

Heritage Statement.

Land North of Rayleigh Spur Roundabout, Basildon.

On behalf of Renewable Energy Systems Ltd.

Date: 25/06/2025 | Pegasus Ref: P24-3044

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Document Management.

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1. Introduction

1.1. Pegasus Group have been commissioned by RES Limited to prepare a Heritage Statement to consider the proposed development of a BESS at Land North of Rayleigh Spur Roundabout, Basildon in Essex, as shown on the Site Location Plan provided at Plate 1.

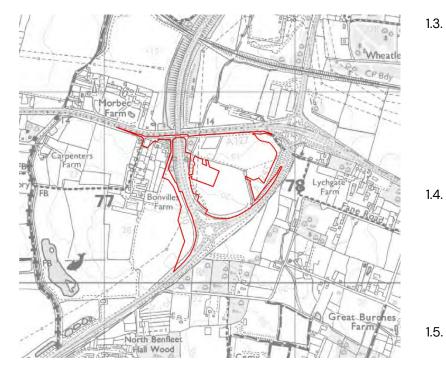


Plate 1: Site Location Plan

- 1.2. The site is approximately 18.27 ha in area and comprises part of three predominantly arable land parcels, an area of woodland and an access road to the north-west and west, located predominantly to the north of the Rayleigh Spur Roundabout.
 - This Assessment provides information with regards to the significance of the historic environment to fulfil the requirement given in paragraph 207 of the Government's *National Planning Policy Framework* (the *NPPF*) which requires:

"...an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting".¹

- In order to inform an assessment of the acceptability of the scheme in relation to impacts on the historic environment and archaeological resource, following paragraphs 212 to 215 of the *NPPF*, any harm to the historic environment resulting from the proposed development is also described, including impacts on significance through changes to setting.
- As required by paragraph 207 of the *NPPF*, the detail and assessment in this Report is considered to be "proportionate to the assets' importance".²

² MHCLG, NPPF, para. 207.

¹ Ministry of Housing, Communities & Local Government (MHCLG), *National Planning Policy Framework (NPPF)* (London, December 2024), para. 207.



2. Methodology

- 2.1. The aims of this Report are to assess the significance of the heritage resource within the site/study area, to assess any contribution that the site makes to the heritage significance of the identified heritage assets, and to identify any harm or benefit to them which may result from the implementation of the development proposals, along with the level of any harm caused, if relevant.
- 2.2. This assessment considers the archaeological resource and built heritage.

Sources

- 2.3. The following key sources have been consulted as part of this assessment:
 - The Essex Historic Environment Record (HER) for information on the recorded heritage resource within the vicinity of the site;
 - The National Heritage List for England for information on designated heritage assets;
 - Historic maps available at Essex Record Office and online;
 - Aerial photographs available online via Historic England's Aerial Photo Explorer and Britain from Above;
 - Historic England's Aerial Archaeology Mapping
 Explorer; and

- Other online resources, including Ordnance Survey Open Source data; geological data available from the British Geological Survey and Cranfield University's Soilscapes Viewer; Google Earth satellite imagery; and LiDAR data from the Environment Agency.
- 2.4. For digital datasets, information was sourced for a 1km study area measured from the boundaries of the site. Information gathered is discussed within the text where it is of relevance to the potential heritage resource of the site. A gazetteer of recorded sites and findspots is included as *Appendix 1* and maps illustrating the resource and study area are included as *Appendix 2*.
- 2.5. Historic cartographic sources and aerial photographs were reviewed for the site, and beyond this where professional judgement deemed necessary.
- 2.6. Digital terrain model LiDAR data, at 1m resolution, is freely available from the Environment Agency. This was processed using ArcGIS software. Multiple hill-shade and shaded-relief models were created, principally via adjustment of the following variables: azimuth, height, and 'z-factor' or exaggeration. The models created were colourised using pre-defined ramps and classified attribute data. The DTM shaded relief model, with azimuths graduated by 450 intervals from 0-3600, is provided in **Appendix 7**.
- 2.7. Heritage assets in the wider area were assessed as deemed appropriate (see Section 6).



Site Visit

2.8. A site visit was undertaken by a Heritage Consultant from Pegasus Group on Tuesday 25th February 2025, during which the site and its surrounds were assessed.

Geophysical Survey

2.9. A geophysical survey was undertaken across the site in February 2025. The results of the survey are outlined in Section 5 below and a full copy of the Geophysical Survey report is included in *Appendix 8*.

Photographs

2.10. Photographs included in the body text of this Report are for illustrative purposes only to assist in the discussions of heritage assets, their settings, and views, where relevant. Unless explicitly stated, they are not accurate visual representations of the site or development proposals nor do they conform to any standard or guidance i.e., the Landscape Institute Technical Guidance Note 06/19. However, the photographs included are intended to be an honest representation and are taken without the use of a zoom lens or edited, unless stated in the description or caption.

Assessment Methodology

- 2.11. Full details of the assessment methodology used in the preparation of this Report are provided within *Appendix*3. However, for clarity, this methodology has been informed by the following:
 - ClfA's Standard and Guidance for Historic Environment Desk-Based Assessment;³
 - Historic Environment Good Practice Advice in Planning: 2 – Managing Significance in Decision– Taking in the Historic Environment (hereafter GPA:2);⁴
 - Historic Environment Good Practice Advice in Planning Note 3 (Second Edition) – The Setting of Heritage Assets, the key guidance of assessing setting (hereafter GPA:3);⁵
 - Historic England Advice Note 1 (Second Edition) Conservation Area Appraisal, Designation and Management (hereafter HEAN:1).⁶
 - Historic England Advice Note 12 Statements of Heritage Significance: Analysing Significance in Heritage Assets (hereafter HEAN:12);⁷ and



 ⁶ Historic England, Historic England Advice Note 1 - Conservation Area Appraisal, Designation and Management (HEAN:1) (2nd edition, Swindon, February 2019).
 ⁷ Historic England, Historic England Advice Note 12 - Statements of Heritage Significance: Analysing Significance in Heritage Assets (HEAN:12) (Swindon, October 2019).

³ Chartered Institute for Archaeologists (ClfA), *Standard and Guidance for Historic Environment Desk-Based Assessment* (revised edition, October 2020).

⁴ Historic England, Historic Environment Good Practice Advice in Planning: 2 – Managing Significance in Decision-Taking in the Historic Environment (GPA:2) (2nd edition, Swindon, July 2015).

⁵ Historic England, Historic Environment Good Practice Advice in Planning Note 3 – The Setting of Heritage Assets (GPA:3) (2nd edition, Swindon, December 2017).



 Conservation Principles: Polices and Guidance for the Sustainable Management of the Historic Environment.⁸

Consideration of Harm

- 2.12. It is important to consider whether the proposals cause harm. If they do, then one must consider whether the harm represents "*substantial harm*" or "*less than substantial harm*" to the identified designated heritage assets, in the context of paragraphs 214 and 215 of the *NPPF*.⁹ With regard to non-designated heritage assets, potential harm should be considered within the context of paragraph 216 of the *NPPF*.¹⁰
- 2.13. The *PPG* clarifies that within each category of harm ("*less than substantial*" or "*substantial*"), the extent of the harm may vary and should be clearly articulated.¹¹
- 2.14. The guidance set out within the PPG also clarifies that "substantial harm" is a high test, and that it may not arise in many cases. It makes it clear that it is the degree of harm to the significance of the asset, rather than the scale of development which is to be assessed.¹² In addition, it has been clarified in a High Court Judgement of 2013 that substantial harm would be harm that would:

"...have such a serious impact on the significance of the asset that its significance was either vitiated altogether or very much reduced." ¹³

⁸ English Heritage, Conservation Principles: Policies and Guidance for the Sustainable Management of the Historic Environment (London, April 2008).

⁹ MHCLG, NPPF, paras. 214 and 215.

¹⁰ MHCLG, NPPF, para. 216.



3. Site Description and Planning History

Site Description

3.1. As stated above, the site is approximately 18.27 ha in area and comprises part of three predominantly arable land parcels, an area of woodland, and an access road to the north-west and west, located predominantly to the north of the Rayleigh Spur Roundabout (Plates 2-3).



Plate 2: View south-west across the site from the northeastern extent



Plate 3: View north-east across the site from the southwestern extent

- 3.2. The site is crossed by telegraph wires.
- 3.3. The site is bounded by a business park beyond the A127 to the north; agricultural land and woodland beyond the A1245 to the east and south-east; and woodland, agricultural land a farmstead and land in equestrian use beyond the A130 to the south-west and west.



Planning History

- 3.4. A review of the online version of the Basildon District Council planning application viewer does not indicate any relevant planning history for the site.
- 3.5. As noted in the Planning Statement, it is acknowledged that a scope of works is agreed in relation to the A127/A130 Fairglen Interchange.



4. Policy Framework

Legislation

- 4.1. Legislation relating to the built historic environment is primarily set out within the *Planning (Listed Buildings and Conservation Areas) Act 1990,* which provides statutory protection for Listed Buildings and their settings and Conservation Areas.¹⁴
- 4.2. In addition to the statutory obligations set out within the aforementioned Act, Section 38(6) of the *Planning and Compulsory Purchase Act 2004* requires that all planning applications, including those for Listed Building Consent, are determined in accordance with the Development Plan unless material considerations indicate otherwise.¹⁵
- 4.3. Full details of the relevant legislation are provided in *Appendix 4*.

National Planning Policy Guidance

4.4. National Planning Policy guidance relating to the historic environment is provided within Section 16 of the Government's *National Planning Policy Framework* (NPPF), an updated version of which was published in December 2024. The NPPF is also supplemented by the national *Planning Policy Guidance* (*PPG*) which comprises a full and consolidated review of planning practice guidance documents to be read alongside the NPPF and which contains a section related to the Historic Environment.¹⁶ The *PPG* also contains the *National Design Guide*.¹⁷

4.5. Full details of the relevant national policy guidance are provided within *Appendix 4*.

The Development Plan

- 4.6. Applications for Planning Permission are currently considered against the policy and guidance set out within the Basildon District Local Plan Saved Policies (September 2007) of the 1998 Local Plan. No policies relating to the historic environment were saved.
- 4.7. The Basildon Borough Draft Local Plan 2023-2043 Regulation 18 document was produced in November 2024 and was out for public consultation from November to mid-January 2025. This contains draft policies pertaining to the historic environment.
- 4.8. Details of the policy specific relevant to the application proposals are provided within *Appendix 6*.

¹⁴ UK Public General Acts, Planning (Listed Buildings and Conservation Areas) Act 1990.

¹⁵ UK Public General Acts, Planning and Compulsory Purchase Act 2004, Section 38(6).

 ¹⁶ Ministry of Housing, Communities & Local Government (MHCLG), *Planning Practice Guidance: Historic Environment (PPG)* (revised edition, 14th February 2024), https://www.gov.uk/guidance/conserving-and-enhancing-the-historic-environment.
 ¹⁷ Ministry of Housing, Communities & Local Government (MHCLG), *National Design Guide* (London, January 2021).



5. The Historic Environment

- 5.1. This section provides a review of the recorded heritage resource within the site and its vicinity in order to identify any extant heritage assets within the site and to assess the potential for below-ground archaeological remains.
- 5.2. Designated heritage assets are referenced using their seven-digit NHLE number, HER 'event' numbers have the prefix EEX and HER 'monument' numbers have the prefix MEX and are referenced by their 'PrefRef' number.
- 5.3. A gazetteer of relevant heritage data is included as Appendix 1. Designated heritage assets and HER records are illustrated on Figures 1–2 in Appendix 2.

Previous Archaeological Works

- 5.4. A trial trench evaluation was undertaken in two areas within the site in 2021 (Areas 3 and 4) associated with improvements to the Fairglen Interchange (no Event ref). 29 trenches were excavated in Area 3, with a further six trenches not investigated due to ecological restrictions. No archaeological features were identified. Land drains were recorded within trench 96 in the southern extent.
- 5.5. 42 trenches were investigated in Area 4. The evaluation identified archaeological features in 11 trenches, as well as numerous below-ground remains of furrows and a modern ditch across three trenches. All of the archaeological features identified in Area 4 were devoid of finds and therefore it is not possible to accurately assign a date.



Plate 4: Extract from the 2021 trial trench evaluation report of work undertaken within the site

- 5.6. Fieldwalking, a geophysical survey and trial trench evaluation took place in the north-western extent of the site in 1994 and along the route of the A130 bypass (EEX52479-80).
- 5.7. A geophysical survey was undertaken across the areas of the site which were not subject to previous trial trench evaluation (discussed below) in February 2025 (EEX61232, *Appendix 8*). No anomalies were identified which were suggestive of features of archaeological

origin. A 20m diameter pit was recorded which may have represented a back-filled pond or clay pit, although there is no corresponding feature identified on Ordnance Survey mapping. Strong variation was identified along the boundaries of the site, and are most likely associated with the construction of the Fairglen Interchange.

- 5.8. Previous archaeological works in the wider surrounds of the site are shown on Figure 2 and comprise the following:
 - A trial trench evaluation *c*. 50m north of the site in 2020 (EEX59778);
 - A trial trench evaluation for the Saddlers Farm Junction Improvement *c*. 215m south-west of the site in 2010 (EEX56009);
 - A planned trial trench evaluation c. 455m east of the site which is due to be undertaken in 2025 (EEX61231);
 - A watching brief at Dollyman's Farm Borrow Pit *c*. 570m north of the site in 2001–2002 (EEX55790).
- 5.9. The results of these works are discussed below, where relevant to the potential archaeological resource of the site.

Topography and Geology

- 5.10. The topography of the site varies from approximately 20m in the southern extent of the site, and slopes down to approximately 15m aOD in the northern extent of the site.
- 5.11. The solid geology of the site is mapped as London Clay Formation comprising clay, silt and sand formed between 56 and 47.8 million years ago during the Palaeogene period.¹⁸ No superficial geology is mapped within the site area.
- 5.12. The soils within the site are characterised as slowly permeable, seasonally wet, slightly acidic, but base-rich, loamy and clayey soils.¹⁹

Archaeological Baseline

Prehistoric (pre-43 AD) and Romano-British (AD 43 - 410)

- 5.13. The geophysical survey within the site did not identify any anomalies suggestive of archaeological remains of prehistoric to Romano-British date within the site (EEX61232). The trial trench evaluation in the eastern and western extents of the site did not identify any features which could be confidently attributed to the prehistoric to Roman periods (no HER ref.).
- 5.14. During a trial trench evaluation *c*. 50m north of the site, no significant archaeological features were identified,

¹⁸ British Geological Survey, *Geology of Britain Viewer*, https://www.bgs.ac.uk/map-viewers/geology-of-britain-viewer/.

¹⁹ Cranfield University, *Soilscapes*, http://www.landis.org.uk/soilscapes/.



although a fragment of prehistoric flint and a small quantity of sherds of possible Bronze Age to Iron Age pottery were identified as surface finds (MEX1050375, 49748, EEX59778). It is likely that the finds had been either redeposited or discarded in an agricultural environment.

- 5.15. Fieldwalking along the route of the A130 bypass *c*. immediately west to 75m west of the site identified scatters of burnt flint, prehistoric pottery and worked flint, and subsequent trial trench evaluation recorded a ditch of likely prehistoric date, although no datable evidence was recorded (MEX39792, 14627, MEX39795, 14628, EEX52479–52480).
- 5.16. A multi-period settlement was identified within the barrow pit for the A130 c. 590m north of the site (MEX1049379, 48913, EEX55790). A small unenclosed settlement of Bronze Age date was identified, which contained two oval post-built structures. During the Late Iron Age into the early Roman period, the area was laid out as a series of enclosures either side of a trackway. Potentially associated with stock management. A large ditch was then excavated during the mid- to Late Romano-British period.
- 5.17. The Roman road from Chelmsford to Wickford and Canvey Island lies c. 605m west of the access road to the site (MEX1051385, 80650).
- 5.18. An early Roman rural settlement was identified during previous archaeological works *c*. 475m south-west of the site (MEX1040599, 47640, EEX56009). This was represented by an enclosure ditch and pit which contained pottery of early Romano-British date.

- 5.19. During a fieldwalking survey, three sherds of Roman pottery were recorded *c*. immediately west of the site (MEX39789, 14624, EEX52479–52480). Subsequent trial trench evaluation did not identify any archaeological features of Roman date.
- 5.20. A number of finds of Romano-British date have been identified in the wider surrounds of the site, predominantly as residual findspots. The findspot of a single sherd of Romano-British pottery was recorded c. 130m north of the site (MEX24490, 7611). The findspot of two copper alloy Roman coins were identified c. 200m west of the site (MEX1047543, 55852). The findspot of a pottery sherd of likely Roman date was recorded c. 210m north of the site (MEX24548, 7651). The findspot of a Roman worked object was recorded c. 630m south of the site (MEX23557, 7185).

<u>Early medieval (410 AD – 1066) and Medieval (1066 – 1539)</u>

- 5.21. The site was historically located in the parish of North Benfleet and most likely formed part of its agricultural hinterland from the medieval period onwards.
- 5.22. The geophysical survey within the site did not identify any anomalies suggestive of archaeological remains of medieval date within the site (EEX61232). The trial trench evaluation in the eastern extent of the site identified the below-ground remains of furrows of likely medieval to post-medieval date (no HER ref.). No finds or features were identified within the site during the trial trench evaluation in the western extent of the site.
- 5.23. The below-ground remains of furrows associated with the medieval to post-medieval agricultural technique of ridge



and furrow were identified within the north-west extent of the site during a trial trench evaluation (MEX39787, 14622, EEX52479-52480). Also recorded was an east to west orientated ditch which was devoid of finds and therefore undated.

- 5.24. Furrows were also identified during the trial trench evaluation within the eastern extent of the site in 2021 (no HER ref.). Also recorded were a number of archaeological features which were devoid of finds and are therefore undated.
- 5.25. During fieldwalking immediately west of the site, a single sherd of Saxon pottery of likely 7^{th-} to 9th-century date was recorded (MEX39788, 14623, EEX52479-52480). Subsequent evaluation in this area did not identify any archaeological remains of Saxon date.
- 5.26. Four sherds of medieval pottery were identified during a fieldwalking survey to the west of the site (MEX39790, 14625).
- 5.27. The findspot of a silver coin of medieval date was recorded *c*. 165m west of the site (MEX1044152, 52461), with a second example also recorded *c*. 220m west of the site (MEX1044153, 52462).

<u>Post-medieval (1540 – 1750), Early Modern (1750 – 1901),</u> <u>Modern (1901 – present)</u>

5.28. The site is depicted on the North Benfleet Tithe Map of 1840 (Plate 5). The site comprised part of numerous land parcels (consisting of predominantly arable land with some grassland) which were under the ownership and occupancy of John Sparkes, who also owned and occupied Bonvilles Farm to the west of the site. 5.29. The geophysical survey within the site identified the below-ground remains of the field boundary in the north-eastern extent of the site.

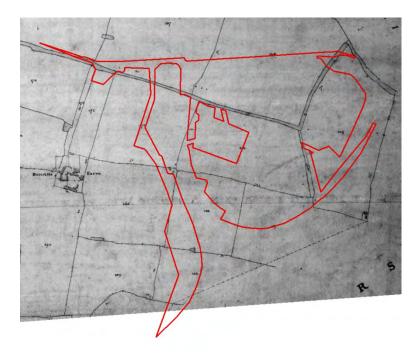


Plate 5: Extract from the North Benfleet Tithe Map of 1840



5.30. The site is depicted on the Ordnance Survey Map of 1880 (Plate 6). No major changes are shown within the site itself. A footpath is shown crossing the eastern extent of the site in a north-east to south-west orientation. Some of the field boundaries in the area are shown as treelined.

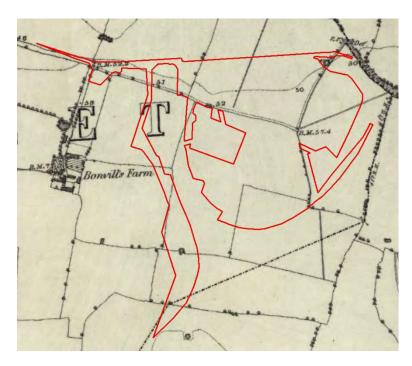


Plate 6: Extract from the Ordnance Survey Map of 1880

5.31. The site is depicted on the Ordnance Survey Map of 1922 (Plate 7). No major changes are shown on this mapping.

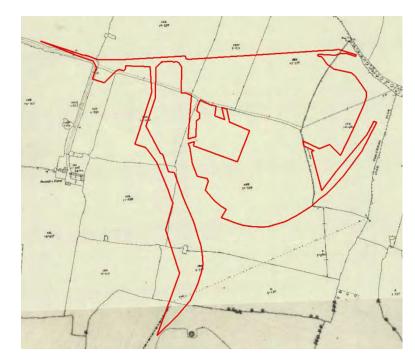


Plate 7: Extract from the Ordnance Survey Map of 1922



5.32. The site is depicted on the Ordnance Survey Map of 1947 (Plate 8). The A127 had been constructed to the north of the site, which formed the northern boundary of the site. Development was constructed to the west of the northern extent of the site.

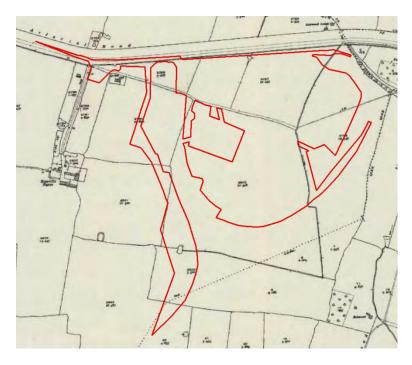


Plate 8: Extract from the Ordnance Survey Map of 1947

5.33. The site is depicted on the Ordnance Survey Map of 1956 (Plate 9). No major changes are shown within the site. An area of orchard is shown as extending into the northwestern extent of the site, north of Bonvills Farm.

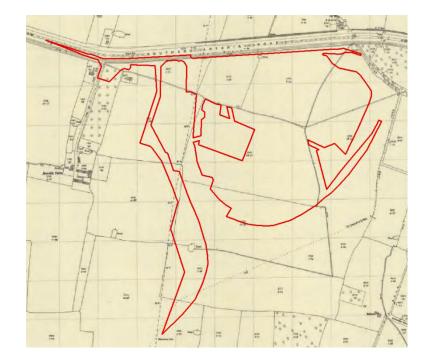


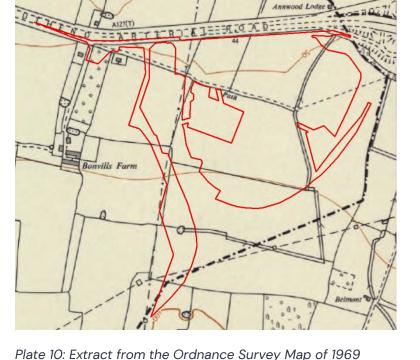
Plate 9: Extract from the Ordnance Survey Map of 1956

- 5.34. The site is depicted on the Ordnance Survey Map of 1969 (Plate 10). No major changes are shown within the site. Road construction to the north-east of the site indicates the road to the north-east of the site was underway.
- The land within the site is shown on the modern aerial 5.35. image as comprising a mixture of arable land and woodland (Plate 11). The A130 and A1245 were constructed and formed the eastern, south-eastern, south-western and western boundaries of the main area of the site.



Plate 11: Modern aerial image of the site

5.36. A modern ditch was recorded in the eastern extent of the site during the trial trench evaluation from 2021 (no HER ref.). The geophysical survey undertaken within the site in 2025 did not identify any anomalies suggestive of a continuation of this feature (EEX61232). A 20m diameter pit was recorded which may have represented a back-







filled pond or clay pit, although there is no corresponding feature identified on Ordnance Survey mapping.

The wider area

- 5.37. The Shenfield and Southend Railway lies c. 360m north of the site (MEX1051274, 80549). The railway opened for goods in 1888 and for passengers in 1889.
- 5.38. A number of buildings and structures have been constructed in the wider surrounds of the site during the post-medieval to modern periods and comprise the following:
 - A brickworks c. 715m south of the site (MEX1035759, 15415);
 - Beke Hall c. 750m north-east of the site (MEX1010533, 35129); and
 - Great Burches Farmhouse *c*. 975m south-east of the site (MEX1002879, 27499).
- 5.39. Two memorials are located *c*. 685m north of the site which commemorate aircraft crash sites from the First World War (MEX1032955-56, 19383-84). These memorials are Grade II Listed Buildings.
- 5.40. A field boundary located *c*. 540m west of the site between Harrow Road and Rushbottom Lane appears to be an example of late enclosure and contains hawthorn, blackthorn and field maple hedges (MEX2888, 9086).
- 5.41. During a topsoil strip *c*. 465m west of the site, two postmedieval field boundaries were recorded (MEX1040409, 47470).

- 5.42. A scatter of post-medieval and tile was recorded during a fieldwalking survey to the west of the site (MEX39791, 14626, EEX52479-52480). Subsequent trial trench evaluation in this area did not identify any features of post-medieval to modern date.
- 5.43. The findspot of a post-medieval silver penny depicting James I was recorded *c*. 285m west of the site (MEX1045910, 54219).

<u>Undated</u>

- 5.44. During the trial trench evaluation in the eastern extent of the site, 11 features were recorded which are considered to be of archaeological origin, although no finds were identified to date them (no HER ref.). The features were primarily orientated in a north-west to south-east alignment, which was similar to the orientation of the furrows, and are not considered to be of sufficient interest to be considered heritage assets (Plate 12).
- 5.45. The geophysical survey undertaken within the site in 2025 did not identify any anomalies along this same alignment as extending into that part of the site.

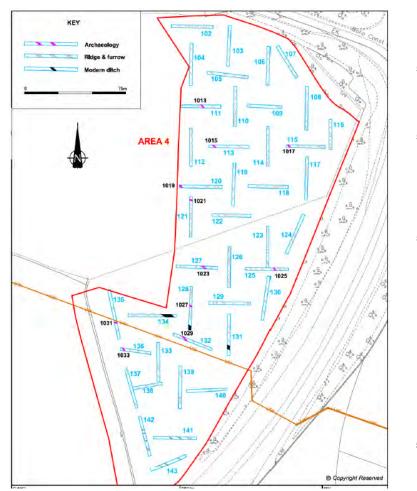


Plate 12: Extract from the trial trench evaluation report of Area 4 (the western extent of the site)

5.46. The majority of the trenches which were excavated during the Saddlers Farm Junction improvement works *c*.
215m south-west of the site did not contain any archaeological finds or features (MEX1040596, 47639,

EEX56009). The exception, an early Roman site, has been referred to in the period section above.

- 5.47. During a topsoil strip *c*. 465m south-west of the site, a pit and a field boundary of uncertain date were identified (MEX1040409, 47470).
- 5.48. Cropmarks of a possible curvilinear enclosure were identified on an aerial photograph *c*. 860m north-west of the site and is of uncertain date (MEX1031167, 18277).

Statement of Archaeological Potential and Significance

- 5.49. The geophysical survey within the site did not identify any anomalies suggestive of archaeological remains of prehistoric to Romano-British date within the site. The trial trench evaluation in the eastern and western extents of the site did not identify any features which could be confidently attributed to the prehistoric to Roman periods. On this basis, there is no evidence to suggest that the land within the site was a focus for activity of this date. Therefore, the potential for significant archaeological remains of prehistoric to Romano-British date within the site is considered to be low.
- 5.50. The geophysical survey within the site did not identify any anomalies suggestive of archaeological remains of medieval date within the site. The trial trench evaluation in the eastern extent of the site identified the belowground remains of furrows of likely medieval to postmedieval date. No finds or features of medieval date were identified within the site during the trial trench evaluation in the western extent of the site. There is no evidence to suggest that the land within the site was a focus for medieval settlement activity, but rather it was part of the agricultural landscape. The below–ground remains of

furrows within the site are not considered to be of sufficient interest to be considered heritage assets. On this basis, the potential for significant archaeological remains of medieval date within the site is considered to be low.

- 5.51. The site has been in arable use since at least the mid-19th century onwards. The geophysical survey showed evidence for former field boundaries and filled-in ponds within the site. A modern ditch was identified within the site during the trial trench evaluation in the eastern extent. The potential for significant archaeological remains of post-medieval to modern date within the site is considered to be low.
- 5.52. During the trial trench evaluation in the eastern extent of the site, a number of features of uncertain date were recorded. No anomalies were identified during the geophysical survey which were along the same alignment

which extended into the central area of the site. Therefore, the potential for significant archaeological remains of uncertain date within the site is considered to be low.

Designated Heritage Assets

- 5.53. No designated heritage assets lie within or in the immediate vicinity of the site.
- 5.54. The Grade II Listed War Memorials at Dollyman's Farm lie c. 695m north-west of the site (1453844). The Grade II Listed Beke Hall lies c. 785m north-east of the site (1112682). The Grade II Listed Great Burches Farmhouse lies c. 995m south-east of the site (1170105).
- 5.55. Designated heritage assets in the vicinity of the site are considered in further detail in the Setting Assessment Section below.



6. Setting Assessment

- 6.1. Step 1 of the methodology recommended by the Historic England guidance *GPA:3* (see 'Methodology') is to identify which heritage assets might be affected by a proposed development.²⁰
- 6.2. Development proposals may adversely impact heritage assets where they remove a feature that contributes to the significance of a heritage asset or where they interfere with an element of a heritage asset's setting that contributes to its significance, such as interrupting a key relationship or a designed view.
- 6.3. Consideration was made as to whether any of the heritage assets present within or beyond the study area include the site as part of their setting, and therefore may potentially be affected by the proposed development.
- 6.4. Screened Zone of Theoretical Visibility (SZTV) modelling, supported by observations made during the site visit, has informed Step 1.
- 6.5. The following Listed Buildings lie in the surrounds of the site:
 - The Grade II Listed War Memorials at Dollyman's Farm *c*. 685m north of the site (1453844);
 - The Grade II Listed Beke Hall *c*. 760m north-east of the site (1112682); and

- The Grade II Listed Great Burches Farmhouse *c*. 985m south-east of the site (1170105).
- 6.6. Assets in the wider surrounds include the Grade II* Listed Church of All Saints c. 1.32km west of the site, with a further four Grade II Listed Buildings located to the west.
- 6.7. The proposed development within the site is for a battery energy storage system (BESS) and associated infrastructure which will reach a height of 4.5m and 6.8m, focussed in the central area of the site.
- 6.8. The SZTV modelling indicates that the proposed development will not be intervisible with the majority of designated heritage assets in the surrounds of the site.
- 6.9. The SZTV indicates that there may be some intervisibility with the Grade II Listed Beke Hall, c. 760m north-east of the site (1112682), although the development would be seen in association with intervening agricultural land, woodland, road infrastructure and business development. It was ascertained during the site visit that there were no ground-level views between the site within the site and Beke Hall, and desk-based research has not established a historical association between the two. Therefore, although there may be glimpsed and distant views of the development south-west from the asset, these are not considered to be views which contribute to its overall heritage significance. On this basis, the Grade II Listed

²⁰ Historic England, *GPA*:3, p. 4.

Beke Hall has not been taken forwards for further assessment.

6.10. The SZTV indicates that there may be some intervisibility between the land within the site and the Grade II Listed Buildings at Great Wheatley Farm *c*. 1.71km east of the site (1112679, 1168472, 1252995). Any glimpsed views of the proposed development would be seen in association with extensive intervening agricultural land and existing road infrastructure. It was ascertained during the site visit that there were no ground-level views between the site within the site and the assets at Great Wheatley Farm, and desk-based research has not established a historical

association between them. Therefore, although there may be glimpsed and distant views of the development south-west from the assets, these are not considered to be views which contribute to their overall heritage significance. On this basis, the Grade II Listed Buildings at Great Wheatley Farm have not been taken forwards for further assessment.

6.11. The proposed development within the site will result in no harm to the heritage significance of designated heritage assets, via an alteration to their setting.



7. Conclusions

Archaeological resource

- 7.1. The geophysical survey within the site did not identify any anomalies suggestive of archaeological remains of prehistoric to Romano-British date within the site. The trial trench evaluation in the eastern and western extents of the site did not identify any features which could be confidently attributed to the prehistoric to Roman periods. On this basis, there is no evidence to suggest that the land within the site was a focus for activity of this date. Therefore, the potential for significant archaeological remains of prehistoric to Romano-British date within the site is considered to be low.
- 7.2. The geophysical survey within the site did not identify any anomalies suggestive of archaeological remains of medieval date within the site. The trial trench evaluation in the eastern extent of the site identified the belowground remains of furrows of likely medieval to postmedieval date. No finds or features of medieval date were identified within the site during the trial trench evaluation in the western extent of the site. There is no evidence to suggest that the land within the site was a focus for medieval settlement activity, but rather it was part of the agricultural landscape. The below-ground remains of furrows within the site are not considered to be of sufficient interest to be considered heritage assets. On this basis, the potential for significant archaeological remains of medieval date within the site is considered to be low.
- 7.3. The site has been in arable use since at least the mid-19th century onwards. The geophysical survey showed

evidence for former field boundaries and filled-in ponds within the site. A modern ditch was identified within the site during the trial trench evaluation in the eastern extent. The potential for significant archaeological remains of post-medieval to modern date within the site is considered to be low.

7.4. During the trial trench evaluation in the eastern extent of the site, a number of features of uncertain date were recorded. No anomalies were identified during the geophysical survey which were along the same alignment which extended into the central area of the site. Therefore, the potential for significant archaeological remains of uncertain date within the site is considered to be low.

<u>Setting</u>

- 7.5. No designated heritage assets lie within or in the immediate vicinity of the site.
- 7.6. Following a review of designated heritage assets in the wider surrounds of the site, it is concluded that the proposed development within the site will result in no harm to designated heritage assets, via an alteration to setting.



Sources

Legislation
UK Public General Acts, Ancient Monuments and Archaeological Areas Act 1979.
UK Public General Acts, Planning (Listed Buildings and Conservation Areas) Act 1990.
UK Public General Acts, Planning and Compulsory Purchase Act 2004.
UK Public General Acts, Town and Country Planning Act 1990.

Policy and Guidance

Chartered Institute for Archaeologists (CIfA), Standard and Guidance for Historic Environment Desk-Based Assessment (revised edition
October 2020).

Ministry of Housing, Communities & Local Government (MHCLG), National Planning Policy Framework (NPPF) (London, December 2024).

Ministry of Housing, Communities & Local Government (MHCLG), Planning Practice Guidance (PPG) (revised February 2024).

English Heritage, Conservation Principles: Policies and Guidance for the Sustainable Management of the Historic Environment (London, April 2008).

Historic England, Conservation Area Appraisal, Designation and Management, Historic England Advice Note 1 (2nd edition, Swindon, February 2019).



Historic England, Managing Significance in Decision-Taking in the Historic Environment: Historic Environment Good Practice Advice in Planning: 2 (2nd edition, Swindon, July 2015).

Historic England, Statements of Heritage Significance: Analysing Significance in Heritage Assets, Historic England Advice Note 12 (Swindon, October 2019).

Historic England, The Setting of Heritage Assets: Historic Environment Good Practice Advice in Planning Note 3 (2nd edition, Swindon, December 2017).

Court and Appeal Decisions

Barnwell Manor Wind Energy Ltd v (1) East Northamptonshire DC & Others [2014] EWCA Civ 137.

Bedford Borough Council v Secretary of State for Communities and Local Government [2013] EWHC 2847 (Admin).

Catesby Estates Ltd. V. Steer [2018] EWCA Civ 1697.

Jones v Mordue [2015] EWCA Civ 1243.

Kay, R (on the application of) v Secretary of State for Housing Communities and Local Government & Anor [2020] EWHC 2292 (Admin).

Palmer v Herefordshire Council & Anor [2016] EWCA Civ 1061.

R (Forge Field Society) v Sevenoaks District Council [2014] EWHC 1895 (Admin).



Cartographic Sources			
1840	North Benfleet Tithe Map		
1880	Ordnance Survey Map		
1922	Ordnance Survey Map		
1947	Ordnance Survey Map		
1956	Ordnance Survey Map		
1969	Ordnance Survey Map		



Appendix 1: Gazetteer

Heritage Data

HER Event Data

Ev UID	Record Type	Name
EEX52479	AI	Trial Trenching by FAG (ECC) at A130 Bypass, 1994
EEX52480	FSR	Geophysical survey by Geophysical Surveys of Bradford at A130 Bypass Stage II, 1994
EEX56009	AI	Sadlers Farm Junction Improvement
EEX55790	AI	Dollymans's Farm Borrow Pit, Rochford
EEX59778	AI	Trial trenching by MOLA at Michelins Farm, Rayleigh, 2020
EEX61231	AI	Archaeological Evaluation at Land West Of Great Wheatley Farm, Great Wheatley Road, Rayleigh
EEX61232	AI	Geophysical Survey at the center of the Fairglen Interchange of the A127, A130 7 A1245



HER Monument Data

Mon UID	Pref Ref	Name	Mon Type	
MEX1002879	27499	Great Burches Farmhouse	TIMBER FRAMED HOUSE; MANOR HOUSE	Post Medieval
MEX1010533	35129	Beke Hall	TIMBER FRAMED HOUSE	Post Medieval
MEX1032955	19383	Memorial to Captain AB Kynoch RFC, S of Dollymans Farm, Shotgate	COMMEMORATIVE MONUMENT; AIRCRAFT CRASH SITE	Modern
MEX1032956	19384	Memorial to Captain HC Stroud RFC, S of Dollymans Farm, Shotgate		
MEX1044152	52461	A Portable Antiquities Scheme findspot of Medieval date. FINDSPOT		Medieval
MEX1044153	52462	A Portable Antiquities Scheme findspot of Medieval date.	FINDSPOT	Medieval
MEX1045910	54219	A Portable Antiquities Scheme findspot of Post Medieval date. FINDSPOT		Post Medieval
MEX1047543	55852	A Portable Antiquities Scheme findspot of Roman date. FINDSPOT		Roman
MEX23557	7185	Thundersley	FINDSPOT	Roman
MEX24490	7611	Wickford FINDSPOT		Roman



MEX24548	7651	East of Morbec Farm	FINDSPOT	Roman
MEX39787	14622	A130 By-Pass Stage II (A132-A127) RIDGE AND FURROW M		Medieval
MEX39788	14623	A130 By-Pass Stage II (A132-A127) FINDSPOT		Early Medieval
MEX39789	14624	A130 By-Pass Stage II (A132-A127)	DITCH	Prehistoric
MEX39790	14625	A130 By-Pass Stage II (A132-A127)	FINDSPOT	Medieval
MEX39791	14626	A130 By-Pass Stage II (A132-A127)	FINDSPOT	Post Medieval
MEX39792	14627	130 By-Pass Stage II (A132-A127) DITCH P		Prehistoric
MEX39795	14628	A130 By-Pass Stage II (A132-A127) DITCH		Prehistoric
MEX1051274	80549	Shenfield And Southend Railway	RAILWAY	Late 19th century to Modern
MEX1051385	80650	Roman road from Chelmsford to Wickford and Canvey Island	ROAD	Roman
MEX1031167	18277	Fanton HallCURVILINEAR ENCLOSURE; LINEAR FEATURE; FIELD BOUNDARYU		Unknown
MEX1035759	15415	Manor Brick Works	TERRACOTTA WORKS; BRICKWORKS; CLAY DRAINAGE PIPE WORKS	Post Medieval to Modern



MEX1040409	47470	A130 Site 29 – Lyons Borrow Pit	FIELD BOUNDARY; PIT; FIELD BOUNDARY	Post Medieval
MEX1040596	47639	Sadlers Farm Junction Improvement		Unknown
MEX1040599	47640	Sadlers Farm Junction Improvement - Area J	DITCH; PIT; SETTLEMENT	Roman
MEX1049379	48913	Dollymans Borrow Pit, Prehistoric settlement	SETTLEMENT; POST HOLE; FIELD SYSTEM	Late Bronze Age to Roman
MEX28888	9086	Old Rectory, North Benfleet	FIELD BOUNDARY	Post Medieval
MEX1050375	49748	Prehistoric flint and sherds at Michelins Farm, Rayleigh		Unknown



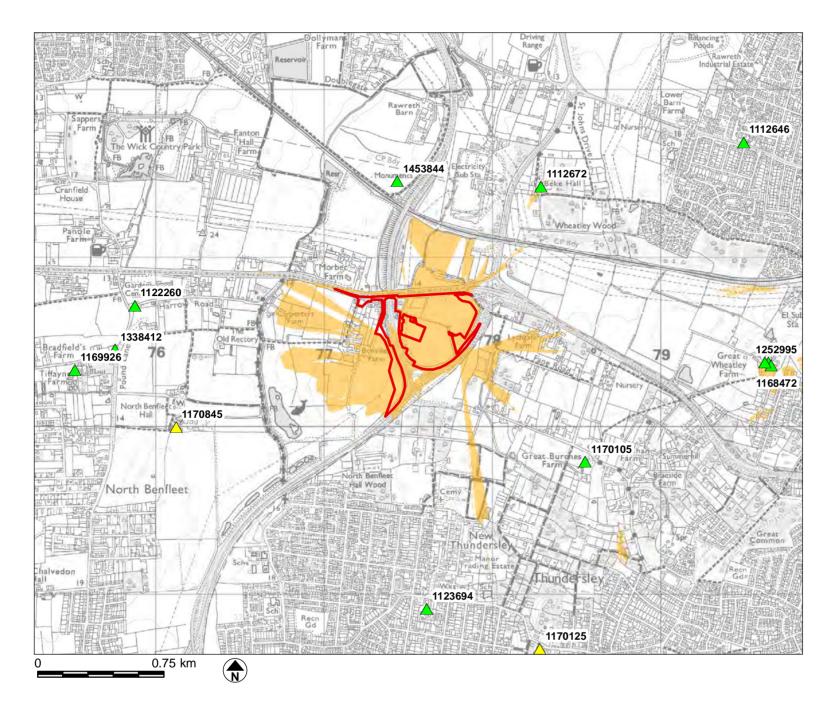
Historic England Data

Historic England Listed Buildings

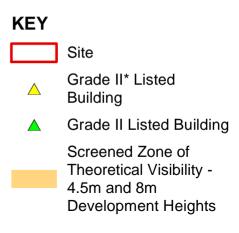
List Entry	Name	Grade	Eastings	Northings
1112672	BEKE HALL	II	578287	191426.36084392
1170105	GREAT BURCHES FARMHOUSE	II	578551	189792.36084392
1453844	War memorials at Dollyman's Farm	II	577538.140001297	191450.467423



Appendix 2: Figures



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Revisions: First Issue- 12/06/2025 RW

Figure 1: Designated Heritage Assets

Land North of Rayleigh Spur Roundabout, Basildon

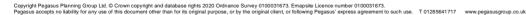
Client: RES Limited

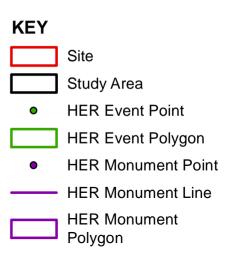
 DRWG No: P24-3044
 Sheet No: - REV:

 Drawn by: RW
 Approved by: GS

 Date: 12/06/2025
 Scale: 1:22,500 @ A4







Revisions: First Issue- 12/06/2025 RW

Figure 2: Essex HER Data

Land North of Rayleigh Spur Roundabout, Basildon

Client: RES Limited

DRWG No: P24-3044 Drawn by: RW Date: 12/06/2025 Scale: 1:17,500 @ A4

Sheet No: - REV: -

Approved by: GS



Appendix 3: Assessment Methodology

Assessment of significance

In the NPPF, heritage significance is defined as:

"The value of a heritage asset to this and future generations because of its heritage interest. That interest may be archaeological, architectural, artistic or historic. Significance derives not only from a heritage asset's physical presence, but also from its setting. For World Heritage Sites, the cultural value described within each site's Statement of Outstanding Universal Value forms part of its significance."²¹

Historic England's *GPA*:2 gives advice on the assessment of significance as part of the application process. It advises understanding the nature, extent, and level of significance of a heritage asset.²²

In order to do this, *GPA 2* also advocates considering the four types of heritage value an asset may hold, as identified in English Heritage's *Conservation Principles.*²³ These essentially cover the heritage 'interests' given in the glossaries of the *NPPF* and the *PPG* which are archaeological, architectural and artistic, and historic.²⁴

The PPG provides further information on the interests it identifies:

- Archaeological interest: As defined in the Glossary to the National Planning Policy Framework, there will be archaeological interest in a heritage asset if it holds, or potentially holds, evidence of past human activity worthy of expert investigation at some point.
- 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 skills, 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.²⁵

²⁵ MHCLG, *PPG*, paragraph 006, reference ID: 18a-006-20190723.

²¹ MHCLG, *NPPF*, Annex 2.

²² Historic England, GPA:2.

²³ Historic England, Conservation Principles: Policies and Guidance for the Sustainable Management of the Historic Environment (London, April 2008). These heritage values

are identified as being 'aesthetic', 'communal', 'historical' and 'evidential', see idem pp. 28–32. ²⁴ MHCLG, *NPPF*, Annex 2; MHCLG, *PPG*, paragraph 006, reference ID: 18a–006–2019072.

Significance results from a combination of any, some, or all of the interests described above.

Historic England guidance on assessing heritage significance, *HEAN*:12, advises using the terminology of the *NPPF* and *PPG*, and thus it is that terminology which is used in this Report. ²⁶

Listed Buildings and Conservation Areas are generally designated for their special architectural and historic interest. Scheduling is predominantly, although not exclusively, associated with archaeological interest.

Setting and significance

As defined in the NPPF:

"Significance derives not only from a heritage asset's physical presence, but also from its setting."²⁷

Setting is defined as:

"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."²⁸

Therefore, setting can contribute to, affect an appreciation of significance, or be neutral with regards to heritage values.

Assessing change through alteration to setting

How setting might contribute to these values has been assessed within this Report with reference to *GPA*:3, particularly the checklist given on page 11. This advocates the clear articulation of "*what matters and why*".²⁹

In *GPA*:3, a stepped approach is recommended, of which Step 1 is to identify which heritage assets and their settings are affected. Step 2 is to assess whether, how and to what degree settings make a contribution to the significance of the heritage asset(s) or allow significance to be appreciated. The guidance includes a (nonexhaustive) checklist of elements of the physical surroundings of an asset that might be considered when undertaking the assessment including, among other things: topography, other heritage assets, green space, functional relationships and degree of change over time. It also lists aspects associated with the experience of the asset which might be considered, including: views, intentional intervisibility, tranquillity, sense of enclosure, accessibility, rarity and land use.

Step 3 is to assess the effect of the proposed development on the significance of the asset(s). Step 4 is to explore ways to maximise enhancement and minimise harm. Step 5 is to make and document the decision and monitor outcomes.

A Court of Appeal judgement has confirmed that whilst issues of visibility are important when assessing setting, visibility does not necessarily confer a contribution to significance and factors other than visibility should also be considered, with Lindblom LJ stating at

 ²⁶ Historic England, Statements of Heritage Significance: Analysing Significance in Heritage Assets, Historic England Advice Note 12 (Swindon, October 2019).
 ²⁷ MHCLG, NPPF, Annex 2.

paragraphs 25 and 26 of the judgement (referring to an earlier Court of Appeal judgement):

Paragraph 25 – "But – again in the particular context of visual effects – I said that if "a proposed development is to affect the setting of a listed building there must be a distinct visual relationship of some kind between the two – a visual relationship which is more than remote or ephemeral, and which in some way bears on one's experience of the listed building in its surrounding landscape or townscape" (paragraph 56)".

Paragraph 26 – "This does not mean, however, that factors other than the visual and physical must be ignored when a decision-maker is considering the extent of a listed building's setting. Generally, of course, the decision-maker will be concentrating on visual and physical considerations, as in Williams (see also, for example, the first instance judgment in R. (on the application of Miller) v North Yorkshire County Council [2009] EWHC 2172 (Admin), at paragraph 89). But it is clear from the relevant national policy and guidance to which I have referred, in particular the guidance in paragraph 18a-013-20140306 of the PPG, that the Government recognizes the potential relevance of other considerations – economic, social and historical. These other considerations may include, for example, "the historic relationship between places". Historic England's advice in GPA3 was broadly to the same effect." 30

Levels of significance

Descriptions of significance will naturally anticipate the ways in which impacts will be considered. Hence descriptions of the significance of Conservation Areas will make reference to their special interest and character and appearance, and the significance of Listed Buildings will be discussed with reference to the building, its setting and any features of special architectural or historic interest which it possesses.

In accordance with the levels of significance articulated in the *NPPF* and the *PPG*, three levels of significance are identified:

- Designated heritage assets of the highest significance, as identified in paragraph 213 of the NPPF, comprising Grade I and II* Listed Buildings, Grade I and II* Registered Parks and Gardens, Scheduled Monuments, Protected Wreck Sites, World Heritage Sites and Registered Battlefields (and also including some Conservation Areas) and nondesignated heritage assets of archaeological interest which are demonstrably of equivalent significance to Scheduled Monuments, as identified in footnote 75 of the NPPF;³¹
- Designated heritage assets of less than the highest significance, as identified in paragraph 213 of the NPPF, comprising Grade II Listed Buildings and Grade II Registered Parks and Gardens (and also some Conservation Areas);³² and

 ³⁰ Catesby Estates Ltd. V. Steer [2018] EWCA Civ 1697, paras. 25 and 26.
 ³¹ MHCLG, *NPPF*, para. 213 and fn. 75.



• Non-designated heritage assets. Non-designated heritage assets are defined within the PPG as "buildings, monuments, sites, places, areas or landscapes identified by plan-making bodies as having a degree of significance meriting consideration in planning decisions, but which do not meet the criteria for designated heritage assets".³³

Additionally, it is of course possible that sites, buildings or areas have no heritage significance.

Assessment of harm

Assessment of any harm will be articulated in terms of the policy and law that the proposed development will be assessed against, such as whether a proposed development preserves or enhances the character or appearance of a Conservation Area, and articulating the scale of any harm in order to inform a balanced judgement/weighing exercise as required by the NPPF.

In accordance with key policy, the following levels of harm may potentially be identified for designated heritage assets:

> • Substantial harm or total loss. It has been clarified in a High Court Judgement of 2013 that this would be harm that would "have such a serious impact on the significance of the asset that its significance was either vitiated altogether or very much reduced";³⁴ and

• Less than substantial harm. Harm of a lesser level than that defined above.

With regards to these two categories, the PPG states:

"Within each category of harm (which category applies should be explicitly identified), the extent of the harm may vary and should be clearly articulated."³⁵

Hence, for example, harm that is less than substantial would be further described with reference to where it lies on that spectrum or scale of harm, for example low end, middle, and upper end of the less than substantial harm spectrum/scale.

With regards to non-designated heritage assets, there is no basis in policy for describing harm to them as substantial or less than substantial, rather the *NPPF* requires that the scale of any harm or loss is articulated whilst having regard to the significance of the asset. Harm to such assets is therefore articulated as a level of harm to their overall significance, using descriptors such as minor, moderate and major harm.

It is also possible that development proposals will cause no harm or preserve the significance of heritage assets. Here, a High Court Judgement of 2014 is relevant. This concluded that with regard to preserving the setting of a Listed building or preserving the character and appearance of a Conservation Area, "*preserving*" means doing "*no harm*".³⁶

³³ MHCLG, *PPG*, paragraph 039, reference ID: 18a-039-20190723.

³⁴ Bedford Borough Council v Secretary of State for Communities and Local Government [2013] EWHC 2847 (Admin), para. 25.

³⁵ MHCLG, *PPG*, paragraph 018, reference ID: 18a-018-20190723.

³⁶ R (Forge Field Society) v Sevenoaks District Council [2014] EWHC 1895 (Admin).



Preservation does not mean no change, it specifically means no harm. *GPA:2* states that "*Change to heritage assets is inevitable but it is only harmful when significance is damaged*".³⁷ Thus, change is accepted in Historic England's guidance as part of the evolution of the landscape and environment. It is whether such change is neutral, harmful or beneficial to the significance of an asset that matters.

As part of this, setting may be a key consideration. When evaluating any harm to significance through changes to setting, this Report follows the methodology given in *GPA:3*, described above. Fundamental to this methodology is a consideration of *"what matters and why"*.³⁸ Of particular relevance is the checklist given on page 13 of *GPA:3*.³⁹

It should be noted that this key document also states:

"Setting is not itself a heritage asset, nor a heritage designation..."40

Hence any impacts are described in terms of how they affect the significance of a heritage asset, and heritage interests that contribute to this significance, through changes to setting.

With regards to changes in setting, GPA:3 states that:

"Conserving or enhancing heritage assets by taking their settings into account need not prevent change".⁴¹

Additionally, whilst the statutory duty requires that special regard should be paid to the desirability of not harming the setting of a

Listed Building, that cannot mean that any harm, however minor, would necessarily require Planning Permission to be refused. This point has been clarified in the Court of Appeal.⁴²

Benefits

Proposed development may also result in benefits to heritage assets, and these are articulated in terms of how they enhance the heritage interests, and hence the significance, of the assets concerned.

As detailed further in *Appendix 5*, the *NPPF* (at Paragraphs 214 and 215) requires harm to a designated heritage asset to be weighed against the public benefits of the development proposals.⁴³

Recent High Court Decisions have confirmed that enhancement to the historic environment should be considered as a public benefit under the provisions of Paragraphs 214 to 216.⁴⁴

The *PPG* provides further clarity on what is meant by the term 'public benefit', including how these may be derived from enhancement to the historic environment ('heritage benefits'), as follows:

"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

³⁷ Historic England, GPA:2, p. 9.

³⁸ Historic England, *GPA*:3, p. 8.

³⁹ Historic England, GPA:3, p. 13.

⁴⁰ Historic England, *GPA*:3, p. 4.

⁴¹ Historic England, GPA 3., p. 8.

 ⁴² Palmer v Herefordshire Council & Anor [2016] EWCA Civ 1061.
 ⁴³ MHCLG, *NPPF*, paras. 214 and 215.

⁴⁴ Including – Kay, R (on the application of) v Secretary of State for Housing Communities and Local Government & Anor [2020] EWHC 2292 (Admin); MHCLG, *NPPF*, paras. 214 and 216.

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."⁴⁵

Any "*heritage benefits*" arising from the proposed development, in line with the narrative above, will be clearly articulated in order for them to be taken into account by the decision maker.

⁴⁵ MHCLG, *PPG*, paragraph 020, reference ID: 18a-020-20190723.



Appendix 4: Legislative Framework

Legislation relating to the built historic environment is primarily set out within the *Planning (Listed Buildings and Conservation Areas) Act 1990*, which provides statutory protection for Listed Buildings and Conservation Areas.⁴⁶ It does not provide statutory protection for non-designated or Locally Listed heritage assets.

Section 66(1) of the Act states that:

"In considering whether to grant planning permission [or permission in principle] for development which affects a listed building or its setting, the local planning authority or, as the case may be, the Secretary of State, shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses."⁴⁷

In the 2014 Court of Appeal judgement in relation to the Barnwell Manor case, Sullivan LJ held that:

> "Parliament in enacting section 66(1) did intend that the desirability of preserving the settings of listed buildings should not simply be given careful consideration by the decision-maker for the purpose of deciding whether there would be some harm, but should be given "considerable importance and weight"

when the decision-maker carries out the balancing exercise."48

A judgement in the Court of Appeal ('Mordue') has clarified that, with regards to the setting of Listed Buildings, where the principles of the NPPF are applied (in particular paragraph 134 of the 2012 version of the NPPF, the requirements of which are now given in paragraph 215 of the current, revised NPPF, see **Appendix 5**), this is in keeping with the requirements of the 1990 Act.⁴⁹

With regards to development within Conservation Areas, Section 72(1) of the *Planning (Listed Buildings and Conservation Areas) Act* 1990 states:

"In the exercise, with respect to any buildings or other land in a conservation area, of any powers under any of the provisions mentioned in subsection (2), special attention shall be paid to the desirability of preserving or enhancing the character or appearance of that area."⁵⁰

Unlike Section 66(1), Section 72(1) of the Act does not make reference to the setting of a Conservation Area. This makes it plain that it is the character and appearance of the designated Conservation Area that is the focus of special attention.

⁴⁶ UK Public General Acts, Planning (Listed Buildings and Conservation Areas) Act 1990.

 $^{^{\}rm 47}$ UK Public General Acts, Planning (Listed Buildings and Conservation Areas) Act 1990, Section 66(1).

 $^{^{\}rm 48}$ Barnwell Manor Wind Energy Ltd v (1) East Northamptonshire DC & Others [2014] EWCA Civ 137. para. 24.

⁴⁹ Jones v Mordue [2015] EWCA Civ 1243.

⁵⁰ UK Public General Acts, Planning (Listed Buildings and Conservation Areas) Act 1990. Section 72(1).



In addition to the statutory obligations set out within the *Planning* (*Listed Buildings and Conservations Area*) *Act 1990*, Section 38(6) of the *Planning and Compulsory Purchase Act 2004* requires that all planning applications, including those for Listed Building Consent, are determined in accordance with the Development Plan unless material considerations indicate otherwise.⁵¹

⁵¹ UK Public General Acts, Planning and Compulsory Purchase Act 2004, Section 38(6).



Appendix 5: National Policy Guidance

The National Planning Policy Framework (December 2024)

National policy and guidance is set out in the Government's National Planning Policy Framework (NPPF) published in December 2024. This replaced and updated the previous NPPF (December 2023). The NPPF needs to be read as a whole and is intended to promote the concept of delivering sustainable development.

The *NPPF* sets out the Government's economic, environmental and social planning policies for England. Taken together, these policies articulate the Government's vision of sustainable development, which should be interpreted and applied locally to meet local aspirations. The *NPPF* continues to recognise that the planning system is plan-led and that therefore Local Plans, incorporating Neighbourhood Plans, where relevant, are the starting point for the determination of any planning application, including those which relate to the historic environment.

The overarching policy change applicable to the proposed development is the presumption in favour of sustainable development. This presumption in favour of sustainable development (the 'presumption') sets out the tone of the Government's overall stance and operates with and through the other policies of the *NPPF*. Its purpose is to send a strong signal to all those involved in the planning process about the need to plan positively for appropriate new development; so that both planmaking and development management are proactive and driven by a search for opportunities to deliver sustainable development, rather than barriers. Conserving historic assets in a manner appropriate to their significance forms part of this drive towards sustainable development.

The purpose of the planning system is to contribute to the achievement of sustainable development and the *NPPF* sets out three 'objectives' to facilitate sustainable development: an economic objective, a social objective, and an environmental objective. The presumption is key to delivering these objectives, by creating a positive pro-development framework which is underpinned by the wider economic, environmental and social provisions of the *NPPF*. The presumption is set out in full at paragraph 11 of the *NPPF* and reads as follows:

"Plans and decisions should apply a presumption in favour of sustainable development.

For plan-making this means that:

- a. all plans should promote a sustainable pattern of development that seeks to: meet the development needs of their area; align growth and infrastructure; improve the environment; mitigate climate change (including by making effective use of land in urban areas) and adapt to its effects;
- b. strategic policies should, as a minimum, provide for objectively assessed needs for housing and other uses, as well as any needs that cannot be met within neighbouring areas, unless:
 - i. the application of policies in this Framework that protect areas or assets of particular importance provides a strong reason for restricting



the overall scale, type or distribution of development in the plan area; or

ii. any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole.

For decision-taking this means:

- a. approving development proposals that accord with an up-to-date development plan without delay; or
- b. where there are no relevant development plan policies, or the policies which are most important for determining the application are out-of-date, granting permission unless:
 - i. the application policies in this Framework that protect areas or assets of particular importance provides a strong reason for refusing the development proposed; or
 - ii. any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole, having particular regard to key policies for directing development to sustainable locations,

making effective use of land, securing well-designed places and providing affordable homes, individually or in combination."⁵²

However, it is important to note that footnote 7 of the NPPF applies in relation to the final bullet of paragraph 11. This provides a context for paragraph 11 and reads as follows:

> "The policies referred to are those in this Framework (rather than those in development plans) relating to: habitats sites (and those sites listed in paragraph 189) and/or designated as Sites of Special Scientific Interest; land designated as Green Belt, Local Green Space, a National Landscape, a National Park (or within the Broads Authority) or defined as Heritage Coast; irreplaceable habitats; designated heritage assets (and other heritage assets of archaeological interest referred to in footnote 75); and areas at risk of flooding or coastal change."⁵³ (our emphasis)

The *NPPF* continues to recognise that the planning system is planled and that therefore, Local Plans, incorporating Neighbourhood Plans, where relevant, are the starting point for the determination of any planning application.

Heritage Assets are defined in the NPPF as:

"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. It includes designated heritage assets and assets identified by the local planning authority (including local listing)."54

The NPPF goes on to define a Designated Heritage Asset as a:

"World Heritage Site, Scheduled Monument, Listed Building, Protected Wreck Site, Registered Park and Garden, Registered Battlefield or Conservation Area designated under relevant legislation."⁵⁵

As set out above, significance is also defined as:

"The value of a heritage asset to this and future generations because of its heritage interest. The interest may be archaeological, architectural, artistic or historic. Significance derives not only from a heritage asset's physical presence, but also from its setting. For World Heritage Sites, the cultural value described within each site's Statement of Outstanding Universal Value forms part of its significance."⁵⁶

Section 16 of the NPPF relates to 'Conserving and enhancing the historic environment' and states at paragraph 208 that:

"Local planning authorities should identify and assess the particular significance of any heritage asset that may be affected by a proposal (including by development affecting the setting of a heritage asset) taking account of the available evidence and any necessary expertise. They should take this into account when considering the impact of a proposal on a heritage asset, to avoid or minimise any conflict between the heritage asset's conservation and any aspect of the proposal."⁵⁷

Paragraph 210 goes on to state that:

"In determining planning applications, local planning authorities should take account of:

- a. the desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation;
- b. the positive contribution that conservation of heritage assets can make to sustainable communities including their economic vitality; and
- c. the desirability of new development making a positive contribution to local character and distinctiveness."⁵⁸

With regard to the impact of proposals on the significance of a heritage asset, paragraphs 212 and 213 are relevant and read as follows:

"When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation (and the more important the

⁵⁴ MHCLG, *NPPF*, Annex 2.

⁵⁵ MHCLG, *NPPF*, Annex 2.

⁵⁶ MHCLG, NPPF, Annex 2.

asset, the greater the weight should be). This is irrespective of whether any potential harm amounts to substantial harm, total loss or less than substantial harm to its significance."⁵⁹

"Any harm to, or loss of, the significance of a designated heritage asset (from its alteration or destruction, or from development within its setting), should require clear and convincing justification. 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."⁶⁰

Section b) of paragraph 213, which describes assets of the highest significance, also includes footnote 75 of the NPPF, which states that non-designated heritage assets of archaeological interest which are demonstrably of equivalent significance to Scheduled Monuments should be considered subject to the policies for designated heritage assets.

In the context of the above, it should be noted that paragraph 214 reads as follows:

"Where a proposed development will lead to substantial harm to (or total loss of significance of) a designated heritage asset, local planning authorities should refuse consent, unless it can be demonstrated that the substantial harm or total loss is necessary to achieve substantial public benefits that outweigh that harm or loss, or all of the following apply:

- a. the nature of the heritage asset prevents all reasonable uses of the site; and
- b. no viable use of the heritage asset itself can be found in the medium term through appropriate marketing that will enable its conservation; and
- c. conservation by grant-funding or some form of not for profit, charitable or public ownership is demonstrably not possible; and
- d. the harm or loss is outweighed by the benefit of bringing the site back into use."61

Paragraph 215 goes on to state:

"Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal including, where appropriate, securing its optimum viable use."⁶²

 ⁵⁹ MHCLG, *NPPF*, para. 212.
 ⁶⁰ MHCLG, *NPPF*, para. 213.

With regards to non-designated heritage assets, paragraph 216 of NPPF states that:

"The effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing applications that directly or indirectly affect nondesignated heritage assets, a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset."⁶³

Overall, the NPPF confirms that the primary objective of development management is to foster the delivery of sustainable development, not to hinder or prevent it. Local Planning Authorities should approach development management decisions positively,

looking for solutions rather than problems so that applications can be approved wherever it is practical to do so. Additionally, securing the optimum viable use of sites and achieving public benefits are also key material considerations for application proposals.

National Planning Practice Guidance

The then Department for Communities and Local Government (now the Ministry of Housing, Communities & Local Government (MHCLG)) launched the planning practice guidance web-based resource in March 2014, accompanied by a ministerial statement which confirmed that a number of previous planning practice guidance documents were cancelled.

This also introduced the national Planning Practice Guidance (PPG) which comprised a full and consolidated review of planning practice guidance documents to be read alongside the NPPF.

The PPG has a discrete section on the subject of the Historic Environment, which confirms that the consideration of 'significance' in decision taking is important and states:

> "Heritage assets may be affected by direct physical change or by change in their setting. Being able to properly assess the nature, extent and importance of the significance of a heritage asset, and the contribution of its setting, is very important to understanding the potential impact and acceptability of development proposals."⁶⁴

In terms of assessment of substantial harm, the PPG confirms that whether a proposal causes substantial harm will be a judgement for the individual decision taker having regard to the individual circumstances and the policy set out within the NPPF. It goes on to state:

> "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

⁶³ MHCLG, *NPPF*, para. 216.



still be less than substantial harm or conceivably not harmful at all, for example, when removing later inappropriate additions to historic buildings which harm their 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."⁶⁵ (our emphasis)

National Design Guide:

Section C2 relates to valuing heritage, local history and culture and states:

"When determining how a site may be developed, it is important to understand the history of how the place has evolved. The local sense of place and identity are shaped by local history, culture and heritage, and how these have influenced the built environment and wider landscape."⁶⁶

"Sensitive re-use or adaptation adds to the richness and variety of a scheme and to its diversity of activities and users. It helps to integrate heritage into proposals in an environmentally sustainable way."⁶⁷

It goes on to state that:

"Well-designed places and buildings are influenced positively by:

- the history and heritage of the site, its surroundings and the wider area, including cultural influences;
- the significance and setting of heritage assets and any other specific features that merit conserving and enhancing;
- the local vernacular, including historical building typologies such as the terrace, town house, mews, villa or mansion block, the treatment of façades, characteristic materials and details – see Identity.

Today's new developments extend the history of the context. The best of them will become valued as tomorrow's heritage, representing the architecture and placemaking of the early 21st century."⁶⁸

 ⁶⁵ MHCLG, *PPG*, paragraph 018, reference ID: 18a-018-20190723.
 ⁶⁶ MHCLG, *NDG*, para. 46.



Appendix 6: Relevant Development Plan Policies

Applications for Planning Permission within Basildon are currently considered against the policy and guidance set out within the Basildon District Local Plan Saved Policies (September 2007) of the 1998 Local Plan. No policies relating to the historic environment were saved.

The Basildon Borough Draft Local Plan 2023–2043 Regulation 18 document was produced in November 2024 and was out for public consultation from November to mid–January 2025. This contains the following relevant draft policies:

""Policy HE1: Conserving and Enhancing the Historic Environment

1. The Council will seek to protect, conserve, and enhance the Borough's historic environment. This includes both designated and non-designated heritage assets and their settings, including Listed Buildings, historic structures, Conservation Areas, landscapes, and archaeology.

2. Development proposals should be sensitively designed and should not cause harm to the historic environment. All development proposals which would have an impact on the historic environment, or any features of the historic environment, will be expected to:

a. Conserve, or where appropriate enhance, the significance, character, setting and local distinctiveness of the heritage asset;

b. Make a positive contribution to local character through high standards of design, which reflect and complement its significance, including through the use of appropriate materials and construction techniques;

c. Ensure alterations, including those for energy efficiency and renewable energy, are balanced alongside the need to retain the integrity of the historic environment and to respect the character and significance of the asset; and

d. Submit a Heritage Statement as part of the application.

3. Where a proposed development will lead to substantial harm to (or total loss of significance of) a designated heritage asset, consent will be refused, unless the proposal can demonstrate that the substantial harm or total loss is necessary to achieve substantial public benefits that outweigh that harm or loss, or all of the following apply:

a. the nature of the heritage asset prevents all reasonable uses of the site; and

b. no viable use of the heritage asset itself can be found in the medium term through appropriate marketing that will enable its conservation; and

c. conservation by grant-funding or some form of charitable or public ownership is demonstrably not possible; and d. The harm or loss is outweighed by the benefit of bringing the site back into use."

"Policy HE2: Conservation Areas

1. Development within or affecting the setting of the Borough's Conservation Areas, as defined on the Policies Map, including views in or out, should preserve or enhance the character or appearance of the Conservation Area. Consideration must be given to the streetscape, plot and frontage sizes, materials and relationships between all existing buildings, structures, and spaces. Proposals should have particular regard to the special features and key characteristics identified within the relevant character appraisal and management plan for the Conservation Area.

2. Open spaces, trees, and other hard and soft landscape features important to the character or appearance of the area should be retained, or if replaced or enhanced, still be in keeping with the character of the area.

3. Proposals for all new development, including alterations and extensions to buildings, their reuse and the incorporation of energy efficiency and renewable energy technologies, must be of a high quality and sensitive design.

4. Proposals to demolish buildings and/or structures will be assessed against their contribution to the significance of the Conservation Area as a heritage asset. Where substantial harm would be caused to a Conservation Area's significance, the proposal will be resisted unless substantial public benefits outweighing any harm to the Conservation Area can be demonstrated. Where the harm would be less than substantial, it will be weighed against any public benefits of the proposal, including securing optimum viable use of the heritage asset.

5. For development proposals involving demolition a programme of recording and understanding of the heritage asset which is to be affected will be expected as part of the development proposal and the recordings must be submitted for inclusion on the Essex Historic Environment Record."

"Policy HE3: Listed Buildings

1. Proposals for development, including change of use, that involve any alterations to a Listed Building or within its curtilage, will be supported where they:

a. Do not lead to substantial harm to, or total loss of, the significance of the building, including its setting;

b. Harmonise with the period, style, materials and detailing of the building;

c. Retain and repair existing features and fabric, or, if missing, replace them in a sympathetic manner;

d. Do not harm the structural integrity or stability of the building, or that of adjoining buildings or structures; and e. Relate sensitively to the original building and not adversely affect the internal or external appearance or character of the building, curtilage, or its setting.

2. Proposals affecting the significance of a Listed Building will be required to:

a. Be supported by a Historic Building Survey carried out in accordance with Historic England guidelines, which demonstrate an understanding of the significance of the Listed Building and its setting by describing it in sufficient detail to determine its historic or architectural interest to a level proportionate with its importance;

b. Justify any harm proposed to the Listed Building and demonstrate the overriding public benefits which would outweigh the harm to the Listed Building or its setting. The greater the harm to the significance of the Listed Building, the greater justification and public benefit that will be required before the application could gain support; and

c. Minimise any identified harm or loss to the Listed Building through mitigation."

"Policy HE4: Scheduled Monuments and Archaeology

1. As a precautionary approach to ensuring that archaeological remains in the Borough are protected, the Council will require an appropriate desk-based archaeological assessment and, where necessary, a field evaluation where heritage assets of archaeological interest of any significance are, or may be present on the site of a proposed development, or are likely to be affected by the proposed development. This assessment must form part of the planning application.

2. Scheduled Monuments and other important archaeological sites and their settings will be preserved in situ. Mitigation measures must be taken to ensure the preservation of all remains of archaeological importance, and to avoid harm being caused to the important archaeological remains if they are to be preserved in situ.

3. Development proposals affecting archaeological remains of less than national importance must be conserved in a manner appropriate to their significance.

4. If archaeological remains are to be impacted upon by development, a programme of excavation, recording, publication, and archiving of remains must be provided as part of the proposal. Evidence should be deposited with the Essex Historic Environment Record and any archives with a local museum or other public depository."

"Policy HE5: Non-Designated Heritage Assets

1. Proposals for development, including repairs, change of use, alterations, and extensions to a non-designated heritage asset (NDHA) will be supported where they are designed sensitively and sympathetically and not adversely affect the appearance or character of the asset.

P

2. Where a NDHA is directly or indirectly affected by development proposals, their significance should be retained within development wherever reasonably practicable. Where this is not practicable, consideration will be given to the scale of any harm or loss of the heritage asset and to the significance of the heritage asset when determining the application."



Appendix 7: LiDAR Data

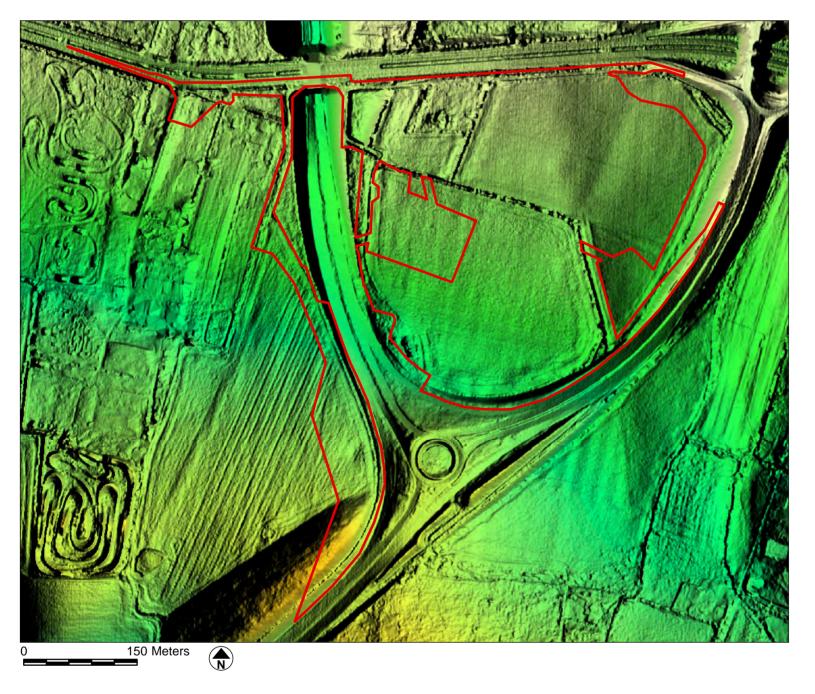


LiDAR 45 degree interval

Land North of Rayleigh Spur Roundabout, Basildon

Client: RES Limited

DRWG No: P24-3044 Drawn by: RW Date: 12/06/2025 Scale: 1:5,000 @ A4 Sheet No: - REV: -Approved by: GS



LiDAR 90 degree interval

Land North of Rayleigh Spur Roundabout, Basildon

Client: RES Limited DRWG No: **P24-3044** Drawn by: RW Date: 12/06/2025 Scale: 1:5,000 @ A4

Sheet No: - REV:-Approved by: GS



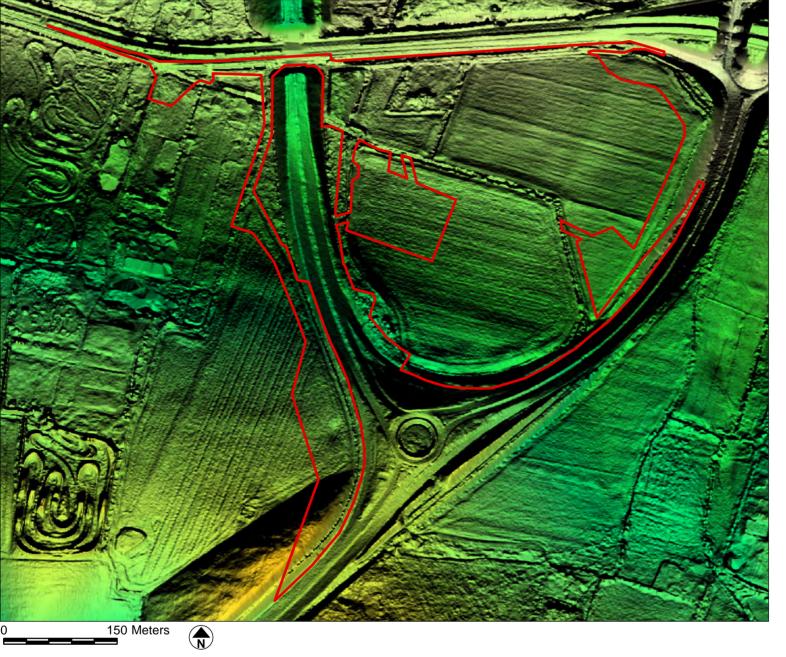
KEY Site

LiDAR 135 degree interval

Land North of Rayleigh Spur Roundabout, Basildon

Client: RES Limited DRWG No: P24-3044 Drawn by: RW Date: 12/06/2025 Scale: 1:5,000 @ A4

Sheet No: - REV: -Approved by: GS



LiDAR 180 degree interval

Land North of Rayleigh Spur Roundabout, Basildon

Client: RES Limited DRWG No: P24-3044 Sheet No: - REV: -Drawn by: RW Approved by: GS Date: 12/06/2025 Scale: 1:5,000 @ A4



KEY Site

LiDAR 225 degree interval

Land North of Rayleigh Spur Roundabout, Basildon

Client: RES Limited DRWG No: P24-3044 Drawn by: RW Date: 12/06/2025 Scale: 1:5,000 @ A4

Sheet No: - REV: -Approved by: GS

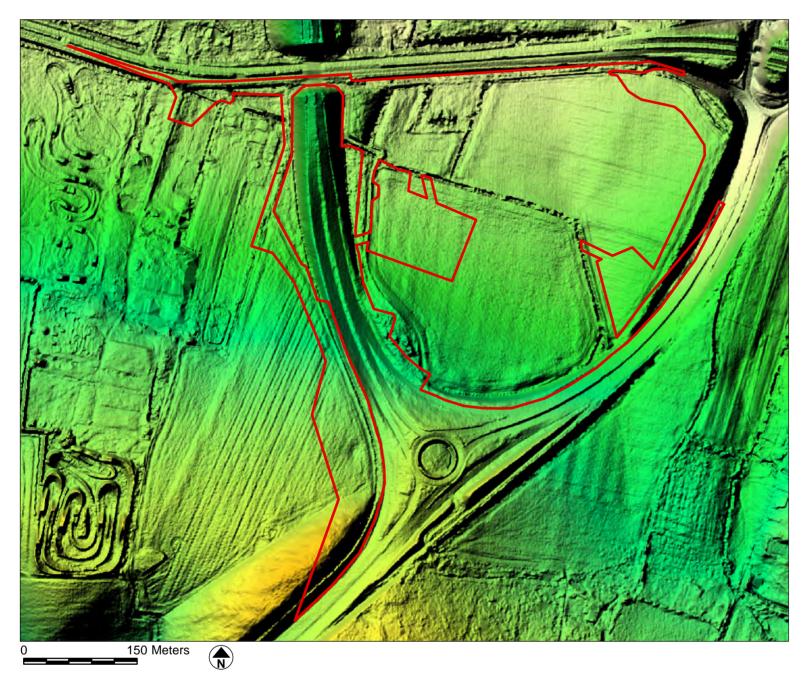


LiDAR 270 degree interval

Land North of Rayleigh Spur Roundabout, Basildon

Client: RES Limited DRWG No: P24-3044 Drawn by: RW Date: 12/06/2025 Scale: 1:5,000 @ A4

Sheet No: - REV: -Approved by: GS

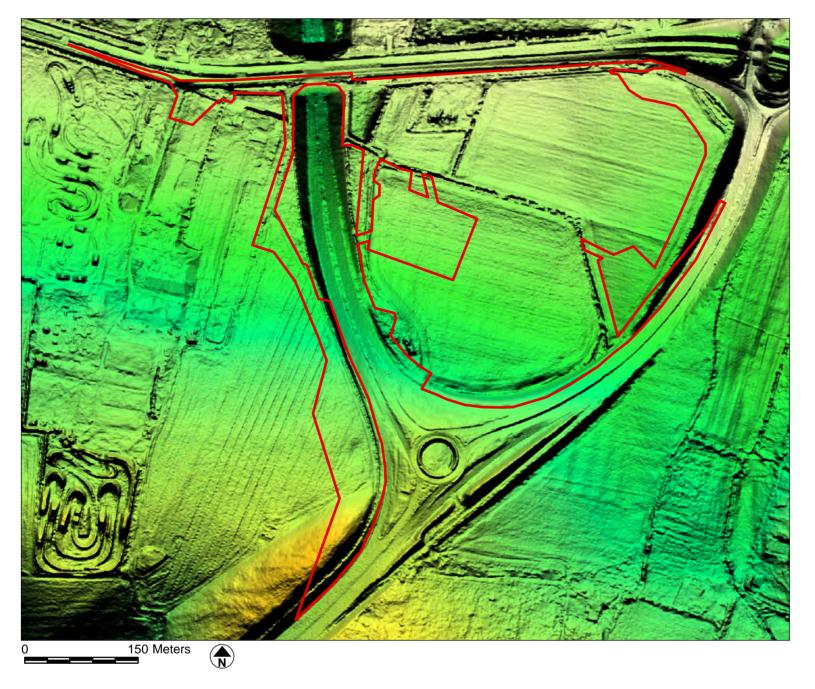


LiDAR 315 degree interval

Land North of Rayleigh Spur Roundabout, Basildon

Client: RES Limited DRWG No: P24-3044 Drawn by: RW Date: 12/06/2025 Scale: 1:5,000 @ A4

Sheet No: - REV: -Approved by: GS



LiDAR 360 degree interval

Land North of Rayleigh Spur Roundabout, Basildon

Client: RES Limited DRWG No: P24-3044 Drawn by: RW Date: 12/06/2025 Scale: 1:5,000 @ A4

Sheet No: - REV: -Approved by: GS



Appendix 8: Geophysical Survey Report

pre-construct geophysics

archaeological surveys

GEOPHYSICAL (GRADIOMETER) SURVEY

PROPOSED BATTERY ENERGY STORAGE SYSTEM NORTH BENFLEET, ESSEX

NGR TQ 77650 90600

ESSEX HER EVENT CODE: EEX61232

NGR 461500 313000

REPORT PREPARED BY DAVID BUNN ON BEHALF OF PEGASUS PLANNING GROUP LTD & RES GROUP FEBRUARY 2025

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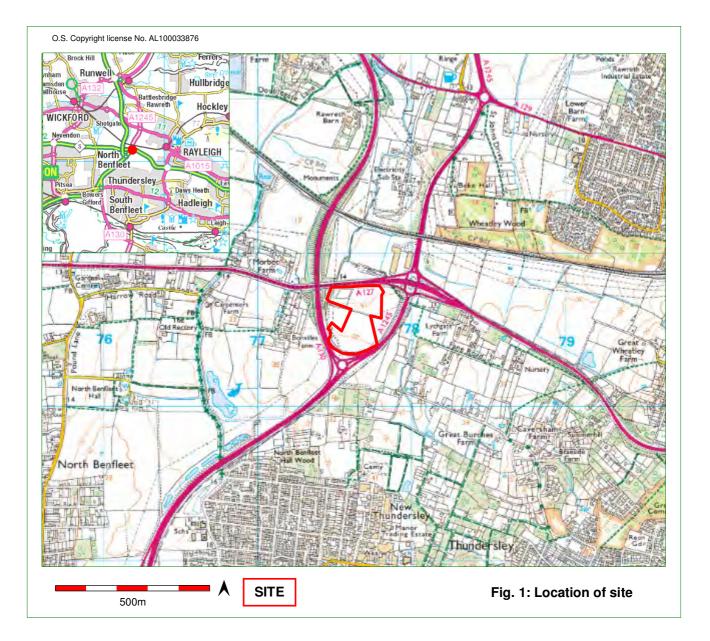
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PRE-CONSTRUCT GEOPHYSICS LTD 47, MANOR ROAD, SAXILBY, LINCOLN, LN1 2HX TEL: 01522 704900/07734958015

> e-mail: pcgeophysics@outlook.net www.geophysicalsurveying.uk

Non technical summary

- A fluxgate gradiometer survey undertaken on the proposed site of a Battery Energy Storage System (BESS) at North Benfleet, Essex..
- The survey has recorded only limited evidence of magnetic variation that conceivably reflects buried archaeological remains, in the form of a possible backfilled pond or clay pit in the north-eastern part of the site.
- Strong variation was recorded across a buried service that extends across the central part of the site and by miscellaneous ferrous-rich deposits in the north-western and south-western regions that are probably relate to the construction of the Fairglen Interchange.



1.0 Introduction

Acting for RES Group, Pegasus Planning Group commissioned a geophysical survey of land at North Benfleet, Essex.

The objective of the geophysical survey is to provide information relating to potential archaeological resources within the site, thus forming part of an archaeological evaluation designed to inform an application for the installation of a Battery Energy Storage System (BESS).

This proactive pre-application approach is advocated by both the NPPF (2018, as revised) and accompanying PPG. Specifically in respect of heritage, this approach is advocated by Historic England in their 'Historic Environment Good Practice Advice in Planning Note 2: Managing Significance in Decision-Taking in the Historic Environment' (2015). Paragraph 6 of this guidance provides that:

'Both the NPPF... and the PPG... highlight early engagement and pre-application discussion. Where the proposal is likely to affect the significance of heritage assets, applicants are encouraged to consider that significance at an early stage and to take their own expert advice, and then to engage in pre-application discussion with the local planning authority and their heritage advisers to ensure that any issues can be identified and appropriately addressed. As part of this process, these discussions and subsequent applications usually benefit from a structured approach to the assembly and analysis of relevant information' (2015: 1).

2.0 Site Description (Fig. 1)

The c.10ha site lies to the north-east of North Benfleet within the centre of the Fairglen Interchange of the A127, A130 7 A1245 (centred at NGR TQ 77650 90600).

It encompasses an irregularly-shaped parcel of land spread across three arable fields (Areas 1 - 3).

A chain link fence encompassed an area in the north-east part of Area 1. At the time of survey, this was partially overgrown and contained widespread heaps of farm manure. Not suitable for survey, this might have been originally utilised as a works compound during the construction of the Fairglen Interchange. Similarly, a narrow strip of land at the south-western edge of the site was overgrown, hence not surveyed.

3.0 Geology and topography

The solid geology of the site is mapped as London Clay Formation - sedimentary bedrock formed between 56 and 47.8 million years ago during the Palaeogene period (BGS, 2025).

Superficial deposits are unrecorded.

The site occupies a north facing incline, the ground level falling from >20m AOD to <15m AOD.

4.0 Archaeological Context

In 2021, Wardell Armstrong undertook an evaluation by trial trenching associated with improvements to the Fairglen Interchange (Podbury, 2021). This investigation included areas of land to the immediate east and west of the current site, where only limited evidence of archaeological remains were identified. The findings of the evaluation suggest that the survival of the archaeological features and artefacts was poor. Indeed, it appears that survival had been influenced by later ploughing - in the form of heavily truncated medieval ridge and furrow cultivation (that the followed natural contours) and, perhaps to a greater extent, by landscaping associated the construction of the interchange.

Whilst Essex online HER¹ lists a concentration of burnt flint found during field walking on land in close proximity to the west of the site (SMR No.14622), the aforementioned evaluation identified traces an east-west aligned ditch in addition to the relict ridge and furrow cultivation.

Other monuments to the south-west (to the immediate west of the A130 and A1245) identified a scatter of burned flint, worked flint, prehistoric and medieval pottery and probable prehistoric ditches (SMR Nos. 14624, 14625, 14626, 14627, 14628), with a findspot of RB pottery to the immediate north of the site and the A127) and prehistoric pottery within c.250m to the north (SMR No.7611, 7651).

5.0 Methodology

5.1 The survey methodology used is based on relevant heritage industry guidance and best practice advice, including the *EAC Guidelines for the use of Geophysics in Archaeology* (Schmidt et al. 2016), and the '*Standard and Guidance for Archaeological Geophysical Survey*' (Chartered Institute for Archaeologists, 2014). A Written Scheme of Investigation was prepared prior to the commencemnt of fiedwork (Bunn, 2025).

5.2 Fluxgate Gradiometry is a non-intrusive scientific prospecting tool that is used to determine the presence/absence of some classes of sub-surface archaeological features (e.g. pits, ditches, kilns, and occasionally stone walls).

The use of magnetic surveys to locate sub-surface ceramic materials and areas of burning, as well as magnetically weaker features, is well established, particularly on large green field sites. The detection of anomalies requires the use of highly sensitive instruments; in this instance the Bartington 601 Dual Fluxgate Gradiometer. This is accurately calibrated to the mean magnetic value of each survey area. Two sensors mounted vertically and separated by 1m measure slight, localised distortions of the earth's magnetic field, which are recorded via a data logger.

It should be noted that this technique only records magnetic variation in relation to natural background levels, established by careful selection of magnetically 'quiet' zones where instrument sensors are calibrated to 0nT. As such, the magnetic response of archaeological remains will vary according to geology/pedology, with a possibility that buried features could remain undetected should their magnetic susceptibility closely match that of the surrounding soils. Additionally, some remains may be buried beyond the effective 1m - 2m range of the instrumentation; for example beneath alluvium. Back-filled shallow pits or ditches might also exhibit minimal variation.

The fieldwork was undertaken on $3^{rd} - 5^{th}$ February 2025.

The zigzag traverse methodology was employed, with readings taken at 0.25m intervals along 1.0m wide traverses.

The survey grid was established by Global Positioning Satellite using a Leica GS015 RTX, to an accuracy of $\pm -0.1m$.

The data were processed using Terrasurveyor V3.

The raw data set are reproduced as greyscale images on Fig. 2 (data clipped to +/-20nT).

The stacked trace plot images are presented on Fig. 3 (data clipped to +/-20nT).

A 'Despike' function was applied to reduce the effect of extreme readings induced by metal objects, and 'Destripe' to eliminate striping introduced by zigzag traversing. The data were clipped to +/-4 nT on the greyscale images of the processed data (Fig. 4).

Anomalies in excess of +/-10nT are highlighted pink and blue on the interpretive figure (Fig. 5). These are characterised magnetically as dipolar 'iron spikes', often displaying strong

positive and/or negative responses, which reflect ferrous-rich objects (particularly apparent on stacked trace plots). Examples include those forming/deposited along current or former boundaries (e.g. wire fencing), services and random scatters of horseshoes, ploughshares etc across open areas. Fired (ferro-enhanced) material, such as brick/tile fragments (often where the latter are introduced during manuring or land drain construction) usually induce a similar though predominately weaker response, closer to c+/-5nT (highlighted in pink/blue on the interpretive image). Collectively, concentrations of such anomalies typically indicate probable rubble spreads, such as backfilled ponds/ditches and demolished buildings. On a cautionary note, fired clay associated with early activity has the same magnetic characteristics as modern brick/tile rubble. As such, the interpretation of such variation must consider the context in which it occurs.

The report will be submitted as a PDF. Digital, geo-referenced copies of the geophysical survey plans will be supplied to the client.

A digital archive of the geophysical data and report will be retained by PCG.

5.0 Results and discussion (Figs. 2 – 5)

The survey identified a potential c.20m diameter sub-circular pit in the mid-southern part of Area 2 (Fig. 5: circled red). Of probable anthropogenic origin, it possibly signifies a back-filled pond and/or clay pit; though no corresponding feature is depicted on historic O.S. Maps². With that in mind, it should be noted that there is no clearly-defined geophysical evidence of any of associated activity (such as a pottery manufacturing), within this locality and elsewhere within the site.

The survey recorded *in situ* remains of a back-filled open drain² at the eastern side of Area 2 (yellow line).

Strong readings (pink and blue) include those induced by a service that extends along the southern edges of Areas 1 and 2 (blue line).

Zones of extreme variation were also recorded across probable miscellaneous modern ferrous rich objects and materials in close proximity to the southern boundary of Area 3 and north-western corner of Area 1, including a short linear array of readings in the latter region that might reflect a redundant service. All are conceivably associated with the construction of the Fairglen Interchange.

Elsewhere, discrete examples typically indicate a scatter of objects contained within the plough soil, such as ploughshares, horseshoes and fragments of imported brick/tile.

Discussed anomalies were recorded against a relatively neutral backdrop of natural variation (greenscale), with slight linear enhancements in Areas 2 & 3 indicators of probable palaeochannels (dotted green lines).

7.0 Conclusions

The survey has recorded only limited evidence of magnetic variation that conceivably reflects buried archaeological remains, in the form of a possible backfilled pond or clay pit in the north-eastern part of the site.

Strong variation was recorded across a buried service that extends across the central part of the site and by miscellaneous ferrous-rich deposits in the north-western and south-western regions that are probably relate to the construction of the Fairglen Interchange.

8.0 Acknowledgements

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9.0 References

British Geological Survey. 2025. Geology of Britain viewer, 1:50,000 geological mapping, bedrock and superficial - http://mapapps.bgs.ac.uk/geologyofbritain/home.html

Bunn, D. 2025. *Proposed Battery Energy Storage System North Benfleet, Essex*. Written Scheme of Investigation for Geophysical Survey, Pre-Construct Geophysics, unpublished.

CIFA 2014 *Standard and Guidance for Archaeological Geophysical Survey.* Chartered Institute for Archaeologists.

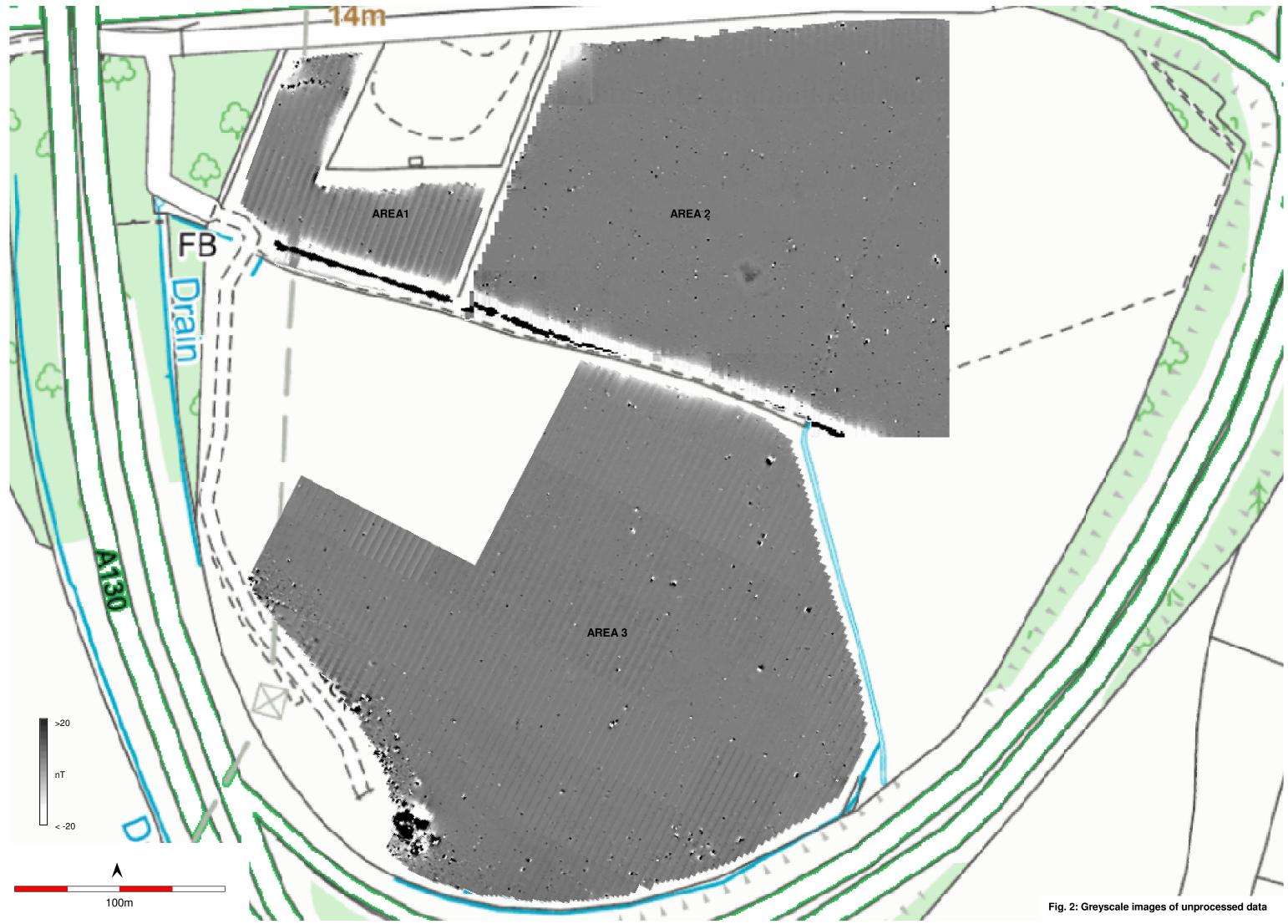
English Heritage. 2008 *Geophysical Survey in Archaeological Field Evaluation*. London, English Heritage.

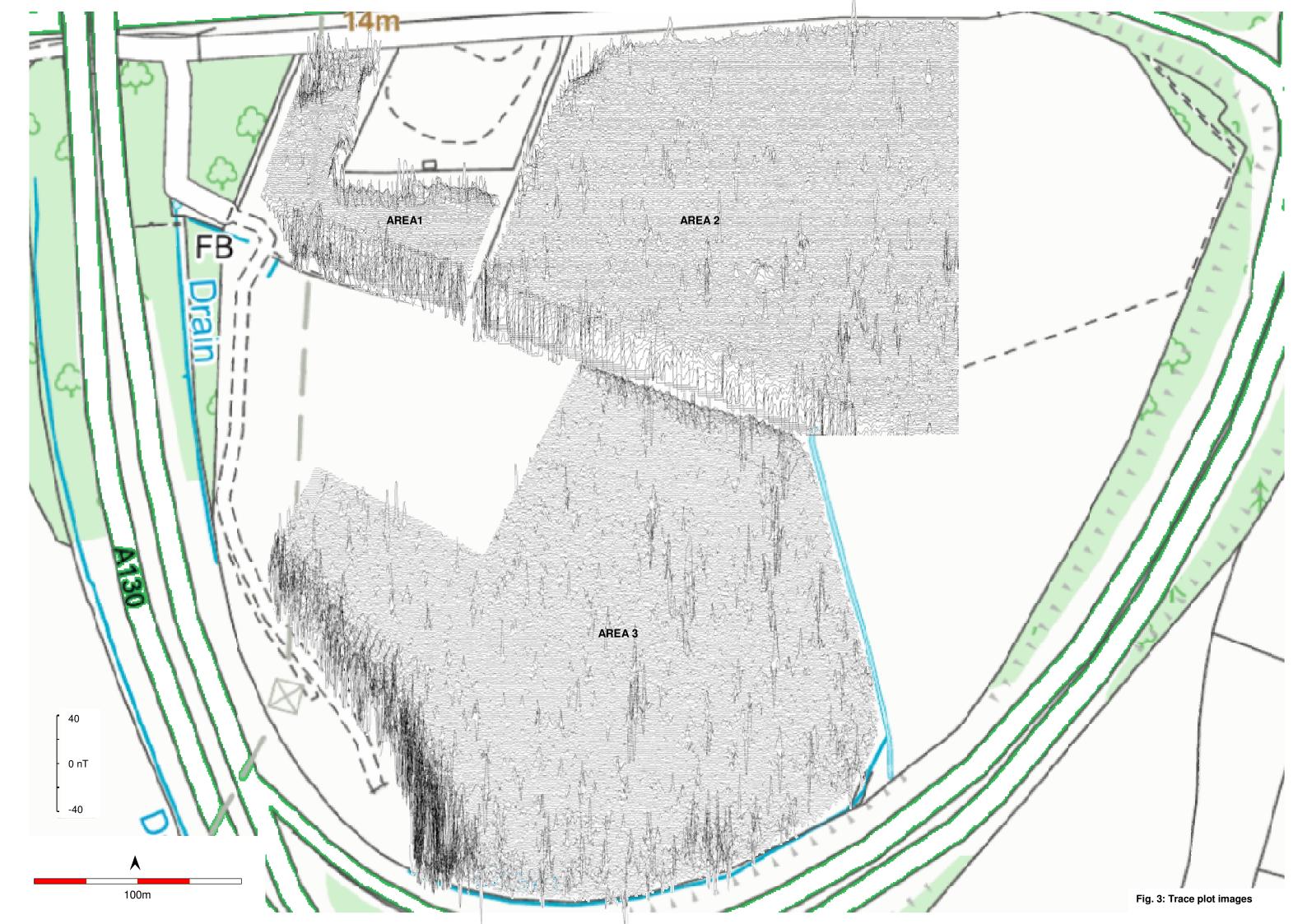
Podbury, L. 2021 *A127 / A130 Fairglen Interchange, Essex.* Archaeological Evaluation Report, Wardell Armstrong Job No. BE10070 (unpublished)

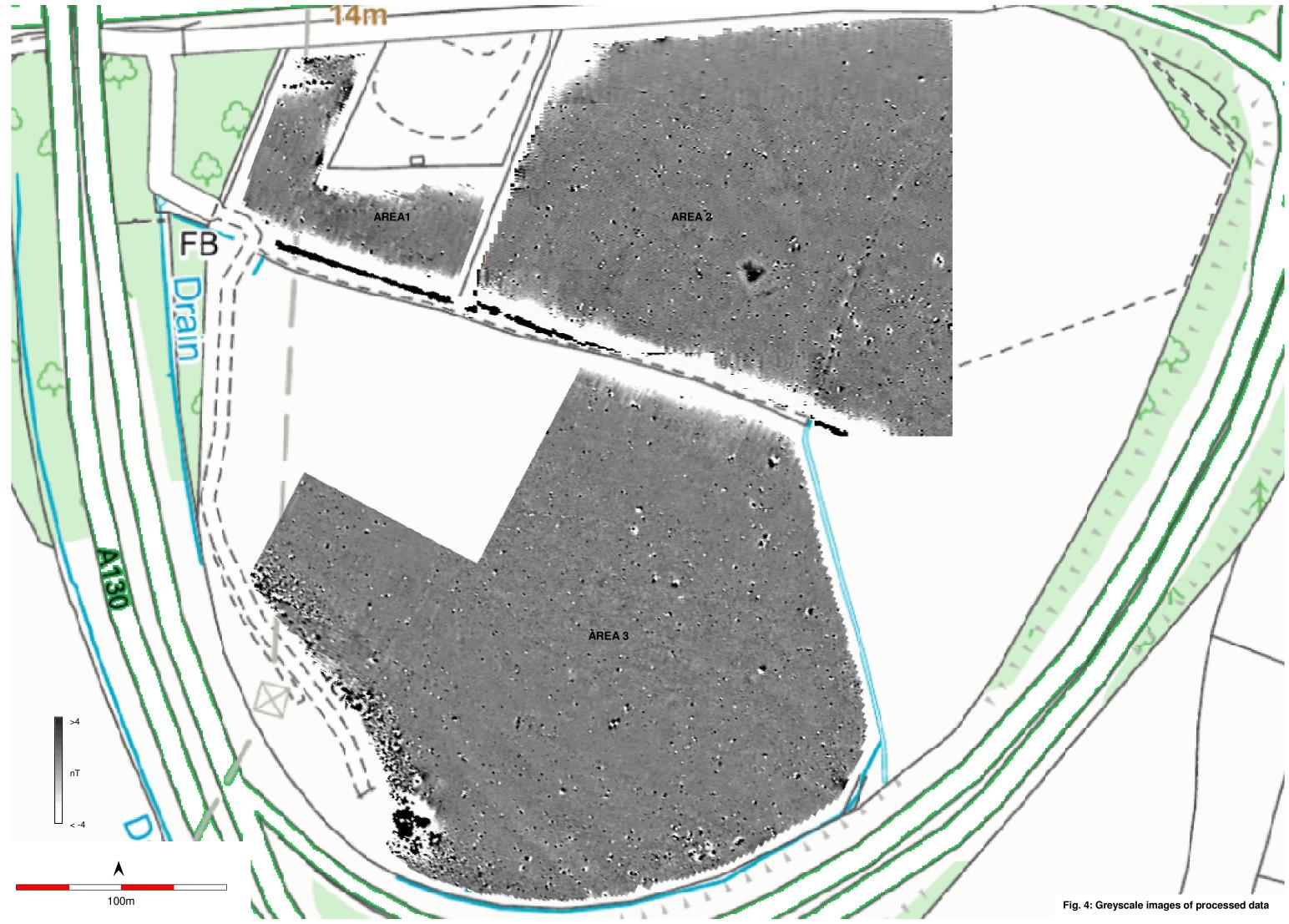
Schmidt, A; Linford, Linford, P; N; David, A; Gaffney, C; Sarris, A; & Fassbinder, J; 2016. EAC *Guidelines for the use of Geophysics in Archaeology: Questions to Ask and Points to Consider. EAC Guidelines 2.* Euopae Archaeologiae Consilium.

¹www.heritagegateway.org.uk

²http://www.old-maps.co.uk/maps.html









Planning (Listed Buildings and Conservation Areas) Act 1990 Town & Country Planning Act 1990 (as amended) Planning and Compulsory Purchase Act 2004



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