





Archaeological Field Unit

Land at Woburn Road, Marston Moretaine, Bedfordshire: An Archaeological Desk-based Assessment

P Bright and N Shepherd 1998

Cambridgeshire County Council

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Land at Woburn Road, Marston Moretaine, Bedfordshire: An Archaeological Desk-based Assessment

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Summary

This desk-based assessment examined an area of agricultural land to the west of Marston Moretaine, Bedfordshire, close to Moat Farm. It was carried out in order to identify and map archaeological information derived from documentary sources as part of a broader archaeological evaluation prior to development.

The land around Moat Farm has long been considered archaeologically sensitive. It contains a range of medieval features including Moat Farm itself, a series of settlement earthworks to the north-west of Woburn Road as well as ridge and furrow, part of the medieval field system of Marston Moretaine. Moat Farm and some of the earthworks are a Scheduled Ancient Monument.

The actual study area is located in an area of ridge and furrow to the north-west of the moat and settlement earthworks. Recent archaeological investigations immediately to the north suggest these obscure earlier archaeological remains of late prehistoric to early medieval date. In particular parts of an early to late Iron Age settlement may be expected across the north part of the study area with late Saxon to early medieval remains adjacent to the moat and settlement earthworks.

Little ground disturbance has occurred within the study area as it has been pasture since the medieval period with cultivation occurring only recently.

A geophysical survey of the area located several areas of anomalies, which may correspond with subsoil archaeological features. These lay mainly in the north-central and north-western parts of the site.

Further archaeological evaluation in the form of trial excavation will be necessary to determine the exact nature and condition of the archaeological deposits within the study area.

TABLE OF CONTENTS

1	INTRODUCTION		
	1.1	Geology, Topography and Soils	1
	1.2	Modern Land Use	1
2	REVIEV	W OF KNOWN DATA	2
	2.1	The Historic Environment Record	2
	2.2	Aerial Photographs	3
3	ASSESS	MENT METHODOLOGY	4
4	RESULT		4
	4.1	Geology	4
	4.2	Land Use	4
		Archaeology	
		Ground Disturbance	5
		BCAS Projects Database	
	4.6	Historic Map Studies	6
5		EOLOGICAL POTENTIAL	8
	5.1	The Early Prehistoric	
	5.2	•	
	5.3		
		The Saxon Period	
		The Medieval Period	
	5.6	The Post-Medieval and Modern Period	11
6	CONCL		11
	6.1	•	
	6.2	Limitations of the Evidence	11
7	GEOPH	YSICAL SURVEY	13
	7.1	Summary	13
	7.2	Conclusions	14
	ACKNO	WLEDGEMENTS	15
	BIBLIO	GRAPHY	15
	APPENI	DIX 1	
		Air Photographs Consulted	16
LI	ST OF FI	GURES	## Study Area
Fi	gure 1	· Location of Marston Moretaine	17
Fi	gure 2	Location of study area and Scheduled Ancient Monument	18
Fig	gure 3	Location of HER and BCAS data	19
Fi	gure 4	Plot of earthworks from aerial photograph CPE/UK/1792/4106/1946	20
Fi	gure 5	Plot of earthworks from aerial photograph Aerofilms/96C/558/Run 7:0346/1996	21
-	gure 6	Beancroft Road (BCAS site 264). All features plan	
-	gure 7	Moat Farm (BCAS site 348). Plan locating investigations	23
	gure 8	Part of the Jefferys map of 1765	24
	gure 9	Part of the 1st edition OS map of 1882	25
Fig	gure 10	Archaeological interpretation of geophysical anomalies	26

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1 INTRODUCTION

This assessment concerns approximately 6.6ha of farmland to the west of the historic village centre of Marston Moretaine centred at SP 992 412 (Figs 1 and 2). The western boundary is marked by the recently constructed A421 Marston Bypass. The northern boundary of the site comprises a post-enclosure field boundary beyond which modern housing development has already taken place. The east boundary runs to the rear of a Scheduled Ancient Monument fronting onto the Woburn Road. The south boundary comprises a post-enclosure field boundary.

1.1 Geology, Topography and Soils

Marston Moretaine lies within the broad, flat vale of the Great Ouse (known locally as the Marston Vale), 7km to the south of the main channel at Kempston. Streams draining north towards the Ouse have eroded a wide basin through surface boulder clay deposits exposing the underlying Oxford clays. Marston sits in the very centre of the basin at around 40m OD, the edges of the basin broadly marked by the 50m contour on the 1:50000 OS map. Beyond this to the west land rises to over 110m OD between Cranfield and Wharley End. To the east the topography is much gentler rising to only around 55m OD toward Houghton Conquest and Wilstead. The Greensand ridge, running south west to north east across the county, marks the southern extent of the basin.

The village straddles the boundary between gravelly loamy drifts to the east and alluvial deposits laid down by streams to the west. It is in this latter area that the study area sits. Soil development over these two deposits is slightly different (Soil Survey of England and Wales 1983). To the east Milton Association gleyed brown soils occur. Across the alluvium non calcareous gleyed soils of the Rowsham Association are present. Both are classed as having moderate to imperfect drainage status contributing to the development of low grade agricultural soils (graded 3 by MAFF soil classification 1971).

The poorly drained nature of the land is reflected in the settlement's name, Marston being derived from the Old English 'merston', meaning settlement by the marsh.

1.2 Modern Land Use

The site is currently put down to grass and cartographic and aerial photographic evidence suggests this has been the main land-use from the medieval period. However, recent ploughing to improve the grass has occurred and surrounding fields are now predominantly arable. The land comprising the study area has now been identified as part of a residential allocation within the Mid Bedfordshire Local Plan.

2 REVIEW OF KNOWN DATA

This assessment comprises a review of known data drawn from four main archive sources:

the Historic Environment Record of Bedfordshire County Council, the National Library of Air Photographs (NLAP) at the National Monument Record in Swindon,

the archives of the Bedfordshire County Archaeology Service (BCAS), and the Bedfordshire County Record Office located at County Hall in Bedford.

Together these provide a comprehensive database for the archaeology and history of the Marston Moretaine area. They collate all known archaeological investigations and finds across the study area, and provide access to primary and secondary documentary sources, principally aerial photographs and cartographic evidence.

2.1 The Historic Environment Record

The Bedfordshire County Council's catalogue of known archaeological sites and historic buildings was consulted. All of the entries that concern this study are listed below. Summaries of all archaeological investigations carried out within the County are included, although the most recent works by BCAS and others have yet to be registered. All works by BCAS are detailed in a separate section below and are not included here. The following table lists HER sites not within the BCAS database, and these are located on Fig 3.

HER No.	Location	Description
53	SP 992 413	Moated site. Well preserved water filled moat containing settlement earthworks. Possibly of C14th date replacing earlier site to south (HER 8317). Part of SAM
54	SP 995 412	Moated site. Only southern arm survives. Remainder built over by Rectory.
2791		Ridge and furrow earthworks. Extensive coverage around the village core including the study area
4800	SP 992 413	Current Moretayne Manor house within moated enclosure HER 53. Includes within its core a C15th cruck-framed hall.
8317	SP 995 410	Moated site. Part surviving moat to south of Church.
8727	SP 992 411	Earthwork house platforms fronting the Woburn Road. Separated from ridge and furrow to the north-west by hollow way. Part of SAM
15321	TL 000 417	Crop mark enclosures. Superficially, these appear to include a possible 'banjo enclosure', a type generally attributed to the middle Iron Age However, the cropmarks are perhaps best interpreted as a cluster of enclosures, representing a ditched Iron Age farmstead site which has been substantially re-modelled at least once.

Table 1 HER sites not within the BCAS Database

2.2 Aerial Photographs

Potential

On suitable soils sub-surface archaeological features are often visible as marks in ripening crops or as soil marks in ploughed ground. However, the water retentive soils of the study area do not always show crop marks with great clarity. Study of aerial photographs from the vale of Marston in general suggests that many of the recently identified cropmarks are forming on a localised basis on soils that are relatively gravel-rich (pers. comm. Stephen Coleman). In addition all photographs show the study area as under grass. Although cropmarks do sometimes show in grass, the potential for site identification is much reduced in comparison with areas of more vigorous arable crops. Ridge and furrow earthworks are also present across the site further reducing the potential for buried features to show as a result of the ridge and furrow marks themselves and the variable depth of topsoil.

Overall the site has low potential for the identification of buried (pre-medieval) features, but high potential for the mapping of upstanding (medieval) earthwork features

Sources

The collections held at Bedfordshire County Council, within the Historic Environment Record (HER), and at the National Library of Air Photographs (NLAP) at the National Monument Record in Swindon were consulted for vertical and oblique photographs. All relevant photographs held in Cambridge at CUCAP in Cambridge have already been integrated into the Bedford and Swindon archives. A list of photographs is contained in appendix 1.

3 ASSESSMENT METHODOLOGY

The entire area was assessed. Mapping of extant earthworks had already been undertaken by BCC from black and white obliques and these were checked for accuracy (Fig. 4). Recent verticals were scanned and geo-referenced using GIS software (GSYS 2.8) against a digital copy of the Ordnance Survey map (Fig 5).

4 RESULTS

4.1 Geology

No features relating to geological processes could be seen within the study area although meandering crop marks within fields to the west and east appear to mark the position of relict stream channels. It is possible that similar features may be encountered within the study area.

4.2 Land Use

Throughout the period covered by aerial survey (1946-1996) the dominant land-use within the study area has been pasture, although attempts have been made to improve this with intermittent ploughing. The 1946 obliques (CPE/UK/1792) show clear upstanding ridge and furrow in low evening sunlight. However, by 1954 (NJ, 8-10) the study area has clearly been ploughed and the ridge and furrow appears as more diffuse soil marks. By 1996 (Aerofilms/96c/558/Run 7), although it is still visible in grass, it is much harder define. Other than ploughing and buildings associated with Moat Farm no other forms of ground disturbance, such as quarrying can be seen.

4.3 Archaeology

Archaeological features appear within the study area as earthworks, soil marks or slight crop marks in grass. Predominantly these relate to areas of ridge and furrow with headlands. Beyond the study area to the south and west the

earthworks of the moated site (HER 53) and settlement enclosures fronting the Woburn Road (HER 8727) can be seen.

No features likely to date to earlier periods can be seen.

The most recent plotting carried out using the Hunting Surveys and Aerofilms verticals add little to the earlier photographs, excepting increased complexity to field boundaries to the north of Moat Farm Cottages, possibly representing enclosures earlier or later than the ridge and furrow (Fig.5);

4.4 Ground disturbance

Other than agriculture (covered above) and buildings associated with Moat Farm no major ground disturbance could be seen. Some limited recent disturbance may have occurred to the rear of Moat Farm cottages, where the ground appears uneven, and in the north-western part of the study area where light marks indicate tracks, possibly run over during the construction of the adjacent housing estate.

Some disturbance might be expected adjacent to the A421 road and overbridge although ridge and furrow could clearly be seen running up to the road corridor.

4.5 BCAS Projects Database

Bedfordshire County Archaeology Service maintains a Project database recording all watching briefs, evaluations and excavations the service has carried out since its inception in 1972. Summary information on most projects is available through the HER although more recent projects will only be listed at BCAS. The database is available for enquiries and a search was undertaken centred on the study area. All listing were assessed.

BCAS has undertaken a total of six archaeological investigations within 1km of the site.

The archaeological record is summarised below.

BCAS Project Number: 88 (not registered on HER)

Location: St. Mary the Virgin Church, Marston Moretaine SP 996 411

Description: Watching brief in response to the digging of French drains at the church. Artefacts largely of architectural fragments and some pieces of iron-work were recovered.

BCAS Project Number: 264 (HER 16140) (Fig. 6)

Location: Beancroft Rd. Marston Moretaine SP 992 415

Description: Watching brief in advance of housing development over an area of c.2ha. Pits dating to the Pre-Belgic Iron Age indicate peripheral settlement to the north. Denser feature concentration on the south side of the site indicate more substantial settlement of Belgic Iron Age date. Possibly enclosed by a boundary ditch, settlement features included pits post-holes and other structural cuts. A single cremation was excavated on the south boundary of the site. Medieval ridge and furrow including a headland was also recorded.

BCAS Project Number: 348 (HER16098) (Fig. 7) Location: Moat Farm, Marston Moretaine SP 994 413

Description: Trench evaluation and area excavation in advance of residential development identified evidence for occupation dating from the 10th/11th centuries on the south side of the site and a medieval field system to the north. Three phases of occupation were identified by later excavation: the first represented by three post and trench-built structures; the second more substantial post-built structures with associated boundary ditches and field system; and the third the stone footings of a barn.

BCAS Project Number: 463 (not registered on HER)

Location: Old Village Nursing Home, Marston Moretaine SP 994 413

Description: Excavation uncovered features dating from the late medieval to the modern

period. These included boundary ditches, a pond and a number of pits.

BCAS Project Number: 503 (not registered on HER)

Location: Church End lower school, Marston Moretaine SP 996 417

Description: Excavation following evaluation uncovered the remains of a Saxo-Norman post

and beam building. A late medieval ditch and saw-pit were also excavated.

BCAS Project Number: 514 (not registered on HER)

Location: Stewartby 'Millennium Country Park' TL 004 412

Description: Large scale evaluation with limited area excavation along the line of a road corridor. Uncovered evidence of Iron Age/Romano-British enclosures and significant early to

middle Saxon settlement including structures.

4.6 Historic Map Studies

All of the historic maps for this area held by the Bedfordshire County Records Office were consulted.

The Jefferys map of Bedfordshire produced in 1765 (Fig. 8)

This provides a useful guide to the general extent of the village at the time. 'Marston' is represented as clustering around a green running west from the church to the Woburn Road. Some infill onto the green can also be identified. Settlement along the Woburn Road is focused on the Moat Farm site at its intersection with a lane running east to Marston Wood End and Bancroft and in a ribbon development on the eastern side of the Woburn Road to the north of this. It is interesting to note that in addition to the Moat Farm site a second building, immediately to its north-east, and fronting the Wood End Lane, is also marked.

The Tithe map of 1837

The earliest detailed cartographic evidence for the study area comes from the 1837 Tithe Map (CRO MAT 31). This is identical in all but scale to another similarly dated map which is drawn at 12.5 inches to the mile (CRO X1\22\1A&B).

Marston Moretaine was enclosed in 1797, and although no enclosure map exists, it is possible to superimpose the awards from the Award Book onto the Tithe map and onto the first edition OS map which provides a better copy (Fig. 9). The fields were much as they are today (save for their arbitrary division by

the recent A421 bypass). The study area is seen to comprise parts of four awards.

The southern part of 'Row Mead' (361) forms the southernmost field within the study area.

Part of 'Shaws Close' (360) lies to the north of this

Almost the entire part of 'First Sward Field' (355) is included to north beyond this.

That part of 'Home Close' (392) not included within the Scheduled Ancient Monument is also within the Study Area.

The lane to Wood End is marked along the northern boundary of First Sward Field, although this appears to have been replaced as the main route by a new road to Beancroft.

The moated enclosure at Moat Farm is clearly marked along with those to the SW.

The general extent of the village is similar to that shown in Jefferys Map. None of the settlement earthworks fronting onto the Woburn Road within Home Close (HER 8727) are shown.

Village map 1859 (CRO D.1/259)

A simple sketch of the village centre, this shows the three moated sites and, in addition, some possible fish ponds further to the south.

The 1882 1st Edition Ordnance Survey map (Fig. 9)

Within the study area the field boundaries remain those on the 1837 Tithe Map. The Moat is marked, as is the lane to Wood End. The buildings of the nineteenth century Moat Farm appear for the first time to the south of the moat within Home Close. Buildings immediately to the west of the moat previously shown on the Tithe map do not appear.

The 1901 2nd Edition Ordnance Survey map

This shows field boundaries and roads/trackways over the study area to be unaltered. The main buildings of Moat farm are increased in size.

The 1925 3rd Edition Ordnance Survey map

This shows a minor field boundary change against the Woburn Road at the junction of Row Mead and Home Close where a small area has been enclosed. The small building at Moat farm adjacent to the south west corner of the moat is now reduced in size but the other buildings remain unchanged.

5 ARCHAEOLOGICAL POTENTIAL

5.1 The early Prehistoric (c.150,000BC - 800BC)

A small collection of residual flint dating from the late Neolithic/early Bronze Age have been recovered from excavations in the vicinity. Few tools were identified, the assemblage largely comprising debitage. None of this is indicative of substantive activity or settlement. This suggests the study area has low potential for evidence of this period.

5.2 The later Prehistoric (800BC to AD43)

"The Oxford Clays of the vale of Marston have been specifically described as 'one of the largest gaps on the map' in terms of both pre-'Belgic' and 'Belgic' settlement (Simco 1984). It is now generally accepted that this distribution pattern has been skewed both by modern land use and by the differing susceptibility of soil types to aerial photography. While it is clear that the favoured occupation areas were the lighter soils of the Great Ouse catchment and the chalk uplands to the south of the county, the true settlement pattern is likely to have been more complex"

Shotliff and Crick (1998)

There is evidence of Iron Age enclosure from recent excavations at Stewartby 'Millennium Country Park' (BCAS 514) and the cropmark site (HER 15321) may also be of Iron Age date. The Beancroft Road (BCAS 264) excavation provides clear evidence of prolonged activity adjacent to the study area during the Iron Age. The type, concentration and extent of features suggests a small agricultural settlement.

Such sites are often dispersed over large areas, e.g. Harrold (Eagles and Evison 1972), Odell (Dix 1980) and Village Farm, Elstow (BCAS in prep). It is likely that the Beancroft road site continues at least into the northern part of the study area. Very little Iron Age pottery was recovered from the Moat Farm excavation to the south east, possibly providing a limit to the activity in that direction.

The study area has high potential to contain archaeological remains of Iron Age date and in particular for the late Belgic Iron Age.

5.3 The Roman Period (AD43 - AD410)

Given the recent discoveries of prehistoric date it is surprising that sites of the Roman period are still rare. Few features of Roman date have been excavated within the Marston area. However, as with the late Prehistoric the picture may be changing as recent excavations at Stewartby have identified Roman period ditches. Small amounts of Roman pottery have been recovered from residual contexts elsewhere in the village. At Hill Farm (HER12476), in the north-west of the parish, a pottery scatter may indicate settlement

Although no pottery of Roman date was recovered from the Beancroft Road site, and only a very small amount from Moat Farm, there is nevertheless moderate potential for Roman period activity being present within the study area.

5.4 The Saxon Period (5th century AD to 11th Century AD)

Recent work within the Bedford area at Harrold and Elstow has confirmed the picture of shifting settlement patterns from the early into the middle Saxon period. Settlements of these periods are seldom located directly within the later Saxon or medieval focus. Recent excavations at Stewartby suggest a similar situation for Marston Moretaine where a substantial and extensive early to middle Saxon settlement focus is located some 300m to the east of the parish church in an area that was later part of the medieval township's field system.

This may represent the only focus of early to middle Saxon settlement in the area. This is supported by the lack of contemporary Saxon pottery from sites in the centre and western part of Marston where the earliest structures and features are dated from the tenth century. However, recent large scale excavation in the Ivel Valley at Stratton near Biggleswade (BCAS in prep) suggests that settlements of this date are often polyfocal and so a second focus somewhere in the Marston area would not be a surprising discovery. Nevertheless lying as it does within the core and western periphery of the medieval/modern village the study area is unlikely to contain remains of early to middle Saxon date.

Later Saxon activity is more likely. Documentary evidence demonstrates that the township of Marston existed before AD969 when the Aspley Guise Charter refers to a meeting at a common boundary of the men of Cranfield, Marston and "Hulecote", near an old maple tree (BHRS, v, 46). Although the township at that time may have comprised numerous small dispersed settlements excavations at Church End School and Moat Farm indicates that today's village of Marston Moretaine may well have originated as one of these smaller settlements (Crick 1998).

5.5 The Medieval Period (11th century AD - 16th Century AD)

Although early to late medieval pottery was recovered at the Stewartby site it appears to indicate manuring across open fields rather than settlement (BCAS 98/33). Excavations within the village at Church End school and adjacent to the study area at Moat Farm suggest settlement had shifted to the site of the modern village from around the 10th century.

The Moat Farm evidence in particular may provide an indication of the date of the settlement earthworks preserved along the Woburn Rd. frontage and contained within the Scheduled Area. These extend for about 300m along the northern side of Woburn Road, from Moretayne Manor west as far as Moat Farm Cottages. The platforms range in size from 5m x 10m to 10m x 30m and are considered to be medieval tofts. A 10th century date for the establishment

of these enclosures would be consistent with abandonment some time in the 12-13th century when a hiatus in activity at Moat Farm is suggested by the ceramics. This may be related to the establishment of the moated site of Moretayne Manor (which may represent an expansion of a pre-existing site or a move from one of the moated sites to the south). It seems likely that its construction necessitated the clearance of at least part of these areas and reflects an assertion of superior status. The present building within the moat is early 15th century in date, but it may well have had an earlier predecessor.

The settlement enclosures are aligned along the south side of a holloway (essentially a back lane). To the north the latter is defined by a raised bank, which also marks the southern limit of an area of ridge and furrow. The eastern boundary of the study area lies to the north of this hollow way/bank. If the hollow way represents the limit of occupation then no settlement features of that date should be expected within the study area. However, the earthworks represent only the form and extent of the settlement at the time it was abandoned. They may be good for earlier periods but large scale excavations on medieval settlement sites at Stratton (BCAS in prep) and at Westbury in Milton Keynes (Ivens et al 1995) demonstrate the extreme fluidity of form of these settlements. Enclosures change size and shape over time, expanding out over ridge and furrow or being taken into cultivation. They expand to amalgamate with neighbouring enclosures or can become sub-divided. Excavations at Moat Farm suggest this was happening within Marston and so it would be prudent to expect evidence for earlier medieval activity beneath the ridge and furrow within the study area.

The majority of evidence for medieval activity within the study area comes from the large amount of ridge and furrow seen in aerial photographs. This is very extensive and can be clearly seen to cover most of the area which is under investigation as well as substantial amounts of the surrounding fields.

The pattern of ridge and furrow survived fossilised in the uncultivated grassland until recently and has been plotted from aerial photographs. However, just as the settlement earthworks merely record the pattern at abandonment, so this is also true for the ridge and furrow which becomes fossilised when turned over to pasture. When in use the layout of furlongs and the form of the individual furrows could change over time reflecting developments in tenurial boundaries or in agricultural regimes. Many of these changes are visible within the earthwork systems themselves, with new alignments of furrows cutting across old, cultivation of headlands and the slighting or narrowing of furrows. Some of these are suggested within the study area by the pattern of furrows seen in aerial photographs and may be preserved in the sub-soil marks left by relict systems.

Overall the study area has good potential for the preservation of medieval settlement features along its western margins adjacent to the moated site and settlement earthworks. Across the majority of the site only features associated with medieval cultivation are likely to be preserved.

5.6 The Post-Medieval and Modern period

From the cartographic and aerial photographic evidence it seems likely that the study area has been under grass from the late medieval period through to the present day with very little effective change in land use. The greatest developments include enclosure which may have largely respected pre-existing furlong boundaries and the establishment of Moat Farm, within Home Close.

6 CONCLUSIONS

6.1 Potential for Archaeological Remains within the Study Area

- There is no convincing evidence for early prehistoric activity
- Iron Age settlement features are likely to continue into the northern part of the development area
- There is low to moderate potential for Roman period remains across the site.
- There is low to moderate potential for remains of early to middle Anglo-Saxon date
- Late Saxon or early medieval features may survive adjacent to the moat representing a possible early layout of the manorial site.
- Medieval settlement features of c10th-12th century may survive along the southern boundary of the site
- Ground disturbance is limited to medieval and modern ploughing and the construction of buildings forming part of the Moat Farm complex.

6.2 Limitations of the evidence

6.2.1 Aerial photographs

Aerial photographs provide a good record for the form and limits of medieval settlement and agriculture at the time at which these areas were abandoned to grassland. They allow us to map with some certainty the location of areas of significant medieval activity such as the moated site, the settlement enclosures fronting the Woburn Road and areas of ridge and furrow cultivation.

Earlier medieval, Roman and prehistoric features may, however, survive buried beneath the earthworks and here the land use and the geology mitigates against the development of soil and cropmarks that might otherwise be visible on photographs.

6.2.2 HER entries

The limited value of air photographs in the area has contributed to the small number of HER entries which focus on the major earthwork remains of medieval date. This are also governed by the lack of archaeological survey and other fieldwork in an area until recently thought to be largely devoid of premedieval settlement.

6.2.3 Cartographic sources

Cartographic sources are extant from the late eighteenth century and are useful in projecting backwards into the later medieval period only. In general they confirm the pattern of medieval fields visible from air photographs and serve to inform our understanding of the morphology and development of the later medieval and modern settlement in general terms.

6.2.4 Recent excavated evidence

Recent development within the historic village and its environs has instigated a number of archaeological investigations. Along with the evidence of aerial photographs these provide possibly the best indicators of the likely archaeological potential of the study area.

In particular two sites have been excavated immediately adjacent to the northern limits of the study area and both suggest archaeological features should be expected beneath ridge and furrow.

The circumstances of the two projects suggest that features may be more widespread and concentrated than at first thought. The observations at Beancroft road were undertaken during development as part of a watching brief. Only very obvious features would have been visible, and these only in areas where ground disturbance was being undertaken. At Moat Farm substantive excavation was only undertaken on the road corridor to the south of the site. Trial trenches on the northern part of the site did not locate archaeological features. Experience on other sites suggests that the limited trenching exercise might have missed unenclosed settlement comprising pits, post-holes and short lengths of gully, as described at Beancroft Road.

6.2.5 Levels of Ground Disturbance

Cultivation from the medieval period will have affected the survival of any buried archaeology, although a lack of regular modern ploughing may have resulted in better than average survival.

Excavations within areas of ridge and furrow at Beancroft Road and Moat Farm suggest only cut features will survive, although headlands may protect archaeological features to a greater degree.

Modern ploughing visible in the 1957 aerial photographs, can be seen to have denuded surface archaeology visible as well defined earthworks on photographs taken in 1946.

The early 19th century construction of the buildings associated with Moat Farm will have had some localised effect on the archaeology underlying that area although, as the depth of foundations and the extent of any clearance for these buildings is unknown it is impossible to tell the extent of potential damage to the archaeological record.

There is no evidence for quarrying across the site although aerial photographs indicate possibly disturbed ground to the rear of Moat Farm cottages.

Some disturbance may be expected adjacent to the A421 and the overbridge.

7 Geophysical Survey

Following completion of the initial work of the desk-based assessment, a geophysical survey by magnetometer (fluxgate gradiometer) was undertaken on the site. This was carried out for Cambridgeshire County Council Archaeology Field unit by GeoQuest Associates of Consett, County Durham. The full report on these investigations is held in the site archive at the CCC - AFU office in Fulbourn, Cambridge. The results of the survey and conclusions are, however, summarised below. The results are also given in diagrammatic form in figure 10.

7.1 Summary

Geomagnetic scanning was carried out over 6.5ha of land at Marston Moretaine in Bedfordshire, as part of an archaeological assessment prior to a proposed residential development. The results of the scanning suggested that parts of the application area merited more detailed survey and so gridded magnetic surveys were undertaken over 3.2ha.

A former drain has been detected in Area 1 with possible ridge and furrow remains on its northern side.

The survey of Area 2 has detected geomagnetic anomalies corresponding to medieval ridge and furrow cultivation and an area of probable rubble dumping near the moat. Further anomalies in the north-western part of this field may reflect the remains of a ditched enclosure. This area of the site is immediately adjacent to the Beancroft Road site (BCAS site 264, below, fig. 6). The anomalies detected here may therefore reflect a continuation of Iron Age settlement into the subject site. The actual character and date of these features, however, can only be determined by excavation.

The survey of Area 3 has detected ridge and furrow remains across most of the field with a headland detected in the southern part. Some intense anomalies in the

northern part of the area may indicate concentrations of ferrous debris or areas of burning. The remains of several possible ditched enclosures and pits appear to have been detected in the north-western part of this survey area.

7.2 Conclusions

The geophysical survey has detected anomalies which may indicate the presence of subsoil archaeological features in several zones within the subject site, principally the north-western corner and the north-central area (the north of area 3). These anomalies will certainly warrant further investigation by any further intrusive evaluation that is proposed, such as trial trenching. Areas devoid of apparent geophysical anomalies also warrant a certain amount of investigation, however, as a control.

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Appendix 1

Air photographs consulted

Historic Environment Record

Sortie Number	Date
NJ 8-10, 11-15	27 March 1954
HSL/UK/76023/Run14 1199-1200	24 June 1976
Aearofilms/96C/558/Run 70346-0347	15 July 1996

National Library of Air Photographs cover search number 47409899

Sortie Number	Date
3G/TUD/UK/86 6074-76	26 March 1946
CPE/UK/1792 3034-3036	11 Oct 1946
4106-107	11 Oct 1946
58/677,5040-42	12 May 1951
540/528, 5096-98	05 June 1951
58/2250, 113-14	22 Aug 1957
58/2640, 96-98, 173-3	01 Dec 1958
58/2689,40-42, 79-80	25 Jan 1959
585517, 175-77	18 Oct 1962
58/T/118, 128-29	26 Sept 1958
US/7PH/GP/LOC170 5007-008	08 Feb 1944
US/7PH/GP/LOC173 5009	10 Feb 1944
MAL/78016 169-171, 237-240, 259-261	27 May 1978
OS/64195 87	12 Sept 1964
OS/70437 75-76	22 Nov 1970
MAL/52041 3174-75	01 July 1952

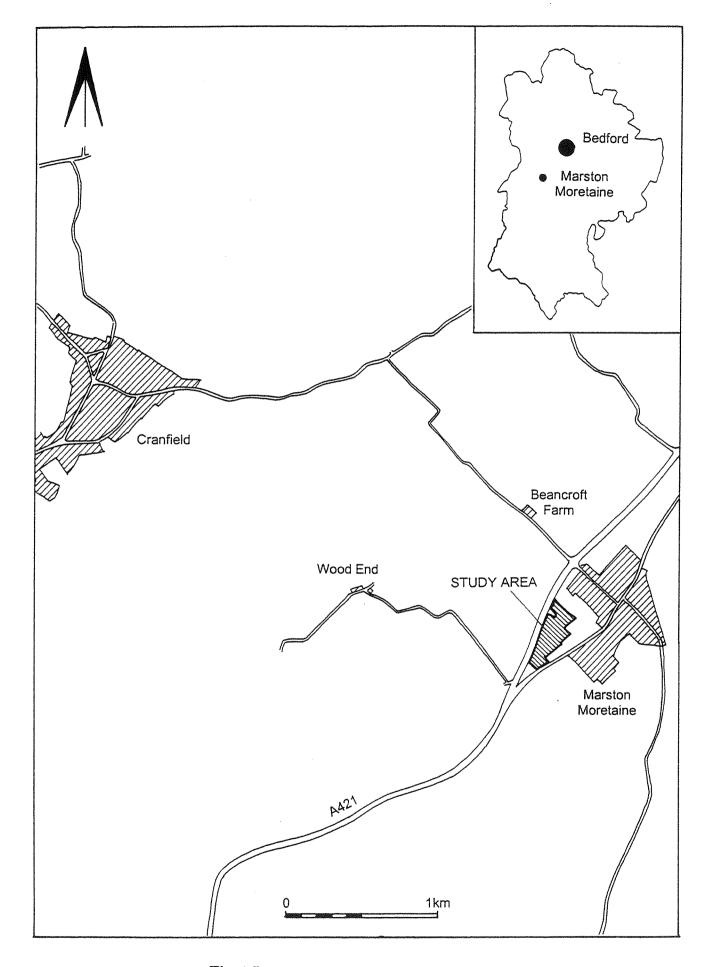
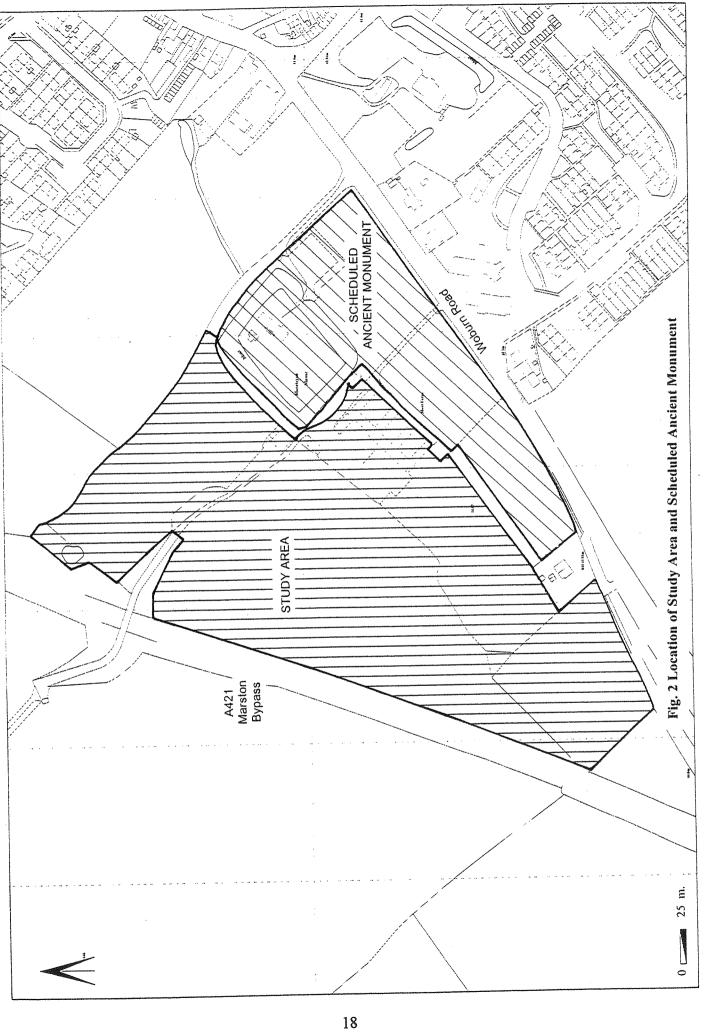
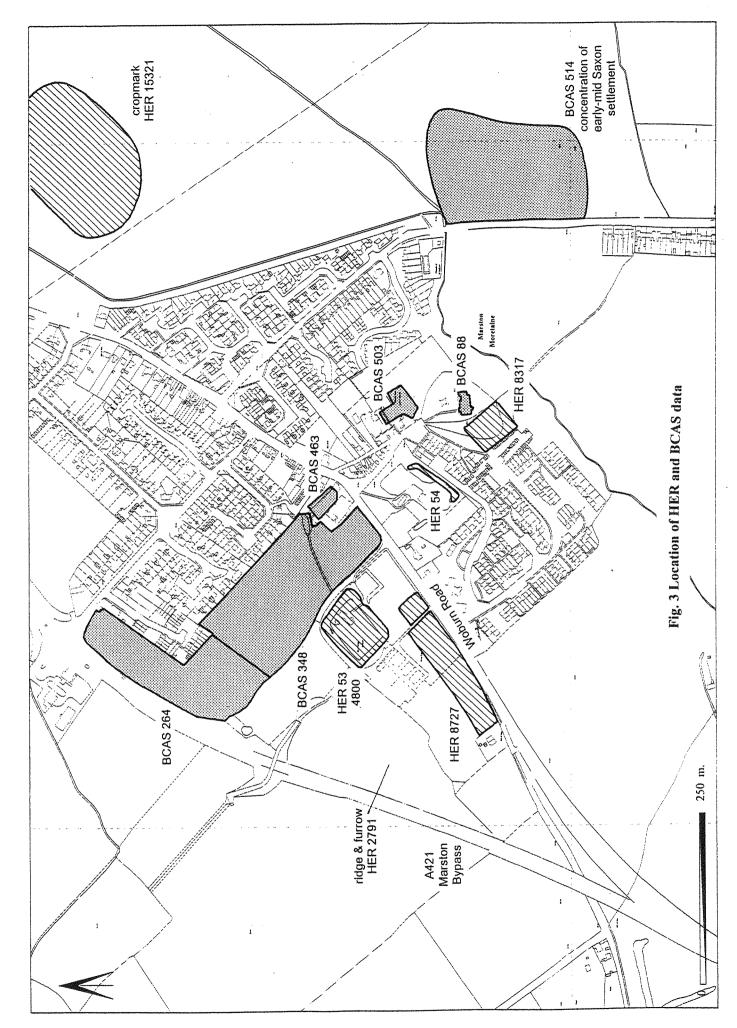


Fig. 1 Location of Marston Moretaine





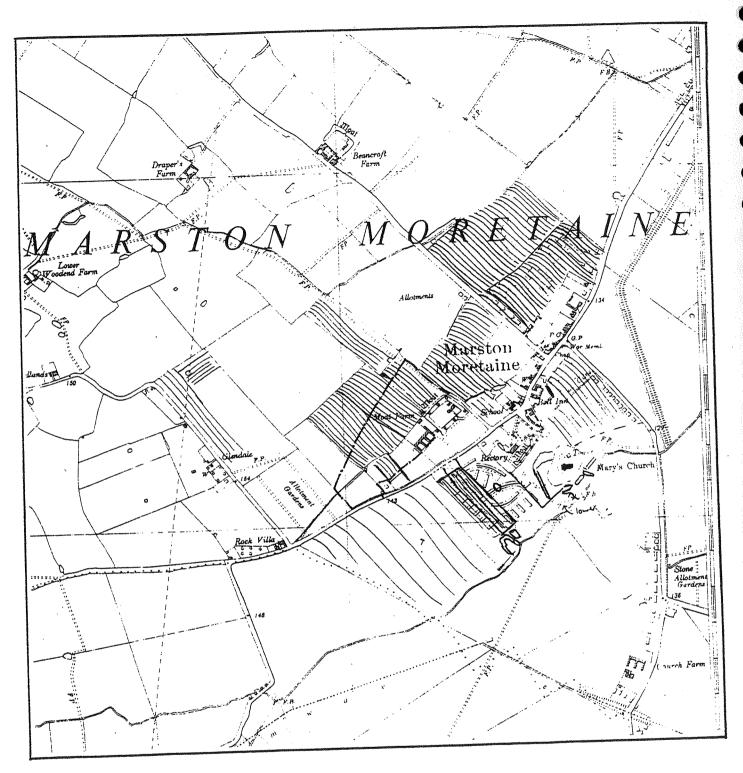
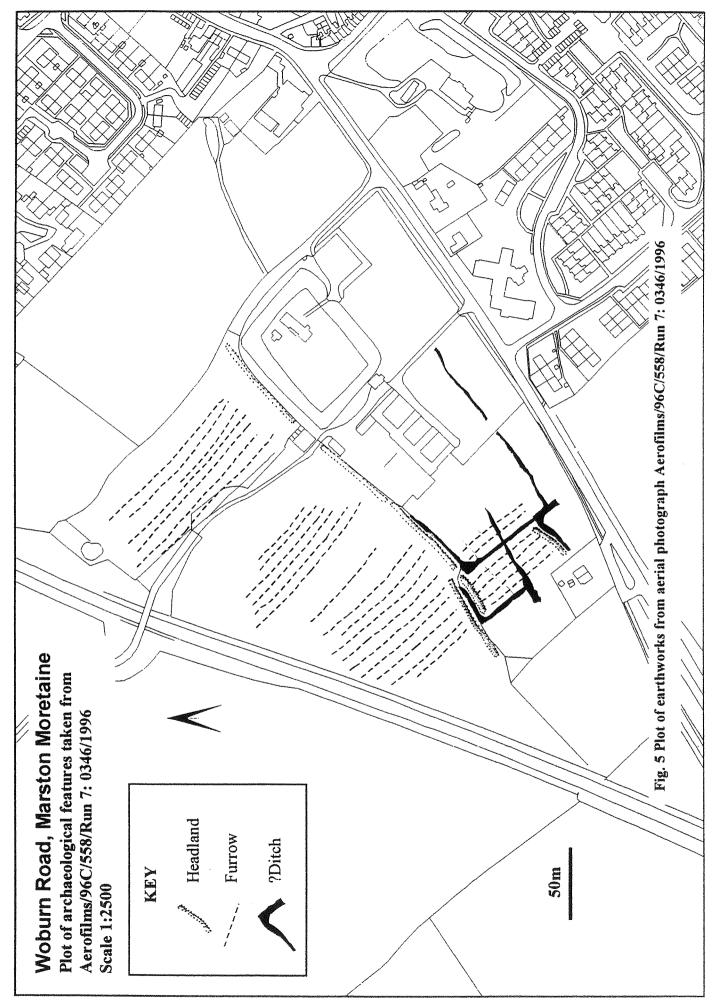


Fig. 4 Plot of earthworks from aerial photograph CPE/UK/1792/4106/1946 Reproduced from the Bedfordshire Historic Environment Record with the permission of Bedfordshire County Council



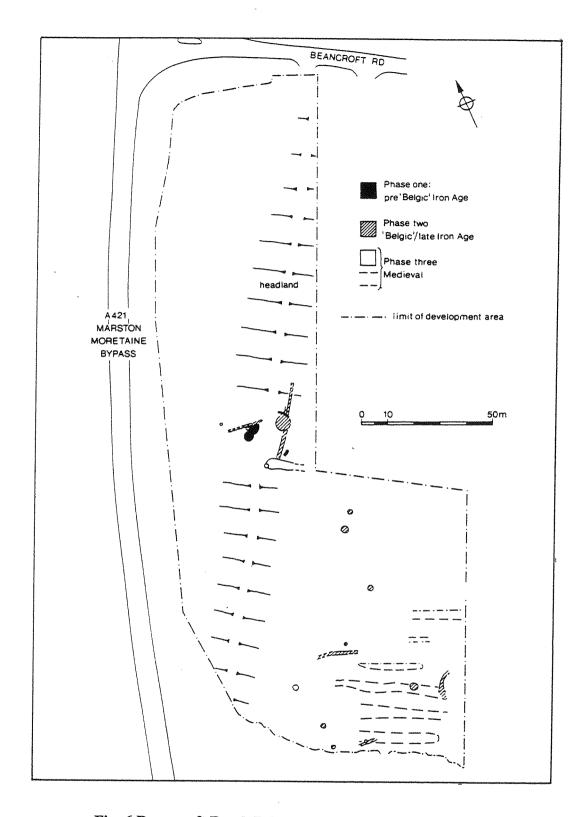


Fig. 6 Beancroft Road (BCAS site 264). All features plan

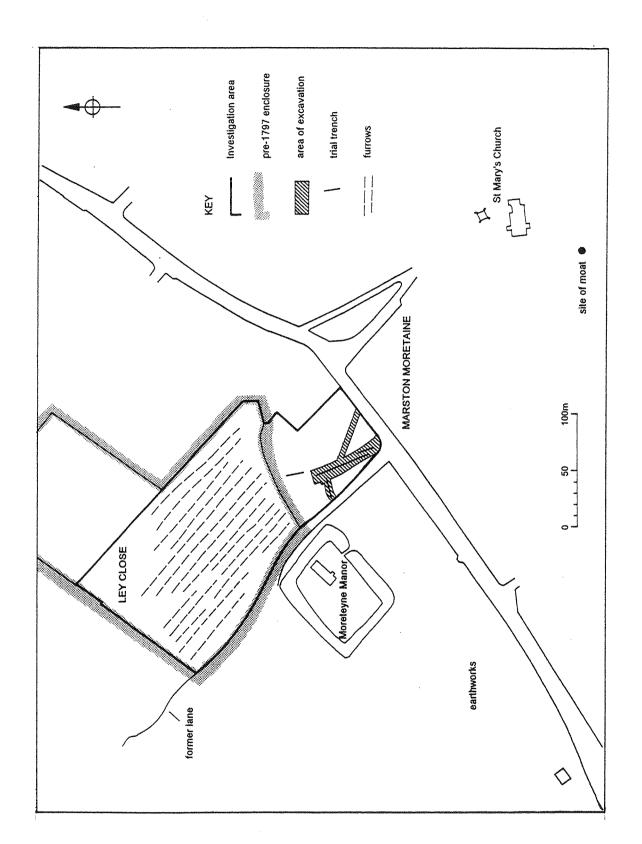


Fig. 7 Moat Farm (BCAS site 348) Plan locating investigations

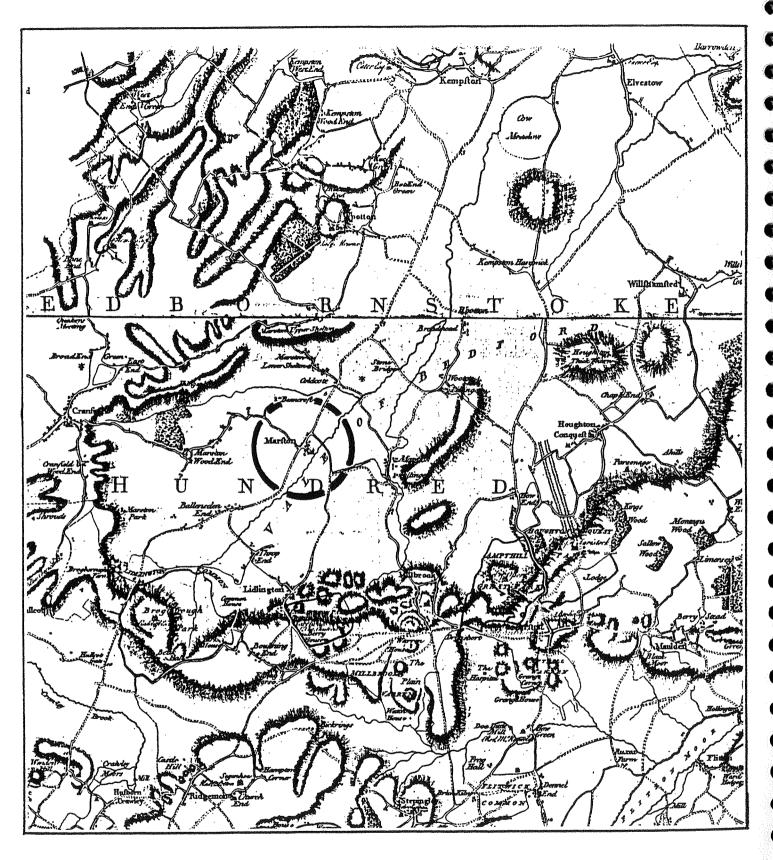


Fig. 8 Part of the Jefferys Map of 1765

