# A602 CORRIDOR IMPROVEMENTS WARE ROAD REALIGNMENT

## **ARCHAEOLOGICAL WORKS PHASE 1**

## NON-INTRUSIVE EVALUATION

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Compiled by	Checked by	Approved by
Mark Philips	Joe Abrams	Drew Shotliff

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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 Mark Phillips (Project Officer) and Joe Abrams (Project Manager). The fieldwalking was undertaken by Mark Phillips (Project Officer), Anthony Clifton-Jones, Jerry Stone and Adrian Woolmer (Assistant Supervisors) with GPS survey by Mercedes Planas (Souterrain). Desk-based assessment research was undertaken by Mark Phillips.

The artefact summary was prepared by Jackie Wells (Finds Officer). The figures were prepared by Joan Lightning (CAD Technician) and Mark Phillips. All Albion projects are under the overall management of Drew Shotliff (Operations Manager).

Albion Archaeology is grateful to Karen Smith, Hertfordshire Highways for commissioning the project. We are also grateful to the staff of the Hertfordshire Historic Environment Record, Hertfordshire Archives and Local Studies Service and the National Monuments Record.

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Albion Archaeology St Mary's Church St Mary's Street Bedford, MK42 0AS : 01234 294001

Fax: 01234 294001

e-mail: office@albion-arch.com Website: www.albion-arch.com

#### Structure of this Report

Section 1 serves as an introduction to the site, describing its location and the aims of the project. The methodology and results of the fieldwalking survey are discussed in section 2. Section 3 outlines the methodology and describes the sources consulted in the desk-based assessment. Section 4 summarises the archaeological and historical information from the desk-based assessment. Section 5 details the cartographic analysis. Section 6 is a synthesis in which the limitations of non-intrusive evaluation are outlined and the archaeological potential of the Development Area is summarised. Section 7 is a bibliography.



Appendix 1 contains technical data relating to the fieldwalking survey. Appendix 2 lists the sites and buildings recorded in the HER for the desk-based assessment Study Area. Appendix 3 lists the sites recorded in the NMR. Appendix 4 lists the cartographic sources consulted during the desk-based assessment. Appendix 5 is a copy of the relevant sections of the Hertfordshire Structure Plan Review.

#### **Key Terms**

Throughout this document, the following terms or abbreviations are used:

Albion Archaeology

Client Hertfordshire Highways

HALS Hertfordshire's Archive and Local Studies Service

HER Hertfordshire's Historic Environment Record

HEU Historic Environment Unit of Hertfordshire County Council

IFA Institute of Field Archaeologists

NMR National Monuments Record

MAP II Management of Archaeological Projects (English Heritage 1991)

WSI Written Scheme of Investigation



## Non-Technical Summary

Hertfordshire Highways is proposing to re-align a section of the A602 Ware Road to the east of Watton-at-Stone, Hertfordshire. Albion Archaeology was commissioned to undertake Phase I of a programme of archaeological works to assess the archaeological potential of the Development Area. Between November 2006 and January 2007, Albion Archaeology undertook a non-intrusive archaeological field evaluation (fieldwalking survey) and a desk-based assessment of the Development Area and its immediate surroundings. This report presents the results of that work.

In order to predict the potential for previously undiscovered archaeological remains within the proposed Development Area, the assessment has reviewed the documentary, cartographic and archaeological evidence available for both the Development Area itself and for land extending 500m beyond the limits of it (henceforth called the Study Area).

The desk-based assessment revealed no significant archaeological remains within the Development Area. However, the wider Study Area contains evidence for a wide variety of archaeological remains, ranging in date from the prehistoric to the post-medieval periods. These include prehistoric ring ditches and enclosures, a Roman road, surface finds and settlement evidence, medieval settlement and surface finds and post-medieval landscape features.

The fieldwalking survey covered the Development Area and a c.20m "buffer" within adjacent arable land. A small number of artefacts dating from the prehistoric, Roman and medieval periods were recovered with few significant concentrations of material. The great majority of the recovered artefacts were post-medieval or modern in date. The varied surface conditions across the survey area limit the comparative value of the results of the work.

The following table indicates, on current knowledge, the likelihood of archaeological remains surviving within the Development Area.

Period	Potential for finding archaeological remains (Low, Moderate, High)	Relative significance of archaeological remains on a regional/national level (Low, Moderate, High)
Prehistoric (before AD43)	Low	High
Roman (AD43-AD450)	Moderate	High
Medieval (AD450-AD1550)	Moderate	High
Post-medieval (AD1550- AD1900)	High	Low
Modern (AD1900-present)	High	Low

Due to the inherent limitations of non-intrusive methods of archaeological evaluation, further work may be required both to determine whether or not sub-surface archaeological remains actually survive within the Development Area and to assess more precisely their significance.



#### 1. INTRODUCTION

### 1.1 Project background

Hertfordshire Highways is proposing to re-align a section of the A602 Ware Road to the east of Watton-at-Stone. The re-aligned carriageway commences *c*.250m west of Heath Mount School and continues to the Sacombe Pound road junction. Figure 1, which is based on scheme plan 737786/003/ENV/002, shows the extent of the land affected by the scheme (the Development Area).

The environmental impacts of the scheme are currently being assessed and a programme of archaeological works forms a part of this process. Hertfordshire County Council's Historic Environment Unit (HEU) issued a design brief for the works (HCC 2006). Albion Archaeology was commissioned to undertake Phase 1 of the archaeological works by Hertfordshire Highways. Albion Archaeology has prepared a Written Scheme of Investigation (Albion 2006) outlining the circumstances of the project, Albion's organisational approach, the underlying research objectives and the methods that will be used to address those objectives in accordance with the brief.

The Phase 1 works comprise desk-based assessment and fieldwalking, the results of which are reported in this document. Following the completion of this phase of work a post-assessment review of the findings (Phase 2) will be undertaken by HCC's HEU to determine whether further evaluation or mitigation measures are necessary.

#### 1.2 Site location and description

The A602 links Stevenage and Ware. The stretch of road proposed for re-alignment lies approximately midway between the two, immediately to the east of Watton-at-Stone at TL 3190 1926 (Figure 1). The length of road affected by the realignment extends from a point c.280m east of Bardolphs (in the west) to the junction with Sacombe Pound (at the east) a distance of c.1.5km. The realigned road would lie to the north of the present carriageway; the junction with Sacombe Pound would be repositioned.

This stretch of the A602 occupies an area of rising ground (*c*.70-95mOD) on the eastern side of the valley of the River Beane. The highest point is situated at the junction with Whempstead Road. This is at the southern end of a north-south ridge of higher ground, forming the watershed between the River Beane to the west and the Old Bourne and Dane End Tributary to the east.

The soils along the line of the road consist predominantly of clay soils above upper chalk. Borehole data indicate the presence of sandy/gravel clays, formed as glacial deposits or head deposits (sediments formed through slope processes under periglacial conditions) and glaciofluvial deposits of clays, gravels and sands. The depth of these deposits varies across the Development Area from between 0.8m and more than 5.5m. They are deepest towards the base of the south-eastern facing slope at Sacombe Pound.



The footprint of the re-aligned road affects five main land parcels. For ease of reference, these have been numbered from west (Field 1) to east (Field 5). The scheme is illustrated in Figures 1 to 6. Figure 1 shows the geographical location of the scheme with the extent of the fieldwalking and desk-based assessment Study Area. The results of the fieldwalking are depicted in Figures 2 and 3. Figure 4 indicates the location of find spots and sites listed in the HER and Figures 5 and 6 show historic map data.

### 1.3 Methodologies

The WSI (Albion Archaeology 2006) stipulated two stages of works, utilising non-intrusive evaluation techniques. These comprised fieldwalking and desk-based assessment.

Not all the fields were suitable for fieldwalking:

- Field 2 was under pasture;
- Field 3 was a combination of grass verge and woodland.

The desk-based assessment comprised an examination of known archaeological evidence and historic maps within a Study Area that extended for 500m from all sides of the Development Area.

#### 1.4 Professional standards

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

- Albion Archaeology's *Procedures Manual: Volume 1 Fieldwork* (2<sup>nd</sup> ed, 2001).
- IFA's Codes of Conduct, Standards and Guidance for Archaeological Field Evaluation.
- IFA Guidelines for Finds Work.
- English Heritage's *The Management of Archaeological Projects* (1991)
- Depositing Archaeological Archives in Hertfordshire (January 2006)



#### 2. FIELDWALKING

#### 2.1 Introduction

Fieldwalking is a survey technique involving the systematic recovery of artefacts from the ground surface. The distribution of artefacts, especially the identification of concentrations, may indicate the location of past human activity.

Given suitable conditions (including soil, weathering, crop growth and light), artefacts can be seen within ploughed soil. These occur because cultivation over buried archaeological features/deposits results in the movement of artefacts into the overlying ploughsoil.

The purpose of the fieldwalking was to collect artefacts from the surface of suitable arable land within the Development Area and a *c*.20m "buffer" within adjacent arable land. The survey sought to identify significant clusters of artefacts, indicative of past human occupation or other activity. The fieldwalking was carried out by experienced Albion Archaeology staff.

#### 2.2 Method statement

An area of c.13 hectares was evaluated using this method. This included the proposed corridor of the re-aligned A602 and the proposed Sacombe Pound alterations, including the land between the existing, and proposed, route (Figure 1).

The work was undertaken in two stages: Fields 1 and 4 were walked in November 2006 and Field 5 was walked in January 2007. Fields 2 and 3 were covered by permanent pasture and trees respectively, and were not suitable for fieldwalking.

At the time of walking, weather conditions varied from dry and bright to rainy and overcast. Ground conditions varied across the area. Fields 1 and 4 had been cultivated and sown with cereal and brassica crops. Due to the unusually mild weather, these crops had grown rapidly, resulting in a significant level of ground cover. Field 5 had been ploughed and sown with beans. At the time of walking, the crop was just emerging and the surface of the soil had been weathered by rain producing excellent conditions for fieldwalking.

Collection units comprised parallel lines at 20m intervals that followed the curving line of the proposed realignment. The fieldwalkers walked down the centre of each line and retrieved artefactual material from a 1.00m wide strip on either side of the line.

Individual findspots were then precisely located on the Ordnance Survey National Grid using differential GPS survey equipment. This ensures that identified artefact concentrations could be accurately located in any subsequent stages of evaluation.

A summary of the results of the survey is presented below; detailed information on all the artefacts recovered is contained in Appendix 3.



#### 2.3 Results

The fieldwalking recovered a range of artefacts that includes flint, pottery, ceramic building material, glass etc. The distribution of these artefacts is illustrated in Figures 2 and 3 and summarised below by field number.

#### 2.3.1 Field 1

Three pieces of worked flint (flakes), one sherd of post-medieval pottery, one fragment of medieval/post-medieval ceramic building material (CBM) and three fragments of post-medieval/modern CBM were recovered from this field.

#### 2.3.2 Field 4

Four pieces of worked flint were recovered from this field. These consisted of three flakes, two of them with retouch and a core fragment.

#### 2.3.3 Field 5

A small amount of material dated to the prehistoric, Roman and medieval periods was recovered from this field. The prehistoric material comprises fourteen worked flints, mostly flakes with a retouched flake, core fragment, small blade and a scraper. It was evenly distributed across the area, with no apparent concentrations.

The Roman material comprises seven sherds of pottery, three from the north-west part of the area (TL 3240 1902 and TL 3232 1916) and four clustered in the extreme east of the area (TL 3283 1885). The majority is dated to broadly to the Roman period (2<sup>nd</sup> century or later); two sherds in the eastern cluster can be more precisely dated to the 3<sup>rd</sup>-4<sup>th</sup> centuries.

The medieval material comprises seven sherds of Hertfordshire greyware pottery (12<sup>th</sup>-13<sup>th</sup> centuries) clustered at the extreme eastern end of the area (TL 3284 1885).

A large number of artefacts dating from the post-medieval and modern periods were recovered from Field 5. The majority of this material comprised ceramic building material and modern pottery. Eight sherds of post-medieval pottery were widely distributed across the field. The ceramic building material consisted mainly of roof tile dateable to the late medieval/post-medieval and the post-medieval/modern periods. The numerous sherds of modern pottery found in this field consisted almost exclusively of flowerpot. This formed a dense concentration in the area adjacent to the access road to Sacombe Hill Farm (TL 3234 1911, with the remainder showing no clear pattern of distribution across the field.

#### 2.4 Significance

Ground conditions were very different between Fields 1 and 4 on the one hand, and Field 5 on the other. This makes comparison between the two areas of survey problematic. The comparatively larger quantity of recovered material from Field 5 is likely to be a collection bias, rather than a genuine distribution.

#### 2.4.1 Prehistoric

No significant concentrations of prehistoric flint were identified and no prehistoric pottery was found. The flint largely comprises flakes, with very few definitely



identifiable tools. This quantity of material is typical of the "background noise" of flint artefact scatters across arable fields in lowland Britain.

#### **2.4.2** Roman

A small cluster of Roman pottery (four sherds) was identified at the extreme eastern end of Field 5 (TL 3283 1885). This is not, in itself, conclusive evidence for a Roman site in this location. The Roman road (HER 4615), the settlement at Bardolphs Farm (HER 2068) and the occupation evidence found on the Watton-at-Stone bypass (HER 6554) could be a source of dispersed artefacts across the local landscape. (See Section 4.3 for fuller HER data.) However, the potential significance of this artefact cluster may be increased by the nearby discovery of a Roman brooch (HER 11269). This cluster probably merits further testing to try to determine whether or not it derives from sub-surface archaeological deposits.

The absence of Roman material from Fields 1 and 4 may be a function of ground conditions rather than a genuine distribution.

#### 2.4.3 Medieval

The only medieval pottery produced by the fieldwalking was concentrated at the extreme eastern end of Field 5 (TL 3284 1885). The absence of any other medieval pottery from the fieldwalked area suggests that there is a significant chance that this material derives from sub-surface archaeological remains, rather than from manuring of fields. Interestingly, it is in a similar location to the small cluster of Roman pottery described above.

The absence of medieval material from Fields 1 and 4 may be a function of ground conditions rather than a genuine distribution.

### 2.4.4 Post-medieval and modern.

No distributions of archaeological significance were identified within this material. The concentration of modern pottery to the east of the Sacombe Hill Farm access may be the result of roadside activity in the recent past.

The contrast between Field 5 and Fields 1 and 4 is a function of ground conditions rather than a genuine distribution.



## 3. DESK-BASED ASSESSMENT

#### 3.1 Aims

An archaeological desk-based assessment is an assessment of the known or potential archaeological resource within a given area, consisting of a collation of existing archaeological, historical and topographical information in order to identify the likely extent, character and quality of the known or potential archaeological resource.

## 3.2 Methodology

This desk-based assessment was carried out according to the Institute of Field Archaeologists' *Standard and Guidance for Archaeological Desk-Based Assessments* (IFA 1999). It reviews the available documentary, cartographic and archaeological evidence for land within the Study Area (Figure 4). The limit of the Study Area extends for 500m from each side of the Development Area.

During the preparation of this document, the following sources of information were pursued. Where relevant information was available, this was incorporated into the assessment of the archaeological potential of the Development Area (Sections 4 and 5).

#### 3.2.1 Hertfordshire's Historic Environment Record (HER)

This is a database of archaeological information containing written and pictorial records of known archaeological monuments, previous archaeological investigations, find spots and buildings of historical and archaeological significance.

The HER contains information specific to the county of Hertfordshire. It is maintained by Hertfordshire County Council, Hertford.

#### 3.2.2 The National Monuments Record (NMR)

This is a database similar in content to the HER. However, it is a national database rather than a county-specific one. For a comprehensive assessment of the known archaeology of an area it is often helpful to search both the HER and the NMR.

The NMR is maintained by English Heritage, Swindon.

#### 3.2.3 Cartographic data

Early maps and other illustrations of a particular landscape can be a very productive area of research. Often they indicate dramatic changes in land use during the post-medieval and modern periods. This can be very helpful in appreciating how the archaeological resource may have been affected by the changes in farming practices and expansion of settlements that took place during the 19<sup>th</sup> and 20<sup>th</sup> centuries in particular.

The principal sources consulted in this case were Ordnance Survey, tithe and inclosure maps held by Hertfordshire Archives and Local Studies (HALS). The HALS is maintained by Hertfordshire County Council, at County Hall in Hertford.



## 3.2.4 Aerial Photographs

Given the right circumstances (light, crop conditions, moisture content of the soil and presence/absence of snow) aerial photographs can sometimes reveal crop and soil marks indicative of buried archaeological features.

The principal source consulted was the Hertfordshire HER.



## 4. ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

This section reviews the archaeological and historical background of the Study Area (Figure 4). The value of this background information in predicting the archaeological potential within the Development Area is reviewed in Section 6.

For the purpose of this document, the fields that fall within the Development Area (the footprint of the road) have been numbered 1-5 from west to east (Figure 1) in order to ease discussion. The fields within the wider Study Area (the area covered by the desk-based assessment) have not been numbered.

The archaeological remains identified within the Historic Environment Record (HER) and the National Monuments Record (NMR) are discussed below and listed in Appendices 2 and 3.

#### 4.1 Undated

Two features or sites have been recorded within Woodhall Park. These comprise maculae (cropmarks in the form of circular spots) (HER 7586) and linear earthworks (HER 10291). The maculae are located within a garden on the western side of the mansion at the centre of Woodhall Park. The linear earthworks are located in the eastern part of the parkland.

A linear cropmark (HER 7590) interpreted as a ditch, is located to the east of Bardolphs (Figures 4 and 6) between two ring ditch cropmarks (see Section 4.2).

## 4.2 Prehistoric (before AD43)

A number of possible prehistoric features have been recorded through aerial photography. These consist of ring ditches and a polygonal enclosure. The ring ditches are likely to represent the remains of late Neolithic or Bronze Age burial monuments.

One ring ditch (HER 7583) is located at the western end of the Study Area, a short distance to the south of the River Beane.

Two ring ditches (HER 7588, 7589) and a polygonal enclosure (HER 7587) are situated within close proximity of one another to the east of Bardolphspark Wood. They are situated on the west-facing slope of a dry valley feature that slopes down to the south-east towards the River Beane

Other ring ditches are situated at the south-eastern end of the Study Area, close to the Dane End Tributary brook on the east side of the A602, Ware Road. One is a single ring ditch (HER 4801) and soilmarks nearby (HER 10292) may represent the remains of two ring ditches.

## 4.3 Roman (AD43-c.AD450)

Evidence of activity during the Roman period comprises a road, possible sites of occupation in the western part of the Study Area and surface finds in the eastern and south-eastern parts of the Study Area.



The line of a Roman road (HER 4615) aligned broadly east to west, crosses the northern part of the Study Area. The road runs from the basilica at Verulamium, north-eastwards to Welwyn and then eastwards to join Ermine Street south of Braughing. Excavation of the road in the parish of Standon, outside of the Study Area (towards the eastern end of the road) revealed a thin gravelled surface in one trench and a well-made metalled surface of compacted flint with shallow drainage gutters to either side.

Within the Study Area, the course of the road is preserved in the line of a series of historic field boundaries (Figure 5). Cropmarks (HER 7665 and 7665) to the south of Watton-at-Stone, a short distance to the west of the Study Area, show the line of the road as two parallel ditches.

Evidence of occupation was observed at the Rye Field site (HER 6554) during the construction of the Watton-at-Stone bypass (see Section 4.6). Further evidence in the vicinity consists of tesserae, stone or tile fragments used in mosaics, found at Bardolphs (HER 2068).

A single Roman rosette brooch (HER 11269) was found to the south-west of Sacombe, in the eastern part of the study area. A surface scatter of Roman material (HER 11270) was recovered at the extreme south-eastern end of the Study Area.

#### 4.4 Medieval (c.AD450-AD1550)

Very little data relating to the medieval period exists within the Study Area.

Bardolphs (HER 11184) is a farmstead situated a short distance to the east of the village of Watton-at-Stone and directly south of Bardolphspark Wood. The farmstead is associated with the family of Isabella Bardulf, who held land in the parish in 1307. The present farm is likely to be on, or near, the site of the medieval farmstead. The lords of Bardolph held the parish of Watton, later known as the parish of Bardolphs.

#### 4.5 Post-medieval (AD1550-AD1900)

Various features, ranging in date from the beginning to the end of the post-medieval period, are known from the Study Area.

Woodhall Park was the site of a deer park (HER 6708) from at least the 16<sup>th</sup> century. In the 18<sup>th</sup> century (*c*.1780) it was developed into a landscaped park (HER 7344) surrounding a large brick-built mansion (now Heath Mount School), with ancillary buildings consisting of stables and gatehouse lodges. The park is listed in the English Heritage Register of Historic Parks and Gardens (GD1259, Grade II).

Two milestones are recorded on the course of the A602 Ware Road (within the Study Area). HER 12992 is situated outside Woodhall Park, a short distance to the west of the junction with the Whempstead Road. It is recorded as being almost hidden in the grass verge outside the perimeter wall of Woodhall Park. The other milestone (HER 5065) is situated on the eastern side of the road opposite the west entrance into Woodhall Park and Burr's Green Farm. It is made of stone and measures *c*.61cm by 61cm. On the back, in an excellent state of preservation, is the inscription: "Repaired by a Voluntary Subscription from the Inhabitants of Ware 1751".



The farm buildings that form the western side of the cluster of buildings at Bardolphs appear to belong to a planned farm (HER 11171).

## 4.6 Archaeological investigations

Evidence of occupation dating from the Roman period was recovered from the Rye Field site (HER 6554) located on the western limit of the Study Area. The site was investigated by the Welwyn Archaeological Society in 1984 during a rescue excavation undertaken during the construction of the Watton-at-Stone Bypass. The evidence is summarised in a brief unpublished report prepared by Tony Rook in 1984. The *in situ* archaeological deposits were located within a small area of *c*.15m by 12m. Structural evidence comprised, a 'corn dryer', a small rectangular stone platform and possible floor layers composed of chalk or cobbles.

Artefacts recovered include pottery, an enamelled brooch, lava quern and coins. More than 700 coins were recovered by metal detecting from ploughsoil close to the site. A large proportion of the coins from both the excavation and the plough soil appeared to date from the 4<sup>th</sup> century AD.



### 5. CARTOGRAPHIC EVIDENCE

#### 5.1 Introduction

This section contains a discussion of selected historical maps illustrating the changes occurring from the 19<sup>th</sup> century to the modern period. Details of the maps discussed below are illustrated in Figures 5 and 6.

## 5.2 Map regression analysis

#### 5.2.1 Tithe Maps of Watton and Sacombe, 1839 (Figure 5)

The landscape at this time was very similar in character to that of the present day.

The land to the south of the Ware Road, west of the cross roads formed by the Ware Road and Sacombe Pound, was occupied by the landscaped parkland of Woodhall Park. The interior of Woodhall Park appears from the map evidence to have been relatively open parkland with discrete clusters of trees. Around the edges of the park, belts of trees formed a backdrop for the landscaped park and screened off the land beyond the park.

South-east of Woodhall Park, to the south of the Ware Road, the land around Burrs Green Farm was divided into a series of relatively small irregular-shaped fields and an area of woodland

To the north of the Ware Road, the landscape was divided into comparatively large rectilinear and polygonal fields. At this time, the field boundaries aligned east-west formed a nearly unbroken line where they followed the course of the former Roman road (HER 4615). With the exception of Bardolphspark Wood and some small copses, there were few trees on the north side of the Ware Road compared to the parkland to the south.

#### **5.2.2 Enclosure Maps 1851**

The medieval landscape was altered considerably by the enclosure of the common fields in the later 18<sup>th</sup> and early 19<sup>th</sup> centuries. No enclosure map survives for Watton-at-Stone. However, the Bengeo enclosure map (dated 1851) includes the parishes of Sacombe and Stapleford. It does not show any plots of land that fall within the Study Area suggesting that common land in Sacombe had already been enclosed when the map was produced.

## 5.2.3 1st and 2nd Edition Ordnance Survey Maps, 1880 and 1898 (Figure 6)

Many of the boundaries established by the early 19<sup>th</sup> century remained unchanged during this period. The most significant changes consist of the realignment of the Ware Road, and the enlargement of Woodhall Park and modifications to the road network.

The realignment of the Ware Road affected the section of road between the access track to Sacombe Hill Farm and a position close to the south-eastern limit of the current Study Area. Prior to the work, the road followed an irregular line formed by



the boundary of Woodhall Park and fields to the north of Burrs Green Farm. The line of the road was straightened by moving it a short distance towards the north-east.

The modification of the Ware Road appears to have been connected with, or to have enabled changes to, the eastern end of the Woodhall Park estate. The boundary of the park was extended, cutting across fields to the north of Burrs Green Farm. As part of the changes, a small road or track that ran south-eastwards from a crossroads with Ware Road and Sacombe Pound towards Stapleford was diverted to the south of Burrs Green Farm, keeping it outside of the new park boundary.

One other minor modification to the road network is visible. The line of Whempstead Road was altered and a right-angled bend was removed, straightening the section of the road where it joins the Ware Road.

Only small modifications to the pattern of field boundaries occurred. These involved the removal of a few of the smaller sub-divisions within the larger field pattern.

The farmstead at Bardolphs shows some changes possibly connected to changing fashions or social aspirations. The pattern of paths and trees, mapped in plots located directly south-east of the house, suggests that this was a landscaped garden. In the field to the east of the farmstead, field sub-divisions were removed and an area of unenclosed tree planting suggests that parkland was established in this field.

Other details shown on these maps include quarries adjacent to the Ware Road, labelled "Old Gravel Pit", "Old Chalk Pit" and "Old Chalk Pit and Lime Kiln". These features are not shown on the maps of 1839 but appear to have been disused by the later part of the 19<sup>th</sup> century. At this time, the access to the chalk pit and lime kiln off the track to Sacombe Hill Farm was occupied by two buildings within a small enclosed area.

### 5.2.4 3rd Edition Ordnance Survey Map, 1923

Little of note has changed in the layout of the landscape by the 1920s.

The buildings noted in the access to the chalk pit and lime kiln on the maps of the 1890s has disappeared by this time.

#### 5.2.5 Modern Ordnance Survey Map, 2000 (Figure 1)

The modern map shows very few changes from the situation in the 1920s. The most significant change is the creation of the Watton-at-Stone bypass at the extreme west end of the Study Area.

The landscape to the south of the Ware Road has remained largely unchanged. To the north, the pattern of field boundaries has changed slightly. Most significantly, the removal of some hedged boundaries to the south-east and south-west of Bardolphspark Wood is apparent, resulting in amalgamation into larger units.

#### 5.3 Pre-1845 hedgerows and boundaries of historic interest

The *Hedgerows Regulations 1997 Guide to the Law and Good Practice* (DEFRA 2002) states in section 2.1:



'Hedgerows are distinctive features of the countryside. As the most traditional type of field boundary in many areas, hedgerows, and the field banks on which they often run, are of considerable historic interest. Many date back to the first enclosure of the land and may incorporate other historic features such as ancient earthworks, parish or old property boundaries. They thus contribute positively to the character and interest of the landscape.'

The Guide defines important historic hedgerows as features that:

- Mark the boundary, or part of the boundary, of a historic land unit.
- Are included in the schedule of monuments compiled by the Secretary of State.
- Are recorded in a Sites and Monuments Record.
- Form an integral part of a pre-1845 field system, or a pre-1870 enclosure field system.

Comparison of the Tithe maps of 1839 (Figure 5) and modern maps shows that a number of boundaries dating from before 1845 still exist. These are shown in Figure 7. This figure includes field boundaries and roadside boundaries that are believed to survive as complete or partial hedged boundaries, in addition to areas of woodland where the boundary of the wood predates 1845.

The majority of the existing historic boundaries occur in the area to the north of the Ware Road. The lack of historic boundaries to the south of the road reflects the fact that much of the land on this side of the road has been an area of open landscaped parkland from the 18<sup>th</sup> century onwards.

### 5.4 Historic landscape characterisation

The map regression analysis demonstrates that the landscape within the Study Area has seen relatively few changes since the early 19<sup>th</sup> century.

The Roman road (HER 4615) is the earliest feature that had a significant impact on the layout of the landscape. The survival of this feature on 19<sup>th</sup> century maps as a green lane and as a series of footpaths, suggests that it persisted into the post-medieval period due to its continued use as a path or track during the medieval period.

The other significant feature in the formation of the landscape is the parkland to the south of the Ware Road. It has existed as a deer park from at least the 16<sup>th</sup> century (HER 6708). Its influence on the landscape continued into the 18<sup>th</sup> century as it became part of the developing fashion for landscaped parkland (HER 7344).

During the 19<sup>th</sup> century, the landscape is characterised by the continued development of land to the south of the Ware Road as a country estate and some consolidation of fields to the north of the road into larger arable units.

The 20<sup>th</sup> century saw the construction of the Watton-at-Stone bypass and the continued removal of field boundaries to form larger units, more suited to mechanised farming.



#### 6. SYNTHESIS

The research into the archaeological and historical background of the Development Area and the wider Study Area has demonstrated that the local landscape is characterised by a variety of archaeological evidence. This includes possible prehistoric burial monuments and an enclosure, Roman settlement, surface artefacts and a road, a possible medieval homestead and pottery concentration and evidence of post-medieval activities. An analysis of historic map data has demonstrated that a number of pre-1845 boundaries survive within the Study Area.

The majority of the known archaeological sites lie within the wider Study Area, with a lesser density of archaeological features within the Development Area itself. The Study Area as a whole was discussed in Sections 4 and 5. This section focuses on how that background information reflects on the archaeological potential of the Development Area itself.

#### 6.1 Limitations of non-intrusive evaluation

Although each piece of non-intrusive fieldwork has provided valuable information on the location and extent of archaeological remains within the scheme boundaries, it is important to consider the limitations of this type of evidence. The potential limitations of fieldwalking and desk-based assessment are discussed below.

### 6.1.1 Limitations of fieldwalking

Artefact concentrations often indicate the location of past human activity, for example the medieval pottery in Field 5. However, the reliability of the evidence is often dependent on the conditions at the time of fieldwalking. In the case of the present survey, the crop growth in Fields 1 and 4 partially obscured the ground surface. By contrast, the ploughed and weathered condition of Field 5 resulted in good visibility of artefacts. These differences are reflected in the densities of material from these different areas, with far greater numbers of artefacts recovered from Field 5.

Fieldwalking can sometimes produce results that do not reflect the presence of subsurface archaeological deposits. Factors including the durability of the artefact (pottery fabrics dominated by grog and shell inclusions may not survive), depth and regularity of ploughing, soil type, nature of rubbish disposal in antiquity and presence of alluvial deposits overlying archaeological remains can all play a part. Therefore, where artefact concentrations are absent within a study area, it cannot be categorically stated that there are no sub-surface archaeological deposits.

#### 6.1.2 Limitations of desk-based assessment

Whilst a useful starting point, desk-based assessment is of limited value as a predictive tool for the precise location and characterisation of sub-surface archaeological deposits. It should be noted that archaeological features, particularly those of prehistoric to early medieval date, often survive below ground, without any visible trace at the surface.

## 6.2 Summary of the archaeological potential of the Development Area

All of the fields discussed below were examined in the desk-based assessment for records of known archaeological remains and evidence from historic maps.



Fieldwalking could not be undertaken in Fields 2 and 3, while crop growth in Fields 1 and 4 had a negative affect on artefact recovery.

#### Field 1

Within the Development Area, fieldwalking recovered a small quantity of worked flint along with pottery and CBM dated to the post-medieval and modern periods. The presence of a post-medieval milestone (HER 12992) was noted in the desk-based assessment.

Beyond the Development Area, there are a number of known archaeological remains at a distance of *c*.100m to 300m. These include ring ditches and a polygonal enclosure of probable prehistoric date (HER 7588, 7589 and 7587), a Roman road and possible Roman building remains (HER 4615/2068) and medieval/post-medieval occupation at Bardolphs (HER 11184). Historic maps indicate the former location of a small gravel pit just to the north of the western end of the Development Area.

#### Field 2

This field was unsuitable for fieldwalking and no records of known archaeological remains were found in the desk-based assessment.

#### Field 3

This field was unsuitable for fieldwalking and no records of known archaeological remains were found in the desk-based assessment.

#### Field 4

Fieldwalking recovered a small amount of worked flint. Cartographic evidence shows that a chalk pit and lime kiln were established on the northern edge of the Development Area during the post-medieval period.

#### Field 5

Evidence from within the Development Area consists of artefacts recovered by fieldwalking. There are no records of known archaeological remains from within the Development Area, although a Roman brooch (HER 11269) was recovered from the field a short distance beyond the Development Area. The material recovered by fieldwalking comprises worked flint, Roman pottery, medieval pottery in addition to pottery and ceramic building material dated to the post-medieval and modern periods.

The worked flint largely comprised flakes; it showed no strong clusters. The Roman pottery occurred in very small quantities with a possible cluster at extreme northeastern corner of the Development Area. A small cluster of medieval pottery was recovered from the same location.

The evidence suggests that the potential for sub-surface archaeological remains dating to the prehistoric period is low whilst the potential for remains of the Roman and medieval periods is moderate.

#### **Summary**

On the basis of the work undertaken to date, the potential for finding archaeological remains within the Development Area is summarised below.



Period	Potential for finding archaeological remains (Low, Moderate, High)	Relative significance of archaeological remains on a regional/national level (Low, Moderate, High)
Prehistoric (before AD43)	Low	High
Roman (AD43-c.AD450)	Moderate	High
Medieval (c.AD450- AD1550)	Moderate	High
Post-medieval (AD1550-AD1900)	High	Low
Modern (AD1900-present)	High	Low

## 6.3 Impact of proposed development

Any development (such as road and compound construction) involving groundworks is likely to have a significant impact on any archaeological remains that may still exist within the Development Area. This impact can be mitigated by appropriate archaeological works.

## 6.4 Confidence rating for the current study

The present study has presented evidence indicating that the Development Area may contain significant archaeological remains.

When considering the results of the fieldwalking survey it should be remembered that ground conditions in Fields 1 and 4 were not optimal due to the advance state of the crops in these fields. The effects of this are clear when the results are compared with those from Field 5.

It must be stressed that that much remains unknown. A non-intrusive survey clearly has only limited value as a predictive tool for the precise location and characterisation of sub-surface archaeological deposits. Therefore, hitherto undiscovered archaeological remains may be present within the Development Area. These will only be detectable through intrusive archaeological evaluation.



### 7. BIBLIOGRAPHY

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- IFA's Codes of Conduct, Standards and Guidance for Archaeological Field Evaluation.
- IFA Guidelines for Finds Work.



## 8. APPENDICES

## 8.1 Appendix 1 – Fieldwalking summary table

As there is no county-wide pottey type series for Hertfordshire, fabrics have been identified in accordance with the Bedfordshire Ceramic Type Series, currently maintained by Albion Archaeology on behalf of Bedfordshire County Council.

Field Number	Find type	Bag No.	Number of sherds/ or fragments	Weight (g)
	Worked flint			
4	Retouched flake (possibly an unfinished scraper)	1	1	19
4	Core fragment	2	1	6
4	Flake	3	1	6
4	Retouched flake	4	1	7
1	Flake	5	1	4
1	Flake	6	1	6
1	Flake	8	1	1
5	Core fragment	37	1	24
5	Flake	80	1	4
5	Flake	95	1	2
5	Flake	97	1	4
5	Utilised flake	102	1	8
5	Retouched flake (possibly an unfinished arrowhead)	106	1	6
5	Flake	118	1	6
5	Small blade	119	1	1
5	Flake	121	1	1
5	Scraper	127	1	35
5	Flake	129	1	3
5	Flake	141	1	3
5	Flake	142	1	8
5	Flake	149	1	4
	Pottery: Roman			
5	Fine orange sand (type R05B): C2+	46	1	11
5	Micaceous greyware (type R06D): C2+	90	1	2
5	Grog and sand greyware (type R06F): C2+	91	1	4
5	Oxford colour coat (type R11D): C3-4	160	1	2
5	Oxford oxidised ware (type R11): C3-4	161	1	3
5	Hadham oxidised ware (type R22A): C2+	163	1	11
5	Fine greyware (type R06C): C2+	169	1	5
	Pottery: medieval			
5	Hertfordshire greyware (type C60): C12-13	164	1	7
5	Hertfordshire greyware (type C60): C12-13	165	1	4
5	Hertfordshire greyware (type C60): C12-13	166	1	14
5	Hertfordshire greyware (type C60): C12-13	167	1	6
5	Hertfordshire greyware (type C60): C12-13	168	1	6
5	Hertfordshire greyware (type C60): C12-13	170	1	2
5	Hertfordshire greyware (type C60): C12-13	171	1	2



5 C 5 E 5 C 5 C 5 F 5 F 5 F 5 F 5 F 5 F 5 F 5 F	Solazed red earthenware (type P01): C17-18 Solazed red earthenware (Frechen type P25): C16-17 Solazed red earthenware (Frechen type P01): C17-18 Solazed red earthenware (type P01): C17-18 Solazed red earthenw	11 34 73 84 96 100 122 144 154 13 14 15 17 18 19	1 1 1 1 1 1 1 1 1 3 1 1	55 4 25 4 3 50 21 8 7 16 37 11
5 C 5 C 5 E 5 C 5 C 5 C 5 C 5 C 6 S 6 C 7 P 5 F 5 F 5 F 5 F 5 F 5 F 5 F 5 F	Glazed red earthenware (type P01): C17-18 German stoneware (Frechen type P25): C16-17 Pottery: modern Glower pot	73 84 96 100 122 144 154 13 14 15 17 18	1 1 1 1 1 1 1 1 3 1	255 44 33 500 211 88 7
5 C 5 B 5 C 5 C 5 C 5 E 5 C 5 F 5 F 5 F 5 F 5 F 5 F 5 F 5 F	Glazed red earthenware (type P01): C17-18 Grown salt-glazed stoneware (type P36A): C17-18 Glazed red earthenware (type P01): C17-18 German stoneware (Frechen type P25): C16-17 Cottery: modern Clower pot	73 84 96 100 122 144 154 13 14 15 17 18	1 1 1 1 1 1 1 1 3 1	255 44 33 500 211 88 7
5 E S S S S S S S S S S S S S S S S S S	Blackware (type P14): C17  Blazed red earthenware (type P01): C17-18 Blazed red earthenware (type P01): C17-18 Brown salt-glazed stoneware (type P36A): C17-18 Blazed red earthenware (type P01): C17-18 Blazed red earthenware (type P01): C17-18 Berman stoneware (Frechen type P25): C16-17  Pottery: modern Blower pot	84 96 100 122 144 154 13 14 15 17 18	1 1 1 1 1 1 1 3 1	44 33 500 211 88 77 160 37
5 C 5 C 5 E 5 C 5 C 5 F 5 F 5 F 5 F 5 F 5 F 5 F 5 F	Glazed red earthenware (type P01): C17-18 Glazed red earthenware (type P01): C17-18 Grown salt-glazed stoneware (type P36A): C17-18 Glazed red earthenware (type P01): C17-18 German stoneware (Frechen type P25): C16-17 Cottery: modern Glower pot	96 100 122 144 154 13 14 15 17	1 1 1 1 1 3 1	3 50 21 8 7 16 37
5 C 5 B 5 C 5 C 5 C 5 F 5 F 5 F 5 F 5 F 5 F 5 F 5 F	Glazed red earthenware (type P01): C17-18 Grown salt-glazed stoneware (type P36A): C17-18 Glazed red earthenware (type P01): C17-18 German stoneware (Frechen type P25): C16-17 Cottery: modern Glower pot	100 122 144 154 13 14 15 17	1 1 1 1 3 1	50 21 8 7 16 37
5 E E 5 C C 5 C C F E 5	Brown salt-glazed stoneware (type P36A): C17-18 Glazed red earthenware (type P01): C17-18 German stoneware (Frechen type P25): C16-17 Pottery: modern Flower pot	122 144 154 13 14 15 17 18	1 1 1 3 1	21 8 7 16 37
5 CC 5 CC 5 CC 7 P S S F S S S F S S S F S S S F S S S F S S S F S S S F S S S F S S S F S S S F S S S F S S S F S S S F S S S F S S S F S S S F S S S F S S S F S S S F S S S S F S S S S F S S S S F S S S S S S S S S S S S F S	Glazed red earthenware (type P01): C17-18 German stoneware (Frechen type P25): C16-17 Pottery: modern Flower pot	144 154 13 14 15 17 18	1 1 3 1	16 37
5 C P 5 F 5 F 5 F 5 F 5 F 5 F 5 F 5 F 5 F 5 F	German stoneware (Frechen type P25): C16-17  Pottery: modern  Flower pot	154 13 14 15 17 18	1 1 3 1	16 37
5 F 5 F 5 F 5 F 5 F 5 F 5 F 5 F 5 F 5 F	Pottery: modern Flower pot	13 14 15 17 18	1 3 1	16
5 F 5 F 5 F 5 F 5 F 5 F 5 F 5 F 5 F 5 F	Clower pot	14 15 17 18	3 1 1	37
5 F 5 F 5 F 5 F 5 F 5 F 5 F 5 F 5 F 5 F	Flower pot Flower pot Flower pot Flower pot Flower pot Flower pot	14 15 17 18	3 1 1	37
5 F 5 F 5 F 5 F 5 F 5 F 5 F 5 F 5 F 5 F	Flower pot Flower pot Flower pot Flower pot Flower pot	15 17 18	1	
5 F 5 F 5 F 5 F 5 F 5 F 5 F 5 F 5 F 5 F	Flower pot Flower pot Flower pot Flower pot	17 18	1	11
5 F 5 F 5 F 5 F 5 F 5 F 5 F 5 F 5 F 5 F	Flower pot Flower pot Flower pot Flower pot	18		
5 F 5 F 5 F 5 F 5 F 5 F 5 F 5 F 5 F	lower pot lower pot			4
5 F 5 F 5 F 5 F 5 F 5 F 5 F 5 F	lower pot	19	2	29
5 F 5 F 5 F 5 F 5 F 5 F	lower pot		5	67
5 F 5 F 5 F 5 F 5 F	*	20	2	8
5 F 5 F 5 F 5 F	lower pot	21	2	12
5 F 5 F 5 F	Tower pot	22	4	54
5 F 5 F	Tower pot	23	2	3
5 F	lower pot	24	1	22
	Tower pot	26	1	11
5 F	Tower pot	27	1	75
	Tower pot	28	1	6
	lower pot	29	2	19
	Tower pot	30	1	8
	Tower pot	31	2	5
	lower pot	32	1	3
	lower pot	33	1	2
	Tower pot	35	1	99
	Nower pot	38	1	5
	Tower pot	39	1	7
	Tower pot	41	2	13
	Tower pot	42	5	61
	lower pot	43	7	41
	Tower pot	44	1	13
	lower pot	45	1	4
	lower pot	47	1	22
	lower pot	48	1	13
	lower pot	50	1	14
	lower pot	51	1	4
	lower pot	52	1	8
	lower pot	53	1	8
	lower pot	54	2	12
	lower pot	55	1	2
		56	4	20
5 F	lower pot	301	4	111



	Pottery: modern			
5	Flower pot	59	1	42
5	Flower pot	60	1	27
5	Flower pot	61	2	17
5	Flower pot	67	1	6
5	Flower pot	86	1	8
5	Flower pot	111	1	20
5	Flower pot	113	1	10
5	Flower pot	115	1	19
5	White salt-glazed stoneware (type P37): C18	132	1	34
5	Flower pot	136	1	8
5	Flower pot	140	1	5
5	Flower pot	146	1	4
5	Flower pot	150	1	4
5	Flower pot	157	1	7
5	Flower pot	172	1	26
	Pottery: undiagnostic			
5	Miscellaneous oxidised sandy (Roman or medieval)	16	1	5
	Ceramic building material: medieval/post-			
	medieval			
1	Brick	10	1	36
5	Flat roof tile	40	1	72
5	Flat roof tile	49	1	26
5	Flat roof tile	58	1	23
5	Flat roof tile	61	2	76
5	Flat roof tile	62	1	20
5	Flat roof tile	63	1	17
5	Flat roof tile	64	1	23
5	Flat roof tile	65	1	41
5	Flat roof tile	66	2	50
5	Flat roof tile	68	1	25
5	Flat roof tile	69	1	59
5	Flat roof tile	70	2	49
5	Flat roof tile	71	1	45
5	Flat roof tile	73	1	13
5	Flat roof tile	74	1	12
5	Flat roof tile	76	1	48
5	Brick	77	1	418
5	Flat roof tile	78	1	31
5	Flat roof tile Flat roof tile	79 81	1	37 24
			1	
5	Flat roof tile Flat roof tile	82	1	12
5		83 87	1	50 15
5	Flat roof tile Flat roof tile	99	1	13
5	Flat roof tile  Flat roof tile	101	1	13
5	Flat roof tile  Flat roof tile	101	1	22
5	Flat roof tile  Flat roof tile	103	1	22
5	Flat roof tile	104	1	18
3	That foot the	103	1	18



	Ceramic building material: medieval/post-medieval			
5	Flat roof tile	109	1	12
5	Flat roof tile	114	1	33
5	Flat roof tile	117	1	40
5	Curved / ridge tile	120	1	23
5	Flat roof tile	123	1	12
5	Flat roof tile	126	1	55
5	Flat roof tile (+ nail hole)	130	1	28
5	Flat roof tile	131	1	47
5	Flat roof tile	133	1	13
5	Flat roof tile	134	1	9
5	Flat roof tile	139	2	38
5	Brick	145	1	136
5	Flat roof tile (+ nail hole)	147	1	56
5	Flat roof tile	152	1	24
	Ceramic building material: modern			
1	Pantile	7	1	15
1	Brick	9	1	308
1	Flat roof tile	12	1	5
5	Pantile	21	1	8
5	Pantile	53	1	16
5	Flat roof tile	59	1	36
5	Flat roof tile	72	1	15
5	Flat roof tile	110	1	13
5	Pantile	112	1	16
5	Flat roof tile	124	1	11
5	Flat roof tile	125	1	18
5	Flat roof tile	128	2	73
5	Brick	135	1	165
5	Pantile	137	1	28
5	Flat roof tile	138	1	18
5	Flat roof tile	143	1	5
5	Flat roof tile	159	1	40
	Ceramic building material: undiagnostic	109	-	
5	Fragment	85	1	4
5	Flat roof tile	107	1	20
5	Flat roof tile	116	1	5
5	Flat roof tile	148	1	15
5	Fragment	153	1	1
	Other finds	133	-	
5	Cast iron grate or boot scraper fragment	93	1	354
5	Coal	89	1	2
5	Glass slag	94	1	4
5	Land drain	25	1	25
5	Land drain	88	1	10
5	Land drain	92	1	45
5	Land drain	155	1	28
5	Land drain	156	1	53



5	Land drain	158	1	11
5	Land drain	162	1	15

## 8.2 Appendix 2 – Buildings and sites listed on the Hertfordshire HER

HER No	Description of site/find	Period
2068	Roman tesserae, Bardolphs Farm, Watton-at-Stone	Roman
4615	Roman Road. Also recorded as NMR 1044928 (Scheduled	Roman
4013	monument No 29390).	
4801	Cropmark of a ring ditch, east of Ware Road, Sacombe	Prehistoric
5065	Milestone, opposite Burrs Green, Sacombe	Post-medieval
6554	Roman occupation, Rye Field site, Watton-at-Stone bypass	Roman
6708	Site of deer park, Woodhall Park	Post-medieval
7244	Woodhall Park, 18 <sup>th</sup> century park and 20 <sup>th</sup> century garden,	Post-medieval
7344	Watton-at-Stone	
7583	Cropmark of a ring ditch, Watton-at-Stone	Prehistoric
7586	Cropmarks of maculae, Woodhall Park, Watton-at-Stone	Undated
7587	Cropmarks of a polygonal enclosure, east of Bardolphs,	Prehistoric
/38/	Watton-at-Stone	
7588	Cropmarks of a ring ditch, east of Bardolphs, Watton-at-	Prehistoric
7300	Stone	
7589	Cropmarks of a ring ditch, east of Bardolphs, Watton-at-	Prehistoric
1309	Stone	
7590	Cropmarks of ditch, east of Bardolphs, Watton-at-Stone	Undated
10291	Linear earthworks, Woodhall Park, Sacombe	Undated
10292	Soilmarks east of Ware Road, Sacombe	Prehistoric
11171	Probable planned farm, Bardolphs, Watton-at-Stone	Post-medieval
11184	Bardolphs, Watton-at-Stone	Med/post-medieval
11269	Roman rosette brooch, south-west of Sacombe	Roman
11270	Roman material, west of Riding Wood, Sacombe	Roman
12992	Milestone, outside Woodhall Park, Watton-at-Stone	Post-medieval

## 8.3 Appendix 3 – Sites listed on the National Monuments Record

NMR No	Description of site/find
367516	Roman coins found at Watton. Location uncertain, found during the 18 <sup>th</sup> century.
367545	"Neolithic arrow-heads and celts" Watton. Location uncertain, found before 1905
367553	Woodhall Park, 18 <sup>th</sup> C country house, replacing an earlier building.
540393	Woodhall Park, landscape parkland. Deer park in 16 <sup>th</sup> century subsequently
	landscaped in 18 <sup>th</sup> century.
1044928	Roman road, Roman road number RR21. A Roman road and 17 large pits believed to be quarries for road. A section of the road in the parish of Standon is scheduled (Scheduled monument No 29390).



## 8.4 Appendix 4 – List of cartographic sources

Location	Description
HALS	1 <sup>st</sup> Ed. Ordnance Survey, 25 inch, Sheet XXI-10, 1881
HALS	1 <sup>st</sup> Ed. Ordnance Survey, 25 inch, Sheet XXI-11, 1880
HALS	2 <sup>nd</sup> Ed. Ordnance Survey, 25 inch, Sheet XXI-14, 1898
HALS	2 <sup>nd</sup> Ed. Ordnance Survey, 25 inch, Sheet XXI-15, 1898
HALS	3 <sup>rd</sup> Ed. Ordnance Survey, 25 inch, Sheet XXI-10, 1923
HALS	3 <sup>rd</sup> Ed. Ordnance Survey, 25 inch, Sheet XXI-11, 1923
HALS	3 <sup>rd</sup> Ed. Ordnance Survey, 25 inch, Sheet XXI-14, 1923
HALS	3 <sup>rd</sup> Ed. Ordnance Survey, 25 inch, Sheet XXI-15, 1923
HALS	Tithe map, Sacombe Parish, 1839
HALS	Tithe map, Watton Parish, 1839
HALS	Enclosure map of Bengeo, Sacombe and Stapleford, 1851

## 8.5 Appendix 5 – Development plan framework

The following information is the relevant part of Hertfordshire Structure Plan Review 1991 - 2011 (Hertfordshire County Council 1992). This document replaced the 1986 Structure Plan Review incorporating the 1991 Approved Alterations, which was approved by the Secretary of State for Environment on 23 June 1992 and became operative on 14 July 1992.

This is available at:

http://www.hertsdirect.org/infobase/docs/pdfstore/structureplanfull.pdf

#### 8.5.1 Scheduled Ancient Monuments and Other Archaeological Remains

- 354. Buildings, monuments and landscapes of historic and archaeological significance make a major contribution to the character and quality of the urban and rural environment of Hertfordshire. Many elements of Hertfordshire's historic environment are irreplaceable and are of national and international significance and as well as contributing to a local sense of identity.
- 355. Man-made environmental assets comprise a broad range of features and remains and include historic buildings, structures, sites, buried deposits and landscape features of historic and archaeological interest. These assets can be appreciated through tourism, education and leisure activities, and have strong links with landscape character.
- 356. The principal record of Hertfordshire's archaeological heritage is the County Sites and Monuments Record (SMR) which contains a wide range information. The SMR and specialist advice needed to interpret is contents will underpin any initiatives to conserve and enhance Hertfordshire's archaeological heritage. This process will also be informed by developing intelligence on the landscape archaeology of Hertfordshire.
- 357. Some archaeological sites are afforded statutory protection as Scheduled Ancient Monuments (SAMs), however the majority of archaeological remains, many of which are of national importance, are not scheduled and require protection and management by other means, including the planning process. PPG16 on 'Archaeology and Planning' sets out



guidance on the protection of this aspect of the historic environment and, like PPG9 on 'Nature Conservation', advocates a hierarchical approach to the conservation of remains according to their degree of importance.

#### 8.5.2 Listed Buildings

358. PPG15 on 'Planning and the Historic Environment' sets out a full statement of Government policies for the identification, protection and enhancement of historic buildings. These buildings are included on the statutory lists, published by the Department of Culture, Media and Sport on the basis of their special architectural or historic interest. They make a major contribution to the historic, architectural and visual character of landscapes and Hertfordshire Structure Plan Review 1991 - 2011, adopted April 1998 108 townscapes in the county. In addition they contribute to the prosperity of the local economy through tourism and leisure.

359. There are over 8,000 statutorily listed buildings in the County. A substantial number are timber-framed and date from the medieval period when Hertfordshire had an abundance of forests. Many of the listed buildings in the countryside are or were farm buildings including barns, stables, granaries and dovecotes. In order to retain their special historic and architectural character the preferred use for such structures is for them to continue in their original use, thereby providing a link with the agricultural past. Where this is not possible, conversion to small scale commercial, industrial, recreation or tourism use may be acceptable.

360. Hertfordshire contains several hundred country houses which reflect the impact of the gentry between the sixteenth and nineteenth centuries. They tend to occupy sites of historic importance and are important as features in the countryside. Some, like Moor Park, Hatfield and Knebworth Houses, were the country seats of the nobility and are surrounded by pleasure gardens and parks. Others, less ambitious in size, have no estate attached. The latter, with only gardens and ornamental grounds, may have served as a Dower Houses, hunting lodges, or the houses of the stewards, built and maintained from the resources of the estate. In addition, the proximity of rural Hertfordshire to London has meant that for centuries many people, having grown rich in trade or the professions, have purchased estates in the County and settled down as landowners.

361. Many country houses are under threat through demolition, change of use, or breaking up of the estate land as a result of economic or social changes. The paramount considerations for preservation are the aesthetic importance of these houses in their setting, and their value as part of the historical and cultural heritage of the nation. They provide physical evidence of the social history and domestic life of certain levels of society, frequently over several centuries. The buildings themselves and their attendant gates, lodges, stables and garden buildings are monuments to fine craftsmanship as well as to great architects and the development of domestic architecture.

362. The Hertfordshire Building Preservation Trust provides specialist advice to assist in the preservation and well being of buildings and their surroundings.



#### 8.5.3 Conservation Areas

- 363. Hertfordshire is well endowed with many historic towns and villages. These owe their character mainly to their historic buildings both individually, and in groups, together with the spaces that they enclose. These irreplaceable buildings are a vital part of the county's architectural heritage.
- 364. Many are within the 170 Conservation Areas which have been designated by local planning authorities in accordance with the duties imposed under Section 69 of the Listed Buildings and Conservation Areas Act 1990. They range in scale from the large parts of town centres to parts of rural villages. In recent years the contribution made by the pioneers 11 'Change of Use of Country Houses', of the Garden City Movement and the first New Towns in Hertfordshire has been marked by the designation of Letchworth, Welwyn Garden City, and Stevenage New Town.
- 365. Designation introduces a general control over the demolition of unlisted buildings and provides the basis for policies designed to preserve or enhance all the aspects of character or appearance that define an area's special interest. District and borough councils also have a duty to review their areas from time to time to consider whether further designation of conservation areas is required.
- 366. The main responsibility for the designation, control of development within or affecting them, and the proposals for enhancing Conservation Areas also lies with the district and borough councils. The Hertfordshire Building Preservation Trust offers a specialist design and conservation service to the planning authorities, designers, developers, builders and members of the public.

#### 8.5.4 Historic Parks and Gardens

367. Historic Parks and Gardens contribute to the quality of the County's landscape reflecting cultural and horticultural ideas of their time. They also offer a resource for recreation, tourism and education and often provide outstanding settings for listed buildings. English Heritage has compiled a Register of Parks and Gardens of Special Historic Interest which are considered to be of national importance. Most of the 37 registered in Hertfordshire were artistically designed to complement country houses and to form their special setting. They include the work of Johannes Kip, Charles Bridgeman, Lancelot Brown, Richard Woods and Humphrey Repton. The Hertfordshire Building Preservation Trust works closely with the Hertfordshire Gardens Trust and Hertfordshire County Council to promote the preservation and maintenance of Parks and Gardens included on the Register and others.

368. Following survey work a list has been compiled of historic parks and gardens in Hertfordshire which may, on further investigation, also be worthy of inclusion on the English Heritage Register. These unregistered sites still fall within the remit of Policy 38 (under category x, which is distinguished from sites on the Register which are included under category iv).

#### 8.5.5 Sites with Historic Associations

369. In addition to buildings, sites and locations which merit protection and conservation



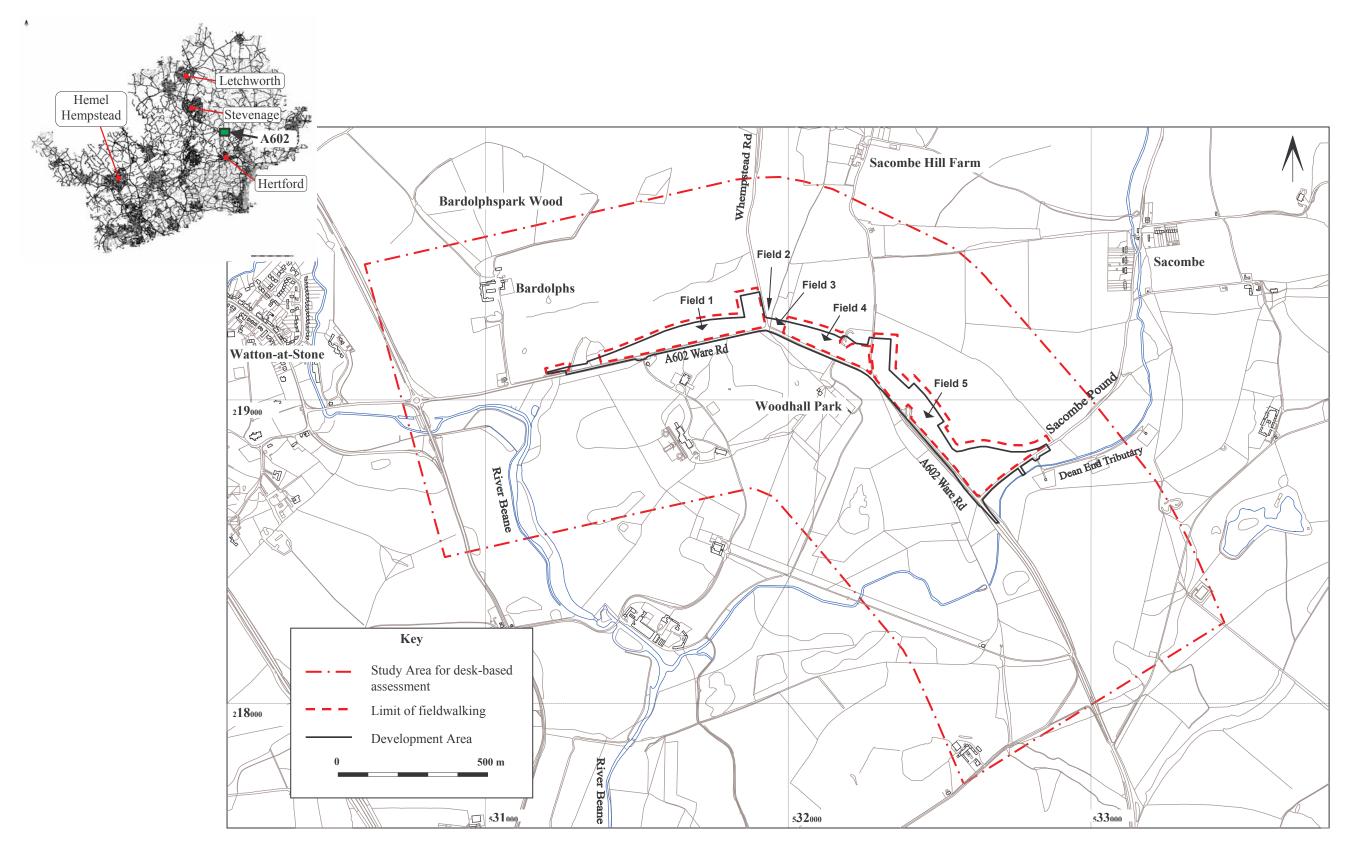
because of their integral physical architectural, nature conservation, archaeological or other interest and importance, there are others which have interest because of their historic associations. Such associations include birthplaces or homes of famous or important individuals and sites or locations of famous or important events. English Heritage, for example, has compiled a draft Register of Historic Battlefields which will be comparable in status with the Register of Parks and Gardens of Special Historic Interest.

# POLICY 38 CRITICAL CAPITAL AND OTHER IMPORTANT ENVIRONMENTAL ASSETS

Critical Capital and other important environmental assets as listed below will be given protection from development or other proposals which would cause loss, permanent damage or significant and irreversible change to those particular characteristics and features that define their special quality. The degree of protection given will be appropriate to status, according to their international, national or local importance. The maintenance and enhancement, where appropriate, of these assets will be encouraged.

- i) The Chilterns Area of Outstanding Natural Beauty;
- ii) Special Areas of Conservation, Special Protection Areas, National Nature Reserves, Ramsar Sites and Sites of Special Scientific Interest;
- iii) Local Nature Reserves, other nature reserves and other identified Wildlife Sites and Prime Biodiversity Areas;
- iv) Identified landscapes of high historic value, including Registered Parks and Gardens of Special Historical Interest;
- v) Regionally Important Geological/Geomorphological Sites (RIGS);
- vi) Species of fauna and flora protected by law or identified in the UK Biodiversity Action Plan as in need of particular conservation action;
- vii) Scheduled Ancient Monuments and other archaeological remains of both national and more local importance, and their setting;
- viii) Listed buildings and their settings and other buildings of architectural, archaeological or historic merit;
- ix) Conservation Areas:
- x) Unregistered historic parks and gardens, and their setting;
- xi) Sites with historic associations.







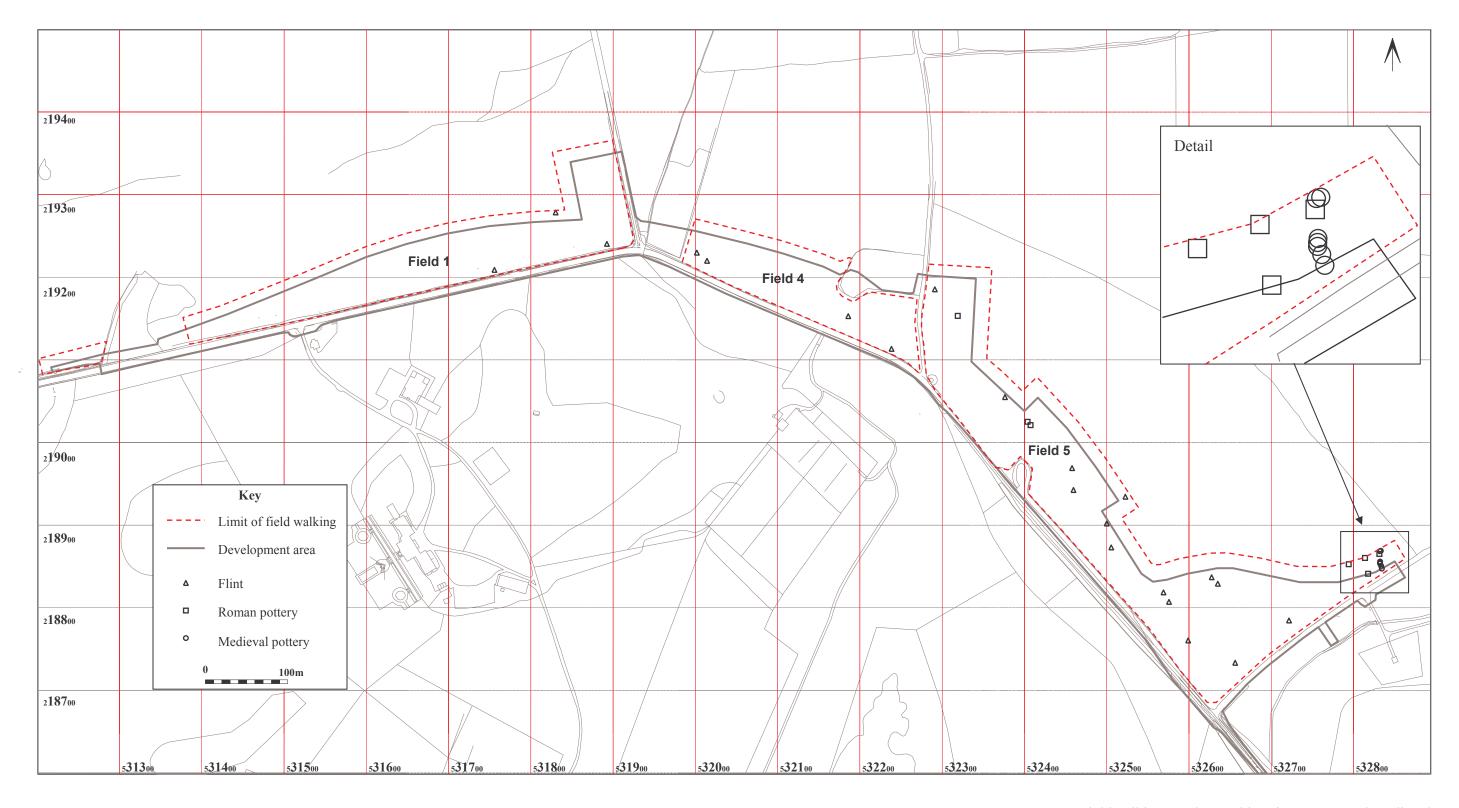


Figure 2: Fieldwalking results: Prehistoric, Roman and medieval
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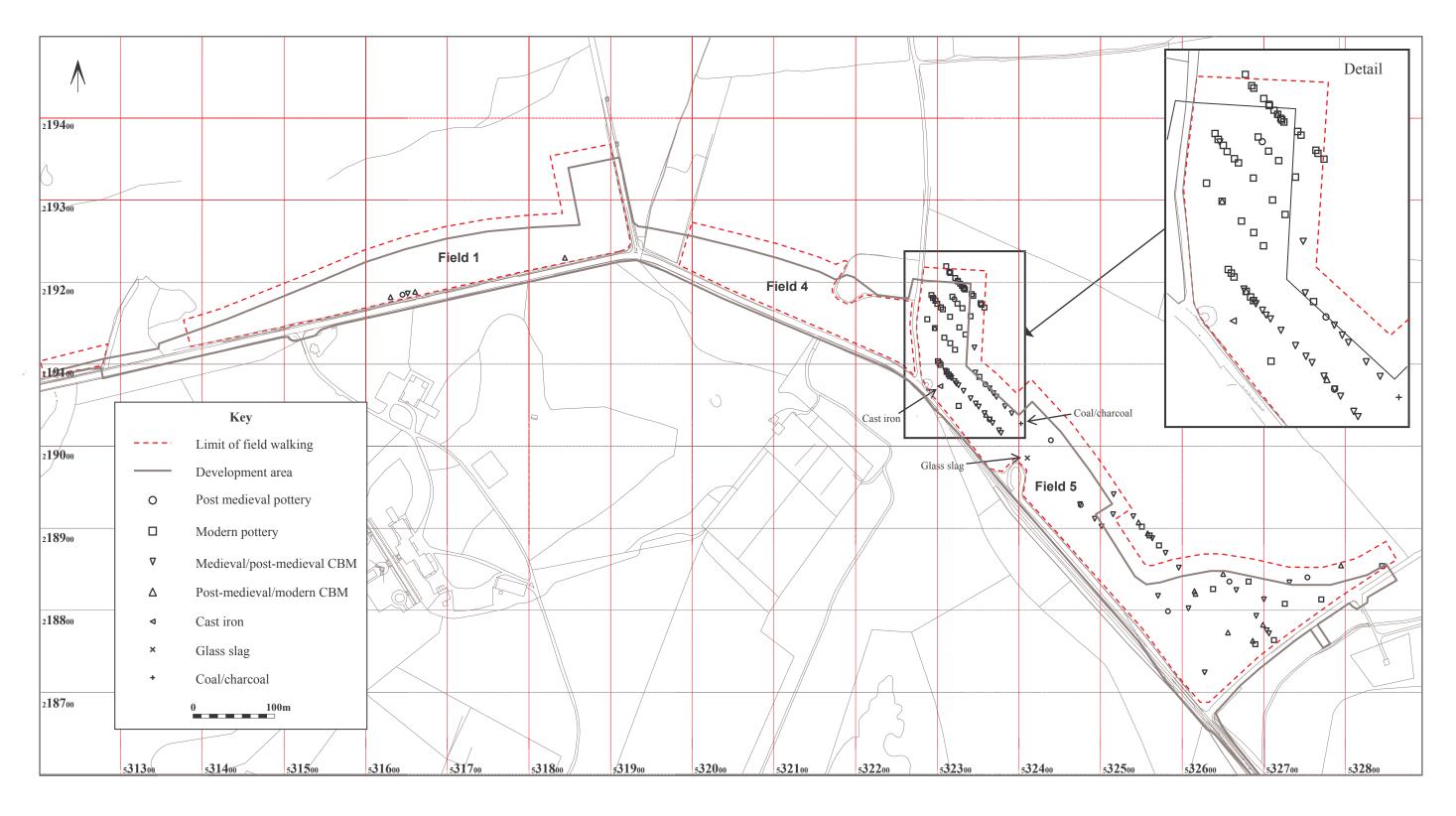


Figure 3: Fieldwalking results: post-medieval and modern

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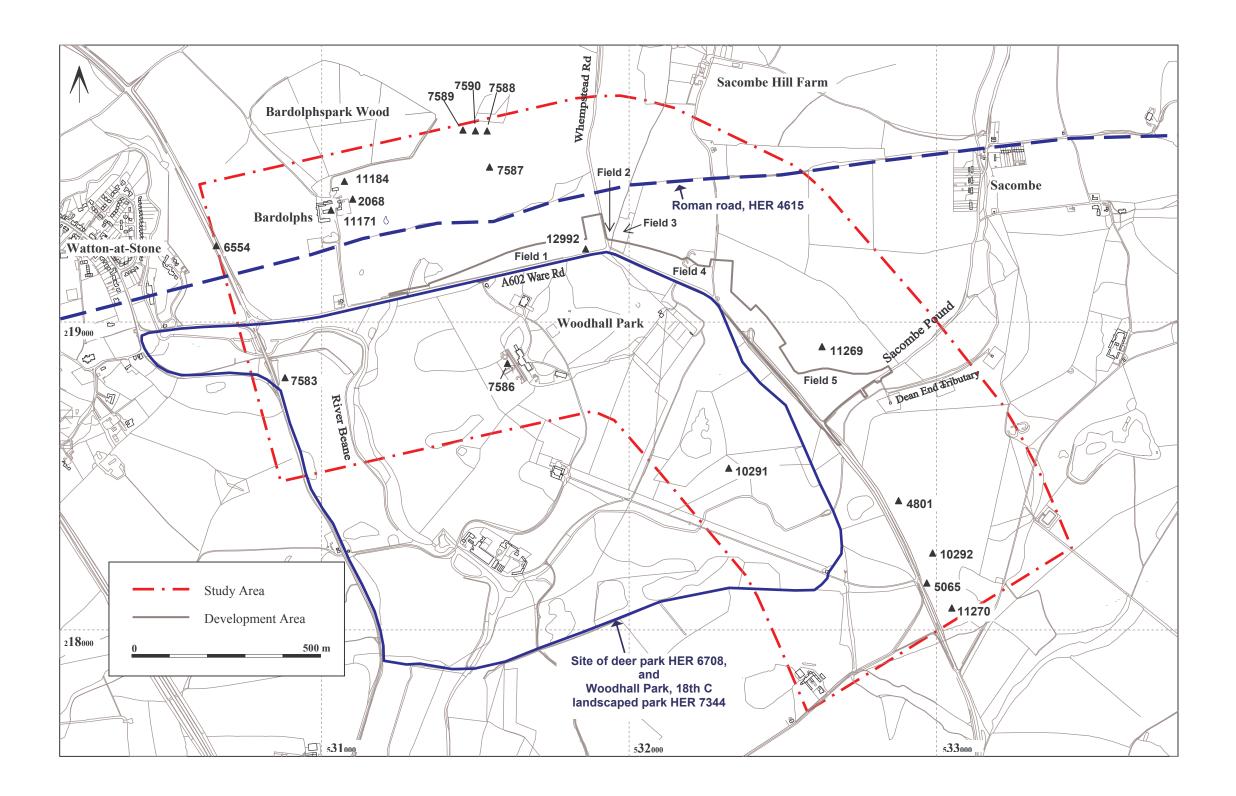
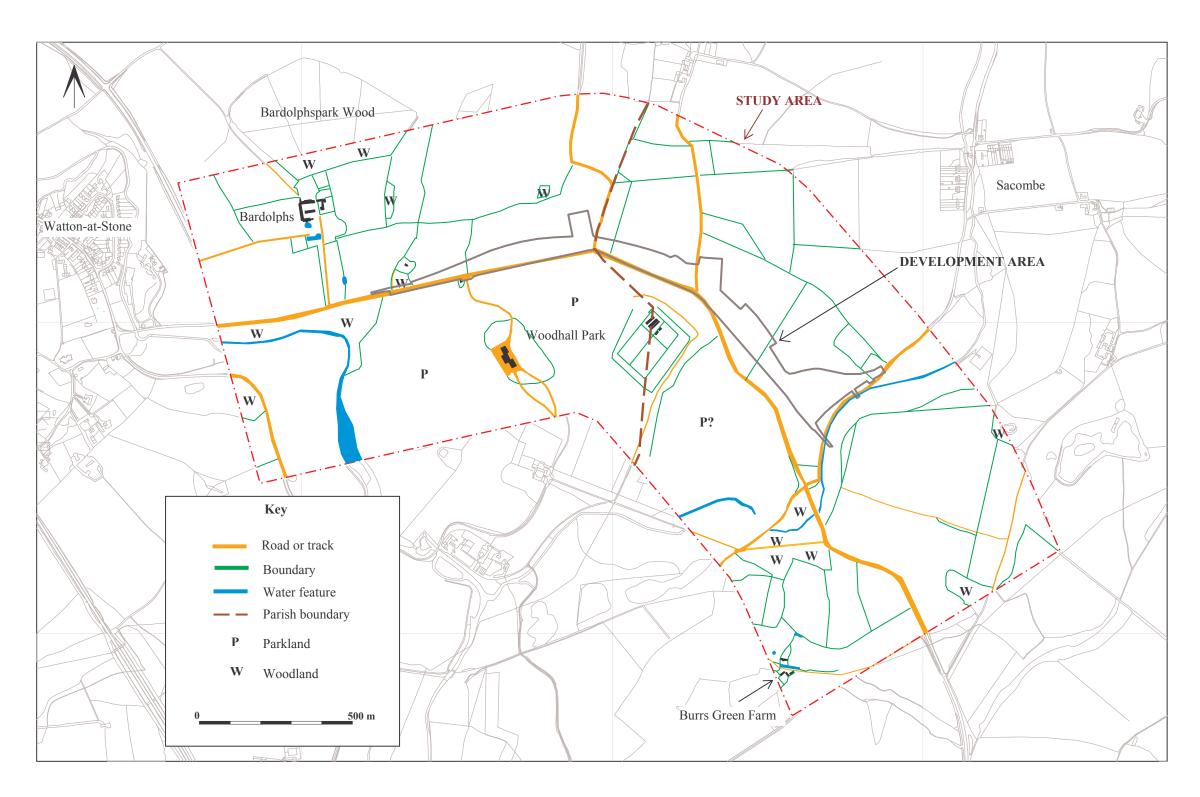


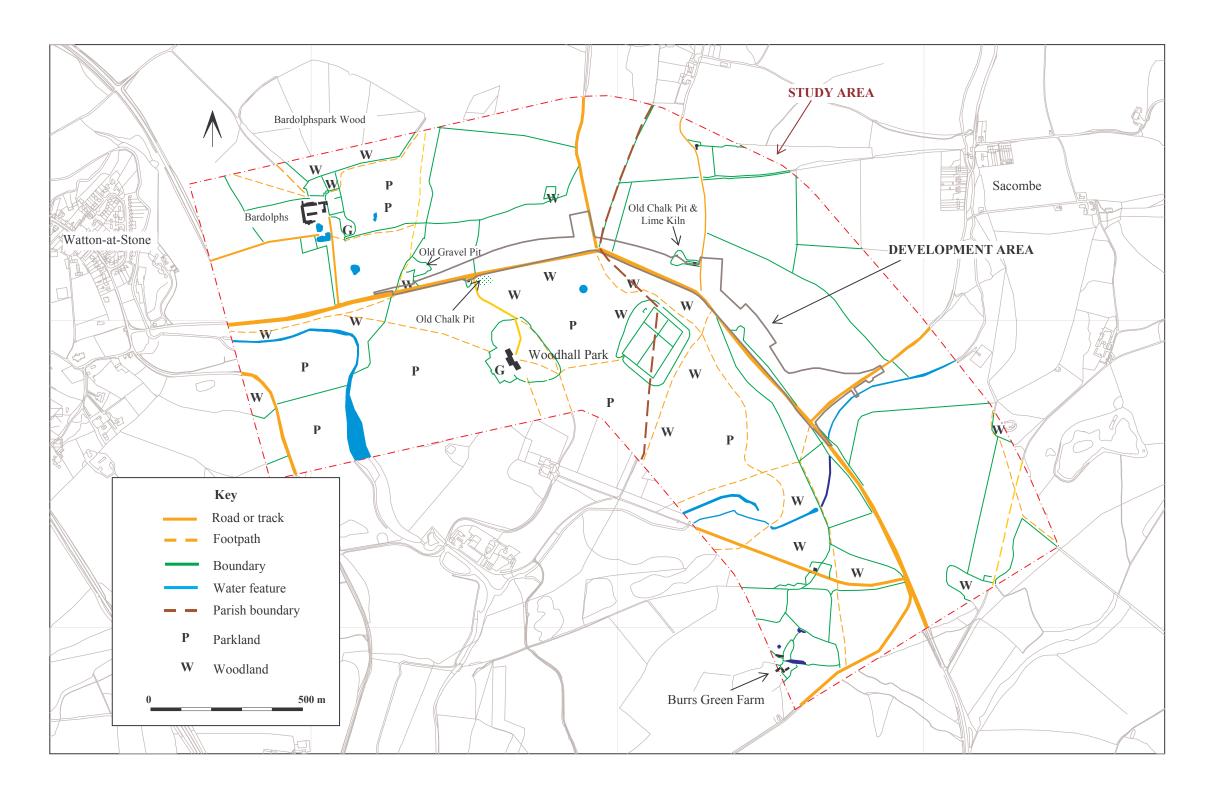
Figure 4: Historic environment data





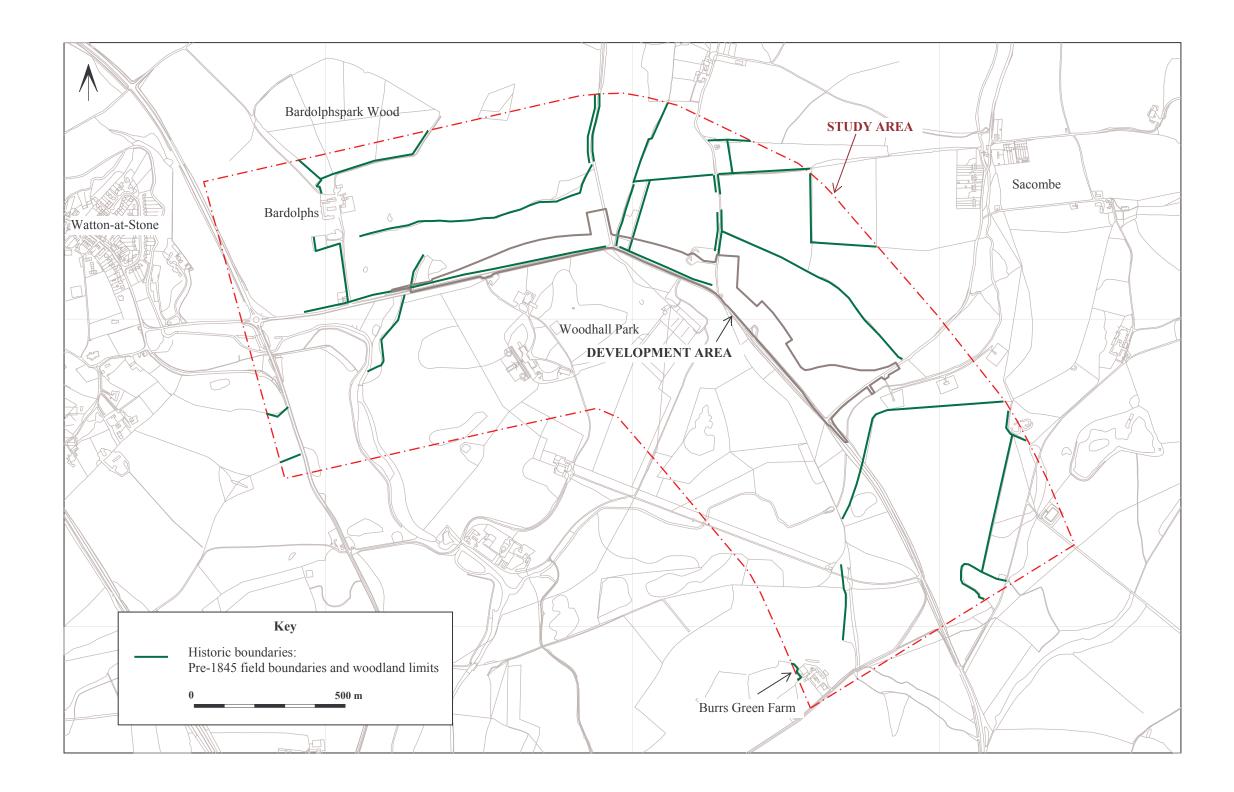
**Figure 5:** Historic map data; Watton and Sacombe Tithe maps 1839





**Figure 6:** Historic map data; 1<sup>st</sup> and 2<sup>nd</sup> edition Ordnance Survey Maps, 1880 and 1898





**Figure 7:** Historic boundaries (pre-1845)