

Heritage Statement

Pelham Spring Solar Farm, Maggotts End

On behalf of Low Carbon Solar Park 6 Limited

Date: 02/09/2022 | Pegasus Ref: P20-1300

Author: Rebecca Ward





Document Management.

Version	Date	Author	Checked / Approved by:	Reason for revision
1	29.07.2022	RW	GS	-
2	23.08.2022	RW	GS	Client comments
3	02.09.2022	RW	GS	Red line alteration

Contents.

1.	Introduction	5
	Site Description and Planning History	
	Methodology	
	Policy Framework	12
	The Historic Environment	14
6.	Setting Assessment	.25
	Conclusions	.46

P

Appendices contents.

Appendix 1: Assessment Methodology	
Appendix 2: Legislative Framework	
Appendix 3: National Policy Guidance	
Appendix 4: Relevant Development Plan Policies	
Appendix 5: Gazetteer of Heritage Data	62
Appendix 6: Designation Descriptions	72
Appendix 7: Figures	73
Appendix 8: LiDAR Shaded-Relief Model	74
Appendix 9: Geophysical Survey Report	75

Plates:

Plate 1: Site Location Plan	5
Plate 2: View south from the northern extent of the site	6
Plate 3: View north from along the southern boundary across the eastern extent of the site	
Plate 4: View north-west from the central part of the site across the western extent of the site	7
Plate 5: The area subject to the metal detector survey in 2004-2007 (blue hatched area)	
Plate 6: Extract from an aerial photograph of the site from April 2017 (Google Earth)	
Plate 7: Extract from the geophysical survey report showing anomalies identified in the northern extent of the site	17
Plate 8: Extract from the geophysical survey report showing anomalies identified in the western extent of the site	
Plate 9: Extract from the Chapman and Andre Map of Essex of 1777	
Plate 10: Extract from the Tithe Map of Berden of 1839	
Plate 11: Extract from the Tithe Map of Manuden of 1840	21
Plate 12: Extract from the Ordnance Survey Map of 1881	
Plate 13: Extract from the Ordnance Survey Map of 1923	
Plate 14: Extract from the Ordnance Survey Map of 1951	
Plate 15: View west towards the moated site at Battles Hall, southern arm and central area visible	
Plate 16: View from the moated site at Battles Hall towards the site (no intervisibility due to intervening vegetation and agricultural land)	27
Plate 17: The Grade II Listed Battles Hall	
Plate 18: The Grade II Listed Dovecote 30m north-west of Battles	
Plate 19: The Grade II Listed Cartlodge 30m south-east of Battles	
Plate 20: View from Battles Hall in the direction of the site (no clear intervisibility)	
Plate 21: View south-east from the southern site boundary in the direction of the Battles Hall complex	
Plate 22: Zoomed in version of Plate 21	
Plate 23: View west from the ProW to the west of the Battles Hall complex towards the assets	

Plate 24: View west towards the main frontage of Battles Hall from the ProW to the east	
Plate 25: View from Blakings Lane PRoW towards the Scheduled The Crump	
Plate 26: The Grade II Listed The Crump and former barn to the north-west	
Plate 27: View north from within the northern extent of the site towards The Crump	
Plate 28: The Grade II Listed Brick House	
Plate 29: View east from adjacent to the boundary plot associated with Brick House towards the site, visible rising up beyond intervening agricultural land	
Plate 30: View west from the western boundary of the eastern site parcel towards Brick House beyond intervening agricultural land	
Plate 31: Zoomed in version of Plate 30	
Plate 32: The Grade II Listed Rose Garth	40
Plate 33: View south from along the unnamed lane towards Rose Garth which shows the deliberate planting of trees on the opposite side of t which will result in less clear views between the site and the asset during the summer months	
Plate 34: View east from adjacent to Rose Garth towards the site, visible beyond intervening agricultural land	41
Plate 35: View west from the western boundary of the eastern site parcel towards Rose Garth	41
Plate 36: Zoomed in version of Plate 35	41
Plate 37: The Grade II Listed Peyton Hall and the Grade II Listed Barn to the south-east	
Plate 38: View west from the PRoW adjacent to Peyton Hall towards the site, boundary vegetation visible	
Plate 39: View west from the site boundary towards the assets at Peyton Hall with intervening agricultural land not located within the site in t foreground	
Plate 40: Zoomed in version of Plate 39	

P

1. Introduction

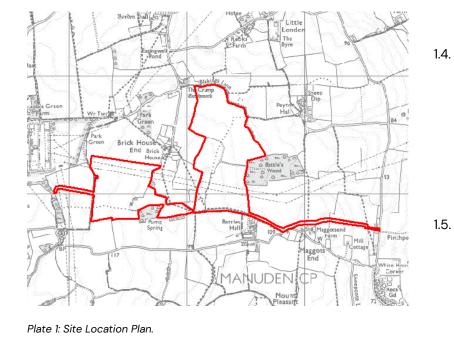
1.1. Pegasus Group have been commissioned by Low Carbon Solar Park 6 Limited to prepare a Heritage Statement to consider the proposed solar farm development at Pelham Spring Solar Farm, Maggotts End, Essex, as shown on the Site Location Plan provided at Plate 1. number of PRoWs. The site boundary includes the proposed construction and operational accesses to the south-east and the proposed cable route to the west.

- 1.3. The proposal consists of the construction, operation, maintenance and decommissioning of a ground mounted solar park.
 - This Assessment provides information with regards to the significance of the historic environment to fulfil the requirement given in paragraph 194 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, following paragraphs 199 to 203 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.
- 1.6. As required by paragraph 194 of the *NPPF*, the detail and assessment in this Report is considered to be "proportionate to the assets' importance".²

¹ Department for Levelling Up, Housing and Communities (DLUHC), *National Planning Policy Framework (NPPF)* (London, July 2021), para. 194.



The site is approximately 76.36 ha in area and comprises

part of six agricultural fields which are crossed by a

1.2.



² DLUHC, NPPF, para. 194.



2. Site Description and Planning History

Site Description

2.1. As stated above, the site is approximately 76.36 ha in area and comprises part of six fields which are currently in arable agricultural use (Plates 2–4). The fields are separated by a mixture of hedgerows and trees. The site is crossed by a number of PRoWs and of electricity pylons.



Plate 2: View south from the northern extent of the site



Plate 3: View north from along the southern boundary across the eastern extent of the site





Plate 4: View north-west from the central part of the site across the western extent of the site

- 2.2. The site boundary includes the existing access road to the east, an access to the south and the proposed cable route to the west.
- 2.3. The site is bounded by agricultural land to the north beyond Blakings Lane to the north; a mixture of woodland and agricultural land to the east; agricultural land to the south; and a mixture of woodland and agricultural land to the west.

Planning History

2.4. A review of the planning history records held online by Uttlesford District Council has indicated a number of applications within the site which relate to the erection of the overhead electricity lines/power cables.

- 2.5. The following application relates to the previous application for solar development within the site:
- 2.6. UTT/21/3356/FUL Land near Pelham Substation, Maggots End Road, Manuden – Construction and operation of a solar farm comprising ground mounted solar photovoltaic (PV) arrays and battery storage together with associated development, including inverter cabins, DNO substation, customer switchgear, access, fencing, CCTV cameras and landscaping. Application Refused 24th January 2022.
- 2.7. The application had eight reasons for refusal, two of which related to the historic environment as follows:

"There are several heritage assets in close proximity of the site including a number of grade two listed buildings and 2 ancient monuments. The Local Planning Authority has a duty under Section 66(1) of the Listed Buildings & Conservation Areas Act 1990 to have special regard to the desirability of preserving the setting and significance of any features of special architectural or historical interest.

The existing site positively contributes to the identified heritage assets setting and significance through being open land with views through to the wider agrarian landscape which preserves their sense of tranquillity. The setting of the heritage assets will inevitably be affected by the proposals which would result in an industrialising effect, contrary to the verdant and rural landscape setting and would result in an erosion of the rural character of the designated heritage assets. The proposals would thereby result in 'less than substantial' through change in their setting. Furthermore, a lack of information was submitted in the supporting heritage statement and thereby the impact of the proposals cannot be accurately assessed as part of this application, and no assessment of the potential impacts of the proposals upon the significance of the heritage assets has been made, thus Paragraph 194 of the NPPF (2021) has not been met.

Having regard to the guidance in paragraph 202 of the National Planning Policy Framework, the Local Planning Authority has considered the public benefits associated with the development but concludes that these would not outweigh the harm caused to the significance and setting of the designated heritage asset. The proposals are thereby contrary to policy ENV2 and ENV4 of the Adopted Local Plan and the National Planning Policy Framework."

and

"The Heritage Statement highlights late prehistoric finds and features, including ring ditches, within the vicinity of the site along with the probable sites of two medieval moats within the proposed development area. The proposed development also lies in close proximity to two scheduled sites, The Crump, and Battles Hall. Furthermore, there statement identifies is the potential for the medieval remains of a possible moated enclosure within the site. Following the guidance within the NPPF at present the application has not provided appropriate consideration of the impact of the development such as a geophysical assessment and photographic evidence of the area to allow for the LPA to assess the historic environment as required by paragraph 194 and policy ENV4 of the adopted local plan."

- 2.8. A geophysical survey has since been undertaken within the site and the results discussed with the County Archaeologist. The layout of the panels for the resubmission has been altered to take into account the archaeological remains within the site, and also the setting of nearby designated heritage assets.
- 2.9. The following application relates to the conversion of barns at Battles Hall:

UTT/1176/10/FUL – Change of use of barns to five dwellings. Extensions, alterations and new garage/store. Demolition of [other] barns. Application Approved 7th September 2010.

2.10. These residences are located to the north of Battles Hall.

3. Methodology

- 3.1. 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.
- 3.2. This assessment considers built heritage and archaeology.

Sources

- 3.3. 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 in the vicinity of the site;
 - The National Heritage List for England for information on designated heritage assets;
 - Historic maps available online;
 - Aerial photographs available online via Historic England's Aerial Photo Explorer and Britain from Above;
 - The Essex Record Office Archives online catalogue; and
 - Google Earth satellite imagery.

- 3.4. 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 5 and maps illustrating the resource and study area are included as Appendix 7.
- 3.5. Due to the study area extending into Hertfordshire, an enquiry was sent to the Hertfordshire HER asking whether any data was present in the extending area. No response was received. A review at the online version of the HER does not record any events or monuments within or adjacent to the extension of the proposed cable route in the western extent of the site.
- 3.6. Historic cartographic sources and aerial photographs were reviewed for the site, and beyond this where professional judgement deemed necessary.
- 3.7. 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 45° intervals from 0-360°, is provided in Appendix 8.
- 3.8. Heritage assets in the wider area were assessed as deemed appropriate (see Section 6).

Site Visit

3.9. A site visit was undertaken by a Heritage Consultant from Pegasus Group on Tuesday 23rd February 2021, during which the site and its surrounds were assessed.

Geophysical Survey

3.10. A geophysical survey was undertaken within the site in March 2022 by Headland Archaeology. The survey recorded anomalies indicative of archaeological activity at three locations within the site which have been interpreted as possible settlement activity. The results of the geophysical survey are included in Section 5 below and a full copy of the Geophysical Survey Report is included in Appendix 9.

Photographs

3.11. 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

- 3.12. Full details of the assessment methodology used in the preparation of this Report are provided within *Appendix*1. However, for clarity, this methodology has been informed by the following:
 - Historic Environment Good Practice Advice in Planning: 2 – Managing Significance in Decision– Taking in the Historic Environment (hereafter GPA:2);³
 - 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);⁴
 - Historic England Advice Note 1 (Second Edition) Conservation Area Appraisal, Designation and Management (hereafter HEAN:1).⁵
 - Historic England Advice Note 12 Statements of Heritage Significance: Analysing Significance in Heritage Assets (hereafter HEAN:12);⁶

³ 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).

⁴ Historic England, *Historic Environment Good Practice Advice in Planning Note 3 – The Setting of Heritage Assets (GPA:3)* (2nd edition, Swindon, December 2017).

 ⁵ Historic England, Historic England Advice Note 1 - Conservation Area Appraisal, Designation and Management (HEAN:1) (2nd edition, Swindon, February 2019).
 ⁶ Historic England, Historic England Advice Note 12 - Statements of Heritage Significance: Analysing Significance in Heritage Assets (HEAN:12) (Swindon, October 2019).



 Historic England Advice Note 15 – Commercial Renewable Energy Development and the Historic Environment (hereafter HEAN:15);⁷ and Conservation Principles: Polices and Guidance for the Sustainable Management of the Historic Environment.⁸

⁷ Historic England, Historic England Advice Note 15 – Commercial Renewable Energy Development and the Historic Environment (HEAN:15) (Swindon, February 2021).

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.⁹
- 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.¹⁰
- 4.3. Full details of the relevant legislation are provided in *Appendix 2*.

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 July 2021. 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.¹¹ The PPG also contains the *National Design Guide*.¹²

4.5. Full details of the relevant national policy guidance is provided within *Appendix 3*.

The Development Plan

- 4.6. Applications within Uttlesford District are currently considered against the policy and guidance set out within the Uttlesford Local Plan (adopted January 2005).
- 4.7. Details of the policy specific relevant to the application proposals are provided within *Appendix 4*.
- 4.8. In this case, although the Local Plan and the policies above are of relevance, they were adopted prior to the inception of the NPPF, and as so the weight which can be attributed to them will be determined by their consistency with the policy guidance set out within the NPPF. Since the above policies do not allow for a balanced judgement to be undertaken by the decision maker, the policies are not considered to reflect the guidance within the NPPF and therefore considered to be out of date.

 ⁹ UK Public General Acts, Planning (Listed Buildings and Conservation Areas) Act 1990.
 ¹⁰ UK Public General Acts, Planning and Compulsory Purchase Act 2004, Section 38(6).

 ¹¹ Department for Levelling Up, Housing and Communities (DLUHC), *Planning Practice Guidance: Historic Environment (PPG)* (revised edition, 23rd July 2019), https://www.gov.uk/guidance/conserving-and-enhancing-the-historic-environment.
 ¹² Department for Levelling Up, Housing and Communities (DLUHC), *National Design Guide* (London, January 2021).



4.9. Uttlesford District Council were working on a new Local Plan 2019, although this was withdrawn in 2020 and have commenced working on a new Local Plan. No draft

policies were available at the time of writing this assessment.



5. The Historic Environment

- 5.1. The following 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.
- 5.3. A gazetteer of relevant heritage data is included as Appendix 1. Designated heritage assets and HER records are illustrated on Figures 1–3 in Appendix 3.

Previous Archaeological Works

- 5.4. A geophysical survey was undertaken within the site in March 2022. The survey recorded anomalies indicative of archaeological activity at three locations within the site which have been interpreted as possible settlement activity. These are discussed in the period sections below. A full copy of the Geophysical Survey Report is included in Appendix 9.
- 5.5. A metal detector survey was undertaken within the northern extent of the site at the location of a potential medieval moated site in 2004–2007 (not recorded on the HER). The area surveyed comprised two large fields known as Long Field and Reedings within the northern extent of the site (Plate 5).

- 5.6. Previous archaeological works undertaken within the study area comprise the following:
 - A field survey, excavation and visual assessment at The Crump c. 110m north of the site in 1950, 1958, 1979–80, 1982 (EEX730–1, 733, 745–6);
 - Historic building survey at Peyton Hall c. 455m east of the site in 2019 (EEX59298); and
 - An earthwork survey and excavation at The Rookery c. 540m north of the site in 1950 and 1954 (EEX13884-5, 52369).

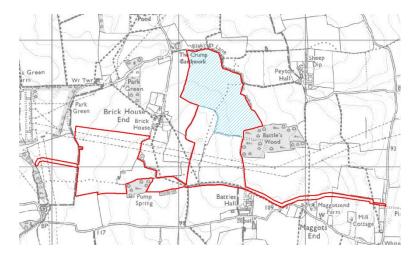


Plate 5: The area subject to the metal detector survey in 2004-2007 (blue hatched area)

5.7. The results of these works are discussed below, where relevant to the potential archaeological resource of the site.

Topography and geology

- 5.8. The topography of the site varies from approximately 105m aOD and rises to approximately 120m aOD in the northern and western extents of the site.
- 5.9. The solid geology of the site is mapped as Lewes Nodular Chalk Formation and Seaford Chalk Formation comprising chalk formed between 93.9 and 83.6 million years ago during the Cretaceous period. The superficial geology of the site is mapped as Lowestoft Formation, Diamicton formed between 480 and 423 thousand years ago during the Quaternary period.

Archaeological Baseline

Earlier Prehistoric (pre c. 700 BC)

- 5.10. No earlier prehistoric features have been recorded within the site by the HER and no anomalies suggestive of earlier prehistoric activity were identified during the geophysical survey within the site.
- 5.11. The metal detector survey within the northern extent of the site identified two finds of earlier prehistoric date; an unfinished Neolithic flint implement; and a fragment of a Bronze Age palstave axe which appears to have been deliberately broken (not recorded on the HER). Both of the artefacts were recorded in close proximity to Blakings Lane, which may conceivably have originated as a prehistoric ridgeway track.

- 5.12. A Bronze Age Beaker inhumation burial was recorded c. 975m north of the site in 1907 under the main entrance of the Berden Wesleyan Chapel (MEX13914). The extended inhumation burial which was associated with a metal bangle was identified by workmen when digging foundations. The bones have since mainly been lost.
- 5.13. The cropmarks of a ring ditch which could represent the remains of a prehistoric round barrow was recorded to the west of the cable route, *c*. 645m west of the main site, on aerial photographs (MEX1038985). The cropmarks of a second ring ditch were also identified *c*. 940m northeast of the site (MEX1038986).
- 5.14. The cropmarks of a rectangular enclosure measuring approximately 99m by 60m was identified *c*. 820m north-west of the site (MEX1040815). No internal features or entrances were visible.
- 5.15. A number of findspots of earlier prehistoric date were identified within the study area, consisting of pottery sherds and metal artefacts of Bronze Age date. The nature and location of these findspots located in the wider surrounds of the site are described in Appendix 2.

Iron Age (c. 700 BC – AD 43) and Romano-British (AD 43 – 410)

5.16. The geophysical survey within the site identified anomalies suggestive of archaeological activity of possible Iron Age to Romano-British date in the form of rectilinear enclosures which appear to be bounded to the south by an east to west aligned ditch in the northern extent of the site (see Plate 7 below). Outside of this southern boundary, smaller more irregular sub-circular enclosures were identified. Based on their form and the presence of numerous artefacts of Roman date in this location (as discussed below) they could be tentatively dated to the Iron Age or Romano–British periods, although could be of later date.

- 5.17. The findspot of eight copper alloy coins of Romano-British date was recorded within the northern extent of the site, adjacent to Blakings Lane, which were discovered in September 2009 (MEX1047006). The coins dated to the 3rd and 4th centuries AD.
- 5.18. As part of the metal detector survey in the northern extent of the site in 2004-2007, a number of artefacts of Roman date were recorded, with an apparent concentration along Blakings Lane (not recorded on the HER). The vast majority of the coins identified dated between the 3rd and 4th centuries, although two brooches were recorded which were of 1^{st-} or 2nd-century date.
- 5.19. The geophysical survey also identified a series of enclosures along the western boundary of the western extent of the site (see Plate 8 below). Identified within and outside of one of the enclosures were numerous discrete anomalies, possibly representing pit-like features and possible sites of burning, which suggestive potential settlement activity. A small circular feature was identified in the southern extent, and it is unclear whether this was contemporary with the other features to the north. Based on the form of these features, an Iron Age to Romano-British date cannot be ruled out.
- 5.20. A large number of findspots of Iron Age to Roman date have been recorded within the wider study area, including metal coins and artefacts as well as pottery sherds. The nature and location of these findspots located in the wider area are described in Appendix 2.

Early medieval (410 AD – 1066) and Medieval (1066 – 1539)

- 5.21. The majority of the site was historically located in the parish of Manuden, whilst the northern extent was historically located in the parish of Berden. The majority of the site most likely formed part of the agricultural hinterland to these settlements during the medieval period.
- 5.22. The cropmark of a rectangular enclosure with a broad ditch and entrance on its north-western side was recorded in the central area of the northern extent of the site (MEX13939, Plate 6). Due to its form, it may represent a moated site of likely medieval date. Aerial photographs and the processed LiDAR imagery (Appendix 8) show that the enclosure has angular corners, internal maculae, and annex and a narrow ditch which surrounds the whole site (Plate 6). A small ditched enclosure lies to the northwest. The southern and western arms of the moat are depicted on a plan of the parish of Berden from 1783 (not reproduced), but is not depicted on mapping from the 19th century onwards.



Plate 6: Extract from an aerial photograph of the site from April 2017 (Google Earth)

5.23. A metal detector survey was undertaken in the northern extent of the site and covered the area of the moated site in 2004–2007 (not recorded on the HER). The survey identified a scatter of medieval coins which were mainly concentrated on the area of the platform, and dated from the late 12th to the late 14th centuries. Artefacts of medieval date recorded from the periphery of the moated site comprised horse ornaments and fixtures. 5.24. The geophysical survey within the site identified three sides of the previously identified moated enclosure; the western side was not identified in the magnetic data (Plate 7). Linear anomalies in the north-eastern extent suggest some internal division. Other ditch-like anomalies and outlying enclosures on a similar alignment to the moated site are recorded to the north, south and east which indicates a wider area of fields and enclosure.



Plate 7: Extract from the geophysical survey report showing anomalies identified in the northern extent of the site

- 5.25. As stated in the Iron Age to Romano-British section above, to the north of the moated enclosure a series of rectilinear enclosures were identified, (Plate 7). These may have been contemporary with the moated enclosure, although may be of earlier date. A further enclosure complex was identified by the geophysical survey to the south-east of the moated enclosure, adjacent to Battles Wood.
- 5.26. A second potential square moated site is located within the western extent of the site, although has been plotted by the HER as potentially extending into the fields to the north and south (MEX1036848). Field boundaries were also identified on aerial photographs of the area. The geophysical survey identified a series of enclosures along the western boundary of the western extent of the site, as noted in the Iron Age to Romano-British section above (Plate 8). These may have been of medieval date, and were potentially associated with a small circular feature identified in the southern extent of the site.

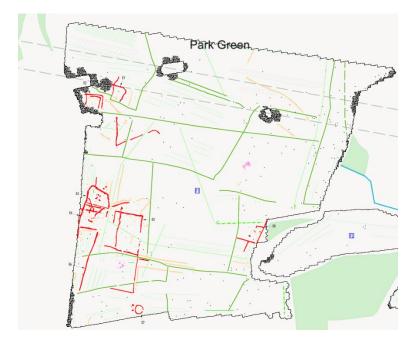


Plate 8: Extract from the geophysical survey report showing anomalies identified in the western extent of the site

- 5.27. The site of a moat is recorded at Battles Hall, located c. 145m south of the site (MEX13893). The moat was rectangular and enclosed the garden and site of the former house. Only the northern and southern arms of the moat remain visible. The moated site is a Scheduled Monument and has been assessed in further detail in Section 6.
- 5.28. The majority of moated sites served as prestigious aristocratic and noble residences with the provision of a moat was intended as a status symbol. They commonly consist of wide ditches which are often water-filled, which partly or completely enclose an 'island' of dry ground.

September 2022 | RW | P20-1300

- 5.29. The Crump, a Norman ring motte, lies c. 30m north of the site (MEX729, EEX730-1, 733, 745-6). The monument includes a raised area of ground which measures 32m in diameter at the base and stands c. 3m in height. The owner has previously carried out minor investigations at The Crump. It has been designated as a Scheduled Monument and is assessed in further detail in Section 6.
- 5.30. Another motte has been recorded in the study area at The Rookery c. 295m 650m north-west of the site (MEX13883, EEX13884-5, 52369). Excavations recorded pottery of 12th- to 13th-century date. It is suggested that this motte predated the one located at The Crump. By 1966 the site had been completely ploughed out.
- 5.31. A number of buildings were constructed in the wider study area which have medieval origins. These comprised farmsteads located within a rural landscape as well as buildings focused at Berden to the north. These comprise the following:
 - The Crump and former barn *c*. 110m north of the site (MEX1010901);
 - Brick House c. 210m west of the site (MEX1010899);
 - Berden Hall c. 745m north of the site (MEX1010889);
 - Granary to the north-east of Berden Hall *c*. 750m north of the site (MEX1010890);
 - The Church of St Nicholas at Berden *c*. 840m north of the site (MEX1010888); and
 - White House Farmhouse *c*. 980m north of the site (MEX1010892).

5.32. A large number of findspots of medieval origin have been recorded within the study area. Findspots in the wider study area include a variety of artefacts including rings, blades, mounts, coins and buckles. The nature and location of these findspots in the wider area are described in Appendix 2.

Post- medieval (1540 – 1800) and Modern (1801 – present)

5.33. The area is depicted on the Chapman and Andre Map of Essex from 1777 (Plate 9). Blakings Lane is depicted as a trackway between The Crump and Peyton Hall. A number of buildings had been constructed by this time including Battles Hall and its associated outbuildings located to the south of the central-southern part of the site (MEX1011673-5, 13896) and Hillview and Saffrons located to the south of the south-eastern extent of the site (MEX1011671-2). Peyton Hall and the associated barn are also depicted c. 490m east of the site (MEX1011663-4). Also depicted is Brick House to the west and The Crump to the north, both of medieval origin.





Plate 9: Extract from the Chapman and Andre Map of Essex of 1777

5.34. The northern and western extents of the site are depicted on the Berden Tithe Map of 1839 (Plate 10). The part of the site in this parish comprised part of 16 land parcels. 10 of the land parcels were under the ownership of Christ's Hospital and the occupancy of Nathaniel Hayden and comprised a mixture of arable land and grass. The remaining six land parcels comprised arable land which were under the ownership of Nicholas Calvert Esquire and under the occupancy of Thomas Sworder.



Plate 10: Extract from the Tithe Map of Berden of 1839

5.35. During the geophysical survey, three sides of a possible enclosure were identified along the eastern boundary of the western extent of the site (see Plate 8 above). The southern side of the enclosure terminates at a 19th-century boundary and is considered to be later than the features identified along the western boundary.

5.36. The remainder of the site is depicted on the Manuden Tithe Map of 1840 (Plate 11). The parts of the site in this parish comprised part of 15 land parcels, which were predominantly under the ownership of Nicholas Calvert Esquire and the occupancy of Charles Brand, although the other landowner was Robert Gosling Esquire and the occupiers were George Turnbull and William Burks. The land within the parish of Manuden comprised predominantly arable agricultural land, with a single land parcel used for grass and a single land parcel of woodland.

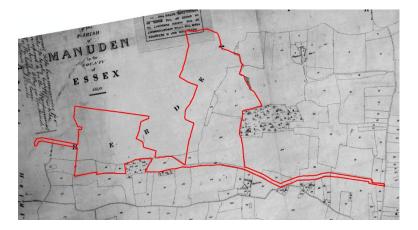


Plate 11: Extract from the Tithe Map of Manuden of 1840

5.37. The site is depicted on the Ordnance Survey Map of 1881 (Plate 12). The site comprised a part of several land parcels, crossed by numerous PRoWs.

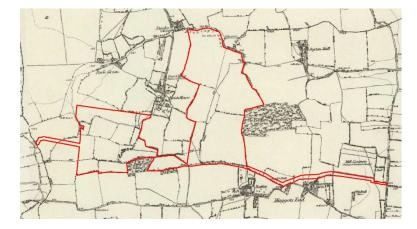


Plate 12: Extract from the Ordnance Survey Map of 1881

- 5.38. Cropmarks of field boundaries have been identified on aerial photographs in the south-eastern extent of the site (MEX1036849). Some of these are marked on Ordnance Survey mapping from the late 19th century and were recorded as anomalies during the geophysical survey within the site. The route of the proposed construction access route also crosses cropmarks indicative of field boundaries (MEX1036850).
- 5.39. No major changes are depicted on the Ordnance Survey Maps of 1923 (Plate 13) or 1951 (Plate 14).

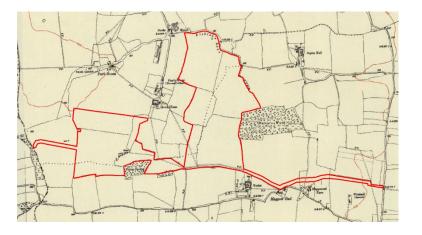


Plate 13: Extract from the Ordnance Survey Map of 1923

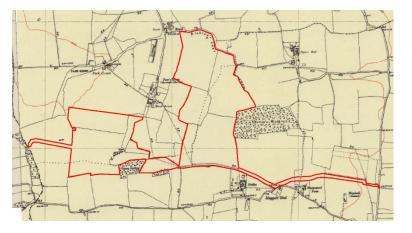


Plate 14: Extract from the Ordnance Survey Map of 1951

5.40. The historic landscape of the site has been characterised as comprising pre-18th-century irregular enclosure and post-1950s boundary loss.

The wider area

- 5.41. An evaluation at The Crump c. 110m north of the site identified two ditches and a single gully (MEX1049337, EEX58986 – not depicted on Figure 2). One of the ditches contained a fragment of modern CBM (ceramic building material). No direct association with the medieval ringwork was identified.
- 5.42. A number of buildings and structures were constructed during the post-medieval and modern periods in the vicinity of the site, predominantly focused to the north at Berden and south-east at Manuden, but also comprising farmsteads in the wider landscape. A table of these buildings is included in Appendix 1.

Undated

- 5.43. A number of cropmarks of uncertain date have been identified within the study area on aerial photographs. These comprise the following:
 - Sub-rectangular enclosures c. 215m south-east of the site and immediately south of the construction access route from the east (MEX13898);
 - Field boundaries and a potential enclosure located *c*. 230 south of the site (MEX1036853);
 - Field boundaries and a possible ring ditch *c*. 490m south of the site (MEX1034468);
 - Two enclosures and two parallel, widely-spaced ditches c. 630m south-east of the site (MEX13942); and

• Ring ditch c. 670m south of the site (MEX1036852).

Statement of Archaeological Potential and Significance

- 5.44. No anomalies suggestive of earlier prehistoric activity were identified during the geophysical survey within the site. There is some evidence for earlier prehistoric activity within the study area in the form of cropmarks indicative of features of this date, and a small quantity material of this date within the site. A Bronze Age Beaker burial was recorded at Berden to the north and prehistoric pottery was identified during evaluation at Manuden. On this basis, the potential for significant archaeological remains of earlier prehistoric date within the site is considered to be low.
- 5.45. The geophysical survey identified two areas which were suggestive of archaeological activity of possible Iron Age to Romano-British date, in the northernmost extent of the site and in the western extent of the site. These comprised anomalies comprising a series of enclosures which could tentatively be dated to these periods based on their form. There is some evidence for Iron Age to Roman activity in the site, including an apparent loose concentration of findspots of artefacts of Romano-British date in the northern extent of the site. The findspot of a fragment of quern stone was recorded immediately south of the site. A large quantity of findspots of this date have also been identified in the wider area. On this basis, the potential for significant archaeological remains of Iron Age to Roman date within the site is considered to be moderate to high.

- 5.46. The geophysical survey within the site identified anomalies suggestive of activity of medieval date. Three sides of the previously identified moated enclosure as well as some internal features and other ditch-like anomalies and outlying enclosures suggestive of a wider area of fields and enclosures. The series of enclosures located within the northern and western areas of the site may be contemporary with the moated sites and may be of medieval date.
- 5.47. Following the results of the geophysical survey, an informal discussion was undertaken with the Archaeological Advisor, and it was suggested that panels should be removed along the northern extent of the site and to the north of the moated enclosure. This has been taken into account in the revised proposals.
- With regards to significance, around 6,000 moated sites 5.48. are known within England, and are predominantly located in the central and eastern parts of the country. The Scheduling Selection Guide for Settlement Sites to 1500 (Historic England 2018) states that factors which may favour designation include good quality earthworks, the presence of listed medieval buildings within the moat, and the presence of associated features such as fishponds or ridge and furrow in a contemporary landscape. A very large number of moats are recorded within Essex, and a Scheduled example at Battles Hall lies to the south of the site, which has extant remains of the northern and southern arms. Within the site, where the remains are ploughed down and survive as extremely slight earthworks and below ground remains only, they are not considered to be of a significance commensurate to a Scheduled Monument, but rather are considered as a non-designated heritage asset. As such, any harm resulting from the proposed development to the asset





should be weighed against the public benefits of the proposed scheme. Solar panels are proposed in the area of the possible moated site and the anomalies in the western extent of the site. The piles associated with the solar panels will cause discrete impacts across the area, although a relatively low disturbance overall.

5.49. During the mid-19th century, the land within the site was utilised as a mixture of arable, grass and woodland, and its arable use has continued into the 21st century. Cropmarks of field boundaries are visible within the site on modern aerial imagery which are depicted on mapping from the 19th century. The geophysical survey identified three sides of a possible enclosure of potential postmedieval to modern date in the eastern extent of the western area of the site. Development in the study area was focused at Berden to the north and Manuden to the south-east, as well as farmsteads located in the wider landscape. On this basis, the potential for significant archaeological remains of post-medieval to modern date is considered to be low.

Designated Heritage Assets

- 5.50. No designated heritage assets are located within the site.
- 5.51. The Scheduled The Crump: a ringwork 600m south of Berden lies c. 35m north of the site (1009308) and the Grade II Listed The Crump and former barn (now room) adjoining to north-west lies c. 120m north of the site (1112471).
- 5.52. The Scheduled Moated site at Battles Manor lies c. 150m south of the site (1011630). The Grade II Listed Battles Hall lies c. 150m south of the site (1276720) and is associated with the Grade II Listed Cart Lodge and Grade II Listed Dovecote (1239353, 12139462).
- 5.53. A number of further Grade II Listed Buildings are recorded in the surrounds of the site.
- 5.54. 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. With regards to heritage assets within the surrounds of the site, Step 1 of the methodology recommended by *GPA3* (see methodology), is to identify which heritage assets might be affected by a proposed development.¹³
- 6.2. Development proposals may adversely impact heritage assets where they remove a feature which contributes to the significance of a heritage asset, or where they interfere with an element of a heritage asset's setting which contributes to its significance, such as interrupting a key relationship or a designed view.
- 6.3. It is however widely accepted (paragraph 207 of the *NPPF*) that not all parts of a heritage asset will necessarily be of equal significance.¹⁴ In some cases, certain elements of a heritage asset can accommodate substantial changes whilst preserving the significance of the asset.
- 6.4. Significance can be derived from many elements, including the historic fabric of a building or elements of its surrounds.
- 6.5. Consideration, based upon professional judgement and on-site analysis, was therefore made as to whether any of the heritage assets present within the surrounding area may include the site as part of their setting, whether the site contributes to their overall heritage significance, and

whether the assets may potentially be affected by the proposed scheme as a result.

- 6.6. It has been observed that the following heritage assets have the potential to be sensitive to the development proposals on the basis of distance, intervisibility and a historical, functional association and thus these have been taken forward for further assessment below:
 - The Scheduled Moated site at Battles Manor c. 150m south of the site (1011630); and
 - The Grade II Listed Battles Hall c. 150m south of the site and associated dovecote c. 100m south of the site and cartlodge c. 195m south of the site (1276720, 1239462, 1239353).
- 6.7. Assets in the vicinity identified for further assessment on the basis of distance and intervisibility comprise the following:
 - The Scheduled The Crump: a ringwork 600m south of Berden *c*. 35m north of the site (1009308);
 - The Grade II Listed The Crump and former barn (now room) adjoining to north-west *c*. 120m north of the site (1112471);

¹³ Historic England, *GPA*:3, p. 4.

- The Grade II Listed Brick House *c*. 215m west of the site (1170302);
- The Grade II Listed Rose Garth c. 125m west of the site (1322443); and
- The Grade II Listed Peyton Hall and Barn to the south-east *c*. 495-515m east of the site (1233139, 1233141).
- 6.8. With regard to other heritage assets in the vicinity of the site, assessment has concluded that the site does not form any part of setting that positively contributes to overall heritage significance due the nature of the asset and a lack of visual connections, spatial relationships or historic connections. Accordingly, the proposed development is not anticipated to result in a change that would impact upon the overall heritage assets have therefore been excluded from further assessment within this Report.

Moated Site at Battles Manor

- 6.9. The Moated site at Battles Manor lies *c*. 150m south of the site (1011630). The asset was added to the National List on 17th September 1993 and a full copy of the List Entry is included in Appendix 5.
- 6.10. The rectangular moated site is situated on an east-facing slope above the River Stort. Only the northern and southern arms of the moat remain visible as the eastern and western arms have been infilled (Plate 15). The northern arm is 52m in length and the southern arm is 60m in length. Both of the arms are approximately 12m in width and are waterfilled. These are depicted on the processed LiDAR imagery in Appendix 5. The original

house, which is documented as dating from the 14th century, would have been located between the two visible arms and a large quantity of tile was recorded in this area. A garden wall of brick construction runs along the southern side of the northern arm and continues along the western edge of the island and partially to the north of the southern arm. The present Battles Manor House, which dates from the mid-17th century and is assessed below, is situated in the north-eastern corner of the Scheduled area.



Plate 15: View west towards the moated site at Battles Hall, southern arm and central area visible

6.11. Moated sites were built throughout the medieval period and are widely scattered across England, with around 6,000 examples known in the country, and exhibit a high level of diversity in their forms and size.



- 6.12. The wider surrounds of the moat comprise the farmstead at Battles Hall, including the farmhouse, dovecote and cartlodge, with formerly associated converted residences to the north of the farmstead.
- 6.13. At the time of the Tithe Apportionment in the mid-19th century, Battles Hall, including the moated site, was under the ownership of Nicholas Calvert Esquire and the occupancy of Charles Brand who also owned and occupied a number of land parcels within the site. This historic functional association between the land within the site and the asset has continued into the 21st century.
- 6.14. There is no clear intervisibility between the Scheduled moated site and the land within the site due to the presence of intervening vegetation and agricultural land (Plate 16).



Plate 16: View from the moated site at Battles Hall towards the site (no intervisibility due to intervening vegetation and agricultural land)

- 6.15. The moat is best appreciated from its immediate surrounds, including views west from the driveway to Battles Farm where the platform, southern arm and part of the brick wall are most visible, and views from the driveway to the converted residences to the north of Battles Farm where the northern arm and the western and northern extents of the brick wall are most visible.
- 6.16. As a Scheduled Monument, the moated site is considered to be a designated heritage asset of the highest significance, as defined by the NPPF.
- 6.17. The moated site at Battles Hall principally derives its significance from the archaeological and historical interest of its remaining northern and southern arms and platform as well as the below-ground remains of the

moat and the former dwelling which will retain information relating to the occupation of the site. The water-filled ditches will retain environmental evidence regarding the economy of the inhabitants at Battles Hall and the landscape in which they lived. The upstanding remains of the brick walls also hold historical and artistic interest.

- 6.18. As well as this, setting also contributes to the heritage significance of the asset. The elements of the setting of the moated site at Battles Hall that primarily contribute to its significance comprise the following:
 - The late-16th-century Battles Hall which was constructed in the north-eastern extent of the moated site, which most utilised some materials from the 14th-century dwelling located within the moat;
 - The associated farmstead of which the moat is part; and
 - Views towards the moated site from where it is best appreciated; from the driveway to Battles Hall and the road to the converted barns.
- 6.19. Parts of the surrounding agricultural land also contribute to the heritage significance of the moated site as elements of the agricultural landscape which formed a rural setting to the asset.
- 6.20. Some of the land within the eastern extent of the site has a historical association with Battles Hall and therefore the moated site as land which was under the same ownership and occupancy as the farmstead during the mid-19th century. Part of the land within the site is under the

ownership and occupancy of Battles Hall Farm, with some of the land associated with the neighbouring Green Farm.

- 6.21. The land within the site is considered to make a very minor contribution to the heritage significance of the moated site through setting.
- 6.22. The proposed development would result in the installation of a solar farm including all associated works, equipment and infrastructure. The development will result in a change of the character of the land within the site from agricultural to solar farm development. The site boundary has been deliberately set back from the assets at Battles Hall and intervening agricultural land between the site and the moated site at Battles Hall would remain as unchanged. Open space is proposed in the area of the site in closest proximity to the assets, and existing vegetation within the site in this area will be retained.
- 6.23. Part of the land within the eastern extent of the site has a historic association with the assets at Battles Hall although there is no clear intervisibility between the land within the site and the moated site. Therefore, the land within the site is considered to make a very minor contribution to the heritage significance of the moated site at Battles Manor. On this basis, the proposed development within the site will result in less than substantial harm at the lowermost end of the spectrum to the heritage significance of the Scheduled moated site at Battles Manor, with regards to setting.

Battles Hall and associated outbuildings

6.24. The Grade II Listed Battles Hall lies *c*. 150m south of the site (1276720). The Grade II Listed Dovecote 30m northwest of Battles lies *c*. 100m south of the site (1239462).

The Grade II Listed Cartlodge 30m south-east of Battles lies *c*. 195m south of the site (1239353).

- 6.25. Battles Hall was added to the National List on 26th November 1951, and the Dovecote and Granary were added to the National List on 26th October 1983. The full copy of the List Entries for the assets are included in Appendix 5.
- 6.26. The two-storey with attic Battles Hall was constructed during the late 16th century into the early 17th century with a timber frame and using some materials from an earlier house in the vicinity. The ground storey is faced in brick with the upper storey plastered and a tiled roof (Plate 17). The house was the seat of the Wadd family until the later 17th century. The dwelling is partly moated (see section on Moated site at Battles Manor above). The main façade of Battles Hall faces in an easterly direction, away from the site.



Plate 17: The Grade II Listed Battles Hall

6.27. The dovecote reaches two-storeys and was constructed out of red brick in a Flemish bond with a tiled roof (Plate 18). A one-storey lean-to was constructed on the southern end of the dovecote, initialled and date 1812 above the entrance.



Plate 18: The Grade II Listed Dovecote 30m north-west of Battles

6.28. The cartlodge was constructed out of a timber frame and weatherboard under a thatched, hipped roof during the 17th or 18th century (Plate 19). The cartlodge comprises seven bays, two of which are enclosed at the northern extent.



Plate 19: The Grade II Listed Cartlodge 30m south-east of Battles

- 6.29. The immediate surrounds of the farmstead comprise formerly associated outbuildings to the north which have been converted into five separate residences which are accessed by a road to the west of the Battles Hall complex. The wider surrounds of the assets comprise agricultural land and a single residence located to the south-east, on the opposite side of the road.
- 6.30. At the time of the Tithe Apportionment in the mid-19th century, Battles Hall was under the ownership of Nicholas Calvert Esquire and the occupancy of Charles Brand who also owned and occupied a number of land parcels within the site. This historic functional association between the land within the site and the asset has continued into the 21st century.

6.31.

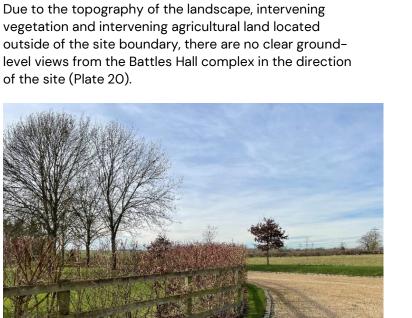


Plate 20: View from Battles Hall in the direction of the site (no clear intervisibility)

6.32. Views from within the site towards Battles Hall comprise the upper storeys, roof and chimneys of the Hall itself and the dovecote, seen in association with intervening vegetation and agricultural land located outside of the site boundary (Plates 21–22). The converted outbuildings to the north of Battles Hall are apparent in this view. A PRoW follows the southern boundary of the site which also allows views to the upper storeys, roof and chimneys of the asset.



Plate 21: View south-east from the southern site boundary in the direction of the Battles Hall complex



Plate 22: Zoomed in version of Plate 21

6.33. The assets at Battles Hall can also be appreciated from the continuation of the ProW beyond the site, and from other ProWs in the immediate vicinity (Plate 23).



Plate 23: View west from the ProW to the west of the Battles Hall complex towards the assets

6.34. The main façade of Battles Hall faces in an easterly direction, away from the site. This main façade is best appreciated from within the associated plot of the assets, but views towards this eastern elevation are also possible from the ProW to the east of the site (Plate 24).



Plate 24: View west towards the main frontage of Battles Hall from the ProW to the east

- 6.35. As stated above, the assets are best appreciated from their associated plot, where they can be read as part of a farmstead complex, although the farmstead has been altered by the conversion of the former outbuildings to the north.
- 6.36. As Grade II Listed Buildings, the assets at Battles Hall are considered to be designated heritage assets of less than the highest significance, as defined by the NPPF.
- 6.37. The heritage significance of Battles Hall is primarily derived from its built form, which has architectural, artistic and historic illustrative values as an example of a partially moated, 17th-century dwelling.

- 6.38. The heritage significance of the Dovecote at Battles Hall is primarily derived from its built form, which has architectural, artistic and historic interest as an example of a 17th-century building with later additions. The heritage significance of the Cartlodge at Battles Hall is primarily derived from its built form, which has architectural, artistic and historic interest as an example of a 17^{th-}or 18th-century outbuilding.
- 6.39. Setting also contributes to the heritage significance of these assets, but to a lesser degree than their fabric. The elements of the assets' setting that make the greatest contribution to its heritage significance comprise the following:
 - The associated garden plot from where the assets can be best appreciated;
 - The associated farm buildings which allow the agricultural nature of the farmstead to be understood;
 - The remains of the Scheduled Moat which have archaeological interest;
 - Views towards the group of assets from the road; and
 - Views towards the group of assets from the ProWs in the wider surrounds.
- 6.40. Parts of the surrounding agricultural land also contribute to the heritage significance of the assets as elements of the agricultural landscape which formed a rural setting to the farmstead.

- 6.41. Parts of the land within the eastern extent of the site has a historical association with Battles Hall as land which was under the same ownership and occupancy as the farmstead during the mid-19th century. The land within the site is considered to make a very minor contribution to the heritage significance of the assets through setting.
- 6.42. The proposed development would result in the installation of a solar farm including all associated works, equipment and infrastructure. The development will result in a change of the character of the land within the site from agricultural to solar farm development. The site boundary has been set back from the assets and intervening agricultural land between the site and the assets at Battles Hall would remain as unchanged. Open space is proposed in the area of the site in closest proximity to the assets, and existing vegetation within the site in this area will be retained. Part of the land within the site has a historic association with the Grade II Listed Buildings. There are views towards the assets from within the site, seen in association with existing mature vegetation. Therefore, the land within the site is considered to make a minor contribution to the heritage significance of the Battles Hall Listed Buildings. On this basis, the proposed development within the site will result in less than substantial harm at the lower end of the spectrum to the heritage significance of the Grade II Listed Battles Hall, the Grade II Listed Dovecote and the Grade II Listed Cartlodge, with regards to setting.

The Crump

6.43. The Crump lies *c*. 35m north of the site (1009308). The asset was added to the National List on 22nd September 1954, and the most recent amendment took place on 3rd

august 1992. A full copy of the List Entry is included in Appendix 5.

6.44. The Crump comprises a ringwork situated on an eastfacing slope above the River Stort (Plate 25). The monument includes a raised area of ground c. 32m in diameter at the base and stands c. 3m high. The top of the raised area is 10m in diameter and has a c. 1m deep depression in it, potentially due to previous excavation in this area. Surrounding the raised area is a moat; the western half of the moat remains waterfilled, whilst the eastern half has become silted up. The earthwork is visible on the processed LiDAR imagery in Appendix 8.



Plate 25: View from Blakings Lane PRoW towards the Scheduled The Crump

6.45. The Crump was the subject of limited excavation by the landowner during the 1950s who excavated a small

trench in the interior of the mound and identified a clay floor, a packed post hole, 12th-century pottery sherds and metal fragments.

- 6.46. The Scheduled Monument is located on private land and is therefore not publicly accessible. The Grade II Listed The Crump lies to the west of the asset and agricultural land surrounds it on all other sides.
- 6.47. There is no known historical or functional association between the land within the site and The Crump.
- 6.48. There are glimpsed views towards the asset from Blakings Lane through the existing mature vegetation. Intervisibility between the land within the site and The Crump is blocked by vegetation on either side of Blakings Lane and vegetation along the north-western site boundary which prevents any intervisibility between the two.
- 6.49. As a Scheduled Monument, The Crump is considered to be a designated heritage asset of the highest significance, as defined by the NPPF.
- 6.50. The heritage significance of The Crump is principally derived from its archaeological and historical interest as a ringwork of medieval date which survives as both upstanding and below-ground remains which will retain archaeological information on the occupation of the site and environmental evidence on the economy and the landscape at this time.
- 6.51. As well as this, the asset also derives some of its significance through setting. The main element of its setting comprises the immediately adjacent agricultural landscape to the north which would have formed part of

the asset's historic rural setting. Blakings Lane, which is considered to have been a trackway potentially established during the prehistoric period, would have formed a southern boundary to the asset. The Crump (a Grade II Listed Building assessed below) was constructed during the later medieval period to the west of the site. This also contributes to the heritage significance of the Scheduled Monument through setting.

- 6.52. As stated above, Blakings Lane lies between the land within the site and The Crump. The vegetation on either side of this trackway blocks any intervisibility between the land within the site and the asset. The land within the site is not considered to contribute to the heritage significance of the Scheduled The Crump.
- The proposed development would result in the 6.53. installation of a solar farm including all associated works, equipment and infrastructure. The development will result in a change of the character of the land within the site from agricultural to solar farm development. There is no known historical or functional association between the land within the site and The Crump and there is no intervisibility between the two due to the dense intervening vegetation on either side of Blakings Lane. As part of the development proposals, this vegetation along Blakings Lane is to be retained and planting is proposed along the northern site boundary. The panels are set back from The Crump with an area of intervening open space proposed in the northern extent of the site. The land within the site is not considered to contribute to the heritage significance of The Crump. On this basis, the proposed development within the site is considered to result in no harm to the heritage significance of the Scheduled The Crump.

The Crump and former barn

- 6.54. The Grade II Listed The Crump and former barn (now additional residential accommodation) adjoining to north-west lies c. 120m north of the site (1112471). The asset was added to the National List on 22nd February 1980 and a full copy of the List Entry is included in Appendix 5.
- 6.55. The one-storey-and-attic The Crump, formerly known as Stocks Farm, was constructed during the 16th to 17th century out of timber frame and plaster with lattice leaded casements and a thatched roof (Plate 26). A former three-bay timber-framed and plastered barn to the north-west of the house has now forms part of the house and is attached to it by a modern wing. Some of the timber-framing is exposed.



Plate 26: The Grade II Listed The Crump and former barn to the northwest

- 6.56. Outbuildings which lie to the south of the asset were converted in 2013–14 to form a residential annexe.
- 6.57. There is no known historical or functional association between the land within the site and The Crump.
- 6.58. Due to the residential annexe located to the south of The Crump, there are no clear views from adjacent to the asset in the direction of the site. Similarly, views from within the site towards the asset include the annexe in front of the roof of The Crump (Plate 27).



Plate 27: View north from within the northern extent of the site towards The Crump

- 6.59. The asset is best appreciated from its associated plot and in views from the road to the west.
- 6.60. As a Grade II Listed Building, The Crump and former barn is considered to be a designated heritage asset of less than the highest significance, as defined by the NPPF.
- 6.61. The heritage significance of the asset is primarily derived from its built form, which has architectural, artistic and historic interest as a farmhouse of 16th to 17th century date with later additions and alterations. Setting also contributes to the heritage significance of the asset, but to a lesser degree than its fabric. The element of the asset's setting that makes the greatest contribution to its heritage significance is its associated garden plot, from where it is likely to be best appreciated.

- 6.62. Surrounding agricultural land also contributes to the heritage significance of the asset, as part of its former historic rural landholding and which forms part of the rural setting of the asset. This does not include the land within the site.
- The proposed development would result in the 6.63. installation of a solar farm including all associated works, equipment and infrastructure. The development will result in a change of the character of the land within the site from agricultural to solar farm development. Intervening land between the site and The Crump would remain as unchanged. There is no historical functional association between the land within the site and the asset, and any intervisibility is blocked by the annexe to the south of The Crump and vegetation along Blakings Way. As part of the development proposals, the panels are set back from The Crump and former barn within the site with an area of intervening open space proposed in the northern extent of the site. The land within the site is not considered to contribute to the heritage significance of the asset. On this basis, the proposed development within the site will result in no harm to the heritage significance of the Grade II Listed The Crump and former barn to the north-west.

Brick House

- 6.64. The Grade II Listed Brick House lies c. 215m west of the site (1170302). The asset was added to the National List on 26th November 1951 and a full copy of the List Entry is included in Appendix 5.
- 6.65. The dwelling originated during the 16th or 17th century, although was completely refaced in red brick in 1670, and has a slate roof which is hipped at the eastern and

western ends (Plate 28). The main façade of the assets faces north onto its associated front drive and up the access road.



Plate 28: The Grade II Listed Brick House

- 6.66. The asset is located within an associated garden plot which lies to the south. The wider surrounds comprise agricultural land to the east, south and west, and residential development to the north. The asset lies at the end of an unnamed lane along with a small number of other properties.
- 6.67. There is no known historical functional association between the land within the site and the asset.
- 6.68. There are glimpsed views towards the land within the site from adjacent to the plot of Brick House which includes

intervening vegetation and agricultural land located outside of the site boundary (Plate 29).



Plate 29: View east from adjacent to the boundary plot associated with Brick House towards the site, visible rising up beyond intervening agricultural land

6.69. There are views from within the western extent of the site towards the eastern elevation of Brick House, seen in association with intervening vegetation and agricultural land (Plates 30–31).



Plate 30: View west from the western boundary of the eastern site parcel towards Brick House beyond intervening agricultural land



Plate 31: Zoomed in version of Plate 30

- 6.70. The asset is best appreciated from its associated garden plot, particularly the front garden from where the main northern elevation can be experienced and understood. The asset can also be appreciated from the unnamed land to the north which approaches Brick House and its main northern elevation.
- 6.71. As a Grade II Listed Building, Brick House is considered to be a designated heritage asset of less than the highest significance, as defined by the NPPF.
- 6.72. The heritage significance of Brick House is primarily derived from its built form, which has architectural, artistic and historic interest as a dwelling which originated during the 16th or 17th century, although was completely refaced in red brick in 1670.
- 6.73. As well as this, the asset also derives a small amount of its significance from its setting. The main elements of its setting which contribute to its significance are the position of the asset within its associated boundary plot and its experience and appreciation from this location as well as views towards the asset from the unnamed road which are considered to make a minor contribution to the overall experience and appreciation of the asset. A number of meadows are also part of the immediate setting of Brick House.
- 6.74. Some parts of the surrounding agricultural land also contribute to the heritage significance of the asset, as parts of its historic rural setting. The site is separated from the asset by intervening agricultural land and there is no known historical functional association between the land within the site and the asset. Views towards the asset from within the site are not considered to be key

views. The site is not considered to contribute to the heritage significance of the asset through setting.

6.75. The proposed development would result in the installation of a solar farm including all associated works, equipment and infrastructure. The development will result in a change of the character of the land within the site from agricultural to solar farm development. Intervening land between the site and Brick House would remain as unchanged. As part of the development proposals, the existing vegetation along the western boundary of the site will be retained. There is no known historical or functional association between the land within the site and the asset. There is intervisibility between the site and the asset which includes intervening agricultural land and vegetation and the land within the site is not considered to contribute to the heritage significance of the asset. On this basis, the proposed development within the site will result in no harm to the heritage significance of the Grade II Listed Brick House.

Rose Garth

- 6.76. The Grade II Listed Rose Garth lies *c*. 145m west of the site (1322443). The asset was added to the National List on 22nd February 1980 and a copy of the full List Entry has been included in Appendix 5.
- 6.77. The one-storey-and-attic Rose Garth was constructed during the 17th century out of timber frame and plaster with a thatched roof. The dwelling has been restored in recent times (Plate 32).





Plate 32: The Grade II Listed Rose Garth

- 6.78. The main eastern elevation of the asset fronts onto the unnamed land to the east. Rose Garth is located within an associated elongated garden plot along the north-south orientated roadside. The wider surrounds comprise agricultural land to the east beyond the road; woodland to the south; agricultural land to the west; and pasture used for the keeping of horses to the north. A small number of residences lie to the south of the asset.
- 6.79. There is no known historical or functional association between the land within the site and the asset.
- 6.80. There is intervisibility between the land within the central area of the site and the Grade II Listed Rose Garth due to the topography of the landscape. Trees have been planted opposite Rose Garth on the eastern side of the unnamed lane, and their foliage is anticipated to become

fuller during the summer months and would provide more glimpsed views from the asset to the site (Plate 33). Intervening agricultural land outside of the site boundary lies between the two (Plate 34).



Plate 33: View south from along the unnamed lane towards Rose Garth which shows the deliberate planting of trees on the opposite side of the road which will result in less clear views between the site and the asset during the summer months

September 2022 | RW | P20-1300



Plate 34: View east from adjacent to Rose Garth towards the site, visible beyond intervening agricultural land

6.81. Views towards Rose Garth from within the site comprise its principal eastern elevation which fronts onto the road (Plates 35–36). The trees, which are not saplings, on the opposite side of the road are visible in these views and will screen visibility towards the historic core of the asset during the summer months.



Plate 35: View west from the western boundary of the eastern site parcel towards Rose Garth



Plate 36: Zoomed in version of Plate 35

- 6.82. The asset is best appreciated from its associated garden plot and from the road to the east. As stated above, the main façade of Rose Garth fronts onto the unnamed lane.
- 6.83. As a Grade II Listed Building, Rose Garth is considered to be a designated heritage asset of less than the highest significance, as defined by the NPPF.
- 6.84. The heritage significance of Rose Garth is primarily derived from its built form, which has architectural, artistic and historic interest as a cottage which originated during the 17th century with modern alterations.
- 6.85. As well as this, the asset also derives a small amount of its significance from its setting. The main elements of its setting which contribute to its significance are the position of the asset within its associated boundary plot and its experience and appreciation from this location as well as views towards the asset from the unnamed road which are considered to make a minor contribution to the overall experience and appreciation of the asset.
- 6.86. Some parts of the surrounding agricultural land also contribute to the heritage significance of the asset, as part of its rural setting. The site is separated from the asset by intervening agricultural land and there is no known historical functional association between the land within the site and the asset. Views towards the site from the asset are not considered to be key views, particularly as trees on the opposite side of the lane to the asset which help to shield views to the wider agricultural land, especially during the summer months. The site is not considered to contribute to the heritage significance of the asset through setting.

The proposed development would result in the installation of a solar farm including all associated works, equipment and infrastructure. The development will result in a change of the character of the land within the site from agricultural to solar farm development. Intervening agricultural land between the site and Rose Garth would remain as unchanged and the existing vegetation immediately to its east will be retained. As part of the development proposals, the existing vegetation along the western boundary of the site will be retained. There is no known historical or functional association between the land within the site and the asset. There is intervisibility between the land within the site and the asset, although these are not considered to be key views and the land within the site is not considered to contribute to the heritage significance of the asset. On this basis, the proposed development within the site will result in no harm to the heritage significance of the Grade II Listed Rose Garth.

Peyton Hall and barn to south-east

6.87.

- 6.88. The Grade II Listed Peyton Hall lies c. 505m east of the site and the Grade II Listed Barn to south-east of Peyton Hall lies c. 520m east of the site (1233139, 1233141). Both assets were added to the National List on 22nd February 1980 and copies of their List Entries are included in Appendix 5.
- 6.89. Peyton Hall was constructed during the 17th century out of a timber frame and plaster. A number of later additions and alterations have been added to the asset. The fivebay aisled barn to the south-east of the Hall was also constructed during the 17th century and has a timber frame and weatherboard with a tiled roof. Both assets are visible in Plate 37.





Plate 37: The Grade II Listed Peyton Hall and the Grade II Listed Barn to the south-east

- 6.90. The assets form part of a larger farm complex including agricultural outbuildings to the south-west of Peyton Hall and opposite the barn and further outbuildings located to the south-east. Residences are also included within the farm complex. The wider surrounds comprise agricultural land on all sides.
- 6.91. There is no known historical functional association between the land within the site and the assets at Peyton Hall.

6.92. There are views from the PRoW located adjacent to the associated farmyard of Peyton Hall in the direction of the site which comprises vegetation along the north-eastern boundary (Plate 38). The ground level of the site is not apparent in these views.



Plate 38: View west from the PRoW adjacent to Peyton Hall towards the site, boundary vegetation visible

6.93. There are glimpsed north-easterly views from along the north-eastern site boundary in the direction of the assets at Peyton Hall, mainly comprising their associated roofs and chimneys, seen with a large amount of intervening agricultural land in the foreground (Plates 39-40).



Plate 39: View west from the site boundary towards the assets at Peyton Hall with intervening agricultural land not located within the site in the foreground



Plate 40: Zoomed in version of Plate 39

6.94. The assets are best appreciated in views from their associated farmyard complex.

- 6.95. As Grade II Listed Buildings, Peyton Hall and the barn to the south-west are considered to be designated heritage assets of less than the highest significance, as defined by the NPPF.
- 6.96. The heritage significance of the assets is primarily derived from their built form, which has architectural, artistic and historic illustrative values as a 17th-century Hall and associated 17th-century barn.
- 6.97. Setting also contributes to the heritage significance of the assets, but to a lesser degree than their fabrics. The elements of the assets' settings that make the greatest contribution to their heritage significance comprise their associated farmyard complex including the barns and outbuildings which allow the agricultural nature of the buildings to be understood. Parts of the surrounding agricultural land also contribute to the heritage significance of the asset as part of its historic rural setting. The land within the site is not considered to contribute to the heritage.
- 6.98. The proposed development would result in the installation of a solar farm including all associated works, equipment and infrastructure. The development will result in a change of the character of the land within the site from agricultural to solar farm development. Intervening land between the site and the assets would remain as unchanged and the existing mature vegetation along Blakings Lane will be retained and strengthened adjacent to the northern site boundary as part of the development proposals. There is no known historical or functional association between the land within the site and the asset. There is intervisibility between the land within the site and the asset, although these views are not



considered to be key views and the land within the site is not considered to contribute to the heritage significance of the asset. On this basis, the proposed development within the site will result in no harm to the heritage significance of the Grade II Listed Peyton Hall and the Grade II Listed Barn to south-east of Peyton Hall.

7. Conclusions

Archaeological resource

- 7.1. No anomalies suggestive of earlier prehistoric activity were identified during the geophysical survey within the site. There is some evidence for earlier prehistoric activity within the study area in the form of cropmarks indicative of features of this date, and a small quantity material of this date within the site. A Bronze Age Beaker burial was recorded at Berden to the north and prehistoric pottery was identified during evaluation at Manuden. On this basis, the potential for significant archaeological remains of earlier prehistoric date within the site is considered to be low.
- 7.2. The geophysical survey identified two areas which were suggestive of archaeological activity of possible Iron Age to Romano-British date, in the northernmost extent of the site and in the western extent of the site. These comprised anomalies comprising a series of enclosures which could tentatively be dated to these periods based on their form. There is some evidence for Iron Age to Roman activity in the site, including an apparent loose concentration of findspots of artefacts of Romano-British date in the northern extent of the site. The findspot of a fragment of quern stone was recorded immediately south of the site. A large quantity of findspots of this date have also been identified in the wider area. On this basis, the potential for significant archaeological remains of Iron Age to Roman date within the site is considered to be moderate to hight.
- 7.3. The geophysical survey within the site identified anomalies suggestive of activity of medieval date. Three

sides of the previously identified moated enclosure as well as some internal features and other ditch-like anomalies and outlying enclosures suggestive of a wider area of fields and enclosures. The series of enclosures located within the northern and western areas of the site may be contemporary with the moated sites and may be of medieval date.

- 7.4. Following the results of the geophysical survey, an informal discussion was undertaken with the Archaeological Advisor, and it was suggested that panels should be removed along the northern extent of the site and to the north of the moated enclosure. This has been taken into account in the revised proposals.
- 7.5. With regards to significance, around 6,000 moated sites are known within England, and are predominantly located in the central and eastern parts of the country. The Scheduling Selection Guide for Settlement Sites to 1500 (Historic England 2018) states that factors which may favour designation include good quality earthworks, the presence of listed medieval buildings within the moat, and the presence of associated features such as fishponds or ridge and furrow in a contemporary landscape. A very large number of moats are recorded within Essex, and a Scheduled example at Battles Hall lies to the south of the site, which has extant remains of the northern and southern arms. Within the site, where the remains are ploughed down and survive as extremely slight earthworks and below ground remains only, they are not considered to be of a significance commensurate to a Scheduled Monument, but rather are considered as a non-designated heritage asset. As such, any harm



resulting from the proposed development to the asset should be weighed against the public benefits of the proposed scheme.

- 7.6. Solar panels are proposed in the area of the possible moated site and the anomalies in the western extent of the site. The piles associated with the solar panels will cause discrete impacts across the area, although a relatively low disturbance overall.
- 7.7. During the mid-19th century, the land within the site was utilised as a mixture of arable, grass and woodland, and its arable use has continued into the 21st century. Cropmarks of field boundaries are visible within the site on modern aerial imagery which are depicted on mapping from the 19th century. The geophysical survey identified three sides of a possible enclosure of potential postmedieval to modern sate in the eastern extent of the western area of the site. Development in the study area was focused at Berden to the north and Manuden to the south-east, as well as farmsteads located in the wider landscape. On this basis, the potential for significant archaeological remains of post-medieval to modern date is considered to be low.

Setting

- 7.8. No designated heritage assets are recorded within the site.
- 7.9. Following detailed assessment, the proposed development within the site is anticipated to result in less than substantial harm at the lower end of the spectrum to the heritage significance of the Grade II Listed Battles Hall, the Grade II Listed Dovecote and the Grade II Listed Cartlodge, with regards to setting.
- 7.10. The proposed development is anticipated to result in less than substantial harm at the lowermost end of the spectrum to the heritage significance of the Scheduled moated site at Battles Manor, with regards to setting.
- 7.11. The proposed development within the site is anticipated to result in no harm to the heritage significance of the Scheduled The Crump, the Grade II Listed The Crump and former barn (now room) adjoining to north-west, the Grade II Listed Brick House, the Grade II Listed Rose Garth, Grade II Listed Peyton Hall and the Grade II Listed Barn to south-east of Peyton Hall, with regards to setting.

Appendix 1: 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."¹⁵

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.¹⁶

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*.¹⁷ These essentially cover the heritage 'interests' given in the glossaries of the *NPPF* and the *PPG* which are archaeological, architectural and artistic, and historic.¹⁸

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.¹⁹

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

¹⁵ DLUHC, *NPPF*, pp. 71–72.

¹⁶ Historic England, GPA:2.

¹⁷ 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.

¹⁸ DLUHC, NPPF, p. 71; DLUHC, PPG, Annex 2.

¹⁹ DLUHC, *PPG*, paragraph 006, reference ID: 18a-006-20190723.

The most-recently issued 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. ²⁰

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."²¹

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."²²

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*".²³

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

²² DLUHC, *NPPF*, p. 71.
 ²³ Historic England, *GPA*:3, pp. 8, 11.

 ²⁰ Historic England, Statements of Heritage Significance: Analysing Significance in Heritage Assets, Historic England Advice Note 12 (Swindon, October 2019).
 ²¹ DLUHC, NPPF, p. 72.

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." 24

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 200 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 68 of the NPPF;²⁵
- Designated heritage assets of less than the highest significance, as identified in paragraph 200 of the NPPF, comprising Grade II Listed buildings and Grade II Registered Parks and Gardens (and also some Conservation Areas);²⁶ and

 $^{^{24}}$ Catesby Estates Ltd. V. Steer [2018] EWCA Civ 1697, paras. 25 and 26. 25 DLUHC, NPPF, para. 200 and fn. 68.



• 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".²⁷

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";²⁸ 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."²⁹

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*".³⁰

²⁹ DLUHC, *PPG*, paragraph 018, reference ID: 18a–018–20190723.

²⁷ DLUHC, *PPG*, paragraph 039, reference ID: 18a-039-20190723.

²⁸ Bedford Borough Council v Secretary of State for Communities and Local Government [2013] EWHC 2847 (Admin), para. 25.

³⁰ 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*".³¹ 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*".³² Of particular relevance is the checklist given on page 13 of *GPA:3*.³³

It should be noted that this key document also states:

"Setting is not itself a heritage asset, nor a heritage designation..."³⁴

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".³⁵ 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.³⁶

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 3*, the *NPPF* (at Paragraphs 201 and 202) requires harm to a designated heritage asset to be weighed against the public benefits of the development proposals.³⁷

Recent High Court Decisions have confirmed that enhancement to the historic environment should be considered as a public benefit under the provisions of Paragraphs 201 to 203.³⁸

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).

³¹ Historic England, *GPA*:2, p. 9.

³² Historic England, GPA:3, p. 8.

³³ Historic England, GPA:3, p. 13.

³⁴ Historic England, *GPA*:3, p. 4.

³⁵ Historic England, GPA 3., p. 8.

 ³⁶ Palmer v Herefordshire Council & Anor [2016] EWCA Civ 1061.
 ³⁷ DLUHC, NPPF, paras. 201 and 202.

³⁸ Including – Kay, R (on the application of) v Secretary of State for Housing Communities and Local Government & Anor [2020] EWHC 2292 (Admin); DLUHC, *NPPF*, paras. 201 and 203.

Public benefits should flow from the proposed development. They should be of a nature or scale to be of benefit to the public at large and not just be a private benefit. However, benefits do not always have to be visible or accessible to the public in order to be genuine public benefits, for example, works to a listed private dwelling which secure its future as a designated heritage asset could be a public benefit.

Examples of heritage benefits may include:

- sustaining or enhancing the significance of a heritage asset and the contribution of its setting
- reducing or removing risks to a heritage asset
- securing the optimum viable use of a heritage asset in support of its long term conservation."³⁹

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.

³⁹ MHCLG, *PPG*, paragraph 020, reference ID: 18a–020–20190723.

Appendix 2: 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.⁴⁰ It does not provide statutory protection for non-designated or Locally Listed heritage assets.

Section 66(1) of the Act goes on to state 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."⁴¹

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."⁴²

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 202 of the current, revised NPPF, see **Appendix 3**), this is in keeping with the requirements of the 1990 Act.⁴³

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.⁴⁴

⁴⁰ UK Public General Acts, Planning (Listed Buildings and Conservation Areas) Act 1990.

⁴¹ UK Public General Acts, Planning (Listed Buildings and Conservation Areas) Act 1990, Section 66(1).

 $^{^{\}rm 42}$ Barnwell Manor Wind Energy Ltd v (1) East Northamptonshire DC & Others [2014] EWCA Civ 137. para. 24.

⁴³ Jones v Mordue [2015] EWCA Civ 1243.

⁴⁴ UK Public General Acts, Planning and Compulsory Purchase Act 2004, Section 38(6).

Appendix 3: National Policy Guidance

The National Planning Policy Framework (July 2021)

National policy and guidance is set out in the Government's National Planning Policy Framework (NPPF) published in July 2021. This replaced and updated the previous NPPF 2019. 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 clear 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."⁴⁵

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 180) and/or designated as Sites of Special Scientific Interest; land designated as Green Belt, Local Green Space, an Area of Outstanding Natural Beauty, 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 68); and areas at risk of flooding or coastal change."⁴⁶ (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)."⁴⁷

⁴⁵ DLUHC, *NPPF*, para. 11.

⁴⁶ DLUHC, *NPPF*, para. 11, fn. 7.

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."⁴⁸

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."⁴⁹

Section 16 of the NPPF relates to 'Conserving and enhancing the historic environment' and states at paragraph 195 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."⁵⁰ Paragraph 197 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."⁵¹

With regard to the impact of proposals on the significance of a heritage asset, paragraphs 199 and 200 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 asset, the greater the weight should be). This is irrespective of whether any potential harm amounts to

 ⁴⁸ DLUHC, *NPPF*, p. 66.
 ⁴⁹ DLUHC, *NPPF*, pp. 71–72.

substantial harm, total loss or less than substantial harm to its significance."⁵²

"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."⁵³

Section b) of paragraph 200, which describes assets of the highest significance, also includes footnote 68 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 201 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."⁵⁴

Paragraph 202 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."⁵⁵

With regards to non-designated heritage assets, paragraph 203 of NPPF states that:

"The effect of an application on the significance of a non-designated heritage asset should be taken into

⁵² DLUHC, *NPPF*, para. 199. ⁵³ DLUHC, *NPPF*, para. 200.

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."⁵⁶

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 Department for Levelling Up, Housing and Communities (DLUHC)) 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."⁵⁷

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 still be less than substantial harm or conceivably not harmful at all, for example, when removing later inappropriate additions to historic buildings which

July 2022 | RW | P20-1300

⁵⁶ DLUHC, *NPPF*, para. 203.

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."⁵⁸ (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."⁵⁹

"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."⁶⁰

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."⁶¹

 ⁵⁸ DLUHC, *PPG*, paragraph O18, reference ID: 18a-O18-20190723.
 ⁵⁹ DLUHC, *NDG*, para. 46.

Appendix 4: Relevant Development Plan Policies

Planning applications within Uttlesford District are currently considered against the policy and guidance set out within the Uttlesford Local Plan (adopted January 2005). This includes the following relevant policies:

"Policy ENV2 – Development affecting Listed Buildings

Development affecting a listed building should be in keeping with its scale, character and surroundings. Demolition of a listed building, or development proposals that adversely affect the setting, and alterations that impair the special characteristics of a listed building will not be permitted. In cases where planning permission might not normally be granted for the conversion of listed buildings to alternative uses, favourable consideration may be accorded to schemes which incorporate works that represent the most practical way of preserving the building and its architectural and historic characteristics and its setting."

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

"Policy ENV9 – Historic Landscapes

Development proposals likely to harm significant local historic landscapes, historic parks and gardens and protected lanes as defined on the proposals map will not be permitted unless the need for the development outweighs the historic significance of the site."

"Policy ENV4 – Ancient Monuments and Sites of Archaeological Importance

Where nationally important archaeological remains, whether scheduled or not, and their settings, are affected by proposed development there will be a

Appendix 5: Gazetteer of Heritage Data

Heritage Data

HER Event Data

EvUID	Record Type	Name
EEX13884	AI	PART EXCAV by Knocker,
EEX13885	FSR	PART SURVEY by OS
EEX52369	AI	Excavation at the Rookery
EEX73O	FSR	FULL SURVEY by OS,
EEX731	AI	PART EXCAV by Stewart, Dr A S,
EEX733	FSR	PART SURVEY by Legg, T,
EEX745	FSR	Field visit to 122 by Paterson, H, FMW on NOV-1979
EEX746	FSR	Field visit to 122 by Chant, K, FMW on DEC-1982
EEX59298	FSR	Peyton Hall, Clavering Road, Manuden, Essex. CM23 1AA. Historic building recording and analysis of the shelter.

HER Monument Data

MonUID	EHCR_No	Record Type	Site_Name	MonType	Period
MEX1010888	35477	LB	Church of St Nicholas, Berden	CHURCH	Medieval
MEX1010889	35478	LB	Berden Hall	HOUSE	Medieval to Post Medieval
MEX1010890	35479	LB	Granary to NE of Berden Hall	GRANARY	Medieval to Post Medieval
MEX1010891	35480	LB	The Forge Cottage	TIMBER FRAMED HOUSE	Post Medieval



MEX1010892	35481	LB	White House Farmhouse	TIMBER FRAMED HOUSE	Medieval to Post Medieval
MEX1010893	35482	LB	Post Office and Store	TIMBER FRAMED HOUSE; SHOP	Post Medieval
MEX1010899	35488	LB	Brick House	HOUSE	Medieval to Post Medieval
MEX1010900	35489	LB	Rose Garth	TIMBER FRAMED HOUSE	Post Medieval
MEX1010901	35490	LB	The Crump and former barn (now room) adjoining to NW	TIMBER FRAMED HOUSE; TIMBER FRAMED BARN	Medieval to Post Medieval
MEX1010903	35492	LB	Jersey Farmhouse	TIMBER FRAMED HOUSE	Post Medieval
MEX1010904	35493	LB	Rowan Cottage	TIMBER FRAMED HOUSE	Post Medieval
MEX1010905	35494	LB	Gate Cottage	TIMBER FRAMED HOUSE	Post Medieval
MEX1010906	35495	LB	Rooks Farmhouse	TIMBER FRAMED HOUSE	Post Medieval
MEX1011364	35949	BLD	Two barn range to SW of Thrifts Farmhouse	TIMBER FRAMED BARN	Post Medieval
MEX1011663	36248	LB	Peyton Hall	TIMBER FRAMED HOUSE	Post Medieval
MEX1011664	36249	LB	Barn to SE of Peyton Hall	TIMBER FRAMED BARN	Post Medieval
MEX1011671	36256	LB	Saffrons	TIMBER FRAMED HOUSE	Post Medieval
MEX1011672	36257	LB	Hillview	TIMBER FRAMED HOUSE	Post Medieval
MEX1011673	36258	LB	Battles Hall	TIMBER FRAMED HOUSE	Post Medieval
MEX1011674	36259	LB	Cart lodge 30m SE of Battles	CART SHED	Post Medieval
MEX1011675	36260	LB	Dovecote 30m NW of Battles	DOVECOTE	Post Medieval
MEX1031837	39279	LB	Dane Pytle	TIMBER FRAMED HOUSE	Post Medieval
MEX1040224	47345	FS	Woollens field, Manuden, detecting survey, Roman finds	FINDSPOT	Roman
MEX1040225	47346	FS	Woollens field, Manuden	FINDSPOT	Medieval

MEX1040226	47347	FS	Detecting survey at Woollens Field, Saucemeres, Manuden	FINDSPOT	Post Medieval
MEX1040228	47349	FS	Detecting survey at Sands field, Saucemeres, Manuden, Roman	FINDSPOT	Roman
MEX1040229	47350	FS	Detecting survey at Sands Field, Saucemeres, Manuden	FINDSPOT	Post Medieval
MEX1042352	50661	PAS	A Portable Antiquities Scheme findspot of unknown date.	FINDSPOT	Unknown
MEX1042353	50662	PAS	A Portable Antiquities Scheme findspot of Roman to Unknown date.	FINDSPOT	Roman to Unknown
MEX1042354	50663	PAS	A Portable Antiquities Scheme findspot of Roman to Unknown date.	FINDSPOT	Roman to Unknown
MEX1042675	50984	PAS	A Portable Antiquities Scheme findspot of Middle Bronze Age to Late Bronze Age date.	FINDSPOT	Middle Bronze Age to Late Bronze Age
MEX1042791	51100	PAS	A Portable Antiquities Scheme findspot of Early Bronze Age to Late Bronze Age date.	FINDSPOT	Early Bronze Age to Late Bronze Age
MEX1042879	51188	PAS	A Portable Antiquities Scheme findspot of Early Medieval date.	FINDSPOT	Early Medieval
MEX1043043	51352	PAS	A Portable Antiquities Scheme findspot of Early Medieval date.	FINDSPOT	Early Medieval
MEX1043195	51504	PAS	A Portable Antiquities Scheme findspot of Late Iron Age to Roman date.	FINDSPOT	Late Iron Age to Roman
MEX1043201	51510	PAS	A Portable Antiquities Scheme findspot of Late Iron Age to Roman date.	FINDSPOT	Late Iron Age to Roman
MEX1043203	51512	PAS	A Portable Antiquities Scheme findspot of Late Iron Age date.	FINDSPOT	Late Iron Age

MEX1043629	51938	PAS	A Portable Antiquities Scheme findspot of Early Medieval to Post Medieval date.	FINDSPOT	Early Medieval to Post Medieval
MEX1043646	51955	PAS	A Portable Antiquities Scheme findspot of Late Iron Age to Roman date.	FINDSPOT	Late Iron Age to Roman
MEX1043844	52153	PAS	A Portable Antiquities Scheme findspot of Medieval date.	FINDSPOT	Medieval
MEX1043848	52157	PAS	A Portable Antiquities Scheme findspot of Medieval date.	FINDSPOT	Medieval
MEX1043849	52158	PAS	A Portable Antiquities Scheme findspot of Medieval date.	FINDSPOT	Medieval
MEX1043852	52161	PAS	A Portable Antiquities Scheme findspot of Medieval date.	FINDSPOT	Medieval
MEX1043853	52162	PAS	A Portable Antiquities Scheme findspot of Medieval date.	FINDSPOT	Medieval
MEX1043856	52165	PAS	A Portable Antiquities Scheme findspot of Medieval date.	FINDSPOT	Medieval
MEX1043858	52167	PAS	A Portable Antiquities Scheme findspot of Medieval date.	FINDSPOT	Medieval
MEX1043863	52172	PAS	A Portable Antiquities Scheme findspot of Medieval date.	FINDSPOT	Medieval
MEX1043865	52174	PAS	A Portable Antiquities Scheme findspot of unknown date.	FINDSPOT	Unknown
MEX1043867	52176	PAS	A Portable Antiquities Scheme findspot of Medieval date.	FINDSPOT	Medieval
MEX1043874	52183	PAS	A Portable Antiquities Scheme findspot of Medieval date.	FINDSPOT	Medieval
MEX1043875	52184	PAS	A Portable Antiquities Scheme findspot of Medieval date.	FINDSPOT	Medieval

MEX1043878	52187	PAS	A Portable Antiquities Scheme findspot of Medieval date.	FINDSPOT	Medieval
MEX1045005	53314	PAS	A Portable Antiquities Scheme findspot of Medieval to Post Medieval date.	FINDSPOT	Medieval to Post Medieval
MEX1045007	53316	PAS	A Portable Antiquities Scheme findspot of Medieval to Post Medieval date.	FINDSPOT	Medieval to Post Medieval
MEX1045012	53321	PAS	A Portable Antiquities Scheme findspot of Medieval to Post Medieval date.	FINDSPOT	Medieval to Post Medieval
MEX1045617	53926	PAS	A Portable Antiquities Scheme findspot of Post Medieval date.	FINDSPOT	Post Medieval
MEX1045619	53928	PAS	A Portable Antiquities Scheme findspot of Post Medieval date.	FINDSPOT	Post Medieval
MEX1045622	53931	PAS	A Portable Antiquities Scheme findspot of Post Medieval date.	FINDSPOT	Post Medieval
MEX1045635	53944	PAS	A Portable Antiquities Scheme findspot of Post Medieval date.	FINDSPOT	Post Medieval
MEX1045636	53945	PAS	A Portable Antiquities Scheme findspot of Post Medieval date.	FINDSPOT	Post Medieval
MEX1045637	53946	PAS	A Portable Antiquities Scheme findspot of Medieval to Post Medieval date.	FINDSPOT	Medieval to Post Medieval
MEX1046984	55293	PAS	A Portable Antiquities Scheme findspot of Roman date.	FINDSPOT	Roman
MEX1046985	55294	PAS	A Portable Antiquities Scheme findspot of Roman to Early Medieval date.	FINDSPOT	Roman to Early Medieval
MEX1046986	55295	PAS	A Portable Antiquities Scheme findspot of Roman date.	FINDSPOT	Roman
MEX1046988	55297	PAS	A Portable Antiquities Scheme findspot of Late Iron Age to Roman date.	FINDSPOT	Late Iron Age to Roman

MEX1046989	55298	PAS	A Portable Antiquities Scheme findspot of Roman date.	FINDSPOT	Roman
MEX1046991	55300	PAS	A Portable Antiquities Scheme findspot of Roman date.	FINDSPOT	Roman
MEX1046994	55303	PAS	A Portable Antiquities Scheme findspot of Late Iron Age to Roman date.	FINDSPOT	Late Iron Age to Roman
MEX1046995	55304	PAS	A Portable Antiquities Scheme findspot of Roman date.	FINDSPOT	Roman
MEX1046996	55305	PAS	A Portable Antiquities Scheme findspot of Roman to Early Medieval date.	FINDSPOT	Roman to Early Medieval
MEX1046997	55306	PAS	A Portable Antiquities Scheme findspot of Roman date.	FINDSPOT	Roman
MEX1046998	55307	PAS	A Portable Antiquities Scheme findspot of Roman date.	FINDSPOT	Roman
MEX1046999	55308	PAS	A Portable Antiquities Scheme findspot of Roman date.	FINDSPOT	Roman
MEX1047000	55309	PAS	A Portable Antiquities Scheme findspot of Roman date.	FINDSPOT	Roman
MEX1047002	55311	PAS	A Portable Antiquities Scheme findspot of Late Iron Age to Roman date.	FINDSPOT	Late Iron Age to Roman
MEX1047004	55313	PAS	A Portable Antiquities Scheme findspot of Roman date.	FINDSPOT	Roman
MEX1047006	55315	PAS	A Portable Antiquities Scheme findspot of Roman date.	FINDSPOT	Roman
MEX1047008	55317	PAS	A Portable Antiquities Scheme findspot of Late Iron Age to Roman date.	FINDSPOT	Late Iron Age to Roman
MEX1047009	55318	PAS	A Portable Antiquities Scheme findspot of Roman date.	FINDSPOT	Roman

MEX1047010	55319	PAS	A Portable Antiquities Scheme findspot of Roman date.	FINDSPOT	Roman
MEX1047020	55329	PAS	A Portable Antiquities Scheme findspot of Late Iron Age to Roman date.	FINDSPOT	Late Iron Age to Roman
MEX1047022	55331	PAS	A Portable Antiquities Scheme findspot of Roman date.	FINDSPOT	Roman
MEX1047023	55332	PAS	A Portable Antiquities Scheme findspot of Roman to Early Medieval date.	FINDSPOT	Roman to Early Medieval
MEX1049337	48901	MON	Land at The Crump, Brickhouse Lane, Berden, Essex		Unknown
MEX1049882	49231	BLD	Peyton Hall, Clavering Road, Manuden, Essex		Unknown
MEX1034468	19566	MON	Mount Pleasant	FIELD BOUNDARY; RING DITCH; ENCLOSURE	Unknown
MEX1036848	19562	MON	Berden	FIELD BOUNDARY	Unknown
MEX1036849	19563	MON	Battles Wood, Manuden	FIELD BOUNDARY	Unknown
MEX1036850	19565	MON	Little London, Berden	FIELD BOUNDARY	Unknown
MEX1036852	19568	MON	Battles Cottage, Manuden	RING DITCH	Unknown
MEX1036853	19569	MON	Mallows Green, Manuden	FIELD BOUNDARY	Unknown
MEX1038985	46423	MON	Crabb's Green	RING DITCH; FIELD BOUNDARY; ENCLOSURE	Lower Palaeolithic to Medieval
MEX1038986	46430	MON	Coles Green	RING DITCH; FIELD BOUNDARY	Lower Palaeolithic to Medieval
MEX1040223	47344	FS	Woollens field, Manuden, detecting survey, prehistoric finds	FINDSPOT	Bronze Age
MEX1040815	47982	MON	White Hart Farm	ENCLOSURE	Later Prehistoric

1		
	Г	
Ϊ		

MEX1040227	47348	FS	Detecting survey Sands Field, Saucemeres, Manuden, prehistoric	FINDSPOT; FINDSPOT	Late Bronze Age to Late Iron Age
MEX1049337	48901	MON	Land at The Crump, Brickhouse Lane, Berden, Essex		Unknown
MEX13883	3854	MON	The Rookery or Cumber Hills	RINGWORK; HEARTH	Medieval
MEX13893	3855	MON	Battles Manor House-the moat	MOAT; HOUSE; GARDEN WALL	Medieval
MEX13896	3856	MON	Battles Manor House	HOUSE; GARDEN WALL; GATE	Post Medieval
MEX13898	3857	MON	Battles Manor House-Cropmarks south of	RECTILINEAR ENCLOSURE	Unknown
MEX13908	3861	MON	Berden Hall	HOUSE; GRANARY	Post Medieval
MEX13914	3863	MON	Berden Wesleyan Chapel-Beaker burial under	INHUMATION	Early Bronze Age
MEX13939	3875	MON	Battle's Wood-cropmarks north west of	RECTANGULAR ENCLOSURE; SITE	Unknown
MEX729	122	MON	Stock's Farm - The Crump	RINGWORK; MOAT; FLOOR; POST HOLE	Medieval
MEX13942	3876	MON	Mount Pleasant – cropmarks near	FIELD BOUNDARY; ENCLOSURE; DITCH	Medieval

Historic England Data

Historic England Listed Buildings

List Entry	Name	Grade	Easting	Northing
1112468	BERDEN HALL	*	546746	229505.3608
1112469	WHITE HOUSE FARMHOUSE	Ш	546865.6735	229827.5102

1112471	THE CRUMP AND FORMER BARN (NOW ROOM) ADJOINING TO NORTH- WEST	II	546940	228949.3608
1112472	GATE COTTAGE	II	547723	229554.3608
1170264	CHURCH OF ST NICHOLAS	Ι	546769	229630.3608
1170276	POST OFFICE AND STORE	Ш	546835.1589	229811.3374
1170281	MARTIN'S GREEN	Ш	546785	229858.3608
1170302	BRICK HOUSE	Ш	546868	228368.3608
1170316	ROOKS FARMHOUSE	Ш	547535	229402.3608
1233139	PEYTON HALL	Ш	547973	228803.3608
1233141	BARN TO SOUTH EAST OF PEYTON HALL	Ш	547994	228771.3608
1233147	SAFFRONS	Ш	548006	227650.3608
1233148	MALLOWS GREEN FARMHOUSE	Ш	547209	226598.3608
1233150	SAUCEMERES FARMHOUSE	Ш	547262	226791.3608
1233623	PINCHPOOL	Ш	549055	227622.3608
1233642	99, THE STREET	Ш	548694	227048.3608
1233997	OAKDALE	Ш	548700	227034.3608
1239353	CART LODGE 30 METRES SOUTH EAST OF BATTLES	Ш	547575	227632.3608
1239462	DOVECOTE 30 METRES NORTH WEST OF BATTLES	Ш	547534	227725.3608
1273717	DANE PYTLE	Ш	547757	229457.3608
1276474	LAUREL COTTAGE	Ш	548711	227066.3608
1276515	BARN TO SOUTH WEST AT RIGHT ANGLES TO PINCHPOOLS	II	549042	227603.3608
1276516	BARN TO EAST OF PINCHPOOLS	II	549084	227602.3608
1276524	CHAPEL COTTAGE	II	548680	227032.3608
1276720	BATTLES HALL	Ш	547557	227675.3608



				1
1276721	85 AND 85A, MALLOWS GREEN	II	547112	226610.3608
1276749	HILLVIEW	II	547854	227679.3608
1306121	ROWAN COTTAGE	Ш	547716	229314.3608
1306141	GRANARY NORTH EAST OF BERDEN HALL	Ш	546781.1419	229530.3687
1307885	GREENS FARMHOUSE	Ш	545426	227819.3608
1322441	THE FORGE COTTAGE	Ш	546908	229814.3608
1322442	ROSE COTTAGE	Ш	546828.6693	229846.8804
1322443	ROSE GARTH	Ш	546887	228561.3608
1322444	JERSEY FARMHOUSE	II	547747	229310.3608

Historic England Scheduled Monuments

List Entry	Name	Easting	Northing
1009308	The Crump: a ringwork 600m south of Berden	547002.7557	228956.3413
1011630	Moated site at Battles Manor	547519.846	227650.6729

P

Appendix 6: Designation Descriptions





Moated site at Battles Manor

Overview

Heritage Category: Scheduled Monument

List Entry Number: 1011630

Date first listed: 17-Sep-1993



© Crown Copyright and database right 2021. All rights reserved. Ordnance Survey Licence number 100024900. © British Crown and SeaZone Solutions Limited 2021. All rights reserved. Licence number 102006.006. Use of this data is subject to <u>Terms and Conditions</u> (*https://historicengland.org.uk/terms/website-terms-conditions/*).

The above map is for quick reference purposes only and may not be to scale. For a copy of the full scale map, please see the attached PDF -**1011630.pdf**

(https://mapservices.HistoricEngland.org.uk/printwebservicehle/StatutoryPrint.svc/10598/HLE_A4L_NoGrade\HLE_A3L_NoGrade.pdf)

The PDF will be generated from our live systems and may take a few minutes to download depending on how busy our servers are. We apologise for this delay.

This copy shows the entry on 16-Mar-2021 at 15:50:26.

Location

The building or site itself may lie within the boundary of more than one authority.

- County:
- Essex

District: Uttlesford (District Authority)

Parish: Manuden

National Grid Reference: TL 47518 27651

Reasons for Designation

Around 6,000 moated sites are known in England. They consist of wide ditches, often or seasonally water-filled, partly or completely enclosing one or more islands of dry ground on which stood domestic or religious buildings. In some cases the islands were used for horticulture. The majority of moated sites served as prestigious aristocratic and seigneurial residences with the provision of a moat intended as a status symbol rather than a practical military defence. The peak period during which moated sites were built was between about 1250 and 1350 and by far the greatest concentration lies in central and eastern parts of England. However, moated sites were built throughout the medieval period, are widely scattered throughout England and exhibit a high level of diversity in their forms and sizes. They form a significant class of medieval monument and are important for the understanding of the distribution of wealth and status in the countryside. Many examples provide conditions favourable to the survival of organic remains.

Although two of the moat arms are no longer visible, the moated site at Battles Manor remains well preserved and will retain archaeological information relating to the occupation of the site and the waterfilled ditches will retain environmental evidence pertaining to the economy of its inhabitants and the landscape in which they lived.

Details

The monument includes a rectangular shaped moated site situated on an east-facing slope overlooking the River Stort, 1.75km north-west of Manuden church. The northern and southern moat arms remain visible. The eastern and western arms have been infilled, but will survive as buried features. The southern arm measures 60m in length while the northern arm is 52m long. Both arms are 12m wide and are waterfilled. The garden between the two moat arms contains a heavy scatter of tile fragments which indicates a former structure, probably the original house, which is documented as dating from the 14th century. The garden wall, which runs along the south side of the northern arm and continues along the western edge of the island, is constructed of early brick and contains a 16th century entrance which is now blocked up. The wall and blocked gateway are included in the scheduling. The present Battles Manor House, which dates from the mid 17th century, is situated in the north-east corner of the area of the scheduling and is Listed Grade II. The house, outbuildings and paths are all excluded from the scheduling although the ground beneath them is included.

MAP EXTRACT The site of the monument is shown on the attached map extract. It includes a 2 metre boundary around the archaeological features, considered to be essential for the monument's support and preservation.

Legacy

The contents of this record have been generated from a legacy data system.

- Legacy System number: 20689
- Legacy System: RSM

Sources

Other

TL 42 NE 7, Information from National Archaeological Record (TL 42 NE 7),

Legal

This monument is scheduled under the Ancient Monuments and Archaeological Areas Act 1979 as amended as it appears to the Secretary of State to be of national importance. This entry is a copy, the original is held by the Department for Digital, Culture, Media and Sport.

End of official listing



BATTLES HALL

Overview

Heritage Category: Listed Building

Grade: II

List Entry Number: 1276720

Date first listed: 26-Nov-1951

Date of most recent amendment: 22-Feb-1980

Statutory Address: BATTLES HALL, MAGGOTS END





© Crown Copyright and database right 2021. All rights reserved. Ordnance Survey Licence number 100024900. © British Crown and SeaZone Solutions Limited 2021. All rights reserved. Licence number 102006.006. Use of this data is subject to <u>Terms and Conditions</u> (*https://historicengland.org.uk/terms/website-terms-conditions/*).

The above map is for quick reference purposes only and may not be to scale. For a copy of the full scale map, please see the attached PDF - **1276720.pdf**

(https://mapservices.HistoricEngland.org.uk/printwebservicehle/StatutoryPrint.svc/405574/HLE_A4L_Grade\HLE_A3L_Grade.pdf)

The PDF will be generated from our live systems and may take a few minutes to download depending on how busy our servers are. We apologise for this delay.

This copy shows the entry on 16-Mar-2021 at 15:51:24.

Location

Statutory Address: BATTLES HALL, MAGGOTS END

The building or site itself may lie within the boundary of more than one authority. County: Essex

District: Uttlesford (District Authority)

Parish: Manuden

National Grid Reference: TL 47557 27675

Details

MANUDEN MAGGOTS END 1. 5222 Battles Hall [formerly listed as Battles Farmhouse (or Manor House)] TL 42 NE 21/564 26.11.51

||

2. Partly moated timber-framed building built circa 1660 with some materials from an early house on the site. It was the seat of the Waad family until the later C17. Renovated, with the ground storey faced in brick and the upper storey plastered. Two storeys, attics and cellars. A 2 storeyed entrance porch projects on the front. One:one:two window range on the upper storey and 2:2 window range on the ground storey. The windows are mainly double-hung sashes with glazing bars. South of the porch there is an original mullioned and transomed window with leaded lights. The doorways have original frames and, on the inside, there is an original panelled door. Roof tiled, hipped at the north and south ends, with an original central chimney stack with a moulded brick stringcourse to the base. (RCHM 3).

Listing NGR: TL4755727675

Legacy

The contents of this record have been generated from a legacy data system.

- Legacy System number: 408610
- Legacy System: LBS

Legal

This building is listed under the Planning (Listed Buildings and Conservation Areas) Act 1990 as amended for its special architectural or historic interest.

End of official listing



DOVECOTE 30 METRES NORTH WEST OF BATTLES

 $Q \equiv$

Overview

Heritage Category: Listed Building

Grade: II

List Entry Number: 1239462

Date first listed: 26-Oct-1983

Statutory Address: DOVECOTE 30 METRES NORTH WEST OF BATTLES, MAGGOTS END



© Crown Copyright and database right 2021. All rights reserved. Ordnance Survey Licence number 100024900. © British Crown and SeaZone Solutions Limited 2021. All rights reserved. Licence number 102006.006. Use of this data is subject to <u>Terms and Conditions</u> (*https://historicengland.org.uk/terms/website-terms-conditions/*).

The above map is for quick reference purposes only and may not be to scale. For a copy of the full scale map, please see the attached PDF - **1239462.pdf**

(https://mapservices.HistoricEngland.org.uk/printwebservicehle/StatutoryPrint.svc/219951/HLE_A4L_Grade\HLE_A3L_Grade.pdf)

The PDF will be generated from our live systems and may take a few minutes to download depending on how busy our servers are. We apologise for this delay.

This copy shows the entry on 16-Mar-2021 at 15:51:46.

Location

Statutory Address: DOVECOTE 30 METRES NORTH WEST OF BATTLES, MAGGOTS END

The building or site itself may lie within the boundary of more than one authority. County:

Essex

District: Uttlesford (District Authority)

Parish: Manuden

National Grid Reference: TL 47534 27725

Details

MANUDEN MAGGOTS END 1. 5222 Dovecote 30m north-west TL SW 19/565B of Battles

II GV

2. Red brick flemish bond 18/19C, 2 storeys under gambrel old tiled roof. Under eaves dogtooth cornice. One storey lean-to on south end, initialled and dated 1812 above entrance door.

Listing NGR: TL4753427725

Legacy

The contents of this record have been generated from a legacy data system.

- Legacy System number: 417210
- Legacy System:
- LBS

Legal

This building is listed under the Planning (Listed Buildings and Conservation Areas) Act 1990 as amended for its special architectural or historic interest.

End of official listing



CART LODGE 30 METRES SOUTH EAST OF BATTLES

 $Q \equiv$

Overview

Heritage Category: Listed Building

Grade: II

List Entry Number: 1239353

Date first listed: 26-Oct-1983

Statutory Address: CART LODGE 30 METRES SOUTH EAST OF BATTLES, MAGGOTS END



© Crown Copyright and database right 2021. All rights reserved. Ordnance Survey Licence number 100024900. © British Crown and SeaZone Solutions Limited 2021. All rights reserved. Licence number 102006.006. Use of this data is subject to <u>Terms and Conditions</u> (*https://historicengland.org.uk/terms/website-terms-conditions/*).

The above map is for quick reference purposes only and may not be to scale. For a copy of the full scale map, please see the attached PDF - **1239353.pdf**

(https://mapservices.HistoricEngland.org.uk/printwebservicehle/StatutoryPrint.svc/389025/HLE_A4L_Grade\HLE_A3L_Grade.pdf)

The PDF will be generated from our live systems and may take a few minutes to download depending on how busy our servers are. We apologise for this delay.

This copy shows the entry on 16-Mar-2021 at 15:52:07.

Location

Statutory Address: CART LODGE 30 METRES SOUTH EAST OF BATTLES, MAGGOTS END

The building or site itself may lie within the boundary of more than one authority. County: Essex

District: Uttlesford (District Authority)

Parish: Manuden

National Grid Reference: TL 47575 27632

Details

MANUDEN MAGGOTS END 1. 5222 END Cart Lodge 30m TL SW 19/565A South-east of Battles

II GV

2. The cart lodge is 17/18C of seven bays, the northern two bays enclosed. Timberframed and weatherboarded under thatched hipped roof. Curved braces to tie beams, side purlin roof.

Listing NGR: TL4757527632

Legacy

The contents of this record have been generated from a legacy data system.

- Legacy System number: 417209
- Legacy System:
- LBS

Legal

This building is listed under the Planning (Listed Buildings and Conservation Areas) Act 1990 as amended for its special architectural or historic interest.

End of official listing



The Crump: a ringwork 600m south of Berden

Overview

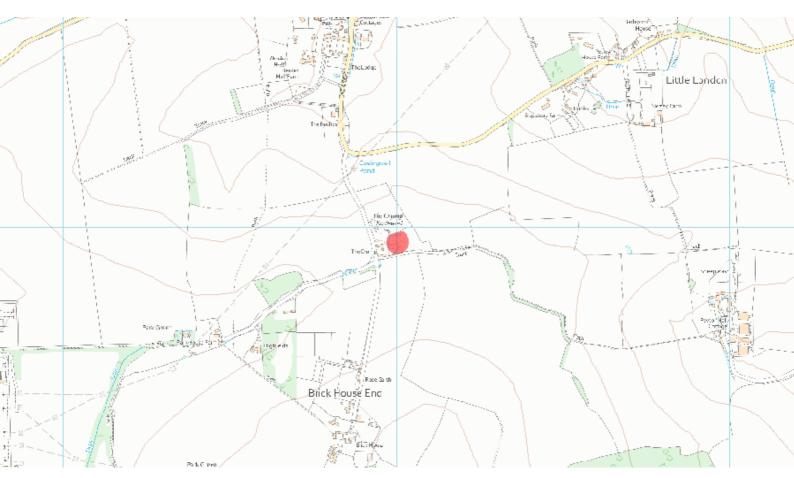
Heritage Category: Scheduled Monument

List Entry Number: 1009308

Date first listed: 22-Sep-1954

Date of most recent amendment: 03-Aug-1992





© Crown Copyright and database right 2021. All rights reserved. Ordnance Survey Licence number 100024900. © British Crown and SeaZone Solutions Limited 2021. All rights reserved. Licence number 102006.006. Use of this data is subject to <u>Terms and Conditions</u> (*https://historicengland.org.uk/terms/website-terms-conditions/*).

The above map is for quick reference purposes only and may not be to scale. For a copy of the full scale map, please see the attached PDF - **1009308.pdf**

(https://mapservices.HistoricEngland.org.uk/printwebservicehle/StatutoryPrint.svc/25903/HLE_A4L_NoGrade\HLE_A3L_NoGrade.pdf)

The PDF will be generated from our live systems and may take a few minutes to download depending on how busy our servers are. We apologise for this delay.

This copy shows the entry on 16-Mar-2021 at 15:52:41.

Location

The building or site itself may lie within the boundary of more than one authority.

- County:
- Essex

District: Uttlesford (District Authority)

Parish: Berden

National Grid Reference: TL 47002 28955

Reasons for Designation

Ringworks are medieval fortifications built and occupied from the late Anglo-Saxon period to the later 12th century. They comprised a small defended area containing buildings which was surrounded or partly surrounded by a substantial ditch and a bank surmounted by a timber palisade or, rarely, a stone wall. Occasionally a more lightly defended embanked enclosure, the bailey, adjoined the ringwork. Ringworks acted as strongholds for military operations and in some cases as defended aristocratic or manorial settlements. They are rare nationally with only 200 recorded examples and less than 60 with baileys. As such, and as one of a limited number and very restricted range of Anglo-Saxon and Norman fortifications, ringworks are of particular significance to our understanding of the period.

Despite limited excavation, The Crump ringwork is well preserved and will retain archaeological information pertaining to the occupation of the site and environmental evidence relating both to the economy of its inhabitants and the landscape in which they lived.

Details

The monument comprises a ringwork known as The Crump and is situated on an east-facing slope overlooking the River Stort. The monument includes a raised area of ground which measures 32m in diameter at the base and stands c.3m high. The top of the raised area is saucer-shaped and is 10m in diameter and c.1m deep. This may be due to partial excavation or possibly subsidence of this area. Surrounding the raised area is a moat which has a maximum width of 12m and is about 1.5m deep. The western half of the moat remains waterfilled, while the eastern half has become silted up over the years. In 1958 the owner excavated a small trench in the interior of the mound. A clay floor and a packed post hole were found along with some 12th century pottery and metal fragments.

MAP EXTRACT The site of the monument is shown on the attached map extract. It includes a 2 metre boundary around the archaeological features, considered to be essential for the monument's support and preservation.

Legacy

The contents of this record have been generated from a legacy data system.

- Legacy System number: 20665
- Legacy System: RSM

Sources

Other SMR No: 122, Information from SMR (No 122),

Legal

This monument is scheduled under the Ancient Monuments and Archaeological Areas Act 1979 as amended as it appears to the Secretary of State to be of national importance. This entry is a copy, the original is held by the Department for Digital, Culture, Media and Sport.

End of official listing



BRICK HOUSE

Overview

Heritage Category: Listed Building

Grade: II

List Entry Number: 1170302

Date first listed: 26-Nov-1951

Date of most recent amendment: 22-Feb-1980

Statutory Address: BRICK HOUSE, BRICK HOUSE END $Q \equiv$



© Crown Copyright and database right 2021. All rights reserved. Ordnance Survey Licence number 100024900. © British Crown and SeaZone Solutions Limited 2021. All rights reserved. Licence number 102006.006. Use of this data is subject to <u>Terms and Conditions</u> (*https://historicengland.org.uk/terms/website-terms-conditions/*).

The above map is for quick reference purposes only and may not be to scale. For a copy of the full scale map, please see the attached PDF - **1170302.pdf**

(https://mapservices.HistoricEngland.org.uk/printwebservicehle/StatutoryPrint.svc/419838/HLE_A4L_Grade\HLE_A3L_Grade.pdf)

The PDF will be generated from our live systems and may take a few minutes to download depending on how busy our servers are. We apologise for this delay.

This copy shows the entry on 16-Mar-2021 at 11:06:57.

Location

Statutory Address: BRICK HOUSE, BRICK HOUSE END

The building or site itself may lie within the boundary of more than one authority. County: Essex

District: Uttlesford (District Authority)

Parish: Berden

National Grid Reference: TL 46868 28368

Details

BERDEN BRICK HOUSE END 1. 5222 Brick House (formerly listed as Brick House at Park Green) TL 42 NE 21/80 26.11.51

||

2. A house of C16-C17 origin but completely refaced in red brick in 1670. Five window range double-hung sashes with glazing bars, in flush cased frames. The ground storey windows have segmental heads of 1670. A raised brick band extends across the front between the storeys. Roof slate, hipped at the east and west ends. (RCHM 17).

Listing NGR: TL4686828368

Legacy

The contents of this record have been generated from a legacy data system.

- Legacy System number: 121485
- Legacy System: LBS

Sources

Other An Inventory of the Historical Monuments in Essex North West, (1916)

Legal

This building is listed under the Planning (Listed Buildings and Conservation Areas) Act 1990 as amended for its special architectural or historic interest.

End of official listing



Q

 \equiv

ROSE GARTH

Overview

Heritage Category: Listed Building

Grade: II

List Entry Number: 1322443

Date first listed: 22-Feb-1980

Statutory Address: ROSE GARTH, BRICK HOUSE END



© Crown Copyright and database right 2021. All rights reserved. Ordnance Survey Licence number 100024900. © British Crown and SeaZone Solutions Limited 2021. All rights reserved. Licence number 102006.006. Use of this data is subject to <u>Terms and Conditions</u> (*https://historicengland.org.uk/terms/website-terms-conditions/*).

The above map is for quick reference purposes only and may not be to scale. For a copy of the full scale map, please see the attached PDF - **1322443.pdf**

(https://mapservices.HistoricEngland.org.uk/printwebservicehle/StatutoryPrint.svc/292453/HLE_A4L_Grade\HLE_A3L_Grade.pdf)

The PDF will be generated from our live systems and may take a few minutes to download depending on how busy our servers are. We apologise for this delay.

This copy shows the entry on 16-Mar-2021 at 11:07:00.

Location

Statutory Address: ROSE GARTH, BRICK HOUSE END

The building or site itself may lie within the boundary of more than one authority. County: Essex

District: Uttlesford (District Authority)

Parish: Berden

National Grid Reference: TL 46887 28561

Details

BERDEN BRICK HOUSE END 1. 5222 Rose Garth TL 42 NE 21/81

||

2. C17 timber-framed and plastered building. Restored. One storey and attics. Small casements windows with lattice leaded lights. Roof thatched, with one central stack and one external end stack at the south end. Ripped at the north end. (RCHM 16).

Listing NGR: TL4688728561

Legacy

The contents of this record have been generated from a legacy data system.

- Legacy System number: 121486
- Legacy System:
- LBS

Sources

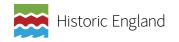
Other

An Inventory of the Historical Monuments in Essex North West, (1916)

Legal

This building is listed under the Planning (Listed Buildings and Conservation Areas) Act 1990 as amended for its special architectural or historic interest.

End of official listing



PEYTON HALL

Overview

Heritage Category: Listed Building

Grade: II

List Entry Number: 1233139

Date first listed: 22-Feb-1980

Statutory Address: PEYTON HALL





© Crown Copyright and database right 2021. All rights reserved. Ordnance Survey Licence number 100024900. © British Crown and SeaZone Solutions Limited 2021. All rights reserved. Licence number 102006.006. Use of this data is subject to <u>Terms and Conditions</u> (*https://historicengland.org.uk/terms/website-terms-conditions/*).

The above map is for quick reference purposes only and may not be to scale. For a copy of the full scale map, please see the attached PDF -**1233139.pdf**

(https://mapservices.HistoricEngland.org.uk/printwebservicehle/StatutoryPrint.svc/214442/HLE_A4L_Grade\HLE_A3L_Grade.pdf)

The PDF will be generated from our live systems and may take a few minutes to download depending on how busy our servers are. We apologise for this delay.

This copy shows the entry on 16-Mar-2021 at 15:54:12.

Location

Statutory Address: PEYTON HALL

The building or site itself may lie within the boundary of more than one authority.

County: Essex

District: Uttlesford (District Authority)

Parish: Manuden

National Grid Reference: TL 47973 28803

Details

MANUDEN 1. 5222 Peyton Hall TL 42 NE 21/1341

I

2. C17 timber-framed and plastered building with later additions and alterations. One storey and attics to the main block. Partly casement windows and partly double-hung sashes some with vertical glazing bars. The ground storey has 3 modern bays. Roof tiled, with 3 sloping roofed dormers and an original central chimney stack.

Listing NGR: TL4797328803

Legacy

The contents of this record have been generated from a legacy data system. Legacy System number:

408598

Legacy System: LBS

Legal

This building is listed under the Planning (Listed Buildings and Conservation Areas) Act 1990 as amended for its special architectural or historic interest.

End of official listing



BARN TO SOUTH EAST OF PEYTON HALL

 $Q \equiv$

Overview

Heritage Category: Listed Building

Grade: II

List Entry Number: 1233141

Date first listed: 22-Feb-1980

Statutory Address: BARN TO SOUTH EAST OF PEYTON HALL



© Crown Copyright and database right 2021. All rights reserved. Ordnance Survey Licence number 100024900. © British Crown and SeaZone Solutions Limited 2021. All rights reserved. Licence number 102006.006. Use of this data is subject to <u>Terms and Conditions</u> (*https://historicengland.org.uk/terms/website-terms-conditions/*).

The above map is for quick reference purposes only and may not be to scale. For a copy of the full scale map, please see the attached PDF - **1233141.pdf**

(https://mapservices.HistoricEngland.org.uk/printwebservicehle/StatutoryPrint.svc/214443/HLE_A4L_Grade\HLE_A3L_Grade.pdf)

The PDF will be generated from our live systems and may take a few minutes to download depending on how busy our servers are. We apologise for this delay.

This copy shows the entry on 16-Mar-2021 at 15:54:15.

Location

Statutory Address: BARN TO SOUTH EAST OF PEYTON HALL

The building or site itself may lie within the boundary of more than one authority. County: Essex

District: Uttlesford (District Authority)

Parish: Manuden

National Grid Reference: TL 47994 28771

Details

MANUDEN 1. 5222 Barn to south-east of Peyton Hall TL 42 NE 21/1342

||

2. C17 timber-framed and weather-boarded 5-bay aisled barn. Roof tiled.

Listing NGR: TL4799428771

Legacy

The contents of this record have been generated from a legacy data system. Legacy System number: 408601

Legacy System: LBS

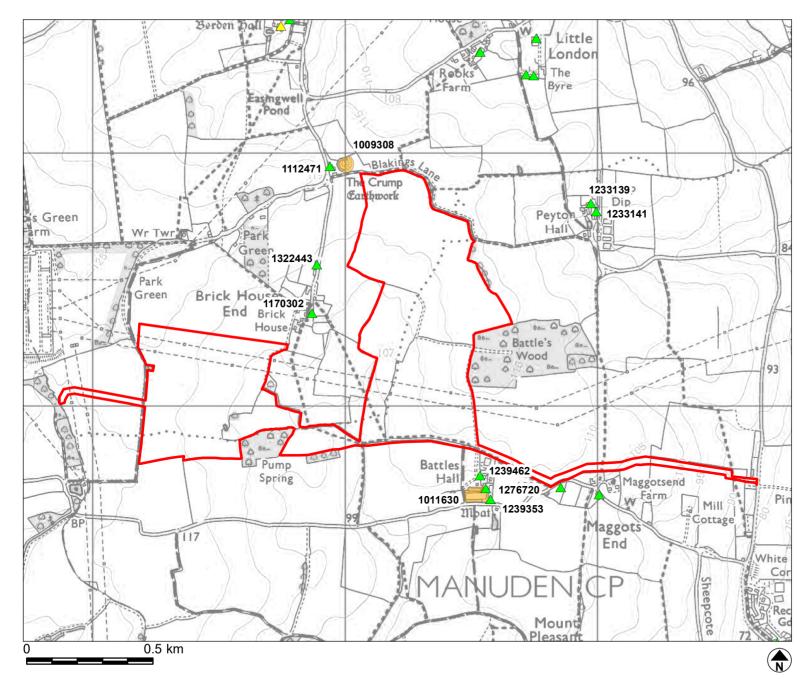
Legal

This building is listed under the Planning (Listed Buildings and Conservation Areas) Act 1990 as amended for its special architectural or historic interest.

End of official listing

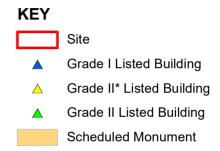


Appendix 7: Figures



PLANNING | DESIGN | ENVIRONMENT | ECONOMICS | HERITAGE

Copyright Pegasus Planning Group Ltd. Crown copyright. All rights reserved. 2019 Emapsite Licence number 0100031673. Ordnance Survey Copyright Licence number 100042093. Promap Licence number 10002449. Pegasus accepts no lability for any use of this document other than for its original purpose, or by the original clent, or following Pegasus' express agreement to such use. T 01285 641717 www.pegasusgroup.co.uk

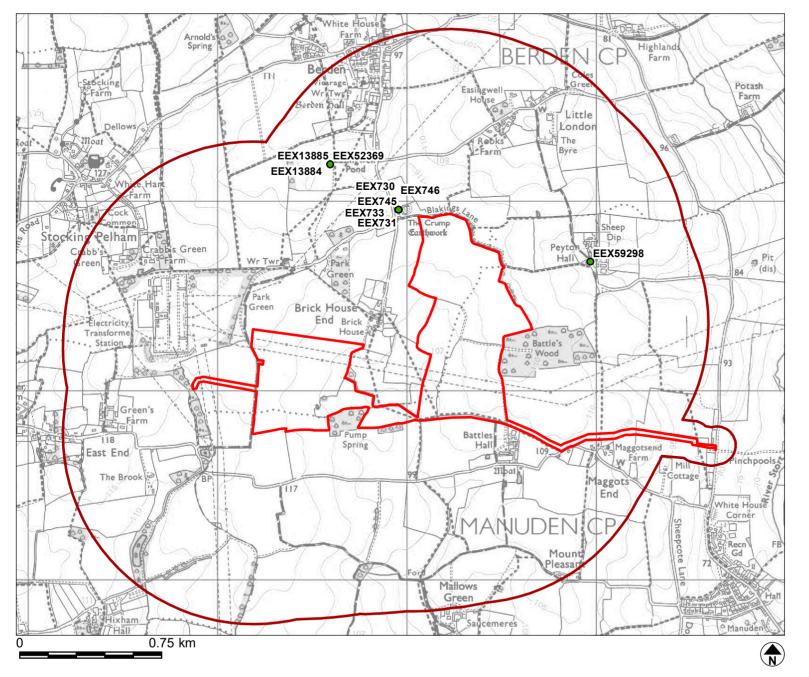


Revisions: First Issue- 26/07/2022 RW Second Issue- 02/09/2022 RW - red line alteration

Figure 1: Designated Heritage Assets

Pelham Spring Solar Farm, Maggotts End

Client: Low Carbon Solar Investment Company Ltd. DRWG No: P20-1300 Sheet No: - REV:-Drawn by: RW Approved by: GST Date: 02/09/2022 Scale: 1:15,000 @ A3





Revisions: First Issue- 26/07/2022 RW Second Issue- 02/09/2022 RW - red line alteration

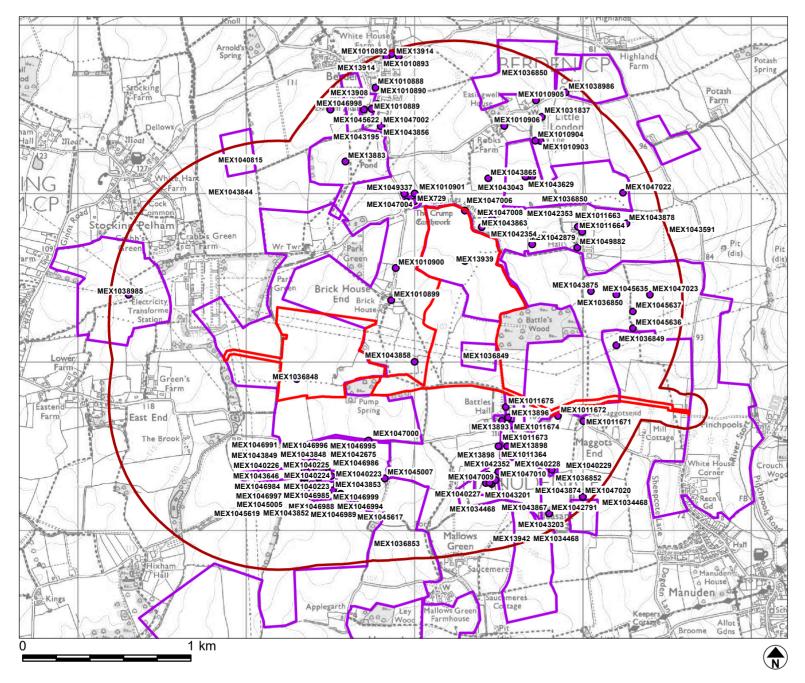
Figure 2: Essex HER Event Data

Pelham Spring Solar Farm, Maggotts End

Client: Low Carbon Solar Investment Company Ltd. DRWG No: P20-1300 Sheet No: - REV: -Drawn by: RW Approved by: GST Date: 02/09/2022 Scale: 1:20,000 @ A3

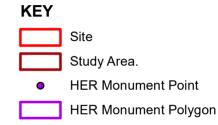
PLANNING | DESIGN | ENVIRONMENT | ECONOMICS | HERITAGE

Copyright Pegasus Planning Group Ltd. Crown copyright. All rights reserved. 2019 Emapsite Licence number 0100031673. Ordnance Survey Copyright Licence number 100042093. Promap Licence number 100020449 Pegasus accepts no lability for any use of this document other than for its original purpose, or by the original client, or following Pegasus' express agreement to such use. T 01285 641717 www.pegasusgroup.co.uk





Copyright Pegasus Planning Group Ltd. Crown copyright. All rights reserved. 2019 Emapsite Licence number 0100031673. Ordnance Survey Copyright Licence number 100042093. Promap Licence number 100020449. Pegasus accepts no liability for any use of this document other than for its original purpose, or by the original clent, or following Pegasus' express agreement to such use. T 01285 641717 www.pegasusgroup.co.uk

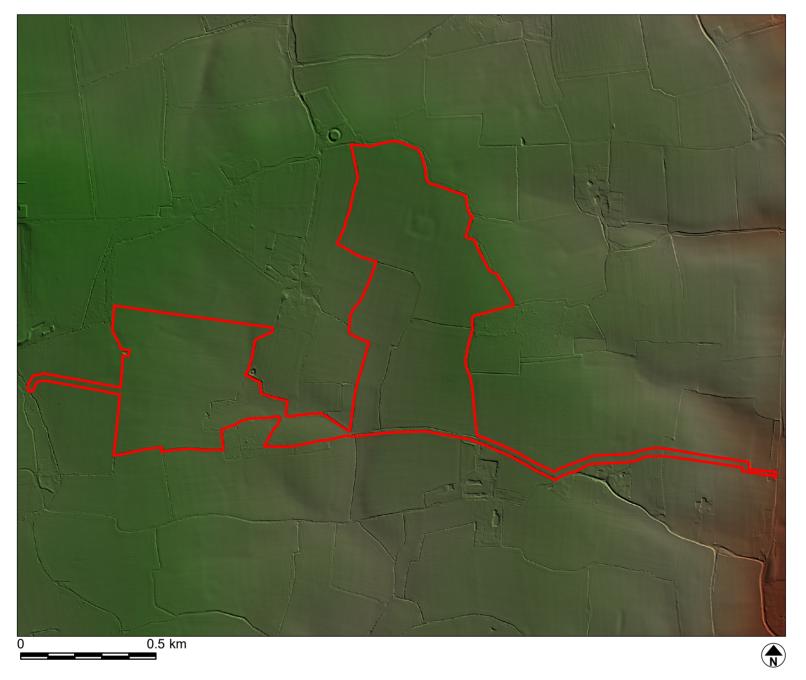


Revisions: First Issue- 26/07/2022 RW Second Issue- 02/09/2022 RW - red line alteration

Figure 3: Essex HER Monument Data

Pelham Spring Solar Farm, Maggotts End

Client: Low Carbon Solar Investment Company Ltd. DRWG No: P20-1300 Sheet No: - REV: -Drawn by: RW Approved by: GST Date: 02/09/2022 Scale: 1:22,500 @ A3



KEY Site

Revisions: First Issue- 29/07/2022 RW Second Issue- 02/09/2022 RW - red line alteration

LiDAR Shaded Relief Model 45 degree azimuth

Pelham Spring Solar Farm, Maggotts End

Client: Low Carbon Solar Investment Compnay Ltd. DRWG No: P20-1300 Sheet No: - REV:-Drawn by: RW Approved by: GST Date: 02/09/2022 Scale: 1:14,000 @ A3

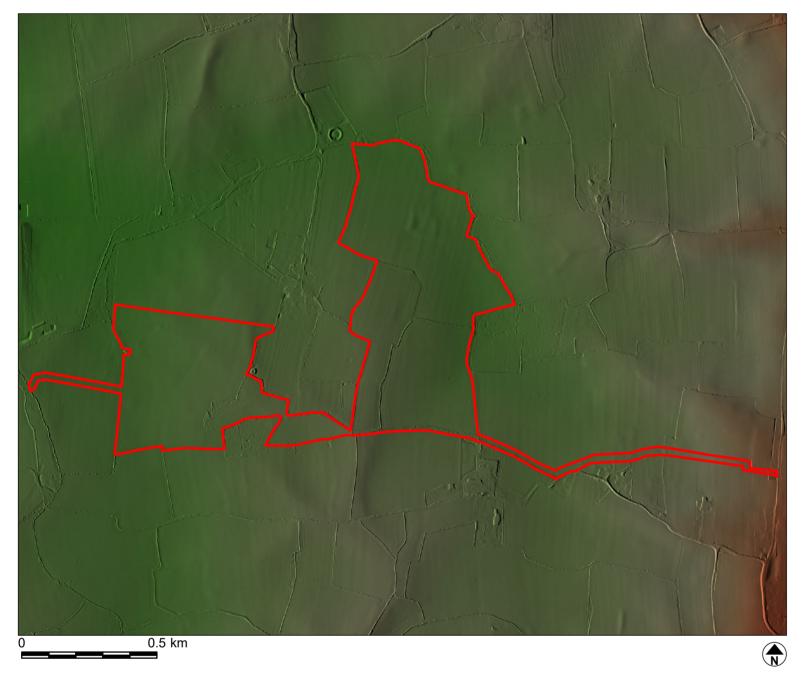
PLANNING | DESIGN | ENVIRONMENT | ECONOMICS | HERITAGE

Copyright Pegasus Planning Group Ltd. Crown copyright. All rights reserved. 2019 Emapsile Licence number 0100031673. Ordnance Survey Copyright Licence number 100042093. Promap Licence number 100020449. Pegasus accepts no lability for any use of this document other than for its original purpose, or by the original client, or following Pegasus' express agreement to such use. T 01285 641717 www.pegasusgroup.co.uk



Appendix 8: LiDAR Shaded-Relief Model

July 2022 | RW | P20-1300



KEY Site

Revisions: First Issue- 29/07/2022 RW Second Issue- 02/09/2022 RW - red line alteration

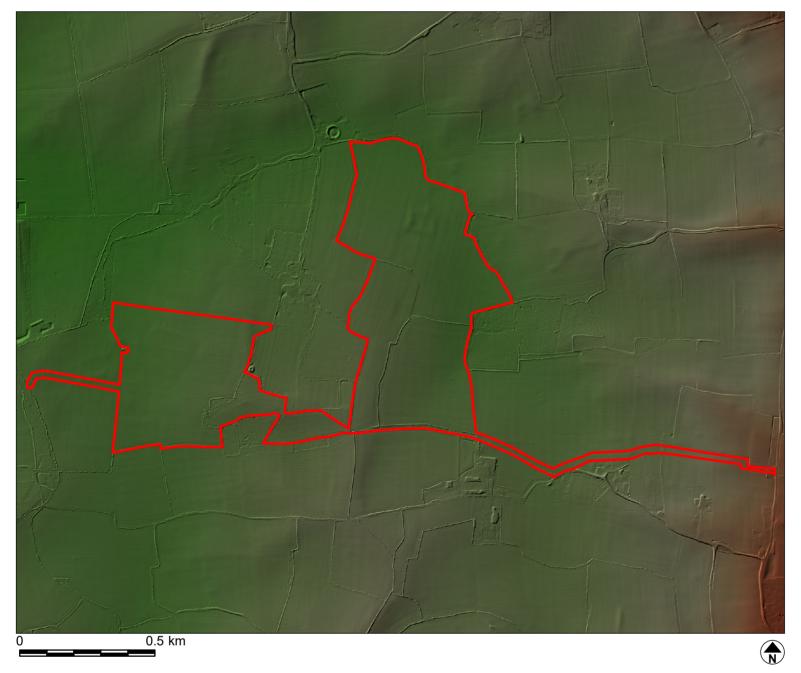
LiDAR Shaded Relief Model 90 degree azimuth

Pelham Spring Solar Farm, Maggotts End

Client: Low Carbon Solar Investment Compnay Ltd. DRWG No: P20-1300 Sheet No: - REV:-Drawn by: RW Approved by: GST Date: 02/09/2022 Scale: 1:14,000 @ A3

PLANNING | DESIGN | ENVIRONMENT | ECONOMICS | HERITAGE

Copyright Pegasus Planning Group Ltd. Crown copyright. All rights reserved. 2019 Emapsile Licence number 0100031673. Ordnance Survey Copyright Licence number 100042093. Promap Licence number 100020449. Pegasus accepts no liability for any use of this document other than for its original purpose, or by the original client, or following Pegasus' express agreement to such use. T 01285 641717 www.pegasusgroup.co.uk



KEY Site

Revisions: First Issue- 29/07/2022 RW Second Issue- 02/09/2022 RW - red line alteration

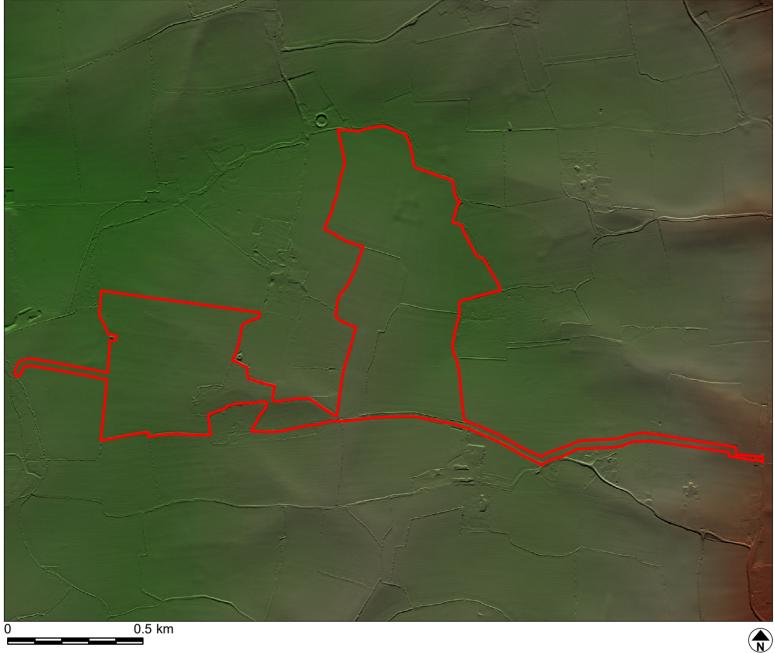
LiDAR Shaded Relief Model 135 degree azimuth

Pelham Spring Solar Farm, Maggotts End

Client: Low Carbon Solar Investment Compnay Ltd. DRWG No: P20-1300 Sheet No: - REV:-Drawn by: RW Approved by: GST Date: 02/09/2022 Scale: 1:14,000 @ A3

PLANNING | DESIGN | ENVIRONMENT | ECONOMICS | HERITAGE

Copyright Pegasus Planning Group Ltd. Crown copyright. All rights reserved. 2019 Emapsile Licence number 0100031673. Ordnance Survey Copyright Licence number 100042093. Promap Licence number 100020449. Pegasus accepts no lability for any use of this document other than for its original purpose, or by the original clent, or following Pegasus' express agreement to such use. T 01285 641717 www.pegasusgroup.co.uk



KEY

Site

Revisions: First Issue- 29/07/2022 RW Second Issue- 02/09/2022 RW - red line alteration

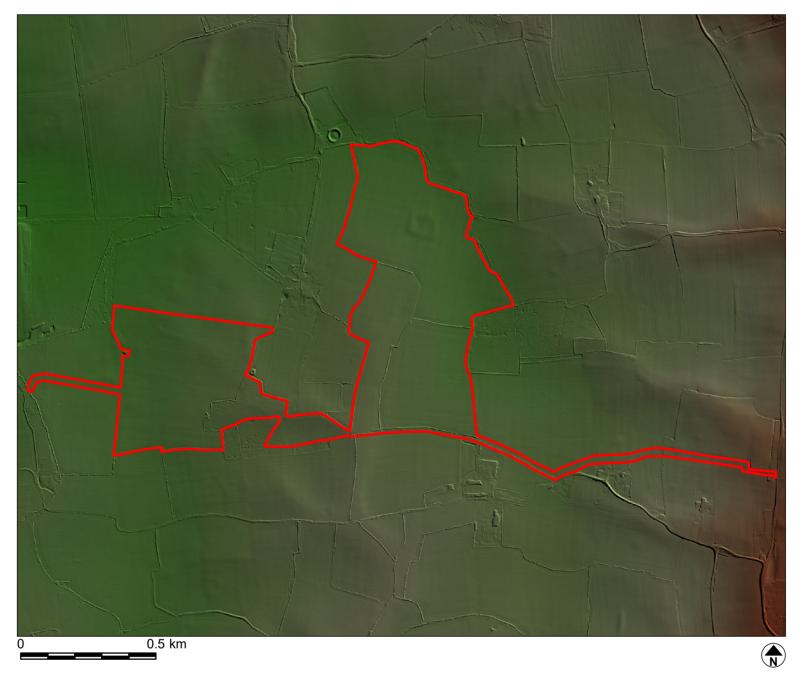
LiDAR Shaded Relief Model 180 degree azimuth

Pelham Spring Solar Farm, Maggotts End

Client: Low Carbon Solar Investment Compnay Ltd. DRWG No: P20-1300 Sheet No: - REV: -Drawn by: RW Approved by: GST Date: 02/09/2022 Scale: 1:14,000 @ A3

PLANNING | DESIGN | ENVIRONMENT | ECONOMICS | HERITAGE

Copyright Pegasus Planning Group Ltd. Crown copyright. All rights reserved. 2019 Emapsile Licence number 0100031673. Ordnance Survey Copyright Licence number 100042093. Promap Licence number 100020449. Pegasus accepts no lability for any use of this document other than for its original purpose, or by the original clent, or following Pegasus' express agreement to such use. T 01285 641717 www.pegasusgroup.co.uk



KEY Site

Revisions: First Issue- 29/07/2022 RW Second Issue- 02/09/2022 RW - red line alteration

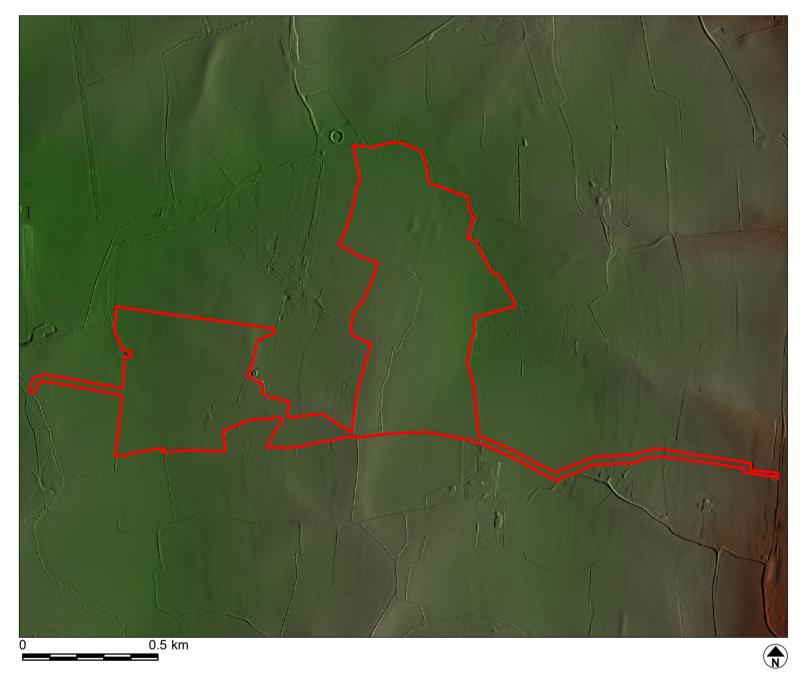
LiDAR Shaded Relief Model 225 degree azimuth

Pelham Spring Solar Farm, Maggotts End

Client: Low Carbon Solar Investment Compnay Ltd. DRWG No: P20-1300 Sheet No: - REV:-Drawn by: RW Approved by: GST Date: 02/09/2022 Scale: 1:14,000 @ A3

PLANNING | DESIGN | ENVIRONMENT | ECONOMICS | HERITAGE

Copyright Pegasus Planning Group Ltd. Crown copyright. All rights reserved. 2019 Emapsite Licence number 0100031673. Ordnance Survey Copyright Licence number 100042093. Promap Licence number 100020449. Pegasus accepts no lability for any use of this document other than for its original purpose, or by the original client, or following Pegasus' express agreement to such use. T 01285 641717 www.pegasusgroup.co.uk



KEY Site

Revisions: First Issue- 29/07/2022 RW Second Issue- 02/09/2022 RW - red line alteration

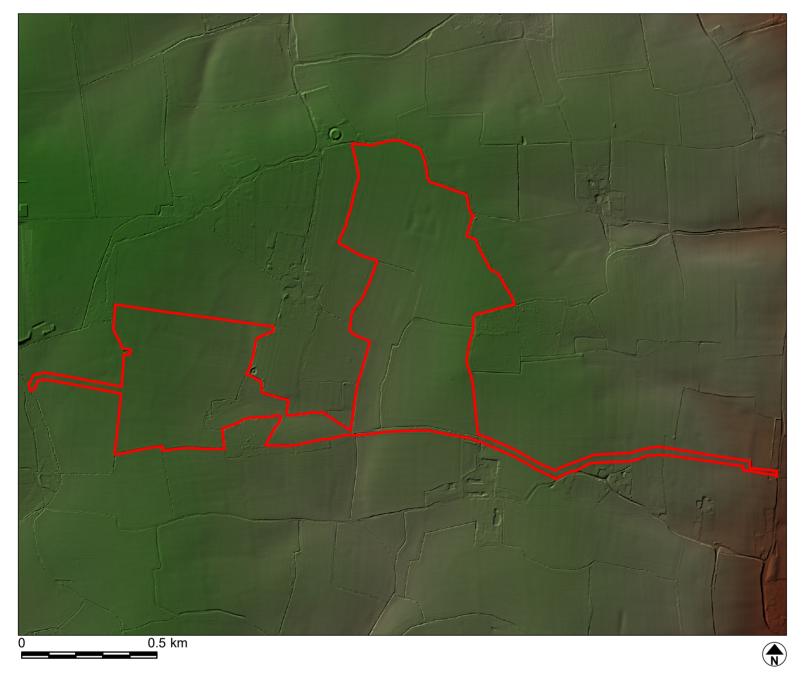
LiDAR Shaded Relief Model 270 degree azimuth

Pelham Spring Solar Farm, Maggotts End

Client: Low Carbon Solar Investment Compnay Ltd. DRWG No: P20-1300 Sheet No: - REV:-Drawn by: RW Approved by: GST Date: 02/09/2022 Scale: 1:14,000 @ A3

PLANNING | DESIGN | ENVIRONMENT | ECONOMICS | HERITAGE

Copyright Pegasus Planning Group Ltd. Crown copyright. All rights reserved. 2019 Emapsile Licence number 0100031673. Ordnance Survey Copyright Licence number 100042093. Promap Licence number 100020449. Pegasus accepts no lability for any use of this document other than for its original purpose, or by the original client, or following Pegasus' express agreement to such use. T 01285 641717 www.pegasusgroup.co.uk



KEY Site

Revisions: First Issue- 29/07/2022 RW Second Issue- 02/09/2022 RW - red line alteration

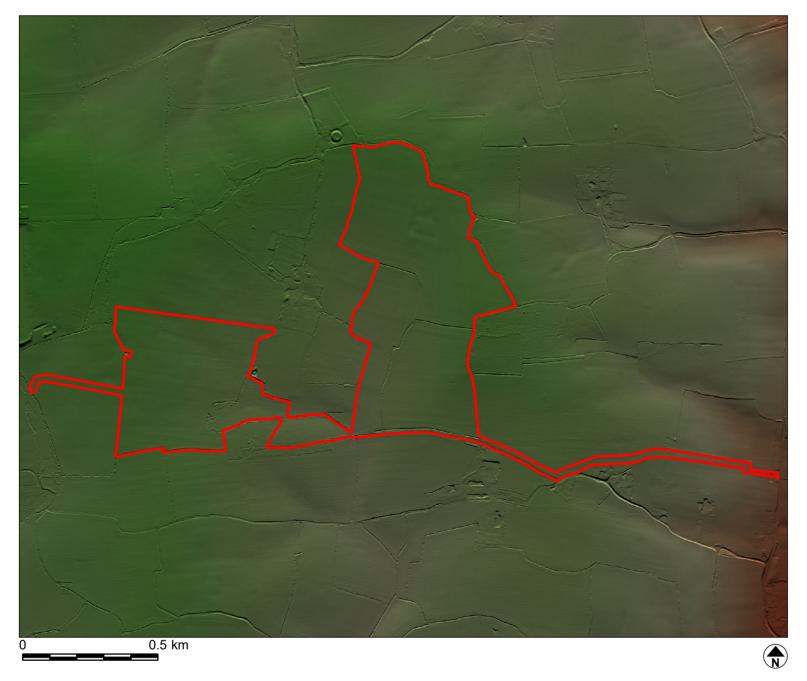
LiDAR Shaded Relief Model 315 degree azimuth

Pelham Spring Solar Farm, Maggotts End

Client: Low Carbon Solar Investment Compnay Ltd. DRWG No: P20-1300 Sheet No: - REV:-Drawn by: RW Approved by: GST Date: 02/09/2022 Scale: 1:14,000 @ A3

PLANNING | DESIGN | ENVIRONMENT | ECONOMICS | HERITAGE

Copyright Pegasus Planning Group Ltd. Crown copyright. All rights reserved. 2019 Emapsile Licence number 0100031673. Ordnance Survey Copyright Licence number 100042093. Promap Licence number 100020449. Pegasus accepts no lability for any use of this document other than for its original purpose, or by the original client, or following Pegasus' express agreement to such use. T 01285 641717 www.pegasusgroup.co.uk



KEY Site

Revisions: First Issue- 29/07/2022 RW Second Issue- 02/09/2022 RW - red line alteration

LiDAR Shaded Relief Model 360 degree azimuth

Pelham Spring Solar Farm, Maggotts End

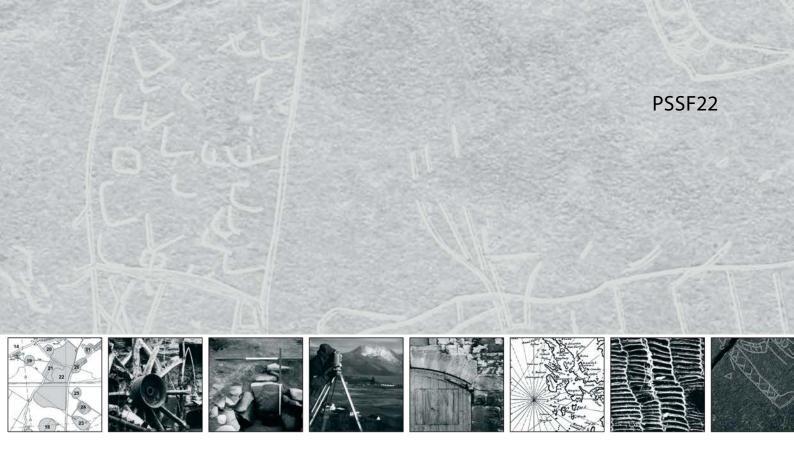
Client: Low Carbon Solar Investment Compnay Ltd. DRWG No: P20-1300 Sheet No: - REV: -Drawn by: RW Approved by: GST Date: 02/09/2022 Scale: 1:14,000 @ A3

PLANNING | DESIGN | ENVIRONMENT | ECONOMICS | HERITAGE

Copyright Pegasus Planning Group Ltd. Crown copyright. All rights reserved. 2019 Emapsile Licence number 0100031673. Ordnance Survey Copyright Licence number 100042093. Promap Licence number 100020449. Pegasus accepts no lability for any use of this document other than for its original purpose, or by the original client, or following Pegasus' express agreement to such use. T 01285 641717 www.pegasusgroup.co.uk



Appendix 9: Geophysical Survey Report



PELHAM SPRING SOLAR FARM, ESSEX

GEOPHYSICAL SURVEY REPORT

commissioned by Pegasus Group on behalf of Low Carbon Solar Park 6 Ltd

March 2022





PELHAM SPRING SOLAR FARM, ESSEX

GEOPHYSICAL SURVEY REPORT

commissioned by Pegasus Group on behalf of Low Carbon Solar Park 6 Ltd

March 2022

© 2022 by Headland Archaeology (UK) Ltd Contains OS data © Crown copyright and database right (2022).

This report adheres to the quality standard of ISO 9001:2015

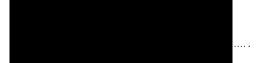
PROJECT INFO:

HA Project Code PSSF22 / Event Code. PSMA22 / NGR NGR 547759, 227860 / Parish Manuden / Local Authority Essex County Council / Fieldwork Date 14/02/2022 – 25/02/2022 / OASIS Ref. headland1-505578

PROJECT TEAM:

Project Manager Alistair Webb / Author Alistair Webb, Matthew Berry / Fieldwork Bradley Groves, Neil Paveley / Graphics Beata Wieczorek-Oleksy, Lesley Collett, Matthew Berry, Ross Bishop





Headland Archaeology Yorkshire & North Units 23–25 & 15 | Acorn Business Centre | Balme Road | Cleckheaton BD19 4EZ t 0127 493 8019

e yorkshireandnorth@headlandarchaeology.com w www.headlandarchaeology.com







PROJECT SUMMARY

Headland Archaeology (UK) Ltd was commissioned by Pegasus Group on behalf of Low Carbon Solar Park 6 Ltd to undertake a geophysical (magnetometer) survey covering approximately 80 hectares at the site of a proposed solar project on land south-east of Stocking Pelham, Essex at Maggots End. The results of the survey will accompany a planning application for the future development of the site and will also inform future archaeological strategy at the site, if required.

The survey has recorded anomalies indicative of significant and extensive archaeological activity at three locations in the proposed development area (PDA) all of which are interpreted as highly likely to be foci of settlement activity, possibly of different periods.

AAA1 comprises a series of fields and smaller enclosures extending for approximately 500m along the western edge of the PDA in F1. The most concentrated and extensive area of activity is in F4 (AAA2 North and South) where a moated site is confirmed with outlying fields. North of this, along the northern edge of the PDA in F4, a second area of activity is identified. Although many of the anomalies here are low magnitude this complex area of enclosures is also clearly defined and extensive. However, given the extensive nature of, and proximity between, the two areas of activity it is difficult to be certain where one area finishes and the other starts or indeed whether they overlap. A third, isolated enclosure complex, AAA3, is also recorded in F4 bordering the north-west corner of Battle's Wood.

Despite the level of archaeological activity described, parts of the PDA are devoid of anomalies. No anomalies of archaeological potential are recorded in F2 and F3 with very few recorded in F5 and F6 and the eastern half of F1.

Many of the recorded anomalies are very weak responses although mostly easily discernible against the relatively homogenous magnetic background. It is therefore possible there may be other features that cannot be detected. Nevertheless, it is considered highly likely that the extent of all the areas of significant remains have been identified and their extent defined by the survey.

CONTENTS

1	INTRODUCTION		1
	1.1	SITE LOCATION, TOPOGRAPHY AND LAND-USE	1
	1.2	GEOLOGY AND SOILS	1
2	ARCH	HAEOLOGICAL BACKGROUND	2
3	AIMS, METHODOLOGY & PRESENTATION		2
	3.1	AIMS & OBJECTIVES	2
	3.2	METHODOLOGY	3
	3.3	DATA PRESENTATION & TECHNICAL DETAIL	3
4	RESULTS AND DISCUSSION		4
	4.1	SITE CONDITIONS	4
	4.2	FERROUS AND MODERN ANOMALIES	4
	4.3	GEOLOGICAL ANOMALIES	5
	4.4	AGRICULTURAL ANOMALIES	5
	4.5	ANOMALIES OF ARCHAEOLOGICAL ORIGIN	5
	4.6	ANOMALIES OF POSSIBLE ARCHAEOLOGICAL ORIGIN	6
5	CONC	CLUSION	б
6	REFERENCES		7
7	APPENDICES		8
	APPE	NDIX 1 MAGNETOMETER SURVEY	8
	APPE	NDIX 2 SURVEY LOCATION INFORMATION	9
	APPE	ENDIX 3 GEOPHYSICAL SURVEY ARCHIVE	9
	APPE	NDIX 4 DATA PROCESSING	9
	APPE	ENDIX 5 OASIS ARCHIVE	10

LIST OF ILLUSTRATIONS

ILLUS 1 SITE LOCATION	VIII
ILLUS 2 F1, LOOKING NORTH-EAST	2
ILLUS 3 F2, LOOKING NORTH-EAST	3
ILLUS 4 F5, LOOKING NORTH	4
ILLUS 5 F6, UNSUITABLE AREA LOOKING WEST	5
ILLUS 6 SURVEY LOCATION SHOWING GPS SWATHS AND PHOTOGRAPH LOCATIONS (1:7,500)	9
ILLUS 7 OVERALL GREYSCALE PLOT OF PROCESSED MAGNETOMETER DATA (1:7,500)	11
ILLUS 8 OVERALL INTERPRETATION OF MAGNETOMETER DATA (1:7,500)	13
ILLUS 9 PROCESSED GREYSCALE MAGNETOMETER DATA; SECTOR 1 (1:2,500)	15
ILLUS 10 XY TRACE PLOT OF MINIMALLY PROCESSED MAGNETOMETER DATA; SECTOR 1 (1;2,500)	17
ILLUS 11 INTERPRETATION OF MAGNETOMETER DATA; SECTOR 1 (1:2,500)	19
ILLUS 12 PROCESSED GREYSCALE MAGNETOMETER DATA; SECTOR 2 (1:2,500)	21
ILLUS 13 XY TRACE PLOT OF MINIMALLY PROCESSED MAGNETOMETER DATA; SECTOR 2 (1;2,500)	23
ILLUS 14 INTERPRETATION OF MAGNETOMETER DATA; SECTOR 2 (1:2,500)	25
ILLUS 15 PROCESSED GREYSCALE MAGNETOMETER DATA; SECTOR 3 (1:2,500)	27
ILLUS 16 XY TRACE PLOT OF MINIMALLY PROCESSED MAGNETOMETER DATA; SECTOR 3 (1;2,500)	29
ILLUS 17 INTERPRETATION OF MAGNETOMETER DATA; SECTOR 3 (1:2,500)	31
ILLUS 18 PROCESSED GREYSCALE MAGNETOMETER DATA; AAA1 NORTH (1:1,000)	33
ILLUS 19 XY TRACE PLOT OF MINIMALLY PROCESSED MAGNETOMETER DATA; AAA1 NORTH (1;1,000)	35
ILLUS 20 INTERPRETATION OF MAGNETOMETER DATA; AAA1 NORTH (1:1,000)	37
ILLUS 21 PROCESSED GREYSCALE MAGNETOMETER DATA; AAA1 SOUTH (1:1,000)	39
ILLUS 22 XY TRACE PLOT OF MINIMALLY PROCESSED MAGNETOMETER DATA; AAA1 SOUTH (1;1,000)	41
ILLUS 23 INTERPRETATION OF MAGNETOMETER DATA; AAA1 SOUTH (1:1,000)	43
ILLUS 24 PROCESSED GREYSCALE MAGNETOMETER DATA; AAA2 NORTH (1:1,000)	45
ILLUS 25 XY TRACE PLOT OF MINIMALLY PROCESSED MAGNETOMETER DATA; AAA2 NORTH (1;1,000)	47
ILLUS 26 INTERPRETATION OF MAGNETOMETER DATA; AAA2 NORTH (1:1,000)	49

ILLUS 27 PROCESSED GREYSCALE MAGNETOMETER DATA; AAA2 SOUTH (1:1,000)	51
ILLUS 28 XY TRACE PLOT OF MINIMALLY PROCESSED MAGNETOMETER DATA; AAA2 SOUTH (1;1,000)	53
ILLUS 29 INTERPRETATION OF MAGNETOMETER DATA; AAA2 SOUTH (1:1,000)	55
ILLUS 30 PROCESSED GREYSCALE MAGNETOMETER DATA; AAA3 (1:1,000)	57
ILLUS 31 XY TRACE PLOT OF MINIMALLY PROCESSED MAGNETOMETER	59



e yorkshireandnorth@headlandarchaeology.com w www.headlandarchaeology.com

PELHAM SPRING SOLAR FARM, ESSEX

GEOPHYSICAL SURVEY REPORT

1 INTRODUCTION

Headland Archaeology (UK) Ltd was instructed by Pegasus Group on behalf of Low Carbon Solar Park 6 Ltd (the Client) to undertake a geophysical (magnetometer) survey on land at Pelham Spring, Maggots End, Essex (Illus 1). The results of the geophysical survey will be submitted, together with a Heritage Statement (Pegasus Group 2021), as part of a planning application for the development of Pelham Springs Solar Farm which will involve the installation of a renewable energy generating station comprising ground mounted photovoltaic solar arrays together with substation, transformer stations, site accesses, internal access tracks, security measures, access gates, other ancillary infrastructure and landscaping and biodiversity enhancements. The results will also inform future archaeological strategy at the site, if required.

The survey was undertaken in accordance with a Written Scheme of Investigation for Geophysical Survey (WSI) (Headland Archaeology 2022), following guidance contained in the National Planning Policy Framework (MHCLG 2021) and was carried out in line with current best practice (Chartered Institute for Archaeologists 2014, Europae Archaeologia Consilium 2016).

The survey was carried out between February 14th and February 25th, 2022.

1.1 SITE LOCATION, TOPOGRAPHY AND LAND-USE

The Proposed Development Area (PDA) occupies an area of approximately 80ha directly south-east of the village of Stocking

Pelham, Essex, at Maggots End and is centred at NGR 547759, 227860. It comprises an irregularly shaped block of land, covering six fields (F1 to F6 inclusive) in two sections. The western section lies immediately east of Stocking Pelham Substation and south-west of Brick House End. The larger eastern section lies north-west of Battle's Wood and south of Blakings Lane (Illus 1). The survey did not cover any proposed access tracks or cable corridors.

At the time of survey, the PDA was predominantly under young cereal crops except for fields F2 and F3 which were short pasture. Two areas of bird cover at the northern margins of F2 and F6 were unsuitable for survey (Illus 2 to Illus 5 inclusive).

Topographically the PDA is largely flat with gentle slopes down to the southern boundary where a stream lies at roughly 106m Above Ordnance Datum (AOD). The western and northern limits of the PDA lay at approximately 118m Above Ordnance Datum (AOD).

1.2 GEOLOGY AND SOILS

The solid geology of the PDA is mapped as Lewes Nodular Chalk Formation and Seaford Chalk Formation, chalk formed between 93.9 and 83.6 million years ago during the Cretaceous period. The superficial geology of the site is mapped as Lowestoft Formation, Diamicton formed between 480 and 423 thousand years ago during the Quaternary period (BGS 2022).

The soils are classified in the Soilscape 9 Association, being described as lime rich loamy and clayey soils with impeded drainage (Cranfield University 2022).



ILLUS 2 F1, looking north-east

2 ARCHAEOLOGICAL BACKGROUND

A Heritage Statement (Pegasus Group 2021) concludes that,

There is some evidence for earlier prehistoric activity within the (overall) study area in the form of cropmarks indicative of features of this date, and a small quantity of material of this date within the site (PDA). A Bronze Age Beaker burial was recorded at Berden to the north and prehistoric pottery was identified during evaluation at Manuden. On this basis, the potential for significant archaeological remains of earlier prehistoric date within the PDA is considered to be low.

There is some evidence for Iron Age to Roman activity in the site, including an apparent loose concentration of findspots of artefacts of Romano-British date in the northern extent of the site. The findspot of a fragment of quern stone was recorded immediately south of the site. A large quantity of findspots of this date have also been identified in the wider search area. On this basis, the potential for significant archaeological remains of Iron Age to Roman date within the site is considered to be low to moderate.

Cropmarks have been identified within the northern extent of the site which may represent a possible moated enclosure, and LiDAR data suggests very slight earthworks in this location. A metal detector survey identified finds of medieval date concentrated in an area of cropmarks dated to the 12th to 14th century. A second potential moat was also recorded in the western extent of the PDA by the HER although a review of aerial photographs and the processed LiDAR data did not identify it. Numerous moated sites are recorded within Essex, and a Scheduled example at Battles Hall, which has extant remains of the northern and southern arms, lies to the south of the PDA. During the mid-19th century, the land within the PDA was utilised as a mixture of arable, grass and woodland, and its arable use has continued into the 21st century. Cropmarks of field boundaries visible within the PDA on modern aerial imagery are depicted on mapping from the 19th century. Development in the study area was focused at Berden to the north and Manuden to the south-east, as well as farmsteads located in the wider landscape. On this basis, the potential for significant archaeological remains of post-medieval to modern date is considered to be low'.

3 AIMS, METHODOLOGY & PRESENTATION

3.1 AIMS & OBJECTIVES

The principal aim of the programme of geophysical survey was to gather information to establish the presence/absence, character, and extent of any archaeological remains within the PDA. This will enable an assessment to be made of the impact of any proposed development on any sub-surface archaeological remains, if present, and thereby inform any further investigation strategies, as appropriate.

The specific archaeological objectives of the geophysical survey were:

- to gather enough information to inform the extent, condition, character, and date (as far as circumstances permit) of any archaeological features and deposits within the PDA,
- to obtain information that will contribute to an evaluation of the significance of the scheme upon cultural heritage assets, and
- > to prepare a report summarising the results of the survey.



ILLUS 3 F2, looking north-east

3.2 METHODOLOGY

Magnetic survey methods rely on the ability of a variety of instruments to measure very small magnetic fields associated with buried archaeological remains. A feature such as a ditch, pit or kiln can act like a small magnet, or series of magnets, that produce distortions (anomalies) in the earth's magnetic field. In mapping these slight variations, detailed plans of sites can be obtained as buried features often produce reasonably characteristic anomaly shapes and strengths (Gaffney & Gater 2003). Further information on soil magnetism and the interpretation of magnetic anomalies is provided in Appendix 1.

Magnetometry is the most widely used geophysical survey technique in archaeology as it can quickly evaluate large areas and, under favourable conditions, identify a wide range of archaeological features including infilled cut features such as large pits, gullies and ditches, hearths, and areas of burning and kilns and brick structures. It is therefore good at locating settlements of all periods, prehistoric field systems and enclosures and areas of industrial or modern activity, amongst others. It is less successful in identifying smaller features such as post-holes and small pits (except when using a nonstandard sampling interval), unenclosed (prehistoric) settlement sites and graves/burial grounds. However, magnetometry is by far the single most useful technique and was assessed as the best nonintrusive evaluation tool for this site.

The survey was undertaken using four Bartington Grad601 sensors mounted at 1m intervals (1m traverse interval) onto a rigid frame. The system was programmed to take readings at a frequency of 10Hz (allowing for a 10–15cm sample interval) on roaming traverses (swaths) 4m apart (Illus 6). These readings were stored on an external weatherproof laptop and later downloaded for processing and interpretation. The system was linked to a Trimble R8s Real Time Kinetic (RTK) differential Global Positioning System (dGPS) outputting in NMEA mode to ensure a high positional accuracy for each data point.

MLGrad601 and MultiGrad601 (Geomar Software Inc.) software was used to collect and export the data. Terrasurveyor V3.0.37.0 (DWConsulting) software was used to process and present the data.

3.3 DATA PRESENTATION & TECHNICAL DETAIL

A general site location plan is shown in Illus 1 at a scale of 1:20,000. Illus 2 to Illus 5 inclusive are site condition photographs. Illus 6 shows the GPS swaths and photograph locations at 1:7,500. Overall greyscale magnetometer data and interpretation are displayed at 1:7,500 in Illus 7 and Illus 8 respectively. Fully processed (greyscale) data, minimally processed data (XY trace plot) data and interpretative plots are presented, at a scale of 1:2,500, in Illus 9 to Illus 17 inclusive. Larger scale plots at 1:1,000, of three areas of archaeological activity are presented in Illus 18 to Illus 32 inclusive.

Technical information on the equipment used, data processing and magnetic survey methodology is given in Appendix 1. Appendix 2 details the survey location information and Appendix 3 describes the composition and location of the site archive. Data processing details are presented in Appendix 4. A copy of the OASIS entry (Online Access to the Index of Archaeological Investigations) is reproduced in Appendix 5.

The survey methodology, report and any recommendations comply with the Written Scheme of Investigation (Headland Archaeology 2022), guidelines outlined by Europae Archaeologia Consilium (EAC 2016) and by the Chartered Institute for Archaeologists (CIFA 2014). All illustrations from Ordnance Survey (OS) mapping are reproduced



ILLUS 4 F5, looking north

with the permission of the controller of Her Majesty's Stationery Office (© Crown copyright).

The illustrations in this report have been produced following analysis of the data in 'raw' (minimally processed) and processed formats and over a range of different display levels. All illustrations are presented to display and interpret the data to best effect. The interpretations are based on the experience and knowledge of Headland management and reporting staff.

4 RESULTS AND DISCUSSION

4.1 SITE CONDITIONS

Magnetometer survey can generally be recommended over any sedimentary bedrock and results can be particularly good on Cretaceous Chalk, (English Heritage 2008; Table 4), although Quaternary superficial deposits can lead to variability of results. Nevertheless, it was considered that magnetometry was the most appropriate geophysical technique for evaluating the PDA taking account of the limitations noted in Section 3.2 above.

Surface conditions across the PDA were good throughout and subsequently data quality was also good with only minimal post-processing required. No problems were encountered during the fieldwork.

The overall magnetic background across the PDA was relatively homogeneous, particularly in the eastern part of the PDA in F4, F5 and F6. In the south-western quarter of F1, in the western part of the PDA, there is slightly more background variation but in general anomalies were readily identifiable against this 'flat' magnetic background. Anomalies of modern, agricultural, and, most significantly, archaeological origin have been clearly identified against this magnetic background confirming that the soils and geology are suitable for magnetometry. The results therefore likely provide a very good indication of the extent of sub-surface archaeological features within the PDA, notwithstanding the limitations of magnetometer survey to identify certain types and sizes of archaeological feature.

The anomalies have been classified into categories according to their origin/type and are described below.

4.2 FERROUS AND MODERN ANOMALIES

Ferrous anomalies, characterised as individual 'spikes', are typically caused by ferrous (magnetic) material, either on the ground surface or in the plough-soil. Little importance is normally given to such anomalies, unless there is any supporting evidence for an archaeological interpretation, as modern ferrous debris is common on most sites, often being introduced into the topsoil during manuring or tipping/infilling. There is no obvious clustering to the ferrous anomalies within the PDA that would suggest an archaeological origin was likely. Far more probable is that the 'spike' responses are caused by the random distribution of ferrous debris in the upper soil horizons.

Large 'halos' and bands of linear striations of magnetic disturbance recorded in F1, F5 and F6 (Illus 8) are due to the proximity of electricity pylons carrying the overhead electricity cables to/from Stocking Pelham Substation that borders the PDA to the west.

Magnetic disturbance in places along the field boundaries are either caused by the accumulation of ferrous debris at the field edge or the presence of barbed wire or wire mesh in the boundary itself.



ILLUS 5 F6, unsuitable area looking west

4.3 GEOLOGICAL ANOMALIES

As mentioned in Section 4.1 the magnetic background is very uniform across the PDA. The only anomalies identified as being geological in origin are a small cluster of amorphous magnetically enhanced anomalies that are recorded close to the stream that forms the northern border of F3 (Illus 15 to Illus 17) and which are probably alluvial in origin; there are numerous field drains in F3 attesting to the fact that this field is poorly drained and probably prone to flooding. Parallel ephemeral trends in the data in F5 broadly running north/south (in line with the direction of slope) are also interpreted as geological in origin.

4.4 AGRICULTURAL ANOMALIES

Several linear anomalies in F1 (Illus 8) attest to the fact that this large field was formerly made up of several much smaller fields. These former boundaries are broadly parallel or orthogonal to the current field boundaries and are recorded on first edition and later Ordnance Survey maps. Anomalies locating former boundaries and likely former boundaries but not shown on historic mapping are also recorded in F4, F5 and F6.

Other linear trends recorded across the PDA are also due to agricultural activity and either reflect the orientation of modern or recent cultivation or land drains, such as those in F3 (see Section 4.3 above).

4.5 ANOMALIES OF ARCHAEOLOGICAL ORIGIN

A plethora of anomalies interpreted as of possible or probable archaeological potential have been identified across the PDA at several locations. To aid description these clusters of anomalies have been grouped into areas of archaeological activity (AAA's). Unless stated otherwise these anomalies are caused by soil filled (mostly) linear features, usually ditches forming enclosures or fields or defining areas of settlement, or discrete features such as pits or possible sites of burning.

AAA1 North and South (Illus 9–11 and Illus 18–23)

Strung along about 500m along the western edge of the PDA in F1 are a series of enclosures of varying size.

Two small enclosures (Illus 18 to Ilus 20 - E1 and E2), centred at NGR TL 46238 28196, are recorded at the northern end of F1, immediately to the south of the overhead power lines. Linear ditch-like anomalies are also recorded east and south-east of the two enclosures. The magnetic 'halo' caused by the electricity pylon could potentially be 'masking' other archaeological anomalies/features up against the western PDA boundary.

Further to the south another small, less regular, enclosure (Illus 21 to Illus 23 – E3) is recorded up against the PDA boundary. Numerous discrete anomalies (pit-like features and possible sites of burning) both within and immediately outside E3 suggest probable settlement activity. South of E3 are three other, much larger, enclosures (Illus 21 to Illus 23 – E4, E5 and E6). Discrete anomalies are again recorded although less frequent and some of these responses may be due to variation in the superficial deposits.

On the southern boundary of F1 a single sub-circular anomaly (Illus 21 to Illus 23 – E7) is identified, centred at NGR TL 46310 27811. It is not clear whether this feature is associated with the cluster of enclosures to the north.

On the eastern boundary of F1 three sides of another possible enclosure, (E8, centred at NGR TL 46443 27971) are recorded although the orientation of the enclosure and the fact that the southern side of the enclosure terminates at a 19th century

boundary could suggest a later origin than the features recorded on the western edge of the field.

AAA2 North and South and AAA3 (Illus 12–14 and Illus 24–32)

Anomalies indicative of at least two periods of archaeological activity are recorded covering at least 50% of the northern half of F4 at the northern edge of the PDA. Another smaller separate area of archaeological activity is also recorded on the south-eastern edge of F4 adjacent to Battle's Wood.

In the centre of F4 broad low magnitude linear anomalies (Illus 27 to Illus 29 – E9) clearly define three sides of a moated enclosure, centred at NGR TL 47327 28622 that is visible as a cropmark (MEX13939) on satellite imagery; medieval coins have also been recovered in this part of the PDA. The western side of the enclosure is not recorded in the magnetic data. Linear anomalies in the north-eastern corner of the enclosure suggest at least some internal partitioning within E9. Numerous other linear ditch-like anomalies and outlying enclosures on the same basic alignment as E9 are recorded immediately to the north, south and east, strongly indicating the moated site was surrounded by a much larger area of fields and enclosures.

North of E9 along the northern edge of F4 and extending around the east and north-eastern edges of the field is an extensive and complex area of enclosures. Many of the anomalies are of low magnitude but the complexity and number of anomalies is clearly indicative of settlement activity. An east/west aligned ditch anomaly, D1, looks to form the southern boundary of this settlement activity, which comprises multiple adjoining, mostly rectilinear enclosures of varying size and shape, centred at NGR TL 47207 28892. To the south of D1 the activity is less dense with several much smaller more irregular sub-circular enclosures (E10, E11 and E12) being recorded.

A third area of archaeological activity (AAA3) is identified in F4. It is located approximately 0.5km south-east of the moated site, E9, and nearly 1km south-east of the settlement in AAA2 North in the southeastern corner of the field bordering Battle's Wood and is centred at NGR TL 47519 28319. AAA3 comprises part of a large enclosure, E13, that has been divided into at least four other enclosures of varying size and shape, the whole complex clearly extending beyond the PDA boundary into Battle's Wood. The distinct morphology and distance of E13 from the other settlement features in F4 suggest this cluster of discrete and curvilinear features may be indicative of a third period of activity, although this possibility is speculative.

4.6 ANOMALIES OF POSSIBLE ARCHAEOLOGICAL ORIGIN

A large square enclosure, E14, is appended to the eastern side of a possible former 19th century field boundary in F6, centred at NGR TL 47408 28043 (Illus 15 to Illus 17). A few vague and discontinuous anomalies with no obvious pattern are also recorded adjacent to E14 to the north and north-west of the electricity pylon.

Also, in F6, on the eastern edge of the field, centred at NGR TL 47519 27881, is another very small cluster of anomalies, E15, that might be of archaeological origin. However, the responses are localised and bisected by a modern trackway marking the eastern limit of the PDA leading to uncertainty as to their cause.

5 CONCLUSION

The survey has recorded anomalies indicative of significant and extensive archaeological activity at three locations in the PDA all of which are interpreted as highly likely to be foci of settlement activity, possibly of different periods.

AAA1 comprises a series of fields and smaller enclosures extending for approximately 500m along the western edge of the PDA in F1.

The most concentrated and extensive area of activity is in F4 (AAA2 North and South) where a moated site is confirmed with outlying fields. North of this, along the northern edge of the PDA in F4, a second area of activity is identified. Although many of the anomalies here are of low magnitude this complex area of enclosures is also clearly defined. However, given the extensive nature of, and proximity between, the two areas of activity it is difficult to be certain where one area finishes and the other starts or indeed whether they overlap. A third, isolated enclosure complex, AAA3, is also recorded in F4 bordering Battle's Wood.

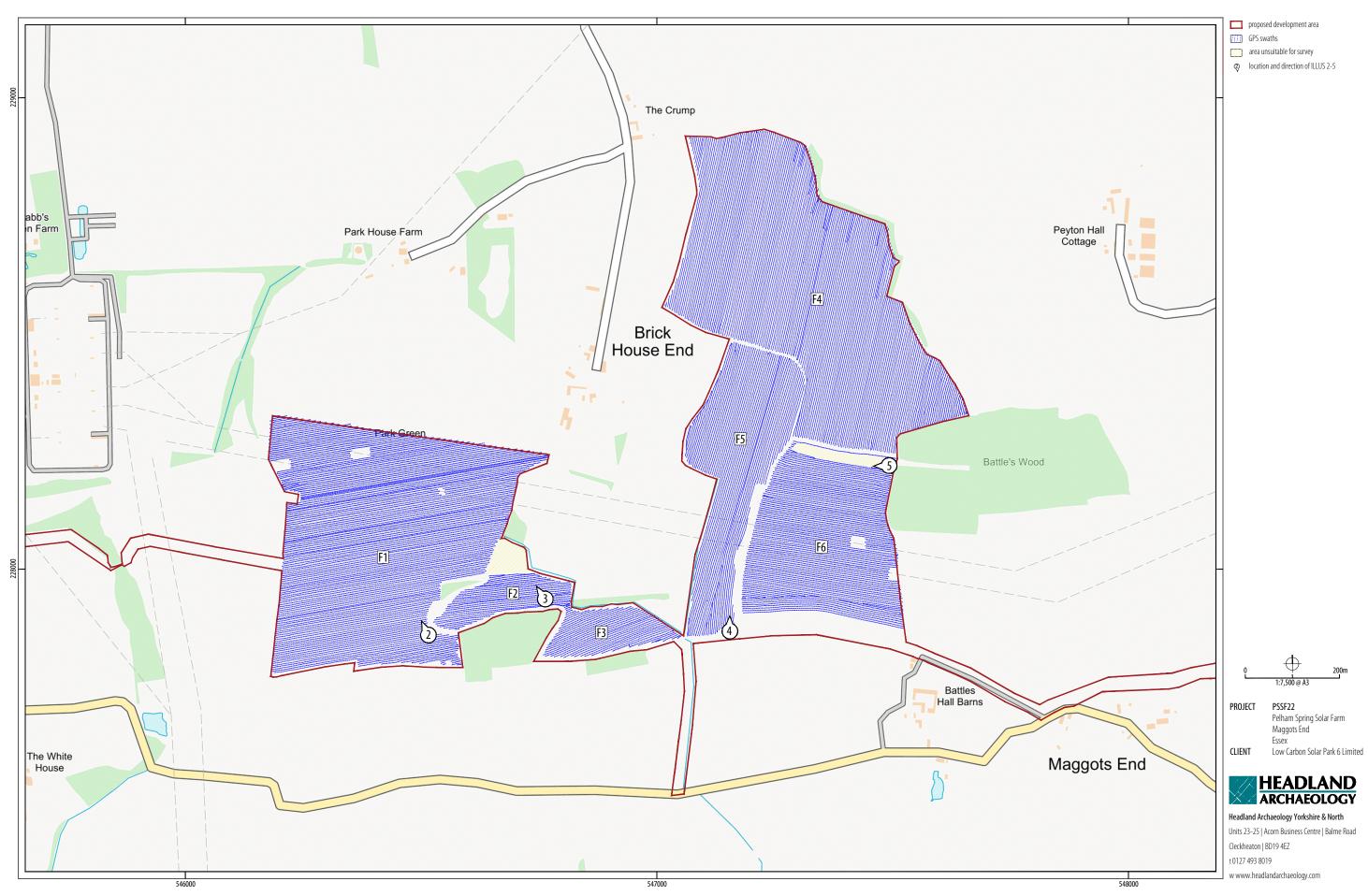
Despite the level of archaeological activity described, parts of the PDA are devoid of anomalies. No anomalies of archaeological potential are recorded in F2 and F3 with very few recorded in F5 and F6 and the eastern half of F1.

Many of the recorded anomalies are very weak responses although mostly easily discernible against the relatively homogenous magnetic background. It is therefore possible there may be other features that cannot be detected. Nevertheless, it is considered highly likely that the extent of all the areas of significant remains have been identified and their extent defined by the survey.

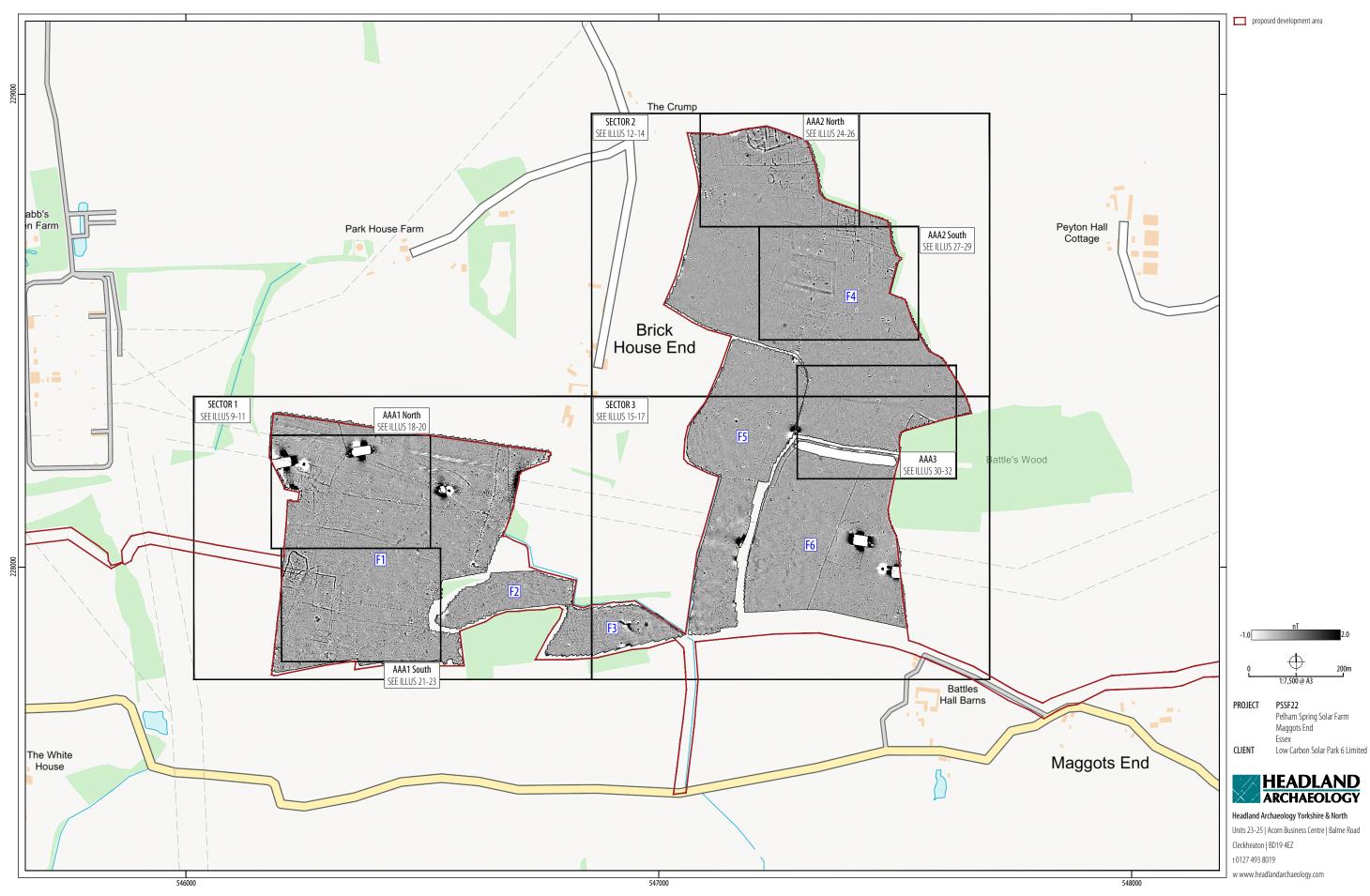
6 **REFERENCES**

Chartered Institute for Archaeologists (CIfA) 2014 Standard and guidance for archaeological geophysical survey (Reading) accessed 14th March 2022					
Cranfield University (2020) Cranfield Soil and Agrifood Institute Soilscapes accessed 14th March 2022					
English Heritage (2008) <i>Geophysical Survey in Archaeological Field</i> <i>Evaluation</i>					
Europae Archaeologia Consillium (EAC) 2016 EAC Guidelines for the Use of Geophysics in Archaeology: Question to Ask and Points to Consider (Namur, Belgium) accessed 14th March 2022					
Gaffney C & Gater J (2003) <i>Revealing the Buried Past: Geophysics for</i> <i>Archaeologists</i> Stroud					
Headland Archaeology 2022 <i>Crays Hall, Billericay, Essex Written Scheme</i> <i>of Investigation for Geophysical Survey</i> [unpublished client document] Ref. CCHB22					
Ministry of Housing, Communities and Local Government (MHCLG) 2021 National Planning Policy Framework accessed 14th March 2022					
Natural Environment Research Council (RCS) 2022 British Coological					

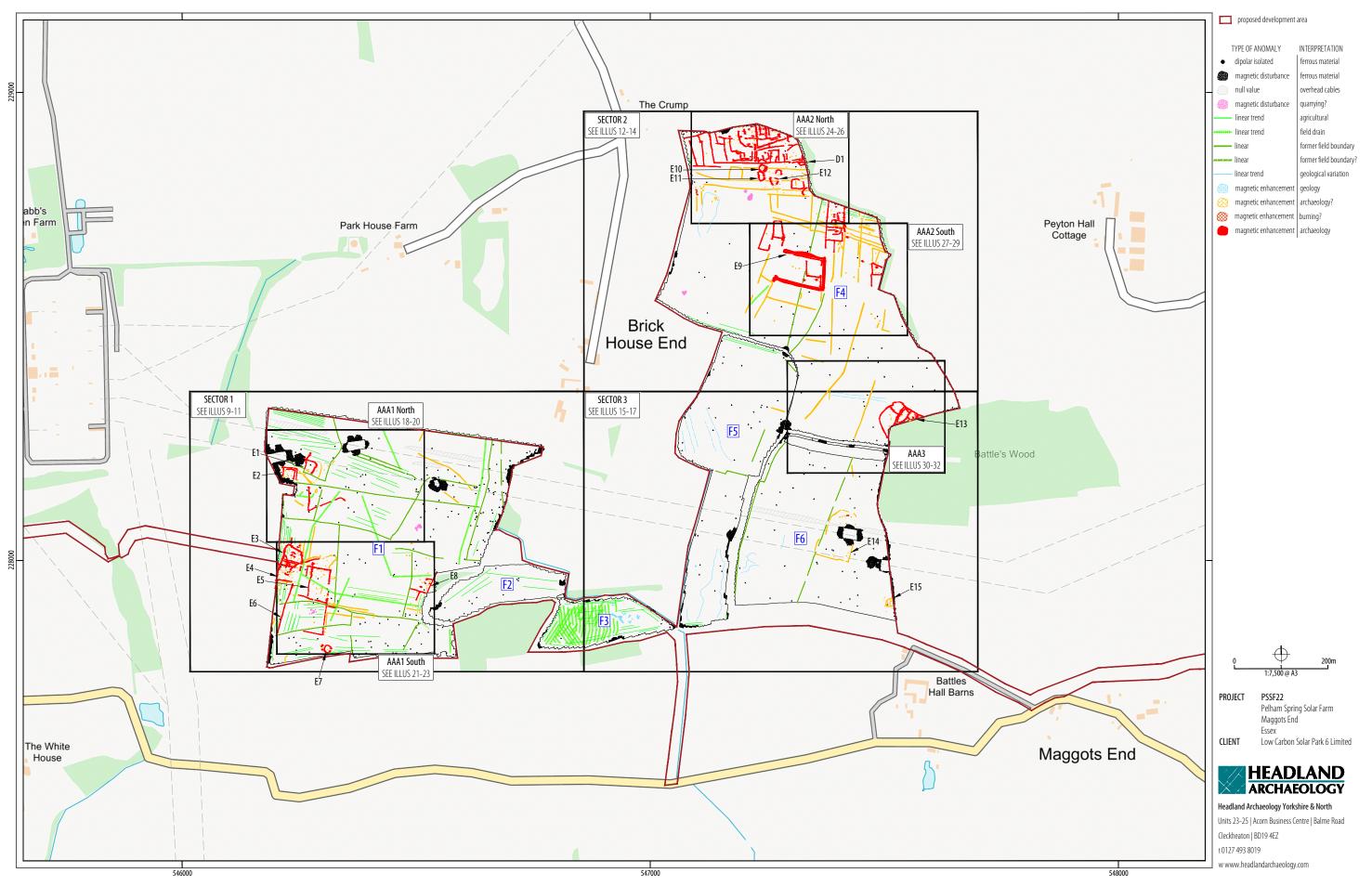
- Natural Environment Research Council (BGS) 2022 *British Geological Survey* accessed 14th March 2022
- Pegasus Group (2021) *Heritage Statement; Pelham Spring Solar Farm, Maggots End* [unpublished client document] Ref P20-1300.



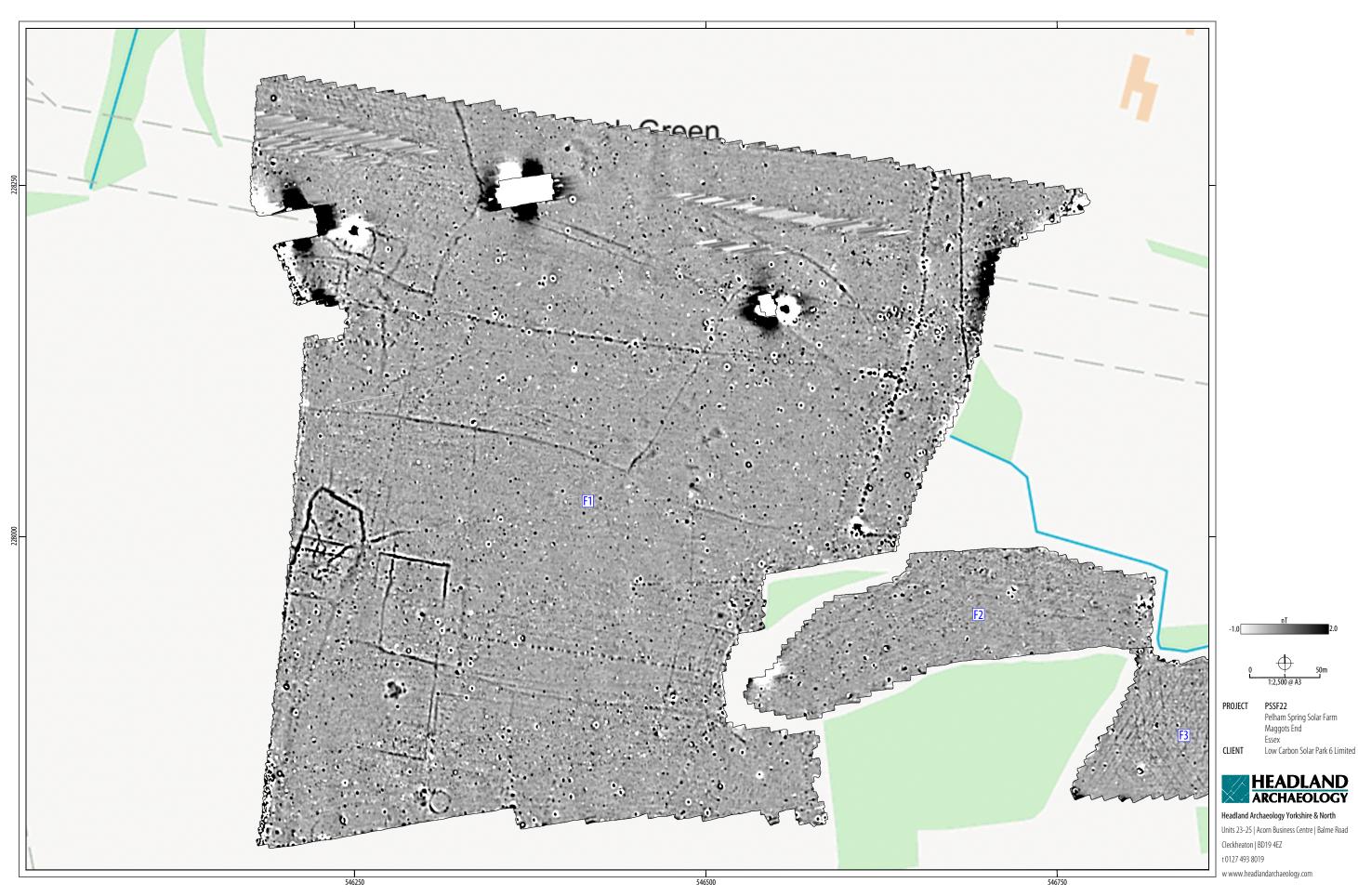
ILLUS 6 Geophysical survey location showing GPS swaths and photograph locations

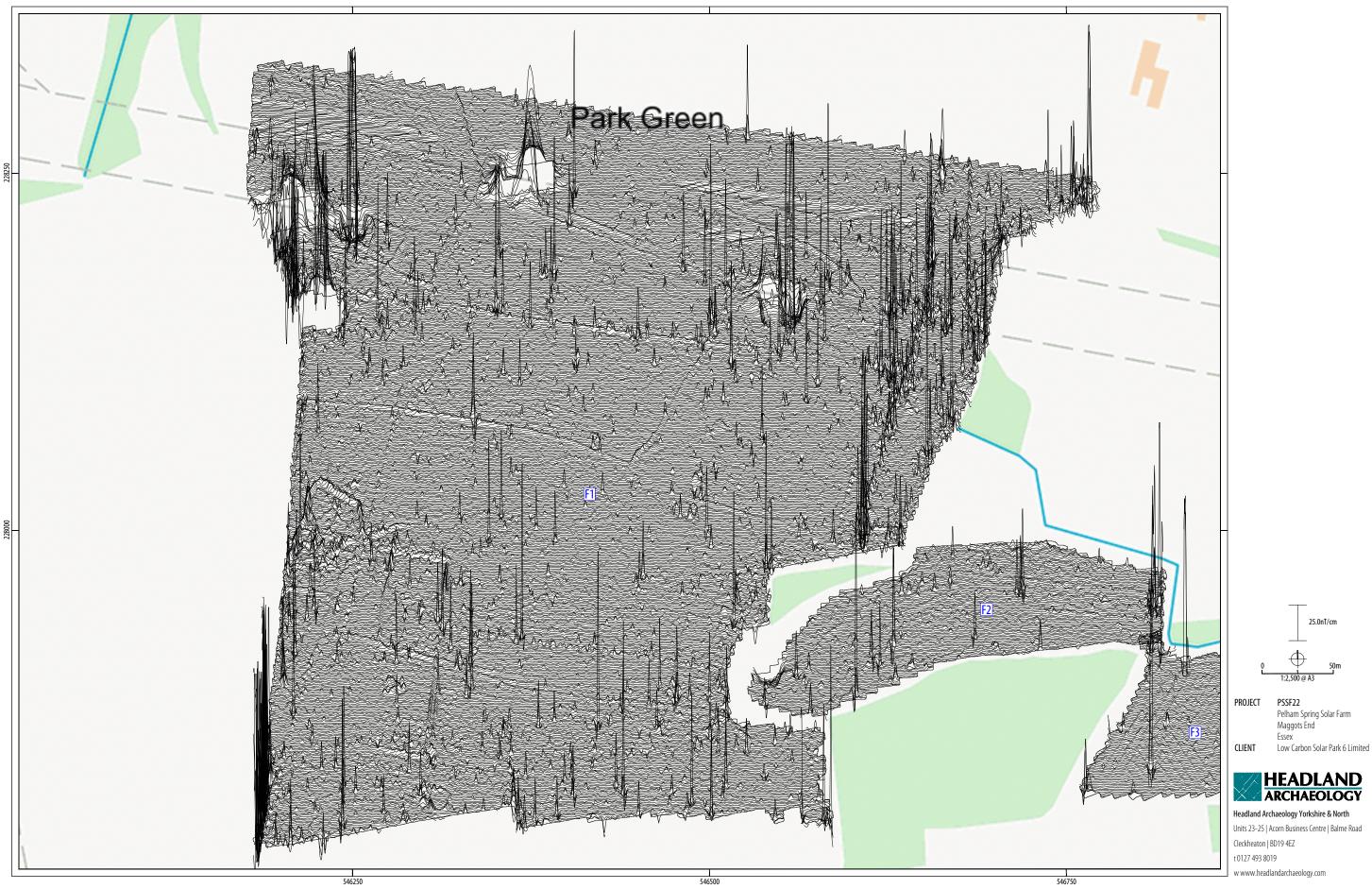


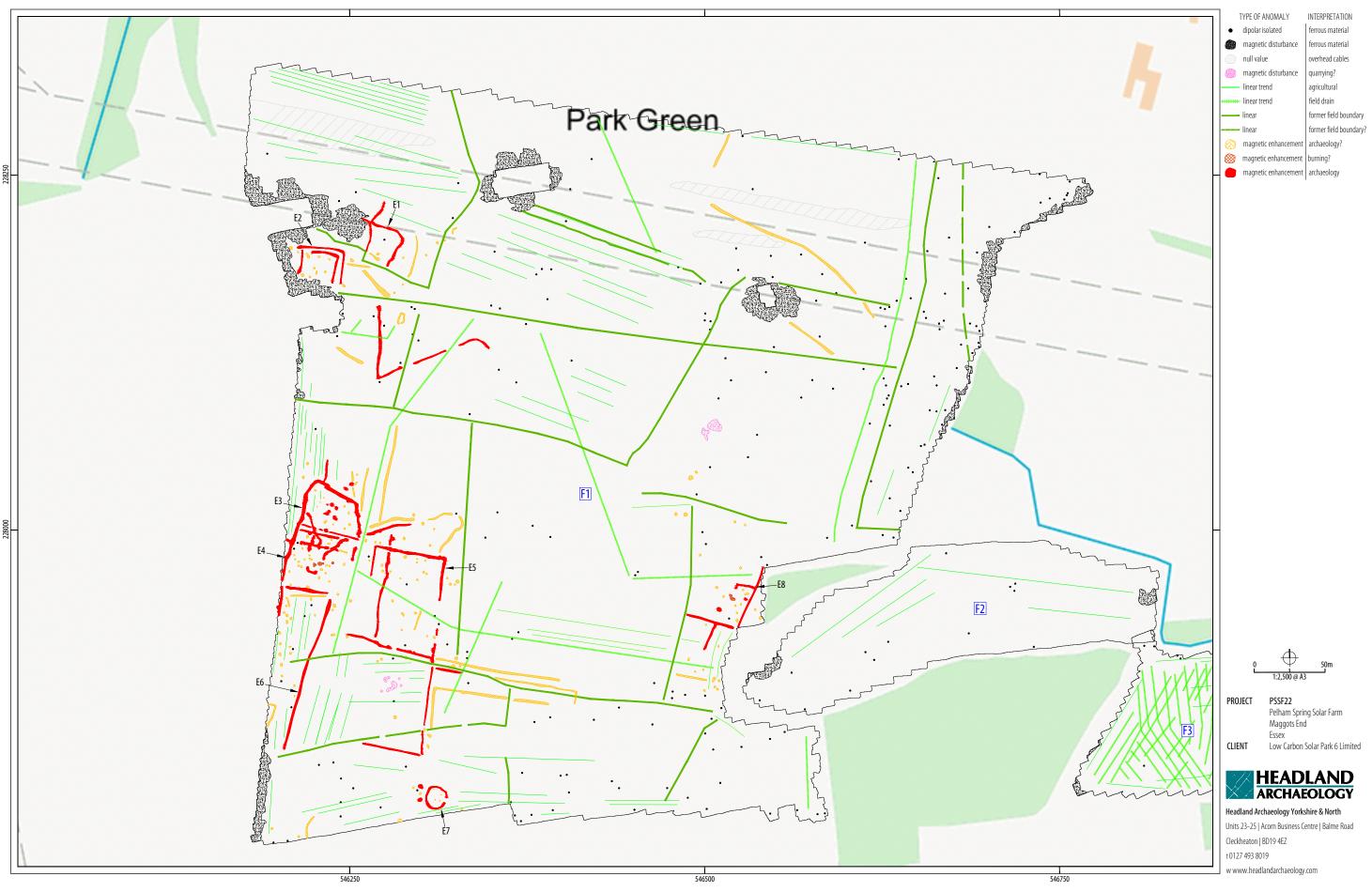
ILLUS 7 Overall greyscale plot of processed magnetometer data



ILLUS 8 Overall interpretation of magnetometer data





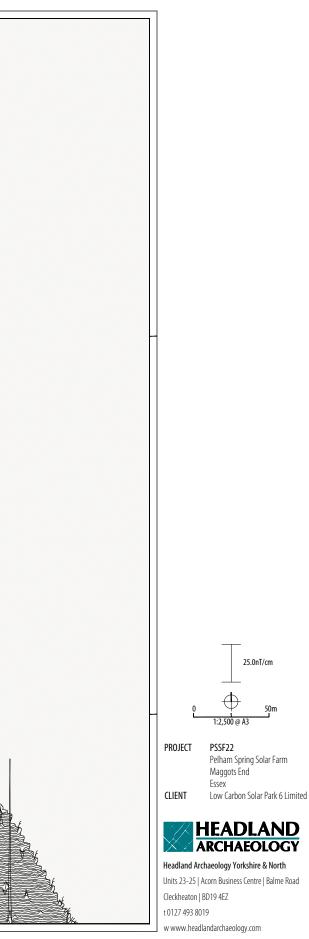


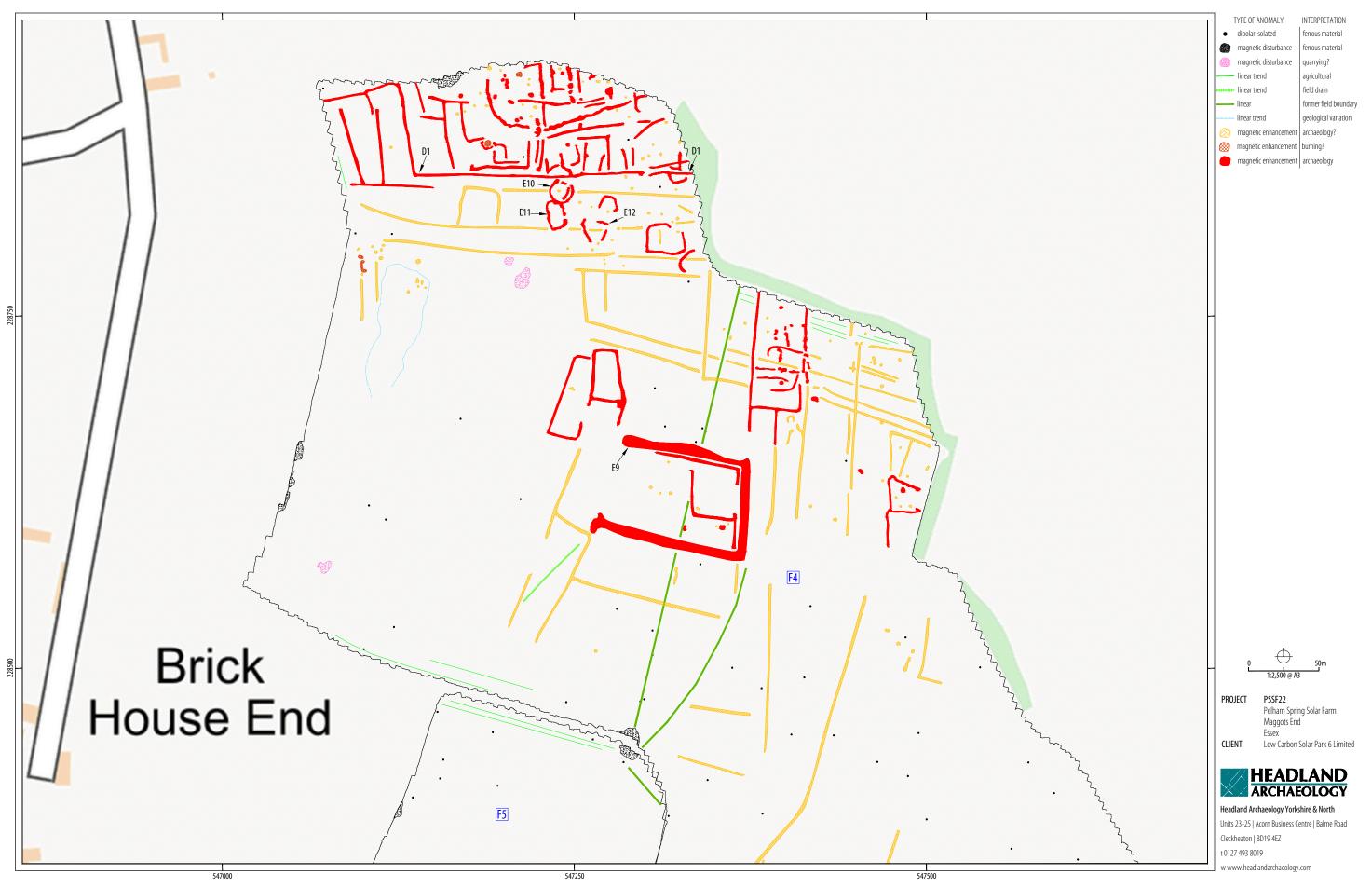


nT -1.0
-1.0
0 5 0m
1:2,500 @ A3
PROJECT PSSF22
Pelham Spring Solar Farm
Maggots End
Essex CLIENT Low Carbon Solar Park 6 Lim
Headland Archaeology Yorkshire & North
Units 23–25 Acorn Business Centre Balme Roa
Cleckheaton BD19 4EZ t 0127 493 8019
t 0127 493 8019 w www.beadlandarchaeology.com

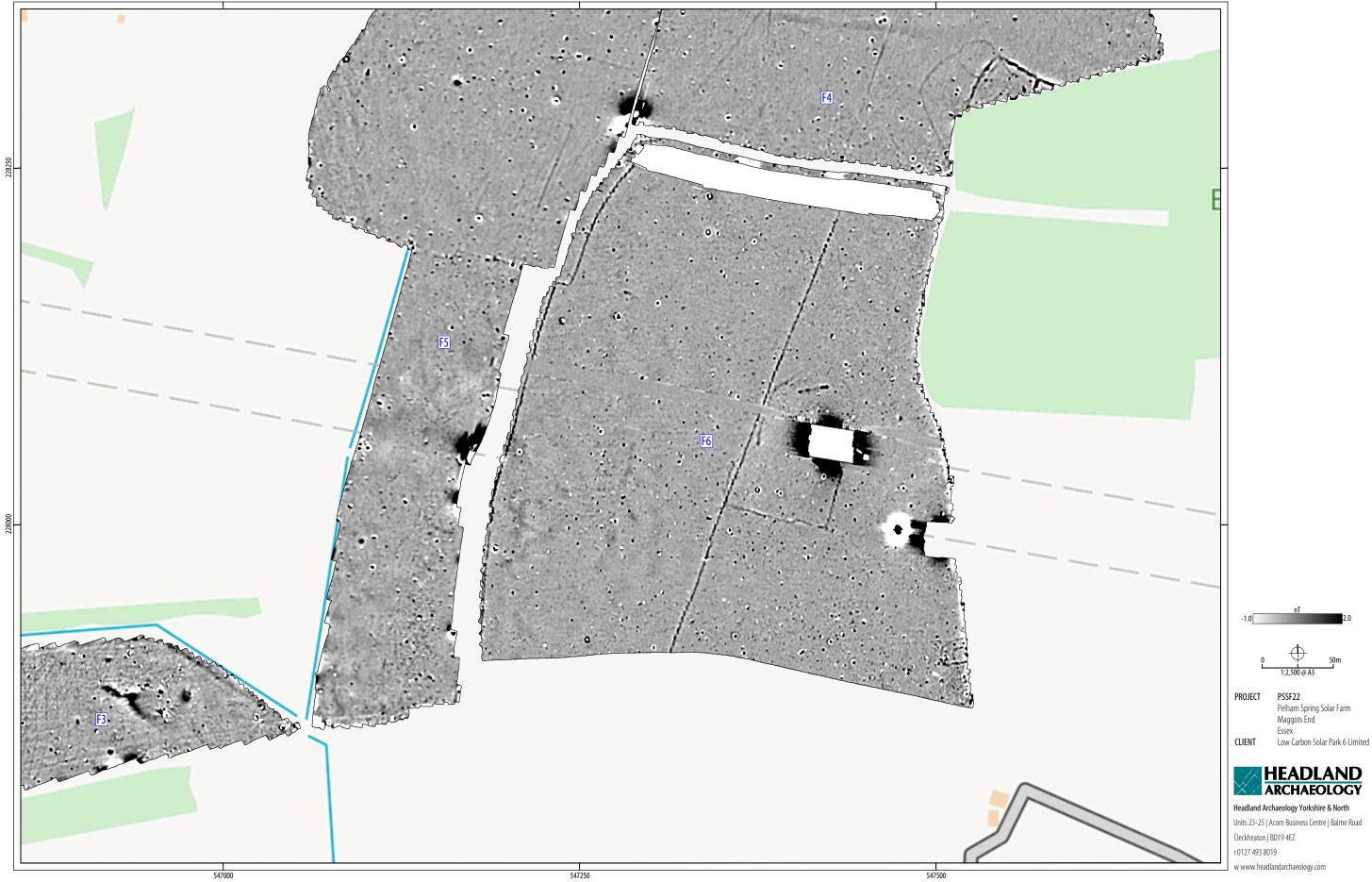


ILLUS 13 XY trace plot of minimally processed magnetometer data; Sector 2

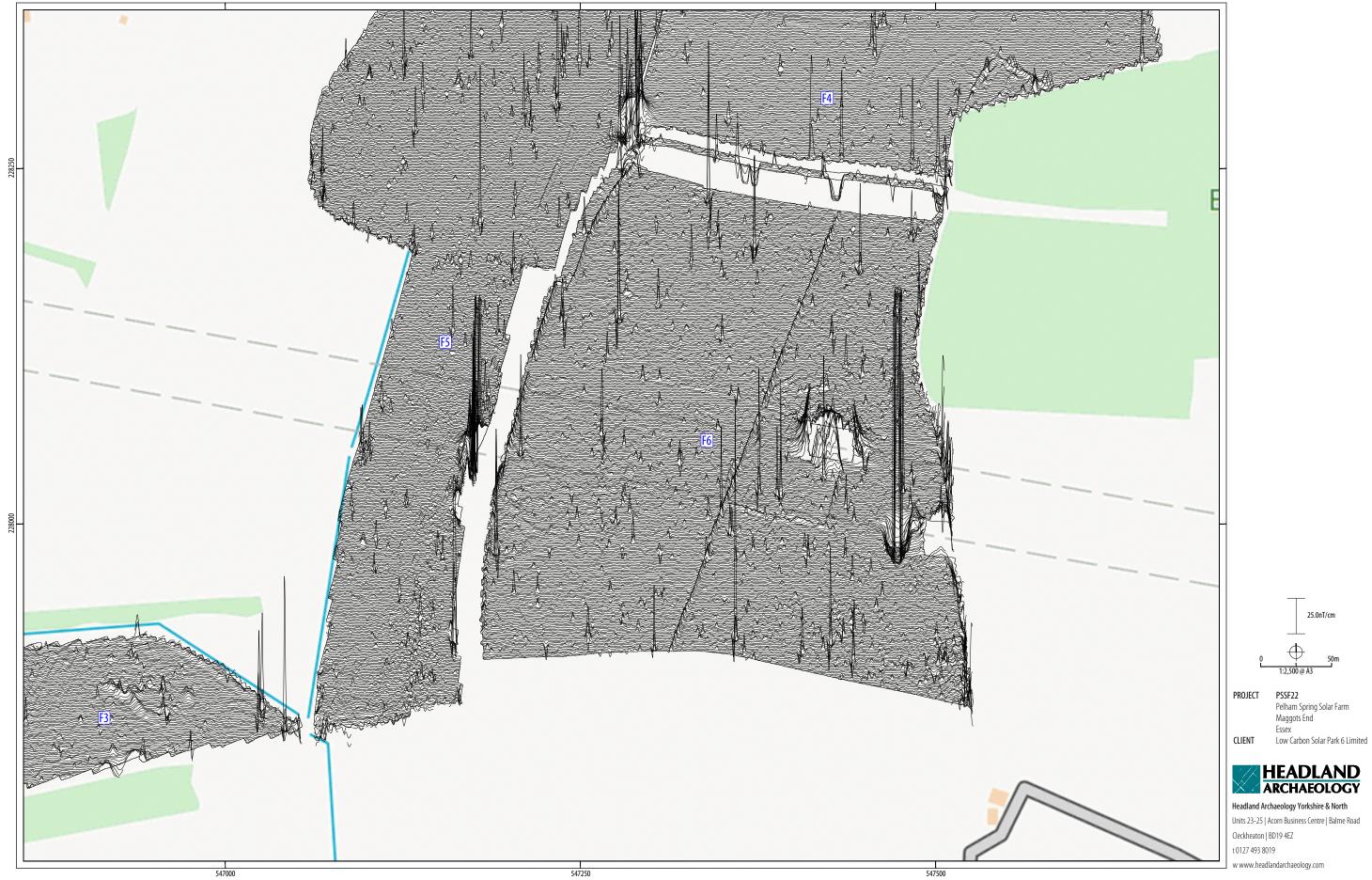




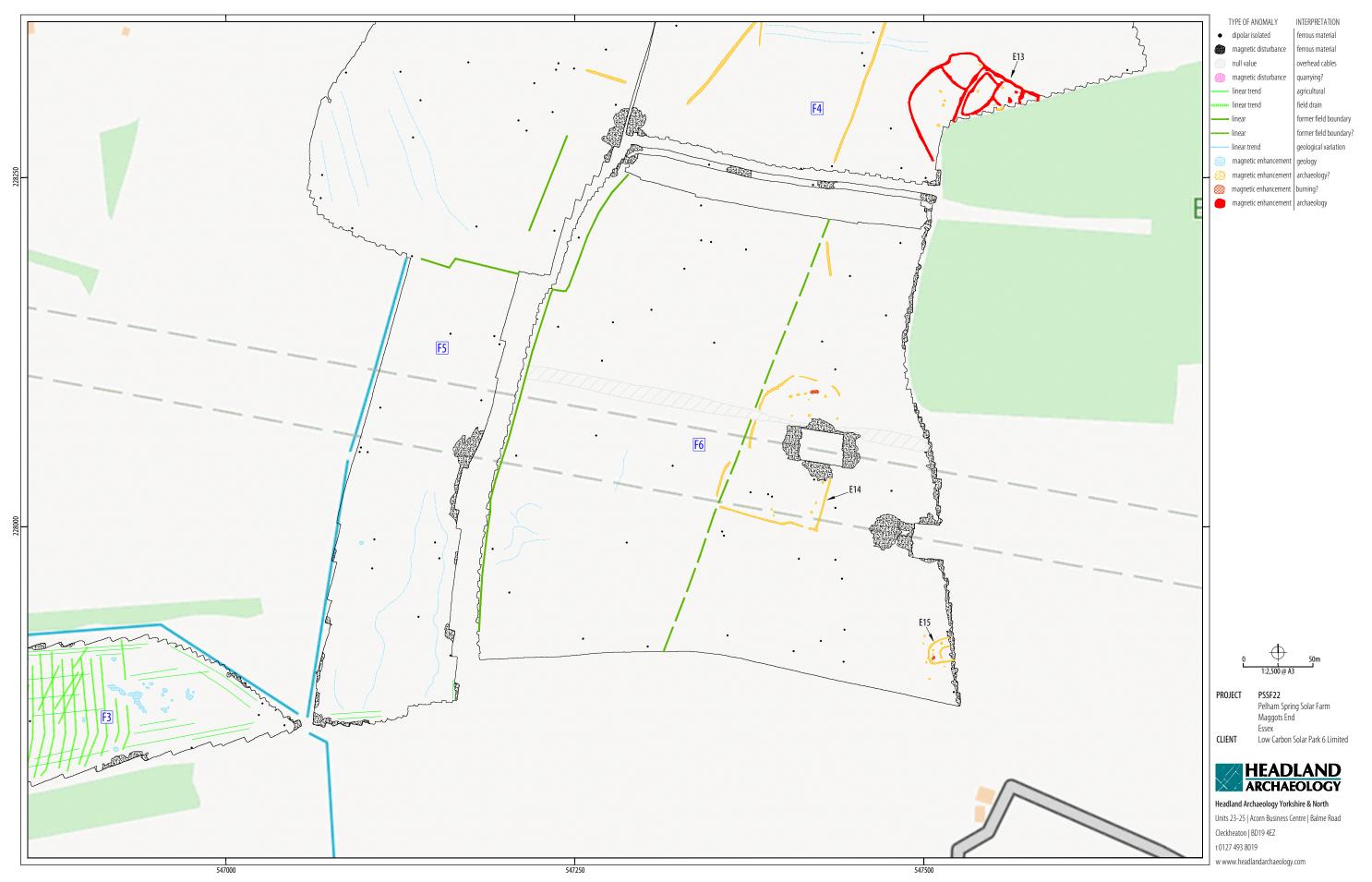
ILLUS 14 Interpretation of magnetometer data; Sector 2



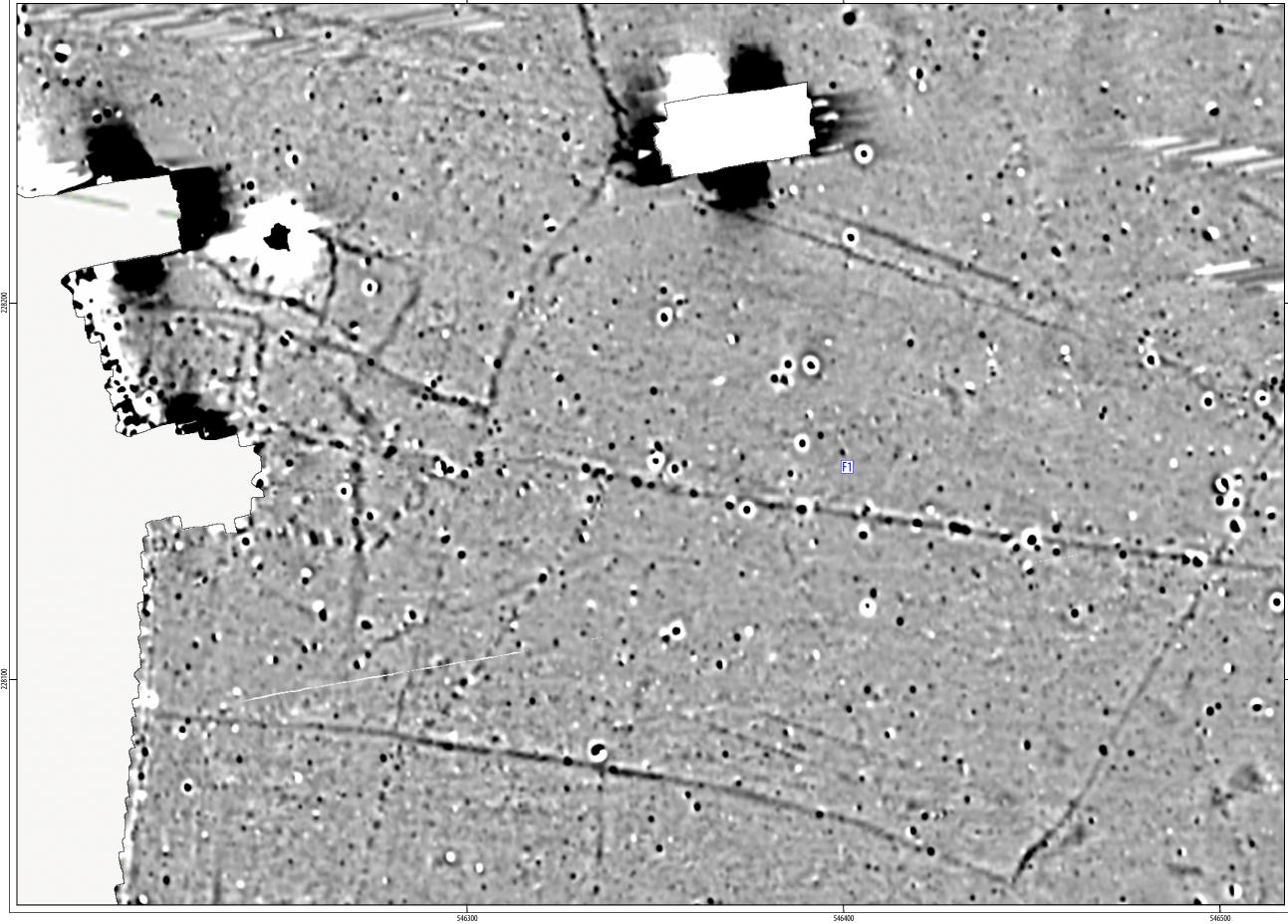
ILLUS 15 Processed greyscale magnetometer data; Sector 3



ILLUS 16 XY trace plot of minimally processed magnetometer data; Sector 3

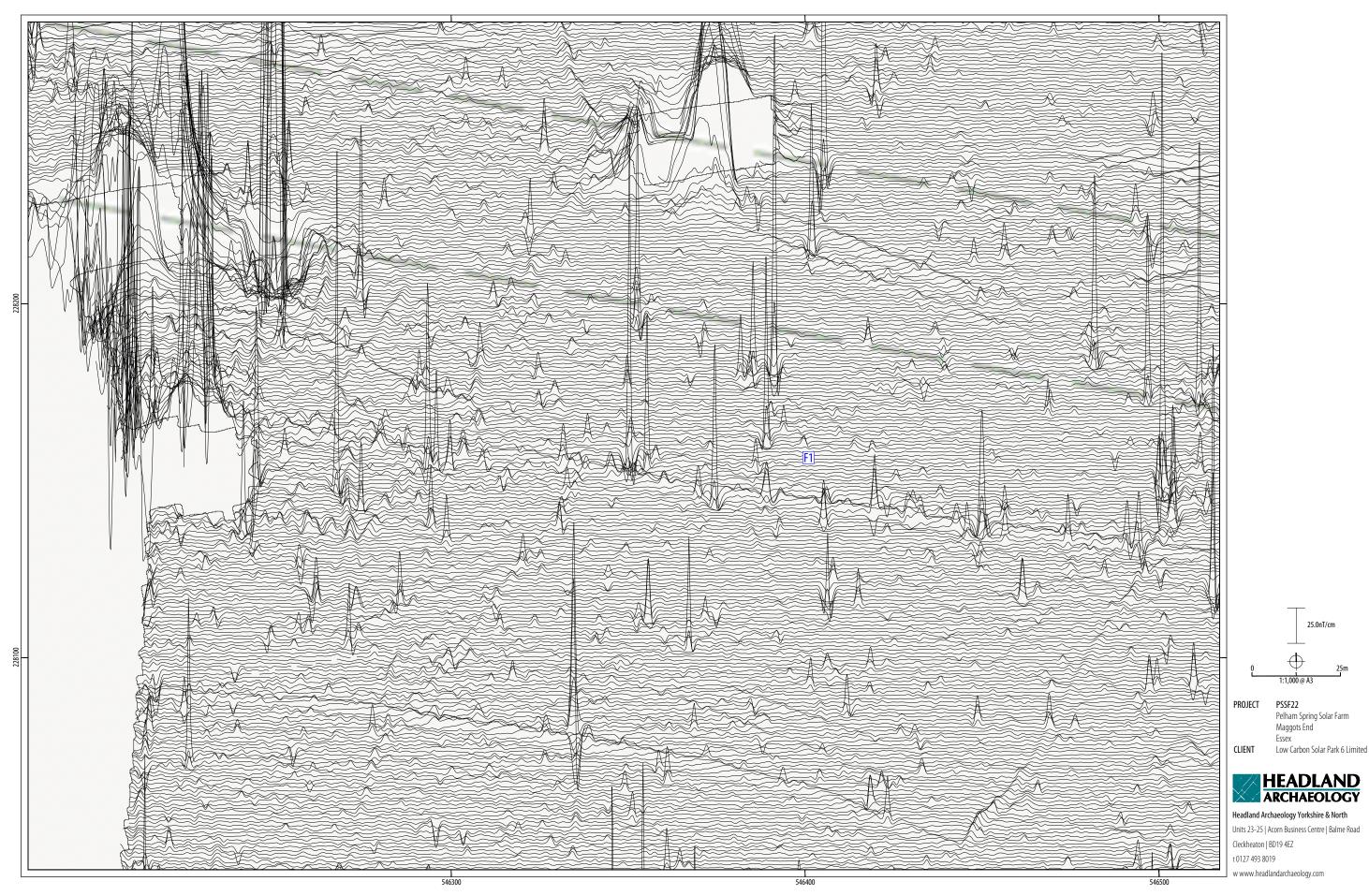


ILLUS 17 Interpretation of magnetometer data; Sector 3

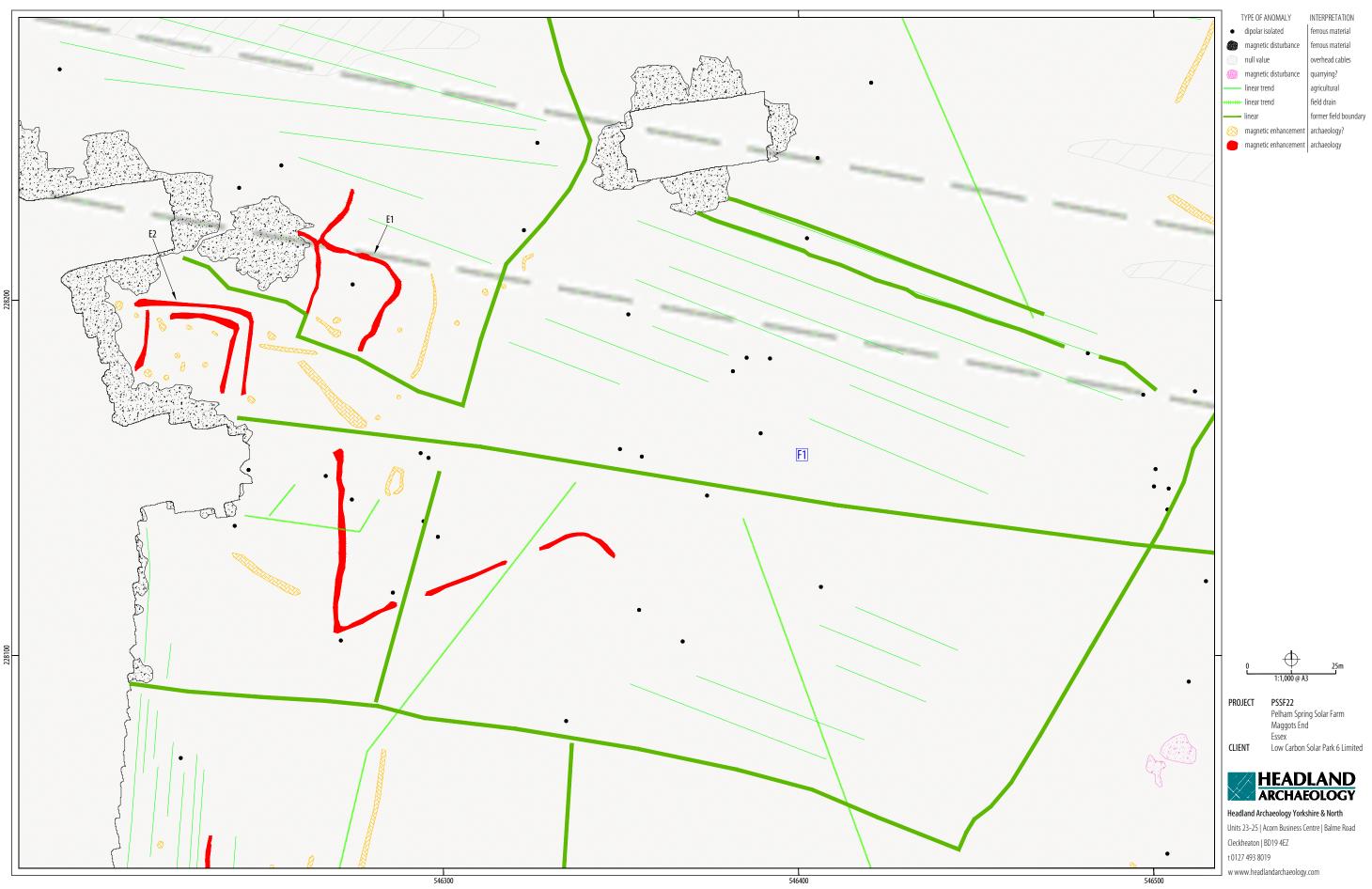




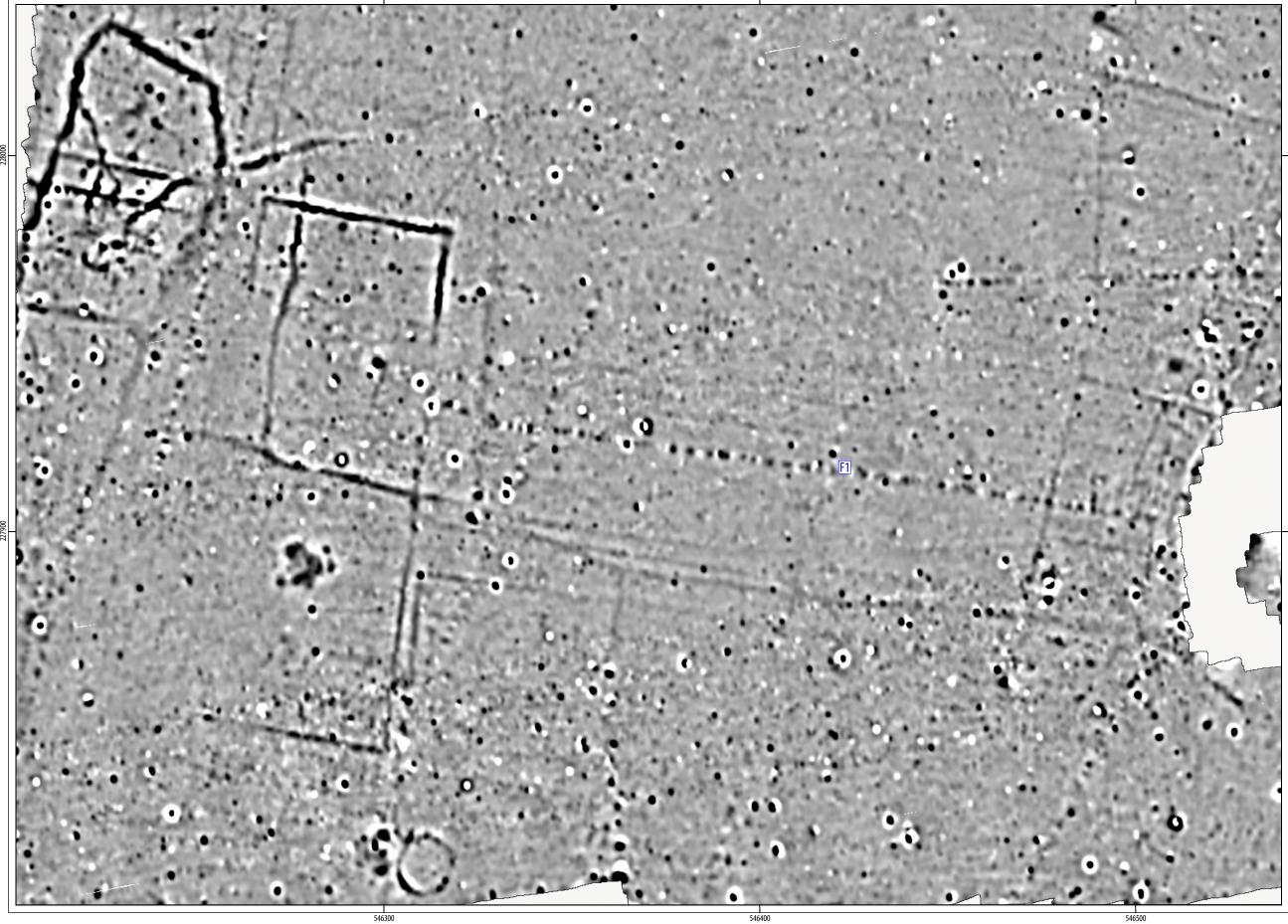
546500



ILLUS 19 XY trace plot of minimally processed magnetometer data; AAA1 North



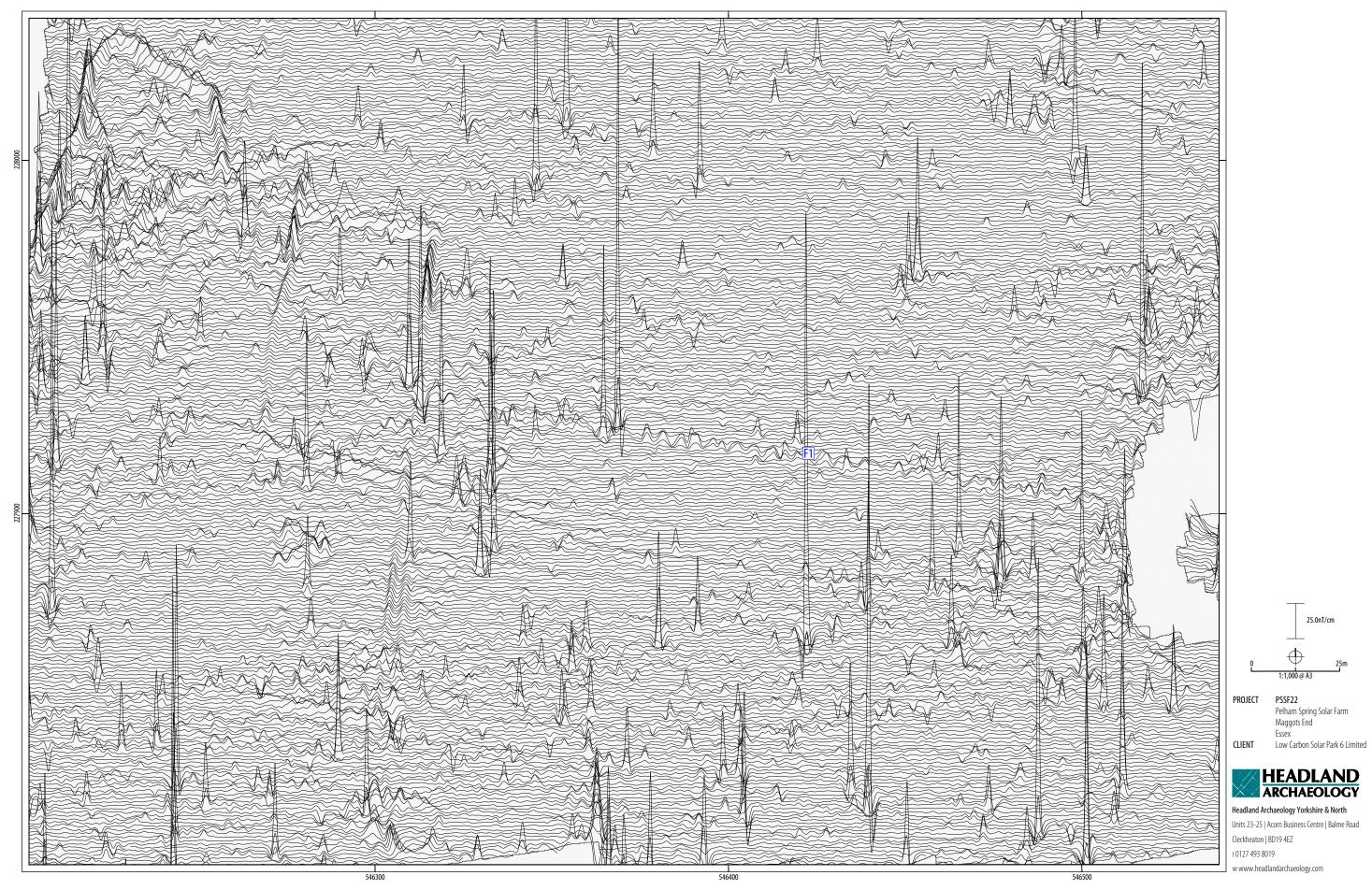
ILLUS 20 Interpretation of magnetometer data; AAA1 North



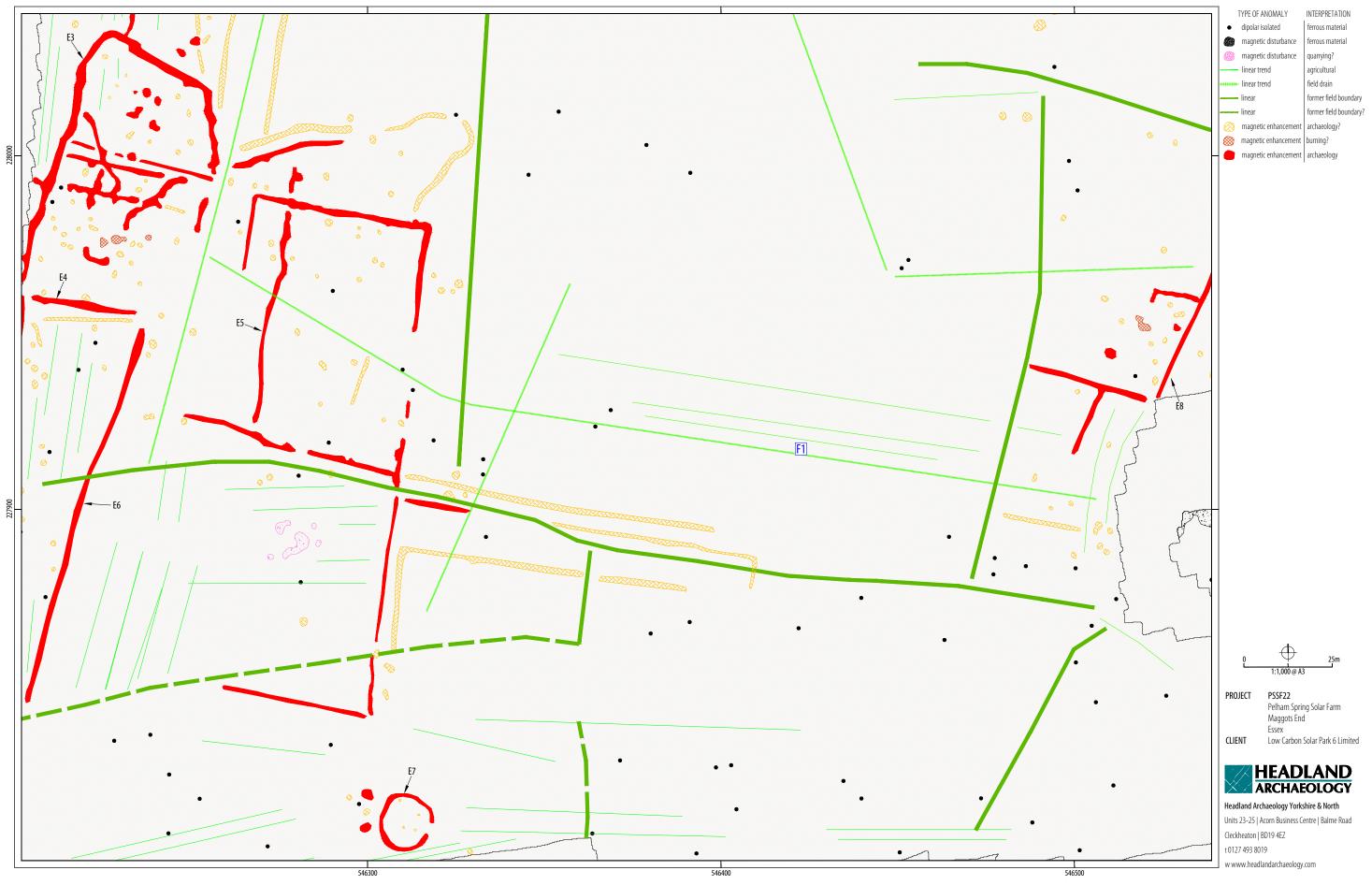
ILLUS 21 Processed greyscale magnetometer data; AAA1 South



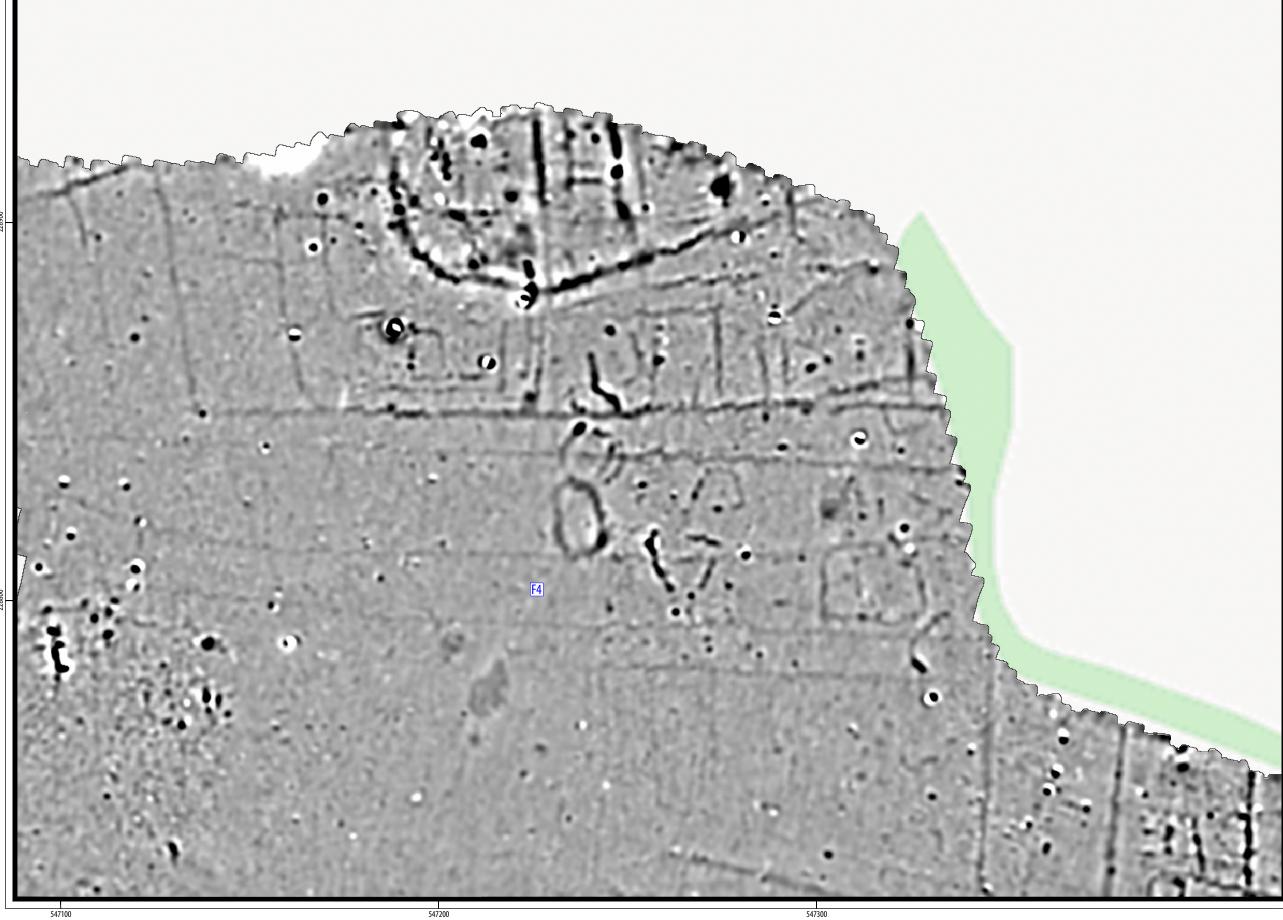
546500



ILLUS 22 XY trace plot of minimally processed magnetometer data; AAA1 South



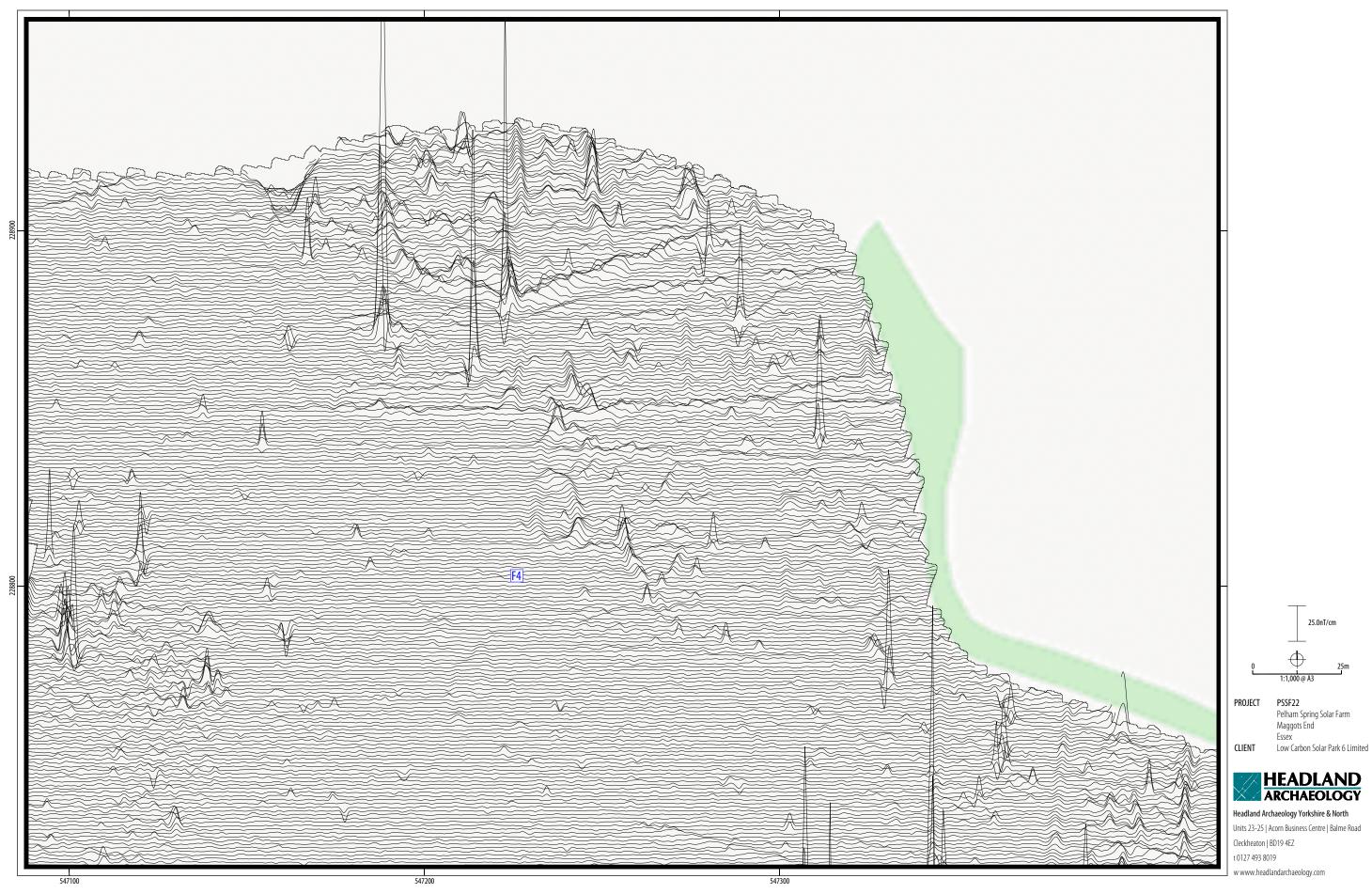
ILLUS 23 Interpretation of magnetometer data; AAA1 South



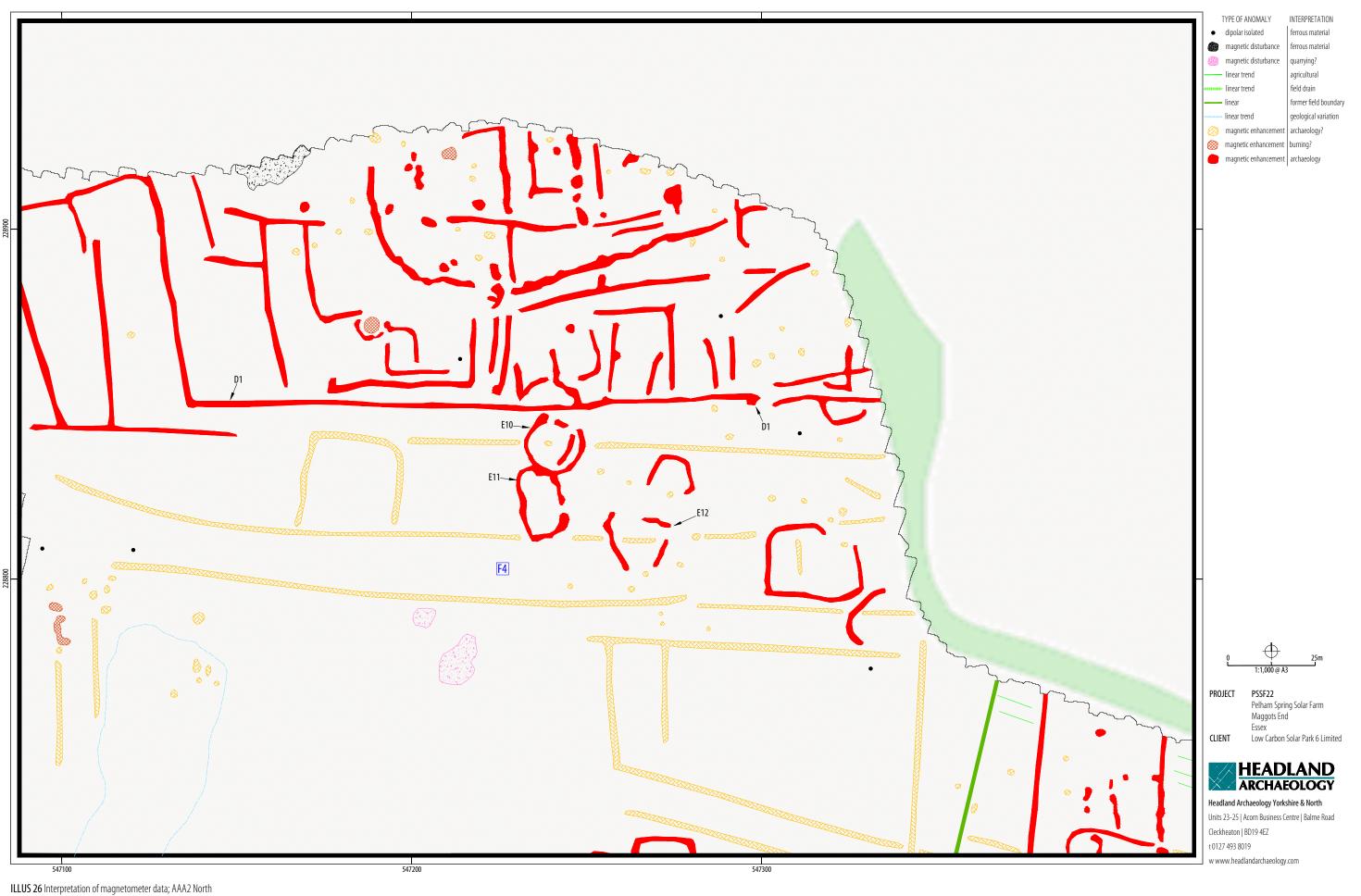
ILLUS 24 Processed greyscale magnetometer data; AAA2 North

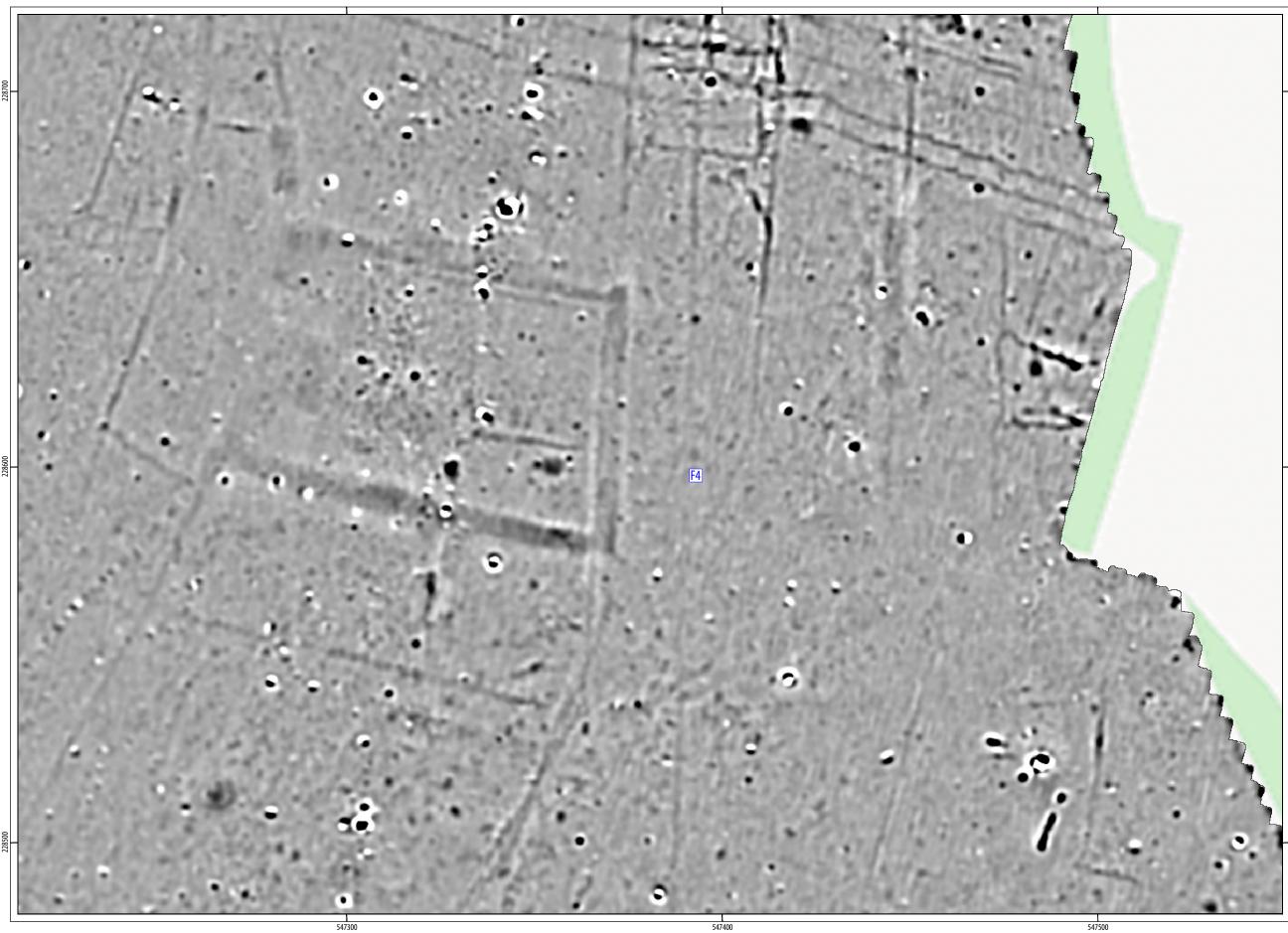


w www.headlandarchaeology.com



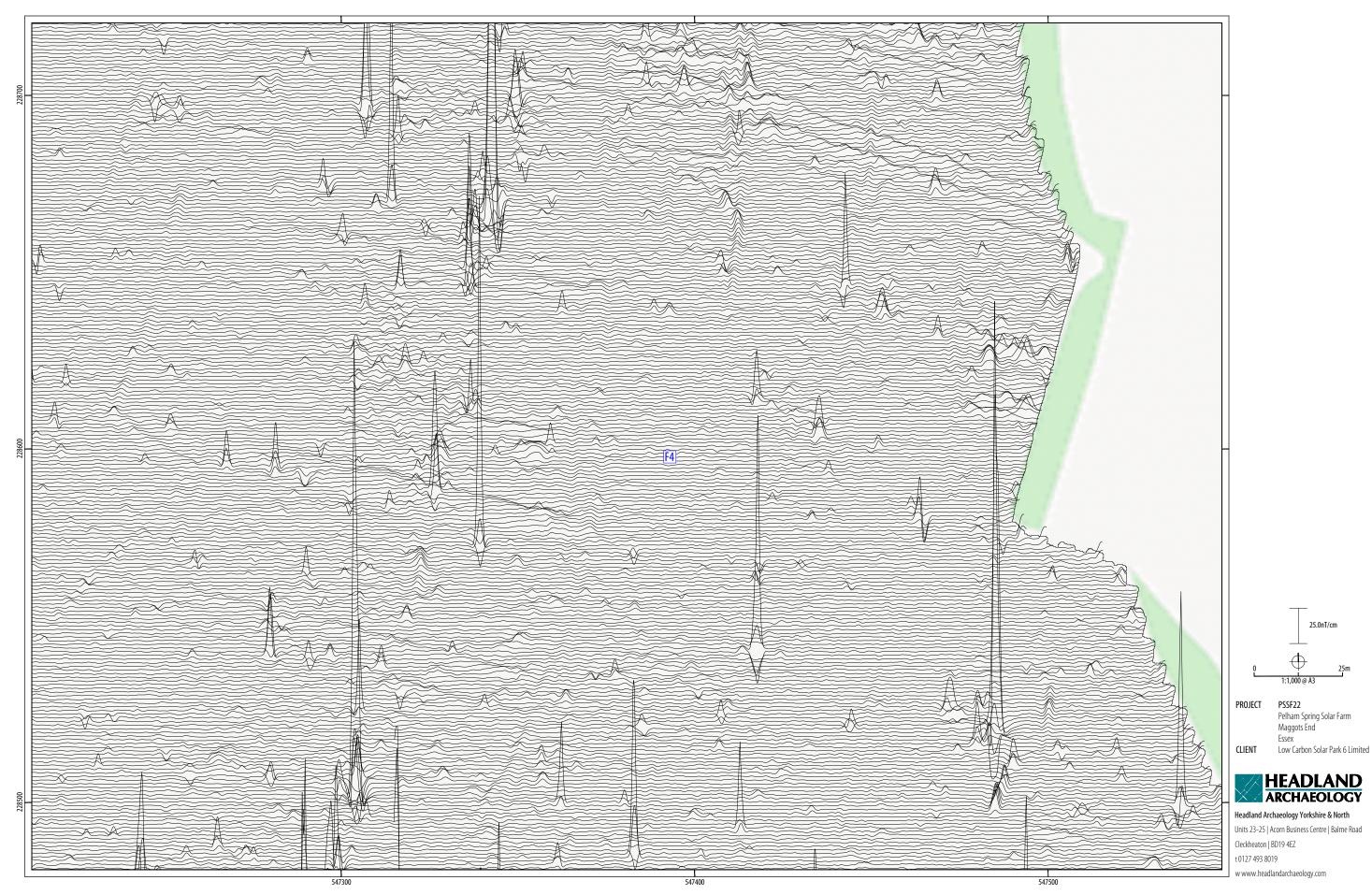
ILLUS 25 XY trace plot of minimally processed magnetometer data; AAA2 North



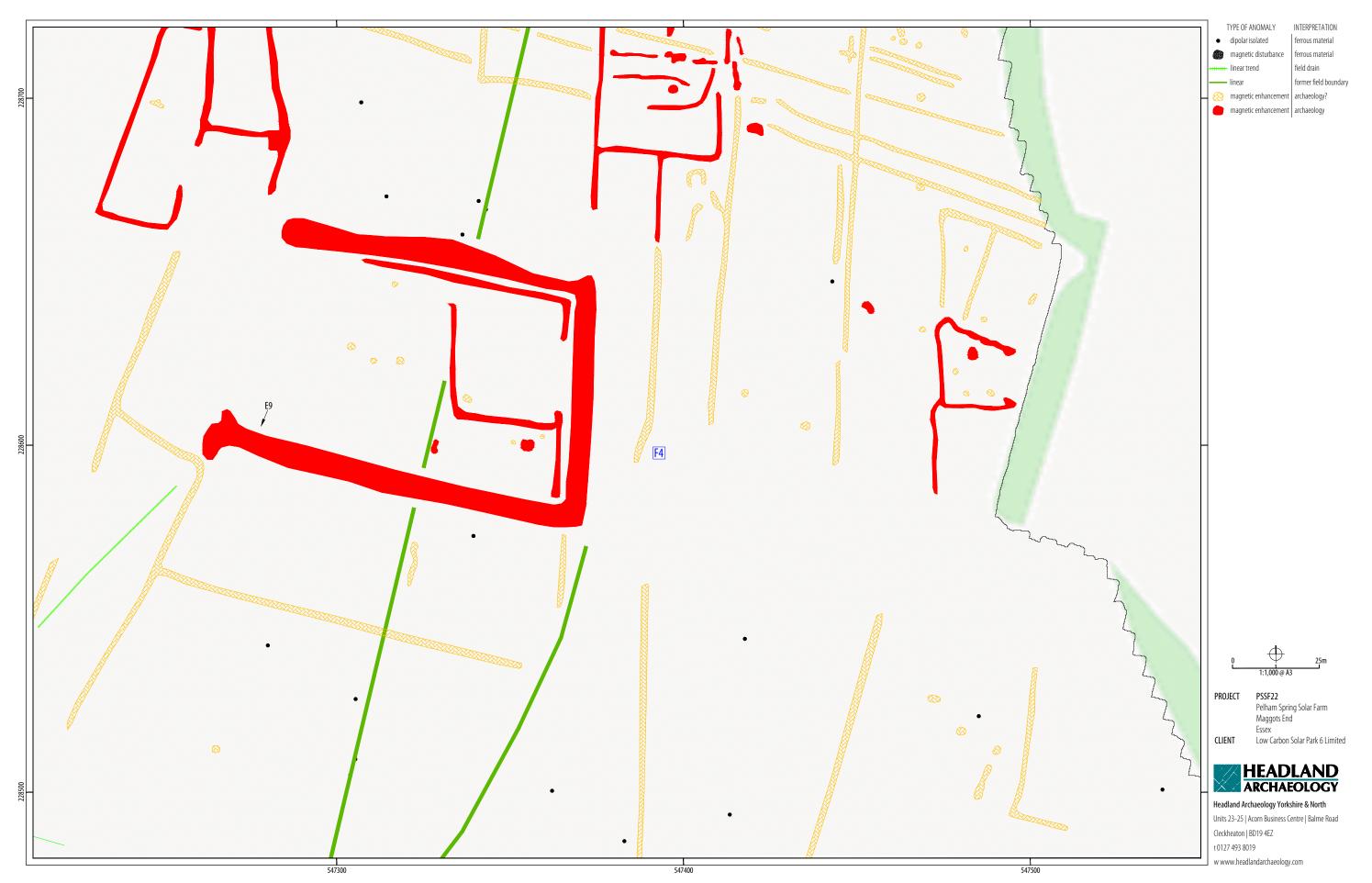


ILLUS 27 Processed greyscale magnetometer data; AAA2 South

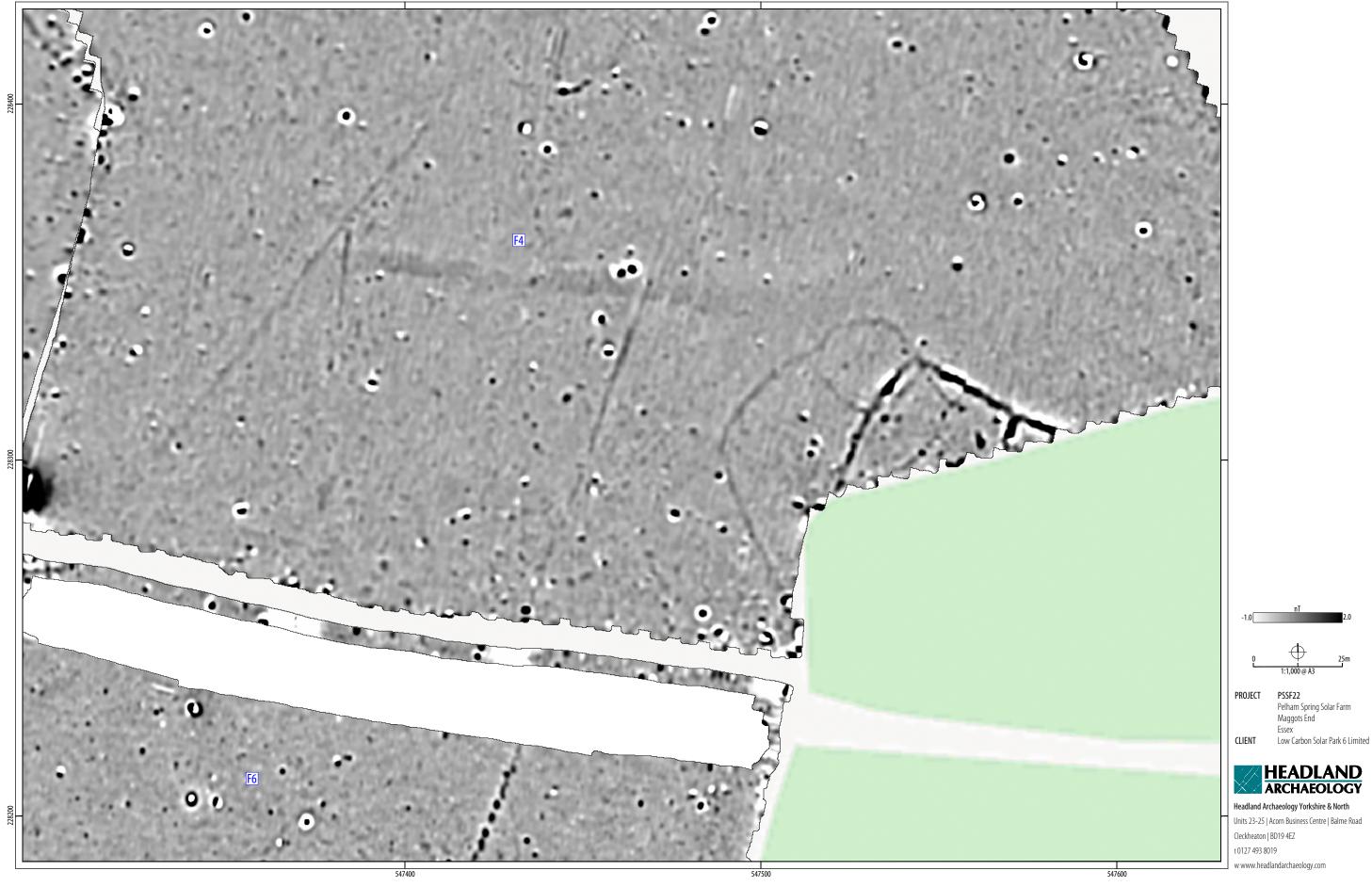




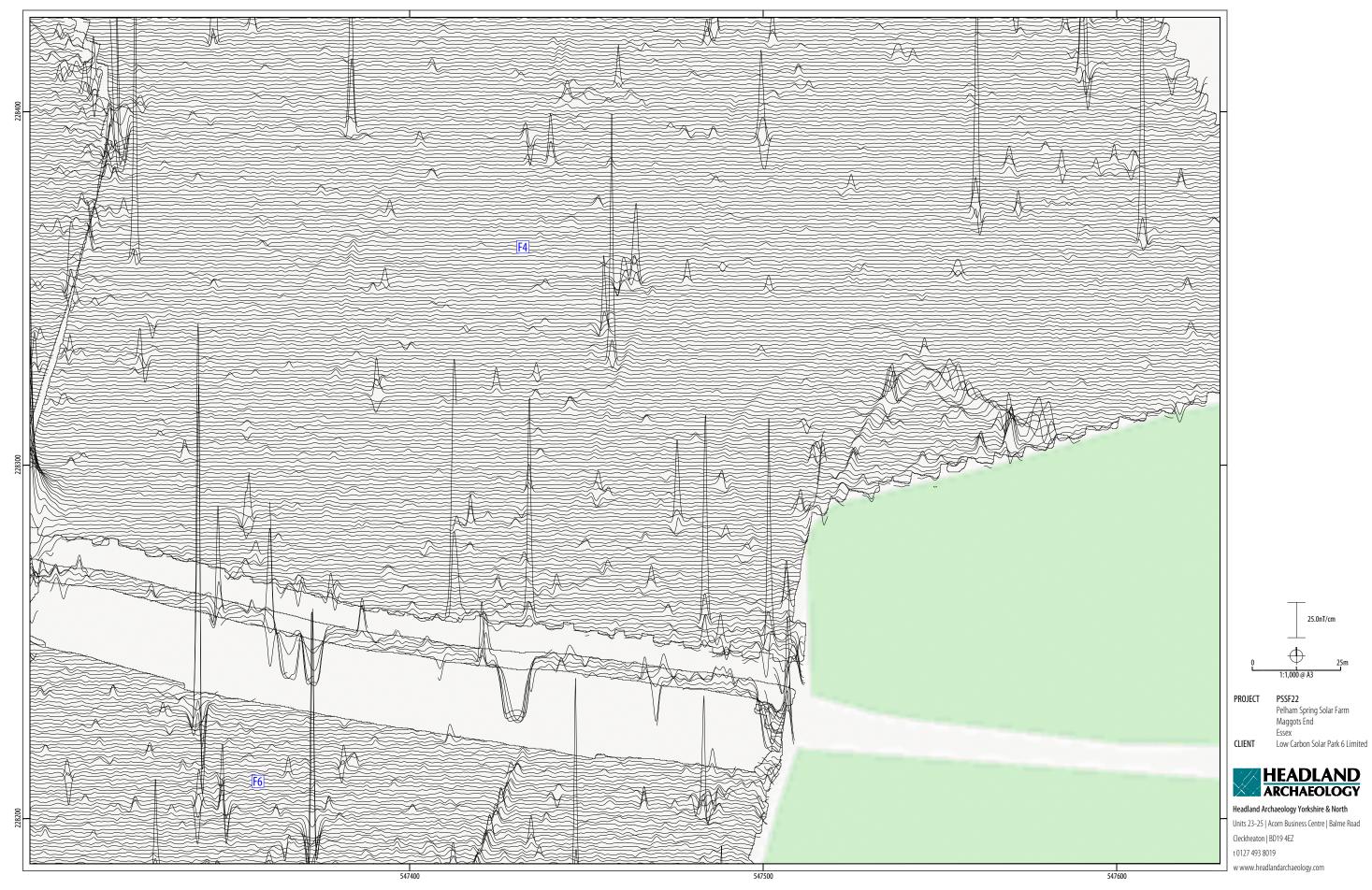
ILLUS 28 XY trace plot of minimally processed magnetometer data; AAA2 South



ILLUS 29 Interpretation of magnetometer data; AAA2 South



ILLUS 30 Processed greyscale magnetometer data; AAA3



ILLUS 31 XY trace plot of minimally processed magnetometer data; AAA3



7 APPENDICES

APPENDIX 1 MAGNETOMETER SURVEY

Magnetic susceptibility and soil magnetism

Iron makes up about 6% of the earth's crust and is mostly present in soils and rocks as minerals such as maghaemite and haematite. These minerals have a weak, measurable magnetic property termed magnetic susceptibility. Human activities can redistribute these minerals and change (enhance) others into more magnetic forms so that by measuring the magnetic susceptibility of the topsoil, areas where human occupation or settlement has occurred can be identified by virtue of the attendant increase (enhancement) in magnetic susceptibility. If the enhanced material subsequently comes to fill features, such as ditches or pits, localised isolated and linear magnetic anomalies can result whose presence can be detected by a magnetometer (fluxgate gradiometer).

In general, it is the contrast between the magnetic susceptibility of deposits filling cut features, such as ditches or pits, and the magnetic susceptibility of the topsoil, subsoil and rock, into which these features have been cut, which causes the most recognisable responses. This is primarily because there is a tendency for magnetic ferrous compounds to become concentrated in the topsoil, thereby making it more magnetic than the subsoil or the bedrock. Linear features cut into the subsoil or geology, such as ditches, that have been silted up or have been backfilled with topsoil will therefore usually produce a positive magnetic response relative to the background soil levels. Discrete feature, such as pits, can also be detected.

The magnetic susceptibility of a soil can also be enhanced by the application of heat. This effect can lead to the detection of features such as hearths, kilns, or areas of burning.

Types of magnetic anomaly

In most instances anomalies are termed 'positive'. This means that they have a positive magnetic value relative to the magnetic background on any given site. However, some features can manifest themselves as 'negative' anomalies that, conversely, means that the response is negative relative to the mean magnetic background.

Where it is not possible to give a probable cause of an observed anomaly a '?' is appended.

It should be noted that anomalies interpreted as modern in origin might be caused by features that are present in the topsoil or upper layers of the subsoil. Removal of soil to an archaeological or natural layer can therefore remove the feature causing the anomaly.

The types of response mentioned above can be divided into five main categories that are used in the graphical interpretation of the magnetic data:

Isolated dipolar anomalies (iron spikes) These responses are typically caused by ferrous material either on the surface or in the topsoil. They cause a rapid variation in the magnetic response giving a characteristic 'spiky' trace. Although ferrous archaeological artefacts could produce this type of response, unless there is supporting evidence for an archaeological interpretation, little emphasis is normally given to such anomalies, as modern ferrous objects are common on rural sites, often being introduced into the topsoil during manuring.

Areas of magnetic disturbance These responses can have several causes often being associated with burnt material, such as slag waste or brick rubble or other strongly magnetised/fired material. Ferrous structures such as pylons, mesh or barbed wire and buried pipes can also cause the same disturbed response. A modern origin is usually assumed unless there is other supporting information.

Lightning-induced remnant magnetisation (LIRM) LIRM anomalies are thought to be caused in the near surface soil horizons by the flow of an electrical current associated with lightning strikes. These observed anomalies have a strong bipolar signal which decreases with distance from the spike point and often appear as linear or radial in shape.

Linear trend This is usually a weak or broad linear anomaly of unknown cause or date. These anomalies are often caused by agricultural activity, either ploughing or land drains being a common cause.

Areas of magnetic enhancement/positive isolated anomalies Areas of enhanced response are characterised by a general increase in the magnetic background over a localised area whilst discrete anomalies are manifest by an increased response (sometimes only visible on an XY trace plot) on two or three successive traverses. In neither instance is there the intense dipolar response characteristic exhibited by an area of magnetic disturbance or of an 'iron spike' anomaly (see above). These anomalies can be caused by infilled discrete archaeological features such as pits or post-holes or by kilns. They can also be caused by pedological variations or by natural infilled features on certain geologies. Ferrous material in the subsoil can also give a similar response. It can often therefore be very difficult to establish an anthropogenic origin without intrusive investigation or other supporting information.

Linear and curvilinear anomalies Such anomalies have a variety of origins. They may be caused by agricultural practice (recent ploughing trends, earlier ridge and furrow regimes or land drains), natural geomorphological features such as palaeochannels or by infilled archaeological ditches.

APPENDIX 2 SURVEY LOCATION INFORMATION

An initial survey base station was established using a Trimble VRS differential Global Positioning System (dGPS). The magnetometer data was georeferenced using a Trimble RTK differential Global Positioning System (Trimble R8s model).

Temporary sight markers were laid out using a Trimble VRS differential Global Positioning System (Trimble R8s model) to guide the operator and ensure full coverage. The accuracy of this dGPS equipment is better than 0.01m.

The survey data were then super-imposed onto a base map provided by the client to produce the displayed block locations. However, it should be noted that Ordnance Survey positional accuracy for digital map data has an error of 0.5m for urban and floodplain areas, 1.0m for rural areas and 2.5m for mountain and moorland areas. This potential error must be considered if coordinates are measured off hard copies of the mapping rather than using the digital coordinates.

Headland Archaeology cannot accept responsibility for errors of fact or opinion resulting from data supplied by a third party.

APPENDIX 3 GEOPHYSICAL SURVEY ARCHIVE

The geophysical archive comprises an archive disk containing the raw data in XYZ format, a raster image of each greyscale plot with associate world file, and a PDF of the report.

The project will be archived in-house in accordance with recent good practice guidelines (http://guides.archaeologydataservice. ac.uk/g2gp/Geophysics_3). The data will be stored in an indexed archive and migrated to new formats when necessary.

APPENDIX 4 DATA PROCESSING

The gradiometer data has been presented in this report in processed greyscale and minimally processed XY trace plot format.

Data collected using RTK GPS-based methods cannot be produced without minimal processing of the data. The minimally processed data has been interpolated to project the data onto a regular grid and de-striped to correct for slight variations in instrument calibration drift and any other artificial data.

A high pass filter has been applied to the greyscale plots to remove low frequency anomalies (relating to survey tracks and modern agricultural features) to maximise the clarity and interpretability of the archaeological anomalies.

The data has also been clipped to remove extreme values and to improve data contrast.

APPENDIX 5 OASIS ARCHIVE

OASIS ID (UID): headland1-505578

Project Name:	Geophysical Survey, Magnetometry Survey at Pelham Spring Solar Farm, Essex
Activity type:	Geophysical Survey, Magnetometry Survey, MAGNETOMETRY SURVEY
Project Identifier(s):	p22-052
Planning Id:	[no data]
Reason for Investigation:	Planning: Pre application
Organisation Responsible for work:	Headland Archaeology (UK) Ltd
Project Dates:	14-Feb-2022 - 25-Feb-2022
HER:	Essex HER
HER Identifiers:	[no data]
Project Methodology:	The survey was undertaken using four Bartington Grad601 sensors mounted at 1m intervals (1m traverse interval) onto a rigid frame. The system was programmed to take readings at a frequency of 10Hz (allowing for a 10-15cm sample interval) on roaming traverses (swaths) 4m apart. These readings were stored on an external weatherproof laptop and later downloaded for processing and interpretation. The system was linked to a Trimble R8s Real Time Kinetic (RTK) differential Global Positioning System (dGPS) outputting in NMEA mode to ensure a high positional accuracy for each data point. MLGrad601 and MultiGrad601 (Geomar Software Inc.) software was used to collect and export the data. Terrasurveyor V3.0.37.0 (DWConsulting) software was used to process and present the data.
Project Results:	The survey has recorded anomalies indicative of significant and extensive archaeological activity at three locations in the proposed development area (PDA) all of which are interpreted as highly likely to be foci of settlement activity, possibly of different periods. AAA1 comprises a series of fields and smaller enclosures extending for approximately 500m along the western edge of the PDA in F1. The most concentrated and extensive area of activity is in F4 (AAA2 North and South) where a moated site is confirmed with outlying fields. North of this, along the northern edge of the PDA in F4, a second area of activity is identified. Although many of the anomalies here are low magnitude this complex area of enclosures is also clearly defined and extensive. However, given the extensive nature of, and proximity between, the two areas of activity it is difficult to be certain where one area finishes and the other starts or indeed whether they overlap. A third, isolated enclosure complex, AAA3, is also recorded in F4 bordering the north-west corner of Battle's Wood. Despite the level of archaeological activity described, parts of the PDA are devoid of anomalies. No anomalies of archaeological potential are recorded in F2 and F3 with very few recorded in F5 and F6 and the eastern half of F1. Many of the recorded anomalies are very weak responses although mostly easily discernible against the relatively homogenous magnetic background. It is therefore possible there may be other features that cannot be detected. Nevertheless, it is considered highly likely that the extent of all the areas of significant remains have been identified and their extent defined by the survey.
Keywords:	_
Archive:	_







Headland Archaeology Scotland

13 Jane Street Edinburgh EH6 5HE t 0131 467 7705 e scotland@headlandarchaeology.com Headland Archaeology Yorkshire & North Units 23–25 & 15 | Acom Business Centre | Balme Road Cleckheaton BD19 4EZ t 0127 493 8019 e yorkshireandnorth@headlandarchaeology.com Headland Archaeology South & East Building 68C |Wrest Park | Silsoe Bedfordshire MK45 4HS t 01525 861 578 e southandeast@headlandarchaeology.com w w w.headlandarchaeology.com Headland Archaeology Midlands & West Unit 1 | Clearview Court | Twyford Rd Hereford HR2 6JR t 01432 364 901 e midlandsandwest@headlandarchaeology.com Headland Archaeology North West Fourways House | 57 Hilton Street Manchester M1 2EJ t 0161 236 2757 e northwest@headlandarchaeology.com Planning (Listed Buildings and Conservation Areas) Act 1990 Town & Country Planning Act 1990 (as amended) Planning and Compulsory Purchase Act 2004



Birmingham (City) 39 Bennetts Hill, Birmingham, B2 5SN T 0121 308 9570 Birmingham@pegasusgroup.co.uk Offices throughout the UK and Ireland.

Expertly Done.

DESIGN | ECONOMICS | ENVIRONMENT | HERITAGE | LAND & PROPERTY | PLANNING | TRANSPORT & INFRASTRUCTURE

All paper sources from sustainably managed forests Pegasus Group is a trading name of Pegasus Planning Group Limited (07277000) registered in England and Wales. Registered office: Querns Business Centre, Whitworth Road, Cirencester, Gloucestershire, GL7 1RT We are **ISO** certified **9001**, **14001**, **45001**

