is the southeastern edge of the main central palaeochannel of the River Cam. These flint scatters produced many microliths, blades, cores and scrapers, a few

axes and axe fragments and Neolithic pottery sherds. Other sites occur on sand and gravel knolls in the fen including a widespread scatter south of the ridge. The lithics lay mainly in the ploughsoil (Hall 1996, 102).

In Hallard's Fen, 1km to the southeast, a probable Neolithic and Early Bronze Age settlement site (HER 06388) has produced large numbers of flint and stone implements including flint cores, waste flakes, axes, scrapers, burins, arrowheads and polished stone axes (RCHM 1972).

Other archaeological discoveries in the immediate area include a Bronze Age flint knife and an associated Beaker vessel (HER MCB 7790) which indicate the possibility of a cemetery or barrow of the period in the area.

By the late prehistoric period peat would have spread rapidly over the area from the River Cam in the west to the chalky slopes of Burwell, remaining as fen through to post-medieval times (Hall 1996, 102).

The fen edge town of Burwell is first recorded as *Burewelle* in the Chronicles of the Abbott of Ramsey in 969 AD and means 'spring by the burg' (Ekwall 1989).

Burwell Lode was first recorded in 1604 and was recut on its present alignment by the Bedford Level Commissioners at the same time as Reach Lode in the early 1650s. The enclosure and drainage of the fens bounded by the two lodes, including the investigation area, was complete by the early 18th century. However, the subsequent gradual shrinkage of the fen surface made drainage impossible and in 1841 Burwell Drainage Commission was set up to construct engine pumps. These were not satisfactory and much of the area remained unsuitable for agriculture until 1940 when the drainage system was connected to drains in the Swaffham Drainage District by means of a culvert under Reach Lode (RCHM 1972).

A recent archaeological evaluation and subsequent monitoring and recording investigation, prior to the construction of the bund, ditch and cycleway, immediately to the southeast of the current site revealed a number of tree-throws, two of which contained Neolithic flints, and an undated palaeochannel (Peachey 2010a).

A subsequent evaluation a short distance to the west, at Burwell Fen Hundred Acres, revealed a Mesolithic flint scatter suggestive of a short episode of flintworking by a mobile population, probably directed towards the repair and maintenance of hunting equipment. This lay adjacent to a large palaeochannel, a tributary of the River Cam (Peachey 2010b).

3. AIMS AND OBJECTIVES

The aim of the work was to gather sufficient information for the archaeological curator to be able to formulate a policy for the management of the archaeological resources present on the site.

The objectives were to establish the type of archaeological activity that might be present within the site, to determine its likely extent, the date and function of the archaeological features present on the site, their state of preservation, spatial arrangement and the extent to which surrounding archaeological features extended into the application area, and to establish the way in which any archaeological features identified fitted into the pattern of occupation and land-use in the surrounding landscape.

4. METHODS

Two trenches measuring 60m x 1.8m and one measuring 52m x 1.8m were excavated by machine under archaeological supervision (Fig. 3). The

trenches were cleaned by hand and examined for archaeological remains. Each deposit was allocated a unique reference number (context number) with an individual written description. A list of all contexts and their descriptions appears as Appendix 2. A photographic record was compiled and sections were drawn at a scale of 1:10. Recording was undertaken according to standard Archaeological Project Services' practice.

Following excavation, records were checked and a stratigraphic matrix produced. Phasing was assigned based on the nature of the deposits and recognisable relationships between them, and supplemented by provisional artefact dating.

5. RESULTS

Archaeological contexts are listed below and described. The numbers in brackets are the context numbers assigned in the field.

Trench 1 (Fig 4)

The earliest deposit in this trench was natural light yellowish brown clay sand silt (106). This was overlain, at the easternmost 2m of the trench, by a 0.05m thick light grey clay (105). This patch of buried soil was fully hand excavated for flints, four being retrieved: a Mesolithic bladelet core, a Mesolithic or Early Neolithic flake and two natural flakes (Appendix 3). Above this soil was 0.15m of thick dark grey humic silt (104), probably deposited in standing water. Overlying this was up to 0.1m thick light grey clayey silt (103) alluvium. At the west end of the trench, the natural was overlain by 0.08m thick dark grey silty sand flood deposit(107).

These deposits were sealed by an up to 0.27m thick layer of degraded, dehydrated dark peat (102).

This deposit was almost certainly cut by circular post hole [108] (Fig 5, Section 1) which was only identified on machining down to natural. The post hole was 0.2m in diameter with a rounded base and at least 0.08m deep. It was filled by light grey sandy clay (109). This was overlain by 0.4m thick topsoil (101).

Trench 2 (Fig 4, Plate 3)

The natural in Trench 2 was mottled orange/light yellowish grey silty sand (210).

In places this was overlain by an up to 0.14m thick buried soil of mid grey slightly clayey silt (209) (Fig 5, Section 5, Plate 5). This was hand excavated for flints in a 2m x 1m area adjacent to Section 5 but none were revealed. This was sealed by a dark brown peat layer (208) up to 0.15m thick. Above the peat was a light grey sandy silt flood deposit (207), up to 0.08m thick which was sealed by a 0.18m thick layer of dark greyish brown peat (204).

In the central part of the trench, the peat was cut by two features of probable early modern date.

A northwest to southeast aligned ditch [203] (Fig 5, Section 3, Plate 4) was 1m wide and 0.5m deep and filled with very dark grey fine peaty silt (202).

North of this, on a similar alignment, oblong cut [206] (Fig 5, Section 5, Plate 5) was 1.2m long, 0.8m wide and 0.42m deep. It was filled with loose dark brown woody peat (205). These features were sealed by 0.36m thick topsoil (201).

Trench 3 (Fig 4)

At the east end of the trench was a light grey sandy clay natural deposit (307) which was overlain by 0.3m thick natural light brown orange clay sand silt (306).

Lying immediately above the natural was a 0.16m thick layer of light grey sandy silt (305), a probable buried soil (Fig 5, representative sections, Plate 6). This was overlain by 0.13m thick dark grey humic silt (304), a probable standing water deposit, also buried. Two areas of these deposits were hand excavated for flints (Fig 4) and two Mesolithic flints were retrieved from (304): a broken blade, or unfinished microlith, and a blade flake. Over this, at the west end of the trench, a 0.07m thick layer of light grey humic silt (303) was a probable alluvial deposit similar to (103). This layer was sealed by 0.17m thick dessicated peat (302).

This was probably cut by ovoid post hole [310] (Fig 5, Section 4) which was only seen on machining down to natural. The post hole measured 0.4m x 0.3m with a rounded base and was at least 0.1m deep. It was filled by light grey sandy clay (308) and dark grey clayey silt (309).

The overlying topsoil (301) was 0.46m thick.

6. DISCUSSION

Natural deposits comprised generally orangey brown clayey silty sand with occasional gravel patches, Quaternary River Terrace deposits.

A patchy buried soil was revealed above the natural in all three trenches. This was beneath a sequence of alluvial silts and peat. The peat had been truncated by ploughing.

The buried soil at the east end of Trench 1 and a humic layer, above a buried soil and below peat, in Trench 3 contained Mesolithic struck flint indicating flintworking taking place in the vicinity.

Mesolithic and Early Neolithic flint scatters had previously been discovered on sand and gravel knolls in the vicinity

(Peachey 2010b) and on the sandy Swaffham Prior ridge to the southwest (Hall 1996, 102).

Cambridgeshire sites at Honey Hill, Ramsey and Eye Hill Farm, Soham investigated by the Fenland Project showed that earlier Neolithic scatters could be as small as 20-30m across. As at Burwell Fen Hundred Acres (Peachey 2010b), any buried soil, where the flints would have lain, or shallow features had been ploughed out. Whatever occupation had occurred in prehistory did not create major sub-surface features. The distributions of scatters reflected limited and sporadic use of locations such as small camps with different forms of working distributed across both the landscape and the seasons (Edmonds *et al.* 1999).

At Burwell Fen Burwell Lode Bridge, the natural deposits were about 0.85m lower than on the sandy knoll at Burwell Fen Hundred Acres and so the buried soils had not been ploughed out. They remained *in situ* beneath a truncated peat layer although no archaeological features were revealed upon their removal.

The two undated features in Trench 2 were probably an early modern marling trench and pit similar to those previously found nearby (Peachey 2010a, b).

7. CONCLUSION

An archaeological evaluation was carried out at Burwell Lode Bridge, Burwell Fen, Burwell, Cambridgeshire as the site lay in an area of archaeological potential close to discoveries of Mesolithic flintwork.

The evaluation revealed patchy buried soils beneath peat. Sampling of these revealed several Mesolithic flints suggesting nearby flintworking. This reflected previous evidence of a prehistoric presence on the low sand and gravel knolls in the vicinity.

Finds comprised struck flint of Mesolithic date with a single flake which may be Early Neolithic.

8. ACKNOWLEDGEMENTS

Archaeological Project Services wishes to acknowledge the assistance of The National Trust who commissioned the project. The work was coordinated by Dale Trimble who edited this report along with Tom Lane.

9. PERSONNEL

Project Coordinator: Dale Trimble
Site Supervisor: Mark Peachey
Site Assistant: Jonathon Smith
Surveying: Dale Trimble
Finds processing: Denise Buckley
Photographic reproduction: Mark Peachey
CAD Illustration: Mark Peachey
Post-excavation analysis: Mark Peachey

10. BIBLIOGRAPHY

Edmonds, M., Evans, C., and Gibson, D. 1999 *Assembly and Collection- Lithic Complexes in the Cambridgeshire Fenlands* Proceedings of the Prehistoric Society **65** 47-82

Ekwall, E, 1989 *The Concise Oxford Dictionary of English Place-Names* (4th edition)

Google maps website

Hall, D., 1996 *The Fenland Project, Number 10: Cambridgeshire Survey, The Isle of Ely and Wisbech* East Anglian Archaeology **79**

Hodge, CAH, Burton, RGO, Corbett, WM, Evans, R, and Seale, RS, 1984, *Soils and their use in Eastern England*, Soil Survey of England and Wales **13**

IfA, 2008 *Standards and Guidance for Archaeological Evaluations*

Peachey, M., 2010a *Archaeological evaluation and monitoring and recording at Burwell Bund and Cycleway, Burwell, Cambridgeshire (BUAF 10)* Unpublished APS Report **55/10**

Peachey, M., 2010b *Archaeological evaluation and excavation at Burwell Fen Hundred Acres, Burwell, Cambridgeshire (BFHA 10)* Unpublished APS Report **96/10**

RCHM 1972 *An Inventory of the Historical Monuments in the County of Cambridgeshire Vol II. NE Cambridgeshire*

11. ABBREVIATIONS

APS Archaeological Project Services

HER Heritage Environment Record

IfA Institute for Archaeologists

NGR National Grid Reference

RCHM Royal Commission on Historic Monuments



Figure 1 General location map

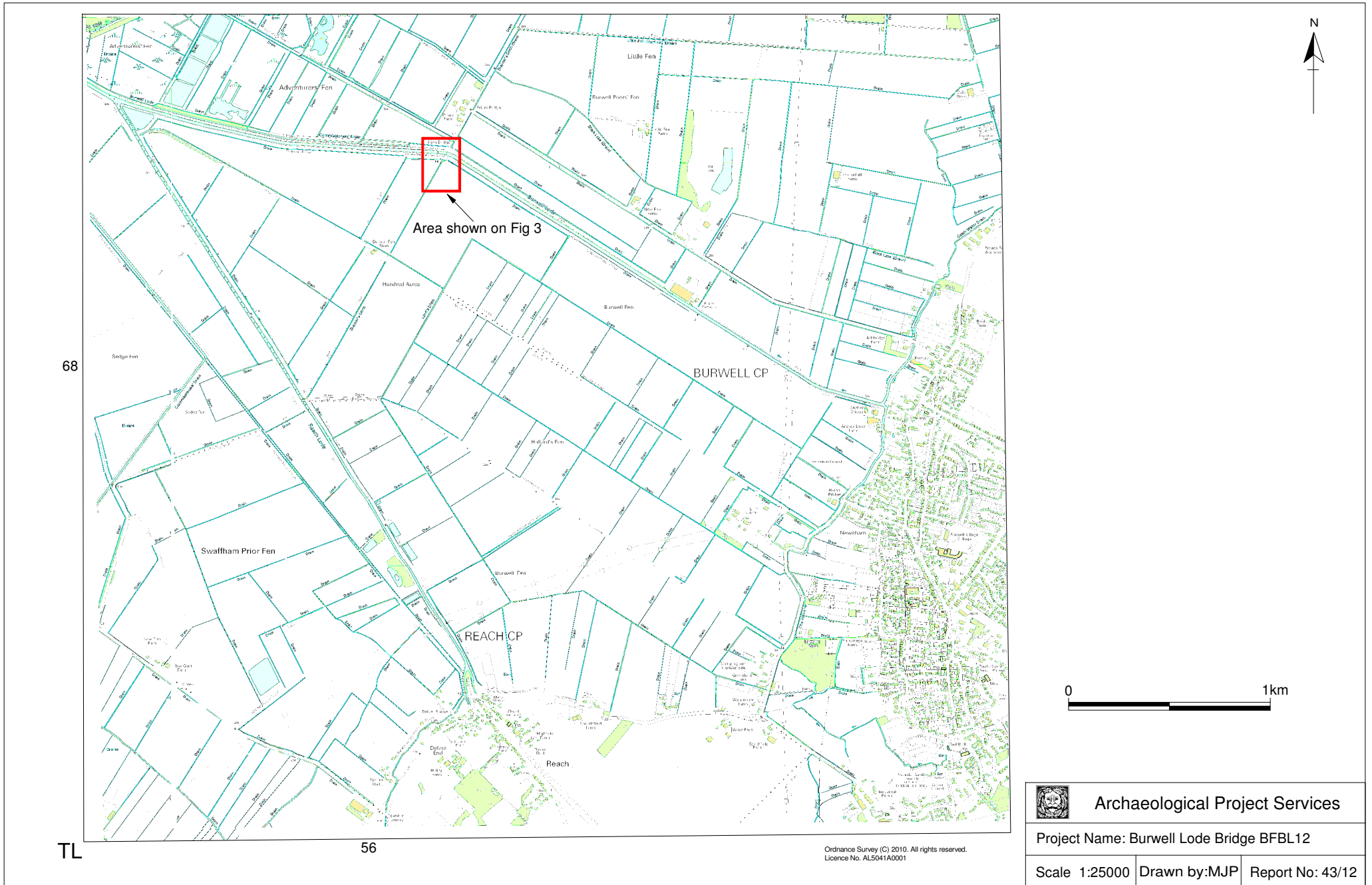


Figure 2. Site Location Plan

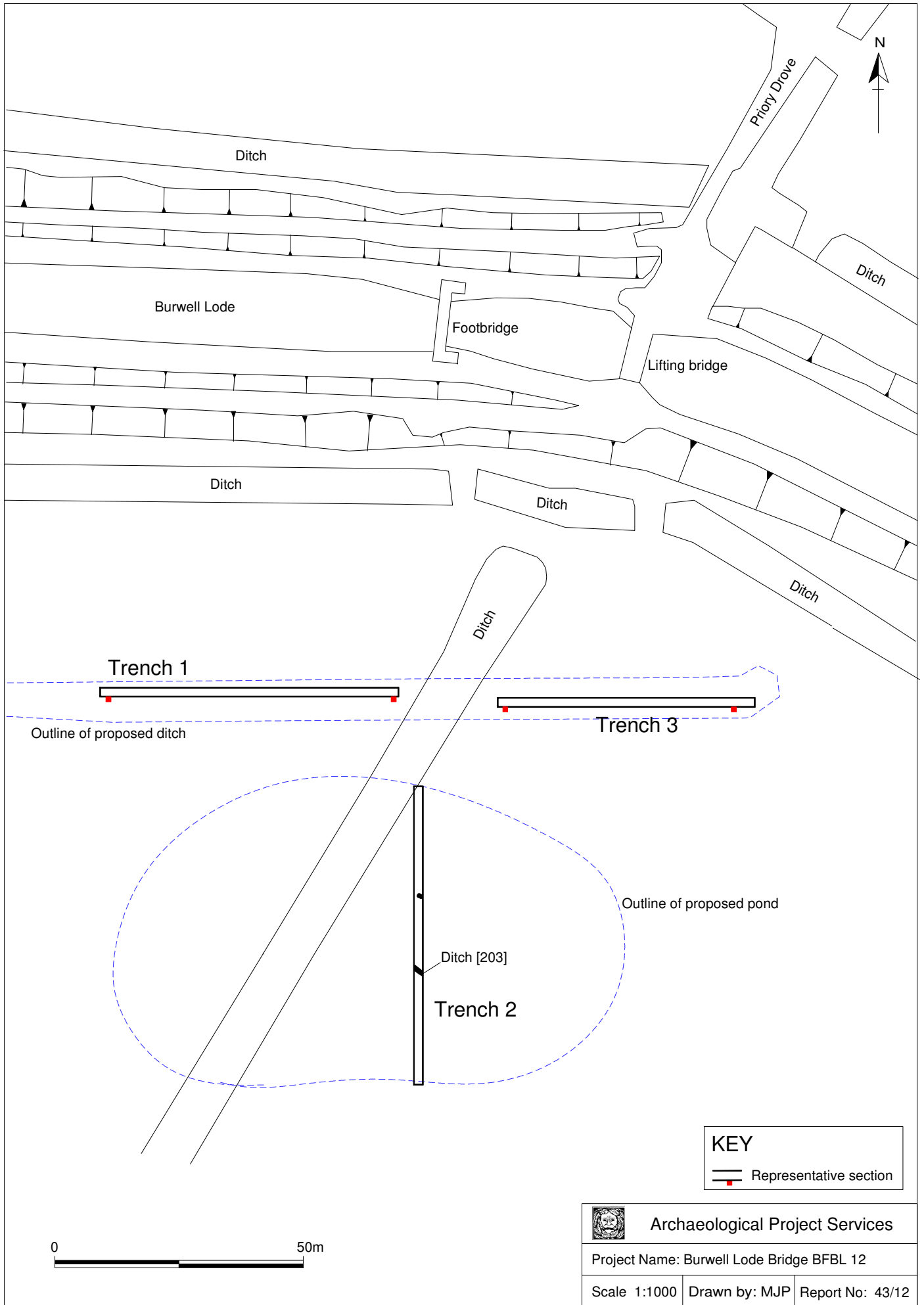


Figure 3. Trench Location Plan

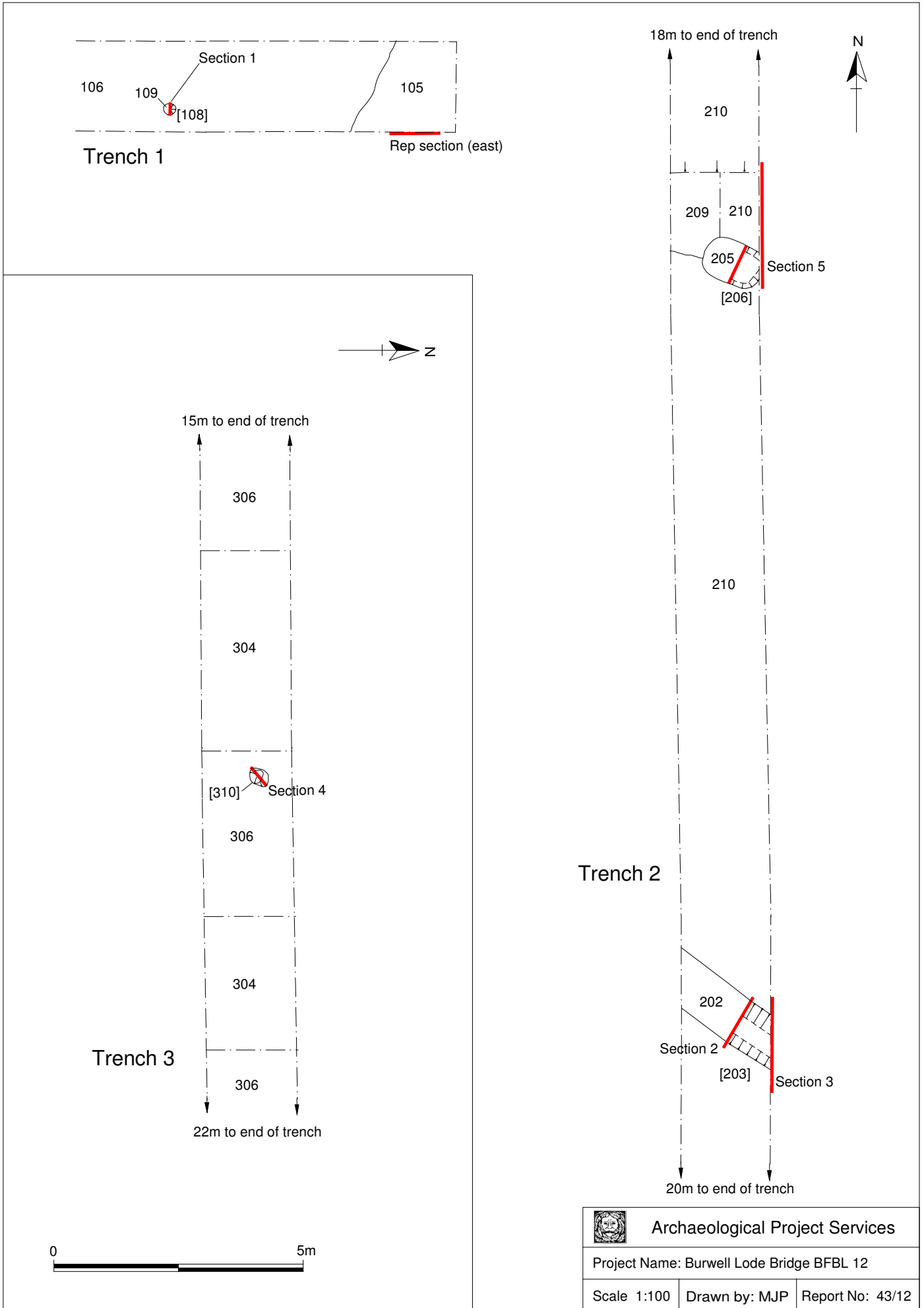
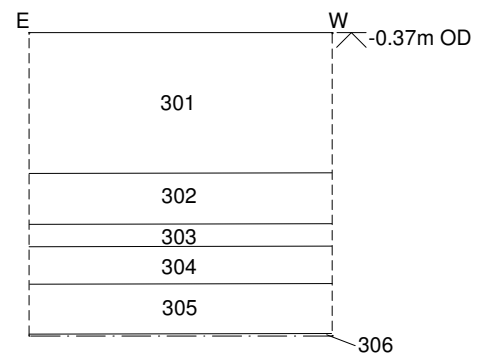
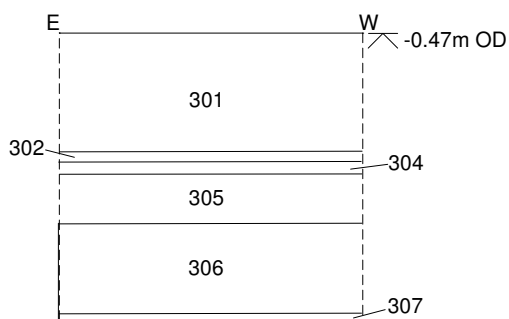
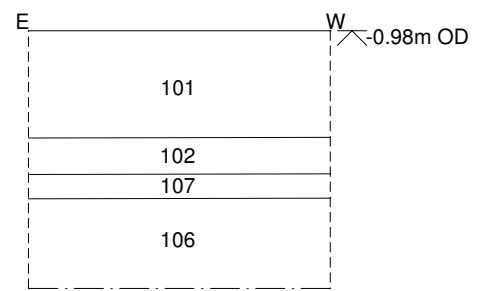
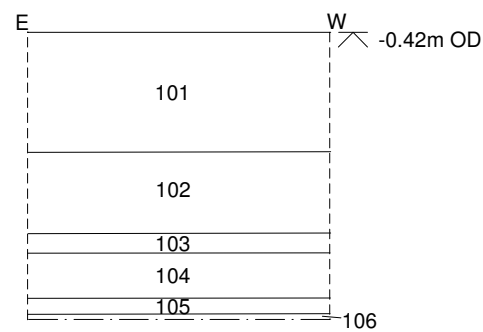
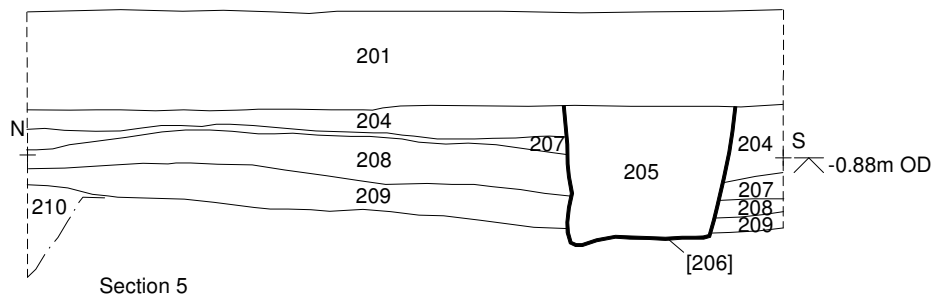
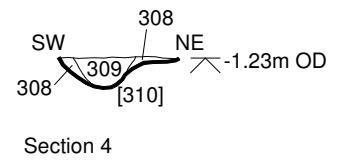
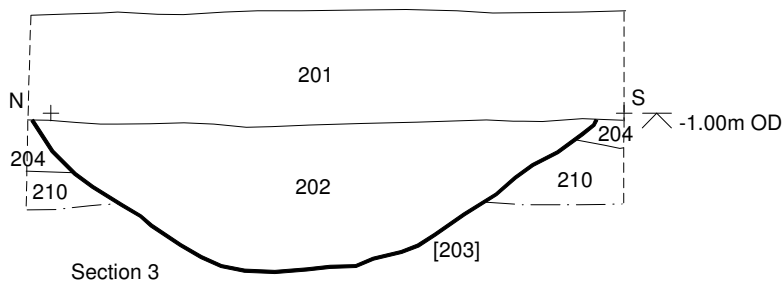
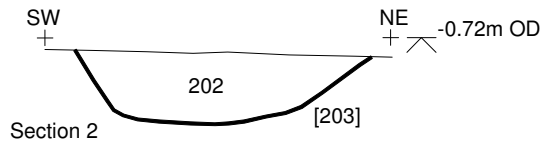
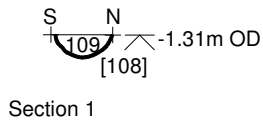


Figure 4. Trench Plans



Archaeological Project Services

Project Name: Burwell Lode Bridge BFBL 12

Scale 1:25

Drawn by: MJP

Report No: 43/12

Figure 5. Sections



Plate 1. Area of Trench 1 prior to machining looking north



Plate 2. Machining Trench 3 looking northeast



Plate 3. Trench 2 looking north



Plate 4. Trench 2, ditch [203], Section 3 looking east



Plate 5. Trench 2, Section 5, marling pit [206] cutting buried soil (209), looking east

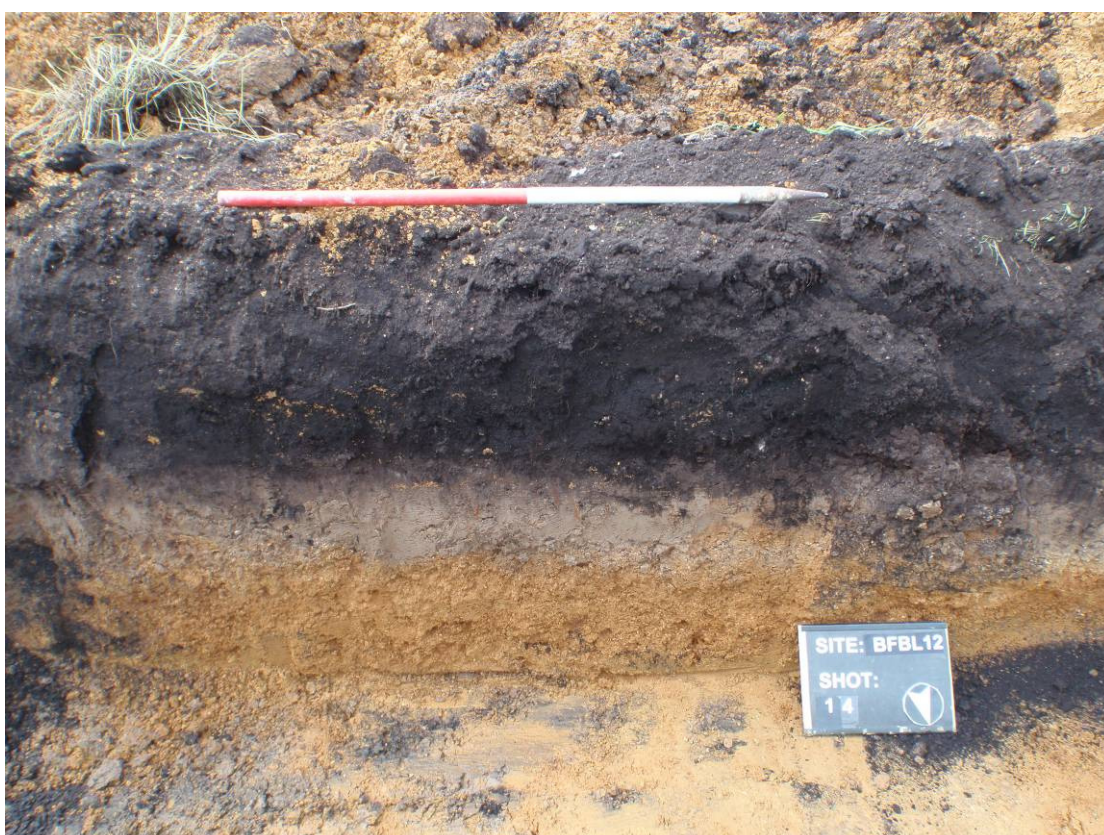


Plate 6. Trench 3 representative section (east) looking south showing buried soil (305)

Appendix 1: BURWELL LODGE BRIDGE, HARRISONS DROVE, BURWELL WRITTEN SCHEME OF INVESTIGATION FOR ARCHAEOLOGICAL EVALUATION

PREPARED FOR THE NATIONAL TRUST

BY ARCHAEOLOGICAL PROJECT SERVICES

Institute of Field Archaeologists' Registered Archaeological Organisation No. 21

MAY 2012

1 SUMMARY

- 1.1 *This document comprises a Written Scheme of Investigation for evaluation of land in advance of construction of a Bridge across Burwell Lode, Harrisons Drove, Burwell, Cambridgeshire. The development forms part of the Wicken Fen Vision Strategy.*
- 1.2 *The Cambridgeshire Historic Environment Record contains records which suggest that the site has a high archaeological potential. Artefacts characteristic of Mesolithic and Neolithic activity have been discovered north of Burwell Lode and recent trial trenching in the area has identified peat filled palaeochannels and Mesolithic flint work characteristic of sporadic occupation of the area.*
- 1.3 *The development forms part of a scheme to enclose an area of c139 hectares of land as part of a National Trust scheme to rewet Adventurer's Fen. This specification applies to groundworks to be undertaken as part of the construction of a Bridge across Burwell Lode.*
- 1.4 *On completion of the fieldwork a report will be prepared detailing the findings of the investigation. The report will consist of a text describing the nature of the archaeological deposits located and will be supported by illustrations and photographs.*

2 INTRODUCTION

- 2.1 This document comprises a specification for the evaluation of land at Burwell Load, Harrison's Drove, Burwell, Cambridgeshire.
 - 2.1.1 The document contains the following parts:
 - 2.1.2 Overview
 - 2.1.3 The archaeological and natural setting
 - 2.1.4 Stages of work and methodologies to be used
 - 2.1.5 List of specialists
 - 2.1.6 Programme of works and staffing structure of the project

3 SITE LOCATION

- 3.1 Burwell lies 6km northwest of Newmarket and 15km northeast of Cambridge in southern Cambridgeshire. The site of the proposed development is located south of the present bridge over Burwell Lode, at the edge of Adventurers' Fen and south of Priory Farm on Harrison's Drove.

4 PLANNING BACKGROUND

- 4.1 Due to the high archaeological potential of the site, a condition has been placed on planning consent (11/00886/FUL) by East Cambridgeshire District Council requiring a scheme of archaeological work to be undertaken at the site. The first phase of this work will be an archaeological evaluation to assess the nature and potential of the site, and a programme of archaeological monitoring. This specification deals solely with the evaluation and monitoring phase.
- 4.2 This specification relates to evaluation of areas on the south side of Burwell Lode subject to groundworks associated with construction of a new bridge across the watercourse.

5 SOILS AND TOPOGRAPHY

- 5.1 The area lies within a low lying flat, open river plain at surface Ordnance Datum heights of 0m OD to -1.20m OD where peats have developed on a substrate of Gault Clay. Small knolls of sand and gravels comprised of First River Terrace deposits are scattered around Adventurer's Fen and adjacent areas.

6 ARCHAEOLOGICAL OVERVIEW

- 6.1 The Fenland has long been recognised as an important archaeological landscape, containing superimposed evidence of settlement, ritual and agricultural remains dating from the prehistoric period onwards.
- 6.2 Archaeological discoveries in the area include a Bronze Age flint knife and an associated Beaker vessel (Her ref. MCB 7790) which indicate the possibility of a cemetery or barrow of the period in the area.
- 6.3 There are also records of two nineteenth century windpumps in the area; Dawson's Mill (MCB8032) and Dyson's Mill (Her ref. MCB8233). These were used to assist water flow in the Lodes and are thought to be located in the proposed area of new wetland. Groundworks undertaken in 1943 revealed the foundations of Dawson's mill but Dyson's Mill has been removed and rebuilt elsewhere.
- 6.4 Burwell Lode was first recorded in 1604 (HER ref MCB8229) and was recut on its present alignment by the Bedford Level Commissioners at the same time as Reach Lode in the early 1650s. Reach Lode is locally known as a navigable 17th century watercourse and drain but there is some evidence that it was in existence in 1279 and may lie partly on the line of precursors dating to as early as the Roman period (HER MCB9521). The enclosure and drainage of the fens bounded by the two lodes, including the investigation area, was complete by the early 18th century. Excavations conducted in 2010 for a bridge scheme over Reach Lode to the south presented evidence of N-S aligned prehistoric palaeochannels, one of which, at 5m depth, yielded useful, dated evidence of the paleoenvironment (OAE evaluation: ECB3345).
- 6.5 In some parts of the fen the small gravelly knolls formed of First River terrace deposits dotted around Adventurer's Fen and the surrounding area have been shown to be locations for prehistoric activity, eg. MCB's 1373 – 6 and 7597)
- 6.6 Evaluation and excavation undertaken in advance of construction of the cycle path from Reach Lode identified a Mesolithic flint scatter characteristic of flintworking by a mobile population, involving the repair and maintenance of hunting equipment (Peachey, 2010).

7 AIMS AND OBJECTIVES

- 7.1 The aim of the work will be to gather sufficient information for the archaeological curator to be able to formulate a policy for the management of the archaeological resources present on the site.
- 7.2 The objectives of the work will be to:
 - 7.2.1 Establish the type of archaeological activity that may be present within the site.
 - 7.2.2 Determine the likely extent of archaeological activity present within the site.
 - 7.2.3 Determine the date and function of the archaeological features present on the site.
 - 7.2.4 Determine the state of preservation of the archaeological features present on the site.
 - 7.2.5 Determine the spatial arrangement of the archaeological features present within the site.
 - 7.2.6 Determine the extent to which the surrounding archaeological features extend into the application area.
 - 7.2.7 Establish the way in which the archaeological features identified fit into the pattern of occupation and land-use in the surrounding landscape.

8 TRIAL TRENCHING AND MONITORING

8.1 Reasoning for this technique

- 8.1.1 Trial trenching enables the *in situ* determination of the sequence, date, nature, depth, environmental potential and density of archaeological features present on the site.
- 8.1.2 The trial trenching will comprise the excavation of three 2 m wide trenches measuring 170m long in total. These will be arranged as shown in Figure 1 with trenches placed within line of the realigned ditch, the proposed pond and within the line of the proposed ramp on the southern side of the lode.

8.2 General Considerations

- 8.2.1 All work will be undertaken following statutory Health and Safety requirements in operation at the time of the investigation.
- 8.2.2 The work will be undertaken according to the relevant codes of practice issued by the Institute of Field Archaeologists (IFA). *Archaeological Project Services* is an IFA Registered Archaeological Organisation (No. 21).
- 8.2.3 Any and all artefacts found during the investigation and thought to be 'treasure', as defined by the Treasure Act 1996, will be removed from site to a secure store and promptly reported to the appropriate coroner's office.
- 8.2.4 Excavation of the archaeological features exposed will only be undertaken as far as is required to determine their date, sequence, density and nature. All archaeological features exposed will be excavated and recorded unless otherwise agreed with the Cambridgeshire Archaeology Office. The investigation will, as far as is reasonably practicable, determine the level of the natural deposits to ensure that the depth of the archaeological sequence present on the site is established.
- 8.2.5 Open trenches will be marked by hazard tape attached to road irons or similar poles. Subject to the consent of the archaeological curator, and following the appropriate recording, the trenches, particularly those of excessive depth, will be backfilled as soon as possible to minimise any health and safety risks.

8.3 Methodology

- 8.3.1 Removal of the topsoil and any other overburden will be undertaken by mechanical excavator using a toothless ditching bucket. To ensure that the correct amount of material is removed and that no archaeological deposits are damaged, this work will be supervised by Archaeological Project Services. On completion of the removal of the overburden, the nature of the underlying deposits will be assessed by hand excavation before any further mechanical excavation that may be required. Thereafter, the trenches will be cleaned by hand to enable the identification and analysis of the archaeological features exposed.
- 8.3.2 Investigation of the features will be undertaken only as far as required to determine their date, form and function. The work will consist of half- or quarter-sectioning of features as required and, where appropriate, the removal of layers. Should features be located which may be worthy of preservation *in situ*, excavation will be limited to the absolute minimum, (*ie* the minimum disturbance) necessary to interpret the form, function and date of the features.
- 8.3.3 The archaeological features encountered will be recorded on Archaeological Project Services pro-forma context record sheets. The system used is the single context method by which individual archaeological units of stratigraphy are assigned a unique record number and are individually described and drawn.
- 8.3.4 Plans of features will be drawn at a scale of 1:20 and sections at a scale of 1:10. Should individual features merit it, they will be drawn at a larger scale.
- 8.3.5 Throughout the duration of the trial trenching a photographic record consisting of black and white prints (reproduced as contact sheets) and colour slides will be compiled. The photographic record will consist of:

- the site before the commencement of field operations.
 - the site during work to show specific stages of work, and the layout of the archaeology within individual trenches.
 - individual features and, where appropriate, their sections.
 - groups of features where their relationship is important.
 - the site on completion of field work
- 8.4 Should human remains be encountered, they will be left *in situ* with excavation being limited to the identification and recording of such remains. If removal of the remains is necessary the appropriate Home Office licences will be obtained and the local environmental health department informed. If relevant, the coroner and the police will be notified.
- 8.5 Finds collected during the fieldwork will be bagged and labelled according to the individual deposit from which they were recovered ready for later washing and analysis.
- 8.6 The spoil generated during the investigation will be mounded along the edges of the trial trenches with the top soil being kept separate from the other material excavated for subsequent backfilling.
- 8.7 The precise location of the trenches within the site and the location of site recording grid will be established by an EDM survey.

9 ENVIRONMENTAL ASSESSMENT

- 9.1 During the investigation specialist advice will be obtained from an environmental archaeologist. If necessary the specialist will visit the site and will prepare a report detailing the nature of the environmental material present on the site and its potential for additional analysis should further stages of archaeological work be required. The results of the specialist's assessment will be incorporated into the final report.

10 POST-EXCAVATION AND REPORT

10.1 Stage 1

- 10.1.1 On completion of site operations, the records and schedules produced during the trial trenching will be checked and ordered to ensure that they form a uniform sequence constituting a level II archive. A stratigraphic matrix of the archaeological deposits and features present on the site will be prepared. All photographic material will be catalogued: the colour slides will be labelled and mounted on appropriate hangers and the black and white contact prints will be labelled, in both cases the labelling will refer to schedules identifying the subject/s photographed.
- 10.1.2 All finds recovered during the trial trenching will be washed, marked, bagged and labelled according to the individual deposit from which they were recovered. Any finds requiring specialist treatment and conservation will be sent to the Conservation Laboratory at the City and County Museum, Lincoln.

10.2 Stage 2

- 10.2.1 Detailed examination of the stratigraphic matrix to enable the determination of the various phases of activity on the site.
- 10.2.2 Finds will be sent to specialists for identification and dating.

11.3 Stage 3

- 11.3.1 On completion of stage 2, a report detailing the findings of the investigation will be prepared. This will consist of:
- A non-technical summary of the results of the investigation.

- A description of the archaeological setting of the site.
- Description of the topography and geology of the investigation area.
- Description of the methodologies used during the investigation and discussion of their effectiveness in the light of the results
- A text describing the findings of the investigation.
- Plans of the trenches showing the archaeological features exposed. If a sequence of archaeological deposits is encountered, separate plans for each phase will be produced.
- Sections of the trenches and archaeological features.
- Interpretation of the archaeological features exposed and their context within the surrounding landscape.
- Specialist reports on the finds from the site.
- Appropriate photographs of the site and specific archaeological features or groups of features.
- A consideration of the significance of the remains found, in local, regional, national and international terms, using recognised evaluation criteria.

11 ARCHIVE

- 12.1 The documentation, finds, photographs and other records and materials generated during the evaluation will be sorted and ordered in accordance with the procedures in the Society of Museum Archaeologists' document *Transfer of Archaeological Archives to Museums* (1994), and any additional local requirements, for long term storage and curation. This work will be undertaken by the Finds Supervisor, an Archaeological Assistant and the Conservator (if relevant). The archive will be deposited within an approved County store as soon as possible after completion of the post-excavation and analysis.
- 12.2 If required, microfilming of the archive will be carried out at Lincolnshire Archives. The silver master will be transferred to the RCHME and a diazo copy will be deposited with the Cambridgeshire County Council Archaeology Service Historic Environment Record.
- 12.3 Prior to the project commencing, the Cambridgeshire County Archaeological Office will be contacted to obtain their agreement to receipt of the project archive and to establish their requirements with regards to labelling, ordering, storage, conservation and organisation of the archive. The event number for this project issued by the Cambridgeshire Historic Environment Record will be ECB3387.
- 12.4 Upon completion and submission of the evaluation report, the landowner will be contacted to arrange legal transfer of title to the archaeological objects retained during the investigation from themselves to the receiving museum. The transfer of title will be effected by a standard letter supplied to the landowner for signature.

13 REPORT DEPOSITION

- 13.1 An unbound draft copy of the report will be supplied initially to the County Archaeological Office for comment. Copies of the final report will be sent to: the client; the Cambridgeshire County Council Archaeology Office (2 copies); and the Cambridgeshire County Historic Environment Record.

14 PUBLICATION

- 14.1 A report of the findings of the investigation will be submitted for inclusion in the appropriate local journal. Notes or articles describing the results of the investigation will also be submitted for publication in the appropriate national journals: *Medieval Archaeology* and *Journal of the Medieval Settlement Research Group* for medieval and later remains, and *Britannia* for discoveries of Roman date.
- 14.2 Details of the investigation will also be input to the Online Access to the Index of Archaeological Investigations (OASIS).

15 CURATORIAL MONITORING

- 15.1 Curatorial responsibility for the project lies with Cambridgeshire County Council Archaeology Office. As much notice as possible will be given in writing to the curator prior to the commencement of the project to enable them to make appropriate monitoring arrangements.

16 VARIATIONS TO THE PROPOSED SCHEME OF WORKS

- 16.1 Variations to the scheme of works will only be made following written confirmation from the archaeological curator.
- 16.2 Should the archaeological curator require any additional investigation beyond the scope of the brief for works, or this specification, then the cost and duration of those supplementary examinations will be negotiated between the client and the contractor.

17 SPECIALISTS TO BE USED DURING THE PROJECT

- 17.1 The following organisations/persons will, in principle and if necessary, be used as subcontractors to provide the relevant specialist work and reports in respect of any objects or material recovered during the investigation that require their expert knowledge and input. Engagement of any particular specialist subcontractor is also dependent on their availability and ability to meet programming requirements.

<u>Task</u>	<u>Body to be undertaking the work</u>
Air Photograph plotting	Roger Palmer, independent specialist
Conservation	Conservation Laboratory, City and County Museum, Lincoln.
Pottery Analysis	Prehistoric: David Knight Trent and Peak Archaeological Trust or Dr Carol Allen, independent specialist. Small assemblages may be reported on by Dale Trimble, Project Manager for APS or by Alex Beeby the in house pottery specialist at APS. All work by the latter will be mentored by the named specialists.
Roman:	Barbara Precious, independent specialist (formerly City of Lincoln Archaeological Unit), or local specialist if required. APS is currently operating an IFA workplace bursary employing a Alex Beeby who may undertake the work mentored by the named specialist.
Anglo-Saxon:	Dr Anne Irving, independent pottery specialist.
Medieval and later:	Dr Anne Irving, APS in house pottery specialist.
Other Artefacts	J Cowgill, independent specialist
Human Remains Analysis	R Gowland, independent specialist
Animal Remains Analysis	M . Holmes, independent specialist
Environmental Analysis	Val Fryer, independent specialist
Soil Micromorphology	Dr Charly French, independent specialist
Pollen Assessment	Pat Wiltshire, independent specialist
Radiocarbon dating	Beta Analytic Inc., Florida, USA
Dendrochronology dating	University of Sheffield Dendrochronology Laboratory

18 PROGRAMME OF WORKS AND STAFFING LEVELS

- 18.1 The Senior Archaeologist, Archaeological Project Services, Tom Lane, MIFA, will have overall responsibility and control of all aspects of the work.
- 18.2 Site work will be undertaken by a Project Officer with experience of archaeological excavations of this type, assisted by 1 experienced archaeological technician. The archaeological works are programmed to take 3 days.
- 18.3 Post-excavation report production is expected to take up to 3 working weeks. Post-excavation analysis will be undertaken by the Project Officer, or post-excavation analyst as appropriate, with assistance from a finds supervisor, illustrator and external specialists.
- 18.4 Contingency
 - 18.4.1 Contingencies for the analysis of pollen samples, bulk environmental samples, special finds requiring conservation and C14 dating are specified in the project budget.
 - 18.4.2 The activation of any contingency requirement will be by agreement with the client and in consultation with the County Archaeology Office.

19 INSURANCES

- 19.1 Archaeological Project Services, as part of the Heritage Trust of Lincolnshire, maintains Employers Liability insurance to £10,000,000. Additionally, the company maintains Public and Products Liability insurances, each with indemnity of £5,000,000. Copies of insurance documentation can be supplied on request.

20 COPYRIGHT

- 20.1 Archaeological Project Services shall retain full copyright of any commissioned reports under the *Copyright, Designs and Patents Act 1988* with all rights reserved; excepting that it hereby provides an exclusive licence to the client for the use of such documents by the client in all matters directly relating to the project as described in the Project Specification.
- 20.2 Licence will also be given to the archaeological curators to use the documentary archive for educational, public and research purposes.
- 20.3 In the case of non-satisfactory settlement of account then copyright will remain fully and exclusively with Archaeological Project Services. In these circumstances it will be an infringement under the *Copyright, Designs and Patents Act 1988* for the client to pass any report, partial report, or copy of same, to any third party. Reports submitted in good faith by Archaeological Project Services to any Planning Authority or archaeological curator will be removed from said Planning Authority and/or archaeological curator. The Planning Authority and/or archaeological curator will be notified by Archaeological Project Services that the use of any such information previously supplied constitutes an infringement under the *Copyright, Designs and Patents Act 1988* and may result in legal action.
- 20.4 The author of any report or specialist contribution to a report shall retain intellectual copyright of their work and may make use of their work for educational or research purposes or for further publication.

21 BIBLIOGRAPHY

Brown N. and Glazebrook, J. (eds) 2000 *Research and Archaeology: A Framework for the Eastern Counties: 2 Research Agenda and Strategy*. East Anglian Archaeology, Occasional Paper **8**

English Heritage, 1991 *The Management of Archaeological Projects*. London.

Institute of Field Archaeologists, 1997 *Standards and Guidance for Archaeological Field Excavation*.

Hodge, CAH, Burton, RGO, Corbett, WM, Evans, R, and Seale, RS, 1984 *Soils and their use in Eastern England*, Soil Survey of England and Wales **13**

Peachey, M., 2010 Archaeological Evaluation and Excavation at Burwell Fen Hundred Acres, Burwell, Cambridgeshire (BFHA 10)

APPENDIX 2

Context Summary

Context	Trench	Description	Interpretation	Date
101	1	Friable dark grey sandy silt 0.4m thick	Topsoil	
102	1	Friable black silt, degraded, dehydrated peat 0.27m thick	Peat layer	
103	1	Soft light grey clayey silt up to 0.1m thick	Flood deposit	
104	1	Soft dark grey humic silt 0.15m thick	Standing water deposit?	
105	1	Soft light grey clay at east end of trench 0.05m thick	Buried soil	Mesolithic
106	1	Soft light yellowish brown clay sand silt, at least 0.02m thick	Natural	
107	1	Loose dark grey silty sand 0.08m thick	Alluvial deposit or leaching from peat into the sand	
108	1	Circular cut with rounded sides and base, 0.2m diameter, 0.08m deep	Post hole	
109	1	Soft light grey sandy clay 0.08m thick	Fill of [108]	
201	2	Loose dark grey clayey silt 0.36m thick	Topsoil	
202	2	Loose very dark grey fine slightly peaty silt, 0.5m thick, similar to (201)	Fill of [203]	
203	2	NW-SE aligned cut with moderately sloping sides, flat base, 2.2m+ long, 1m wide, 0.5m deep	Cut of ditch	
204	2	Soft very dark greyish brown peat 0.18m thick	Peat layer	
205	2	Loose dark brown peat with frequent twigs, 0.42m thick	Fill of [206]	
206	2	Oblong cut with steep sides and flattish base, 1.2m long, 0.8m wide, 0.42m deep	Cut of marling pit	
207	2	Soft light grey sandy silt up to 0.08m thick	Flood deposit	
208	2	Dark brown peat up to 0.15m thick	Peat layer	
209	2	Soft mid grey slightly clayey silt up to 0.14m thick	Buried soil	
210	2	Soft mottled orange/light yellowish grey silty sand	Natural	
301	3	Soft dark grey sandy silt up to 0.46m thick	Topsoil	
302	3	Friable black clayey silt 0.17m thick	Dessicated peat	
303	3	Soft light grey humic silt, at west end of trench, same as (103), 0.07m thick	Flood deposit	
304	3	Soft dark grey humic silt with frequent lenses of dessicated peat and a lot of snail shells 0.13m thick	Standing water deposit?	Mesolithic

305	3	Soft light grey sandy silt 0.16m thick	Buried soil	
306	3	Soft light browny orange clay sand silt, 0.3m thick	Natural	
307	3	Soft light grey sandy clay	Natural	
308	3	Soft light grey sandy clay 0.1m thick	Fill of [310]	
309	3	Soft dark grey clayey silt 0.1m thick	Fill of [310], post pipe?	
310	3	Oval cut with rounded sides and base, 0.4m x 0.3m, 0.1m deep	Cut of post hole or root disturbance	

Appendix 3

THE FINDS

WORKED FLINT

By Tom Lane

Introduction

Flints were located beneath peats during evaluation in Burwell

Condition

The items are moderately fresh but with some abrasion. There are no conservation requirements.

Results

Table 1, Worked Flint Archive

Cxt	Description	No	Wt (g)	Date
105	Flake. Patinated, burnt and fire cracked. 26 x 13 x 3mm	1	<1	Meso or E. Neo
105	Bladelet core. Heavily patinated.	1	17	Mesolithic
105	Two natural flakes (Discarded)			
304	Broken Blade or unfinished Microlith. Heavily patinated. 20 x 9 x 1mm	1	<1	Mesolithic
304	Blade flake. Patinated. 16 x 10 x 1mm	1	1	Mesolithic

Provenance

The items were located in deposits sealed by peat. Context 105 is a buried soil which was sampled and 304 may have originated as a buried soil.

Range

The items, a core, flakes and a probably unfinished tool indicate Mesolithic flintworking taking place at or near the location

Potential

Sealed beneath peat the buried surface has good potential for yielding further well-preserved prehistoric archaeology.

Summary

A small number of flints was retrieved from buried contexts in Burwell Fen.

SPOT DATING

The dating in Table 2 is based on the evidence provided by the finds detailed above.

Table 2, Spot dates

Cxt	Date	Comments
105	Mesolithic	
304	Mesolithic	

ABBREVIATIONS

CXT Context
W (g) Weight (grams)

Appendix 4

GLOSSARY

Alluvium	Deposits laid down by water. Marine alluvium is deposited by the sea, and fresh water alluvium is laid down by rivers and in lakes.
Bronze Age	A period characterised by the introduction of bronze into the country for tools, between 2250 and 800 BC.
Context	An archaeological context represents a distinct archaeological event or process. For example, the action of digging a pit creates a context (the cut) as does the process of its subsequent backfill (the fill). Each context encountered during an archaeological investigation is allocated a unique number by the archaeologist and a record sheet detailing the description and interpretation of the context (the context sheet) is created and placed in the site archive. Context numbers are identified within the report text by brackets, e.g. [004].
Cut	A cut refers to the physical action of digging a posthole, pit, ditch, foundation trench, etc. Once the fills of these features are removed during an archaeological investigation the original 'cut' is therefore exposed and subsequently recorded.
Fill	Once a feature has been dug it begins to silt up (either slowly or rapidly) or it can be back-filled manually. The soil(s) that become contained by the 'cut' are referred to as its fill(s).
Layer	A layer is a term used to describe an accumulation of soil or other material that is not contained within a cut.
Medieval	The Middle Ages, dating from approximately AD 1066-1500.
Mesolithic	The 'Middle Stone Age' period, part of the prehistoric era, dating from approximately 11000 - 4500 BC.
Natural	Undisturbed deposit(s) of soil or rock which have accumulated without the influence of human activity
Neolithic	The 'New Stone Age' period, part of the prehistoric era, dating from approximately 4500 - 2250 BC.
Post hole	The hole cut to take a timber post, usually in an upright position. The hole may have been dug larger than the post and contain soil or stones to support the post. Alternatively, the posthole may have been formed through the process of driving the post into the ground.
Post-medieval	The period following the Middle Ages, dating from approximately AD 1500-1800.
Prehistoric	The period of human history prior to the introduction of writing. In Britain the prehistoric period lasts from the first evidence of human occupation about 500,000 BC, until the Roman invasion in the middle of the 1st century AD.

Appendix 5

THE ARCHIVE

The evaluation archive consists of:

2	Context register sheets
5	Context sheets
3	Trench record sheets
3	Daily record sheets
1	Photographic record sheet
1	Section record sheet
1	Plan record sheet
7	Sheets of scale drawings
1	Stratigraphic matrix
1	Bag of finds

All primary records and finds are currently kept at:

Archaeological Project Services
The Old School
Cameron Street
Heckington
Sleaford
Lincolnshire
NG34 9RW

The ultimate destination of the project archive is:

Cambridgeshire County Council
Castle Court
Shire Hall
Cambridge
CB3 0AP

Accession Number: ECB 3775

Archaeological Project Services Site Code: BFBL 12

OASIS Record No: archaeo11-128073

The discussion and comments provided in this report are based on the archaeology revealed during the site investigations. Other archaeological finds and features may exist on the development site but away from the areas exposed during the course of this fieldwork. *Archaeological Project Services* cannot confirm that those areas unexposed are free from archaeology nor that any archaeology present there is of a similar character to that revealed during the current investigation.

Archaeological Project Services shall retain full copyright of any commissioned reports under the *Copyright, Designs and Patents Act 1988* with all rights reserved; excepting that it hereby provides an exclusive licence to the client for the use of such documents by the client in all matters directly relating to the project as described in the Project Specification.