



One Earth Solar Farm

Outline Written Scheme of Investigation

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Glossary

Term	Definition
Archaeological Interest	The potential for a heritage asset to hold archaeological interest is defined in NPS EN-1: 'There will be archaeological interest in a heritage asset if it holds, or may potentially hold, evidence of past human activity worthy of expert investigation at some point' (footnote 234).
Designated Heritage Assets	<p>Designated heritage assets are defined in Overarching National Policy Statement for Energy EN-1 ('NPS EN-1', Department for Energy Security and Net Zero, November 2023) as '<i>Some heritage assets have a level of significance that justifies official designation. Categories of designated heritage assets are World Heritage Sites, Scheduled Monuments, Protected Wreck Sites, Protected Military Remains, Listed Buildings, Registered Parks and Gardens, Registered Battlefields, Conservation Areas, Registered Historic Landscapes (Wales only)</i>' (paragraph 5.9.4).</p> <p>There are heritage assets that are not currently designated, but which have been demonstrated to be of equivalent significance to designated heritage assets of the highest significance. These are:</p> <ul style="list-style-type: none"> • those that the Secretary of State has recognised as being capable of being designated as a Scheduled Monument or Protected Wreck Site but has decided not to designate • those that the Secretary of State has recognised as being of equivalent significance to Scheduled Monuments or Protected Wreck Sites but are incapable of being designated by virtue of being outside the scope of the related legislation. • those that have yet to be formally assessed by the Secretary of State, but which have potential to demonstrate equivalent significance to Scheduled Monuments or Protected Wreck Sites. (paragraph 5.9.5) <p>Non-designated heritage assets of archaeological interest that are demonstrably of equivalent significance to Scheduled Monuments or Protected Wreck Sites should be considered subject to the policies for designated heritage assets (paragraph 5.9.6)</p>
Non-Designated Heritage Assets	Non-designated heritage assets are defined in Planning Practice Guidance (2019) as: 'Non-designated heritage assets are buildings, monuments, sites, places, areas or landscapes identified by plan-making bodies as having a degree of heritage significance meriting consideration in planning decisions, but which do not meet the criteria for designated heritage assets' (paragraph 39). In line with NPS EN-1, non-designated heritage assets have significance that merits consideration, even though those assets are of lesser significance than designated heritage assets (paragraph 5.9.7).
Buried heritage assets	Heritage assets, including both Designated Heritage Assets and Non-Designated Heritage Assets (as defined above), that comprise buried remains (i.e. exist below present ground level).
Heritage Significance (Value)	Significance is defined in NPS EN-1 with reference to the National Planning Policy Framework Annex 2 ('NPPF', 2023) as 'The sum of the heritage interests that a heritage asset hold is referred to as its significance. Significance derives not only from a heritage asset's physical presence, but also from its setting' (paragraph 5.9.3, footnote 230). Heritage interests may be historic, archaeological, architectural, or artistic. For the purposes of this assessment, significance is referred to as 'sensitivity' to avoid confusion with EIA terminology of 'significant environmental effect'.

List of Abbreviations and Acronyms

Abbreviation/Acronym	Meaning
AMP	Archaeology Management Plan
AMS	Archaeological Mitigation Strategy
DBA	Desk Based Assessment
DEMP	Decommissioning Environmental Management Plan
EIA	Environmental Impact Assessment
ES	Environmental Statement
HE	Historic England
HER	Historic Environment Record
LPA	Local Planning Authority
LCC	Lincolnshire County Council
NDHA	Non-Designated Heritage Asset
NCC	Nottinghamshire County Council
NPS	National Policy Statement
NPPF	National Planning Policy Framework
OAMP	Outline Archaeological Management Plan
OCEMP	Outline Construction Environmental Management Plan
ODEMP	Outline Decommissioning Environmental Management Plan
OOEMP	Outline Operation Environmental Management Plan
OWSI	Outline Written Scheme of Investigation
PEIR	Preliminary Environmental Information Report
SM	Scheduled Monument
SSWSI	Site Specific Written Scheme of Investigation

1. Introduction

1.1 Overview and Scope of the Document

- 1.1.1 This document is an outline Written Scheme of Investigation (oWSI) produced by Icen Projects of behalf of One Earth Solar Farm Ltd (the 'Applicant') for the One Earth Solar Farm Proposed Development (the 'Proposed Development').
- 1.1.2 This document sets out the preliminary scope, strategy and guiding principles for the design, coordination and implementation of the next stage of archaeological works to be undertaken in relation to the Development Consent Order (DCO) application for One Earth Solar Farm. The purpose of these works is to inform the detailed design process, and their implementation to be secured through a Requirement within the DCO. This document also sets out the professional standards, research objectives and overarching methodologies that will govern the execution of the next stage of archaeological works.
- 1.1.3 Furthermore, this document presents the approach to consultation and approvals for the stages of further evaluation and mitigation and details the framework to deliver the stages of investigation and following post excavation assessment, analysis, publication and archive processes.

1.2 The Proposed Development

- 1.2.1 The Proposed Development will be sited across approximately 1,433 hectares (ha) of land within Lincolnshire and Nottinghamshire (the 'Order Limits'). The Proposed Development also extends across three administrative boundaries within the County areas, these being Newark and Sherwood District Council, West Lindsey District Council and Bassetlaw District Council (Figure 1).
- 1.2.2 The approximate centre of the Order Limits lies at National Grid Reference SK 482138, 371996.
- 1.2.3 The Proposed Development will involve the installation, operation (including maintenance) and decommissioning of solar photovoltaic (PV) panels, Battery Energy Storage Systems (BESS) and associated grid connection infrastructure which will allow for the generation and export of electricity to the proposed National Grid High Marnham Substation.
- 1.2.4 The Proposed Development is a Nationally Significant Infrastructure Project (NSIP) and therefore needs to be consented through a Development Consent Order (DCO).

1.3 Status of this Document

- 1.3.1 This document has been prepared for submission alongside the Archaeological ES Chapter (Application Document APP-038) as a draft document to support the DCO, and forms a dynamic strategy for the next stage of archaeological work
- 1.3.2 This document has been compiled based on the results of the trial trench evaluations undertaken to date within the Order Limits, and on the preliminary design parameters for the Proposed Development.

- 1.3.3 Upon review and approval of the trial trenching evaluation reports by Historic England and the Archaeology Advisory Teams to the LPAs, this document will be updated and submitted to Historic England and the Archaeology Advisory Teams to the LPAs for approval as per draft DCO requirement 12.

1.4 Roles and Responsibilities

- 1.4.1 The Applicant will establish the appropriate roles and responsibilities for site staff as set out in Outline Construction Environmental Management Plan (OCEMP) (Application Document APP-176).
- 1.4.2 The Archaeology Advisory Teams to the LPAs and Historic England will be responsible for confirming that the requirements of the DCO are met, in accordance with any conditions relating to archaeology. The Historic England and the Archaeology Advisory Teams to the LPAs will be responsible for final sign off and approval of the additional trial trenching evaluation work and mitigation measures.
- 1.4.3 The Applicant will appoint an Archaeological Clerk of Works (ACoW) for the Proposed Project. The ACoW, working on behalf of the Applicant, will be responsible for liaising with the Archaeology Advisory Teams to the LPAs and Historic England to ensure that evaluation and mitigation measures are correctly implemented, monitored, and maintained during the construction phase of the works. This will include monitoring the Archaeological Contractor's work to ensure compliance with the agreed methodology and this oWSI and monitoring the specific construction activities to ensure compliance with all archaeological mitigation requirements, including protection measures, set out in the Outline CEMP (Application Document APP-176). Roles and responsibilities of the ACoW are further discussed in Section 7.2 and 7.3 of this document.
- 1.4.4 The Applicant will appoint the Archaeological Contractor to carry out the archaeological evaluation and mitigation fieldwork. The Archaeological Contractor will be responsible for the production of Site-Specific WSIs for each stage of archaeological investigation (refer to Section 6).

2. Previous Archaeological Work undertaken in support to the DCO submission

2.1.1 The following archaeological assessment and reports informed the DCO application, and the strategy detailed in this document:

- > Archaeological ES Chapter (Application Document APP-038)
- > **6.21 Archaeological Desk-Based Assessment [APP-110 to APP-115]**, which included:
 - > Geoarchaeological Deposit Model
 - > Lidar and Aerial Photography Archaeological Landscape Assessment
- > **6.21 Geophysical Survey Report [APP-116 to APP-123]**
- > **One Earth Solar Farm: Archaeological Evaluation Post-excavation Assessment Report¹**

2.1.2 The Archaeological Desk-Based Assessment (DBA) provided, as far as is reasonably possible from existing records, the nature, extent and significance of the historic environment within the Order Limits.²

2.1.3 A geophysical survey was undertaken across several mobilisations between January 2024 and December 2024 across 1261,5 hectares of land included in the Order Limits³. The survey of the area adjoining the former High Marnham Power Station, approximately 55he, has been largely carried out during the evaluation works for the High Marnham Green Energy Business Park in 2023. The survey determined as far as is reasonably possible, the nature of the detectable archaeological resource within the Order Limits.

2.1.4 A geoarchaeological deposit model was undertaken in December 2024. A total of no. 8 boreholes were undertaken targeting the area along the River Trent with archaeological potential for the survival of paleoenvironmental remains dating to the prehistoric and historic periods alluvium deposits and selected for the trenchless crossing for the cables under the River Trent⁴.

2.1.5 The trial trenching evaluation comprised a tiered approach to assessing the likely impact of the Proposed Development on archaeology of high Sensitivity within the Order Limits. In line with ClfA Standard and Guidance for Archaeological Evaluation, the approach to the trial trenching was informed by the results of the DBA and geophysical survey. The

¹ Issued to the Archaeology Advisory Teams to the LPAs and Historic England on the 24th of July 2025 for comments.

² A full list of the sources consulted for the Archaeological DBA is included in **6.21 Appendix 9.3: Archaeological Desk-Based Assessment [APP-110 to APP-115]**

³ The results of the geophysical survey are presented in **6.21 Appendix 9.4: Geophysical Survey Report [APP-116 to APP-123]**

⁴ The geoarchaeological model is presented as part of the DBA in **6.21 Appendix 9.3: Archaeological Desk-Based Assessment [APP-110 to APP-115]**.

rationale for the tier system implanted for the trial trenching evaluation is summarised below:

- > Key areas with the highest potential impact from the Proposed Development (substation and BESS options parameters) have been identified as part of the design process. These have been investigated through a 3% trial trenching sample.
- > An area of special archaeological interest has been identified by the Archaeological Advisory Teams to the Local Planning Authorities (LPAs) and Historic England for their significant archaeological potential (Ragnall) in their scoping response. As above, this has been investigated through a 3% trial trenching sample.
- > Some of the areas outside of those detailed above but identified in the Desk-Based Assessment and/or geophysical survey as being of archaeological potential have been evaluated through a 2% trench sample. This allowed further data collection and confirmation of the results of these initial surveys, by objectively testing the results of the geophysics against the results of intrusive evaluation.

- 2.1.6 The trial trenching evaluation included, as appropriate, trenches targeting features identified by the geophysical survey as well as trenches targeting apparently 'blank' areas in the selected evaluation areas.
- 2.1.7 A first phase of the trial trenching evaluation was undertaken between September 2024 and December 2024. The evaluation comprised 523 trial trenches⁵.
- 2.1.8 A second phase of trial trenching evaluation has been undertaken between March and April 2025, following further consultation with the Archaeological Advisory Teams to the LPAs and Historic England. The evaluation focused on the land south of the STW Water Reservoir and comprised 9 trenches, which targeted both the potential archaeological features detected by the geophysical survey, and 'blank' areas.
- 2.1.9 The trial trenching evaluation provided the required information to define the nature, extent, preservation and significance to inform the archaeological mitigation strategy for the Proposed Development. This includes assessing the Project Design's capacity to address and accommodate any archaeological constraints that have been, or may in the future be, identified. This process also provided a better understanding of the buried heritage assets and demonstrated the substantial reliability of the non-intrusive assessments and evaluation carried out to inform the targeted trial trenching evaluation.
- 2.1.10 In consideration of the following:

⁵ The results of the trial trenching evaluation are presented in **One Earth Solar Farm: Archaeological Evaluation Post-excavation Assessment Report**

- > CifA's Code of Conduct Principle 2 stating that *"the member has a responsibility for the conservation of the historic environment,"* and Rules 2.1 stating that *"A member shall strive to conserve archaeological sites and material as a resource for study and enjoyment now and in the future, and shall encourage others to do the same. Where such conservation is not possible, they shall seek to ensure the creation and maintenance of an adequate record through appropriate forms of research, recording, archiving of records and other relevant material, and dissemination of results"*, and Rule 2.3 stating that *"A member shall ensure that the objects of a research project are an adequate justification for the destruction of the archaeological evidence which it will entail."*
- > Paragraph 5.9.11 of the Overarching National Policy Statement for Energy (EN-1, 2024), stating that *"Where a site on which development is proposed includes, or the available evidence suggests it has the potential to include, heritage assets with an archaeological interest, the applicant should carry out appropriate desk-based assessment and, where such desk-based research is insufficient to properly assess the interest, a field evaluation. Where proposed development will affect the setting of a heritage asset, accurate representative visualisations may be necessary to explain the impact."*
- > Paragraph 5.9.21 of the EN-1 stating that *"Where there is a high probability (based on an adequate assessment) that a development site may include, as yet undiscovered heritage assets with archaeological interest, the Secretary of State will consider requirements to ensure appropriate procedures are in place for the identification and treatment of such assets discovered during construction."*
- > Paragraph 2.3.8 of the National Policy Statement for Renewable Energy Infrastructure (EN-3) stating that *"In considering the impact on the historic environment as set out in Section 5.9 of EN-1 and whether the Secretary of State is satisfied that the substantial public benefits would outweigh any loss or harm to the significance of a designated heritage asset, the Secretary of State should take into account the positive role that large-scale renewable projects play in the mitigation of climate change, the delivery of energy security and the urgency of meeting the net zero target."*

2.1.11 The extent and scope of the first phase of the targeted trial trenching evaluation is considered proportionate and appropriate, striking the right balance between providing the required evidence to inform the DCO application and limiting the impact on Buried Heritage Assets arising from any intrusive archaeological work. In other words, carrying out any further trial trenching evaluation as a pre-commencement requirement, will reduce the risk of any disproportionate harm to buried heritage deposits arising from a partial or total removal of assets as a consequence of the archaeological trial trenching investigation, to not be offset by the positive environmental effects of the Proposed Development.

3. Legislation, Planning Policy and Guidance

3.1 Legislation, National and Local Planning Policy

3.1.1 Legislation, planning policy and guidance relating to buried heritage, and pertinent to this document comprises:

- > Infrastructure Planning (Decisions) Regulations 2010 – specific reference to Regulation 3
- > Ancient Monuments and Archaeological Areas Act 1979 – Part I Ancient Monuments: Protection of Scheduled Monuments
- > Overarching National Policy Statement for Energy (EN-1) (2024)
- > National Policy Statement for Renewable Energy Infrastructure (EN-3) (2024)
- > National Policy Statement for Electricity Networks Infrastructure (EN- 5) (2023)
- > National Planning Policy Framework (2024)
- > Newark and Sherwood, Draft Amended Allocations and Development Management Plan (AADMDPD), Regulation 22, (January 2024)
- > Newark and Sherwood District Council (2023), Local Development Framework, Allocations and Development Management, Development Plan Document (AADMDPD), Submission Version, January 2024
- > Newark and Sherwood District Council (2019), Amended Core Strategy Development Plan
- > Central Lincolnshire Local Plan (2023)
- > Bassetlaw District Council (2010) Local Development Framework, Publication Core Strategy and Development Management Policies
- > Draft Bassetlaw Local Plan (2023) 2020-2038: Main Modifications Version, August 2023

3.2 Professional Regulations and Standards & Guidance

3.2.1 This document has been drafted with reference to the following national professional regulations, standards and guidance:

- > Chartered Institute for Archaeologists (CIfA), 2023, Standard for archaeological excavation
- > Chartered Institute for Archaeologists (CIfA), 2023, Standard for archaeological monitoring and recording
- > Chartered Institute for Archaeologists (CIfA), 2014a, Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials (revised 2020)

- > Chartered Institute for Archaeologists (CIfA), 2014b, Standard and Guidance for Archaeological Field Evaluation (revised 2023)
- > Chartered Institute for Archaeologists (CIfA), 2014c, Code of Conduct (revised 2022)
- > Chartered Institute for Archaeologists (CIfA), 2014d, Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives (revised 2020)
- > Chartered Institute for Archaeologists (CIfA), 2014e, Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials.
- > Chartered Institute for Archaeologists (CIfA), 2014f, Standard and guidance for historic environment desk-based assessment (revised 2020)
- > English Heritage (2008) Conservation Principles, Policies and Guidance
- > Historic England (2015), Managing Significance in Decision-Taking in the Historic Environment – Historic Environment Good Practice Advice in Planning: 1. The Historic Environment in Local Plans ('GPA2')
- > Historic England (2017) The Setting of Heritage Assets – Historic Environment Good Practice Advice in Planning: 3. Historic England and Historic Environment Forum
- > Historic England (2007, updated 2019) Piling and Archaeology guidance and good practice
- > Historic England (2020) Good Practice in Planning 4: Enabling Development and Heritage Assets
- > Historic England (2021) Historic Environment Advice Note 15. Commercial Renewable Energy Development and the Historic Environment ('HEAN15', Historic England)
- > Historic England (2022) Planning and Archaeology: Historic England Advice Note 17
- > Lincolnshire County Council, Guidance for large schemes including NSIPs and EIAs, General Scoping Opinion for the Historic Environment
- > Planning Practice Guidance (2023), Historic Environment (2019)
- > The British Association for Biological Anthropology and Osteoarchaeology (BABAO) 2019, Code of Ethics and Code of Practice

3.2.2 A professional, accredited and competent archaeological contractor will be appointed to deliver the work described within this Outline WSI.

4. LIMITATIONS AND ASSUMPTIONS

- 4.1.1 The combination of desk-based and field investigations has enabled confident and robust conclusions (while acknowledging any specific inherent limitations) regarding the likelihood of buried archaeological remains, their potential Sensitivity, the likely effects of the Proposed Development, and the direction for an appropriate mitigation strategy.
- 4.1.2 This document will be updated in accordance with the results of the ongoing consultation with the Archaeological Advisory Teams to the LPAs and Historic England and will consider the continuous development of the Project Design.
- 4.1.3 Where trial trench evaluation was not undertaken in certain areas of the Order Limits it is not regarded as a limitation to the assessment. The impacts and any additional mitigation requirements in these areas can be adequately understood based on the data presented in the DBA and the results of the completed geophysical survey evaluation which, alongside the results of the trial trench evaluation of other areas, provide a robust basis for understanding the impacts and mitigation requirements of the Order Limits as a whole.
- 4.1.4 Providing a flexible strategy for the next phases of trial trenching evaluation and mitigation allows this document to remain flexible and responsive to any future potential environmental constraints, technological advancements, and updates in professional guidance.
- 4.1.5 The need for flexibility in design, layout and technology is recognised in National Policy Statement EN-1 is details of a development, such as the final design, may not be finalised until after consent is granted.
- 4.1.6 This approach aligns with industry best practice and has been successfully adopted on recently consented NSIPs (such as Longfield Solar Farm, Essex, Mallard Pass Solar Farm, Lincolnshire, and Springwell Solar Farm, Lincolnshire).

5. ARCHAEOLOGICAL BACKGROUND

5.1 Geology, Topography and Site Description

Geology

5.1.1 Superficial deposits are present across much of the Prosed Development, although there are areas with no mapped superficial deposits, predominantly in the western part of the Order Limits, and more restricted areas to the east of the River Trent (BGS 2025).

- > The dominant superficial deposit is the Holme Pierrepont Sand and Gravel member, which is present around Low Marnham, from Fledborough to Woodcoates, in bands to the west and east of the River Trent and in a more widespread distribution further east.
- > Alluvium is present along the course of the River Trent, and in more limited extents along more minor watercourses throughout the Order Limits. An area of Devensian Till (mainly clay) is present in the northwest of the Order Limits, between Ragnall and Darlton. To the east of the River Trent, there are some deposits of Blown Sand.

5.1.2 Bedrock geology is dominated by mudstone from the Mercia Mudstone Group. This comprises mainly red mudstone with some layers of siltstones or halite-bearing units. Thin sandstone beds may be present. A small section of the Order Limits at the far eastern extent is underlain by mudstones from the Penarth Group. These are grey to black mudstones with occasional limestone or sandstone layers (BGS 2024).

5.1.3 The alluvial deposits along the Trent have archaeological potential for the survival of Holocene (post-ice age) paleoenvironmental remains dating to the prehistoric and historic periods. Such remains have the potential for environmental reconstruction via waterlogged seeds, pollen, macro fossils etc along with sedimentological examination. They may also contain indicators of human activity and early landscape management.

5.1.4 Earlier prehistoric human activity may also be present from the terrace gravels that flank the river in the form of flint tool or tool working remains.

Topography

5.1.5 The Order Limits comprises a contiguous block of land between the villages of south Clifton, Newton on Trent Thorney and Skegby. It is roughly split in half longitudinally by the River Trent, and it is bounded to the north by the A57.

5.1.6 Topographically the majority of the land within the Order Limits east of the River Trent and in the floodplain of the river is generally flat between c. 6m and 10m above Ordnance Datum (aOD). The topography of the land parcels within the Order Limits located to the west of the River Trent is more varied, rising to approximately 20m aOD in both the northwest and southwest corners around the A57 and Skegby respectively, from roughly 7m aOD near Fledborough.

5.1.7 The land included in the Order Limits is predominantly open fields used for arable farming, with a smaller fraction used for grazing (estimated percentages 90% arable to 10% grazing). No significant buildings are present. Occasional ponds were observed

within fields, with most surface water being present in ditches along field boundaries. In terms of potential contamination sources, some minor areas of waste storage (associated with agricultural land-use) were noted. There was no visible evidence of infilled pits or quarries. An above ground oil pipeline was noted crossing the eastern area of the Order Limits. A former oil well facility is also present (on-site within the northeast area). Pumping stations operate to manage the surface water in some locations. Drainage ditches were deeper in western parts of the Order Limits. Visible discoloration of water was observed in ditches in some locations. Overhead power lines are common across the area.

Designated Heritage Assets

- 5.1.8 Two Scheduled Monuments (SM) were originally partially within the Order Limits, albeit both are currently excluded from the developable area as part of the Environmental Measures already included in the Design of the Proposed Development: Roman Vexillation Fortress, Two Roman Marching Camps and a Royal Observers Corps Monitoring Post, Newton-on-Trent (NHLE: 1003608); and Whimpton Moor Medieval Village and Moated Site, Ragnall (NHLE: 1017567).
- 5.1.9 There are 2 further Scheduled Monuments within the 2 km study area (outside of the Order Limits). This includes:
- > Ringwork at Kingshaugh Farm, East Markham (NHLE: 1018619), 1.4km west; and
 - > Cross in St Peter and St Paul's Churchyard, Kettlethorpe (NHLE: 1018289), 1.5km north.
- 5.1.10 There are seven further Scheduled Monuments within the 5 km study area, but outside of the 2 km Study Area:
- > Moat, three fishponds, enclosures, hollow way, and part of a road at Hall Yard (NHLE: 1008247), 2.2km southwest;
 - > Moated site W of Church Road (NHLE: 1017858), 3.4km east;
 - > Deserted Village of North Ingleby (NHLE: 1003570), 4.6km northeast;
 - > Site of medieval nunnery, Broadholme (NHLE: 1008670), 3.9km east;
 - > Site of medieval town, Torksey (NHLE: 1004991), 4.9km north;
 - > Torksey Castle (NHLE: 1005056), 5km north; and,
 - > Fleet Plantation moated site (NHLE: 1008594), 4.2km north.

5.2 Archaeological Background

- 5.2.1 All the buried heritage assets and the complete archaeological baseline are detailed further in 6.21 Appendix 9.3 Archaeological Desk-Based Assessment [APP-110 to APP-115]. The section below summarises the DBA and the geophysical survey results, focusing on buried heritage assets included in the Order Limits.

Palaeolithic Period to Iron Age (Before AD 43)

- 5.2.2 Within the Order Limits, the known main cluster of prehistoric occupation (PH001) has been detected through a number of surveys, cropmarks and aerial photography analysis and archaeological interventions on the area of Newton Cliff on the east bank of River Trent, between North Clifton and Newton-on-Trent, west of Thorney and encircling the Roman Vexillation Fortress and marching camps (NHLE: 1003608). According to the HER and Portable Antiquities Scheme data, in this area over 50,000 artefacts have been collected during a number of archaeological interventions, field walk surveys and chance/antiquarian finds. Assets in this group, especially those represented by artefact scatters show evidence for having been affected by historic (and ongoing) agricultural activities – for example MLI52576, comprising a significant scatter of prehistoric finds across three fields, is noted in the HER description as being indicative of “sever plough damage to a site of late Mesolithic to late Neolithic/early Bronze Age date”. Field excavations exposed significant remains spanning the late Mesolithic to late Neolithic/early Bronze Age, such as remains of a late Mesolithic structure, linear features, waste pits and flint tool production debris, a Neolithic structure and Bronze Age features and finds. This suggests a pattern of late Mesolithic to late Neolithic/early Bronze Age occupation in the wider landscape, perhaps intermittent, transient or seasonal in nature, connected to the exploitation of the rich resources offered by the River Trent and associated environment.
- 5.2.3 The geophysical survey carried out to inform the DCO application, confirmed the presence of a likely settlement site dated to the late Iron Age/early Roman period comprising a series of enclosures and ditches aligned north-south located south of the Water Reservoir (UN005).
- 5.2.4 Further east within the Order Limits and southeast of Newton-on-Trent, extensive cropmarks were identified, suggesting the presence of a large number of ditches, field boundaries, trackways, and linear features, along with a number of enclosures and possible pit features (PH002). Whilst the dating is unconfirmed, the features were thought likely to date to the Iron Age or Roman periods. Both the Archaeological Landscape Assessment and the geophysical survey recorded further archaeological activity west of Southmoor Lane likely associated with the above (UN004). The cropmarks recorded in the HER extending northeast of Southmoor Lane potentially related to PH002 have not been associated with archaeological deposits by the geophysical survey, and therefore might not be of archaeological origin
- 5.2.5 During the archaeological excavation at Andrew’s Field near South Clifton, Neolithic to early Bronze Age artefacts not associated with features or structures were recorded. Additionally, casual finds, primarily flints not associated with clear occupation markers, were recovered between North and South Clifton, outside the southeast boundary of the Order Limits (PH004).

Roman Period (AD 43 – 410)

- 5.2.6 The most significant known Roman remains are those of the Vexillation Fortress and marching camps. This area is a protected Scheduled Monument (along with a Royal Monitoring Corps observation post, NHLE: 1003608) and is located to the southwest of Newton-on-Trent, on the eastern bank of the Trent where the river bends sharply (RO001), outside but in close proximity with the Order Limits. The fortress dates from the 1st century AD, during the military conquest of Britannia by the Roman Army and forms a rare subset of Roman defensive sites. The observation post, which forms part of the monument, was principally a Cold War era monitoring station for spotting enemy aircraft and reporting nuclear explosions and the resultant spread of radioactive fallout in the

event of nuclear attack. It was in use between 1961 and 1991. While the Roman Vexillation Fortress sits wholly outside of the Order Limits and it is included in a non-development buffer, it has been considered in this summary as there is potential for some buried heritage features within the Order Limits, in the proximity of the Fortress, to be associated with it

5.2.7 Within the Order Limits, on the West bank of the River Trent south of Ragnall, aerial photographs and cropmarks shows the presence of a number of earthworks and enclosures. These have been interpreted as a potential Roman settlement (RO004). Geophysical survey recorded cluster of low-magnitude archaeological features likely defining areas of settlement activities in three locations (UN012), which are likely corresponding with the possible Roman settlement and cropmark complex recoded in the HER. This has also been confirmed by the Lidar and Aerial Photography Archaeological Landscape Assessment, which recoded an area containing a complex assemblage of linear anomalies which could be interpreted as a settlement of Iron-Age to Roman date.

5.2.8 As discussed above regarding PH002, southeast of Newton-on-Trent, a review of the HER data, suggests the presence of features of potential Roman chronology within the Order Limits (RO003). Both the Archaeological Landscape Assessment and the geophysical survey carried out to inform this DBA, recorded further archaeological activity west of Southmoor Lane likely associated with the above (UN004). The cropmarks recorded in the HER extending northeast of Southmoor Lane potentially related to RO003 have not been associated with archaeological deposits by the geophysical survey.

Saxon and Medieval Period (AD 410 –1485)

5.2.9 The main medieval buried heritage within the 2km Study Area is Whimpton Moor medieval village and moated site (ME001), which is also designated as Scheduled Monument (NHLE: 1017567). The monument includes the earthwork and buried remains associated with Whimpton Moor medieval village and the moated site. The earthworks represent former house platforms, boundaries, ponds, a moated dwelling and remains of ridge and furrow cultivation. Potentially connected to the medieval village, northwest of the Study Area there have been found two skeletons, one in a stone coffin. Notwithstanding the outline of the Scheduled Monument as designated lies outside of the Order Limits, the HER data, geophysical survey and the Archaeological Landscape Assessment, highlighted the presence of a potential buried heritage anomalies related to Whimpton Moor that might partially extend on within the Order Limits on the West and on the South. While Whimpton Moor sits wholly outside of the Order Limits and it is included in a non-development buffer, it has been considered in this summary as there is potential for some buried heritage features within the Order Limits, in the proximity of the village, to be associated with it

5.2.10 In substantial continuity with the prehistoric and Roman period, a number of Saxon and medieval occupation markers are located between North Clifton Newton-on-Trent, within the Order Limits. Scatters of medieval pottery collected during systematic field walk survey and remnants of ridge and furrow cultivation noted as visible crop marks variously suggest that the area was still being in use during the medieval period (ME006).

- 5.2.11 A medieval field system or cultivation remains comprising ridge and furrows has been recorded on the HER within the Order Limits, approximately 1.2km southeast of Newton-on-Trent (ME008).
- 5.2.12 The Medieval Deer Park surrounding the medieval manor of Kettlethorpe (ME009) covers a portion of the northeast corner of the Order Limits, and spans north until the limits of the Study Area. This encompasses a number of heritage assets, including the Cross in St Peter and St Paul's Churchyard, Kettlethorpe (NHLE:1018289), located 1.6 km north of the Order Limits.

Post-medieval to Modern Period (AD 1485 – present)

- 5.2.13 The majority of the post-medieval and modern buried heritage assets within the Study Area lie outside of the Order Limits, which appears to have been predominantly under agricultural use throughout the post-medieval and modern periods.
- 5.2.14 Outside of the Order Limits but within the 2km Study Area, the former Royal Observer Corps underground observation post constitute, together with the Vexillation Fortress, a Scheduled Monument (RO001, List Entry Number 1003608). The post was built during the Cold War, as part of a national system to provide civil and military authorities with essential information in the event of a nuclear attack.
- 5.2.15 Partially within the Order Limits, on the northwest corner, the Medieval Deer Park of Kettlethorpe (ME008), shows also some post-medieval modification such as banks, ditches, drains and the erection of walls mostly located around Kettlethorpe Hall. While the related HER entry extends partially within the Order Limits, there are no clear buried heritage assets clearly recorded within it.
- 5.2.16 On the west bank of River Trent, map depictions suggest the presence of two brick kilns: one nearby Ragnall (PM001) and one east of Skeby (PM002). Both are thought to be built at the end of the 18th century, but they are last recorded on the map of 1836. Potential buried remnants related to these kilns may still be present within the Order Limits. The Geophysical survey carried out to inform the DCO for the Proposed Development, located PM001 roughly 100m further to the west in respect of the location recorded in the HER.

Undated

- 5.2.17 Within the Order Limits, the following undated buried heritage assets have been recorded during the assessment work carried out to date:

- > A number of linear and cut features, some of which have been tentatively interpreted in the HER as potential enclosures, have been recorded in the eastern part of the Order Limits, west of Thorney (UN002). These have been identified via cropmarks in the HER, but the results of the geophysical survey only recorded anomalies almost exclusively of agricultural, natural, and modern origin. The Aerial Photography Archaeological Landscape Assessment shows a collection of linear anomalies includes two parallel lines probably representing a track or road of unknown date. Adjacent to this, several linear anomalies are likely to represent boundary ditches, one of which is curved and might be a segment of a small, rounded enclosure. There is also a concentration of discrete anomalies nearby, possibly representing pits.
- > Settlement activities concentrated along the west side of Southmoore Lane, including enclosure and linear features, have been recorded by the geophysical survey (UN004). These seems to extend south up to Mill Lane, in what seems like a continuous line of archaeological activity. The cropmarks recorded in the HER extending northeast of Southmoore Lane potentially related to PH002, RO003 and ME004 have not been associated with archaeological deposits by the geophysical survey.
- > An area of high archaeological interest is located in the fields south of the Water Reservoir, on the east bank of River Trent by both the assessment of the HER and by the geophysical survey (UN005). This suggested the presence of a likely settlement, potentially related with PH001, comprising enclosures, linear features and an area that has been provisionally interpreted as localised burning. Despite the high archaeological potential of the area west of the reservoir suggested by the HER, the geophysical survey only detected east-west aligned traces of ridge and furrow. The geophysical survey carried out on the field south of UN005, did not return any anomaly of archaeological nature.
- > The geophysical survey and the Aerial Photography Archaeological Landscape Assessment mapped a series of adjoining rectilinear enclosures and ditches probably indicating settlement activities potentially associated with the cluster of cropmarks and enclosures recoded in the HER localised in the same area (UN006 and UN007). A further small cluster of anomalies has been recorded approximately 130 m northeast of UN007, adjacent to a prehistoric artefact scatter recoded in the HER (PH004). The association between the latter and UN006 and UN007 is at the moment only conjectural.
- > Earthworks, including banks and quarry activities, are recorded in a large portion of land only partially included in the Order Limits, southwest of Ragnall Village (UN008). The geophysical survey carried out in the area did not record any anomalies of potential archaeological origin.
- > A potential rectilinear enclosure has been recorded by the geophysical survey approximately 100 m north of the High Marhnam Power Station (UN009). Potentially connected, on the south of UN009, a circular arrangement of discrete pit-like responses suggests the presence of further archaeological features, or a unified one. The potential features have also been recorded in the Aerial Photography Archaeological Landscape Assessment
- > Approximately 250 m south of the Potential Roman Settlement at Ragnall, west of Fledborough, a right-angled ring ditch associated with other cut features of potential archaeological origin has been recorded during the geophysical survey (UN010).

- > Two small cluster of ditches and a potential enclosure have been recorded at the western and south-western boundary of the field south of Fledborough Beck (UN011). Approximately 375 m to the south, another small cluster of perpendicular ditches aligned broadly north-south, and east-west has been tentatively interpreted as an enclosure (UN013). Both UN011 and UN013 have also been recorded during the geophysical survey and the Aerial Photography Archaeological Landscape Assessment.
- > Both the geophysical survey and the Aerial Photography Archaeological Landscape Assessment, on the area of the Potential Roman Settlement at Ragnall (RO004) and on the adjoining fields showed a large area of archaeological activities (UN012). Clusters of linear anomalies interpreted as ditches forming adjoining enclosures, likely defining areas of settlement activities are mapped in three distinct locations. Further archaeological activities potentially related with RO004/UN012 are also recorded slightly north (UN021) and northwest, close to Chestnut Farm (UN022). Close to River Trent, another cluster of potential archaeological activity has been recorded approximately 400 m east of Ragnall (UN023).
- > Potential ditch-like anomalies are recorded in the field west of Fledborough Road, tentatively interpreted as a small enclosure (UN014).
- > A magnetic anomaly has been recorded 85 m east of the post-medieval brick kiln recorded in the HER (PM002). The anomaly, while potentially related to the kiln, does not present the same magnitude and signature that would be typical of kilns (UN015). The preliminary results of the geophysical survey in the same field indicated the potential presence of two additional anomalies, which, after further analysis of the data, were proven to be non-archaeological (UN016 and UN017).
- > In the fields west and southwest adjacent to the Deserted Village of Whimpton Moor, the survey recorded a number of linear anomalies interpreted as potential continuation of trackways, and two enclosures likely related to Whimpton Moor (UN018). These were partially overlapped by north-south orientated ridge and furrow cultivations which truncates the archaeological features.
- > A rectangular enclosure and another circular anomaly of potential archaeological nature are recorded south west of the Deserted Village of Whimpton Moor, south of Far Hill Farm Barn and Farhill Ln. (UN019). Slightly south of UN019, traces of north-south aligned ridge and furrows cultivation have been recorded, but no archaeological anomalies potentially related to trackway recorded in the HER (UN020) have been recorded.
- > A small cluster or potential archaeological features comprising ditches and enclosures has been recorded on the northeastern corner of the Order Limits, south of the A57 and west of Birchland Farm (UN024). The Aerial Photography Archaeological Landscape Assessment confirmed the presence of curving, linear anomalies of unknown origin in the area.
- > A potential concentration of linear features, tentatively interpreted as trackways and enclosures, has been recorded on the field north of the railway, approximately 1.5 km west of Marham bounded by Crabtree Ln on the west and on the north (UN025). The low magnitude of the anomalies in this area may only suggest the presence of a small settlement in the area.

- > A single possible square enclosure has been recorded immediately northwest of the northern pylon, approximately 70 m south of Hollowgate Ln. (UN026). As per UN025, the low magnitude of the anomaly makes this interpretation uncertain.
- > A semi-oval shaped potential enclosure has been recoded southwest of Moor Barn Farm, in the field south of the railway (UN027).
- > A small possible enclosure has been identified from linear features by the geophysical survey and the Aerial Photography Archaeological Landscape Assessment in the southwest corner of the Order Limits, approximately 225 m east of Skegby Rd (UN028).

5.3 Archaeological Trial Trenching

- 5.3.1 The results of the archaeological trial trenching evaluation carried out to date are summarised below. All the archaeological works have been carried out in line with the methodology and scope of work defined by the Site Specific WSI and approved by the Archaeological Advisory Teams to the LPAs of the respective LPAs in 2024 and 2025.
- 5.3.2 Table 1 below presents the site-specific approach to the trial trenching evaluation carried out to inform the DCO, based on the rationale summaries in Paragraph 2.1.5

Table 1 - Site-specific approach to the trial trenching

Area	Reason for trenching to inform the DCO	Sampling (%)
Area 1 North-East	Highest potential impact from the Proposed Development (substation and BESS options parameters).	3%
Area 2 South-East	Highest potential impact from the Proposed Development (substation and BESS options parameters).	3%
Area 3 East	Area identified in the Desk-Based Assessment and/or geophysical survey as being of archaeological potential.	2%
Area 4 East	Area identified in the Desk-Based Assessment and/or geophysical survey as being of archaeological potential.	2%
Area 8 East	Area identified in the Desk-Based Assessment and/or geophysical survey as being of archaeological potential.	2%
Area 1 South West	Highest potential impact from the Proposed Development (substation and BESS options parameters).	3%
Area 2 West	Highest potential impact from the Proposed Development (substation and BESS options parameters).	3%
Area 3 West	Highest potential impact from the Proposed Development (substation and BESS options parameters).	3%
Area 4 West	Highest potential impact from the Proposed Development (substation and BESS options parameters).	3%

Ragnall	Area of special archaeological interest has been identified by the Archaeological Advisory Teams to the Local Planning Authorities (LPAs) and Historic England.	3%
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Lincolnshire - Area 1 North-East

- 5.3.3 27 trenches were excavated across Area 1NE, 12 of which contained archaeological features.
- 5.3.4 The ditches of the rectilinear enclosure identified by the geophysical survey was not all present on the northern edge of Area 1 NE (Tr 1039 & 1042) but ditches and pits identified within these trenches indicate settlement activity, including possible enclosures, are located in this area. Trench 1043 to the east of the enclosure identified the linear anomalies of a possible eastern extend of the activity and two parallel ditches were identified in Trench 1038 to the west of the putative enclosure.
- 5.3.5 Previously unseen archaeological features were encountered to the west of this activity. An east-west orientated trackway running to the enclosure to the east was identified in Trenches 1034 to 1037 and 1040. Patches of the cobbled surface of the trackway survived in places.
- 5.3.6 A poorly preserved E-W orientated inhumation burial was located on the northern side of the trackway ditch in Trench 1034. Lines of nails were located either side of the grave cut, suggesting that the burial was within a coffin.
- 5.3.7 The parallel ditches identified in the geophysical survey running southward from the activity on the northern edge of Area 1 NE was not present in any of the trenches targeting it.

Lincolnshire - Area 2 South-East

- 5.3.8 In total 28 trenches were opened, investigated and recorded during the evaluation. Geophysical survey had identified a sitewide pattern of ridge and furrow cultivation, additional likely modern agricultural anomalies to the western edge of site and two linear anomalies towards the southeastern corner of site. No archaeology was observed in any of the trenches

Lincolnshire - Area 3 East

- 5.3.9 In total 117 trenches were excavated across Area 3E, 49 of which contained archaeological features.
- 5.3.10 The geophysical data indicated the presence of a series of north-to-south oriented rectilinear enclosures located to the west of Southmoore Lane. The northern enclosure was identified in Trenches 1254 and 1255. It measured roughly 73m by 43m or 0.34 hectares in plan, was bounded to the west by a north-south aligned trackway comprising two parallel ditches (Trench 1240, 1253 & 1255) and an east-west trackway (Trench 1254 and 1255). Several ditches delineating the northern enclosure showed signs of recutting, suggesting maintenance and re-modelling of this enclosure was undertaken. A

circular enclosure was located on its northern side (Trench 1239). The field systems seen to the north-east of the ladder settlement in the geophysical survey were not identified in the trenches.

- 5.3.11 The southern enclosure was less well defined, but ditches and pits were identified in Trenches 1271 and 1272. Archaeological features associated with the Roman ladder settlement were also identified beyond this southern enclosure. This area to the south of the southern enclosure is a separate field which has not undergone a geophysical survey, but ditches and pits identified in Trenches 1273, 1274, 1282 and 1283 suggest that the linear settlement continued southward and joined with the enclosures seen in the northern edge of Area 1 NE.
- 5.3.12 An isolated rectilinear enclosure was located 200m west of the northern and southern enclosures (Trenches 1267 & 1268). This enclosure contained a complex multi-phase archaeological activity including occupation layers, pits and ditches. A further enclosure was tentatively identified to its north (Trench 1258).
- 5.3.13 The eastern field contained a number of undated field boundaries, some narrow ditches of unknown origin and remnants of the postmedieval ridge and furrow system. Archaeological features identified in Trench 1322 may relate to the settlement activity seen to the west.

Lincolnshire - Area 4 East

- 5.3.14 In total 16 trenches were excavated across Area 5 East, 9 of which contained archaeological features, in large parts corresponding to activity previously identified on the geophysical survey.
- 5.3.15 Trial trenching confirmed the presence of an agricultural drainage system in the south half of the site comprising parallel straight-sided narrow furrows (see Tr 1209 & 1211). A series of undated ditches and furrows were identified in Trenches 1200, 1201 and 1206. This activity comprised shallow narrow ditches and a wider ditch in TR 1200 which had been recut. No material culture was recovered.

Lincolnshire - Area 8 East

- 5.3.16 In total 8 trenches were excavated across Area 8 East, seven of which contained archaeology, corresponding to activity previously identified on the geophysical survey. Finds from the fill of these features suggest that the activity identified is Roman in date.
- 5.3.17 TR01 targeted the central area of the northern rectangular enclosure oriented east to west. Towards the western end of trench a wide north-south orientated ditch, likely associated with the western edge of enclosure, was recorded. At the eastern end of the trench N-S oriented ditch was observed towards the eastern end of trench, potentially an internal division within the enclosure. A terminus of a N-S orientated ditch was also observed within the internal space of the enclosure which may also represent an internal division.
- 5.3.18 TR02 targeted the L-shaped feature to the east of the northern enclosure. The trench contained two east-west orientated ditches, a pit partially visible within the trench and a

terminus of a ditch. A number of other potential archaeological features were investigated but determined to be of agricultural origin.

- 5.3.19 TR04 targeted the northern edge of the southern rectangular enclosure. The two east-west orientated ditches seen on the geophysical survey were both extant. These appear to form the northern edge of a N-S orientated rectilinear sub-enclosure running from the main enclosed space to the south. Additionally, nine postholes were recorded following the northern edge of the southern ditch, and a pit was partially visible at the southern end of the trench.
- 5.3.20 TR05 targeted an enclosure adjoining the northern enclosure to its south. Both the northern and southern edges of this enclosure were identified in the trench, the northern edge formed of two parallel ditches. Internal features were also identified within the enclosure. These were surveyed but were not excavated due to Health and Safety limitations of safe depth of excavation.
- 5.3.21 TR06 targeted the eastern rectangular enclosure and putative internal pitting identified in the geophysical survey. These features were extant. Thick occupational layers located within the enclosure were also investigated and recorded. A E-W orientated ditch ran for 17m along the length of the trench. This activity was located beneath the Roman archaeology observed. A flint tool was recovered from the fill of the ditch and this activity may be prehistoric in date.
- 5.3.22 TR07 targeted a C-shaped feature to the south of the eastern enclosure. This C-shaped feature was extant within the trench and a double line of ditches was observed at the southern edge of the feature. Towards the southern end of the trench, outside of the C-shaped feature, a substantial occupational layer covered 14 postholes. It is possible that this area is located within a building.
- 5.3.23 TR08 targeted the southern, central and eastern side of the southern rectangular enclosure. The trench confirmed that the southern edge of the enclosure was extant. A dry-stone wall of Roman date was recorded within the interior of the enclosure, delineating the edge of a pit of substantial depth

Nottinghamshire - Area 1 South West

- 5.3.24 Of the 33 trenches excavated in Area 1SW, 3 contained post-medieval to modern furrows corresponding to the agricultural activity previously identified on the geophysical survey. TR1021 contained an undated ditch, [15119], whilst the remaining 29 trenches contained no archaeology. **Error! Reference source not found.** A single trench (TR1006) was descoped due to flooding.

Nottinghamshire - Area 2 West

- 5.3.25 115 trial trenches were opened, investigated and recorded. 10 trenches contained archaeological features, in large parts corresponding to activity previously identified on the geophysical survey.
- 5.3.26 The archaeological features identified in the geophysical survey on the central western side of the field were seen in TR2034, TR2035, TR2054, and TR2056. This activity consisted of two sub-rectangular enclosures, one to the south of the E-W trackway and

one to the north, and a pentagonal enclosure to the. Internal features were identified within the enclosures and several of the enclosure ditches showed signs of recutting. TR2034 contained a spread of dark occupation material containing a significant amount of Roman pottery, suggesting that this enclosure was domestic in function.

- 5.3.27 Archaeological features were also identified in the southern edge of the field, over the location of the geophysical anomalies identified in this area. TR2098, TR2099, TR2100, TR2108, TR2109, and TR2110 confirmed that at least three interconnected enclosures were extant and were Roman in date. In addition, post-medieval furrows were noted in TR2095, extending on an north-east to south-west alignment.

Nottinghamshire - Area 3 West

- 5.3.28 48 trial trenches were opened, investigated and recorded. Of the 48 trenches excavated, only three contained archaeology, comprising a group of east to west ditches, alongside two modern spreads containing modern bricks deriving from the demolition of a modern wall. No finds were recovered from any of the ditches, but their spatial association with the modern spreads suggests they are post-medieval or modern in date.

Nottinghamshire - Area 4 West

- 5.3.29 32 trial trenches were opened, investigated and recorded. Field boundaries were recorded in two of the trenches, but no archaeology was identified.

Nottinghamshire - Ragnall

- 5.3.30 A total of 106 trenches were excavated across Ragnall.
- 5.3.31 In the western end of the area (Ragnall I), the principal features were a farmstead associated with a y-shaped trackway, both of which were already identified by the geophysical survey. Dating evidence from the excavated features suggest that these date to the early Roman period with limited evidence for continued activity into the later Roman period.
- 5.3.32 The evaluation recorded an area comprising of a spread of ditches which did not form any clearly definable enclosures, located east of Ragnall I (Ragnall II). A high proportion of the trenches within this area did not contain archaeological features, suggesting that this part of the Ragnall site did not form a focus for settlement, but could have been utilised as arable fields or for the grazing of livestock. Of note within the area is the evidence for Iron Age activity, although this was restricted to a single ditch.
- 5.3.33 Like Ragnall II to the south, Ragnall III was characterized by a low level of activity, with several possible ditch features identified in the geophysical survey. These included an L-shaped anomaly within the northern half. On the whole the excavated features contained limited dating evidence, prohibiting closer scrutiny of the sequence within this area and in turn its relationship to the other Ragnall areas.
- 5.3.34 Ragnall IV to the south-east of Ragnall III contained a complex array of enclosures and ditches concentrated along the eastern side of the area defining a potential farmstead II. A series of possible enclosures were noted along the westernmost side, which could be

related to those to the east, but the area in between these was not included in the geophysical survey and the precise relationship between the two is uncertain.

- 5.3.35 The principle enclosure, comprised a large L-shaped enclosure, divided into two cells. The southernmost cell appeared to be open, whilst that to the north cell appeared to be divided into a series of smaller spaces. In between the two was an east to west trackway, with a second east to west trackway located along the northern edge of the norther cell, with trackway entering between them. The area north of the enclosure was slightly less clear, but elements of further probable trackways and ditches can be observed. To the south was a second possible enclosure which could be related to the farmstead described above.

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6. OUTLINE OBJECTIVES

6.1 Trial Trenching Evaluation objectives

General Objectives

6.1.1 The general objectives of any evaluation are to establish:

- > The earliest archaeological deposits;
- > The latest archaeological deposits;
- > The extent, date, state of preservation and character of archaeological deposits encountered;
- > The extent of modern disturbance; and,
- > The scope of any further archaeological evaluation and/or mitigation that may be required following the works carried out so far.

One Earth Specific Objectives

6.1.2 Considering the results of the archaeological works carried out to date, the historical background of the Site, the overarching aims of the Updated research Agenda and Strategy for the Historic Environment of the East Midlands (HE 2012), and the East Midlands Historic Environment Research Framework (2022) the following site-specific objectives of the evaluation are the mitigation stage of work will continue to work to the strategy detailed in Updated research Agenda and Strategy for the Historic Environment of the East Midlands (HE 2012), and the East Midlands Historic Environment Research Framework (2022).

6.1.3 Site Specific Written Schemes of Investigation (SSWSIs) will outline the area specific research objectives guided by the overarching objectives below, in line with the previous Project Desing (Iceni, 2024).

- > General
 - > Establish the nature, extent, and significance of any sub-surface archaeological remains present across the Site.
 - > To what extent will the Scheme impact any subsurface archaeological remains present on the Site?
- > Prehistoric
 - > Establish nature and extent of any prehistoric land occupation within the sites and how this relates to the wider Study Area.
 - > To further the study of prehistoric, especially later prehistoric, material culture with reference to the movement of people and ideas.
- > Roman

- > Establish the nature and extent of Roman activity on the Site, including evidence for settlement, agriculture, and industrial activities.
- > To study evidence for continuity or development in settlement/occupation patterns from the Iron Age into the Roman period.
- > Is there any evidence for remains relating to the military conquest of Britannia in the 1st century AD?
- > Medieval
 - > What is the nature and extent of the medieval settlement and associated features, such as field systems, within the Site?
 - > What is the nature and extent of the medieval settlement and/or agricultural activity relating to existing (modern) settlements within the Study Area?
 - > What is the nature and extent of the medieval roads, lanes or other features relating to patterns of connectivity and communication within the Site?
- > Post-medieval
 - > What is the nature and extent of the post-medieval activity on the Site?

6.2 Strategy for further trial trenching

Areas with potential archaeological remains identified to date

- 6.2.1 The assessment work completed to date has identified 29 discrete locations where important buried archaeological remains may survive within the Order Limits, 9 of which have already been subjected to archaeological trial trenching as per Section 2 of this document (Figure 2). The selection of these areas followed the strategy illustrated in Section 2 of this document.
- 6.2.2 The results of the trial trenching undertaken to date proved a strong correlation between the assessments carried out as part of the DBA, including the geoarchaeological deposit model, the results of the geophysical survey, and the actual buried heritage deposits and features recorded during the intrusive evaluation.
- 6.2.3 A further phase of trial trenching will be carried out as a pre-commencement requirement, to investigate the other 20 locations with potential for buried heritage deposits detected during the assessment work completed to date, as per Figure 2. In line with the methodology implemented for the first two phases of the trial trenching, a 2% trial trenching sample with a contingency for additional trenching is considered to be appropriate.

Further trial trenching

- 6.2.4 Additionally, and in line with Paragraph 2.10.115 of EN-3, to minimise the risk of buried archaeological remains outside the 29 locations identified, archaeological trial trenching will take place in advance of construction in areas where high impacts arising from the construction activities of the Proposed Development are expected, as per detailed design of the Proposed Development

- 6.2.5 These areas were not the focus of the targeted trial trenching undertaken for the purposes of the ES. However, they are proposed for further investigation post-consent. This approach has been taken on the basis that these areas offer greater flexibility to avoid or mitigate impacts on unexpected archaeological finds at Detailed Design (i.e. avoiding new residual likely significant effects not already identified in the ES), and that they have a lower potential for archaeology (and therefore less scope for impacts) compared to the areas discussed in Paragraph 2.1.5 of this document
- 6.2.6 In line with the methodology implemented for the first two phases of the trial trenching, a 2% trial trenching sample with a contingency for additional trenching is considered to be appropriate. This will be carried out in advance of construction to inform the detailed design phase of the Proposed Development in order to:
- > Define Areas of Archaeological Constraint (AAC) in consultation with Historic England and the Archaeological Advisory Teams to LPAs;
 - > Refine the indicative archaeological mitigation areas;
 - > Inform of the depth of archaeological remains below ground in order to determine if concrete feet (or similar) will be appropriate mitigation;
 - > Minimise the impact of the Proposed Development on the archaeological resource;
 - > Identify important archaeological remains to be preserved; and,
 - > Inform the measures to record archaeological features where preservation in situ is not necessary or feasible.
- 6.2.7 As set out in the Archaeological ES Chapter (Application Document APP-038) and detailed in the Archaeological DBA (APP-110 to APP-115), the proposed construction works packages are identified and the potential impact (based on the current design) is as follows⁶:
- > Work No. 1: Solar PV Infrastructure - Magnitude of Impact: **Negligible**
 - > Work No. 2: BESS – Magnitude of Impact: **High**
 - > Work No. 3: Substation – Magnitude of Impact: **High**
 - > Work No. 4: Grid Connection Cable Route – Magnitude of Impact: **High**
 - > Work No. 5: Ancillary Works – Magnitude of Impact: **High (localised)**
 - > Work No. 6: Primary Construction Compounds– Magnitude of Impact: **Medium**
 - > Work No. 7: Highway Works – Magnitude of Impact: **Negligible**
 - > Work No. 8: Landscape and Ecology – Magnitude of Impact: **Medium**
- 6.2.8 In consideration of the trial trenching evaluation carried out to date, which involved all areas affected by Work No. 2 and Work No. 3, in consideration of the negligible impact

⁶ The expected impact arising from the Works associated with the Proposed Development are discussed in detail in 6.9 Chapter 9 - Buried Heritage [APP-038].

arising from Work No. 1,, in consideration of the negligible extend of the areas affected by Works No. 8, the following rationale for defining the scope of further trial trenching post consent but prior to commencement of the development -and therefore the locations to be evaluated- is considered proportionate to the expected impact of the Proposed Development at the current stage of design:

- > Within grid connection cable route corridors (Work no. 4) where no potential archaeological remains have been identified – trial trenching along route of cable;
- > Within the areas selected for the Primary Construction Compound (Work no. 6) where no potential archaeological remains have been identified - localised trial trenching within the footprint of areas affected by below-ground activities, or activities that may have a detrimental effect on archaeological deposits;
- > Within areas of hard and soft landscape (Work no. 8) where no potential archaeological remains have been identified – localised trial trenching within the footprint of areas affected by below-ground activities, or activities that may have a detrimental effect on archaeological deposits.

- 6.2.9 In consideration of the fact that Work No. 5 does not currently have a detailed design available, and recognising the wide range of potential impacts associated with its individual elements (ranging from negligible to high), the assessment of Work No. 5, and the corresponding commitment regarding the extent and nature of any additional trial trenching evaluation, will be deferred until the Detailed Design stage is reached. The ACoW will liaise with the Archaeological Advisory Teams to LPAs and Historic England to define any requirement for additional evaluation in this area.
- 6.2.10 As the detailed design for the Proposed Development has not yet been finalised, the exact location, extent, and potential impact of cabling, ancillary works, compound locations, areas selected for landscape and ecology enhancement have not been determined, and therefore the areas requiring additional evaluation are not set This oWSI will be informed by the progress of the detail design for the Proposed Development, and the results of any further archaeological work will be appropriately considered and provided for in the detailed design.
- 6.2.11 To reduce any disproportionate impact on archaeological deposits, a straight-to-mitigation approach may be implemented when suitable, in agreement with the Archaeological Advisory Teams to the LPAs and Historic England.
- 6.2.12 Any further archaeological work undertaken prior to the commencement of the consented development (as defined by the DCO) will be discussed and agreed with the Archaeological Advisory Teams to the LPAs and Historic England before any work begins.

6.3 Archaeological Mitigation Strategy (AMS)

- 6.3.1 A suitable and proportionate mitigation strategy will be defined for all locations containing buried heritage assets that will be totally or partially affected by the Proposed Development, within the footprint of that impact.

- 6.3.2 In line with the Archaeological ES Chapter (Application Document APP-038), the selected mitigation strategy will take into account the nature, sensitivity and extend of the buried heritage assets, the nature and magnitude of impact of the effect arising from the Proposed Development, and the suitability and practicability of implementing said mitigation.
- 6.3.3 The AMS will be submitted for approval and secured through a Requirement of the DCO after consent is granted.

Avoidance and/or Preservation in situ

- 6.3.4 The AMS and the Design of the Proposed Development will take into account the results of the assessment carried out to date. It will also consider any further archaeological work carried out prior to commencement in order to avoid, reduce or mitigate any significant effect on the known buried heritage assets.
- 6.3.5 An avoidance measure has included substantial setbacks incorporated into the Proposed Development Design, with extensive buffer areas around the two Scheduled Monuments in the vicinity of the Order Limits (the Roman Vexillation Fortress Scheduled Monument and Whimpton Moor Scheduled Monument), and selected villages to mitigate harm
- 6.3.6 The cabling between the east and west sides of the Order Limits across the River Trent will be undertaken by trenchless crossing (such as Directional Drilling).
- 6.3.7 In line with NPPF, the relevant professional guidance and best practice, avoidance of any known buried heritage assets will be the preferred mitigation strategy. This consists in the exclusion of discrete, identified area(s) of buried archaeological remains (and an appropriate protective 'buffer') from the works associated with the Proposed Development, which will be defined as Areas of Archaeological Constraint (AAC).
- 6.3.8 AAC areas will be identified prior to construction in consultation with the Archaeological Advisory Teams to LPAs and Historic England. Where preservation in situ is the preferred strategy, the AAC will be demarcated by fencing to avoid accidental entry and disturbance of archaeological remains during the construction, operation, maintenance, and decommissioning of the Proposed Development.
- 6.3.9 The definition of each AAC will be informed by the results of the DBA and geophysical survey, with the extent of each area guided by the results of the trial trench evaluation. Each AAC site will be defined to include a reasonable buffer to avoid impacts to the buried archaeological remains or extant earthworks.
- 6.3.10 An Archaeological Clerk of Works (ACoW) will be appointed for the Construction Phase who will be reviewing and monitoring all works in the Order Limits, and the compliance with this oWSI. The specific details of the protection and cordoning of these areas will be detailed in the CEMP.
- 6.3.11 As identified in the DBA, the installation of mounting structures (sometimes known as piles) will involve very minimal disturbance of the subsoil through effects as truncation, displacement, and vibration within the footprint of the pile (likely to be 300mm).

- 6.3.12 If any pile locations happen to coincide with buried archaeological remains, the disturbance to larger features, such as in-filled ditches, pits or trackways, is expected to be minimal in comparison to the amount left undisturbed. For smaller discrete features like pits, postholes, or stake holes, the likelihood of piles being positioned in a way that would affect more than a small proportion of these features, or more than one of a group of such small features is very low, with complete avoidance of such features being the most probable scenario. Considering the nature of the buried heritage deposits recorded so far within the Order Limits, the loss of a small percentage of these features would be balanced by the removal of the portion of land from current agricultural use, thereby avoiding any additional impacts arising from the effects of modern ploughing and intensive turf farming. Furthermore, as stated within EN-3, "solar PV developments may have a positive effect, for example archaeological assets may be protected by a solar PV farm as the site is removed from regular ploughing". Considering also the specific nature of the shallow cabling and piled footings of the Solar PV Development which will unlikely cause disturbances on the majority of the buried archaeological remains that are known, or potential may survive, within the site in excess of the one caused by ploughing and other agricultural activities, it is considered that in the majority of the Order Limits, the areas allocated for solar PV will present an effective embedded preservation in situ mitigation for the majority of the Consent Order.
- 6.3.13 For some especially rare and sensitive buried archaeological remains, the disturbance of piling could have a material effect. Particularly sensitive buried archaeological remains comprise:
- > waterlogged remains, whereby the soil chemistry and conditions could be affected;
 - > human remains, whereby even minimal disturbance could result in a potentially disproportionate loss of archaeological evidence, alongside; and,
 - > complex structured deposits, such as those associated with burials but also structural remains such as floor surfaces.
- 6.3.14 In consideration of the assessments and evaluation work carried out to date, only one inhumation was recorded within the Order Limits, no mounds/burial structure and no waterlogged remains have been recorded, or their presence assumed.
- 6.3.15 Nonetheless, if further archaeological works would record any such remains, where beneficial and practicable, the mounting structure for solar arrays will involve micro-siting of piles in order to avoid specific archaeological features and/or it will be supported by concrete footings rather than piles, avoiding any ground intrusive impact on discrete areas within the solar PV development.
- 6.3.16 This option would be deployed on the assumption that the ground conditions are suitable, and compaction or vertical movement would be avoided. These 'no-dig' construction solutions would also necessitate the burying of cables only as deep as the ploughsoils i.e., outside (above) the horizons where buried archaeological remains survive or, avoiding trenching excavations altogether. Further to this, construction activities would be designed and implemented in such a way to avoid or greatly minimise ground disturbance from vehicular (plant) movements (i.e., avoiding rutting). These specific measures will be set out in the CEMP following Detailed Design.

- 6.3.17 It is feasible and potentially desirable, for both options (avoidance areas and 'no-dig construction') to be deployed separately or in combination as appropriate.
- 6.3.18 The effectiveness and practicability of both options (avoidance areas and 'no-dig construction') will be informed by the archaeological evaluation results, and by Detail Design of the Proposed Development and will be discussed and agreed with the Archaeology Advisory Teams to the LPAs and Historic England.

Preservation by record

- 6.3.19 Where avoidance, preservation is situ and/or specific embedded environmental measures cannot be employed or are not deemed sufficient to avoid or reduce the impact on buried heritage assets, where-significant adverse effects will be offset through the implementation of a programme of archaeological mitigation excavation and recording where remains of higher significance are present, or by an archaeological monitoring and recording where remains of lesser significance are present, or a combination of both where necessary . These measures will comprise an appropriate programme of archaeological fieldwork, followed by assessment and reporting of the results and where appropriate publication.
- 6.3.20 Specifically, the following industry-wide recognised archaeological mitigation measures will be included in the program of archaeological mitigation and will be applied as forms of control and mitigation over any impact on buried heritage assets, depending on their nature, sensitivity and the extent of our Proposed Development's impacts:
- > A programme of archaeological mitigation by record, such as strip and map and sample. or detailed excavation, to a level commensurate with the significance of the asset and the impact arising from the Proposed Development prior to the construction works, targeting the affected assets identified during the DBA, geophysical survey and trial trenching evaluation and outlined in this Chapter.
 - > A programme of archaeological monitoring and recording may be undertaken during the construction works.
 - > Where non-intrusive trenching methods are proposed for cable routes, the CEMP(s) will include a contingency for archaeological intervention/mitigation in the event that unplanned activities threaten the preservation of known buried heritage remains.
- 6.3.21 The extent of areas requiring targeted archaeological excavation will be agreed by the Applicant, Archaeology Advisory Teams to the LPAs and Historic England in advance of construction following a review of the trial trench evaluation results and detailed design.
- 6.3.22 SSWSIs for the area of targeted excavation will be prepared by the Archaeological Contractor and submitted to the determining authority, as per Section 6.1 of this OWSI.
- #### **6.4 Summary of Proposed Addition Trial Trenching and Mitigation Strategy to date**
- 6.4.1 This section summarises the proposed strategy for additional archaeological works in relation to the buried heritage assets identified and discussed in the Archaeological ES Chapter (Application Document APP-038).

- 6.4.2 This has to be considered 'living' and evolving strategy, which will be updated to reflect the detailed design for the Proposed Development and the results of the additional trial trenching and adjust the proposed mitigation accordingly.

PH001	
Description of Asset	PH001 includes a cluster of prehistoric occupation recorded in the HER within the area of Newton Cliff on the east bank of River Trent, between North Clifton and Newton-on-Trent, west of Thorney and encircling the Roman Vexillation Fortress and Marching Camps. The geophysical survey carried out to inform the DCO, confirmed the presence of a likely settlement site comprising a series of enclosures and ditches aligned north-south located south of the Water Reservoir (UN005), potentially associated with the various multi-period prehistoric assets included in PH001.
Work Packages affecting the asset	Work No. 1: Solar PV Infrastructure Work No. 5: Ancillary Works Work No. 6: Primary Construction Compounds Work No. 8: Landscape and Ecology
Evaluation carried out to date	2% trial trenching sample.
Further Trial Trenching	Depending on the location of Work no. 5, Work No. 6 and Work No. 8, further localised trial trenching may be required within the areas affected by below ground activities.
Proposed Mitigation	Avoidance/preservation in situ as preferred mitigation strategy in in the footprint of Works 5, 6 and 8 only. Localised archaeological monitoring and/or archaeological strip/map and sample to mitigate impacts if required.

PH002	
Description of Asset	PH002 includes an area of extensive cropmarks southeast of Newton-on-Trent, which may suggest the presence of a large number of ditches, field boundaries, trackways, and linear features, along with a number of enclosures and possible pit features which might be related to Prehistoric settlement activity. Both the Archaeological Landscape Assessment and the geophysical survey carried out, recorded further archaeological activity west of Southmoor Lane likely associated with the above (UN004).
Work Packages affecting the asset	Work No. 1: Solar PV Infrastructure Work No. 2: BESS Work No. 3: Substation Work No. 5: Ancillary Works Work No. 6: Primary Construction Compounds Work No. 8: Landscape and Ecology
Evaluation carried out to date	3% trial trenching sample.
Further Trial Trenching	Not required. The archaeological evaluation carried out in Area 1NE identified settlement activity likely related to PH002.

Proposed Mitigation	Due to the extent of the impact arising from Work No. 2 and Work No. 3, the expected most suitable mitigation would be an archaeological strip, map and sample of the affected area.
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RO001	
Description of Asset	The Vexillation Fortress and marching camps are a protected Scheduled Monument (along with a Royal Monitoring Corps observation post, NHLE: 1003608) located to the southwest of Newton-on-Trent, on the eastern bank of the Trent where the river bends sharply, in close proximity with the Order Limits (RO001). Both the Archaeological Landscape Assessment and the geophysical survey carried out in the area recorded extensive below-ground features. As RO001 lies outside of the Order Limits, no trial trenching evaluation has been carried out in the area.
Work Packages affecting the asset	N/A
Evaluation carried out to date	N/A
Further Trial Trenching	N/A
Proposed Mitigation	As a 50 m setback has been included as environmental measure, no development is proposed on the land featuring the Roman Vexillation Fortress Scheduled Monument, and its surroundings have also been removed from the Order Limits.

RO003	
Description of Asset	RO003 comprises evidence of potential Roman occupation located southeast of Newton-on-Trent, confirmed also by the Archaeological Landscape Assessment and by the geophysical survey.
Work Packages affecting the asset	Work No. 1: Solar PV Infrastructure Work No. 2: BESS Work No. 3: Substation – Magnitude of Impact Work No. 5: Ancillary Works Work No. 6: Primary Construction Compounds Work No. 8: Landscape and Ecology
Evaluation carried out to date	3% trial trenching sample.
Further Trial Trenching	Not required. The archaeological evaluation carried out in Area 1NE and Area 3E identified settlement activity likely related to RO003.
Proposed Mitigation	Due to the extent of the impact arising from Work No. 2 and Work No. 3, the expected most suitable mitigation would be an archaeological strip, map and sample of the affected area.

RO004

Description of Asset	RO004 includes a vast area of cropmarks showing the presence of extensive archaeological activities located on the west side of River Trent. This has been interpreted in the HERs as a potential roman settlement. The geophysical survey and the Aerial Photography Archaeological Landscape Assessment recorded an area containing a complex assemblage of linear anomalies, likely confirming the interpretation in the HERs
Work Packages affecting the asset	Work No. 1: Solar PV Infrastructure Work No. 5: Ancillary Works Work No. 6: Primary Construction Compounds
Evaluation carried out to date	3% trial trenching sample.
Further Trial Trenching	Expected on the footprint of Works 5 and 6.
Proposed Mitigation	Concrete footing/micrositing on the extent of Work 1. Avoidance/preservation in situ as preferred mitigation strategy in the footprint of Works 5 and 6 only. Localised archaeological monitoring and/or archaeological strip/map and sample to mitigate impacts if required.

ME001	
Description of Asset	ME001 includes the earthwork and buried remains associated with Whimpton Moor medieval village and the moated site, a which is designated as Scheduled Monument (NHLE: 1017567).
Work Packages affecting the asset	N/A
Evaluation carried out to date	N/A
Further Trial Trenching	N/A
Proposed Mitigation	As a 50 m setback has been included as environmental measure, no development is proposed on the land featuring the Whimpton Moor medieval village and Moated Site, and its surroundings have also been removed from the Order Limits (ME001).

ME006	
Description of Asset	ME006 includes a number of Saxon and medieval occupation markers including scatter of pottery and remnants of ridge and furrow cultivation noted as visible crop marks variously located in the same area of PH002, and RO002. The presence of potential medieval features and deposits has been confirmed also by the Archaeological Landscape Assessment and by the geophysical survey
Work Packages affecting the asset	Work No. 1: Solar PV Infrastructure Work No. 5: Ancillary Works Work No. 6: Primary Construction Compounds
Evaluation carried out to date	N/A

Further Trial Trenching	Expected on the footprint of Works 5 and 6.
Proposed Mitigation	If required, avoidance/preservation in situ as preferred mitigation strategy, in the footprint of Works 5 and 6 only. Localised archaeological monitoring and/or archaeological strip/map and sample to mitigate impacts if required.

ME008	
Description of Asset	ME008 includes a number of medieval field system or cultivation remains comprising ridge and furrows approximately 1.2 km southeast of Newton-on-Trent.
Work Packages affecting the asset	Work No. 1: Solar PV Infrastructure Work No. 5: Ancillary Works Work No. 6: Primary Construction Compounds
Evaluation carried out to date	N/A
Further Trial Trenching	Expected on the footprint of Works 5 and 6.
Proposed Mitigation	If required, avoidance/preservation in situ as preferred mitigation strategy, in the footprint of Works 5 and 6 only. Localised archaeological monitoring and/or archaeological strip/map and sample to mitigate impacts if required.

ME009	
Description of Asset	The Medieval Deer Park surrounding the medieval manor of Kettlethorpe (ME009) covers a portion of the northeast corner of the Order Limits, and spans north until the limits of the Study Area. No buried heritage deposits have been recorded within the Order Limits by the geophysical survey.
Work Packages affecting the asset	Work No. 1: Solar PV Infrastructure Work No. 5: Ancillary Works Work No. 6: Primary Construction Compounds Work No. 8: Landscape and Ecology
Evaluation carried out to date	N/A
Further Trial Trenching	Expected on the footprint of Works 5, 6 and 8
Proposed Mitigation	If required, avoidance/preservation in situ as preferred mitigation strategy, in the footprint of Works 5, 6 and 8 only. Localised archaeological monitoring and/or archaeological strip/map and sample to mitigate impacts if required.

PM001

Description of Asset	PM001 is defined by the indicated cartographic location of a post medieval brick kiln located approximately 600 m east of Deserted Village of Whimpton Moore. The geophysical survey identified the potential location of this kiln approximately 100 m east of the location recorded in the HER.
Work Packages affecting the asset	Work No. 1: Solar PV Infrastructure Work No. 5: Ancillary Works Work No. 6: Primary Construction Compounds Work No. 8: Landscape and Ecology
Evaluation carried out to date	N/A
Further Trial Trenching	Expected on the footprint of Works 5 and 6.
Proposed Mitigation	If required, avoidance/preservation in situ as preferred mitigation strategy, in the footprint of Works 5 and 6 only. Localised archaeological monitoring and/or archaeological strip/map and sample to mitigate impacts if required.

PM002	
Description of Asset	PM002 PM001 is defined by the indicated cartographic location of a post medieval brick kiln located approximately 20 m south of Polly Taylor Rd.
Work Packages affecting the asset	Work No. 1: Solar PV Infrastructure Work No. 5: Ancillary Works Work No. 6: Primary Construction Compounds
Evaluation carried out to date	N/A
Further Trial Trenching	Expected on the footprint of Works 5 and 6.
Proposed Mitigation	If required, avoidance/preservation in situ as preferred mitigation strategy, in the footprint of Works 5 and 6 only. Localised archaeological monitoring and/or archaeological strip/map and sample to mitigate impacts if required.

UN002	
Description of Asset	UN002 includes a number of linear and cut features, some of which have been tentatively interpreted in the HER as potential enclosures, that have been recorded in the eastern part of the Order Limits, west of Thorney. The results of the geophysical survey only recorded anomalies almost exclusively of agricultural, natural, and modern origin. The Aerial Photography Archaeological Landscape Assessment shows a collection of linear anomalies includes two parallel lines probably representing a track or road of unknown date. Adjacent to this, several linear anomalies are likely to represent boundary ditches, one of which is curved and might be a segment of a small, rounded enclosure. There is also a concentration of discrete anomalies nearby, possibly representing pits.
Work Packages affecting the asset	Work No. 1: Solar PV Infrastructure Work No. 5: Ancillary Works Work No. 6: Primary Construction Compounds

	Work No. 8: Landscape and Ecology
Evaluation carried out to date	N/A
Further Trial Trenching	Expected on the footprint of Works 5, 6 and 8.
Proposed Mitigation	If required, avoidance/preservation in situ as preferred mitigation strategy, in the footprint of Works 5, 6 and 8 only. Localised archaeological monitoring and/or archaeological strip/map and sample to mitigate impacts if required.

UN004	
Description of Asset	UN004 includes settlement activity concentrated along the west side of Southmoore Lane, including enclosure and linear features likely of Iron-Age to Roman date. These features have been recorded by the geophysical survey and seems to extend south up to Mill Lane, in what is likely a north-south oriented ladder settlement. The cropmarks recorded in the HER extending northeast of Southmoore Lane have not been associated with archaeological deposits by the geophysical survey.
Work Packages affecting the asset	Work No. 1: Solar PV Infrastructure Work No. 2: BESS Work No. 3: Substation Work No. 5: Ancillary Works Work No. 6: Primary Construction Compounds Work No. 8: Landscape and Ecology
Evaluation carried out to date	3% trial trenching sample.
Further Trial Trenching	Not required. The archaeological evaluation carried out in Area 1NE identified settlement activities likely related to UN004. No archaeological features have been recorded during the evaluation of Area 2SE.
Proposed Mitigation	Due to the extent of the impact arising from Work No. 2 and Work No. 3, the expected most suitable mitigation would be an archaeological strip, map and sample of the affected area.

UN005	
Description of Asset	UN005 consists of a series of enclosures and ditches aligned north-south, situated south of the Water Reservoir recorded in the HER data. These features were also identified through geophysical survey. The limited evidence of settlement activity suggests an association with the various multi-period prehistoric assets included in PH001.
Work Packages affecting the asset	Work No. 1: Solar PV Infrastructure Work No. 5: Ancillary Works Work No. 6: Primary Construction Compounds Work No. 8: Landscape and Ecology
Evaluation carried out to date	N/A

Further Trial Trenching	Expected on the footprint of Works 5, 6 and 8.
Proposed Mitigation	If required, avoidance/preservation in situ as preferred mitigation strategy, in the footprint of Works 5, 6 and 8 only. Localised archaeological monitoring and/or archaeological strip/map and sample to mitigate impacts if required.

UN006	
Description of Asset	UN006 comprises scant evidence of settlement activity, including a series of adjoining rectilinear enclosures and ditches, recorded as a cluster of cropmarks and enclosures in the HERs, and also identified by the geophysical survey and the Aerial Photography Archaeological Landscape Assessment.
Work Packages affecting the asset	Work No. 1: Solar PV Infrastructure Work No. 5: Ancillary Works Work No. 6: Primary Construction Compounds Work No. 8: Landscape and Ecology
Evaluation carried out to date	N/A
Further Trial Trenching	Expected on the footprint of Works 5, 6 and 8.
Proposed Mitigation	If required, avoidance/preservation in situ as preferred mitigation strategy, in the footprint of Works 5, 6 and 8 only. Localised archaeological monitoring and/or archaeological strip/map and sample to mitigate impacts if required.

UN007	
Description of Asset	UN007 comprises scant evidence of settlement activity, including a series of adjoining rectilinear enclosures and ditches, recorded as a cluster of cropmarks and enclosures in the HERs, and also identified by the geophysical survey and the Aerial Photography Archaeological Landscape Assessment and potentially part of the same field system/occupation of UN006.
Work Packages affecting the asset	Work No. 1: Solar PV Infrastructure Work No. 5: Ancillary Works Work No. 6: Primary Construction Compounds
Evaluation carried out to date	N/A
Further Trial Trenching	Expected on the footprint of Works 5 and 6
Proposed Mitigation	If required, avoidance/preservation in situ as preferred mitigation strategy, in the footprint of Works 5 and 6 only. Localised archaeological monitoring and/or archaeological strip/map and sample to mitigate impacts if required.

UN008

Description of Asset	UN008 comprises a number of earthworks, including banks representing the remains of relict field boundaries and quarry activities, recorded in a large portion of land only partially included in the Order Limits, southwest of Ragnall Village. The geophysical survey carried out in the area did not record any anomaly of potential archaeological origin.
Work Packages affecting the asset	Work No. 1: Solar PV Infrastructure Work No. 4: Grid Connection Cable Route Work No. 5: Ancillary Works Work No. 6: Primary Construction Compounds Work No. 8: Landscape and Ecology
Evaluation carried out to date	N/A
Further Trial Trenching	Expected on the footprint of Works 4, 5, 6 and 8.
Proposed Mitigation	If required, avoidance/preservation in situ as preferred mitigation strategy, in the footprint of Works 4, 5, 6 and 8 only. Localised archaeological monitoring and/or archaeological strip/map and sample to mitigate impacts if required.

UN009	
Description of Asset	UN009 represent a potential rectilinear enclosure of unknown date recorded by the geophysical survey approximately 100 m north of the High Marhnam Power Station, potentially connected to a circular arrangement of discrete pit-like features on the south. These features could indicate possible limited settlement activity in the area.
Work Packages affecting the asset	Work No. 5: Ancillary Works Work No. 8: Landscape and Ecology
Evaluation carried out to date	N/A
Further Trial Trenching	Expected on the footprint of Work 5 and 8.
Proposed Mitigation	If required, avoidance/preservation in situ as preferred mitigation strategy, in the footprint of Works 5 and 8 only. Localised archaeological monitoring and/or archaeological strip/map and sample to mitigate impacts if required.

UN010	
Description of Asset	UN010 represents a right-angled ring ditch associated with other cut features of potential archaeological origin has been recorded during the geophysical survey located approximately 250 m south of the Potential Roman Settlement at Ragnall, west of Fledborough. The association of this scant evidence of settlement activity with Ragnall is unlikely, due to the relatively high distance between the two locations.
Work Packages affecting the asset	Work No. 1: Solar PV Infrastructure Work No. 5: Ancillary Works Work No. 6: Primary Construction Compounds

Evaluation carried out to date	N/A
Further Trial Trenching	Expected on the footprint of Works 5 and 6.
Proposed Mitigation	If required, avoidance/preservation in situ as preferred mitigation strategy, in the footprint of Works 5 and 6 8 only. Localised archaeological monitoring and/or archaeological strip/map and sample to mitigate impacts if required.

UN011	
Description of Asset	UN011 includes two small cluster of ditches likely remains of relict field boundaries, and a potential undated enclosure recorded at the western and south-western boundary of the field south of Fledborough Beck by the geophysical survey.
Work Packages affecting the asset	Work No. 1: Solar PV Infrastructure Work No. 5: Ancillary Works Work No. 6: Primary Construction Compound
Evaluation carried out to date	2% trial trenching sample.
Further Trial Trenching	Not required. The trial trenching evaluation recoded a spread of dark occupation material containing a significant amount of Roman pottery, suggesting that this enclosure was domestic in function
Proposed Mitigation	No mitigation is required outside of the areas affected by below ground activities associated with Works 5 and 6. Avoidance/preservation in situ as preferred mitigation strategy. Localised archaeological monitoring and/or archaeological strip/map and sample to mitigate impacts if required.

UN012	
Description of Asset	UN012 encompasses a large area of archaeological activity recorded in the HER, located in and including the area of the Potential Roman Village of Ragnall (RO004). The presence of extensive archaeological markers has also been confirmed the geophysical survey and the Aerial Photography Archaeological Landscape Assessment.
Work Packages affecting the asset	Work No. 1: Solar PV Infrastructure Work No. 5: Ancillary Works Work No. 6: Primary Construction Compounds Work No. 8: Landscape and Ecology
Evaluation carried out to date	3% trial trenching sample.
Further Trial Trenching	Non required. The trial trenching evaluation recoded four different clusters of archaeological activity within UN012: - In the northern area the features have been interpreted as part of the pre-Roman occupation, likely to be prehistoric in date.

	<ul style="list-style-type: none"> - The western complex of features has been tentatively identified as later prehistoric in date from the recovered pottery assemblage. It also appears that a degree of later occupation/activity was taking place in or close to this location as Roman pottery was recovered. - Material culture recovered from the central area of UN012 indicates that this activity was later prehistoric or Roman in date, with the density of prehistoric material recovered decreasing as investigations headed eastward. - A complex, likely Roman in date, occupation has been recorded in the eastmost area of UN012. The features recorded comprised in-situ occupation layers, the wall foundations of buildings and stratified occupation horizons (assumed to be within the interior of buildings). Building materials including roof tiles and hypocaust and high-status Roman pottery were also collected. This section is likely to be related with the Potential Roman Village of Ragnall (RO004).
Proposed Mitigation	<p>No mitigation is required outside of the areas affected by below ground activities associated with Works 5, 6 and 8.</p> <p>Avoidance/preservation in situ as preferred mitigation strategy.</p> <p>Localised archaeological monitoring and/or archaeological strip/map and sample to mitigate impacts if required.</p>

UN013	
Description of Asset	UN013 includes a small cluster of perpendicular ditches tentatively interpreted as a Roman enclosure, located approximately 375 m to the south of UN011. These are recorded in the HER and their presence has been confirmed by both the geophysical survey and the Aerial Photography Archaeological Landscape Assessment.
Work Packages affecting the asset	<p>Work No. 1: Solar PV Infrastructure</p> <p>Work No. 2: BESS</p> <p>Work No. 3: Substation</p> <p>Work No. 4: Grid Connection Cable Route</p> <p>Work No. 5: Ancillary Works</p> <p>Work No. 6: Primary Construction Compounds</p> <p>Work No. 8: Landscape and Ecology</p>
Evaluation carried out to date	3% trial trenching sample.
Further Trial Trenching	Non required. The trial trenching evaluation carried out recoded at least three interconnected enclosures were extant and were Roman in date.
Proposed Mitigation	Due to the extent of the impact arising from Work No. 2 and Work No. 3, the expected most suitable mitigation would be an archaeological strip, map and sample of the affected area.

UN014	
Description of Asset	UN014 includes a number of potential ditch-like anomalies are recorded by the geophysical survey in the field west of Fledborough Road, tentatively interpreted as a small enclosure of unknown date. The scarce archaeological evidence suggests that UN014 may represent a limited and contained settlement activity.
Work Packages affecting the asset	<p>Work No. 1: Solar PV Infrastructure</p> <p>Work No. 5: Ancillary Works</p> <p>Work No. 6: Primary Construction Compounds</p>

Evaluation carried out to date	N/A
Further Trial Trenching	Expected on the footprint of Works 5 and 6.
Proposed Mitigation	If required, avoidance/preservation in situ as preferred mitigation strategy, in the footprint of Works 5 and 6 only. Localised archaeological monitoring and/or archaeological strip/map and sample to mitigate impacts if required.

UN015	
Description of Asset	UN015 represents a magnetic anomaly potentially related to a post medieval kiln (PM002), recorded by the geophysical survey.
Work Packages affecting the asset	Work No. 1: Solar PV Infrastructure Work No. 5: Ancillary Works Work No. 6: Primary Construction Compounds
Evaluation carried out to date	N/A
Further Trial Trenching	Expected on the footprint of Works 5 and 6.
Proposed Mitigation	If required, avoidance/preservation in situ as preferred mitigation strategy, in the footprint of Works 5 and 6 only. Localised archaeological monitoring and/or archaeological strip/map and sample to mitigate impacts if required.

UN016	
Description of Asset	UN016 includes an anomaly originally recorded by the geophysical survey, which, after further analysis of the data, were determined to be non-archaeological. The trial trenching evaluation proved the absence of archaeological features and deposits in the area.
Work Packages affecting the asset	Work No. 1: Solar PV Infrastructure Work No. 5: Ancillary Works Work No. 6: Primary Construction Compounds
Evaluation carried out to date	2% trial trenching sample.
Further Trial Trenching	Non required. The trial trenching evaluation carried out did not recover any buried heritage deposits.
Proposed Mitigation	Non required.

UN017	
Description of Asset	UN017 includes an anomaly originally recorded by the geophysical survey, which, after further analysis of the data, were determined to be non-archaeological. The trial trenching evaluation proved the absence of archaeological features and deposits in the area.

Work Packages affecting the asset	Work No. 1: Solar PV Infrastructure Work No. 5: Ancillary Works Work No. 6: Primary Construction Compounds Work No. 8: Landscape and Ecology
Evaluation carried out to date	2% trial trenching sample.
Further Trial Trenching	Non required. The trial trenching evaluation carried out did not recover any buried heritage deposits.
Proposed Mitigation	Non required.

UN018	
Description of Asset	UN018 includes a number of linear anomalies tentatively interpreted as potential continuation of trackways and enclosures, located in the fields west and southwest adjacent to the Deserted Village of Whimpton Moor, likely related to settlement activities. These have been recorded by both the geophysical survey and the Aerial Photography Archaeological Landscape Assessment, confirming the HER.
Work Packages affecting the asset	Work No. 1: Solar PV Infrastructure Work No. 5: Ancillary Works Work No. 6: Primary Construction Compounds Work No. 8: Landscape and Ecology
Evaluation carried out to date	N/A
Further Trial Trenching	Expected on the footprint of Works 5, 6 and 8.
Proposed Mitigation	If required, avoidance/preservation in situ as preferred mitigation strategy, in the footprint of Works 5, 6 and 8 only. Localised archaeological monitoring and/or archaeological strip/map and sample to mitigate impacts if required.

UN019	
Description of Asset	UN019 represents a rectangular enclosure and another circular anomaly of potential archaeological nature likely medieval in date, recorded by the geophysical survey south west of the Deserted Village of Whimpton Moor, south of Far Hill Farm Barn and Farhill Ln. If the association with Whimpton Moor is confirmed, these features may represent peripheral section of the medieval village.
Work Packages affecting the asset	Work No. 1: Solar PV Infrastructure Work No. 5: Ancillary Works Work No. 6: Primary Construction Compounds
Evaluation carried out to date	N/A
Further Trial Trenching	Expected on the footprint of Works 5 and 6.

Proposed Mitigation	If required, avoidance/preservation in situ as preferred mitigation strategy, in the footprint of Works 5 and 6 only. Localised archaeological monitoring and/or archaeological strip/map and sample to mitigate impacts if required.
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UN020	
Description of Asset	UN020 includes a cluster of ridge and furrows cultivation located slightly north of UN019 and not currently associated with any archaeological anomalies recorded by the geophysical survey.
Work Packages affecting the asset	Work No. 1: Solar PV Infrastructure Work No. 5: Ancillary Works Work No. 6: Primary Construction Compounds
Evaluation carried out to date	N/A
Further Trial Trenching	Expected on the footprint of Works 5 and 6.
Proposed Mitigation	If required, avoidance/preservation in situ as preferred mitigation strategy, in the footprint of Works 5 and 6 only. Localised archaeological monitoring and/or archaeological strip/map and sample to mitigate impacts if required.

UN021	
Description of Asset	UN021 represents a cluster of potential settlement activity likely associated with the Roman Settlement of Ragnall, located on the north of the main settlement. It has been recorded by both the geophysical survey and the Aerial Photography Archaeological Landscape Assessment.
Work Packages affecting the asset	Work No. 1: Solar PV Infrastructure Work No. 5: Ancillary Works Work No. 6: Primary Construction Compounds
Evaluation carried out to date	N/A
Further Trial Trenching	Expected on the footprint of Works 5 and 6.
Proposed Mitigation	If required, avoidance/preservation in situ as preferred mitigation strategy, in the footprint of Works 5 and 6 only. Localised archaeological monitoring and/or archaeological strip/map and sample to mitigate impacts if required.

UN022	
Description of Asset	UN022 represents a cluster of potential settlement activity potentially associated with the Roman Settlement of Ragnall, recorded northwest of the main settlement, close to Chestnut Farm. It has been recorded by both the geophysical survey and the Aerial Photography Archaeological Landscape Assessment.

Work Packages affecting the asset	Work No. 5: Ancillary Works Work No. 8: Landscape and Ecology
Evaluation carried out to date	N/A
Further Trial Trenching	Expected on the footprint of Works 5 and 8.
Proposed Mitigation	If required, avoidance/preservation in situ as preferred mitigation strategy, in the footprint of Works 5 and 8 only. Localised archaeological monitoring and/or archaeological strip/map and sample to mitigate impacts if required.

UN023	
Description of Asset	UN023 includes a cluster or potential settlement activity and located approximately 400 m east of the Potential Roman Settlement at Ragnall, recorded by both the geophysical survey and the Aerial Photography Archaeological Landscape Assessment.
Work Packages affecting the asset	Work No. 1: Solar PV Infrastructure Work No. 5: Ancillary Works Work No. 6: Primary Construction Compounds Work No. 8: Landscape and Ecology
Evaluation carried out to date	N/A
Further Trial Trenching	Expected on the footprint of Works 5, 6 and 8.
Proposed Mitigation	If required, avoidance/preservation in situ as preferred mitigation strategy, in the footprint of Works 5, 6 and 8 only. Localised archaeological monitoring and/or archaeological strip/map and sample to mitigate impacts if required.

UN024	
Description of Asset	UN024 represents a small cluster or potential settlement activity comprising ditches and enclosures has been recorded during the geophysical survey on the northeastern corner of the Order Limits, south of the A57 and west of Birchland Farm, whose presence has been also confirmed by the Aerial Photography Archaeological Landscape Assessment.
Work Packages affecting the asset	Work No. 1: Solar PV Infrastructure Work No. 5: Ancillary Works Work No. 6: Primary Construction Compounds Work No. 8: Landscape and Ecology
Evaluation carried out to date	N/A
Further Trial Trenching	Expected on the footprint of Works 5, 6 and 8.

Proposed Mitigation	If required, avoidance/preservation in situ as preferred mitigation strategy, in the footprint of Works 5, 6 and 8 only. Localised archaeological monitoring and/or archaeological strip/map and sample to mitigate impacts if required.
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UN025	
Description of Asset	UN025 represents a potential concentration of linear features, tentatively interpreted as trackways and enclosures, recorded by the geophysical survey on the field north of the railway, approximately 1.5 km west of Marham bounded by Crabtree Ln on the west and on the north. This group of assets covers a relatively big area, which could be interpreted as a small Prehistoric or early Roman settlement site
Work Packages affecting the asset	Work No. 1: Solar PV Infrastructure Work No. 4: Grid Connection Cable Route Work No. 5: Ancillary Works Work No. 6: Primary Construction Compounds Work No. 8: Landscape and Ecology
Evaluation carried out to date	N/A
Further Trial Trenching	Expected on the footprint of Works 4, 5, 6 and 8.
Proposed Mitigation	If required, avoidance/preservation in situ as preferred mitigation strategy, in the footprint of Works 4, 5, 6 and 8 only. Localised archaeological monitoring and/or archaeological strip/map and sample to mitigate impacts if required.

UN026	
Description of Asset	UN026, a single possible square enclosure has been recorded by the geophysical survey approximately 70 m south of Hollowgate Ln., representing and undated scant evidence of potential settlement activity
Work Packages affecting the asset	Work No. 1: Solar PV Infrastructure Work No. 4: Grid Connection Cable Route Work No. 5: Ancillary Works Work No. 6: Primary Construction Compounds Work No. 8: Landscape and Ecology
Evaluation carried out to date	N/A
Further Trial Trenching	Expected on the footprint of Works 4, 5, 6 and 8.
Proposed Mitigation	If required, avoidance/preservation in situ as preferred mitigation strategy, in the footprint of Works 4, 5, 6 and 8 only. Localised archaeological monitoring and/or archaeological strip/map and sample to mitigate impacts if required.

UN027

Description of Asset	UN027 represents a semi-oval shaped potential enclosure has been recorded by the geophysical survey southwest of Moor Barn Farm, in the field south of the railway. UN027 is likely part of a wider settlement activity comprising UN006 and UN007.
Work Packages affecting the asset	Work No. 1: Solar PV Infrastructure Work No. 5: Ancillary Works Work No. 6: Primary Construction Compounds
Evaluation carried out to date	N/A
Further Trial Trenching	Expected on the footprint of Works 5 and 6.
Proposed Mitigation	If required, avoidance/preservation in situ as preferred mitigation strategy, in the footprint of Works 5 and 6 only. Localised archaeological monitoring and/or archaeological strip/map and sample to mitigate impacts if required.

UN028	
Description of Asset	UN028 represents a small, isolated, possible enclosure identified by the geophysical survey and the Aerial Photography Archaeological Landscape Assessment in the southwest corner of the Order Limits, approximately 225m east of Skegby Rd.
Work Packages affecting the asset	Work No. 1: Solar PV Infrastructure Work No. 5: Ancillary Works Work No. 6: Primary Construction Compounds
Evaluation carried out to date	N/A
Further Trial Trenching	Expected on the footprint of Works 5 and 6.
Proposed Mitigation	If required, avoidance/preservation in situ as preferred mitigation strategy, in the footprint of Works 5 and 6 only. Localised archaeological monitoring and/or archaeological strip/map and sample to mitigate impacts if required.

7. Outline Archaeological Management Plan (OAMP)

7.1 Site-Specific Written Scheme of Investigation (SSWSI)

- 7.1.1 The Archaeological Contractor will be responsible for the production of SSWSIs prior to the start of each stage of archaeological evaluation and mitigation fieldwork.
- 7.1.2 The SSWSIs will be drafted in accordance with the principles and methods set out in this OWSI and will conform to the requirements of the Lincolnshire Archaeological Handbook. The Archaeological Contractor will be responsible for the delivery of the archaeological evaluation and mitigation programme in accordance with the SSWSIs, and this responsibility will include all on-site and off-site archaeological works and recording.
- 7.1.3 The SSWSIs will be prepared in accordance with the most updated standard and guidance documents and guidelines listed in Section 2, and should include the following sections as a minimum:
- > A statement on the technical, research and ethical competences of the Proposed Project team, including relevant professional accreditation;
 - > Site location (including map) and descriptions;
 - > Context of the Proposed Project;
 - > Geological and topographical background;
 - > Archaeological and historical background;
 - > General and specific research aims of the Proposed Project, with reference to Regional Research Frameworks;
 - > Methodology;
 - > Collection and disposal strategy for artefacts, ecofacts, and all paper, graphic and digital materials (including Data Management Plan and Selection Strategy);
 - > Arrangements for immediate conservation of artefacts;
 - > Details of backfilling;
 - > Post-fieldwork assessment and analysis of project data;
 - > Report preparation (including details of the section headings);
 - > Publication and dissemination proposals, as required;
 - > Copyright;
 - > Details of finds storage;
 - > Programme and staffing;
 - > Health and Safety considerations;
 - > Environmental protection considerations; and

- > Monitoring procedures.

7.2 Approval

- 7.2.1 The SSWSIs will be prepared in consultation with the Archaeological Advisory Teams to the LPAs and Historic England.
- 7.2.2 Prior to commencement of the archaeological works, a programme will be agreed between the Applicant, the Archaeological Contractor, the Archaeological Advisory Teams to the LPAs and Historic England. This programme will detail proposed start and end dates for on-site works. The programme will also account for any post excavation assessment and reporting, as required to discharge any archaeological requirements of the DCO.
- 7.2.3 Site works that have been completed (confirmed as completed during a site meeting and agreed between the Archaeological Contractor, the Archaeological Advisory Teams to the LPAs and Historic England) will be subject to a sign-off procedure.
- 7.2.4 The Archaeological Contractor will submit a completion statement to the ACoW who will distribute it to the Applicant. The ACoW will also submit the completion statement to the Archaeological Advisory Teams to the LPAs and Historic England as confirmation that the relevant works have been completed in compliance with the oWSI and relevant SSWSI. The Archaeological Advisory Teams to the LPAs and Historic England will have final approval and sign off on all archaeological evaluation and mitigation works.

7.3 Procedures for Unexpected Archaeological Discoveries

Human Remains

- 7.3.1 The excavation of any human remain encountered will be undertaken in accordance with the specialist strategy for excavation which will be detailed in the SSWSIS.
- 7.3.2 The Archaeological Contractor will notify the ACoW and the H.M. Coroner with details of the human remains immediately. The removal of the remains will only take place in accordance with a licence from the Ministry of Justice and under the appropriate Environmental Health regulations and section 25 of the Burial Act 1857 (HM Government, 1857).
- 7.3.3 Any excavation of human remains will be carried out in accordance with the following guidance:
 - > APABE 2017 Guidance for Best Practice for the Treatment of Human Remains Excavated from Christian Burial Grounds in England (2nd ed); and,
 - > Mitchell P & Brickley M (eds) 2017 Updated guidelines to the standards for recording human remains.

Unanticipated Significant or Complex Archaeological Discoveries

- 7.3.4 In the event of unanticipated significant or complex archaeological discoveries being made during the course of any works being undertaken for the Proposed Project, the

Archaeological Contractor will notify the Applicant and the ACoW immediately. The ACoW will liaise with the Archaeological Advisory Teams to the LPAs and Historic England in order to determine an appropriate archaeological response, and will liaise with the Archaeological Contractor and the Applicant to estimate the additional time and resources needed to complete the archaeological work should the remains require investigation beyond the scope set out within this OWSI and the relevant SSWSI.

Treasure

- 7.3.5 Any recovered artefacts that are designated treasure as defined by the Treasure Act 1996 will be treated in accordance with said act. The Contractor will follow the advice provided by the portable antiquities scheme for treasure (<http://finds.org.uk/treasure/advice/forarchaeologists>) and follow the Code of Practice attached to the Treasure Act 1996 (DCMS 2023).
- 7.3.6 Should an artefact of artefacts classed as potential treasure be recovered during the course of the Works, the law requires that it is to be reported to the local coroner within 14 days of discovery or realisation that the artefact(s) constitute potential treasure – this reporting requirement will be undertaken by the Contractor, and the archaeological coordinator will be informed.
- 7.3.7 Where appropriate and agreed with the Applicant, the Archaeology Advisory Teams to the LPAs and Historic England, the site/spoil should be scanned with a metal detector and finds recorded and recovered as soon as practicable.
- 7.3.8 Any metal detector user engaged or allowed to undertake this work should formally agree to an appropriate methodology for this work, that any finds remain the property of the landowner, and that all significant finds and their locations shall be fully recorded as part of the project.
- 7.3.9 Any treasure will be removed to a secure store. Where removal cannot be achieved on the same working day as the Discovery, suitable security measures must be taken to protect the finds from theft.
- 7.3.10 All finds and archaeological records should be removed from the site at the end of each working day as a matter of course.

Variation to agreed Design Construction programme

- 7.3.11 In the event any variation to the proposed scope of works during construction activities where no archaeological mitigation works are being undertaken, the Applicant will notify the ACoW immediately. It is anticipated that all constructions work within the affected area will be suspended until completion of any required archaeological excavation and recording is completed in that area.
- 7.3.12 An additional SSWSI may be required to set out the methodology for the archaeological works, and to allow adequate time within the construction programme. The ACoW will liaise with the Archaeological Advisory Teams to the LPAs and Historic England in order to determine whether any archaeological remains are warrant of further investigation,

and to estimate the additional time and resources needed to complete the archaeological investigation should it be required.

7.4 Control Measures

DCO Control Measures

- 7.4.1 Embedded in the DCO there are control measures on the effects included in the ES in order to ensure the effects of the Proposed Development are not materially worse, or different to those included in the ES. Specifically, Schedule 15, paragraph 2(3)(a) of the DCO (which sets out the procedure for discharge of requirements) requires that when the Applicant submits anything to the relevant Planning Authorities to be approved under a requirement (which includes documents or details under the archaeology requirements), the Applicant must include a statement to confirm whether it is likely that the subject matter of the application will give rise to any materially new or materially different environmental effects compared to those in the ES and if it will then it must be accompanied by information setting out what those effects are. The relevant Planning Authorities can then decide whether to approve the documents submitted under the requirement, with this information or require additional assessment to provide the required information. This “lock” guarantees that even if the assumptions the ES are based on change and flexibility, the residual effects will not be materially worse than those assessed.
- 7.4.2 Additionally, the DCO provides that each works package (in Schedule 1 of the DCO) can only be constructed within the corresponding area on the Works Plans. Any variation to the Works Plans will be regulated by Requirement 4 of the DCO. If said variation required a change to the agreed archaeological mitigation, any change to the archaeological mitigation already approved under the requirement, could only be done under Requirement 4.
- 7.4.3 Specifically, to Archaeology:
- > (1) with the approval of relevant LPAs, with such approval being in consultation with the Archaeological Advisory Teams to the LPAs; and
 - > (2) only where any amendment can be demonstrated to the satisfaction of the relevant LPAs to be unlikely to give rise to any materially new or materially different environmental effects from those assessed in the Archaeological ES Chapter, and considered for the AMP. The scope by which amendments to the Proposed Development could be made under Requirement 4 is limited, and if any amendment was made that required a formal amendment to the DCO, the Applicant would be required to consider the environmental effects of so doing, which would involve impacts on archaeology and consideration and input from the Archaeological Advisory Teams and Historic England in that process.

Additional Control Measures and Monitoring Process

- 7.4.4 In addition to the Control Measures presented in Sections 7.3 and 7.4, and as discussed in Sections 1.4 and 7.3 of this document, the Applicant will appoint an ACoW during the Construction, Maintenance and Decommissioning phases. The presence and monitoring role of the ACoW will be defined in consultation with the Archaeological Advisory Teams

to the LPAs and Historic England, and will be included in the relevant OCEMP, OOEMP, and ODEMP.

7.5 Monitoring Process

- 7.5.1 The ACoW will liaise with the Archaeological Contractor to monitor progress and compliance with the DCO requirements and with the contents of this oWSI and approved SSWSIs.
- 7.5.2 This will include (but not be limited to):
- > Overseeing of all aspects of on-site archaeological fieldwork; and
 - > Monitoring of the installation and removal of protective measures, such as temporary fencing from ACC;
 - > Attending to Design and Team Delivery Meetings (DTMs); and,
 - > Assuring that no work or activities are carried out within sites where preservation of archaeological remains is required.
- 7.5.3 The ACoW will act as a coordinator in respect of access and monitoring arrangements with the Archaeological Advisory Teams to the LPAs and Historic England. This will include oversight of engagement between the Archaeological Contractor and the relevant stakeholders, including the Regional Science Advisor for Historic England, to ensure the timely provision of on-site advice to the fieldwork team.
- 7.5.4 The archaeological fieldwork will be subject to ongoing monitoring by the ACoW, who will have unrestricted access to the sites, site records, or any other information as may be required. The work will be inspected to ensure that it is being carried out to the required standard and that it will achieve the desired aims and objectives.
- 7.5.5 Site monitoring meetings will be held as necessary throughout the archaeological programme to allow implementation of the works to be monitored to ensure adherence to the approved SSWSIs, effective decision making where required and to support timely 'sign-off' of archaeological completion.
- 7.5.6 The ACoW will be notified of any development works during the Construction, Maintenance and Decommissioning phases that fall outside areas previously disturbed by Construction-phase groundworks. If such works are expected to affect known archaeological remains identified during evaluation or are expected to have a high magnitude of impact (as described in section 6.2.6) in areas where no remains were identified (section 6.2.7), they will be notified to the Archaeological Advisory Teams to the LPAs and Historic England. Any additional evaluation or mitigation required will be limited to the proposed works beyond the original construction footprint and must be agreed with Archaeological Advisory Teams to the LPAs and Historic England prior to the undertaking.
- 7.5.7 The Archaeological Management Plan (AMP) will be submitted for approval and secured through a Requirement of the DCO, if consent is granted. The AMP will ensure that protective measures presented in this OWSI stay in place and are adhered to throughout

the development, and it will be agreed with the Archaeological Advisory Teams to the LPAs and Historic England.

7.6 Public Outreach and Community Engagement

- 7.6.1 A programme of public outreach and community engagement will be developed prior to the start of the any forthcoming archaeological works, and in consideration to the archaeological results to date in agreement with the Archaeological Advisory Teams to the LPAs and Historic England. This will be set out in the Archaeological Contractors SSWSIs.
- 7.6.2 The aim of public outreach and community engagement is to collaboratively interpret and communicate the results of the archaeological mitigation works to a wide audience, including local communities directly impacted by the Proposed Project, and wider regional audiences where appropriate, in line with the ClfA Professional Practice paper (2021) for public benefit.
- 7.6.3 The objective of the public outreach and community engagement will be to provide information to a wide variety of audiences, ranging from those with a strong interest in archaeology and heritage, to those with no specific involvement.
- 7.6.4 The programme of public outreach and community engagement may, where practicable, incorporate site-based activities, initiatives undertaken during ongoing excavations, and activities undertaken throughout the post-excavation phase. Outreach activities, identification of the target audience, outreach objectives, and media strategy will be set in a separate document and carried out in the Archaeological Contractor's in line with the relevant SSWSI.

8. REPORTING AND ARCHIVE

8.1 Archaeological Report

- 8.1.1 The reporting will follow on from the fieldwork and will take the form of a single 'grey' literature report detailing the results of the fieldwork and assessment of all finds and environmental samples. An online OASIS report will be completed and will be accompanied by a PDF report and boundary file.
- 8.1.2 Alternative reporting requirements will be discussed and agreed with the Local Authority Archaeologist and the Client, following the fieldwork stages once a fuller understanding of the archaeological remains is appreciated.
- 8.1.3 Copies of all reports will be sent to the client and the Archaeology Advisory Teams to LPA and Historic England for approval. Approved versions (electronic and, if required, paper) will also be submitted to Lincolnshire HER.
- 8.1.4 All reports will be written in accordance with the appropriate ClfA standards and guidance documents, particularly ClfA's 'Standard for archaeological field evaluation' (2023a); 'Universal guidance for archaeological field evaluation' (2023b) and 'Standard and guidance for the collection, documentation, conservation and research of archaeological materials' (2014).
- 8.1.5 All reporting will be undertaken by suitably qualified experienced members of staff, familiar with the project. Specialist reporting should adhere to the standards set out in the ClfA toolkit for specialist reporting (<http://www.archaeologists.net/reporting-toolkit>).
- 8.1.6 Draft reports will be submitted within 12 weeks of the completion of fieldwork.

8.2 Report Structure

- 8.2.1 The purpose of the Grey Literature Report is to detail the results of the fieldwork, with accompanying finds and environmental assessments and illustrations.
- 8.2.2 At a minimum, the report will include:
 - > QA sheet detailing title, author, version, date, checked by, approved by;
 - > Non-technical summary, summarising the scope and results of the investigation;
 - > Introduction including:
 - > Centred site location with 12-digit national grid reference;
 - > Background to the scheme;
 - > Description of development proposals and planning history;
 - > Organising of the report;

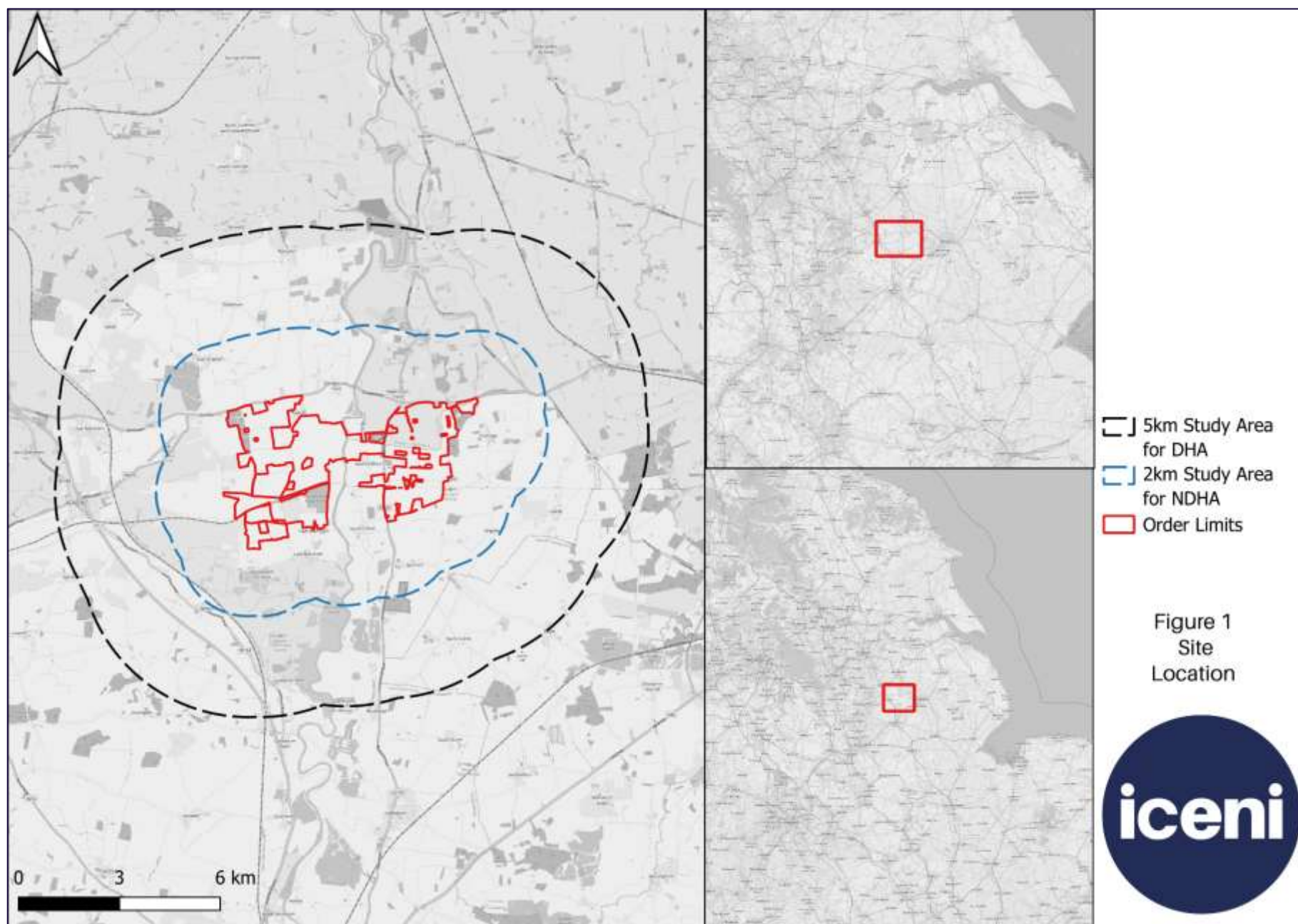
- > Scope and date of fieldwork, archaeological contractors' personnel, commissioning body.
- > Archaeological and historical background (including geological and topographical background and results of previous phases of fieldwork);
- > Methodology employed;
- > Aims and objectives of the investigation, including research framework questions;
- > Results of the investigation including:
 - > Feature/group descriptions (where appropriate), arranged by period;
 - > Finds assessment by artefact type, including quantification, preservation, concordance table, and methods of processing and assessment;
 - > Environmental assessment, including quantification, preservation, details of sampling, processing, assessment and tables;
- > Significance of the results;
- > Appendices containing specialist reports;
- > Digital appendices of registers and any substantial data resource;
- > Illustrations including:
 - > Site location;
 - > Overall site plan(s)
 - > Plans and sections of selected archaeological features;
 - > Colour images illustrating site setting, work in progress, and selected findings.

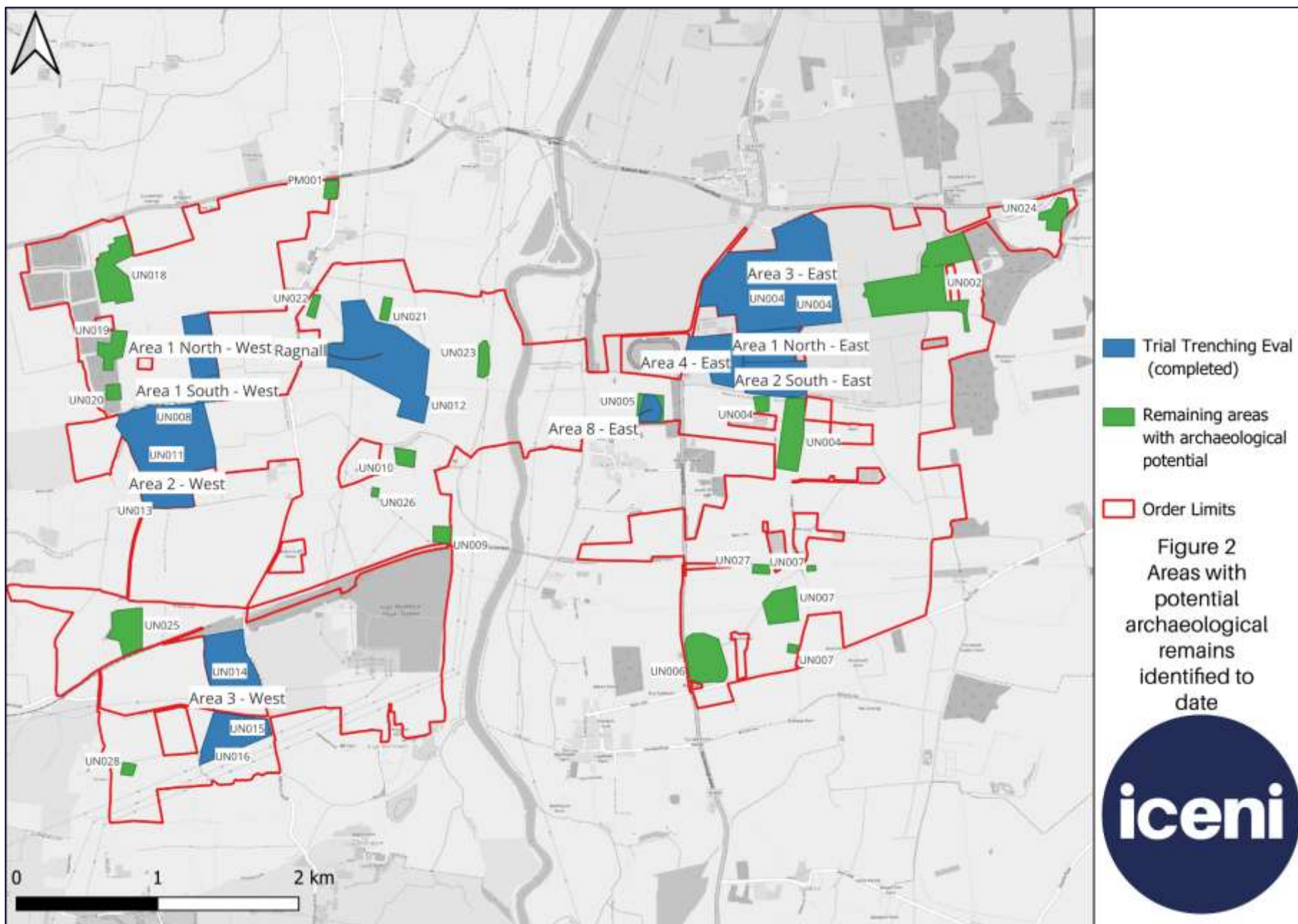
8.3 Archiving

- 8.3.1 The following archive repository will be agreed as the archive repository for the project. An accession number will be requested from the repository for the project, which will be used as a reference on all material to be archived.
- 8.3.2 The project archive will be compiled in accordance with the guidelines published by the ClfA on behalf of the Archaeological Archives Forum (2013). The documentary and digital archive will be submitted to Archaeology Data Services within six months of completion of all work on this project. The preferred method of deposition, where possible, will be digital. An OASIS entry for the project will be started prior to commencement on site and will be completed on completion of the project.
- 8.3.3 Any final publication will report the results of the project as a whole. All finds will be reported to the repository, which will determine the ultimate destination of material archive. Once determined, and within six months, arrangements will be made with the specified museum for the transfer of material and title.

9. **Figures**

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one earth
solar farm