

# PAPWORTH HOSPITAL HERITAGE CENTRE PAPWORTH EVERARD CAMBRIDGESHIRE

## ARCHAEOLOGICAL TRIAL TRENCHING

Project: PH1694 CHER event no.: ECB3462

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Produced for:
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#### **Preface**

Every effort has been made in the preparation of this document to provide as complete a summary as possible within the terms of the method statement. All statements and opinions in this document are offered in good faith. Albion Archaeology cannot accept responsibility for errors of fact or opinion resulting from data supplied by a third party, or for any loss or other consequence arising from decisions or actions made upon the basis of facts or opinions expressed in this document.

#### **Acknowledgements**

The project was commissioned by Graham Reedman of Papworth Hospital NHS Trust. It was monitored on behalf of the Local Planning Authority by Dan McConnell of the Cambridgeshire Archaeology, Planning and Countryside Advice office.

This report has been prepared by Ben Barker (Project Officer), who also undertook the fieldwork with the assistance of Jen Brazil (Archaeological Technician). Illustrations were prepared by Joan Lightning (CAD Technician).

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## **Version History**

Version	Issue date	Reason for re-issue
1.0	04/11/10	n/a

#### **Key Terms**

Throughout this report the following terms or abbreviations are used:

CAPCA	Cambridgeshire Archaeology, Planning and Countryside Advice office
CCC	Cambridgeshire County Council
CHER	Cambridgeshire Historic Environment Record
IfA	Institute for Archaeologists
LPA	Local Planning Authority



## Non-Technical Summary

This document has been prepared by Albion Archaeology on behalf of Papworth Hospital NHS Trust. It reports on archaeological trial trenching undertaken in October 2010. The work was occasioned by the proposed construction of a two-storey Heritage Centre, shop and doctors' mess, and two single-storey blocks.

Papworth Hospital lies on the south side of Papworth Everard village. The development area comprises a triangular area of hard standing of approximately 580m<sup>2</sup> centred on grid reference TL28800/62880. It is currently used as a car park.

The site is located within an area of high archaeological potential which is known to contain significant archaeological remains. This includes the Roman Road of Ermine Street and Papworth Hall medieval moated site. To the south of the site extensive evidence for prehistoric and later settlement has been uncovered in a number of previous archaeological investigations.

Because of the high archaeological potential of the site, a condition was placed on the planning consent requiring the implementation of a programme of archaeological works. A design brief issued by the Cambridgeshire Archaeology, Planning and Countryside Advice office (CAPCA 2010) stated that further information on the archaeological impact of the work was required.

The archaeological potential of the proposed development was evaluated by two trenches. Neither trench revealed any significant archaeological features or deposits.



## 1. INTRODUCTION

## 1.1 Planning Background

Planning permission for the construction of a two-storey Heritage Centre, shop and doctors' mess, and two single-storey blocks has been granted by South Cambridgeshire District Council (S/0559/10/F). Due to the high archaeological potential of the site, the Cambridgeshire Archaeology Planning and Countryside Advice office (CAPCA) advised the LPA that a condition for a scheme of archaeological work should be placed on the planning consent.

CAPCA issued a brief (CAPCA 2010) outlining the requirements for an archaeological evaluation as the first stage of the work required to address the condition. The evaluation comprised trial trenching of the site of the proposed development. The results of the trial trenching will be used to characterise the archaeological potential of the site and to determine whether there is a need for any further investigation.

## 1.2 Site Location, Topography and Geology

Papworth Hospital lies on the south side of Papworth Everard village. The site of the proposed development sits adjacent to the main service road of the hospital and is centred on grid reference TL28800/62880. It comprises a triangular area of hard standing of approximately 580m² which is currently used as a car park.

The ground lies at a height of c.40m OD over most of the site but falls away noticeably towards its northern boundary. The geology of the area comprises till (Boulder Clay) deposits.

## 1.3 Archaeological Background

The site is located within an area of high archaeological potential which is known to contain significant archaeological remains. This includes the Roman Road of Ermine Street and Papworth Hall medieval moated site which is a Scheduled Monument. To the south of the site extensive evidence for prehistoric and later settlement has been uncovered in a number of previous archaeological investigations.



The CHER lists the following records of archaeological significance located in the vicinity of the site.

CHER ref.	Description	Period
00921	Moated site (SM33284)	Medieval
01051	Moat/windmill	Medieval
02469	Village earthworks	Medieval
02525	Ridge and furrow	Medieval
02526	Ridge and furrow	Medieval
11252	Earthworks	Medieval
13049	Enclosure	Iron Age
CB14640	Ridge and furrow, settlement	Medieval/ late prehistoric
	features	
CB15034	Road, Ermine Street	Roman
CB15303	Enclosure	Late Roman
CB15304	Cropmark site	Iron Age/Romano-British
CB15305	Cropmark site	Iron Age/Romano-British
MCB16307	Ditches	Iron Age/Romano-British
MCB17452	Ditches and gullies	Iron Age
MCB17513	Settlement	Iron Age
MCB17571	Artefacts	Mesolithic
MCB17572	Settlement evidence	Middle Iron Age
MCB17573	Settlement evidence	Late Saxon
MCB17575	Ridge and furrow	Medieval
MCB17576	Enclosures	Roman
MCB17909	Ridge and furrow	Medieval
MCB18551	Settlement evidence	Late Bronze Age/Early
		Iron Age
MCB18579	Settlement	Early Roman

## 1.4 Project Objectives

The principal objective of the evaluation was to determine whether archaeological remains were present at the proposed development site and, if so, what were their extent, condition, nature and significance. Particular attention was to be paid to determining the amount of truncation that might have affected any remains, and whether palaeosols or 'B' horizons were present. This information was to be used in the formulation of an appropriate mitigation strategy for the archaeological remains, if present.

The broader objective of the project was to add to the knowledge and understanding of the origins and nature of settlement in the area and to produce an archive report that fully described the archaeological works.



## 2. METHODOLOGY

#### 2.1 Introduction

The methodological approach to the project was detailed in the Project Design (Albion 2010), approved by CAPCA, and is summarised below.

Throughout the project the standards set out in the following documents were adhered to:

Albion Archaeology	Procedures Manual: Volume 1 Fieldwork (2nd edn,
	2001).
• ALGAO (east)	Standards for Field Archaeology in the East of
	England
• CCC	Deposition of Archaeological Archives in the
	Cambridgeshire County Council Archaeology Store
	(HER 2004/1).
• English Heritage	Management of Research Projects in the Historic
	Environment (MoRPHE) (2009)
	Environmental Archaeology: A guide to the theory
	and practice of methods, from sampling and
	recovery to post-excavation (2002/01)
• IfA	By-Laws and Code of Conduct
	Standard and Guidance for Archaeological Field
	Evaluation

## 2.2 Trial Trenching

The trial trenching was carried out in October 2010. It was intended to excavate two trial trenches, each measuring 1.6m wide and 10m long, within the footprints of the proposed buildings (Figure 2). However, the presence of buried and overhead live services necessitated the shortening of Trench 2 to 7m long.

The total area of trenching equated to 27.2m<sup>2</sup>. This represented a 4.7% sample of the proposed development area.

The trenches were opened by a mechanical excavator fitted with a flat-edged ditching bucket, operated by an experienced driver, under the supervision of an appropriately experienced archaeologist.

Overburden was removed down to the top of undisturbed geological deposits. The spoil heaps were scanned for artefacts. The bases of the trenches were cleaned to help reveal any potential archaeological features. All deposits were recorded in a unique number sequence, using Albion Archaeology's *pro forma* sheets. The trenches were subsequently drawn and photographed as appropriate.



## 3. RESULTS

Descriptions of the deposits encountered are provided below, in trench order. Full details are set out in Appendix 1.

## 3.1 Trench 1

Trench 1 was 10m long by 1.6 m wide. It was excavated to a depth of 1.3m, onto Boulder Clay (110). No archaeological features or deposits were encountered other than modern services and construction make-up layers (Figure 3). These comprised approximately 0.7m of made ground above a buried topsoil (105), which contained modern building debris. A 0.3m thick layer of weathered Boulder Clay (106) was identified immediately above the undisturbed chalky Boulder Clay.

A 0.3m wide service trench [107] was located at the south-west end of the trench. It was aligned NW-SE and had been cut into the weathered Boulder Clay. It contained a 50mm diameter cast iron pipe (108) that is likely to have been a water main. The service predated the deposition of the modern make uplayers but is likely to have been of 20th-century origin.

#### 3.2 Trench 2

Trench 2 was 1.6m wide, but shortened to 7m long to avoid fibre optic cables located immediately to the north-west. Undisturbed Boulder Clay (211) was encountered at a depth of 1.1m below current ground level. There was approximately 0.6m of modern build-up above a buried modern topsoil (205) and 0.3m of weathered Boulder Clay (206).

Two modern services were identified. A plastic telecom pipe was revealed at a depth of 0.5m below ground level within the sand and gravel make-up layers (204). It was aligned SSE-NNW and was marked by gas main warning tape. Towards the centre of the trench, a 60mm diameter NW-SE aligned cast iron pipe (208) was located. It was within a 0.3m wide trench [209], cut into the weathered Boulder Clay. It was located at a depth of *c*.1m below current ground level and is likely to have been broadly contemporary with pipe (108) in Trench 1.



## 4. CONCLUSIONS

The presence of a buried topsoil in both of the trenches suggests that there has been little truncation in the area of the proposed development. It appears that the current ground surface has been artificially raised and levelled at some point, probably during the construction of the hospital.

The evaluation trenches themselves were devoid of archaeological features or deposits. Thus, there is no evidence to suggest that the proposed development will impact upon significant archaeological remains.



## 5. REFERENCES

Albion Archaeology 2010. Papworth Hospital, Papworth Everard, Cambridgeshire: Project Design for Archaeological Trial Trenching.

CAPCA 2010. Brief for Archaeological Evaluation: Papworth Hospital Heritage Centre.



## 6. APPENDIX 1: TRENCH SUMMARY



Trench: 1

Max Dimensions: Length: 10.00 m. Width: 1.60 m. Depth to Archaeology Min: m. Max: m.

**Co-ordinates: OS Grid Ref.: TL** (Easting: 28799: Northing: 62891)

OS Grid Ref.: TL (Easting: 28791: Northing: 62886)

Reason: To evaluate potential archaeological deposits within the footprint of the proposed buildings.

<b>Context:</b>	Type:	<b>Description:</b>	Excavated:	<b>Finds Present:</b>
101	Concrete	Cemented light brown grey concrete 0.1m thick.	<b>✓</b>	
102	Make up layer	Compact orange sand 0.1m thick.	<b>✓</b>	
103	Make up layer	Compact mid brown red gravel 0.1m thick.	<b>V</b>	
104	Make up layer	Compact light grey orange sand 0.4m thick.	<b>✓</b>	
105	Buried topsoil	Firm dark grey black silty clay 0.5m thick.	<b>✓</b>	
106	Natural interface	Firm mid brown grey clay 0.3m thick. Weathered Boulder Clay.	<b>✓</b>	
107	Service Trench	Linear E-W dimensions: max breadth 0.3m, min length 2.m		
108	Pipe	Dark red black 50mm diameter cast iron pipe. Thought to be a water main.		
109	Backfill	Firm dark grey brown silty clay Including patches of buried topsoil similar to (105).		
110	Natural	Firm mid green grey clay occasional small chalk . Boulder Clay.		



Trench: 2

Max Dimensions: Length: 7.00 m. Width: 1.60 m. Depth to Archaeology Min: m. Max: m.

**Co-ordinates: OS Grid Ref.: TL** (Easting: 28797: Northing: 62884)

OS Grid Ref.: TL (Easting: 28802: Northing: 62678)

Reason: To evaluate potential archaeological deposits within the footprint of the proposed buildings.

<b>Context:</b>	Type:	Description:	<b>Excavated:</b>	<b>Finds Present:</b>
201	Concrete	Cemented light brown grey concrete 0.1m thick.	✓	
202	Make up layer	Compact mid orange sand 0.1m thick.	✓	
203	Make up layer	Compact mid brown red gravel 0.1m thick.	<b>✓</b>	
204	Make up layer	Compact mid orange 0.25m thick.	<b>✓</b>	
205	Buried topsoil	Firm dark grey black silty clay 0.25m thick.	<b>✓</b>	
206	Weathered interface	Firm mid brown grey clay 0.25m thick. Weathered Boulder Clay.	<b>✓</b>	
207	Pipe	Grey 50mm diameter plastic pipe marked "UPL BT DUCT 56 94" marked by a yellow "Warning Gas Main" tape buried within layer (204). No visible cut.		
209	Service Trench	Linear E-W dimensions: max breadth 0.25m, min depth 0.1m		
208	Pipe	60mm diameter cast iron pipe. Thought to be a water main.		
210	Backfill	Firm dark brown grey silty clay Very similar to buried topsoil (205).		
211	Natural	Firm mid green brown clay frequent small chalk Boulder Clay.		



#### **APPENDIX 2: OASIS DATA FORM** 7.

OASIS ID: albionar1-84613

**Project details** 

Project name Papworth Hospital Heritage Centre

Short description of the

project

Evaluation by two trenches. No archaeological feature or deposits were

identified other than modern services.

Start: 18-10-2010 End: 22-10-2010 Project dates

Yes / Not known Previous/future work

Any associated project

reference codes

PH1694 - Contracting Unit No.

Any associated project

reference codes

S/0559/10/F - Planning Application No.

Any associated project

reference codes

ECB3462 - HER event no.

Type of project Field evaluation

Site status None

Current Land use Other 15 - Other

Monument type -**NONE None** Significant Finds NONE None

'Sample Trenches' Methods & techniques

Development type Large/ medium scale extensions to existing structures (e.g. church,

school, hospitals, law courts, etc.)

Position in the planning

process

After full determination (eg. As a condition)

**Project location** 

Country England

CAMBRIDGESHIRE SOUTH CAMBRIDGESHIRE PAPWORTH Site location

**EVERARD Papworth Hospital Heritage Centre** 

Study area 580.00 Square metres

TL 28800 62880 52.2485928392 -0.113095253975 52 14 54 N 000 06 Site coordinates

47 W Point

**Project creators** 

Name of Organisation Albion Archaeology

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



Project design originator Albion Archaeology

Project director/manager Robert Wardill Project supervisor Ben Barker Developer

Type of sponsor/funding

body

Name of sponsor/funding

body

Papworth Hospital NHS Trust

Project archives

Physical Archive Exists? Νo

Digital Archive recipient

Cambridgeshire County Store

**Digital Contents** 

'other'

Digital Media available

'Images raster / digital photography'

Paper Archive recipient

Cambridgeshire County Store

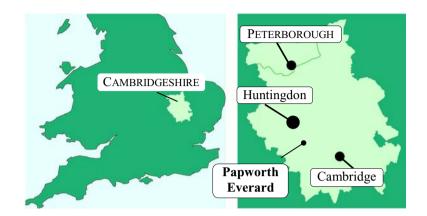
Paper Contents

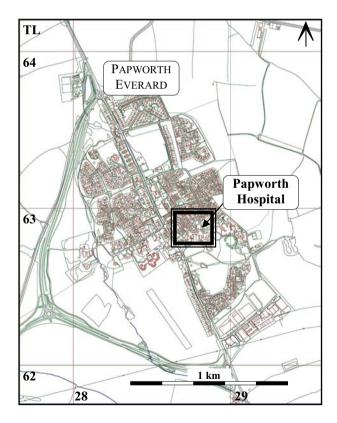
'other'

Paper Media available

'Context sheet', 'Photograph', 'Plan', 'Section'







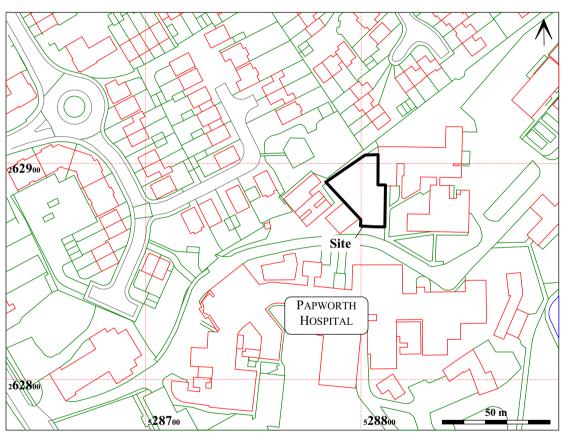


Figure 1: Site location plan

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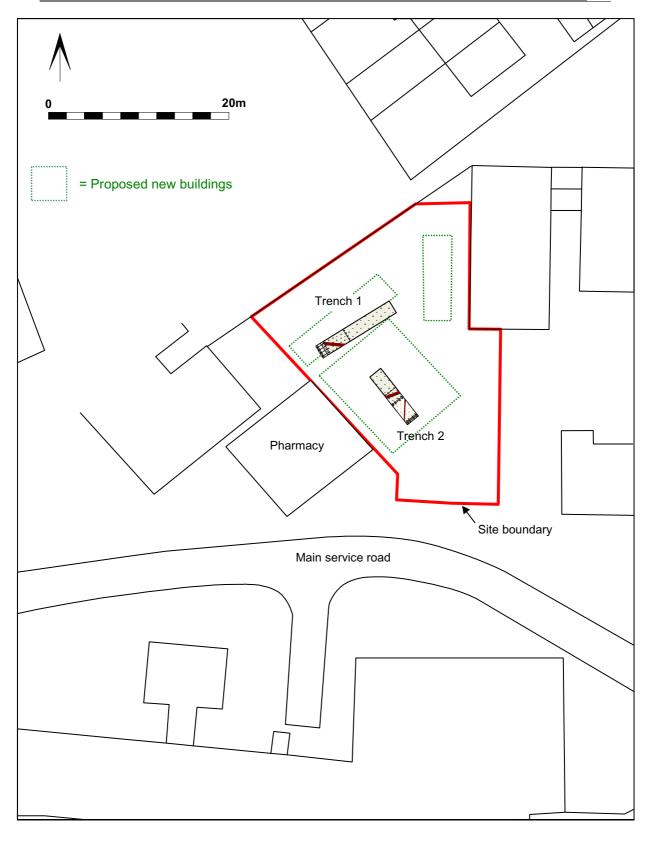


Figure 2: Trench location plan

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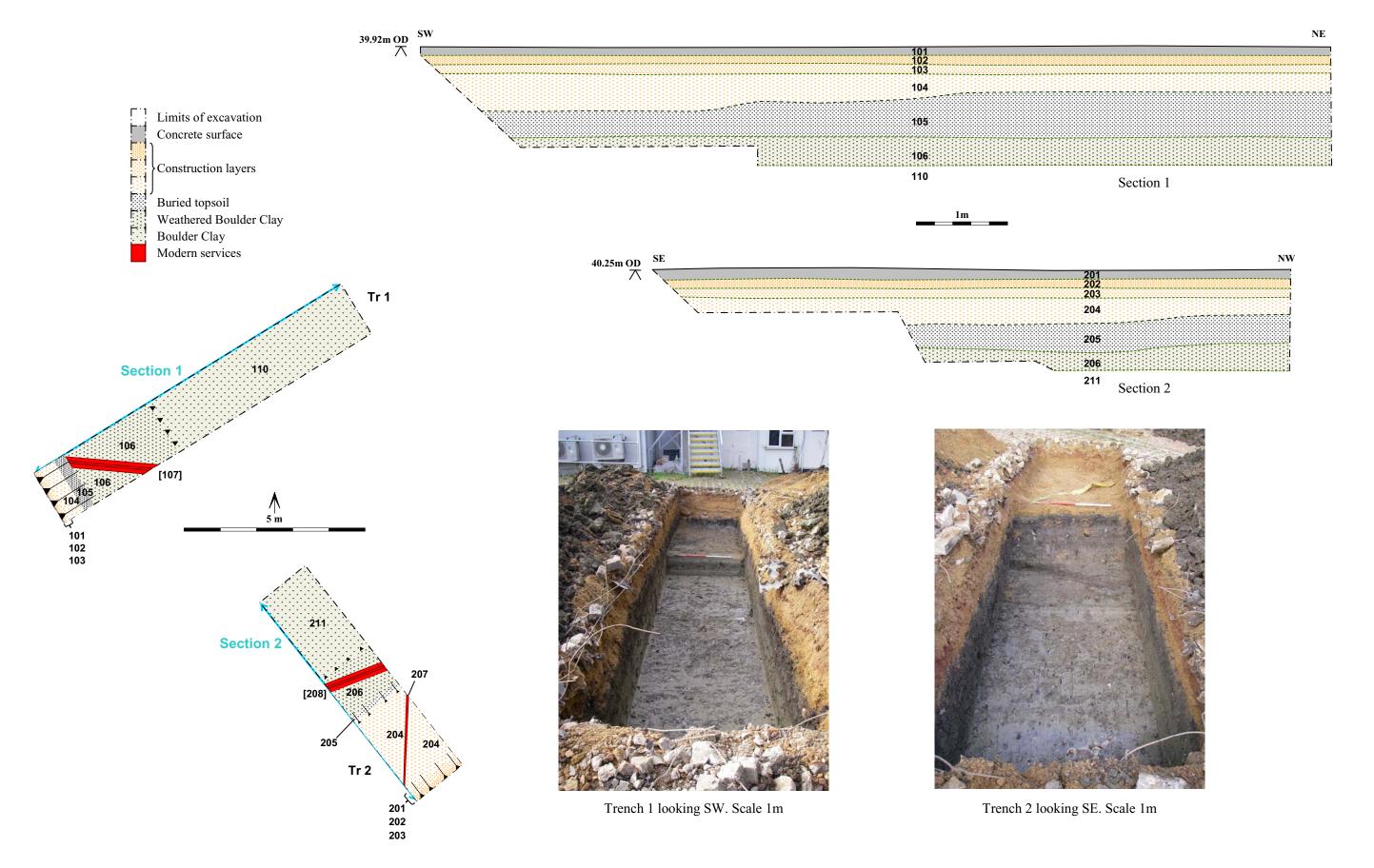


Figure 3: Trenching results