EAST YORKSHIRE SOLAR FARM

East Yorkshire Solar Farm

EN010143

Overarching Written Scheme of Investigation for Archaeological Mitigation

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East Yorkshire Solar Farm Limited

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ES1 This Overarching Written Scheme of Investigation (OWSI) has been commissioned by East Yorkshire Solar Farm Limited (the Applicant) to make provisions for the archaeological evaluation and mitigation works for East Yorkshire Solar Farm (hereafter known as 'the Scheme'). Due to its proposed generating capacity being more than 50 MW, the Scheme is classified as a Nationally Significant Infrastructure Project (NSIP) and will therefore require consent via a Development Consent Order (DCO) under the Planning Act 2008. On 21 November 2023 the Applicant made an application for a Development Consent Order (DCO Application) under section 37 of the Planning Act 2008 (PA 2008) for the Scheme. The Planning Inspectorate accepted the DCO Application for Examination on 19 December 2023.

ES2 The Scheme will comprise the construction, operation and maintenance, and decommissioning of a solar photovoltaic (PV) electricity generating facility and associated infrastructure. Associated infrastructure includes, but is not limited to, underground cabling to connect to the national electricity transmission network at National Grid's Drax Substation; underground cabling between the different areas where solar PV panel arrays are proposed to be located; and areas of landscaping and biodiversity enhancement.

ES3 The Scheme will be located within the 'Order limits'. The Site – the collective term for all land within the Order limits – comprises the Solar PV Site, Ecology Mitigation Area, Interconnecting Cable Corridor, Grid Connection Corridor, and Site Accesses totalling approximately 1,276.5 hectares (ha) (as shown on **Figures 1-3 and 2-3, Environmental Statement (ES) Volume 3 [EN010143/APP/6.3]**). For a description of the Scheme, refer to **Chapter 2: The Scheme, ES Volume 1 [EN010143/APP/6.1]**.

ES4 This OWSI sets out the scope, guiding principles and methods for the planning and implementation of archaeological evaluation and essential archaeological mitigation works for each of the identified sites within the Order limits. These have been identified following analysis of the results of desk-based research and analysis of geophysical surveys and preliminary trial trench evaluation undertaken as part of the Scheme development.

ES5 This OWSI details the archaeological mitigation proposed to evaluate the presence and significance of previously unrecorded remains and reduce the effect of the Scheme on the archaeological resource. Additional evaluation will be undertaken on areas of planned intrusive activities, where no archaeological trial trenching has yet been possible, and the mitigation will comprise either the protection/preservation of archaeological remains, where possible, or, where remains cannot be preserved, a structured programme of archaeological investigation to mitigate the loss.

ES6 Further, this document presents the approach to consultation and approvals, project management, fieldwork methodology, and the post-excavation analysis and publication stages for investigations carried out as part of the archaeological works for the Scheme.

ES7 This document also summarises (where applicable) the extent of previous investigations, provides the research framework for the Scheme, and describes the proposed mitigation works and methods that will be implemented.

ES8 In summary, the OWSI:

a. Is the control document for the programme of archaeological evaluation and the mitigation undertaken on each site or area of archaeological interest in advance of and as part of the construction phase of the Scheme.

b. Details the principles and methods for the preparation of the Site-Specific Written Scheme(s) of Investigation (SSWSI) for each site or operation.

c. Will be a certified document with its implementation being secured by Requirement 10 in Schedule 2 of the Development Consent Order (DCO) (see draft DCO application reference **EN010143/APP/3.1**).

Part One – Overarching Archaeological Mitigation Strategy

1. Introduction

1.1 Project Background

1.1.1 This Overarching Written Scheme of Investigation (OWSI) has been commissioned by East Yorkshire Solar Farm Limited (the Applicant) to make provisions for the archaeological evaluation and mitigation works for East Yorkshire Solar Farm (hereafter known as 'the Scheme'). Due to its proposed generating capacity being more than 50 MW, the Scheme is classified as a Nationally Significant Infrastructure Project (NSIP) and will therefore require consent via a Development Consent Order (DCO) under the Planning Act 2008. On 21 November 2023 the Applicant made an application for a Development Consent Order (DCO Application) under section 37 of the Planning Act 2008 (PA 2008) for the Scheme. The Planning Inspectorate accepted the DCO Application for Examination on 19 December 2023.

1.1.2 The Scheme will comprise the construction, operation and maintenance, and decommissioning of a solar photovoltaic (PV) electricity generating facility and associated infrastructure. Associated infrastructure includes, but is not limited to, underground cabling to connect to the national electricity transmission network at National Grid's Drax Substation; underground cabling between the different areas where solar PV panel arrays are proposed to be located; and areas of landscaping and biodiversity enhancement.

1.1.3 The Scheme will be located within the 'Order limits'. The Site – the collective term for all land within the Order limits – comprises the Solar PV Site, Ecology Mitigation Area, Interconnecting Cable Corridor, Grid Connection Corridor, and Site Accesses totalling approximately 1,276.5 hectares (ha) (as shown on **Figures 1-3 and 2-3, Environmental Statement (ES) Volume 3 [EN010143/APP/6.3]**). For a description of the Scheme, refer to **Chapter 2: The Scheme, ES Volume 1 [EN010143/APP/6.1]**.

1.2 Overview of the Document

1.2.1 This Overarching Written Scheme of Investigation (OWSI) includes the scope, guiding principles and methods for the planning and implementation of archaeological evaluation and essential archaeological mitigation works for each of the identified sites within the Order limits. These have been identified following analysis of the results of desk-based research and analysis of geophysical surveys and preliminary trial trench evaluation undertaken as part of the Scheme development. The sites for archaeological mitigation works are shown on **Plate 1-1**, and discussed in detail in **Appendix B**.

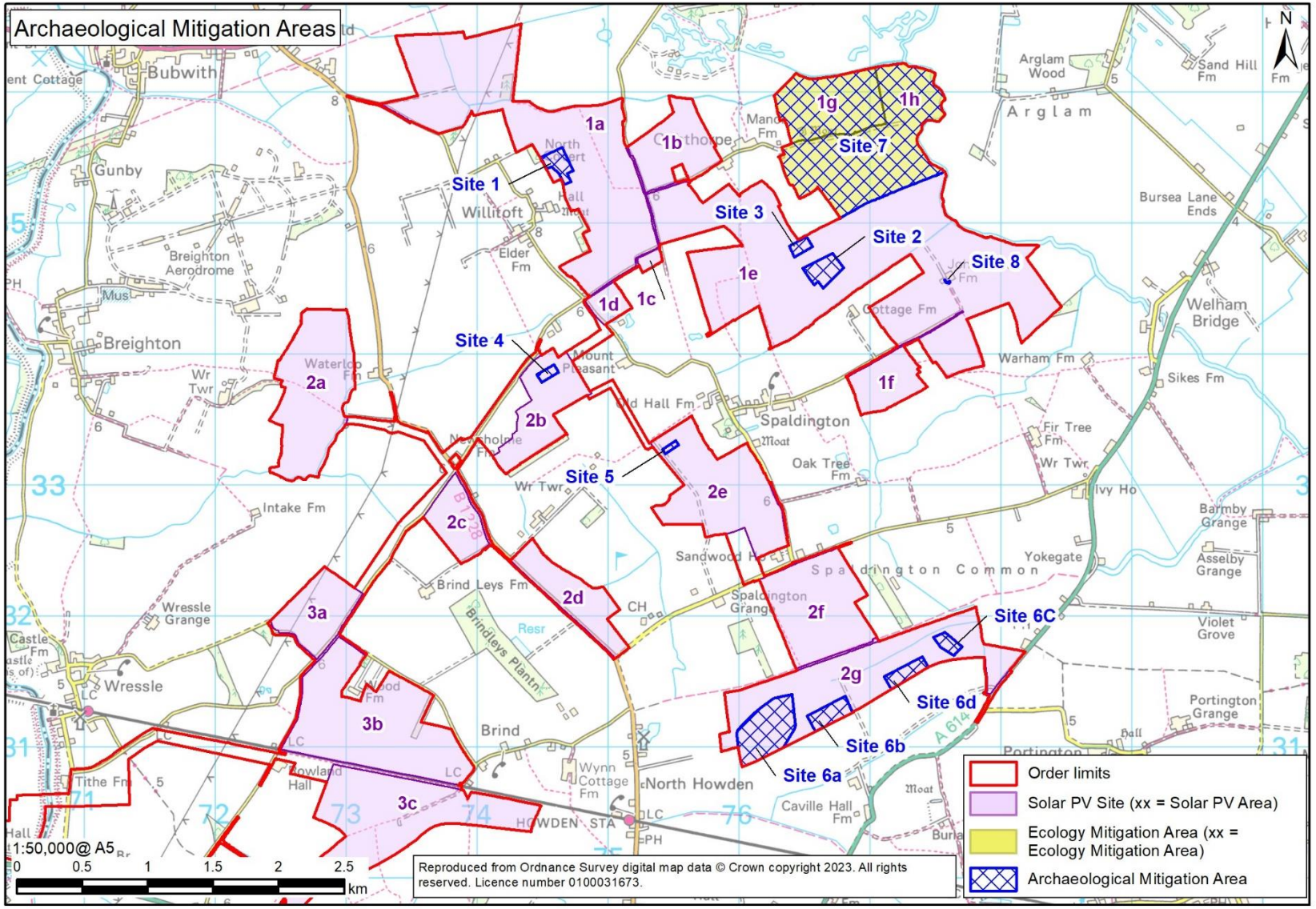

Plate 1-1. Archaeological Mitigation Areas

1.2.2 It details the archaeological mitigation proposed to evaluate the presence and significance of previously unrecorded remains and reduce the effect of the Scheme on the archaeological resource. Additional evaluation will be undertaken on areas of planned intrusive activities, where no archaeological trial trenching has yet been possible, and the mitigation will comprise either the protection/preservation of archaeological remains, where practicable, or, where remains cannot be preserved, a structured programme of archaeological investigation to mitigate the loss.

1.2.3 Further, this document presents the approach to consultation and approvals, project management, fieldwork methodology, and the post-excavation analysis and publication stages for investigations carried out as part of the archaeological works for the Scheme.

1.2.4 This document also summarises (where applicable) the extent of previous investigations, provides the research framework for the Scheme, and describes the proposed mitigation works and methods that will be implemented.

1.2.5 In summary, the OWSI:

a. Is the control document for the programme of archaeological evaluation and the mitigation undertaken on each site or area of archaeological interest in advance of and as part of the construction phase of the Scheme.

b. Details the principles and methods for the preparation of the Site-Specific Written Scheme(s) of Investigation (SSWSI) for each site or operation.

c. Will be a certified document with its implementation being secured by Requirement 10in Schedule 2 of the Development Consent Order (DCO) (see draft DCO application reference EN010143/APP/3.1]).

1.3 The Strategy of the Document

1.3.1 This document sets out the scope, guiding principles and methods for the planning and implementation of the required SSWSIs for each site.

1.3.2 The SSWSIs are documents that relate to particular elements of archaeological fieldwork and detail specific measures to be applied or adopted as part of the programme of archaeological works. They will be prepared by the Archaeological Contractor for the Scheme in accordance with the principles and methods set out in this OWSI and will be approved by the archaeological advisors for East Riding of Yorkshire Council North Yorkshire Council (as relevant) and, where relevant, with Historic England (the Curators).

1.3.3 The individual SSWSIs will be prepared by the Archaeological Contractor in consultation with the Archaeological Clerk of Works (ACoW) and the Curators. Each SSWSI will be prepared and approved prior to the start of fieldwork for each site (the subject of that SSWSI) commencing and is designed to answer specific research questions to advance knowledge gain, or to ensure the protection of archaeological features whilst being mindful of public benefit.

1.4 Roles and Responsibilities

1.4.1 The following terminology is used throughout this document:

a. The Client – East Yorkshire Solar Farm Limited (the Applicant), or their representative (hereafter referred to as the Client's Representative).

b. The Principal Contractor (*i.e.*, the construction contractor for the Scheme).

c. ACoW (as appointed by the Client).

d. Archaeological Contractor (as appointed by the Client or the Principal Contractor).

e. Curators – the local planning authority archaeologists for East Riding of Yorkshire Council and North Yorkshire Council, as well as representatives of Historic England (including, but not limited to, the Inspector of Ancient Monuments, the Inspector of Historic Buildings and the Science Advisor) where relevant.

1.4.2 The archaeological evaluation and mitigation strategy has been produced by AECOM working alongside the Client and in consultation with the Curators.

1.4.3 The Archaeological Contractor, who will be a Registered Organisation with the Chartered Institute for Archaeologists, will be responsible for the delivery of the archaeological mitigation programme, as set out in this OWSI. This responsibility will include all on-site and off-site works, including preparation of SSWSIs, reporting and publication. The Archaeological Contractor's Fieldwork Manager and/or the appointed ACoW will be responsible for oversight of the archaeological programme and will be the principal points of contact for the Curators.

1.4.4 The ACoW will be responsible for monitoring the work undertaken by the Archaeological Contractor, on behalf of the Principal Contractor or the Client, to ensure compliance with this OWSI and the SSWSIs. They will also be responsible for liaising with the Principal Contractor to monitor construction activities to ensure compliance with the OWSI and the CEMP. The ACoW will organise and attend regular site meetings, as required, and will organise and manage remote monitoring and sign-off meetings with the Curators.

1.4.5 The Curators will monitor the fieldwork, either remotely or in person if required, to ensure that it is carried out to the required standard and specification as set out in this OWSI and the SSWSIs, and to ensure that it will achieve the agreed aims and objectives. The Curators will also confirm sign-off of archaeological sites in accordance with section 7.2, prior to construction works commencing within the agreed mitigation areas detailed in Appendix B. The ACoW will be responsible for ensuring that remote monitoring and sign-off procedures are carried out in line with this OWSI. Further detail is provided in Section 7.

1.5 Policy and Guidance

1.5.1 The Strategy conforms with current good practice and takes account of guidance outlined in:

a. Overarching National Policy Statement for Energy (EN-1) (Ref. 1).

b. National Policy Statement for Renewable Energy Infrastructure (EN-3) (Ref. 2).

c. National Policy Statement for Electricity Networks Infrastructure (EN-5) (Ref. 3).

d. National Planning Policy Framework (NPPF) (Ref. 4) and National Planning Practice Guidance (Ref. 5).

e. Management of Research Schemes in the Historic Environment (Ref. 6).

f. Archaeological field evaluation (Ref. 8), archaeological excavation (Ref. 9); archaeological monitoring and recording (Ref. 10); the creation, compilation, transfer and deposition of archaeological archives (Ref. 11); and for the collection, documentation, conservation and research of archaeological materials (Ref. 12).

g. Historic England have also issued a variety of guidance notes for environmental archaeology, human remains, scientific dating, preservation of archaeological remains and archaeological conservation (see **Appendix A**).

1.6 Structure of Document

1.6.1 This document comprises of the following three parts:

Part One – The Detailed Archaeological Strategy

1.6.2 It describes the principles to be applied in undertaking archaeological evaluation and mitigation on the Scheme and proposed strategies. This section details the relevant archaeological baseline, survey results and rationale for evaluation and mitigation for each of the identified areas.

1.6.3 For those areas where archaeological investigation and recording is proposed, relevant research themes and period-based questions are indicated. These have been identified in consultation with specialists, drawing on (but not limited to):

a. Yorkshire Archaeological Research Framework (Ref. 13).

b. Understanding the British Iron Age: an agenda for action (Ref. 14).

c. The Rural Settlement of Roman Britain (Ref. 15).

d. First World War Fieldworks in England (Ref. 16).

1.6.4 Scheme specific research questions have also been developed.

Part Two – The Outline Scope of Works

1.6.5 In this part, the strategy for each of the evaluation and mitigation approaches is discussed and outline method statements are presented. These method statements will form the basis of the works to be detailed in SSWSIs.

1.6.6 The requirements for communication, monitoring and reporting are identified and the procedure for completion of the archaeological works is set out. Assessment, reporting and archiving requirements are outlined.

Part Three – Appendices

1.6.7 These are as follows:

a. **Appendix A** – Standards and Guidance.

b. **Appendix B** – Archaeological Evaluation and Mitigation Action Areas.

c. **Appendix C** – Public Archaeology and Community Engagement Strategy.

d. **Appendix D** – Template Completion Statement.

2. Purpose and Objectives

2.1 Purpose of This Document

2.1.1 The purpose of the OWSI is to detail the scope of the fieldwork methodologies and detail the required strategy to evaluate and mitigate impacts of the Scheme. The strategy for each mitigation site is designed to answer specific research questions to advance knowledge gain, or to ensure the protection of archaeological features where they do not need to be excavated.

2.1.2 The primary aim of the strategy is to maximise knowledge gain, not all sites will be fully excavated. The mitigation of the Scheme is not designed to allow recording for recording's sake, but rather to excavate those sites with intrinsic or group value, which will add to the corpus of knowledge for the region.

2.1.3 The archaeological mitigation approach in this OWSI will be developed and implemented through the SSWSIs in line with the following parameters:

a. Observe professional codes, guidance and standards (see Appendix A).

b. Consider archaeological and cultural heritage evidence from all periods and its contribution to the understanding of the historic landscape and its use over time.

c. Only undertake intrusive works in areas where there will be a direct impact through development (as identified in the ES [as certified by the DCO]), or where there is a need to consider design changes.

d. Utilise the information provided by other disciplines (for example, geotechnical investigations).

e. All works must take account of all statutory designations.

2.2 Objectives

2.2.1 All those undertaking archaeological work associated with the Scheme will:

a. Ensure that a robust programme of archaeological evaluation is undertaken, where intrusive activities are planned, to adequately characterise the archaeological potential and significance of these areas.

b. Ensure a detailed programme of archaeological work is in place to appropriately mitigate impacts on any archaeological remains due to the Scheme.

c. Promote high quality research using intensive excavation methodologies and scientific techniques to explore a transect through the landscape and investigate past settlement patterns, develop new research questions and feed back into the relevant research strategies.

d. The results of archaeological investigation will be published within an appropriate period following assessment and analysis (see Section 11 below for further details). The results of fieldwork interventions will be combined into a single report.

e. Ensure that the results of the investigations (i) are made publicly available in an appropriate format for assimilation into the relevant Historic Environment Records; (ii) develop an understanding of the historic environment resource of the Scheme by the public at large; and (iii) disseminate in a timely manner via the Online Access to the Index of Archaeological Investigations (OASIS) and the Archaeological Data Service (ADS).

f. Ensure that the physical archive (artefacts and ecofacts) is offered to an appropriate receiving institution, agreed with the Curators, so that it can be made publicly accessible.

2.3 Aims of Specific Intervention Types

2.3.1 The following archaeological evaluation and mitigation actions are proposed; the application of these will be determined in consultation with the Curators. Relevant descriptions of proposed mitigation actions are presented in **Table 2-1**. These will be undertaken in a staged approach, where necessary, based on the detailed design, or as responses to specific elements of the Scheme.

Table 2-1. Archaeological Mitigation Measures

Recording Method	Description
Trial Trench Evaluation (Preliminary works stage)	In the few small areas where access has been denied or was not practicable prior to public examination (Grid Connection Corridor, certain locations within the Solar PV Site, etc.), a targeted or sample-based mechanical or hand excavated trench-based investigation would be undertaken to record the extent of archaeological remains identified through non-intrusive survey and to inform decision making on further mitigation recording that may be appropriate. The aims are: • to assess the extent, date, character and state of preservation of any archaeological remains within the Site. • to assess the potential that the Scheme has to address research questions presented in the Yorkshire Archaeological Research Framework: research agenda (Ref. 13) • to assess the effect that later activity has had on the state of preservation of any archaeological resource within the Site. • to inform the scope of any archaeological mitigation that may be required.
Detailed Excavation (Preliminary works stage)	A programme of controlled, intrusive fieldwork with defined objectives which maps, examines, records and interprets archaeological remains at a site or within a

Recording Method	Description
	specified area. The records made and the objects and samples gathered during the fieldwork are combined and studied (assessed and if appropriate analysed) and the results published in detail appropriate to the project design. Detailed Excavation, which may incorporate extensive sample excavation ('strip and record' or 'strip, map and sample'), trench mitigation or test pit mitigation (with soil sieving and artefact recovery), would be undertaken where significant archaeological remains are either known from assessment or evaluation works. Detailed excavation may be targeted at specific sites, areas of interest or a sample range of locations. The extent of the investigation and the excavation strategy for each detailed excavation area would be agreed in consultation with the Curators.
Archaeological Monitoring and Recording (Preliminary works and construction stages)	A programme of observation, investigation and recording of archaeological remains undertaken in specific areas where the presence of, or moderate potential for, archaeological remains has been demonstrated or can be predicted, but where detailed investigation prior to the main construction programme is unfeasible due to safety or logistical considerations, or undesirable due to environmental or engineering constraints. The contractors preferred method of working would be controlled as necessary to allow archaeological recording to take place to the required standard.
Preservation in situ	An area of development that has been excluded to conserve archaeological remains, thereby preserving it for future generations. Measures for preservation in situ would include protective fencing, exclusion zones or burying / sealing remains beneath fill material to ensure that they are not disturbed, in accordance with best practice and guidance (Ref. 31).
Historic Building Recording	A programme of archaeological building investigation and recording intended to establish the character, history, dating, form and archaeological development of a specified building, structure, or complex and its setting. Undertaken prior to the commencement of works, the level and extent of the recording would be agreed in consultation with the Curators.

3. Archaeological Background

3.1 Introduction

3.1.1 The archaeological background of the Scheme has been presented in **Chapter 7: Cultural Heritage, ES Volume 1 [EN010143/APP/6.1]**. This includes the historical and archaeological background of the Scheme within a defined Study Area and the results of archaeological evaluations undertaken as part of the Scheme. The archaeological background is summarised here.

3.1.2 In preparation of the cultural heritage assessment, desk-based research, following the CIfA Standard and guidance for historic environment desk-based assessment (Ref. 17), was undertaken.

3.1.3 The assessment work included analysis of various data sources, geophysical survey and a programme of archaeological evaluation through trial trenching targeting identified anomalies within areas of potential impact. These are presented as Appendices to the ES; **Appendices 7-2, 7-3 and 7-4, ES Volume 2 [EN010143/APP/6.2]**.

3.2 Geophysical Surveys

3.2.1 A geophysical survey (detailed magnetometry) was undertaken to support the archaeological assessment of the Scheme (**Appendix 7-3, ES Volume 2 [EN010143/APP/6.2]**). The survey covered approximately 1,075 hectares (ha) of land within the Solar PV Site and approximately 20 ha of land within the Grid Connection Corridor. Some small areas of the Solar PV Site could not be surveyed, as well as parts of the Grid Connection Corridor.

3.2.2 The geophysical survey detected a small number of foci of probable archaeological activity, including discrete areas of probable archaeological remains in Solar PV Area 2g, Solar PV Area 1e and Solar PV Area 1a (Solar PV Areas are shown on Plate 1-1).

3.2.3 Modern agricultural activity has also been identified in the form of footpaths, former mapped and unmapped field boundaries, and through linear anomalies relating to modern ploughing. Field drains dominate the general landscape of the survey area, which consists of low-lying, poorly draining land. In several areas close to river or drainage courses, anomalies related to alluvial flooding have been identified. Several anomalies have been identified within the survey area that relate to former farms, halls, or other buildings that have since been demolished. Anomalies classified as ‘undetermined’ have been detected and although these are likely to be of natural, agricultural, or modern origin, an archaeological origin cannot be ruled out completely.

3.3 Trial Trenching Evaluation

3.3.1 Archaeological evaluation trenching was undertaken between 14 August 2023 and 13 October 2023, as part of the archaeological evaluations for the Scheme (**Appendix 7-4, ES Volume 2 [EN010143/APP/6.2]**). The scope and extent of the works were based on the results of the geophysical survey and targeted areas of likely archaeological potential as well as areas which the survey suggested were likely to be ‘blank’, in order to fully test the

validity and accuracy of the geophysical survey results. Where concentrated areas of archaeological remains were identified, additional trenches were excavated as necessary to ensure a firm understanding was gained of their likely maximum extent.

3.3.2 The evaluation consisted of the excavation of 498 trenches across the Solar PV Site to ascertain the archaeological potential present within the Order limits. Evidence for archaeology dating from the Iron Age to post-medieval periods was identified. Six areas contained a concentration of features of Iron Age and Romano-British date.

3.3.3 Trial trenching was not undertaken within the Grid Connection Corridor, or within some limited parts of Solar PV Areas 3c and 1e, due to access constraints. The completion of trial trenching in these areas is proposed in this OWSI and will be undertaken as a first stage of works in these areas, with any necessary mitigation following that evaluation.

3.4 Summary of Archaeological Baseline and Potential

Neolithic to Bronze Age (4,000 BC to 700 BC)

3.4.1 Neolithic and early Bronze Age activity is mostly represented in the archaeological record by flint tools and funerary monuments. A possible Bronze Age round barrow (MHU15314) lies just outside the northern boundary of Solar PV Area 3b, at Wood Farm. Although the location of the barrow would appear to be outside the Order limits, the monument, or associated archaeological features, could potentially extend into the Site. The first edition OS map of 1854, and all detailed later mapping, shows a circular eminence in a wood known as Brind Wyre, just to the north-east of the mapped HER point and beyond the site area, which seems most likely to be the barrow described by the HER record. The site visit carried out as a part of this assessment observed the well-preserved round barrow in the centre of the wood at Wood Farm, where it survives as a well-defined circular earthen mound with a clear surrounding ditch at NGR SE 73164 31663, rather than the location of the existing HER point, which lies to the south-west.

3.4.2 Barrows can become a focus for later, often early medieval, burials, and so later activity in a zone surrounding monuments like this is a possibility. Further possible barrows (MHU 6691) have been noted in Brindleys Plantation, *c*. 1 km to the east of Wood Farm and to the south of this, just beyond the northern extent of Howden (MHU20145, MHU13940). It is conceivable that these possible burial monuments could have formed an intentional group with the probable barrow at Wood Farm, perhaps suggesting that more unknown barrows could be present in this area, extending north from Howden, although, none have any obvious, experienceable visual interrelationship. Indeed, many of those mentioned here have not been investigated or proven conclusively.

3.4.3 The site of a possible stone circle (MHU17259), commonly known as ‘Ringstone Wood’, is referred to in medieval sources as having been located near a moated site (MHU1760) to the north of Howden and *c.* 300 m from the eastern boundary of Solar PV Area 3c. Should a late Neolithic or early Bronze Age monument of this type have been located here, it remains

possible that it could have been part of a larger complex of monuments, such as the Gypsey Race landscape near Scarborough, also in the East Riding. The suggested presence of a number of possible barrows in this general area does illustrate the potential for a concentration of such monuments to exist. With that said, the location and nature of this potential site are largely unknown, and no clear archaeological evidence of its existence has been found.

3.4.4 In the same immediate area as these potential barrow and stone circle sites, a possible Neolithic enclosure was identified by a desk-based assessment undertaken at Howden in 2003 (Ref. 32).

3.4.5 **Potential**: The geophysical survey and trial trenching carried out for the Scheme did not identify the presence of features that could relate to Iron Age or Bronze Age activity. However, given the tradition of funerary monuments in this region, there remains a **low** possibility that features from this period are present within the Order limits.

Iron Age (700 BC to AD 43)

3.4.6 During the Iron Age, this area of Britain was within the territory of the Brigantes. Recent research has identified Iron Age settlers as being composed of discrete cultural groups within the larger Brigantes tribe, each with a cultural identity that was distinctly different to other groups in the area (Ref. 34).

3.4.7 Iron Age activity has been recorded across the Humberhead Levels, including settlements, field boundaries, enclosures and trackways. There is much commonality across Britain in terms of the forms and distribution of Iron Age settlement and farming practices, which often see almost uninterrupted continuity into the Roman period, seeing only a slow change to more ‘Romanised’ forms. There are no recorded square barrows in the Site or study area, but this part of Britain does have a tradition for this class of funerary monument. In Yorkshire, most of this class of monument have been recorded in the area between the River Humber and the North Yorkshire Moors, with the majority dating to the Middle Iron Age.

3.4.8 Two heritage assets dating to the Iron Age period are located within the Order limits. Heritage asset (MHU2301) relates to a number of prehistoric boundary ditches, located almost entirely within Solar PV Area 2f. Segments of these ditches appear to be parallel, indicating a possible trackway, but certainly a land division. Heritage asset (MHU22316), towards the eastern edge of Solar PV Area 2g, shows a small segment of possible boundary ditches. Two heritage assets (MHU22504 and MHU22507) are located to the east and north of Area 1e respectively. Both are characterised as enclosure ditches and are located within a swathe of Iron Age and/or Romano-British activity to the east of Spaldington. A single asset, (MHU22416), comprising a potential trackway and field systems, lies north of Bubwith, outside the scope of works, but does highlight the potential for Iron Age and Roman period evidence to exist across the wider Study Area.

3.4.9 **Potential**: the cultural heritage baseline **Appendix 7-2: Cultural Heritage Desk Based Assessment, ES Volume 1 [EN010143/APP/6.1]** assessed there was a strong (**high**) potential for Iron Age archaeology to be present

within the Order limits. The results of the geophysical survey and trial trenching has confirmed settlement archaeology dating to this period.

Roman (AD 43 to AD 410)

3.4.10 Roman activity has been recorded across the Humberhead Levels, including settlement remains, roads, salterns, and pottery kilns.

3.4.11 As mentioned above, a concentration of probable settlement activity, likely to date from the Iron Age through into the Roman period, is evident to the east of Spaldington. These remains, mapped from aerial photography, are visible approximately 3.1 km north-east of Spaldington, proceeding south-east for approximately 3.5 km, with the majority of assets provisionally dated to the Roman period. Study of such sites elsewhere has shown that the archaeological evidence from this concentration is likely related to settlement, agriculture and/or industrial production. A number of assets around Arglam Farm or Arglam Grange, north-east of Solar PV Area 1e, are thought to represent Romano-British settlement and, potentially, iron smelting (MHU1132, MHU6503, MHU6506, MHU6521, MHU6716 and MHU10776). Several find spots of Romano British pottery sherds have been uncovered across the swathe of Romano British activity, and not concentrated to one particular area, further demonstrating the likelihood for widespread evidence of occupation from this period to survive across the area (MHU7916, MHU10774, MHU10783).

3.4.12 Towards the eastern edge of Solar PV Area 1e, three small scatters of Romano British pottery (MHU10775) have been recorded, as well as a small collection of Roman coins (MHU22193) within the north-west extent of Area 1e, indicating possible settlement activity near or within Solar PV Area 1e, as well as a wider potential for isolated Roman finds across the Study Area.

3.4.13 Just to the north-east of the town of Howden, heritage asset (MHU20031) is classified as a potential Roman villa. This identification was determined from aerial photography, within a Desk Based Assessment conducted in 2003 (Ref. 32). This asset lies a short distance to the west of Solar PV Area 2g, within which geophysical survey of the area's western extent has revealed potential anomalies which may represent settlement remains, presumably dating to the Iron Age or Roman period. Roman coins were also uncovered south of Solar PV Area 2g, at Newfields Farm (MHU7572), further indicating Roman period activity around Howden.

3.4.14 Two heritage assets are recorded south of the village of Brackenholme, approximately 2.5 km west of Solar PV Area 3c and within the Grid Connection Corridor. Heritage asset (MHU10785) indicates evidence of ironworking, and heritage asset (MHU21808) represents a findspot of a Roman coin hoard of 201 silver *denarii* split between two Roman beaker vessels.

3.4.15 The widespread evidence of settlement activity, almost certainly relating to pre-Roman Iron Age and Roman period activity, which lies across a wide tract of landscape to the east of Solar PV Areas 1e and 2f and surrounding Solar PV Area 2g, suggests a strong potential for further remains of a similar type to survive within at least the eastern half of Area 2e, and potentially other areas within the Site. The more ephemeral remains identified around

Brackenholme also show some potential for Roman period remains to exist within this part of the Grid Connection Corridor.

3.4.16 Geophysical survey, undertaken to support this assessment, identified a group of anomalies in the western part of Solar PV Area 2g which occupy a broad, north-east to south-west strip across this area. These form a defined linear group of rectilinear enclosures and boundary features, including a well-defined enclosure with internal sub-divisions at the survey area's western boundary. It seems clear that these features represent an eastward progression of an extensive Iron Age to Romano British settlement complex (MHU3198), identified from aerial photography just to the west of Solar PV Area 2g. The alignment of the settlement mirrors that of a medieval/post medieval field boundary, so it may be possible that this probable settlement is considerably later in date, though the morphology is more characteristic of Iron Age/Roman settlements.

3.4.17 **Potential**: the cultural heritage baseline assessed there was a **high** potential for Roman archaeology to be present within the Order limits. The results of the geophysical survey and trial trenching has confirmed settlement archaeology and an area of industrial activity dating to this period.

Early Medieval (AD 410 to 1066)

3.4.18 Early medieval evidence in the Study Area is most likely to be found in established settlements, where settlements from the early medieval period continued to develop into more recognisable forms now characterised most obviously by their later, medieval archaeology. A watching brief at Howden Minster (MHU1754) in 2009 (MHU21654) revealed funerary evidence from the medieval period, mixed within which was a small assemblage of early medieval pottery, providing some residual evidence of the earlier phase of the church and activity within the vicinity. Such a picture is of use in considering settlements like Spaldington, Willitoft, Brackenholme and the medieval settlement site at Caville Hall, all discussed below. These sites, all mentioned in the Domesday survey of 1086, are likely to have been present in the early medieval period, although archaeological evidence from this time will almost certainly be difficult to identify. Nonetheless, this model provides a useful way of considering the general potential for early medieval archaeology within the Study Area, as well as a further layer of significance to the archaeology of these settlements and their surrounds.

3.4.19 **Potential**: The geophysical survey and trial trenching carried out for the Scheme did not identify the presence of features that could be attributed to this period. It is likely that activity focussed around established settlements, and the potential for encountering features from this period is assessed to be **negligible**.

Medieval (1066 to 1540)

3.4.20 The Site and large parts of the surrounding landscape within and beyond the Study Areas, are covered in mapped areas of ridge and furrow cultivation, which is likely to be a mix of medieval and post-medieval dates. These cultivation remains, identified mainly from aerial photography, cover the entirety of some parts of the Site, including Solar PV Areas 2a and 1b, and

large elements of other parts of the Site, including Solar PV Areas 1a, 1e, 2e, 2g, 3b and 3c.

3.4.21 Beyond the spread of medieval cultivation across the landscape, another commonly occurring theme within the Study Area is medieval settlement. Area 1a lies immediately to the east of Willitoft Hall (MHU2911). The hall comprises a moated manorial complex with a chapel (MHU 2908) and possibly another enclosure or complex of fishponds (MHU 15412) close by to the west. Surrounding the manorial centre is thought to be a related medieval settlement, which is recorded in the Domesday survey in 1086 as '*Wilegetot*' (MHU 10076). The pattern of narrow 'strip fields' which lie to the south of Willitoft Hall, reflected in historic Ordnance Survey mapping and still partially identifiable in the current field pattern, might suggest that this settlement lay along the line of the current Willitoft Road, which runs south-east from the hall towards Spaldington. Were this to be the case, it is possible that archaeological remains of this settlement have the potential to survive within the western and south-western parts of Solar PV Area 1a as well as Solar PV Areas 1c and 1d.

3.4.22 A similar archaeological pattern seems likely to be present at Spaldington as well. Named as '*Spellinton*' in the Domesday Book, Spaldington also hosts a moated manorial complex (MHU 2900) and an associated settlement (MHU 9686), which later field patterns suggest may have extended both east and west from the current settlement. There is potential therefore for archaeological remains associated with the settlement to be present in Solar PV Areas 1e, 2e and 1f.

3.4.23 Solar PV Area 2g lies just to the west and north of another moated manorial complex at Caville Hall (MHU3182), which previous fieldwork and aerial photographic analysis suggests is surrounded by a complementary linear settlement (MHU7760). Features almost certainly associated with this settlement have been identified by geophysical survey undertaken to support this assessment. It is possible that the hall's moated enclosure may extend into the southeasternmost extent of Solar PV Area 2g, whilst its contemporary wider settlement, and likely contemporary, or later, ridge and furrow cultivation (MHU22505) certainly do. Another moated site, closely situated just to the north-east of Caville Hall (MHU7689), is likely to be associated with the development of this same manorial complex and does appear to extend into the central section of the southern margin of Solar PV Area 2g. Identified from aerial photography, this moated site is highly likely to preserve archaeological features and deposits relating to higher-status occupation and use of the site during the medieval, and possibly post-medieval, periods. Archaeological features relating to the wider medieval settlement appear to have been clearly identified within the geophysical survey undertaken to support this assessment (refer to Section 4.7 in **Appendix 7-2: Cultural Heritage Desk Based Assessment, ES Volume 1 [EN010143/APP/6.1]**), extending in a typical linear pattern to the west of the hall site.

3.4.24 Another, less well-understood, area of medieval settlement seems to have been located at Brackenholme (MNY10599), which lies within the Grid Connection Corridor to the south of Wressle. Recorded as *Bracheneholm* in the Domesday survey, the property only appears in the summary and not in the main survey document, perhaps suggesting a property of limited value.

With that said, there were 65 taxpayers living there in 1379, although the nearby hamlets of Babthorpe and Hagthorpe may also have been included in that count. Hagthorpe (MNY10601), also named in the summary of the Domesday Book, is also shown in the North Yorkshire County Council HER as lying within the Grid Connection Corridor. Along with the moated site and fishponds at Hagthorpe (MNY10603), as well as an associated chapel (MNY10604), this set of archaeological assets forms a distinct grouping of medieval settlement features within the landscape, albeit one which is poorly understood.

3.4.25 The first edition of the Ordnance Survey (OS) six-inch series (published in 1854) depicts the moated site with only its eastern and southern ditches evident, with the northern and western perimeter not visible. The northern and western ditches may have been cleared away for buildings and landscaping associated with the later Hagthorpe Hall. The eastern ditch is labelled as ‘Moat’ and the interior is also labelled as ‘Site of a Hall’ in this cartographic source, alluding to the previous presence of a late medieval hall within the moated site. The southern ditch and the eastern ditch were both seemingly crossed by causeways though whether these served as original access points into the moated area is not known. On the same map, it is noteworthy that the eastern ditch extends further northwards, beyond the confines of the current plot and into the area of the Grid Connection Corridor, suggesting that the eastern ditch originally measured c. 180m north-south in length. This would suggest the moated site could originally have measured c.180m north-south by c. 110m east-west and extended into the area now occupied by a cultivated field to the immediate north of Hagthorpe Hall. With that said, this now infilled section of the moat is shown as differing in form from the slender moat to the south, presenting an altogether broader and less consistent form. This opens the possibility that this former northerly flooded feature might actually have been a fishpond, not an extension of the moat. If the feature were a fishpond, it is most likely to have been placed outside of the moated area.

3.4.26 If the now infilled feature was a section of moat, the moated site at Hagthorpe would, by extension, have been more rectangular in plan than is suggested by the extant moat today, and would have enclosed an area c.110m east-west by c.180m north-south. This increased size would equally likely suggest a moated site potentially of relatively higher status.

3.4.27 The moated site at Hagthorpe is in good condition and although the main island has later buildings located there, it will nevertheless retain evidence of the earlier structures which originally occupied it. The moat along its eastern and southern sides survives well and will retain environmental evidence relating to the period of the monument's construction.

3.4.28 If the moated site was more extensive, as suggested by the earlier cartographic sources, then the Grid Connection Corridor will likely cross through either of the following:

a. an infilled fishpond which extended from the north-east corner of the moated site; or,

b. an infilled section of the moat and the actual interior of the moated site.

3.4.29 In either scenario, there is potential for archaeological features, structures or artefacts to be uncovered in the Grid Connection Corridor.

3.4.30 Beyond the regularly repeated pattern of settlements with associated manorial and ecclesiastical sites, Solar PV Area 3c – as well as areas beyond its boundary – includes a group of identified assets which relate to the presence of a medieval deer park known as Newsholme Park (MHU9207). This park may be associated with a possible castle site (MHU18167), also interpreted from the visible cropmarks as a possible stock enclosure, at Warp Farm, which lies beyond the southern boundary of Solar PV Area 3c. Within the park itself, although outside the Order limits, is cropmark evidence for the presence of medieval retting pits (MHU 22306) related to the locally significant flax industry. These features lie a short distance from the south-west corner of Solar PV Area 3c, suggesting the possibility that further unidentified pits could extend this grouping into the Site at this point. Retting pits have been the subject of limited study and represent a significant potential palaeoenvironmental resource for studying the environmental impact of the flax industry and its wider environmental context, as well as human influence on the dynamic landscape of the Humberhead Levels more generally.

3.4.31 Beyond the secular archaeology of the medieval period represented in the wider Study Area, significant medieval ecclesiastical sites are also present. Of importance amongst these is the scheduled monument of Drax Augustinian priory (MNY10068) (NHLE 1016857). The scheduled part of the monument is located 60 m west of the Grid Connection Corridor, outside of the Order limits. The non-designated extent, as mapped in the North Yorkshire County Council HER (MNY 10068), is larger than the scheduled area and extends partially into the western extent of the Grid Connection Corridor.

3.4.32 The main route to the priory is thought to have been along Pear Tree Avenue, labelled as Ave Maria Lane on 19th century maps (AEC001). The route, which is outside of the scheduled area and is not recorded on the HER, approaches the monument from the east and would have provided access to the priory through a gatehouse thought to have been located in the area of the western part of the modern farmyard. Given that this routeway cuts across the Grid Connection Corridor, from east to west, it is possible that the Scheme could impact any archaeological features of the medieval route of approach which might survive.

3.4.33 **Potential**: the known presence of the important site of Drax Abbey provides a clear focus around which other medieval activities would have clustered, and serves to help in explaining the potential for, and identified presence of, archaeology from this period within this area. This pattern of activity foci could also apply to medieval manorial sites at Portington and Caville, as well as more poorly understood sites like Hagthorpe, Brackenholme, Babthorpe, Willitoft and Gribthorpe, and there is a **medium** potential for encountering previously unrecorded features from this period within the Order limits.

3.4.34 In the Grid Connection Corridor at Hagthorpe, based on the cartographic evidence and results of comparison with other moated sites in the locality, the area to the immediate north of the known moated site has a **high** potential to contain archaeological remains related to the medieval manorial site.

Post-medieval (1540 to 1900)

3.4.35 Significant drainage activity began in the 1620s when Dutch drainage engineers began large-scale river diversions and land drainage works. They began the practice of 'warping' where farmland was inundated with seasonally impounded tidal waters to deposit fertile alluvial silt. Drainage and warping continued into the 18th century and created today's characteristic flat landscape drained by a network of drains and dykes. In the 18th and 19th centuries new technologies encouraged more efficient drainage, and private and parliamentary enclosure followed, enabling increasingly productive agriculture. However, the traditional pattern of livestock farming supported by hay meadows has survived on an unparalleled scale along the River Derwent.

3.4.36 Within the 1 km Study Area, substantial areas of 'warp' deposits of clay and silt are recorded between Loftsome Bridge and Newsholme Marsh, on the south side of the A63. In this area the HER records two 'warp drains' (MHU22495) of post-medieval date, each represented by a pair of straight parallel lines that show as soilmarks on Newsholme Marsh. The drains are 300 m, and 530 m long, and follow a parallel alignment. A further warp drain (MHU22496), which can be traced for over 0.5 km, is present to the east of Barmby on the Marsh. These significant features, which represent the first widescale drainage management of this wetland zone of the East Riding, all lie beyond the Order limits.

3.4.37 Historic OS mapping for the Site shows a general picture of the landscape having been enclosed from the later 18th century, if not before, and being almost entirely enclosed by the middle of the 19th century with very few areas of unenclosed or common land still present by that time. Latterly, it is possible to observe a general pattern of the aggregation of smaller enclosed fields into larger parcels occurring particularly during the mid-to-late 20th century.

3.4.38 Historic OS mapping, throughout the 19th century, shows that the southern portion of Solar PV Area 2a of the Site was formerly divided into narrow, east-west aligned, 'strip fields', accessed by a network of footpaths connecting to a long, sinuous routeway called 'The Outgang' (MHU14537), which is present on all of the historic mapping available. The Outgang connects to the southern end of the settlement of Breighton at its western end, and, at its eastern end, terminates at an historic area of rough common land, 'Breighton Common'. This pattern suggests that The Outgang, as suggested by its name, represents a droveway, which could be medieval or post-medieval in origin, connecting the settlement of Breighton to its common land. The historic route weaves its way through the network of inbye fields which would have surrounded the settlement from at least the medieval period onwards. The strip fields formerly present within Solar PV Area 2a, which are no longer visible as landscape features, are likely to represent part of this field network which has now been lost to later 19th and 20th century aggregation. The Outgang, which bisects Solar PV Area 2a, and is outside of the Solar PV Site, does survive as a landscape feature in use as a public footpath. The area formerly occupied by Breighton Common is now fully enclosed and cultivated as a part of the modern agricultural landscape; it is no longer recognisable as an historic area of common land.

3.4.39 This pattern in the landscape is clearly informed by the presence of the River Derwent to the west of the settlement, meaning that its common land would be placed accessibly to the east. The same is true for the settlement of Wressle to the south, where 'Wressle Common' survives as a name for an area of enclosed fields covering the extent of Solar PV Area 3a, this area lying to the east of Wressle itself and connected to it by Johnny Hall Lane (MHU14546), the former line of which now forms the northern boundary of Area 3a. The pattern is repeated again to the north-east of Brind, where Solar PV Areas 2a and 2b occupy former sections of common land enclosed into regular field parcels by the mid-19th century. Solar PV Area 2b includes the site of a post-medieval farm steading known as Brindcommon Farm (MHU14558), which preserves the land's former use in its name. Brindcommon Farm itself was demolished in around 1916 to clear the landing approach for airships approaching Breighton Airfield (MHU11046).

3.4.40 **Potential**: Given the extensive historic practice of warping in the area and within land within the Order limits, there is a **high** potential to encounter warp deposits and features, such as drains, associated with the practice.

Modern (1901 to present)

3.4.41 In the 20th century this landscape had a role to play in both World Wars with military remains, airfields and bombing decoys. It also continued to provide sources of energy, in particular through the major concealed coalfield accessed from Selby until 2004. The plentiful supply of water drawn from the main rivers for cooling, along with the local source of coal, resulted in the construction of several power stations, including Drax Power Station.

3.4.42 An important feature in terms of the military history of the Study Area is Breighton Airfield (MHU11046), located outside of the Order limits but within the 1 km Study Area. Opened in 1916 as Howden Airfield, the site at Breighton covers over 1000 acres and was operated as one of the major airship stations of the First World War. Originally intended to cover the east coast ports shipping from attacks by German U-boats, from 1916 to 1918 Howden was a Royal Naval Air Service establishment, with the base transferring to the Royal Air Force when it was established on 1 April 1918. Although airships flew on patrols from Howden until the end of the war, none engaged in direct combat with German submarines. The station remained operational after the end of the war and a new hangar, at the time the largest in the world, was completed in 1919. The No.2 Double Rigid Shed measured 750 ft in length and 130 ft clearance height.

3.4.43 The site was purchased in 1924 by the Airship Guarantee Company, a subsidiary of Vickers Ltd., to design and build the R100 airship as a part of the Imperial Airship Scheme, a programme intended to improve communication between parts of the British Empire through the establishment of commercial airship routes. During this period the author Nevil Shute worked at Howden alongside Barnes Wallis, the eventual inventor of the 'bouncing bomb'. Wallis' innovative work at Howden eventually led to his geodesic airframe fuselage and wing design for the Wellesley, Wellington and Windsor bombers. R100 made its maiden flight from Howden on 16 December 1929, but the loss of the rival government-designed airship, the R101, in October 1930 brought British plans for

commercial use of airships to an end and Vickers closed Howden in December 1930.

3.4.44 The airfield at Breighton was redeveloped in 1941 as RAF Breighton and employed during the Second World War as a base for 460 Squadron of the Royal Australian Air Force and 78 Squadron of the Royal Air Force, both of Bomber Command. After other secondary uses, the airfield was redeveloped again during the Cold War. From 1959 to 1963, as part of Project Emily, the base was a launch site for three nuclear-armed PGM-17 Thor intermediate-range ballistic missiles. The base was also a launch site for the British-made Bristol Bloodhound I air defence missile between 1960 and 1964. These missile sites were both recommended for scheduling in the Cold War Monuments Protection Programme (MPP) report of 2001(Ref. 33), although this has not yet occurred.

3.4.45 Alongside Breighton, the Study Area also includes Selby Naval Airship Station (MNY10376), also known as RAF Barlow and RNAS Barlow. In a similar manner to Breighton, Selby was leased to Armstrong Whitworth in 1917 for the construction of airships. A large aircraft shed and other buildings were erected. The R25 airship was built in 1917, but by the time R33 was completed the war was over and airship production ceased at the site. Used by the Royal Flying Corps, Royal Air Force and the Royal Naval Air Service, the site opened in 1916 and closed in 1921.

3.4.46 Synonymous with this area, and inextricably linked to the development of the Selby coalfield, perhaps the most visible man-made intervention in the Study Area landscape is Drax Power Station, located at the southern end of the Grid Connection Corridor. Drax Power Station was commissioned by the Central Electricity Generating Board after the discovery of the Selby coalfield, with construction starting in 1967. The power station’s generating capacity of 3,906 megawatts is the highest of any power station in the United Kingdom, providing about 6% of the country's electricity supply.

3.4.47 **Potential**: heritage assets dating to the modern period, including features associated with the First World War and Second World War, are well-recorded and none are located within the Order limits. The potential for encountering previously unrecorded modern heritage assets with heritage interest within the Order limits is assessed to be **negligible**.

4. Research Agendas

4.1 Introduction

4.1.1 Consideration of research agendas and themes is key to understanding the potential evidential significance of archaeological remains. The broad principles of a number of existing research agendas will be applicable to the works set out in this document.

4.1.2 The proposed trial trenching has no formal research aims as the goal will be to identify and characterise the archaeological resource for an appropriate mitigation strategy to then be developed.

4.1.3 The research agenda presented below is key to identifying the focus for the archaeological mitigation, and to identify the sites that require further investigation. The purpose is to identify sites which will provide maximum information to answer the research questions set by the relevant frameworks and for the Scheme.

4.1.4 The mitigation strategy has taken the research questions into account, utilising information from desk-based studies, and archaeological evaluation. This has resulted in Scheme-wide research questions, as well as those specific to each mitigation site presented below. The research questions will be reviewed and updated throughout the project – they are not fixed. For example, excavation at one site may lead to different questions for an adjoining site. The strategy should be flexible, and based on real-time information. The research questions will be reviewed during preparation of each SSWSI, during fieldwork and during preparation of the post-excavation assessment report.

4.1.5 The following section provides an overarching strategy, based primarily on the regional and thematic research agendas but also informed by consultation feedback from the Curators. Each site has specific questions, as detailed in Appendix B. Subsequent SSWSIs will contain an updated research agenda section which will set out how the investigation within that specific SSWSI will answer the relevant questions. Therefore, the questions presented in this document are not fixed and the questions set in the SSWSIs should be responsive to the Scheme.

4.2 Relevant Agendas

4.2.1 The relevant research agendas for the mitigation strategy are:

a. Yorkshire Archaeological Research Framework (Ref. 13).

b. Understanding the British Iron Age: an agenda for action (Ref. 14).

c. The Rural Settlement of Roman Britain (Ref. 15).

d. South Yorkshire Historic Environment Research Framework (Ref. 15).

4.3 Overarching Themes

4.3.1 The overarching themes of the research questions for the OWSI relate to the following:

- Bronze Age – Iron Age: settlement and land management (enclosure types; field patterns; boundary features).
- Bronze Age – Iron Age: death and burial.
- Iron Age – Roman: settlement, agriculture, industry and roads.
- Roman: trade and interactions with wider Empire.
- Medieval: land management moated sites and the hierarchy of status.
- Post-medieval: drainage management of wetland zones.

4.4 Research Questions by Period

Early Prehistoric

4.4.1 Archaeological evidence for sites and artefacts dating to the Palaeolithic, Mesolithic and Neolithic periods is extremely rare and, as such, no specific research questions have been defined for these periods. Research questions for the early prehistoric period will be revisited and updated, as necessary, during the production of subsequent SSWSIs.

Bronze Age – Iron Age

4.4.2 The desk-based assessment (**Appendix 7-2: Cultural Heritage Desk Based Assessment, ES Volume 1 [EN010143/APP/6.1]**) notes the presence of several Bronze Age round barrows in the Study Area which potentially form an intentional group, comprising asset MHU15314 which lies just outside the northern boundary of Solar PV Area 3b, at Wood Farm, further possible barrows (MHU6691) in Brindleys Plantation, c. 1 km to the east of Wood Farm, and further evidence to the north of Howden (MHU20145, MHU13940). There is a possibility that previously unknown barrows may be present in the Site.

4.4.3 There are no recorded Iron Age barrows in the Site or Study Area, but East Yorkshire does have a strong tradition of the square barrow and inhumation burial rite (Ref. 19). Most of these monuments have been recorded in the area between the River Humber and the southern slopes of the North Yorkshire Moors, with the majority dating to the Middle Iron Age. It is possible therefore that previously unknown monuments of this class may be present within the Site.

4.4.4 The desk-based assessment refers to Iron Age linear features within the Site. Heritage asset MHU2301 relates to a number of prehistoric boundary ditches, indicating a possible trackway, but also certainly a land division. Heritage asset MHU22316, towards the eastern edge of Solar PV Area 2g, relates to possible boundary ditches.

1: Settlement and Land Management

4.4.5 Question 1A: Can archaeological evidence contribute to the understanding of land management, early enclosure and boundary features, and how these features interacted with settlement patterns?

4.4.6 Question 1B: Can archaeological evidence help to better date and distinguish Bronze Age boundary features from features that are currently presumed to be Iron Age in the archaeological record?

2: Death and Burial

4.4.7 Question 2A: Can burial evidence within the Site contribute to the understanding of the square barrow and inhumation burial rite, and/ or provide evidence of other funerary practices?

4.4.8 Question 2B: How are burial areas and/ or isolated funerary monuments understood within the context of the contemporary landscape. Do their locations conform with other knows sites of funerary activity; can we identify landscape themes, similarities, trends or anomalies? How does the archaeological evidence compare with other parts of the UK?

4.4.9 Question 2C: Can archaeological evidence contribute to the understanding of the spatial relationship between settlement and burial areas?

Iron Age – Roman

4.4.10 Evidence for Iron Age – Romano-British settlement formed the overwhelming majority of the noteworthy archaeological remains uncovered during the geophysical survey and subsequent trial trenching.

4.4.11 Artefactual and ecofactual material recovered from later Iron Age sites requires meticulous quantification and explanation to help refine chronological dating in the archaeological record. The application of Bayesian theory to radiocarbon dates could help refine the absolute chronology for the region. While radiocarbon dating is an essential tool in the excavation of Iron Age features, what is dated is important. As well as those features that might be important for the sequence of the site, features with good pottery assemblages need to be targeted. Finds of datable metalwork in context — particularly brooches and coins — are of great importance and need to be clearly correlated with pottery and other material.

4.4.12 Any opportunity to generate well-stratified ceramic assemblages by thoroughly investigating stratigraphic sequences within individual features, or utilising opportunities or investigating the intersections between features to provide stratigraphic evidence should be maximised with concurrent investigation using absolute dating and ecofactual evidence.

4.4.13 Priorities for research which the Scheme has the potential to address, identified from the research agendas, are as follows.

3: Settlement, Agriculture, Industry and Roads

4.4.14 Question 3A: Can Iron Age and Roman settlement-related remains help address our understanding of settlement patterns and help address the regional imbalance in our understanding of these periods?

4.4.15 Question 3B: Can rigorously collected artefactual and ecofactual data be considered together to shed light on settlement development and changing agricultural production?

4.4.16 Question 3C: Can a more inclusive consideration of the excavated evidence of droveways and field systems, together with artefactual, archaeobotanical and archaeozoological evidence, be used to discuss the relationship between the pastoral and agricultural elements of the rural economy?

4.4.17 Question 3D: Can analysis of ceramic evidence offer insights into social interaction?

4.4.18 Question 3E: Can the development of social hierarchies be recognised and associated with the use or development of particular sites?

4.4.19 Question 3F: Can the impact of the Roman road system be seen within contemporary settlement distribution? (Ref. 19)

4.4.20 Question 3G: Is there evidence for the elite control of iron production? (Ref. 18).

4: Roman Trade and Communications

4.4.21 Question 4A: What evidence is there for trade with other parts of the Roman Empire?

4.4.22 Question 4B: With reference to Question 3F, can areas of industry/production within the site be linked to lines of communication?

Medieval

4.4.23 A poorly understood area of medieval settlement may have been located at Brackenholme (MNY10599), which lies within the Grid Connection Corridor to the south of Wressle. The moated site and fishponds at Hagthorpe (MNY10603) also lie within the Grid Connection Corridor. These features are suggestive of the potential for this part of the Grid Connection Corridor to host the remains of associated medieval settlement and agriculture, as well as the significant, albeit denuded, remains of a higher-status moated site at Hagthorpe.

5: Land Management, Moated Sites, and the Hierarchy of Status

4.4.24 Question 5A: What evidence is there for the presence of buildings and features associated with the moated site at Hagthorpe?

4.4.25 Question 5B: Can the archaeological evidence provide further information relating to the construction, form and spatial extent of Hagthorpe moated site?

4.4.26 Question 5C: What were the impacts of moated sites on the medieval landscape?

4.4.27 Question 5D: Can the layout and form of moated sites (within the Site) contribute to our understanding of the hierarchy of status during the medieval period?

Post-Medieval

4.4.28 Significant land drainage activity began in the 17th century resulting in large-scale river diversions and land drainage works and the practice of ‘warping’,

where farmland was inundated with seasonally impounded tidal waters to deposit fertile alluvial silt. Features and deposits associated with warping may be present in fields adjacent to rivers, particularly the fields adjacent to the Grid Connection Corridor.

6: Drainage Management of Wetland Zones

4.4.29 Question 6A: Are there any warp deposits or features within the Site? What is their extent, and what evidence do they provide relating to drainage management of wetland zones and the influence on agricultural practices within this part of East Riding?

4.4.30 Question 6B: What evidence is there that warp deposits have sealed earlier archaeological remains?

Modern

4.4.31 The locations of heritage assets dating to the modern period, including features associated with First World War and Second World War activity, are well-recorded and none are located within the Order limits. The potential for encountering modern heritage assets with heritage interest within the Order limits is negligible and, as such, there are no research themes relating to this period. This position will be revisited and updated, as necessary, during the production of subsequent SSWSIs.

5. Part Two – Overarching Scope of Works Mitigation Strategy

5.1 Archaeological Evaluation Requirements

5.1.1 Archaeological trial trenching undertaken thus far has targeted known remains identified through desk-based research, and geophysical survey and 'blank' areas within the Solar PV Site. Although extensive trial trenching has been undertaken, some areas of the Solar PV Site, and the Grid Connection Corridor, have not yet been accessible for works to be undertaken. As such, following consent, and a process of detailed design, further trial trench evaluation will be required as the first stage of a staged programme of archaeological works within:

a. Grid Connection Corridor (particularly that part to the immediate north of Hagthorpe Hall); and

b. Solar PV areas 1e12, 1e13, 2a2, 3c2, and 3c3.

5.1.2 Of particular note, within the Grid Connection Corridor, is the area immediately surrounding the moated site at Hagthorpe (MNY10603). Assessment undertaken following consultation with the Archaeologist for North Yorkshire Council has highlighted the potential for remains relating to this moated site, including, possibly, an extension of the moat and settlement remains within it, to extend into the area of the Grid Connection Corridor. Here, targeted trial trenching, alongside targeted trenching within the rest of the corridor, will seek to characterise any archaeological remains in this area as a first stage of works, with a following stage likely to include excavation, where reasonably preserved remains are shown to exist. Should mitigation works be required, the scope of these will be agreed with the Archaeologist for North Yorkshire Council, having regard for the scale of the impact caused by the Scheme (refer to Section 4.8.25 to 4.8.34 in **Appendix 7-2: Cultural Heritage Desk Based Assessment, ES Volume 1 [EN010143/APP/6.1]** for discussion of this potential impact).

5.1.3 To seek to minimise impact to the archaeological resource from archaeological trenching, areas where specific operations which are considered unlikely to disturb any archaeological remains will not be subject to trial trench evaluations prior to construction. These will instead, where appropriate, be subject to archaeological monitoring during construction works. Prior to detailed design, the operation currently considered suitable for mitigation by archaeological monitoring is the creation of linear foot drains within Ecology Mitigation Areas 1g/1h (Golden Plover Mitigation Zone).

5.1.4 Some elements of detailed design are not secured in the DCO and will be finalised following consent. Any activity requiring topsoil stripping and/or excavations, where not previously evaluated, will be subject to trial trench evaluation prior to construction. Should significant remains be encountered, reasonable effort will be made to avoid impacts to the archaeological resource. Where this is not practicable, a programme of archaeological mitigation will be designed and agreed with the Curators and set out in a SSWSI in keeping with this OWSI.

5.1.5 Within the Grid Connection Corridor, where narrow impacts are expected, such as from cable trenches or maintenance tracks, a buffer of 5 m on either side of the expected trench / track will be evaluated so that a minimum corridor of 10 m is evaluated to allow for micrositing. Where a wider easement or working right-of-way is needed, this will be included within the trial trenching evaluation.

5.2 Archaeological Mitigation Requirements

5.2.1 The basic principle for the mitigation strategy is to reduce impacts on archaeological sites resulting from the construction of the Scheme. Significant archaeological remains identified through evaluation will be targeted for mitigation.

Archaeological Excavation

5.2.2 Those sites which have been demonstrated to contain potentially significant archaeological information, and which have the ability to answer as comprehensively as possible the Scheme and site-specific research questions, will be further investigated through excavations.

5.2.3 Based on the results of the geophysical survey and targeted trial trenching, six sites have been identified which require archaeological excavations ahead of construction. These can be seen on **Plate 1-1** and in Appendix B, and are as follows:

a. Iron Age and Romano-British settlement archaeology in Solar PV Area 1a (AEC006) (Site 1).

b. Iron Age and Romano-British settlement archaeology in Solar PV Area 1e (AEC007) (Site 2).

c. Iron Age and Romano-British settlement archaeology in Solar PV Area 1e (AEC008) (Site 3).

d. Iron Age and Romano-British settlement archaeology in Solar PV Area 2b (AEC009) (Site 4).

e. Iron Age and Romano-British settlement archaeology in Solar PV Area 2e (AEC010) (Site 5).

f. Iron Age and Romano-British settlement archaeology in Solar PV Area 2g (AEC011) (Site 6).

Archaeological Monitoring

5.2.4 Aside from archaeological excavation, two intrusive construction activities have been identified as having the potential to uncover or disturb archaeological features not yet recognised within the Order limits: excavation for creation of shallow, linear foot drains in Ecology Mitigation Areas 1g/1h (Golden Plover Mitigation Zone), Site 7 as shown on **Plate 1-1** and in Appendix B, as well as the creation of construction entrances on Pear Tree Lane, to the east of the scheduled monument of Drax Abbey.

5.2.5 The excavation works for the creation of the shallow, linear foot drains in Ecology Mitigation Areas 1g/1h are not expected to cause an impact below the existing topsoil horizon, and, as such, are relatively unlikely to impact any in situ archaeological features. With that said, as the work is relatively extensive, and trial trench evaluation of the area has not been possible, it is

considered that archaeological monitoring and recording is required to partly guide the work in ensuring that excavations are restricted to the topsoil horizon, and, should they extend deeper in certain areas, any surviving archaeology which may be impacted can be recorded. The archaeological monitoring and recording can also ensure that unanticipated impacts from construction machinery required for the work can be monitored and avoided.

5.2.6 Given the nature of the work, it is considered that archaeological trial trenching of the area could be more intrusive than the work proposed and is ecologically undesirable. As such, archaeological monitoring and recording is considered to be the most appropriate joint management and mitigation response.

5.2.7 The creation of construction accesses on Pear Tree Lane at Drax has the potential to uncover and disturb buried components of this historic routeway, as well as any archaeological features associated with it. Archaeological monitoring of excavation works associated with these accesses is considered to be the most appropriate mitigation response.

Historic Building Recording

5.2.8 An additional element of mitigation will be required to reduce the impact of the demolition of ruined traditional farm buildings at Johnson's Farm (AEC005). The area (Site 8) can be seen on **Plate 1-1** and in Appendix B and is as follows:

a. Historic Building Recording, undertaken to meet the requirements of Historic England Level 3, of traditional farmhouse and farm outbuilding at Johnson's Farm (AEC005).

5.2.9 Although the farm buildings in question are ruinous, they retain some level of archaeological interest, which can be realised through a detailed building investigation and recording, thereby mitigating their loss.

5.2.10 Prior to the start of the archaeological works, procedures will be adopted in the CEMP to ensure that sites of archaeological interest are protected, as detailed in this document. Toolbox Talks will be provided by the ACoW and/or the Archaeological Contractor to inform all site personnel of the archaeological and historic environment constraints on site, the protection measures that are required, and their obligations under this OWSI to ensure that these are put in place and complied with. The Toolbox Talks will identify sensitive areas/sites that must not be disturbed until investigation is completed and the site signed-off to construction, or where long-term protection is required. In addition, a Toolbox Talk will be given on the procedures for unexpected finds or archaeological remains that are identified, particularly burials, during soil stripping and the process on how to report these.

5.2.11 In addition, the Archaeological Contractor will prepare a detailed public archaeology and community engagement strategy. This must follow the outline strategy presented in Appendix C.

5.3 Unexpected Finds

5.3.1 If unexpected finds (sites, artefacts, environmental remains or ecofacts, monuments or features) are made during the works, a site consultation meeting(s) will be convened between the Archaeological Contractor, the

ACoW, and the relevant Curators, to consider the significance of the find. Depending on the outcome of the consultation meeting, an addendum to the SSWSI or a new SSWSI will be prepared by the Archaeological Contractor in consultation with the ACoW and the relevant Curator.

5.3.2 The procedure for dealing properly with any unexpected finds during the construction process will be set out in each approved SSWSI and recorded in the CEMP. This includes where unexpected features extend outside of the boundary of each mitigation area. Should archaeological features revealed within the mitigation areas continue outside of the area, and are likely to be subject to construction impact, the mitigation area may need to be extended to sufficiently characterise the material. This will only be undertaken following an understanding of the impact and with the agreement of the Client's representative and the ACoW, in consultation with the Curators. No works will be extended beyond the Order limits.

5.3.3 Any unexpected archaeological discoveries made by the Principal Contractor, or their sub-contractors, should be reported to the ACoW immediately. It is anticipated that any area of unexpected remains outside of existing mitigation areas will be marked-out on site, and that plant or vehicles shall not be permitted to enter the marked-out area except if given clearance to do so by the ACoW. All construction works within the marked-out area will be suspended until completion of the archaeological investigation in that area.

5.4 Site Specific Written Schemes of Investigation

5.4.1 SSWSIs will be prepared setting out in detail the mitigation measures for each archaeological site listed above. The SSWSIs will be informed by the strategy described in this document. Existing information and new datasets collected as fieldwork progresses will inform the design of mitigation works in the SSWSIs during the investigations.

5.4.2 The SSWSIs will be produced by the Archaeological Contractor. The information contained within the following sections of this document will guide the Archaeological Contractor when compiling each SSWSI.

5.4.3 Information to be contained within the SSWSIs and the approvals process is detailed in Section 6.

5.4.4 The specification for the archaeological works contained within the SSWSIs will be written in accordance with this OWSI and the current Standard and Guidance for archaeological evaluation and archaeological excavation prepared by the CIfA (Ref. 8 and Ref. 9) and the current CIfA Code of Conduct (Ref. 7) and will adhere to current and relevant good practice and standards and guidelines (see Appendix A).

5.4.5 Each SSWSI will set out the timing and order of the investigative works and will include details of how the archaeological programme will interact with other construction activities, and the parties undertaking them, at each stage of the archaeological works. Each SSWSI will include a programme for the archaeological work that will be referenced against key milestones/events in the overall design and construction programme.

5.4.6 In areas where archaeological remains or other heritage assets are to be preserved (e.g. protected by temporary perimeter fencing or control

measures for plant movements at construction), a method statement will be prepared at the start of the relevant phase of works in order to describe specific protection measures to be applied to the site or area of interest, and following procedures outlined in the **Framework CEMP [EN010143/APP/7.7]**.

5.5 Archaeological Project Team

5.5.1 The Client, or their Principal Contractor, will employ an ACoW who will form part of the construction team to, include but not limited to, monitor archaeological site works, liaise with the Archaeological Contractor and the Principal Contractor, review SSWSIs, and attend regular site meetings to be held with the Curators.

5.5.2 The archaeological mitigation works will be delivered by one or more Archaeological Contractors, to be appointed by the Client, or their Principal Contractor. The Archaeological Contractor will have prime responsibility for delivery of the full programme of archaeological mitigation as set out in the OWSI, including all on and off site works; outreach activities; technical and non-technical publication and dissemination; and preparation and deposition of the archaeological project archive with the recipient museums and archives.

5.5.3 The Archaeological Contractor will include named key specialists who will either be site-based or have a regular site presence, or who will be on-call at short notice. The Archaeological Contractor and the specialists will have experience of working in the region with the types of geologies, sites and artefacts expected. These are expected to include the following roles:

a. Project Manager.
b. Environmental archaeology co-ordinator.
c. Environmental archaeology supervisor.
d. Archaeobotanist (including palynology).
e. Coleoptera and molluscs specialist.
f. Charcoal specialist.
g. Materials scientist.
h. Finds co-ordinator/processing specialist.
i. Small finds specialist.
j. Lithics specialist with relevant period expertise.
k. Ceramics specialist with relevant period expertise.
l. Ceramic building materials specialist.
m. Coins specialist.
n. Metalwork specialist.
o. Specialist in wood.
p. Worked stone specialist.
q. Geoarchaeologist.

r. Archaeological surveyor.

s. Digital data co-ordinator/manager (and assistants as required).

t. Human remains specialist.

u. Animal bone specialist.

v. Scientific dating specialist, with expertise in chronological modelling.

w. Specialist in phosphate and lipid analysis.

x. Conservation specialist.

y. Metal-detectorist.

z. Landscape historian.

aa. An archives manager.

bb. Geomatics team and illustrators.

cc. Public Archaeology and Community Engagement Team (see Appendix C).

5.5.4 The names and qualifications of the individuals fulfilling these roles will be provided to the ACoW and Curators for information and comment following appointment of the Archaeological Contractor. The post-holders shall be in place at the start of the mitigation programme. Any changes to the named post-holders will be notified to the ACoW who will inform the Curators.

5.5.5 The specialists appointed to the archaeological team will be integrated into the Archaeological Contractor's project team to actively input to the design of strategies for the SSWSIs, including updated research questions and site-specific aims, input to the public archaeology and community engagement elements, and to advise throughout the fieldwork and post-excavation stages. Regular communication between specialist members of the archaeological team and the fieldwork Project Manager and field staff will be ensured through off-site planning meetings, site visits and progress meetings as required.

5.5.6 Archaeological staff (part of the Archaeological Contractor's site team) supervising the investigative works shall be highly experienced in directing machine stripping/ hand stripping of archaeological sites, with direct experience in and knowledge of the archaeological character of the area in general. The staff member(s) shall be familiar with the content of the results of the relevant previous phases of work, including the desk-based assessment, geophysical surveys and trial trenching **[Appendices 7-2, 7-3 and 7-4, ES Volume 2 [EN010143/APP/6.2]**.

5.6 Iterative Development of the Mitigation Strategy

5.6.1 Where required, an iterative site strategy for excavation, artefact recovery and for sampling will be agreed with the ACoW, the Archaeological Contractor and the Curators. As detailed in section 8.7.6 of this OWSI, it is anticipated that processing of finds and environmental samples, and initial assessment of sampled material, will be carried out concurrent with the archaeological excavations.

5.6.2 The mitigation strategy will (where required), be responsive to the works taking place on site. For example, if a site is not answering the expected

research due to a lack of information, then the extent and scope of works should be reviewed. Similarly, sites producing more environmental evidence could have a more intensive sampling strategy than that previously agreed. Unexpected remains (see Section 5.3 above) will also be considered. Consultation must be undertaken with the Curators at meetings or onsite discussions.

6. Site Specific Written Schemes of Investigation

6.1 Contents

6.1.1 The Archaeological Contractor shall produce a SSWSI for each site requiring intervention, detailing the exact scope of the archaeological fieldwork or protection measures to be employed. Each SSWSI must be agreed by the ACoW prior to it being submitted to the Curators. Once agreed by the ACoW, it will be sent by the ACoW to the Curators, who will review the relevant SSWSIs within four weeks of receipt and approve the final document.

6.1.2 The SSWSI should include the following sections as a minimum (see CIfA Standard and Guidance for Archaeological Evaluations (Ref. 8) and CIfA Standard and guidance for Archaeological Excavation (Ref. 9) for further information):

a. A statement on the technical, research and ethical competences of the project team, including relevant professional accreditation.

b. Site location (including map) and descriptions.

c. The project event and/or accession number. These should be shown on all records, finds and samples.

d. Context of the site.

e. Geological and topographical background.

f. Archaeological and historical background.

g. General and specific research aims of the site, with reference to Regional Research Frameworks, as well as earlier phases of work.

h. Methods.

i. Collection and disposal strategy for artefacts, ecofacts, and all paper, graphic and digital materials.

j. Arrangements for immediate conservation of artefacts.

k. Post-fieldwork assessment and analysis of project data.

l. Report preparation (including details of the section headings).

m. Publication and dissemination proposals, as required.

n. Copyright.

o. Details of finds storage. The Archaeological Contractor shall include details of how the finds will be packaged for storage.

p. Data Management Plan for digital archiving.

q. Methods for preparation of the physical archive, including accession numbers.

r. Timetable.

s. Staffing. Details on the expertise of the project team is also required. The project manager should be a named Member of the Chartered Institute for Archaeologists (MCIfA) who is adequately qualified to manage the required archaeological work or who can demonstrate an equivalent level of competence. The composition and experience of the

project team should be described. Specialists should be identified in line with the list detailed in Section 5.5 (e.g. for finds and environmental work). The availability of the environmental specialists (and laboratory) to do analysis for inclusion within the SSWSI should be stated. Note: Specialists should be able to demonstrate a relevant qualification and track record of at least three years continuous relevant work (or equivalent) and appropriate publication. The laboratory should be ready and equipped to undertake analysis on all samples to fulfil the obligations within the timescale. In appropriate circumstances, less experienced staff may conduct work under the supervision of well-established and widely recognised specialists.

t. A statement on compliance with relevant professional ethical and technical standards (including data standards).

u. Health and Safety considerations, including details of relevant insurance.

v. Environmental protection considerations.

7. Monitoring

7.1 Site Monitoring

7.1.1 The ACoW will liaise with the Archaeological Contractor and the Principal Contractor (as relevant) to monitor progress and compliance with the requirements of the SSWSIs. This will include (but not be limited to):

a. Monitoring of all aspects of archaeological fieldwork.

b. Monitoring of the installation and removal of protective measures, such as temporary fencing, at sites where preservation of archaeological remains is required.

7.1.2 The ACoW will act as coordinator in respect of access and monitoring arrangements with the Client's Representative and the Curators. This will include oversight of engagement between the Archaeological Contractor and the relevant Curators to ensure the timely provision of on-site advice to the fieldwork team.

7.1.3 The archaeological mitigation works 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.

7.1.4 It has been agreed with the Curators that the majority of their site monitoring can be undertaken remotely, as long as detailed weekly reports are submitted to them by the ACoW (see Section 13.2). In person site meetings may be held if significant or complex archaeological remains are encountered which would require consultation with the Curators and updates to the methodology in the agreed SSWSI.

7.1.5 The frequency of site meetings will be determined by the ACoW and will be guided by the work taking place on site. Weekly reporting will also be issued to the ACOW by the Archaeological Contractor (see Section 13.2).

7.2 Sign Off Procedures

7.2.1 It is acknowledged that the programme of works will require authentication of completion and the following approach is proposed.

7.2.2 Each of the sites identified above, and any other site where mitigation is required following the result of trial trenching, will have a SSWSI prepared by the Archaeological Contractor.

7.2.3 Each SSWSI will include a programme for the required work. Once the Archaeological Contractor determines the fieldwork to be completed, a remote presentation (via Teams or similar) will be delivered to the ACoW and the relevant Curator to confirm the results of the fieldwork. All parties will have been prepared for this review, by the distribution of a weekly site report on the progress of work (see Section 13.2).

7.2.4 Sites that have been completed (approved by the ACoW in consultation with the Client's Representative and the appropriate Curator) will be subject to a formal signing off procedure. The Archaeological Contractor will submit a completion statement to the ACoW. A template completion statement, to be

used at the completion of each site, is appended as Appendix D. The ACoW will submit the accepted completion statement to the Client's Representative and the appropriate Curator as confirmation that the relevant works have been completed in compliance with the agreed SSWSIs.

7.2.5 In the event of disagreement between the Archaeological Contractor, the ACoW, the relevant Curator and/or the Client's Representative on the progress, strategy or completion of work, a form of arbitration will be proposed.

8. Methodology for Detailed Excavation

8.1 Introduction

8.1.1 Detailed Excavation will be carried out at the locations identified above and any other areas identified from the trial trench evaluation, as agreed between the ACoW and the Curators, as requiring detailed excavation. All excavation will be carried out in accordance with the SSWSIs, and any further instructions from the Client's Representative and the ACoW.

8.2 Machine Excavation

8.2.1 All machine excavation during Detailed Excavation will be undertaken under constant archaeological supervision.

8.2.2 The excavation areas will be set out using electronic survey equipment by the Archaeological Contractor, and agreed with the ACoW. The extent of the stripped excavations will be clearly demarcated and secured with appropriate barrier fencing (such as Heras fencing) to ensure that persons or vehicles cannot inadvertently traverse the areas of investigation while archaeological works are in progress. The fencing (to be provided by the Principal Contractor unless otherwise agreed) will be regularly inspected and maintained by the Principal Contractor until archaeological investigations in the area have been completed, inspected, approved and signed off by the Curators.

8.2.3 No archaeological work should commence without a Permit to Dig (see Section 15). This should include confirmation that the locations of any services are marked, along with any environmental or ecological constraints, and that any additional safety measures required to ensure that each area is safe prior to commencement of mitigation work are in place.

8.2.4 The machine excavation will proceed under the constant supervision of a suitably qualified and experienced archaeologist, and will be undertaken using an appropriate 360° mechanical excavator fitted with a toothless ditching bucket. A toothed bucket or breaker may only be used temporarily if concrete, tarmac or other hard standing is encountered. A toothless bucket is to be used at all other times.

8.2.5 Upon removal of the topsoil, the underlying subsoil shall be removed by mechanical excavator until either the top of the first archaeological horizon or undisturbed natural deposits are encountered. Particular attention should be paid to achieving a clean and well-defined horizon with the machine. Topsoil and subsoil will be stockpiled separately. The mechanical excavator will not traverse any stripped areas.

8.2.6 The machined surface will be hand cleaned if necessary, and inspected for archaeological features, and all identified features should be marked on the ground to ensure that they are not "lost" during the mapping stage. Pre-excavation planning will be undertaken to record all identified archaeological features. The pre-excavation plan will form the basis for discussion on site to inform the strategy for excavation of the archaeological remains. The pre-excavation plan will be made available to the Client's Representative, the ACoW and the Curators before a site meeting is held with the Curators and the ACoW to discuss and finalise agreement of the excavation strategy.

8.2.7 The Archaeological Contractor shall not excavate any area beyond those scheduled for the proposed works. Should archaeological features revealed within the excavation area continue outside of the area and are likely to be subject to construction impact, the excavation area may need to be extended to sufficiently characterise the material. This will only be undertaken with the agreement of the Client's Representative, the ACoW, and in consultation with the Curators.

8.2.8 Hand excavation, recording and sampling will proceed in accordance with the methodology outlined in this OWSI and confirmed in the Archaeological Contractor's SSWSI, in order to meet the aims and objectives of each excavation.

8.2.9 Areas will be recorded on a suitable digital base map/development plan and the stratigraphy and depth of excavation will be recorded. Details on recording procedures where significant archaeology is discovered are detailed in the section below.

8.3 Hand Excavation

8.3.1 Archaeological deposits will be excavated and recorded stratigraphically in accordance with a recording system detailed in the Archaeological Contractor's SSWSI and approved by the Curators. All relationships between features or deposits will be investigated and recorded in order to achieve suitable preservation by record and to fulfil the aims and objectives of the project.

8.3.2 Hand excavation will be initially focussed to provide information on the form, function and date of the archaeological features. Information on the character, nature, contents and significance of features should also be obtained.

8.3.3 Machine-assisted excavation may be permissible if large deposits are encountered but only after agreement with the relevant Curators. The Archaeological Contractor will include a sampling strategy for machine-assisted excavation in their SSWSI.

8.3.4 A sufficient sample of deposits/features will be investigated through hand excavation to record the horizontal and vertical extent of the stratigraphic sequence, to the level of undisturbed natural deposits.

8.3.5 All features identified following soil stripping will be scanned by a metal detector. Spoil from the excavated features will also be scanned with a metal detector to locate any metallic objects.

8.3.6 The Archaeological Contractor will make provision for appropriate archaeological specialists to visit the site or attend meetings upon request in order to advise on the excavation strategy. The Archaeological Contractor will prepare a list of appropriate archaeological specialists with relevant local experience who are likely to be involved in the project and will include this in their SSWSI.

8.3.7 Unless it is agreed otherwise at the pre-excavation site meeting, the following excavation strategy will be employed for archaeological mitigation areas:

a. **Linear features**: A minimum sample in length not less than 1 m long, where the depositional sequence is consistent along the length. Linear features with complex variations of fill type will be sampled sufficiently in order to understand the sequence of deposition - a minimum of 25% along the length of features associated with settlement and a minimum of 10% along the length of features associated with field systems. If appropriate all intersections will be investigated to determine the relationships between features. All termini will be investigated.

b. **Discrete features**: Pits, post-holes and other isolated features will normally be half-sectioned. If large pits or deposits (over 1.5 m diameter) are encountered then the sample excavated should be sufficient to define the extent and maximum depth of the feature and to achieve the objectives of the sampling, but should not be less than 25%. Stake-holes will be fully excavated but only a reasonable proportion will be sampled.

c. **Structures**: These features should be subject to a minimum of 100% excavation. Each structure, including the drip gullies around roundhouses, will be sampled initially to define the extent, form, stratigraphic complexity and depth of the component features and its associated deposits to achieve the objectives of the excavation. All intersections (walls, ditches, gullies) will be investigated to determine the relationship(s) between the component features before being excavated fully, i.e. 100%. The remains of all upstanding walls will be hand cleaned sufficient to understand their dimensions, extent, composition, sequence and relationships and must then be excavated to 100%.

d. **Special or burnt features**: These features should be the subject of 100% excavation. Such features will be identified during pre-excavation planning to enable the input and advice of appropriate archaeological specialists. Where in situ burning is identified no excavation shall take place until the possible recovery of samples for scientific dating has been considered.

e. **Artefact scatters**: These should be the subject of 100% excavation. Where associated with buried land surfaces, in situ flint scatters will require hand cleaning and will need to be spatially defined in three-dimensions to determine the limits of the scatter within the area of investigation.

f. **Human remains**: During excavation human remains will be 100% excavated, recorded in situ and subsequently lifted, labelled and packed to the standard established by Excavation and post-excavation treatment of cremated and inhumed human remains (Ref. 20) and Updated guidelines to the standards for recording human remains (Ref. 21). Environmental samples will be recovered from grave fills and, if advised by the Project Team's Human remains specialist, specific locations such as the abdominal cavity will be sampled for specialist analysis. Site inspection will be made by a recognised specialist who

will advise on the excavation and sampling strategy following guidelines on The Role of the Human Osteologist in an Archaeological Fieldwork Project (Ref. 22). The location of each grave, inhumation/cremation and any associated grave goods will be recorded three dimensionally using metric survey-grade equipment (or its equivalent). The exhumation of any human remains will only be undertaken in accordance with legislative requirements and good practice (refer to Appendix A) and any local environmental health requirements. Further detail is contained in paragraph 8.9.1 below.

g. **Funerary monuments**: Features associated with funerary monuments, including but not limited to ditches, postholes, gullies, pits, will be half-sectioned initially to define the form, stratigraphic complexity and depth of the feature and any component features. Features will then be fully excavated, i.e., 100%.

h. **Tree throws**: Where features are identified as tree throws or hollows a sample will be hand excavated to confirm the interpretation. Features where this interpretation is unclear should be treated as non-structural discrete features and investigated in accordance with the strategy set out above.

i. **Ridge and furrow**: Ridge and furrow will only be recorded during pre-excavation to note its alignment. Excavation of furrows may be required where the relationship with earlier features is unclear, or where they share the alignment of earlier ditches.

8.3.8 Archaeological recording will proceed in accordance with the specification outlined in this mitigation strategy and accepted national, regional and professional standards and guidance (Appendix A).

8.4 Scientific Analysis

8.4.1 To further examine the landscape, past environments, palaeoenvironmental potential, and to provide a more holistic approach to the investigations, scientific analysis should be considered within each SSWSI. The SSWSIs should detail the exact requirements for each site and should be guided by the Archaeological Contractor's geoarchaeologist and guidance from the Historic England Scientific Advisor. The results from one site may also inform the use of the technique in additional areas, by means of an iterative approach to sampling strategies. Local geochemistry should also be taken into account. A two-stage approach may also be considered useful, with an initial appraisal of a broad spread of samples to establish the chosen technique's appropriateness. Sampling, recovery and analysis should follow guidance contained within Historic England's 'Geoarchaeology' (Ref. 23) and English Heritage's 'Environmental Archaeology' (Ref. 24).

8.4.2 Where required, various scientific techniques could be used, depending on the evolving nature of the research questions being asked. Example techniques could include phosphate analysis, faecal lipid biomarkers, soil micromorphology and geochemical analysis of a range of chemicals using a hand-held portable X-ray spectrometer. This latter technique is only relatively recently being used for archaeological survey, and has been used for assessment as part of HS2. This technique can also allow a more rapid assessment of phosphorus than traditional techniques. However, the use of

other scientific techniques will need to be agreed with the ACoW, the Client's Representative and the Curators, including the Historic England Scientific Advisor, and should be tailored to the research questions of each site. Blanket use of these techniques is not expected. The agreed techniques will be detailed in the Archaeological Contractor's SSWSI, with a recognition that the use of these technologies in the field will require good-planning and plenty of lead-in time to mitigate for potential capacity issues.

8.5 Recording

8.5.1 All archaeological remains shall be recorded to good practice standards including the CIfA Standard and Guidance for Archaeological Excavation (Ref. 9).

8.5.2 To minimise the use of paper resources recording would, in the first instance, be undertaken on a suitable digital device, such as an iPad or tablet, using the appropriate software. Recording would be in a format accessible to the relevant parties and will be outlined in the Archaeological Contractor's SSWSI. Where required, hand drawn plans may be required for detailed drawings of specific features (e.g. human remains, kilns etc.).

8.5.3 Archaeological recording is to include as a minimum:

a. A full written (on appropriate pro-forma recording sheets), drawn and photographic record will be made for each element of the excavation works, even where no archaeological features are identified. Where the stratigraphic sequence or inter-cutting features are complex the relationships between contexts shall also be compiled as 'Harris matrix' diagrams (Ref. 9).

b. Plans and sections of features will be produced at an appropriate scale (normally 1:20 for plans and 1:10 for sections). All plans and sections will include spot heights relative to Ordnance Datum in metres, correct to two decimal places.

c. Photography will be taken in line with current industry good practice and the requirements of the local authority. In addition to records of archaeological features, a number of general site photographs will also be taken to give an overview of the site including photographs of areas prior to and upon completion of fieldwork. Particular attention should be paid to obtaining shots suitable for displays, exhibitions and other publicity.

d. Indices of context records, drawings samples and photographs will be maintained and checked. These will form part of the project archive. These indexed registers will be fully cross-referenced.

8.5.4 All photographs of features must include an appropriate scale, a north arrow, and a photo-board. Graduated metric scales of appropriate lengths should be used, ensuring the use of appropriate vertical scales against deep sections in combination with horizontal scales. Photo-boards must be positioned in such a way that the writing is legible and as a minimum include the context number and site code. Photo-boards should also not obscure the archaeological feature that is being recorded. The photographic record must consist of high-quality digital uninterpolated images of at least 10 megapixels taken using a camera with an APS-C or larger sensor. Digital photographs

intended for archive purposes must comply with good practice available at the current time – i.e. high quality non-proprietary raw files (DNG) or TIFF images. The incorporation of clear digital images within ensuing reports, to augment the drawn record, is expected. JPG images and images taken using iPads and/or phones must not be used for archiving purposes.

8.5.5 On completion of the field project the site archive will be consolidated, checked to ensure it is internally consistent and ordered as a permanent archive.

8.5.6 During the course of the fieldwork, the Archaeological Contractor is to make all digital records available to the Principal Contractor, the Client's Representative, the ACoW and the Curators, ensuring it is compatible with their systems. The updated digital record will be provided at agreed intervals, the maximum being one month.

8.6 Artefact Recovery

8.6.1 Artefacts will be collected, stored and processed in accordance with standard methodologies and national guidelines (refer to Appendix A) and in line with local authority requirements. All artefacts recovered on site must be bagged and recorded at the time of recovery to ensure they are appropriately stored. Bulk finds from feature fills of deposits will be collected and recorded by context. Each 'significant find' will be recorded three dimensionally. Similarly, if artefact scatters are encountered each individual artefact should be recorded three dimensionally and individually bagged and recorded as registered finds.

8.6.2 Except for modern artefacts all finds will be collected and retained. The Archaeological Contractor will clarify in their SSWSI their site-specific Selection Strategy and will ensure that it is in-line with CIfA (Ref. 9, Ref. 11, Ref. 12) and local authority guidelines.

8.6.3 Where necessary the artefacts will be stabilised, conserved and stored in accordance with the guidelines of the UKIC (United Kingdom Institute of Conservators) (refer to Appendix A). If necessary, a conservator will visit the site to undertake 'first aid' conservation treatment. If waterlogged organic materials are encountered and appropriate cold storage facilities are not available onsite, the project manager will arrange the removal of the finds to nearby suitable facilities.

8.6.4 Artefacts will be stored in appropriate materials and conditions and monitored to minimise further deterioration.

8.7 Environmental Sampling

8.7.1 The Archaeological Contractor's environmental specialist will outline an appropriate sampling strategy for the archaeological excavation to be included in their SSWSI, which will need to be agreed with the Curators and, where appropriate, the Historic England Science Advisor.

8.7.2 Environmental sampling will be targeted to answer the questions laid out in the Site-specific aims and the regional research agendas.

8.7.3 Provision will also be made for the recovery of material suitable for scientific dating. An appropriate dating specialist with a background in chronological

modelling will be consulted in advance of and throughout the fieldwork and will be available to advise on the ongoing strategy.

8.7.4 Any samples taken must come from securely stratified deposits using the methodologies outlined by Historic England in Environmental Archaeology; A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation (Ref. 24).

8.7.5 Any samples should be taken during feature excavation from appropriately cleaned surfaces, be collected with clean tools and be placed in clean containers. They will be adequately recorded and labelled, and a register of all samples will be kept. Once the samples have been obtained, they should be stored appropriately in a secure location prior to being sent to the appropriate specialist. All samples will be processed, unless otherwise agreed with the Archaeological Contractor's paleoenvironmental advisor, Client's Representative, the ACoW and the Curators.

8.7.6 Provision will be made for the ongoing processing and initial assessment of sampled material, concurrent with the archaeological excavations, in order to provide timely feedback regarding the quality of preservation and the significance of specific deposits during the excavation and to inform the ongoing strategy. As a consequence, consideration must be given to processing on site, or in a nearby compound/facility, of environmental samples to provide dynamic feedback on the environmental content of features, to enable additional sample excavation and processing to be undertaken.

8.7.7 Samples will be taken from stratified, dateable deposits, with a low risk of contamination. Sampling of features should follow the strategy outlined in **Table 8-1** below unless agreed with the ACoW.

Table 8-1. Provisional environmental sampling strategy for archaeological excavation

Potential data	Method	Context type	Sample size (ltr)	Excavated feature sample
Charred plant remains (CPR)	Bulk	Structural/occupation features	40	100%
		Pits (prehistoric)	40	50%
		Pits (Roman)	40	50%
		Pits (medieval)	40+	50%
		Pits (post-medieval)	40	50%
		Gully/ditch (settlement)	40	10%
		Gully/ditch (outfield)	40	5-10%
Waterlogged and organic remains	Bulk	All contexts	10-20	Layer (N/A)
Small bones	Bulk	All contexts	40	50

Potential data	Method	Context type	Sample size (ltr)	Excavated feature sample
Molluscs	Incremental	Deposit sequence	As advised by specialist	N/A
Pollen	Monolith	Deposit sequence	As advised by specialist	N/A

8.7.8 If large deposits of animal bone are encountered, the advice of the project specialist will be sought regarding recording and sampling. Animal bone groups (i.e. articulated animal remains) will be assigned a number and documented using a suitable animal bone group sheet following Historic England guidance (Ref. 25) and will be fully excavated as far as is practicable. Assessment of biological remains will follow standard assessment procedures as laid out in Historic England guidance (Ref. 24; Ref. 25;).

8.7.9 The finds and samples will be processed (cleaned and marked) as appropriate. Each category of find or environmental/industrial material will be examined by a suitably qualified archaeologist or specialist and the results incorporated into the fieldwork report.

8.8 Finds Processing

8.8.1 Initial processing of finds (and if appropriate other samples) will be carried out concurrent with the fieldwork. The Archaeological Contractor should consider the option of initial processing to be undertaken on site or in a nearby compound/facility. Finds suitable for pop-up displays should be identified during excavation. Finds which may contain residues should be retained unwashed until analysis is complete. In addition, the identified receiving institution, as agreed with the Curators, should be consulted during finds processing.

8.8.2 The CIfA finds Toolkit (Ref. 26) should be utilised to develop a selection strategy. This strategy should be developed for each site to ensure the appropriate methodology is applied to each site. This will follow the strategy to be agreed with the identified receiving institution and should be advised by the specialists.

8.8.3 The processing of finds will be finished within 4 weeks after completion of the investigations, the finds will be retained (according to the Selection Strategy), washed, marked, bagged and logged on a MS Access or GIS database (or equivalent), together with their locations according to the requirements set out in the Collection Policy (e.g. ‘significant finds’ will be recorded on the OS National Grid (eastings, northings) and Ordnance Datum (height) to two decimal places).

8.8.4 The finds assemblage will be treated, labelled and stored in accordance with the appropriate Historic England guidance documents, local authority guidelines (if appropriate) and the Institute of Conservation guidelines (refer to Appendix A). The Archaeological Contractor will ensure that the processing of the assemblage is in accordance with the requirements of the recipient museum.

8.8.5 If appropriate, each category of find or each material type will be examined by a suitably qualified archaeologist or specialist and the results incorporated into the fieldwork report.

8.8.6 All finds will be retained, unless otherwise agreed with the ACoW and the Curators, for further analysis during the reporting phase of the archaeological mitigation of the main construction phase.

8.9 Human Remains

8.9.1 If human remains are discovered during the course of the fieldwork the remains shall provisionally, in accordance with current good practice, be covered and protected and left in situ. The Archaeological Contractor should immediately contact the ACoW upon the discovery of Human Remains and liaise with the Principal Contractor as needed to ensure they are maintained securely and ethically in place. The removal of human remains will only take place in accordance with a Ministry of Justice licence, and under the appropriate Environmental Health regulations and the Burial Act 1857 (Ref. 27). In the event of the discovery of human remains the Archaeological Contractor will contact H.M. Coroner. The Archaeological Contractor will be responsible for applying for and following a Ministry of Justice licence.

~~8.9.2 If any human remains are encountered that need to be removed, this will be done in accordance with Article 17 of the draft DCO, which sets out provisions to be followed for the removal of human remains. The work will be undertaken by archaeological specialists, with expertise in the treatment of human remains, in accordance with current good practice and archaeological standards and guidance.~~

~~8.9.3~~8.9.2 Excavation of human remains will be undertaken by archaeological specialists, with expertise in the treatment of human remains, in accordance with current good practice and archaeological standards and guidance, and as per the strategy outlined in paragraph 8.3.7.

8.10 Treasure

8.10.1 Any artefacts which are recovered that fall within the scope of the Treasure Act 1996, the Treasure (Designation) Order 2002, and the Treasure (Designation) (Amendment) Order 2023 (Ref. 28, Ref. 29 and Ref. 37) will be reported to the Client's Representative, the ACoW and the Principal Contractor immediately. The Curators and the relevant Portable Antiquities Scheme Finds Liaison Officer will also be informed. Artefacts that are defined as Treasure according to the above legislation will be vested in the franchisee (e.g. The Duke of Cornwall is franchisee for Cornwall), or if none, the Crown. The Archaeological Contractor will contact H.M. Coroner and will ensure that the Treasure regulations are enforced and that all the relevant parties are kept informed. A list of finds that have been collected that fall under the Treasure Act and related legislation will be included in the fieldwork report.

8.10.2 Artefacts that are classified as 'treasure' will be removed to a safe place but where removal cannot be achieved on the same working day as the discovery, suitable security measures must be taken to protect the finds from damage or unauthorised removal.

9. Methodology for Trial Trench Evaluation

9.1 Introduction

9.1.1 Archaeological trial trenching will be carried out in advance of construction where previous evaluation has not been possible, and where extensive intrusive activities are planned as per the Scheme's detailed design.

9.1.2 Prior to the commencement of fieldwork, the Archaeological Contractor will familiarise themselves with the results of the geophysical survey and other archaeological investigations in the immediate area surrounding the Scheme.

9.1.3 All trench excavation will be carried out in accordance with the SSWSIs, and any further instructions from the Client's Representative and the ACoW.

9.2 Machine Excavation

9.2.1 The Principal Contractor will agree access for plant, and the location of temporary parking and welfare facilities with the Archaeological Contractor.

9.2.2 The evaluation areas will be set out using electronic survey equipment by the Archaeological Contractor. The extent of the trial trenches will be clearly demarcated and secured with appropriate barrier fencing (such as Heras fencing) to ensure that persons or vehicles cannot inadvertently traverse the areas of investigation while archaeological works are in progress. The fencing (to be provided by the Principal Contractor unless otherwise agreed) will be regularly inspected and maintained by the Principal Contractor until archaeological investigations in the area have been completed, inspected, approved and signed off by the Curators.

9.2.3 No archaeological work should commence without a Permit to Dig (see Section 15). This should include confirmation that the locations of any services are marked, highlight any environmental or ecological constraints, and that any additional safety measures required to ensure that each area is safe prior to commencement of the evaluation work are in place.

9.2.4 The machine excavation will proceed under the constant supervision of a suitably qualified and experienced archaeologist using an appropriate 360° mechanical excavator fitted with a toothless ditching bucket. A toothed bucket or breaker may only be used temporarily if concrete, tarmac or other hard standing is encountered. A toothless bucket is to be used at all other times.

9.2.5 Upon removal of the topsoil, the underlying subsoil shall be removed by mechanical excavator until either the top of the first archaeological horizon or undisturbed natural deposits are encountered. Particular attention should be paid to achieving a clean and well-defined horizon with the machine. Topsoil and subsoil will be stockpiled separately. The mechanical excavator will not traverse any stripped areas.

9.2.6 The machined surface will be hand cleaned if necessary, and inspected for archaeological features, and all identified features should be marked on the ground to ensure that they are not "lost" during the mapping stage. Pre-excavation planning will be undertaken to record all identified archaeological features. The pre-excavation plan will form the basis for discussion on site to

inform the strategy for excavation of the archaeological remains within each evaluation trench. The pre-excavation plan will be made available to the Client's Representative, the ACoW and the Curators.

9.2.7 The Archaeological Contractor shall not excavate any area beyond those scheduled for the proposed works. Should archaeological features revealed within the evaluation trench continue outside of the area and are likely to be subject to construction impact, the evaluation trench may need to be extended to sufficiently characterise the material. This will only be undertaken with the agreement of the Client's Representative and the ACoW, in consultation with the Curators.

9.2.8 Hand excavation, recording and sampling will proceed in accordance with the methodology outlined in this OWSI and confirmed in the Archaeological Contractor's SSWSI, in order to meet the aims and objectives of the evaluation.

9.2.9 Areas will be recorded on a suitable digital base map/development plan and the stratigraphy and depth of excavation will be recorded. Details on recording procedures where significant archaeology is discovered are detailed in the section below.

9.2.10 Excavated material will be retained on site and stored within the confines of the trench fencing, adjacent to each trench (within a safe working distance) and will be prevented from entering any drainage system or water course. The Archaeological Contractor must ensure that the edges of the trenches are protected against falling materials and collapsing sides.

9.3 Hand Excavation

9.3.1 Archaeological deposits will be excavated and recorded stratigraphically in accordance with a recording system detailed in the Archaeological Contractor's SSWSI and approved by the Curators. All relationships between features or deposits will be investigated and recorded in order to achieve suitable preservation by record and to fulfil the aims and objectives of the project.

9.3.2 Hand excavation will be initially focussed to provide information on the form, function and date of the archaeological features. Information on the character, nature, contents and significance of features should also be obtained.

9.3.3 Machine-assisted excavation may be permissible if large deposits are encountered but only after agreement with the relevant Curators. The Archaeological Contractor will include a sampling strategy for machine-assisted excavation in their SSWSI.

9.3.4 A sufficient sample of deposits/features will be investigated through hand excavation to record the horizontal and vertical extent of the stratigraphic sequence, to the level of undisturbed natural deposits.

9.3.5 All features identified following soil stripping will be scanned by a metal detector. Spoil from the excavated features will also be scanned with a metal detector to locate any metallic objects.

9.3.6 The Archaeological Contractor will make provision for appropriate archaeological specialists to visit the site or attend meetings upon request in

order to advise on the evaluation strategy. The Archaeological Contractor will prepare a list of appropriate archaeological specialists with relevant local experience who are likely to be involved in the project and will include this in their SSWSI.

9.3.7 Unless it is agreed otherwise at the pre-excavation site meeting the following sampling strategies will be employed for the evaluation:

a. **Linear features**: A minimum sample in length not less than 1 m long, where the depositional sequence is consistent along the length. Linear features with complex variations of fill type will be sampled sufficiently in order to understand the sequence of deposition.

b. **Discrete features**: Pits, post-holes and other isolated features will normally be half-sectioned. If large pits or deposits (over 1.5 m diameter) are encountered then the sample excavated should be sufficient to define the extent and maximum depth of the feature and to achieve the objectives of the sampling, but should not be less than 25%. Stake-holes will be fully excavated but only a reasonable proportion will be sampled.

c. **Structures**: Each structure will be sampled sufficiently to define the extent, form, stratigraphic complexity and depth of the component features and its associated deposits to achieve the objectives of the evaluation. All intersections will be investigated to determine the relationship(s) between the component features. The remains of all upstanding walls will be hand cleaned sufficient to understand their dimensions, extent, composition, sequence and relationships.

d. **Special or burnt features**: These features will be sampled sufficiently to define the extent, form, stratigraphic complexity and depth of the component features and its associated deposits to achieve the objectives of the evaluation.

e. **Artefact scatters**: These features will be sampled sufficiently to define the extent, form, stratigraphic complexity and depth of the component features and its associated deposits to achieve the objectives of the evaluation. Where these are associated with buried land surfaces, they will require hand cleaning and three-dimensional plotting prior to recovery.

f. **Tree throws**: Where features are identified as tree throws or hollows a sample will be hand excavated to confirm the interpretation. Features where this interpretation is unclear should be treated as non-structural discrete features and investigated in accordance with the strategy set out above.

g. **Ridge and furrow**: Ridge and furrow will only be recorded during pre-excavation to note its alignment. Excavation of furrows may be required where the relationship with earlier features is unclear, or where they share the alignment of earlier ditches.

9.3.8 Archaeological recording will proceed in accordance with the specification outlined in this OWSI and the Archaeological Contractor's SSWSI and accepted national, regional and professional standards and guidance (Appendix A).

9.3.9 The methodology for recording, artefact recovery, environmental sampling, finds processing, human remains and treasure should follow the methodology detailed in Section 8 above.

10. Methodology for Preservation of Archaeological Remains

10.1 Introduction

10.1.1 Although no sites have been identified thus far which require preservation in situ, this may be required pending the results of the remaining elements of archaeological evaluation, and any developments which may occur during detailed design. Any decisions regarding the preservation of archaeological remains and the methodologies to be used must be informed by good practice and guidance, including Historic England's guidance, 'Preserving Archaeological Remains' (Ref. 31), set out in the relevant SSWSI, and agreed with the Curators.

10.2 Protective Fencing

10.2.1 In order to demarcate those sites that require preservation of archaeological remains and to avoid unintentional damage during construction, secure timber fencing will be installed during site set-up. The fencing will be installed by a fencing contractor under the supervision of the Archaeological Contractor. Signs will inform all parties of the protected designation of the site and to "keep out".

10.2.2 The location and type of fencing for each site for preservation of archaeological remains will be set out in a Scope of Works prepared by the ACoW. The Principal Contractor and their ACoW will be responsible for regularly monitoring the condition of the fencing and will be responsible for its maintenance until either construction work in that area is complete or at Scheme opening, at which time the removal of the fencing will be monitored by the ACoW.

10.2.3 Notices prohibiting works will be attached to the fencing, detailing the purpose of the fenced off area. This is to ensure that no impacts are made to the remains which are being protected. Should these areas be required for scheme works, a SSWSI must be prepared for each area and it is likely that full archaeological excavation would be required at each location.

10.2.4 The ACoW will give Toolbox Talks to inform all site personnel of the archaeological and historic environment constraints on site, recognition of archaeological deposits, the protection measures that are required and their obligations, and generally to ensure that these are put in place and complied with.

11. Methodology for Historic Building Recording

11.1 Introduction

11.1.1 As part of the construction phase of the Scheme, it will be necessary to demolish two ruined traditional farm buildings at Johnson's Farm (AEC005) (see Appendix B – Site 8) – the former farmhouse and an adjacent open-sided implement shed to the immediate north-west. The farm is located at the eastern end of Ings Lane, to the north-east of Spaldington. To mitigate the impact of this work, it has been determined that an Historic Building Recording, undertaken to Historic England Level 3 standard, is required, prior to any project works being carried out.

11.2 Historic Building Recording

11.2.1 The Principal Contractor will agree access for and the location of temporary parking and welfare facilities with the Archaeological Contractor.

11.2.2 The Principal Contractor will ensure that no works are undertaken to the buildings prior to the Historic Building Recording works.

11.2.3 The Historic Building Recording will be carried out in accordance with a SSWSI provided by the Archaeological Contractor and approved by the ACoW and the Curators. The site recording works will be carried out in accordance with any further instructions from the Client's Representative and the ACoW, as well as the Principal Contractor's site rules.

11.2.4 If, in discussion between the Archaeological Contractor, ACoW, Curators, Client's Representative and the Principal Contractor, it is determined that the aims and objectives of the recording exercise cannot be met due to the structural state of the buildings, all parties will seek to reach an agreement on a reduction in the scope of the work, or a suite of minor remedial or access works which allow the works to be completed successfully.

11.2.5 The aims of the building recording are:

a. To ensure that there exists a photographic, drawn and written record of the structures prior to demolition.

b. To establish and understand the chronological development of the structures within their context.

c. To undertake sufficient background research to place the structures within their historic context.

d. To ensure there is a permanent record of the work undertaken deposited with a suitable archive repository.

e. To ensure all work is undertaken in compliance with Historic England Guidance (Ref. 36) the Code of Conduct of the Chartered Institute for Archaeologists (CIfA) (Ref. 7) and the relevant CIfA Standard and Guidance (Ref. 35).

11.3 Fieldwork Methodology

11.3.1 An historic building survey to a minimum of Historic England Level 3 standard (Ref. 36) will be carried out. This level of survey provides an

analytical record including an introductory descriptive account of the building, together with a systematic account of its origins, development and use. The survey will comprise a written, drawn (measured) and photographic account including the following:

a. The written record will comprise: the precise location of the building together with any statutory and non-statutory designations; the date of the survey and the location of the archive; a descriptive account of the form, function and phasing of the building. This element of the work will also identify all features, fixtures and fittings relevant to the original and subsequent uses of the site as well as the building's form, function, date, and sequence of development. It will also include a discussion of the building's past and present relationship to its setting as well as a discussion of the historical context of the building in terms of its origin, purpose, form, construction, design, materials, status or historical associations.

b. The drawn record will comprise: measured plans of each of the floors, together with drawings of the principal elevations. Existing plans and elevations, such as architect's drawings, will be adapted for parts of the building, and their accuracy will be checked. The plans will show the form and location of features such as blocked windows and doors, and evidence for fixtures of significance. Phased drawings showing successive phases of the building's development will also be included.

c. The photographic record will comprise: photographs of the building's wider aspect together with detailed views of the external appearance of the building. These are normally oblique, but right-angle photographs of elevations containing complex detail will also be taken. The overall appearance of internal rooms and circulation areas will also be captured, together with detailed views of features of significance, as well as any machinery or other plant, including evidence for its former existence. Any dates or other inscriptions as well as any building contents which have a significance bearing on the building's history will also be photographed and, where necessary, transcribed. The photographic archive will consist of digital colour photography at a minimum of 20 megapixels. All detailed photographs will contain a graduated photographic scale. A photographic register detailing (as a minimum) location and direction of each shot will also be compiled.

11.4 Post-Fieldwork Methodology

11.4.1 Following completion of fieldwork, all information will be synthesised in a standalone project report covering the Historic Building Recording exercise only. This will include, as a minimum:

a. Project number, OASIS reference number and site grid reference.

b. A non-technical summary of results.

c. Introduction.

d. Aims and method statement.

e. Legislative, policy and guidance framework.

f. Description of the overall form, survival, significance and development of the buildings and all significant fixtures.

g. Historic map regression.

h. A relevant historic narrative informed by the results of archival research (sources to be used will be confirmed within the SSWSI).

i. Illustrative photography.

j. Location plan of the site of at least 1:10000 scale.

k. Phased floor plans and elevations of sufficient detail to describe the chronological development of the structures.

11.4.2 The report will be submitted to the ACoW and the Client for review and comment. The Archaeological Contractor will address any comments that they may have. The ACoW will issue the revised draft report to the Curators for comment. In finalising the report, the Archaeological Contractor will take account of the comments of the Curators.

12. Methodology for Archaeological Monitoring and Recording

12.1 Introduction

12.1.1 As part of the Scheme, some limited works will be undertaken in areas where it is not possible, or desirable, to undertake archaeological evaluation works in advance of construction. In this instance, archaeological monitoring and recording will be undertaken during the intrusive elements of the construction process, including any access or enabling works. The area where monitoring is required is identified as Site 7 in Appendix B.

12.1.2 Prior to the commencement of fieldwork, the Archaeological Contractor will familiarise themselves with the results of other archaeological investigations in the immediate area surrounding the Scheme.

12.1.3 All works will be carried out in accordance with the SSWSIs, and any further instructions from the Client's Representative, the Principal Contractor and the ACoW.

12.1.4 The Principal Contractor will be responsible for ensuring that contractors working in the archaeological monitoring and recording areas understand the intention and requirements of the archaeological work, and are briefed, in advance of commencement, in how best to cooperate with the Archaeological Contractor to make sure they are achieved.

12.2 Archaeological Monitoring and Recording

12.2.1 Intrusive construction works within the identified monitoring area (identified as Site 7 in Appendix D) will be monitored by a suitably qualified archaeologist(s), who must have experience of such work. Where archaeological features or deposits are encountered, construction works will halt, or relocate in order to continue elsewhere, and suitable time will be afforded to the archaeologist(s) to investigate, sample and record such remains. Equally the archaeologist(s) will aim to minimise disruption to the programme of groundworks through good working practice.

12.2.2 All archaeological features will be recorded on pro-forma sheets, creating a primary written record that will be accompanied by drawn and photographic records. A site diary giving a summary of each day's work will also be maintained including overall interpretive observations.

12.2.3 A drawn record will be compiled of all features, including plan and section/profile illustrations at a suitable scale (usually 1:10, 1:20 or 1:50) depending on the complexity and significance of the remains.

12.2.4 The photographic record of the monitoring will be undertaken in high-resolution digital format. Photographs will be taken of all archaeological and palaeoenvironmental features in addition to general site photography locating the individual features in their wider context.

12.2.5 Methodologies for dealing with small finds, human remains and sampling strategies will follow those laid out above in relation to excavation works.

12.2.6 Given the uncertainty of the presence or level of archaeological remains likely to be encountered as part of this element of the mitigation works, the general aim of the scientific and palaeoenvironmental sampling strategy is:

a. To provide information on the nature of human activity and the past environment in the immediate area, in relation to the archaeological deposits uncovered during the project.

12.2.7 Sampling levels and feature-specific approaches will vary in accordance with the characteristics and potential of individual features to address the aims and objectives outlined above. Sampling and assessment methodologies will follow best practice as set out in relevant guidance.

Extensive Remains and/or Significant Finds

12.2.8 In the event of discovery of archaeological remains that are more extensive and/or significant than could reasonably have been anticipated then the following procedure will be followed:

12.2.9 The Archaeological Contractor will contact the ACoW immediately and seek clarification of how to proceed.

12.2.10 Where remains can be rapidly characterised within the scope of this stage of work, including a small alteration to the design of the existing mitigation works, this will be undertaken following agreement with the Client's Representative, the Principal Contractor and the ACoW.

12.2.11 If, following consultation with the Client's Representative, the Curator, the Principal Contractor and the ACoW, a further/different form of mitigation is deemed necessary and proportionate to the potential significance of the archaeological remains, the ACoW will discuss this with the relevant Curator and the Client's Representative before seeking agreement from all parties and specifying a revised method of work. If considered necessary by the ACoW and the Curator, the Archaeological Contractor will produce a new, or revised, SSWSI for the work.

13. Reporting

13.1 Introduction

13.1.1 Following the completion of the excavation fieldwork phase, all site records will be checked and finds and samples will be processed (cleaned and marked). Each category of find or environmental/industrial material will be examined by a suitably qualified specialist so that the results can be included in the Post-Excavation Assessment Report (PEAR) to be produced at the end of the investigations. Trial trenching, building recording and archaeological monitoring works will not require a PEAR.

13.2 Weekly Reports

13.2.1 Weekly written progress reports, for excavation, evaluation and archaeological monitoring and recording works, will be provided by the Archaeological Contractor and submitted to the ACoW during each phase of fieldwork, to be issued via e-mail each Friday, and to be received no later than 14.30 hrs. This should include details of each area where archaeological work has taken place in the previous week, along with details of any archaeological features located, highlighting significant finds and discoveries and progress against the programme. The ACoW will e-mail the weekly progress reports to the relevant Curators to facilitate their remote sign-off of archaeological areas.

13.3 Interim Statements

13.3.1 Interim statements will be prepared for each archaeological excavation and submitted by the Archaeological Contractor to the ACoW and the Client's Representative. The ACoW will submit these interim statements to the relevant Curators. The purpose of each interim statement is to provide a basic account of the results of the investigations at each site to inform the progress meetings. Interim statements will be prepared within a set time frame following completion of fieldwork at the relevant site. This time frame will be decided by the ACoW, the Client and the Archaeological Contractor prior to the commencement of the post-excavation work. The interim statement will include:

a. A brief summary of the results.

b. A draft or preliminary site plan of each archaeological area or site.

c. A quantification of the primary archive including finds and samples.

d. Identify any issues that have arisen during the course of the fieldwork to ensure that there is integration across the Scheme between sites and phases.

e. A programme of work and schedule for the completion of the PEAR.

13.4 Post-Excavation Assessment

13.4.1 The Archaeological Contractor will meet the set time frames agreed at their engagement, or supplied within the Invitation to Tender, in order that the post-excavation assessment, analysis and publication phases can be

programmed and resourced properly, and so that the completion date for all construction and post-excavation works can be met. It is envisaged that the final publication report will be submitted by the date the Scheme has been completed. The final programme for the post-excavation work shall be agreed between the Archaeological Contractor, ACoW and the Client, in consultation with the Curators.

13.4.2 While each individual excavation site will have its own post-excavation assessment, the results from all fieldwork interventions will be combined and treated as one project for the purposes of the updated project design. The results from earlier investigations (evaluation surveys and any advance archaeological works) will also be assessed/reviewed by the Archaeological Contractor, where it contributes to an understanding of the site and addresses the research questions and aims and objectives of the SSWSIs. The assessment reports should also reflect the previous archaeological work at nearby sites, so that lessons learnt regarding the usefulness of specific techniques can be applied. Following the completion of the post-excavation assessment, the original project objectives will be reviewed to determine the scope of any analysis and publication.

13.4.3 The preparation of the project archive, post-excavation assessments and subsequent analysis and publication phases will be undertaken in accordance with the SSWSIs and Historic England guidelines (Ref. 6), and other relevant archaeological standards and national guidelines (see Appendix A). The different phases will be completed within a set time frame following completion of fieldwork, as agreed between the Archaeological Contractor, ACoW and the Client in consultation with the Curators.

13.4.4 The precise format of the reports is dependent upon the findings of the investigations, but the post-excavation assessment reports will contain the following:

a. A signed QA sheet detailing as a minimum - title, author, version, date, checked by, approved by.

b. A non-technical summary.

c. Site location.

d. Brief archaeological, historical and project background.

e. Methodology.

f. Aims and objectives.

g. Results – factual data statements (stratigraphic, artefactual, environmental, initial scientific dating results).

h. Statements of potential (stratigraphic, artefactual, environmental).

i. Quantification of the project archive (site records, plans, digital files, finds by category and environmental remains) and a list of items recommended for discard at the assessment stage.

j. Statements regarding immediate and long-term storage and curation.

k. Review of original aims and objectives.

l. Statement of the significance of the results in their local, regional, national and international context.

m. Archaeological Research Design (ARD) that sets out how the research aims and objectives of the SSWSIs can be addressed at the analysis stage.

n. Post-excavation analysis method statements.

o. Recommendations for analysis, reporting and publication (including a synopsis of the proposed contents).

p. Proposed resources and programming (task list linked to key personnel, time required and key research questions that the task will answer or facilitate and programme cascade chart).

q. General and detailed plans showing the location of the investigation areas accurately positioned on an OS base with grid co-ordinates and a plan of the identified archaeological remains (to a known scale).

r. Detailed plans and sections/profiles, deposit models etc., to support the narrative.

s. Detailed stratigraphic matrix for each area excavated and how the areas interlink.

t. Photographs and illustrations, including any 3D models.

u. Bibliography.

v. A cross-referenced index to the project archive and summary of contexts.

w. Appendices containing specialist reports.

13.4.5 The post-excavation assessment reports and Updated Project Design (UPD) will be submitted to the ACoW and the Client for review and comment. The Archaeological Contractor will address any comments that they may have. The ACoW will issue the revised draft report to the Curators for comment. In finalising the report, the Archaeological Contractor will take account of the comments of the Curators.

13.4.6 The scope of the analysis and publication report will be dependent upon the assessment and future discussions to be held with the ACoW, the Client and the Curators. The analysis stage will be undertaken in accordance with the UPD and will lead to the compilation of a research archive and the production of integrated report texts and illustrations for publication.

13.5 Outline Publication and Dissemination Proposals

13.5.1 A comprehensive publication and dissemination programme that also considers the context of the investigations will be developed in parallel with the strategy for Public Archaeology and Community Engagement (see Appendix C).

13.5.2 The format and structure of the publication (headings, word counts, figures and photographs) will be informed by the post-excavation assessment and will be decided by the Archaeological Contractor in consultation with the ACoW and the relevant Curators and Historic England. It is envisaged that interim reporting related to mitigation will be published on the Archaeology Data Service archive.

13.5.3 Fieldwork updates would be published annually in fieldwork roundups in appropriate local and period journals. Fieldwork data would be fed into Humber and/or North Yorkshire HER. Discussions should be held with the relevant HER Officer to ensure all relevant data is provided.

13.5.4 The identified receiving institution, or institutions, as agreed with the Curators, should be consulted during the publication and dissemination phases of the Scheme, as recipients of the project archive.

13.5.5 It is anticipated that academic publications would take the form of either a monograph, a series of thematic or chronological monographs, with further reports in the Archaeological Data Service, and/or topic-, theme-, period-, or object-specific articles in appropriate journals. Production of more accessible and popular publications should align with the aims of the Public Archaeology and Community Engagement (PACE) strategy (Appendix C).

13.5.6 The final scope and publication outlet/format for the popular and academic publications associated with the Scheme have not yet been decided. However, it is anticipated that these would be print publications also accessible online as open-access publications. Digital publication, dissemination and stable online archiving via the Archaeology Data Service archive would be prepared/arranged by the Archaeological Contractor.

13.6 Reporting for Archaeological Monitoring and Trial Trenching

13.6.1 Following completion of archaeological monitoring or trial trenching works, a brief interim statement of results will be prepared for each phase of work and submitted by the Archaeological Contractor to the ACoW. The ACoW will submit these interim statements to the Client's Representative and the relevant Curators. The purpose of each interim statement is to provide a basic account of the results of the investigations to inform the progress meetings and to consider whether adjustments to the form or nature of the final report are required. Interim statements will be prepared within one week following completion of fieldwork at the relevant site.

13.6.2 Following the completion of the interim statement, a final archaeological report will be prepared by the Archaeological Contractor.

13.6.3 The precise format of the final report may depend upon the findings of the investigations, but will contain the following:

a. A signed QA sheet detailing as a minimum - title, author, version, date, checked by, approved by.

b. A non-technical summary.

c. Site location.

d. Brief archaeological, historical and project background.

e. Methodology.

f. Aims and objectives.

g. Results – factual data statements (stratigraphic, artefactual, environmental, initial scientific dating results).

h. Statements of potential (stratigraphic, artefactual, environmental).

i. Quantification of the project archive (site records, plans, digital files, finds by category and environmental remains) and a list of items recommended for discard at the assessment stage.

j. Statements regarding immediate and long-term storage and curation.

k. Discussion of the results in their local, regional, national and international context.

l. Post-excavation analysis method statements.

m. Recommendations for analysis, reporting and publication (including a synopsis of the proposed contents).

n. General and detailed plans showing the location of the investigation areas accurately positioned on an OS base with grid co-ordinates and a plan of the identified archaeological remains (to a known scale).

o. Detailed plans and sections/profiles, deposit models etc., to support the narrative.

p. Detailed stratigraphic matrix for each area excavated and how the areas interlink.

q. Photographs and illustrations, including any 3D models.

r. Bibliography.

s. A cross-referenced index to the project archive and summary of contexts.

t. Specialist reports.

14. Archives

14.1 Archive Security and Storage

14.1.1 Archaeological material recovered from fieldwork is irreplaceable. The finds, records and data generated by the fieldwork will be removed from site at the end of each working day and will be kept secure at all stages of the project (Ref. 30; and Appendix A). The Archaeological Contractor will be responsible for the care of the site archive (records and finds) in their possession and should ensure that adequate resources are in place at the start of the fieldwork, including the materials necessary for long-term storage and access to an archaeological conservator. Arrangements should be made for the proper cataloguing and storage of the archive during the project life-cycle (it may be appropriate to liaise with an archive specialist).

14.1.2 Specialist data and reports will clearly state the research potential of the collections, highlighting these for the accessioning museum, as this will ensure that the potential of the collections can be promoted to researchers following deposition.

14.2 Archive Consolidation

14.2.1 The Archaeological Contractor should compile a Data Management Plan in line with CIfA guidelines (Ref. 11) and include details within their SSWSIs. The identified receiving institution, or institutions, are stakeholders in this process and should be consulted during the creation of the Data Management Plan.

14.2.2 The Site records and assemblages (list of fieldwork interventions, notebooks/ diaries, context records (including digital records), feature records, structure records, site geomatics (drawings), photographs and films, finds records and associated data files) will constitute the primary Site archive. This is the key archive of the fieldwork project and the raw data upon which all subsequent assessment and analysis and future interpretation will be based. The archive will therefore not be altered or compromised and the Archaeological Contractor is expected to show due diligence and compliance with the digitisation of data.

14.2.3 The Site archive should be quantified, ordered, indexed and made internally consistent, and in line with current good practice (refer to Appendix A but with particular reference to Ref. 30). All finds and coarse-sieved, and flotation samples will have been processed and stored under appropriate conditions. The archive will also contain a site matrix, a summary of key findings and descriptions of artefactual and environmental assemblages. The content of an outline structure for a fieldwork archive is presented in MoRPHE, Appendix 1, Product P1 and Product P3 (Ref. 6).

14.2.4 The Archaeological Contractor will, prior to the start of fieldwork, liaise with the most appropriate receiving institution, or institutions, to obtain agreement in principle to accept the physical, documentary, digital and photographic archive for long-term storage. This will include the agreement of a retention and disposal policy that is consistent and compliant with both archives. The Archaeological Contractor will be responsible for identifying any specific

requirements, archiving costs or policies of the recipient repository in respect of the archive, and for adhering to those requirements.

14.2.5 Discussions are currently ongoing with the Curators and receiving museums archive officers for the process for the deposition of a digital archive via ADS. This is not yet resolved, but pertains to a non-paper archive of records from sites. Consideration must be given by the Archaeological Contractor to how the digital archive will be dealt with.

14.2.6 Each archaeological mitigation area will have its own unique accession number, which will be obtained from the relevant receiving institution and HER by the Archaeological Contractor in advance of the fieldwork, to ensure that the project is recorded in accordance with the requirements of the local authority. The unique accession number will be recorded in the Archaeological Contractor's SSWSIs.

14.2.7 The archive of finds and records generated during the fieldwork will be removed from the Site at the end of each day and kept secure at all stages of the project until it is deposited with the receiving institution, or institutions. The archive will be produced to current national standards (refer to Appendix A).

14.2.8 Digital site data should be backed-up live, or, as a minimum, daily, to an off-site server.

14.2.9 The deposition of the archive forms the final stage of this project. The Archaeological Contractor shall provide the Client's representative and the ACoW with copies of communication with the accredited repository and written confirmation of the deposition of the archive.

15. Health and Safety

15.1.1 The works fall within the definition of Construction Work as defined under the Construction Design and Management (CDM) Regulations. The Archaeological Contractor will be appointed by the Client, or their Principal Contractor. The Principal Contractor will act as Principal Contractor at all stages of the archaeological site works.

15.1.2 All staff employed by the Archaeological Contractor shall attend the Principal Contractor's site induction. The Archaeological Contractor shall prepare Risk Assessment(s), and a project specific Health and Safety Plan and submit these to the Principal Contractor for approval prior to starting on site.

15.1.3 The Archaeological Contractor's site manager will be qualified to Site Managers Safety Training Scheme (SMSTS) level. All other staff involved in the fieldwork should hold the applicable Construction Skills Certification Scheme (CSCS) qualification and be certified to a minimum standard of 'Professionally Qualified Person (PQP)'. Staff CVs should include SMSTS and CSCS qualifications and expiry dates.

15.1.4 The Principal Contractor will provide the Archaeological Contractor with the results of appropriate service and utility searches. No archaeological works should commence without a Permit to Dig issued by the Principal Contractor. This should include confirmation that the locations of any services are marked, environmental and ecological constraints and that any additional safety measures required to ensure that each area is safe prior to commencement of mitigation work are in place. The Principal Contractor should ensure that appropriate consultation occurs with regard to the potential impact of archaeological works on ecological concerns, and, where appointed, liaison should occur with the project Ecological Clerk of Works (ECoW) prior to the commencement of any works.

15.1.5 The Archaeological Contractor shall at all times maintain a safe working distance from the overhead and buried services/utilities. In addition, the Archaeological Contractor shall be responsible for fulfilling any requirements with regard to work in the vicinity of watercourses as well as any other ecological constraints.

15.1.6 The Archaeological Contractor's Risk Assessment(s) and project Health and Safety Plan shall make reference to relevant guidance and good practice (for example: Health and Safety Executive SEGS6 – Avoidance of Danger from Overhead Lines; HS(G)47 – Avoiding Danger from Underground Services; Energy Networks Association The Safe Use of Mechanical Plant in the Vicinity of Electricity Overhead Lines; PAS 128 – Specification for underground utility detection, verification and location; and Model Procedures for the Management of Land Contamination, CLR 11).

15.1.7 The Archaeological Contractor's site manager will maintain a record of site attendance and attend the Principal Contractor's daily briefing at the start of work for each day.

15.1.8 All site personnel will wear personal protective equipment (PPE) as defined by the Archaeological Contractor's approved risk assessment undertaken in accordance with mandatory requirements. Any visitors to the investigations will require a site induction in accordance with the Principal Contractor's

Health and Safety requirements, and will have read the appropriate Archaeological Contractor's site-specific Risk Assessment and Method Statement. All equipment that is used in the course of the fieldwork must be 'fit for purpose' and be maintained in a sound working condition that complies with all relevant Health and Safety regulations and recommendations.

15.1.9 As a minimum, PPE shall consist of a hard hat, steel toe-capped boots with mid-sole protection and a high visibility jacket or vest. Additional PPE will be issued by the Archaeological Contractor as required, e.g. ear defenders, masks etc. In addition, site personnel will ensure that any visitors to the excavation are equipped with suitable PPE prior to entry to the site.

15.1.10 The Archaeological Contractor will ensure the provision and maintenance of adequate, suitable and sufficient welfare and sanitary facilities at appropriate locations for the duration of the works. The locations for the temporary site welfare facilities and vehicle parking will be agreed with the Principal Contractor prior to the start of the works. Facilities, roles and responsibilities shall adhere to the provisions of The Construction (Design and Management) Regulations 2015 and related Health and Safety Executive guidance.

15.1.11 All staff and visitors involved in the fieldwork should be suitably qualified. Visitors to the site (including, but not limited to, the Curators, specialists etc.) must abide by the Principal Contractor's visitor protocols and induction process. All regular visitors to the site must have undertaken the full induction process or access to site will not be permitted.

15.1.12 All site personnel will familiarise themselves with the following:

a. Site emergency and evacuation procedures.

b. The site's health & safety coordinator.

c. The first aider.

d. The location of the nearest hospital and doctor's surgery.

e. The supervisor will maintain a record of site attendance for each day that there is a team in the field.

16. References

Ref. 1 Department for Energy Security & Net Zero (2023). Overarching National Policy Statement for Energy (EN-1).

Ref. 2 Department for Energy Security & Net Zero (2023). National Policy Statement for Renewable Energy Infrastructure (EN-3).

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Ref. 23 Historic England (2015) Geoarchaeology: Using Earth Sciences to Understand the Archaeological Record.

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17. Abbreviations

Abbreviation / Term	Definition
ACoW	Archaeological Clerk of Works. Individual responsible for monitoring the work undertaken by the Archaeological Contractor, on behalf of the Principal Contractor or the Client, to ensure compliance with this OWSI and the SSWSIs. They will also be responsible for liaising with the Principal Contractor to monitor construction activities to ensure compliance with the OWSI and the CEMP. The ACoW will also organise and attend regular site meetings to be held with the Curators.
CEMP	Construction Environmental Management Plan. A site-specific plan developed to ensure that appropriate environmental management practices are followed during the construction phase of a project.
CIfA	The Chartered Institute for Archaeologists. Professional body representing archaeologists working in the UK and overseas which produces standards and guidance for archaeological works.
CPR	Charred plant remains.
DCO	Development Consent Order. The form of permission for developments categorised as Nationally Significant Infrastructure Projects (NSIP). This includes energy, transport, water and waste projects.
HER	Historic Environment Record. Information services that seek to provide access to comprehensive and dynamic resources relating to the historic environment of a defined geographic area for public benefit and use.
MoRPHE	The Management of Research Projects in the Historic Environment. Project-management guidance designed to support the planning and implementation of research and applied research and development projects in the historic environment sector.
OASIS	OASIS is an online reporting form enabling archaeological and heritage practitioners to provide information about their investigations to regional Historic Environment Records (HERs) and respective national heritage organisations.
OS	Ordnance Survey.
OWSI	Overarching Written Scheme of Investigation (this document)

Abbreviation / Term	Definition
SSWSI	Site-specific Written Scheme of Investigation. Documents generated by the Archaeological Contractor, in line with the general guidance within this OWSI, which outline known and potential archaeological features and deposits or built heritage elements on a site and detail a framework for exploring them using the latest, most appropriate and cost-effective archaeological techniques.

18. Glossary of Frequently Used Terms

Term	Definition
Archaeological Monitoring and Recording	A formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons. This will be within a specified area, where there is a possibility that archaeological deposits may be disturbed or destroyed. The programme will result in the preparation of a report and ordered archive.
Construction Environmental Management Plan (CEMP)	A site-specific plan developed to ensure that appropriate environmental management practices are followed during the construction phase of a project.
Desk-based assessment (DBA)	A programme of study of the historic environment within a specified area or site that addresses agreed research and/or conservation objectives. It consists of an analysis of existing written, graphic, photographic and electronic information in order to identify the likely heritage assets, their interests and significance; the character of the study area, including appropriate consideration of the settings of heritage assets; and the nature, extent and quality of the known or potential archaeological, historic, architectural and artistic interest.
Development consent order (DCO)	The form of permission for developments categorised as Nationally Significant Infrastructure Projects (NSIP). This includes energy, transport, water and waste projects.
Excavation (for archaeological purposes)	A programme of controlled, intrusive fieldwork with defined research objectives, which examines, records and interprets archaeological deposits, features and structures and, as appropriate, retrieves artefacts, ecofacts and other remains within a specified area. The records made and objects gathered during fieldwork are studied and the results of that study published in detail appropriate to the project design.
Geophysical Survey	Non-invasive survey used for discovering buried remains and for better understanding archaeological monuments and historic buildings. A number of techniques can be used, each measuring different physical properties of the ground.
Historic Building Recording	A programme of work intended to establish the character, history, dating, form and archaeological development of a specified building, structure, or complex and its setting.
Historic environment	All aspects of the environment resulting from the interaction between people and places through time, including all surviving physical remains of past human

Term	Definition
	activity, whether visible, buried or submerged, and landscaped and planted or managed flora.
Historic environment record (HER)	Information services that seek to provide access to comprehensive and dynamic resources relating to the historic environment of a defined geographic area for public benefit and use.
Order limits	The limits shown on the land plans and works plans within which the authorised development may be carried out and land acquired or used.
Scheme	East Yorkshire Solar Farm.
Site	The collective term for all land within the Order limits.
Trial Trenching	A limited programme of intrusive fieldwork which determines the presence or absence of archaeological features, structures, deposits, artefacts or ecofacts and their research potential, within a specified area or site. If such archaeological remains are present, field evaluation defines their character, extent, quality and preservation, reports on them and enables an assessment of their significance in a local, regional, national or international context as appropriate.
Written Scheme of Investigation (WSI)	A Written Scheme of Investigation outlines known and potential archaeological features and deposits or built heritage elements on a site and suggests a structure for exploring them using the latest, most appropriate and cost-effective archaeological techniques.

Appendix A Standards and Guidance

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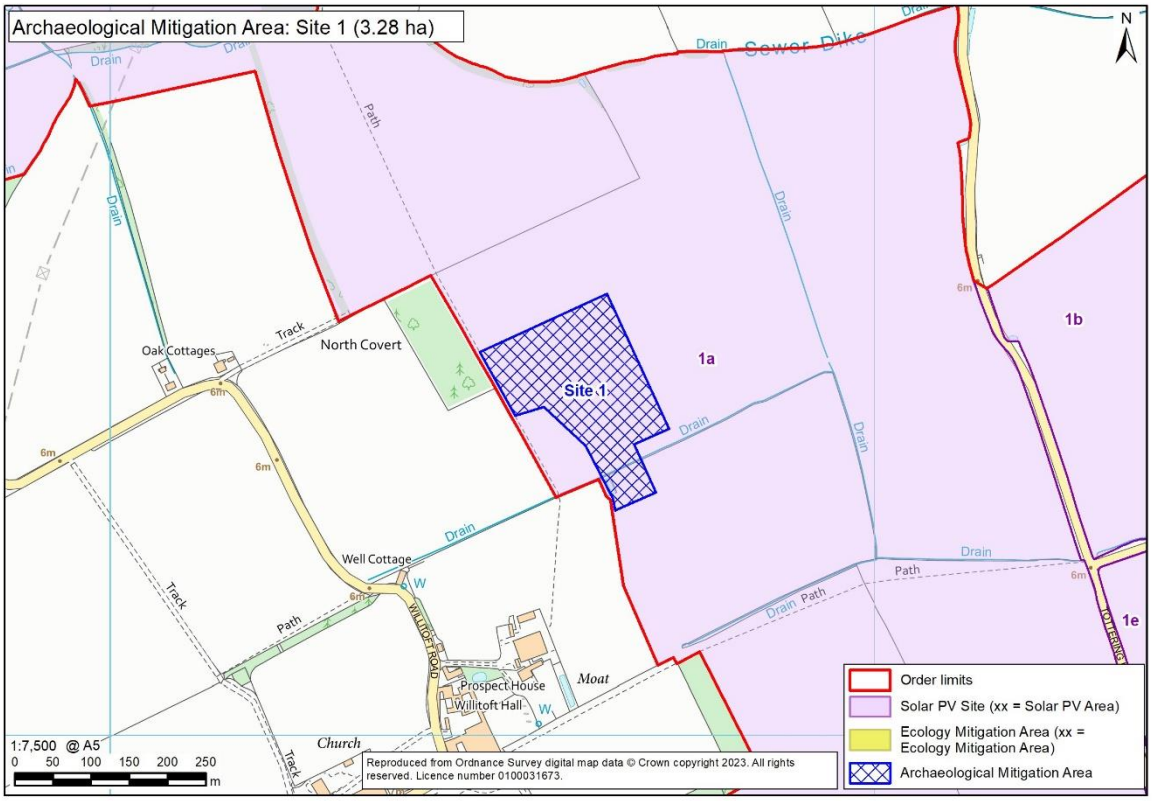
Appendix B Archaeological Mitigation Areas

Site 1 – Iron Age and Romano-British settlement archaeology in Solar PV Area 1a (AEC006)	
Designation:	Non-designated
Field Number:	1a
Reference IDs:	(AEC006)
Approximate location (NGR):	SE 74610 35441
Site area (approximate):	3.28 ha

Map



Description

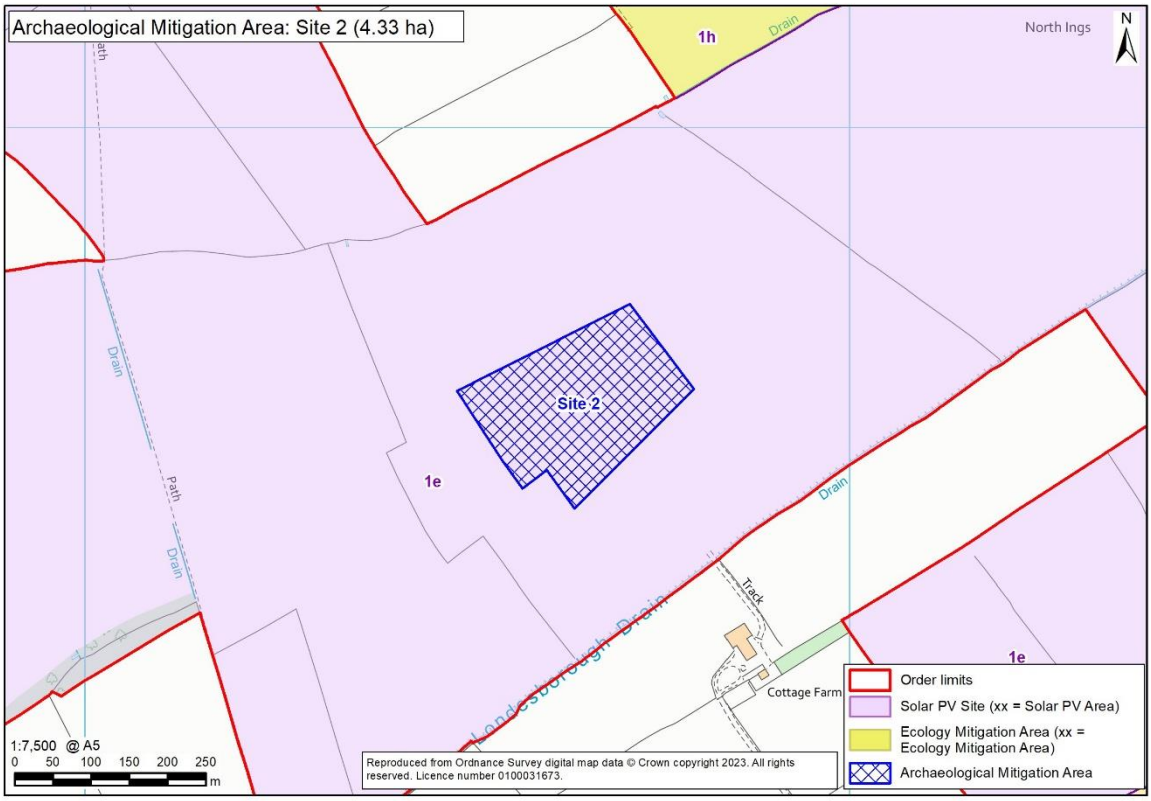
Evaluation trenches 69 and 968 contained a considerable concentration of archaeological remains dating to the Romano-British period, including a pit (6902) with over 700 sherds of pottery (mostly greywares, but also a sherd of samian ware) and a large pit or ditch terminus (6912) exceeding 1m in depth showing multiple layers of deposition. The nature of this activity is difficult to assess at this interim phase, but the density of activity combined with the high recovery rate of ceramic material strongly suggests settlement activity.

While the clarity or detail of the archaeological remains is not entirely in keeping with the geophysical survey, the features within the trenches do broadly correspond to geophysical anomalies in that area of the field. The additional trenches positioned around them (704,

Site 1 – Iron Age and Romano-British settlement archaeology in Solar PV Area 1a (AEC006)
705 and 706) identified that activity does not extend much further to the north and east, beyond the concentration of geophysical anomalies.
Scheme impact
The site would be permanently affected by the construction of the Solar PV arrays. The construction of the Scheme would have a moderate adverse significance of effect on this site.
Mitigation
Detailed Excavation, or Preservation in situ.
Research objectives
Iron Age settlement and field patterns. Iron Age enclosure types. Iron Age – Roman transition. Interconnectivity of Roman settlements and the role of roads. Iron Age and Roman industrial sites.

Site 2 – Iron Age and Romano-British settlement archaeology in Solar PV Area 1e (AEC007)	
Designation:	Non-designated
Field Number:	1e
Reference IDs:	(AEC007)
Approximate location (NGR):	SE 76718 34692
Site area (approximate):	4.33 ha

Map



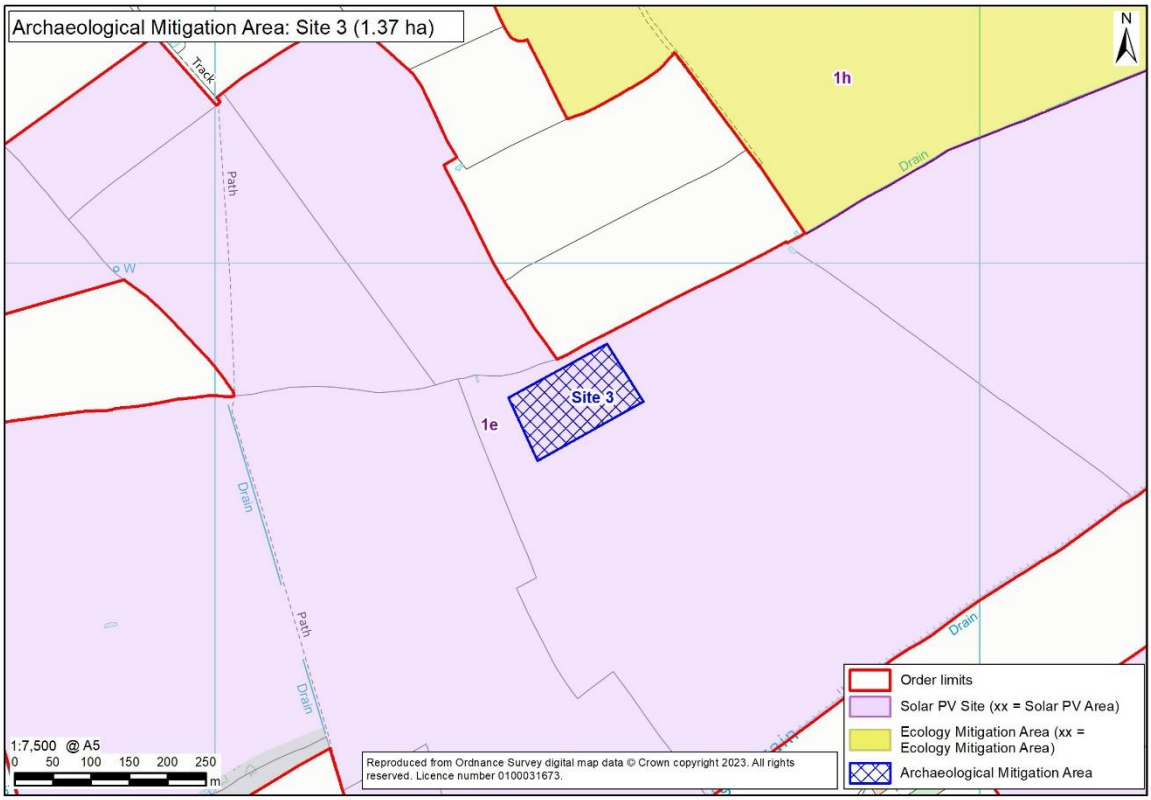
Description

The remains of Romano-British activity to the south of AEC008, but still within Solar PV area 1e.10, was concentrated in evaluation trenches 121 and 122, but also extended into Trenches 120, 124, 125, 708 and 709. The archaeological remains observed appeared to extend over a larger area and encompass dense coverage of geophysical anomalies (Trenches 121 and 122) as well as parts almost devoid of any anomalies (Trenches 708 and 709). The excavated remains comprise large ditches as well as pits, but with less ceramic discard than in other areas of similar remains. Slag recovered from features in Trench 121 and a relative lack of ceramic discard compared to other areas of the Site may indicate an industrial focus rather than settlement to this activity.

Site 2 – Iron Age and Romano-British settlement archaeology in Solar PV Area 1e (AEC007)
Scheme impact
The site would be permanently affected by the construction of the Solar PV arrays. The construction of the Scheme would have a moderate adverse significance of effect on this site.
Mitigation
Detailed Excavation, or Preservation in situ.
Research objectives
Iron Age settlement and field patterns. Iron Age enclosure types. Iron Age – Roman transition. Interconnectivity of Roman settlements and the role of roads. Iron Age and Roman industrial sites.

Site 3 – Iron Age and Romano-British settlement archaeology in Solar PV Area 1e (AEC008)	
Designation:	Non-designated
Field Number:	1e
Reference IDs:	(AEC008)
Approximate location (NGR):	SE 76461 34842
Site area (approximate):	1.37 ha

Map



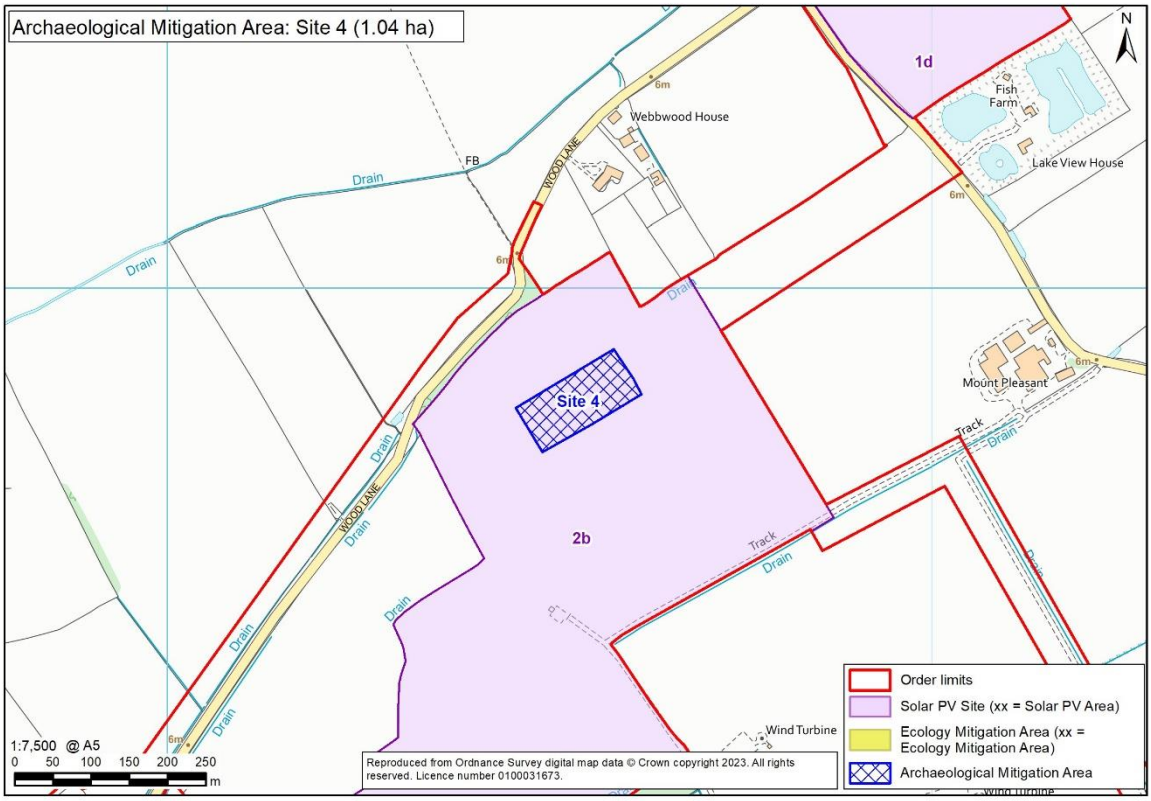
Description

Within Solar PV area 1e.10, the evaluation trenching confirmed the presence of two concentrations of Romano-British activity. The first (AEC008) is in the north of the field (surrounding Trenches 114 and 115) where multiple large ditches crossed Trench 114 and two smaller pits or ditch termini were exposed in Trench 115. These remains broadly correlate with the geophysical survey and were not observed extending into neighbouring trenches suggesting a separate phase of activity to the remains to the south. This was further corroborated by an initial assessment of this pottery by the excavators which suggested an earlier date than the Roman activity to the south due to the presence of grog-tempered pottery.

Site 3 – Iron Age and Romano-British settlement archaeology in Solar PV Area 1e (AEC008)
Scheme impact
The site would be permanently affected by the construction of the Solar PV arrays. The construction of the Scheme would have a moderate adverse significance of effect on this site.
Mitigation
Detailed Excavation, or Preservation in situ.
Research objectives
Bronze Age – Iron Age transition. Iron Age settlement and field patterns. Iron Age enclosure types. Iron Age – Roman transition. Interconnectivity of Roman settlements and the role of roads. Iron Age and Roman industrial sites.

Site 4 – Iron Age and Romano-British settlement archaeology in Solar PV Area 2b (AEC009)	
Designation:	Non-designated
Field Number:	2b
Reference IDs:	(AEC009)
Approximate location (NGR):	SE 74504 33872
Site area (approximate):	1.04 ha

Map



Description

The centre of the Field 2b.1 contained a concentration of Romano-British ditches around Trenches 228, 702 and 703. Pottery from the features comprised mostly grey wares but also included a fragment of mortarium pottery, which is probably indicative of settlement activity. These features do not correlate closely with the geophysical survey, probably due to the density of post-medieval agricultural activity that has subsequently taken place.

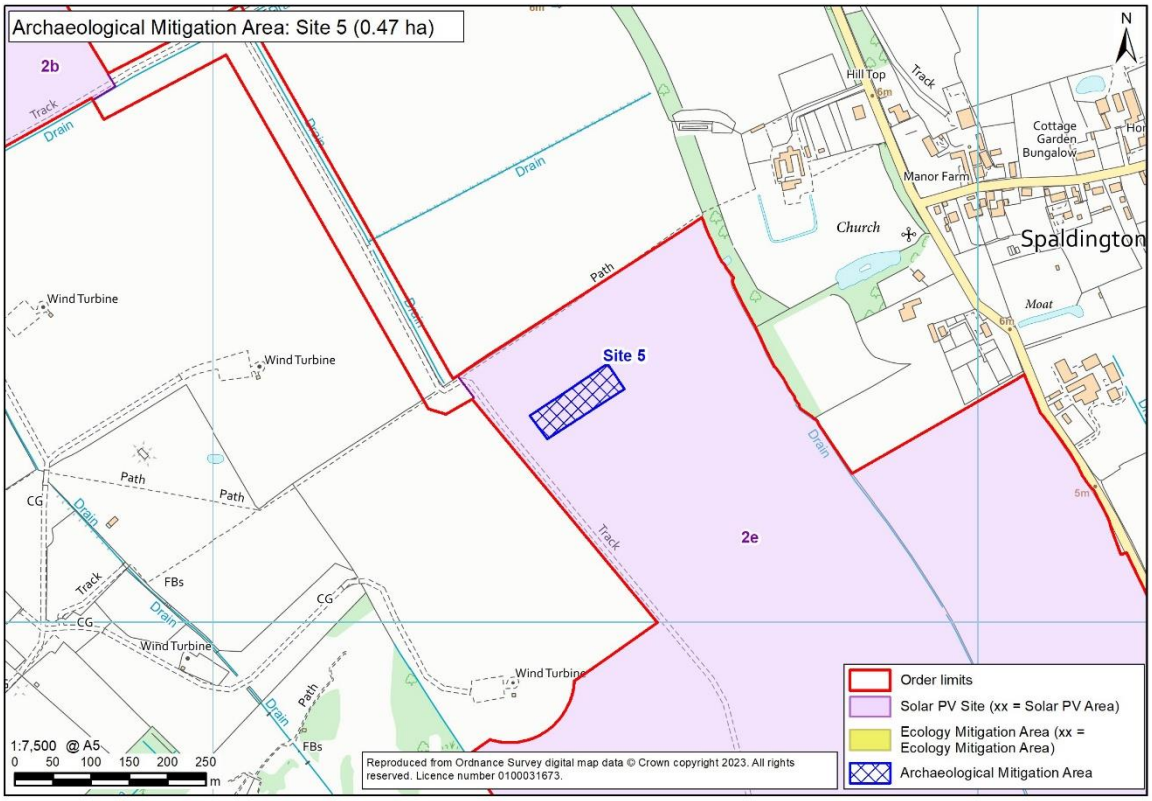
Scheme impact

The site would be permanently affected by the construction of the Solar PV arrays. The construction of the Scheme would have a moderate adverse significance of effect on this site.

Site 4 – Iron Age and Romano-British settlement archaeology in Solar PV Area 2b (AEC009)
Mitigation
Detailed Excavation, or Preservation in situ.
Research objectives
Iron Age settlement and field patterns. Iron Age enclosure types. Iron Age – Roman transition. Interconnectivity of Roman settlements and the role of roads. Iron Age and Roman industrial sites.

Site 5 – Iron Age and Romano-British settlement archaeology in Solar PV Area 2e (AEC010)	
Designation:	Non-designated
Field Number:	2e
Reference IDs:	(AEC010)
Approximate location (NGR):	SE 75471 33305
Site area (approximate):	0.47 ha

Map



Description

The northern part of Field 2e.1 (Trench 267) contained a ditch from which two sherds of Romano-British pottery were recovered. The function of this feature is unclear as it does not correspond to a geophysical anomaly due to more recent agricultural trends identified by the previous geophysical survey and its continuation was not observed in the neighbouring trenches.

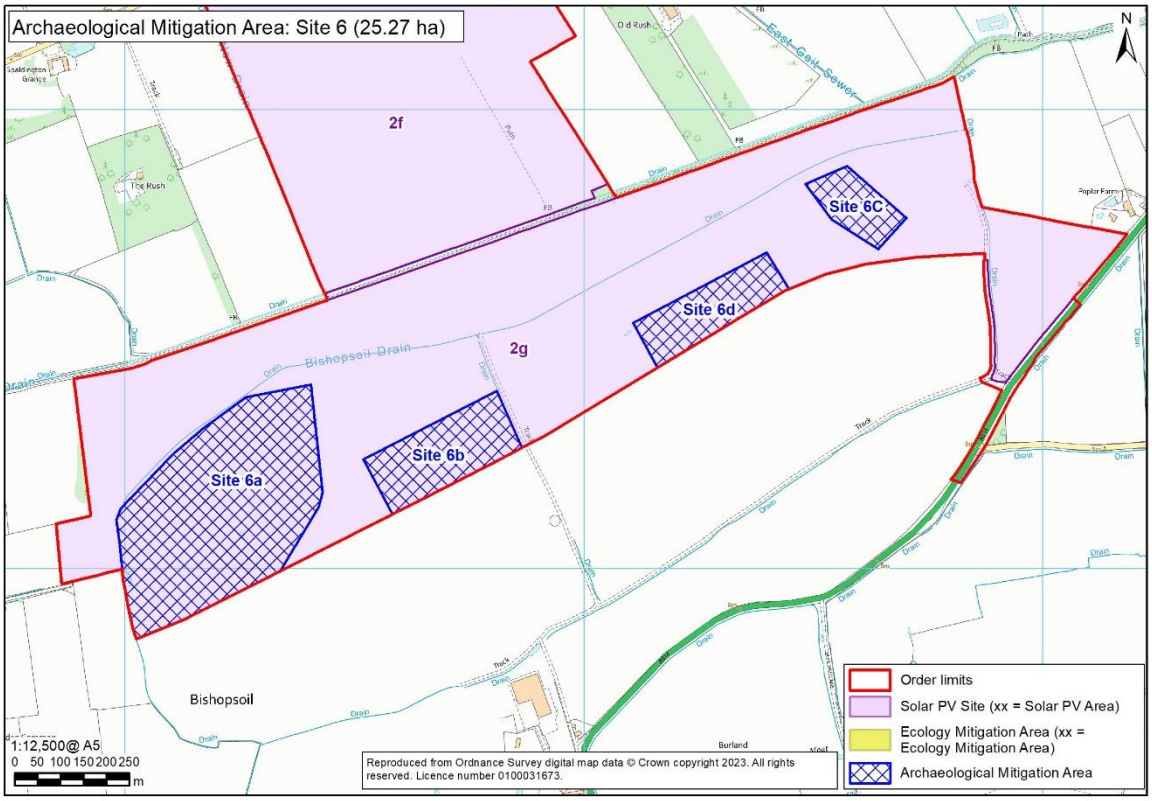
Scheme impact

The site would be permanently affected by the construction of the Solar PV arrays. The construction of the Scheme would have a moderate adverse significance of effect on this site.

Site 5 – Iron Age and Romano-British settlement archaeology in Solar PV Area 2e (AEC010)
Mitigation
Detailed Excavation, or Preservation in situ.
Research objectives
Iron Age settlement and field patterns. Iron Age enclosure types. Iron Age – Roman transition. Interconnectivity of Roman settlements and the role of roads. Iron Age and Roman industrial sites.

Site 6 – Iron Age and Romano-British settlement archaeology in Solar PV Area 2g (AEC011)	
Designation:	Non-designated
Field Number:	2g
Reference IDs:	(AEC011)
Approximate location (NGR):	SE 76359 31191
Site area (approximate):	25.27 ha

Map



Description

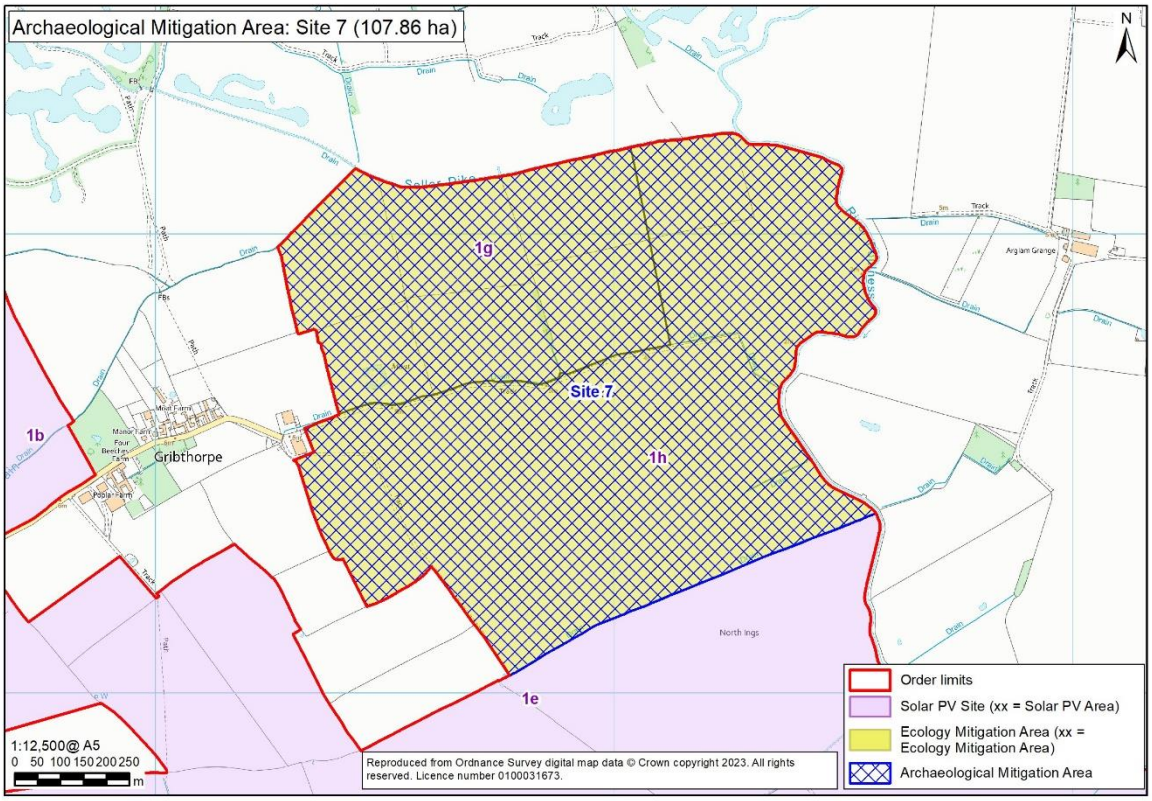
Solar PV area 2g.2[1] contains the greatest concentration of archaeological activity on the Site, stretching in an arc from Trench 68 in the southwest of the field to Trench 533 in the east. There appears to be a break in this activity in the centre of the field around Trenches 308, 309 and 574 which is corroborated by the geophysical survey. The activity comprises multiple ditches interspersed with the occasional pit which, combined with the geophysical survey, suggests a series of linear enclosures. Several of these trenches (13, 581) show stratigraphic activity indicating multiple phases of activity. The quantities of pottery recovered from these features suggest a settlement focus. Of particular note are multiple small ring ditches (Trenches 68 and 581) and a spread of possible industrial material in

[1] The individual fields within the survey areas are referenced by a unique identification code which was allocated for the geophysical survey. This code is referenced and illustrated in **Appendix 7-3, ES Volume 2 [EN010143/APP/6.2]**.

Site 6 – Iron Age and Romano-British settlement archaeology in Solar PV Area 2g (AEC011)
Trench 38. The eastern end of Field 2g.4 contains further remains which follow the broad arc of activity in Field 2g.2 in Trenches 2, 21, 25, 31 and 448. This activity largely comprises ditches but two small pit or post-hole alignments in Trench 21 are likely to be part of a larger structure or structures, again suggesting settlement activity.
Scheme impact
The site would be permanently affected by the construction of the Solar PV arrays. The construction of the Scheme would have a moderate adverse significance of effect on this site.
Mitigation
Detailed Excavation, or Preservation in situ.
Research objectives
Bronze Age – Iron Age transition. Iron Age settlement and field patterns. Iron Age enclosure types. Iron Age – Roman transition. Interconnectivity of Roman settlements and the role of roads. Iron Age and Roman industrial sites.

Site 7 – Creation of shallow, linear foot drains in Ecology Mitigation Areas 1g/1h (Golden Plover Mitigation Zone)	
Designation:	Non-designated
Field Number:	1g/1h
Reference IDs:	None
Approximate location (NGR):	SE 77274 35535 and SE 77228 35889
Site area (approximate):	107.66 ha

Map



Description

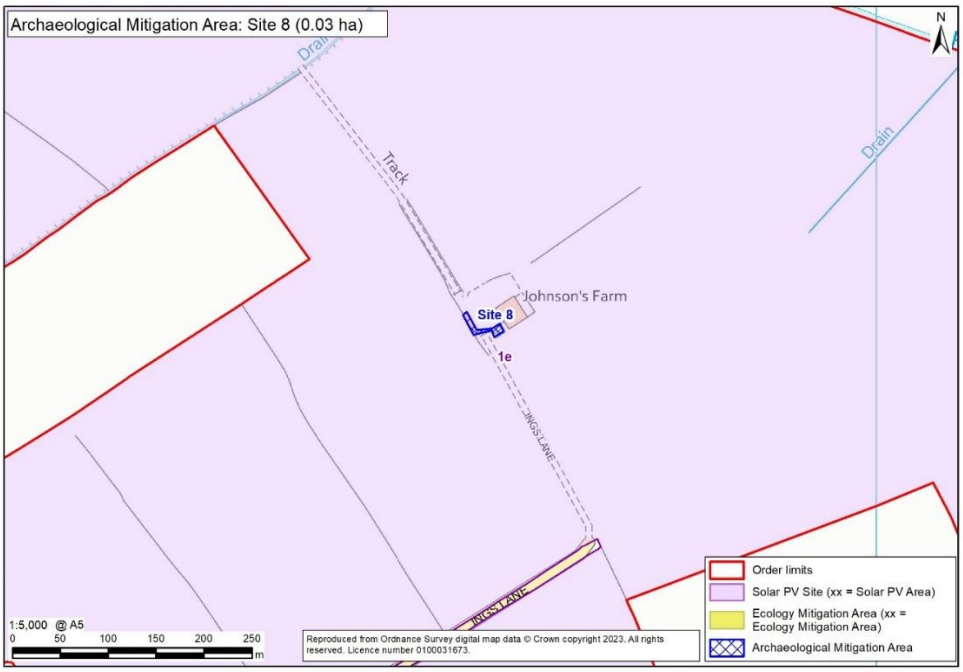
Due to access and ecological constraints, it has not been possible to evaluate this area set aside for Ecology Mitigation works within the Order limits. As such, it is proposed that the creation of 'foot drains', intended to provide habitat enhancement for certain species of visiting birds, will be archaeologically monitored.

In principle, these works are not intended to extend beneath the topsoil horizon, and so are unlikely to create a significant archaeological impact. However, due to the relative uncertainty caused by a lack of evaluation works, and allowing for the variation in construction impacts which can result from poor weather, changes within the soil profile and variations to the works undertaken during detailed design, an archaeological monitoring and recording response is considered appropriate.

Site 7 – Creation of shallow, linear foot drains in Ecology Mitigation Areas 1g/1h (Golden Plover Mitigation Zone)
Scheme impact
The construction of proposed foot drains within this unevaluated area could have a moderate adverse significance of effect on any unknown archaeological remains present within the works area.
Mitigation
Archaeological Monitoring and Recording.
Research objectives
Iron Age settlement and field patterns. Iron Age enclosure types. Iron Age – Roman transition. Interconnectivity of Roman settlements and the role of roads. Iron Age and Roman industrial sites.

Site 8 – Traditional farmhouse and farm outbuilding at Johnson's Farm (AEC005)	
Designation:	Non-designated
Field Number:	1e
Reference IDs:	(AEC005)
Approximate location (NGR):	SE 77594 34554
Site area (approximate):	-

Map



Description

Johnson's Farm (AEC005) is a non-designated historic farmstead, which still retains two of its traditional buildings; the principal farmhouse and a brick-built outbuilding, which would have served as an implement shed, both of which are in a parlous state of repair. The Scheme will require the demolition of these non-designated buildings in order to make the area safe for maintenance use, and permissive public access.

Scheme impact

The traditional farm buildings would be demolished during the construction phase of the Scheme. The construction of the Scheme would have a high adverse significance of effect on this site.

Mitigation

Historic Building Recording.

Research objectives

Agricultural improvement in the 18th and 19th centuries.

Appendix C Public Archaeology and Community Engagement Strategy

Introduction

This Public Archaeology and Community Engagement (PACE) Strategy presents the overarching strategy for the outreach and engagement programme associated with the proposed East Yorkshire Solar Farm Scheme.

The Strategy includes potential site-based activities, initiatives to be undertaken while site work is ongoing, and activities to be undertaken throughout the post-excavation phase.

The initiatives aim to maximise the potential influence and learning opportunities resulting from the archaeological works, providing information to the widest variety of audiences, ranging from members of the public living in the vicinity of the Scheme to visitors to the area.

It is acknowledged that the events and activities proposed often attract the same group of people, generally including those who would frequent local museums and heritage attractions. Efforts should be made to reach those who would not usually engage with archaeology or community heritage in the wider area, to create a lasting legacy to the archaeological and other heritage works undertaken as part of the Scheme.

The post-excavation phase will focus on making information available in more permanent formats, such as exhibitions, printed and pdf format booklets and web-based media. Lectures could be provided to groups with a specific interest in the archaeology of the area during this phase, though it is noted that this form of outreach is self-selecting and not especially effective in reaching significant audiences: resources are better focused on more general information provision.

The Archaeological Contractor will prepare a Scheme specific PACE Strategy, detailing the targeted audiences and the activities to be undertaken. This will include a programme of activities throughout the project lifecycle.

Aims and Objectives

Key research objectives have been identified for the mitigation phase of the East Yorkshire Solar Farm Scheme, to ensure that research is focused on the principal questions that the Scheme has the potential to contribute to or answer. The evidence from these sites also has wider implications for the archaeology of the East of England region.

The aim of the PACE Strategy will be to raise awareness of the significance of the archaeological landscape, to provide a lasting legacy of the archaeological works, and to encourage the enjoyment, interaction and engagement with the archaeological process and discoveries arising from the mitigation works undertaken along the Scheme.

The objectives of the PACE programme will be:

- Engagement and appreciation: Encouraging engagement with and appreciation of the archaeological landscape.
- Knowledge about archaeology within and in the vicinity of the Scheme: Advancing public understanding and stimulating interest and public curiosity about archaeology within the Scheme.
- Public understanding of developer-led archaeology: Making the archaeological process more understandable for the public, particularly in relation to a major Solar Farm Scheme, explaining why the sites selected for investigation have been chosen while others have not.
- Accessible learning: Creating accessible learning opportunities for people to be involved in actively discovering more about their past.
- Disseminating fieldwork information: Disseminating information about the archaeology within the Scheme to schools, the local community, local societies and groups with a keen interest in history and archaeology, and the academic community via a variety of platforms.
- Sharing research: Showcasing the research impact of development-led archaeological fieldwork and how it can inform our understanding of the past with local and regional audiences, including academic interest.
- Inclusive participation: Encouraging engagement with those that may not normally engage with archaeology or local history.

Target Audience

A successful PACE Strategy must consider both who the audience is and the activities they want to partake in. The Strategy should be tailored to meet the needs of the identified audience and provide engaging activities to add enjoyment. Outreach has traditionally been focused on a similar range of activities, such as public talks and site tours, but consideration should be given to other activities to widen the audience.

The PACE Strategy is likely to predominantly focus on those communities directly impacted by the Scheme, or in its immediate vicinity, specifically those people living and working within or adjacent to the Scheme, and those passing through it via local historic lanes. The academic community at relevant universities may also be targeted, through activities such as presentations at conferences, along with the promotion of events or exhibits that may engage with or encourage those who do not normally engage with those targeted by these sorts of events. This will increase the impact of the outreach and the overall project legacy.

Audiences could comprise:

- Local communities, particularly those in villages close to the Scheme, including, but not limited to Howden, Brind, Wressle, Spaldington, Breighton, Gribthorpe, Eastrington, Portington, Barmby on the Marsh, Newsholme and Bubwith.
- Primary and secondary school pupils and teachers.
- Local history groups, both within the Scheme area and the wider area, including history groups in other villages in the wider area.

- Members of local archaeology, history and civic societies.
- Council for British Archaeology (CBA) Young Archaeology Clubs, CBA regional groups.
- Higher education students, including archaeology students.
- Academic archaeologists and members of subject and period specialist societies.
- Relevant elected members.
- Interest-focused and period-focused archaeological research groups.
- Visitors to the area and people travelling through the landscape.

Other relevant groups will also be considered where appropriate.

Activities

A range of outreach and public archaeology activities should be proposed. These need to be tailored to the wants and needs of the differing audiences to maximise benefit.

Activities should be split across the different phases of archaeological work, including excavation and post-excavation. It is not anticipated that trial trench evaluation would form a suitable phase for public engagement unless specifically designed to engage a target audience. Later phases of work will provide different types of activity, although there will be some overlap (such as talks to local groups).

At all stages the research questions of the Scheme should be considered, to ensure that the knowledge gained from the Scheme is disseminated to the public.

The following list of suggested activities may not all take place, and other activity types may be more appropriate:

- A series of presentations to local groups and communities, both during excavation and post-excavation.
- Site tours during excavations.
- Community excavation or other fieldwork event (subject to suitable sites, access and health and safety).
- Liaison with local schools, including educational events, talks and finds handling, continuing to participate in STEM (Science, technology, engineering, and mathematics) events as well as the provision of teaching materials.
- Project website including information such as dig diaries, key finds, videoblogs from site, post-excavation analysis etc.
- Provision of information via social media platforms.
- Reaching a new audience. Activities and displays focused around popular non-heritage events. This strategy minimises the requirement for marketing, as it would make use of existing events that have their own promotional scheme in place. For example, a stall at local food festival could introduce participants to the weird and wonderful world of Roman foods - with information boards, finds from the sites, and food preparation exhibits. Tailored to location.
- Attendance at local history, archaeology or other heritage events.

- Pop-up displays of artefacts and information at community hubs or museums.
- Permanent information panels at suitable locations. This could include displayed QR codes which refer to a website or virtual reproduction.
- Production of a popular publications, on the Scheme as a whole, or covering thematic topics. A booklet for children could be considered.
- Mapping of features from historic maps.
- Contribution to academic and professional conferences (such as CIfA) and publication of papers.
- Artefact handling sessions.
- Volunteer involvement in off-site post-excavation, such as finds cleaning, processing and recording, subject to regulations regarding the use of volunteers on development-led archaeological projects.

Media Strategy

Press releases to local, regional and national media outlets to promote the PACE activities and to inform of the progress of the archaeological mitigation programme, will be the managed by the Client, in consultation with the ACoW, the Archaeological Contractor and the Curators.

Appendix D Template Completion Statement

Fieldwork Completion Statement

Site Name:	
Site Code:	
Historic Environment Investigation Type:	
Archaeological Contractor:	
Fieldwork Director:	
Site Area:	
Dates of fieldwork:	

Summary of Results

	Name	Signature	Date
Author:			
Checked:			
Approved:			