

# Land West of Great Dunmow, Essex

An Archaeological Desk Based Assessment



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# **Land West of Great Dunmow, Essex**

## **An Archaeological Desk Top Assessment**

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Illustrations by V. Herring

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## **SUMMARY**

*This archaeological desktop assessment was requested by Bidwells to assess the likely impact of the development of a c. 55ha site (centred OS TL 6090 2200) on any potential archaeological remains. Evaluation of the archaeological, historical, aerial and cartographic evidence shows the proposed development area is located in an area of known prehistoric and Romano-British activity, areas of Medieval settlement, woodland, parkland and close to former World War II installations. Currently, the proposed development area consists of agricultural land and landscaped parkland.*

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# 1 INTRODUCTION

1.1 This archaeological desktop assessment was requested by Bidwells to assess the likely impact of the development of a c. 55.5a site (centred NGR TL 6090 2200) on potential archaeological remains. Evaluation of the archaeological, historical and cartographic evidence shows the proposed development area is located in an area of known prehistoric and Romano-British activity, areas of Medieval settlement, woodland and close to former World War II installations. Currently, the proposed development area consists of agricultural land and landscaped parkland.

1.2 The principal objective of the study is to determine the presence/absence of known archaeological sites within the PDA and study area environs, and to assess the potential for archaeological remains surviving within the PDA.

1.3 Archaeology is covered by both local and national policy. Nationally the primary policies affecting archaeology are the National Planning Policy Framework (NPPF; March 2012). The aim of the NPPF is that action required as part of the planning process is appropriate and proportionate. The relevant local policy is the Cambridge Local Plan (July 2006). These policies have played a crucial role in prompting and guiding the development of local policy; relevant sections these policies are reproduced in Appendix 1.

1.4 Heritage Assets are defined in Annex 2 of the NPPF as: a building, monument, site, place, area or landscape positively identified as having a degree of significance meriting consideration in planning decisions. They include designated heritage assets (as defined in the NPPF) and assets identified by the local planning authority during the process of decision-making or through the plan-making process.

1.5 Annex 2 also defines Archaeological Interest as a heritage asset which holds or potentially could hold, evidence of past human activity worthy of expert investigation at some point. Heritage assets with archaeological interest are the primary source of evidence about the substance and evolution of places, and of the people and cultures that made them.

1.6 A Designated Heritage Asset comprises a: World Heritage Site, Scheduled Monument, Listed Building, Protected Wreck Site, Registered Park and Garden, Registered Battlefield or Conservation Area.

1.7 Significance is defined as: The value of a heritage asset to this and future generations because of its heritage interest. This interest may be archaeological, architectural, artistic or historic. Significance derives not only from a heritage asset's physical presence, but also from its setting.

1.8 The study sets the findings in the context of both the relevant legislation (national and local) as well as the broader archaeological context, and proposes a broad scheme of mitigation based on the findings.

## **2 METHODOLOGY**

- 2.1 The desk-based assessment has been compiled under the guidelines of the Institute for Field Archaeology's (IFA) Standard and Guidance for Archaeological Desk-Based Assessment 2001. The Cambridge Archaeological Unit is a Registered Archaeological Organisation of the IFA.
- 2.1 The archaeological baseline has been established using the following methods:
- Desk-based assessment
  - Curatorial bodies
  - Previous fieldwork and survey results
- 2.3 The methodology comprises assessing the known potential archaeological resource within the study area in order to characterise the likely extent, quality and worth of the resource within a local, regional, national or international context as appropriate. The assessment is based on existing sources of data including Historic Environment Records (HER), the Addenbrooke's Hospital Archives, published and unpublished archaeological reports, aerial photographs and historic maps. Where there is sufficient data, this may allow modelling of the resource.
- 2.4 The impact assessment, Section S7, takes account of two factors: the potential for and relative importance of the archaeology, and the likely impact of the proposed development upon that archaeology.

### **3 BASELINE CONDITIONS**

- 3.1 The proposed development area (PDA), measuring *c.* 55.5ha, is located to the north of the B1256, a former Roman road and known since the Medieval period as Stane Street (linking Colchester to Braughing). The landscape is characterised by agricultural land, woodland and, to the east, new housing (Woodlands Park), a supermarket and the historic centre of Great Dunmow. To the west is located the A120 dual-carriageway and to the south, the Flich Way, utilising the route of a former railway.

#### **Layout of Study Data**

- 3.2 This report examines a study area extending outwards for 0.5km by 2km from the centre of the proposed development area. Gazetteer points are shown on Figure 1 and are listed in Appendix 2. Gazetteer numbers are referenced in the text in bold e.g. **(1)**.

#### **Topography and Geology**

- 3.3 The underlying geology is London Clay, overlain by Till, and localised areas of alluvium and valley gravels. The topography of the study area is characterised by gently undulating land with small valleys, flat plateaus and small tributary streams bisecting the study area. The PDA is located on one of these plateaus and slopes from west to east from approximately 98m OD to 94m OD.

#### **Past and Current Land Use**

- 3.4 Past and current land use is characterised by earlier roads and tracks (including Stane Street), Medieval field boundaries, Medieval settlement, present day agriculture, the urban expansion of Great Dunmow, the construction of the A120 trunk road and the former rail link between Braintree and Bishop's Stortford; opened 1869, closed 1969 (passenger services ceased in 1952), now the Flich Way. The site is bounded to the south by the B1256, to the north by a stream and the former RAF Great Dunmow (originally part of Easton Park), to the east by agricultural land, and to the west by the A120 and agricultural land. The western third of the PDA consists of landscaped parkland with a processional drive, *The Avenue*, with the original entrance to Easton Park and gatehouse located beside the B1256. Easton Park was developed as formal parkland following the grant of Estaines Manor to Henry Maynard in 1590 and replaced an earlier Medieval deer park. In 1943, the greater part of the parkland was requisitioned for the construction of an airfield (RAF Great Dunmow), resulting in the loss of many of the park's trees; only the runways, perimeter road and former bomb and ammunition storage area tracks survive.

### **4 THE ARCHAEOLOGICAL ASSESSMENT**

#### **Objectives**

- 4.1.1 The study aims to collate and assess existing information relating to the archaeology and history of the area within and immediately surrounding the development area.

This will be used to assess both areas of archaeological potential and determine the likely survival of such remains. This data will then be used to assess the probability of archaeology being encountered along the route of the power cable.

## Sources

4.2 Principal sources consulted for this study were:

- Essex Historic and Environment Record (HER)
- Essex County Records Office (ECRO)
- Historic map sequence
- OS 1805 Old Series map
- OS 1885 First Edition, OS 1:2500, 1:10000, 1:10,560, 1:25,000 and 1:50,000 series to present day

## Aerial Photography Survey

4.3 An examination of the aerial photographic record was undertaken by Roger Palmer to examine an area bisected by the proposed route (the full report is presented in Appendix 3). In summary, no archaeological features were identified in or adjacent to the PDA. This may mean that none of the photographs examined had been taken on suitable dates although the presence on them of former field boundaries demonstrate that some crop and soil responses were visible over deeper cut features. The absence of archaeological evidence on the photographs may, therefore, reflect a genuine absence of backfilled archaeological features that would form a recognisable shape or pattern when seen from above.

## Known and Potential Archaeology

### *Prehistoric (up to 43AD)*

4.4 Aerial photographic surveys, fieldwalking, excavation and surface finds reveal the presence of prehistoric sites and features throughout the study area, and within the PDA. The earlier prehistoric period is represented by a number of flints scatters (**2b**, **4a**, **8**, **11**), a Neolithic chisel (**1c**), potential Mesolithic material (**8**), and prehistoric pottery (**8**), including Bronze Age Post-Deverel-Rimbury pottery sherds at Strood Hall (**15a**). In addition, Neolithic flints from a pit and fragments of copper alloy were recovered from Strood Hall. Iron Age activity is seen within the study area and wider environs and includes a quarry pit west of Strood Hall (**15a**) and Middle and Late Iron Age settlement related features at Highwood Farm (**27c**); located *c.* 400m south of the PDA, evidence at Highwood Farm dating to this period includes pits, four-post built structures and a small rectangular enclosure; archaeological investigations ahead of the construction of the A120 and nearby to the PDA also revealed Iron Age related activity and pottery finds (**1d**, **9a**, **10a**, **10b**, **29c**). A glass bead, two weaving combs and a clay loomweight were recovered also recovered. Earlier excavation east of the PDA in 1993 resulted in the discovery of Middle Iron Age activity (**10**), with at least two roundhouses identified. Metal-detecting at Folly Farm (**24c**) resulted in the recovery of several Iron Age coins, including two silver coins and two blank gold

stater, with aerial photographs of the area revealing numerous linear and possible structural features dating to the period.

*Romano-British (43 - c. 450 AD)*

- 4.5 Evidence of Roman activity within the study area is attested by the major route of the former Roman road, known since the early Medieval period as Stane Street (**35**) (Margary 1964, 1973), that bisects the study area in an east – west direction, with further sections of Roman road identified to the northeast and south of Great Dunmow. Situated close to these roads are a number of sites. These include the Late Iron Age/Roman site located *c.* 0.75km northwest of the PDA (**1d**), evidence of Late Iron Age/Roman activity to the east of the PDA (**10b**), and at least one major settlement site, the farmstead and associated cemetery (with accompanying grave-goods of pottery and metalwork) at Strood Hall (**15a**); fieldwalking ahead of construction of the A120 dual-carriageway resulted in the recovery of pottery and tile from a distinct scatter measuring 100m by 60m (**15b**), with a *Colchester* type flagon recovered from nearby (**16**). A small cremation cemetery, located a short distance to the east of the PDA during archaeological investigations ahead of the construction of new buildings at Great Dunmow Priamry School (O’Brien 2005).
- 4.6 Within the study area a coin hoard was discovered during the 18<sup>th</sup> century on the Maynard Estate (**1b**), with further metalwork finds (possibly coins) found *c.* 200m east of the PDA (**9a**), although no occupation evidence was found during construction of a retail store at this site. Nearby, at Buildings Farm, evidence of a Romano-British fieldsystem and settlement was identified during fieldwork (**10**), dating from the 1<sup>st</sup> to 4<sup>th</sup> centuries AD, with a large quantity of metalwork, pottery recovered. No evidence for buildings was found during the excavation, although two possible circular structures were uncovered; approximately 0.5km to the south, a second fieldsystem was identified on aerial photographs of the area.

*Medieval (c. 450 – 1590 AD)*

- 4.7 Medieval activity (with the exception of the known early histories of Little Canfield, Little Easton and Great Dunmow – see Powell 1963) is relatively limited within the study area and confined to pottery scatters and finds (**4b**, **9b**, **27a**, **29b**, **29c**, **31**), artefacts recovered during metal-detecting (**24b**), and features dating from the period, including a 12<sup>th</sup>-14<sup>th</sup> century hearth, an undated ditch and a gully containing 12<sup>th</sup>-14<sup>th</sup> century pottery (**29a**), a ditch (**29b**), a Saxon coin found near Folly Farm (**14g**) and an earthwork feature (**25**). This feature is of uncertain date, with a prehistoric origin suggested with later Medieval re-use of the site; however, the site is recorded as the location of a windmill and this, combined with the small quantity of Medieval pottery and tile recovered during excavation of the mound, suggests a Medieval or later origin for the mound. At Minchins Farm a possible moated homestead (first recorded in 1509) has been identified (**34a**, **34c**), although this attribution has not been positively confirmed or rejected. Situated to the west of the PDA is the possible site of a deserted Medieval village, Little Canfield (inferred from a series of linear cropmarks observed on aerial photographs), and the formerly moated house and associated ponds and dovecote at Little Canfield Hall (**13**); the former manor boundary of Little Canfield Hall remains visible in the modern fieldsystem, with the

present house dating from the 16<sup>th</sup> century. Listed buildings within the study area dating from the period include Stone Hall (**6b, 6c**), timber-framed barns at Folly Farm and north of Minchens Farm (**14d, 33**), and Highwood Farm farmhouse (**19**).

#### *Post-Medieval (1590 - Present)*

- 4.8 Post-Medieval features and archaeology within the study area comprise a number of historic buildings (several listed: **5, 6a, 14a-14e, 18-23, 26a-26b, 32, 34b**), pottery and tile scatters (**7, 30a**), post-Medieval finds (**7, 24b, 27b, 31**) and linear cropmark features (**13, 48**). Located south of the PDA is located the former Braintree to Bishop's Stortford railway (**36**). Opened to passengers in 1869, this was closed to passengers in 1952, and eventually to freight in 1969; the former route is now a footpath, with only concrete posts remaining. Located to the northwest of the PDA is the site of the former RAF Great Dunmow, operational between 1943 and 1948 and used to store approximately 34,000 military surplus vehicles until the 1950s; situated within 0.5km of the northern boundary of the PDA is the former bomb and ammunition storage area.

#### *Undated*

- 4.9 Several features found within the study area include areas of unclassified cropmarks (**1a, 2, 37**) and field boundaries (**12, 14f, 17, 24a, 28a, 28b**) identified from aerial photographs, several of which appear on earlier editions of Ordnance Survey maps of the area; undated hearths (**18b, 30b**) was also found along the route of the A120.

## **5 CARTOGRAPHIC EVIDENCE**

- 5.1 The cartographic evidence for the study area is extensive and dates from the 17<sup>th</sup> century. Morden's reproduced map of 1722 includes the road network of Essex, with Stane Street more accurately surveyed than on the 1765 edition. Several subsequent maps of the study area by other cartographers are similarly more accurate due to improved surveying techniques, but remain insufficiently detailed to provide specific data regarding the PDA; however, the 1805 Ordnance Survey 1" map sheet records the topography of the PDA, showing this to be a relatively flat plateau bordered to the south by Stane Street and to the north and west by parkland. It is interesting to note that the section of Kitchen's 'most accurate map of the roads of England and Wales' depicting Essex, dated 1764, is remarkably inaccurate, omitting Stane Street altogether.
- 5.2 Estate and tithe maps provide the first extensive detailed surveys of the study area and enable settlement development and modifications to boundaries to be traced from the 18<sup>th</sup> century to the present day, providing evidence of former estate and extant field-boundaries. The development and expansion of Great Dunmow is attested on the OS map sequence and includes the construction of rail and road links from the mid 19<sup>th</sup> century to the present day, notably the construction of the A120 dual-carriageway to the west of the PDA. The OS and Easton Park estate map sequence further elucidates minor field boundary changes within the PDA and changes in land use adjacent to the site, for example the construction of former RAF Great Dunmow (opened 1943, closed 1958), and the former railway linking Braintree to Bishop's Stortford (1868-1969),

now the Flich Way. High Wood, comprising roughly the western third of the PDA, was the entrance to Easton Park, and represents the largest remaining vestige of the former parkland that was not affected by airfield construction. High Wood has been represented on estate maps and the entire historic OS map sequence to the present day.

Date	Description
1610	J. Speed's map of Essex
1648	W. Bleau's map of Essex
1664	J. Bleau's map of Essex
1695 & 1722	R. Morden's map of Essex
1744	I. Cowley's map of Essex
1745	Chapman & Andre's map of Essex
1746	S. Simpson's map of Essex
1748-50	T. Osborn's map of Essex
1749	Estate map of Lewis Way, Esq. (D/DU 234/82)
1764	T. Kitchen's map of Essex
1794	J. Carey's map of Essex
1805	OS Old Series Edition
1811	Easton Lodge estate map (ECRO D/DMg P2)
1831	R. Creighton's map of Essex
1833	S. Hall's map of Essex
1836	W. Schmollinger's map of Essex
1842	Little Canfield title apportionment map (ECRO D/CT 68B)
1876-1920	OS 1:2500 scale First Edition and revisions
1881-1951	OS 1:10560 scale First Edition and revisions
1955-1960	OS 1:10560 scale First Imperial Edition
1953 & 1970	OS 1:2500 scale National Grid First Edition
1971 & 1982	OS 1:10000 scale 1 <sup>st</sup> Metric Edition
2006	Braintree & Saffron Walden, Halstead & Great Dunmow. 1:25000 scale Explorer Sheet 195

**Table 4.1** Cartographic evidence examined during this study

## 6 DISCUSSION

- 6.1 Putative prehistoric cropmarks and Mesolithic to Bronze Age features, flint scatters and artefacts are recorded within the study area, utilising the series of small spring-fed rivers and river Chelmer (part of the wider Chelmer Catchment area). Although the Neolithic chisel recovered from Little Easton is included within this assessment, the lack of precision of where it was found reflects the nature of how the historic record was created rather than the actual distribution of such objects. Significantly, Neolithic flints and Bronze Age pottery have been recovered from archaeological features during excavations at Strood Hall and Highwood Farm, and to the east in Dunmow, and attest to settlement related activity dating to these periods immediately adjacent to the PDA.
- 6.2 The general paucity of archaeological features within study area that pre-date the later Iron Age/Romano-British periods creates several challenges for assessing the likelihood of encountering archaeology of the earlier prehistoric period within the PDA. This challenge is particularly relevant when considering the potential for uncovering discrete archaeological features and artefact, such as those discovered on the former airfield northwest of the PDA, Strood Hall and Highwood Farm, including an Iron Age quarry pit at the former. Nonetheless, excavation and fieldwork within the wider Essex environs during the construction of Stansted Airport (Havis & Brooks

2004) and the A120 dual-carriageway (Timby *et al.* 2007) provide evidence of human activity dating from the Mesolithic to the Late Iron Age, albeit of a probable transient or seasonal nature prior to the Late Bronze Age. Animal husbandry is suggested as the predominant economic and agricultural activity on the clay geology of the area until the Middle and Late Iron Age, when evidence for the cultivation of cereals is more evident and indicates that woodland had been cleared for some time, with 'short dry grassland the dominant habitat' (Carruthers 2007: 187-189). It is thus probable that a similar environmental sequence exists within and adjacent to the PDA; at Highwood Farm (Timby *et al.* 2007; Site 11), immediately south of the PDA, a large number of cattle bones and charred cereal grains were recovered from enclosure ditches attributed to the later Iron Age and Roman periods.

- 6.3 Evidence for substantial Iron Age and Romano-British settlements and a farmstead, including a cemetery (some remains left may have been left in situ at Strood Hall as they were on the edge of the open-area of excavation – D. Webb *pers.comm*), have been found at Buildings Farm (to the east of the PDA), Highwoods Farm and Strood Hall (Wickenden 1988; Atkinson & Lavender 1992; Timby *et al.* 2007 – see fig. 2 for the sites at Highwood Farm and Strood Hall). These sites are located to the west of the known Roman small town at Great Dunmow, itself situated at a nodule point of Roman, possibly earlier, roads and tracks (Going 1988; Figure. 61). The recovery of silver and blank gold coins dating from the Late Iron Age from Folly Farm attest to relatively high status settlement in the area and a number of Iron Age burials have been discovered around Great Dunmow (Powell 1963). This evidence suggest that the study area was densely populated in the Late Iron Age and a potential 'centre' in the pre-conquest period and possibly accounts for the establishment of the later Roman settlement.
- 6.4 Substantial quantities of Roman pottery, coins, metalwork and building material has been recovered from within and around Great Dunmow (Wickenden 1988), including the coin hoard from Little Easton (Kettle & Sorrell 1779), with several cemeteries also discovered within its immediate environs. Stane Street (the current B1256), one of the principle routes of the early Roman province dating from the mid 1<sup>st</sup> century AD, and two further Roman roads (the A130 and a route traceable to Radwinter: Margary 1973; The Viatores 1964) would have provided important landscape boundaries, affording convenient baselines from which to align field and property. An extensive system of field boundaires oriented upon Stane Street, extending from East Essex towards Braughing, has been identified, possibly pre-dating the Roman period, and surviving into the Medieval period (numerous parish boundaries are aligned to the road and attest to its pre- Anglo-Saxon origin). Similarly, the local topography and riverine system would have provided suitable locations for semi- or nucleated settlements dating from the Late Iron Age and persisting into the Romano-British period (see Taylor 2007). The Late Iron Age and Roman settlement and farmsteads at Buildings Farm, Highwood Farm and Strood Hall reflect the density of archaeology dating from these periods that are possibly oriented to the road. It is of note that Wickenden's roadside excavations between 1970 and 1972 in Dunmow beside Stane Street identified a shrine and possible property back-plots aligned to the road, with a similar cremation cemetery to that found at Strood Hall also uncovered (Wickenden 1988: 12-23). A similar settlement pattern to the study area environs is seen in northwest Essex and southern Cambridgeshire, with settlement foci distributed at 0.5km to 1.4km intervals (Williamson 1984; Evans *et al.* 2008). It is possible that several of the

unidentified linear and cropmark features within the study area date to these periods and there exists a high probability of encountering similar occupation evidence within the PDA.

- 6.7 During the Medieval and post-Medieval periods, the study area and PDA is dominated by Great Dunmow, Little Easton and Little Canfield; Middle Saxon pottery dating from the 7<sup>th</sup> century has been found within Dunmow (Wickenden 1988: 45), with scatters of Medieval pottery found throughout the study area. The possible presence of a deserted Medieval village at Little Canfield and the creation of the Easton Park in the late 16<sup>th</sup> century, replacing an earlier deer park, may result in the discovery of further artefact scatters and settlement related features of the early to later Medieval period in the western part of the PDA, notably within High Wood. It is also clear from the documentary and cartographic sources that there was a contraction in settlement density from the later Medieval period in England and was traditionally attributed to the effects of outbreaks of the plague. Post-war research, however, has highlighted the impact of settlement clearance for stock-raising and enclosure and the impact of economic changes due to population decreases following severe outbreaks of the plague (Ashton 1985: 53; Beresford 1954); it is possible the creation of a deer park (the forerunner of Easton Lodge Park and estate) may account for the contraction of Little Canfield resulting in the isolation of the parish church.
- 6.8 The manorial history of the area and Dunmow Hundred is covered in detail elsewhere (see Powell 1963) and is thus not repeated here. Nonetheless, manor houses and moated sites, in addition to the listed buildings included in this assessment, form components of the archaeological and historical landscape with a manor and moated sites noted in the Historic Environment Record; Little Canfield Hall and Minchins Farm. Moated sites are a later Medieval phenomenon, with several hundred recorded in eastern England. The function and purpose of these sites is unclear, with defence, display of wealth and/or as a means to keep out vermin and animals all suggested as possible reasons for their construction. In East Anglia the high density of these sites may reflect a 'woodland' village settlement pattern, or possible 'multi-manor villages, possessing two or more capital messuages, or indeed the even more fragmented tenurial situations found in East Anglia' (Le Patourel & Roberts 1978: 50). There thus exists the possibility of further moats existing within the study area and are unlikely to be encountered within the PDA itself, although this cannot be entirely excluded.
- 6.9 Examination of the historic and cartographic sources (estate, tithe and historic OS map sequence) confirm that the boundaries of the PDA have remained relatively unaltered from the late 16<sup>th</sup> century to the present day, with minor alterations to the internal field boundaries in the eastern third of the proposed development area. Significantly, High Wood appears on early estate maps and all subsequent OS maps of the area, reflecting the historic nature of this part of the PDA; the Gathehouse to Easton Lodge stands beside the junction of the A120 / B1256 at the start of *The Avenue*. It is possible that archaeological features relating to the removal of earlier buildings, agricultural practices and extinct field boundaries may thus be encountered close to the southern boundary of the PDA, with further archaeology within High Wood masked by landscaping and planting that has occurred from the 17<sup>th</sup> century onwards. The wider post-Medieval landscape of the study area has undergone little alteration with the notable exception of the urban expansion of Dunmow, the construction of the Braintree to Bishop's Stortford branch line (construction began in 1864), the

destruction of the larger part of Easton Park during airfield construction, and the more recent construction of the A120 dual-carriageway. With the notable exception of boundary works relating to the B1256, these developments have had little, if any, direct impact upon the PDA.

## **7 CONCLUSION**

- 7.1 The proposed development area is situated within a landscape possessing a rich historical environment with evidence of activity from the prehistoric period to the present date. The known historical land use would indicate a medium to high probability of surviving archaeology and artefacts associated with the former Iron Age to Roman settlements and cemeteries, associated agricultural activities and later landscaping from the later Medieval period onwards. The potential for discovering archaeology pre-dating the Iron Age period is, however, much lower, although this cannot be excluded.

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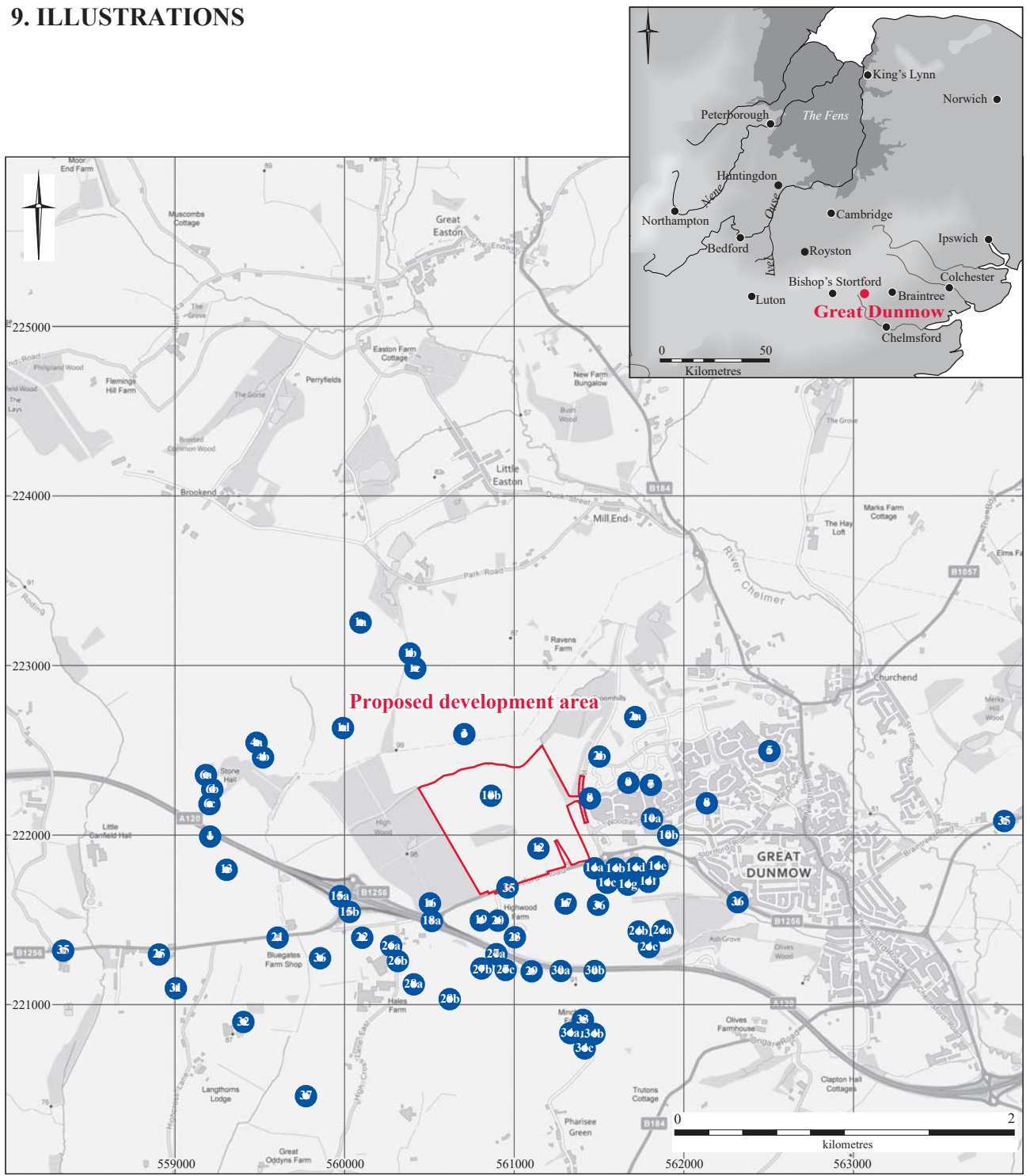
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# 9. ILLUSTRATIONS



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Figure 1. Location of Proposed development area and gazetteer

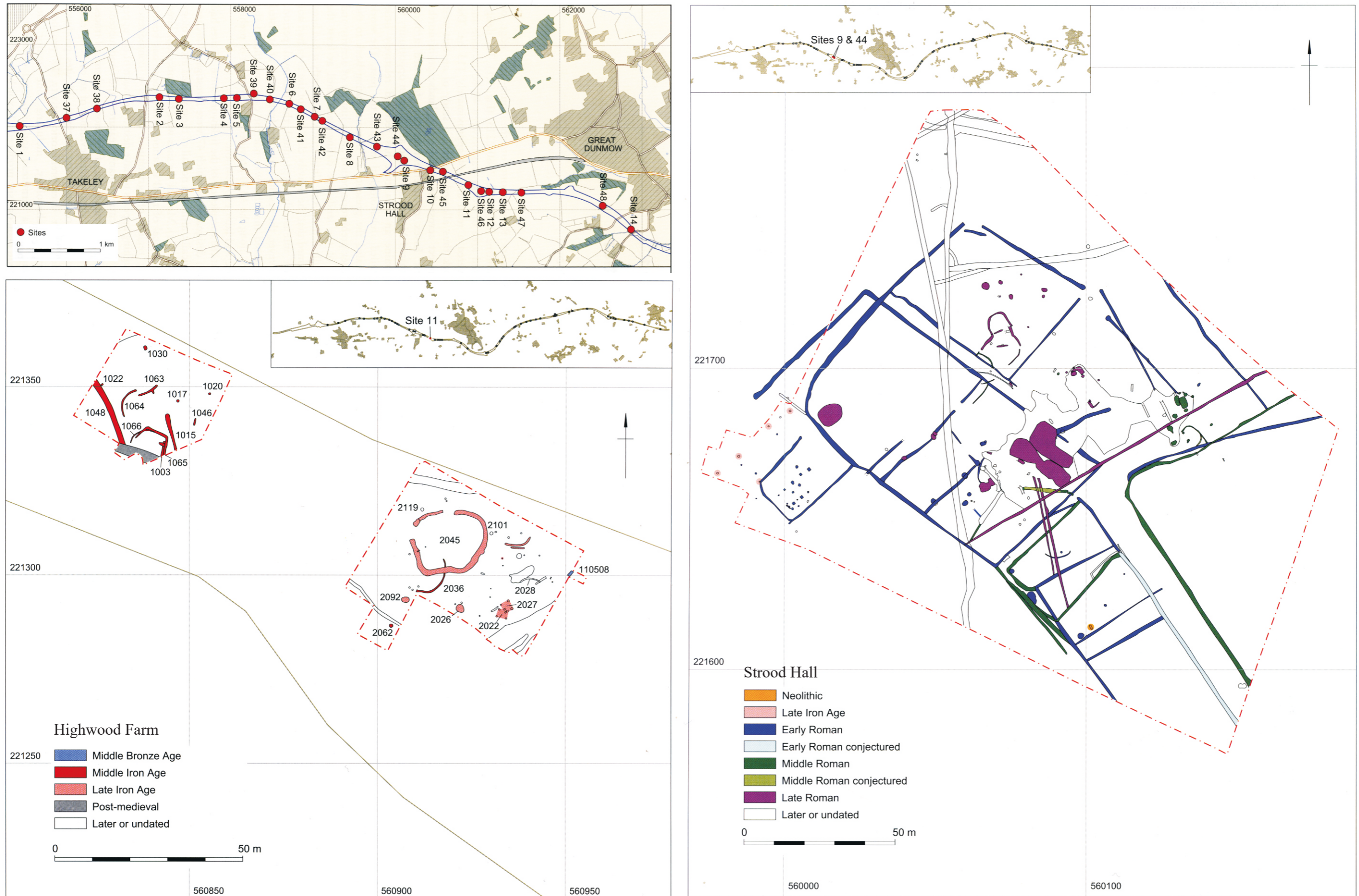


Figure 2. Prehistoric and Romano-British settlement features at Highwood Farm and Strood Hall (reproduced from Braun et al. 2007)

## 10 APPENDICES

### Appendix 1 Planning Policy

#### *National Legislation and Policy*

##### **National Planning Policy Framework, March 2012**

The heritage section of the NPPF incorporates – and streamlines - the existing policies contained in PPS5. It does not alter those policies or create new ones. One policy - HE5 (Monitoring Indicators) - from PPS5 has not been incorporated as a specific policy within the Framework. All other PPS5 policies have been condensed and are included within the heritage section or incorporated elsewhere within the NPPF. Transitional arrangements are provided within the NPPF to ensure that existing plans and submissions are not unduly delayed and reflect previous planning policy and guidelines, even where earlier guidance comes into potential conflict with the NPPF (Appendix 1).

While the NPPF is to be read as a whole in the context of archaeology the NPPF states at Section 17 that the Government's objective is 'to conserve heritage assets in a manner appropriate to their significance, so that they can be enjoyed for their contribution to the quality of life of this and future generations'.

To achieve this paragraph 126 states:

Local planning authorities should set out in their Local Plan a positive strategy for the conservation and enjoyment of the historic environment, including heritage assets most at risk through neglect, decay or other threats. In doing so, they should recognise that heritage assets are an irreplaceable resource and conserve them in a manner appropriate to their significance. In developing this strategy, local planning authorities should take into account:

- the desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation;
- the wider social, cultural, economic and environmental benefits that conservation of the historic environment can bring;
- the desirability of new development making a positive contribution to local character and distinctiveness; and
- opportunities to draw on the contribution.

Paragraph 128 states that in determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance. As a minimum the relevant historic environment record should have been consulted and the heritage assets assessed using appropriate expertise where necessary. Where an application site includes or has the potential to include heritage assets with archaeological interest, local planning authorities should require developers to submit an appropriate desk-based assessment and, where necessary, a field evaluation.

In weighing applications that affect directly or indirectly non designated heritage assets, a balanced judgement will be required having regard to the presumption in favour of sustainable development, the scale of any harm or loss and the significance of the heritage asset.

Paragraph 141 notes states that Local planning authorities should make information about the significance of the historic environment gathered as part of plan-making or development management publicly accessible. They should also require developers to record and advance understanding of the significance of any heritage assets to be lost (wholly or in part) in a manner proportionate to their importance and the impact, and to make this evidence (and any archive generated) publicly accessible. However, the ability to record, evidence of our past should not be a factor in deciding whether such loss should be permitted”.

### ***Local Policy***

#### **Uttlesford District Council Local Plan, 2005**

##### **Policy ENV4 Ancient Monuments and Sites of Archaeological Importance**

Where nationally important archaeological remains, whether scheduled or not, and their settings, are affected by proposed development there will be a presumption in favour of their physical preservation in situ. The preservation in situ of locally important archaeological remains will be sought unless the need for the development outweighs the importance of the archaeology. In situations where there are grounds for believing that sites, monuments or their settings would be affected developers will be required to arrange for an archaeological field assessment to be carried out before the planning application can be determined thus enabling an informed and reasonable planning decision to be made. In circumstances where preservation is not possible or feasible, then development will not be permitted until satisfactory provision has been made for a programme of archaeological investigation and recording prior to commencement of the development.

#### **Uttlesford District Council Draft Local Plan, 2012**

##### **8. Strategic Environmental Policies**

###### **Protecting the Historic Environment**

**13.15** In Uttlesford the historic environment is a rich, complex and irreplaceable resource. It has developed through a history of human activity spanning many thousands of years. Some of the resource is hidden in the form of archaeological deposits. Other elements such as the historic landscape are the highly visible result of many years of agricultural, industrial and commercial activity. The “built” part of the historic environment is equally rich with towns, villages and hamlets set in the gently rolling countryside. There is a wealth of fine buildings, many of them ancient and listed and these buildings with their varied styles and methods of construction span many centuries.

**13.16** The historic environment is a fundamental part of the District’s environmental infrastructure but it is sensitive to change and needs to be properly understood to make sure it is managed and conserved. There may be opportunities to enhance the historic environment and it is important that these are realised and that adverse impacts associated with development are minimised.

**13.17** The Council will continue to work in partnership with archaeology, design and other specialists to make sure that only development which protects and enhances the Historic Environment is approved.

**13.18** The Council has carried out a series of Conservation Area appraisals leading to management plans and some communities have produced their own design advice through Town and Village Design Statements. New development will be expected to comply with such advice where this has been approved by the Council.

### **Policy SP13 - Protecting the Historic Environment**

Proposals for development will need to take into account the significance of any heritage assets and their setting. Development will only be permitted where it protects and enhances any heritage asset and makes a positive contribution to the street scene and/or landscape.

Proposals will be favourably considered for the sympathetic re-use of heritage assets, particularly where they make a positive contribution to the special character of the local environment and can contribute to the delivery of sustainable development and regeneration.

Proposals to modify heritage assets so as to reduce carbon emissions and secure sustainable development will be weighed against harm to the significance of the heritage assets in accordance with appropriate development management proposals.

Proposals for development should also take into account any relevant supplementary or other Council approved guidance.

## Appendix 2 Study Area Site and Finds Gazetteer

OWA = Oxford & Wessex Archaeology

Gaz. No.	Grid ref.	Period	Description	Refs:	HER ref.
1a	TL 600 231	-	Cropmarks of former field boundaries and possible woodland paths or boundaries, some of which are visible on 1 <sup>st</sup> edition OS mapping.	HER ref.	46571
1b	TL 605 245	Roman	Lord Maynard's Estate in Little Easton produced a hoard of denarii of Postumus, Gallienus, Tetricus and Victorinus. May have come from Great or Little Easton. Large coin hoard from Lord Maynard's estate near Dunmow, around mid 18 <sup>th</sup> century. Coins of the Emperors listed above, and "other tyrants".	Kettle and Sorrell; Powell 1963	1369
1c	TL 605 245	Neolithic	Neolithic chisel.	Powell 1963	1378
1d	TL 599 226	Iron Age, Roman	Phase two of an evaluation by trial trenching at Little Easton Airfield recorded Early and Late Iron Age/Roman remains. The early iron Age features comprised: an irregular curvilinear gully, large ditches, fire pits and small linear gullies. Two focal points for this activity were noted. The first in the south-central part of the site seems to be the focus for occupation. The second, on the higher ground in the northwest, may be the location of an enclosure as two large perpendicular ditches were identified in association with fire pits and small gullies. The Late Iron Age/Roman features consist of two tentatively dated ditches which, although widely separated have a similar northwest-southeast alignment. large circular enclosure was mapped for OARPE 2011. The enclosure is approximately 63m in diameter and has no visible entrances or internal features. This feature is probably Iron Age and part of the series of features excavated.	Hikling 2001; Robertson 2007	46482
2a	TL 617 227	-	Cropmarks of two rectangular macula c. 45m x 20m, possibly extractive pits. A third rectangular macular, of similar dimensions appears as an area of ?pasture on the OS 1 <sup>st</sup> edition map. OS 1 <sup>st</sup> Edition 6" Dated 1881. Aerial Photo : MAL-66-68-140	HER ref.	14071
2b	TL 615 225	Prehistoric	A fieldwalking survey on Phases 3 and 4 of a major residential development at Woodlands Park identified concentrations of worked and burnt flint. Subsequent trial trenching revealed the presence of prehistoric pottery but could not securely date the features, therefore the pottery is likely to be residual.	Davis 2003; Barker 2003	45196
3	TL 607 226	-	Former field boundaries. Aerial Photo : 58-278-PI-5161; Map: TL62SW	HER ref.	14081
4a	TL 595 225	Prehistoric	Prehistoric Flints	Heppell: 2000	19543
4b	TL 595 225	Medieval	Medieval pottery scatter	Heppell: 2000	19544
5	TL 625 225	Post-Medieval	The date of the Pest House is unclear, but it probably gave its name to Deadmans Lane on which it stood, which was so named in 1620. It may have been built in response to the 1603 plague in which 48 people died.	Medlycott 1998	18678
6a	TL 592 223	Post-Medieval	One storey. Nearly 1 mile north north east of the church. Rebuilt. Central chimney stack is of 17 <sup>th</sup> century brick. Inside is an old door of studded battens and much 17 <sup>th</sup> century panelling reset. House is timber-framed and plastered with brick and, possibly, stone. L-shaped plan with a square tower- like structure, with circular corner tower. 16th and 17 <sup>th</sup> century red brick chimney stack. Also said to contain 16th century door. Site Assessment: rebuilt.	RCHM 1921	4644
6b	TL 592 223	Medieval	Stone Hall. 14 <sup>th</sup> century windows. Nearly 1 mile north-north east of the church in Easton Park. Rebuilt but it incorporates two 14 <sup>th</sup> century windows of stone, each of two trefoiled ogee lights under a segmented head. In the windows are a few fragments of old glass. A re-used roof truss with two wall posts and a cambered collar beam is probably 15 <sup>th</sup> or 16 <sup>th</sup> century in date (see 4644).	RCHM 1921	4643
6c	TL 592 222	Medieval	14 <sup>th</sup> century and later timber framed house.	HER ref.	37964
7	TL 618 223	Post-Medieval	Modern pottery finds consisted of creamware, pearlware, ironstone, stoneware, and various kitchen wares, and fragments of flower pots. Also found were an iron penknife, a padlock and 2 pennys, one of 1920 and one of 1927.	Atkinson & Lavender 1992	8998

8	TL 617 222	Prehistoric	There was a spread of flints across the central and southern part of the survey area. 3.093kg of burnt flint and 155 pieces of worked flint were collected during field walking of the area. The burnt flint was evenly distributed through out the survey area, with concentrations at TL 6174 2216, TL 6142 2224, TL 6158 2242, TL 6164 2230, TL 6126 2224 and TL 6216 2232. The worked flint was spread evenly and showed no correlation with the burnt flint. The assemblage consisted of 27 tools, 11 cores and 117 flakes. Some of the flint may be of Mesolithic date. 46g of prehistoric pottery was recovered North-West of Newlan Green in no discernable pattern. Most of this consisted of small abraded sherds of Flint-Tempered pottery, datable only generally to the earlier prehistoric period.	Atkinson & Lavender 1992; Germany 1993	8994
9a	TL 618 222	Iron Age, Roman	Excavation of Middle Iron Age settlement, and Roman agricultural activity - recorded by aerial photography on March 22nd 1993. The proposed development of a retail store on the site of the Newton Works factory provided the opportunity to undertake a watching brief close to the Roman road between Dunmow and Bishop Stortford. Local metal detectorists had made finds of Roman material in this area previously, although their exact location is unknown. A large part of the site had been destroyed during the construction of the factory with extensive levelling. No evidence of any occupation was found on the site. Aerial Photo: 146-6; Aerial Photo: SWCL - 15, 16, 17.	Havis 1993	9991
9b	TL 618 222	Medieval	A slight concentration of medieval pottery was noticed in the northeast corner of the Survey area. The medieval pottery totalled 225g. A dense concentration lay at TL 6160 2234, With further lesser concentrations at TL 6176 2222, TL 6184 2208, TL 6164 2212 and TL 6232 2264. The assemblage included two sherds of Early Medieval ware, dating from between the 10th and early 13 <sup>th</sup> centuries, and medieval coarse ware and sandy orange ware of the 13 <sup>th</sup> and 14 <sup>th</sup> centuries, including a Hedingham ware cooking pot, a possible Harlow ware sherd, and a few sherds of Mill Green Ware.	Atkinson & Lavender 1992 Germany 1994	8996
10a	TL 618 221	Iron Age, Roman	Area was field walked in 1992 and a large sherd of Middle Iron Age pottery was found at TL 6178 2214 Excavation in 1993 located the edge of a unsuspected Middle Iron Age settlement. Two places of circular structures were revealed in the form of parts of penannular gullies, with internal post holes in the later phase, surrounded by a deep (1.2m below top of subsoil) enclosure ditch, probably belonging to the later phase. This was succeeded by a series of Romano-British field systems ranging from 1 <sup>st</sup> to 4 <sup>th</sup> century AD. Whilst no actual complex of Roman farm buildings was found, evidence for two possible circular structures within the field system was recovered. Roman pottery and metalwork were abundant. A second field system, identified on aerial photographs, 0.5 km to the south of the excavations, are thought to be at least partly Roman. Aerial Photo: SWC1-15, 16, 17.	Atkinson & Lavender 1992; Lavender 1993, 1997	8995
10b	TL 618 220	Iron Age, Roman	In 1993 excavation in the field north of the primary school discovered evidence for Iron Age and Roman activity (EHER 8995). Excavation in 2004 carried out in advance of the construction of a primary school uncovered further evidence including; Prehistoric evidence consisted of a possible prehistoric pit ,worked flint of early Neolithic Age and possible Early Iron Age pottery. Late Iron Age/early Roman enclosures and pits, an inhumation of a neonate as well as ritually placed deposits. Early Roman enclosures. Late Roman (3 <sup>rd</sup> /4 <sup>th</sup> century) enclosures and a post-built structure were identified. Pits may provide evidence for clay extraction.	Germany 2004	46174
11	TL 592 220	Prehistoric	A fieldwalking project was carried out along the proposed route of the new A120 trunk-road. A concentration of prehistoric finds, mainly flint flakes and burnt flint, were found. The area has suffered some disturbance due to levelling for a WWII airfield behind Stone Hall and removal of some top-soil for a gas pipeline.	Medlycott 1990a & b, 1992	14481
12	TL 613 220	-	Former field boundaries. Aerial Photo: 58-278-PI-5161; Map: TL62SW	HER ref.	14080
13	TL 593 218	Medieval, Post-Medieval	Linear cropmarks, possibly boundaries. According to the Domesday Book, Little Canfield was held by Asgar and two unnamed free men before 1066. By 1066 the land belonged to William of Warenne and Geoffrey de Mandeville. The total area of land was approximately 316 acres. There was enough woodland to sustain 190 pigs in 1066, this decreased to 150 pigs by 1086. There was a priest present since before the conquest, presumably based at All saints Church (4589). In 1066 there were 9 villages and 11 small holders in Little Canfield; in 1086 there were still 9 villages but the number of smallholders had increased to 21. The manor boundary for Little Canfield Hall is still visible in the modern field system, though the internal divisions were largely removed prior to 1897. Little Canfield hall was once moated. The house itself is of 16 <sup>th</sup> century date with more recent additions. Originally, the moated complex included a series of ponds and a large dovecote. A lane is shown on the 1590 map running north from High Cross Lane to just beyond stone hall; it follows the manor boundary line. The route of the A120 and the railway line crosses it just to the south of Stone Hall. By 1842 the access to Stone Hall had moved eastwards to Strood Hall Lane. Aerial Photo: 44/9.	Havis 1994	18293

14a	TL 616 218	Post-Medieval	Folly Farm - 17 <sup>th</sup> century or earlier timber framed granary.	HER ref.	37777
14b	TL 616 218	Post-Medieval	Folly Farm - 16 <sup>th</sup> century and later timber framed house.	HER ref.	37775
14c	TL 616 218	Post-Medieval	Folly Farm - Late 16 <sup>th</sup> / early 17 <sup>th</sup> century stable range or byre.	HER ref.	37778
14d	TL 617 218	Medieval	Folly Farm - 15 <sup>th</sup> – 16 <sup>th</sup> century timber framed barn.	HER ref.	37776
14e	TL 617 218	Post-Medieval	Folly Farm – 18 <sup>th</sup> century timber framed byres and implement sheds.	HER ref.	37779
14f	TL 618 218	-	Linear Cropmarks possibly field boundary. Aerial Photo : 44/5; Aerial Photo : 44/6.	HER ref.	18298
14g	TL 618 218	Medieval	Find spot of late Saxon coin. Location not recorded exactly; east of Folly Farm.	HER ref.	9963
15a	TL 600 216	Bronze Age, Iron Age, Roman	Strood Hall. Fieldwork ahead of construction of the A120. The features and finds suggest the site of a Romano-British Farmstead. Typically these comprise plough truncated cut features; ditches together with a lesser number of gullies, pits and other simple features. Despite truncation features were well defined compound with simple domestic and agricultural structures, together with associated yards, paddocks and in-fields. A small amount of residual prehistoric pottery was recovered from Roman features, however not enough to suggest an antecedent to the Roman settlement. 2001 evaluation uncovered a small cemetery containing approximately 26 cremations and one inhumation burial. 2002 excavations at Site 44 uncovered further 2 <sup>nd</sup> century ditch/gully features with near complete vessels, animal bone, shell, copper alloy objects and worked flint. They were all components of the enclosure ditches identified at Site 9 in 2001. Un-urned cremations were found. A small late Bronze Age pit was also recorded.	Shepherd 2001; OWA 2003; Timby <i>et al.</i> 2007	19455
15b	TL 600 216	Roman	Fieldwalking was carried out along the proposed route of the new A120 trunk-road. This site produced a concentration of Roman pottery and tile which formed a rectangular scatter 100m x 60m, which the route will cut diagonally.	Medlycott 1990a & b, 1992; OWA 2003	14482
16	TL 605 216	Roman	Squat Colchester buff flagon, neck and handle missing, with a ?horse jawbone found during ditching work in 1970.	Going 1988	13888
17	TL 613 216	-	Cropmarks of linear features which probably represent former field boundaries. Two of this group appear on the OS 1st ed. In addition related rectangular maculae, c. 5m x 5m are probably small ponds or troughs. Aerial Photo: 543-RAF-2337-0142 & -0142; Map TL62SW, OS 1st Edition 6" dated: 1881.	HER ref.	14075
18a	TL 605 215	Post-Medieval	Gatehouse to Easton Lodge. 17 <sup>th</sup> century gatehouse with 18 <sup>th</sup> century remodelling.	HER ref.	37774
18b	TL 605 214	-	An undated hearth feature was found to the west and tree throws were recorded. No artefacts were recovered from the site.	OWA 2003	45621
19	TL 608 215	Medieval	Highwood Farmhouse. Late 15 <sup>th</sup> century or earlier timber framed house.	HER ref.	37702
20	TL 609 215	Post-Medieval	Barn at Highwood Farmhouse. 17 <sup>th</sup> century timber framed barn.	HER ref.	37703
21	TL 596 214	Post-Medieval	Strood Hall. Early 19 <sup>th</sup> century red brick house.	HER ref.	37773
22	TL 601 214	Post-Medieval	Cottage west of junction with High Cross Lane. 17 <sup>th</sup> century timber framed house.	HER ref.	37958
23	TL 610 214	Post-Medieval	Round House. Late 18 <sup>th</sup> / early 19 <sup>th</sup> century lodge to Minchins.	HER ref.	37701
24a	TL 618 214	-	Cropmarks - linear features. Extent of cropmarks matches extent of gravel in that field, not necessarily extent of the site itself. Multi-period occupation site. Outside the area of the country park. Aerial Photo: 44/6.	Havis 1994	13088
24b	TL 618 214	Medieval, Post-Medieval	Cropmark and metal detecting site - metal detection by A. Davey recovered Medieval artefacts, concentrated in northeast quarter of the field. Multi-period occupation site. Outside the area of the country park, although a settlement may be located close to the railway line.	Havis 1994	13091
24c	TL 618 214	Iron Age	Cropmark and metal detecting site cropmark evidence for numerous linear features - probably ditches, walls, and buildings; metal detecting finds: 2 silver Iron Age coins 2 blank staters (gold) other 'celtic' coins; Iron age finds concentrated in southwest quarter of field. Multi-period occupation site, outside the area of the country park.	Havis 1994	13090

25	TL 589 213	Medieval	Mound of doubtful antiquity, on the north side of Stane Street, 600yds north east of the church, on high ground. Bowl-shaped and slight traces of a ditch. Mill Hill, the name gives indication of use, but sitting beside Stane Street may indicate a Roman origin. Sited on the highest part of a rise, 22m in diameter, 2.7m high. Summit disturbed and south east side cut away. Possible round barrow utilised for a mill mound. First plantation recorded on 1842 Tithe Map. Section through mound revealed possible cut for cross trees. Mound material clay and chalk. 2 sherds of Medieval pottery found. Later survey in advance of redevelopment; profiles and contour plan constructed. Mound c. 10m in diameter across the top, c. 30m across the bottom. The north and western sides were surrounded by a ditch, presumably filled on other side during construction of the School House and Village Hall. Mound is c. 2.5m above ditch bottom, and c. 1.75m above ditch top. Where mound segment had been removed a section was cleaned and the layers drawn. The earliest layer, possibly natural subsoil, was a heavy orange silt-clay with sparse chalk fragments, sealed by a lighter brownish-yellow silt-clay deposit that appeared to make up the bulk of the mound. No trace of a buried topsoil layer between these layers. At the south west end of the section was a steep -sided flat bottomed slot 1.25m deep and c. 1m wide at the bottom. It contained crumbly silt-clay with fragments of chalk, coal, tile and pottery. Two joining body sherds from a cooking pot of broadly 13 <sup>th</sup> century date were recovered from the mound. Excavation of the exposed trench revealed 7 small body sherds and 2 joining fragments of Medieval roof tile. Finds fit a date range of mid 14 <sup>th</sup> century to late 15 <sup>th</sup> century. The mill was still standing in the 19 <sup>th</sup> century.	RCHM 1921; Priddy 1980; Milton 1982; Milton & Eddy 1983	4626 4627
26a	TL 603 213	Post-Medieval	Greencroft. 17 <sup>th</sup> century timber framed house.	HER ref.	37932
26b	TL 603 213	Post-Medieval	Former Station Master's House. Mid C19 in grey gault brick, with grey slate hipped roof. 2 storeys. 2 window range double hung sashes. Rusticated quoins. lean-to at rear. Gabled porch with grey slate roof. Mid C19 crossing keeper's cottage of similar design to stations on route, with weatherboarded hut housing the gate locking mechanism and signal levers, on former Bishop's Stortford, Dunmow and Braintree Branch Railway. Erroneously listed as Station Master's House, but listed status supported by survey.	Paye 1981; Havis & Pratt 2002	37933
27a	TL 609 213	Medieval	A fieldwalking project was carried out along the proposed route of the new A120 trunk-road. This site produced some Medieval finds. A Medieval ditch was found during the 2001 evaluation.	Medlycott 1990a & b, 1992; OWA 2003; Timby <i>et al.</i> 2007	14484
27b	TL 609 213	Post-Medieval	A fieldwalking project was carried out along the proposed route of the new A120 trunk-road. This site contained a quantity of post-Medieval finds.	Medlycott 1990a & b, 1992	14483
27c	TL 609 213	Iron Age	Highwood Farm. Evaluation revealed several prehistoric pits and ditches. Further investigation revealed a number of pits, gullies and ditches of Middle Iron Age date. The second area revealed a ditched enclosure with related boundary ditches, pits and four-post structures identified as part of a late Iron Age farmstead. Finds include pottery and animal bone with evidence for weaving.	OWA 2003; Timby <i>et al.</i> 2007	45325
28a	TL 604 212	-	Cropmarks of probable former field boundaries, some of which appear on the OS 1 <sup>st</sup> edition. Aerial Photo: 58-278-PI-5061. OS 1st Edition 6"; Map: TL62SW	HER ref.	14390
28b	TL 605 208	-	Cropmarks of extensive former field visible on 1 <sup>st</sup> edition OS mapping	HER ref.	46568
29a	TL 610 212	Medieval	A hearth feature containing 12 <sup>th</sup> -14 <sup>th</sup> century pottery was recorded. An undated pit and N-S orientated gully was recorded containing 12 <sup>th</sup> -14 <sup>th</sup> century pottery as well as late Iron Age pottery. Possibly indicates ephemeral (settlement?) activity of Medieval date	OWA 2003	45327
29b	TL 611 212	Medieval	A fieldwalking project was carried out along the proposed route of the new A120 trunk-road. This site produced a small scatter of Medieval pottery. A Medieval ditch was found during the 2001 evaluation along with pottery.	Medlycott 1990, 1992; OWA 2003; Timby <i>et al.</i> 2007	14485
29c	TL 610 212	Iron Age, Medieval	Site 46- Late Iron Age pottery(residual) was found in a medieval gully. An undated pit was also found during the Evaluation. Site 12-Two of the ditches found in the evaluation seem to represent part of a field system dating to the late BA-early IA period. A small amount of Late BA pottery was recovered	OWA 2003	45326
30a	TL 612 212	Post-Medieval	A fieldwalking project was carried out along the proposed route of the new A120 trunk-road. A concentration of daub with some post-Medieval pottery and tile were found at this site.	Medlycott 1990, 1992	14486

30b	TL 614 212	-	Two groups of features were found; the west group of features comprised an undated N-S aligned gully. The east group consisted of a 'hearth' and a tree throw with burnt flint	OWA 2003	45329
31	TL 590 211	Medieval, Post-Medieval	Pottery sherds dating to the late Medieval and post-Medieval period and 5 peg tile fragments. Due to the isolated position of Little Canfield church a DMV is suspected in the area. (see 4588). No evidence of Medieval occupation was found during pipeline construction.	Havis 1994	19442
32	TL 594 209	Post -Medieval	The Old Rectory. Buildings dating to 1800 On a moated site (see 4578).	HER ref.	4579
33	TL 614 209	Medieval	Barn 40m north of Minchins. Late 14 <sup>th</sup> / early 15 <sup>th</sup> century timber framed barn.	HER ref.	37765
34a	TL 614 208	Medieval	Minchins Farm. Possible homestead moat. East arm of moat almost completely destroyed. Island is bisected from east-west by a dry ditch. OS did not think from surviving remains that it was a moat. Ditch on south side of house has been filled in, leaving an L-shaped water-filled ditch on the west and north sides of the house. Ditch is only c. 3m wide, typical of drainage pattern around the 16 <sup>th</sup> - 17 <sup>th</sup> century farmsteads in the region. Narrow dry cut ditch at TL 6137 2086 probably an overflow channel to farmyard pond, now filled in, but shown on OS 25". Incomplete, rectangular, double? ditch, 5m wide, 1.5m deep to water. Name mentioned 1504, 1540, 1579.. House is 15 <sup>th</sup> and 16 <sup>th</sup> centuries. Timber-framed and plastered. Some timber-frame exposed internally. Moated site. Barn 40m north of Minchins c. 1400. Timber-framed and weather-boarded. Aisled, heavily framed, arch braced tie-beams, arcade bracing and aisle bracing. Crown post-roof.	RCHM 1916; Reaney 1935	1227
34b	TL 614 208	Post-Medieval	Minchins Farm. is 2 storey, walls are timber-framed and plastered. Probably built in 16 <sup>th</sup> century, half H-plan. In the 17 <sup>th</sup> century a small staircase projection was inserted between the north west wing and the main block. A 'modern' addition between the wings. Inside, an old door of moulded battens, a 17 <sup>th</sup> century oak staircase, an old panelled door, one original fireplace. Name mentioned 1504, 1540, 1579. House is 15 <sup>th</sup> and 16 <sup>th</sup> centuries. Timber-framed and plastered. Some timber-frame exposed internally; 20 <sup>th</sup> century windows. Considered the 'moat' to be a drainage enclosure or ditch typical of the pattern in the region around the 16 <sup>th</sup> - 17 <sup>th</sup> centuries: see 1227.	RCHM 1916; Reaney 1935;	1228
34c	TL 614 208	Medieval	Minchins Farm. 15 <sup>th</sup> – 16 <sup>th</sup> century timber framed house – see 1227 and 1228.	HER ref.	37764
35	TL 612 217	Roman	Stane Street. Former Roman road from Colchester to Braughing. M R Hull tentatively marked the course of the road from TL 6214 2184 to TL 6348 2202. There is no trace of the road continuing on this projected line through the centre of Great Dunmow.. Where projected line crosses the Chelmer (TL 6329 2199) no sign of a ford is recorded as the banks are steep and unbroken. Possibly, the Roman road followed the present course of the road into Dunmow from TL 6348 2202 across the old Dunmow Ford, now bridged, to TL 6297 2168. This would bring the road close to where Roman pottery was found in 1935. VCH regards Stane Street as a British track straightened and metalled by Roman engineers. The less-definite part "negotiates the valley with great skill" and its antiquity is confirmed by coincidence of the parish boundary. Thereafter the course was almost straight to Great Dunmow with parish boundaries along it nearly all the way. At Dunmow the road is lost for about a mile, though it points direct to the presumed site of the Roman settlement	Powell 1963	1226
36	TL 612 215	Post-Medieval	The railway line, which ran for almost 18 miles between Braintree and Bishops Stortford was an extension to the Witham to Braintree line and building began in 1864. The first train left Braintree on the 22nd of February 1869. The railway continued to be used until its closure in 1969, although the last passenger train ran on 3rd march 1952. The track has been dismantled, but the stations and several bridges are still intact. From the early 1990s the part of the line from Start Hill to Braintree has formed a country park known as the Flitch Way. (Entry includes HER refs: 16790; 28102; 37933; 40290; 40298-40379).	Havis & Pratt 2002	19629
37	TL 595 206	-	Cropmarks of field boundaries includes boundary of Long Spring Wood shown on OS 1st edition 6" sheet 32.	HER ref.	18887

## **Appendix 3 Aerial Photographic Survey**

Roger Palmer MA, MIFA

### **INTRODUCTION**

This appraisal of aerial photographs was commissioned to examine the potential of aerial photographs to record archaeological features in area of some 90 hectares (centred TL609220)

### **SOILS AND RATIONALE**

The Soil Survey map (SSEW 1983) shows the land to be on Boulder Clay (soil association 411d: hantslope) on which crops tend to indicate sub-surface variations only in dry summers. Because of this it was agreed that a cost-effective first step would be to acquire cover searches from CUCAP/ULM and NMRC and to rapidly examine the easily-available photographs and web resources.

### **ARCHAEOLOGICAL AND NATURAL FEATURES FROM AERIAL PHOTOGRAPHS**

In suitable cultivated soils, sub-surface archaeological features – including ditches, banks, pits, walls or foundations – may be recorded from the air in different ways in different seasons. In spring and summer these may show through their effect on crops growing above them. Such indications tend to be at their most visible in ripening cereal crops on well-drained soils such as chalk or gravel bedrocks. Soils on clay have long been considered poor for affecting differential crop growth but it is known that features do become visible towards the end of unusually dry summers (Evans 2007) and this was demonstrated in a spectacular manner in the vertical survey taken of Bedfordshire in late June 1996 (Palmer 2007). The years of dry summers are known, so if the cover searches listed photographs on those dates they may include archaeological features in the Development Area. However, in any year, the appearance of sub-surface features cannot accurately be predicted and their absence cannot be taken to imply evidence of archaeological absence. In winter months, when the soil is bare or crop cover is thin (when viewed from above), features may show by virtue of their different soils. Upstanding remains, which may survive in unploughed grassland, are also best recorded in winter months when vegetation is sparse and the low angle of the sun helps pick out slight differences of height and slope.

The most informative aerial photographs of archaeological subjects tend to be those resulting from specialist observer-directed reconnaissance. This activity is usually undertaken by an experienced archaeological observer who will fly at seasons and times of day when optimum results are expected. Oblique photographs, taken using a hand-held camera, are the usual products of such investigation. Although oblique photographs are able to provide a very detailed view, they are biased in providing a record that is mainly of features noticed by the observer, understood, and thought to be of archaeological relevance.

Vertical photographs cover the whole of Britain and can provide unbiased scenes on a series of dates between (usually) 1946-7 and the present. Unfortunately these vertical surveys were

not necessarily flown at times of year that are best to record the crop and soil responses that may be seen above sub-surface features. Vertical photographs are taken by a camera fixed inside an aircraft and adjusted to take a series of overlapping views that can be examined stereoscopically. They are often of relatively small scale and their interpretation requires higher perceptive powers and a more cautious approach than that necessary for examination of obliques.

## **PHOTOGRAPHS EXAMINED AND COMMENTS**

Photograph listed in cover searches are identified in the Appendix to this report. All have been rapidly viewed and the following summarises the results of that photo examination.

### **Cambridge University Collection/Unit for Landscape Modelling**

Four oblique and four vertical photographs were identified in a web search of an area surrounding the Development Site. Photo subjects includes 'crop patterns' and 'cropmarks' but none were of fields in the Development Area. The photographs recorded natural features (probably periglacial) and suggest there may be a certain amount of patterning on the ground after topsoil is removed.

### **NMRC, Swindon**

The cover search for the area listed 162 vertical photographs and 12 obliques. In total these recorded the area, or parts of it, on 32 different dates between 1946 and 1993. The list included 12 photographs taken on 5 June 1996 by the Ordnance Survey but, unfortunately, the prints are not yet available at NMRC. Photographs of Bedfordshire taken on a later date in that month recorded an unexpectedly-high number of previously-unknown sites on clay. The only information these photographs showed of sub-surface remains were a number of former field boundaries that probably survive as backfilled ditches. Stereoscopic examination of photographs indicated that some of these were slightly hollow, and appeared thus as recently as 1990. They may be visible on the ground.

### **Internet Sources (accessed 23 March 2009)**

**Flash Earth.** Photographs were taken in late spring-early summer. No archaeological features were visible within or adjacent to the Development Area but, in many fields, advanced growth of crops marked the lines of backfilled ditches of former field boundaries.

**Google Earth.** Photographs ranged in date from autumn 2000 to 10 September 2006. None showed any archaeological information in or adjacent to the Development Site. Those taken on 26 April 2004 showed indications of different soil colours in the Area that perhaps relate to differences in bedrock below the surface.

### ***Archaeological features***

No archaeological features were identified in or adjacent to the Development Area. This may mean that none of the photographs examined had been taken on suitable dates although the presence on them of former field boundaries demonstrate that some crop and soil responses were visible over deeper cut features. The absence of archaeological evidence on the photographs may, therefore, reflect a genuine absence of backfilled archaeological features that would form a recognisable shape or pattern when seen from above.

### ***Non-archaeological features***

Former field boundaries were visible early in the growing season on some photographs. Others showed indications of different soil types and/or geological differences.

### ***Land use***

Unless wooded, all fields were in arable use on all dates of photography. The narrow strip in the southern half of the east edge of the Area was used for storing plant, etc, during development to the east in 1993.

## **RECOMMENDATION**

It is recommended that no further examination of aerial photographs is undertaken for this assessment.

## **REFERENCES**

Evans, R. 2007. The weather and other factors controlling the appearance of crop marks on clay and other 'difficult' soils. In J. Mills and R. Palmer (ed.), *Populating Clay Landscapes*. Tempus: Stroud, 16-27.

Palmer, R. 2007. Seventy-five years v. ninety minutes: implications of the 1996 Bedfordshire vertical aerial survey on our perceptions of clayland archaeology. In J. Mills and R. Palmer (ed.), *Populating Clay Landscapes*. Tempus: Stroud, 88-103.

SSEW. 1983. *Soils of England and Wales: sheet 4: Eastern England (1:250,000)*. Soil Survey of England and Wales, Harpenden.

## APPENDIX: PHOTOGRAPHS EXAMINED

Source: Cambridge University Collection of Aerial Photographs (searched 17 March 2009)

### Oblique photographs

PHOTO_ID	SUBJECT	NGRE	NGRN	DATE
SR34	Panorama near Gt. Dunmow, looking NE	562100	223100	3 Jun 1956
BVU54	Crop patterns, 0.5 mile NNW of Great Dunmow	562400	222600	12 Aug 1975
CMG53	Cropmarks, E of Little Easton	561100	223400	18 Jun 1980
CMG54	Cropmarks, E of Little Easton	561100	223400	18 Jun 1980

### Vertical photographs [there were no library copies]

PHOTO ID	DATE	SUBJECT	SCALE	NGRE	NGRN
ZknLX164	20 Jul 2001	Stansted	0	560305	222988
ZknLX165	20 Jul 2001	Stansted	0	559655	222985
ZknLX200	20 Jul 2001	Stansted	0	559654	221777
ZknLX201	20 Jul 2001	Stansted	0	560308	221772

Source: National Monuments Record: Air Photographs (cover search 37434)

### Specialist collection

Photo reference (NGR and Index number)	Film and frame number		Original number	Date	NGR
TL 5921 / 1	EXC 16811	/ 09	BW/91/40	01 AUG 1991	TL 598216
TL 5921 / 2	EXC 16815	/ 08	BW/91/44	11 AUG 1991	TL 599218
TL 6021 / 1	EXC 16815	/ 07	BW/91/44	11 AUG 1991	TL 604213
TL 6121 / 1	EXC 19121	/ 09	CP/97/42	28 JUL 1997	TL 619211
TL 6121 / 2	EXC 16815	/ 05	BW/91/44	11 AUG 1991	TL 618217
TL 6122 / 1	EXC 16701	/ 15	SWC1	22 MAR 1993	TL 615220
TL 6122 / 2	EXC 16701	/ 16	SWC1	22 MAR 1993	TL 617220
TL 6122 / 3	EXC 16701	/ 17	SWC1	22 MAR 1993	TL 615221
TL 6122 / 4	EXC 16704	/ 15	SWC4	25 AUG 1993	TL 618224
TL 6221 / 17	EXC 16815	/ 06	BW/91/44	11 AUG 1991	TL 620215
TL 6222 / 1	NMR 1952	/ 108		29 JUN 1981	TL 620225
TL 6222 / 2	NMR 1952	/ 109		29 JUN 1981	TL 620225

### Vertical collection

Sortie number	Library number	Camera position	Frame number	Held	Centre NGR	Date	Scale 1:
RAF/106G/UK/1367	304	FV	7412	P	TL 620 219	03 APR 1946	10000
RAF/106G/UK/1367	304	FV	7413	P	TL 613 219	03 APR 1946	10000
RAF/106G/UK/1367	304	FV	7414	P	TL 606 218	03 APR 1946	10000
RAF/106G/UK/1367	304	FV	7415	P	TL 599 218	03 APR 1946	10000
RAF/106G/UK/1367	304	V	5412	P	TL 622 202	03 APR 1946	10000
RAF/106G/UK/1367	304	V	5413	P	TL 615 201	03 APR 1946	10000
RAF/106G/UK/1367	304	V	5414	P	TL 608 201	03 APR 1946	10000
RAF/106G/UK/1367	304	V	5415	P	TL 602 201	03 APR 1946	10000
RAF/106G/UK/1367	304	V	5416	P	TL 595 200	03 APR 1946	10000
RAF/CPE/UK/1993	612	RS	4251	P	TL 595 223	13 APR 1947	9800

RAF/CPE/UK/1993	612	RS	4252	P	TL 601 221	13 APR 1947	9800
RAF/CPE/UK/1993	612	RS	4253	P	TL 607 219	13 APR 1947	9800
RAF/CPE/UK/1993	612	RS	4254	P	TL 614 217	13 APR 1947	9800
RAF/CPE/UK/1993	612	RS	4255	P	TL 620 215	13 APR 1947	9800
RAF/CPE/UK/2135	665	RP	3020	N	TL 617 225	02 JUN 1947	10000
RAF/CPE/UK/2135	665	RP	3021	N	TL 611 225	02 JUN 1947	10000
RAF/CPE/UK/2135	665	RP	3022	N	TL 605 225	02 JUN 1947	10000
RAF/CPE/UK/2135	665	RP	3023	N	TL 598 225	02 JUN 1947	10000
RAF/CPE/UK/2135	665	RP	3024	N	TL 592 225	02 JUN 1947	10000
RAF/541/107	915	RS	4034	P	TL 625 225	26 JUL 1948	10000
RAF/541/107	915	RS	4035	P	TL 620 222	26 JUL 1948	10000
RAF/543/2337	2165	1F21	143	P	TL 613 203	30 JUL 1963	10000
RAF/543/2337	2165	1F21	144	P	TL 606 202	30 JUL 1963	10000
RAF/543/2337	2165	1F21	145	P	TL 598 202	30 JUL 1963	10000
RAF/543/2337	2165	1F22	143	P	TL 613 224	30 JUL 1963	10000
RAF/543/2337	2165	1F22	144	P	TL 605 224	30 JUL 1963	10000
RAF/543/2337	2165	1F22	145	P	TL 597 224	30 JUL 1963	10000
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RAF/58/4627	2195	F41	184	P	TL 602 201	16 AUG 1961	11000
RAF/58/4627	2195	F41	185	P	TL 612 201	16 AUG 1961	11000
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RAF/58/4627	2195	F41	257	P	TL 612 209	16 AUG 1961	11000
RAF/58/4627	2195	F41	258	P	TL 604 209	16 AUG 1961	11000
RAF/58/4627	2195	F41	259	P	TL 596 209	16 AUG 1961	11000
RAF/58/4627	2195	F42	256	P	TL 624 229	16 AUG 1961	11000
RAF/58/4627	2195	F42	257	P	TL 616 229	16 AUG 1961	11000
RAF/58/4627	2195	F42	258	P	TL 607 229	16 AUG 1961	11000
RAF/58/4627	2195	F42	259	P	TL 599 229	16 AUG 1961	11000
RAF/58/4627	2195	F42	260	P	TL 591 229	16 AUG 1961	11000
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HSL/UK/65/404	2342B	V	148	P	TL 611 224	13 AUG 1965	10560
HSL/UK/65/404	2342B	V	149	P	TL 602 221	13 AUG 1965	10560
HSL/UK/65/404	2342B	V	150	P	TL 594 218	13 AUG 1965	10560
HSL/UK/65/404	2342B	V	209	P	TL 608 203	13 AUG 1965	10560
HSL/UK/65/404	2342B	V	210	P	TL 616 207	13 AUG 1965	10560
HSL/UK/65/404	2342B	V	211	P	TL 625 211	13 AUG 1965	10560
HSL/UK/70/1079	2383L	V	3144	N	TL 628 227	09 OCT 1970	12000
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HSL/UK/70/1079	2383L	V	3146	P	TL 628 206	09 OCT 1970	12000
HSL/UK/70/1079	2383L	V	3977	N	TL 609 224	09 OCT 1970	12000
HSL/UK/70/1079	2383L	V	3978	N	TL 609 214	09 OCT 1970	12000
HSL/UK/70/1079	2383L	V	3979	P	TL 609 205	09 OCT 1970	12000
HSL/UK/70/1079	2383L	V	4076	N	TL 589 203	09 OCT 1970	12000
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HSL/UK/70/1079	2383L	V	4078	N	TL 589 223	09 OCT 1970	12000
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RAF/58/10	2894	V	5151	P	TL 603 217	08 MAY 1948	7600
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RAF/58/10	2894	V	5190	P	TL 594 229	08 MAY 1948	7600

RAF/58/10	2894	V	5191	P	TL 600 229	08 MAY 1948	7600
RAF/58/10	2894	V	5192	P	TL 606 230	08 MAY 1948	7600
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RAF/58/315	3093	V	5137	P	TL 614 218	22 AUG 1949	8000
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RAF/58/574	3263	V	5004	P	TL 596 222	03 OCT 1950	8040
RAF/58/574	3263	V	5068	P	TL 602 225	03 OCT 1950	8040
RAF/58/574	3263	V	5069	P	TL 605 219	03 OCT 1950	8040
RAF/58/574	3263	V	5070	P	TL 607 213	03 OCT 1950	8040
RAF/58/574	3263	V	5075	P	TL 612 216	03 OCT 1950	8040
RAF/58/574	3263	V	5076	P	TL 609 222	03 OCT 1950	8040
RAF/58/574	3263	V	5142	P	TL 619 223	03 OCT 1950	8040
RAF/58/574	3263	V	5143	P	TL 621 217	03 OCT 1950	8040
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MAL/68066	5322	V	43	P	TL 600 221	14 OCT 1968	10000
MAL/68066	5322	V	44	P	TL 592 221	14 OCT 1968	10000
MAL/68066	5322	V	133	P	TL 592 226	14 OCT 1968	5000
MAL/68066	5322	V	134	P	TL 596 226	14 OCT 1968	5000
MAL/68066	5322	V	135	P	TL 601 226	14 OCT 1968	5000
MAL/68066	5322	V	136	P	TL 605 226	14 OCT 1968	5000
MAL/68066	5322	V	137	P	TL 609 226	14 OCT 1968	5000
MAL/68066	5322	V	138	P	TL 613 226	14 OCT 1968	5000
MAL/68066	5322	V	139	P	TL 617 226	14 OCT 1968	5000
MAL/68066	5322	V	140	P	TL 621 226	14 OCT 1968	5000
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MAL/68067	5323	V	2	P	TL 616 218	14 OCT 1968	5000
MAL/68067	5323	V	3	P	TL 611 218	14 OCT 1968	5000
MAL/68067	5323	V	4	P	TL 607 218	14 OCT 1968	5000
MAL/68067	5323	V	5	P	TL 602 218	14 OCT 1968	5000
MAL/68067	5323	V	6	P	TL 598 218	14 OCT 1968	5000
MAL/68067	5323	V	7	P	TL 594 218	14 OCT 1968	5000
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MAL/80031	7652	V	67	P	TL 609 221	09 OCT 1980	12000
MAL/80031	7652	V	68	N	TL 599 221	09 OCT 1980	12000
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MAL/81022	7702	V	136	P	TL 605 201	22 JUN 1981	12000
MAL/81022	7702	V	137	N	TL 594 201	22 JUN 1981	12000
MAL/81025	7703	V	134	N	TL 625 202	07 JUL 1981	12000
MAL/81025	7703	V	135	P	TL 614 202	07 JUL 1981	12000
MAL/81025	7703	V	136	N	TL 602 203	07 JUL 1981	12000
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RAF/106G/UK/1639	8115	V	5161	P	TL 605 238	09 JUL 1946	10057
RAF/106G/UK/1639	8115	V	5162	P	TL 600 237	09 JUL 1946	10057
RAF/106G/UK/1639	8115	V	5163	P	TL 595 237	09 JUL 1946	10057
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OS/78163	9987	V	38	P	TL 599 216	23 SEP 1978	7400
OS/78163	9987	V	39	P	TL 606 216	23 SEP 1978	7400
OS/78163	9987	V	40	P	TL 613 216	23 SEP 1978	7400
OS/78163	9987	V	41	P	TL 619 216	23 SEP 1978	7400
OS/78163	9987	V	101	P	TL 621 230	23 SEP 1978	7400
OS/78163	9987	V	102	P	TL 615 229	23 SEP 1978	7400
OS/78163	9987	V	103	P	TL 608 229	23 SEP 1978	7400
OS/78163	9987	V	104	P	TL 602 229	23 SEP 1978	7400
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OS/63248	11052	V	87	P	TL 606 218	12 OCT 1963	6000
OS/63248	11052	V	88	P	TL 601 218	12 OCT 1963	6000
OS/63248	11052	V	89	P	TL 596 218	12 OCT 1963	6000
OS/63248	11052	V	120	P	TL 619 230	12 OCT 1963	6000
OS/63248	11052	V	121	P	TL 614 230	12 OCT 1963	6000
OS/63248	11052	V	122	P	TL 609 230	12 OCT 1963	6000
OS/63248	11052	V	123	P	TL 604 230	12 OCT 1963	6000
OS/63248	11052	V	124	P	TL 599 230	12 OCT 1963	6000
OS/63248	11052	V	125	P	TL 594 230	12 OCT 1963	6000
OS/89051	13420	V	48	P	TL 588 213	20 MAR 1989	10300
OS/89175	13500	V	866	P	TL 594 231	16 MAY 1989	10200
OS/89175	13500	V	903	P	TL 589 214	16 MAY 1989	10200
OS/90057	13680	V	114	P	TL 616 230	09 APR 1990	8100
OS/90057	13680	V	115	P	TL 610 230	09 APR 1990	8100
OS/90057	13680	V	116	P	TL 604 230	09 APR 1990	8100
OS/90057	13680	V	117	P	TL 598 230	09 APR 1990	8100
OS/90057	13680	V	155	P	TL 597 218	09 APR 1990	8100
OS/90057	13680	V	156	P	TL 603 218	09 APR 1990	8100
OS/90057	13680	V	157	P	TL 609 218	09 APR 1990	8100
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OS/90057	13680	V	159	P	TL 616 205	09 APR 1990	8100
OS/90057	13680	V	160	P	TL 609 205	09 APR 1990	8100
OS/90057	13680	V	161	N	TL 603 205	09 APR 1990	8100
OS/90057	13680	V	162	P	TL 596 205	09 APR 1990	8100
OS/91149	13844	V	38	P	TL 601 224	12 AUG 1991	8200
OS/91149	13844	V	39	P	TL 593 224	12 AUG 1991	8200
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OS/96119	15070	V	19	N	TL 603 218	05 JUN 1996	8300
OS/96119	15070	V	20	N	TL 596 218	05 JUN 1996	8300
OS/96118	15071	V	165	N	TL 617 231	05 JUN 1996	8300
OS/96118	15071	V	166	N	TL 610 231	05 JUN 1996	8300
OS/96118	15071	V	167	N	TL 603 231	05 JUN 1996	8300
OS/96118	15071	V	168	N	TL 596 231	05 JUN 1996	8300
OS/96118	15071	V	197	N	TL 596 206	05 JUN 1996	8300
OS/96118	15071	V	198	N	TL 603 206	05 JUN 1996	8300
OS/96118	15071	V	199	N	TL 610 205	05 JUN 1996	8300
OS/96118	15071	V	200	N	TL 617 205	05 JUN 1996	8300