

Gate Burton Energy Park

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1. Introduction

1.1 Overview

- 1.1.1 This document presents the Archaeological Mitigation Strategy (AMS) which sets out the scope and guiding principles for the planning and implementation of archaeological mitigation works in relation to Gate Burton Energy Park (the Scheme).
- 1.1.2 The AMS is presented in two parts: the first part of the document (Part 1) sets out the archaeological mitigation works within the Solar and Energy Storage Park and the second part of the document (Part 2; this part) sets out the archaeological mitigation works within the Grid Connection Corridor.
- 1.1.3 An Environmental Impact Assessment (EIA) has been undertaken for the Scheme and an Environmental Statement (ES) has been prepared in accordance with the Infrastructure Planning (EIA) Regulations 2017 (EIA Regulations) (Ref 1). In accordance with the requirements of the EIA Regulations, the ES contains the assessment of the likely significant effects on cultural heritage that may be caused during the construction of the Scheme and sets out the mitigation responses. This AMS outlines these mitigation measures and sets out the roles and responsibilities designed to ensure that such mitigation measures are carried out.

1.2 The Applicant

- 1.2.1 Gate Burton Energy Park Ltd (the Applicant) has submitted the DCO Application for the construction, operation and decommissioning of the Scheme. The DCO Application is submitted to the Planning Inspectorate, with the decision of whether to grant a DCO to be made by the Secretary of State for Business, Energy and Industrial Strategy (hereafter referred to as the 'Secretary of State') pursuant to the Planning Act 2008 (Ref 2).

1.3 The Scheme

- 1.3.1 The Scheme comprises the installation of solar photovoltaic (PV) generating panels and on-site energy storage facilities across a proposed site in Lincolnshire (hereafter referred to as the 'Solar and Energy Storage Park'), and grid connection infrastructure (hereafter referred to as the 'Grid Connection Corridor'). Further information on the Scheme is provided in **ES Volume 1, Chapter 2: The Scheme [EN010131/APP/3.1]**.
- 1.3.2 The Grid Connection Corridor (hereafter referred to as the 'Site') covers an area of approximately 183 hectares (ha) and is dominated by arable fields. There are hedgerows and watercourses within the Grid Connection Corridor and the River Trent is crossed by the Grid Connection Corridor. The Site is surrounded by mainly arable and pasture fields.

- 1.3.3 The land required for the construction, operation and maintenance, and decommissioning of the Scheme is shown on **ES Volume 2: Figure 1-2 [EN010131/APP/3.2]**, and described in **ES Volume 1, Chapter 2: The Scheme [EN010131/APP/3.1]**.

1.4 Purpose and Structure of the AMS

- 1.4.1 The purpose of the AMS is to set out the scope and methods proposed to mitigate effects of the Scheme on heritage assets within the Site, to secure compliance with relevant national and local planning policies.
- 1.4.2 The Scheme has been designed, as far as practicable, to avoid or reduce effects on cultural heritage assets through siting of the Scheme components, including panel free heritage buffer zones. Further information is provided in **ES Volume 1, Chapter 7: Cultural Heritage [EN010131/APP/3.1]**, the **Outline Design Principles [EN010131/APP/2.3]**, and **Framework Construction Environmental Management Plan (CEMP) [EN010131/APP/7.3]**.
- 1.4.3 This document describes the principles to be applied in undertaking archaeological mitigation and strategies for the protection of archaeological remains, and for the investigation, recording and analysis of archaeological remains that will be impacted as a result of construction.
- 1.4.4 The AMS is structured as follows:
- Section 2 presents an overview of the archaeological baseline and includes a summary of archaeological surveys that have been carried out in relation to the Grid Connection Corridor;
 - Section 3 describes the archaeological mitigation strategies for the Grid Connection Corridor, the aims and objectives of the mitigation and relationship to regional research agendas;
 - Section 4 sets out the protocols for monitoring and approvals;
 - Section 5 sets out the protocols for unexpected archaeological discoveries during construction;
 - Section 6 outlines the requirements for public outreach and community engagement;
 - Section 7 outlines the protocols for variations to Scheme design; and
 - Section 8 sets out the detailed scope for each archaeological mitigation site and the proposed research questions.

1.5 Roles and Responsibilities

- 1.5.1 The Applicant will establish the appropriate roles and responsibilities for site staff as set out in the **Framework CEMP [EN010131/APP/7.3]**.
- 1.5.2 The Archaeological Advisor to the relevant Local Planning Authority will be responsible for ensuring that the requirements of the DCO are met, in accordance with any conditions relating to archaeology.

The Archaeological Advisor to the relevant Local Planning Authority is responsible for ensuring that the mitigation measures are correctly implemented, monitored and maintained during the construction phase of the works. This will include monitoring the Archaeological Contractor's work to ensure compliance with the SSWSIs and this AMS and monitoring the specific construction activities to ensure compliance with all archaeological mitigation requirements, including protection measures, set out in the **Outline Design Principles [EN010131/APP/2.3], Framework CEMP [EN010131/APP/7.3] and AMS**. The Archaeological Advisor to the relevant Local Planning Authority will be responsible for final sign off and approval of all mitigation measures.

- 1.5.3 The Applicant will appoint an Archaeological Clerk of Works (ACoW) for the Scheme. The ACoW, working on behalf of the Client, will be responsible for liaising with the Archaeological Advisor to the relevant Local Planning Authority, and will monitor progress and compliance of the Archaeological Contractor with the requirements of this AMS and approved SSWSIs.
- 1.5.4 The Applicant will appoint an Archaeological Contractor to carry out the archaeological mitigation. The Archaeological Contractor will be responsible for the production of Site-Specific Written Scheme(s) of Investigation (SSWSIs) for each stage of archaeological investigation (refer to Section 4.1).

2. Background Information

2.1 Previous Archaeological Investigations Undertaken for the Scheme

- 2.1.1 A series of archaeological investigations have been undertaken for the Scheme which identified the archaeological resource within the Grid Connection Corridor. A summary of these surveys is provided below and the reports are presented in full in **ES Volume 3: Appendix 7-D to 7F [EN010131/APP/3.3]**.

Geophysical Survey

- 2.1.2 The Site was divided into field numbers, with fields numbered 100-150 located within the Grid Connection Corridor.

Fields 100 – 150

- 2.1.3 The survey identified anomalies associated with archaeological features that are located predominantly in the western part of the Grid Connection Corridor. These mainly comprise rectilinear anomalies suggestive of a series of Romano-British enclosures, possibly incorporating multiple phases of activity, located across Fields 131 – 137. In addition, a series of ditches and pits identified towards the south of the Grid Connection Corridor (in Field 146) suggest a Romano-British enclosure site.
- 2.1.4 The fragmentary remains of further ditches, possible enclosures and pits were identified throughout the Grid Connection Corridor. Due to their lack of coherence or isolated nature it is not possible to identify any characteristics that would suggest a specific chronology, and these may range in date from prehistoric to post-medieval.
- 2.1.5 An oval anomaly, and a rectilinear anomaly were identified to the west of the River Trent within Field 125. Additionally, several circular anomalies located in the north-east of the cable corridor, adjacent to the eastern bank of the River Trent in Field 115, were identified and may represent possible ditches, embankments of roundhouses or small round barrows. Whilst these features are topographically expressed in LiDAR data their interpretation is less than certain from the geophysical results alone, as they could equally relate to natural variation in superficial geological deposits close to the river.
- 2.1.6 Indications of earlier agricultural activity were represented by areas of ridge and furrow and former field boundaries throughout the Grid Connection Corridor. Other 19th-century activity such as possible coal extraction pits, demolished buildings at Rectory Farm, and features associated with Marton Pumping Station were also noted. Other anomalies are thought to be natural or modern in origin and consist of land drains, ploughing regimes, services and a former concrete pylon base.

Aerial Photograph and LiDAR Data Assessment

- 2.1.7 A detailed assessment of available aerial photographs and LiDAR data has been undertaken for the Scheme. The assessed aerial photographs range widely in date and include digital and print, colour and black and white, vertical and oblique formats. LiDAR data was also utilised.
- 2.1.8 There is evidence for Iron Age and Roman settlement at several locations within and immediately adjacent to the survey area, predominantly towards the west of the Grid Connection Corridor. A swathe of cropmarks runs along the western extent of the survey area and although the maps show these to be extensive and cohesive, the evidence is pieced together from many different aerial photographs. Some of the cropmarks represent features that were in use in the post-medieval period and others are likely to be of Iron Age or Roman date. These features comprise enclosures, trackways and field systems.
- 2.1.9 Within the floodplain along the River Trent, subtle variations in topography revealed by the LiDAR imagery suggest alluvial deposits may have washed southward from the meander at Littleborough. There is potential for prehistoric and Roman date features to be concealed beneath these alluvial deposits. Notably, cropmark features are almost entirely absent from the floodplain.
- 2.1.10 Evidence of cultivation during the medieval and post-medieval periods in the form of ridge and furrow and plough headlands is widespread east of the River Trent and less so west of the river. The floodplain was probably grazed during these periods, rather than cultivated. The relationship between the ridge and furrow and plough headlands is complex and where these overlap, it suggests a change in the layout of the fields during these periods. Some of the post-medieval field boundaries appear to follow former plough headlands, suggesting that these persisted as boundary markers through the medieval and post-medieval periods.
- 2.1.11 The assessment largely correlates with the findings of the geophysical survey; However, towards the western extent of the Grid Connection Corridor, within Fields 125 - 140, the aerial assessment identified additional features suspected to date to the Iron Age or Roman period that were not identified in full through the geophysical survey.

Geoarchaeological Assessment

- 2.1.12 A total of 15 boreholes were drilled along the route of the Grid Connection Corridor during Ground Investigation (GI) works. The borehole logs were reviewed alongside historic BGS archive boreholes and a deposit model was compiled.
- 2.1.13 The sequence of deposits recorded across the Grid Connection Corridor comprised Mercia Mudstone bedrock, overlain by sands and gravels of the Holme Pierrepont Sand and Gravel Member, with Holocene floodplain alluvium recorded either side of the River Trent within Fields 112 - 124. At three locations within the floodplain of the River Trent, within Fields 115, 119 and 121, a layer of peat which ranged in thickness from 1.7m to 2.9m thick

was recorded overlying the Holme Pierrepont Sand and Gravel. Towards the east of the Grid Connection Corridor, north of Field 106, three BGS archive boreholes recorded Head deposits overlying the bedrock, which in turn were overlain by the modern soil profile.

Trial Trench Evaluation

- 2.1.14 Across the Grid Connection Corridor, a total of 154 trenches were excavated. Archaeological features comprised ditches, gullies, pits, furrows, a single inhumation, a waterhole and a wall. Archaeological deposits of alluvium, deliberate dumping, demolition layers and peat were also recorded, along with natural features and tree-throw holes.
- 2.1.15 Romano-British activity was the dominant period represented across both the Solar and Energy Storage Park and the Grid Connection Corridor. Within Field 102, a series of ditches were identified which correlate with features identified from the aerial photo and LiDAR assessment, thought to be of Iron Age / Romano-British date and interpreted as probably representing field systems associated with the known Roman settlement sites in the vicinity (AEC013; MLI52472). No finds were retrieved from the features.
- 2.1.16 Across Fields 131 and 132, a total of 23 ditches, five gullies, a ring ditch/gully, a pit and a possible waterhole were identified. These features broadly accord with the results of the aerial photo, LiDAR and geophysical surveys and correlate with the HER record (MNT4983). Finds from these features indicate a Romano-British date and the form and orientation of the features indicate at least two field systems or shifts in alignment over time, as well as parallel ditches that probably represent a trackway, and multiple rectangular enclosures.
- 2.1.17 Towards the northern edge of Field 131, a ring ditch / gully was recorded comprising two concentric gullies. No finds were recovered from the features, but their form suggests a later prehistoric / Iron Age date.
- 2.1.18 Within Fields 136 and 137, further elements of the likely Romano-British landscape were identified. This included 29 ditches that relate well to enclosures, trackways and field systems which also broadly accord with the results of the aerial photo, LiDAR and geophysical surveys and correlate with the HER record (MNT4983).
- 2.1.19 Within Field 146, a dense concentration of features was recorded in the north-eastern corner of the field (AEC014), corresponding well with a series of rectilinear enclosures identified from the geophysical survey. Finds from these features comprise animal bone, pottery, and CBM of Romano-British date.
- 2.1.20 Features of uncertain origin were identified, including two oval enclosures in Field 125. Both features accord well with the aerial photograph and LiDAR mapping, although no finds were retrieved during the trial trench evaluation to aid with interpretation and as such it is unclear if these features are archaeological or geological in origin.

Additional Trial Trench Evaluation

- 2.1.21 Following an amendment to the land required for the Grid Connection Corridor, four fields were added to the redline boundary south of Cottam Power Station (Fields 151, 152, 153, 154). Due to land access constraints, additional trial trenching was only undertaken in Field 154.
- 2.1.22 A total of five trenches were excavated within Field 154. A summary of the results is provided below, and the report is presented in full in ES Volume 3, Appendix X7-E: Grid Connection Corridor Additional Archaeological Trial Trenching Evaluation Fieldwork Report [EN010131/APP/3.3].
- 2.1.23 A single feature was identified in Trench 2010. This comprised a circular feature measuring 1.26m long by 1.32m wide, with a depth of 0.3m. The feature was similar in form and content to the natural features observed across the rest of the field, and likely represents a variation in the natural, backfilled through silting. No features of archaeological origin were identified.

2.2 Archaeological and Historical Background

- 2.2.1 The archaeological and historical background has been assessed in **ES Volume 3: Appendix 7-A Cultural Heritage Desk-Based Assessment [EN010131/APP/3.3]** and summarised here. Heritage assets are presented in **ES Volume 3: Appendix 7-B: Gazetteer of Known Heritage Assets [EN010131/APP/3.3]** and shown on **ES Volume 2: Figures 7-1 to 7-2 [EN010131/APP/3.2]**

Prehistoric (970,000 BC–AD 43)

- 2.2.2 The Grid Connection Corridor is crossed by the River Trent, which would have been a major routeway and providing a range of resources during the prehistoric period. Flint implements dating to the Middle Palaeolithic have been found close to the river south-west of Marton and a flint adze dating from the Upper Palaeolithic or Mesolithic was recovered at Torksey, 1.6 km south of the Solar and Energy Storage Park. Mesolithic flint artefacts and a stone pounder were found in a field close to Lea Grange, to the north of the Solar and Energy Storage Park. Around the north-western corner of the area, possible prehistoric cropmarks have been identified, east of the village of Knaith, but it is unclear precisely what period these relate to.
- 2.2.3 Limited remains have been recovered that indicate early prehistoric settlement. However, south of the Grid Connection Corridor, evidence of Late Neolithic–Early Bronze Age activity was identified during archaeological investigations and a Beaker pottery vessel was retrieved near the bottom of a small pit.
- 2.2.4 Iron Age activity is only evidenced in the HER record by individual recorded finds, with no direct evidence of settlement or funerary practices recorded within the area.

Romano-British (AD 43–410)

- 2.2.5 There is rather more evidence for Iron Age/Romano-British activity within the area, indicating several areas of cropmarks indicating a possible settlement 850 m east of Marton. Furthermore, in the wider area, extensive Romano-British remains are recorded, these are summarised below.
- 2.2.6 The Grid Connection Corridor is crossed by Till Bridge Lane which follows the course of a Roman road linking Ermine Street north of Lincoln, via a ford crossing the River Trent at Marton, to Segelocum. The Roman town of Segelocum, located 3 km north of the Solar and Energy Storage Park, is a scheduled monument, and previous archaeological investigations have identified extensive settlement evidence including building foundations, pavements, kilns and ovens, along with multiple small finds. Although the scheduled area lies outside the previously evaluated area, geophysical survey undertaken on behalf of Historic England showed that the town extends beyond the extent of the scheduled boundary.
- 2.2.7 A scheduled Roman fort, south of Littleborough Lane adjacent to the north-east limit of the Grid Connection Corridor was identified from a series of cropmarks. Following this, a study was undertaken in 1997 of the Romano-British landscape in this area. The work identified possible Iron Age and certain Romano-British features, with a roadside settlement and evidence of agricultural and manufacturing activities, as well as recording a significant collection of small finds identified from field walking. Further evidence of Romano-British settlement, agricultural practices, and a military presence in the form of a fort at Gate Burton, lay 2 km north of the north-eastern extent of the Grid Connection Corridor. These sites together contribute to an overall understanding of the significance of the Roman presence in this area. Within the wider landscape, there is also evidence of settlements, agricultural practices, and a military presence in the form of further forts, as well as multiple individual finds dating to the Romano-British period. Sites within the vicinity include a small rural farming settlement of two phases, spanning the 1st to 3rd centuries at Stow, and cropmarks and artefacts of Romano-British date around Marton. Pottery production is also known in the area, with three 3rd to 4th century Roman pottery kilns excavated at Knaith and a 1st to 3rd century complex of between five and seven kilns at Lea Grange Farm.

Early medieval and medieval (AD 410–1500)

- 2.2.8 In the winter of AD 872–73, the Viking Great Army made camp at Torksey. Their camp has been identified to the north of Torksey village, in the parishes of Brampton and Torksey, 400m south of the Grid Connection Corridor. The camp is thought to have supported several thousand individuals, including warriors, craft workers and merchants.
- 2.2.9 There is evidence for the development of the local landscape in the medieval period, including areas of ridge and furrow and trackways. Many of the extant settlements in the area, such as Littleborough, Gate Burton, Marton, Torksey and Rampton, were established during this period. The villages and hamlets of Littleborough, Marton, and Rampton retain their medieval churches, all listed at Grade I, whilst the church at Gate Burton was

demolished and rebuilt in the post-medieval period. In addition, the scheduled medieval moated site at Fleet Plantation lies adjacent to the southern boundary of the Grid Connection Corridor. Finally, there are numerous features of unknown date identified from aerial photographs across the area. Some of these may relate to medieval farming and landscape practices.

Post-medieval and modern (AD 1500–1800)

- 2.2.10 The post-medieval period is characterised by further development of the medieval settlements, potentially in the 18th and 19th centuries. However, those at Gate Burton and Torksey differ, with the majority of the medieval settlements destroyed and manor houses built in the post-medieval period. The scheduled monument and Grade I listed building of Torksey Castle is an early post-medieval house constructed in 1560, now ruinous with only its west façade and part of the rear wall surviving. The parkland associated with Gate Burton Hall (NHLE 1359458) contains the deserted medieval settlement of Gate Burton. This is a good example of population dispersal caused by emparking (the enclosing of land to create parkland) in the 18th century. The Grade II* listed hall was built in 1774–80.
- 2.2.11 Archaeological evidence of post-medieval date is predominantly associated with industrial activity. This includes windmills, quarries, kilns and brickyards, as well as the route of the railway and navigational improvements to the River Trent further to the west of the Solar and Energy Storage Park.
- 2.2.12 Ordnance Survey (OS) maps from 1885 depict the landscape as agricultural land, subdivided by regular fields. Many of the field boundaries have subsequently been removed to create larger fields. To the north of the Solar and Energy Storage Park, the designated landscapes at Gate Burton and Knaith are also clearly defined, though the boundaries of the historic areas have notably shrunk since these maps were produced in the late 19th century.

3. Archaeological Mitigation Measures

3.1 Aims and Objectives

Aims

- 3.1.1 The overall aim of the archaeological mitigation strategies is to mitigate against the impacts of the Scheme on archaeological remains. Where possible, priority has been given to the preservation of archaeological remains, and where avoidance has not been possible, a programme of archaeological excavation and recording will be undertaken.

General Objectives

- 3.1.2 The general objectives comprise:
- To make a record of the archaeological resource that will be impacted as a result of the Scheme, as identified during previous evaluations;
 - To record (where possible) the nature, depth, extent, character and date of archaeological deposits or features encountered in order to successfully fulfil the research aims of the project;
 - To record the condition or state of preservation of any archaeological deposits or features encountered in order to successfully fulfil the research aims of the project;
 - To record and recover an adequate sample of the range, quality and quantity of artefactual and environmental evidence present in order to successfully fulfil the research aims of the project; and
 - To interpret the archaeology of the Site within its local, regional and national archaeological context.
- 3.1.3 The investigations will result in a comprehensive and structured record that takes into account relevant research agendas and research themes, as well as the results of relevant archaeological investigations undertaken adjacent to the Scheme and a report that is commensurate with the significance of the findings including.

3.2 Regional Research Framework

- 3.2.1 Consideration of research themes is key to understanding the potential evidential significance of archaeological remains.

- 3.2.2 The broad principles of a number of existing research agendas will be applicable. Key archaeological research agendas include:

- East Midlands Historic Environment Research Framework: Late Bronze Age and Iron Age (c.1150 cal BC – AD43) Research Agenda; and
- East Midlands Historic Environment Research Framework: Romano-British (AD43 - c. 410) Research Agenda.

- 3.2.3 Specific research objectives identified from the relevant research agendas of particular relevance to each archaeological mitigation site are set out in Section 8.
- 3.2.4 Further research themes and agendas are outlined in the East Midlands Historic Environment Research Framework (EMHERF) Interactive Digital Resource (Ref 9) and will be consulted so that the archaeology, can, if possible, be placed within their local, regional and national context.
- 3.2.5 Provision should be made for updating the East Midlands Historic Environment Research Framework (EMHERF) where the results of a fieldwork project contribute towards agenda topics. This should be done using the interactive digital resource and noted explicitly in the conclusions of the relevant report.

3.3 Mitigation Strategies

- 3.3.1 The design of the Scheme has been developed to mitigate impacts upon heritage assets and the impact of the Scheme upon any assets has been minimised or avoided where possible. Further information is provided in **ES Volume 1, Chapter 7: Cultural Heritage [EN010131/APP/3.1]**, the **Outline Design Principles [EN010131/APP/2.3]**, and **Framework Construction Environmental Management Plan (CEMP) [EN010131/APP/7.3]**. Priority has been given to the preservation of archaeological remains within the DCO Site boundary, and where avoidance has not been possible, a programme of archaeological recording will be undertaken.
- 3.3.2 Within the Grid Connection Corridor, the archaeological mitigation strategies will comprise:
- Preservation in-situ;
 - Strip, map and record within areas of construction disturbance;
 - Archaeological watching brief;
 - Geoarchaeological assessment;
 - Reinstatement of earthworks following construction;
 - 20m buffer zone from Scheduled Monument Fleet Plantation moated site [NHLE 1008594].
- 3.3.3 A schedule of the archaeological mitigation strategies and the sites they apply to is outlined in Table 1. The archaeological mitigation sites are set out in detail in Section 8 and shown on Figures 1-5.

Table 1 Schedule of Archaeological Mitigation Strategies

Field Number	ES Gazetteer Reference	Description	Mitigation Site Reference	Mitigation Type	Area (ha)
Field 102	MLI52472 / AEC013	Cropmarks indicating Romano-British activity	Site 7	Strip, Map and Record within areas of construction disturbance	5.5ha

Field Number	ES Gazetteer Reference	Description	Mitigation Site Reference	Mitigation Type	Area (ha)
Field 103 / 104	N/A	Romano-British settlement site	Site 8	Strip, Map and Record within areas of construction disturbance	0.7ha
Field 106 / 107	MLI52489	Roman cropmarks, Marton	Site 9	Strip, Map and Record within areas of construction disturbance	2.7ha
Field 110 / 111	MLI52488	Probable post-medieval flood defences, Marton	Site 10	Reinstatement of earthworks following construction	0.6ha
Field 112 / 115 / 115	N/A	Area of previously unevaluated land	Site 11	Strip, Map and Record within areas of construction disturbance	8.4ha
Access Route	MLI125067	The Winter Camp of the Viking Great Army at Torksey	Site 12	Strip, Map and Record within areas of construction disturbance	3ha
Field 125 / 126 / 127 / 128 / 130 / 131	MNT15983 / MNT4983	Possible Iron Age / Roman settlement, Cottam; Cropmarks at South Leverton	Site 13	Strip, Map and Record within areas of construction disturbance	16ha
Field 131 / 132 / 136	MNT4983	Cropmarks at South Leverton	Site 14	Preservation in-situ	7.2ha
Field 137 / 138	MNT4983	Cropmarks at South Leverton	Site 15	Strip, Map and Record within areas of construction disturbance	7ha
Field 146	AEC014	Romano-British settlement site	Site 16	Strip, Map and Record within areas of construction disturbance	1.5ha
Field 154	NHLE 1008594	Scheduled Monument Fleet plantation moated site	N/A	20m buffer zone	N/A
Grid Connection Corridor	N/A	The full route of the Grid Connection Corridor, outside of the identified mitigation sites, will be subject to an archaeological watching brief	N/A	Archaeological Watching Brief	N/A
Grid Connection Corridor	N/A	Deposits of palaeoenvironmental potential identified during the defined mitigation works will be subject to geoarchaeological assessment	N/A	Geoarchaeological Assessment	N/A

Field Number	ES Gazetteer Reference	Description	Mitigation Site Reference	Mitigation Type	Area (ha)
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3.3.4 All archaeological works will be carried out in accordance with this AMS, the approved SSWSI and any further specifications approved by the Archaeological Advisor to the relevant Local Planning Authority. The works will be undertaken in accordance with the guidance provided by ClfA, including the *Code of Conduct* (Ref 3), the *Standard and Guidance for Archaeological Excavation* (Ref 4) and the *Standard and Guidance for an archaeological watching brief* (Ref 5); Historic England guidance including *Geoarchaeology: Using Earth Sciences to Understand the Archaeological Record* (Ref 6); the *Lincolnshire Archaeological Handbook* (Ref 8) and other current and relevant good practice and standards and guidance.

Preservation In-Situ

3.3.5 One area within the Site has been identified for preservation in-situ (Site 14).

3.3.6 The use of Horizontal Directional Drilling, as opposed to open cut trenching, has been proposed in this area and will be designed to reach depths below the buried archaeological remains.

Strip, Map and Record

3.3.7 Eight areas within the Site have been identified for strip, map and record (Sites 7, 8, 9, 11, 12, 13, 15, and 16). The archaeological excavation and recording will be undertaken in advance of the preliminary and main works construction stages. The strip, map and record will be undertaken within the defined mitigation sites within areas of construction disturbance only.

3.3.8 The areas for strip, map and record will be stripped with mechanical plant to an archaeological specification. This means the stripping of topsoil, subsoil or other overburden to the correct archaeological horizon under the supervision of a qualified archaeologist, using mechanical plant with a toothless bucket. Plant will not be permitted to track over stripped areas until archaeological investigations at that location are complete. The Archaeological Contractor may deploy temporary fencing to demarcate the excavation area to ensure no plant inadvertently traverses the area during the works.

Archaeological Watching Brief

3.3.9 The full length of the Grid Connection Corridor, outside of the defined archaeological mitigation sites, will be subject to an archaeological watching brief where intrusive groundworks and topsoil stripping are required, due to the residual low potential for archaeological remains to survive outside of the defined mitigation areas.

3.3.10 The following activities within the Grid Connection Corridor will be subject to a watching brief:

- The cable route;

- Access routes where these require intrusive groundworks;
 - Construction lay-down areas;
 - Construction compounds; and
 - HDD starter and end pits.
- 3.3.11 Should significant archaeological remains be identified within a watching brief area, targeted strip, map and sample will be implemented within areas of construction disturbance, in consultation with the Archaeological Advisor to the relevant Local Planning Authority.
- 3.3.12 All topsoil, subsoil or other overburden stripping across these areas will be undertaken using mechanical plant fitted with a toothless bucket to the correct archaeological horizon, under the supervision of a qualified archaeologist.
- 3.3.13 The principal contractor, or any other groundworks contractors operating on site will allow sufficient time for any archaeological features to be excavated and recorded to meet the requirements of the SSWSI.

Geoarchaeological Assessment

- 3.3.14 Within the defined mitigation areas and during the archaeological watching brief, the potential for deposits of palaeoenvironmental interest to be encountered should be considered, as identified by the geoarchaeological deposit model undertaken for the Scheme.
- 3.3.15 Prior to the start of works, the Archaeological Contractor's geoarchaeological specialist will determine an appropriate sampling strategy, and where appropriate, the advice of the Historic England Regional Science Advisor will be sought. The scope of this sampling strategy will be included in the SSWSIs.

Re-instatement of Earthworks

- 3.3.16 One area of earthworks (Site 10) has been identified within the Site that will be subject to re-instatement following construction. This asset is recorded on the Historic Environment Record (HER) and forms part of the post-medieval to modern flood defences in the vicinity of the River Trent. Should any earthworks survive within the Site and be subject to intrusive groundworks, a SSWSI will be set out detailing the methodology for re-instatement of the earthworks.

20m Buffer Zone for Scheduled Monument

- 3.3.17 Due to the close proximity of the scheduled monument to the southern boundary of the extended Order limits, a buffer zone of 20m from the northern boundary of the Scheduled Monument Fleet Plantation moated site [NHLE 1008594] has been implemented in order to avoid physical impacts to the asset during the construction phase. No construction activities including plant/vehicle movements or excavations will be undertaken within this buffer zone.

3.4 Reporting and Publication

Fieldwork Report

3.4.1 If the results of the archaeological mitigation works are decided by the ACoW and the Archaeological Advisor to the relevant Local Planning Authority to not be significant enough to warrant detailed analysis and publication, then a fieldwork report will be produced. This report will include the following as a minimum:

- A Quality Assurance sheet detailing as a minimum title, author, version, date, checked by, approved by.
- OASIS Report Form.
- A non-technical summary.
- Site location drawing.
- Archaeological and historical background.
- Methodology.
- Aims and objectives.
- Results (to include full description, assessment of condition, quality and significance of the remains).
- Statement of potential with recommendations.
- A statement of the significance of the results in their local, regional and national context cross referenced to relevant research frameworks.
- Current and proposed arrangements for archive storage and curation (including recipient museum details).
- References.
- General and detailed plans showing the location of the survey accurately positioned on an OS base map (to a standard scale).
- Detailed plans and sections illustrating archaeological features (to a standard scale).
- Detailed drawings at appropriate scale(s) and format to sufficiently illustrate the results of the topographic survey.
- Colour photographic plates illustrating the site setting, work in progress and discovered archaeological remains.
- A complete matrix for each archaeological area, if appropriate.
- A cross-referenced index of the project archive.

3.4.2 The report will also aim to draw on the results of relevant previous archaeological investigations undertaken within and adjacent to the Scheme, to produce a coherent and comprehensive record of the archaeological resource.

3.4.3 A digital .pdf copy (complete with illustrations and plates) of the completed draft report will be submitted to the ACoW and the Archaeological Advisor to

the relevant Local Planning Authority for comment. In finalising the report, the comments of the ACoW and the Archaeological Advisor to the relevant Local Planning Authority will be taken into account.

- 3.4.4 A digital record of the final report shall be submitted to the ACoW and the Archaeological Advisor to the relevant Local Planning Authority, containing image files in JPEG or TIFF format, digital text files in Microsoft Word format, and illustrations in AutoCAD format or ArcGIS shapefile format. A fully collated version of the report shall be included in .pdf format.

Post-excavation Assessment Report and Publication

- 3.4.5 If the results of an archaeological fieldwork are of sufficient significance to warrant publication, the report may take the form of a 'Post-excavation Assessment Report' and will include an Updated Project Design (UPD) in accordance with the guidance and standards set out in Historic England's Management of Research Projects in the Historic Environment (Ref 10).
- 3.4.6 The report will also aim to draw on the results of relevant previous archaeological investigations undertaken within and adjacent to the Scheme, to produce a coherent and comprehensive record of the archaeological resource.
- 3.4.7 The Post-excavation Assessment Report and UPD will, as a minimum, present:
- A summary of the project background, original aims and objectives.
 - An integrated description of the results by period for each area of archaeological mitigation.
 - A quantification of each artefact and ecofact type recovered during the mitigation works.
 - An assessment of how the results of the archaeological mitigation address the original and any new research objectives.
 - A proposal for a revised set of research objectives.
 - Recommendations for further analysis and publication.
- 3.4.8 If detailed analysis and publication are recommended by UPD, a stage of post-excavation analysis and publication will be required. The post-excavation analysis stage of the project will comprise the detailed quantification, analysis and reporting of the recorded archaeological remains (contextual records), artefacts and ecofacts recovered during the programme of archaeological mitigation. The post-excavation analysis will be undertaken by the Archaeological Contractor supported by external specialists as appropriate.

Publication

- 3.4.9 If significant results are obtained and it is likely that further stages of archaeological work will be required (i.e. additional watching brief areas); or, if investigation of a single (or several closely related sites) is undertaken over

several phases of archaeological work; publication shall be deferred until such time as the archaeological works are substantially complete.

- 3.4.10 The format of any publication shall be commensurate with the significance of the archaeological results and will be agreed with the ACoW and consulted on with the Archaeological Advisor to the relevant Local Planning Authority. Online publication formats as well as traditional publication formats will be considered.
- 3.4.11 If the results merit it, a popular publication report and illustrated document explaining the results in layman's terms should be produced. The popular report should inform the non-expert audience about the discoveries and their significance in an accessible manner. Popular booklets may be produced both for children and for adult audiences.
- 3.4.12 Any identified publication should also aim to draw on the results of relevant previous archaeological investigations undertaken within and adjacent to the Scheme, to present a coherent and comprehensive record of the archaeological resource within its wider landscape view.

OASIS

- 3.4.13 At the start of the site work (immediately before fieldwork commences) an OASIS online record will be initiated, and key fields will be completed on Details, Location and Creators forms.
- 3.4.14 The final OASIS record shall be included in the fieldwork report and/or post-excavation assessment report.

3.5 Archive and Data Management

- 3.5.1 Prior to the start of works, the Archaeological Contractor will contact the recipient museum (currently expected to be The Collection Museum, Lincoln) to determine the requirements for the preparation and deposition of the physical archive and finds and agree any accession numbers.
- 3.5.2 The archive will be prepared in accordance with the ClfA guidelines, including the *Standard and Guidance for the creation, compilation, transfer and deposition of archaeological archives* (Ref 7), and *The Collections Archaeological Archives Deposition Guidelines* which forms Chapter 17 of the *Lincolnshire Archaeological Handbook* (Ref 8).
- 3.5.3 The Archaeological Contractor will compile a Data Management Plan in line with ClfA guidelines (Ref 7) and include it in their SSWSI.
- 3.5.4 The digital archive must be deposited with a Trusted Digital Repository, such as the Archaeological Data Service) and it is anticipated that the repository will have in-house Data Management Plans to allow for the long-term preservation of the digital archive data, including plans for data back-up and migration to new digital formats as they emerge.

4. Monitoring and Approvals

4.1 SSWSIs

- 4.1.1 The Archaeological Contractor will be responsible for the production of SSWSIs for each stage of archaeological investigation. The SSWSIs will be drafted in accordance with the principles and methods set out in this AMS. The Archaeological Contractor will be responsible for the delivery of the archaeological mitigation programme in accordance with the SSWSIs, and this responsibility will include all on-site and off-site archaeological works and recording.
- 4.1.2 The SSWSIs will be prepared in consultation with the ACoW and approved by the Archaeological Advisor to the relevant Local Planning Authority prior to the start of works.
- 4.1.3 The SSWSI should include the following sections as a minimum:
- A statement on the technical, research and ethical competences of the project team, including relevant professional accreditation;
 - Site location (including map) and descriptions;
 - Context of the project;
 - Geological and topographical background;
 - Archaeological and historical background;
 - General and specific research aims of the project, with reference to Regional Research Frameworks;
 - Methodology;
 - Collection and disposal strategy for artefacts, ecofacts, and all paper, graphic and digital materials (including Selection Strategy);
 - Arrangements for immediate conservation of artefacts;
 - Details of backfilling;
 - Post-fieldwork assessment and analysis of project data;
 - Report preparation (including details of the section headings);
 - Publication and dissemination proposals, as required;
 - Copyright;
 - Details of finds storage;
 - Programme and staffing;
 - Health and Safety considerations;
 - Environmental protection considerations; and
 - Monitoring procedures.

4.2 Monitoring

- 4.2.1 The ACoW will liaise with the Archaeological Contractor to monitor progress and compliance with the requirements of this AMS and approved SSWSIs. This will include (but not be limited to):
- Monitoring of all aspects of fieldwork.
 - Monitoring of the installation and removal of protective measures.
 - Co-ordination of access and monitoring arrangements with the relevant Archaeological Advisor to the relevant Local Planning Authority.
 - Oversight of engagement between the Archaeological Contractor's specialists and the relevant heritage stakeholders, to ensure the timely provision of on-site advice to the fieldwork team (if applicable), and off-site advice during the post-excavation phase.

4.3 Stakeholders and Statutory Roles

- 4.3.1 Implementation of the AMS and SSWSIs will also be monitored by the Archaeological Advisor to the relevant Local Planning Authority.
- 4.3.2 Site monitoring meetings will be held as necessary throughout the archaeological programme to allow implementation of the works to be monitored to ensure adherence to the approved SSWSIs, effective decision making where required and to support timely 'sign-off' of archaeological completion.

4.4 Site Meetings

- 4.4.1 It is anticipated that monitoring meetings will be held weekly during the archaeological works. Attendees will normally include, but not be limited to the following, as required:
- ACoW;
 - Archaeological Contractor;
 - Archaeological Advisor to the relevant Local Planning Authority.

4.5 Progress reports

- 4.5.1 The Archaeological Contractor will prepare weekly progress reports for the duration of the archaeological works. The reports will be issued to the ACoW who will distribute them to the Applicant and the Archaeological Advisor to the relevant Local Planning Authority. The progress reports will include as a minimum:
- General progress and summary of fieldwork results;
 - Programme and resources look-ahead;
 - Site-specific issues (access/ constraints etc.); and

- SHE issues.

4.6 Approvals and Sign-Off of Archaeological Mitigation Sites

- 4.6.1 Site works that have been completed (confirmed as completed during a site meeting and agreed between the ACoW and the Archaeological Advisor to the relevant Local Planning Authority) will be subject to a sign-off procedure.
- 4.6.2 The Archaeological Contractor will submit a completion statement to the ACoW who will distribute it to the Applicant. The ACoW will also submit the completion statement to the Archaeological Advisor to the relevant Local Planning Authority as confirmation that the relevant works have been completed in compliance with the AMS and relevant SSWSI. The Archaeological Advisor to the relevant Local Planning Authority will have final approval and sign off of all archaeological mitigation sites.

5. Procedures for Unexpected Archaeological Discoveries during Construction

5.1 General Approach

- 5.1.1 In the event of unexpected archaeological discoveries being made during construction activities where no archaeological mitigation works are being undertaken, a site-specific Written Scheme of Investigation (WSI) may be required to set out the methodology for the detailed recording of the archaeological remains, and to allow adequate time within the construction programme. Under these circumstances, the remains will be protected from damage and the Applicant will liaise with the Archaeological Contractor and the Archaeological Advisor to the relevant Local Planning Authority in order to determine an appropriate mitigation strategy and to estimate the additional time and resources needed to complete the archaeological investigation should the remains require investigation.
- 5.1.2 Should human remains be discovered during construction activities where no archaeological mitigation works are being undertaken, the remains will be covered and protected and left in-situ in the first instance, in accordance with current best practice. Should human remains be discovered, all works within the vicinity of the relevant area of the site will stop until the remains have been removed. The Applicant will notify the H.M. Coroner and the Archaeological Advisor relevant to the Local Planning Authority with details of the remains immediately. The Applicant will liaise with the ACoW in order to determine an appropriate mitigation strategy and to estimate the additional time and resources needed should removal of human remains be required. The removal of human remains will take place in accordance with Article 17 of the DCO.

6. Public Outreach and Community Engagement

6.1 General Approach

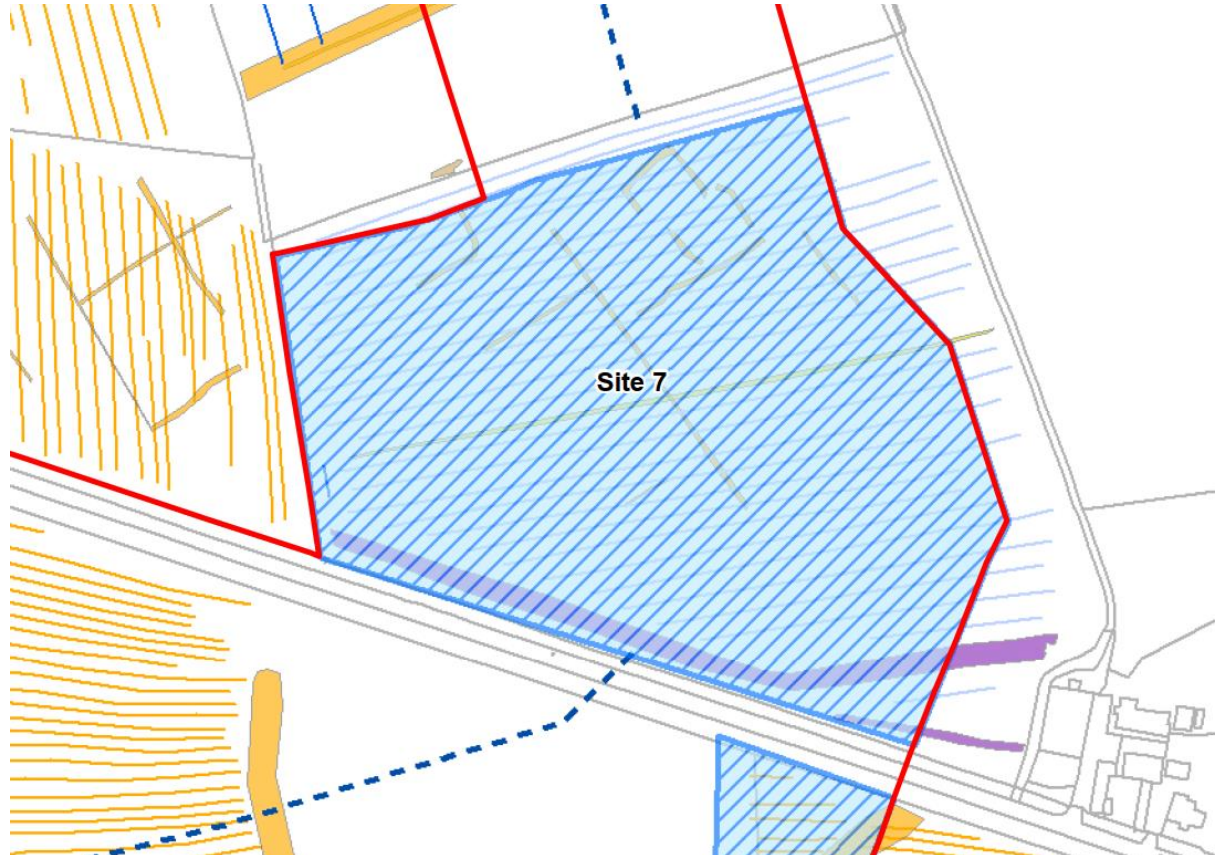
- 6.1.1 A programme of public outreach and community engagement will be developed prior to the start of works in liaison with the Archaeological Advisor to the relevant Local Authority and will be set out in the Archaeological Contractors SSWSIs.
- 6.1.2 The aim of public outreach and community engagement is to collaboratively interpret and communicate the results of the archaeological mitigation works to a wide audience, including local communities directly impacted by the Scheme (that is, people living and working with the locality of the Scheme), and wider regional audiences where appropriate.
- 6.1.3 The objective of the public outreach and community engagement will be to provide information to a wide variety of audiences, ranging from those with a strong interest in archaeology and heritage, to those with no specific involvement.
- 6.1.4 The programme of public outreach and community engagement may incorporate site-based activities, initiatives undertaken during ongoing excavations, and activities undertaken throughout the post-excavation phase. These will be fully set out in the Archaeological Contractors SSWSIs but could include:
- Live, local, site-based activities such as:
 - guided site tours and guided walks (these will be subject to health, safety and access considerations).
 - Live, local, hands-on participative and learning events such as:
 - Work experience or 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).
 - pop-up exhibitions and artefact handling sessions.
 - Education and learning such as:
 - Providing learning resources for classroom-based archaeology sessions aimed at involving children and teachers in their local archaeology and heritage.
 - Public talks and lectures, ranging from local talks to community organisations, local archaeology and history societies, to talks at regional conferences.
- 6.1.5 The Archaeological Contractor should also aim to collaborate with other relevant schemes during any public outreach and community engagement

activities, to present a coherent and comprehensive record of the archaeological resource within its wider landscape view.

7. Variations to Scheme Design

- 7.1.1 Any variations to Scheme design which have the potential to result in additional impacts to archaeological remains not previously identified and/or would change previously identified impacts, will be subject to review. The review will identify any changes to previously identified impacts and will identify the requirement for an appropriate mitigation response.
- 7.1.2 Any variations to the Scheme design will be submitted to the Archaeological Advisor to the relevant Local Planning Authority for review. Appropriate mitigation responses will be identified and agreed in consultation with the Archaeology Advisor to the relevant Local Planning Authority and will be set out in the updated Archaeological Mitigation Strategy (AMS).
- 7.1.3 The AMS will be updated and submitted to the Archaeological Advisor to the relevant Local Planning Authority for approval.

8. Archaeological Mitigation Sites

Site 7	
Designation:	Non-designated
Field Number:	Field 102
ES Gazetteer Reference:	MLI52472/AEC013
Size (ha)	5.5ha
	
Description	
<p>Cropmarks of probable Romano-British activity were recorded to the east of Marton during an aerial photograph survey in 1977 and the HER record extends partially into Field 102. The aerial photo and LiDAR data assessment undertaken for the Scheme identified additional linear features in Field 102 which likely form part of the cropmarks previously recorded. The trial trench evaluation undertaken for the Scheme identified a series of ditches which broadly correlated with the aerial photograph features. No finds were retrieved from the features; however, based on their form and similarity to other features in the vicinity, the features probably form part of a Romano-British field system.</p>	
Scheme impact	
<p>The site would be permanently affected by the installation of cabling, starter and end pits for HDD, as well as temporary construction compounds, temporary construction lay-down areas and access tracks.</p> <p>The construction of the Scheme would have a moderate adverse significance of effect on this site.</p>	

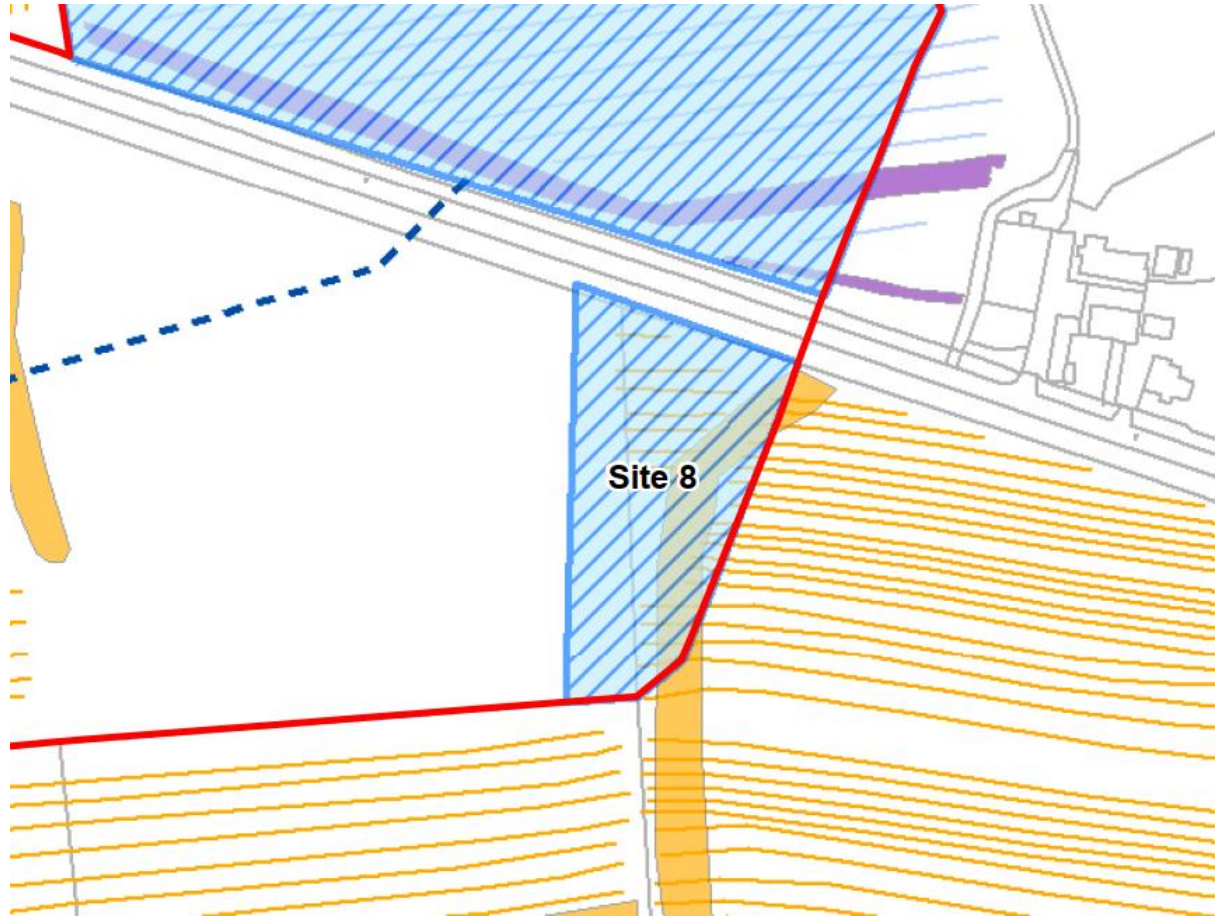
Mitigation

Strip, Map and Record

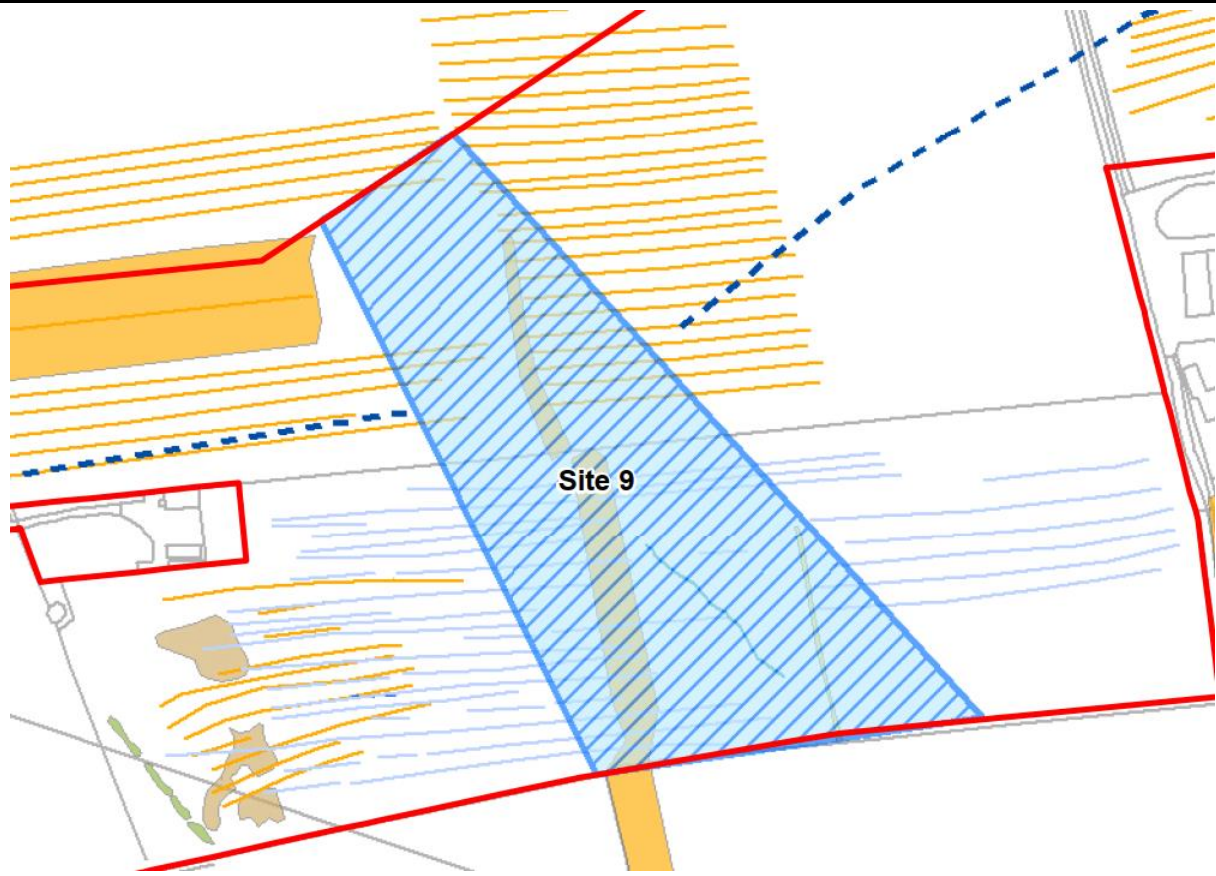
Potential Research Objectives

Romano-British

- 5H: Investigate landscape context of rural settlements
- 5I: Support research and publication of landscape synthesis


Site 8	
Designation:	Non-designated
Field Number:	Field 103 / 104
Reference IDs: (HER and AECOM ref's)	N/A
Size (ha)	0.7ha
	
Description	
<p>During trial trench evaluation for a different scheme adjacent to the redline boundary of this Scheme, a Romano-British settlement site was identified in Field 103, outside of the redline boundary of this Scheme. There is the potential for this settlement activity to extend into the Grid Connection Corridor towards the west of Field 104 and the eastern corner of Field 103.</p>	
Scheme impact	
<p>The site would be permanently affected by the installation of cabling, starter and end pits for HDD, as well as temporary construction compounds, temporary construction lay-down areas and access tracks.</p>	
Mitigation	
<p>Strip, Map and Record</p>	
Potential Research Objectives	
<p>Romano-British</p> <ul style="list-style-type: none"> ▪ 5H: Investigate landscape context of rural settlements 	

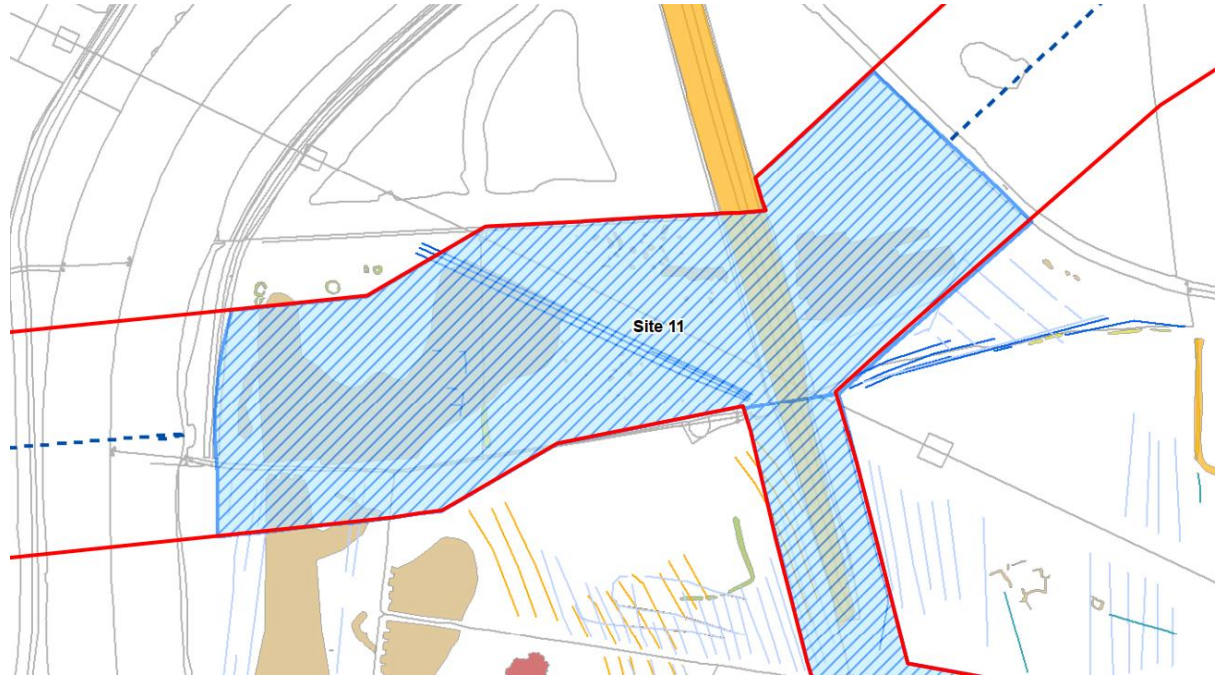
- 5l: Support research and publication of landscape synthesis

Site 9	
Designation:	Non-designated
Field Number:	Field 106 / 107
Reference IDs: (HER and AECOM ref's)	MLI52489
Size (ha)	2.7ha
	
Description	
<p>Cropmarks of a probable Roman trackway and field boundaries were identified to the south-east of Marton (extending across Fields 106 and 107) during an aerial photograph survey as part of the National Mapping Programme undertaken in 1992-1996. During the trial trench evaluation undertaken for the Scheme, no features were identified that correlate with the HER record; however, due to land access constraints, the full extent of the cropmark area was not evaluated, therefore the survival of archaeological features in this area cannot be ruled out.</p>	
Scheme impact	
<p>The site would be permanently affected by the installation of cabling, starter and end pits for HDD, as well as temporary construction compounds, temporary construction lay-down areas and access tracks.</p> <p>The construction of the Scheme would have a moderate adverse significance of effect on this site.</p>	
Mitigation	
Strip, Map and Record	
Potential Research Objectives	

Romano-British

- 5H: Investigate landscape context of rural settlements
- 5I: Support research and publication of landscape synthesis

Site 10	
Designation:	Non-designated
Field Number:	Field 110 / 111
Reference IDs: (HER and AECOM ref's)	MLI52488
Size (ha)	0.6ha
	
Description	
Post-medieval flood defence earthworks are recorded at Marton (MLI52488), within Fields 110 and 111 of the Grid Connection Corridor.	
Scheme impact	
The site would be permanently affected by the installation of cabling, starter and end pits for HDD, as well as temporary construction compounds, temporary construction lay-down areas and access tracks.	
Mitigation	
Earthwork Re-instatement	
Potential Research Objectives	
N/A	

Site 11	
Designation:	Non-designated
Field Number:	Field 112 / 115 / 116
Reference IDs: (HER and AECOM ref's)	N/A
Size (ha)	8.4ha
	
Description	
<p>No trenches were excavated in Fields 112, 115 and 116 during the trial trench evaluation undertaken for the Scheme as a result of land access constraints. The geophysical survey undertaken for the Scheme identified a cluster of circular anomalies towards the north of Field 115 which may be archaeological or geological in nature. In addition, a fragmented L-shaped anomaly was identified towards the east of Field 115 which may represent an enclosure. Based on their form and the known archaeology in the wider landscape, these features may be of Iron Age or Roman date. In addition, the HER record for the Torksey Winter Viking Camp is located approximately 150m south-east of these fields and there is the potential for features and finds associated with the camp to be located within this site.</p>	
Scheme impact	
<p>The site would be permanently affected by the installation of cabling, starter and end pits for HDD, as well as temporary construction compounds, temporary construction lay-down areas and access tracks.</p>	
Mitigation	
Strip, Map and Record	
Potential Research Objectives	
<p>Iron Age</p> <ul style="list-style-type: none"> ▪ 4C: Characterise the LBA-EIA settlement resource and investigate intra-regional variability 	


- 4G: Study the production, distribution and use of artefacts

Romano-British

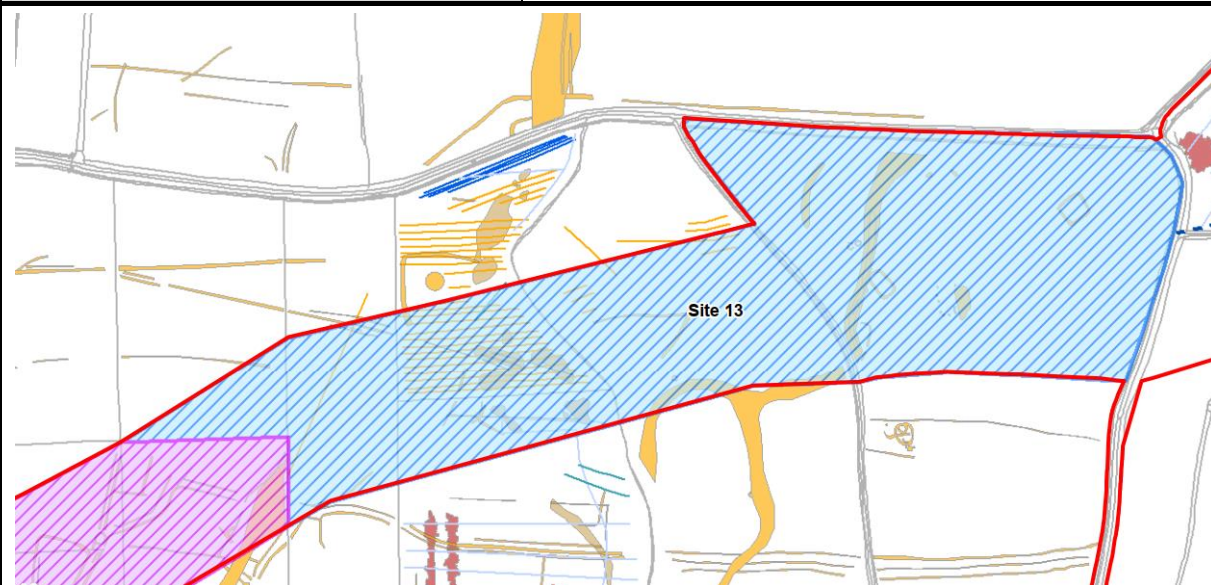
- 5H: Investigate landscape context of rural settlements
- 5I: Support research and publication of landscape synthesis

Early Medieval

- 6A: Elucidate the chronology and demography of Roman to Anglo-Saxon transition period
- 6C: Review the evidence for developing settlement hierarchies
- 6F: Identify cultural boundaries in the Early Medieval period

Site 12	
Designation:	Non-designated
Field Number:	Access Route
Reference IDs: (HER and AECOM ref's)	MLI125067
Size (ha)	3ha
	
Description	
<p>The location and remains of the Viking Great Army Camp are recorded at Torksey (MLI125067) and extend partially into the Grid Connection Corridor towards the south-east, within the proposed access track. The Winter Camp consists of substantial areas of temporary settlement, evidenced by archaeological features and early medieval metal working, along with a large number of artefacts.</p>	
Scheme impact	
<p>The site would be permanently affected by the installation of access tracks.</p>	
Mitigation	
<p>Strip, Map and Record</p>	
Potential Research Objectives	
<p>Early Medieval</p> <ul style="list-style-type: none"> ▪ 6A: Elucidate the chronology and demography of Roman to Anglo-Saxon transition period ▪ 6C: Review the evidence for developing settlement hierarchies ▪ 6F: Identify cultural boundaries in the Early Medieval period 	

Site 13	
Designation:	Non-designated
Field Number:	Field 125 / 126 / 127 / 138 / 130 / 131
Reference IDs: (HER and AECOM ref's)	MNT15983 / MNT4983
Size (ha)	16ha



Description

Within Fields 125 and 126, a large curvilinear enclosure of possible Iron Age or Roman date has been identified from an aerial photograph survey undertaken as part of the National Mapping Programme. Three small circular enclosures with an average diameter of 8m were recorded within the enclosure, and a linear feature approaching the larger enclosure from the east may represent a trackway. The trial trench evaluation undertaken for the Scheme identified two oval enclosures in Field 126; no finds were retrieved from these features and as such it is unclear if these features are archaeological or geological in nature. No other features were identified.

Within Fields 130, 131, 132, 136 and 138 a large area of undated cropmarks has been identified from aerial photographs. Analysis of the available images suggests a group of enclosures, trackways and field systems likely to be of Iron Age or Roman date. The features within the cropmark complex mostly represent rectilinear enclosures with a coaxial field system, with associated trackways and boundaries. A trackway towards the northern end of the complex runs north to south-west and is flanked by enclosures on either side. The evaluation surveys undertaken for the Scheme have confirmed and enhanced understanding of the features identified in the HER, with finds recovered during the trial trench evaluation confirming a largely Romano-British date. A ring ditch / gully was identified in Field 131 comprising two concentric gullies. No finds were recovered from the features, but their form suggests a later prehistoric / Iron Age date.

Scheme impact

The site would be permanently affected by the installation of cabling, starter and end pits for HDD, as well as temporary construction compounds, temporary construction lay-down areas and access tracks.

Mitigation

Strip, Map and Record

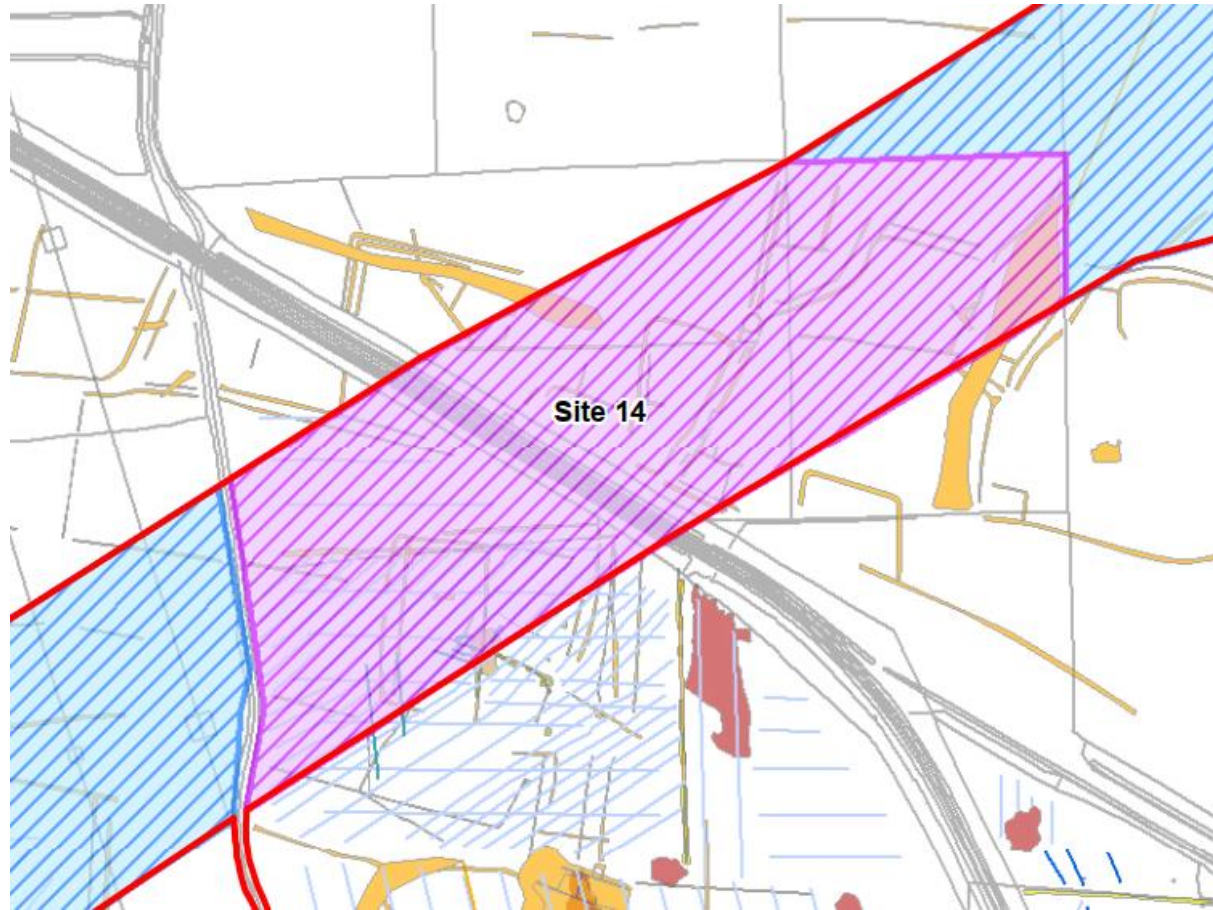
Potential Research Objectives

Iron Age

- 4C: Characterise the LBA-EIA settlement resource and investigate intra-regional variability
- 4G: Study the production, distribution and use of artefacts

Romano-British

- 5H: Investigate landscape context of rural settlements
- 5I: Support research and publication of landscape synthesis

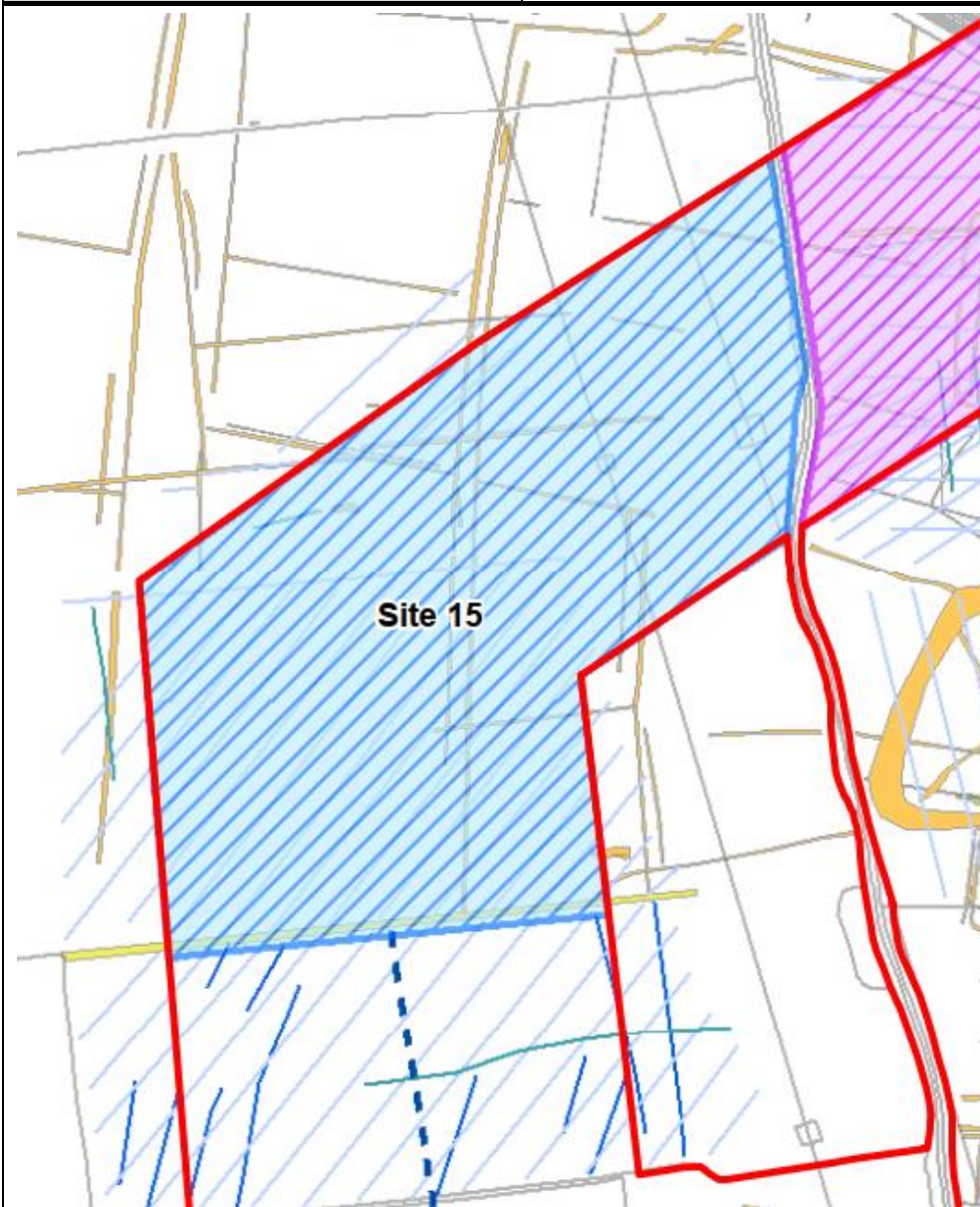
Site 14	
Designation:	Non-designated
Field Number:	Field 131 / 132 / 136
Reference IDs: (HER and AECOM ref's)	MNT4983
Size (ha)	7.2ha
	
Description	
<p>Within Fields 131, 132 and 136, a large area of undated cropmarks has been identified from aerial photographs. Analysis of the available images suggests a group of enclosures, trackways and field systems likely to be of Iron Age or Roman date. The features within the cropmark complex mostly represent rectilinear enclosures with a coaxial field system, with associated trackways and boundaries. A trackway towards the northern end of the complex runs north to south-west and is flanked by enclosures on either side. The evaluation surveys undertaken for the Scheme have confirmed and enhanced understanding of the features identified in the HER, with finds recovered during the trial trench evaluation confirming a largely Romano-British date. A ring ditch / gully was identified in Field 131 comprising two concentric gullies. No finds were recovered from the features, but their form suggests a later prehistoric / Iron Age date.</p>	
Scheme impact	
<p>Embedded mitigation is provided in the form of Horizontal Directional Drilling below the depth of archaeological remains, which would not result in any physical impacts to parts of this asset located within these fields.</p>	
Mitigation	

Preservation in-situ

Potential Research Objectives

N/A

Site 15	
Designation:	Non-designated
Field Number:	Field 137 / 138
Reference IDs: (HER and AECOM ref's)	MNT4983
Size (ha)	7ha



Description

Within Fields 137 and 138, a large area of undated cropmarks has been identified from aerial photographs. Analysis of the available images suggests a group of enclosures, trackways and field systems likely to be of Iron Age or Roman date. The features within the cropmark complex mostly represent rectilinear enclosures with a coaxial field system, with associated trackways and boundaries. A trackway towards the northern end of the complex runs north to south-west and is flanked by enclosures on either side. The evaluation surveys undertaken for the Scheme have confirmed and enhanced understanding of the features identified in the HER, with finds recovered during the trial trench evaluation confirming a largely Romano-British date.

Scheme impact

The site would be permanently affected by the installation of cabling, starter and end pits for HDD, as well as temporary construction compounds, temporary construction lay-down areas and access tracks.

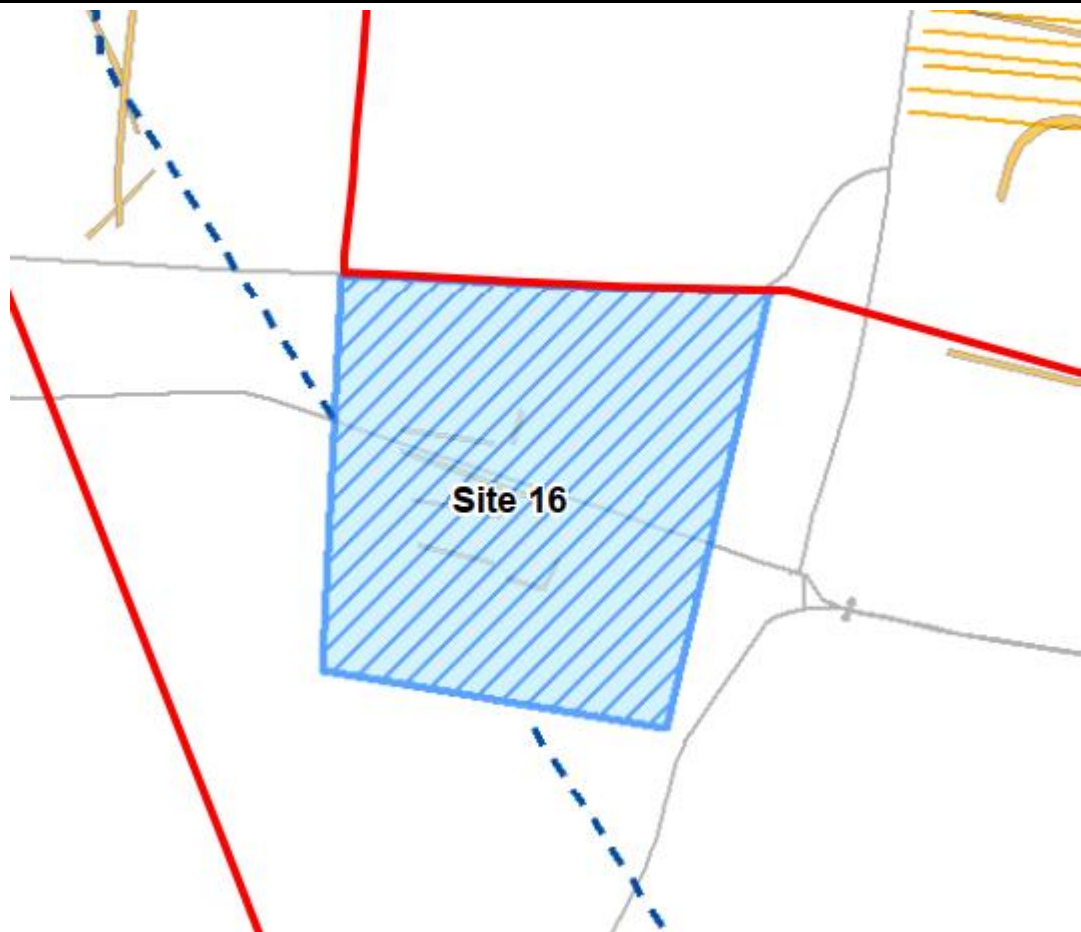
Mitigation

Strip, Map and Record

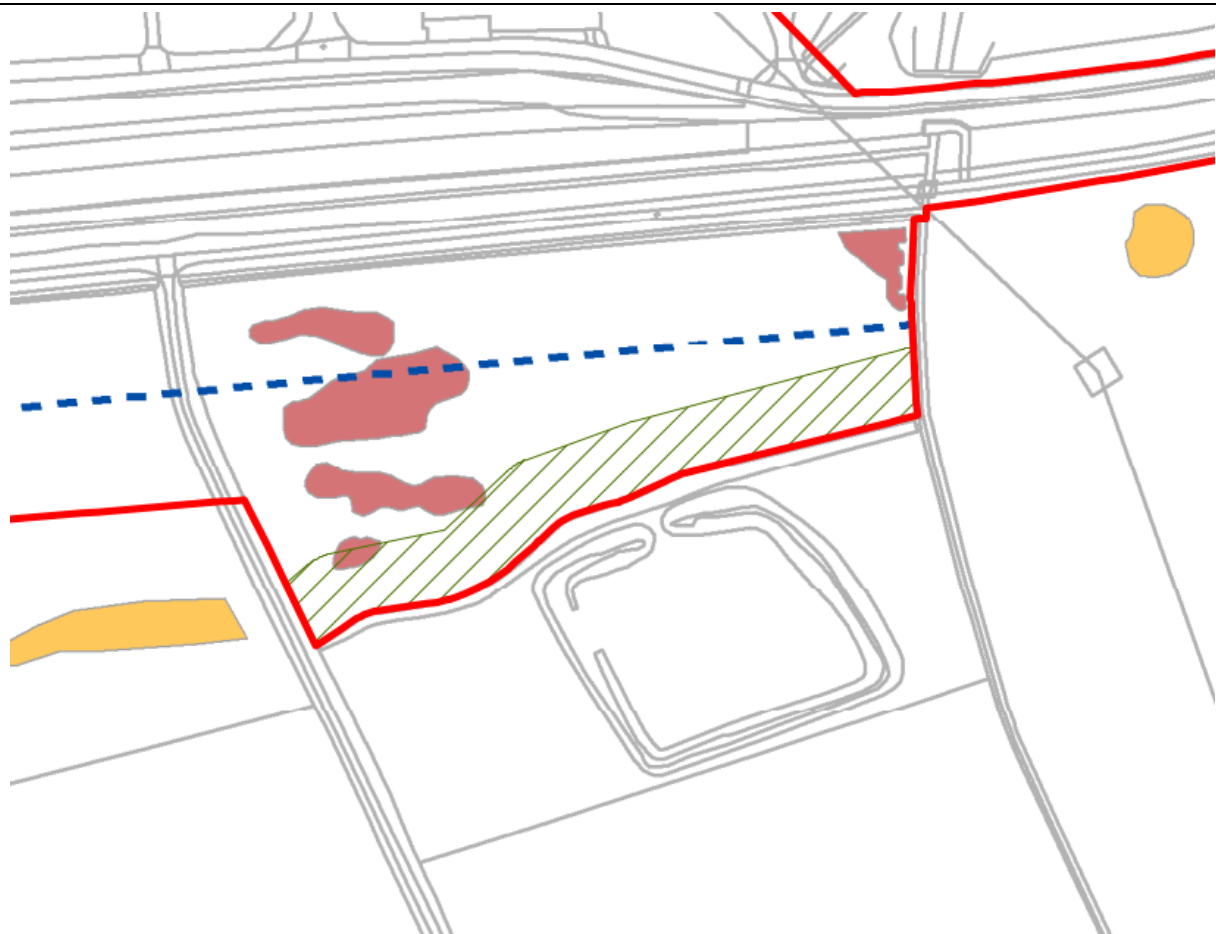
Potential Research Objectives

Romano-British

- 5H: Investigate landscape context of rural settlements
- 5I: Support research and publication of landscape synthesis

Site 16	
Designation:	Non-designated
Field Number:	Field 146
Reference IDs: (HER and AECOM ref's)	AEC014
Size (ha)	1.5ha
	
Description	
<p>Within Field 146, a dense concentration of features was recorded in the north-eastern corner of the field during the trial trench evaluation undertaken for the Scheme. The features correspond well with a series of rectilinear enclosures identified from the geophysical survey. Finds from these features comprise animal bone, pottery, and CBM of Romano-British date. The density of features and range of finds suggests a small Romano-British settlement or activity area.</p>	
Scheme impact	
<p>The site would be permanently affected by the installation of cabling, starter and end pits for HDD, as well as temporary construction compounds, temporary construction lay-down areas and access tracks.</p>	
Mitigation	
<p>Strip, Map and Record</p>	
Potential Research Objectives	
<p>Romano-British</p>	

- 5C: Promote systematic application of scientific dating techniques
- 5D: Support scientific analysis of human remains
- 5H: Investigate landscape context of rural settlements
- 5I: Support research and publication of landscape synthesis

Fleet Plantation Moated Site	
Designation:	Scheduled Monument
Field Number:	Field 154
Reference IDs: (NHLE, HER and AECOM ref's)	NHLE 1008594, HER MNT15343
Size (ha)	20m Buffer Zone
	
Description	
<p>Within Field 154, the Scheduled Monument Fleet Plantation moated site is located immediately bounding the southern limit of the Grid Connection Corridor.</p>	
Scheme impact	
<p>There is the potential for construction activities including the installation of cabling, starter and end pits for HDD, as well as temporary construction compounds, temporary construction lay-down areas and access tracks to physically impact the Scheduled Monument.</p>	
Mitigation	
<p>A 20m buffer zone has been implemented to ensure that construction activities do not result in physical impacts to this asset.</p>	

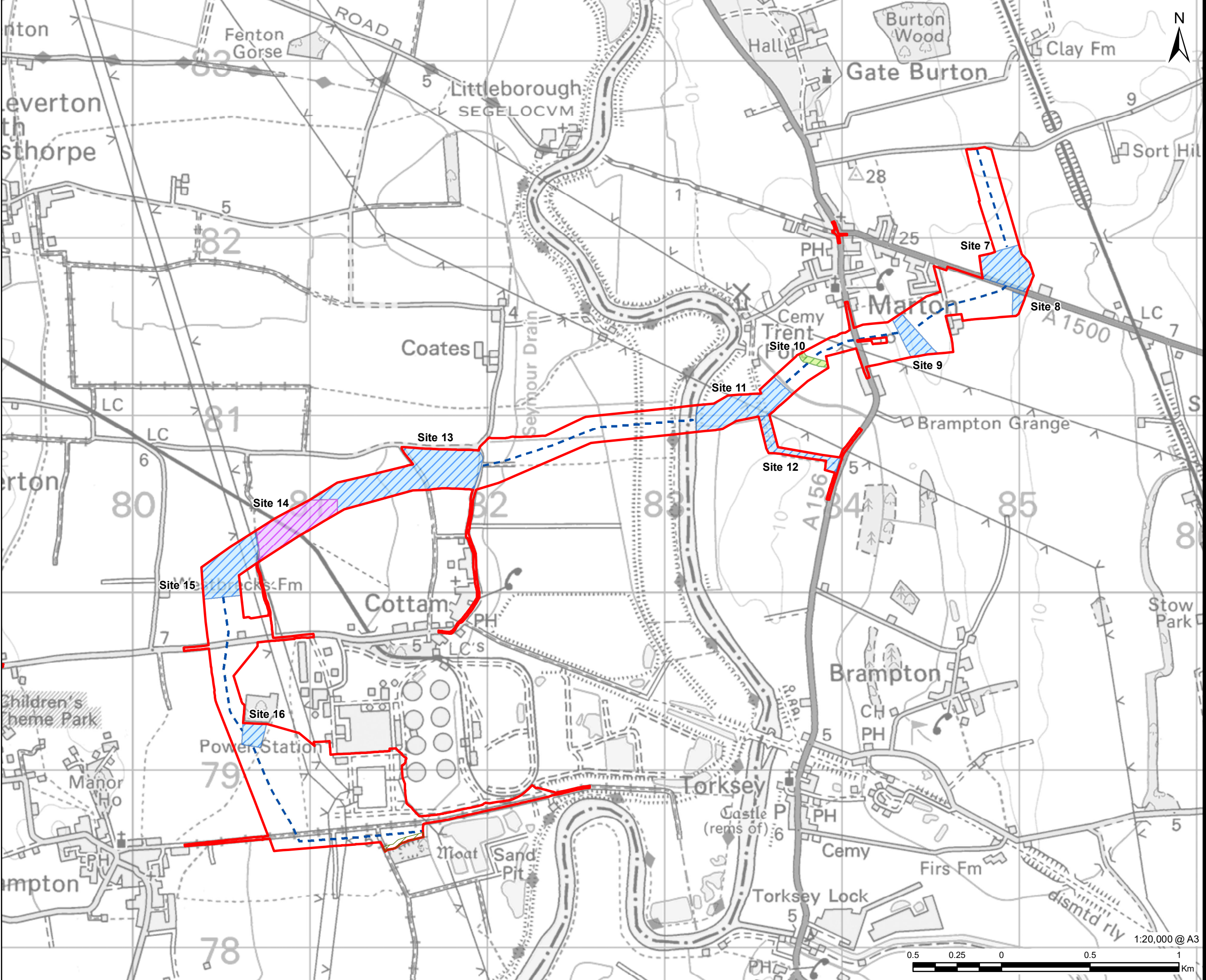
Potential Research Objectives
N/A

9. References

- Ref 1. Her Majesty's Stationary Office (HMSO) (2017) The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017
- Ref 2. HMSO (2008) The Planning Act 2008.
- Ref 3. CIfA (2022) Code of Conduct
- Ref 4. CIfA (2020) Standard and Guidance for Archaeological Excavation
- Ref 5. CIfA (2020) Standard and Guidance for an archaeological watching brief
- Ref 6. Historic England (2015) Geoarchaeology: Using Earth Sciences to Understand the Archaeological Record.
- Ref 7. CIfA (2020) Standard and Guidance for the creation, compilation, transfer and deposition of archaeological archives
- Ref 8. Lincolnshire County Council (2019) The Lincolnshire Archaeological Handbook
- Ref 9. East Midlands Historic Environment Research Framework Interactive Digital Resource (2023)
- Ref 10. Historic England (2015) Management of Research Projects in the Historic Environment. The MoRPHE Project Manger's Guide

Figure 1 - Site Overview

Revision: 01 Drawn: VC Checked: JW Approved: WB Date: 2023-11-14
Filename: \\na.aecomnet.com\s\EMEACroydon\UKCRD1\Legacy\UKCRD1\Map\GIS\Projects\Gate Burton Energy Park\Map2_Maps\Environmental Statement\Chapter 07 - Heritage\Mitigation Strategy\MS_GridC_Figure1_SiteOverview.mxd



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- LEGEND**
- Grid Connection Corridor
 - Indicative Cable Route Watching Brief
 - Archaeological Mitigation Sites**
 - Earthwork Re - instatement
 - Preservation In-Situ
 - Strip, Map and Record
 - Scheduled Monument Buffer Zone

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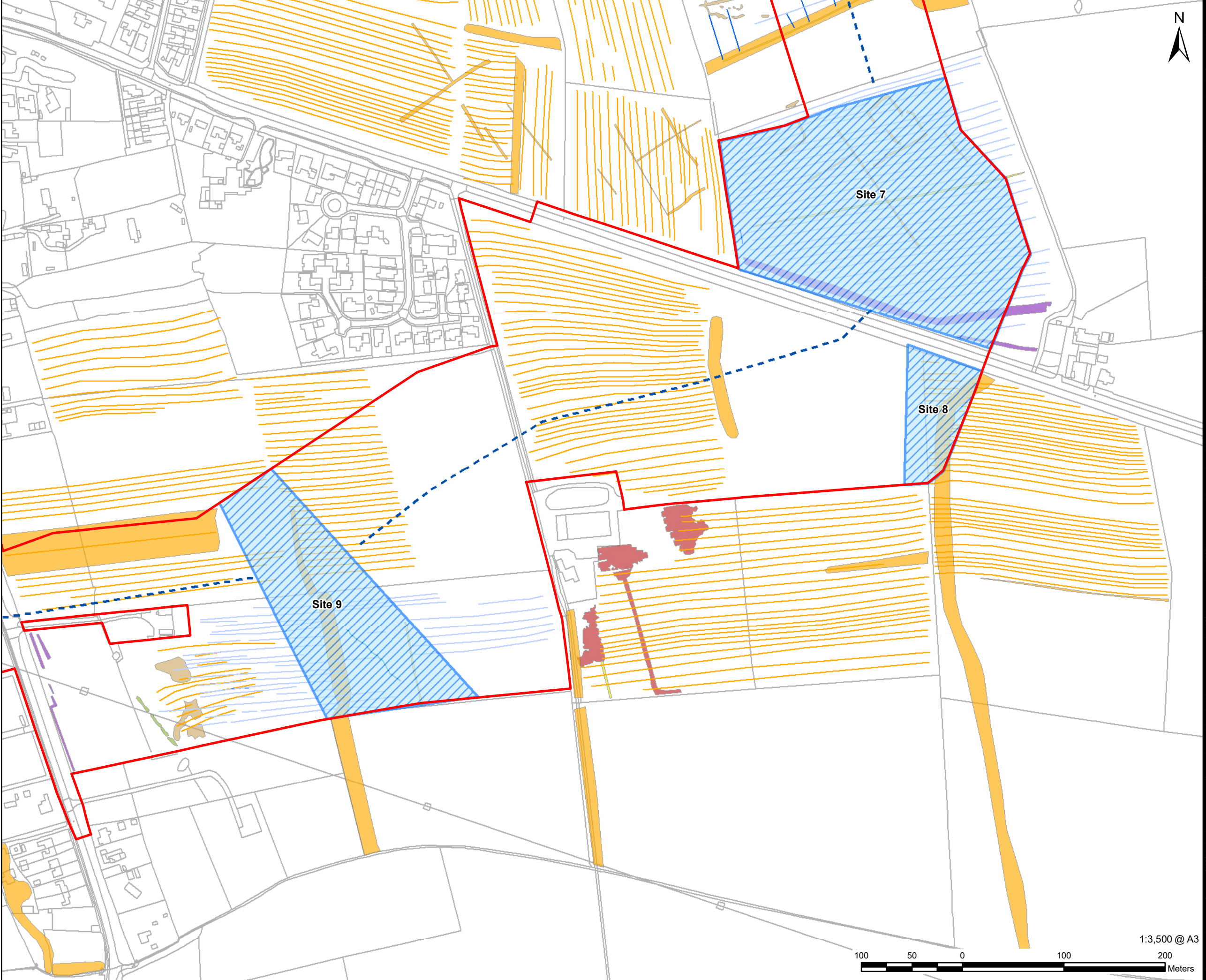
FIGURE TITLE
Archaeological Mitigation Strategy for
Grid Connection Corridor

FIGURE NUMBER
Figure 1

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Figure 2 - Archaeological Mitigation Sites 7, 8 and 9

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Filename: \\na.aecomnet.com\fs\EMEA\Croydon\UKCRD1\Legacy\UKCRD1\FP001\UKCRD1\FP001-V1\IE\projects\general\GIS\Projects\Gate Burton Energy Park\02_Maps\Environmental Statement\Chapter 07 - Heritage\Mitigation Strategy\MIS_GridC_Figures2.mxd



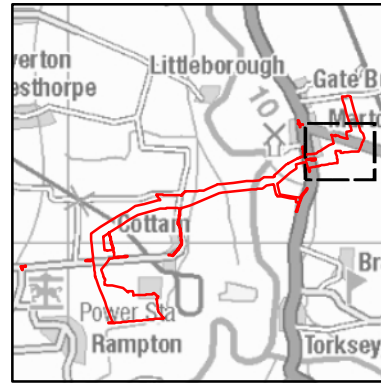
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FIGURE TITLE
Archaeological Mitigation Strategy -
Sites 7, 8 and 9

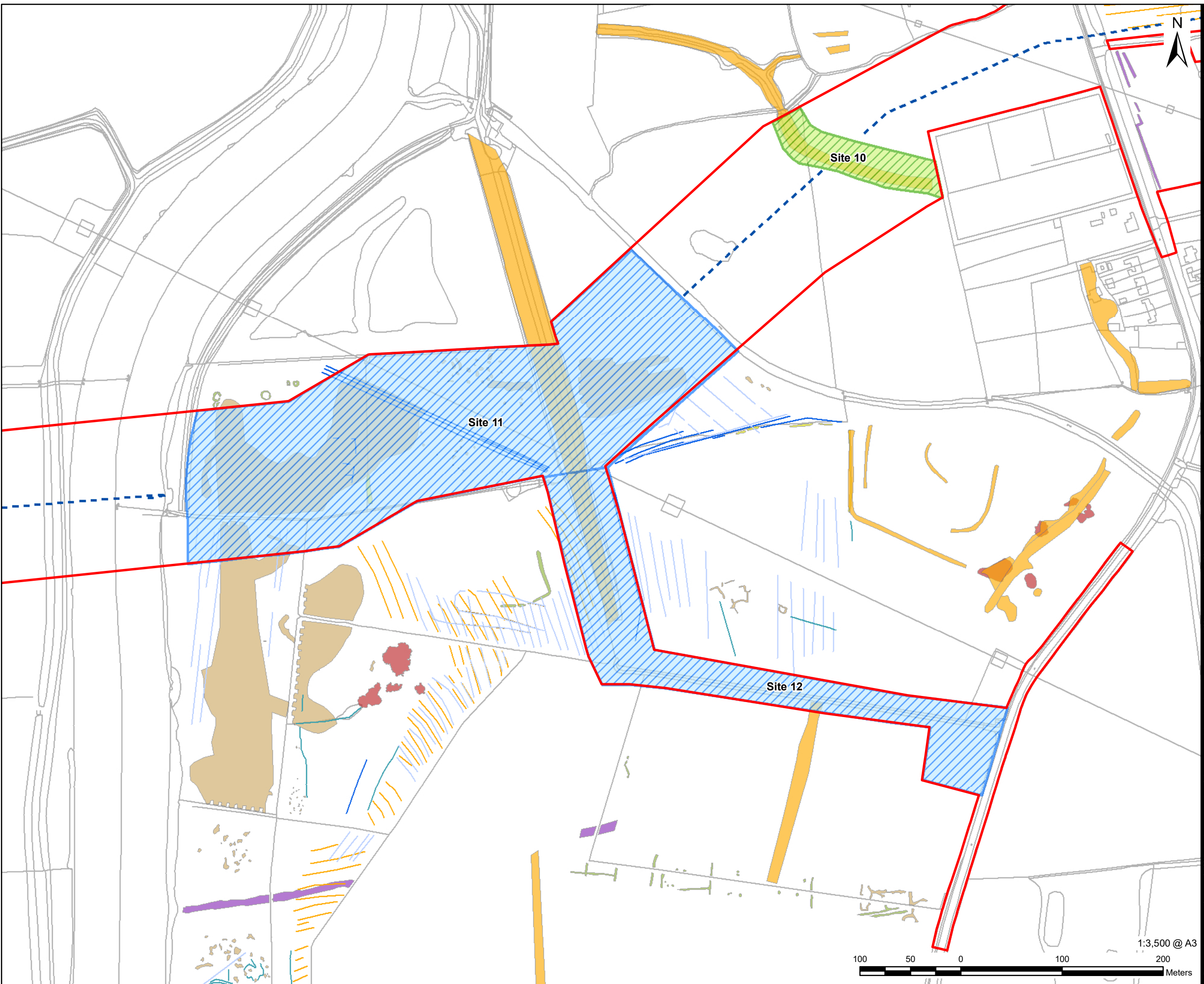
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Figure 3 - Archaeological Mitigation Sites 10, 11 and 12

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Filename: \\na.aecomnet.com\fs\EMEA\Croydon\UKCRD1\Legacy\UKCRD1\FP001\UKCRD1\FP001-V1\IE\projects\general\GIS\Projects\Gate Burton Energy Park\02_Maps\Environmental Statement\Chapter 07 - Heritage\Mitigation Strategy\MS_GridC_Figures3.mxd



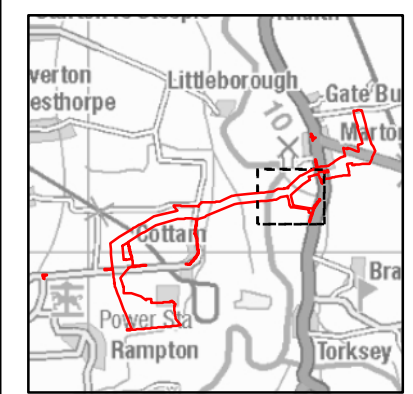
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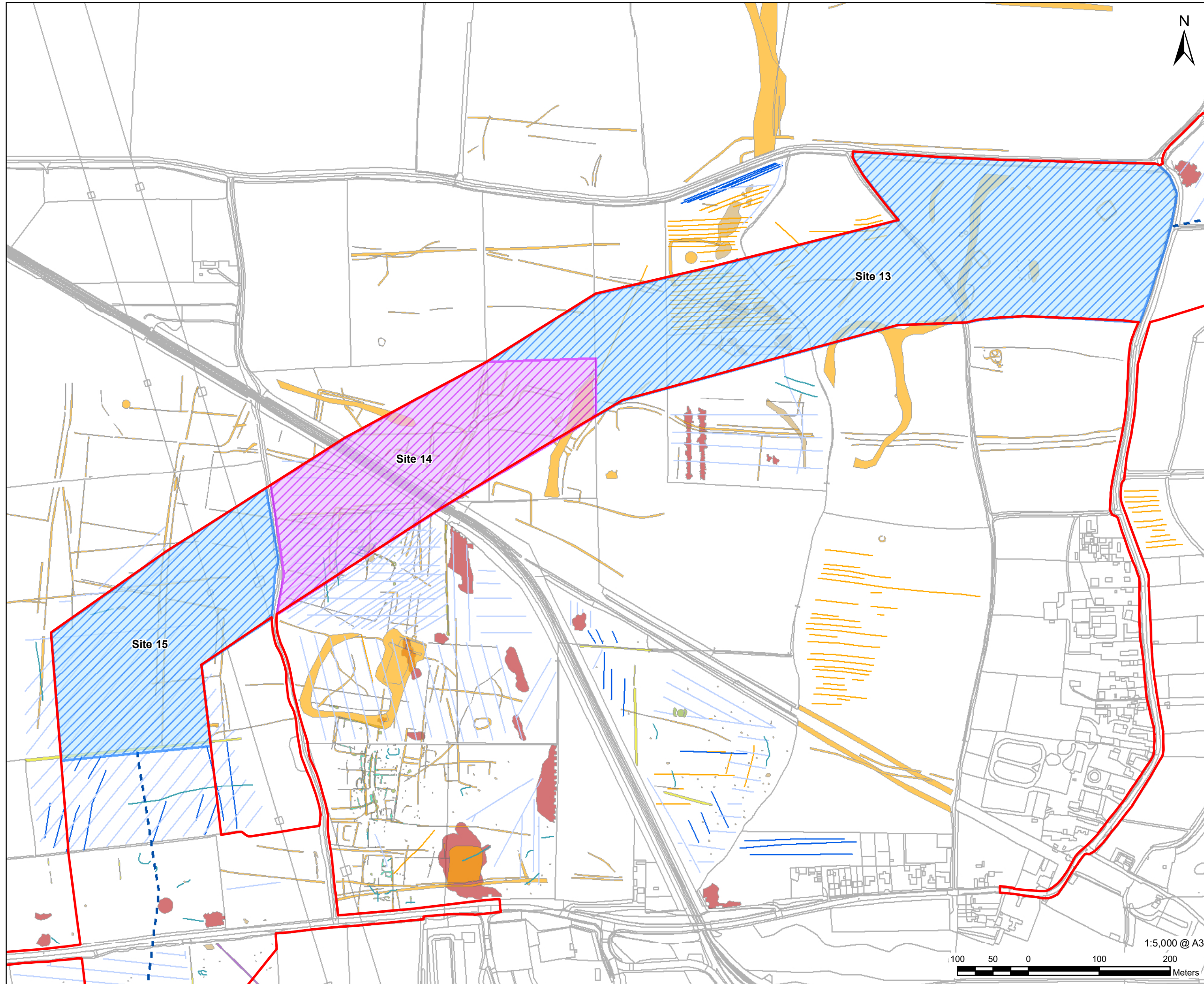
FIGURE TITLE
Archaeological Mitigation Strategy -
Sites 10,12 and 13

FIGURE NUMBER
Figure 3

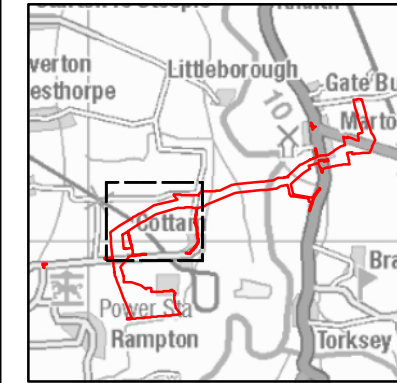


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Figure 4 - Archaeological Mitigation Sites 13, 14 and 15



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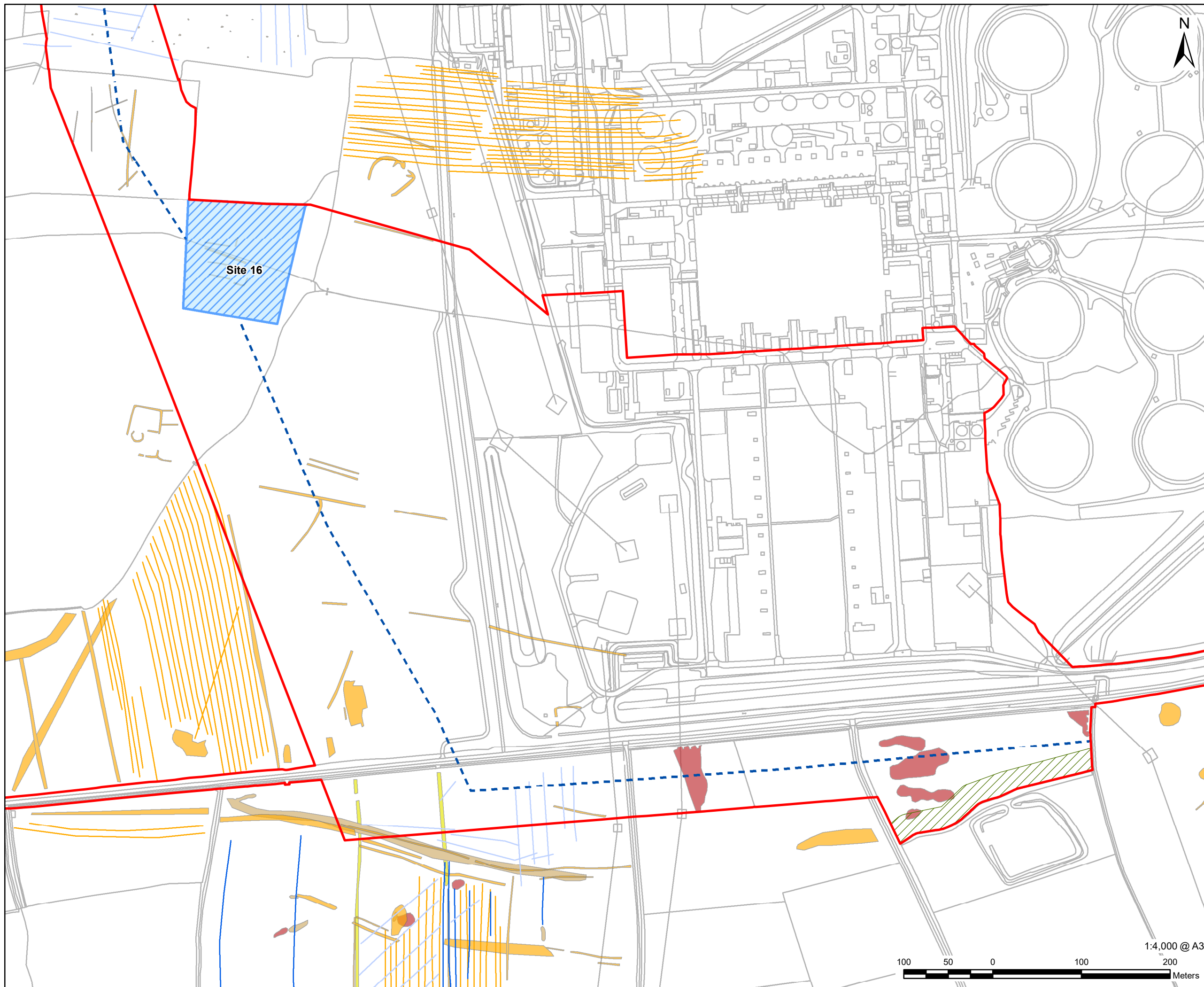
FIGURE TITLE
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Sites 13, 14 and 15

FIGURE NUMBER
Figure 4



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Figure 5 - Archaeological Mitigation Site 16 and 20m Buffer Zone



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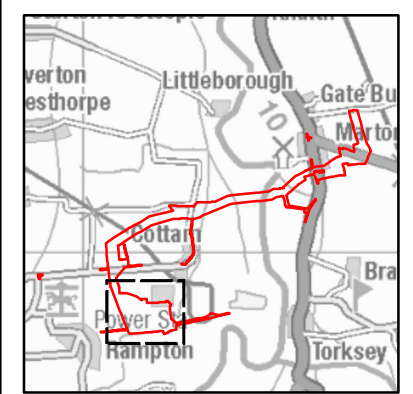
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FIGURE TITLE
 Archaeological Mitigation Strategy - Site 16

FIGURE NUMBER
 Figure 5



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