

Archaeological Monitoring and Recording on the course of a Water Supply Pipeline through Broughton Manor, Brooklands and Glebe development areas of the Milton Keynes Expansion Phase 1



Archaeological Monitoring and Recording Report



September 2008

Client: Anglian Water

OA East Report No: 1067

OASIS No: oxfordar3-48089

NGR: SP 901 396

Archaeological Monitoring and Recording on the course of a Water Supply Pipeline through Broughton Manor, Brooklands and Glebe development areas of the Milton Keynes Expansion Phase 1

Site Code: XBUBBG08

Date of Works: April 08 – July 08

Report No: 1067

Excavator: James Fairbairn

Client: Anglian Water

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HER Event No: MK HER 1168

Date of Works: April 08 – July 08

Client Name: Anglian Water

Client Ref:

Planning Ref: N/A

Grid Ref: SP 901 396


Site Code: XBUBBG08

Finance Code: XBUBBG08

Receiving Body: Bucks County Museum

Accession No: N/A

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Summary

This scheme is the first phase (Eastern Phase) of the overall strategy to supply water in the Milton Keynes area. The site is located approximately 5 km south east of Milton Keynes city centre, near Junction 14 of the M1. This scheme is a developer-lead scheme. The new main is to service 1400 new properties in the Broughton Manor Farm area, and 2600 new properties in the Brooklands and Glebe areas. In addition, an industrial area is to be partially serviced off the same main. Anglian Water is proposing to construct 2.2km of a new 300mm ID PE main, to enable water to be supplied to the Milton Keynes Eastern developments.

The pipeline runs along Childs Way, from grid reference SP 88998 40070, to the intersection with the A5130 where it turns south-east. It follows the A5130 to grid reference SP 90404 39492.

1 GEOLOGY AND TOPOGRAPHY

The natural drift geology in the area comprises sands and gravels, which form part of the late Pleistocene, Devensian Stage Second Terrace gravels terrace system. These occur on relatively flat land at c.65m OD and are c.2m deep overlaying the solid Oxford clays.

2 ARCHAEOLOGICAL BACKGROUND

Although Milton Keynes is seen as a modern town it was developed on an existing rural landscape of fields and villages. The landscape also contains archaeological remains from prehistoric, Roman and historic periods. The valleys of the River Great Ouse and River Ouzel provided a focus for earlier prehistoric activity and settlement. Locally the Roman period is noted for many Villas, which were the focus of the rural economy. Small and dispersed settlements were common in the early medieval period. The area remained largely rural until the late 1960s when Milton Keynes was designated a new town and rapid expansion took place.

There are known Iron Age and Romano-British sites along the pipeline route, the chief of which lies immediately to the south of the A5130 to the east of Broughton Manor Farm (NGR SP 9010 3950). Excavations were undertaken by CAM ARC between August 2006 and March 2007. A summary of these excavations follows:

The work was carried out prior to housing and industrial development and a total of 6.5 hectares (of the proposed 48 hectare development area) was excavated, concentrating on two related occupation areas 20m apart (Area 1 in the north, with the A5130 as its northern boundary, and Area 2 further to the south).

There was limited evidence for pre-Iron Age activity with a small flint working hollow and some unstratified flintwork. The main occupation appears to have begun in the Middle Iron Age with remains encountered in the centre and western parts of Area 1. A farmstead comprised a large sub-rectangular or sub-square enclosure with internal remains of a building. Other features included two further enclosures, one irregular the other c.24m in diameter, two round houses, two '4 post' structures, a single human cremation, and a few pits and ditches.

The settlement became more prosperous in the Late Iron Age/Early Roman period when it expanded to hamlet size. Area 1 may represent a small dispersed settlement and Area 2 may have been inhabited by a separate extended family. Domestic houses and related features as well as cremations were found in both

areas. Within Area 1 an important cremation cemetery was uncovered which showed relatively rich burial customs from c. AD 0 – AD 150. Most of the cremations (35 out of 48) were found within a small area (c.40m by 30m) encompassing three separate enclosures adjacent to the main driveway. This 'religious' area continued to be respected/visited long after disuse when, for example, a Middle Roman shrine was placed adjacent to the former main cremation enclosure. The driveways themselves were presumably for herding livestock, with paddocks and enclosures present. At least one pottery kiln was found and arable farming may have taken place between the two excavation areas.

In the Middle and Late Roman periods the settlement continued in Area 1 as a wealthy farmstead. The main building of this period consisted of a rectangular structure in the centre of the site, which was more than 20m long and 6m wide. In the 4th century AD the large Middle Roman house was replaced by a stone building (c.20m by 14m in size) with four internal post pads each more than 1m in diameter. A disproportionate number of coins and other metal objects, tiles etc. were found in the topsoil and subsoil around this former building. Attached to the western side of the building was a lean-to that housed an oven. Another lean-to comprising an entranceway lay on its eastern side and from thence a stone pathway led to the north-east. Associated with this building were a stone lined well and a possible timber granary. The drove ways continued into at least the Middle Roman period and a field system including a large watering hole occurred in the Late Roman period.

Further to the Broughton Manor Farm site, a recent trench evaluation has been undertaken by Oxford Archaeology (report inprep.) in the area immediately to the north of the A5130 and has confirmed the continuation of the settlement recorded on the CAM ARC site.

3 METHODOLOGY

- 3.1.1 The objective of this watching brief was to determine as far as reasonably possible the presence/absence, location, nature, extent, date, quality, condition and significance of any surviving archaeological deposits within the development area.
- 3.1.2 The Brief required that the pits dug to test the viability of drilling or trenching on the course of the water pipeline were to be monitored and recorded for potential archaeological remains.
- 3.1.3 The area of investigation was located on the Eastern side of Milton Keynes near Broughton running along Childs Way, from SP 88998 40070, to the intersection with the A5130 where it turns south east running down the A5130 to SP 90404 39492.

- 3.1.4 All archaeological features and deposits were recorded using OA East's *pro-forma* sheets. Trench locations, plans and sections were recorded at appropriate scales digital photographs were taken of all relevant features and deposits.
- 3.1.5 Site conditions were dry and warm but the proximity of the traffic on the A5130 made accessibility a little restricted.

4 RESULTS

4.1 Introduction

4.2 Test pits 1,2,3 and 4

- 4.2.1 A series of five test pits were observed and recorded (see fig 1). Test pits **1**, **2**, **3**, and **4** north to south and were machine dug by the contractors directly into the road surface of the A5130 at approximately 25.0m intervals. All four test pits shared similar dimensions of 2.00m in length x 1.00m in width x 2.00m in depth. No archaeology was observed in any of these four test pits. The sections clearly showed the make up of the road surface consisting of approximately 0.30m of asphalt overlying 0.40m of road foundation. This in turn overlaid 1.30m of Oxford clay (see fig1).

4.3 Test pit 5

Test pit number **5** was located on the grass verge directly adjacent to the A5130 (see fig 1) and ran north to south. The contractors excavated this test pit by hand due to the close proximity of a fibre optic cable running the alongside the A5130. This test pit had dimensions of 2.3m in length x 0.70m in width x 1.23m in depth. This was dug primarily to locate the exact position of any cabling or services present. Again there was no archaeology observed within this pit and seemed to consist entirely of a sandy silty backfilled soil relating either to the trenching dug for the fibre optic cable or from the construction of the A5130.

5 DISCUSSION AND CONCLUSIONS

- 5.1.1 The main object of this watching brief was to observe and record any archaeological remains present in either the test pitting or the trenching involved in laying the Anglian Water pipeline. Also in a wider context to try and understand the relationship of the north south linear ditches found during Cam Arc's 2007 excavations of area1 of the Broughton Manor Farm project, (report

No. 968) and features found in Oxford Archaeology's 2008 excavations (report pending) which are located directly to the north. A decision to drill the pipeline through the sensitive area between the excavations meant that no archaeology if present would be visible and the fact that the test pits dug in the A5310 leading up to this area were devoid of any archaeological remains may suggest that the concentration of any possible archaeological features lie undisturbed beneath the A5130.

6 ACKNOWLEDGEMENTS

- 6.1.1 The author would like to thank Anglian Water who commissioned and funded the archaeological work. The project was managed by James Drummond Murray. Thank you to Crane Begg for the graphics work and to Rob Atkins for information on his excavations at Broughton Manor Farm.
- 6.1.2 The brief for archaeological works was written by Nick Crank.

APPENDIX A. OASIS REPORT FORM

All fields are required unless they are not applicable.

Project Details

OASIS Number	Oxfordar3-48089			
Project Name	Broughton Farm WM Project			
Project Dates (fieldwork)	Start	21-04-2008	Finish	01-07-2008
Previous Work (by OA East)	No		Future Work	No

Project Reference Codes

Site Code	XBUBBG08	Planning App. No.	
HER No.	Mk HER 1168	Related HER/OASIS No.	

Type of Project/Techniques Used

Prompt	Planning condition
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Please select all techniques used:

<input checked="" type="checkbox"/> Field Observation (periodic visits)	<input type="checkbox"/> Part Excavation	<input type="checkbox"/> Salvage Record
<input type="checkbox"/> Full Excavation (100%)	<input type="checkbox"/> Part Survey	<input type="checkbox"/> Systematic Field Walking
<input type="checkbox"/> Full Survey	<input checked="" type="checkbox"/> Recorded Observation	<input type="checkbox"/> Systematic Metal Detector Survey
<input type="checkbox"/> Geophysical Survey	<input type="checkbox"/> Remote Operated Vehicle Survey	<input type="checkbox"/> Test Pit Survey
<input type="checkbox"/> Open-Area Excavation	<input type="checkbox"/> Salvage Excavation	<input checked="" type="checkbox"/> Watching Brief

Monument Types/Significant Finds & Their Periods

List feature types using the [NMR Monument Type Thesaurus](#) and significant finds using the [MDA Object type Thesaurus](#) together with their respective periods. If no features/finds were found, please state "none".

Monument	Period	Object	Period
None	Select period...	None	Select period...
None	Select period...	None	Select period...
None	Select period...	None	Select period...

Project Location

County	Buckinghamshire	Site Address (including postcode if possible)	
District	Milton Keynes	Milton Keynes Expansion Phase 1	
Parish	Broughton		
HER	MK HER 1168		
Study Area	2.2km	National Grid Reference	see notes

Project Originators

Organisation	OA EAST
Project Brief Originator	
Project Design Originator	
Project Manager	James Drummond Murray
Supervisor	James fairbairn

Project Archives

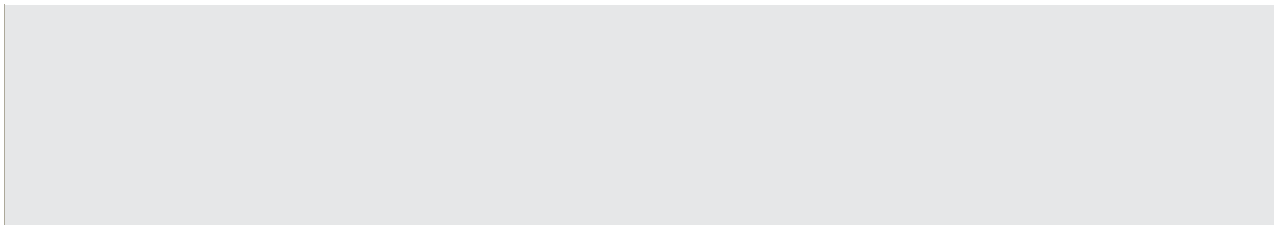
Physical Archive	Digital Archive	Paper Archive
Location ...Bucks County Museum	Location ...Bucks County Museum	Location ...Bucks County Museum
Accession ID ...	Accession ID ...	Accession ID ...

Archive Contents/Media

	Physical Contents	Digital Contents	Paper Contents
Animal Bones	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ceramics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Environmental	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Glass	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Human Bones	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Industrial	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leather	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Metal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stratigraphic		<input type="checkbox"/>	<input type="checkbox"/>
Survey		<input type="checkbox"/>	<input type="checkbox"/>
Textiles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wood	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Worked Bone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Worked Stone/Lithic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
None	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>




Digital Media	Paper Media
<input type="checkbox"/> Database	<input type="checkbox"/> Aerial Photos
<input type="checkbox"/> GIS	<input checked="" type="checkbox"/> Context Sheet
<input type="checkbox"/> Geophysics	<input checked="" type="checkbox"/> Correspondence
<input type="checkbox"/> Images	<input type="checkbox"/> Diary
<input checked="" type="checkbox"/> Illustrations	<input checked="" type="checkbox"/> Drawing
<input type="checkbox"/> Moving Image	<input type="checkbox"/> Manuscript
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<input type="checkbox"/> Survey	<input type="checkbox"/> Matrices
<input checked="" type="checkbox"/> Text	<input type="checkbox"/> Microfilm
<input type="checkbox"/> Virtual Reality	<input type="checkbox"/> Misc.
	<input type="checkbox"/> Research/Notes
	<input type="checkbox"/> Photos
	<input type="checkbox"/> Plans
	<input checked="" type="checkbox"/> Report
	<input checked="" type="checkbox"/> Sections
	<input type="checkbox"/> Survey

Notes: Grid Reference SP 88998 40070 to SP90404 39492




Drawing Conventions

Plans

Limit of Excavation	_____
Deposit - Conjectured	-----
Natural Features	_____
Sondages/Machine Strip	- - - - -
Intrusion/Truncation
Illustrated Section	<u>S.14</u>
Archaeological Deposit	
Excavated Slot	
Modern Deposit	
Cut Number	118

Sections

Limit of Excavation	-----
Cut	_____
Cut-Conjectured	-----
Deposit Horizon	_____
Deposit Horizon - Conjectured	-----
Intrusion/Truncation
Top Surface/Top of Natural	_____
Break in Section/ Limit of Section Drawing	- - - - -
Cut Number	118
Deposit Number	117
Ordnance Datum	18.45m OD ^
Inclusions	

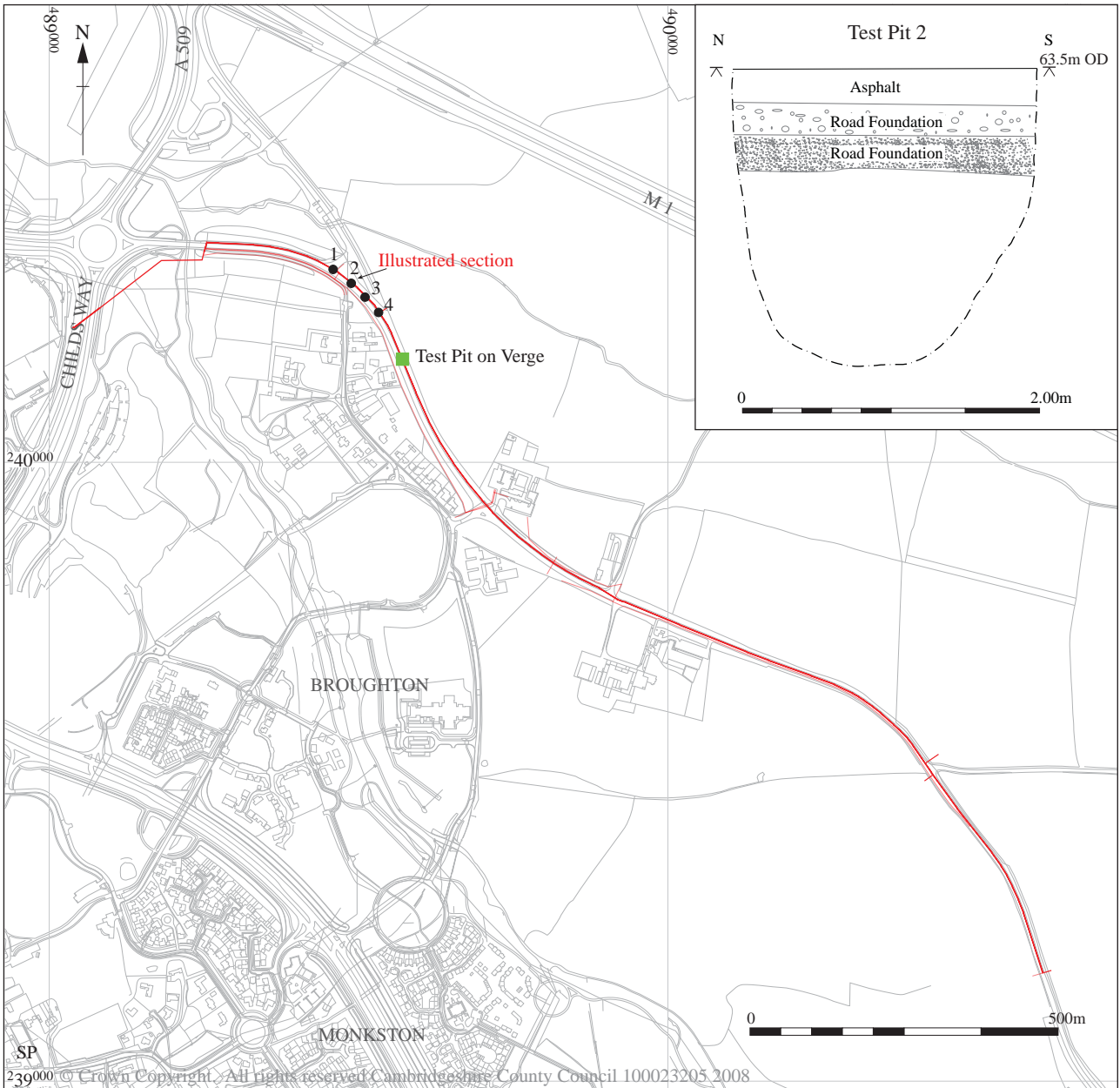
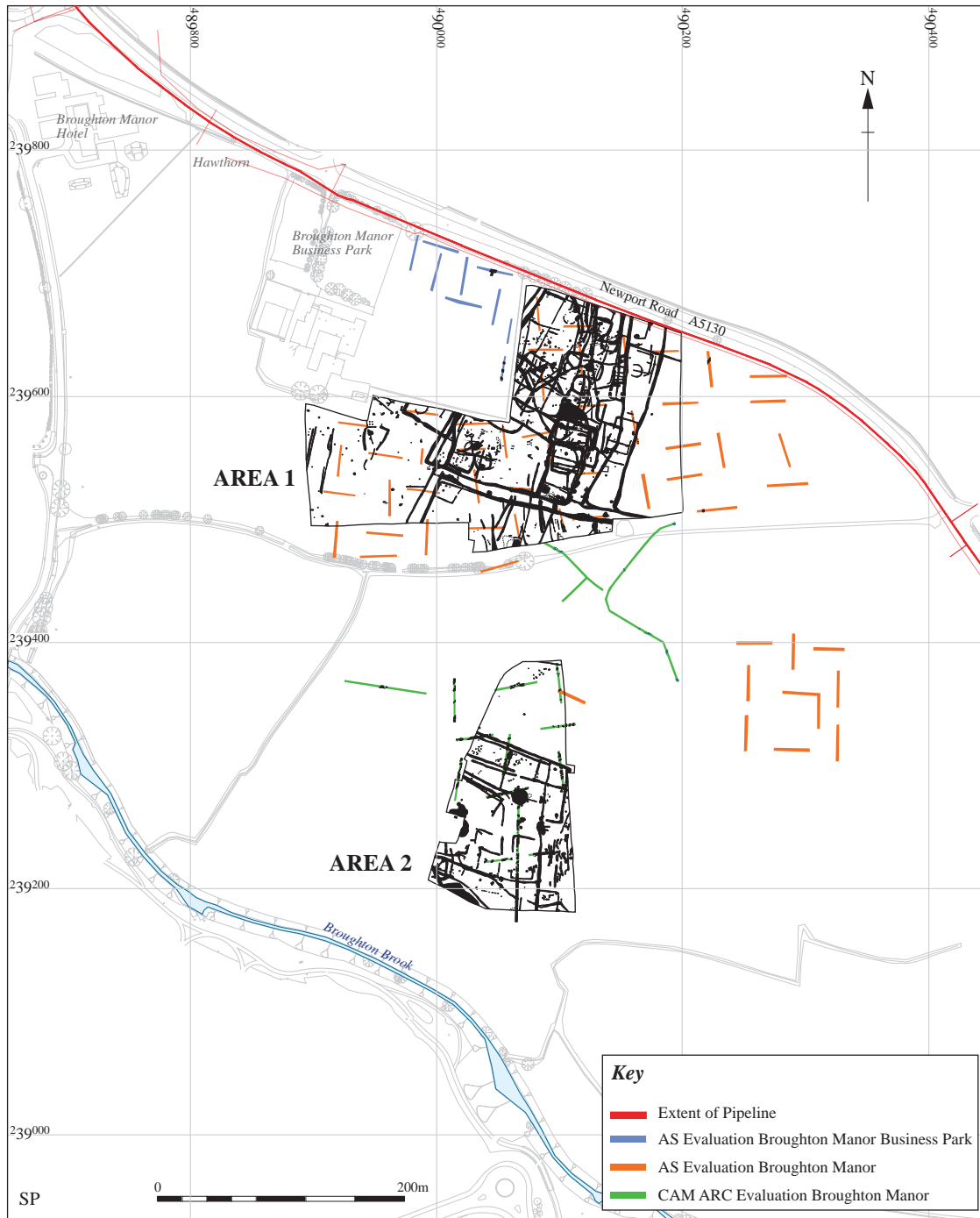


Figure 1: Location of 1m x 2m test pits with the pipeline outlined (red)



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Figure 2: Extent of evaluated archaeology to the south of the pipeline



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