WESTWOOD BIOGAS PLANT HIGHAM PARK RUSHDEN NORTHAMPTONSHIRE

ARCHAEOLOGICAL WATCHING BRIEF

Project: WBG 1383

Document: 2008/72 Version 1.0

8th August 2008

Compiled by	Checked by	Approved by
Adam Lodoen	Rob Wardill	Drew Shotliff

Produced for:
Biogen (UK) Ltd
Milton Parc,
Milton Ernest
Bedfordshire MK44 1YU



Contents

	Non-T	Technical Summary3	3
1	INT	RODUCTION4	Į.
	1.1	Planning Background	1
	1.2	Site Location and Description4	1
	1.3	Archaeological Background4	1
2	ME	THODOLOGY6)
	2.1	Introduction	5
	2.2	Methodology	5
	2.3	Extent and Nature of Groundworks	5
3	RE	SULTS7	7
	3.1	Overburden and geological deposits	7
	3.2	Linear features	7
4	SY	NTHESIS8	3
	4.1	Discussion	3
5	BIE	BLIOGRAPHY9)
6	A D	DENDIY, CONTEXT SUMMARY	



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.

Albion Archaeology St Mary's Church St Mary's Street Bedford, MK42 0AS T: 01234 294001

Fax: 01234 294001

E-mail: office@albion-arch.com Website: <u>www.albion-arch.com</u>

Version History

Version	Issue date	Reason for re-issue
1.0	8 th August 2008	n/a

Structure of the Report

After the introductory Section 1, Section 2 describes the extent of the watching brief. There is a summary of the results of the fieldwork in Section 3, followed by a conclusion (Section 4). Section 5 is a bibliography and Appendix 1 contains an archaeological context summary.

Key Terms

Throughout this report the following terms or abbreviations are used:

CAA County Archaeological Advisor

HER Historic Environment Record

IFA Institute of Field Archaeologists

Acknowledgements

The project was commissioned by Biogen (UK) Ltd. Fieldwork was undertaken by Adam Lodoen (Archaeological Supervisor). This report has been prepared by Adam Lodoen with contributions from Joan Lighting (CAD Technician) and Jackie Wells (Finds Officer).



Non-Technical Summary

Biogen (UK) Ltd is building a biogas plant, with associated access roads, on the site of Higham Park, Rushden, Northamptonshire.

The planned development lay within an area of crop-marks that have provisionally been dated to the prehistoric or Roman periods. The southern limit of the development area follows the southern boundary of a medieval deer park, which was enclosed with earthworks.

Because of the archaeological potential of the site, a condition was attached to the planning permission requiring a programme of archaeological works be carried out.

An initial trial trenching evaluation of the site identified the remains of an extensive former field system. Although no dating evidence was recovered, its form was characteristic of similar systems dating to the Roman period.

The subsequent watching brief on construction groundworks identified further remains of the field system, however, no reliable evidence was recovered to confirm its putative Roman date.



1 INTRODUCTION

1.1 Planning Background

Biogen (UK) Ltd is building a biogas plant, with associated access roads, at Higham Park, Rushden.

Because of the archaeological potential of the site, the County Archaeological Advisor (CAA) recommended to the Local Planning Authority that a condition be attached to the planning permission requiring a programme of archaeological work be carried out.

An initial trenching evaluation was carried out in 2007 (Albion Archaeology 2007) prior to commencement of construction. The results of this work prompted the CAA to ask for an archaeological watching brief to be carried out on construction groundworks.

A Written Scheme of Investigation (Albion Archaeology 2008) was prepared and approved by the CAA prior to commencement of the work.

1.2 Site Location and Description

The development area is located approximately 4.5km to the south-east of Rushden, close to the county boundary with Bedfordshire (Figure 1). The main area of the site is centred on grid reference SP 98910 63200 and covers an area of c. 2.5ha. An access road is also to be constructed to the west to link the site to the A6.

Until recently the development area was under arable cultivation. It lies on roughly flat land at c. 97m OD. The geology of the area comprises chalky Boulder Clay which lies beneath top and subsoil deposits measuring c. 0.55m in depth.

1.3 Archaeological Background

The planned development lies within an area of crop-marks that have provisionally been dated to the prehistoric or Roman periods (Northants HER nos. 9603 and 3254). These are primarily concentrated to the north of the site, though crop-marks have also been identified within the development area itself.

The southern limit of the development area follows the southern boundary of a medieval deer park, which was enclosed with earthworks (Bedfordshire HER 2000, Northants HER no 3253). West Wood, an area of ancient woodland, lies to the south of the development area, while the remains of isolated WWII structures are known to the north and south-west.

The 2007 evaluation (Albion Archaeology 2007) comprised the excavation of ten trial trenches, covering a total area of c. 0.1ha. The remains of an extensive former field system were revealed within the development area. Although it remains undated, comparable Roman field systems have been found at Waddesdon, Buckinghamshire (Keir 2008) and near Caxton, Cambridgeshire (Abrams and Ingham 2007).



Although the dearth of artefactual evidence makes it clear that the field system was solely agricultural in use, with no indication of nearby settlement activity, it is unclear exactly what purpose the ditches served. Similarly arranged ditches on a nearby site at Wollaston, Northamptonshire (Brown and Meadows 2000) were interpreted as bedding trenches, associated with the practice of viticulture. The ditches at Higham Park, however, had lighter fills and less square-sectioned profiles than are usually associated with bedding trenches. It is perhaps more likely that they were designed as part of a land-drainage scheme.

A post-medieval ditch proved to be the origin of the crop-mark identified near the south-western edge of the development area. No trace of the other known crop-mark, targeted by the trenching, was found. The evaluation also did not encounter any boundary remains associated with the medieval deer park.



2 METHODOLOGY

2.1 Introduction

The watching brief was undertaken between 19th June and 8th July 2008. During this period, all groundworks which required monitoring were completed.

All archaeological features and deposits were issued a unique context number, specific to that feature or deposit. Within this report, context numbers referring to cut features are expressed [**], and layers or deposits within cut features are expressed (**).

Detailed technical information on all the deposits and archaeological features referred to below can be found in Appendix 1.

2.2 Methodology

The archaeological works adhered to the standards and field methods set out in the Written Scheme of Investigation (Albion Archaeology 2008). These are summarised below.

- All machine excavation was monitored to identify any *in situ* archaeological deposits that were revealed.
- All disturbed soil was scanned for artefacts.
- All excavated deposits were recorded in accordance with Albion's *Procedures Manual*.
- All archaeological features were recorded at a scale of 1:100 on base plans that were tied in to the OS national grid. Excavated features were planned at a scale of 1:50, and sections drawn at a scale of 1:10.
- All artefacts are to be assigned to their relevant context.
- An appropriate photographic record was maintained for all significant deposits, along with overall photographs of the groundworks undertaken.

Throughout the project, the standards set out in the IFA's *Code of Conduct* and *Standards and Guidance* documents (specifically *Standard and Guidance for an Archaeological Watching Brief*, September 1999), English Heritage's *Management of Archaeological Projects* (1991) and Albion Archaeology's *Procedures Manual* were adhered to.

2.3 Extent and Nature of Groundworks

The groundworks comprised the stripping of approximately 0.25m topsoil from the route of the access road linking the site to the A6, and the c.2.5ha area of the site itself. In addition, three areas within the site totalling c.0.70ha were excavated to geological levels or deeper to accommodate specific elements of the biogas plant (Figure. 2).



3 RESULTS

3.1 Overburden and geological deposits

The overburden consisted of topsoil (100) and subsoil (101), with both being approximately 0.3m in depth.

Undisturbed geological deposits (103) found beneath the subsoil comprised orange clay.

3.2 Linear features

A number of linear features were observed in the north eastern side of the central development area (Figure 2). With the exception of [117], which probably was a modern field drain, they were all interpreted as ditches. Two of the ditches, [111] and [113], had a NE-SW alignment, whilst all the other linear features had a NW-SE alignment. A single post-medieval tile fragment was recovered from the exposed surface of ditch [115].

The width of the ditches ranged between 0.35m and 1.0 m. The observable length of the ditches ranged between 5m and 40m, although their full lengths were unclear. The fills were generally mid to dark grey clay.



4 SYNTHESIS

4.1 Discussion

A number of ditches were uncovered during the construction groundworks. All were on either a NW-SE or NE-SW alignment. These ditches form part of the same field system identified during the trial trench evaluation of the site.

Several of the ditches found during the watching brief were clearly continuations of those found in the trial trenches. Thus ditch [103] / [107] found during the watching brief is the same as ditch [303] of the evaluation, ditch [117] equates to ditch [409], and ditches [111] and [113] are ditches [305] and [307] respectively.

The ditches encountered in the trial trench excavation were interpreted as the remains of an extensive field system, possibly Roman in date, although no dating evidence was recovered.

The only artefactual evidence recovered from the ditches during the watching brief was a single post-medieval tile fragment found on top of ditch [115]. This fragment could however have originated from the subsoil and been pushed into the ditch fill from above, e.g. through ploughing, and cannot for that reason be used to securely date the ditch, or the field system as a whole.

The field system therefore remains undated. As previously mentioned, comparable Roman field systems have however been found at Waddesdon, Buckinghamshire (Keir, 2008) and near Caxton, Cambridgeshire (Abrams and Ingham, 2008).

The field system is considered to be of low archaeological significance, however, its significance would be increased in the event of its being confirmed as Roman.



5 BIBLIOGRAPHY

- Abrams and Ingham, 2008. Farming on the Edge: Archaeological Evidence from the Clay Uplands to the West of Cambridge, East Anglian Archaeology
- Albion Archaeology 2008. Westwood Biogas Plant, Higham Park, Rushden, Northamptonshire: Written Scheme of Investigation for Archaeological Monitoring and Recording.
- Albion Archaeology 2007. Westwood Biogas Plant, Higham Park, Rushden, Northamptonshire: Archaeological Field Evaluation.
- Brown, A.G. and Meadows, I., 2000. 'Roman vineyards in Britain: finds from the Nene Valley and new research', *Antiquity* 74, No. 285.
- Keir, 2008. 'Early Roman bedding trenches and two post-medieval sunken-featured buildings at Waddesdon', *Records of Buckinghamshire*



6 APPENDIX: CONTEXT SUMMARY



Trench: 1

Max Dimensions: Length: 170.00 m. Width: 125.00 m. Depth to Archaeology Min: 0.6 m. Max: 0.6 m.

Co-ordinates: OS Grid Ref.: SP (Easting: 98910: Northing: 63200)

Reason: Construction of biogas plant and access road.

Context:	Type:	Description:	Excavated	Finds Present:
100	Topsoil	Compact dark grey brown loam	✓	
101	Subsoil	Firm mid orange brown clay	✓	
102	Natural	Firm mid orange clay frequent flecks chalk, occasional flecks manganese staining, occasional small-medium stones Orange or blue clay. Frequent chalk flecks, occassional manganese staining and small to medium angular flint nodules.	✓	
103	Ditch	Linear NW-SE dimensions: max breadth 1.m, min length 24.m Same ditch as [107]. Same as ditch [303] in the evaluation.	s	
104		Firm mid yellow grey clay		
105	Ditch	Linear NW-SE dimensions: max breadth 0.6m, min length 18.5m Same ditch [109]	as	
106		Firm dark grey clay		
107	Ditch	Linear NW-SE dimensions: max breadth 0.6m, min length 10.m Same ditch [103]. Same as ditch [303] in the evaluation.	as	
108		Firm dark yellow grey clay		
109	Ditch	Linear NW-SE dimensions: max breadth 0.55m, min length 5.m Same ditch : [105]	as	
110		Firm dark grey clay		
111	Ditch	Linear NE-SW dimensions: max breadth 0.5m, max length 15.m Same as dit [305] in the evaluation.	ch	
112		Firm mid grey brown clay		
113	Ditch	Linear NE-SW dimensions: max breadth 0.65m, min length 5.m Same as dita [307] in the evaluation.	ch	
114		Firm mid grey brown clay		
115	Ditch	Linear NW-SE dimensions: max breadth 0.35m, min length 40.m		
116		Firm mid grey clay Orange mottling.		✓
117	Drain	Linear NW-SE profile: vertical dimensions: max breadth 0.3m, min length 8.5m Cut from high up. Vertical sides.		
118	Backfill	Firm mid orange grey clay		



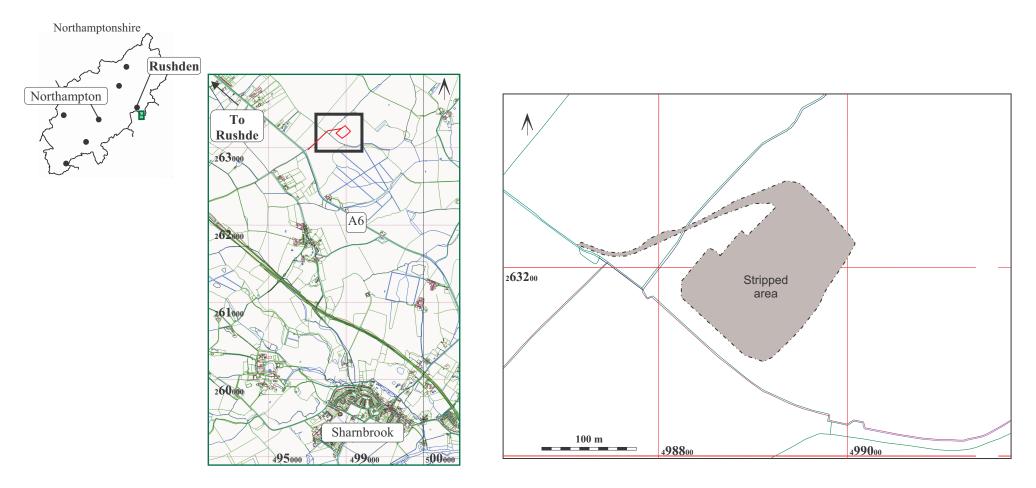
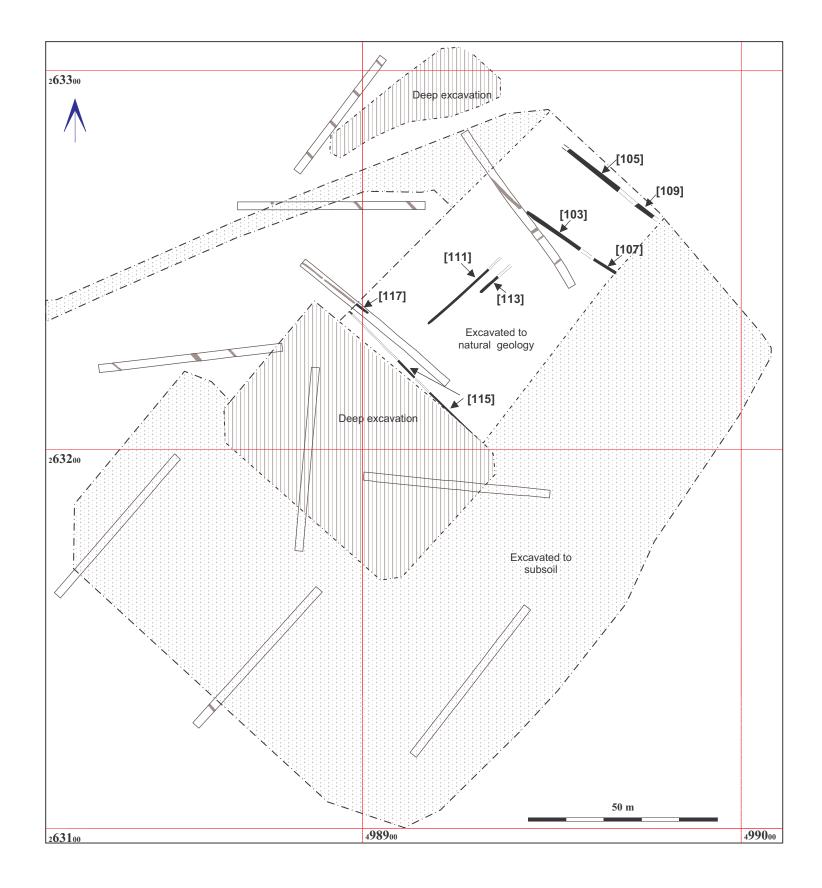


Figure 1: Site location plan

Base map reproduced from the Ordnance Survey Map with the permission of the Controller of Her Majesty's Stationery Office, by Bedfordshire County Council, County Hall, Bedford. OS Licence No. 100017358.. © Crown Copyright.







Ditch [105] looking North-west. Scale 1m



Ditch [115] looking North-west. Scale 1m

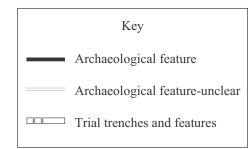


Figure 2: All features