



NORTH FALLS

Offshore Wind Farm

**Onshore Outline ~~Onshore~~ Written
Scheme of Investigation (OWSI) Part
1 of 3 (Tracked)**

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Figure 2 Location of Designated Heritage Assets within the Study Area

Figure 3 Location of Non-Designated Heritage Assets within the Study Area

Figure 4 Geophysical Survey Area Extents

[Figure 5 Overview of the Proposed Phase 2 Trenches](#)

[Figure 6 Proposed Phase 2 Trench Plan](#)

Glossary of Acronyms

ADBA	Archaeological Desk-Based Assessment
ADS	Archaeology Data Service
BGS	British Geological Society
CIfA	Chartered Institute for Archaeologists
DBA	Desked-Based Assessment
DCO	Development Consent Order
EACN	East Anglia Connection Node
ECC	Essex County Council
EIA	Environmental Impact Assessment
ES	Environmental Statement
GCZ	Geoarchaeological Character Zones
GDBA	Geoarchaeological Desk-Based Assessment
GIS	Geographic Information System
GLC	Geoarchaeological Landscape Characterisation
GPS	Global Positioning System
HE	Historic England
HER	Historic Environment Record
LiDAR	Light Detection and Ranging
MHWS	Mean High Water Springs
NMP	National Mapping Programme
NPS	National Policy Statement
NPPF	National Planning Policy Framework
OASIS	Online Access to the Index of Archaeological Investigations
OS	Ordnance Survey
OWSI	Outline Written Scheme of Investigation
PEIR	Preliminary Environmental Information Report
PAD	Protocol for reporting Archaeological Discoveries
PAS	Portable Antiquities Scheme
RAMS	Risk Assessment Method Statements
RWE	RWE Renewables UK Swindon Limited
SSER	SSE Renewable Offshore Windfarm Holdings Limited
TCC	Temporary construction compound
WSI	Written Scheme of Investigation

Glossary of Terminology

<u>Archaeological Contractor</u>	<u>Responsible for delivering the archaeological mitigation programme as set out in the AMS and the Onshore OWSI, including subsequent detailed WSIs post-consent.</u>
<u>Archaeological Curators</u>	<u>Essex County Council's (ECC) Historic Environment Consultant at Place Services (archaeology advisors to Tendring District Council (TDC)) in addition to representatives from Historic England, namely the Inspector of Ancient Monuments and the Science Advisor.</u>
<u>Onshore project area</u>	<u>The boundary within which all onshore infrastructure required for the Project will be located (i.e. landfall; onshore cable route, accesses, construction compounds; onshore substation and onshore cable route.)</u>
Cable landfall search area	Locations being considered for the landfall, comprising the Essex coast between Clacton-on-Sea and Frinton-on-Sea and areas immediately inland thereof.
Landfall	The location where the offshore export cables come ashore at Kirby Brook.
Offshore cable corridor	The corridor of seabed from the array area to the landfall within which the offshore export cables will be located.
Offshore export cables	The cables which bring electricity from the offshore substation platform(s) to the landfall, as well as auxiliary cables.
Onshore cable route	Onshore route within which the onshore export cables and associated infrastructure would be located.
Onshore export cables	The cables which take the electricity from landfall to the onshore substation. These comprise High Voltage Alternative Current (HVAC) cables, buried underground.
<u>Onshore project area</u>	<u>The boundary within which all onshore infrastructure required for the Project will be located (i.e. landfall; onshore cable route, accesses, construction compounds; onshore substation and onshore cable route.)</u>
Onshore substation	A compound containing electrical equipment required to transform and stabilise electricity generated by the project so that it can be connected to the national grid.
Onshore substation works area	Area within which all temporary and permanent works associated within the onshore substation are located, including onshore substation, construction compound, access, landscaping, drainage and earthworks.
<u>Onshore works</u>	<u>The onshore elements of the Project which consist of works within the onshore cable route and onshore substation works area.</u>
<u>Principal Contractor</u>	<u>The appointed contractor that will carry out the construction works associated with the onshore works.</u>
<u>Project Archaeologist</u>	<u>Responsible for monitoring the work undertaken by the Archaeological Contractor and liaising with the Archaeological Curators on behalf of the Project.</u>
<u>Science Advisor</u>	<u>Historic England's Science Advisors provide archaeological science and historic environment management advice to local authorities determining planning applications and to the archaeological contractors carrying out the archaeological fieldwork.</u>
Temporary construction compound	Area set aside to facilitate construction of the onshore cable route. Will be located adjacent to the onshore cable route, with access to the highway where required.
The Applicant	North Falls Offshore Wind Farm Limited (NFOW).
The Project Or 'North Falls'	North Falls Offshore Wind Farm, including all onshore and offshore infrastructure.

1 Introduction

1.1 Project Background

1. The North Falls Offshore Wind Farm project (herein 'North Falls' or 'The Project') is an extension to the existing Greater Gabbard Offshore Wind Farm, which is located in the outer Thames Estuary, and was opened in 2013. The project is being developed by North Falls Offshore Wind Farm Limited (NFOW, also 'the Applicant'), a Joint Venture between SSE Renewables Offshore Windfarm Holdings Limited (SSER) and RWE Renewables UK Swindon Limited (RWE).
2. The project is proposed in response to The Crown Estate's extension leasing round, launched in 2017, with The Crown Estate recognising that extensions to operational wind farms are proven to be a successful way of efficiently developing more offshore generating capacity. NFOW was awarded an Agreement for Lease (AfL) from The Crown Estate in September 2020.
3. The project will comprise an array of offshore wind turbines and offshore electrical platforms which will be connected to the shore by offshore export cables installed within an offshore cable corridor. The project also requires onshore infrastructure in order to connect the offshore wind farm to the National Grid, the footprint for which is collectively referred to as the 'onshore project area'. The onshore project area (as shown on Figure 1, Appendix C) will comprise:
 - Landfall at Kirby Brook;
 - Buried onshore export cables located within an onshore cable route, from landfall (at Kirby Brook) to an onshore substation;
 - Areas for temporary construction compounds (TCCs), construction and operation and maintenance routes;
 - Onshore substation works area, which includes land required for temporary construction, export cables, means of access, drainage, landscaping, environmental mitigation;
 - Onshore substation; and
 - Land within the proposed East Anglia Connection Node (EACN) (the Project's National Grid connection point), for siting infrastructure required to connect to the National Grid.

1.2 Broad Approach and Phasing

4. This Onshore Outline Written Scheme of Investigation (OWSI) forms part of the process outlined in the Archaeological Mitigation Strategy (AMS), which sets out the scope and guiding principles for the planning and implementation of further archaeological and geoarchaeological investigations to be undertaken for the onshore elements of North Falls.
5. The processes in this Onshore OWSI document the phased approach set out in the AMS, with the results of previous phases of archaeological work informing both design decisions (as appropriate) and the needs for and scope and extent

of subsequent phases of work, whether that be further evaluation or sampling, or implementation of agreed mitigation. The approach is intended to be iterative, and collaborative, with regular consultation and engagement with the Archaeological Curators throughout the process.

6. For the purposes of this document, all archaeological investigations carried out pre-submission and pre-consent are referred to as Phase 1. This includes geophysical survey, monitoring and recording of geotechnical investigations and limited evaluation trial trenching, as described in sections 3.4 and 3.6 below.

7. Works proposed post-consent are referred to as Phase 2. Sub-phases of evaluation may be needed, depending on the programming of enabling works (such as those required to facilitate access) and additional phases of work may be required based on the results of Phase 2. Specific works in any Pphase which are proposed as part of the AMS will be detailed in location or activity specific Written Schemes of Investigation, to be agreed with the aArchaeological cCurators as appropriate.

8. It is envisaged that the Archaeological Curators will monitor the progress of works in the field, before agreeing completion. The Phase 2 evaluation works will be subject to appropriate reporting (including any required assessment of finds and samples) and this will be provided to the Archaeological Curators in advance of any decisions of the requirement for (and scope and extent of) formal archaeological mitigation, to be undertaken as Phase 3.

9. Phase 4 is the final phase, consisting of final reporting, formal publication and dissemination, and archiving of the results of all phases of fieldwork will be agreed with the consultees.

1.24.3 Structure and Purpose of the Onshore OWSI

4. This Onshore Outline Written Scheme of Investigation (OWSI) will form the basis for a series of detailed Written Scheme of Investigation (WSIs) for onshore archaeology for all areas of the North Falls onshore project area (see Plate 1). Construction will not commence until the relevant detailed WSI has been approved by the local planning authority in consultation with Essex County Council (ECC) and Historic England (HE) Archaeological Curators. This commitment is secured via Development Consent Order (DCO) Requirement.

- 5.10. This Onshore OWSI sets out the proposed approaches, methodologies and commitments to archaeological survey, evaluation and investigation to be undertaken post-consent. These were identified as the outcomes to the Environmental Impact Assessment (EIA) process as set out in Environmental Statement (ES) Chapter 25 Onshore Archaeology and Cultural Heritage [APP-039]. This includes both initial informative survey stages of mitigation work archaeological evaluation works (Phase 2) set out in Section 6 and subsequent additional mitigation measures (Phase 3) set out in Section 7, where required. This forms part of an overarching mitigation strategy to be undertaken within the onshore project area.

- 6.11. The AMS and Onshore OWSI as certified by the Secretary of State would be incorporated into the contracts for the principal contractors of all onshore works as authorised by the DCO. All principal contractors, subcontractors and their suppliers would be required to observe the relevant provisions of the AMS and

Onshore OWSI and subsequent detailed location or activity specific WSI~~s~~ and provide evidence of how they will ensure its requirements would be implemented.

12. It is anticipated that the ~~initial—informative—survey—stages—of—mitigation~~archaeological evaluation works (Phase 2) would take place as part of the wider pre-construction programme and activities, followed by ~~further and additional bespoke mitigation requirements~~mitigation measures (Phase 3) on a case-by-case basis, as required, in ongoing consultation and engagement with ~~ECG and HE~~the Archaeological Curators.
13. The scope of the Onshore OWSI covers the onshore project area to Mean High Water Springs (MHWS). All heritage receptors below MHWS are covered by the Outline Offshore Written Scheme of Investigation [REP3-015].
14. Following the submission of the DCO application, comments have been provided by stakeholders regarding the content of the Onshore OWSI. Table 1-1 provides a summary of the amendments that have been made to the Onshore OWSI in response.

Table 1-14.4 Summary of Onshore OWSI changes

<u>Onshore OWSI Revision Number</u>	<u>Summary of Changes</u>	<u>Relevant Section of the Onshore OWSI</u>
<u>01</u>	<u>Additional text detailing how this Onshore OWSI aligns with the approach and phasing set out in the AMS.</u>	<u>Sections 1.2 to 1.4</u>
	<u>Update regarding the amount of geophysical survey and trial trenching completed to date.</u>	<u>Sections 3.4 and 6.2 to 6.4</u>
	<u>Consideration of the scheduled cropmark site south-west of St Mary's Church, Little Bromley included as part of the archaeological potential for the onshore project area.</u>	<u>Section 3.5</u>
	<u>Aims/objectives and methodology for archaeological and geoarchaeological monitoring of Ground Investigation (GI) works added.</u>	<u>Section 6.4</u>
	<u>Aims/objectives and methodology, including approach to sampling and recording, for trial trenching and Palaeolithic test pitting added.</u>	<u>Section 6.5</u>
	<u>Aims/objectives and methodology for geoarchaeological borehole survey added.</u>	<u>Section 6.6</u>
	<u>A new section detailing the approach to reporting, publication and archiving added.</u>	<u>Section 6.7</u>

<u>Onshore OWSI Revision Number</u>	<u>Summary of Changes</u>	<u>Relevant Section of the Onshore OWSI</u>
	<u>Re-ordered the mitigation measures so that preservation in-situ takes priority.</u>	<u>Section 7.2</u>
	<u>Aims of detailed archaeological excavation added.</u>	<u>Section 7.3</u>
	<u>Details of strip, map and record mitigation added.</u>	<u>Section 7.4</u>
	<u>Details of geoarchaeological assessment added.</u>	<u>Section 7.5</u>
	<u>Project-specific details added to the public engagement and community outreach section.</u>	<u>Section 8.</u>
	<u>Minor updates to Appendix A to reflect terminology used in the AMS.</u>	<u>Appendix A</u>
	<u>Updates to the Schedule of Archaeological Requirements where outstanding geophysical survey has been completed.</u>	<u>Appendix B</u>
	<u>Updates to figure 4 showing geophysical survey extents and inclusion of trench plan shown on figures 5 and 6.</u>	<u>Appendix C</u>
	<u>Terminology updated throughout document to align with the roles and phasing detailed within the AMS</u>	<u>Throughout document</u>
	<u>Revisions to document in response to Historic England's Written Representation [REP2-039]</u>	<u>Throughout document</u>

1.31.4 Broad Approach to Developing the Detailed WSI

- ~~7. This onshore OWSI sets out the proposed approaches, methodologies and commitments to archaeological survey, evaluation and investigation which were identified as the outcomes to the Environmental Impact Assessment (EIA) process. The scope of the onshore OWSI covers the onshore project area to Mean High Water Springs (MHWS), all heritage receptors below MHWS are covered by the Offshore OWSI (**Document Reference 7.11**). These are set out in Environmental Statement (ES) Chapter 25 Onshore Archaeology and Cultural Heritage (Document Reference 3.1.27).~~
- ~~8.15. Each post-consent initial informative stage of mitigation work~~The archaeological evaluation works (survey stagePhase 2) which will include archaeological trial trench and Palaeolithic test pit evaluation, and geoarchaeological monitoring of Ground Investigation (GI) works ~~would be subject to a~~ separate survey-specific

WSIs (Section 5), which will provide further survey-specific details in line with this Onshore OWSI.

~~9.16.~~ These will build on previous WSIs agreed with ~~EGC and H&E~~ the Archaeological Curators during the pre-application period. These include:

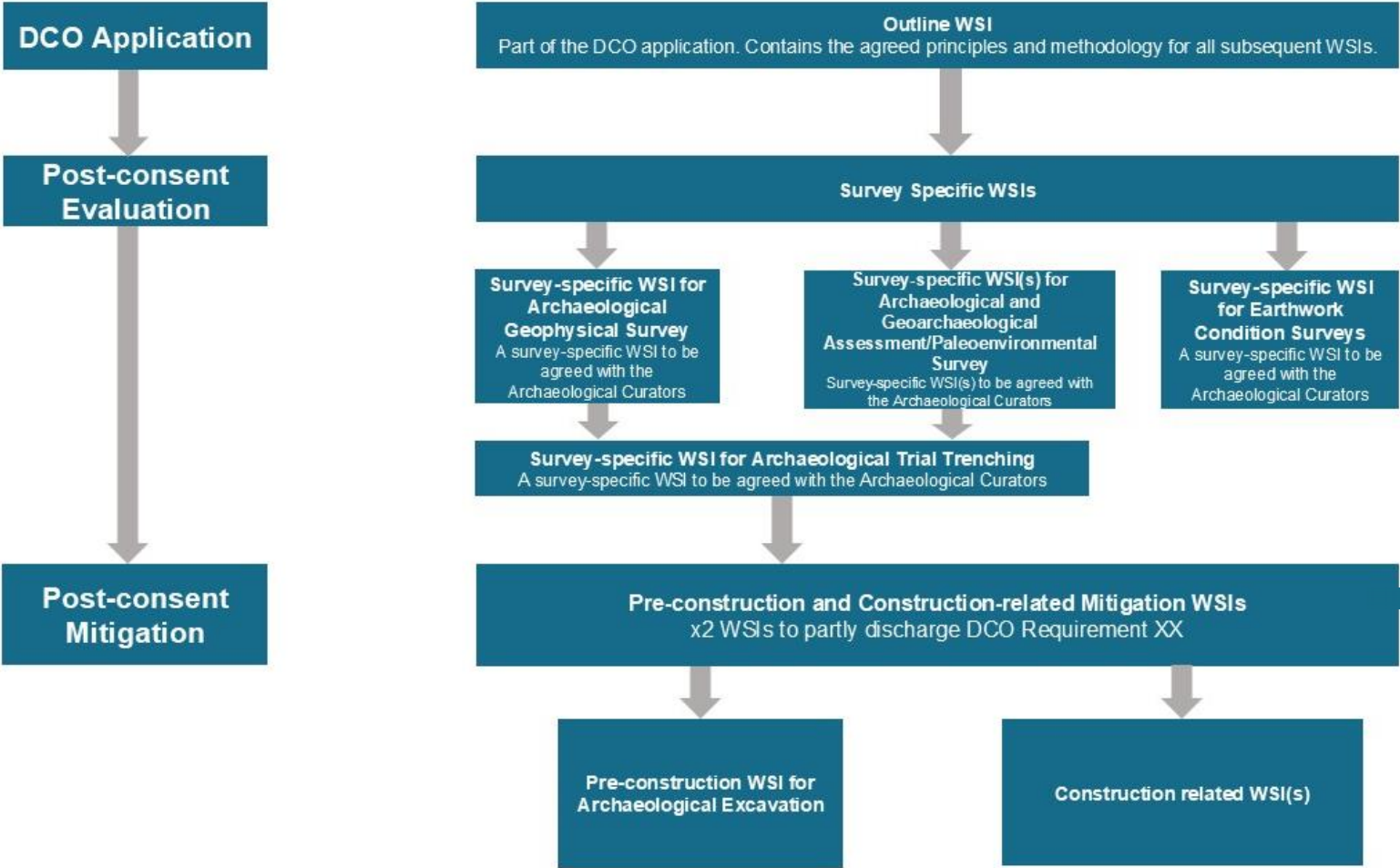
- Written Scheme of Investigation for Archaeological Geophysical Survey (Royal HaskoningDHV, 2022);
- Written Scheme of Investigation for Archaeological and Geoarchaeological Monitoring of Ground Investigation Works (Wessex Archaeology, 2022); and
- Written Scheme of Investigation for Archaeological Trial Trenching (Wessex Archaeology, 2023).

~~10.17.~~ The survey-specific WSIs to be agreed with ~~EGC~~ the Archaeological Curators, will form part of the wider onshore AMS for both the pre-construction and construction phase. These will follow the methodologies proposed under this Onshore OWSI and will detail the ~~subsequent additional~~ mitigation measures (Phase 3) to be undertaken within the onshore project area. These would be informed by the results of the ~~initial informative stage of mitigation work~~ Phase 2 archaeological evaluation works as well as build upon the information within this Onshore OWSI (see Section 6). This would be an iterative process to developing and refining the mitigation approach ensuring that all potential impacts upon onshore archaeology arising from the project are fully identified and appropriately and proportionately mitigated, wherever possible (as detailed within the AMS).

~~11.18.~~ Example (model) clauses (Appendix A) have been included as outline examples of the likely approaches to archaeological mitigation works required and the associated specifications. These relate to methodologies for ~~Archaeological archaeological Excavation~~ excavation, strip, map and record and archaeological monitoring ~~Watching brief and recording~~. The precise clauses would only be determined during the development of the detailed WSI for archaeological mitigation post-consent.

~~12.19.~~ The flow chart below (Plate 1) provides a visual representation of the stages to producing the survey-specific WSIs which will inform the mitigation WSIs required to part discharge the DCO Requirement.

Plate 1 Post-consent WSI production



2 Legislation Policy and Guidance

2.1 Legislation and Planning Policy

~~13.~~20. The primary legislation relating to the consent regime for the Project is provided by the Planning Act 2008, with the assessment undertaken with specific reference to the principal policy documents with respect to Nationally Significant Infrastructure Projects are the National Policy Statements (NPS). Of specific relevance to the Projects is EN-1 Overarching NPS for Energy (DESNZ 2023a) and EN-5 for Electricity Networks Infrastructure (DESNZ 2023b). Also of relevance is the National Planning Policy Framework (NPPF) Section 16: Conserving and enhancing the historic environment; although the NPPF is not directed specifically at NSIPs, it sets out the principal national policy on the importance, management and safeguarding of heritage assets within the planning process.

2.2 Standards and Guidance

~~14.~~21. The following relevant standards, guidance and good practice produced by the Chartered Institute for Archaeologists (CIfA) and the Association of Local Government Archaeological Officers (ALGAO) have been taken account of in the production of this Onshore OWSI:

- Standards for Field Archaeology in the East of England (ALGAO, 2003)
- Standard and guidance for geophysical survey (CIfA, 2020a);
- Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives (CIfA, 2020bc);
- Standard and guidance for the collection, documentation, conservation and research of archaeological materials (CIfA, 2020c);
- Advice Note for Post-Excavation Assessment (ALGAO, 2015);
- Code of Conduct (CIfA, 2021a);
- Standard and guidance for the archaeological investigation and recording of standing buildings or structures (CIfA, 2019b);
- Standard and ~~guidance~~ Universal guidance for archaeological excavation (CIfA, 2023a);
- Standard and Universal guidance for archaeological field evaluation (CIfA, 2023b); and
- Standard and Universal guidance for an archaeological monitoring and recording (CIfA, 2023c).

~~15.~~22. Of further relevance is the following non-exhaustive list of publications from Historic England. Other survey and investigation-specific guidelines will also apply in addition to those listed below:

- Environmental Archaeology: A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation (2nd Edition) (English Heritage, now Historic England, 2011);
- Management of Research Projects in the Historic Environment (MoRPHE: Historic England, 2015a);
- Geoarchaeology: Using Earth Sciences to Understand the Archaeological Record (Historic England, 2015b);
- Preserving Archaeological Remains: Decision-taking for Sites under Development (Historic England, 2016a);
- Guidelines for the Use of Geophysics in Archaeology. Questions to Ask and Points to Consider (EAC Guideline 2) (European Archaeologiae Consilium – EAC, 2016);
- Understanding Historic Buildings. A Guide to Good Recording Practice (Historic England, 2016b); and
- Understanding the Archaeology of Landscapes (Historic England, 2017).

3 Archaeological and Historical Baseline Summary

3.1 Introduction

~~16.23.~~ The following section provides a summary of the known and potential onshore archaeological and cultural heritage resource within the defined study areas as detailed in ES Chapter 25 Onshore Archaeology and Cultural Heritage **(Document Reference: 3.1.27)[APP-039]**.

~~17.24.~~ The baseline environment was informed by:

- ES Appendix 25.1 Cable landfall search area historic environment desk-based assessment **(Document Reference: 3.3.48)[APP-144]**;
- ES Appendix 25.2 Onshore Cable Corridors(s) and Onshore Substation Zone Historic Environment Desk-Based (baseline) Assessment **(Document Reference: 3.3.49)[APP-145] and [APP-146]**;
- ES Appendix 25.5 Heritage Walkover Survey **(Document Reference: 3.3.52)[APP151]**;
- ES Appendix 25.6 Geoarchaeological Desk-based Assessment **(Document Reference: 3.3.53)[APP152]**;
- ES Appendix 25.8 Archaeological Geophysical Survey Report **(Document Reference: 3.3.55)[APP-154] and [APP155]**;
- ES Appendix 25.9 Five Estuaries Archaeological and Geoarchaeological Monitoring of Ground Investigation Works Report **(Document Reference: 3.3.56)[APP-156]**;
- ES Appendix 25.10 Five Estuaries & North Falls Onshore Substation Area Archaeological Evaluation Report: Phase 1 **(Document Reference: 3.3.57)[APP-157]**;
- ES Appendix 25.11 Five Estuaries & North Falls Onshore Substation Area Archaeological Evaluation Report: Phase 2 **(Document Reference: 3.3.58)[APP-158]**; and
- ES Appendix 25.12 Five Estuaries & North Falls Onshore Substation Area Palaeolithic Evaluation Report: Phase 2 **(Document Reference: 3.3.59)[APP-159]**.

~~18.~~ The archaeological periods referred to in this chapter are broadly defined by the following date ranges:

- ~~Palaeolithic: 960,000 BC — 8,500 BC;~~
- ~~Mesolithic: 8,500 — 4,000 BC;~~
- ~~Neolithic: 4,000 — 2,200 BC;~~
- ~~Bronze Age: 2,200 — 700 BC;~~
- ~~Iron Age: 700 BC — AD 43;~~
- ~~Romano-British: AD 43 — 410;~~
- ~~Early medieval (Saxon): AD 410 — 1066;~~

- ~~Medieval: AD 1066—1499;~~
- ~~Post-medieval and 19th Century: AD 1500—1899; and~~
- ~~Modern: AD 1900—present day.~~

3.2 Designated Heritage Assets

~~19.25.~~ There are ~~449–450~~ designated heritage assets within the 1km designated heritage assets study area around the onshore cable route and 5km study area around the onshore substation works area, comprising:

- ~~Seven–Eight~~ Scheduled Monuments;
- Two Registered Parks and Gardens;
- 432 Listed Buildings; and
- Eight Conservation Areas.

~~20.26.~~ Details of the designated assets within the designated heritage assets study area, are presented in a gazetteer (ES Appendix 25.7 Onshore historic environment gazetteers ~~(Document Reference: 3.3.54)~~[APP-153] and on Figure 2, Appendix C.

~~21.27.~~ At present, ~~an access route is located at the end of Church Lane within one designated heritage assets is partly located within the onshore project area: the Great Holland Conservation Area. Operation and maintenance access routes to service the landfall located within the onshore project area currently extend into the southern half of Frinton Conservation Area.~~

~~22.28.~~ There are no other designated heritage assets located within the onshore project area.

3.3 Summary of ~~n~~Non-designated heritage assets within the Study Area

~~23.29.~~ There are 240 known non-designated heritage assets within the 500m non-designated heritage assets study area based on the ES onshore project area (ES Appendices 25.1 and, 25.2, ~~and 25.7~~ ~~(Document Reference: 3.3.48, 3.3.49 and 3.3.54)~~[APP-144] to [APP-146] and on Figure 3, Appendix C). The full gazetteer is presented in ES Appendix 25.7 Onshore historic environment gazetteers ~~(Document Reference: 3.3.54)~~[APP-153]. Of these records, 52 fall within the onshore project area. Eight of those located within the onshore project area are findspots or finds recorded by the Portable Antiquities Scheme (PAS).

~~24.30.~~ Non-designated heritage assets subject to potential direct physical impacts are confined to the onshore project area and may comprise potential subsurface archaeological remains and above ground heritage assets (e.g. earthworks or structures).

3.4 Sub-surface Archaeological Remains

~~25.31.~~ Features indicative of below ground archaeological remains, as indicated by data available and archaeologically assessed as part of the archaeological desk-based assessment (ADBA) (ES Appendices 25.1 ~~(Document Reference:~~

- ~~3.3.48)~~[\[APP-144\]](#) and 25.2 ~~(Document Reference: 3.3.49)~~[\[APP-145\]](#) and [\[APP-146\]](#), include cropmarks, soil/parch marks, depressions, and ditches.
- ~~26.32.~~ Sub-surface archaeological remains may also be indicated by features identified in aerial photographs or historic map data as former buildings, structures, or sites. These may no longer survive as extant above ground remains but below ground remains may still be present (ES Appendix 25.2 Onshore Cable Corridors(s) and Onshore Substation Zone Historic Environment Desk-Based (baseline) Assessment ~~(Document Reference 3.3.49)~~[\[APP-145\]](#)).
- ~~27.33.~~ A programme of archaeological geophysical survey (detailed magnetometry) has been undertaken across the onshore project area in all areas that were suitable for survey and available for access (Figure 4, Appendix C) to help inform the understanding of the subsurface archaeological potential of the onshore project area (see ES Appendix 25.8 Archaeological Geophysical Survey Report ~~(Document Reference 3.3.55)~~[\[APP-154\]](#) and [\[APP-155\]](#)). It is worth noting that the total area surveyed was 708.8 ha, much of which now falls outside the onshore project area. This data was used to inform route refinement and micro-siting of the onshore cable route around anomalies of potential archaeological interest. The types of buried archaeological remains identified range from extensive areas of settlement and enclosure to single clearly defined features.
- ~~28.34.~~ A total of ~~14.57~~ ha of surveyable onshore project area remains to be completed due to access constraints and unsuitable weather conditions. The remaining survey will be undertaken in Spring and Summer 2025 post-consent and prior to detailed design to inform the subsequent intrusive archaeological Phase 2 archaeological evaluation works (e.g. trial trenching).
- ~~29.~~ Heritage assets within the onshore project area considered to potentially represent surviving below ground archaeological remains have not yet been fully evaluated through intrusive evaluation approaches, with the exception of the onshore substation works area.
- ~~30.35.~~ A phased programme of archaeological evaluation by trial trenching has been undertaken at the onshore substation works area and on land to the north of Little Clacton Road (Phase 1). The detailed reports of the evaluation works undertaken at the onshore substation works area are shown in ES Appendix 25.10 Five Estuaries & North Falls Onshore Substation Area Archaeological Evaluation Report: Phase 1 ~~(Document Reference: 3.3.57)~~[\[APP-157\]](#) and ES Appendix 25.11 Five Estuaries & North Falls Onshore Substation Area Archaeological Evaluation Report: Phase 2 ~~(Document Reference: 3.3.58)~~[\[APP-158\]](#), the results of which confirmed the presence of multiple field systems / land management features and discrete pits and post-holes, demonstrating the accuracy of the previous geophysical and aerial photography survey. Features dated to the Bronze / Iron Age and Medieval periods were identified from artefactual evidence, with tentative evidence for Romano-British activity. Details of the archaeological evaluation on land to the north of Little Clacton Road can be found in Five Estuaries OSWF and North Falls OSWF Little Clacton Road Archaeological Evaluation Report (Wessex Archaeology, 2024).
- ~~31.36.~~ A summary of the below ground archaeological remains identified within the onshore project area from the desk-based, and non-intrusive and intrusive

evaluation surveys-investigations has informed the Schedule of Archaeological Requirements (Appendix B).

3.5 Archaeological Potential of the Onshore Project Area

32-37. The overall archaeological potential of the onshore project area is considered to be high (i.e. archaeological discoveries are likely), with the following key areas along the onshore cable route identified for potential archaeological discoveries:

- For the Palaeolithic, Mesolithic, and Neolithic periods, there is a moderate likelihood of finds limited to lithic artefacts. Evidence within the immediate vicinity at Lawford (1.5 km north from the onshore substation works area), comprises evidence for a more settled existence from the Neolithic period onwards. A Scheduled Neolithic henge is recorded to the south-west of St Mary's Church in Little Bromley (approximately 100m south-west of the onshore cable route) which includes evidence for Bronze Age round barrow cemeteries and Iron Age or Romano-British enclosures (NHLE 1489898).
- Bronze Age funerary activity in the form of cropmark evidence is focused around the Little Bromley area (near to the onshore project area). Additional undated ring-ditch features identifiable from the geophysical survey and HER record are located at various points along the onshore cable route, suggesting a moderate to high likelihood for unrecorded assets relating to funerary practice. The concentration of prehistoric findspots within the vicinity of the onshore substation works area increases the potential for further finds in this area. Similarly, the record of ring-ditches and possible associated enclosures in the HER around Beaumont-cum-Moze and Great Holland suggests there is potential for Bronze Age activity in these areas.
- Iron Age evidence is demonstrated in the HER as a red hill at the intertidal zone at landfall, though no evidence of this was identified during the heritage walkover survey. The high density of Iron Age and post-medieval findspots to the south of Little Bromley suggests this could be an area of particular sensitivity, consistent with multiperiod settlement. Geophysical survey of the area revealed linear and curvilinear anomalies, discrete features and a residual remains of a possible trackway which has been identified on aerial imagery sources. Smaller concentrations of findspots near to Lawford, Beaumont-cum-Moze, and Great Holland, suggest a moderate likelihood for Iron Age activity at these areas in particular, which likely relate to isolated settlement and agricultural field systems.
- The first and second phase of evaluation trenching at the onshore substation works area identified a number of features dating to the Bronze / Iron Age period based on artefactual evidence. At the phase 1 evaluation, a grave containing cremated human remains was discovered, but a lack of dating evidence hampers further discussion of the burial. Numerous Bronze Age ring ditches are known to lie within the environs of the onshore substation works area, including a substantial group at Great Bromley some 3km to the south. Similarly, the findspot of a Bronze Age hoard was

recorded at the centre of the onshore substation works area. The cremation rite was practiced across the wide temporal range covered by these finds, and although a Bronze / Iron Age or Romano-British date appears most likely, it cannot be stated with certainty.

- Romano-British activity is represented in abundance to the north-west of Little Bromley (across the onshore substation works area) where a small settlement is likely present at the intersection of various Roman roads radiating from Colchester and out to coastal settlements/harbours. The geophysical survey undertaken across the onshore substation works area provided enhanced information for this site (see ES Appendix 25.8 Archaeological Geophysical Survey Report (~~Document Reference: 3.3.55~~)[APP-154] and [APP-155]). Note, artefactual evidence recovered from the subsequent evaluation trenching dating to the Romano-British period is considered too small a quantity to be reliable for dating features at the onshore substation works area. Similar concentrations are around Little Bromley and Beaumont-cum-Moze and to a lesser degree at Beaumont Quay. Any previously unrecorded assets would likely be representative of the road network and land-use in association with settlement and subsistence.
- High likelihood of unrecorded assets relating to the medieval period (and potentially the early medieval period) likely relating to isolated rural settlement and agricultural field systems. Archaeological remains relating to settlement and agriculture would potentially be concentrated in the vicinity of existing settlements, evidenced by the concentrations of finds to the south of Little Bromley, around Beaumont-cum-Moze and Thorpe-le-Soken, with dispersed finds and cropmark evidence of field boundaries, enclosures and trackways in the wider area.
- Similarly with the ~~p~~Post-medieval period, unrecorded assets are likely to relate to isolated settlements and agriculture, with more dense settlement patterns around Great Clacton and Walton-on-the-Naze evidenced by findspots of coins and a trade token. ~~Well-~~preserved remains relating to industrial activities may be concentrated near Beaumont Quay where a lime kiln survives in good condition. An additional brick kiln is recorded at Thorpe-le-Soken within the onshore project area. Further evidence is noted around Little Bromley and Horsley Cross.
- Moderate likelihood of surviving unrecorded evidence relating to defensive measures during the 19th century, WWI and WWII, particularly around the coastal areas, such as pillboxes and remains associated with the demolished Martello Tower H.

3.6 Geoarchaeological and Palaeoenvironmental Potential

~~33.38.~~ The geoarchaeological desk-based assessment (GDBA) (ES Appendix 25.6 (~~Document Reference: 3.3.53~~)[APP-152]) identified deposits of archaeological and geoarchaeological interest within the onshore project area. A total of nine Geoarchaeological Character Zones (GCZs) were originally defined in the previous GDBA produced for the onshore project area (based on the Preliminary Environmental Information Report (PEIR) assessment

boundary). These GCZs have been updated following new data obtained from recent geoarchaeological monitoring of GI works (ES Appendix 25.9 Five Estuaries Archaeological and Geoarchaeological Monitoring of Ground Investigation Works Report (~~Document Reference: 3.3.56~~)[APP-156] and geoarchaeological investigations at the onshore substation works area (ES Appendix 25.12 Five Estuaries & North Falls Onshore Substation Area Palaeolithic Evaluation Report: Phase 2 (~~Document Reference: 3.3.59~~)[APP-159]).

- ~~34.39.~~ These include Pleistocene fluvial deposits and Brickearth, and Alluvium of Holocene date with some potential for Pleistocene and/or Holocene Head/Colluvium to be present. Following the secondary phases of geoarchaeological evaluation these deposits were generally identified as of low importance but a gully identified in the geoarchaeological evaluation may be of medium importance at the onshore substation works area.
- ~~35.40.~~ Pleistocene fluvial deposits are expected to be present along much of the onshore cable route but are unproven in areas where geological records are absent. Sands and gravels, interpreted as part of the Kesgrave terraces sequence, were recorded during geoarchaeological monitoring of ground investigation (GI) boreholes at the proposed landfall of the Five Estuaries Offshore Wind Farm (ES Appendix 25.9 –Five Estuaries Archaeological and Geoarchaeological Monitoring of Ground Investigation Works Report, (~~Document Reference: 3.3.56~~)[APP-156]). There is moderate to high potential for Lower to Middle Palaeolithic archaeology and faunal remains to be present within these deposits, or for fine-grained or organic lenses with palaeoenvironmental potential to be preserved.
- ~~36.41.~~ Brickearth is present in the northern and southern parts of the onshore cable route and while its archaeological and palaeoenvironmental potential is largely unknown, there is evidence for preservation of archaeological (including mammalian) remains within similar deposits at Wrabness and Holbrook Bay located to the north of the onshore cable route.
- ~~37.42.~~ Alluvium is of geoarchaeological interest as it may contain or partially mask Holocene archaeological features and/or layers, preserve palaeochannels (remnants of rivers or stream channels that flowed in the past and have been currently filled or buried by younger fluvial sediments) and contain peat or richly organic units that have high palaeoenvironmental potential. Alluvium was recorded during geoarchaeological monitoring of GI boreholes at the proposed landfall of the Five Estuaries Offshore Wind Farm (ES Appendix 25.9 Five Estuaries Archaeological and Geoarchaeological Monitoring of Ground Investigation Works Report (~~Document Reference: 3.3.56~~)[APP-156]). The alluvium comprised an upper and lower minerogenic unit, separated by a peat ranging in thickness from 0.5 to 1.5m. The confirmed presence of alluvium and peat within the Holland Haven Marshes indicates there is high potential for deposits with a perceived heritage importance of high to be present at the possible landfall location. Although not proven by legacy borehole data, alluvium is likely to be present on the floodplain of the Tendring Brook towards the centre of the onshore cable route (northeast of Tendring), and towards the north, in the area of Holland Brook (close to Horsley Cross).

~~38.43.~~ Deposit modelling along the onshore cable route indicates there is some potential for Head and Colluvium to be present, particularly near the base of slopes. These deposits have potential to include eroded or redeposited archaeological material, or to seal underlying layers of archaeological interest (e.g. buried soil horizons).

~~39.44.~~ Results from a priority geophysical survey near Little Bromley located across the onshore substation works area identified a series of ditch and water channel features interpreted as superficial geology (ES Appendix 25.8 Archaeological Geophysical Survey Report ~~(Document Reference: 3.3.55)~~[\[APP-154\]](#) and [\[APP-155\]](#)). Little Bromley is located in a GCZ characterised by Head/Colluvium and Brickearth, overlying Pleistocene fluvial deposits. There are no modern watercourses in this area, which is characterised by relatively high, flat ground.

~~40.45.~~ Across the Tendering peninsula there is evidence of patterned ground which is a phenomena that occurs in cold climates when physical processes such as freezing and thawing move sediment, washing fine grained material down and bringing coarser gravel to the surface (Essex County Council and Tendring District Council, 2009). This is most common on flat ground where Brickearth overlies sands and gravels as is expected in the Little Bromley area. Therefore, the features observed in the geophysical survey may be patterned ground and represent a landscape that formed during the last cold stage, approximately 15,000-20,000 years ago.

~~46.~~ A summary of the GCZs for the onshore project area (based on Tables 4 and 6 in ES Appendix 25.9 Five Estuaries Archaeological and Geoarchaeological Monitoring of Ground Investigation Works Report ~~(Document Reference: 3.3.56)~~[\[APP-156\]](#)) is presented in Table 3-1 below.

Table 3-1 Summary of geoarchaeological character zones (GCZs) within the onshore project area

GCZ	Principal Quaternary deposits	Approximate depth of deposits (metres below ground level (m bgl))	Archaeological potential of deposits	Palaeoenvironmental potential of deposits	Geoarchaeological significance
1	Alluvium Peat Fluvial Sands and Gravels (Late Pleistocene)	0.00-9.00 3.00-6.00 9.00-12.00	Low ⁽¹⁾ High Unknown	Low ⁽¹⁾ High Unknown	Low-Moderate Moderate-High Unknown
2	Unknown	Unknown	Unknown	Unknown	Unknown
3	Colluvium Head-Brickearth / Head-Gravel Kesgrave Sands and Gravels (Cooks Green Gravel)	Unknown 0.20-4.50 0.50-6.00	Low Unknown Unknown	Low ⁽²⁾ Unknown Unknown	Low-Moderate Unknown Unknown
3a	Head-Brickearth Kesgrave Sands and Gravels (Cooks Green Gravel)	0.20-2.00 1.20-5.60	Unknown Unknown	Unknown Unknown	Unknown Unknown
3b	Head-Brickearth	0.30-4.50	Moderate	Low	Moderate
4	Colluvium Head-Brickearth / Head-Gravel Kesgrave Sands and Gravels (Cooks Green Gravel)	Unknown	Low Unknown Unknown	Low ⁽²⁾ Unknown Moderate	Low-Moderate Unknown Moderate-High
4a	Head-Brickearth Kesgrave Sands and Gravels (Cooks Green Gravel)	1.00-4.10 2.00-3.00	Unknown Unknown	Unknown Unknown	Unknown Unknown
5	Alluvium Colluvium Head-Brickearth / Head-Gravel Kesgrave Sands and Gravels (Cooks Green Gravel/ Wivenhoe Gravel)	Unknown	Low ⁽¹⁾ Low Unknown Unknown	Low ⁽¹⁾ Low ⁽²⁾ Unknown Unknown	Low-Moderate Low-Moderate Unknown Unknown

GCZ	Principal Quaternary deposits	Approximate depth of deposits (metres below ground level (m bgl))	Archaeological potential of deposits	Palaeoenvironmental potential of deposits	Geoarchaeological significance
6	Colluvium Head-Brickearth / Head-Gravel Kesgrave Sands and Gravels (Ardleigh Gravel / Wivenhoe Gravel)	Unknown 0.20-3.00+ 0.50-3.50+	Low Unknown Unknown	Low ⁽²⁾ Unknown Unknown	Low-Moderate Unknown Unknown
7	Alluvium Colluvium Head-Brickearth / Head-Gravel Kesgrave Sands and Gravels (Ardleigh Gravel)	Unknown	Low ⁽¹⁾ Low Unknown Unknown	Low ⁽¹⁾ Low ⁽²⁾ Unknown Unknown	Low-Moderate Low-Moderate Unknown Unknown
8	Colluvium Head-Brickearth / Head-Gravel Kesgrave Sands and Gravels (Ardleigh Gravel)	Unknown 0.00-2.75 0.00-10.00	Low Unknown Unknown	Low ⁽²⁾ Unknown Unknown	Low-Moderate Unknown Unknown
8a	Head-Brickearth Head-Gravel Sands Kesgrave Sands and Gravels (Ardleigh Gravel)	0.30-1.70 0.60-2.55 0.90-3.20 1.60-3.0+	Low Low-Moderate Low Low ⁽³⁾	Low Low Unknown Low ⁽³⁾	Moderate-Low Unknown Unknown High
8b	Head-Brickearth Head-Gravel Kesgrave Sands and Gravels (Ardleigh Gravel)	0.27-1.00 0.45-1.80 0.50-3.20+	Low Low-Moderate Low ⁽³⁾	Low Low Low-Moderate ⁽³⁾	Moderate-Low Unknown High

⁽¹⁾ may contain organic-rich or peat units of high archaeological and palaeoenvironmental potential

⁽²⁾ may contain calcareous units of moderate palaeoenvironmental potential

⁽³⁾ potential of deposits below evaluated depth is unknown

3.7 Above Ground Archaeological Remains and Heritage Assets

41.47. Features considered to represent above ground heritage assets within the onshore project area are summarised in Table 3-2.

Table 3-23.2 Possible above ground heritage assets within onshore project area

EHER Number	APS ID	Description	Perceived Heritage Importance
Landfall			
10048	N/A	Pillbox on the sea wall at Sandy Point. An FW3/22 pillbox standing on the sea wall at Sandy Point.	Low-Medium
48671	N/A	Site of Mr Barton's Pans, Holland Haven, at the mouth of the former Gunfleet Estuary. Thought to be copperas settling pans.	Low-Medium
Onshore Cable Route			
3143	APS_04	Field boundaries visible as cropmarks on historic aerial photographs and satellite imagery with residual earthwork remains visible on LiDAR data.	Low-Medium
Onshore substation works area			
No above ground heritage assets within the onshore substation works area.			

42.48. These heritage assets represent only those within the onshore project area which are considered to represent above ground remains as indicated by descriptive information held by the HER and assessed as a result of the aerial photographic, LiDAR and historic map analysis.

43.49. It is worth noting that during the heritage walkover survey, the detail of the pans at the site of Mr Barton's Pans (EHER 48671) were difficult to establish due to the nature of the long vegetation along this stretch of marshland. Similarly, during the walkover, a slightly raised area was identified at the location of residual earthwork remains visible on LiDAR data (EHER 3143). However, it was not clear if the undulating landscape was a result of natural occurrences or human activity.

44.50. It is also acknowledged that examples of above ground historic earthworks are a rare resource within Tendring as a result of agricultural activity and as such are considered valuable where they do survive as above ground features.

4 Schedule of Archaeological Requirements

45.51. This Onshore OWSI should be read with reference to the outline Schedule of Archaeological Requirements table (Appendix B), which presents a summary of the currently known and potential remains within the onshore project area.

46.52. The location of these known and potential archaeological remains is presented on Figure 3, Appendix C with further detail provided in ES Appendix 25.2 Onshore Cable Corridors(s) and Onshore Substation Zone Historic Environment Desk-Based (baseline) Assessment (**Document Reference: 3.3.49[APP-145] and [APP-146]**).

- ~~47.53.~~ The outline Schedule of Archaeological Requirements is not definitive and would be subject to regular updates and refinements throughout the post-consent stages of the Project. This will occur as more information comes to light, and at key milestones as part of the post-consent archaeological works (for example, following ~~each initial informative stage of mitigation~~ Phase 2 archaeological evaluation, see Section 6). This would be prior to ~~additional the Phase 3~~ mitigation measures being established and formalised within subsequent pre-construction and construction-related mitigation WSIs (see Section 7).
- ~~48.54.~~ In the initial post-consent stage of the Project, careful attention will be given to planning the program and scheduling of the Phase 2 archaeological ~~survey evaluation~~ works and investigation.
- ~~49.55.~~ Each of the survey-specific and subsequent pre-construction and construction related WSIs (see Section 1.3 above and Section 5) would include detail on anticipated timetabling and programme. With respect to intrusive work, this would also include anticipated post-excavation (Phase 4) timeframes (where required).
- ~~50.56.~~ It is also anticipated that the Project would retain the services of an archaeological consultant/coordinator (known as the Project Archaeologist and appointed by the Project) in the post-consent stages of the project, as detailed in the AMS. The ~~archaeological consultant/coordinator~~ Project Archaeologist would identify any programme pinch points early in the process, so that these can be effectively allowed for and managed within the wider project timescales. The ~~Archaeological consultant/coordinator~~ Project Archaeologist would be responsible for the execution of the survey-specific WSIs, input into fieldwork design, management of the appointed Archaeological Contractor(s) and consultation/engagement with ~~ECC (and HE as appropriate)~~ the Archaeological Curators.
- ~~51.57.~~ Every effort would be made for archaeological works to be appropriately planned with sufficient time allowance provided, within the confines of what can be realistically expected and anticipated at each stage.
- ~~52.58.~~ During the construction phase, an archaeologist may not be on site to monitor all elements of the intrusive groundworks (following agreement with ~~ECC (and HE as appropriate)~~ the Archaeological Curators) where proportionate mitigation has already been carried out within these areas). In these instances, NFOW and the relevant appointed Principal Contractor(s) will implement a protocol for reporting archaeological discoveries (PAD) (see Section 7.8) as an opportunity to engage with the workforce and allow reporting of remains that would be recovered outside archaeological investigation.

5 Survey Specific WSIs

5.1 Introduction

~~53.59. Each initial informative stage of mitigation work (ultimately informing subsequently required mitigation approaches)The Phase 2 archaeological evaluation work~~ would be subject to ~~a~~ bespoke survey specific WSIs produced by the ~~appointed Archaeological Co-ordinator~~Project Archaeologist and approved by ~~EGC (and HE, as required)the Archaeological Curators~~. Any variations to the survey specific WSIs would be agreed with ~~EGC (and HE, as required)the Archaeological Curators~~ prior to their implementation.

~~54.60. The initial informative stages of mitigation work~~Phase 2 archaeological evaluation works will include:

- Geophysical Survey of remaining areas;
- Archaeological and Geoarchaeological monitoring of Ground Investigation (GI) works;
- ~~Targeted~~ Archaeological Trial Trenching;
- Targeted Earthwork Condition (Global Positioning System (GPS)/topographic) Survey; and
- Targeted Geoarchaeological Assessment/Palaeoenvironmental Survey.

~~55.61. Details on the methodologies for each initial informative stage of mitigation work~~type of archaeological evaluation work is presented in Section 6.

~~56.62. Ongoing consultation regarding the commencement and location of the initial informative stages of mitigation~~archaeological evaluation works will continue with ~~EGC (and HE, as required)the Archaeological Curators~~ post-consent.

5.2 Aims and Objectives

~~57.63. The general aims and objectives for the post-consent initial informative stages of mitigation~~of the Phase 2 archaeological evaluation works are to:

- Further examine the archaeological, geoarchaeological and cultural heritage resource within the onshore project area, including clarifying the presence/absence and extent of any buried archaeological remains (and above ground remains, e.g. earthworks, extant buildings/structures, where present);
- Identify, within the constraints of the works, the date, character, significance and condition of any surviving remains within the onshore project area;
- Assess the degree of predicted impacts to sub-surface horizons and to document the extent of archaeological survival of buried deposits within the onshore project area;
- Analyse and interpret the results; and

- Produce reports which will present the results of the works in sufficient detail to allow informed decisions to be made concerning ~~ongoing, and where appropriate additional,~~ mitigation ~~strategies~~ measures (Phase 3).

~~58.64.~~ In addition to the above aims and objectives, the survey-specific WSIs and subsequent mitigation related WSIs produced in the post-consent/pre-construction phases will seek to identify further specific research aims and objectives (including overarching research questions) for the archaeological works associated with the Project. Where possible and applicable these will be directly linked to the East of England Regional Research Framework (<https://researchframeworks.org/eoe/research-agenda/>) and the Tendring Heritage Strategy (Place Services, 2019).

5.3 Monitoring

~~59.65.~~ Having agreed the survey-specific WSIs, the ~~Archaeological Coordinator / Contractor(s)~~ Project Archaeologist will inform ~~ECC (and HE, as required), the Archaeological Curators~~ of the proposed commencement dates of fieldwork for each survey / investigation type, and then provide regular updates on the progress of the surveys.

~~60.66.~~ Reasonable and regular access to the site will be arranged for ~~representatives of ECC and HE, as appropriate~~ the Archaeological Curators, for inspection and monitoring visits. These will be accompanied by the ~~Archaeological Coordinator~~ Project Archaeologist and Archaeological Contractor(s).

5.4 Health and Safety

~~61.67.~~ Health and Safety considerations will be of paramount importance in conducting all archaeological fieldwork. Safe working practices will override archaeological considerations at all times.

~~62.68.~~ All work will be carried out in accordance with the Health and Safety at Work Act 1974 and the Management of Health and Safety Regulations 1992, as well as all other relevant Health and Safety legislation, regulations and codes of practice in force at the time.

~~63.69.~~ Where fieldwork is anticipated to fall outside of CDM regulations, such as the ~~initial informative stage of mitigation~~ Phase 2 archaeological evaluation works carried out under Survey Specific WSIs (see Plate 1), the Archaeological Contractor(s) will supply a copy of their Health and Safety Policy and a site and task specific health and safety focused Risk Assessment Method Statement (RAMS) document to NFOW before the commencement of any fieldwork. The RAMS will have been read and understood by all staff attending the site before any survey and investigation works commence. The Risk Assessment will be subject to updates as any new risks are identified and regularly reviewed.

~~64.70.~~ Where fieldwork is anticipated to fall under CDM regulations, the Archaeological Contractor(s) RAMS will respond, and align to, the Principal Contractors Construction Phase Health and Safety Plan.

~~65.71.~~ The appropriate landowner agreements will need to be in place and any environmental constraints will be highlighted, considered and managed both

prior to any archaeological works commencing and during the survey and investigation works themselves.

6 Methodologies (Further Survey and Evaluation Work) Archaeological Evaluation Works (Phase 2)

6.1 General Approach

~~66.72. Each stage of further survey and~~ The Phase 2 archaeological evaluation works will be undertaken post-consent and in advance of construction works. ~~In the event that~~ If non-designated heritage assets cannot be avoided this will be followed by subsequent the Phase 3 archaeological mitigation measures, as and where required (see Section 7).

6.2 Additional Project Wide Geophysical Survey

~~67.73.~~ In the pre-application stages of the Project, Wessex Archaeology undertook a targeted programme of archaeological geophysical survey across the onshore project area. The survey coverage equated to approximately 85% of the onshore project area.

~~68.74.~~ A further geophysical survey effort was undertaken in 2024 which was completed across approximately 8% (7.5 ha) of the onshore project area. Survey of t~~across the remaining-outstanding 157% (714.5 ha) of the onshore project area will be undertaken post-consent in Spring and Summer 2025. This aims to achieve as close to full coverage of the onshore project area as practicable to inform subsequent intrusive archaeological surveys (e.g. trial trenching) and further inform approaches to mitigation requirements, both at pre-construction and at / during construction~~ The geophysical survey will be undertaken in accordance with the approved WSI for Geophysical Survey (Error! Reference source not found.-Royal HaskoningDHV, 2022).

6.3 Earthwork Condition (GPS/topographic) Survey

75. Earthwork Condition Surveys would target locations (for example in areas of pasture and non-arable, or any areas thought or known to contain important surviving or potentially important historic landscape features) to record the presence/absence, extent, profile and 'on the ground' condition of any surviving, above ground historic earthworks. This would focus on features which may be impacted by the construction works within the onshore project area.

76. The assessment of the baseline historic environment data and results of the walkover survey identified the following sites for potential Earthwork Condition Survey:

- Field boundaries visible as cropmarks on historic aerial photographs and satellite imagery with residual earthwork remains visible on LiDAR data (EHER 3143).

77. It is worth noting that during the heritage walkover survey, a slightly raised area was identified which may corroborate with the microtopographic earthwork remains identified from LiDAR data. However, it was difficult to determine if this

undulation was a natural disturbance in the landscape or a result of human activity.

78. Data collected from the topographical survey would predominantly feed into an additional approach (in certain identified areas) with respect to construction related backfilling and reinstatement (e.g. the 'restoration' of any historic earthwork features or trends and landform/shape, where possible).

6.36.4 Archaeological and Geoarchaeological ~~Watching Brief~~Monitoring on Geotechnical Works

79. Archaeological and geoarchaeological monitoring of ~~G~~round ~~I~~nvestigation (GI) works will be carried out post-consent as part of the Phase 2 evaluation works to assess the presence or absence of archaeological remains, geoarchaeological deposits and palaeoenvironmental deposits, and to investigate their extent, nature, quality, date, and character. The GI works are required to inform detailed design of the Project.

80. The scope, method and programme of the ~~GI~~se works are currently unknown however the locations of any GI interventions will be reviewed against priorities of each GCZ of the onshore project area previously identified within the GDBA (Appendix 25.6 Geoarchaeological DBA (**Document Reference: 3.3.53**)[APP-152]. Key areas may be subject to more intensive monitoring due to increased potential, for example, at landfall (GCZ1 in Appendix 25.6 [APP-152]) where organic waterlogged deposits with high geoarchaeological potential have been identified. GI logs for any unmonitored interventions will be subject to review by a geoarchaeological specialist.

81. The onshore substation area may be subject to impacts from piling for the onshore substation foundations; these would not be required on other areas of the route, and as such this is also likely to be a key area for the monitoring of geotechnical works.

- 69.82. Should the GI works take place prior to the archaeological and geoarchaeological works proposed below in Section 6.5, the scope/distribution of the archaeological and geoarchaeological works can be refined to account for the additional information provided by the GI works.

83. The scope of the archaeological and geoarchaeological ~~watching brief~~monitoring will be ~~outlined~~ detailed in a survey specific WSI, which will detail the GI interventions to be monitored, and agreed with ~~EGC (and Historic England)~~the Archaeological Curators post-consent.

6.4.1 Aims of the archaeological and geoarchaeological monitoring of GI works

84. The general aims (or purpose) of the archaeological and geoarchaeological monitoring of GI works, in compliance with the ClfA Standard and Universal guidance for archaeological field evaluation (ClfA, 2023b), are:

- provide information about the archaeological and geoarchaeological potential of the onshore project area;
- consider the possible significance of any archaeological and geoarchaeological evidence present, or potentially present, in the context of national and regional research priorities and agendas, and

- inform the scope and nature of any further archaeological and geoarchaeological work that may be required; or the formation of a bespoke mitigation strategy (to offset the impact of the development on the archaeological and geoarchaeological resource); or a management strategy.

6.4.2 Objectives of the archaeological and geoarchaeological monitoring of GI works

85. The specific objectives of the archaeological and geoarchaeological monitoring of GI works are:

- to record the sequence of superficial deposits at each GI location;
- to obtain geoarchaeological samples of relevant deposits (where possible within the scope of the GI works);
- to undertake deposit modelling of the data arising from geoarchaeological monitoring, integrating any available existing GI data and relevant British Geological Society (BGS) archive boreholes, in order to map the extent, thickness and depth of Quaternary superficial deposits;
- interpret the probable environments represented;
- determine the importance of the deposits with regard to their archaeological and geoarchaeological (including palaeoenvironmental) potential; and
- Make specific recommendations for further work, where appropriate, which may include geoarchaeological borehole survey, palaeoenvironmental assessment and/or scientific dating.

6.46.5 Archaeological Trial Trenching and Palaeolithic Test Pitting

~~71. A programme of archaeological trial trenching has been undertaken in agreement with EGC and HE, and following the methodology proposed in the Written Scheme of Investigation for Archaeological Trial Trenching at the onshore substation works area (Wessex Archaeology, 2023) and in the Written Scheme of Investigation for Archaeological Trial Trenching at land north of Little Clacton Road (Wessex Archaeology, 2023)⁴. The two phases of trial trenching works (located at the onshore substation works area) have been completed as of October 2023, the detailed reports of which can be found in ES Appendix 25.10 Five Estuaries & North Falls Onshore Substation Area Archaeological Evaluation Report: Phase 1 (Document Reference: 3.3.57) and ES Appendix 25.11 Five Estuaries & North Falls Onshore Substation Area Archaeological Evaluation Report: Phase 2 (Document Reference: 3.3.58). The archaeological evaluation at land north of Little Clacton Road is still ongoing, the results of which are expected to be received in Spring 2024 which will further~~

⁴ ~~These works have not been carried out to date due to weather constraints.~~

~~inform the approaches to subsequent additional mitigation requirements (both pre-construction and at / during construction) on a case-by-case basis.~~

~~86. A further programme of onshore project area-wide trial trenching and Palaeolithic test pitting will be undertaken post-consent as part of the Phase 2 works in areas out with those previously investigated. The density, quantity and final location of the trenches/test pits proposed for Phase 2 will be agreed with the Archaeological Curators, in line with the processes set out in the AMS; a nominal 4% sample is envisaged (see preliminary trench plan Figure 5 in Appendix C).~~

~~87. The trench locations will be selected in order to sample probable and possible archaeological features identified through the geophysical survey, features identified from the aerial photographic and lidar assessment, and also apparent 'blank' areas. Test pits undertaken for the assessment of Palaeolithic deposits will be placed at regular intervals. A detailed survey specific WSI post-consent will set out the number and distribution of the trenches/test pits. These will be focused primarily on potential archaeological anomalies identified from the analysis of the geophysical survey data, Aerial Photographic and Lidar Assessment and Geoarchaeological Assessment work. Several trenches may also be needed to sample and investigate apparent blank areas.~~

~~72. The trial trenching will inform decision-making on appropriate mitigation measures (Phase 3 – see Section 7) for the archaeological resource by establishing the likely significance of remains and deposits encountered in both the Phase 1 (pre-consent) and Phase 2 (post-consent) evaluation, in line with the process set out in the AMS.~~

~~88.~~

~~6.5.1 Objectives of the archaeological trial trenching The Archaeological Co-ordinator and the Archaeological Contractor will agree a trial trenching strategy with ECG which is appropriate and proportionate to the type of archaeological anomaly being targeted for evaluation. This will ensure its character is established and suitable mitigation is subsequently undertaken.~~

~~89. Following consideration of the archaeological potential of the onshore project area, the specific objectives of the trial trench evaluation are to:~~

- ~~• test the results of the geophysical survey (including apparent 'blank' areas);~~
- ~~• test the results of the National Mapping Programme (NMP) Survey and aerial photograph examination undertaken for the Project;~~
- ~~• assess and characterise potential prehistoric, Roman and medieval features which may exist within the onshore project area; and~~
- ~~• assess and characterise evidence for medieval/post-medieval agricultural activity within the onshore project area.~~

~~90. The objectives of the trial trench evaluation would be developed further with reference to specific research questions/themes based on the East of England Regional Research Framework (ALGAO East of England, 2021), in the detailed WSI post-consent.~~

6.5.2 Objectives of the Palaeolithic test pit evaluation

91. The GDBA (ES Appendix 25.6 [APP-152]) identified the presence of Pleistocene deposits in the onshore project area that may contain significant Palaeolithic geoarchaeological resources (artefacts and/or paleoenvironmental evidence). Test pitting, augmented where appropriate with purposive geoarchaeological boreholes (see Section 6.6), is the most appropriate method for evaluating this resource. The specific objectives of Palaeolithic test pit evaluation are to:

- establish the potential of Pleistocene deposits to preserve Palaeolithic archaeology;
- establish the potential of Pleistocene deposits to preserve paleoenvironmental and scientific dating evidence, and
- inform on possible requirements for further targeted work that may be required to mitigate the impact of the Project on the Palaeolithic geoarchaeological resource or develop a management strategy to prevent impacts.

6.5.3 Setting out the trenches/test pits

92. All trenches/test pits will be set out using a Global Navigation Satellite System (GNSS) or similar. Minor adjustments to the layout may be required to take account of constraints such as vegetation or located services, and to allow for machine manoeuvring. The trench locations will be tied into the Ordnance Survey (OS) National Grid and Ordnance Datum (OD) (Newlyn), as defined by OSTN15 and OSGM15.

6.5.4 Service location and other constraints

93. The Applicant will provide information regarding the presence of any below/above-ground services, and any ecological, environmental or other constraints.

94. Before excavation begins, the evaluation area will be walked over and visually inspected to identify, where possible, the location of any below/above-ground services. All trial trench/test pit locations will be scanned before and during excavation with a Cable Avoidance Tool (CAT) to verify the absence of any live underground services.

6.5.5 Trial trench methodology

95. The trenches will typically be 30m x 2m in extent, except as agreed. They will be excavated using a 360° tracked excavator equipped with a toothless bucket. Machine excavation will be under the constant supervision and instruction of the monitoring archaeologist. Machine excavation will proceed in level spits of approximately 50–200mm until either the archaeological horizon or the natural geology is exposed. Where necessary, the base of the trench/surface of archaeological deposits will be cleaned by hand.

96. All archaeological features and deposits identified will be hand-excavated, unless by agreement with the Archaeological Curators. The stripped surface

and any archaeological features, including the soil derived from machine stripping and hand-excavation, will be scanned with a metal detector to maximise the recovery of metal objects. Artefacts and other finds will be collected and bagged by context.

97. The following sampling strategy is suggested:

- Linear features will be hand excavated to achieve a 10% sample along their length, with a minimum section width of 1m;
- The termini of any linear feature would be 100% excavated;
- Discrete features will be hand excavated to achieve a 50% sample;
- Significant bonded or structural remains, building slots or postholes will be preserved intact for excavation in more appropriate circumstances, even if fills are sampled;
- Complex features such as hearths, will be 100% hand excavated, unless part of a larger structure where cleaning and preservation for excavation in appropriate circumstances would be required or where archaeomagnetic dating is being considered.

98. If an exceptional number and/or complexity of archaeological deposits are identified, sample excavation will aim to be minimally intrusive, but sufficient to resolve the principal aims of the evaluation, to a level agreed with the Archaeological Curators under requirement.

99. Intersections between features will be avoided when excavating sample sections to maximise uncontaminated material and avoid removing evidence of relationships in confined circumstances. The surface of the features will be cleaned to establish the relationship as far as possible. More substantial features that extend beyond the limit of the excavation will be recorded in plan only, particularly where partial excavation has the potential to impede later characterisation, chronological assumptions or preservation of fragile artefacts such as waterlogged deposits. Where required, trenches and features deeper than 1.2m will be stepped once.

100. If human remains are uncovered, the specific methods outlined below (Section 6.5.12.2) will be followed.

101. Where complex archaeological stratification is encountered, deposits will be left in situ and alternative measures taken to assess their depth, as agreed with the Archaeological Curators.

6.5.6 Palaeolithic test pitting methodology

102. Palaeolithic test pits will be carried out under the supervision of a geoarchaeological specialist experienced in interpreting Pleistocene sediments and identifying Palaeolithic artefacts. Test pits will be positioned at the end of the identified trenches.

103. The test pits will be excavated using a 360° mechanical excavator with a toothless bucket. Machine excavation will be under the constant supervision and instruction of the geoarchaeological specialist, who will record and number the sequence of sedimentary units as excavation progresses following standard descriptive practices. The textural characteristics (grain-size, consolidation,

colour, material and sedimentary structures) of sedimentary units will be recorded, and the shape and nature of their lithostratigraphic contacts (dip, conformity and overall geometry).

104. Machine excavation will proceed in level spits of approximately 50-100mm, respecting the interface between sedimentary units, until either the bedrock geology is exposed, or further excavation becomes impractical.
105. Test pits will be entered at the maximum safe depth (usually c. 1.2 m, but less if loose sands/gravel are present) to record the upper stratigraphy. After excavation has progressed beyond this depth, recording will typically take place without entering the test pit. It may be occasionally necessary to widen and step out the upper part of a test pit to allow direct access to its lower part, for instance for controlled artefact retrieval, to investigate for the presence of an undisturbed land surface, or for controlled palaeoenvironmental and/or sediment sampling.
106. Sediment samples of at least 100 litre will be taken at regular intervals in stratigraphic succession through the Quaternary stratigraphy in each test pit and sieved on-site through a 10mm mesh to investigate whether artefacts and/or macro vertebrate faunal remains are present. If the sediment encountered is not suitable for dry-sieving (i.e. too clayey), excavation will proceed in shallower spits of c. 50mm, looking carefully for the presence of any (geo)archaeological evidence, and the spit samples will also be carefully investigated by hand (using archaeological trowels) for any archaeological evidence.
107. The potential for deposits to preserve paleoenvironmental evidence will be assessed for each Quaternary sediment unit by the monitoring geoarchaeological specialist. If deposits suitable for palaeoenvironmental sampling are encountered and can be safely sampled, appropriate samples will be taken. Sampling methodologies are outlined in Section 6.5.14.
108. Consideration will also be given to the suitability of any sediment units for luminescence dating or dating of mollusc shells, if abundant enough, by Amino Acid Racemisation (AAR).
109. Samples for luminescence dating may be taken if the deposits are safely accessible. Where deposits cannot be safely accessed for sampling during the evaluation stage, the mitigation should allow for stepped test pits with associated sampling as a second phase of work, if appropriate (Section 7.5).
110. If exceptionally complex/significant geoarchaeological deposits are identified, test pitting will aim to be minimally intrusive, but sufficient to resolve the aims of the evaluation, to a level agreed with the Archaeological Curators and the Applicant. If this is not possible, deposits will be left in situ and alternative assessment measures implemented, as agreed with the Archaeological Curators.
111. If any archaeological features are identified in deposits overlying or cut into the Pleistocene stratigraphy, these will be excavated and recorded following the above methodology for trenches or the location of the test pit moved to avoid disturbance.
112. The results of the Palaeolithic test pit evaluation will be integrated into the existing geoarchaeological deposit model for the onshore project area (see Section 6.7.4).

6.5.7 Recording of trial trenches

113. All exposed archaeological deposits and features will be recorded using the Archaeological Contractor's pro-forma recording system.
114. A complete record of excavated archaeological features and deposits will be made. This will include plans and sections, drawn to appropriate scales (generally 1:20 or 1:50 for plans, 1:10 for sections) and tied to the OS National Grid.
115. A full photographic record will be made using digital cameras equipped with an image sensor of not less than 10 megapixels. This will record both the detail and the general context of the principal features and the trial trenches. Digital images will be subject to managed quality control and curation processes, which will embed appropriate metadata within the image and ensure long term accessibility of the image set. Photographs will also be taken of all areas, including access routes, to provide a record of conditions prior to and on completion of the evaluation.

6.5.8 Recording of test pits

116. The test pits will be recorded using the Archaeological Contractor's pro-forma recording system, along with a drawn measured sketch section of at least one face.
117. For each lithostratigraphic unit, descriptions and interpretations of the deposits will be provided, using the Archaeological Contractor's in-house standard geoarchaeological field and laboratory descriptions guidelines, which are in accordance with BS EN ISO 146881:2018 Geotechnical investigation and testing – Identification and classification of soil.
118. Descriptions of deposits will include information such as:
- Depth;
 - Texture;
 - Composition;
 - Colour;
 - Inclusions;
 - Structure; and
 - Shape and nature of contacts between deposits.
119. Interpretations will include, where possible, probable depositional environments and formation processes.
120. All samples taken will be individually numbered. The location, size, stratigraphic context, purpose and whether retained or processed on site will be recorded.
121. A full photographic record will be made using digital cameras equipped with an image sensor of not less than 10 megapixels. This will record both the detail and the general context of the principal lithological and stratigraphic features, and the evaluation area as a whole. Digital images will be subject to managed quality control and curation processes which will embed appropriate metadata

within the image and ensure long term accessibility of the image set. Photographs will also be taken of all areas, including access routes, to provide a record of conditions prior to and on completion of the evaluation.

6.5.9 Survey of trial trenches and test pits

122. The real time kinematic (RTK) survey of all trenches and features will be carried out using a Leica GNSS (or similar) connected to Leica's SmartNet service. All survey data will be recorded in OS National Grid coordinates and heights above OD (Newlyn), as defined by OSTN15 and OSGM15, with a three-dimensional accuracy of at least 50mm.

6.5.10 Monitoring of trial trenches and test pitting

123. The Applicant (via their Project Archaeologist) will inform the Archaeological Curators in writing in advance of the start of the evaluation and keep them updated on its progress. Access will be arranged for the Archaeological Curators to make site visits to inspect and monitor the progress of the evaluation.

124. The progress of the evaluation and the effectiveness of the techniques used will be regularly reviewed together with the Archaeological Curators.

6.5.11 Reinstatement of trial trenches and test pits

125. The trenches will only be backfilled following inspection by or with the agreement of the Archaeological Curators. Trenches completed to the satisfaction of the Archaeological Curators will be backfilled using excavated materials in the order in which they were excavated, and left level on completion. No other reinstatement or surface treatment will be undertaken.

73-126. Test pits will be immediately backfilled on completion using excavated materials in the order in which they were excavated. No further reinstatement will be carried out.

6.5.12 FindsEarthwork Condition (GPS/topographic) Survey

6.5.12.1 General

127. All archaeological finds will be retained, although those of clearly very recent origin with negligible potential to provide information relevant to the project aims and objectives may be recorded on site and not retained. This will be undertaken at the discretion of the Archaeological Contractor. Where appropriate, soil samples may be taken and sieved to aid in finds recovery. Any finds requiring conservation or specific storage conditions will be dealt with immediately in line with First Aid for Finds (Watkinson and Neal 1998).

6.5.12.2 Human Remains

128. In the event of the discovery of any human remains (articulated or disarticulated, cremated or unburnt), all excavation of the deposit(s) will cease pending evaluation.

129. Initially the remains will be left in situ, covered and protected, pending discussions regarding the need for excavation/removal or sampling. Where this

is deemed appropriate, the human remains will be fully recorded, excavated and removed from site in compliance with Article 20 of the draft DCO ([REP4-004]). If human remains are discovered, a subsample of the assemblage will be investigated so that an appropriate mitigation strategy can be developed.

130. Excavation and post-excavation processing of human remains will be in accordance with the Archaeological Contractor's protocols and in-line with current guidance documents (e.g., Historic England, 2018, and McKinley 2013) and the standards set out in ClfA Technical Paper 13 (McKinley and Roberts 2013). Appropriate specialist guidance/site visits will be undertaken if required.
131. The final deposition of human remains subsequent to the appropriate level of osteological analysis and other specialist sampling/examinations will follow the requirements set out in Article 20 of the draft DCO ([REP4-004]).

6.5.12.3 Treasure

132. The Archaeological Contractor will immediately notify the Applicant and the Archaeological Curators on discovery of any material covered, or potentially covered, by the Treasure Act 1996. All information required by the Treasure Act (i.e., finder, location, material, date, associated items etc.) will be reported to the Coroner within 14 days and the Portable Antiquities Scheme via the Essex Finds Liaison Officer.

6.5.13 Environmental Sampling – Trial Trenches

133. All sampling will adhere to the principles outlined in Historic England's guidance (English Heritage, 2011 and Historic England, 2015b).
134. Bulk environmental soil samples, for the recovery of plant macrofossils, wood charcoal, small animal bones and other small artefacts, will be taken as appropriate from well-sealed and dateable contexts. In general, features directly associated with particular activities (e.g., pits, latrines, cesspits, hearths, ovens, kilns, and corn driers) should be prioritised for sampling over features, such as ditches or postholes, which are likely to contain reworked and residual material. However, this will be considered on a case-by-case basis to identify deposits of interest worthy of sampling infilling other features (e.g. ditches).
135. Should deposits such as fired clay be discovered an archaeomagnetic dating specialist would be contacted to assess the suitability for archaeomagnetic dating. This contact would be made remotely and would include photographs of the deposit(s).
136. Features such as cesspits and latrines would also be sampled to assess the presence of remains such as parasites. Further details on the types and methods of samples will be provided in the detailed WSI, post-consent.
137. If waterlogged or mineralised deposits are encountered, an environmental sampling strategy will be devised and agreed with the Archaeological Curators. Specialist guidance will be provided by a member of the Archaeological Contractor's geoarchaeological and environmental team, with site visits undertaken if required.
138. Any samples will be of an appropriate size – typically 40 litres for the recovery of environmental evidence from dry contexts, and 10 litres from waterlogged deposits. Historic England guidance on the recording sampling and

conservation of waterlogged wood would be consulted as appropriate (Historic England, 2010).

139. Following specialist advice, other sampling methods such as monolith, Kubiena or contiguous small bulk (column) samples may be employed to enable investigation of deposits with regard to microfossils (e.g., pollen, diatoms) and macrofossils (e.g., molluscs, insects), soil micromorphological or soil chemical analyses.

6.5.14 Geoarchaeological Sampling – Test Pits

6.5.14.1 Palaeoenvironmental Sampling

140. The potential for Pleistocene deposits to preserve palaeoenvironmental evidence will be assessed by the monitoring geoarchaeological specialist. If deposits suitable for palaeoenvironmental sampling are encountered, and are safely accessible for sampling, appropriate samples will be taken following the methodology outlined below.

141. Palaeoenvironmental sampling will adhere to the principles outlined in Historic England's guidance (English Heritage, 2011 and Historic England, 2015b). Bulk samples will be taken from suitable deposits and assessed for palaeoenvironmental indicators. The size of the samples to be taken are summarised in Table 6-1.

Table 6-1 Bulk palaeoenvironmental sampling

<u>Indicator</u>	<u>Deposits</u>	<u>Sample size (litres)</u>
<u>Ostracods and foraminifera</u>	<u>Waterlain clays, silts and fine sands</u>	<u>0.30</u>
<u>Diatoms</u>	<u>Clays and silts</u>	<u>0.10</u>
<u>Pollen</u>	<u>Clays, silts and peats</u>	<u>0.10</u>
<u>Molluscs</u>	<u>Clays, silts and fine sands and clayey/silty gravels</u>	<u>2.00</u>
<u>Small vertebrates</u>	<u>Clays, silts and fine sands and clayey/silty gravels</u>	<u>30.00</u>
<u>Large vertebrates</u>	<u>Clays, silts and fine sands and clayey/silty gravels</u>	<u>80.00</u>
<u>Insects and plant macro remains</u>	<u>Organic clays, silts and peat</u>	<u>10.00</u>

142. If appropriate, other sampling methods such as monoliths or contiguous small bulk (column) samples may be employed to enable investigation of deposits with regard to microfossils (e.g., pollen) and macrofossils (e.g., molluscs).

6.5.14.2 Sedimentological Sampling

143. To assist in assessing mode of deposition (e.g., aeolian, alluvial, colluvial etc.) of key sediments, samples of 20 millilitres may be taken from fine grained sediments for particle size analysis.

144. Bulk samples of 20-40 litres may be taken from clastic sediments for clast lithological analysis to assist in determining the mode of deposition and, for fluvial contexts, reconstruct palaeo-drainage history (including fluvial diversions and catchment changes).

145. Recommendations for sedimentological sample assessment will be made in the Palaeolithic test pitting evaluation report, where appropriate.

6.5.14.3 Scientific Dating

146. Consideration will also be given to the suitability of any Pleistocene sediments exposed in the test pits for luminescence dating. Luminescence dating sampling will be carried out in accordance with Historic England's Luminescence Dating: Guidelines on using luminescence dating in archaeology (English Heritage, 2008).

147. If mollusc shells are identified, their potential for dating by Amino Acid Racemisation (AAR) will be considered.

6.1. If organic sediments are identified, their potential to contain short lived plant remains suitable for AMS radiocarbon dating will be considered and take account of Historic England's guidance Radiocarbon Dating and Chronological Modelling (2022).

~~74.1. Earthwork Condition Surveys would target locations (for example in areas of pasture and non-arable, or any areas thought or known to contain important surviving or potentially important historic landscape features) to record the presence/absence, extent, profile and 'on the ground' condition of any surviving, above ground historic earthworks. This would focus on features which may be impacted by the construction works within the onshore project area.~~

~~75.1. The assessment of the baseline historic environment data and results of the walkover survey identified the following sites for potential Earthwork Condition Survey:~~

~~68.1. Field boundaries visible as cropmarks on historic aerial photographs and satellite imagery with residual earthwork remains visible on LiDAR data (EHER 3143).~~

~~76.1. It is worth noting that during the heritage walkover survey, a slightly raised area was identified which may corroborate with the microtopographic earthwork remains identified from LiDAR data. However, it was difficult to determine if this undulation was a natural disturbance in the landscape or a result of human activity.~~

~~77.148. Data collected from the topographical survey would predominantly feed into an additional approach (in certain identified areas) with respect to construction related backfilling and reinstatement (e.g. the 'restoration' of any historic earthwork features or trends and landform/shape, where possible).~~

6.6 Geoarchaeological Assessment / Palaeoenvironmental Borehole Survey

149. A principal focus of the geoarchaeological borehole survey is anticipated to be deeply buried superficial deposits identified in the geoarchaeological monitoring of GI works at the landfall between Holland Haven and Frinton on Sea (Appendix 25.9 [APP-156]). Additional purposive geoarchaeological boreholes may also be required to investigate deeply buried Pleistocene deposits with geoarchaeological potential at other locations in the onshore project area. It is anticipated that the borehole survey will be restricted to GCZ1 as defined in the GDBA (ES Appendix 25.6 [APP-152]), although boreholes may be required in other locations in the onshore project area.

150. As set out in Section 6.3, it is proposed to undertake geoarchaeological and archaeological monitoring of GI works. The results of this will inform the requirements for any geoarchaeological boreholes will be determined based on the results of geoarchaeological monitoring of GI (Section).

6.6.1 Aims and objectives of the Geoarchaeological Borehole

~~Survey Geoarchaeological assessment/palaeoenvironmental survey is largely designed to identify deposits that often lie outside the main areas of traditional archaeological interest along a large linear scheme. These have a high potential for yielding information that would permit the reconstruction of the past environmental, vegetational and land use history of the areas within the onshore project area.~~

6.6.1

~~6.6.2 Where required and justified, such a survey often facilitates the recognition of:~~

~~6.6.3 localised palaeochannel sediments;~~

~~6.6.4 small bogs or lake deposits;~~

~~6.6.5 valley floodplain sediments and dry valley fills; and~~

~~6.6.6 buried soils from which the palaeoenvironmental history of an area may be reconstructed through the analysis of a series of identified features.~~

~~6.6.7 For example, any identified areas of peat-rich soils, with the potential for organic preservation and which would be impacted by the Project.~~

~~6.6.8 Methods for this assessment will include Palaeolithic test pit evaluation to further identify the presence of Pleistocene deposits identified within project area following the GBDA (ES Appendix 25.6 **(Document Reference: 3.3.53)**). Geoarchaeological borehole survey may also be appropriate where the Project is likely to impact on any deeply buried deposits within the onshore project area. This could include the landfall area between Holland Haven and Frinton on Sea (GCZ1) where previous work has identified the presence of peats buried 3.00m bgl and within the onshore substation works area (should impacts to these depths occur).~~

~~6.6.9 Monitoring of any additional GI works undertaken within the onshore project area may address some aims of the geoarchaeological assessment and may negate the need for further purposive geoarchaeological evaluation. Similarly, some of the test pit evaluation could be undertaken in tandem with any proposed archaeological trial trench evaluation.~~

151. The requirements for any geoarchaeological boreholes will be determined based on the results of geoarchaeological monitoring of GI (Section 6.3). The specific aims of the geoarchaeological borehole survey are as follows:

- provide information about the geoarchaeological potential of the survey area;

- consider the possible significance of any geoarchaeological evidence present, or potentially present, in the context of national and regional research priorities and agendas (e.g., ALGAO, 2021); and
- to inform on possible requirements for proportionate geoarchaeological work that may be required to offset the impacts of the Project on the geoarchaeological resource or develop a management strategy to prevent impacts.

152. The specific aims of the survey will be addressed by achieving the following objectives;

- record the sequence of deposits at each borehole location;
- obtain geoarchaeological samples of relevant deposits including for palaeoenvironmental assessment (where possible);
- undertake deposit modelling of the data arising from the borehole survey, integrating any available GI data and relevant BGS archive boreholes, in order to map the extent, thickness and depth of deposits;
- interpret the probable environments represented;
- determine the importance of the deposits with regard to their geoarchaeological potential; and
- make specific recommendations for further work, where appropriate, which may include palaeoenvironmental assessment and/or scientific dating.

6.6.2 Fieldwork Methodology

153. Boreholes will be carried out using a mechanical drilling rig. Specific drilling methods and borehole locations will be defined within a detailed survey-specific WSI post-consent and will be developed in conjunction with the proposals for post-consent GI works.

154. The drilling rig will be operated by experienced engineers under the supervision of a suitably experienced geoarchaeologist.

155. The supervising geoarchaeologist will record, describe and interpret the sequences of deposits encountered in order to allow assessment of likely geoarchaeological potential. Paleoenvironmental, sedimentological and dating sampling will be carried based on professional judgement and in accordance with the aims and objectives of the evaluation. Sampling will be carried out in accordance with the methodology outlined in Section 6.5.14.

156. Where deposits of geoarchaeological potential are identified in the boreholes, the Archaeological Contractor will retain suitable core lengths in sleeved liners.

157. If deposits with geoarchaeological potential are identified in hand-dug starter pits, a suitable sampling strategy will be devised including column or bulk sampling where practical.

158. Retained core lengths will be sealed and marked with the project number, site number, borehole number and sample depth and retained for laboratory assessment.

159. Boreholes described in the field or retrieved for later description will include the following information;

- Depth;
- Texture;
- Composition;
- Colour;
- Inclusions;
- Structure; and
- Contacts between deposits.

160. Interpretations will include, where possible, probable depositional environments and formation processes.

161. A full photographic record will be made using digital cameras equipped with an image sensor of not less than 10 megapixels. This will record both the detail and the general context of the principal lithological and stratigraphic features, and the survey area as a whole.

162. Digital images will be subject to managed quality control and curation processes which will embed appropriate metadata within the image and ensure long term accessibility of the image set. Photographs will also be taken of all areas, including access routes, to provide a record of conditions prior to and on completion of the borehole survey.

163. Methods for reinstatement at borehole locations will be agreed and outlined within a detailed survey-specific WSI.

164. The real time kinematic (RTK) survey of all boreholes will be carried out using a Leica GNSS or similar connected to Leica's SmartNet service. All survey data will be recorded in OS National Grid coordinates and heights above OD (Newlyn), as defined by OSGM15 and OSTN15, with a three-dimensional accuracy of at least 50mm.

6.7 Post-Excavation Methods for Phase 2 Evaluation

6.7.1 Trial Trenches

6.7.1.1 Stratigraphic evidence

165. All written and drawn records from the evaluation will be collated, checked for consistency and stratigraphic relationships. Key data will be transcribed into a database, which can be updated during any future analyses. The preliminary phasing of archaeological features and deposits will be undertaken using stratigraphic relationships and the spot dating from finds, particularly pottery.

166. A written description will be made of all archaeologically significant features and deposits that were exposed and excavated, ordered either by trench or by period as appropriate. Details of all contexts will be provided in trench tables in the appendix of the report.

6.6.9.16.7.1.2 Finds evidence

167. All retained finds will, as a minimum, be washed (as appropriate), weighed, counted and identified. They will then be recorded to a level appropriate to the aims and objectives of the evaluation. Recording and reporting will conform to the Type 2 (Appraisal) level according to ClfA's Toolkit for Specialist Reporting (2021b), to include appropriate quantification, characterisation and assessment of significance and potential. The report will include a table of finds by feature/context or trench.
168. Metalwork from stratified contexts will be X-rayed and, along with other fragile and delicate materials, stored in a stable environment. The X-raying of objects and other conservation needs will be undertaken by an appropriate conservation centre.
169. Finds will be suitably bagged and boxed in accordance with the guidance given by the relevant museum and generally in accordance with the standards of the ClfA (2020b).

6.7.1.3 Environmental evidence

170. Bulk environmental soil samples will be processed by standard flotation methods. The residues will be fractionated into 5.6/4mm and 1/0.5mm and dried if necessary. The coarse residue fraction (>5.6/4mm), and the fine fraction where appropriate, will be sorted and discarded, with any finds recovered given to the appropriate specialist. The flot will be retained on a 0.25mm mesh and scanned to assess the range of environmental remains present and their preservation. Unsorted fine residues will be retained until after any analyses and discarded following final reporting (in accordance with the selection strategy outlined in section 6.9.4).
171. In the case of samples from cremation-related deposits, the flots will be retained on a 0.25mm mesh, with residues fractionated into 4mm, 2mm and 1mm. In the case of samples from inhumation burial deposits, the sample will be wet sieved through 9.5mm and 1mm mesh sizes. The coarse fractions (9.5 mm) will be sorted with any finds recovered given to the appropriate specialist together with the finer residues.
172. Any waterlogged samples will be processed by standard waterlogged flotation methods.
173. Recording and reporting will conform to the Type 2 (Appraisal) level according to ClfA's Toolkit for Specialist Reporting (2021b), to include appropriate quantification, characterisation and assessment of significance and potential.

6.7.2 Test Pits

6.7.2.1 Lithostratigraphic Evidence

174. All written and drawn records from the evaluation will be collated and checked for consistency.
175. Where possible, probable depositional environments, formation processes and chronology will be considered.
176. A written description will be made of all geoarchaeological deposits, ordered either by intervention or lithostratigraphy. Details of all lithostratigraphic contexts will be provided in tables in an appendix to the report.

6.7.2.2 Finds Evidence

177. All retained finds will, as a minimum, be washed (as appropriate), weighed, counted and identified. They will then be recorded to a level appropriate to the aims and objectives of the evaluation. The report will include a table of finds by lithostratigraphic context and/or intervention.
178. Metalwork from stratified contexts will be X-rayed and, along with other fragile and delicate materials, stored in a stable environment. The X-raying of objects and other conservation needs will be undertaken by an appropriate conservation centre.
179. Finds will be suitably bagged and boxed in accordance with the guidance given by the relevant museum and generally in accordance with the standards of the ClfA (2020b).

6.7.2.3 Palaeoenvironmental, Sedimentological and Scientific dating samples

180. Palaeoenvironmental and dating samples may be obtained during the evaluation. Where appropriate samples are identified, and which have the potential to contribute to the overarching aims and objectives of the evaluation, sample assessment and/or dating may be recommended. Recommendations will be made in the Palaeolithic test pitting evaluation report.

6.7.3 Borehole Survey

6.7.3.1 Stratigraphic evidence

181. All written and drawn records from the evaluation will be collated and checked for consistency.
182. Where possible, probable depositional environments, formation processes and chronostratigraphic context will be considered.
183. Deposits will be preliminary phased using stratigraphic relationships, augmented with additional chronological information, if available.
184. A written description will be made of all geoarchaeological deposits, ordered by intervention. Details of all contexts will be provided in tables in the appendix of the report.

6.7.3.2 Finds Evidence

185. All retained finds will, as a minimum, be washed (as appropriate), weighed, counted and identified. They will then be recorded to a level appropriate to the aims and objectives of the evaluation. Recording and reporting will conform to the Type 2 (Appraisal) level according to ClfA's Toolkit for Specialist Reporting (2021b), to include appropriate quantification, characterisation and assessment of significance and potential. The report will include a table of finds by feature/context or trench.
186. Metalwork from stratified contexts will be X-rayed and, along with other fragile and delicate materials, stored in a stable environment. The X-raying of objects and other conservation needs will be undertaken by an appropriate conservation centre.
187. Finds will be suitably bagged and boxed in accordance with the guidance given by the relevant museum and generally in accordance with the standards of the ClfA (2020b).

6.7.3.3 Palaeoenvironmental assessment and scientific dating

188. Where appropriate deposits are identified in retained cores, and which have the potential to contribute to the overarching aims and objectives of the borehole survey, palaeoenvironmental assessment and dating may be recommended.
189. This assessment may include a suite of complementary techniques comprising targeted and proportionate assessment of pollen, diatom, ostracod, plant macrofossil, molluscan and coleopteran remains, supported by radiocarbon and/or Optically Stimulated Luminescence (OSL) dating. Multiple techniques are typically assessed in accordance with Historic England guidelines on good practice in environmental archaeology (English Heritage, 2011) and geoarchaeology (Historic England, 2015).
190. Detailed recommendations for assessment will be provided in the borehole survey report.

6.7.4 Deposit Modelling

191. Data obtained during the evaluation will be used to update the geoarchaeological deposit model for the Project provided in the GDBA (Appendix 25.6 [APP-152]). Data will principally derive from geoarchaeological monitoring of GI, Palaeolithic test pitting evaluation and geoarchaeological borehole survey, but will be augmented with the results of the archaeological trial trenching as appropriate.
192. Deposit modelling identifies the range of Quaternary deposits that may be present in a defined area and maps their lateral extent and depth. The deposit modelling will be carried out in accordance with Deposit modeling and archaeology: guidance for mapping buried deposits (Historic England, 2020).
193. Only lithostratigraphic records with sufficiently detailed descriptive terminology and location data (including surface elevation) will be included in the model.
194. All available data points will be entered into industry standard geological utilities software (Rockworks™ 23). Each stratigraphic unit will be given a colour and pattern allowing cross correlation and grouping of the different sedimentary units. The grouping of these deposits will be based on lithological descriptions, which define distinct depositional environments referred to as 'stratigraphic units' (e.g., Bedrock, Alluvium and Made Ground)
195. Outputs generated using RockWorks 23™ may include two-dimensional stratigraphic profiles ('transects') of selected interventions and/or models of surface height and/or thickness were generated using an inverse-distance weighted (IDW) algorithm for the stratigraphic units present.
196. The modelling algorithms employed in the creation of the outputs will be described in the methods section of the report. The results of the deposit modelling will be reviewed and utilised within the final report with a comment on data coverage and the limitations and practical use of the deposit model.

6.7.5 Geoarchaeological Landscape Characterisation

197. The results of the GI monitoring and evaluation will be used to provide an updated Geoarchaeological Landscape Characterisation (GLC) for the Project, building upon that provided in the GDBA (Appendix 25.6 [APP-152]). The GLC

works on the same principles as a Historic Landscape Characterisation (English Heritage, 2004) and Landscape Character Assessment (Natural England, 2014), but in this case largely considers the shallow buried and outcropping superficial geological elements of the landscape.

198. The GLC will consider variations in the Quaternary geology across the onshore project area, sub-dividing the evaluation into different GCZs, where appropriate.

199. The GLC will provide an assessment of the archaeological and geoarchaeological potential of Quaternary deposits in each GCZ. It provides a framework for more precisely determining archaeological and geoarchaeological potential at a scale which can most effectively inform future decision making, including the formation of details for a bespoke mitigation strategy (to offset the impact of the Project on the geoarchaeological resource); or a management strategy to prevent impacts.

6.8 Phase 2 Reporting

6.8.1 General

200. Following completion of the Phase 2 fieldwork and the subsequent evaluation of the stratigraphic, artefactual and ecofactual evidence, draft reports will be submitted for approval to the Archaeological Curators, for comment. Once approved, a final version will be submitted.

201. The report will include the following elements:

- Non-technical summary;
- Project background;
- Archaeological and historical context;
- Aims and objectives;
- Methods;
- Results – stratigraphic, finds and environmental;
- Conclusions in relation to the project aims and objectives, and discussion in relation to the wider local, regional or other archaeological contexts and research frameworks and recommendations for further work, as appropriate;
- Archive preparation and deposition arrangements;
- Appendices, including trench summary tables;
- Illustrations; and
- References.

202. A copy of the final report will be deposited with the Essex Historic Environment Record (HER), along with spatial digital survey data (.dxf or shapefile format) relating to evaluation.

203. This report will inform decision making with the Archaeological Curators as to the scope and extent of any further archaeological work required for formal mitigation to be undertaken as Phase 3 (see Section 7).

6.8.2 Publication

204. In the event that further mitigation is required (Phase 3 – Section 7), consideration will be given to appropriate post-excavation analysis and the preparation of an appropriate programme of publication and dissemination. Details will be set out in a WSI to be agreed with the Archaeological Curators.
205. If no further mitigation works are undertaken, a short report on the results of the evaluation will be prepared for publication in a suitable journal, if considered appropriate and agreed with the Applicant and the Archaeological Curators.

6.8.3 OASIS

206. An OASIS (online access to the index of archaeological investigation) record (<http://oasis.ac.uk>) will be created, with key fields completed, and a .pdf version of the final report submitted. Subject to any contractual requirements on confidentiality, copies of the OASIS record will be integrated into the relevant local and national records and published through the Archaeology Data Service (ADS) ArchSearch catalogue.
207. An OASIS sheet shall be completed at the end of the archaeological work and supplied to the Archaeological Curators. This will be completed in digital form. A copy should also be emailed to the Hon. Editor of the Essex Archaeology and History Journal for inclusion in the annual round-up of projects in the Journal.

6.9 Archive Storage and Curation (Phase 4)

6.9.1 Museum

208. It is recommended that the project archive resulting from the evaluation is deposited with the Colchester Museums Resource Centre. Provision should be made for the cost of long-term storage in the post-fieldwork costs. The museum will receive notification of the project prior to the commencement of fieldwork. A Site code for the evaluation will be obtained from the Historic Environment Consultant at Place Services, Essex County Council.

6.9.2 Transfer of title

209. On completion of the evaluation (or extended fieldwork programme), reasonable effort will be made to persuade the legal owner of any finds recovered (i.e., the landowner), with the exception of human remains and any objects covered by the Treasure Act 1996, to transfer their ownership to the museum in a written agreement.
210. It is acknowledged that a landowner may want the finds (or particular finds) returned to them following completion of the assessment and analysis work. In this instance, the Archaeological Contractor will return the finds to the landowner following full and appropriate recording, as set out in the Museums Essex guidelines (2022), and conservation (if required), and approved by the Archaeological Curators. The Archaeological Contractor will also advise the landowner on the appropriate care and suitable conditions for storage. Further details of an approach to returning the finds to a landowner will be set out within the survey-specific WSIs.

6.9.3 Preparation of archive

6.9.3.1 Physical archive

211. The complete physical archive, which may include paper records, graphics, artefacts, and ecofacts, will be prepared following the standard conditions for the acceptance of excavated archaeological material by Colchester Museums Resource Centre, and in general following nationally recommended guidelines (Brown 2011; ClfA 2020b; SMA 1995). The archive will usually be deposited within one year of the completion of the archaeological work, with the agreement of the Applicant.

6.9.3.2 Digital archive

212. The digital archive generated by the archaeological work will be deposited with a Trusted Digital Repository, in this instance the Archaeology Data Service (ADS), to ensure its long-term curation. Digital data will be prepared following ADS guidelines (ADS, 2013 and online guidance) and accompanied by metadata.

6.9.4 Selection strategy

213. It is widely accepted that not all the records and materials (artefacts and ecofacts) collected or created during the course of an archaeological project require preservation in perpetuity. These records and materials will be subject to selection in order to establish what will be retained for long-term curation, with the aim of ensuring that all elements selected to be retained are appropriate to establish the significance of the project and support future research, outreach, engagement, display and learning activities, i.e., the retained archive should fulfil the requirements of future researchers and the receiving Museum.

214. The selection strategy, which details the project-specific selection process, is underpinned by national guidelines on selection and retention (Brown, 2011, section 4) and generic selection policies (SMA, 1993) and follows ClfA's Toolkit for Selecting Archaeological Archives (2022). It should be agreed by all stakeholders and fully documented in the project archive.

215. Decisions on selection will be deferred until after the fieldwork stage, and no detailed strategy is presented here. Any material not selected for retention may be used for teaching or reference collections by the Museum, or by the Archaeological Contractor.

6.9.5 Security copy

78.—In line with current best practice (e.g., Brown 2011), on completion of the project a security copy of the written records will be prepared in the form of a digital PDF/A file. PDF/A is an ISO-standardised version of the Portable Document Format (PDF) designed for the digital preservation of electronic documents through omission of features ill-suited to long-term archiving.

79.—

80-216. _____

7 Methodologies (Mitigation Measures (Phase 3))

7.1 Introduction

~~81.217.~~ The ~~post-consent stages of survey and~~ Phase 2 archaeological evaluation works have the potential to indicate the presence of previously unknown buried archaeological remains (and further verify previously known / anticipated above ground and buried site archaeological remains).

~~82.218.~~ The results of the survey and Phase 2 archaeological evaluation works will enable the archaeological and historic environment resource associated with and impacted by the Project to either be safeguarded and/or better understood. This would be by means of ~~subsequent~~ mitigation measures in a manner that is both appropriate and proportionate to the significance of the remains present. This would be formally agreed through consultation with ~~EGG (and HE, as required)~~ the Archaeological Curators as part of separate pre-construction and construction related WSIs.

~~83.219.~~ ~~Subsequent~~ The Phase 3 mitigation measures are expected to comprise a combination of the following recognised standard approaches both in advance of and/or during construction:

- Preservation In Situ;
- Detailed Archaeological Excavation;
- Strip, map and record;
- Geoarchaeological sampling, sample assessment and analysis;
- ~~Archaeological Monitoring/Watching Brief;~~
- ~~Preservation In Situ;~~
- Sensitive and Precautionary Approaches to Construction Works;
- Protocol for Archaeological Discoveries; and
- Reinstatement of Field Boundaries and Hedgerows.

7.2 Preservation In-Situ

220. Where well-preserved and/or significant archaeological remains survive within the onshore project area, the Archaeological Curators may state a preference for preservation 'in-situ' of certain remains. Guidance provided within *Preserving Archaeological Remains. Decision-taking for Sites under Development* (Historic England, 2016a) would be referred to inform the decision regarding preservation in situ.

221. Where opportunities remain for preserving sites or important features, areas or elements of archaeological remains in situ through the pre-construction and construction stages, these would be considered on a case-by-case, site by site and area by area basis in further discussion with the Archaeological Curators. A management strategy would be developed in consultation with the Archaeological Curators as to how an archaeological site will be preserved.

222. As part of the post-consent detailed design phase, further consideration would be given, where possible, to micro-siting (within the confines of the onshore project area) which will seek to minimise impact upon those areas of highest archaeological significance, within the confines of engineering and other environmental constraints.

7.27.3 Detailed Archaeological Excavation

~~84.223.~~ Archaeological excavation is an intrusive form of fieldwork, which systematically identifies, examines and records archaeological deposits, features and structures. It also recovers artefacts, ecofacts and other remains within a specified area where the extents of archaeological remains are well defined by previous survey and evaluation work.

~~85. Example (model) clauses (Appendix A) have been included only as outline examples of the likely approaches to mitigation works required and the associated specifications. These relate to methodologies for Archaeological Excavation and archaeological monitoring/watching brief.~~

224. This type of mitigation would be recommended in advance of construction and employed where significant, complex and / or dense archaeological remains, are defined by the Phase 2 evaluation and where micro-siting of the cables (for example) is not appropriate or achievable, and therefore the preservation in-situ of known archaeological deposits is not possible.

225. In accordance with the ClfA Standard and Universal guidance for archaeological excavation (2023a), the general aims of the archaeological excavation will be to:

- Further define the features identified during the evaluation;
- Examine the archaeological resource within the onshore project area;
- Seek a better understanding of and compile a lasting record of the resource, within a defined framework of research objectives; and
- Analyse and interpret the results and disseminate them.

~~86.226.~~ Outline details of the excavation methodology, sampling and recording are set out in Appendix A.

227. Should the archaeological remains extend beyond the limits of the pre-defined archaeological excavation area and continue within the onshore project area, machine stripping will continue from the feature(s) of interest until the area is clear of archaeological remains.

~~87.~~ Archaeological Detailed archaeological excavation will lead to a programme of post-excavation assessment, analysis, and publication (Phase 4) following completion of the archaeological fieldwork. A

~~88.228.~~ Following completion of the archaeological excavation fieldwork, a post-excavation assessment would be carried out in accordance with Historic England~~HE~~'s guidance MoRPHE (Historic England, 2015a). This would result in the preparation of an Updated Project Design (UPD). This would include the following:

- proposals and a timetable for further analysis (including scientific dating, if appropriate);
- publication of the results (including a synopsis for publication) in an appropriate academic journal or monograph series; and
- preparation of the archive (including all paper records, reports and finds assemblages) for deposition in an appropriate museum or archive facility.

89-229. ECG-The Archaeological Curators would be consulted on the proposals included in the UPD prior to issue.

90-230. Wherever possible archaeological excavation would be carried out in advance of construction, as this would ensure that the most sensitive sites of identified archaeological significance are dealt with well in advance of relevant construction activity. Additionally, this would ensure that construction would be able to progress in an effective and timely manner in these areas during the construction window.

7.4 Strip, map and record

231. Strip, map and record sets out an approach that is more appropriate to areas where uncertainty over the extent of significant remains persists after evaluation.

232. Once all the topsoil and subsoil has been 'stripped', the surface is cleaned back manually by the Archaeological Contractor and archaeological features are 'mapped'. The features are drawn and compiled onto a site plan so that all the remains can be looked at in relation to one another. Decisions are then made as to which features to excavate and how much (% and location). A 'sample' of the archaeological features are then hand-excavated, enough to allow the clear identification of phases of human occupation on the site. The sampling level would be agreed in consultation with the Archaeological Curators.

233. A detailed WSI will be produced setting out the specific methodologies for strip, map and record, including a generic recording and sampling strategy which will be agreed in advance with the Archaeological Curators and will be refined, as required, following the soil strip of the strip, map and record area.

234. The areas of strip, map, and record may be temporarily fenced to demarcate the archaeological working area to ensure no physical impacts are caused prior to implementation of the programme. These areas will not be released for construction until the agreed archaeological field work has been completed and signed off by the Archaeological Curators.

235. Following completion of the strip, map and record areas, a programme of post-excavation assessment, analysis and publication (Phase 4) would be required, as appropriate, as outlined above under Section 7.3.

7.5 Geoarchaeological sampling, sample assessment and analysis

236. Appropriate methods of geoarchaeological sampling are dependent on sampling requirements but could include stepped test pits or trenches for controlled recovery of artefacts, and/or palaeoenvironmental and dating samples or targeted boreholes to recover palaeoenvironmental and dating

samples. Geoarchaeological sampling, sample assessment and, if required, analysis is usually subject to a staged program of investigation, with detailed requirements determined at each stage.

237. Mitigative geoarchaeological works should be carried out in accordance with a WSI that conforms to Historic England guidance 'Geoarchaeology: Using Earth Sciences to Understand the Archaeological Record' (2015b) and 'Curating the Palaeolithic' (2023)

7.37.6 Archaeological Monitoring and Recording/Watching Brief

91.238. Archaeological monitoring ~~and recording/watching brief~~ involves archaeological observation and any subsequent required investigation conducted during certain groundworks (e.g. targeted areas of both topsoil stripping and excavation of the cable trench, if required and where possible) associated with the construction phase.

92.239. Where appropriate (in locations identified in advance), machine excavation would proceed under archaeological observation, but would not be controlled directly by the ~~nominated on-site archaeologist~~ Archaeological Contractor(s). A contingency period would be included in the works programme to allow investigation and recording of archaeological remains that might be identified, disturbed, or destroyed. ~~Watching briefs (a~~ Archaeological monitoring) normally take place where there is:

- ~~• A lower potential of encountering archaeological remains but the presence of which has not yet been assessed;~~
- Specific features within a larger area that is otherwise not of great interest (e.g. field systems);
- Near to but outwith excavation areas where a lower density of features is expected such that excavation would not be a proportionate response; and
- In areas where works are not proportionately practicable outwith the context of a defined scheme (e.g. safety – near services or active roads, or area with limited activity windows).

93.240. An agreed mechanism would be established to allow archaeological investigation during the ~~watching brief~~ monitoring, where appropriate. However, it is not usually anticipated that substantial archaeological remains (which would generally be highlighted for archaeological excavation were known about) would be found in areas that have been identified for ~~watching brief~~ archaeological monitoring, although the possibility still remains.

94.241. The programme of ~~the watching brief~~ archaeological monitoring and recording would also result in the preparation of a report and ordered archive. Where archaeological remains are investigated and recorded a further programme of post-excavation assessment, analysis and publication (Phase 4) would be required, as appropriate, as outlined above under detailed the archaeological excavation (Section 7.3).

7.4—Preservation In-Situ

95. ~~Where well-preserved and/or significant archaeological remains survive within or along a development site, ECC may state a preference for preservation ‘in-situ’ of certain remains.~~
96. ~~Where opportunities remain for preserving sites or important features, areas or elements of archaeological remains in situ through the pre-construction and construction stages, these would be considered on a case-by-case, site by site and area by area basis in further discussion with the ECC (and HE as required).~~
97. ~~As part of the post-consent detailed design phase, further consideration would be given, where possible, to micro-siting (within the confines of the onshore project area) which will seek to minimise impact upon those areas of highest sub-surface archaeological potential, within the confines of engineering and other environmental constraints.~~

7.57.7 Sensitive and Precautionary Approaches to Construction Works

- 98.242. Certain areas within the onshore project area may require additional, sensitive and precautionary approaches to construction works. The aim of these would be to ensure no accidental damage or accidental physical interactions occur with certain existing sensitive structures and features (of a historic nature) in identified areas.
- 99.243. The onshore cable route may be more constrained at certain locations and construction works will need to be conducted in a sensitive and controlled manner. Signage and temporary barriers would be required to ensure that no accidental damage or physical interactions occur, in certain instances.
- 100.244. Specific constrained areas would be identified in the post-consent detailed design stage. The above measures of precautionary working will likely need to be adopted and would be further detailed in a Construction Stage Plan(s), Code of Construction Practice, Contractor Environmental Action Plan(s), or similar. These documents outline the strategies and measures ~~a contractor~~ the Principal Contractor intends to implement to manage and minimise the environmental impact of their activities during ~~a~~ construction.

7.67.8 Protocol for Archaeological Discoveries

- 101.245. Following agreement with ~~ECC (and HE as required)~~ the Archaeological Curators that proportionate mitigation has been carried out within the onshore project area, an archaeologist may not be on site to monitor all elements of the intrusive groundworks. In these instances, NFOW and the relevant appointed Principal Contractor(s) will implement a protocol for reporting archaeological discoveries (PAD) as an opportunity to engage with the workforce and allow reporting of remains that would be recovered outside archaeological investigation. The PAD would be based on the principles set out in the Offshore Renewables Protocol for Archaeological Discoveries (ORPAD) (The Crown Estate, 2014).
- 102.246. ORPAD (The Crown Estate, 2014) states that “*It is recognised that this Protocol refers primarily to offshore schemes of development. However, with offshore renewable schemes it is usual to have associated infrastructure (such*

as export cables) that impact not only the offshore historic environment, but also inshore, inter-tidal, and in fully terrestrial localities. Therefore, this Protocol has been designed to operate in all of these environments, where an archaeologist is not present.”

~~103.247.~~ ORPAD came into effect in December 2010 (updated in July 2014) and applies to pre-construction, construction, and installation activities in developing offshore renewable energy schemes where an archaeologist is not present on site. The main objective of the protocol is to reduce direct impacts from occurring on currently unrecorded heritage assets. This is done by allowing for the effective reporting of discoveries of archaeological material in a manner that is conducive to construction works in order to ensure that advice, concerning measures to address discoveries, is received and implemented in a timely and efficient manner.

~~104.248.~~ Should previously unknown buried archaeological remains of a significant nature be encountered during construction works, the temporary suspension of intrusive groundworks may be required.

~~105.249.~~ Each worksite team will have a Site Champion, a single person who is responsible for reporting discoveries to a Nominated Contact within the NFOW project team. The Nominated Contact will notify the ~~Archaeological co-ordinator~~Project Archaeologist, who will seek further advice from ~~ECG~~the Archaeological Curators.

~~106.250.~~ The Nominated Contact would be the Environment Manager and/or Principal Contractor within the NFOW project team. Individual Site Champions for specific activities would be specified in method statements. The identity of the Site Champion would be clearly communicated to work teams, via pre-commencement briefings (toolbox talks) for example.

~~107.251.~~ NFOW would be responsible for ensuring that construction teams working within the onshore project area are provided with appropriate training in the application of the PAD and that all staff and contractors are aware of their responsibilities under the protocol.

~~108.252.~~ Training to construction staff, site crews and work teams with regard to the practical application of the protocol in their day-to-day work can be provided by a sufficiently experienced and qualified Archaeological Contractor. Hard copies of the PAD document would be made available for use at each temporary construction compound.

~~109.253.~~ Provision would be made by NFOW, in accordance with the PAD, for the prompt reporting/recording to ~~ECG~~the Archaeological Curators of archaeological remains encountered or suspected during works.

~~110.254.~~ Following completion of the onshore construction works, a report would be produced by the Archaeological Contractor presenting the results of the PAD implementation during relevant activities. This would be submitted to ~~ECG~~the Local Planning Authority’s Historic Environment Consultant. If no discoveries are made, a nil discoveries report would be compiled to demonstrate adherence to the measures as would be set out in the construction-related mitigation WSI. ~~This would be produced in the post-consent/pre-construction stages of the Project.~~

7.77.9 Reinstatement of Field Boundaries and Hedgerows

111.255. Impact to the Historic Landscape Character (HLC) of the onshore project area has been minimised through careful route selection. This would be further offset by returning field boundaries/hedgerows to their pre-construction condition and character post-construction, wherever possible, as part of a sensitive programme of backfilling and reinstatement/landscaping (see Outline Landscape and Ecological Management Strategy ~~(Document Reference 7.14)~~**(REP4-006)**).

112.256. Certain hedgerows and field boundaries (e.g. county and parish boundaries) may require archaeological recording prior to and/or during the construction process and further enhanced provisions made and implemented during backfilling and reinstatement.

8 **Public Outreach Engagement / Community Engagement Outreach**

257. It is ~~acknowledged~~recognised that archaeological works will generate significant public interest. ~~In response, therefore~~ a public outreach programme will be implemented. The specific details of this outreach initiative will be set out in an overarching engagement strategy to be included in the site-specific WSIs as relevant. These WSIs, secured by DCO Requirement 11, will be subject to consultation with ~~EGG and HE~~the Archaeological Curators and submitted to and approved by the relevant ~~local~~ planning authority before commencing archaeological mitigation works.

8.1 Research Themes

258. As outlined in section 5.2, following the Phase 2 evaluation the Project will develop a series of research themes/questions which the Phase 3 mitigation work will seek to address. These research themes/questions will also align with the East of England Regional Research Framework (ALGAO East of England, 2021).

259. As part of the public engagement strategy, common themes relevant to the archaeology observed on the Project will be incorporated into the different types of engagement activities as appropriate to provide a focus for those engagement activities. These themes will be linked to the Project's archaeological research agenda to be developed following Phase 2. At this stage, the following broad research themes are suggested:

- Understand periodisation within the onshore development area;
- Understand landscape division and use within the onshore development area; and
- Understand connectivity between the onshore development area and more widely.

260. Consideration will also be given to the Outline Offshore Written Scheme of Investigation (**REP3-015**) with regard to potential linkages to the offshore and intertidal historic environment.

8.2 Potential Outreach Opportunities

~~113-261.~~ 261. The outreach programme may encompass the following components, ~~customised~~tailored to suit the Project's requirements:

- Regular updates through a social media presence, highlighting significant discoveries and promoting engagement events such as talks and open days at appropriate stages.
- Issuing press releases to local media when noteworthy archaeological finds are identified or when specific events warrant promotion. Coordination and distribution of these releases will be managed through the broader communication efforts of the Project.
- A dedicated archaeology Project web page.

- Conducting publicly accessible talks delivered by the archaeological contractor(s) to local interest groups, including schools and Parish groups/councils, to discuss ongoing excavations.
- Extending invitations to specialist broadcast media productions to cover key findings or major excavations, ensuring national exposure.
- Organising a publicly accessible conference at a suitable local venue after the completion of fieldwork and post-excavation assessment, presenting the most significant results of the archaeological project to a general audience.
- Hosting open days, where feasible and safe, particularly relevant to larger set-piece excavations.
- School workshops, activities and loan boxes;
- Workshops for local groups including finds handling and Q&A sessions;
- Displays and exhibitions in the local area either permanent or temporary; and/or
- Volunteer or student placements.
- Provision of information/interpretation boards around key assets.
- Developing popular publications, in addition to formal result publications, that describe significant discoveries for a general audience. These publications will be linked to the school curriculum at Key Stages 2, 3, and 4.

262. The public engagement and outreach programme will be available to all that have an interest in the archaeology uncovered within the onshore project area. Examples of those groups with particular interest, and who may wish to help shape the public engagement strategy include:

- Tendring District Local Historic Recorders;
- Essex Society for Archaeology and History;
- Frinton and Walton Heritage Trust;
- Tendring Primary School; and
- Parish communities located within the onshore project area, such as Ardleigh Parish Council.

86.263. Opportunities to coordinate public events and outreach strategies (where Pproject programmes allow), and share knowledge gained from the archaeological investigations with neighbouring projects, such as Norwich to Tilbury National Grid project, will also be sought.

9 Conclusion / Summary

- ~~114-264.~~ In accordance with the AMS, ~~t~~This Onshore OWSI has been produced to set out the ~~principles and~~ proposed approaches to archaeological ~~survey and investigation~~evaluation and mitigation that would be undertaken in advance of and during construction. This includes both ~~initial informative stages of mitigation~~archaeological evaluation works (Phase 2) and subsequent mitigation measures (Phase 3), as and where required.
- ~~115.~~ ~~This document sets out an initial overarching archaeological mitigation strategy that would be undertaken within the onshore project area once the DCO has been granted.~~
- ~~116-265.~~ The survey specific WSIs and final pre-construction and construction mitigation WSIs would be agreed with and approved by the ~~relevant relevant~~ planning authority in consultation with ~~ECC (and HE, as required)~~the Archaeological Curators. All documents would be produced in-line with relevant legislation, planning policy, guidance and good practice (Section 2).

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Appendix A. Example (Model) Clauses – Mitigation Works Specification: Archaeological Excavation and Archaeological Monitoring / ~~Watching Brief and Recording~~

A.1.1 Introduction

~~117-266.~~ The following sections provide example (model) clauses specific to the type of ~~additional~~ archaeological mitigation work (and the associated specifications) likely to be required following the evaluation ~~stages-works~~ post-consent. Preparation of pre-construction and construction related WSIs will be undertaken with reference to and inclusion of relevant model clauses, as outlined below.

~~118-267.~~ The structure outlined below is anticipated to provide the framework only for the pre-construction and construction related mitigation WSIs, which would be tailored with specific requirements and circumstances on a case-by-case / site-by-site basis, as required.

~~119-268.~~ The information provided is specific to the location of the Project within Essex, as well as more general local, regional and national-type approaches.

~~120-269.~~ This appendix relates mainly to archaeological excavation and recording approaches and associated requirements to be undertaken.

A.1.2 General Approach

~~121-270.~~ All WSIs will be prepared in accordance with:

- Standard and ~~Universal gg~~ guidance for archaeological excavation (ClfA, 2023a);
- Standard and ~~Universal gg~~ guidance for archaeological field evaluation (ClfA, 2023b); and
- Standard and ~~guidance-Universal guidance~~ for an archaeological monitoring and recording (ClfA, 2023c).
- ClfA: Code of Conduct (ClfA ~~20192021a~~); and
- ~~Historic England~~: Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide (Historic England 2015a).
- Standards for Field Archaeology in the East of England (ALGAO, 2003)

The WSIs will also take account of:

~~Research and Archaeology: A Framework for the Eastern Counties: 1. Resource Assessment (Glazebrook, 1997);~~

~~94. Research and Archaeology: A Framework for the Eastern Counties: 2. Research Agenda and Strategy (Brown and Glazebrook (eds), 2000);~~

~~95-271. The Greater Thames Estuary: Historic Environment Research Framework (Essex County Council, 2010)~~

- ~~Research and Archaeology Revisited: A Revised Framework for the East of England (Medlycott et al., 2011); and~~

- East of England Regional Research Framework (ALGAO East of England, 2021) ~~Available at: <https://researchframeworks.org/ee>~~;
- Tendring Heritage Strategy (Place Services, 2019); and
- The Greater Thames Estuary: Historic Environment Research Framework (Essex County Council, 2010).

A.1.3 Site Briefings (~~Tool Box~~Toolbox Talks)

~~123-272.~~ Site briefings will include, as a minimum; the Applicant's Health and Safety requirements/procedures; the Principal Contractor's Health and Safety requirements/procedures; and Unexploded Ordnance (UXO) awareness. There may also be ecological briefings ('toolbox talks') and requirements in specific relation to archaeological works.

~~124-273.~~ It is assumed that the Principal Contractor will be responsible for UXO survey and clearance across the onshore project area by a specialist UXO survey team, in advance of construction.

A.1.4 Archaeological Monitoring and Soil Stripping

~~125-274.~~ The location of archaeological excavation areas will be plotted on the ground using electronic survey equipment typically accurate to ± 100 mm in the field with respect to the OS grid, in order to ensure that the positions are transcribed accurately from location plans.

~~126-275.~~ Mechanical excavation will utilise suitable construction plant (and fully certified and experienced machine drivers), which for areas of archaeological excavation is anticipated to be a tracked ~~360-degree~~360-degree excavator(s) or other suitable plant, fitted with a flat bladed 'toothless' ditching bucket. The topsoil and subsoil within the archaeological excavation areas will be excavated in spits under the direct control and supervision of the Archaeological Contractor(s).

~~127-276.~~ For areas outlined for archaeological excavation, the topsoil and subsoil will be removed until either the top of the latest archaeological horizon or undisturbed natural deposits are encountered. Particular attention will be paid to achieving a clean and well-defined horizon (surface) with the machine.

~~128-277.~~ Topsoil and subsoil excavated from archaeological excavation will be stored separately. As far as practicable this will be beyond the limits of excavation areas. Or where possible, within the limits of the 'site' on archaeologically blank areas.

~~129-278.~~ All spoil arising from archaeological excavation areas should also be investigated and scanned with a metal detector by the Archaeological Contractor(s) to recover any artefacts.

~~130-279.~~ The extent of archaeological excavation should be clearly marked, and the ends enclosed / demarcated using high visibility fencing in order to highlight the archaeological excavation area and in order to ensure that no construction traffic can inadvertently enter the work area. The Archaeological Contractor(s) will make daily checks of any fencing.

~~131.280.~~ If there are deep excavations (> c. 1.2-1.5 m deep) then alternative fencing arrangements will be required and agreed in conjunction with the Principal Contractor, the Archaeological Contractor(s) and the project, this may involve fencing being erected around individual slots through features or over parts of the 'site'.

~~132.281.~~ The machined surface will be cleaned by hand, where required, for the acceptable definition of archaeological remains. It is not anticipated that the entire archaeological excavation areas will require hand cleaning.

~~133.282.~~ Provision will be made so that any areas in which sub-surface archaeological remains are identified as being present are not subject to prolonged periods of exposure. Archaeological remains and / or deposits left exposed to the elements for extended periods can suffer weathering which can accelerate their degradation, damage and / or loss. In addition, archaeology left exposed may be the target of heritage crime (e.g. illegal metal detecting). The Archaeological Contractor(s) will be responsible for ensuring that adequate security and protection measures are put in place ~~in order to~~ alleviate this risk, alongside the Principal Contractor, where relevant.

A.1.5 Hand Excavation of Archaeological Features

~~134.283.~~ Archaeological features and deposits will be excavated using appropriate hand tools, such as a mattock, shovel and hand trowel, in an archaeologically controlled and stratigraphic manner ~~in order to~~ meet the aims and objectives of the investigation.

~~135.284.~~ Hand excavation will be targeted to provide sufficient information on the form, extent, level of preservation and function, with emphasis on stratigraphic relationships between features and recovery of dating evidence. Archaeological excavation and recording will be confined to the working width of the machined area. The samples identified below should be taken as typical of the works required and may be varied with reference to the stated aims of the defined archaeological works.

- A minimum of 10% of the identified feature will be excavated along the length of all linear and curvilinear features (with each excavated section not less than 1 m). Key intersections will be investigated to determine the stratigraphic relationship between features, and sections will be located at all ditch terminals and to provide equal spatial coverage along the length of the feature.
- Discrete features, such as postholes and pits, less than 1 m in diameter, will be half sectioned (50%). Postholes which form part of a building will be 100% excavated.
- A minimum 25% will be excavated from all discrete features, such as pits, greater than 1 m in diameter. Where possible, a complete section will be excavated across the feature to recover its full profile. Where fully justified, and safe to do so, the feature may be subject to 100% excavation.
- Smaller discrete features, such as stake holes, will be 100% excavated.

- Structures, such as sunken floor buildings or kilns, will be ~~100% excavated~~ sampled and excavated in accordance with a bespoke sampling strategy agreed with the Archaeological Curators.
- All burials and funerary contexts will be 100% excavated. Human remains will be treated in accordance with the provisions set out at Article 20 of the draft DCO (REP4-004) ~~The excavation of human remains requires an exhumation licence to be obtained from the Ministry of Justice (see Section A.1.9).~~ Features associated with funerary remains, such as postholes or enclosing ditches around barrows, will be initially 50% sample excavated and recorded with the remaining deposits rapidly hand excavated to achieve a 100% sample.

~~136-285.~~ If deep features, such as shafts or wells, are encountered, hand-excavation will not proceed below a safe working depth of c. 1.2-1.5m from the machined surface. An appropriate methodology for achieving full excavation below this depth will be agreed in consultation with the ~~Archaeological Coordinator~~ Project Archaeologist, the Principal Contractor (where applicable), the Archaeological Contractor(s), ~~Place Services~~ the Archaeological Curators and the Project.

~~137-286.~~ A separate method statement for excavation of deep features would be prepared by the Archaeological Contractor(s), if required.

~~138-287.~~ Machine-assisted excavation may be permissible if large / deep deposits or homogenous and non-archaeological layers are encountered, but only after consultation with the ~~Archaeological Coordinator~~ Project Archaeologist and ~~ECG~~ the Archaeological Curators.

~~139-288.~~ Any variation to the above would be agreed with the ~~Archaeological Coordinator~~ Project Archaeologist, NFOW and / or their representatives, the Archaeological Contractor(s) and ~~ECG~~ the Archaeological Curators on site and shall be confirmed in writing.

A.1.6 Archaeological Recording

~~140-289.~~ All archaeological contexts and artefacts exposed or examined must be adequately surveyed, sampled, cleaned, planned, excavated and replaced by record on appropriate pro forma context, finds and sample sheets, by the production of plans, sections and elevations at appropriate scales and by photographic record (ALGAO, 2003).

~~141-290.~~ An accession number will also be obtained by the Archaeological Contractor from the Museum Resource Centre at Colchester prior to commencing work.

~~142-291.~~ Following machine excavation, the extent of excavation areas would be accurately recorded using electronic survey equipment typically accurate to $\pm 100\text{mm}$ in the field with respect to the OS grid. The data would be overlaid at an appropriate scale onto the OS National Grid (using digital map data).

~~143-292.~~ Archaeological remains would be recorded in plan using electronic survey equipment. All survey points used would be accurately tied into the OS National Grid.

- 144.293.** A full written, drawn and photographic record would be made of archaeological features and deposits (contexts) with each context given a unique number and described on a separate record sheet. A context register, with brief details, will also be kept during the archaeological work.
- 145.294.** In addition to the electronic survey of features, as a minimum, all interventions and areas of detailed archaeology would be planned by hand, using tape measures.
- 146.295.** Hand drawn plans and sections of features would be produced at an appropriate scale (normally 1:20 for plans and 1:10 for sections) with Ordnance Datum (OD) heights recorded in metres, correct to two decimal places.
- 147.296.** Each drawing would be given a unique drawing number. A drawing register, with brief details, would be maintained throughout the archaeological works.
- 148.297.** Digital colour photography will form an integral part of the recording strategy, and all photographs will incorporate scales, an identification board and directional arrow. A photographic record would be maintained throughout. Photographs would be taken of all excavated features.
- 149.298.** A photographic register, with brief details, will also be maintained throughout the archaeological works.

A.1.7 Artefact Recovery

- 150.299.** With respect to finds and landowner permissions for the removal of artefacts and ecofacts, it is common practice on linear, multi-phase schemes to approach the landowners at the end of the Project to request their permission to deposit any artefacts in an appropriate local museum, once all items are accounted for. This process will be adhered to as part of the Project and will be facilitated and overseen by the Archaeological Contractor(s).
- 151.300.** Artefacts will be collected and labelled with the unique site code and context number of the deposit in which they were recovered.
- 152.301.** Each 'significant' find will be recorded three dimensionally using electronic survey equipment typically accurate to ± 100 mm in the field with respect to the OS grid and assigned a specific number. Similarly, if artefact scatters are encountered these will also be recorded three dimensionally.
- 153.302.** Bulk finds will be collected and recorded by context.
- 154.303.** All archaeological artefacts that are collected from excavation areas and any area excavated archaeologically during archaeological monitoring (~~watching brief~~) that do not clearly belong to a particular context will be recorded as un-stratified and assigned the topsoil context number.
- 155.304.** All non-modern and significant modern artefacts will be stored and processed in a manner appropriate to the material to minimise further deterioration.
- 156.305.** All retained artefacts will be assessed prior to cleaning for their potential to retain organic remains. Historic England's Organic Residue Analysis and Archaeology: Guidance for Good Practice (2017) will be referred to for guidance. Following initial assessment, the appropriate artefacts will, as a

minimum, be washed, weighed, counted and identified. Any artefacts requiring conservation or specific storage conditions will be dealt with immediately in line with First Aid for Finds (Watkinson & Neal 1998).

~~157.306.~~ Artefacts will be properly conserved after excavation and will be stabilised for storage, where required. If necessary, a conservator will visit the site to undertake 'first aid' conservation treatment. If any of the excavation areas and any area excavated archaeologically during archaeological monitoring (~~watching brief~~) result in the recovery of unstable artefactual remains (e.g. metallic objects or preserved wood/leather), the Archaeological Contractor(s) will commission the services of a suitable specialist to advise and implement conservation of unstable artefacts; to undertake x-ray analysis and to provide an assessment of potential summary, which will then be attached to the main report(s).

~~158.307.~~ All finds and environmental 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 post-excavation assessment report.

~~159.308.~~ The collection, documentation and conservation of all artefactual and ecofactual material will conform to ClfA Standards and guidance for the collection, documentation, conservation and research of archaeological materials (ClfA 2014e).

A.1.8 Soil Sampling Strategy

~~160.309.~~ Environmental samples will be taken from a range of contexts and phases encountered on site, and from any deposit where it is expected that worthwhile environmental evidence may be recovered. Such deposits will include, though not be restricted to, waterlogged and burnt contexts. Provision will be made for the recovery of material suitable for scientific dating.

~~161.310.~~ The soil sampling strategy for each excavation area will be informed by the results of the evaluation works, and any bespoke soil sampling strategy identified by the specialists as part of the post-excavation assessment of the evaluation works will be detailed in the site-specific WSIs/Method Statements. Where practicable and deemed important, an environmental specialist will visit individual 'sites' and advise on an appropriate strategy to maximise the potential recovery, tied into the East of England Regional Research Framework (~~Medlycott~~ALGAO East of England, 20142021).

~~162.311.~~ Flotation samples will be taken as part of a sampling strategy from a range of stratigraphically secure contexts, where present, and will typically be up to 40 litres in size. Where feasible, flotation samples will be taken as scatter samples, whereby tubs will be filled from different locations within the designated fill to avoid spatial preservation bias or missing biological remains invisible to the naked eye which can form discrete 'clusters' within the fill (English Heritage, now Historic England 2011).

~~163.312.~~ Samples must be taken 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.

Samples should be stored appropriately in a secure location prior to being sent to the appropriate specialist.

~~164-313.~~ Radiocarbon, dendrochronology, archaeomagnetic, pollen and monolith samples may be considered for collection where justified and warranted. Samples selected for radiocarbon dating would take account of Historic England's guidance Radiocarbon Dating and Chronological Modelling (2022) and the potential value of using Bayesian models to develop robust dating chronologies will be considered. Careful consideration of the materials sampled for dating, particularly from organic deposits such as peat, will also be made. These approaches ~~would need will~~ to be discussed and agreed in consultation with the ~~Archaeological Coordinator~~Project Archaeologist, the Archaeological Contractor(s), ~~ECC~~the Archaeological Curators and NFOW.

~~165-314.~~ Further advice on the appropriateness of the Archaeological Contractor's proposed strategies will be sought from the Historic England Science Advisor ~~(East of England)~~, as appropriate, ~~although ECC would provide advice and recommendations in the first instance, again as required.~~

~~166-315.~~ The sampling strategy, analysis of samples and subsequent reporting will follow best practice as recommended by Historic England (English Heritage, now Historic England 2011).

~~167-316.~~ All environmental samples will be processed as appropriate. Each category of environmental material will be examined by a suitably qualified archaeologist or specialist and the results incorporated into the report.

A.1.9 Human Remains

~~317.~~ Human remains will be treated in accordance with the provisions set out at Article 20 of the draft DCO (IREP4-005).~~If human remains are discovered, an application for a licence from the Ministry of Justice under Section 25 of the Burials Act 1857 will be made by the Archaeological Contractor(s).~~ The works will also take place in accordance with the appropriate Environmental Health regulations. Other specific and bespoke requirements may also be required, on a case-by-case / site-by-site basis. ~~Excavation of the human remains will only take place after a licence is obtained.~~

~~318.~~ A sampling strategy for the investigation and sampling of human remains will be developed in accordance with Historic England's guidance The Role of the Human Osteologist in an Archaeological Fieldwork Project (2018), whereby spatially distinct samples from the head, torso and feet area of a grave should be recovered.

~~319.~~ Other guidance for the recording and removal of human remains include:

- Excavation and Post Excavation Treatment of Cremated and Inhumed Human Remains (McKinley and Roberts 1993);
- The Updated Guidelines for the Standards for Recording Human Remains (ClfA and the British Association for Biological Anthropology and Osteoarchaeology 2017) as set out by ClfA; and
- Science and the Dead: Destructive Sampling of Archaeological Human Remains for Scientific Analysis (Advisory Panel on the Archaeology of Burials in England 2023).

A.1.10 Treasure

~~169-320.~~ Any recovered artefacts that are designated Treasure as defined by the Treasure Act 1996 will be treated in accordance with said Act. All Treasure will be reported to H. M. Coroner. NFOW and the ~~Archaeological Coordinator~~Project Archaeologist will also be informed at the earliest opportunity.

~~170-321.~~ Any Treasure will be removed to a secure store. Where removal cannot be ~~effected~~accomplished on the same working day as the discovery, suitable security measures must be taken to protect the finds from theft.

A.1.11 Completion of Archaeological Fieldwork (Phase 4)

The Archaeological Contractor(s) shall prepare and submit completion statements to ~~t~~The Project and the ~~Archaeological Coordinator~~Project Archaeologist once each distinct excavation area and any area excavated archaeologically during archaeological monitoring ~~/watching brief~~ have been vacated. ~~F~~following internal review these will also be made available to ~~ECG~~the Archaeological Curators / Historic England~~HE (as appropriate)~~ for information and comment.

~~171-322.~~ The completion statements will include:

- A brief summary of the results of the works.
- A general location plan and all features plan of the excavation areas and any areas excavated archaeologically during monitoring ~~/watching~~briefwork.
- Quantification of the primary archive including contexts, finds and samples.
- A brief chronological summary of the archaeological remains.

A.1.12 Reporting Requirements

~~172-323.~~ Verbal progress reports and brief written progress reports will be provided to the Project and the ~~Archaeological Coordinator~~Project Archaeologist regularly during the Phase 3 archaeological investigations and also at any stage during the works, upon reasonable request. ~~ECG~~The Archaeological Curators~~and HE~~ will also be regularly updated with progress.

~~173-324.~~ The subsequent reporting of the archaeological investigations will be commensurate with the results of the investigation and will be produced in accordance with the relevant ClfA Standards and Guidance documents (ClfA 2019a-b and 2014a-f). The Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide (Historic England 2015) should also be considered relevant.

~~174-325.~~ The post-excavation assessment report for each excavation area and any areas excavated archaeologically during monitoring ~~/watching brief~~works should ultimately incorporate the results of the earlier programmes of archaeological trial trenching. This will ensure the results from all fieldwork are fully integrated.

~~175-326.~~ Records and finds from other previous archaeological works (where project applicable) should also be examined and integrated into the assessment report, wherever possible. All finds must be assessed in relation to latest

existing local and regional artefact type series. The content provided within the assessment report will adhere to best practice and available guidance, where relevant.

~~176.327.~~ A draft report will be issued for review by NFOW and the ~~Archaeological Coordinator~~Project Archaeologist prior to agreement and issue of the final report to ~~ECC the Archaeological Curators, and HE where required.~~

~~177.328.~~ It is anticipated that issue of the final report should follow within two weeks of comments being provided on the draft report (timeframe to be agreed with ~~ECC the Archaeological Curators~~ post-consent).

~~178.329.~~ A fully collated and completed version of the report shall be included in PDF format. Both hard and digital version copies of the report will ultimately be lodged with ECC. The Archaeological Contractor(s) will be responsible for ensuring this is done. Upon request, a project CD or USB shall also be submitted containing image files in JPEG or TIFF format, digital text files shall be submitted in Microsoft Word format, and figures and drawings in recent / compatible version AutoCAD and / or ArcGIS format. A copy of the final report will be deposited with the Essex HER, along with surveyed spatial digital data (.dxf or shapefile format).

~~179.330.~~ A digital version of the report will be placed with OASIS (~~Online Access to the Index of Archaeological Investigations~~) at - <http://www.oasis.ac.uk/>. An OASIS form will be included as part of all reports produced. The Archaeological Contractor(s) will be responsible for ensuring this is done.

A.1.13 Archive Preparation and Deposition

~~180.331.~~ The archive will consist of the documentary and digital records and any archaeological material generated during all phases of the fieldwork.

~~181.332.~~ All records and materials produced will be quantified, ordered, indexed, marked with the unique project, site and context number and internally consistent. The archive will be kept secure at all stages of the project.

~~182.333.~~ The site archive will be deposited with the Museum Resource Centre in Colchester within an agreed timeframe (to be determined with ~~ECC the Mmuseum~~ post-consent) following completion of all archaeological fieldwork and reporting associated with the project. It will then become publicly accessible (~~timeframe to be agreed with ECC post-consent~~).

~~183.334.~~ The Archaeological Contractor(s) will be responsible for identifying any specific requirements or policies of the museum / records office in respect of the archive, and for adhering to those requirements. The archive will conform to the standards required by the national guidelines in Archaeological Archives: A guide to best practice in creation, compilation, transfer and curation (~~AAF 2007~~Brown, 2011) and Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives (ClfA 2014f).

~~184.335.~~ Finds must be appropriately conserved and stored in accordance with UK Institute of Conservators Guidelines (Walker 1990). The finds, as a permanent part of the site archive, should be deposited with the East Riding Museum Service. If this is not possible for all or any part of the finds archive,

then provision must be made for additional recording (e.g. photography, illustration, analysis), as appropriate.

~~185-336.~~ Prior to the commencement of archaeological fieldwork, the Archaeological Contractor(s) will contact ~~Essex HER~~~~EGG~~ regarding the acquisition of further event numbers or confirming previous event numbers still apply. Event numbers may be issued on an area by area / stage by stage or project wide basis, but this will be confirmed with ~~EGG~~~~Essex HER~~ personnel prior to starting the next stage of archaeological works in each instance.

~~186-337.~~ Also, at the start of work (immediately before fieldwork recommences) an OASIS online record (<http://ads.ahds.ac.uk/project/oasis/>) must be initiated by the Archaeological Contractor(s) and main areas / stages of the project completed on details, location and creators forms.

~~187-338.~~ All parts of the OASIS online form must be completed for submission to ~~the Essex HER~~~~EGG~~. This should include an uploaded .pdf version of entire final reporting (a paper copy should also be included with the archive), as relevant to each stage of fieldwork.

~~188-339.~~ The deposition of the archive forms the final stage of the (archaeological) project. The Archaeological Contractor(s) must provide the project and the ~~Archaeological Coordinator~~~~Project Archaeologist~~ with copies of all communication with the recipient museum / records office and written confirmation of the receipt / deposition of the archive.

~~189-340.~~ The Archaeological Contractor(s) will liaise with the project to address the transfer of ownership and any copyright issues.

A.1.14 Monitoring Progress and Site Visits

~~190-341.~~ The archaeological investigations will be subject to regular monitoring visits by the ~~Archaeological Coordinator~~~~Project Archaeologist~~, who will have unrestricted access to the archaeological site, site records and any other information.

~~191-342.~~ The work will be inspected to ensure that it is being carried out to the required standards and that it will achieve the stated aims and objectives.

~~192-343.~~ The Archaeological Contractor(s) will only accept instruction from the projects and the ~~Archaeological Coordinator~~~~Project Archaeologist~~. There may also be occasions where instructions are given by the Principal Contractor, where appropriate/relevant.

~~193-344.~~ If any problems are encountered during the archaeological works these will be reported immediately to the project and the ~~Archaeological Coordinator~~~~Project Archaeologist~~.

~~194-345.~~ Monitoring progress meetings between the project, the ~~Archaeological Coordinator~~~~Project Archaeologist~~ and the Archaeological Contractor(s) will be held on site during the course of the excavation works, and any area excavated archaeologically during monitoring ~~/watching brief~~~~works~~. Representatives from ~~EGG~~~~the Archaeological Curators~~ and ~~Historic England~~~~HE~~ (where applicable) shall be invited to attend in order to monitor the works. These meetings will be arranged by the ~~Archaeological Coordinator~~~~Project Archaeologist~~.

~~195-346.~~ ~~ECG~~The Archaeological Curators will also be afforded access to the site on request (and as agreed with The Projects and the Archaeological Contractor(s)), outside of any formal monitoring progress meetings. Arrangements should be made through the ~~Archaeological Coordinator~~Project Archaeologist and the Archaeological Contractor's(s') key named contacts. Where appropriate, the Principal Contractor will also need to be informed in order that access can be facilitated in a safe manner.

~~196-347.~~ Following top-soil strip and associated sub-soil removal across excavation areas, an initial meeting between the Archaeological Contractor(s), the project, the ~~Archaeological Coordinator~~Project Archaeologist and ~~ECG~~the Archaeological Curators may be held to further agree the excavation / recording / sampling strategy for each area / site / stage etc.

~~197-348.~~ Where necessary to achieve the objectives of the investigation within the overall project programme, variations to the scope of works will be agreed on site at progress meetings, as appropriate.

~~198-349.~~ Any variations caused by ecological constraints, vegetation cover or ground conditions will be agreed with the project, the Archaeological Contractor(s) and the ~~Archaeological Coordinator~~Project Archaeologist and communicated to ~~ECG~~the Archaeological Curators / HE (as appropriate).

~~199-350.~~ Following the discovery of any unexpected archaeological sites during archaeological monitoring ~~/—watching brief—~~works, the Archaeological Contractor(s) will ensure that the archaeological remains are properly dealt with and sufficiently resourced beyond (in addition to) the monitoring ~~/—watching brief~~ archaeologist(s) on site, where appropriate. A process for this will be agreed between the Archaeological Contractor(s), NFOW and the ~~Archaeological Coordinator~~Project Archaeologist. The Principal Contractor will also need to be informed of any additional personnel on site, where appropriate/relevant.

A.1.15 Security, Confidentiality and Publicity

~~200-351.~~ Although information regarding the project is in the public domain, the archaeological investigation works may attract interest.

~~201-352.~~ In the event of any enquiries by the public, the Archaeological Contractor(s) will refer all enquiries to the project, the ~~Archaeological Coordinator~~Project Archaeologist and the Principal Contractor without making any unauthorised statements or comments.

~~202-353.~~ The Archaeological Contractor(s) will not disseminate information or images associated with the project for publicity or information purposes, without the permission of the project.

A.1.16 Copyright

~~203-354.~~ The Archaeological Contractor(s) shall assign copyright in all reports and documentation / images produced as part of this project to the project. The Archaeological Contractor(s) shall retain the right to be identified as the author / originator of the material.

~~204-355.~~ The Archaeological Contractor(s) may apply in writing to use / disseminate any of the project archive or documentation (including images), and any such permission will not be unreasonably withheld.

A.1.17 Resources and Timetable

~~205-356.~~ All archaeological personnel involved in the project must be suitably qualified and experienced professionals. The Archaeological Contractor(s) will provide ~~t~~The Projects and the ~~Archaeological Coordinator~~Project Archaeologist with staff CVs of the Project Manager, Project Officer(s), Site Supervisor(s) and any proposed specialists. These will in turn be provided to ~~ECG~~the Archaeological Curators, if requested.

~~206-357.~~ Site assistants' CVs will not be required, but all site assistants should ideally have a minimum of six months excavation experience. Additional CVs must be made available upon request by the project and the ~~Archaeological Coordinator~~Project Archaeologist.

~~207-358.~~ All equipment and tools required by the Archaeological Contractor(s) will be supplied by the Archaeological Contractor(s).

~~208-359.~~ The Archaeological Contractor(s) must give immediate warning to ~~t~~The Projects and the ~~Archaeological Coordinator~~Project Archaeologist should any agreed programme date not be achievable, due to for example severe / extreme weather conditions.

A.1.18 Health and Safety

~~209-360.~~ The Archaeological Contractor(s) will adhere to any overarching risk assessments and any project specific health and safety plan prepared by the Principal Contractor, the project and / or their representatives.

~~210-361.~~ The Archaeological Contractor(s) will provide the project and / or their representatives with details of their public and professional indemnity insurance and all other insurances required by law.

~~211-362.~~ The Archaeological Contractor(s) will have their own Health and Safety policies compiled using national guidelines, which conform to all relevant Health and Safety legislation. A copy of the Archaeological Contractor(s) Health and Safety policy will be submitted to the project and / or their representatives.

~~212-363.~~ The Archaeological Contractor(s) will prepare health and safety focused RAMS specific to the archaeological works to be undertaken and will submit these to the project and / or their representatives for approval prior to entering the individual work sites.

~~213-364.~~ Pre-Construction Information will be provided by the project and / or their representatives in accordance with the Approved Code of Practice, as required.

~~214-365.~~ The Archaeological Contractor(s) shall be responsible for identifying any buried or overhead services and taking the necessary precautions to avoid damage to such services, prior to the commencement of excavation works. Service location plans and UXO information (if available) will be provided by the project and / or their representatives, where appropriate, but these must be checked through appropriate means prior to the commencement of archaeological investigation works.

~~215-366.~~ The Archaeological Contractor(s) will not commence any excavation works unless authorised to do so by the project and / or their representatives.

216.367. The Archaeological Contractor will adhere to the Principal Contractor's and North Fall's Personal Protective Equipment requirements (PPE). As a minimum the following PPE will be worn at all times on site:

- High visibility vest / jacket;
- Approved work wear (e.g. overalls/trousers/long-sleeved tops);
- Hard hat;
- Safety boots with reinforced toes and mid-sole, with ankle support;
- Safety glasses; and
- Gloves.

217.368. In undertaking the work the archaeologists are to abide by all statutory provisions and by-laws relating to the work in question, especially the Health and Safety at Work Act 1974.

218.369. No lone working will be permitted at any time.

219.370. The archaeological works may be halted in the event that adverse / extreme weather, ground conditions or health and safety requirements demand it and the site-specific situation reassessed prior to any recommencement.

A.1.19 General Provisions

220.371. Following completion of the archaeological investigation and recording works, the Archaeological Contractor(s) will leave work sites in a tidy and workmanlike condition at the end of each day, and remove all materials brought onto the site, including any grid pegs or other markers.

221.372. The Archaeological Contractor(s) is to allow the site records to be inspected and examined at any reasonable time, during or after the investigations, by the project and the ~~Archaeological Coordinator~~Project Archaeologist.

222.373. Access for parking and use/provision of site welfare facilities shall be agreed between the project and the Archaeological Contractor(s) prior to entering each discreet work site.

223.374. Provision must be made for fencing of archaeological remains, or potential archaeological remains, where identified at / during construction, whilst archaeological investigation and recording works continue.

224.375. The Archaeological Contractor(s) will need to make provision for site security, in conjunction with the project and the Principal Contractor (where relevant), particularly where sensitive archaeological remains are uncovered.

Appendix B. Schedule of Archaeological Requirements

Table B.10-1 Schedule of Archaeological Requirements

EHER Number	APS ID	WA ID (geophysics results)	Description	Perceived Heritage Importance	Interaction	Post-consent Evaluation Stages to be agreed with ECCthe Archaeological Curators		
						Geophysical Survey	Trial Trenching	Earthwork Survey
Landfall								
10048	N/A	N/A	Pillbox on the sea wall at Sandy Point. An FW3/22 pillbox standing on the sea wall at Sandy Point.	Low-Medium	No: Onshore cable route intersects the asset at landfall, however it is assumed that there will be no impacts due to the use of trenchless crossings in this area. Should impacts be expected, mitigation techniques will be agreed with stakeholders post-consent.	N/A	N/A	N/A
48671	N/A	N/A	Site of Mr Barton's Pans, Holland Haven, at the mouth of the former Gunfleet Estuary. Thought to be copperas settling pans.	Low- Medium	No: Onshore cable route intersects the asset at landfall, however it is assumed that there will be no impacts due to the use of trenchless crossings in this area. Should impacts be expected, mitigation techniques will be agreed with stakeholders post-consent.	N/A	N/A	N/A
48658	N/A	N/A	Site of the former Gunfleet estuary, used as a port and haven in the medieval period, gradually silted up in	Medium	Yes: Onshore cable route and temporary construction compound intersects the asset and will be affected by	Partial coverage: Survey of remaining areas to be agreed in	Yes	No

EHER Number	APS ID	WA ID (geophysics results)	Description	Perceived Heritage Importance	Interaction	Post-consent Evaluation Stages to be agreed with ECC <u>the Archaeological Curators</u>		
						Geophysical Survey	Trial Trenching	Earthwork Survey
			the post-medieval period.		construction related activities	consultation with the relevant stakeholders		
48484	N/A	N/A	An area of grazing marsh along the former tidal reaches of the Holland Brook and Holland Haven, including a mixture of improved grassland and relict salt marsh. Sea walls survive, a single red hill has been recorded, as have preserved timbers.	Low-Medium	Yes: Onshore cable route and temporary construction compound intersects the area identified in the HER and will be affected by construction related activities	Partial coverage: Survey of remaining areas to be agreed in consultation with the relevant stakeholders	Yes	No
N/A	N/A	Field HNN_08: 5502	A possible embankment (feature 5502) or water management system was identified during the geophysical survey along the western edge of Gunfleet Estuary. This appears to be a ditch and bank feature with angular turns suggesting a manmade rather than natural origin.	Low-Medium	Yes: Onshore cable route and temporary construction compound intersects the anomaly identified in the geophysical survey and will be affected by construction related activities	Completed	Yes	No

EHER Number	APS ID	WA ID (geophysics results)	Description	Perceived Heritage Importance	Interaction	Post-consent Evaluation Stages to be agreed with ECG <u>the Archaeological Curators</u>		
						Geophysical Survey	Trial Trenching	Earthwork Survey
Onshore cable route								
N/A	N/A	Field LCR_04: 5403	A large enclosure 5403 was identified in the north-western part of the survey area. However, it could equally relate to a past channel of the Holland Brook River.	Low-Medium	Yes: Onshore cable route intersects the anomaly identified in the geophysical survey and will be affected by construction related activities	Completed	Yes <u>Completed</u>	No
N/A	N/A	Field LCR_01: 5405	Former field boundaries identifiable on 1898 OS mapping.	Low	Yes: Onshore cable route intersects the anomaly identified in the geophysical survey and will be affected by construction related activities	Completed	Yes	No
2978	APS_10	N/A	Mainly geological features some possible archaeological features - linear features and pits.	Low-Medium	Yes: Onshore cable route intersects the features identified on aerial imagery sources and will be affected by construction related activities	Completed	Yes	No
17224	N/A	N/A	Cropmark of geological marks, Manor Farm.	Low	Yes: Onshore cable route intersects the area of cropmarks recorded in the HER and will be affected by construction related activities	Yes: Partial coverage <u>Completed</u>	Yes	No

EHER Number	APS ID	WA ID (geophysics results)	Description	Perceived Heritage Importance	Interaction	Post-consent Evaluation Stages to be agreed with ECC <u>the Archaeological Curators</u>		
						Geophysical Survey	Trial Trenching	Earthwork Survey
2975	APS_09a	Fields LCR_06, LCR_07: 5411, 5412	Field System which overlies earlier boundaries, trackways and possible pit alignments visible as cropmarks and soil marks. Area is heavily disturbed by geological cropmarks which may be masking archaeological features. There are also a large number of pits which may be natural features.	Low-Medium	Yes: Onshore cable route intersects the area of cropmarks recorded in the HER and anomalies identified in the geophysical survey and will be affected by construction related activities	Completed	Yes	No
3627	APS_14a	N/A	Square enclosures visible as cropmarks likely part of a Post Medieval field system. Underlying ditched feature is of unknown origin. Area is heavily disturbed by geological cropmarks which may be masking archaeological features. There is also a small number of pits.	Low-Medium	Yes: Onshore cable route intersects the area of cropmarks identified on aerial imagery sources and will be affected by construction related activities	Completed	Yes	No
16986	APS_01	N/A <u>N/A</u>	Undated field boundaries visible as cropmarks.	Low	Yes: Onshore cable route intersects the area of cropmarks identified on aerial imagery sources and will be affected by	Completed	Yes <u>Completed</u>	No

EHER Number	APS ID	WA ID (geophysics results)	Description	Perceived Heritage Importance	Interaction	Post-consent Evaluation Stages to be agreed with <u>ECCthe Archaeological Curators</u>		
						Geophysical Survey	Trial Trenching	Earthwork Survey
					construction related activities			
16986	APS_02	N/A	Cropmarks of linear features - field boundaries.	Low	Not Anticipated: An O&M access track partially intersects the area of cropmarks visible on aerial imagery sources, however, it is not anticipated that any direct affects will arise due to the use of an existing track for access	N/A	N/A	N/A
3570	APS_03	N/A	Field boundaries visible as cropmarks. Birch Hoe Farm: Linear features, field boundaries, trackways running north to south, pits, all masked by periglacial features.	Low-Medium	Yes: Onshore cable route and an off-route access road intersects the area of cropmarks identified on aerial imagery sources and will be affected by construction and traffic related activities	Partial coverage: Survey of outstanding section of off-route access track TBC following detailed project design <u>Completed</u>	Yes	No
3143 17231	APS_04	Field KWC_09: 5305	Field boundaries visible as cropmarks. East of Thorpe Park: Cropmarks masked by geological features: field boundaries, trackways and enclosures.	Low-Medium	Yes: An off-route access road and O&M access track intersects the area of cropmarks identified on aerial imagery sources and anomalies identified in the geophysical survey, and will be affected by operation and	Partial coverage: Survey of outstanding section of off-route access track TBC following	Yes	TBC

EHER Number	APS ID	WA ID (geophysics results)	Description	Perceived Heritage Importance	Interaction	Post-consent Evaluation Stages to be agreed with ECC <u>the Archaeological Curators</u>		
						Geophysical Survey	Trial Trenching	Earthwork Survey
			Grove Fruit Farm: Cropmark of linear features; field boundaries and possible enclosure		maintenance related activities	detailed project design		
N/A	N/A	KWC_04: 5300	A rectilinear enclosure (feature 5300) was identified during the geophysical survey at the eastern part of the field that could relate to a livestock enclosure.	Low-Medium	Yes: Onshore cable route intersects the area of cropmarks identified on aerial imagery sources and anomalies identified in the geophysical survey, and will be affected by construction related activities	Completed	Yes	No
3089	N/A	N/A	A wider area of cropmarks of linear features which are unlikely to lie within the onshore project area.	Low	Yes: An access zone intersects the area of cropmarks recorded in the HER and will be affected by construction related activities	To be agreed with relevant stakeholders post-consent	To be agreed with relevant stakeholders post-consent	No
N/A	N/A	Field KCW_07: 5304	Former field boundary (5304) illustrated on 1898 Second Edition OS maps.	Low	Yes: Onshore cable route intersects the anomalies identified in the geophysical survey and will be affected by construction related activities	Completed	Yes	No
N/A	N/A	KWC:07: 5301	A ditch-like feature (5300) identified during the geophysical survey with an opening to the north-west. This may	Low-High	Yes: Onshore cable route intersects the anomalies identified in the geophysical survey and will be affected by	Completed	Yes	No

EHER Number	APS ID	WA ID (geophysics results)	Description	Perceived Heritage Importance	Interaction	Post-consent Evaluation Stages to be agreed with <u>ECCthe Archaeological Curators</u>		
						Geophysical Survey	Trial Trenching	Earthwork Survey
			relate to prehistoric activity, such as a roundhouse or a round barrow.		construction related activities			
N/A	N/A	Area_20_07: 5200	A weak positive curvilinear anomaly (5200) identified during the geophysical survey. It is up to 2 m wide and 46 m long. On the western side, it likely extends beyond the survey area and is cut off by an area of increased magnetic response at the east, where it forms a rectilinear area of 8 m by 5 m. It indicates a ditch-like feature of unknown date.	Low	Yes: Onshore cable route and access zone intersects the anomalies identified in the geophysical survey and will be affected by construction related activities	Completed	Yes	No
N/A	N/A	Area_20_07: 5201	A weak positive linear anomaly (5201) identified during the geophysical survey. It is up to 2 m wide and traverses the site on a north-east – south-west orientation. This anomaly is indicative of a ditch-like feature and could relate to a field boundary that	Low	Yes: Onshore cable route and access zone intersects the anomalies identified in the geophysical survey and will be affected by construction related activities	Completed	Yes	No

EHER Number	APS ID	WA ID (geophysics results)	Description	Perceived Heritage Importance	Interaction	Post-consent Evaluation Stages to be agreed with <u>ECCthe Archaeological Curators</u>		
						Geophysical Survey	Trial Trenching	Earthwork Survey
			predates mapping. It is equally possible, however, that it relates to the B1034 road nearby.					
47285	APS_05	Area_20_07: 5202, 5203, 5204, 5205	Field boundaries visible as cropmarks at Thorpe Cross. Weak, positive linear anomalies 5202 – 5205 identified during the geophysical survey indicate ditch features that are up to 2 m wide. These correspond with field boundaries noted on the 1898 Second Edition OS map and within the HER and APS datasets.	Low	Yes: Onshore cable route intersects the anomalies identified in the geophysical survey and will be affected by construction related activities	Completed	Yes	No
N/A	N/A	Area_18_02: 5100	A weak, annular positive anomaly (5100) identified during the geophysical survey. The anomaly is 13 m in diameter and 1.3 m wide. It indicates a ditch-like feature related to a possible roundhouse or a barrow	Low-High	Yes: Onshore cable route intersects the anomalies identified in the geophysical survey and will be affected by construction related activities	Completed	Yes	No

EHER Number	APS ID	WA ID (geophysics results)	Description	Perceived Heritage Importance	Interaction	Post-consent Evaluation Stages to be agreed with ECCthe Archaeological Curators		
						Geophysical Survey	Trial Trenching	Earthwork Survey
46798	APS_06	N/A	Field boundaries visible as cropmarks at New Hall.	Low	Yes: Onshore cable route, off-route access track, access zone and O&M tracks intersect the area of cropmarks recorded in the HER and will be affected by construction related activities	Completed	Yes	No
46801	APS_07	Area_18_06: 5102	Field boundaries visible as cropmarks at Golden Lane.	Low	Yes: Onshore cable route, access zone and O&M tracks intersect the area of cropmarks visible on aerial imagery sources and will be affected by construction related activities	Completed	Yes	No
3160	N/A	N/A	Near Thorpe Green, possible cropmarks comprising linear features, pits, and possibly two ring ditches. These latter marks are on grassland and may be grazing marks rather than archaeological.	Low-Medium	Yes (slight): Onshore cable route intersects the north-eastern extent of the area of cropmarks recorded in the HER and will be affected by construction related activities	Completed	Yes	No
52955	N/A	N/A	A PAS findspot of a coin of Medieval date.	Low	Yes: Onshore cable route intersects the findspot recorded in the HER and will be affected by construction related activities	Completed	Yes	No

EHER Number	APS ID	WA ID (geophysics results)	Description	Perceived Heritage Importance	Interaction	Post-consent Evaluation Stages to be agreed with ECCthe Archaeological Curators		
						Geophysical Survey	Trial Trenching	Earthwork Survey
17243	APS_08 & APS_07	Area_18_02: 5101, Area_18_06: 5102	Field system visible as cropmarks and cropmarks of a linear feature (low validity), Thorpe-le-Soken. Weak positive linear anomalies have been detected (5101 and 5102) from the geophysical survey which support the HER and APS records.	Low	Yes: Onshore cable route intersects the area of cropmarks identified on aerial imagery sources and anomalies identified in the geophysical survey, and will be affected by construction related activities	Completed	Yes	No
3073	N/A	N/A	Barker's Farm - suggested line of Roman road.	Low-High	Yes: Onshore cable route intersects the suggested line of the Roman road recorded in the HER and will be affected by construction related activities	Yes	Yes	No
17241 3042	APS_09	Field EOT_01: 4802, 4803, 5804; EOT_02: 4805, 4806, 4807	A tumulus depicted on the earlier edition OS mapping indicates the position of a likely Bronze Age round barrow which was visible later as a cropmark. Tumulus marked on 6" OS series of 1874-5, at Mill Hill. Cropmark of field boundaries.	Low-High	Yes: Onshore cable route intersects the features identified on aerial imagery sources and the anomalies identified in the geophysical survey, and will be affected by construction related activities	Completed	Yes	No

EHER Number	APS ID	WA ID (geophysics results)	Description	Perceived Heritage Importance	Interaction	Post-consent Evaluation Stages to be agreed with <u>ECCthe Archaeological Curators</u>		
						Geophysical Survey	Trial Trenching	Earthwork Survey
N/A	APS_09	Field EOT_05: 4810, 4811	FA former field boundaries (4810, 4811) corresponding to APS data was identified in the geophysical survey and is marked on the 1898 Second Edition OS map.	Low	Yes: Onshore cable route, TCC and off-route access intersect the anomalies identified during the geophysical survey and will be affected by construction related activities	Completed	Yes	No
N/A	N/A	Field EOT_05: 4801	Ditch-like feature (4801) identified during the geophysical survey, possibly a field boundary that predates the available maps.	Low	Yes: TCC intersects the anomaly identified during the geophysical survey and will be affected by construction related activities	Completed	Yes	No
48329 3189 3136	APS_10	Area_12_01: 4703	Cropmarks of ring ditches and linear ditches and possible trackways, and field boundaries near Lodge Lane. South of Wolves Hall Farm, cropmarks comprising linear features and trackways. Field boundary (4703) also identified during the geophysical surveys.	Low-Medium	Yes: Onshore cable route intersects the anomalies identified in the geophysical survey and will be affected by construction related activities	Completed	Yes	No

EHER Number	APS ID	WA ID (geophysics results)	Description	Perceived Heritage Importance	Interaction	Post-consent Evaluation Stages to be agreed with ECCthe Archaeological Curators		
						Geophysical Survey	Trial Trenching	Earthwork Survey
3179	APS_11	Field TGN_03: 4607; TGN_04: 4606	Field system and possible drainage visible as earthworks. Cropmarks comprising a possible ring ditch, plus linear features which may be geological or field drainage, north of Tendring Green	Low-Medium	Yes: Onshore cable route intersects the anomalies identified in the geophysical survey and will be affected by construction related activities	Completed	Yes	No
N/A	N/A	Field TNG_01: 4603, 4604	Two potential ditch features (4603 & 4604) identified during the geophysical survey on a rectilinear alignment are noted in the southern portion of the survey in field TGN_01. They delimit a 90 m by 90 m area on a south-west to north-east orientation.	Low	Yes: Onshore cable route intersects the anomalies identified in the geophysical survey and will be affected by construction related activities	Completed	Yes	No
3167	APS_14	Area_10_02, Area_10_04: 4505, 4506, 4508	Field system visible as extant on 1950s aerial photographs and as cropmarks on satellite imagery. Cropmarks comprising a possible double-ditched trackway, an adjoining irregular linear feature, and a possible ring	Low-Medium	Yes: Onshore cable route intersects the anomalies identified in the geophysical survey and will be affected by construction related activities	Completed	Yes	No

EHER Number	APS ID	WA ID (geophysics results)	Description	Perceived Heritage Importance	Interaction	Post-consent Evaluation Stages to be agreed with <u>ECCthe Archaeological Curators</u>		
						Geophysical Survey	Trial Trenching	Earthwork Survey
			ditch, although the aerial photo is rather dark and these features are not clear to the east of Hempstall's Farm. Former field boundaries (4505, 4506, 4508) were identified during the geophysical survey.					
N/A	N/A	Area_10_02: 4500	Feature 4500 identified during the geophysical survey pertains to a possible earthen bank of unknown origin. The presence of Bronze Age barrows and round houses in the wider landscape suggests this could be of the same origin. It could as well be a response from superficial deposits and as such reflect a natural feature.	Low-High	Yes: Onshore cable route intersects the anomalies identified in the geophysical survey and will be affected by construction related activities	Completed	Yes	No
N/A	N/A	Area_10_01: 4501, 4502, 4503, 4504	Feature 4501 identified during the geophysical survey is a curvilinear feature running on a south-west to north-east orientation for	Low-Medium	Yes: TCC and off-route access intersect the anomalies identified during the geophysical survey and will be affected	Completed	Yes	No

EHER Number	APS ID	WA ID (geophysics results)	Description	Perceived Heritage Importance	Interaction	Post-consent Evaluation Stages to be agreed with ECC <u>the Archaeological Curators</u>		
						Geophysical Survey	Trial Trenching	Earthwork Survey
			26m. This indicates a ditch-like feature and relate to a small enclosure. Features 4502 - 4504 relate to former field boundaries on 1898 Second Edition OS mapping.		by construction related activities			
17325 3177 47376	APS_20	Area_09_01: 4400; Area_09_02: 4402	Bradfield Lodge: cropmarks of former field, woodland and irregular enclosure. South of Bradfield Lodge: cropmarks comprising trackways, field boundaries and ring ditches. Cropmark of a possible mill mound west of Abbots Hall, plus linear features which may be geological to the north of Abbott's Hall. A former field boundary (4400, 4402) was identified during the geophysical survey and is visible on the 1898 Second Edition OS map.	Low-Medium	Yes: Onshore cable route intersects the anomalies identified in the geophysical survey and will be affected by construction related activities	Completed	Yes	No

EHER Number	APS ID	WA ID (geophysics results)	Description	Perceived Heritage Importance	Interaction	Post-consent Evaluation Stages to be agreed with ECC <u>the Archaeological Curators</u>		
						Geophysical Survey	Trial Trenching	Earthwork Survey
50930	N/A	N/A	A PAS findspot of a buckle of Post-medieval date.	Low	Yes: Onshore cable route intersects the findspot recorded in the HER and will be affected by construction related activities	Yes Completed	Yes	No
3130	APS_18	N/A	Cropmarks of field boundaries and possible trackways to the east of Mulley's Farm.	Low	Yes: Onshore cable route intersects the cropmarks visible on aerial imagery sources and will be affected by construction related activities	Completed	Yes	No
N/A	N/A	Area_5_05: 4216, 4218, 4219	Former field boundaries (4216, 4218, 4219) on a northeast to southwest alignment identified during the geophysical survey.	Low	Yes: Onshore cable route and TCC intersect the anomalies identified in the geophysical survey and will be affected by construction related activities	Completed	Yes	No
3131	APS_15	N/A	Cropmarks of linear ditches and a series of five ring ditches to the east of Mulley's Farm. Also cropmarks comprising field boundaries and trackways. The features appear to lie outside of the onshore project area.	Low-Medium	Not Anticipated: Access tracks intersect the area of cropmarks visible on aerial imagery sources, however, no direct impacts are expected due to use of the existing trackways	Completed	N/A	No

EHER Number	APS ID	WA ID (geophysics results)	Description	Perceived Heritage Importance	Interaction	Post-consent Evaluation Stages to be agreed with ECC <u>the Archaeological Curators</u>		
						Geophysical Survey	Trial Trenching	Earthwork Survey
3182	N/A	N/A	Cropmarks of linear features some of which may be agricultural or geological in origin. The features are expected to lie outside of the onshore project area.	Low	Not Anticipated: Access tracks intersect the area of cropmarks visible on aerial imagery sources, however, no direct impacts are expected due to use of existing trackways	Up to moderate adverse N/A	N/A	No
3148	APS_12	Area_5_03: 4209	Cropmark of three ring ditches, plus some linear features of field and parish boundaries at Hawkins Farm. A former field boundary (4209) was identified in the north-east of Area_5_03 and is recorded on the 1898 Second Edition OS map.	Low-Medium	Yes: Onshore cable route, substation access road and TCC intersect the anomalies identified in the geophysical survey and will be affected by construction related activities	Completed	Yes	No
N/A	N/A	Area_5_05: 4200, 4202	The northern boundary of a rectilinear enclosure (4200) identified during the geophysical survey in the centre of the survey area indicates prehistoric activity within the site. Feature 4202 may relate to a small stone wall and is likely, not	Low-Medium	Yes: Onshore cable route intersects the anomalies identified in the geophysical survey and will be affected by construction related activities	Completed	Yes	No

EHER Number	APS ID	WA ID (geophysics results)	Description	Perceived Heritage Importance	Interaction	Post-consent Evaluation Stages to be agreed with ECC <u>the Archaeological Curators</u>		
						Geophysical Survey	Trial Trenching	Earthwork Survey
			contemporary with the enclosure at 4200.					
17318 17321	N/A	N/A	Cropmarks of parish and field boundaries at Welhams Farm. Features unlikely to lie within the onshore project area.	Low	Not Anticipated: Access tracks intersect the area of cropmarks visible on aerial imagery sources, however, no direct impacts are expected due to use of existing trackways	N/A	N/A	N/A
N/A	N/A	Area_5_04: 4203, 4208	A rectilinear enclosure (4203) occupies a square area of 21m by 21m and is 2m in width. An oval anomaly is located within the northwestern corner of it that occupies an area of 6m by 3.5m. This type of anomaly could represent an oven or kiln, however it could equally indicate a ferrous object. The feature at (4203) has been interpreted as a ditched enclosure, however, further investigation would be required to determine its origin. A former field boundary (4208) has been identified to the	Low-Medium	Yes: TCC intersects the anomalies identified during the geophysical survey and will be affected by construction related activities	Completed	Yes	No

EHER Number	APS ID	WA ID (geophysics results)	Description	Perceived Heritage Importance	Interaction	Post-consent Evaluation Stages to be agreed with ECCthe Archaeological Curators		
						Geophysical Survey	Trial Trenching	Earthwork Survey
			south-west of the postulate enclosure.					
N/A	APS_19	Area_04_02: 4102, 4103, 4104, 4105, 4106, 4107, 4112	<p>The gradiometer survey has identified anomalies which may be archaeological in origin.</p> <p>The remains of an older field system (4102-4107), absent from available map sources, have been identified across most of the site. In addition, several ring-ditch features (4112) similar to the circular features, identified from aerial photographs in the wider area could indicate further settlement activity.</p>	Low-Medium	Yes: Onshore cable route intersects the anomalies identified in the geophysical survey and will be affected by construction related activities	Completed	Yes	No
2460	APS_19	Fields LB_04, LB_07, LB_09, Area_5_01: 4024, 4029, 4032, 4206, 4207	Cropmarks covering a large area, mainly linear features being part of field systems or trackways, but there are also many ring ditches and several enclosures, and what may be a henge, south	Low-High	Yes: Onshore substation works area and onshore substation access route intersect the anomalies identified in the geophysical survey and will be affected by construction related activities	Completed	Yes	No

EHER Number	APS ID	WA ID (geophysics results)	Description	Perceived Heritage Importance	Interaction	Post-consent Evaluation Stages to be agreed with <u>ECCthe Archaeological Curators</u>		
						Geophysical Survey	Trial Trenching	Earthwork Survey
			and west of Little Bromley Hall. Positive linear anomalies on geophysical survey indicating ditch-like features. Identified as former field boundaries.					
N/A	N/A	Field LB_07: 4038	An irregular shaped anomaly (4038) covers an area of 65m by 34m and indicates a surface distribution of magnetic material such as burned clay bricks. It corresponds to the location of the former Rudkin's farm, known from 1896 OS mapping.	Low-Medium	Yes: Onshore substation works area intersects the anomalies identified in the geophysical survey and will be affected by construction related activities	Completed	Yes	No
52884	N/A	N/A	A PAS findspot of a strainer of Medieval date.	Low	Yes: Onshore substation access route intersects the findspot recorded in the HER and will be affected by construction related activities	Completed	Yes	No
54689	N/A	N/A	A PAS findspot of a pendant of Post-medieval date.	Low	Yes: Onshore cable route intersects the findspot recorded in the HER and will be affected by	Completed	Yes	No

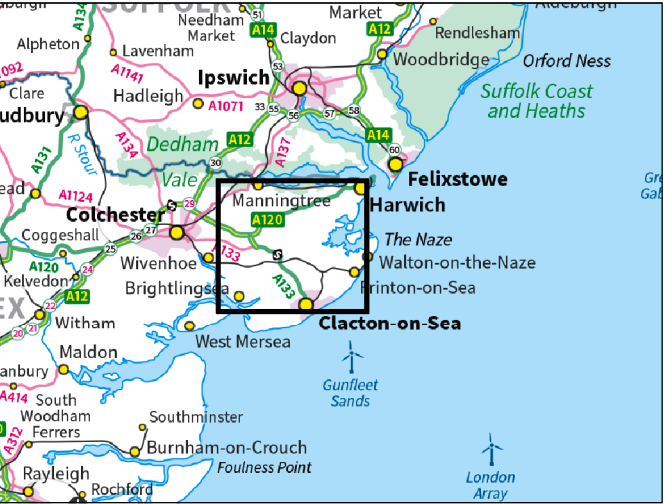
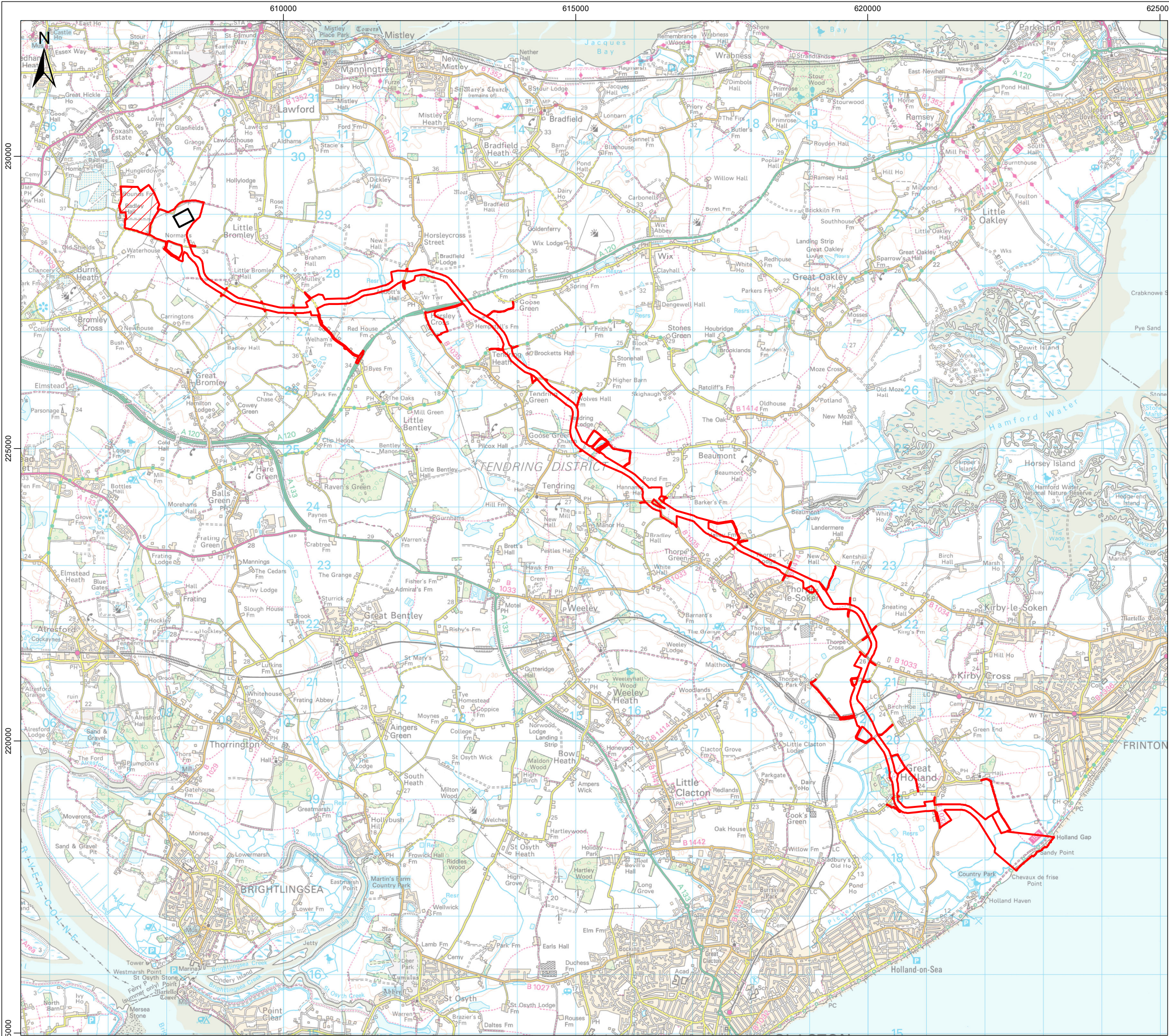
EHER Number	APS ID	WA ID (geophysics results)	Description	Perceived Heritage Importance	Interaction	Post-consent Evaluation Stages to be agreed with ECC <u>the Archaeological Curators</u>		
						Geophysical Survey	Trial Trenching	Earthwork Survey
					construction related activities			
Onshore substation works area								
2607 2573	APS_2 7	N/A	Linear features at right angles to Roman road, probably field division, at Badley Hall. Roman road, linking Mistley with Colchester. Site is connected to APS sites 23, 30 and 31.	Medium	Yes: Onshore substation works area intersects the features visible on aerial imagery sources – TBC following detailed project design	Yes -Completed	Yes	No
17486 2668 3168 2631	APS_2 6	Fields LB_01, LB_02: 4000, 4001, 4002, 4003, 4004, 4005, 4006, 4007, 4008, 4009, 4010, 4016, 4017, 4018, 4019, 4021, 4022, 4031	Site of Roman road (feature 4000) and associated linear features including field boundaries. Some features confirmed by geophysical survey, such as the likely Roman Road, field system, and possible enclosures. At the phase 1 evaluation, two parallel ditches were identified at the approximate location of the likely Roman road. However, no dateable material was recovered from either of the ditches, nor any	Low-High	Yes: Onshore cable route, onshore substation works area intersects the archaeology identified during the geophysical survey and trial trenching evaluation and will be affected by construction related activities	Completed	Completed	No

EHER Number	APS ID	WA ID (geophysics results)	Description	Perceived Heritage Importance	Interaction	Post-consent Evaluation Stages to be agreed with <u>ECCthe Archaeological Curators</u>		
						Geophysical Survey	Trial Trenching	Earthwork Survey
			<p>signs of a road surface. Field system and enclosures to the south of the road were also confirmed by the evaluation, but with little datable material culture. An enclosure to the north of the likely Roman Road contained few residual sherds of pottery dating to the Romano-British period,</p> <p>A ditch at the north-east boundary of the onshore substation works are interpreted as possible archaeology in the geophysical survey (but not attributed a WA ID), was found to be the earliest feature on site, based on the recovery of 25 sherds of Late Prehistoric pottery from the fill. No other definitely dated Prehistoric features were identified during the evaluation.</p> <p>East-west alignment of possible Roman road</p>					

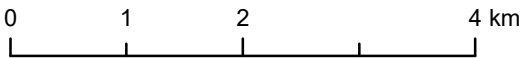
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						Geophysical Survey	Trial Trenching	Earthwork Survey
			<p>through Horsleycross Street (HER 3168) extending to the north of Little Bromley (HER 2631).</p> <p>Also, location of former Lower Barn (4231).</p> <p>North of Norman's Farm are cropmarks of linear features (HER 17486)</p> <p>Former field boundaries present on 1898 OS mapping (4210, 4219, 4220, 4221, 4222).</p> <p>Three ring ditches, one with only half its circumference visible are recorded north of Norman's Farm (HER 2668).</p>					
2468	N/A	N/A	Sesterce, probably of Hadrian, found in 1930, at Holly Lodge	Low	Yes: Onshore substation works area intersects the findspot recorded in the HER and will be affected by construction related activities	Completed	Completed	No
51070	N/A	N/A	A PAS findspot of a hoard Middle Bronze	Low-Medium	Yes: Onshore substation works area intersects the findspot recorded in the HER and will be affected	Completed	Completed	No

EHER Number	APS ID	WA ID (geophysics results)	Description	Perceived Heritage Importance	Interaction	Post-consent Evaluation Stages to be agreed with ECC <u>the Archaeological Curators</u>		
						Geophysical Survey	Trial Trenching	Earthwork Survey
			Age to Late Bronze Age date.		by construction related activities			
50910	N/A	N/A	A PAS findspot of an Ampulla, Harness, Pendant, and Tokens of Medieval to Post-medieval date.	Low	Yes: Onshore substation works area intersects the findspot recorded in the HER and will be affected by construction related activities	Completed	Completed	No
17110	APS_30	N/A	An area of Cropmarks of a double-ditched rectangular enclosure, with entrances, a curvilinear enclosure, trackways, linear features, a Roman road (PRN 2631) and field boundaries. Features unlikely to lie within the onshore project area.	Low	Yes (slight): Onshore substation works area intersects the southern extent of the area of cropmarks visible on aerial imagery sources and will be affected by construction related activities	Completed	Completed	No
52869	N/A	N/A	A PAS findspot of an Ampulla, Harness, Pendant, and Tokens of Medieval to Post-medieval date.	Low	Yes: Onshore substation works area intersects the findspot recorded in the HER and will be affected by construction related activities	Completed	Completed	No

Appendix C. Figures



- Legend**
- Onshore Project Area
 - Onshore Substation
 - East Anglia Connection Node (EACN)



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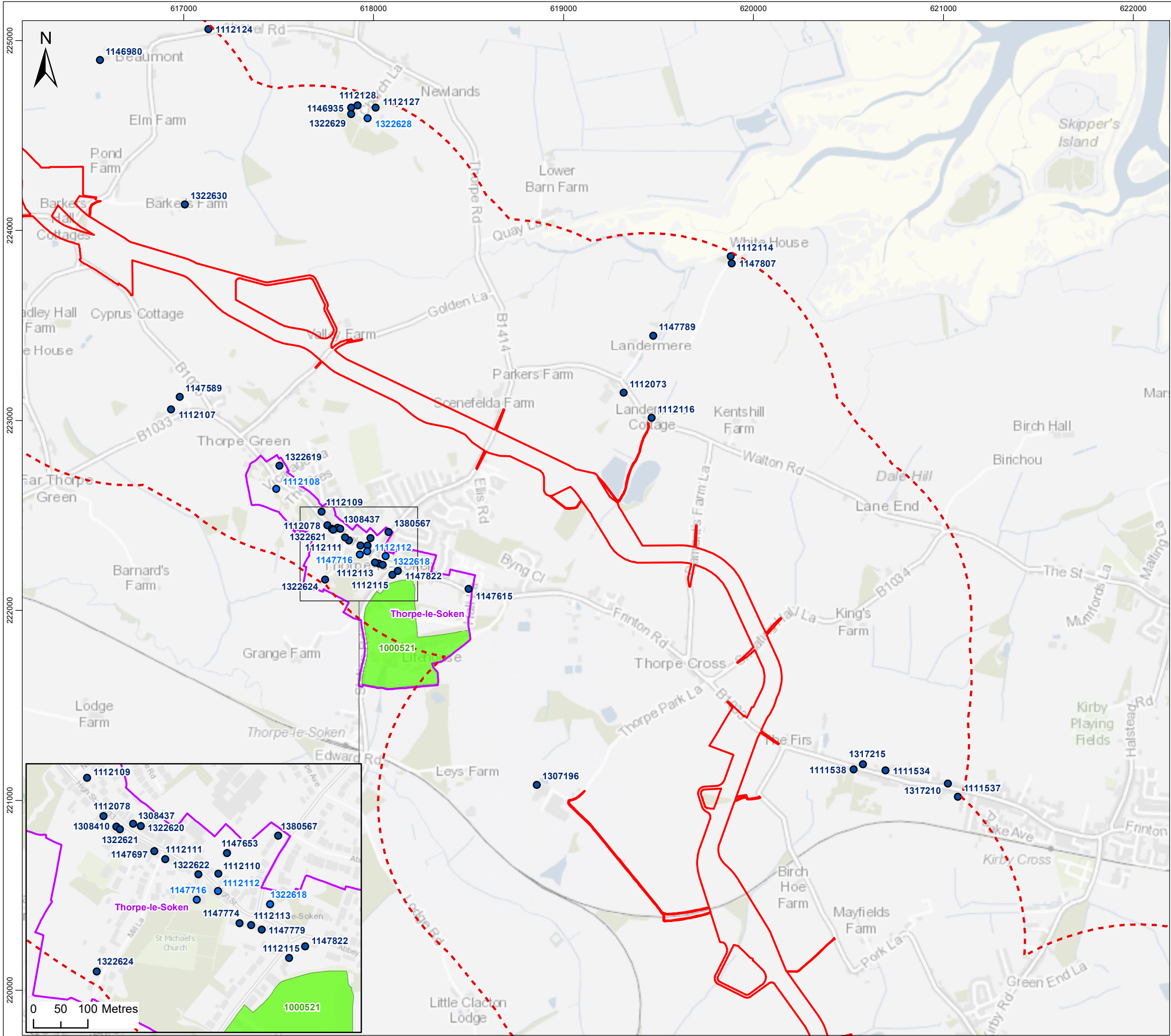
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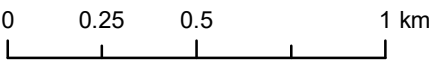
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Scale 1:65,000 Plot Size A3 Datum OSGB36 Projection BNG





- Legend**
- Onshore Project Area
 - Designated Heritage Assets Study Area
 - Conservation Area
 - Registered Park and Gardens
- Listed Building Grades**
- II*
 - II



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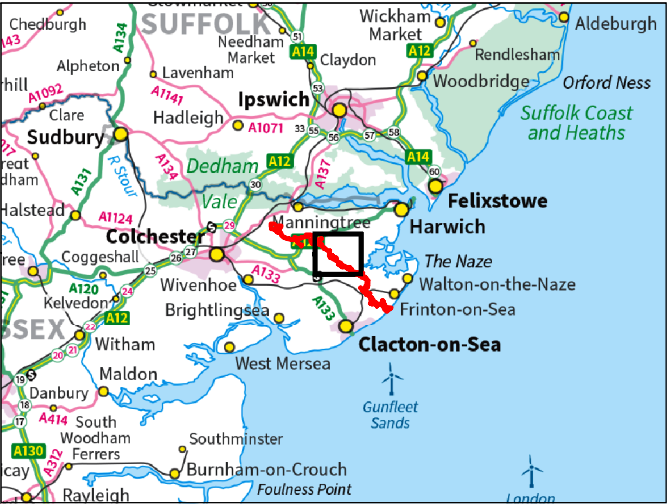
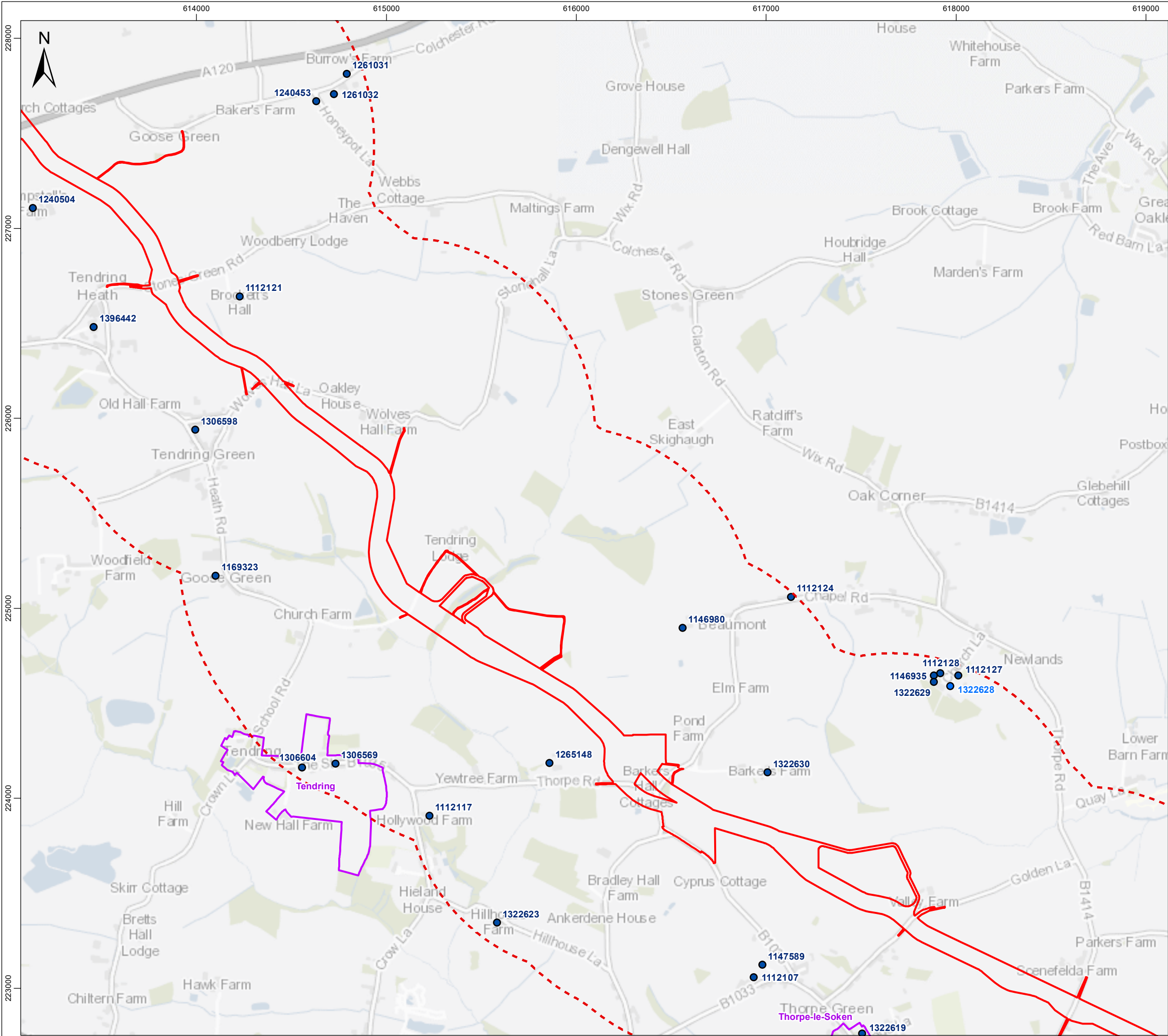
Location of Designated Heritage Assets within the Study Area

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01	05/04/2024	First issue	FC	DG

Drawing Number	Figure Number
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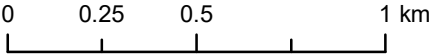


Legend

- Onshore Project Area
- Designated Heritage Assets Study Area
- Conservation Area

Listed Building Grades

- II*
- II



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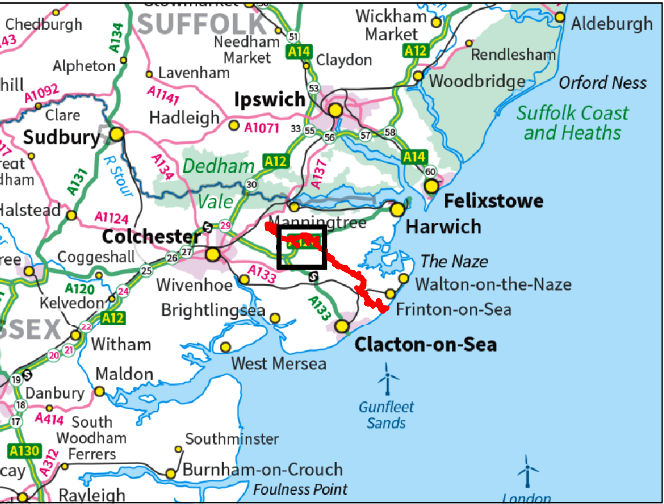
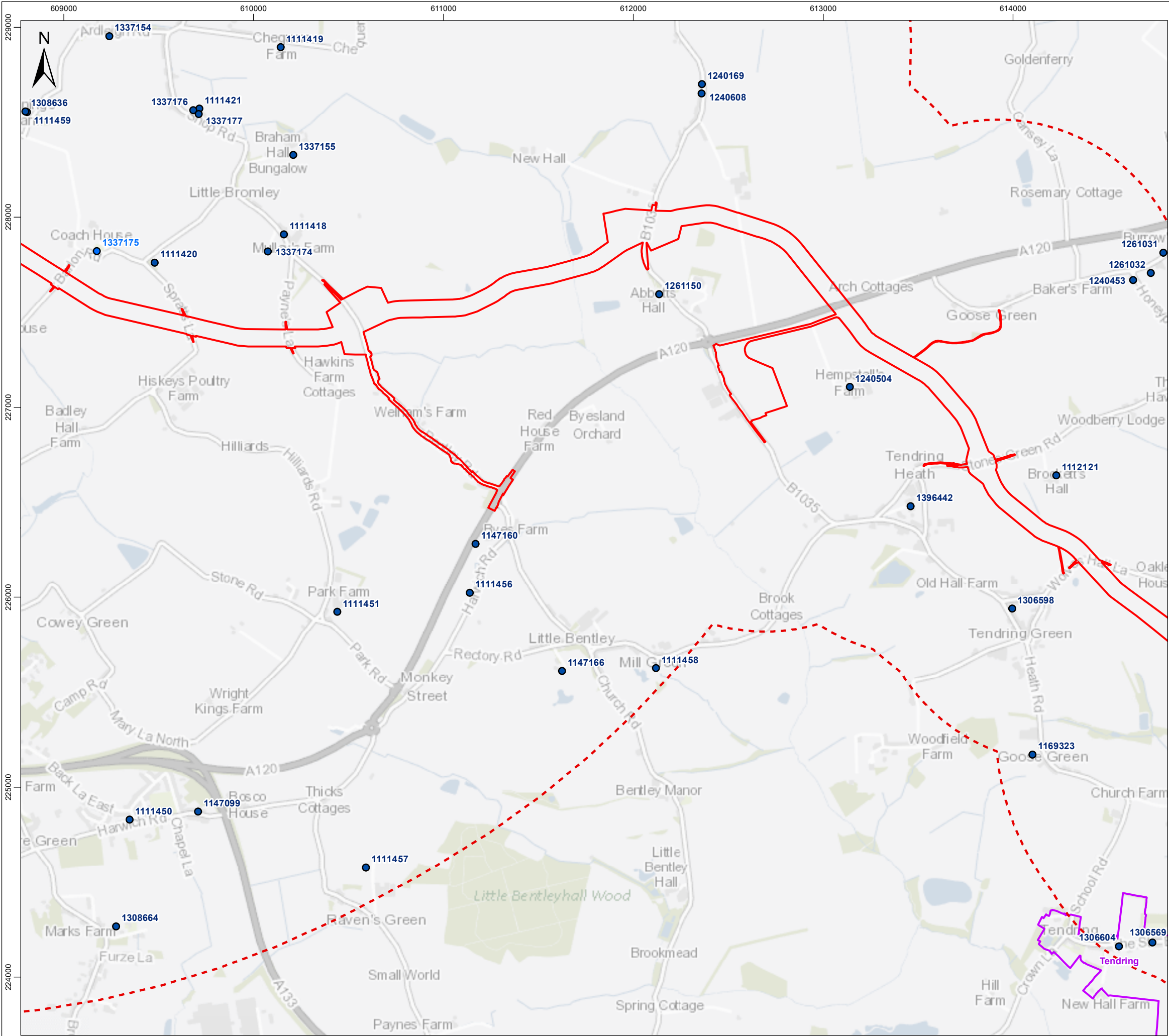
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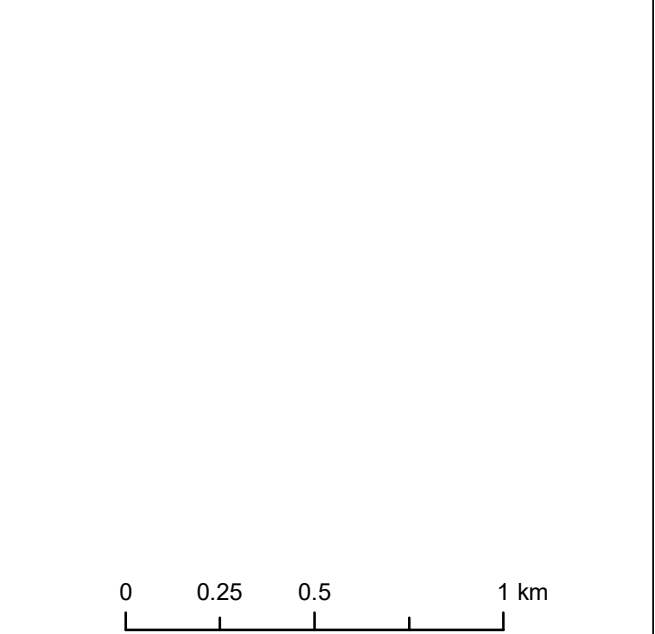


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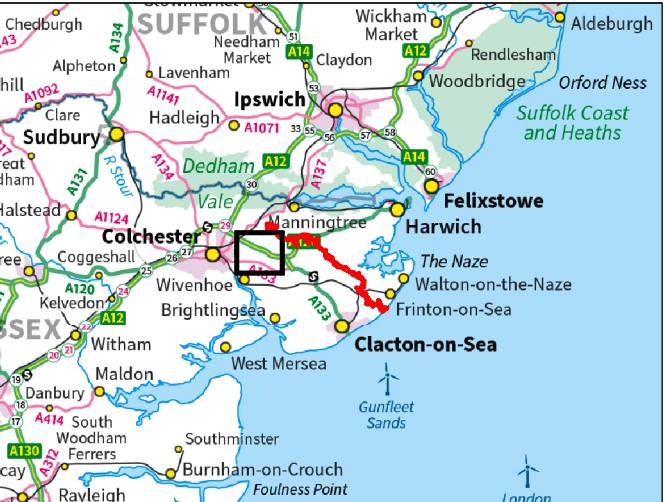
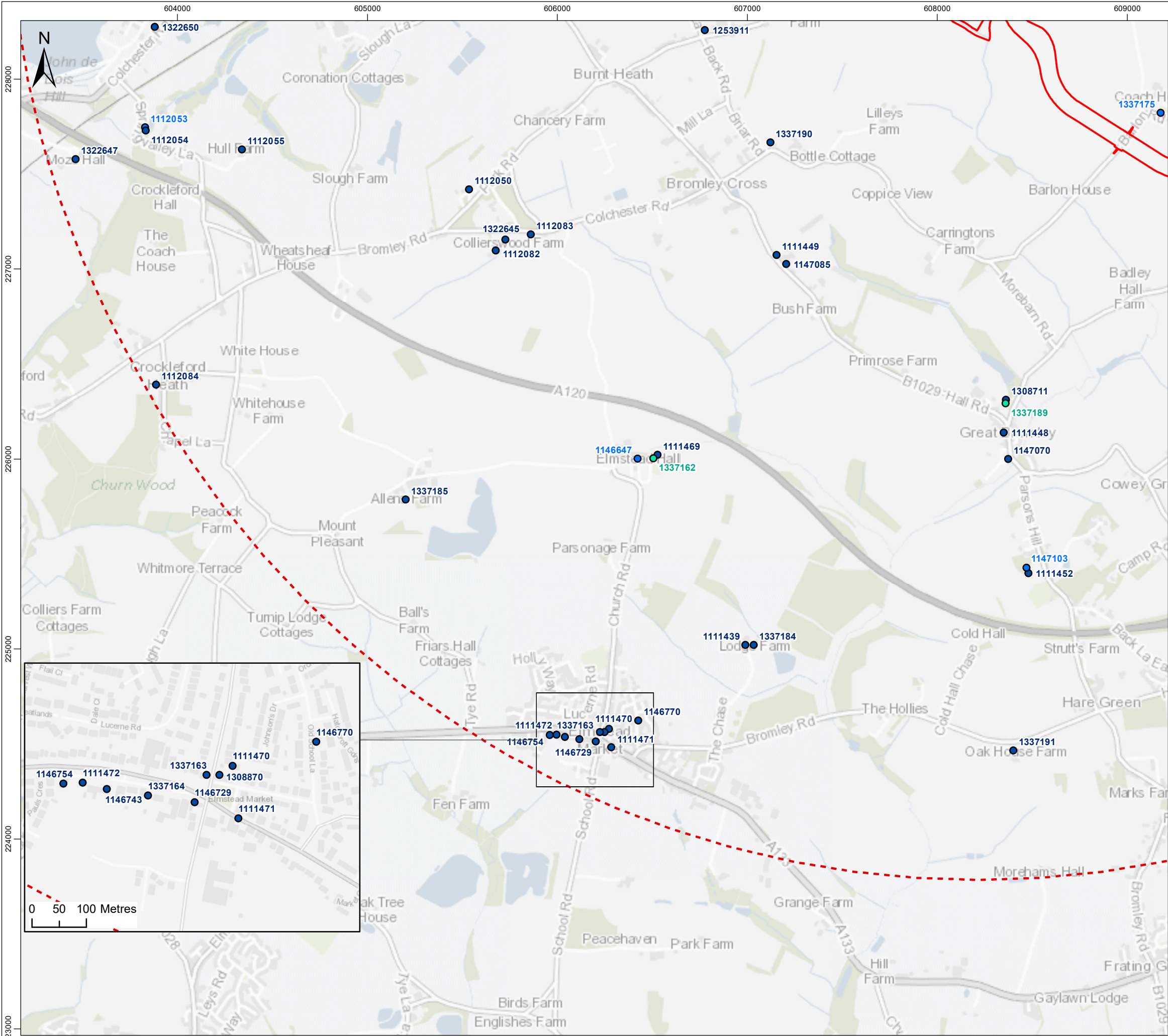
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Drawing Number	Figure Number
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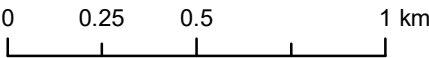


Legend

- Onshore Project Area
- Designated Heritage Assets Study Area

Listed Building Grades

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- II



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Location of Designated Heritage Assets within the Study Area

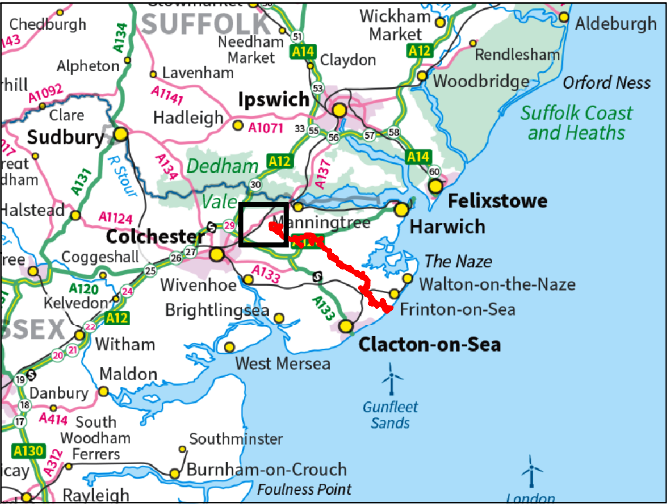
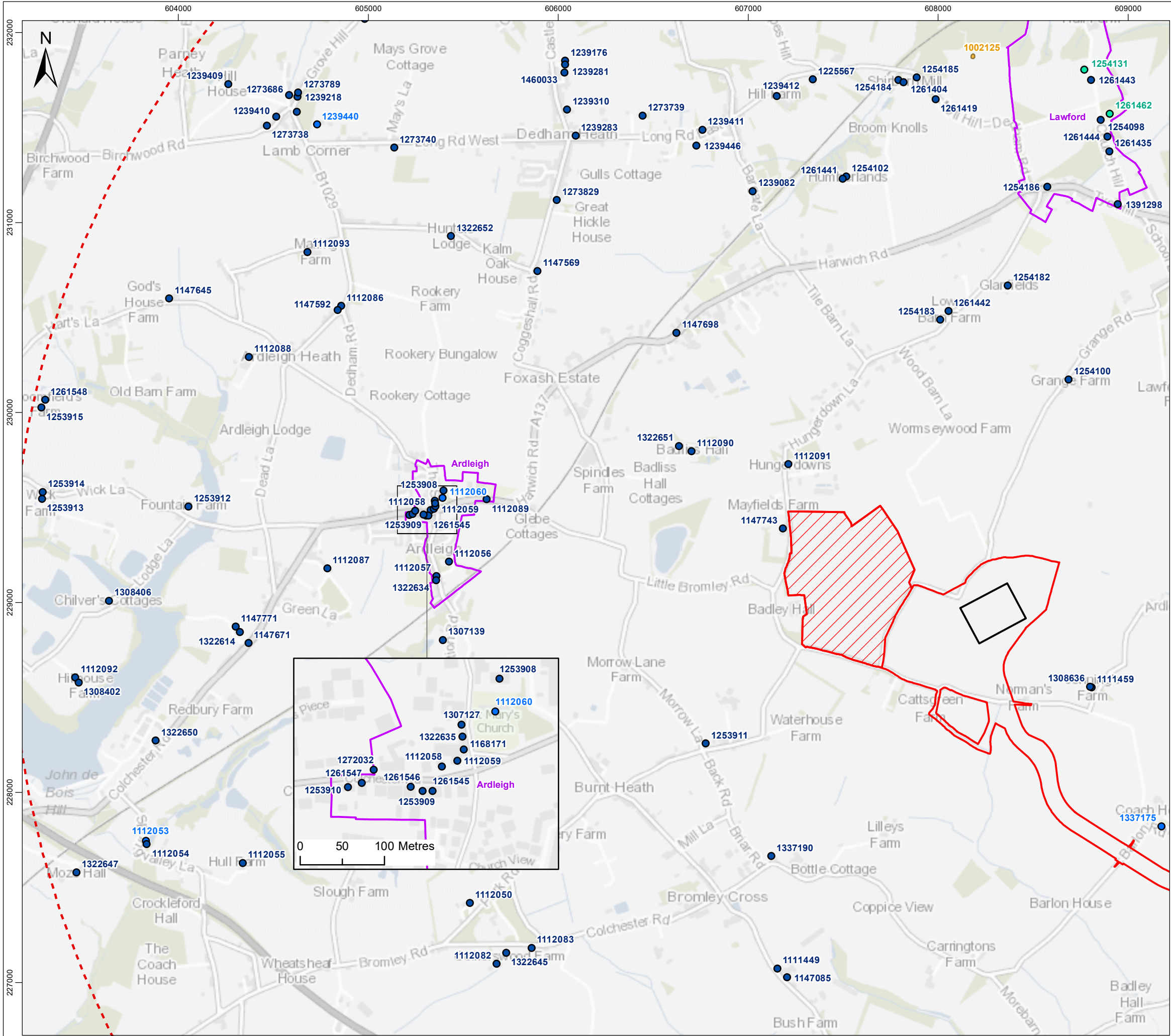
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Drawing Number	Figure Number
PB9244-RHD-ZZ-ON-DR-GS-0532	2e

Scale	Plot Size	Datum	Projection
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Offshore Wind Farm



Legend

- Onshore Project Area
- Onshore Substation
- East Anglia Connection Node (EACN)
- Designated Heritage Assets Study Area
- Scheduled Monument
- Conservation Area

Listed Building Grades

- I
- II*
- II

0 0.25 0.5 1 km



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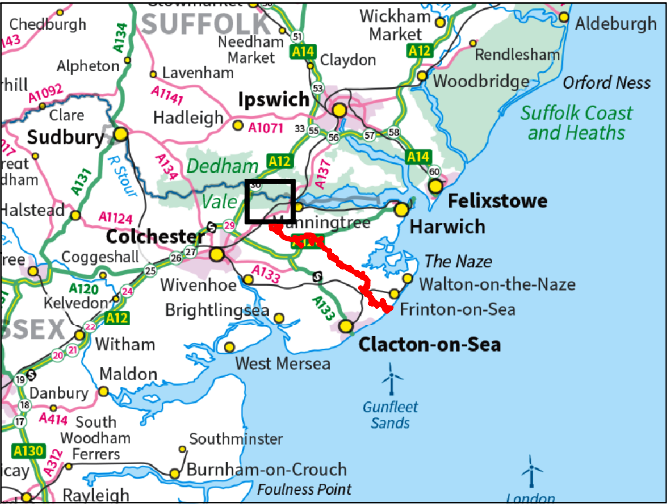
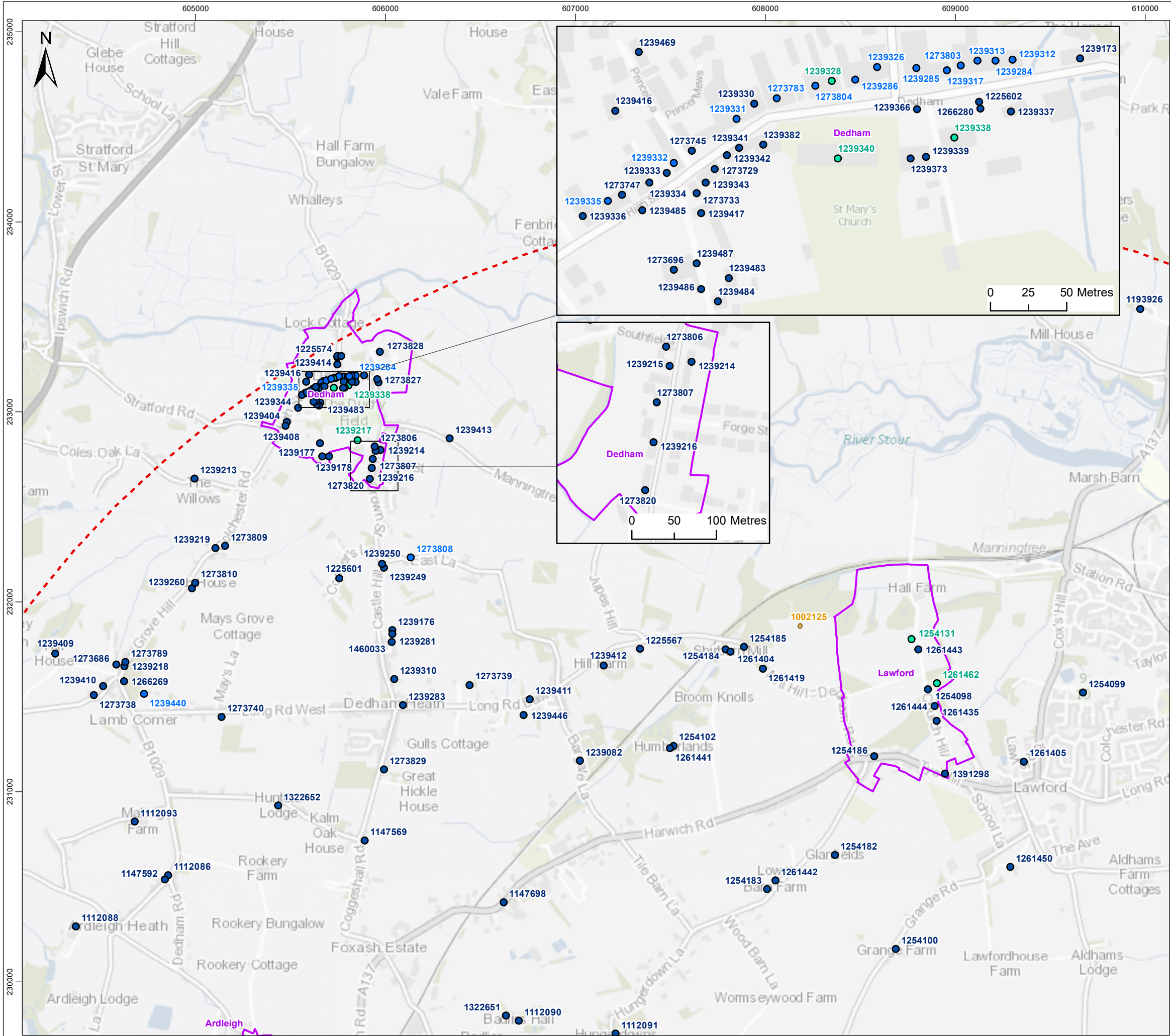
Location of Designated Heritage Assets within the Study Area

Rev	Date	Remarks	Drwn	Chkd
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01	19/12/2023	First issue	FC	MJ

Drawing Number	Figure Number
PB9244-RHD-ZZ-ON-DR-GS-0532	2f

Scale	Plot Size	Datum	Projection
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Legend

- Onshore Project Area
- Designated Heritage Assets Study Area
- Scheduled Monument
- Conservation Area

Listed Building Grades

- I
- II*
- II

Location of Designated Heritage Assets within the Study Area

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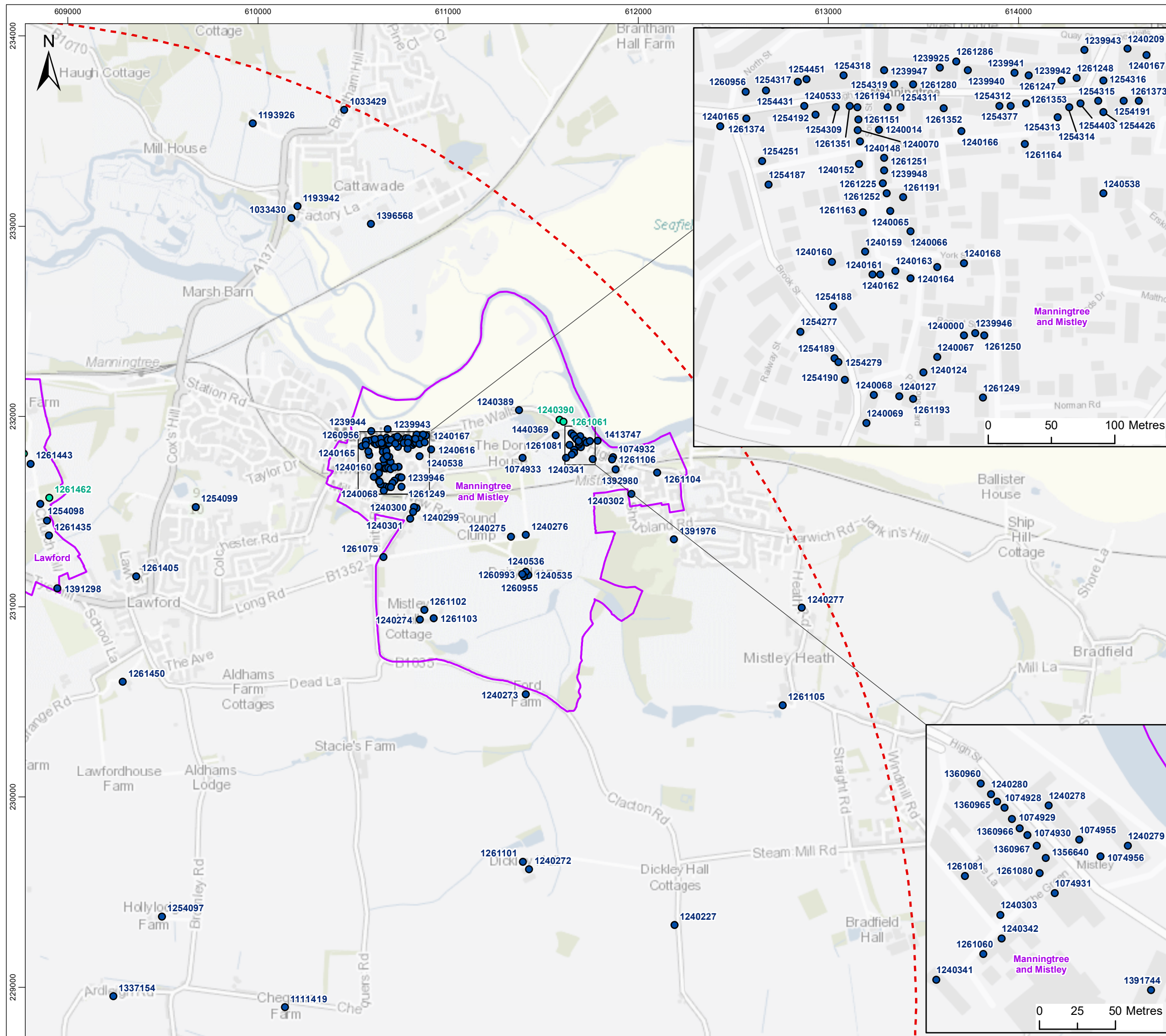
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Figure Number: **2g**




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NORTH FALLS
Offshore Wind Farm

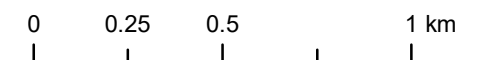


Legend

-  Onshore Project Area
 Designated Heritage Assets Study Area
 Conservation Area

Listed Building Grades

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Drawing Number

PB9244-RHD-ZZ-ON-DR-GS-0532

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2h

Scale
1:20,000

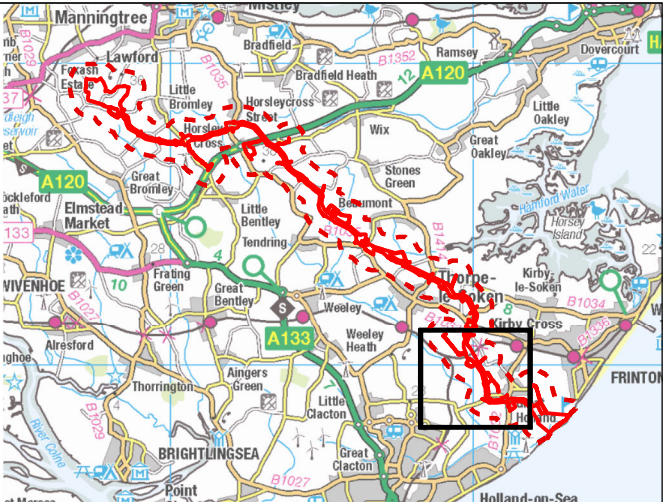
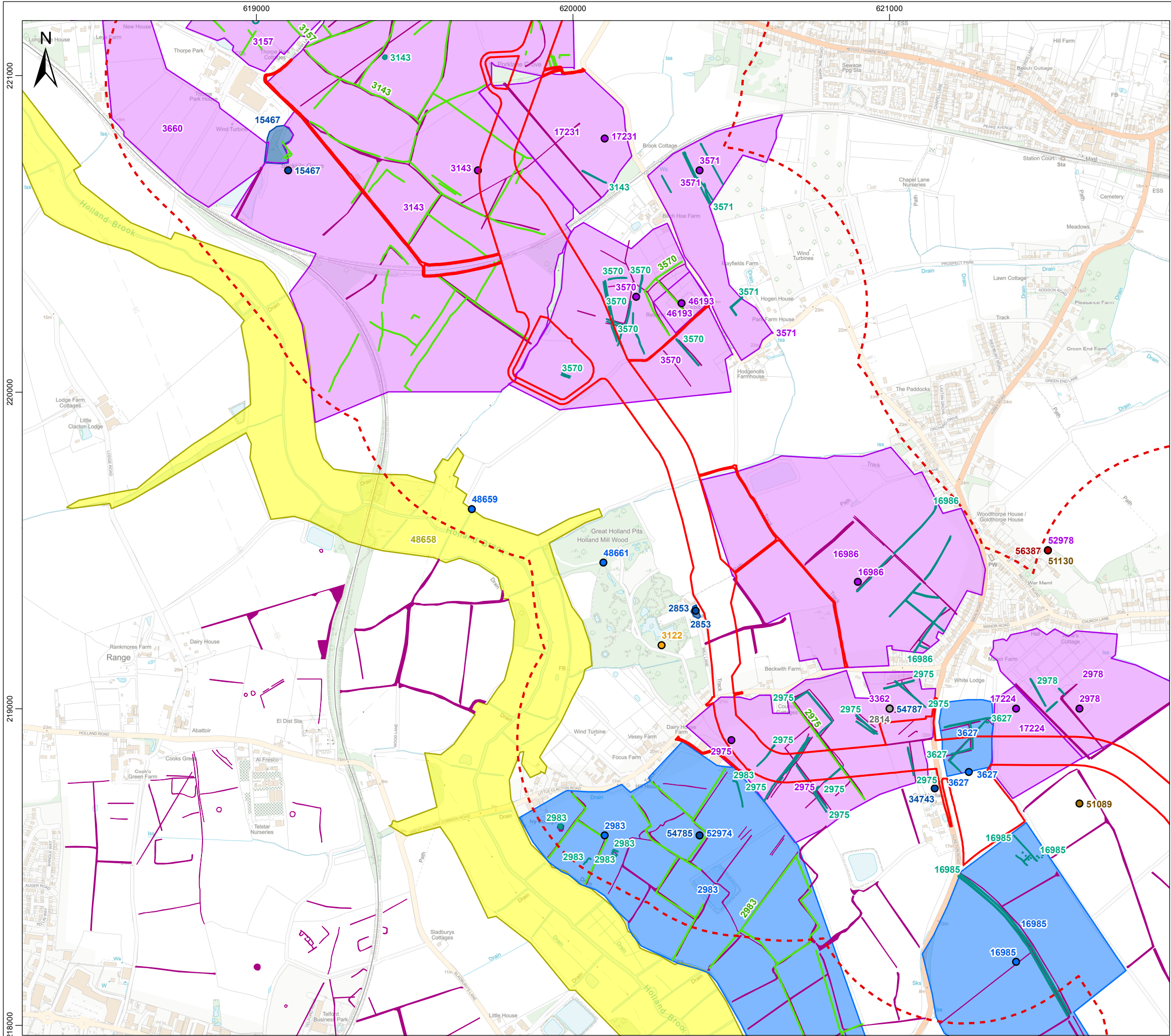
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Datum	OSGB36
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Projection	BNG
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NORTH FALLS
Offshore Wind Farm



Legend

Onshore Project Area
Non-Designated Heritage Assets Study Area
APS Heritage Asset
NMP Line
NMP Polygon
Medieval
Post Medieval
Unknown
Mesolithic

Non-Designated Heritage Assets

APS Heritage Asset
NMP Line
NMP Polygon

Monument Point (Period)

- Neolithic
- Bronze Age
- Iron Age
- Roman
- Medieval
- Post Medieval
- Unknown

Monument Polygon (Period)

- Mesolithic

0 125 250 500 Metres

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Location of Non-Designated Heritage Assets within the Study Area

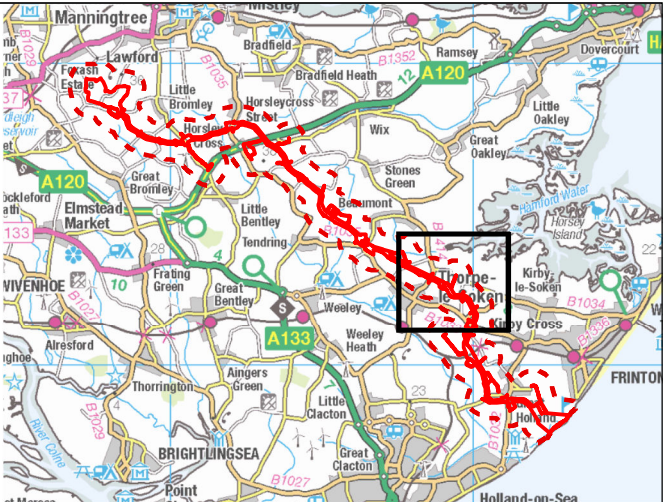
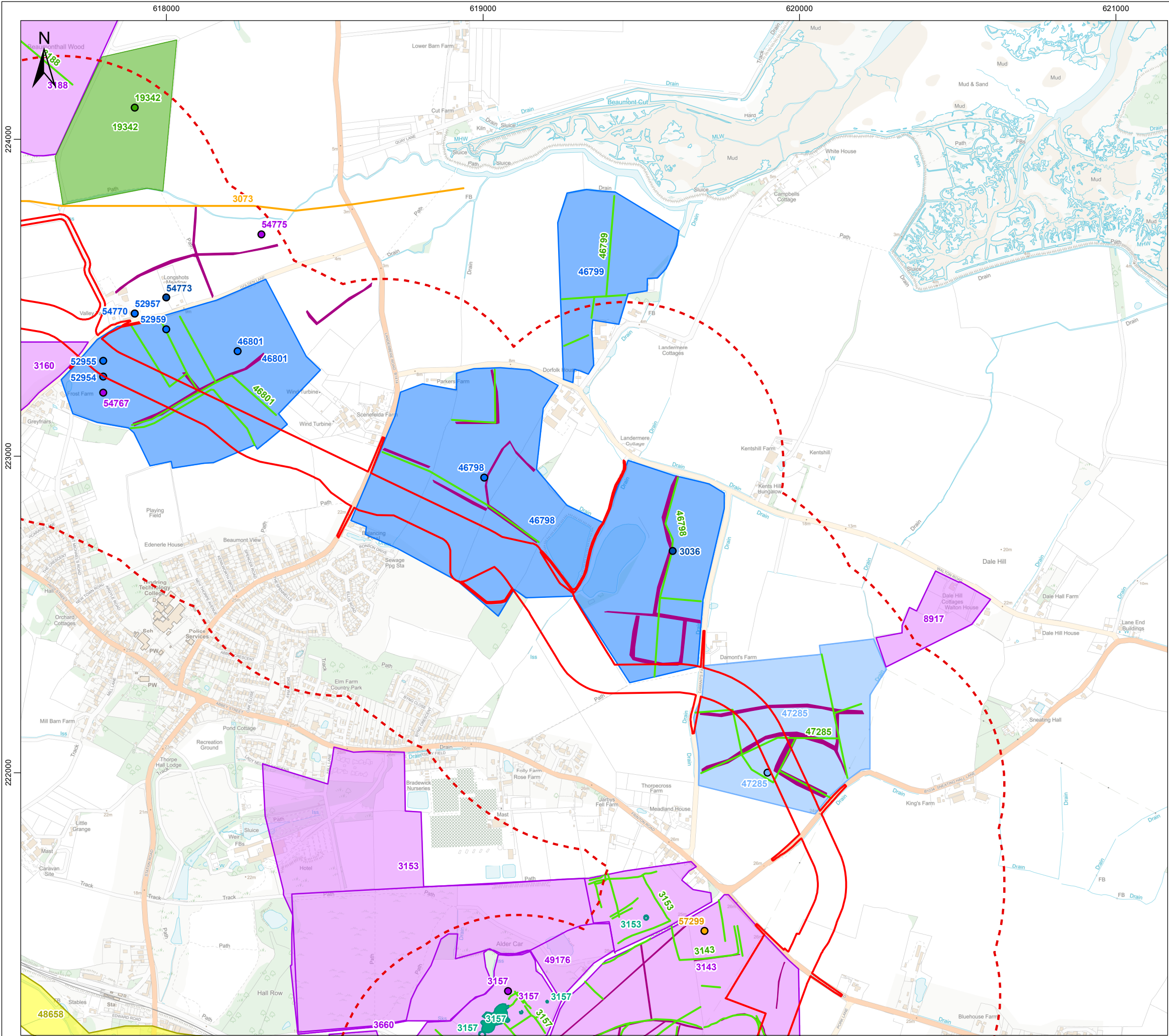
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01	05/04/2024	First issue	FC	DG

Drawing Number: **PB9244-RHD-ZZ-ON-DR-GS-0533** Figure Number: **3b**

Scale: 1:12,000 Plot Size: A3 Datum: OSGB36 Projection: BNG

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NORTH FALLS
Offshore Wind Farm



Legend

Onshore Project Area

Non-Designated Heritage Assets



Monument Polygon (Period)

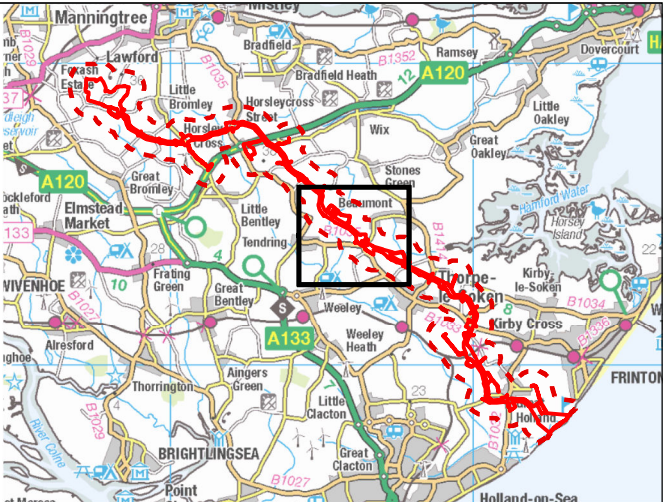
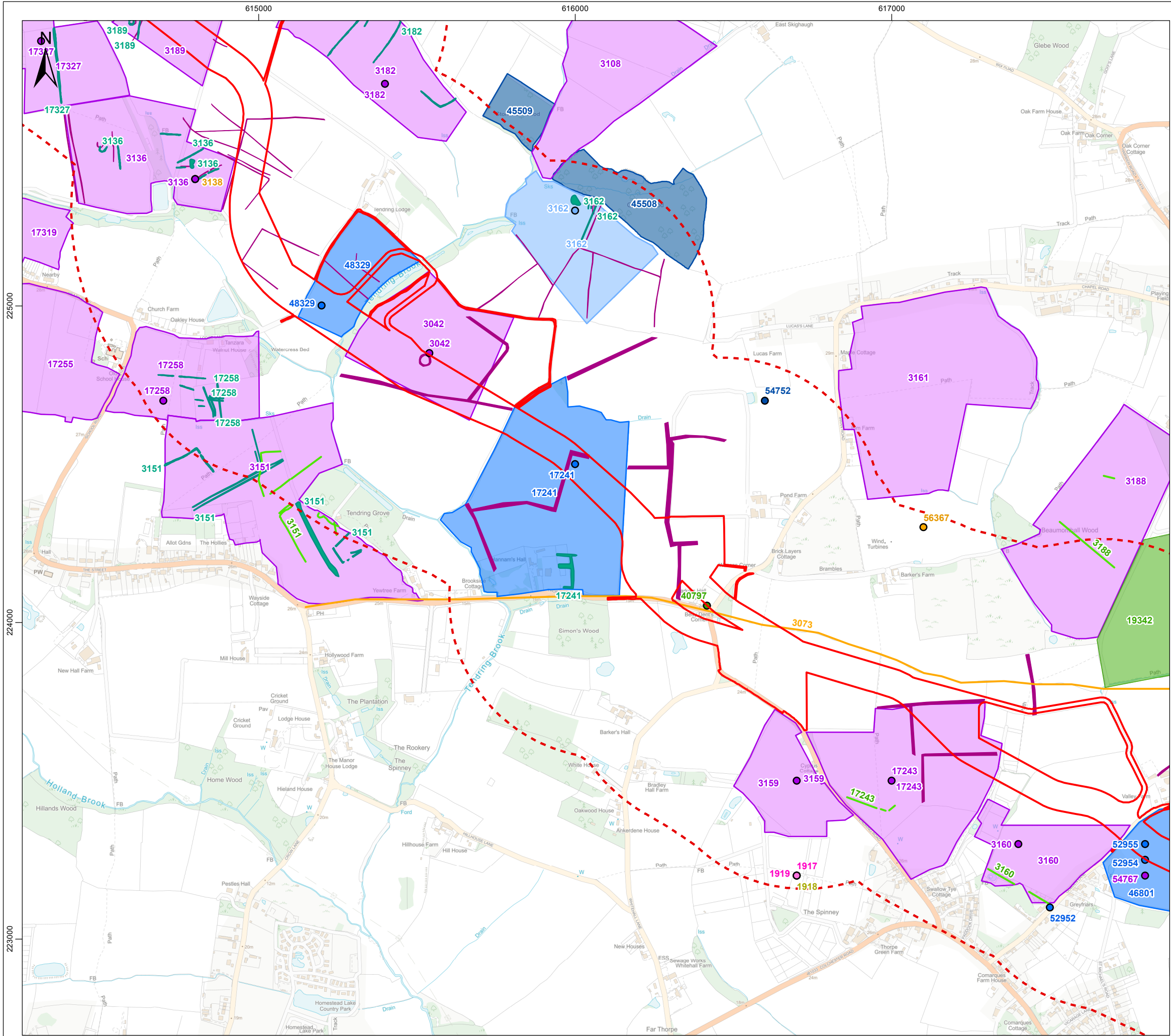
Monument Point (Period)

Monument Line (Period)

0 125 250 500 Metres

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Drawing Title				
Location of Non-Designated Heritage Assets within the Study Area				
Rev	Date	Remarks	Drwn	Chkd
02	10/06/2024	Second issue	FC	DG
01	05/04/2024	First issue	FC	DG
Drawing Number			Figure Number	
PB9244-RHD-ZZ-ON-DR-GS-0533			3c	
Scale	Plot Size	Datum	Projection	
1:12,000	A3	OSGB36	BNG	
				
Royal HaskoningDHV Enhancing Society Together		NORTH FALLS Offshore Wind Farm		



Legend

Onshore Project Area

- Non-Designated
- Heritage Assets Study Area

Non-Designated Heritage Assets

- APS Heritage Asset
- NMP Line
- NMP Polygon

Monument Line (Period)

- Roman

Monument Polygon (Period)

- Early Medieval
- Medieval
- Post Medieval
- Modern
- Unknown

Monument Point (Period)

- Palaeolithic
- Mesolithic
- Roman
- Early Medieval
- Medieval
- Post Medieval
- Modern
- Unknown

0 125 250 500 Metres

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Drawing Title


Location of Non-Designated Heritage Assets within the Study Area


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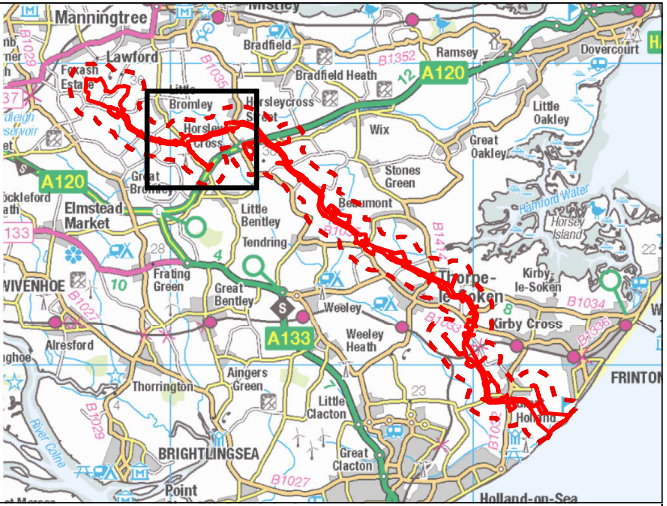
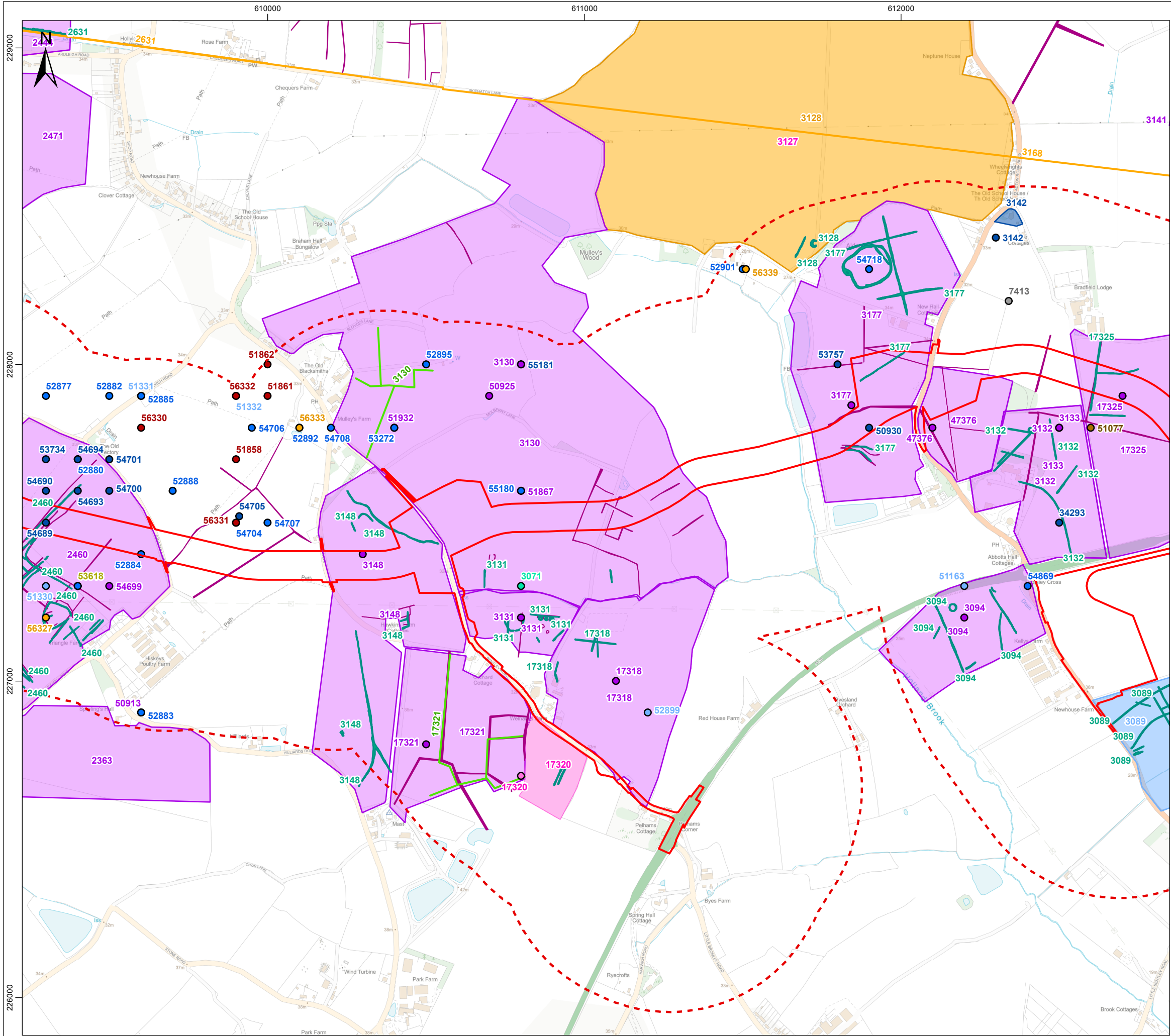
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Figure Number: **3d**

Scale: 1:12,000 | Plot Size: A3 | Datum: OSGB36 | Projection: BNG

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 **NORTH FALLS**
Offshore Wind Farm



Legend

Onshore Project Area

- Non-Designated Heritage Assets Study Area

Non-Designated Heritage Assets

- APS Heritage Asset
- NMP Line
- NMP Polygon

Monument Point (Period)

- Palaeolithic
- Mesolithic
- Prehistoric
- Neolithic
- Bronze Age
- Iron Age
- Roman
- Early Medieval
- Medieval
- Post Medieval

Monument Line (Period)

- Roman

Monument Polygon (Period)

- Palaeolithic
- Roman
- Early Medieval
- Post Medieval
- Unknown

0 125 250 500 Metres

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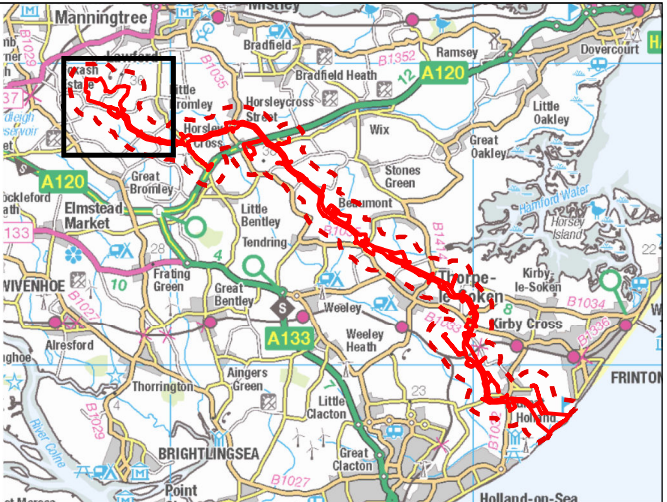
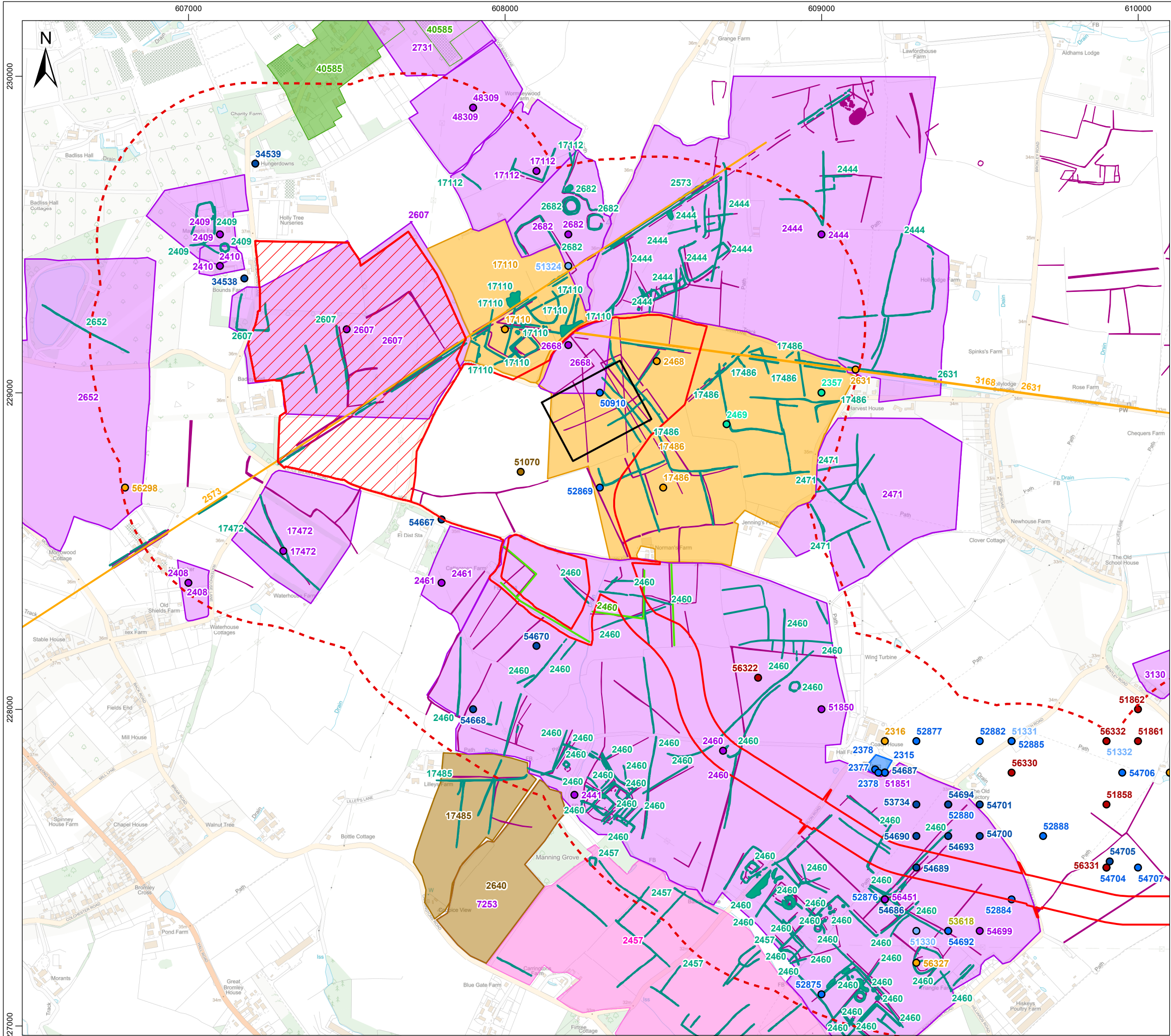
Location of Non-Designated Heritage Assets within the Study Area

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Drawing Number	Figure Number
PB9244-RHD-ZZ-ON-DR-GS-0533	3f

Scale	Plot Size	Datum	Projection
1:12,000	A3	OSGB36	BNG





Legend

- Onshore Project Area
- Onshore Substation
- East Anglia Connection Node (EACN)
- Non-Designated Heritage Assets Study Area
- Non-Designated Heritage Assets
- APS Heritage Asset
- NMP Line
- NMP Polygon
- Monument Line (Period)
- Monument Polygon (Period)
- Monument Point (Period)

Monument Line (Period)

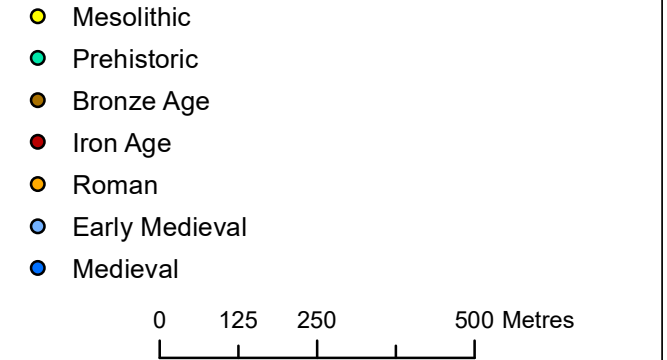
- Roman

Monument Polygon (Period)

- Palaeolithic
- Bronze Age
- Roman
- Medieval
- Modern
- Unknown

Monument Point (Period)

- Mesolithic
- Prehistoric
- Bronze Age
- Iron Age
- Roman
- Early Medieval
- Medieval
- Post Medieval
- Unknown



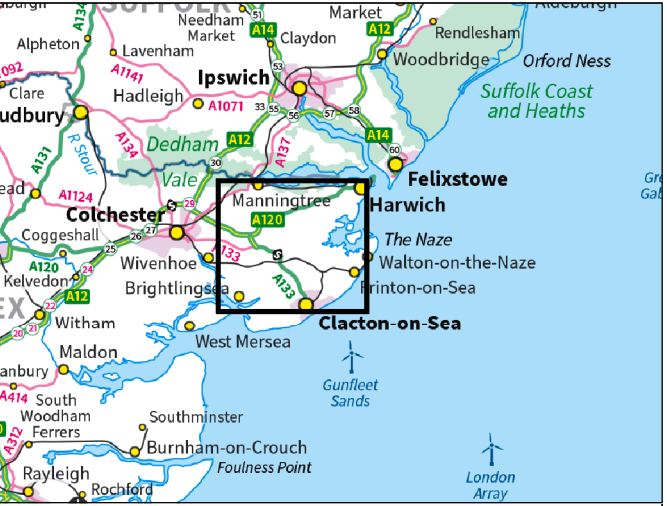
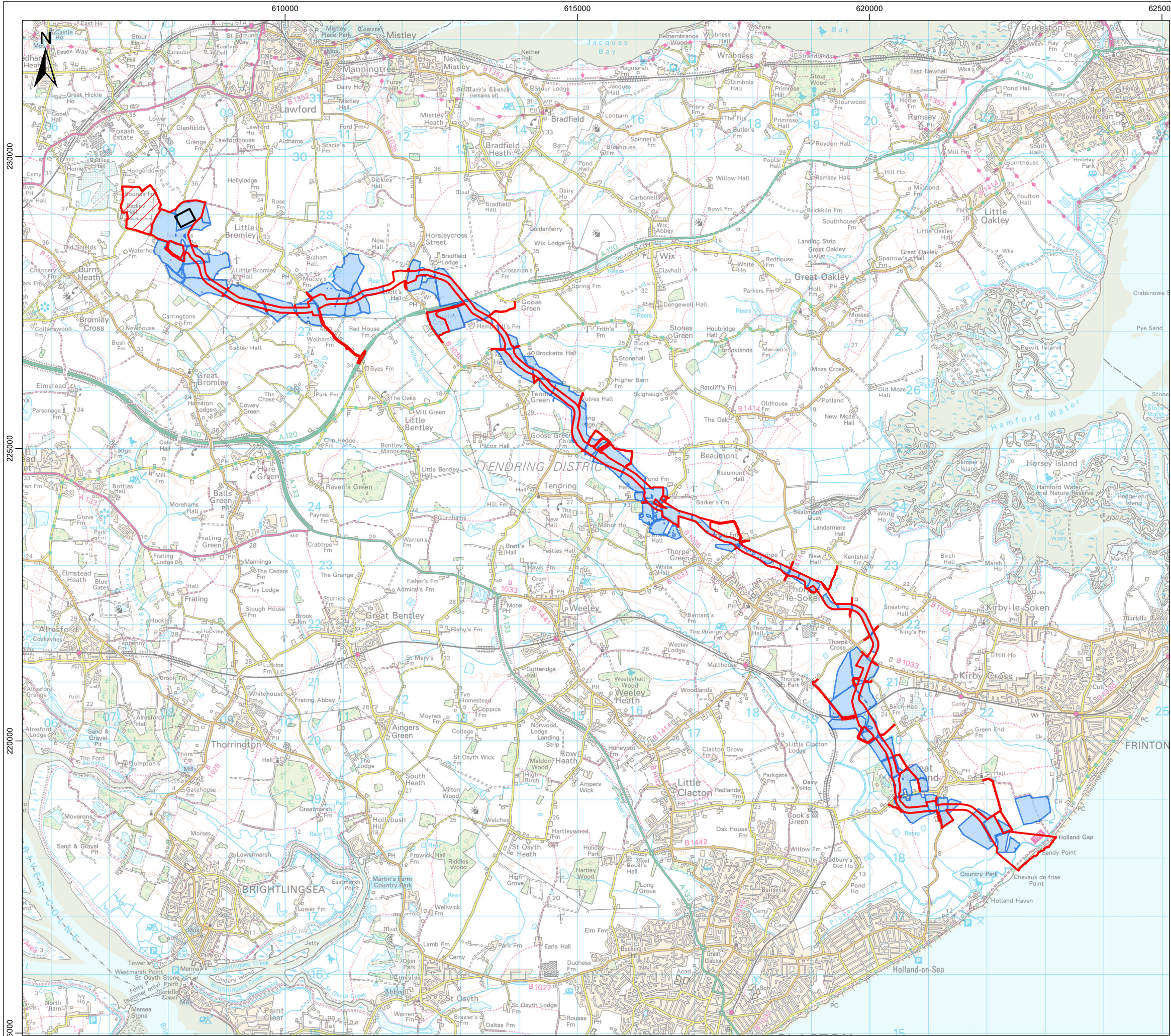
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Location of Non-Designated Heritage Assets within the Study Area

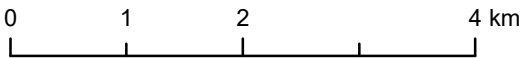
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Drawing Number	Figure Number
PB9244-RHD-ZZ-ON-DR-GS-0533	3g

Scale	Plot Size	Datum	Projection
1:12,000	A3	OSGB36	BNG



- Legend**
- Onshore Project Area
 - Onshore Substation
 - East Anglia Connection Node (EACN)
 - Geophysical Survey Area



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Drawing Title

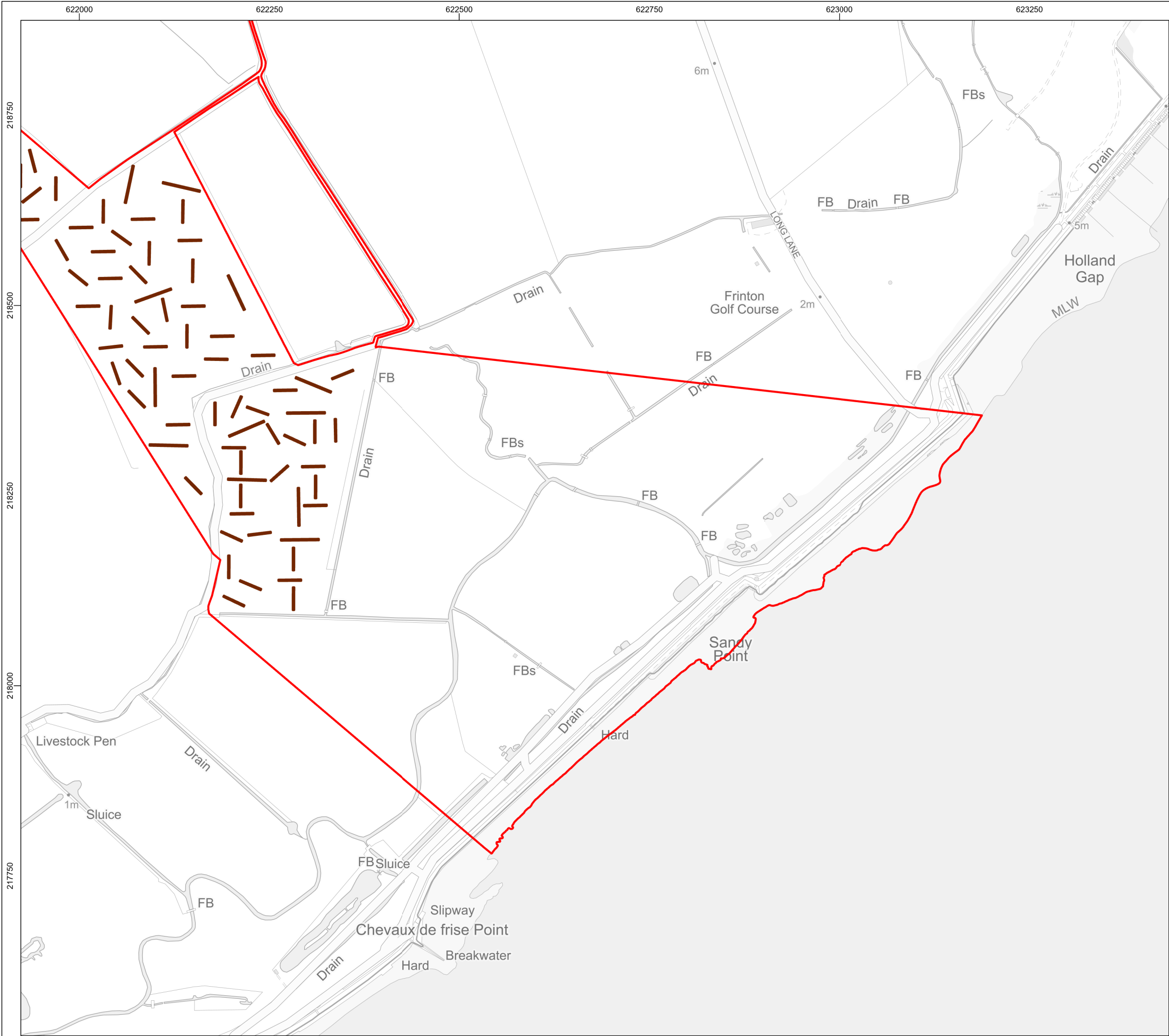
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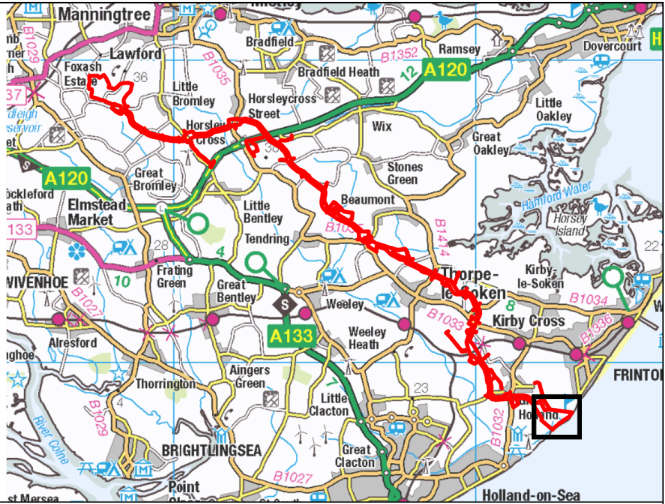
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Scale	Plot Size	Datum	Projection
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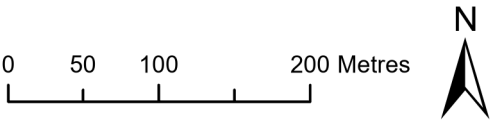


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Legend

- Onshore Project Area
- Phase 2 Trench



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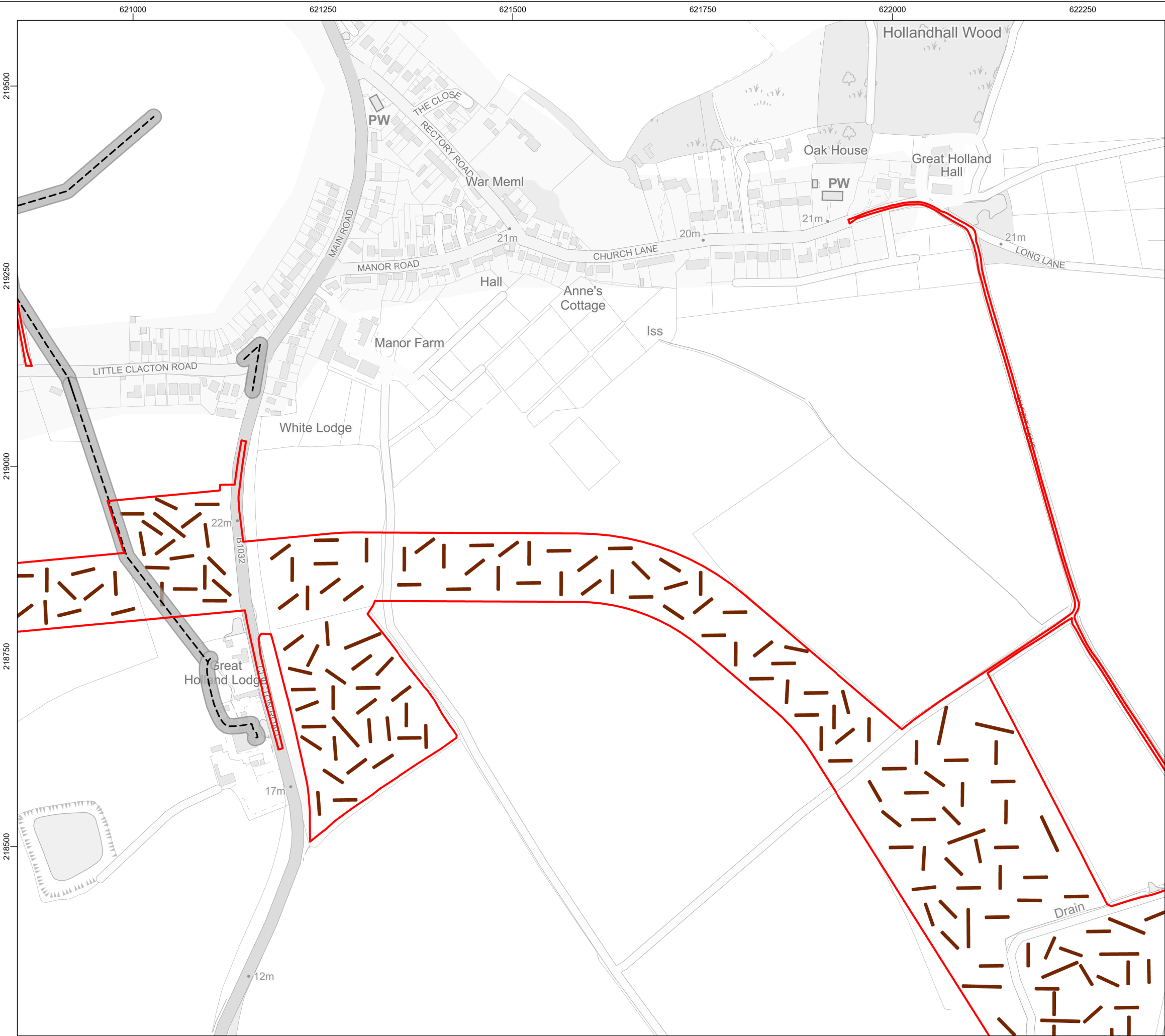
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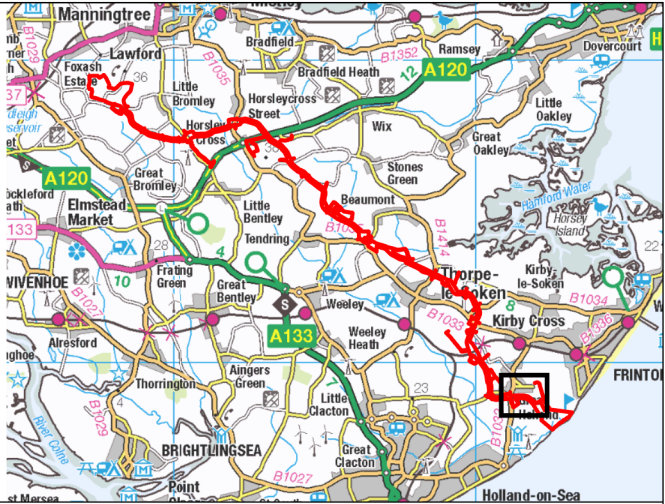
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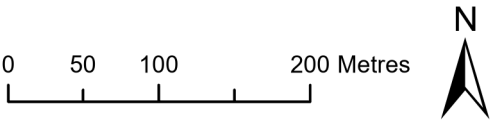




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- Legend**
- Onshore Project Area
 - Overhead Power Line
 - Overhead Power Line 10m Buffer
 - Phase 2 Trench



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Drawing Title

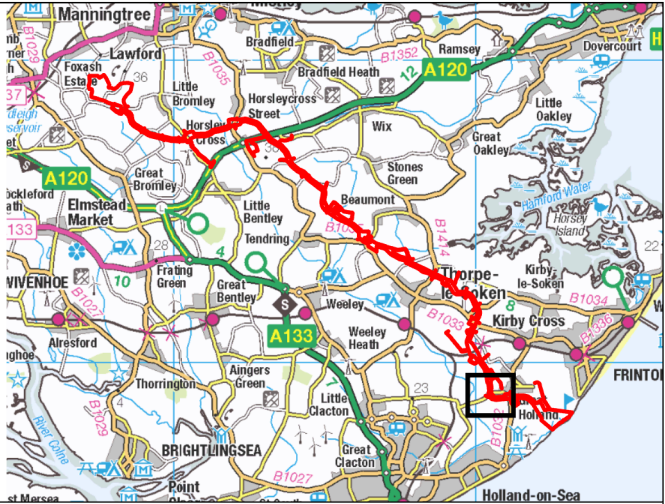
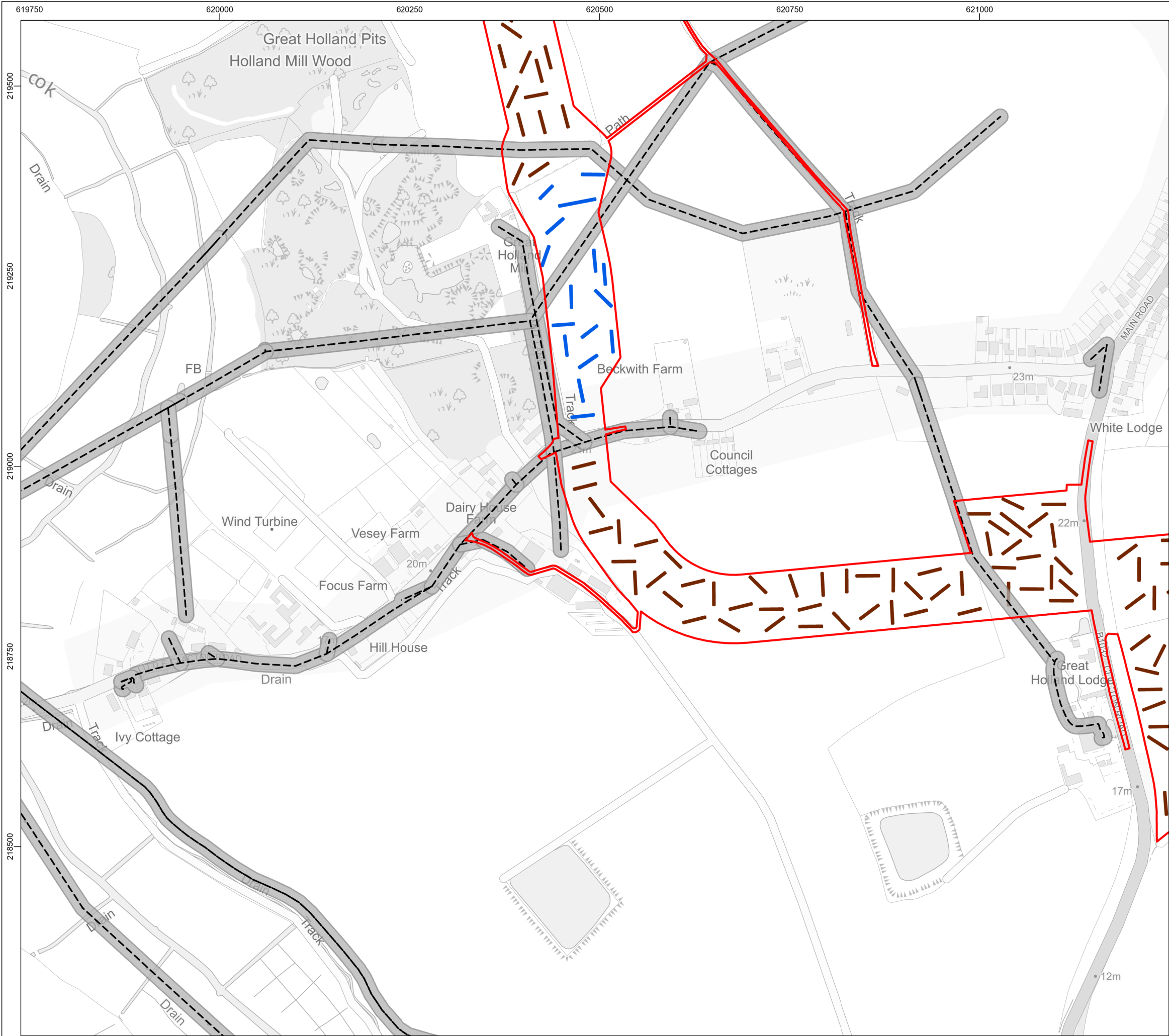
Overview of the Proposed Phase 2 Trenches

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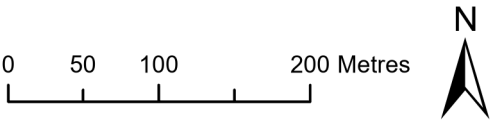
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Scale	Plot Size	Datum	Projection
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- Legend**
- Onshore Project Area
 - Overhead Power Line
 - Overhead Power Line 10m Buffer
 - Phase 1 Trench (Pre-consent)
 - Phase 2 Trench



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Drawing Title

Overview of the Proposed Phase 2 Trenches

Rev	Date	Remarks	Drwn	Chkd
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Drawing Number	Figure Number
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Scale	Plot Size	Datum	Projection
1:5,000	A3	OSGB36	BNG





NORTH FALLS

Offshore Wind Farm



HARNESSING THE POWER OF NORTH SEA WIND

North Falls Offshore Wind Farm Limited

A joint venture company owned equally by SSE Renewables and RWE.

To contact please email contact@northfallsoffshore.com

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