#### BEDFORD ROWING LAKE, WILLINGTON

#### **ARCHAEOLOGICAL FIELD EVALUATION**

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Produced for: Woods Hardwick Planning Ltd 17 Goldington Road Bedford MK40 3NH

On Behalf of The Poynter Charitable Trust

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### Preface

Every effort has been made in the preparation of this document to provide as complete an assessment as possible, within the terms of the specification. 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.

This report has been prepared by Wesley Keir (Project Officer). Jackie Wells (Finds Officer) prepared the section on the finds assemblage. Joan Lightning (CAD Technician) digitised the plans and produced the figures. The evaluation was undertaken by Wesley Keir, Christiane Meckseper (Project Officer), Jerry Stone (Assistant Supervisor), Elizabeth Davis (Assistant Supervisor) and Phil Henderson (Archaeological Technician). The project was managed by Jeremy Oetgen (Project Manager). Drew Shotliff (Operations Manager) was responsible for quality control.

Albion Archaeology is exceptionally grateful to all those whose efforts enabled this evaluation to be completed within a very short timescale, including: Martin Oake (County Archaeological Officer); Lesley-Ann Mather (Archaeological Officer); John Hargreaves and the staff of Woods Hardwick Planning Ltd; representatives of the Poynter Trust; and Lafarge Aggregates Ltd. Particular thanks are due to the landowners and their agents who kindly granted access to their land for the purpose of this evaluation.

Plant was supplied by Whitmore Plant. The assistance with information regarding the location of the high pressure gas main on site by Rob Lines of Transco is also gratefully acknowledged.

References to cartographic sources are used in this report with the permission of Bedfordshire and Luton Archives and Records Service.

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#### Structure of this report

After the introductory Section 1, the results of the trial excavation are presented in Section 2 (including a discussion on the artefact assemblage). A synthesis of the results and their significance is presented in Section 3. A summary of the evidence recovered in each trench is included in the Appendix (Section 4).

# Key Terms

Throughout this report the following terms or abbreviations are used:

Albion	Albion Archaeology
BCC CAO	Bedfordshire County Council's County Archaeological Officer
Client	Woods Hardwick Planning Ltd
IFA	Institute of Field Archaeologists
Procedures Manual	<i>Procedures Manual Volume 1 Fieldwork</i> , 2 <sup>nd</sup> Edition 2001. Bedfordshire County Council

# Non-Technical Summary

Between 22<sup>nd</sup> and 28<sup>th</sup> May 2006, Albion Archaeology carried out an archaeological evaluation, in advance of a planning application, on land to the north-west of Willington centred on Grid Reference TL 1015 5010. The work was carried out for Woods Hardwick Planning Ltd on behalf of the Poynter Charitable Trust. The Evaluation Area comprised c.5.9 hectares, though much of this was covered by areas of dense scrub and trees. This restricted the area that could be evaluated to approximately 1.4 hectares, which consisted of grassland with concentrations of shrubs, small trees and clumps of brambles.

Various cropmarks of geological and archaeological origin are present within the Evaluation Area and it is set in a complex archaeological landscape consisting of prehistoric ritual sites and Iron Age/Romano-British settlement activity. Traces of early or middle Saxon settlement were recently identified to the south-west of Octagon Farm and a possible medieval moated site is situated to the south-east of the Evaluation Area. The former Bedford to Sandy railway line also runs across the Evaluation Area.

Fifteen trial trenches, some targeted on cropmarks, were distributed across the site. They confirmed the presence of an early prehistoric ring ditch that surrounded a probable prehistoric round barrow located on the edge of the south-east side of the Evaluation Area. However, the majority of features revealed appeared to be associated with post-medieval agriculture and land division, such as the numerous furrows and boundary ditches. Evidence of tree and shrub clearance predating the furrows and boundary ditches was also revealed. The location of a former course of the Elstow Brook was identified and correlated with a large cropmark generally orientated south-west to north-east.



# 1. INTRODUCTION

#### 1.1 Planning Background

Planning permission is being sought by Woods Hardwick Planning Ltd, on behalf of the Poynter Charitable Trust, for the construction of a rowing lake at Willington, Bedfordshire.

A desk-based assessment<sup>1</sup>, undertaken as part of the Environmental Statement for the proposed rowing lake, concluded that the land near the centre of the development area had not been evaluated and that there was potential for the survival of archaeological features and deposits. The County Archaeological Officer (CAO) of Bedfordshire County Council subsequently advised that the land was in an archaeologically sensitive location and that further information regarding the archaeological potential of the area was required, prior to determination of the planning application.

The CAO did not issue a brief for the evaluation but requested submission of a Project Design for his approval in advance of commencement. Albion archaeology was commissioned to prepare the Project Design<sup>2</sup>, which was approved by the CAO. The results of the fieldwork are presented in the present report.

#### 1.2 Site Location and Description

The Evaluation Area (Figure 1) is located to the north-west of Willington and is centred on grid reference TL 1015 5010. It straddles the disused railway line and public bridleway that crosses the area from east to west. Parallel to the railway line is an easement for a high-pressure gas main and a high-pressure main sewer also crosses the site. The application area is bounded in the north by the Lafarge Aggregates processing site and in the south-west and south-east by traditional field boundaries consisting of hedges and trees.

The site comprises an area of c.5.9 hectares, though at the time of the fieldwork much of this was covered by areas of dense scrub and trees (Figure 2). This restricted the area that could be evaluated to approximately 1.4 hectares, which consisted of grassland with concentrations of shrubs, small trees and clumps of brambles.

The site is fairly level and is situated at an average height of 23m OD. The underlying geology is formed by the river gravel terraces of the Great Ouse Valley, overlying Oxford Clay.

#### 1.3 Archaeological Background

The archaeology and cultural heritage of the wider area is summarised in the Environmental Statement, commissioned to accompany the planning application for the rowing lake. The following section briefly reviews this evidence with specific reference to the Evaluation Area.

<sup>&</sup>lt;sup>1</sup> ES [2003], Chapter 12: 'Archaeology and Cultural Heritage', paragraph 12.46.

<sup>&</sup>lt;sup>2</sup> Albion Archaeology 2006, Bedford Rowing Lake, Willington. Project Design for Archaeological Field Evaluation

#### 1.3.1 Archaeological features within the Evaluation Area

Cropmarks within the Evaluation Area were all undated prior to the evaluation. These were plotted digitally to assist preparation of the trench strategy, and the plot is illustrated in relation to the trench layout in Figure 3. The shape of the cropmarks suggested that they represented former enclosures, possibly associated with the medieval moat that lies further to the east (see below, Section 1.3.2). It was thought possible that the cropmarks were outlying elements of the medieval village of Willington.

Other, less distinct cropmarks were interpreted as geological in origin, perhaps indicating the extent of alluvium around the Elstow Brook. Although the latter generally follows a meandering course, it appears to have been canalised along a straight channel in the vicinity of the Evaluation Area. Its 'natural' course was expected to lie to the north of this channel and within the Evaluation Area. This canalisation predated the OS 25-inch First Edition map.

The former Bedford to Sandy railway line runs across the Evaluation Area. Although now modified as a cycle track, this is a feature of industrial archaeological interest. It is also a potential cause of damage to earlier archaeological remains, particularly if construction material has been quarried from borrow pits alongside the track.

Further damage to archaeological deposits must have also occurred during the laying of the main services which traverse the site. There is no available record of these works.

#### 1.3.2 Archaeological features in the vicinity of the Evaluation Area

The proposed development is set in a complex archaeological landscape consisting of prehistoric ritual sites and Iron Age/Romano-British settlement activity. The sites are known mainly through cropmark evidence. Evaluation and excavation has generally been more comprehensive for land to the north and west of the present Evaluation Area, where systematic fieldwork has been undertaken over many years in connection with post-PPG16 development. On land to the south and east, considerable mineral extraction was undertaken prior to the publication of PPG16 and there were consequently relatively few opportunities for archaeological investigation.

A number of Neolithic and Bronze Age ritual sites in the form of ring ditches, enclosures, a possible Neolithic 'cursus' monument and a possible Iron Age square barrow are situated in what is now Willington Quarry North. Excavations in the late 1980s and early 1990s in advance of gravel extraction at Plantation Quarry to the north of the present Evaluation Area identified further prehistoric ritual sites, including a Neolithic mortuary enclosure with a female burial and two Bronze Age ring ditches. The excavations also uncovered several Iron Age- and one late Iron Age/Romano-British enclosure and two Iron Age pennanular ditches crossed by a post alignment<sup>3</sup>.

Several of these sites have been designated Scheduled Ancient Monuments (SAM). SAM 20746 is situated immediately to the west of the Evaluation Area and consists of

<sup>&</sup>lt;sup>3</sup> Dawson M 1996. *Plantation Quarry, Willington: Excavations 1988-1991*. Bedfordshire Archaeological Journal 22, 2-49.

two ring ditches, which are part of a Neolithic and Bronze Age mortuary complex. A further ring ditch and other related features lie further to the west (SAMs 20745 and 20747). Excavations in advance of gravel extraction recorded another, smaller, ring ditch, adjacent to the quarry access road<sup>4</sup>. This ring ditch had been identified previously as a cropmark but it did not show up as a feature in subsequent trial trenching.

A complex of archaeological features consisting of ring ditches, irregular enclosures and linear marks lie to the south of the development area and the cropmarks partly extend into the area to be evaluated (see above, and Figure 3). One ring ditch lies just south of the Evaluation Area. There is no recorded archaeological investigation of this ring ditch. At least two of the ring ditches were excavated in the 1960s. One revealed the stone base for a temple or mortuary building<sup>5</sup>. Another, known as 'Cople 'b'', contained burials, possible stone structures and the debris of a peat-fuelled funerary pyre<sup>6</sup>. The date of construction of the latter ring ditch was not proven, but pottery found in the bottom of the ditch was thought tentatively to date from the middle Saxon period.

The archaeological landscape around the development area includes numerous Iron Age and Romano-British settlements and rectilinear field systems, enclosures and trackways. These settlements occupied land which is now considered liable to flood<sup>7</sup>.

In addition to the evidence from the Cople 'b' ring ditch, traces of early or middle Saxon settlement were recently identified to the south-west of Octagon Farm<sup>8</sup>. The evidence consisted of a few fragments of pottery and other artefacts recovered from pits (refuse pits or wells). To date, no Saxon sites have been identified in Willington Quarry North, despite close monitoring of the mineral extraction there. This suggests that early/middle Saxon settlements were generally located further from the River Great Ouse than their Iron Age and Roman predecessors, but still on lower-lying ground than was occupied by the medieval and modern villages of Willington and Cople.

A possible medieval moated site is situated to the south-east of the Evaluation Area. However, the earthworks have been entirely levelled through cultivation and are no longer visible. The village of Willington is medieval in origin and it is probable that the Evaluation Area was open cultivated land in the medieval period, comprising part of the common field system belonging to the village. No remains of medieval cultivation activity survive but, given its relative proximity to the moat and the extreme north-west end of the village, it is possible that the remains of outlying 'tofts' or other small enclosures may exist (see the discussion of the cropmark evidence in Section 1.3.1).

<sup>&</sup>lt;sup>4</sup> Albion Archaeology, in. prep.

<sup>&</sup>lt;sup>5</sup> Ordnance Survey record card for Antiquity no. TL 15 SW 19 (HER 1618)

<sup>&</sup>lt;sup>6</sup> Dyer, J., 1994, 'Ring Ditch 'b' at Cople, Bedfordshire', Bedfordshire Archaeology, 21, pp 1–9

<sup>&</sup>lt;sup>7</sup> Proposals Map indicating land liable to flood, published in *Bedford Borough Local Plan*, (Bedford Borough Council, adopted 20/10/2002)

<sup>&</sup>lt;sup>8</sup> Albion Archaeology, 2004, Octagon Farm South, Willington Quarry, Bedfordshire: Trial Trench Evaluation Report. Report 2004/18

The dovecote and a stables building at Willington are Scheduled Ancient Monuments (SAM BD10 and BD10a) and the farmhouse at Octagon Farm is a Grade II listed building. Sand and gravel extraction has taken place in the Willington area since the development of the brick industry in the post-medieval period. The existence of a temporary brick clamp at Claypit Close, close to Octagon Farm has been recorded in the field to the south-west of the Evaluation Area.

# 2. TRIAL EXCAVATION

#### 2.1 Introduction

The evaluation was carried out between 22<sup>nd</sup> and 28<sup>th</sup> May 2006. Fifteen trenches, between 28m and 33m long and approximately 2m wide, were positioned across the site. Trenches 1-3 and 5–10 were targeted on cropmark features (Figure 3), while Trench 4 and Trenches 11–15 were located to provide even coverage of the remaining 'blank' areas to test for hitherto undetected archaeological remains. Trenches 7 and 8 were subsequently extended to provide further information regarding features visible within the trenches.

As stated in Section 1.2 and shown in Figure 2, the location of the trenches was restricted by the dense shrub and tree cover. This allowed only areas to the south of the railway track to be evaluated and the location of Trenches 14 and 15 had to be moved from their proposed positions in the Project Design. However, this did not affect the location of the trenches designed to target the cropmarks.

The aim of the trial trenching was to provide information regarding:

- the location, extent, nature and date of any archaeological features or deposits that might be present;
- the integrity and state of preservation of any archaeological features or deposits that might be present.

Detailed technical information on all deposits and archaeological features discussed below can be found in Section 4.

#### 2.2 Method Statement

Detailed method statements for the principal investigative techniques are presented in the Project Design. The present section summarises the main points regarding the methodological approach to the project.

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

- IFA's Code of Conduct (Revised edition 2002), the Standard and Guidance for Archaeological Field Evaluation (Revised edition 2001) and the Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials (2001);
- Albion Archaeology's *Procedures Manual: Volume 1 Fieldwork* (2<sup>nd</sup> edn, 2001);
- Association of County Archaeological Officers' Briefs and Specifications for Archaeological Assessment and Field Evaluation (1993);
- English Heritage's Management of Archaeological Projects 'MAP 2' (1991);
- English Heritage Centre for Archaeology guidelines for Environmental Archaeology (2002);
- Preparing Archaeological Archives for Deposition with Registered Museums in Bedfordshire (Bedford Museum and Luton Museum, 2002);
- Society of Museum Archaeologists' *Preparation of Archaeological Archives:* Selection Retention and Dispersal of Archaeological Collections (1993);

• Medieval Pottery Research Group's *Minimum Standards for the Processing, Recording, Analysis and Publication of Post-Roman Ceramics* (2001).

The main points with regard to the trial excavation methodology were as follows:

- The trenches were opened by mechanical excavator fitted with a toothless bucket and operated by an experienced driver under archaeological supervision.
- Topsoil and modern overburden was removed by machine down to the top of archaeological deposits, or clean natural deposits, whichever was encountered first.
- The spoil tips and any archaeological features were scanned for artefacts. Artefacts recovered from spoil tips, were assigned to the relevant context number for the trench.
- Recording took place on pro-forma sheets in accordance with Albion Archaeology's *Procedures Manual*.
- The trenches were inspected by the CAO, prior to being backfilled.

The position of the trenches was discussed and agreed with the CAO in advance of trial trenching. Prior to excavation and post-excavation, the location of the trenches was surveyed by dGPS and tied into the national grid.

The trenches were cleaned by hand in order to expose any archaeological features and deposits. Subsequently, each trench was planned and photographed. All deposits were recorded using a unique number sequence commencing at 100 for Trench 1, 200 for Trench 2 etc.

All archaeological and geological deposits and features (known as 'contexts') were assigned an individual number. Numbers in brackets within the text refer to the context number issued to each deposit of feature on site. Context numbers referring to cut features (i.e. pits, ditches etc.) are expressed [\*\*\*]; layers and deposits within cut features are expressed (\*\*\*).

#### 2.3 Results of the Trial Excavation

#### 2.3.1 General deposit model

The natural strata revealed within Trenches 1-10 and 14 consisted of silty or sandy gravel. Trenches 9-15 also revealed a typically brown-grey clay layer<sup>9</sup>. This overlay the gravel and is probably an alluvial clay derived from a former course of the Elstow Brook. A sondage was machine excavated through this layer in the south end of Trench 13 and revealed the layer to be approximately 0.9m thick, overlaying a sandy gravel layer (1302) 0.10m thick, which in turn overlay a blue-grey (?Oxford) clay (1303) at a depth of 19.80m OD.

A clay silt subsoil was present within Trenches 4, 6-9 and  $15^{10}$ . This overlay the natural gravel and was between 0.10m and 0.35m thick. A topsoil comprised of a dark grey-brown clay loam, 0.2m to 0.4m thick, overlay the subsoil and alluvial clay where present, as well as the natural gravel.

<sup>&</sup>lt;sup>9</sup> see layers (901), (1017), (1101), (1201), (1301), (1402) and (1502) in Appendix 4.1 <sup>10</sup> see layers (408), (601), (701), (801), (903) and (1501) in Appendix 4.1

Bedford Rowing Lake, Willington Archaeological Field Evaluation.

All the archaeological features were sealed by the subsoil (where present) and the topsoil.

#### 2.3.2 Former course of the Elstow Brook

A former course of the Elstow Brook could be distinguished within Trenches 9-15 by the presence of an alluvial deposit of typically brown-grey clay<sup>11</sup>. A machine-excavated sondage in the southern end of Trench 13 revealed this layer to be 0.9m thick, overlying layers of natural gravels (1302) and clay (1303). The course of the Brook appeared to be approximately aligned north-east to south-west, corresponding with a cropmark (Figure 3).

Apart from some land drains and a modern gully within Trench 11, no archaeological features were cut through this deposit. However, two sherds of probable early-middle Saxon pottery were recovered from the alluvial deposit in Trench 14. As they were found within this alluvial deposit, it is probable that they have been washed along the stream bed.

#### 2.3.3 The prehistoric ring ditch

Two curving concentric ditches [516] and [521] were revealed within the south-east end of Trench 5 (Figures 3, 4 and 5). The outer and larger of the two ditches, [521], corresponded with a targeted cropmark measuring 22m across interpreted as a ring ditch (Figure 3). The evidence suggests that these features are the remains of a round barrow, a type of burial monument dating from the late Neolithic or early Bronze Age.

The outer ditch [521] was 3m across and 1m deep. It had steeply sloping sides with a more gradual slope at the top and a relatively flat base. The undercutting profile at the base of the sides is probably the result of water erosion (see section on Figure 5). The ditch contained four fills; the lower fill (518) produced prehistoric worked flint flakes and animal bone.

A smaller concentric ditch [516] was located 3.5m to the south-east of ditch [521]. Its alignment suggests it is associated with ditch [521]. It was 0.6m wide and 0.4m deep with near vertical sloping sides and slightly concave base. It contained three fills but no artefacts.

Possible mound material associated with the ring ditch was identified at the southeastern end of the trench. Two layers (511) and (512) were present overlaying the smaller ditch [516] and sealed by the topsoil. They consisted of a brown silty sand and together measured up to 0.25m thick. Layer (512) was confined to the south-east side of ditch [516] and was overlain by (511) which overlay both (512) and ditch [516] and was visible for 3.7m in the section. Layer (512) contained a worked flint flake. It is probable that these layers are associated with possible mound material within the circuit of the ring ditch. The fact that these layers overlay the smaller ditch [516] may imply that the ditch predates the mound material, or alternatively that the mound material has been spread over the ditch by more recent plough action.

<sup>11</sup> see layers (901), (1017), (1101), (1201), (1301), (1402) and (1502) in Appendix 4.1

#### 2.3.4 Possible areas of burning associated with tree and shrub clearance

Within Trenches 7, 8 and 10, areas of red clay and gravel were visible (Figures 6 and 7) which may be the result of tree and shrub clearance. They were irregular in shape and, where excavated, were contained within shallow irregular hollows. The irregular nature of these hollows suggests they may be caused by tree or shrub disturbance. The red clay and gravel appears to be the result of scorching of the natural strata. Burnt/fired clay fragments were retrieved from hollows [712], [812] and [816].

Hollows [712] and [714] were cut by probable post-medieval furrow [710] and hollows [808] and [816] were cut by probable post-medieval ditch [814]. This shows that they pre-date these post-medieval features. The burnt areas were also sealed by the subsoil where present.

#### 2.3.5 North-to-south and east-west aligned boundaries in Trench 10

Two probable hedge line boundaries [1004] and [1007] were identified in Trench 10. One was aligned north-south, the other east-west, in the middle of the trench (Figure 6). They both had concave sides and slightly concave bases. [1007] was 1.25m wide, whilst [1004] was cut and obscured by furrow [1013]. They both contained similar deposits which comprised of two fills. The lower fill (1006) and (1009) was a greybrown sandy silt with frequent gravel inclusions and was disturbed by rooting. The shape and fill of these features suggest they may be hedge line boundaries.

#### 2.3.6 Post-medieval boundary ditches

A series of ditches were identified orientated north-east to south-west and north-west to south-east (Figures 4-8)<sup>12</sup>. They were between 0.5m and 2.5m wide and, where excavated, between 0.15m and 0.6m deep. They typically contained a mid brown clay silt or silty clay. Some of the ditches also contained a darker more humic fill that may represent hedge lines.

Ditches [101], [301], [523] and [603] were segments of the same ditch which was at least 123m long and appeared to coincide with one of the targeted cropmarks (Figure 3). Ditch [702] and [803] corresponds to a targeted cropmark that forms an L-shaped linear feature (Figure 3 and 6). Artefacts recovered from ditches [101] and [510] suggest they are post-medieval in date. Ditch [101] also contained a clay pipe fragment and a small, abraded, early medieval pottery sherd which is likely to be residual. These ditches were possibly associated with small enclosures for stock management.

#### 2.3.7 Furrows

A series of furrows orientated north-west to south-east were identified<sup>13</sup>. Their orientation suggests they are associated with the post-medieval boundary ditches described above. Furrow [1014] contained a post-medieval tile fragment.

<sup>&</sup>lt;sup>12</sup> see features [101], [204], [301], [510], [523], [603], [702], [803], [814], [1010] and [1403] in Appendix 4.1 <sup>13</sup> see features [202], [401], [404], [406], [605], [706], [708], [710], [1013] and [1015] in Appendix 4.1

### 2.4 Artefact Assemblage

#### 2.4.1 Introduction

The evaluation produced a small finds assemblage comprising pottery, roof tile, worked flint, burnt/fired clay, animal bone and clay pipe (Table 1). The material was scanned to ascertain its nature, condition and where possible date range. No finds were recovered from Trenches 2-4, 6, 9, 11-13, or 15.

Area	Tr.	Feature	Feature type	Context	Spot date*	Finds summary
1	01	101	Ditch -secondary fill	103	Early medieval	Pottery (1g)
		101	Ditch -primary fill	104	Post-medieval	Clay pipe (7g)
	05	510	Ditch	504	Post-medieval	Roof tile (76g)
		512	Layer	512	Prehistoric	Worked flint (3g)
		521	Ditch	518	Prehistoric	Animal bone (37g); worked flint (38g)
	07	702	Ditch	703	-	Burnt/fired clay (38g)
		712	Tree-throw	713	-	Burnt/fired clay (4g)
	08	812	Tree-throw	813	-	Burnt/fired clay (45g)
		816	Tree-throw	817	-	Burnt/fired clay (8g)
	10	1013	Furrow	1014	Post-medieval	Roof tile (75g)
2	14	1402	Alluvium	1402	Saxon	Pottery (21g)

\* - spot date based on date of latest artefact in context

 Table 1: Artefact Summary

#### 2.4.2 Pottery

Three abraded pottery sherds weighing 22g were recovered. Fabric types were identified in accordance with the Bedfordshire Ceramic Type Series, currently maintained by Albion Archaeology on behalf of Bedfordshire County Council.

The secondary fill of ditch [101], Trench 1 yielded a small sand tempered sherd (fabric type C59A) datable to the  $12^{th}$ - $13^{th}$  centuries. The sherd is likely to be residual within the feature, which also contained a fragment of post-medieval clay pipe stem. Two undiagnostic sand tempered sherds of probable early to middle Saxon date (fabric type A16) were recovered from alluvial deposit (1402), Trench 14.

#### 2.4.3 Other finds

The secondary fill of putative ring ditch [521], Trench 5, yielded seven abraded long bone fragments (37g) which are not identifiable to species. Seven flint waste flakes (38g) were recovered from the same fill. A single waste flake (1g) derived from layer/mound material (512). Although several flakes are broken, the flint is generally of 'fresh' appearance.

Four sand tempered pieces of post-medieval flat roof tile (246g) were recovered from ditch [510], Trench 5, and furrow [1013], Trench 10.

Twenty amorphous burnt/fired clay fragments (95g) derived from ditch [702] and treethrows [712], [812] and [816], Trenches 7 and 8. All occur in an oxidised sand tempered fabric, and are abraded.



# 3. SYNTHESIS

#### 3.1 Discussion

Trial trenching has confirmed the presence of a ring ditch with an associated smaller ditch that probably comprise the ditches of a prehistoric round barrow located on the edge of the south-east side of the Evaluation Area. The identified presence of possible mound material overlying the smaller, inner ditch is significant as it suggests there is more than one phase of construction or use of the monument. The inner ditch predates the mound and, by implication, the outer ditch (assuming the latter was contemporary with the mound). This indicates enlargement and modification to the monument. Few double ring ditches have been identified in the entire Great Ouse Valley and fewer still have been excavated<sup>14</sup>. At Biddenham, the double ring ditch L270 was identified by geophysical survey and shows a similar form and size in plan, though this appears to show a causeway in the outer ditch<sup>15</sup>.

Approximately half of the Evaluation Area lay within a former course of the Elstow Brook. This was identified by the distribution of alluvial deposits in some of the trenches and correlated with the cropmark evidence.

Areas of tree and shrub clearance, indicated by burnt clay and gravel, were revealed in the north-east end of the Evaluation Area. They may possibly be associated with postmedieval agriculture. The reddish hue and nature of the clay suggests it has been burnt, and together with their irregular shape indicates they are possibly associated with shrub or tree clearance. Two of these areas were demonstrated to predate probable post-medieval features. This together with the fact that they are sealed by the subsoil (where present) indicates they are not associated with any modern tree or shrub clearance. However, it is possible they are associated with clearing the field in preparation for post-medieval agriculture as represented by the revealed boundary ditches and furrows, although why they would be confined to just this area of the site is unclear.

Two features in Trench 10 were on a different alignment to and appeared to pre-date the post-medieval boundary ditches and furrows, although these appeared to represent hedge line boundaries.

Apart from the above, the vast majority of features revealed by the trial trenching appear to be boundary ditches and furrows associated with post-medieval agriculture. Neither, the 2-inch Ordnance Surveyor's Draft Map (surveyed in 1815) or the 1<sup>st</sup> Edition 25-inch Ordnance Survey Map of the 1880s show any corresponding boundaries or evidence of agriculture within this area.

#### 3.2 Summary of Significance

The trial trenching has demonstrated that the surviving archaeological deposits within the Evaluation Area largely derive from post-medieval agricultural activity and land

 <sup>&</sup>lt;sup>14</sup> Luke, M. 2005. An archaeological resource assessment of the Palaeolithic, Mesolithic, Early Neolithic and Late Neolithic/Early Bronze Age IN *Bedfordshire Research Frameworks Draft* <sup>15</sup> Luke, M. in prep. *Biddenham Loop, Draft Publication Text*

division. However, the trial trenching has confirmed the presence of a prehistoric ring ditch, which clips the south-east side of the Evaluation Area, on what would become the southern shore of the proposed lake. The presence of a double ditch is rare in the Great Ouse Valley<sup>16</sup>, as is the survival of mound material<sup>17</sup>.

The ring ditch is one of many prehistoric ring ditches known in the Willington/Cople area. The surviving examples have been identified as nationally important by English Heritage and most have been designated as scheduled ancient monuments (SAMs). The ring ditch identified in the present evaluation is of similar quality and is, therefore, also of national importance.

Two abraded sherds of Saxon pottery were recovered from the former course of the Elstow Brook. However, as they were found in the alluvium, these sherds have almost certainly been washed along the stream bed and do not indicate significant Saxon occupation within the Evaluation Area. A small abraded sherd of early medieval pottery was recovered from the upper fill of one of the post-medieval ditches, but is probably residual.

 <sup>&</sup>lt;sup>16</sup> Luke, M. 2005. An archaeological resource assessment of the Palaeolithic, Mesolithic, Early Neolithic and Late Neolithic/Early Bronze Age IN *Bedfordshire Research Frameworks Draft* <sup>17</sup> Luke, M. in prep. *Biddenham Loop, Draft Publication Text*



### 4.1 Trench Summaries





Context:	Туре:	Description:	Excavated:	Finds Present:
100	Topsoil	Firm dark brown grey clay loam moderate small-medium stones	$\checkmark$	
101	Ditch	Linear E-W profile: concave base: concave dimensions: min length 3.5m, min breadth 1.07m, min depth 0.4m	n 🗸	
102	Upper fill	Firm mid brown grey silty clay occasional small-medium stones	$\checkmark$	
103	Secondary fill	Firm mid grey brown clay silt occasional small stones	$\checkmark$	$\checkmark$
104	Primary fill	Loose mid brown orange silty clay frequent medium stones	$\checkmark$	$\checkmark$
105	Natural	Friable light brown silty gravel		



Context:	Type:	Description:	Excavated:	Finds Present:
200	Topsoil	Dark brown grey clay loam frequent small-medium stones	$\checkmark$	
201	Natural	Friable light brown orange silty gravel		
202	Furrow	Linear NW-SE profile: concave base: concave dimensions: min length 2.m, m breadth 1.6m, min depth 0.1m	in 🗸	
203	Fill	Firm light grey orange clay silt occasional small-medium stones	$\checkmark$	
204	Ditch	Linear E-W profile: concave base: concave dimensions: min length 2.2m, min breadth 0.75m, min depth 0.15m		
205	Fill	Loose light grey orange sandy silt moderate small-medium stones	$\checkmark$	



Context:	Type:	Description:	Excavated: Finds	s Present:
300	Topsoil	Dark brown clay loam frequent small-medium stones	$\checkmark$	
301	Ditch	Linear NE-SW dimensions: min length 2.5m, max breadth 0.85m Not excavated. Same as [101].		
302		Mid brown grey clay silt		
303	Natural	Yellow brown silty gravel		

Trench:	4					
<b>Max Dimensions:</b>	Length:	29.70 m.	Width:	2.00 m.	Depth to Archaeology Min: 0.25 m	. Max: m.
<b>OS Co-ordinates:</b>	Ref. 1:	TL099764	9989	<b>Ref. 2:</b>	TL0998850015	
Reason:	General o	coverage.				

Context:	Туре:	Description:	Excavated:	Finds Present:
400	Topsoil	Dark brown clay loam frequent small stones	$\checkmark$	
401	Furrow	Linear NW-SE profile: concave base: flat dimensions: min length 2.2m, min breadth 2.m, min depth 0.25m	$\checkmark$	
402	Fill	Mid grey brown sandy silt frequent small stones	$\checkmark$	
403	Natural	Orange brown silty gravel		
404	Furrow	Linear NW-SE dimensions: min length 2.2m, min breadth 1.3m Furrow - no excavated.	nt 🗌	
405	Fill	Mid grey brown sandy silt		
406	Furrow	Linear NW-SE dimensions: min length 2.m, min breadth 3.3m Furrow - not excavated.		
407	Fill	Mid grey brown sandy silt		
408	Subsoil	Mid brown clay silt frequent small-medium stones	$\checkmark$	

# Trench:5Max Dimensions:Length:33.00 m.Width:2.20 m.Depth to Archaeology Min:0.3 m.Max:m.OS Co-ordinates:Ref. 1:TL1001450002Ref. 2:TL1004249986Reason:Investigate cropmarks.

Context:	Туре:	Description:	Excavated:	Finds Present:
500	Topsoil	Dark grey brown loam	$\checkmark$	
501	Natural	Friable orange red sand moderate small stones	$\checkmark$	
502	Natural	Red orange sandy gravel		
510	Ditch	Linear NE-SW profile: stepped base: concave dimensions: min length 2.5m, n breadth 1.65m, min depth 0.6m	nin 🗸	
503	Upper fill	Dark orange brown sand moderate small stones	$\checkmark$	
504	Fill	Dark grey silty sand occasional small stones	$\checkmark$	$\checkmark$
505	Fill	Dark orange brown sand occasional small stones	$\checkmark$	
506	Fill	Grey green clay occasional small stones	$\checkmark$	
507	Fill	Red brown sand occasional small stones	$\checkmark$	
508	Secondary fill	Light orange brown sandy clay occasional small stones	$\checkmark$	
509	Primary fill	Light orange brown clay gravel	$\checkmark$	
511	Layer	Mid grey brown silty sand Possible mound material.	$\checkmark$	
512	Layer	Mid grey brown silty sand Possible mound material.	$\checkmark$	$\checkmark$
516	Ditch	Curving linear NE-SW profile: near vertical base: concave dimensions: min length 2.35m, min breadth 0.57m, min depth 0.4m	$\checkmark$	
513	Upper fill	Friable dark green sand	$\checkmark$	
514	Secondary fill	Friable light grey sand	$\checkmark$	
515	Primary fill	Mid grey brown sandy gravel	$\checkmark$	
521	Ditch	Curving linear NE-SW profile: stepped base: flat dimensions: min length 2.3r min breadth 3.2m, min depth 1.07m	n, 🔽	
517	Upper fill	Dark red brown sand frequent small-medium stones	$\checkmark$	
518	Secondary fill	Mid grey green clay sand moderate small-medium stones	$\checkmark$	$\checkmark$
519	Primary fill	Dark brown silty sand moderate small stones	$\checkmark$	
520	Primary fill	Dark brown silty sand moderate small stones	$\checkmark$	
523	Ditch	Linear NE-SW dimensions: min length 2.3m, max breadth 1.85m Not excavated - same as [301] + [601].		
522	Fill	Mid grey brown silty sand		



Trench:	6					
<b>Max Dimensions:</b>	Length:	30.00 m.	Width: 2	2.10 m.	Depth to Archaeology Min: 0.4 m.	Max: m.
<b>OS Co-ordinates:</b>	<b>Ref. 1:</b>	TL100435(	0028	<b>Ref. 2:</b>	TL1005050000	
Reason:	Investiga	te cropmark	k and ger	neral cove	rage.	

Context:	Туре:	Description:	Excavated:	Finds Present:
600	Topsoil	Dark brown clay loam moderate small-medium stones	$\checkmark$	
601	Subsoil	Mid brown clay silt moderate small-medium stones	$\checkmark$	
602	Natural	Red orange sandy gravel		
603	Ditch	Linear NE-SW dimensions: min length 2.3m, min breadth 0.5m Not excavate same as [510].	ed -	
604	Fill	Mid orange brown silty clay		
605	Furrow	Linear NW-SE dimensions: min length 3.7m, min breadth 1.6m Not excavate	d 🗌	
606	Fill	Mid brown orange silty clay occasional small stones		

Max: m.

# Trench:7Max Dimensions:Length:30.00 m.Width:2.10 m.Depth to Archaeology Min:0.35 m.OS Co-ordinates:Ref. 1:TL1006050031Ref. 2:TL1008550046Reason:Investigate cropmarks.

Context:	Туре:	Description:	Excavated:	Finds Present:
700	Topsoil	Dark brown clay loam moderate small-medium stones	$\checkmark$	
701	Subsoil	Mid grey brown clay silt	$\checkmark$	
702	Ditch	Linear NW-SE profile: irregular base: concave dimensions: min length 2.m, m breadth 1.5m, min depth 0.45m	nin 🗸	
703	Primary fill	Firm mid brown grey silty clay	$\checkmark$	$\checkmark$
704	Upper fill	Mid brown clay silt moderate small stones	$\checkmark$	
705	Secondary fill	Dark brown clay silt	$\checkmark$	
706	Furrow	Linear NW-SE dimensions: min length 2.m, min breadth 0.8m Unexcavated.		
707	Fill	Mid orange brown silty clay moderate small-medium stones		
708	Furrow	Linear NW-SE dimensions: min length 2.m, min breadth 0.7m Unexcavated.		
709	Fill	Mid orange brown silty clay moderate small-medium stones		
710	Furrow	Linear NW-SE dimensions: min length 2.m, min breadth 1.m Unexcavated.		
711	Fill	Mid orange brown sandy clay moderate small-medium stones		
712	Treethrow	Irregular dimensions: min length 1.8m, min breadth 1.15m Unexcavated.		
713	Fill	Orange red clay occasional small-medium stones Burnt / heated clay fill.		$\checkmark$
714	Treethrow	Irregular dimensions: min length 1.65m, min breadth 1.2m Unexcavated.		
715	Fill	Orange red clay moderate small stones		
716	Natural	Brown orange sandy gravel		

# Trench:8Max Dimensions:Length:30.00 m.Width:2.10 m.Depth to Archaeology Min:0.4 m.Max:m.OS Co-ordinates:Ref. 1:TL1007750061Ref. 2:TL1009750039Reason:Investigate cropmarks and general coverage.

Context:	Type: Description:		Excavated:	<b>Finds Present:</b>
800	Topsoil	Dark grey brown clay loam moderate small-medium stones	$\checkmark$	
801	Subsoil	Mid grey brown clay silt moderate small-medium stones	$\checkmark$	
802	Natural	Brown orange silty gravel		
803	Ditch	Linear NE-SW dimensions: min breadth 2.5m, min length 2.1m Not excavate	ed.	
804	Fill	Mid orange brown silty clay moderate small-medium stones		
805	Fill	Dark grey brown silty clay		
806	Modern Intrusion	Two distinct areas of probable modern disturbance partially visible in the ed of the trench and measuring up to 0.7m across. Both were unexcavated.	ges	
807	Fill	Loose yellow gravel		
808	Treethrow	Irregular profile: irregular base: uneven dimensions: min depth 0.21m, min length 3.3m, min breadth 2.1m	$\checkmark$	
809	Fill	Orange red clay moderate small-medium stones A burnt deposit.	$\checkmark$	
810	Treethrow	Irregular profile: irregular base: uneven dimensions: min length 2.8m, min breadth 2.m, min diameter 0.2m	$\checkmark$	
811	Fill	Mid brown clay silt moderate small-medium stones	$\checkmark$	
812	Treethrow	Irregular dimensions: min length 4.45m, min breadth 2.1m		
813	Fill	Grey red clay moderate small-medium stones		
814	Ditch	Linear NE-SW dimensions: min length 2.3m, min breadth 0.8m Not excavate	ed.	
815	Fill	Mid brown grey silty clay moderate small-medium stones		
816	Treethrow	Irregular dimensions: min length 0.7m, min breadth 0.7m		
817	Fill	Red clay moderate small-medium stones		
818	Treethrow	Irregular dimensions: min length 2.1m, max breadth 2.25m		
819	Fill	Red clay moderate small-medium stones A burnt deposit.		

Trench: Max Dimensions:	9 Length:	28.00 m. Width:	2.00 m.	Denth to Archaeology Min: m.	Max: m.		
OS Co-ordinates:	Ref. 1:	TL1008550073	<b>Ref. 2:</b>	TL1011150065			
Reason:	Investiga	Investigate cropmarks.					

Context:	Туре:	Description:	<b>Excavated:</b> Find	s Present:
900	Topsoil	Mid brown clay loam moderate small-medium stones	$\checkmark$	
901	Alluvium	Firm brown grey silty clay		
902	Natural	Orange brown silty gravel		
903	Subsoil	Mid brown clay silt moderate small-medium stones Present at NW end of trench.	$\checkmark$	

 $\square$ 

Trench:10Max Dimensions:Length:30.00 m.Width:2.00 m.Depth to Archaeology Min:0.36 m.Max:m.OS Co-ordinates:Ref. 1:TL1011850050Ref. 2:TL1012850077Reason:Investigate cropmarks and general coverage.

Context:	Type:	Description:	Excavated:	: Finds Present:
1000	Topsoil	Firm dark brown grey clay loam frequent small-medium stones	$\checkmark$	
1001	Natural	Mid yellow brown silty gravel		
1002	Treethrow	Irregular profile: near vertical base: flat dimensions: min length 3.25m, min breadth 0.85m, min depth 0.19m	✓	
1003	Fill	Red brown clay silt frequent small-medium stones, occasional large stones	$\checkmark$	
1004	Ditch	Linear N-S profile: concave base: concave dimensions: min length 4.75m, min breadth 1.25m, min depth 0.25m	$\checkmark$	
1005	Fill	Light grey brown clay silt occasional small stones	$\checkmark$	
1006	Fill	Friable dark grey sandy silt frequent small-medium stones	$\checkmark$	
1007	Ditch	Linear E-W dimensions: min depth 0.24m	$\checkmark$	
1008	Fill	Light grey brown clay silt occasional small stones	$\checkmark$	
1009	Fill	Light grey brown silty gravel	$\checkmark$	
1010	Ditch	Linear NW-SE dimensions: min length 2.5m, min breadth 1.5m Not excavate	d. 🗌	
1011	Fill	Mid orange brown clay silt moderate small stones		
1012	Fill	Dark grey brown clay silt frequent small stones		
1013	Furrow	Linear NW-SE dimensions: min length 2.2m, min breadth 2.05m Not excavat	ed.	
1014		Firm mid brown orange clay silt occasional small-medium stones		
1015	Furrow	Linear NW-SE dimensions: min length 2.3m, min breadth 1.3m Unexcavated	. [	
1016	Fill	Mid orange brown clay silt moderate small stones		
1017	Alluvium	Firm brown grey silty clay		

Trencl	h: 11							
<b>Max Dimension</b>	s: Length:	30.00 m.	Width:	2.20 m.	Depth to Archaeology Min:	m.	Max: m.	
OS Co-ordinate	s: Ref. 1:	TL098924	49987	<b>Ref. 2:</b>	TL0990250015			
Reason	n: General	coverage.						
Context: Type:	Ι	Description				Excavate	d: Finds Pres	ent:

	- J P			
1100	Topsoil	Friable dark grey brown clay loam occasional small-medium stones	$\checkmark$	
1101	Alluvium	Firm brown grey silty clay		

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Max Dimensions	Length: 31.00 1	n Width•	2.10 m	Denth to Archaeology N	Min·	m	Max	m
OS Co-ordinates:	Ref. 1: TL099	5050016	Ref. 2:	TL0992950039	v1111.		1 <b>114A.</b>	
Reason:								
Context: Type:	Descripti	0 <b>n:</b>				Excavated	: Finds	Present:

	- 5 15 - 5			
1200	Topsoil	Friable dark grey brown clay loam occasional small-medium stones	✓	
1201	Alluvium	Firm brown grey silty clay		

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Trench: Max Dimensions: OS Co-ordinates: Reason:	13 Length: 30.00 m. Width: 2.10 Ref. 1: TL0995950035 Ref General coverage.	m. Depth to Archaeology Min: m. M f. 2: TL0996050065	lax: m.
Context: Type:	Description:	Excavated:	Finds Present:

1300	Topsoil	Friable dark grey brown clay loam moderate small-medium stones	$\checkmark$	
1301	Alluvium	Firm brown grey clay	$\checkmark$	
1302	Natural	Friable red sand frequent small-medium stones	$\checkmark$	
1303	Natural	Firm blue grey clay		



Trench: Max Dimensions: OS Co-ordinates:	14 Length: Ref. 1:	30.00 m. TL098895	Width: 50027	2.10 m. Ref. 2:	Depth to Archaeology Min: 0.3 m. TL0990350054	Max: m.
Reason:	General	coverage.				

Context:	Type:	Description:	Excavated:	Finds Present:
1400	Topsoil	Friable dark grey brown clay loam moderate small-medium stones	$\checkmark$	
1401	Natural	Red brown silty gravel		
1402	Alluvium	Grey brown clay		$\checkmark$
1403	Ditch	Linear NE-SW dimensions: max breadth 1.m, min length 3.6m Unexcavated	I. 🗌	
1404	Fill	Mid brown grey clay silt		

Trench: Max Dimensions: OS Co-ordinates: Reason:	15 Length: 30.00 m. Width: 2.20 m. Ref. 1: TL1003950041 Ref. 2 General coverage.	Depth to Archaeology Min: m. TL1006450057	Max: m.
Context: Type:	Description:	Excav	vated: Finds Present:

Contexti	- , p	Description	Excuvateur i mus i resente		
1500	Topsoil	Friable dark grey brown clay loam moderate small-medium stones	$\checkmark$		
1501	Subsoil	Mid grey brown clay silt moderate small-medium stones	$\checkmark$		
1502	Alluvium	Brown grey clay			
1503	Natural	Mid red brown gravel			







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Figure 2: Area available for trenching Base map reproduced from the Ordnance Survey Land-line Map (2004 PAI), with the permission of the Controller of Her Majesty's Stationery Office, by Bedfordshire County Council, County Hall, Bedford. OS Licence No. 076465(LA). © Crown Copyright.





Figure 3: Archaeological evaluation trenches and cropmarks Base map reproduced from the Ordnance Survey Land-line Map (2004 PAI), with the permission of the Controller of Her Majesty's Stationery Office, by Bedfordshire County Council, County Hall, Bedford. OS Licence No. 076465(LA). © Crown Copyright.



Figure 4: Trenches 1 to 5; all features

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Ring ditches [516] and [521], and post-medieval ditch [510], looking south. Scale 1m

Figure 5: Trench 5; ring ditches [516] and [521] either side of post-medieval ditch [510]

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Figure 7: Trench 8 extension, showing ditch [814] and burnt areas [808] and [816]

