ARCHAEOLOGICAL DESK-BASED ASSESSMENT

BURSTEAD SOLAR FARM AND BATTERY STORAGE 'FREE GO'

LAND SOUTH AND EAST OF GREAT BURSTEAD, BILLERICAY, ESSEX

NOVEMBER 2023

Burstead Solar Farm, Free Go, Billericay, Essex

Archaeological Desk-Based Assessment

landgage HERITAGE

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LANDGAGE HERITAGE LIMITED

Company registration Number: 12993775

Project Details

Landgage Heritage Project Reference	PR0071
Commissioning Client	Enso Green Holdings J Limited
Local Planning Authority	Basildon Council and Rochford District Council
Site grid reference	The eastern parcel: 569873, 193027 and western parcel: 568647, 191902

Version History

1st version	**Date of issue**	**Author**	**Reviewed by**	**Comments**
Draft issue	06 NOV 2023	Charles Winterburn	Will Bedford	1st external issue
2nd issue	20 NOV 2023	Charles Winterburn	Will Bedford	Updated following client comments

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Non-technical summary

This report has been prepared in relation to the land south and east of Burstead, Billericay, Essex (the study site) on behalf of Enso Green Holdings J Limited. This land is proposed for development as a solar farm and battery storage facility with all associated infrastructure. This assessment has been produced to inform a free go planning application for the proposed development of the study site, the proposed development is only for development within the western parcel of the study site, there will be no development within the eastern parcel.

This report has been produced in accordance with the Chartered Institute for Archaeologists (CIfA) standard and guidance for historic environment desk-based assessments (CIfA 2014), as well as Historic England (HE) guidance on the assessment of the significance and setting of heritage assets (HE 2015 and 2017, respectively). The assessment provided in this report has been informed by a review of data from the historic environment record (HER) held by Essex County Council, data held in the National Heritage List for England (NHLE) held by Historic England, a review of lidar data held by the Environment Agency (EA) and aerial imagery from available sources, as well as by the results of previous archaeological investigations in the wider area around the study site.

A review of the available evidence has found that the study site has a general potential for the presence of peripheral remains associated with agricultural land use during the prehistoric, Roman, Medieval and Post-Medieval periods. There is also a moderate potential for the presence of former Medieval and Post-Medieval field boundaries, as well as for the presence of Post-Medieval quarrying activity. The study site has a low potential for the presence of remains of interest from other periods.

The cable route passes through the settlement of Wickham, as well as land to the east of Wickham which is known to contain buried remains of interest. However, the cable route is located within the roadway of the modern A129, the route of which was archaeologically excavated to the east of Wickham, and the construction of which would have truncated any remains which may have been present along the route. However, where the cable route passes close to the multi-period site at Beauchamps in Wickham, previous archaeological work has shown there to be potential for the presence of buried remains even in areas which have been previously developed. As such, this assessment has found that the cable route has a general potential to contain buried remains of Prehistoric, Roman and Medieval dates, within the historic core of Wickham, and also close to the multi-period site at Beauchamps. There is a low potential for the presence of buried remains of interest in the remainder of the cable route.

The impact of the proposed development on any below ground remains within the study site is limited, comprising a total below ground impact of less than 1% of the study site area. The framework arrays which would support the solar panels result in a highly localised impact, which would generally only affect highly sensitive remains, such as human burials, or fragile remnants of ancient human habitation, of which there is no evidence for within the study site. This impact would be spread in rows across the whole of the study site.

The excavation of the cable trenches within the study site has the potential to result in a localised impact along the route of the trench, where this may coincide with buried archaeological remains. Likewise, the small foundations excavated for the construction of the access road and the structures to contain equipment, such as the electrical inverters and transformer units, also have the potential to result in localised impacts to below ground remains.

The identified impact within the study site could be mitigated by several measures, including:

- a programme of archaeological works, which would be targeted to record any archaeological remains which may be affected by the cable trenches, or proposed structures within the study site prior to their construction; or
- protection by means of modified foundations, such as concrete foundations;
- exclusion from development
- a combination of the approaches above.

The overall level of impact of the proposed development on the identified archaeological resources in the study site would therefore be very low, and the risk of a localised impact which would significantly affect the archaeological interest of any buried remains would also be low. It is therefore clear that there is no in principle archaeological constraint to the implementation of the proposed development.

A trench would be excavated within the cable route, and would measure approximately 600mm wide and 1m in depth. The excavation of the trench has the potential to result in a localised impact to the identified remains within Wickham, if present. The identified impact resulting from the excavation of the trench along the cable route could be mitigated by a programme of archaeological monitoring and recording, focussed on the historic core of Wickham and the vicinity of the multi-period settlement site at Beauchamps. This would ensure any features present would be recorded prior to impact, and would also contribute to local research objectives by providing additional information relevant to the multi-period site. As such it would adequately compensate for the loss of any remains within the cable route.

The proposed development could readily accommodate any of the mitigation measures outlined, without resulting in a significance change to the proposals. Therefore, it is considered that any further archaeological works could be undertaken post-consent, and secured via a suitably worded planning condition. A conditioned programme of works was recommended by Teresa O'Connor, a Historic Environment officer at Essex County Council in relation to the refused planning application (22/00411/FULL):

> *In view of this, the following recommendation is made in line with the National Planning Policy Framework: (Paragraph 194 and 205)*
>
> *1. No development or preliminary groundworks of any kind shall take place until a programme of archaeological investigation has been secured in accordance with a written scheme of investigation which has been submitted by the applicant, and approved in writing by the local planning authority.*
>
> *2. No development or preliminary groundworks of any kind shall take place until the completion of the programme of archaeological evaluation identified in the WSI defined in Part 1 and confirmed by the Local Authority archaeological advisors.*
>
> *3. A mitigation strategy detailing the excavation / preservation strategy shall be submitted to the local planning authority following the completion of the archaeological evaluation.*
>
> *4. No development or preliminary groundworks can commence on those areas containing archaeological deposits until the satisfactory completion of fieldwork, as detailed in the mitigation strategy, and which has been approved in writing by the local planning authority.*
>
> *5. The applicant will submit to the local planning authority a post excavation assessment (to be submitted within six months of the completion of the fieldwork, unless otherwise agreed in advance with the Planning Authority). This will result in the completion of post excavation*

analysis, preparation of a full site archive and report ready for deposition at the local museum, and submission of a publication report.

A recognised professional team of archaeologists should undertake the archaeological work. The Local Council should inform the applicant of the archaeological recommendation and its financial implications. An archaeological brief can be produced by this office detailing the work required on request.

On this basis it is clear that the impact of the proposed development on the archaeological potential of the study site could be adequately mitigated, and the development made acceptable in terms of archaeological impacts. It therefore accords with the requirements in paragraph 203 of the NPPF and policies ENV1 of the local adopted and emerging Rochford District Council plans and also Basildon Council Local Development Plan.

1.0 Introduction

1.1 The Study Site

1.1.1 This archaeological desk-based assessment considers land south and east of Burstead, Billericay, Essex (Fig. 1). It has been prepared by Landgage Heritage Ltd on behalf of Enso Green Holdings J Limited. It has been prepared to inform a free go planning application for the development of the study site as a solar farm and battery storage facility with all associated infrastructure in the eastern parcel of the study site; the proposed development will only take place within the eastern parcel, there will be no development undertaken within the western parcel; this was the result of the refusal of an initial planning application (22/00411/FULL).

1.1.2 The site (hereafter referred to as the study site) is located at grid references – the eastern parcel: 569873, 193027 and western parcel: 568647, 191902. The western parcel will remain undeveloped. As has been discussed, there will be no development within the western parcel, as such when the site is referred to within this document it is only in reference to the eastern parcel and the cable route.

1.1.3 The eastern parcel will be referred to as the study site. The proposed development also includes a cable connection to a substation at the National Grid Rayleigh substation. This connection route will be referred to as the cable route.

Site Conditions

1.1.4 The study site comprises 7 arable fields, while the cable route is located primarily along existing roads (see Plate 1 below).

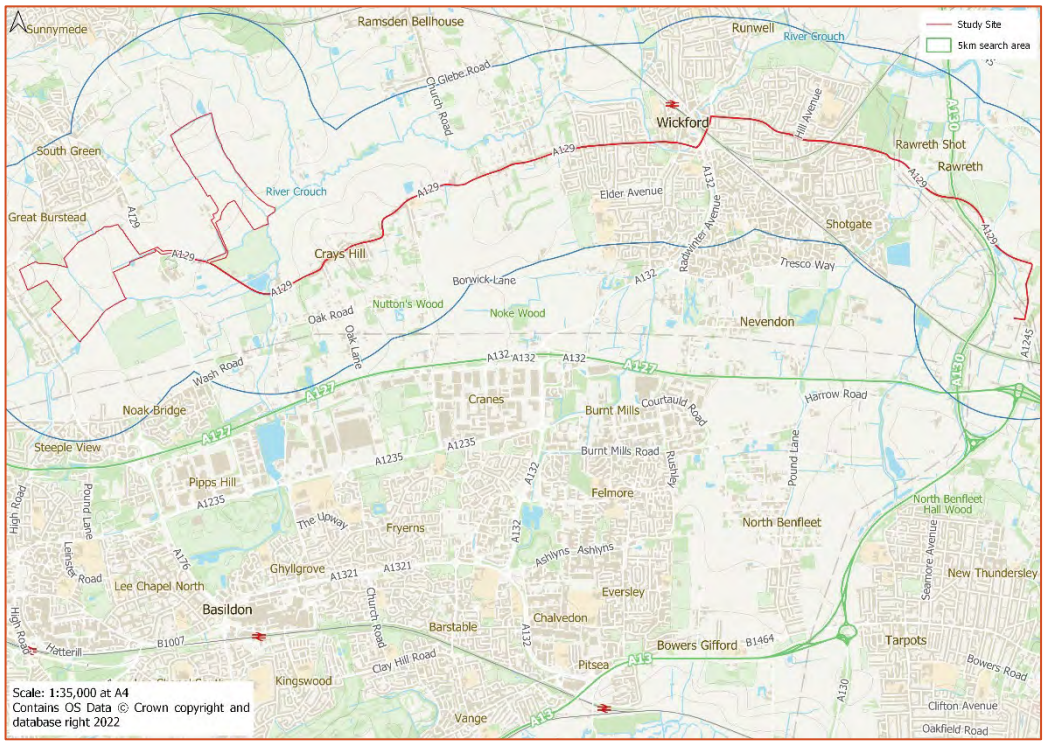

Plate 1 Study Site Location

Location, Geology and Topography

1.1.5 The study site is located across 3 arable fields (see Fig. 1). The study site occupies several south facing slopes in a valley along the River Crouch (see plate2). The topography of the site suggests it would have been a valuable place for early human activity, which is discussed further in section 4.5.1, below.

1.1.6 The underlying geology of the study site comprises London clay formation, with superficial deposits of alluvium – clay, silt, sand, and gravel; and river terrace – sand and gravel (BSG geology of Britain viewer 2022).

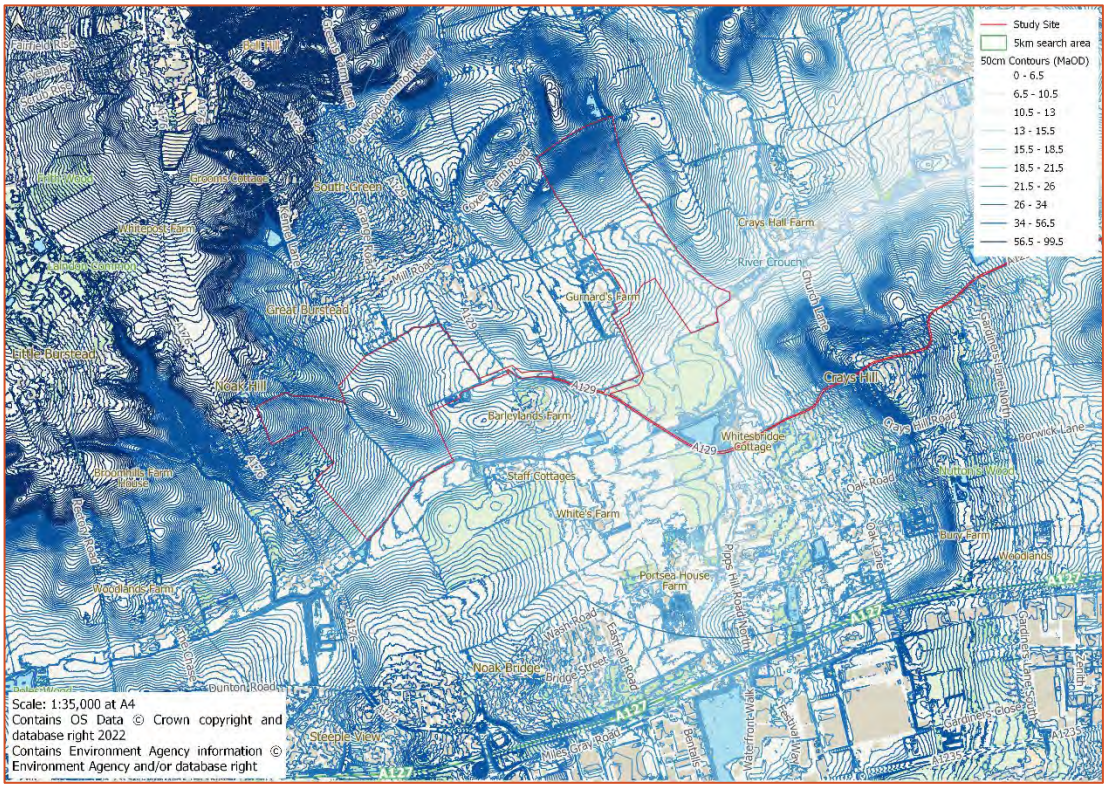

Plate 2 50cm Contours

1.2 The Proposed Development

1.2.1 The proposed development comprises a solar farm and battery storage facility, consisting of arrays of photovoltaic panels throughout the study site. The panels would be set at a maximum height of 3m. The panels would be supported by small, fixed pile foundations, which would be driven into the ground and would each measure 0.01m^2 in area. The proposed development would also include access tracks, small buildings to contain electrical inverters, transformers and batteries, fencing and trenches for cabling. Foundations for the buildings would be modest, and further details are provided on the accompanying plans. The focus of the below ground works would be at these small buildings. This planning application has removed any development within the western parcel of land in response to the refusal of a previous planning applications (22/00411/FULL Basildon) (22/00359/FUL Rochford).

1.3 Purpose and Scope of Assessment

1.3.1 This report assesses the effect the proposed development would have on the significance of heritage assets through any direct physical effects. This assessment is made in the context of the statutory and policy framework set out in section 2. It follows best practice, and the approach to the assessment is set out in section 3. It has also been produced in accordance with the Chartered Institute for Archaeologists (CIfA) standard and guidance for historic environment desk-based assessment (CIfA 2017).

1.3.2 Section 4 of the report provides:

- An assessment of the potential the study site has to contain buried archaeological remains, based on available evidence; and
- An assessment of the significance of the buried archaeological heritage assets which could be affected.

1.3.3 Section 5 provides an assessment of the effect the implementation of the proposed development would have on the significance of the heritage assets, including a consideration of any mitigation measures and residual effects.

1.3.4 Finally, section 6 provides a summary of the results of the report.

2.0 Legislative, Planning and Development Plan Framework

2.1 Ancient Monuments & Archaeological Areas Act 1979

2.1.1 The Ancient Monuments & Archaeological Areas Act 1979 (as amended) protects the fabric of Scheduled Monuments, but not their settings.

2.2 National Planning Policy Framework & Planning Practice Guidance

Introduction and General Overview

2.2.1 Government policy in relation to the historic environment is set out in section 16 of the National Planning Policy Framework (NPPF), entitled 'Conserving and Enhancing the Historic Environment'. This provides policy for local planning authorities, property owners, developers and others on how effects to heritage assets which would result from a proposed development should be weighed and considered in plan-making and planning decisions.

2.2.2 The NPPF is supported by guidance provided in the Planning Practice Guidance (PPG), which helps to clarify some terms and requirements within the NPPF. The PPG has a category on the historic environment, which provides specific guidance in relation to heritage policies in section 16 of the NPPF.

2.2.3 In paragraph 189, the NPPF describes heritage assets as an irreplaceable resource, which should be "conserved in a manner appropriate to their significance, so that they can be enjoyed for their contribution to the quality of life of existing and future generations".

Key Heritage Policies

2.2.4 Section 16 of the NPPF contains a number of key policies in relation to decision-making and the historic environment. These are briefly described below and are referenced to the NPPF by paragraph number.

2.2.5 Paragraph 194 provides policy on the level of information required to inform a planning application which affects the historic environment. It states that developers must describe the significance of any heritage assets which would be affected by a proposed development, and specifies that the level of detail should be proportionate to the assets' importance and no more than is required to understand the impact the development would have on the significance of the asset.

2.2.6 Paragraph 199 requires that decision makers give great weight to the conservation of designated heritage assets when considering applications that could affect an assets' significance. It also makes clear that great weight must be given irrespective of the degree of harm which would result.

2.2.7 Paragraph 200 states that any harm to the significance of a designated heritage asset must be supported by a clear and convincing justification. It then goes on to differentiate between designated heritage assets, and designated heritage assets of the highest significance while setting policy in relation to substantial harm:

Substantial harm to or loss of:

(a) grade II listed buildings, or grade II registered parks or gardens, should be exceptional;

(b) assets of the highest significance, notably scheduled monuments, protected wreck sites, registered battlefields, grade I and II listed buildings, grade I and II**

registered parks and gardens, and World Heritage Sites, should be wholly exceptional

2.2.8 The NPPF does not provide a definition of substantial harm, however the Planning Practice Guidance on the historic environment provides guidance on how to identify substantial harm in paragraph 18a-018:

> *Whether a proposal causes substantial harm will be a judgment for the decision-maker, having regard to the circumstances of the case and the policy in the National Planning Policy Framework. In general terms, substantial harm is a high test, so it may not arise in many cases. For example, in determining whether works to a listed building constitute substantial harm, an important consideration would be whether the adverse impact seriously affects a key element of its special architectural or historic interest. It is the degree of harm to the asset's significance rather than the scale of the development that is to be assessed. The harm may arise from works to the asset or from development within its setting.*
>
> *While the impact of total destruction is obvious, partial destruction is likely to have a considerable impact but, depending on the circumstances, it may still be less than substantial harm or conceivably not harmful at all, for example, when removing later additions to historic buildings where those additions are inappropriate and harm the buildings' significance. Similarly, works that are moderate or minor in scale are likely to cause less than substantial harm or no harm at all. However, even minor works have the potential to cause substantial harm, depending on the nature of their impact on the asset and its setting.*

2.2.9 Paragraph 201 then states that where a development would result in substantial harm or loss to a designated heritage asset the local planning authority should refuse consent unless it can be demonstrated that the proposed development would provide substantial benefits that clearly outweigh the harm, or specific circumstances apply.

2.2.10 Paragraph 202 specifies that where a development would result in less than substantial harm to the significance of a designated heritage asset, then this harm should be weighed against the public benefits of the proposal.

2.2.11 Paragraph 203 specifies that effects of a proposed development on the significance of non-designated heritage assets should be taken into account in the determination of the planning application, and requires that a balanced judgement is had having regard to both the scale of any harm or loss, and the significance of the asset.

2.2.12 Paragraph 205 requires that developers record and advance understanding of the significance of any heritage assets to be lost, in a manner proportionate to the significance of the asset to be lost, and to make this evidence publicly available.

2.2.13 Paragraph 206 requires that local planning authorities treat favourably planning applications that preserve elements of the setting of a heritage asset that contribute positively to its significance, or better reveal or enhance the significance of the heritage asset.

Key Definitions

2.2.14 Annex 2 of the NPPF provides a number of key definitions in relation to the historic environment:

- **Heritage Assets**: A building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest. Heritage asset includes designated heritage assets and assets identified by the local planning authority (including local listing).
- **Archaeological Interest**: 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.
- **Designated Heritage Assets**: World Heritage Sites, Scheduled Monuments, Listed Buildings, Protected Wreck Sites, Registered Park and Gardens, Registered Battlefields and Conservation Areas.
- **Significance**: 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.
- **Setting**: The surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral.
- **Conservation** (for heritage policy): The process of maintaining and managing change to a heritage asset in a way that sustains and, where appropriate, enhances its significance.

2.2.15 In addition to the definitions provided in Annex 2 of the NPPF, the PPG also provides important definitions of what is meant by architectural, artistic and historic interest in paragraph 18a-006:

- **Architectural and artistic interest**: These are interests in the design and general aesthetics of a place. They can arise from conscious design or fortuitously from the way the heritage asset has evolved. More specifically, architectural interest is an interest in the art or science of the design, construction, craftsmanship and decoration of buildings and structures of all types. Artistic interest is an interest in other human creative skill, like sculpture.
- **Historic interest**: An interest in past lives and events (including pre-historic). Heritage assets can illustrate or be associated with them. Heritage assets with historic interest not only provide a material record of our nation's history, but can also provide meaning for communities derived from their collective experience of a place and can symbolise wider values such as faith and cultural identity.

2.3 Local Planning Policy

2.3.1 Local planning policy is provided by the adopted 1998 (remaining saved policies) Basildon local plan and the Rochford District Council adopted core strategy 2011. The Rochford DC Core Strategy has the following policy relevant to this assessment.

Policy ENV1 – Protection and Enhancement of the Natural Landscape and Habitats and the Protection of Historical and Archaeological Sites

The Council will maintain, restore and enhance sites of international, national and local nature conservation importance. These will include Special Areas of Conservation (SACs),

Special Protection Areas (SPAs), Ramsar Sites, Sites of Special Scientific Interest (SSSIs), Ancient Woodlands, Local Nature Reserves (LNRs) and Local Wildlife Sites (LoWSs). In particular, the Council will support the implementation of the Crouch and Roach Management Plan.

The Council will also protect landscapes of historical and archaeological interest.

2.3.2 These policies are considered within this DBA.

3.0 Assessment Methodology

3.1 Scope of Study

For the Assessment of Archaeological Potential

3.1.1 The archaeological potential of the study site will be assessed by reviewing available relevant evidence, both from within the study site, and also from the surrounding area, and using this to assess the potential the study site has to contain buried archaeological remains. The evidence will be drawn from the following resources, where relevant and available:

- The LPA's Historic Environment Record (HER) data;
- The results of previous archaeological investigations (if available and relevant);
- The National Heritage List for England (NHLE) held by Historic England;
- The Historic England Archive;
- Pastscape;
- The Archaeology Data Service (ADS);
- Local studies and record office research;
- Environment Agency lidar data (if available and relevant);
- Aerial photography (if available and relevant);
- A site walk over (where possible and appropriate); and
- Review of historic mapping.

3.1.2 In addition, information about the topography and geology of the study site will also be collated and considered alongside the archaeological evidence.

3.1.3 These records and resources will be examined in relation to the study site, and a suitable buffer zone (the study area) around the study site. This is to ensure that the baseline information used to inform the assessment of potential for the study site includes sufficient information with which to understand the context of the evidence discussed. The extent of the study area needed to inform the assessment will depend on the quantity and quality of the evidence available, as well as the size of the study site among other factors.

3.1.4 The standard extent of the study area is usually 1km from the study site's boundary. However, this may be varied depending on the nature of the evidence available; for example in some urban settings there may be a high quantity of evidence in the immediate vicinity of the study site, meaning that the extent of the study area can be reduced and more focussed on the study site and the immediately surrounding area.

3.1.5 On this occasion, a 1km search radius from the study site boundary is considered appropriate for the study area.

For the Assessment of Setting Impacts

3.1.6 This assessment will also consider the potential effects of development within the study site on the significance of archaeological heritage assets, through effects to their settings. The archaeological heritage assets identified by the assessment of potential undertaken within this assessment may have a setting, such as surviving earthworks, and / or reflections of the buried remains reflected in later, above ground features visible today. As

such, even if not directly impacted by a proposed development, their setting may be affected. In addition, archaeological heritage assets in the surrounding area may have a setting, and so may be affected by development within the study site. The heritage assets which require assessment have been selected with reference to the National Heritage List for England (NHLE) database held by Historic England, as well as information held by the LPA on conservation areas and heritage assets.

3.1.7 A search radius of 1km from the study site boundary was used to establish which archaeological heritage assets required assessment for impacts.

3.1.8 Not all designated heritage assets within this radius will require full assessment for impacts; as set out in paragraph 194 of the NPPF, the level of detail will be sufficient to inform the nature and degree of effect of development within the study area on the significance of the heritage asset in question. When a heritage asset has been excluded, a clear justification will be provided, for example if the asset is sufficiently far, and well screened from the study site.

3.2 Methodology for assessment of archaeological potential

3.2.1 The available evidence will be reviewed and used to determine what potential the study site has to contain buried archaeological remains. Regard must be had to the reliability of the evidence reviewed, any limitations inherent in the methods used to generate that evidence, and to the relevance of the evidence in informing the assessment of archaeological potential of the study site. The assessment will consider the available archaeological evidence by historical period.

3.2.2 It is not necessary to describe all available evidence for each period exhaustively; the assessment of potential should focus on the evidence which helps to clarify the archaeological potential of the study site.

3.2.3 The historical periods referred to in this assessment are set out below:

Prehistoric period

Palaeolithic	900,000 BC to 12,000 BC
Mesolithic	12,000 BC to 4,000 BC
Neolithic	4,000 BC to 2,300 BC
Bronze Age	2,300 BC to 800 BC
Iron Age	800 BC to AD 43

Historic period

Roman	AD 43 to AD 410
Early medieval/Saxon	AD 410 to AD 1066
Medieval	AD 1066 to AD 1485
Post-Medieval	AD 1485 to AD 1901
Modern	AD 1901 to present

3.2.4 The potential for the study site to contain buried remains will be categorised as either known, moderate, general, low, limited, no potential or unknown potential, based on the criteria set out below.

- **Known potential**: where a site is known to have archaeological remains, for example from evidence provided by archaeological investigations.

- **Moderate potential**: where the available evidence suggests there is a strong possibility for a site to contain archaeological remains, but it is not conclusive or certain. For example, an adjacent field to that being assessed has been subject to archaeological field investigations and is known to have evidence of occupation remains. But there is no clear evidence in the results of the investigations that these remains continue into the site being assessed.
- **General potential**: where the available evidence suggests that archaeological remains may be present in the study site, but the evidence is not clear enough to determine whether the study site is likely or unlikely to contain associated buried remains. For example, there may be a general potential for archaeology, evidenced by residual finds in nearby investigations and other evidence in the wider area, but no clear evidence close to the study site, which would help to determine whether their presence within the study site is likely or unlikely.
- **Low potential**: where the available evidence suggests that the presence of archaeological remains within a site is unlikely, but this is not certain or conclusive.
- **No potential**: where a site is known to have no archaeological remains, for example due to past mineral extraction, or when previous archaeological works demonstrate that no remains are present.
- **Unknown potential**: where there is insufficient information to provide any assessment of the archaeological potential of a site.

3.2.5 The assessments of potential set out above can refer to the potential across the whole of the study site, or to only part of it. For example, potential for evidence from a particular period may be focussed in a specific part of the study site, or there may be evidence of localised mineral extraction.

3.3 Methodology for Assessment of the Significance and Setting of Heritage Assets

3.3.1 The significance and setting of the heritage assets considered within this report will be assessed using the methodology set out below. The methodology has been informed by Historic England's Good Practice Advice in Planning notes 2 and 3, which provide guidance on the assessment of the significance and the setting of heritage assets.

3.3.2 This section will therefore firstly summarise the methods set out in the Historic England guidance notes. This will be followed by a description of how the Historic England methods will be applied within this report.

Methodology for Assessment of Significance of Heritage Assets

3.3.3 Ultimately the assessment of the significance of archaeological remains and other heritage assets is a matter of professional judgement, having regard to the available evidence, including research priorities, guidance, as well as any designation the asset may have. However, assessments of significance should follow Historic England's Historic Environment Good Practice Advice in Planning: 2, Managing Significance in Decision-Taking in the Historic Environment (GPA 2). This sets out that, when assessing the significance of a heritage asset, the nature, extent and level of the significance should be considered.

3.3.4 The **nature** of the significance refers to a heritage asset's archaeological, architectural, historic or artistic interest (NPPF annex 2), and to what extent its significance is derived from one or more of these. For example, a buried archaeological site may have high archaeological interest, but limited artistic interest.

3.3.5 The **extent** of the significance refers to the area in which the significance resides, which includes the setting of a heritage asset.

3.3.6 The **level** of significance refers to the heritage asset's importance; for example scheduled archaeological remains are considered to be of the national significance. For the purposes of this assessment, the significance of the heritage assets will be assessed to determine whether they are of the highest national, national, regional, local or limited significance. The distinction between heritage assets of national, as opposed to those of the highest national significance has been made to reflect the distinction made in paragraph 200 of the NPPF.

3.3.7 The assessment will be made with reference to the Principles of Selection for Scheduled Monuments provided in Annex 1 of the DCMS policy statement on Scheduled Monuments, Historic England designation guidance and research priorities set out in the relevant regional and local archaeological research frameworks, as appropriate.

3.3.8 The levels of significance used in this assessment are briefly defined below.

- **National (highest significance)** - Scheduled monuments (and archaeological remains of demonstrably equivalent significance), protected wreck sites, registered battlefields, grade I and II* listed buildings, grade I and II* registered parks and gardens, and World Heritage Sites.
- **National** - Grade II listed buildings, grade II registered parks or gardens and conservation areas.
- **Regional** - Archaeological remains which have considerable archaeological interest, but which do not meet the criteria for designation. Remains which contain evidence that would make a substantive contribution to regional research objectives. A historic building with considerable architectural and historic special interest, but which does not meet the criteria for listing.
- **Local** - Archaeological remains which have clear archaeological interest, and which preserve evidence that would contribute to local research priorities. Such remains would make a limited contribution to regional research objectives. Locally listed historic buildings identified by the LPA, for example in a conservation area appraisal.
- **Limited** - Archaeological remains which have limited evidence that would not meaningfully contribute to local or regional research objectives. A historic building which retains limited original fabric, and/or whose historic interest has been largely compromised.

Methodology for Assessment of Setting of Heritage Assets

3.3.9 The setting of heritage assets will be assessed in line with Historic England's Historic Environment Good Practice Advice in Planning 3: The Setting of Heritage Assets (GPA 3). This sets out a five-step process for the assessment of the setting of a heritage asset (Historic England, 2017, p 8):

Step 1. Identify which heritage assets and their settings are affected.
Step 2. Assess the degree to which these settings make a contribution to the significance of the heritage asset(s) or allow significance to be appreciated.
Step 3. Assess the effects of the proposed development, whether beneficial or harmful, on that significance or on the ability to appreciate it.
Step 4. Explore ways to maximise enhancement and avoid or minimise harm.

Step 5. Make and document the decision and monitor outcomes.

3.3.10 This assessment will consider Steps 1 through 3 for all heritage assets which require assessment. Step 4 may be considered on a case by case basis as required. Step 5 is beyond the remit of the assessment.

3.3.11 The guidance also sets out the "twin roles" of setting in relation to the significance of heritage assets. It states that the setting can either contribute to the significance of a heritage asset, or provide an ability to appreciate that significance (Historic England, 2017, p 1 and 4).

Application of methods within this report

3.3.12 A full assessment of the potential impacts and effects of a proposed development on the significance of a heritage asset must incorporate the approaches in both GPA 2 and GPA 3, as it is necessary to understand both the setting and the significance of a heritage asset in order to understand what effect a development proposal would have on the significance of the heritage asset in question.

3.3.13 This report has therefore been structured to ensure that each step within both guidance notes is undertaken consistently for each heritage asset assessed. Table 1, below, sets out where each step of GPA 2 and 3 are found within this report. The table is organised around the first four steps in GPA 3, as the assessment of significance outlined in GPA 2 forms part of step 2 of the approach set out in GPA 3.

Table 1: Summary of application of Historic England guidance within report

GPA 3 Steps	Location within report and descriptions
Step 1	- Section 3.1: Sets out the search areas used to determine which heritage assets may require further assessment. - Section 4.1: Describes any refinements to the scope of the assessment.
Step 2	- Section 4: Contains descriptions of all the heritage assets which have been confirmed as requiring further assessment, consisting of: o An assessment of the potential the study site has to contain buried archaeological heritage assets. o An assessment of the significance of the archaeological heritage assets, in accordance with the approach set out in Historic England's Good Practice Advice in Planning note 2, and summarised above; and o A description of the extent and setting of the heritage asset, and of the role the asset's setting plays in its significance if any.
Step 3	- Section 4: There will also be an assessment of the role the study site plays within the setting and significance of any potential archaeological heritage assets, confirming whether the study site forms part of or is within the setting of the heritage asset, and whether it is a positive, negative or neutral aspect of its setting and / or significance. This helps to inform the impact assessment. - Section 5: Provides an assessment of the impacts and effects of the proposed development on the significance of the heritage asset. This is undertaken in accordance with the approach set out in sections 3.4 and 3.5, below.
Step 4	- If appropriate, additional mitigation measures may be suggested to further reduce any harm identified in section 5.3.

3.4 Assessment of Impacts

3.4.1 As is confirmed by the PPG: "What matters in assessing whether a proposal might cause harm is the impact on the significance of the heritage asset" (PPG 18a-018). The NPPF uses the term "harm", when discussing the impacts of a development on the significance of a heritage asset. The assessment of the overall impacts of the proposed development on the significance of heritage assets is evaluated by taking into account both the significance of the heritage asset, and the nature and extent of the predicted impact on that significance. If a proposal would change the setting of a heritage asset in a way which is considered harmful, it is essential that clear reasoning is provided on why the change would lead to harm. That reasoning must explain how the change to the setting of the heritage asset would either affect some element of its setting which contributes to its significance or hinder the appreciation of the asset's significance.

3.4.2 The NPPF identifies only three levels of harm, substantial harm, less than substantial harm and no harm in the wording of the policies set out in paragraphs 200-202. However, as is noted above, the PPG states that substantial harm is a "high test" (PPG Paragraph 18a-018). This means that less than substantial harm can encompass impacts that range from just below substantial harm, down to just above negligible, which is a considerable range of impacts. Furthermore, in paragraph 18a-018 the PPG also clarifies that:

> *Within each category of harm (which category applies should be explicitly identified), the extent of the harm may vary and should be clearly articulated.*

3.4.3 Therefore, to ensure the impacts are clearly articulated, where a finding of less than substantial harm is identified it will be categorised as either medium or low depending on the degree of harm. This results in a spectrum of potential impacts on the significance of heritage assets which ranges from no impact up to substantial harm. This spectrum of impacts is summarised in Table 1, below, along with brief descriptions of the terms used.

Table 2: Criteria for determining the degree of harm on the significance of heritage assets

Level of impact	Description
Substantial harm	- Total or substantial loss of the significance of a heritage asset. - Harm to a heritage asset through effects to its setting, such that the significance of the asset would be totally lost or substantially reduced (e.g. the significance of a designated heritage asset would be reduced to such a degree that its designation would be questionable; the significance of an undesignated heritage asset would be reduced to such a degree that its categorisation as a heritage asset would be questionable).
Less than substantial harm - medium	- Moderate harm to a heritage asset, such that the asset's significance would be materially affected/considerably devalued, but not totally or substantially lost.
Less than substantial harm - low	- Low level of harm to the significance of a heritage asset. - This could include the removal of fabric that forms part of the heritage asset, but that is not integral to its significance (e.g. the demolition of later extensions/additions of little intrinsic value). - Low level of harm to the heritage asset's significance through effects to its setting.
Negligible	- A change to a heritage asset or its setting that involves no loss of significance or harm.

Table 2: Criteria for determining the degree of harm on the significance of heritage assets	
Level of impact	Description
No Impact	- No change to a heritage asset or its setting.

3.4.4 Assessments of the degree of harm on the significance of heritage assets are based on the extent to which the proposed development would affect the nature, extent and level of significance of the asset. By nature this process is not quantitative but relies on professional judgement. However, this judgment is informed by accepted, observable facts, such as spatial relationships and designations.

3.5 Assessment of Heritage Benefits

3.5.1 There are no criteria within the NPPF or in the PPG for the assessment of beneficial effects to the significance of heritage assets. However the NPPF does make it clear that enhancements to the significance of heritage assets are desirable (paragraph 192) and that developments that enhance the significance of heritage assets should be treated favourably (paragraph 206).

3.5.2 The National Planning Policy Guidance defines public benefits, and also provides examples of heritage benefits in Paragraph 18a-020:

> *The National Planning Policy Framework requires any harm to designated heritage assets to be weighed against the public benefits of the proposal.*
>
> *Public benefits may follow from many developments and could be anything that delivers economic, social or environmental objectives as described in the National Planning Policy Framework (paragraph 8). Public benefits should flow from the proposed development. They should be of a nature or scale to be of benefit to the public at large and not just be a private benefit. However, benefits do not always have to be visible or accessible to the public in order to be genuine public benefits, for example, works to a listed private dwelling which secure its future as a designated heritage asset could be a public benefit.*
>
> *Examples of heritage benefits may include:*
>
> - *sustaining or enhancing the significance of a heritage asset and the contribution of its setting*
> - *reducing or removing risks to a heritage asset*
> - *securing the optimum viable use of a heritage asset in support of its long term conservation*

3.5.3 Furthermore, there are often instances where the effects of a development on the significance of a heritage asset are multifaceted, with both harmful and beneficial effects. In these instances it is necessary to come to an overall understanding of the impact of a proposed development, which considers both positive and negative effects. To inform such a judgment, it is not sufficient to understand that an effect is beneficial, it is also necessary to understand the scale of the benefit in order to understand how a harmful effect compares to a beneficial one.

3.5.4 Therefore, where a beneficial effect to a heritage asset is identified it will categorised as either substantial, moderate or low, mirroring the degrees of harm set out in table 1.

Where a benefit is categorised, this will be justified within the assessment. The categorisation of a benefit will follow the broad criteria set out below in table 2.

Table 3: Scale of heritage benefits	
Level of effect	Description
Substantial benefit	- Benefits that enhance key elements of a heritage asset's significance to a substantive degree. This would include effects such as substantial repairs or restoration of original fabric of a listed building which is at risk, or works that allow a central part of an asset's special interest to be appreciated or understood where this was not previously possible.
Moderate benefit	- Benefits that provide a moderate enhancement to important elements of a heritage asset's significance. Examples would be realising the research value of remains of archaeological interest through archaeological investigation, modest repairs and restoration of key parts of the fabric of a heritage asset, and works that better reveal key elements of the significance of a listed building, either by removing unsympathetic extensions or by sympathetically modifying the building's setting.
Low benefit	- Benefits that either provide minor enhancements to important elements of a heritage asset's significance, or which benefit more peripheral elements of the asset's significance. Examples would include removing unsympathetic elements from the setting of a heritage asset which allow for generally enhanced appreciation of the asset's significance, or minor repairs and restoration of a historic building's fabric.

3.5.5 It is important to note that the descriptions and categories above are for guidance, and that assessments of benefits must ultimately be based on professional judgment which is informed by a thorough understanding of the heritage asset's significance, and of the effects of the proposed development.

3.6 Photography

3.6.1 Photographs taken to illustrate the scale of a heritage asset from a particular viewpoint have been taken with a Canon EOS 6D camera with a 24-105mm lens. The camera has a 20.2 megapixel full-frame CMOS sensor.

3.6.2 Research has found that images taken with a focal length of between 70mm and 80mm provide the most realistic representation of landscape features in terms of their scale within the photograph, with shorter focal lengths (i.e. 50mm or 60mm) found to exaggerate the distance of the object (Hunter 2012). While this chapter does not consider landscape impacts, it does consider views of heritage assets within their setting, including distant key views, in which similar considerations to those studied by Hunter's research apply (for instance, one of the receptors considered in the 2012 study was Urquhart Castle, a scheduled monument in Scotland).

3.6.3 Therefore, photographs of heritage assets within this assessment, such as a church tower seen from a specific viewpoint, will be taken at focal lengths of between 70mm to 80mm, to provide an accurate representation of the scale of the heritage asset within any view presented. Lower focal lengths (which provide a more wide-angle view) may be used in certain circumstances, for example in urban contexts or for general site or location photographs, to provide better context for a view, or understanding of the setting of a heritage asset, if appropriate. The focal length of the image will be provided with all photographs.

3.6.4 Care has also been taken to ensure that the images presented are of a good quality. Photographs are taken in clear weather wherever possible. Finally, photographs within the body of this assessment are provided for illustrative purposes only and are not sized within the assessment for viewing to scale as is done in Landscape and Visual Impact Assessment (LVIA). If it is necessary to provide such a scaled view, it will be clearly labelled with specific viewing instructions.

3.7 Methodology for Assessment of Lidar Data

3.7.1 Lidar (light detection and ranging) uses airborne laser scanning to scan the ground to provide a highly accurate set of topographic data at a high level of resolution. This data can be used to detect slight earthwork remains and other archaeological features to a degree of accuracy previously only possible through detailed field survey or photogrammetry (HE 2018).

3.7.2 The Environment Agency (EA) regularly collects Lidar data for England to help model flood risk, and has made this data publicly available. The EA has also completed a programme to map the whole of England using lidar to a resolution of 1m to help them better plan for the future and also so that this data can assist in other environmental studies. As such it should be possible to use lidar to help understand the archaeological potential of most rural sites across England.

3.7.3 Digital Terrain Models (DTM) are a surface model generated from lidar data, which shows the ground surface with buildings and trees filtered out to create a 'bare earth' effect. DTM data is regularly used to detect archaeological features, as the 'bare earth' model can assist in the detection of archaeological earthworks remains and even subtle depressions associated with ancient ditches. DTM models can also sometimes detect archaeological features which would be obscured by tree cover in aerial photographs. Therefore lidar assessments will make use of DTM data unless otherwise stated.

3.7.4 Generally the assessment will make use of the highest resolution data available from the EA for the study site and surrounding area, although regard will also be had to the date of the available data; some data is up to 10 years old and may not reflect the current condition of the site under assessment. The date and resolution of the data used will be noted in the assessment. Where two different datasets have been used, for instance where coverage for higher 0.5m resolution data does not cover the whole of the assessment site and 1m data is also used, the different datasets will be analysed separately and this will be clearly stated and referenced in the assessment.

3.7.5 EA lidar data is processed using standard settings in the Relief Visualisation Toolkit (RVT) version 2.4 and reviewed using QGIS. The results of the analysis are then reviewed for evidence of remains, in conjunction with other available evidence. The lidar data will only be illustrated where clear evidence of archaeological features is detected.

4.0 Archaeological Baseline

4.1 Archaeological Evidence, Potential and Significance

4.1.1 The archaeological evidence considered in this assessment comprises evidence from:

- The Essex County Council Historic Environment Record;
- Previous archaeological investigations in the vicinity;
- Lidar data from the Environment Agency;
- Aerial imagery available from Google Earth; and
- Historic mapping, including OS maps and earlier tithe and estate maps.

4.1.2 The evidence provided by each of these sources is described below, together with a consideration of the reliability of the information provided by each source, and its relevance to the assessment of the archaeological potential of the study site. This will be followed by an assessment of the archaeological potential of the study site by period. Finally, an assessment of the likely significance of the potential buried archaeology within the study site will be provided.

4.2 Previous archaeological investigations

4.3 As part of the preparation for the current planning application a geophysical survey of the study site was commissioned to inform the assessment provided in this assessment. The full results of the survey are provided under a separate cover; however a summary of the results is provided below for ease of reference (Magnitude Surveys 2022):

> *Magnitude Surveys was commissioned to assess the subsurface archaeological potential of approximately 96.2ha area of land south and east of Burstead, Billericary, Essex. A fluxgate gradiometer survey was successfully completed across the survey area. No anomalies suggestive of significant archaeological features were identified. The geophysical survey has primarily identified anomalies related to the agricultural use of the landscape, including former mapped and unmapped field boundaries, a possible infilled pond, drains and agricultural trends which likely correspond with modern ploughing. Natural variations in the background have also been detected. Anomalies of an undetermined origin have been identified which may have resulted from natural processes or agricultural or modern activities, although an archaeological origin cannot be excluded entirely. Some of these may relate to unrecorded extraction of the local clay, silt, sand and gravel deposits. The impact of modern activity is limited to broad ferrous anomalies produced by telegraph poles, underground services and wire fences.*

4.3.1 The interpretation of the results for the eastern part of the study site can be seen overleaf in plate 3.

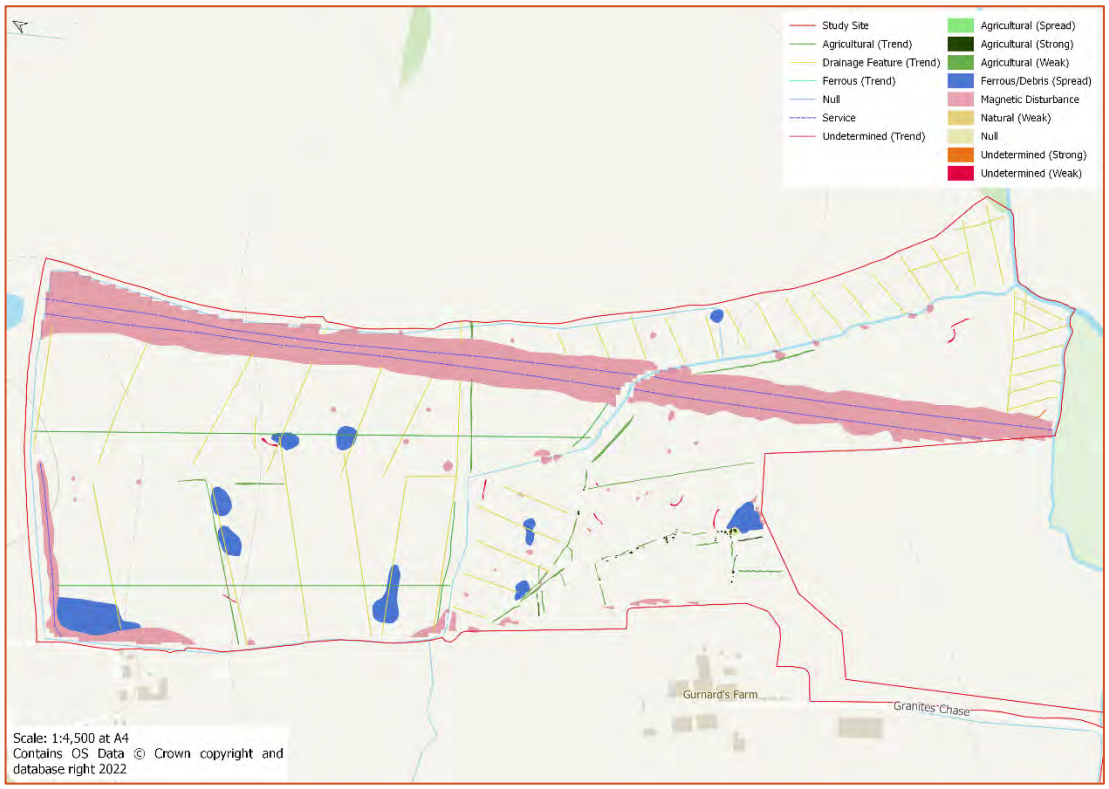

Plate 3 Geophysics Interpretation, east is towards the top of the image.

4.3.2 A programme of archaeological works was undertaken at Beauchamp's Farm (HER EEX24295); to the north of the cable route along the A129, located at the site of Beauchamps High School in the eastern part of Wickford. The investigations revealed a significant multiphase site which has been subject to multiple archaeological investigations in the 20th century. Beauchamp's Farm appears to have been a site of settlement and activity dating from the Palaeolithic through to the Medieval and Post-Medieval. Initially excavated in the mid-20th century (HER EEX24295) there have been several investigations since (HER EEX52842, HER EEX56202, HER EEX55793, HER EEX59709, HER EEX53706). The wealth of archaeological evidence comes from the 20th century investigations led by Rodwell (HER EEX24295).

4.3.3 The earliest phase of activity is represented by a single Palaeolithic hand axe (HER MEX24294). The Neolithic activity on the site is characterised by a small number of flint flakes (HER MEX24298). The Bronze Age is represented by a socket and loop of a Late Bronze Age socketed axe alongside a socketed knife find (HER MEX24299). The Iron Age settlement was described as extensive, and comprised (HER MEX42416):

> *… pits, post holes and ditches. A small polygonal structure may have been a shrine. Early Iron Age settlement must have been extensive as much pottery was found. The settlement is interpreted as a farmstead. In the Middle Iron Age the site continued to be occupied; a ditched enclosure seems to have surrounded the farmstead at that time. More extensive settlement is indicated in the Late Iron Age, with successive enclosures and associated pits and ditches, also gravelled floors and wells. A vast amount of handmade and wheel-thrown belgic pottery was recovered and also bronze, potin and gold coins. Evidence was found to suggest the Late Iron Age settlement was destroyed by fire. Late Iron Age features included hut circles and a divided enclosure.*

4.3.4 Alongside the Iron Age settlement, part of an apparently large 'Belgic' cemetery comprising 40 cremations was found.

4.3.5 The excavation report (HER EEX24295) focuses heavily on the Roman phase of settlement, and the HER provides a detailed summary of the findings (HER MEX24304):

> *The earliest Roman occupation is represented by a marching camp that probably overlapped the late Iron Age settlement…The site was occupied throughout the Roman period, reaching its maximum extent in the 4th century. Buildings had been largely destroyed by late agriculture, except where unusual conditions favoured preservation. Remains of dug features survived best, e.g. pits, cess pits, underground tanks, wells, hearths, ditches. Several tons of pottery and other material were found, also over 600 coins, mostly bronze, with some silver. Jewellery included a silver finger ring, a finely cut garnet (probably from a gold necklace). A wide variety of pottery was found, including Colchester, Nene Valley, Oxford, Gaulish and Flemish wares. It is possible that Beauchamp's was on a trade route from the coast to inland. Continental goods found, include Samian wares, Rhenish wares, amphorae, pipe clay figurines, perhaps glazed pottery. In the late 2nd century, a defensive enclosure was begun but not completed.*
>
> *Part of the settlement was destroyed by fire. Debris was also found from a further fire in late Roman times, including human remains. Two large timber-lined wells remained in use well into the 5th century. Romano Saxon pottery was found in quantity in these levels.*
>
> *The end of site is not clear as later levels did not survive post-Roman ploughing except in rare situations, e.g., hearths built in shrinkage over wells. In 1967 the Roman road running into the settlement from the east was sectioned. On the east it seemed to make for the Roman road to Chelmsford. It seemed to be no earlier than 3rd century in date. The defensive ditch was excavated. Gradual silting up during the 3rd and 4th centuries was indicated. Various timber buildings were excavated.*
>
> *A 1st century cremation burial was found, also many other interesting finds. (A 2nd century burial - had been found in 1966). Notable among the 1968 discoveries was a rectangular stone structure, with apparently a raised floor overall, suggesting a granary. A construction date in the 1st half of the 4th century is suggested. Early and late Roman enclosures, including the defensive ditch, were excavated. The presumed villa is suggested to be under construction in the 2nd century.*

4.3.6 The early Medieval period within this site was characterised by a collection of Early Saxon grass-tempered wares (HER MEX42423). The Medieval period was represented by the 13th century foundations of Beauchamp's Farm, alongside a small amount of Medieval pottery and a ditch and bank (HER MEX24311). Beauchamp's Farm is the Post-Medieval element of the site, recorded prior to its demolition (HER MEX24316).

4.3.7 A sizeable site to the south of the A129 and of the multi-period site at Beauchamps was subjected to a trial trenched evaluation in 2014 (HER MEX1041075; Cotswold Archaeology 2014). Despite the proximity of the known settlement site to the north, the trenching found no evidence of buried archaeological remains within that site.

4.3.8 An archaeological salvage excavation was undertaken across the north side of the A129 in Wickford (HER EEX24395), in response to the excavation of a trench for a drain connection. The modern road surface was found to be 12 inches deep (approximately 300mm), below which a possible historic road surface was recorded to a depth of 28-30 inches (around 710-760mm) beneath the modern road surface (HER MEX24388).

4.3.9 The historic road surface was found near to the centre of Wickford, approximately 600m to the west of the multi-period settlement site at Beauchamps noted above. The cable route for the proposed development crosses the area in which the HER records this work as having taken place.

4.3.10 Archaeological works were undertaken ahead of the construction of a section of the A129 at Rawreth in the 1960s (HER MEX28805). The construction of this segment of the road was subject to archaeological works, which encountered a number of features of interest. The results of the investigations are presented in volume 9 of Essex Archaeology and History, and are also recorded in the HER under reference MEX28805.

4.3.11 The Essex Archaeology and History publication provides the following summary of the findings of these investigations (Drury et al 1977):

> *This report describes discoveries made during the construction of the A129 Chichester Hall Diversion, and subsequent excavations at TQ 774 929, in 1968. A middle Bronze Age burial was found; an occupation area nearby, including a probable hut, belonged to the early Iron Age. Features apparently associated with a late Roman farm were found within a ditched enclosure c. 105 m wide. The upper fills of the ditches contained Anglo Saxon grass-tempered pottery, more being recovered from a cable trench nearby. An early medieval mill-pond and overflow stream were noted near Rawreth Shot Bridge; the bridge itself, constructed in 1800, was also recorded.*

4.3.12 The archaeological remains referred to were located to the north of the cable route.

4.3.13 A substantive programme of archaeological works was undertaken ahead of the construction of the A130 by-pass: A12 Chelmsford by-pass to the A127 Southend arterial road in 1991 through 1994, and in 1999 through 2002. The by-pass route was approximately 15km long, but the southern part of the route crosses the A129 at the eastern end of the cable route for the proposed development. The A130 by-pass works also included the replacement of a section of the A129 from the Hodgson Way Roundabout to the junction of the A129 with the Old London Road, which coincides with most of the easternmost part of the cable route for the proposed development.

4.3.14 The results of the archaeological investigations were published in Essex Archaeology and History volume 36 (Dale, Maynard & Compton 2005). This publication provides the following summary of the findings of the investigations:

> *Archaeological investigation along the line of the A130 bypass south of Chelmsford uncovered 29 sites, dating from the Mesolithic period onwards in a road corridor c.15km in length, and seldom more than 100m wide. Despite the limitations imposed by this narrow linear transect, evidence for extensive Bronze Age and Iron Age settlement was recovered in this area, where little prehistoric activity was hitherto known. Unequivocal evidence for Late Iron Age settlement was, in contrast, sparse, but this may simply be masked by conservative ceramic traditions continuing from the Middle Iron Age, rather than indicating a hiatus in settlement. Romano-British settlements excavated were rural in nature; while only a part of the field systems were investigated, the evidence does not suggest an imposition post-conquest of an extensive single system of land organisation. The varying alignments of the Roman-British boundaries uncovered also suggest that they had little if any influence on later field patterns. Saxon occupation was surprisingly widespread; with one major settlement site, centred on a bow-sided building, supplemented by a number of isolated finds elsewhere. There was considerable evidence of medieval settlement, although the design of the route meant that the fieldwork*

probably avoided other medieval foci which have continued in occupation until the present day. Finds assemblages were, in general, quotidian, but the results do indicate clearly the archaeological potential of the London Clay in the south of the county.

4.3.15 The location of the archaeological investigations undertaken as part of the A130 by-pass were determined by fieldwalking, some trial trenching as well as some areas of strip, map and sample. A number of sites in the southern half of the scheme were not fully investigated as many areas were to be preserved under embankments, and at other times by methodological restrictions in place in the design of the project (Dale, Maynard & Compton 2005, pp13-14). Of the sites reported on, site 16, named Hodgson Way Roundabout, included the new route of the A129 introduced at the same time as the A130 by-pass (Dale, Maynard & Compton 2005, p 28):

Site 16: Hodgson Way Roundabout

(TQ 7693 9299)

This site consisted of a length of over 200m of the route of a link road, crossing a narrow valley and recorded after topsoil stripping had taken place. Elements of a medieval field system were uncovered, with the majority of the ditches following north-south or east-west alignments. Many of the ditches, however, were fragmentary and severely truncated. The bulk of the pottery suggests a 13th to 14th-century date for the field system, but this may reflect disuse during a period of economic decline, or a shift to pastoral farming. There were few other signs of occupation or activity; some pits and post-holes survived, but it is likely that the majority of evidence from this site has been lost to ploughing. A small quantity of residual prehistoric and Roman material was also recovered.

4.3.16 This suggests that this part of the cable route, to the east of the Hodgson Way Roundabout, has already been archaeologically excavated and recorded as part of the A130 project.

4.3.17 The land at Outwood Solar Farm, located northeast of the eastern field of the study site, was subject to a programme of archaeological works as part of the planning application for the development of that site. The programme of works consisted of a desk-based assessment, a geophysical survey, archaeological trial trenching and a watching brief, which were undertaken in 2014 and 2015. The report on the findings of the investigations provides the following summary of the archaeological remains detected within this site (Wessex Archaeology 2016, pp17-18):

Prehistoric period

Prehistoric archaeological remains recorded on Site include a ditch in Trench 3, a ditch and post hole in Trench 5, a post hole in the Phase II cable trenching and a pit in the Phase III cable trenching. Unfortunately, the spatial relationship between these features is far too wide to draw any distinct settlement pattern although the orientation and proximity of ditch [2057], ditch [410] in Trench 4 and geophysical anomaly 4006 does hint at a potential enclosure.

The likelihood that the prehistoric features are relatively isolated is also suggested by the probably dates given to the ceramics recovered with ditch [2057] falling in the range of Late Bronze Age/Early Iron Age while ditch [410] may be either Iron Age or possibly Saxon in date (see above). It is worthy of note that should these two features be the

same contemporary enclosure ditch then they form a similar alignment to a medieval enclosure recorded to the west in Trench 2.

Iron Age to Romano-British periods

Features dating to this period have been assigned due to the retrieval of grog tempered ceramic and are even more sparse that the earlier period described above. Although the pottery is much more diagnostic in form the distance between ditch [603] in Trench 6 and ditch [2004] in the Phase I trench is too far to draw and firm conclusions on.

Saxon period

As mentioned above provisional dating of Iron Age pottery fragments from ditch [410] may add to this period should they be of Saxon date. That said, and if this this were the case, then this would be accompanied by a pit [308] in Trench 3 and a ditch [2006] recorded during the Phase I watching brief. Once again this features are too few and far to draw any conclusive remarks about Saxon settlement however, it is worth mentioning that ditch [2006] runs parallel with [2004] on an alignment similar to a geophysical trend immediately south of [2004]. It is also possible, of course, that these finds are residual in a later (medieval?) context.

Medieval period

The medieval period is by the far the most represented on the Site. Within Trench 2 the presence of a potential enclosure ditch suggested by the geophysical survey was confirmed along with a smaller internal parallel ditch (203/207) also being present (Figure 3). In fact the alignment and orientation of these ditches appear to follow the line of increase magnetic response (Figure 7), continue through the ditch [2022] and return to ditches [2010/2013/2015] forming a large rectangular enclosure. It is also possible that a smaller enclosure may be present with the ditches returning towards Trench 3 and tying in with [311] and [313] in Trench 3. The presence of pits and post holes may present the possibility of potential structures although within such a limited window it is difficult to be more specific.

Undated

In addition to the remains described above many more linear and discrete features were recorded during the archaeological fieldwork. It often proves futile to attempt to 'join the dots' in cases such as this where features are so far apart but what needs to be emphasised is that the presence of addition undated features does add to our overall understanding that there is a multi-phased archaeological site within the development area. Some of the undated linear features are on the same alignment as dateable enclosures and field boundaries and so it is tempting to suggest that these represent a peripheral agrarian landscape centred on a focal point of early settlement. The distribution of features, whether dated or not, does seem to dissipate the further away from Trench 3 one gets which perhaps supports the idea that the settlement is relatively isolated. This is further emphasised by the geophysical survey.

4.3.18 The archaeological works found that this site was likely to have formed part of the rural landscape surrounding settlements throughout its history, with no evidence of substantive settlement remains detected. The remains are likely to represent the remnants of agricultural activity, although some small scale, localised occupation may have been present within this site during the Medieval period, based on the presence of pits and post holes.

4.3.19 The remains of a Roman settlement were discovered at the site of Billericay School, approximately 1.5km to the north of the western field of the study site. This site has been subject to multiple phases of archaeological work, comprising archaeological excavations and watching briefs undertaken in 1987 and 1988 (Rudling 1990).

4.3.20 The findings of these investigations were published in Essex Archaeology and History, volume 21 (Rudling 1990). This publication has the following summary of the findings of these investigations:

> *Rescue Excavations and a Watching Brief at Billericay Secondary School during 1987/8 revealed traces of Late Iron Age/Romano-British (1st to 4th century A.D.) occupation. The major features discovered included cremation burials, ditches, wells and pits. These results are discussed in conjunction with earlier discoveries at Billericay.*

4.4 Lidar data

4.4.1 The Lidar data shows potential evidence of the mining relating activities noted in the geophysical survey report. A cluster of similar potential mining related features can also be seen in the wider study area, to the east the eastern field of the study site (see plate 4, below).

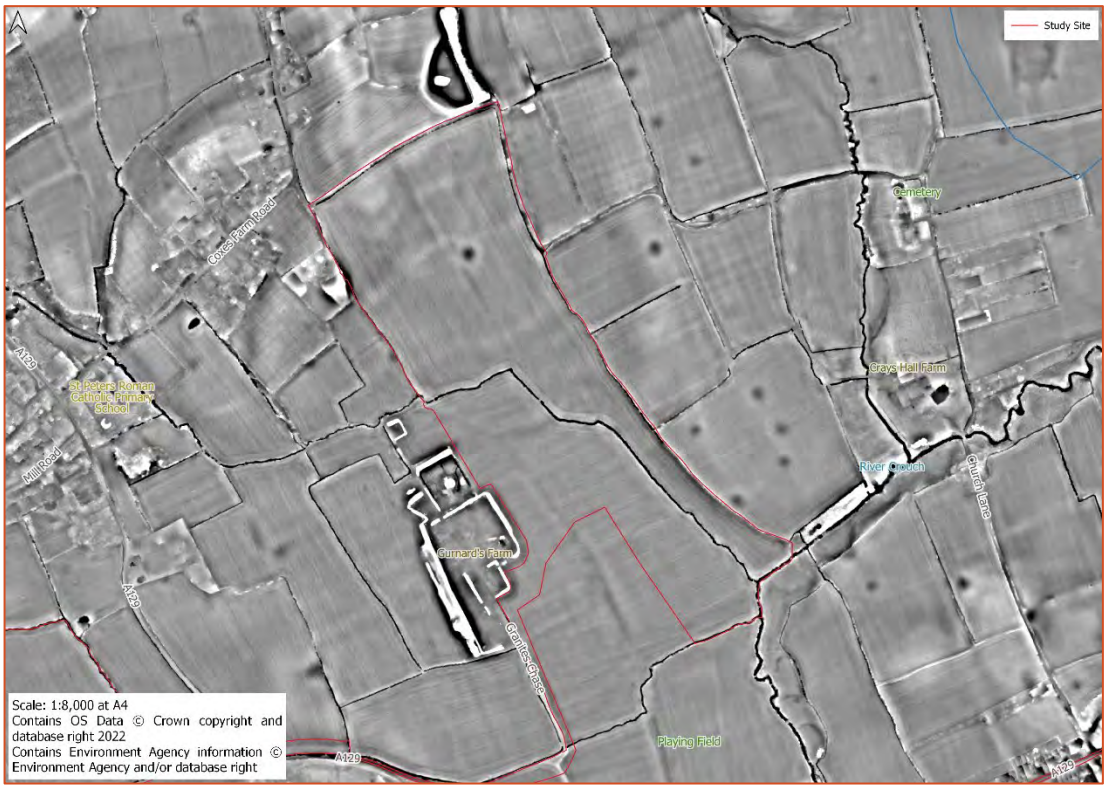

Plate 4 Simple Local Relief Model of the eastern part of the study site

4.4.2 A number of the historic agricultural field boundaries noted in the geophysical survey are visible in the lidar data within the study site.

4.5 Site Walkover

4.5.1 No archaeological features were noted during the site walkover.

4.6 Review of archaeological evidence by period

Prehistoric

4.6.1 The archaeological works undertaken at the Outwood Solar Farm, located 100m to the northeast of the eastern field of the study site, found evidence of prehistoric ditches and some associated finds (Wessex Archaeology 2016). The evidence found suggests that this area was predominantly agricultural in nature during this period, with no evidence of substantive settlement activity found.

4.6.2 The archaeological excavations at Beauchamps Farm in Wickford found evidence of early, mid and late Iron Age occupation remains, as well as a cemetery (HER MEX24294), in land to the immediate north of the cable route there. The cable route also passes through an area in which prehistoric pottery was recovered during savage works just to the west of the Beauchamps Farm site (HER MEX24396), although the precise location in which these remains were found is unclear.

4.6.3 Archaeological works undertaking in the 1960s ahead of the construction of the A129 Chichester Diversion, found evidence of prehistoric activity in Rawreth, approximately 200m to the north of the easternmost part of the cable route. The finds included a Bronze Age burial, as well as a probable but likely dating to the Iron Age (Drury et al 1977).

4.6.4 There is more limited confirmed evidence of prehistoric activity in the vicinity of the study site, other than the remains encountered at Outwood Solar Farm to the east, as is noted above. A cropmark of a ring ditch, potentially of Bronze Age date, is noted at Benson's Farm, 800m to the south of the study site (HER MEX1040317). Other evidence from the HER consists of chance finds of artefacts in the wider area:

(1) MEX18864 – 700m north of the western study site – a findspot relating to a Palaeolithic 'light brown flint hand-axe'.

(2) MEX37188 – c900m west of the western study site – a findspot relating to a neolithic flint flaked axe.

(3) MEX22273 – c1km west of the western study site – an Iron Age findspot.

(4) MEX18746 – 1km north of the western study site and 900m northwest of the eastern study site – a findspot relating to a Mesolithic knife.

4.6.5 Finally, the geophysical survey of the study site found no evidence indicative of the presence of archaeological remains of interest (Magnitude Surveys 2022).

4.6.6 The cable route for the proposed development passes through and close by areas of known prehistoric potential, such as at Beauchamp Farm in Wickford, suggesting that associated remains are likely to be present in those parts of the cable route. The findings at the Outwood Solar Farm suggest that the study site, near Billericay, formed part of a rural landscape during this period, with some features present such as field boundaries and occasional pits, but no clear evidence of prehistoric settlement activity.

4.6.7 As such it is considered that the study site has a low potential for the presence of prehistoric settlement remains, and a general potential for the presence of peripheral remains associated with agricultural land use. The cable route has a moderate potential to reveal buried remains where it passes close by to the multi-period site at Beauchamps Farm.

Roman

4.6.8 As has been noted above, the multi-period site at Beauchamps Farm included a substantive Roman settlement, which started as a marching camp, but evolved into a substantive settlement which was occupied throughout the Roman occupation (Drury et al 1977). Archaeological salvage works during excavations for the installation of a drain found evidence of a historic road surface approximately 300mm under the modern road surface. The historic road was interpreted as the remnants of a potential Roman road associated with the Beauchamps site to the east. The road surface was found on the route of the A129, within the cable route, near to the Wickford CofE infant school. The HER suggests that the route of a Roman road may coincide with the route of the A129 in the centre and west of Wickford, where it also forms the cable route (HER MEX24564).

4.6.9 A Roman enclosure was found in the archaeological works undertaken as part of the A129 Chichester Diversion, approximately 75m north of the easternmost part of the cable route for the proposed development, south of Rawreth (HER MEX28810). The proposed cable route is also within 100m of the site of a presumed Roman burial at Witherden's farm (HER MEX24187), also at the easternmost part of the cable route. This was discovered in the 19th century and consisted of a number of broken bones and urns, but there is little information on the context of these remains.

4.6.10 Closer to the study site the archaeological works undertaken at Outwood Solar Farm found limited evidence from this period, with few finds, suggesting no settlement activity was present in this site (Wessex Archaeology 2016). A Roman settlement is present at the site of Billericay school, approximately 1.5km to the north of the study site (Rudling 1990), so it is possible that settlement activity in this area was focussed there during this period.

4.6.11 HER records in the wider area around the study site consists of chance discoveries of artefacts in the wider area:

(1) MEX1032262 – 800m northwest – a findspot relating to an earring found during metal detection.

(2) MEX40691 – 950m northwest – a findspot relating to: 'a quantity of RB tile including tegula and imbrex and one sherd of Roman grey ware' also found during metal detection.

(3) MEX18888 – 950m northwest – a findspot of two silver coins.

(4) MEX1047297 – 1km to the south – a final findspot relating to a Portable Antiquities Scheme (PAS) find of a coin.

4.6.12 Finally, the geophysical survey of the study site found no evidence suggestive of Roman settlement or associated activity (Magnitude Surveys 2022).

4.6.13 The study site seems to have been located in a rural context outside of areas of settlement during this period, as evidenced by the results of the geophysical survey as well as by the results of the works at Outwood Farm, to the east. As such it is unlikely that the study site will contain the remains of Roman settlement activity. Accordingly, it is considered that the study site has a low potential to contain buried remains of interest from this period. The cable route passes through an area where a potential Roman road surface was encountered 300mm below the modern road surface in Wickford. Given this, and also the proximity of the archaeological remains at Beauchamps Farm to the cable route, it is considered likely that associated remains may be present in nearby parts of the cable

route. As such it is considered that the cable route has a moderate potential to contain buried Roman remains, in the western part of Wickford.

Saxon

4.6.14 The multi-period settlement site at Beauchamps Farm had evidence that two timber lined wells within the site remained in use into the 5th century (HER MEX24304). The settlement at Wickford is recorded in the Domesday Book as being held in AD 1066, suggesting some pre-Conquest settlement was present, but evidence of settlement in the HER is limited. Residual Saxon finds were recovered as chance finds near to Rawreth (HER MEX1041076), and residual Saxon pottery was recovered during works to the rear of the Castle Public House in the centre of Wickford (HER MEX1033241). The archaeological works at Outwood Solar Farm may have recovered Saxon pottery, however it was not clear whether these finds were residual deposits (Wessex Archaeology 2016).

4.6.15 The geophysical survey of the study site found no evidence suggestive of Saxon settlement within the study site (Magnitude Surveys 2022).

4.6.16 On this basis it is considered that the study site has a low potential to contain buried remains from this period.

Medieval

4.6.17 The archaeological works at Outwood Solar Farm found evidence of a substantial Medieval enclosure, which contained some pits and post holes that could indicate the presence of structures. These remains were first detected by a geophysical survey of the Outwood site, which was then tested by trial trenching (Wessex Archaeology 2016).

4.6.18 The church of St Mary Magdalane is located 250m to the north of the westernmost field of the study site. The church has Norman origins, while the main building dates to the 14th or 15th century church (HER MEX1002122 and HER MEX40839). A possible homestead moat is located 280m north of the study site (HER MEX18753), close to the church, and a timber framed house is recorded as being present 250m west of the study site, which may have origins in the Medieval period (HER MEX1002127).

4.6.19 A possible moated site is also recorded at Crays Hill, immediately to the north of the cable route (HER MEX24480). The cable route in Wickham is close to another potential moated site at Wickford Rectory (HER MEX24432) and the site of the Church of St Catherine, which is on the site of a Medieval church (HER MEX1033368). The proposed cable route runs close to the Early Medieval and Medieval occupation and use of the site at Beauchamp's farm (HER MEX42423), and through an area where salvage archaeological works recovered Medieval pottery near to the Beauchamps site (HER MEX24397).

4.6.20 The archaeological works undertaken as part of the construction of the A130 and the new stretch of the A129 found the remains of a Medieval and Post-Medieval field system on the route of the cable route to the west of Wickham (Dale, Maynard & Compton 2005), which may form part of the rural hinterland surrounding the Medieval settlement at Beauchamps.

4.6.21 Other Medieval entries of interest with the HER consist of two records relating to the Church of St Mary at Ramsden Crays, 700m east of the eastern study site. The church has 15th century origins however it was entirely rebuilt in 1871 (HER MEX1002114 and HER MEX40835).

4.6.22 Finally, the geophysical survey of the study site detected no evidence of Medieval settlement remains, or enclosures, such as were detected by the works at Outwood Solar Farm to the east (Magnitude Surveys 2022).

4.6.23 The available evidence suggests that the study site formed part of the rural landscape surrounding settlement, which was focussed to the north, and is unlikely to contain buried remains of settlement activity from the Medieval period. As such it is considered that the study site has a low potential for the presence of these remains.

4.6.24 The geophysical survey detected a number of earlier field boundaries, and these could be the remnants of agricultural activity within the study site, which could in turn date to this period. As such the study site is considered to have a moderate potential for the presence of the remnants of agricultural activity.

4.6.25 The cable route runs through the historic core of Wickham, and close to the site of potential moated sites at Crays Hill, and at the former Rectory in Wickham, as well as areas known to have contained Medieval pottery near to Beauchamps. The cable route is located within the A129 roadway, which is in turn largely located on historic routes (see Figures 4 through 9). As such it is likely that the cable route is located outside of the occupation sites, although the presence of associated peripheral remains cannot be discounted. The construction of the modern road will also have resulted in some truncation to remains throughout the route, although the degree of impact can vary as is evidenced by the survival of some elements of a historic road in Wickham (HER EEX24389). Therefore, there is a general potential for the presence of peripheral remains associated with the moated sites along the cable route, with a low potential for other parts of the cable route.

Post-Medieval/Modern

4.6.26 The HER holds a number of records relating to the Post-Medieval period within the wider study area, none of which fall within the study site. The most significant of these are the Post-Medieval features associated with the Church of St Mary Magdalene, 250m to the north of the study site (HER MEX40840), discussed in the section above, and the Church of St Mary at Ramsden Crays, located 700m to the east (HER MEX40836), also discussed above.

4.6.27 The proposed cable route runs close to the Post-Medieval farmstead located at Beauchamp's farm (HER MEX24316), which was formally located to the north of the current A129 road. The Post-Medieval buildings were investigated and recorded before demolition in the late 20th century (HER EEX24295). During the demolition works, the 18th century structure was found to be built on 13th century foundations.

4.6.28 Within the study site, the geophysical survey detected anomalies interpreted as relating to Post-Medieval quarrying activity (Magnitude Surveys 2022). This interpretation is supported by the analysis undertaken of the lidar data (Plate 4). As can be seen in plate 4, there is also possible mining relating activity that can be seen in the lidar data towards the northern end of the eastern fields of the study site. Similar readings can also be seen further to the east of this. The geophysical survey also detected evidence of earlier historic field boundaries within the study site, which may be evidence of Post-Medieval agricultural management of the study site (Magnitude Surveys 2022).

4.6.29 Based on a review of the available evidence, it is considered that the study site has a moderate potential to contain archaeological evidence of Post-Medieval quarrying, likely to consist of infilled pits. There is a low potential for the study site to contain buried remnants of settlements relating to the Post-Medieval period.

4.6.30 The cable route runs through the historic core of Wickham, and close to the site of Post-Medieval settlement at Beauchamps. The settlement here was also set back from the road, and so the cable route is unlikely to contain buried remains associated with this. On this basis it is considered that the cable route has a low potential to contain buried remains of interest from this period.

4.7 Summary of archaeological potential and assessment of significance

4.7.1 The study site has a general potential for the presence of peripheral remains associated with agricultural land use during the Prehistoric, Medieval, and Post-Medieval periods. There is also a moderate potential for the presence of former Medieval and Post-Medieval field boundaries, as well as for the presence of Post-Medieval quarrying activity. The study site has a low potential for the presence of remains of interest from other periods.

4.7.2 The cable route passes through the settlement of Wickham, as well as land to the east of Wickham which is known to contain buried remains of interest. However, the cable route is located within the roadway of the modern A129, the route of which was archaeologically excavated to the east of Wickham, and the construction of which would have truncated any remains which may have been present along the route. However, where the cable route passes close to the multi-period site at Beauchamps in Wickham, previous archaeological work has shown there to be potential for the presence of buried remains even in areas which have been previously developed. As such, this assessment has found that the cable route has a general potential to contain buried remains of Prehistoric, Roman and Medieval dates, within the historic core of Wickham, and also close to the multi-period site at Beauchamps. There is a low potential for the presence of buried remains of interest in the remainder of the cable route.

Level of significance

4.7.3 Any archaeological remains within the study site, from any era, would be of no more than local significance.

Nature of significance

4.7.4 The identified potential archaeological remains will have archaeological interest.

Extent of significance, including setting

4.7.5 The potential for remains is located primarily within the south and southwestern part of the western area of the study site, and the eastern area of the study site.

5.0 Proposed Development and Predicted Effects

5.1 The Proposed Development

5.1.1 The proposed development comprises a solar installation, consisting of arrays of photovoltaic panels throughout the study site. The panels would be set at a maximum height of 3.5m. The panels would be supported by small H-shaped pile foundations, which would be driven into the ground and would each measure 0.01m^2 in area. The proposed development would also include access tracks, small buildings to contain electrical inverters and transformers, fencing and trenches for cabling. Foundations for the small buildings would be modest, and further details are provided under a separate cover. No substantive landscaping or ground reduction is planned as part of the proposed development. This planning application has removed any development within the western parcel of land in response to the refusal of a previous planning application (22/00411/FULL Basildon) and (22/00359/FUL Rochford).

5.1.2 The cable trenching will normally comprise a 1m deep, and 600mm wide trench, which is excavated along the edge of the rows of panel racks, along one side of each field of the study site. In addition, a cable trench is also excavated from the inverters to a substation or control building, situated off site. The exact location of the cable trenches can change between the design of the layout and the installation of the proposed development, and this allows for some flexibility in the location of some impacts in relation to the archaeological remains within the study site.

5.2 Potential Impacts

5.2.1 The impact of the proposed development on any below ground remains within the study site is limited, comprising a total below ground impact of less than 1% of the study site area. The H-piles result in a highly localised impact, which would generally only affect highly sensitive remains, such as human burials, or fragile remnants of ancient human habitation. This impact would be spread in rows across the whole of the study site.

5.2.2 The excavation of the cable trenches within the study site has the potential to result in a localised impact along the route of the trench, where this may coincide with buried archaeological remains. Likewise, the small foundations excavated for the construction of the access road and the structures to contain electrical inverters and transformers also have the potential to result in localised impacts to below ground remains.

5.2.3 Given the level of significance and sensitivity of the remains likely to be within the study site, it is considered that the impact of the piles supporting the PV arrays would be negligible. The excavation of cable trenches within the study site could result in a localised impact, if a trench cuts through an area which contains an archaeological feature. Therefore, the overall impact of the proposed development would be low, but with some potential for localised impacts.

5.2.4 The excavation of the trench along the cable route for the connection to the National Grid Rayleigh substation will follow the existing routes associated with modern roads. It is possible that the trench could impact buried remains partially preserved under the A129 in the historic core of Wickham, and near to the multi-period settlement site at Beauchamps. The physical impacts would be of a localised nature, focussed along the route of the trench. The prosed cable route departs the A129 to travel south to the National Grid Rayleigh substation, across 3 agricultural fields. An analysis of Lidar data at this point does

not reveal any suspected archaeological features, and the HER does not hold any records for this area.

5.3 Mitigation Measures

5.3.1 A programme of mitigation measures has already been agreed with Terese O'Connor, a Historic Environment officer at Essex County Council in relation to the refused planning application (22/00411/FULL):

In view of this, the following recommendation is made in line with the National Planning Policy Framework: (Paragraph 194 and 205)

1. No development or preliminary groundworks of any kind shall take place until a programme of archaeological investigation has been secured in accordance with a written scheme of investigation which has been submitted by the applicant, and approved in writing by the local planning authority.

2. No development or preliminary groundworks of any kind shall take place until the completion of the programme of archaeological evaluation identified in the WSI defined in Part 1 and confirmed by the Local Authority archaeological advisors.

3. A mitigation strategy detailing the excavation / preservation strategy shall be submitted to the local planning authority following the completion of the archaeological evaluation.

4. No development or preliminary groundworks can commence on those areas containing archaeological deposits until the satisfactory completion of fieldwork, as detailed in the mitigation strategy, and which has been approved in writing by the local planning authority.

5. The applicant will submit to the local planning authority a post excavation assessment (to be submitted within six months of the completion of the fieldwork, unless otherwise agreed in advance with the Planning Authority). This will result in the completion of post excavation analysis, preparation of a full site archive and report ready for deposition at the local museum, and submission of a publication report.

A recognised professional team of archaeologists should undertake the archaeological work. The Local Council should inform the applicant of the archaeological recommendation and its financial implications. An archaeological brief can be produced by this office detailing the work required on request.

6.0 Summary and Conclusions

6.1.1 This archaeological desk-based assessment considers land south and east of Burstead, Billericay, Essex which is proposed for development as a solar farm and battery storage facility with all associated infrastructure. The proposed development is only for development within the western parcel of the study site, there will be no development within the eastern parcel. This assessment has been produced to inform a free go planning application.

6.1.2 A review of the available evidence has found that the study site has a general potential for the presence of peripheral remains associated with agricultural land use during the prehistoric, Roman, Medieval and Post-Medieval periods. There is also a moderate potential for the presence of former Medieval and Post-Medieval field boundaries, as well as for the presence of Post-Medieval quarrying activity. The study site has a low potential for the presence of remains of interest from other periods.

6.1.3 The cable route passes through the settlement of Wickham, as well as land to the east of Wickham which is known to contain buried remains of interest. However, the cable route is located within the roadway of the modern A129, the route of which was archaeologically excavated to the east of Wickham, and the construction of which would have truncated any remains which may have been present along the route. However, where the cable route passes close to the multi-period site at Beauchamps in Wickham, previous archaeological work has shown there to be potential for the presence of buried remains even in areas which have been previously developed. As such, this assessment has found that the cable route has a general potential to contain buried remains of Prehistoric, Roman and Medieval dates, within the historic core of Wickham, and also close to the multi-period site at Beauchamps. There is a low potential for the presence of buried remains of interest in the remainder of the cable route.

6.1.4 The impact of the proposed development on any below ground remains within the study site is limited, comprising a total below ground impact of less than 1% of the study site area. The framework arrays which would support the solar panels result in a highly localised impact, which would generally only affect highly sensitive remains, such as human burials, or fragile remnants of ancient human habitation, of which there is no evidence for within the study site. This impact would be spread in rows across the whole of the study site.

6.1.5 The excavation of the cable trenches within the study site has the potential to result in a localised impact along the route of the trench, where this may coincide with buried archaeological remains. Likewise, the small foundations excavated for the construction of the access road and the structures to contain equipment, such as the electrical inverters and transformer units, also have the potential to result in localised impacts to below ground remains.

6.1.6 The identified impact within the study site could be mitigated by several measures, including:

(1) a programme of archaeological works, which would be targeted to record any archaeological remains which may be affected by the cable trenches, or proposed structures within the study site prior to their construction; or

(2) exclusion from development

(3) a combination of the approaches above.

6.1.7 The overall level of impact of the proposed development on the identified archaeological resources in the study site would therefore be very low, and the risk of a localised impact which would significantly affect the archaeological interest of any buried remains would also be low. It is therefore clear that there is no in principle archaeological constraint to the implementation of the proposed development.

6.1.8 A trench would be excavated within the cable route, and would measure approximately 600mm wide and 1m in depth. The excavation of the trench has the potential to result in a localised impact to the identified remains within Wickham, if present. The identified impact resulting from the excavation of the trench along the cable route could be mitigated by a programme of archaeological monitoring and recording, focussed on the historic core of Wickham and the vicinity of the multi-period settlement site at Beauchamps. This would ensure any features present would be recorded prior to impact, and would also contribute to local research objectives by providing additional information relevant to the multi-period site. As such it would adequately compensate for the loss of any remains within the cable route.

6.1.9 The proposed development could readily accommodate any of the mitigation measures outlined, without resulting in a significance change to the proposals. Therefore, it is considered that any further archaeological works could be undertaken post-consent and secured via a suitably worded planning condition. A conditioned programme of works was recommended by Teresa O'Connor, a Historic Environment officer at Essex County Council in relation to the refused planning application (22/00411/FULL):

In view of this, the following recommendation is made in line with the National Planning Policy Framework: (Paragraph 194 and 205)

1. No development or preliminary groundworks of any kind shall take place until a programme of archaeological investigation has been secured in accordance with a written scheme of investigation which has been submitted by the applicant, and approved in writing by the local planning authority.

2. No development or preliminary groundworks of any kind shall take place until the completion of the programme of archaeological evaluation identified in the WSI defined in Part 1 and confirmed by the Local Authority archaeological advisors.

3. A mitigation strategy detailing the excavation / preservation strategy shall be submitted to the local planning authority following the completion of the archaeological evaluation.

4. No development or preliminary groundworks can commence on those areas containing archaeological deposits until the satisfactory completion of fieldwork, as detailed in the mitigation strategy, and which has been approved in writing by the local planning authority.

5. The applicant will submit to the local planning authority a post excavation assessment (to be submitted within six months of the completion of the fieldwork, unless otherwise agreed in advance with the Planning Authority). This will result in the completion of post excavation analysis, preparation of a full site archive and report ready for deposition at the local museum, and submission of a publication report.

A recognised professional team of archaeologists should undertake the archaeological work. The Local Council should inform the applicant of the archaeological

recommendation and its financial implications. An archaeological brief can be produced by this office detailing the work required on request.

6.1.10 On this basis it is clear that the impact of the proposed development on the archaeological potential of the study site could be adequately mitigated, and the development made acceptable in terms of archaeological impacts. It therefore accords with the requirements in paragraph 203 of the NPPF and policies ENV1 of the local adopted and emerging Rochford District Council plans and the Basildon Council Local Development Plan.

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Cartographic

1777 Chapman and Andre Map

1805 OS Drawing

1824 C & I Greenwood Map

1840 Tithe Map

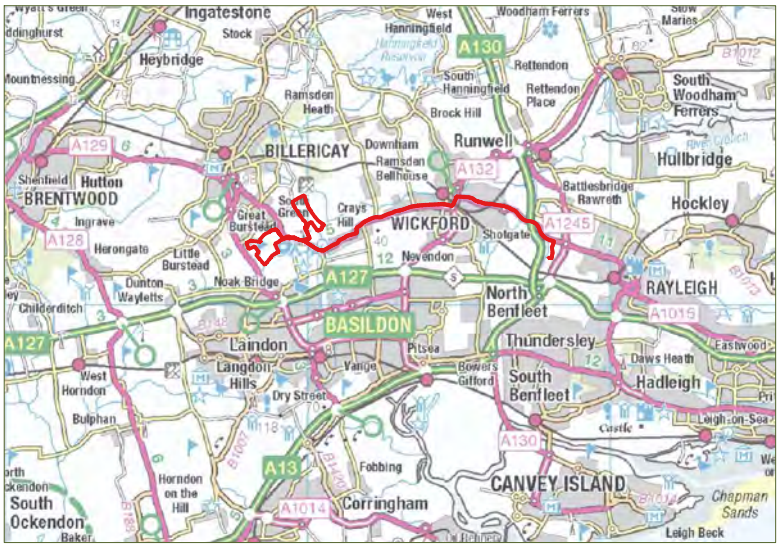
OS Maps 1874, 1898, 1924, 1938, 1960 at 1:10,560

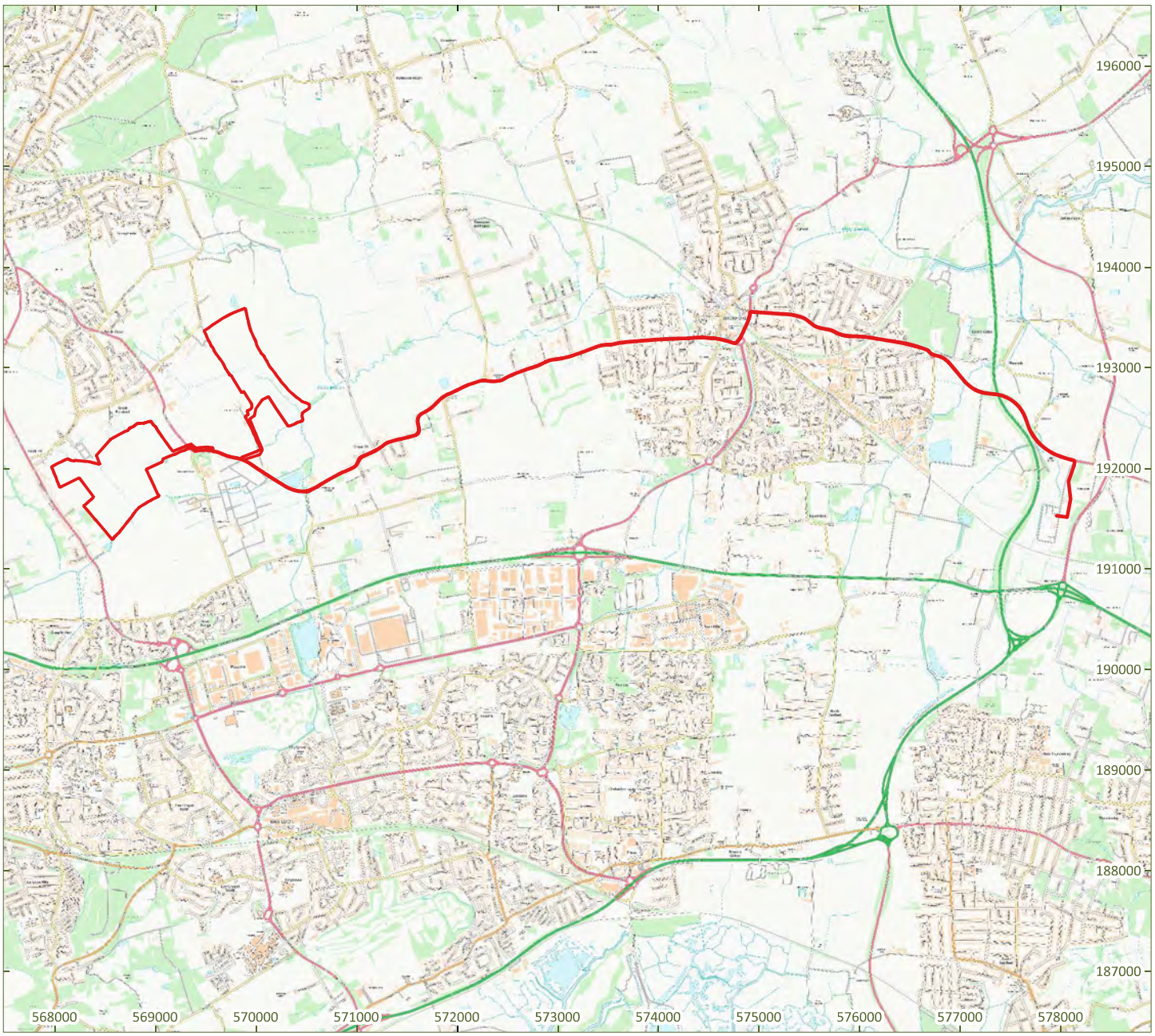
OS Maps 1972, 1982, 2001 at 1:10,000

Lidar

Lidar data were downloaded from the Environment Agency website in January 2022 - https://environment.data.gov.uk/DefraDataDownload/?Mode=survey

Tile Name	Year	Resolution (m)
TQ69SE	2020	1
TQ79SE	2020	1
TQ79SW	2020	1





landgage HERITAGE

Legend

Study Site

N

0 4km

Scale 1:60,000@A4

Address:

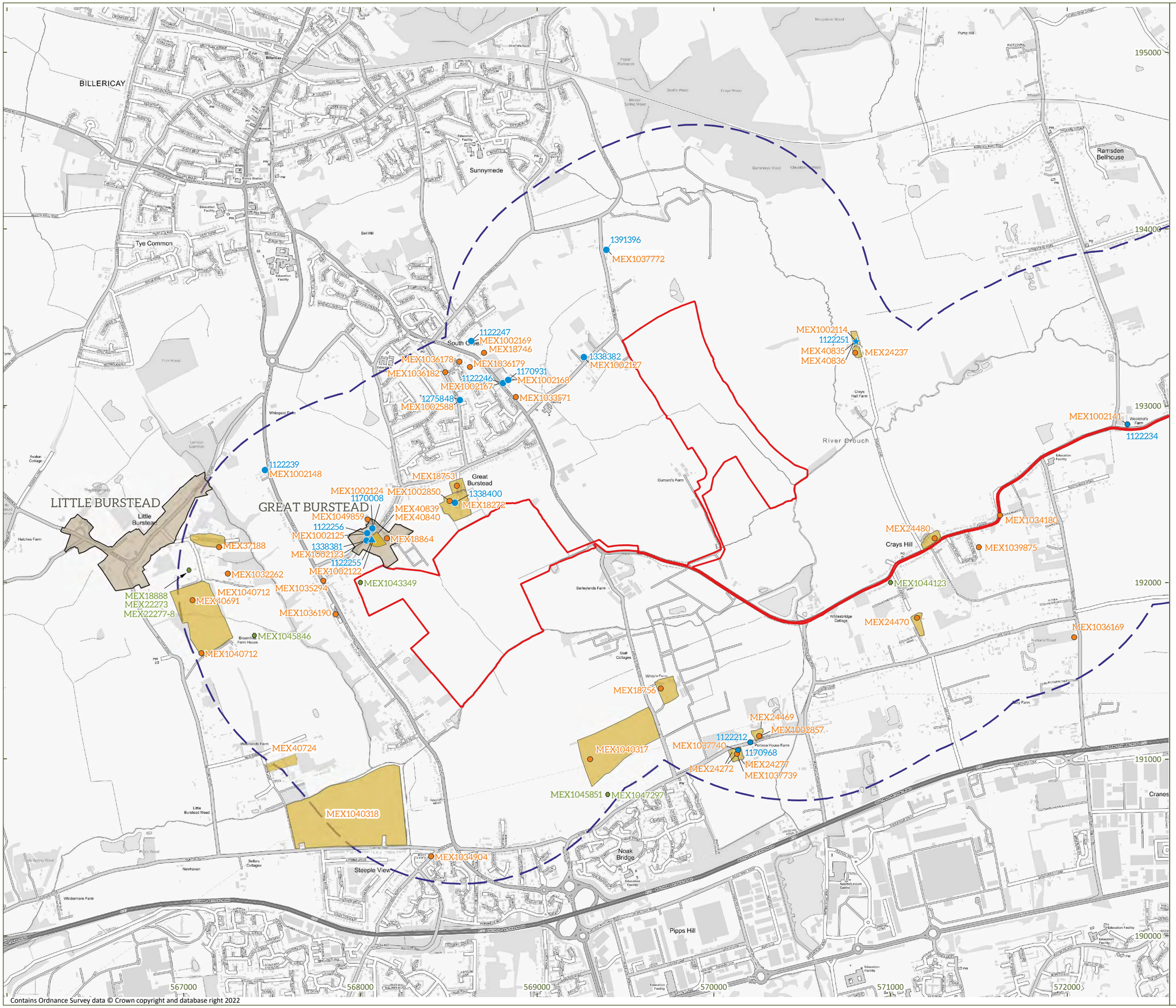
Burstead Solar Farm

Title:

Figure 1: Location of site

Project No: PR0071 Date: 08/03/2022

Drawing No: PR0071_016



Contains Ordnance Survey data © Crown copyright and database right 2022

Legend

- Study Site
- 1km Study Area

Designated Heritage Assets

- Grade I Listed Buildings
- Grade II* Listed Buildings
- Grade II Listed Buildings
- Conservation Areas

Non-designated Heritage Assets

- HER Data - Monument Points
- HER Data - Monument Polygons
- HER Data - Monument Lines
- HER Data - Findspot

N

0 1km

Scale 1:20,000@A3

landgage HERITAGE

Project No: PR0071 Date: 08/03/2022

Drawing No: PR0071_16

Address:

Burstead Solar Farm

Title:

Figure 2a: HER Data – Monuments