#### **A507 RIDGMONT BYPASS:**

#### MILL FARM

#### EARTHWORK SURVEY

# Project: RGT1024

Document: 2007/141 Version: 1.0

#### 15th July 2007

Compiled by	Checked by	Approved by	
Gary Edmondson	Gary Edmondson	Drew Shotliff	

#### Produced for: Scott Wilson on behalf of Bedfordshire Highways

© Copyright Albion Archaeology 2007, all rights reserved



# **Contents**

reface					
ructure of this Document					
Key Terms					
Non-Technical Summary4					
1. INTRODUCTION					
1.1 Planning Background5					
1.2 Site Location and Description					
1.3 Archaeological Background					
1.4 Historical Documents					
2. RESULTS					
2.1 Introduction10					
2.2 Earthwork Survey10					
3. SUMMARY 13					
4. BIBLIOGRAPHY14					

# List of Figures

Figure 1:	Mill	Farm	location	map
-----------	------	------	----------	-----

- Figure 2: Historical maps
- Figure 3: Hachure plan of earthworks
- Figure 4: Contour plan of earthworks
- Figure 5: Digital terrain map
- Figure 6: Selected images 1 and 2
- Figure 7: Selected images 3 and 4
- Figure 8: Selected images 5 and 6

The figures are bound at the back of the report



# Preface

Every effort has been made in the preparation of this document and all statements 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 document has been produced by Gary Edmondson (Project Manager). All Albion projects are under the overall management of Drew Shotliff (Operations Manager). The earthwork survey was undertaken by Mercedes Planas and Gary Edmondson. The figures were produced by Mercedes Planas and Joan Lightning. Albion would like to acknowledge the assistance of the staff of Mill Farm (Woburn Experimental Farm) during the survey.

Albion Archaeology St Mary's Church St Mary's Street Bedford, MK42 0AS  $\widehat{\phantom{a}}$ : 01234 294004 Fax: 01234 294008 e-mail: g.edmondson@albion-arch.com Website: www.albion-arch.com

#### Structure of this Document

After the introductory Section 1, the results of the survey are outlined in Section 2. Section 3 provides a summary of the results of the work. Section 4 is a bibliography.

# Key Terms

Throughout this report the following terms or abbreviations are used:

Albion	Albion Archaeology (formerly Bedfordshire County Archaeology Service (BCAS))
Client's Consultant	Scott Wilson
CAO	County Archaeological Officer
Client	Bedfordshire Highways / Amey
GPS	Global Positioning System
IFA	Institute of Field Archaeologists
Procedures Manual	<i>Procedures Manual Volume 1 Fieldwork</i> , 2 <sup>nd</sup> Edition 2001. Bedfordshire County Council



This document has been prepared by Albion Archaeology for Scott Wilson on behalf of Bedfordshire Highways. It represents a summary of the results of an earthwork survey undertaken in the land parcel to the south of Mill Farm, situated to the west of Ridgmont, Bedfordshire. The work is part of the archaeological mitigation strategy associated with the construction of the A507 Ridgmont Bypass and Mill Road improvement scheme.

The route of the bypass road corridor is parallel to the M1 motorway, north of Ridgmont village, extending from TL (4)9666 (2)2372 in the north-west to TL (4)9828 (2)2366 in the south-east. Associated road improvements will also be undertaken along Mill Road, south of the M1 motorway. This will involve the carriageway encroaching on the land parcel south of Mill Farm, resulting in the earthworks in the eastern part of the land parcel being obscured. Following consultation with the Bedfordshire County Archaeological Officer, it was determined that earthwork survey of the whole land parcel should be undertaken in advance of the construction programme.

In 2001, geophysical survey (BCAS 2001) identified a series of possible features in the land parcel immediately south of Mill Farm, centred at grid reference TL (4)9645 (2)3604. The subsequent programme of evaluation (Albion Archaeology 2006) identified earthworks in this area. The site was formerly known as Crawley Mill and the earthworks were believed to represent the site of the mill pond.

No archaeological features corresponding to the geophysical anomalies were identified in the evaluation. However, this investigation did indicate that the earthworks were formed through the reduction of the ground surface in the centre of the land parcel, rather than embankment of the margins of the area. The geology comprises a relatively thin band of sand of the Woburn Sand Formation overlying an impervious layer. This depression was not associated with extraction of clay for the brickworks, situated on the opposite side of Mill Road. However, it would appear that the excavated sand was removed from the site, suggesting the pond also acted as a quarry. Sand would have been useful for tempering the clay for brick-making.

The earthwork survey was undertaken in early November 2006 and recorded features which correspond to the mill pond depicted on a 1799 Estate Map. However, later modifications, relating to the subsequent use of the area for pasture have affected the form of the surviving earthworks. Historic maps and illustrations indicate that the mill pond was situated in the area south of the watermill. The latter is still standing, although it is now used for housing livestock and for general storage.

The site archive, which contains all records of the project (Project number RGT 1024), is currently held at St Mary's Church, Bedford. It will eventually be transferred to Bedford Museum, under Accession Number BEDFM 2003/331, which also incorporates all aspects of the mitigation work.

It is essential that the above summary is read in conjunction with the main body of the report.



#### 1.1 Planning Background

Bedfordshire County Council has granted permission for the construction of the A507 Ridgmont Bypass. The scheme involves the construction of a bypass aligned parallel with the M1 motorway, together with road improvements on Mill Road.

In order to determine the archaeological potential of the area of the road scheme, archaeological evaluation works were undertaken. These comprised geophysical survey (BCAS 2001, Pre-Construct Geophysics 2003), desk-based assessment (Jacobs Babtie 2002), systematic surface artefact collection (Albion Archaeology 2003) and trial excavation (Albion Archaeology 2006).

The evaluation defined four Archaeological Zones containing significant archaeological remains which would require mitigation in advance of construction. The Mill Road Archaeological Zone consists of a series of earthworks within a small land parcel, located immediately to the south of Mill Farm (Woburn Experimental Farm). This area would be adversely affected by the road improvements, as the road embankment would be widened, masking part of the earthworks.

#### 1.2 Site Location and Description

Ridgmont is situated towards Bedfordshire's western border (Figure 1). The land parcel containing the earthworks is located immediately south of Mill Farm centred at grid reference TL (4)9645 (2)3604, *c*. 1km west of Ridgmont. The limits of this land parcel defined the Study Area, which is roughly rectangular, 115m long by up to 70m wide, and aligned NE-SW. Within this area there is a small rectangular enclosure for a weather station. The Study Area is bounded by the curving line of Mill Road and associated hedge to the east, the former mill building to the north, a track and farm buildings to the north-west, and arable land to the south-west and south.

The topography in the vicinity of Mill Farm is relatively flat at c. 84m OD, although the Study Area covers a slight north-south aligned ridge c. 1m above the adjacent land — the ground falling to the east and west within this area. This land parcel is a paddock for the experimental farm, whilst the adjacent land is under arable cultivation. The central part of the land parcel consists of a well-defined, roughly triangular depression, comprising a wider east-west element in the south, with a narrower arm to the north.

The geology in the vicinity of Mill Farm is predominantly Oxford Clay to the north and Woburn Sands Formation to the south (British Geological Survey 1992). In the area of the paddock superficial deposits comprise a NE-SW aligned band of alluvium and 1st terrace deposits, with an extensive area of head deposit to the south.

# 1.3 Archaeological Background

Previously recorded archaeological evidence is present in the areas adjacent to the road scheme, with several sites identified within the road corridor. These date from the Mesolithic to the modern period. Medieval dispersed settlement is known in this area, with settlements existing at Husbourne Crawley, Segenhoe, Brogborough and the possible site of a castle at Ridgmont. Much of the land around Ridgmont is thought to have been open fields in the medieval period.

A small cluster of sites is recorded in this area by the Bedfordshire Historic Environment Record (HER) (see Figure 1). The Study Area is adjacent to Crawley Mill (HER 2626), which is now known as Mill Farm. On the eastern side of the road is the site of a post-medieval brickworks (HER 7113), which included a brick oven and distinctive horizontal windmill-powered pug mill for mixing the clay. However, only the clay pits, now filled with water, survive to the present day (Figure 1).

Geophysical survey of the paddock adjacent to Mill Farm (BCAS 2001) identified several linear and rectilinear anomalies, which were interpreted as the remains of pre-enclosure field boundaries. Trench 25 on the eastern margin of the depression targeted these features and the earthwork itself. The trench was excavated to a depth of 1.11–1.39m below ground level to reveal undisturbed geological strata comprising loose mid orange yellow sand. This would indicate that the depression was not associated with clay extraction for the brickworks on the opposite side of the road. No archaeological features correlating to the geophysical anomalies were found during trial excavation, although several areas of root and tree disturbance may account for them.

The earthworks formed a coherent pattern comprising a large, roughly triangular depression, which local residents know as Crawley Mill pond. The trial excavation indicated that the earthworks were formed through the reduction of the ground surface in the centre of the field, rather than embankment of the margins of the area.

#### 1.4 Historical Documents

Several historical maps are available for the Study Area, the most useful of which is the 1799 Estate Map. There are, however, discrepancies between several maps, making it difficult to present a seamless chronological narrative. A drawing of the mill c.1820 also survives.

#### 1.4.1 1760 Enclosure Map

This is the only mill shown on the map, although no detail is discernable.

#### 1.4.2 1799 Estate Map

The mill pond is clearly defined in an elongated, crescentic form, with its long axis aligned roughly east-west (Figure 2a). The western arm tapers to a point in the north, whilst the stubbier eastern arm is parallel to Mill Lane, splitting into two elements just south of a building of roughly 'H'-shaped form in plan. The building, which is orientated roughly east-west, is probably the mill. It is likely that the western element of this arm, which intersected the western end of the mill

building, supplied water to the mill wheel, whilst the less clearly defined eastern arm would appear to be on an alignment to pass to the east of the building, possibly defining the bypass leat. The lack of a continuation of this channel suggests the leat may have been covered. Two tapering irregularities extend from the south-eastern part of the pond towards Mill Road, creating a very distinctive shape. The Estate Map suggests that the pond was approximately 110m long and up to 14m wide.

The stream feeding the mill pond from the south-west has a very angular form, indicating that it is within a man-made channel. The stream feeds into the south-western corner of the pond. The continuation of the stream appears a short distance north of the mill building, although it is not clear if the gap is artistic licence or if this section was within a covered leat. The stream continues northwards in a short section of linear channel, indicating that it was within a leat. Beyond that, further to the north, it follows its natural, sinuous course.

Two irregular land parcels 133 and 134 are depicted to the north and south of the pond.

The building has a roughly 'H'-shaped form in plan, aligned roughly east-west, perpendicular to the pond. A short north-south section links this to the shorter northern east-west range. This would appear to be the mill.

### 1.4.3 Draft Ordnance Survey Map 1815

This preliminary survey for Ordnance Survey clearly shows a pond parallel with and adjacent to the road. The pond is much smaller than that on the 1799 map, corresponding to the eastern part of the earlier pond. Although the map is not clear, there is a suggestion that the feeder channel had been revised, with the pond now being fed from a leat which entered the pond near the road in the south-east. This may correspond to the bulge at the southern margin of the depression. The area to the north of the pond is occupied by a series of buildings forming a rectangle. The land divisions in the area have been rearranged, forming a rectilinear pattern. It is not clear why the capacity of the pond was reduced, although there is documentary evidence to indicate ongoing modifications to the water supply.

This map also defined a dog-leg in the course of the road, which appears to be associated with the development of buildings immediately north of the mill. Beyond these buildings, the road returns to its original course.

#### 1.4.4 Drawing c.1820

Drawn by T. Fisher in about 1820, and identified as Crawley Mill, this drawing appears to depict the northern side of the watermill, as the horizontal pug mill and oven chimney of the brickworks can be seen at the edge of the image. This drawing shows a main building perpendicular to the leat with a smaller range of buildings, comprising several components, coming towards the viewer, with a chimney stack at the gable end. This may confirm the presence of the perpendicular building depicted on the 1815 map, although detail of the buildings cannot be discerned. The drawing indicates that the roof of the main building was

hipped. A significant timber extension can be seen to the right, whilst a small, single-storey lean-to can be seen to the left — possibly associated with the weighing machine. Partly obscured by hayricks is another single-storey building, although it is not clear which side of the road the building is on. The watercourse is aligned on the right hand side of the building and appears to be well maintained. This would appear to be an active mill leat.

The drawing appears to show evidence for several of the modifications which are typical of a water-powered mill. These buildings often underwent a series of characteristic modifications to adapt to changing circumstances. The timber structure would appear to be a wheelhouse, constructed to enclose the waterwheel.

No timber extension now survives, although a brick extension on the western side has a stone date tablet of 1873. This has a single chimney stack located in the north-west corner of the extension. The form and size indicate that it is not a chimney for a steam engine. This structure may have replaced the timber wheelhouse shown on the drawing. The brick extension bay with date tablet is another characteristic development, as is the standardisation of iron window frames seen on the north-facing façade.

Often the next stage would be to enlarge the mill by raising the roof space. The drawing shows a relatively low roof with hips. The current roof is of uniform construction along the extended length of the building. It lacks the hips shown on the drawing and would appear to be proportionally deeper.

The perpendicular buildings shown in the drawing would appear to be separate from the mill building, rather than defining an attached wing for a steam engine. The form of the nearest building together with surrounding fencing suggests a domestic function, as does the form of the gable end chimney stack. There is no evidence to suggest that, at this date, steam was being utilised to power the mill. These buildings are not shown on the 1799 map, whilst detail on the 1815 draft map is unclear.

#### 1.4.5 1830s Documents

Correspondence dating to 1830 refers to recommendations for alterations to the water supply, suggesting that it was still water-powered at this date. It probably remained water-powered until at least the 1870s, when the Woburn Experimental Farm took it over, subsequently draining the pond in 1884.

#### 1.4.6 1873 Stone Date Tablet

The tablet is part of a brick extension on the western side of the mill building, in the wheelhouse area. This possibly replaces a wooden structure shown on the c.1820 drawing (see 1.4.4 above).

This may define a more extensive programme of modification to the building as a slate roof is uniform along the whole length of the extended building, whilst lacking the hips depicted on the drawing. All the windows on the northern façade, of both the older building and western extension have similar frames. However,



these modifications could have been a later phase of works, after the extension was added.

#### 1.4.7 1884 Documents

Documentary evidence indicates that the mill pond was drained in 1884 (BCC 1983, 4).

#### 1.4.8 1891 Ordnance Survey Map

There is some sub-division of the rectangular land parcels to the west of the mill compared to the draft map of 1815. The area of the pond is blank, although significantly, two watercourses are shown to stop abruptly at the margins of this blank area (Figure 2b). The angled watercourse in the south-west corresponds to the leat feeding the pond on the 1799 map, although lacking the final connecting element. To the north of the location of the former pond, a stream appears, following the approximate course of the northern edge of land parcel 133 depicted on the 1799 map. There is no evidence for a stream here on the 1799 map. The map does not show any link between these two watercourses.

The southernmost building, adjacent to the W.M. label (Figure 2b) corresponds to the location of the present mill building. Significantly, this is shown to have a weighing machine (W.M.) situated at the eastern end, where there is access from the road. This would suggest that it is the mill building, although it is not clear whether the absence of a pond indicates a change in the power source or a change in the function of the building. A steam engine would still need a significant supply of water for the boiler when operating. However, as the milling equipment is still present in the mill building, this could indicate a change in the power source.

The buildings to the north of the mill are clearly defined. It is, however, difficult to compare the number and location with those shown on the 1815 map, due to the lack of detail on the earlier map. There is no evidence for the dog-leg in the course of the road shown on the 1815 map.



# 2. RESULTS

#### 2.1 Introduction

The earthwork survey was undertaken in early November 2006. At the time, this area was being used as a paddock for cows, which had been relocated for the duration of the survey. There was evidence of erosion and churning of the base and sides of the pond depression by livestock, particularly in the wetter areas.

The initial stage of the survey utilised dGPS, to capture the main detail with a total station survey used to fill in additional detail. These were combined to produce the final survey drawing. A photographic survey was made of the earthworks. In order to put these feature in context, a rapid examination of the exterior of the mill building was made. Although it was not possible to examine the interior of the building, the farm manager indicated that milling machinery was still present.

### 2.2 Earthwork Survey

The whole land parcel was surveyed, with a focus on the roughly triangular depression which occupied the bulk of the area. The results of the survey are shown as a hachure plan (Figure 3), contour plan (Figure 4), and as a digital rendition of the terrain (Figure 5). The main components of the mill pond will be discussed (A-C) followed by later features which affected these earthworks (**D** and **E**); (**F**) is considered to be the natural slope of the slight ridge, rather than a leat from the mill pond.

The Study Area corresponds to the majority of the pond as shown on the 1799 Estate Map (Figure 2a). Only the western extent of the pond, comprising the junction with the feeder channel and the western arm were beyond the survey area. However, these features are still visible in the ploughed field immediately to the west as a combination of a depression and soil marks (Figure 6: image 1).

#### 2.2.1 Leat (A)

Situated towards the northern margin of the Study Area, a linear depression (A) extends from the junction with the pond (B) for c.35m to the north, tapering towards the former mill due to masking by later activity (D). The depression was 19m wide with convex upper edges merging to a concave base at a maximum depth of 0.6m (Figure 3: profiles P1 and P2 and Figure 6: image 2).

# 2.2.2 Pond (B)

This has a roughly rectangular form in plan and extends roughly east-west for at least 65m. At *c*.45m, it is widest in the west, which is considerably wider than the pond as depicted on the 1799 Estate Map (Figure 3, Figure 6: image 2). The maximum depth of 0.8m is close to the northern edge of the pond, although generally the depth is 0.6m, a similar level to the base of the leat (Figure 3: profile P3). Generally the edges of the pond are well-defined, with a convex upper edge merging into a  $c.30^{\circ}$  slope which itself merges into an undulating base (Figure 7: images 3 and 4). It is not clear to what extent animal erosion has affected the base of the pond in particular. Although the evaluation indicated that the upper

geological strata comprise clean, loose sand, standing water in the base of the depression indicates the presence of an impervious layer near the surface, confirming that the depression can hold water. There was no evidence from the evaluation to indicate that material excavated from the pond was dumped in the surrounding area to raise the ground level.

The pond depression merges into a later ramp to the road in the east (E) and continues to the west beyond the Study Area (Figure 3). To the north it merges into leat (A) and to the south depression (C), which are probably contemporary.

# 2.2.3 South Depression (C)

Situated at the south-eastern extent of pond (**B**), the depression is 35m wide at the intersection, tapering to 19m at the southern limit of the Study Area (Figure 3). The depression has a concave profile up to 0.6m deep in the north, with a defined, deeper, linear element, with the base rising to the south (Figure 4, Figure 6: image 2 and Figure 7: image 4). This is above the basal level of the pond. The continuation was present, although less clearly defined in the ploughed land to the south, due to the noticeable drop in ground level of this area due to cultivation.

This southwards extension from the pond is similar to a feature seen on the 1799 Estate Map, although that pond, if accurately surveyed, was a considerably narrower feature. This may represent the later alterations to the pond, as depicted on the 1815 draft map, showing a possible feeder ditch entering from the south in approximately this area.

# 2.2.4 Ramp to building (D)

To provide access for livestock to the upper floor of the former mill, a ramp was constructed. This extends c.16m, almost the length of the building, by up to 12m to the south, obscuring the continuation of leat (A) (Figure 3: profile P2, Figure 8: images 5 and 6). The ramp rises approximately 0.5m above the surrounding ground surface to a door inserted into the upper floor of the mill. The top of the ramp around the door is capped with a concrete slab.

There is no contrast in the vegetation growing on the ramp and in the surrounding area, suggesting that it is derived from similar material. A considerable quantity of material would have been required, with a maximum thickness of material approaching 1.2m in the leat area. The source of this material is not apparent, although it may have been associated with terracing of the area to the west to create the track and area for buildings.

# 2.2.5 Ramp down from Road (E)

Extending from the roadside hedge line, the depression is 20m wide, with a concave profile, the base sloping down to the north-west into the pond (**B**) (Figure 4 and Figure 7: image 4). A slight ridge marks the maximum extent of c.35m from the hedge line (Figure 4). This appear to be similar to the eastern extension of the pond shown on the 1799 Estate Map (Figure 2a), although larger and extending further towards the road. This would suggest that it was an original feature which underwent modification.



#### 2.2.6 Slope parallel to Mill Road (F)

Situated to the east of and parallel with leat ( $\mathbf{A}$ ), this well-defined linear slope extends from the vicinity of the mill building southwards for at least 50m. It is obscured by the hedge line bounding Mill Road (Figures 3 and 4). This slope stops immediately north of ramp ( $\mathbf{E}$ ). The slope is steep, dropping at least 1.1m towards the road. This is considered to be the natural slope of the ground, with a less steep slope seen on the opposite side of leat ( $\mathbf{A}$ ), sloping down to the trackway in the west. There is no indication that this slope had been accentuated by the deposition of material derived from the digging or maintenance of the leat, which may have been detectable as a vegetation change.

# 3. SUMMARY

The earthwork survey has identified a variety of features which, when examined in relation to historical documents, define a sequence of changes to this land parcel. The evidence in the form of earthworks in this area has been preserved due to historic land division associated with land parcel 134 as shown on the 1799 Estate Map. This appears to have been associated with the creation of the pond, separating this small area from the larger area to the south and west, which has been ploughed, obscuring the continuation of the earthworks.

The main features of the original mill pond comprise the leat to the mill (**A**) and part of the pond itself (**B**), which occupy the majority of the Study Area. Perhaps significantly, the pond was perpendicular to the associated feeder channel and leat. The pond underwent significant changes over time, possibly suggesting problems with maintaining the water supply — possible due to the off-set alignment of the pond. Creating the large, crescent-shaped mill pond must have involved a significant investment of labour — as must the considerable alteration to the local drainage pattern through the cutting of a series of channels. The pond as shown in 1799 was of considerable size, although the current depression is even larger. The pond was created by the excavation of sand, which appears to have been taken way from the site, possibly to the adjacent brickworks. It is possible that ramp (**E**) at the eastern end of the pond was used to get this material to the road. The exposed upper edges of the pond, composed of sand, would have been vulnerable to erosion, which may have required additional work to maintain the water supply.

The pond was supplied with water from the south-west and from this point curved into the higher ground to the north. A cursory examination of the local topography beyond the Study Area suggest this extra capacity would have required considerable work to ensure the water flowed eastwards. The western part of the pond had been abandoned within 20 years, with a change to a feeder ditch, pond and leat which were on the same alignment. It is not clear how the reduction in the capacity of the pond was achieved as there was no evidence for any blocking in the western part of the pond depression.

From the latter half of the 19th century the history of the mill is unclear. There is documentary evidence to indicate that the pond was drained in 1884, with no evidence for this feature on the 1891 map. In this period the mill building underwent significant modification, although it is not clear if this was related to a change in function.

The creation of ramp (**D**) and conversion of the upper storey of the mill building for housing livestock marks the end of milling at the site. The upper storey of the building is still used for this purpose. The expansion of ramp (**E**) onto Mill Road may also relate to this change in function. However this original feature may have been utilised for modifications to the pond over time. The pond is significantly larger that that indicated on the 1799 map, possibly indicating expansion of the pond, with the sand being removed from the site.

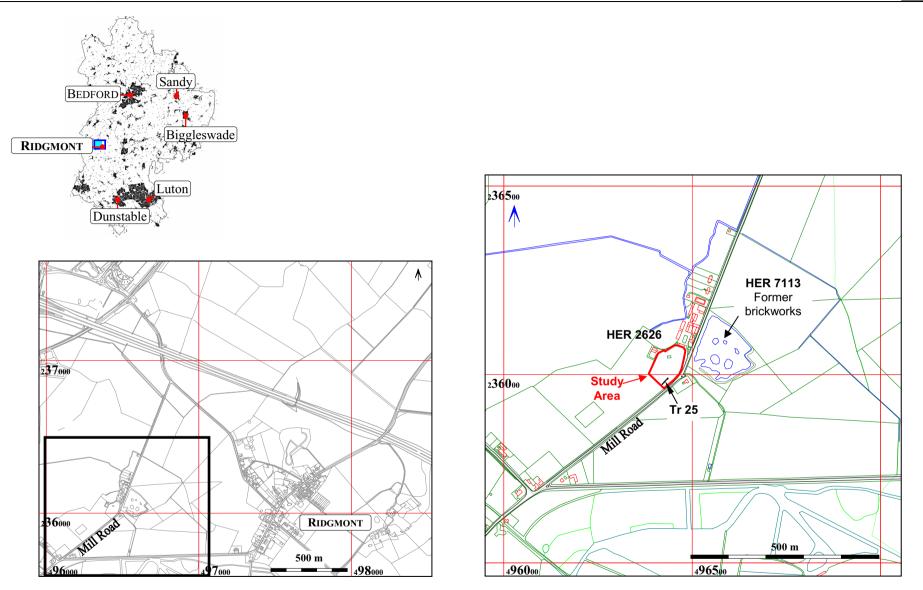


- Albion Archaeology, 2001, Procedures Manual Vol. 1: Fieldworklbion Archaeology, 2003, Ridgmont Bypass Bedfordshire: Surface Collection Survey. 2003/62
- Albion Archaeology, 2006, A507 Ridgmont Bypass Archaeological Field Evaluation 2006/45
- BCAS, 2001, Report on Geophysical Survey: Husbourne Crawley, Bedfordshire, A507 Ridgmont Bypass
- Bedfordshire County Council, 1983, Husbourne Crawley Town Survey
- British Geological Survey, 1992, 1:50 000 Series Solid and Drift Geology Sheet 220 Leighton Buzzard
- IFA, 1999a, Institute of Field Archaeologists' Code of Conduct
- Pre Construct Geophysics, 2003, *Fluxgate Gradiometer, Scan and Topsoil* Magnetic Susceptibility Surveys: Ridgmont Bypass, Bedfordshire
- Jacobs Babtie, 2002, A507 Ridgmont Bypass: Environmental Statement
- Jacobs Babtie, 2005, A507 Ridgmont Bypass: Archaeological Investigation and Associated Works



FIGURES

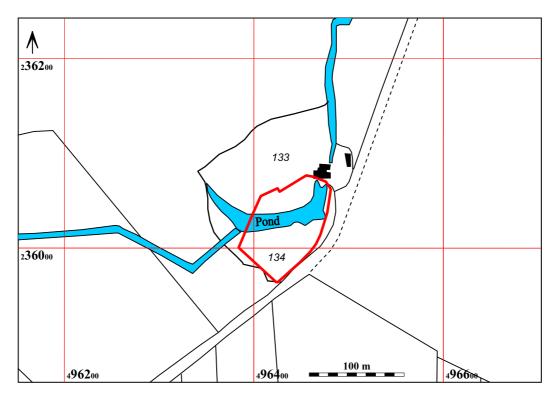




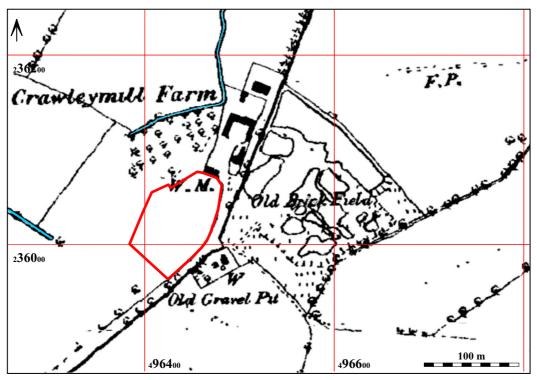
#### Figure 1: Mill Farm location map

Base map reproduced from the Ordnance Survey Land-line Map (2004), with the permission of the Controller of Her Majesty's Stationery Office, by Bedfordshire County Council, County Hall, Bedford. OS Licence No. 100017358. (LA). © Crown Copyright.

A507 Ridgmont Bypass: Mill Farm Earthwork Survey

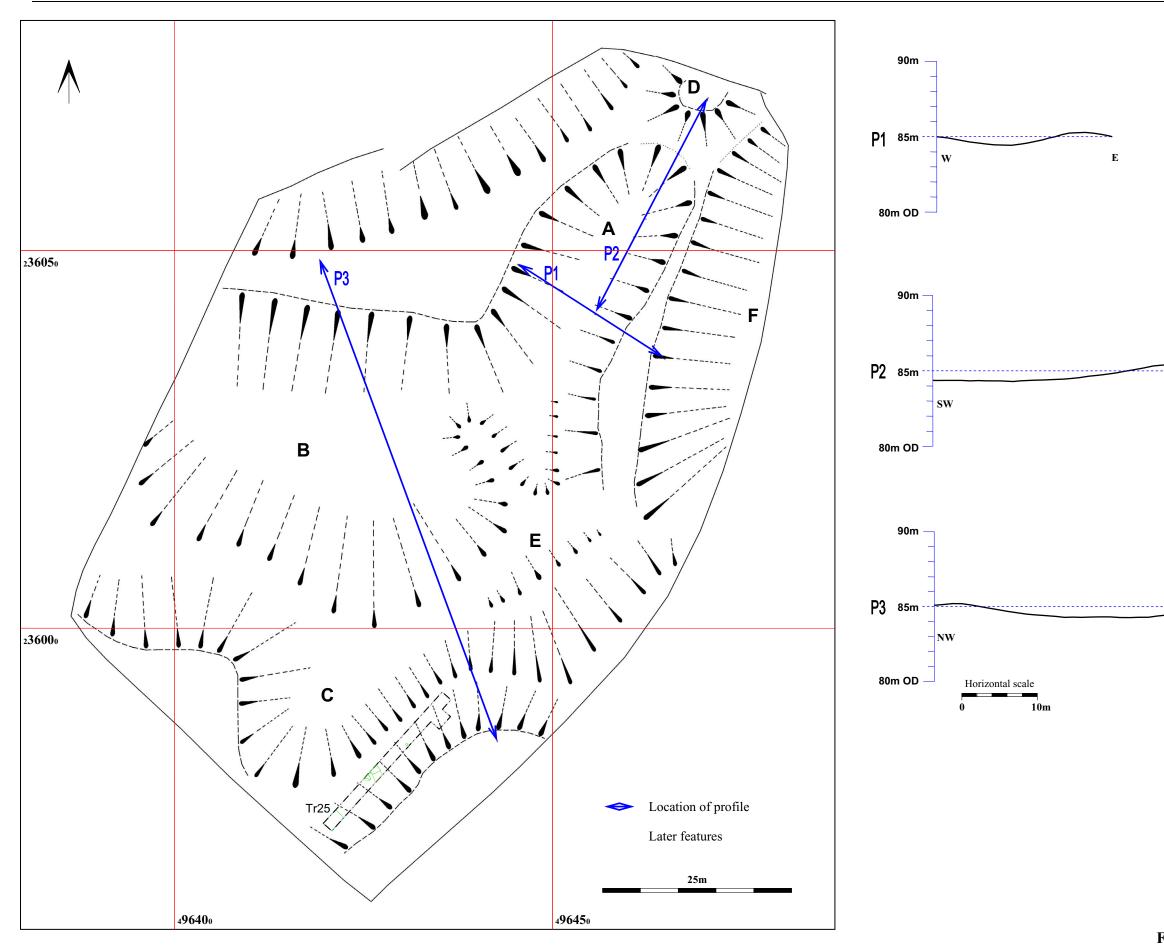


a) 1799 Estate Map; detail of pond in relation to modern Ordnance Survey grid, mill building, and Study Area (scale and grid approximate)



b) 1891 1st edition Ordnance Survey map (scale and grid approximate)

Figure 2: Historical maps



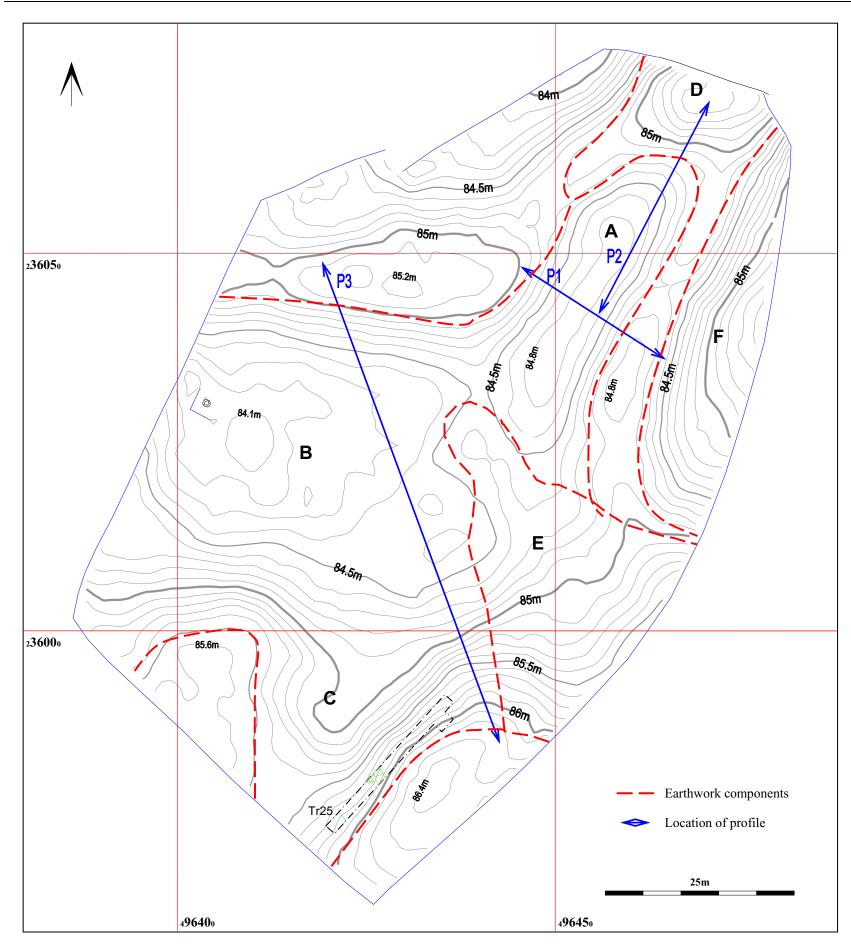
A507 Ridgmont Bypass: Mill Farm Earthwork Survey

# $\bigcirc$

NE

SE

Figure 3: Hachure plan of earthworks



A507 Ridgmont Bypass: Mill Farm Earthwork Survey

# $\bigcap$

Figure 4: Contour plan of earthworks

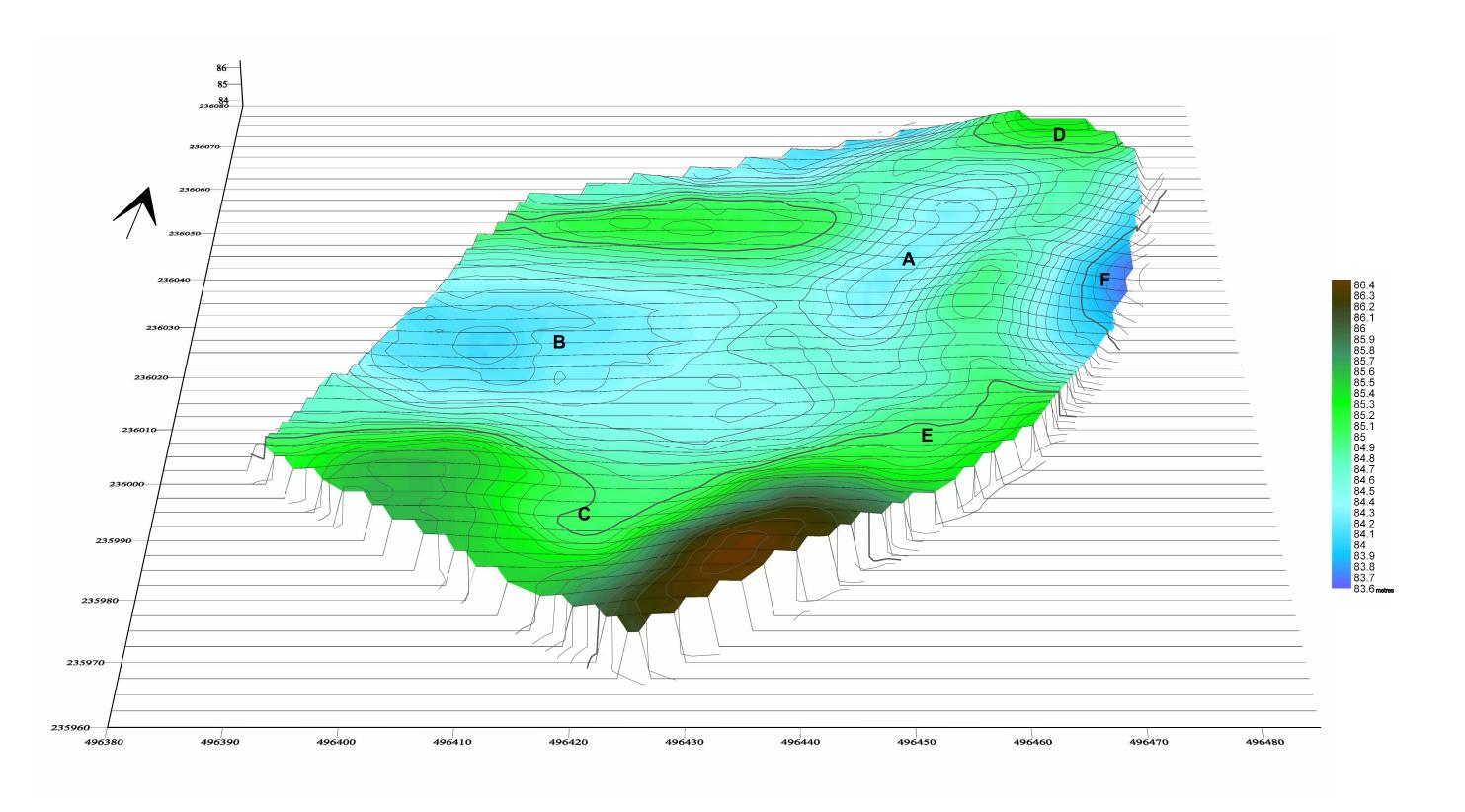


Figure 5: Digital terrain map



**Image 1:** View from edge of Study Area of continuation of pond, comprising depression defining western arm of pond (to right) and feeder channel to left (visible as dark soil mark).



Image 2: General view looking south-west from ramp (D) along leat (A) to pond (B). Dip at top left, visible against ploughed field is depression (C).

Figure 6: Selected images 1 and 2



**Image 3:** View of Study Area, looking to north-west across widest part of former mill pond (**B**), with ramp (**D**) to mill in distance.



**Image 4:** View from northern edge of former pond (**B**), looking to south-eastern corner. The southern depression (**C**) is visible to the right of the tree, with ramp (**E**) to road is to the left.

Figure 7: Selected images 3 and 4



Image 5: Mill building, which was extended in the 1873 according to stone date tablet, with later ramp (D) to first floor associated with change in use.



**Image 6:** View of southern façade of mill building from bottom of ramp (**D**). The white door is a later insertion; one of several visible alterations to the building.

Figure 8: Selected images 5 and 6