RWE Renewables UK Dogger Bank South (West) Limited

RWE Renewables UK Dogger Bank South (East) Limited

Dogger Bank South Offshore Wind Farms

Outline Onshore Written Scheme of Investigation (Revision 2) (Clean)

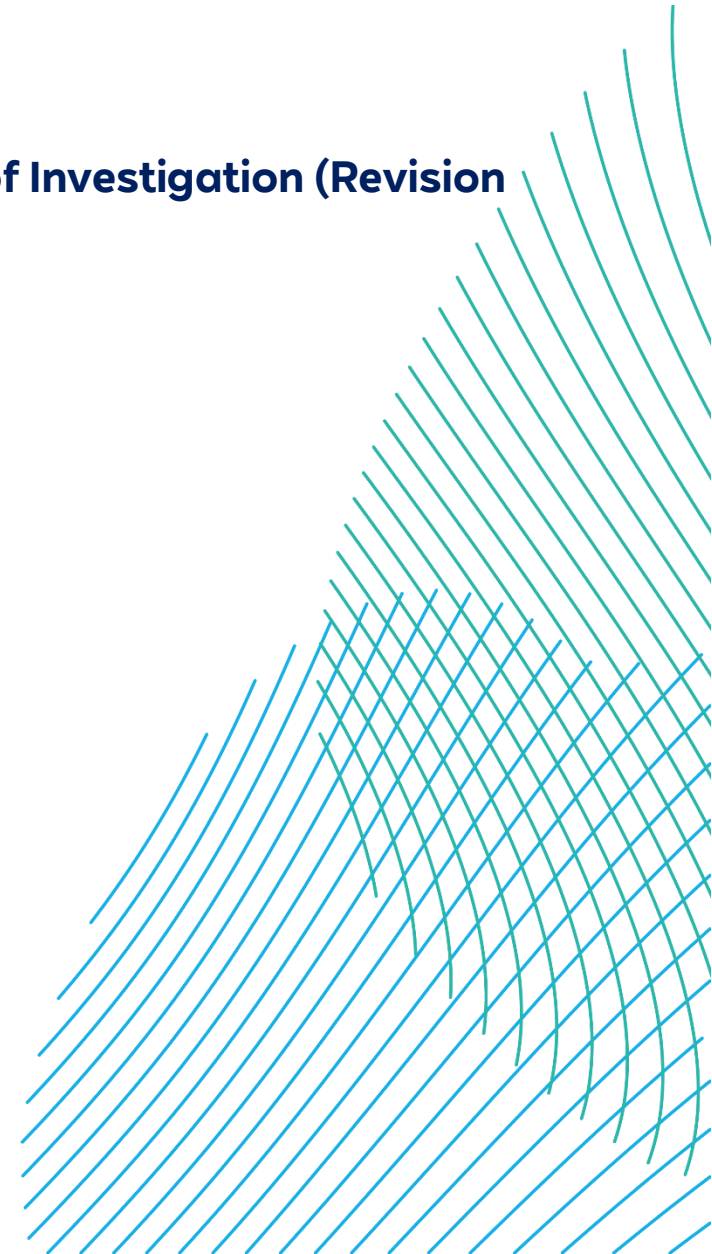
Volume 8

April 2025

Application Reference: 8.14

APFP Regulation: 5(2)(q)

Revision: 02



Unrestricted

Company:	**RWE Renewables UK Dogger Bank South (West) Limited and RWE Renewables UK Dogger Bank South (East) Limited**	Asset:	**Development**
Project:	**Dogger Bank South Offshore Wind Farms**	Sub Project/Package:	**Consents**
Document Title or Description:	Outline Onshore Written Scheme of Investigation (Revision 2) (Clean)		
Document Number:	005028834-02	Contractor Reference Number:	PC2340-RHD-ON-ZZ-RP-Z-0136

Rev No.	Date	Status/Reason for Issue	Author	Checked by	Approved by
01	June 2024	Final for DCO Application	RHDHV	RWE	RWE
02	April 2025	Submission for Deadline 4	RHDHV	RWE	RWE

Revision Change Log			
Rev No.	**Page**	**Section**	**Description**
01	N/A	N/A	Submitted for DCO Application
02	N/A	N/A	8.14 Outline Onshore Written Scheme of Investigation has been updated
02	27/28, 32	6, Table 6-1	The research agenda has been updated to include explicit reference to discussion of Mesolithic material to reflect potential linkages with deposit sequences offshore as outlined in the response to Historic England's Written Representation (REP1-059:3.4.3) [REP2-057].
02	49 137-142	9 Appendix 3	The public outreach and engagement strategy has been updated as a stand-alone appendix (appendix 3) as outlined in the response to Historic England's Written Rep [REP1-059:65) [REP2-057] and in the Historic England SoCG (Revision 2) [document reference 9.4].
02	52	References	Additional reference added.
02	57	Appendix 1	Reference to the Burials Act 1857 has been added.
02	57, 61	Appendix 1	Human Remains has been updated following The Applicants Response to January 2025 Action Points Responses to Issue Specific Hearing 1 Action Point 5 [AS-155] where it was concluded that reference to Article 19 would be removed.
02	70-136	Appendix 2	Appendix 2 has been updated to align the assets with those reported in The Applicants' Responses to Issue Specific Hearing 2 Supplementary Agenda Questions Appendix A Heritage assets, the effects and the attributed level of harm in response to ISH2 10.9 (Revision 1) [REP2-059] submitted at Deadline 2.

Contents

Tables

Appendices

Figures

Glossary

Term	Definition
Dogger Bank South (DBS) Offshore Wind Farms	The collective name for the two Projects, DBS East and DBS West.
Landfall	The point on the coastline at which the offshore export cables are brought onshore, connecting to the onshore cables at the Transition Joint Bay (TJB) above mean high water.
Onshore Converter Stations	A compound containing electrical equipment required to transform HVDC and stabilise electricity generated by the Projects so that it can be connected to the electricity transmission network as HVAC. There will be one Onshore Converter Station for each Project.
Onshore Development Area	The Onshore Development Area for ES is the boundary within which all onshore infrastructure required for the Projects would be located including Landfall Zone, Onshore Export Cable Corridor, accesses, Temporary Construction Compounds and Onshore Converter Stations.
Onshore Export Cable Corridor	This is the area which includes cable trenches, haul roads, spoil storage areas, and limits of deviation for micro-siting. For assessment purposes, the cable corridor does not include the Onshore Converter Stations, Transition Joint Bays or temporary access routes; but includes Temporary Construction Compounds (purely for the cable route).
Onshore Export Cables	Onshore Export Cables take the electric from the Transition Joint Bay to the Onshore Converter Stations.
Onshore Grid Connection Points	The Onshore Grid Connection Points is the location where the electricity produced by the Projects would be transferred to the national grid. There are two Onshore Grid Connection Points, one for each Project, which will be located in the same place.

Term	Definition
Onshore Substation Zone	Parcel of land within the Onshore Development Area where the Onshore Converter Station infrastructure (including the haul roads, Temporary Construction Compounds and associated cable routeing) would be located.
The Applicants	The Applicants for the Projects are RWE Renewables UK Dogger Bank South (East) Limited and RWE Renewables UK Dogger Bank South (West) Limited. The Applicants are themselves jointly owned by the RWE Group of companies (51% stake) and Masdar (49% stake).
The Projects	DBS East and DBS West (collectively referred to as the Dogger Bank South Offshore Wind Farms).

Acronyms

Term	Definition
ALGAO	Association of Local Government Archaeological Officers
CIfA	Chartered Institute for Archaeologists
DBS	Dogger Bank South
DCO	Development Consent Order
ECC	Export Cable Corridor
ES	Environmental Statement
HAP	Humber Archaeology Partnership
HDD	Horizontal Directional Drilling
HE	Historic England
HER	Historic Environment Record
OASIS	Online Access to the Index of Archaeological Investigations
UXO	Unexploded Ordnance
WSI	Written Scheme of Investigation

1 Introduction

1.1. General Project Background

1. RWE Renewables UK Dogger Bank South (West) Limited and RWE Renewables UK Dogger Bank South (East) Limited (hereafter referred to as the Applicants) are proposing to develop the Dogger Bank South (DBS) Offshore Wind Farms (hereafter 'the Projects'). The Array Areas for the Projects are located more than 100 km off the northeast coast of England at the shallow offshore area of the North Sea known as Dogger Bank. DBS is made up of two separate sites, DBS East and DBS West. Each Project could have an installed capacity of up to 1.5 GW. The Projects will include both offshore and onshore infrastructure including export cables to landfall, and connection to the electricity transmission network.

2. The Projects' Onshore Development Area (**Figure 1**) consist of:

   - A landfall (within the Landfall Zone) at Skipsea,
   - An approximately 35km long Onshore Export Cable Corridor (construction easement typically 75m wide, and extending to up to 90m at complex trenchless crossings), and associated Temporary Construction Compounds,
   - Up to two Onshore Converter Stations (within the Onshore Substation Zone) to the southwest of Beverley,
   - An approximately 2.5km onward connection to the proposed Birkhill Wood National Grid Substation.

3. Royal HaskoningDHV has provided environmental and consenting support services to the Applicants, including onshore archaeology and cultural heritage. Regular and ongoing consultation with the Historic Environment consultees has been undertaken, including Historic England (HE), Humber Archaeology Partnership (HAP who act as Archaeological Advisors to the East Riding of Yorkshire Council and East Riding of Yorkshire Council's Conservation Officer, to inform the archaeology and cultural heritage assessment **(Volume 7, Chapter 22 Onshore Archaeology and Cultural Heritage (application ref. 7.22)).** HAP are East Riding of Yorkshire Council's current advisors on archaeology and as such where HAP is referenced in this document it should be taken to read as HAP, (or other) archaeological advisor to East Riding of Yorkshire Council.

4. Site Selection was carried out to inform the Onshore Development Area and has avoided all known designated heritage assets. Non designated heritage assets were considered and, where practicable, avoided by onshore infrastructure whilst factoring in other constraints (See **Figures 2-5**).

1.2. Structure and Purpose of the Outline Onshore WSI

5. This Outline Onshore Written Scheme of Investigation (WSI) will form the basis for a detailed WSI for onshore archaeology for all areas of the Onshore Development Area. Requirement 18 of the draft DCO requires that *'No phase of the onshore works may commence until a written scheme of archaeological investigation for that phase (which must accord with the outline onshore written scheme of investigation) has, after consultation with the statutory historic body, been submitted to and approved by the relevant planning authority.'*

6. The Outline Onshore WSI sets out the proposed approaches and commitments to archaeological survey and investigation to be undertaken post-consent. This includes both initial informative survey stages of mitigation work and subsequent additional mitigation measures, where required. This forms part of an overarching mitigation strategy to be undertaken within the Onshore Development Area.

7. The Outline Onshore WSI 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 Outline WSI and subsequent detailed WSI and provide evidence of how they will ensure its requirements would be implemented.

8. It is anticipated that the initial informative survey stages of mitigation would take place as part of the wider pre-construction programme and activities, followed by further and additional bespoke mitigation requirements on a case-by-case basis, as required, in ongoing consultation and engagement with HAP, East Riding of Yorkshire Council and HE.

1.3. Broad Approach to Developing the Detailed WSI

9. This Outline Onshore WSI sets out the proposed approaches, methodologies and commitments to archaeological survey, evaluation and investigation which were identified as the outcomes to the EIA process. These are set out in **Volume 7, Chapter 22 Onshore Archaeology and Cultural Heritage (application ref: 7.22)**.

10. Each post-consent initial informative stage of mitigation work (survey stage) would be subject to a separate survey-specific WSI to be agreed following consultations with HAP (and HE, as required), which will provide further survey-specific details in line with this Outline Onshore WSI.

11. These will build on previous WSIs agreed with HAP and HE during the pre-application period. These include:

- Written Scheme of Investigation for Archaeological Geophysical Survey (RHDHV 2023a).
- Written Scheme of Investigation for Archaeological and Geoarchaeological Monitoring of Ground Investigation Works (RHDHV 2023b).
- Written Scheme of Investigation for Archaeological Trial Trenching (RHDHV 2023c).

12. As part of the wider onshore archaeological mitigation strategy both pre-construction and construction related WSIs would be produced. These will detail the subsequent additional mitigation measures to be undertaken within the Onshore Development Area. These would be informed by the results of the initial informative stage of mitigation work as well as build upon the information within this Outline Onshore WSI (see **Appendix 2**). This would be an iterative process to developing and refining the mitigation approach ensuring that all potential impacts upon onshore archaeology arising from the Projects are fully identified and appropriately and proportionately mitigated, wherever possible.

13. Example (model) clauses (**Appendix 1**) 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.

2 Legislation Policy and Guidance

2.1 Legislation and Planning Policy

14. The primary legislation relating to the consent regime for the Projects is provided by the Planning Act 2008. The Act provides for the designation of a series of National Planning Statements (NPSs) setting out national policy in relation to NSIPs. Of specific relevance to the Projects is EN-1 Overarching NPS for Energy (DESNZ 2023a), EN-3 NPS for Renewable Energy Infrastructure (DESNZ 2023b) and EN-5 for Electricity Networks Infrastructure (DESNZ 2023c). 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, this sets out the principal national policy on the importance, management and safeguarding of heritage assets within the planning process.

2.2 Standards, Guidance and Good Practice

15. The following relevant standards, guidance and good practice have been taken account of in the production of this Outline Onshore WSI, produced by the Chartered Institute for Archaeology (CIfA) and the Association of Local Government Archaeological Officers (ALGAO):

- Standard and guidance for geophysical survey (CIfA, 2014a);
- Standard and guidance for the collection, documentation, conservation and research of archaeological materials (CIfA, 2014b);
- Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives (CIfA, 2014c);
- Advice Note for Post-Excavation Assessment (ALGAO, 2015);
- Code of Conduct (CIfA, 2022);
- Standard and guidance for archaeological excavation (CIfA, 2023a);
- Standard and guidance for archaeological field evaluation (CIfA, 2023b); and
- Standard and guidance for an archaeological monitoring and recording (CIfA, 2023c).

16. Of further relevance is the following non-exhaustive list of publications from HE. Other survey and investigation specific guidelines will also apply (Historic England, 2024) 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); and
- Understanding the Archaeology of Landscapes (Historic England, 2017).

3 Archaeological and Historical Baseline Summary

3.1 Summary

17. The region has a rich and varied history of archaeological, geoarchaeological and geological interest, providing local distinctiveness and contributing to the area's character, culture and economy (East Riding of Yorkshire Council 2018).

18. The secure hill-tops, fertile floodplains, mineral resources and navigable rivers have all contributed to the Region's historic environment (Government Office for Yorkshire and The Humber 2008).

19. Within the wider landscape there is anticipated to be a high potential for buried archaeological remains dating from the prehistoric to modern periods. This has been evidenced by archaeological works undertaken for other wind farm projects and linear infrastructure schemes within the wider region.

20. 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 **Volume 7, Chapter 22 Onshore Archaeology and Cultural Heritage (application ref: 7.22)**:

- **Volume 7, Appendix 22-2 Archaeological Desk-Based Assessment (application ref: 7.22.22.2)**;
- **Volume 7 Appendix 22-3 and 22-10 Assessment of Airborne and Satellite Remote Sensing Data (application ref: 7.22.22.3 and application ref: 7.22.22.10)**;
- **Volume 7 Appendix 22-4 Heritage Walkover Survey (application ref: 7.22.22.4)**;
- **Volume 7 Appendix 22-7 Geophysical Assessment Report (application ref: 7.22.22.7)**; and
- **Volume 7 Appendix 22-8 Interim Archaeological Evaluation Report (application ref: 7.22.22.8)**.

21. The Archaeological Desk-Based Assessment (**Volume 7, Appendix 22-2, (application ref: 7.22.22.2)**) is based on a 500m study area from the refined Onshore Development Area. Non-designated heritage assets that can generally be characterised by:

- Prehistoric settlement sites;
- Prehistoric findspots;
- Ring ditches and barrow cemeteries;
- Deserted medieval settlement sites;
- Post-medieval settlement and agricultural features;
- WWII defences; and
- Undated cropmarks, potentially representing buried archaeological remains.

22. The historic environment resource identified as being, or potentially being, present within the Onshore Development Area include buried archaeological and geoarchaeological remains, historic earthworks and non-listed structures.

23. The impact assessment presented in **Volume 7, Chapter 22 Onshore Archaeology and Cultural Heritage (application ref: 7.22)** identified potential direct (physical) impact upon the significance of known or as-yet unknown non-designated heritage assets as a result of intrusive groundworks and other construction-related activities associated with the works.

24. **Volume 7, Chapter 22 Onshore Archaeology and Cultural Heritage (application ref: 7.22)** concluded that following the application of appropriate and proportionate evaluation and mitigation approaches, to be agreed in consultation with the ETG, the residual impact is anticipated to be reduced (or offset) to an impact significance level of minor adverse, as a worst-case scenario. The rationale for this is that industry standard archaeological excavation and recording strategies cannot entirely mitigate for the total loss of archaeological remains, as stated in the NPPF and NPS-EN1 and EN3. However, mitigation can be considered to allow for an off-setting of this EIA impact significance, as the work will ensure a full record of any remains is made, with the potential for the results to feed into local, regional and national research aims and further current archaeological understanding.

3.2 Geoarchaeological Baseline

25. The following section provides a brief summary of the geoarchaeological and paleoenvironmental potential within the defined study areas as detailed in **Volume 7, Chapter 22 Onshore Archaeology and Cultural Heritage (application ref: 7.22)**:

- **Volume 7, Appendix 22-6 Geoarchaeological Desk Based Assessment (application ref: 7.22.22.6)**; and
- **Volume 7, Appendix 22-9 Archaeological and Geoarchaeological Watching Brief and Deposit Model Report (application ref: 7.22.22.9)**.

26. The Geoarchaeological Desk-Based Assessment (GDBA) identified deposits of archaeological and geoarchaeological interest within the Onshore Development Area. These include Holocene age alluvial, organic, and lacustrine deposits and colluvium, along with Pleistocene age glaciofluvial deposits and Head. Glacial till is present across the entire Onshore Development Area and whilst it has relatively low geoarchaeological potential, there is evidence near Skipsea of archaeological material being preserved on the surface of the deposit. The boundary between till and overlying deposits is therefore of archaeological interest.

27. Based on distribution and character of the deposit sequence, as identified in the deposit model, updated areas of archaeological and palaeoenvironmental potential (AoP) have been mapped for the Onshore Development Area. These are summarised below and presented on **Table 7-1** and **Figures 22-9-49 to 22-9-52 (Volume 7, Appendix 22-9 Archaeological and Geoarchaeological Watching Brief and Deposit Model Report (application ref: 7.22.22.9))**:

- AoP-A: Holocene alluvium/tidal deposits, organic deposits, lacustrine deposits, and colluvium.
- AoP-B: Glaciofluvial deposits.
- AoP-C: Head deposits.
- AoP-D: Near surface glacial till.

4 Schedule of Archaeological Requirements

28. This Outline Onshore WSI should be read with reference to the Outline Schedule of Archaeological Requirements table **(Appendix 2 – Outline Schedule of Archaeological Requirements)**, which presents a summary of the currently known and potential remains within the Onshore Development Area. The location of these known and potential archaeological remains are presented on the figures within **Volume 7, Chapter 22 Onshore Archaeology and Cultural Heritage (application ref: 7.22),** for convenience these are also presented as Figures 1 to 5 within this report. Further detailed figures are available within the following Technical Reports:

- **Volume 7, Appendix 22-2 Archaeological Desk-Based Assessment (application ref: 7.22.22.2)**;
- **Volume 7, Appendix 22-3 and 22-10 Assessment of Airborne and Satellite Remote Sensing Data (application ref: 7.22.22.3 and application ref: 7.22.22.10)**;
- **Volume 7, Appendix 22-7 Geophysical Assessment Report (application ref: 7.22.22.7)**;
- **Volume 7, Appendix 22-8 Interim Archaeological Evaluation Report (application ref: 7.22.22.8)**; and
- **Volume 7, Appendix 22-9 Archaeological and Geoarchaeological Watching Brief and Deposit Model Report (application ref: 7.22.22.9)**.

29. The Outline Schedule of Archaeological Requirements table **(Appendix 2– Outline Schedule of Archaeological Requirements)** is not definitive and will be subject to regular updates and refinements throughout the post-consent stages, as more information comes to light, and at key milestones as part of the post-consent archaeological works (for example, following each stage of evaluation works, see section 7), prior to mitigation measures being established and formalised within subsequent pre-construction and construction related mitigation WSIs (see section 8).

30. In the early post-consent stages of the Projects, the programme and timetabling of archaeological works will be subject to appropriate consideration with respect to making effective and expedient provision for commencing required pre-construction archaeological survey and investigation work in a timely and efficient manner. Each of the survey-specific and subsequent pre-construction and construction related WSIs will include detail on anticipated timetabling and programme. With respect to intrusive work, this will also include anticipated post-excavation timeframes (where required).

31. It is also anticipated that the Applicants will retain the services of an Archaeological Coordinator (appointed by the Applicants) in the post-consent stages of the Projects, in order to identify any programme pinch points early in the process, so that these can be effectively allowed for and managed within the wider Projects' timescales. The Archaeological Coordinator would be responsible for execution of the post consent WSI's, input into fieldwork design, management of the appointed Archaeological Contractor(s) and consultation/engagement with HAP (and HE as appropriate). Every effort will 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.

32. During the construction phase, an archaeologist may not be on site to monitor all elements of the intrusive groundworks (following agreement with HAP (and HE as appropriate) that proportionate mitigation has already been carried out within these areas). In these instances, the Projects and the relevant appointed Principal Contractor(s) may implement a protocol for reporting archaeological discoveries 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

33. Each post-consent stage of survey and evaluation work (ultimately informing subsequently required mitigation approaches) will be subject to a bespoke survey-specific WSI produced by the appointed Archaeological Contractor(s) and approved by East Riding of Yorkshire Council in consultation with HAP (and HE, as required). Any variations to the survey-specific WSIs will be agreed with East Riding of Yorkshire Council in consultation with HAP (and HE, as required) prior to their implementation.

34. The post-consent stages of survey and evaluation work will include:

- Further targeted Onshore Archaeological Geophysical Survey (if required) across areas not subject to the Archaeological Geophysical Survey carried out to date;
- Targeted Archaeological Trial Trenching to allow more detailed mitigation proposals to be developed and agreed (see section 8); and
- Targeted Geoarchaeological Assessment / Palaeoenvironmental Survey.

35. Details on the methodologies for each post-consent stage of survey and evaluation work is presented in section 7.

5.2 Aims and Objectives

36. The general aims and objectives for the post-consent stages of survey and evaluation work are to:

- Further establish the archaeological and historic environment resource within the Onshore Development 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 and condition of any surviving remains within the Onshore Development Area;
- Assess the degree of existing impacts to sub-surface horizons and to document the extent of archaeological survival of buried deposits within the Onshore Development Area;
- Analyse and interpret the results; and

- Produce reports which will present the results of the works in sufficient detail, including information to allow informed decisions to be made concerning ongoing, and where appropriate additional mitigation strategies.

37. 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 Projects. Where possible and applicable these will be directly linked to the Yorkshire Archaeological Research Framework (Roskams and Whyman 2007), any relevant chronological and thematic frameworks and the initial research agenda outlined in section 6.

5.3 Monitoring

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

39. Reasonable and regular access to the site will be arranged for representatives of HAP (and HE, as required), for inspection and monitoring visits. These will be accompanied by the Archaeological Coordinator and / or Archaeological Contractor(s).

5.4 Health and Safety

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

41. All work will be carried out in accordance with the Health and Safety at Work etc. 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.

42. 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 the Applicants before the commencement of any fieldwork. The Risk Assessment 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.

43. 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 Research Agenda

44. The Projects will be guided by a research agenda, which will need to be responsive to the Projects' lifecycle and the ongoing results of surveys that are undertaken post-consent. The Projects will need to keep under review the best ways to address these aims and look at how far the Projects can go to addressing them. The research aims/themes may change as the Projects progress and some new aims and themes will likely arise and others may not require any further work post-consent. The ongoing results of the surveys undertaken post-consent will help support our understanding of how far the evidence and data collected will be able to address the structured research agenda below **(Table 6-1)**. The research agenda references and draws from the following research frameworks:

- Yorkshire Archaeological Research Framework: Research Agenda (YARF, 2007).
- Yorkshire Wolds Research Strategy (YWRS, 2024).
- Medieval Settlement Research Framework: Medieval Society Research Group Research Priorities (MSRG) (The Research Frameworks Network, 2024).
- National Mesolithic Research Framework (NMRF) Primary Research Themes (The Research Frameworks Network, 2024).
- Iron Age and Roman Archaeological Research Agenda (2001 Agenda following the 'Romano-British Research Agendas' session held at the 1999 Roman Archaeology Conference) (Council for British Archaeology, 2001).
- East Midlands Historic Environment Research Framework (EMHERF) Research Agenda (The Research Frameworks Network, 2024).
- North-East Research Framework (NERF) (The Research Frameworks Network, 2024).

45. Further frameworks identified by Historic England in the following location have been reviewed but do not contain themes which align with those identified based on the current understanding of the archaeological potential within the Onshore Development Area, or which set more strategic or synthetic aims which may draw on information gathered from the Projects but would not be appropriate to include as aims here (e.g. archival research projects). The relevance of these frameworks to the archaeological works will be kept under review in the light of emerging results from the fieldwork and these aims will be referenced where they become appropriate.

46. Results from recent archaeological excavations on large linear projects in the region such as Dogger Bank A & B (AOC 2021) have also been reviewed and considered within the context of the agenda where relevant.

47. Research aims/themes and objectives have been numbered for ease of cross referencing during further stages of evaluation and mitigation. The research topics will guide the post-excavation assessment and analysis phases of the Projects and will be further refined in light of the results of archaeological investigation.

Table 6-1 Research Agenda

Aim/Theme	Objective	Rationale	Mapping to Regional and National Research Agendas	Initial Method of Assessment
1: Understand landscape division and use within the Onshore Development Area.	1A: Is there evidence for topographic, geological and geomorphological zoning within the Onshore Development Area?	HER Records do not show consistent patterning in the landscape in all periods to allow for confident identification of specific 'sites', or areas of interest, particularly in prehistory. The landscape moves from Holderness lowlands to Wold-edge and through different geological and geomorphological contexts, suggesting that differential patterns of land use would be expected. Glacial till is present across the whole of the Onshore Development Area including a section near Skipsea where archaeological material	YARF notes differentiation between in-situ Palaeolithic remains from pre-Devensian deposits and redeposited material recovered from Glacial Till. YARF notes that spatial patterning of recorded Mesolithic remains is not currently sufficiently understood to be a reliable predictor of past occupation. EMHERF aim 2.2.2 considers how sites are distributed across low-lying and upland areas and how many sites might be concealed beneath alluvium, colluvium and other masking deposits. YARF identifies the need to map palaeoenvironment and suggests Pre-Devensian deposits may have elevated potential for early-prehistoric material. YARF notes differentiation between in situ remains from pre-Devensian	Geoarchaeological field investigation (see section 7.5 and **Table 7-1**). Trial Trenching (see section 7.3). Sampling strategy.

Aim/Theme	Objective	Rationale	Mapping to Regional and National Research Agendas	Initial Method of Assessment
		has potential to have been preserved in the surface of the deposit. This consequently has potential to aid the aims noted within YARF. The GDBA has identified variation within deposits including Late Pleistocene to Holocene Age also aiding this need to map early deposits linked to zoning and landscape use. Recent work on the Dogger Bank A & B projects have demonstrated that Holderness experienced more extensive settlement and management during the Iron Age and Roman periods than previously thought. When combined with palaeoenvironmental	deposits and redeposited material recovered from Glacial Till. YWRS Aim 1.11 considered the need to understand the changing nature of Iron Age settlement.	

Aim/Theme	Objective	Rationale	Mapping to Regional and National Research Agendas	Initial Method of Assessment
		results, there is significant potential to reconstruct environmental conditions and enhance our understanding of how settlements were connected to natural resources and interacted with the environment (AOC 2021).		
	1B: Is there evidence for differential use of landscape zones in different periods?	Site selection preferences may be expected to reflect changing environmental, technological, political and cultural conditions in different periods. Finds of artefactual material may reflect currently unrecorded settlement or other occupation.	YARF notes that there is a need to understand Iron Age settlement and occupation on a landscape level. YARF identifies potential for research to challenge existing assumption of the primacy of livestock ranching in the Iron Age. YARF identifies the need to investigate potential changes in settlement patterns in the Iron Age related to changing	Geoarchaeological field investigation (see section 7.5 and **Table 7-1**). Trial Trenching (see section 7.3). Sampling strategy.

Aim/Theme	Objective	Rationale	Mapping to Regional and National Research Agendas	Initial Method of Assessment
		Though there is limited activity related to evidence for Iron Age settlement within the Study Area, potential enclosures are noted within the Onshore Development Area providing potential for further information on the relationship to land within the Iron Age.	climatic conditions. See also YWRS Aim 1.13. YARF notes poor understanding of connection between Iron Age burial sites and contemporary settlement. YARF notes the need for landscape-scale interdisciplinary approaches to consider settlements in their contemporary landscape in the medieval period having regard to contemporary administrative units.	
2: Understand periodisation within the Onshore Development Area.	2A: What temporal periods of activity are apparent and is there evidence for change over time?	HER records are suggestive of the presence of archaeological remains of all periods from early prehistory to the modern period. A review of Mesolithic material at landfall within the context of offshore deposits to characterise	YARF flags the Mesolithic/Neolithic transition as a key point of uncertainty that requires additional study. NERF: Aim PM1 notes the need for further understanding regarding the post-glacial coastline. YARF identifies a need to better consider the chronology and meaning of the transition between Mesolithic and Neolithic, Neolithic and Bronze Age and	Geoarchaeological field investigation (see section 7.5 and **Table 7-1**). Trial Trenching (see section 7.3). Sampling strategy.

Aim/Theme	Objective	Rationale	Mapping to Regional and National Research Agendas	Initial Method of Assessment
		similarities / differences in the sequence and character of material recovered from Mesolithic deposits onshore and offshore and identify how far these relate to past use and environmental context and how far to post-depositional processes.	Bronze-Age and Iron Age periods in Yorkshire. See also in YWRS: Aim 1.6 transitions between Mesolithic and Neolithic; Aim 1.8 transition from Bronze Age and Iron Age and Aim 1.13 regarding transition between Iron Age and Romano-British periods. YARF notes the need to better understand change over time during the Neolithic and Bronze-Age periods. NMRF notes in Theme 3 – Investigating Change and Diversity that the Mesolithic is often discussed as a uniform concept removing a sense of change and history across six millennia. NMRF expresses the need to understand the transition from the Lateglacial to early Postglacial hunter-gatherer societies, identify change through the Mesolithic at national and regional scales and understand the transition from the Later Mesolithic to the Early Neolithic.	

Aim/Theme	Objective	Rationale	Mapping to Regional and National Research Agendas	Initial Method of Assessment
	2B: Is there evidence that temporal periods may be less readily observed and what techniques could be used to better identify/investigate these?	Early prehistoric and early-medieval sites are frequently difficult to observe, with no or limited use of ceramics and more ephemeral settlement patterns or construction methods. Some periods, particularly in later prehistory and the Romano-British period are frequently characterised by over-representation of more visible high status or ceremonial sites compared to domestic or agricultural occupation. Some geological contexts provide greater visibility of specific site types.	YARF flags a potential under-representation of Bronze Age land divisions and enclosures. NMRF stresses the need to obtain good quality data as Mesolithic archaeology is notoriously difficult to find. NMF Strategy 2 Enhancing approaches to fieldwork and survey notes the need to explore further how different prospection methods can be proportionally and appropriately used to better capture data. MSRG Research Priority 3 is to consider innovative research to better understand medieval settlement.	Geoarchaeological field investigation (see section 7.5 and **Table 7-1**). Trial Trenching (see section 7.3). Sampling strategy.

Aim/Theme	Objective	Rationale	Mapping to Regional and National Research Agendas	Initial Method of Assessment
3: Understand Connectivity	3A: Is there sufficient/appropriate material culture evidence to understand connections between the Onshore Development Area and the wider regional context? Is there evidence for common material culture with other landscape zones in the region?	Some periods, most notably in early prehistory, are at present only represented by artefactual material. Archaeological study of Holderness and the Wolds has frequently focused on site and sub-regional issues and has not address an understanding of the connections between theses area or with the wider region. Understanding observations in a wider regional and national context will allow for more sophisticated analysis and a better appreciation of heritage significance.	YARF flags regional connections as a key research theme for the Neolithic period. YARF flags the recent challenges to past interpretations of Neolithic use of the landscape and cultural distinctiveness and identifies a potential lowland 'core' in East Yorkshire highlighting continuity between the Wolds and Holderness. YARF notes that spatial patterning of recorded Mesolithic remains is not currently sufficiently understood to be a reliable predictor of past occupation. YARF notes the need to challenge existing understanding of core/periphery relationships in the Bronze Age. YARF identifies need to understand signifiers of social hierarchy. YARF notes need to understand post-medieval agriculture in the context of wider technological change.	Geoarchaeological field investigation (see section 7.5 and **Table 7-1**). Trial Trenching (see section 7.3). Sampling strategy.

Aim/Theme	Objective	Rationale	Mapping to Regional and National Research Agendas	Initial Method of Assessment
4: Site and Period-Specific issues based on previously observed remains.	4A: Investigate whether Palaeolithic deposits survive in-situ within the Onshore Development Area.	Some periods, most notably in early prehistory, are at present only represented by artefactual material therefore the research agenda and evaluation and mitigation strategy would need to address this.	YWRS Theme 1, Aims 1.1, 1.2 and 1.3 relate to identification of Palaeolithic remains in the Wolds and how this relates to "off-Wolds" data as well as other research questions around changing landscape context.	Geoarchaeological field investigation (see section 7.5 and **Table 7-1**). Trial Trenching (see section 7.3). Sampling strategy.
	4B: Investigate whether Mesolithic deposits survive in-situ within the Onshore Development Area.	There is an inherent difficulty in identifying Mesolithic therefore the research agenda and evaluation and mitigation strategy would need to address this. With stray finds of flint objects dating to the Mesolithic including some evidence of Settlement along the Onshore Cable Corridor, the moderate potential for	YWRS Theme 1, Aims 1.4 and 1.5 relate to the identification of Mesolithic remains, habitation patterns, environmental change and land use patterns in the Wolds in comparison with "off-Wolds" data.	Geoarchaeological field investigation (see section 7.5 and **Table 7-1**). Trial Trenching (see section 7.3). Sampling strategy.

Aim/Theme	Objective	Rationale	Mapping to Regional and National Research Agendas	Initial Method of Assessment
		further finds dating to this period suggests that this aim can be investigated within this work. A review of the character of Mesolithic material at landfall within the context of offshore deposits with regard to habitation patterns, environmental change and land use to further establish the significance of both marine and terrestrial archaeological material.		
	4C: Understand whether the limited evidence for Romano-British archaeology in the Onshore Development Area	Whilst the evidence for the Romano-British is scant in the Onshore Development Area, this is not strictly so regionally, therefore the research agenda and evaluation and mitigation	YARF notes wide variation in the dates at which cultural change related to Roman occupation is apparent in the material record. See also YWRS Aim 1.13. YARF notes the need for research into the continuity of Iron Age cultural expressions and landscape divisions into the	Trial Trenching (see section 7.3). Sampling strategy.

Aim/Theme	Objective	Rationale	Mapping to Regional and National Research Agendas	Initial Method of Assessment
	reflects a genuine absence of such remains.	strategy would need to address this. Potential further activity may be present in the single Romano-British settlement site positioned to the south of the Substation Zone now outside the Onshore Development Area.	Romano-British period. See also YWRS Aim 1.13.	
	4D: Understand linkage between DMVs and their hinterlands and how that changed, such as at Nunkeeling and Eske.	YARF and YWRS have both highlighted the need to address a series of research questions about early medieval and medieval settlement patterns and their development. The areas around Eske, Nunkeeling and Catfoss are all highly likely to contain medieval-dated unrecorded assets.	YARF notes that the current understanding of agricultural landscapes is poor and requires further research. YARF expresses the need for a better understanding of early-medieval settlement geography. YWRS Aim 1.15 presents a series of research questions on early medieval settlement. YWRS Aim 1.17 presents a series of research questions considering changes to medieval settlement patterns.	Trial Trenching (see section 7.3). Sampling strategy.

Aim/Theme	Objective	Rationale	Mapping to Regional and National Research Agendas	Initial Method of Assessment
		With the likely presence of Cleeton, a 'lost' medieval hamlet identified within the project's Landfall Zone during trial trenching, the project has potential to expand on current knowledge of early medieval settlements. Cleeton is a particularly pertinent example for improving knowledge on changes to medieval settlement patterns with features observed during trial trenching represent settlement over more than one phase of activity.		
	4E: Understand strategic and tactical purpose/interaction of WWII military sites, enhancing current	YWRS highlights the need to address where were the military infrastructures related to the war positioned and why. With	YWRS Aim 1.21 presents a series of research questions regarding location and purpose of military infrastructure in the Wolds. These include 'what was the short and long-term impact of the First	Trial Trenching (see section 7.3). Sampling strategy.

Aim/Theme	Objective	Rationale	Mapping to Regional and National Research Agendas	Initial Method of Assessment
	knowledge on the positioning of military sites.	the Heavy Anti-aircraft gunsite, 350m west of Butt Farm (Scheduled Monument NHLE 1019186) situated in close proximity to the Onshore Development Area, the potential for engagement / enhancement alongside the potential to uncover further information surrounding this military infrastructure would aid the research and engagement with the landscape theme within the YWRS.	and Second World War, in terms of both loss (through death or relocation for work) and growth (e.g. evacuees, temporary or permanent military communities, for training or stationing)? Where were the military infrastructures related to the war positioned and why (e.g. Staxton Wold radar/listening post, aerodromes, training bases for tanks and troops, air raid shelters, nuclear bunkers and coastal defence systems, hospitals or recuperative bases) and what was their impact on the local agricultural and heritage landscape (e.g. occupation of county houses and estate landscapes)?' (2022)	Public outreach / community engagement.

7 Methodologies (Further Survey and Evaluation Work)

7.1 General Approach

48. Each stage of further survey and evaluation work will be undertaken post-consent and in advance of construction works. In the event that non-designated heritage assets cannot be avoided this will be followed by subsequent mitigation measures, as and where required (see section 7).

49. In order to meet a potential construction date of 2026, the Applicants are front loading the archaeological evaluation with pre-construction archaeological evaluation works to continue from 2023 through the post application stage to 2026.

7.2 Additional Project Wide Archaeological Geophysical Survey

50. In the pre-application stages of the Projects, AOC Archaeology undertook a targeted programme of priority archaeological geophysical survey, which included 25 Priority Areas covering the landfall, sections of the Onshore Export Cable Corridor and the Substation Zone (Figures 4 and 5).

51. The survey areas were agreed in advance with HAP and HE and undertaken in accordance with the WSI for Archaeological Geophysical Survey (Royal HaskoningDHV, 2022).

52. A total of approximately 943ha across seventeen of the 25 Priority Areas and the PEIR boundary has been investigated to date by magnetic gradiometry. The final Onshore Development Area covers an area of 455ha, of which approximately 434ha is suitable for geophysical survey (excluding roads, woodland, hedges etc). As of the end of January 2024, 339ha has been surveyed. At the time of writing geophysical survey is currently ongoing with a view of achieving maximum coverage possible.

53. Should further geophysical survey be required post-consent, this will be agreed with HAP and HE (where required) and undertaken with the aim to identify further anomalies representing archaeological sites and features across the remainder of the Onshore Development Area. The outline Schedule of Archaeological Requirements **(Appendix 2 – Outline Schedule of Archaeological Requirements)** provides an initial overview of which remaining areas require a geophysical survey based on existing baseline information and which areas require further discussion with HAP (and HE, as required).

54. Data collected from this additional programme of geophysical survey will then be analysed alongside the existing data, information and reporting from the priority survey programme, as well as a review of pre-enclosure maps. This will contribute directly to informing archaeological trial trench locations and positioning, and the production of trench location plans for approval by East Riding of Yorkshire Council in consultation with HAP (and HE, as required).

55. Although detailed magnetometry will be the standard technique to be adopted and implemented for the outstanding post-consent geophysical survey work, as it is considered the most appropriate and feasible method to practically cover the area still requiring survey, additional and alternative geophysical survey techniques (if/where relevant) will also be considered within the post-consent stages of the Projects, to be agreed with HAP and HE (where required).

56. The results of the existing desk-based investigations and any results from the Geoarchaeological Assessment (section 7.5) will be considered as to the most effective type of geophysical survey technique to use. Furthermore, any requirement for an additional geophysical survey technique to be used in a specific area to further characterise the geophysical anomalies of archaeological potential, will take into consideration the results of the initial geophysical survey and the effectiveness of trial trenching within the area identified.

57. The application and scope of any such alternative or additional methods (in discrete and defined areas) will be outlined in a separate survey-specific WSI post-consent, and if required, will be considered on a case-by-case (anomaly and suspected feature) basis through consultation with HAP and HE (where required).

7.3 Archaeological Trial Trenching

58. An initial programme of archaeological trial trenching was agreed with HAP and HE in accordance with the methodology proposed in the Written Scheme of Investigation for Archaeological Trial Trenching (RHDHV, 2023c). This Phase 1 of trial trenching works (located at the landfall and Substation Zone) was completed in December 2023. A second phase (Phase 2) is ongoing at key priority areas on the Onshore Export Cable Corridor in Spring 2024 and the remaining areas from Phase 1 which could not be completed due to weather reasons. The results of the works are expected will further inform the approaches to subsequent additional mitigation requirements (both pre-construction and at / during construction) on a case by case basis.

59. The programme of trial trenching will continue to be undertaken post-consent. 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.

60. The Archaeological Co-ordinator and the Archaeological Contractor have agreed a trial trenching strategy with HAP 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.

61. Next steps may include for example, set-piece (open-area) excavations (normally undertaken within the pre-construction programme as part of an early works programme for instance); excavations (sometimes fitted into / alongside the construction programme or undertaken immediately in advance); archaeological monitoring (watching briefs) often undertaken during the construction topsoil strip, sometimes also on the excavation of the cable trench(es), and any subsequent / associated open cut trenching and ground intrusive works, e.g. at crossing locations, joint pits, compound and mobilisation areas etc., and where an archaeological presence is not required a protocol for archaeological discoveries is implemented.

7.4 Investigation and Recording of Standing Buildings or Structures

62. Built heritage/historic building surveys and recording may also be required at certain targeted locations as part of the post-consent initial informative stages of mitigation, and could result in subsequent, additional mitigation, as required, in the form of further conservation and restoration requirements. For example, the WWI pillbox (MHU9991) located within the landfall zone.

7.5 Geoarchaeological Assessment / Paleoenvironmental Survey

63. 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 Development Area. Where required and justified, such a survey often facilitates the recognition of:

- Localised palaeochannel sediments;
- Small bogs or lake deposits;
- Valley floodplain sediments and dry valley fills; and
- Buried soils from which the palaeoenvironmental history of an area may be reconstructed through the analysis of a series of identified features.

64. For example; any identified areas of peat-rich soils, with the potential for organic preservation and which will be impacted by the works.

65. The Geoarchaeological Desk Based Assessment (**Volume 7, Appendix 22-6 (application ref: 7.22.22.6)**) highlighted the geoarchaeological and palaeoenvironmental potential based on a desktop review of existing information. This was subsequently updated following the archaeological and geoarchaeological monitoring of ground investigation works (**Volume 7, Appendix 22-9 (application ref: 7.22.22.9)**) with an updated deposit model produced. A summary of the geoarchaeological and palaeoenvironmental potential within the Onshore Development Area is summarised in **Table 7-1**.

66. For the purposes of the assessment, the Onshore Development Area was separated into four areas:

- Area 1: Skipsea (landfall)
- Area 2: Skipsea to Leven
- Area 3: Leven to Beverley
- Area 4: Beverley to Substation Zone

Table 7-1 Areas of Potential (AoP) for archaeology and palaeoenvironmental interest

AoP	Character of Area	Palaeoenvironmental Potential
A (Alluvium, Organic deposits, Lacustrine, and colluvium)	Holocene alluvium/tidal deposits, organic deposits, lacustrine deposits, and colluvium. Alluvial/tidal sequences may include upper deposits formed as anthropogenic warp. Applies to: Area 1 – north and east, and small parts to the southwest. Area 2 – the centre, southwest, and small parts of the north. Area 3 – large parts of the centre to the east. Area 4 – linear arrangements through the north and centre.	Minerogenic deposits from within these low-lying regions provide moderate potential for the preservation of palaeoenvironmental proxies (e.g. pollen, ostracods, diatoms) which can be used to reconstruct changes in hydrology, climate, and local ecology. This includes human influence. Organic deposits within these sequences present moderate to high potential for preservation of proxies such as pollen and plant macrofossils, which can aid in reconstruction of changing environments in the past. Lacustrine deposits likely associate with meres can contain Late Glacial deposits of palaeoenvironmental importance, and alluvial sequences more likely represent Holocene development. Colluvium deposits, being mixed naturally deposited sediment, do not provide good potential for paleoenvironmental. However, the isolated occurrences may seal ecofact-sensitive soil

AoP	Character of Area	Palaeoenvironmental Potential
		horizons in the surface of underlying deposits. If sequences include, partially or as a whole, late to post-medieval warp these will have less potential to include palaeoenvironmental remains of significant age within the deposits but still have the potential to seal underlying earlier deposits. General potential for AoP - Moderate to high significance x moderate to high probability = **moderate to high potential**
B (Glaciofluvial)	Glaciofluvial deposits. Applies to: Area 1 - small parts of the north and centre. Area 2 – the southwest and small parts between the centre and southwest. Area 3 – the east and small parts of the centre to western central region. Area 4 – parts of the southeast within the Substation Zone.	High energy depositional environments and coarse clastic deposits yield low potential for preservation of palaeoenvironmental proxies and faunal remains due to high erosion and reworking unless interglacial horizons are identified within the unit. General potential for AoP - Moderate significance x Low potential = **moderate to low potential**.
C (Head)	Head. Applies to: Area 4 – linear region extending into the southwest of the redline boundary at the Substation Zone.	Slumping of head deposits may preserve past ground horizons and seal any existing ecological features (remains of plants, insects, molluscs). Due to high mixing and low structure associated with head deposits, the potential of the deposits themselves is very low.

AoP	Character of Area	Palaeoenvironmental Potential
		General potential for AoP - Moderate significance x very low probability = **low potential**.
D (Till)	Till. Applies to: Area 1 – much of the southwest, parts of the east and north. Area 2 – northern half of area, and large part of south. Area 3 – western end, parts of east and eastern centre. Area 4 – majority of northwest and west.	Till presents little opportunity for preservation of palaeoenvironmental proxies and organic horizons. General potential for AoP - Moderate significance x very low Probability = **low potential**.

67. A post-consent approach to geoarchaeology and the palaeoenvironment will be formulated for approval by HAP (and HE, as required), and subsequently implemented.

8 Methodologies (Mitigation Measures)

8.1 Introduction

68. The post-consent stages of survey and evaluation work have the potential to indicate the presence of previously unknown buried archaeological remains (and further verify previously known / anticipated above ground and buried site remains). This will enable the archaeological and historic environment resource associated with and impacted by the Projects to either be safe-guarded and / or better understood by means of subsequent mitigation measures in a manner that is both appropriate and proportionate to the significance of the remains present. This will be formally agreed with HAP (and HE, as required) as part of separate pre-construction and construction related WSIs.

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

- Further advance and enacting of preservation in situ options and requirements (e.g. avoidance / micro-siting / HDD etc., where possible);
- Archaeological excavation: including subsequent post-excavation assessment, and analysis, publication and archiving;
- Archaeological monitoring / watching brief: including subsequent post-excavation assessment, and analysis, publication and archiving (where appropriate);
- Protocol for archaeological discoveries;
- Sensitive and Precautionary Approaches to Construction Works.

8.2 Preservation In-Situ

70. Where well-preserved and / or significant archaeological remains survive within the Onshore Development Area, HAP (and HE, as required), may state a preference for preservation 'in-situ' of certain remains.

71. Where opportunities remain for preserving sites (including important features) / certain areas or elements of sites / certain areas of significantly important archaeological remains in-situ through the pre-construction and construction stages, these will be considered on a case by case, site by site and area by area basis in further discussion with East Riding of Yorkshire Council and HAP in the first instance, and with HE if deemed required.

72. As part of the post-consent detailed design phase, further consideration will be given, where possible, to micro-siting (within the confines of the established Onshore Development 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.

8.3 Archaeological Excavation

8.3.1 Set Piece Excavation (SPE)

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

74. This type of mitigation will be recommended where the presence of a known site of high archaeological importance and complexity has been highlighted by previous field survey and confirmed by trial trenching, 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.

75. Should the archaeological remains extend beyond the limits of the pre-defined SPE area and continue within the Onshore Development Area, machine stripping will continue from the feature(s) of interest until the area is clear of archaeological remains.

76. SPE will lead to a programme of post-excavation assessment, analysis and publication.

77. Following completion of the SPE fieldwork, a post-excavation assessment would be carried out in accordance with HE's guidance MoRPHE (Historic England 2015a). This would result in the preparation of an Updated Project Design (UPD), which would include 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. HAP would be consulted on the proposals included in the UPD prior to issue.

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

8.4 Archaeological Monitoring / Watching Brief

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

80. Where appropriate (as determined by an assessment of archaeological potential), (in locations identified and agreed in advance with East Riding of Yorkshire Council in consultation with HAP), machine excavation would proceed under archaeological observation, but would not be controlled directly by the nominated on-site archaeologist(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. Archaeological monitoring (watching brief) normally takes place where there is considered to be a lower potential of encountering archaeological remains, as part of construction-led ground intrusive works. Where there is demonstrably little to no archaeological remains present it is considered that archaeological monitoring is not required, and any unexpected remains would be covered by the Protocol for Archaeological Discoveries (see section 8.5).

81. An agreed mechanism would be established to allow for archaeological investigation during the archaeological monitoring works, where appropriate. However, it is not usually anticipated that substantial archaeological remains (which would generally be highlighted for SPE or SMS approaches where known about) will be found in areas that have been identified for archaeological monitoring, although the possibility still remains.

82. The programmes of archaeological monitoring would also result in the preparation of a report and ordered archive. Where archaeological remains are investigated and recorded, a further and/or integrated programme of post-excavation assessment, analysis and publication would be required, as appropriate in consultation with HAP, as outlined in Paragraphs 7.2.1.4 and 7.2.1.5.

8.5 Protocol for Archaeological Discoveries

83. Following agreement with HAP (and HE as required) that proportionate mitigation has been completed within the onshore project area or a defined part of the project area, further formal archaeological investigation would not be required. In these instances, the Projects 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).

84. Section 1.2.9 of ORPAD 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*** [emphasis added]. *Therefore this Protocol has been designed to operate in all of these environments, where an archaeologist is not present.*" (The Crown Estate 2014).

85. ORPAD came into effect in December 2010 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 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.

86. Each worksite team will have a Site Champion, a single person who is responsible for reporting discoveries to a Nominated Contact within the Applicant's core team. The Nominated Contact uploads discoveries onto a secure web portal and the Implementation Service is alerted to the presence of new discoveries. The Crown Estate provides for the reporting and assessment of discoveries through the ORPAD Implementation Service, currently maintained by Wessex Archaeology.

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

88. The Projects will be responsible for ensuring that construction teams working within the Onshore Development Area are provided with appropriate training in the application of ORPAD and that all staff and contractors are aware of their responsibilities under the protocol. The ORPAD documentation, including a full description of the methodology and requirements for implementing the protocol, can be found via the following web link: https://www.thecrownestate.co.uk/media/1782/ei-protocol-for-archaeological-discoveries-offshore-renewables-projects.pdf

89. 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 the Implementation Service or by an alternative sufficiently experienced and qualified Archaeological Contractor. Hard copies of the ORPAD document will be made available for use at each temporary construction compound.

90. Provision will be made by the Projects, in accordance with ORPAD, for the prompt reporting / recording to HAP (and HE, as required) of archaeological remains encountered or suspected during works.

91. Following completion of the onshore construction works, a report will be produced by the Archaeological Contractor presenting the results of the ORPAD implementation during relevant activities and submitted to HAP (and HE, as required). In the event that no discoveries are made, a nil discoveries report should be compiled in order to demonstrate adherence to the measures as will be set out in the construction-related mitigation WSI, to be produced in the post consent / pre-construction stages of the Projects.

8.6 Sensitive and Precautionary Approaches to Construction Works

92. Certain areas within the Onshore Development 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. For example, the WWII AA Battery at Butt Farm (MHU 15288), and archaeological remains of high significance identified during the Phase 1 trenching within the Landfall Zone along with the upstanding pillbox (MHU 9991).

93. The Onshore Export Cable Corridor 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.

94. Specific constrained areas would be identified in the post-consent detailed design stage.

95. The above measures of precautionary working will likely need to be adopted and would be further detailed in a Construction Stage Plan(s), Contractor Environmental Action Plan(s), or similar. These documents outline the strategies and measures a contractor intends to implement to manage and minimise the environmental impact of their activities during a construction.

9 Public Outreach / Community Engagement

96. It is recognised that archaeological works will generate significant public interest, therefore a comprehensive public outreach program will be implemented. The specific details of this outreach initiative are set out in an overarching engagement strategy (further detailed in **Appendix 3**) to be developed further and included in the site-specific WSIs as relevant. These WSIs, subject to consultation with HE and HAP, are to be submitted to and approved by the relevant planning authority in accordance with Requirement 18 of the **draft Development Consent Order (DCO) (Revision 7)** [document reference 3.1] before commencing archaeological mitigation works.

10 Conclusion / Summary

97. This Outline Onshore WSI has been produced to set out the principles and proposed approaches to archaeological survey and investigations that will be undertaken post-consent. This includes both survey and evaluation work and subsequent mitigation measures, as and where required.

98. This document sets out an initial overarching archaeological mitigation strategy that will be undertaken within the Onshore Development Area of the Projects once the DCO has been granted.

99. The survey-specific WSIs and final pre-construction and construction mitigation WSIs will be agreed with and approved by East Riding of Yorkshire Council in consultation with HAP and HE in the post-consent stages of the Projects. All documents will be produced in-line with relevant legislation, planning policy, guidance and good practice (section 2).

References

AAF (2007). Archaeological Archives: A guide to best practice in creation, compilation, transfer and curation, Archaeological Archives Forum.

ALGAO (2015). Advice Note for Post-Excavation Assessment, Association of Local Government Archaeological Officers.

AOC (2021). Dogger Bank Windfarm A & B: SMR1 and TAM3, Post-Excavation Assessment Report (Draft)

Chartered Institute for Archaeologists (2014a). Standard and guidance for archaeological geophysical survey, CIfA, Reading.

Chartered Institute for Archaeologists (2014b). Standard and guidance for the collection, documentation, conservation and research of archaeological materials, CIfA, Reading

Chartered Institute for Archaeologists (2014c). Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives, CIfA, Reading.

Chartered Institute for Archaeologists (2022). Code of Conduct, CIfA, Reading

Chartered Institute for Archaeologists (2023a). Standard and guidance for archaeological excavation, CIfA, Reading.

Chartered Institute for Archaeologists (2023b). Standard and guidance for archaeological field evaluation, CIfA, Reading.

Chartered Institute for Archaeologists (2023c). Standard and guidance for archaeological monitoring and recording, CIfA, Reading.

Council for British Archaeology (2201) Iron Age and Roman Archaeological Research Agenda following the 'Romano-British Research Agendas' session held at the 1999 Roman Archaeology Conference). Available at: archiveDownload (archaeologydataservice.ac.uk). Accessed 07/11/23.

Department for Energy Security & Net Zero (2023b) National Policy Statement for Renewable Energy Infrastructure (EN 3). Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1147382/NPS_EN-3.pdf. Accessed 07/11/23.

Department for Energy Security & Net Zero (2023c) National Policy Statement for Electricity Networks Infrastructure (EN-5). Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1147384/NPS_EN-5.pdf. Accessed 07/11/23.

EAC (2016). Guidelines for the Use of Geophysics in Archaeology. Questions to Ask and Points to Consider (EAC Guideline 2) (European Archaeologiae Consilium).

English Heritage (now Historic England) (2011). Environmental Archaeology: A guide to the theory and practice of methods, from sampling and recovery to post-excavation (second edition), Centre for Archaeology Guidelines. English Heritage: Reference 51644

Historic England (2015a). Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide. Historic England: Reference HEAG024.

Historic England (2015b). Geoarchaeology: Using Earth Sciences to Understand the Archaeological Record. Reference: HEAG067.

Historic England (2016a). Preserving Archaeological Remains: Decision taking for Sites under Development. Reference: HEAG100a

Historic England (2016b). Understanding Historic Buildings. A Guide to Good Recording Practice. Reference: HEAG099.

Historic England (2017). Understanding the Archaeology of Landscapes: A Guide to Good Recording Practice (Second Edition). Reference: HEAG142.

Historic England (2024). Current Guidance and Advice. Available at: [redacted] Accessed 07/11/23.

Historic England (2025). Annual Heritage at Risk Registers and Maps. Available at: [redacted] Accessed 13/03/25

Ministry of Housing, Communities and Local Government (2019). National Planning Policy Framework.

Roskams, S. and Whyman, M. (2007). Yorkshire Archaeological Research Framework: research agenda. Yorkshire Archaeological Research Framework Forum and English Heritage – project number 2936 RFRA.

Royal HaskoningDHV (2023a) RWE Renewables UK Dogger Bank South (West) Limited RWE Renewables UK Dogger Bank South (East) Limited. Dogger Bank South Offshore Wind Farms: Written Scheme of Investigation for Archaeological Geophysical Survey.

Royal HaskoningDHV (2023b) RWE Renewables UK Dogger Bank South (West) Limited RWE Renewables UK Dogger Bank South (East) Limited. Dogger Bank South Offshore Wind Farms: Written Scheme of Investigation for Archaeological and Geoarchaeological Monitoring of Ground Investigation Works.

Royal HaskoningDHV (2023c) RWE Renewables UK Dogger Bank South (West) Limited RWE Renewables UK Dogger Bank South (East) Limited. Dogger Bank South Offshore Wind Farms: Written Scheme of Investigation for Archaeological Trial Trenching.

Schmidt & Ernenwein (2011). Guide to Good Practice: Geophysical Data in Archaeology. Archaeological Data Service (ADS).

The Research Frameworks Network (2024). Available at: The Research Frameworks Network - Research Frameworks. Accessed 07/11/23.

Walker, K. (1990). Guidelines for the Preparation of Excavation Archives for Long-term Storage, UKIC, London.

Watkinson & Neal (1998). First Aid for Finds, UKIC Archaeology Section.

Yorkshire Archaeological Research Framework: Research Agenda (YARF) (2007). A report prepared for the Yorkshire Archaeological Research Framework. Available at: Yorkshire Archaeological Research Framework [redacted] Accessed 07/11/23.

Yorkshire Wolds Research Strategy (YWRS, 2024). Available at: Home - Yorkshire Wolds Research Strategy ([redacted]). Accessed 07/11/23.

Appendix 1 – Example (Model) Clauses – Mitigation Works Specification: SPE, SMS and Archaeological Monitoring / Watching Brief

Introduction

100. 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 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.

101. The structure outlined below is anticipated to provide the framework only for the preconstruction 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.

102. The information provided is specific to the location of the project within the East Riding of Yorkshire, as well as more general local, regional and national-type approaches.

103. This appendix relates mainly to archaeological excavation and recording approaches and associated requirements to be undertaken under excavation and archaeological monitoring / watching brief scenarios.

General Approach

104. All WSIs will be prepared in accordance with:

- Standard and guidance for archaeological excavation (CIfA, 2023a);
- Standard and guidance for archaeological field evaluation (CIfA, 2023b);
- Standard and guidance for an archaeological monitoring and recording (CIfA, 2023c
- CIfA: Code of Conduct (CIfA 2023); and
- HE: Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide (Historic England 2015a).

105. The WSIs will also take account of the Yorkshire Regional Research Framework: research agenda (Roskams and Whyman 2007).

Site Briefings (Tool Box Talks)

106. Site briefings will include, as a minimum; the Applicants' 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.

107. It is assumed that the Principal Contractor will be responsible for UXO survey and clearance across the Onshore Development Area by a specialist UXO survey team, in advance of construction.

Archaeological Monitoring and Soil Stripping

108. The location of 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.

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

110. For areas outlined for 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.

111. Topsoil and subsoil excavated from excavation areas 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.

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

113. The extent of 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.

114. 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 Applicants, this may involve fencing being erected around individual slots through features or over parts of the 'site'.

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

116. 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.

Hand Excavation of Archaeological Features

117. 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.

118. 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.

119. 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.

120. 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.

121. 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.

122. Smaller discrete features, such as stake holes, will be 100% excavated.

123. Structures, such as sunken floor buildings or kilns, will be 100% excavated.

124. Ring ditches and / or eaves-drip gullies believed to relate to structures will be investigated by excavated sections up to 2 m wide, with all sections being fully recorded, to achieve a minimum 50% sample of the feature. Remaining deposits may require rapid hand excavation in order to achieve a 100% sample.

125. All burials and funerary contexts will be 100% excavated. Human remains will be treated in accordance with the provisions set out in the Burials Act 1857. 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.

126. 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, the Principal Contractor (where applicable), the Archaeological Contractor(s), HAP and the Applicants.

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

128. 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 and HAP.

129. Any variation to the above would be agreed with the Archaeological Coordinator, the Applicants and, the Archaeological Contractor(s) and HAP on site and shall be confirmed in writing.

Archaeological Recording

130. Excavation areas and any area excavated archaeologically during archaeological monitoring (watching brief) will be given a unique site code, and this will be written on all records, drawings, artefact bags and sample containers.

131. An accession number will also be obtained by the Archaeological Contractor(s) from East Riding Museum Service prior to commencing work.

132. Following machine excavation, the extent of excavation areas and any area excavated archaeologically during archaeological monitoring (watching brief) will be accurately recorded using electronic survey equipment typically accurate to ± 100 mm in the field with respect to the OS grid. The data will be overlaid at an appropriate scale onto the OS National Grid (using digital map data).

133. Archaeological remains will be recorded in plan using electronic survey equipment. All survey points used will be accurately tied into the OS National Grid.

134. A full written, drawn and photographic record will 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.

135. In addition to the electronic survey of features, as a minimum, all interventions and areas of detailed archaeology will be planned by hand, using tape measures.

136. Hand drawn plans and sections of features will 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.

137. Each drawing will be given a unique drawing number. A drawing register, with brief details, will be maintained throughout the archaeological works.

138. 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 will be maintained throughout. Photographs will be taken of all excavated features.

139. In addition to records of archaeological features, general photographs recording the context of the excavation and any area excavated archaeologically during archaeological monitoring (watching brief) will also be taken.

140. A photographic register, with brief details, will also be maintained throughout the archaeological works.

Artefact Recovery

141. 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).

142. Artefacts will be collected and labelled with the unique site code and context number of the deposit in which they were recovered.

143. 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 'Special Finds' number. Similarly, if artefact scatters are encountered these will also be recorded three dimensionally.

144. Bulk finds will be collected and recorded by context.

145. 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.

146. All non-modern and significant modern artefacts will be stored and processed in a manner appropriate to the material to minimise further deterioration.

147. All retained 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).

148. 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).

149. 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.

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

Soil Sampling Strategy

151. 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.

152. 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 regional research agenda (Roskams and Whyman 2007).

153. 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).

154. 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.

155. Radiocarbon, dendrochronology, archaeomagnetic, pollen and monolith samples may be considered for collection where justified and warranted. These approaches would need to be agreed in consultation with the Archaeological Coordinator, the Archaeological Contractor(s), HAP and the Applicants.

156. Further advice on the appropriateness of the Archaeological Contractor('s/s') proposed strategies will be sought from the HE Science Advisor (Yorkshire), as appropriate, although HAP would provide advice and recommendations in the first instance, again as required.

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

158. 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.

Human Remains

159. Should human remains be unexpectedly recovered during construction, they will be treated in accordance with the provisions set out in the Burial Act 1857. 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.

Treasure

160. 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. The Applicants and the Archaeological Coordinator will also be informed at the earliest opportunity.

161. Any Treasure will be removed to a secure store. Where removal cannot be affected on the same working day as the discovery, suitable security measures must be taken to protect the finds from theft.

Completion of Archaeological Fieldwork

162. The Archaeological Contractor(s) shall prepare and submit completion statements to the Applicants and the Archaeological Coordinator once each distinct excavation area and any area excavated archaeologically during archaeological monitoring / watching brief have been vacated. Following internal review these will also be made available to HAP / HE (as appropriate) for information and comment.

163. 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 brief.
- Quantification of the primary archive including contexts, finds and samples.
- A brief chronological summary of the archaeological remains.

Reporting Requirements

164. Verbal progress reports and brief written progress reports will be provided to the Applicants and the Archaeological Coordinator regularly during the archaeological investigations and also at any stage during the works, upon reasonable request. HAP and HE will also be regularly updated with progress.

165. The reporting of the archaeological investigations will be commensurate with the results of the investigation and will be produced in accordance with the relevant CIfA Standards and Guidance documents (CIfA 2023a-c). The Management of Research Projects in the Historic Environment: The MoRPHE Project Mangers' Guide (Historic England 2015) should also be considered relevant.

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

167. 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.

168. A draft report will be issued for review by the Applicants and the Archaeological Coordinator prior to agreement and issue of the final report to HAP, and HE where required.

169. 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 HAP post-consent).

170. 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 Humber HER (HHER). 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.

171. 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.

Archive Preparation and Deposition

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

173. 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.

174. The site archive will be deposited with the East Riding Museum Service within an agreed timeframe (to be determined with HAP 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 HAP post-consent).

175. 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) and Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives (CIfA 2014f).

176. 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.

177. Prior to the commencement of archaeological fieldwork, the Archaeological Contractor(s) will contact the HHER 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 HHER personnel prior to starting the next stage of archaeological works in each instance.

178. 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 the main areas / stages of the Projects completed on details, location and creators forms.

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

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

181. The Archaeological Contractor(s) will liaise with the Applicants to address the transfer of ownership and any copyright issues.

Monitoring Progress and Site Visits

182. The archaeological investigations will be subject to regular monitoring visits by the Projects' Archaeological Coordinator, who will have unrestricted access to the archaeological site, site records and any other information.

183. 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.

184. The Archaeological Contractor(s) will only accept instruction from the Projects and the Archaeological Coordinator. There may also be occasions where instructions are given by the Principal Contractor, where appropriate/relevant.

185. If any problems are encountered during the archaeological works, these will be reported immediately to the Projects and the Archaeological Coordinator.

186. Monitoring progress meetings between the Projects, the Archaeological Coordinator 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. Representatives from HAP and HE (where applicable) shall be invited to attend in order to monitor the works on behalf of East Riding of Yorkshire Council. These meetings will be arranged by the Archaeological Coordinator.

187. HAP 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 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.

188. Following top-soil strip and associated sub-soil removal across excavation areas, an initial meeting between the Archaeological Contractor(s), the Projects, the Archaeological Coordinator and HAP may be held to further agree the excavation / recording / sampling strategy for each area / site / stage etc.

189. 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.

190. Any variations caused by ecological constraints, vegetation cover or ground conditions will be agreed with the Projects, the Archaeological Contractor(s) and the Archaeological Coordinator and communicated to HAP / HE (as appropriate).

191. Following the discovery of any unexpected archaeological sites during archaeological monitoring / watching brief work, 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), the Projects and the Archaeological Coordinator. The Principal Contractor will also need to be informed of any additional personnel on site, where appropriate/relevant.

Security, Confidentiality and Publicity

192. Although information regarding the project is in the public domain, the archaeological investigation works may attract interest.

193. In the event of any enquiries by the public, the Archaeological Contractor(s) will refer all enquiries to the Projects, the Archaeological Coordinator and the Principal Contractor without making any unauthorised statements or comments.

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

Copyright

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

196. 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.

Resources and Timetable

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

198. 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 Projects and the Archaeological Coordinator.

199. All equipment and tools required by the Archaeological Contractor(s) will be supplied by the Archaeological Contractor(s).

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

Health and Safety

201. 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 Applicants and / or their representatives.

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

203. 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 Applicants and / or their representatives.

204. 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 Applicants and / or their representatives for approval prior to entering the individual work sites.

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

206. 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 Applicants and / or their representatives, where appropriate, but these must be checked through appropriate means prior to the commencement of archaeological investigation works.

207. The Archaeological Contractor(s) will not commence any excavation works unless authorised to do so by the Applicants and / or their representatives.

208. The Archaeological Contractor will adhere to the Principal Contractor's and the Applicants' 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.

209. 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 etc. Act 1974.

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

211. 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.

General Provisions

212. 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.

213. 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 Applicants and the Archaeological Coordinator.

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

215. 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.

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

Appendix 2 - Outline Schedule of Archaeological Requirements

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
Landfall Emergency Access Route (Intertidal)	MHU21180	WWII military structure.	Low	Building identified through APs. The HER records the structure as confirmed destroyed by 2009.	n/a	**No.** Remains are no longer extant.	517370	457770	n/a	n/a	n/a
Landfall Emergency Access Route (Intertidal)	APS_081 / MHU21189	WWII pillbox and surrounding barbed wire obstructions.	Low	Pillbox identified through APs. Confirmed destroyed in 2009 in the HER.	n/a	**No.** Remains are no longer extant.	517620	457110	n/a	n/a	n/a
Landfall Emergency Access Route (Intertidal)	MHU21196	WWII pillbox.	Low	Pillbox identified through APs. The HER states it has been lost to coastal erosion no longer surviving in situ in 2009.	n/a	**No.** Remains are no longer extant.	517740	456720	n/a	n/a	n/a
Landfall Emergency Access Route (Intertidal)	APS_079	WWII defensive site	Low to Medium	A defensive site identified through APs which has been built over and lost to coastal erosion.	n/a	**No.** Remains are no longer extant.	Centred on 517395	Centred on 457496	n/a	n/a	n/a

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
Intertidal	MHU21209	WWII observation post with loopholes on the cliff edge.	Low	The site of a former WWII observation post, east of Skipsea. Still visible on the beach in 2009 but in poor condition. No visible remains were identified during the walkover survey.	n/a	**No**. Interaction between this asset and the construction works is negligible due to the adoption of a trenchless methodology within the intertidal zone.	518200	455200	n/a	n/a	n/a
Intertidal	MHU18429	WWII pillbox.	Low	WWII pillbox visible on APs. The remains lay on the beach in poor condition in 2009. No structural remains were identified during the walkover survey.	n/a	**No**. Interaction between this asset and the construction works is negligible due to the adoption of a trenchless methodology within the intertidal zone.	518150	455250	n/a	n/a	n/a
Landfall Zone	MHU21232	Large pit in cliff section.	Low	Possible large pit visible in the cliff section. Fill cut	n/a	**No**. The interaction between this	518133	455347	No	No	n/a

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
				by a modern field drain. The pit was not identified during the walkover survey.		asset and the construction works is negligible as the asset was likely lost to coastal erosion.					
Intertidal	MHU21245	WWII concrete posts.	Low	WWII concrete posts, probably anti-aircraft landing obstacles. The remains were not identified during the walkover survey.	n/a	**No**. Interaction between this asset and the construction works is negligible due to the adoption of a trenchless methodology within the intertidal zone.	518104	455556	n/a	n/a	n/a
Intertidal	MHU21246	WWII pillbox.	Low	Remains of WWII pillbox.	n/a	**No**. Interaction between this asset and the construction works is negligible as the structure	518064	455736	n/a	n/a	n/a

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
						is no longer extant.					
Landfall Zone	MHU21231	Ditch visible in cliff section.	Low	Ditch approximately 1m wide seen in the cliff section. Grey fill containing some gravel. The ditch was not identified during the walkover survey.	n/a	**No.** There is no interaction between the construction works and this asset (if extant) due to the adoption of a trenchless methodology at the intertidal zone.	518024	455610	No	No	n/a
Landfall Zone	APS_088 / MHU9991	WWII pillbox.	Low to Medium	Upstanding remains of a WWII pillbox.	n/a	**No.** The construction works are not expected to interact with this asset due to its position against the Landfall Zone boundary.	517965	455165	n/a	n/a	Avoidance (Sensitive and Precautionary Approaches to Construction Works)
Landfall Zone	MHU9992	WWII pillbox.	Medium	WWII pillbox visible on APs, now situated in the centre of a field. Identified	n/a	**No**. Interaction between this asset and the construction	517905	455465	n/a	n/a	Avoidance (Sensitive and Precautionary

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
				during the walkover survey.		works is negligible due to the adoption of a trenchless methodology within this area zone.					Approaches to Construction Works)
Landfall Zone	APS_084 / MHU21208 / 1141A	WWII bomb craters.	Low	Four WWII bomb craters visible as a row of earthworks on an east to west alignment on APs. The HER states that they were infilled and not visible in 2009 and not visible via visualised LiDAR data.	Completed. Geophysical survey partially corroborated with earthworks identified from Aerial Photo, however the trial trenching did not identify any associated remains and as such is considered to no longer be extant.	**None**	517670	455470	Completed as part of DCO application.	Completed as part of DCO application.	n/a
Landfall Zone	APS_080 / MHU21207	Ridge and furrow.	Low	Medieval/post-medieval ridge and furrow visible as earthworks and cropmarks on APs east and north-east of	Completed. Geophysical survey and trial trenching of the area identified linear trends corresponding	**Yes.** The area lies within the extent of the Onshore Development Area.	517600	455500	Completed as part of DCO application.	Completed as part of DCO application.	To be agreed with the Local Planning Authority (LPA) through site-

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
				Skipsea village. Nearly all of this appears as cropmarks or to be no longer extant on the latest 1992 OS vertical photography. Mostly not visible in 2009.	to ridge and furrow.						specific WSI approval
Landfall Zone	1145A, 1145B, 1145C, 1145D, 1145E	Suspected remains of medieval village of Cleeton.	**High***	No evidence of cropmarks or earthworks from AP/Lidar assessment.	Completed. The trial trenching evaluation confirmed the results of the geophysical survey, revealing a high concentration of archaeological features in the northwest corner of the site, including large and small boundary ditches, pits and post-holes, representing multiple phases	**No.** The feature lies within the extent of the Onshore Development Area but is not expected to interact with the construction works based on the current ES design freeze information. The area has been flagged as a Zone to Avoid.	Centred on 517528	Centred on 455430	Completed as part of DCO application.	Completed as part of DCO application.	Avoidance (Sensitive and Precautionary Approaches to Construction Works)

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
					of medieval settlement activity in this area. Finds of pottery and mixed medieval fabrics were among the most common finds type across the settlement, the character of which appears to be domestic, with no obvious signs of industrial activity.						
Landfall Zone	1145F	Post-medieval cobblestone deposit	Low	No evidence of cropmarks or earthworks from AP/Lidar assessment.	Completed. The trial trenching evaluation confirmed the results of the geophysical survey, revealing a spread of cobble stones resembling a dump of hard material to consolidate the	**Yes**. This deposit would potentially be removed by a trenchless crossing zone, as the exact location of the crossing zone is subject to detail design. In the event of loss, archaeologic	Centred on 517484	Centred on 455153	Completed as part of DCO application.	Completed as part of DCO application.	To be agreed with the Local Planning Authority (LPA) through site-specific WSI approval

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
					ground. The cobbles appeared to have been imported and dumped within a sandy matrix and were most likely deposited in the post-medieval period.	al recording would retain the limited archaeological interest of these remains.					
Landfall Zone	1144B	Geological deposits and discrete pits	**Medium***	No evidence of cropmarks or earthworks from AP/Lidar assessment.	Completed. The trial trenching evaluation confirmed the results of the geophysical survey, revealing paleochannel or pond deposits within Trenches 37 and 38 suggesting this location has been prone to flooding for an extended period. A small number of discrete pits were excavated and a possible	**Yes.** These features would be affected but extend beyond the Onshore Development Area, and significant elements would not be affected.	Centred on 517654	Centred on 455427	Completed as part of DCO application.	Completed as part of DCO application.	To be agreed with LPA through site-specific WSI approval

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
					ditch terminus in Trench 37, all containing natural sterile deposits.						
Landfall Zone	1312A, 1312B, 1312C, 1312D, 1312E, 1312F	Double ditched trackway close to settlement and Iron Age/Roman activity	Medium	No evidence of cropmarks or earthworks from AP/Lidar assessment.	Completed. The trial trenching evaluation revealed a double-ditched trackway corroborating with the geophysical survey results (1312A). The area immediately surrounding the trackway ditches contained a significant concentration of features and high incidence of finds, indicating that this part of the site is likely to be close to	**No.** The feature lies within the extent of the Onshore Development Area but is not anticipated to interact with the TJB and Temporary Construction Compound shown in Figure 5.2 [APP-072].	Centred on 518013	Centred on 455217	Completed as part of DCO application.	Completed as part of DCO application.	Avoidance (Sensitive and Precautionary Approaches to Construction Works)

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
					settlement activity possibly extending into the site. Finds and stratigraphy in this area suggest probable Iron Age to Roman activity.						
Landfall Zone	1141B, 1141C	Undated and Iron Age/Roman activity	Medium	No evidence of cropmarks or earthworks from AP/Lidar assessment.	Completed. The trial trenching evaluation revealed an area of undated and Iron Age/Roman activity in the north and northwest edge of the site. A substantial ditch was identified which corroborated with the results of the geophysical survey (1141B). Further west, many sherds of	**No.** The feature lies within the extent of the Onshore Development Area but is not anticipated to interact with the TJB and Temporary Construction Compound shown in Figure 5.2 [APP-072].	Centred on 517585	Centred on 455529	Completed as part of DCO application.	Completed as part of DCO application.	Avoidance (Sensitive and Precautionary Approaches to Construction Works)

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
					handmade pottery of probable Iron Age date were recovered from a feature in Trench 57. Several struck flints were also recovered from this region indicating a possible prehistoric date.						
Onshore ECC	11A	Possible enclosures.	Low	No evidence of cropmarks or earthworks from AP/Lidar assessment.	Completed. The geophysical survey identified a series of abutting enclosures (11A) which were interpreted to be probable archaeology, which partially lies within the Onshore Development Area.	**Yes.** A Temporary Construction Compound is located over part of the archaeological anomaly identified in the geophysical survey.	Centred on 517589	Centred on 454875	Completed as part of DCO application.	TBC	To be agreed with LPA through site-specific WSI approval

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
Onshore ECC	35D	Rectilinear anomaly	Low	No evidence of cropmarks or earthworks from AP/Lidar assessment.	Completed. The geophysical survey identified a poorly defined rectilinear anomaly (35D) which has been interpreted as possible archaeology.	**Yes.** The Onshore ECC intersects with features identified from the geophysical survey.	Centred on 517056	Centred on 454361	Completed as part of DCO application.	TBC	To be agreed with LPA through site-specific WSI approval
Onshore ECC	35E, 35F	Linear trend and rectilinear anomalies	**Low***	No evidence of cropmarks or earthworks from AP/Lidar assessment.	Completed. The geophysical survey identified a linear trend (35F) which have been interpreted as possible archaeology, though its obscurities could suggest a natural origin. The geophysical survey also identified a series of rectilinear anomalies (35E) which marginally extend into the	**Yes.** The Onshore ECC intersects with features identified from the geophysical survey. Requires ground truthing (as part of the programme of archaeological trial trenching).	Centred on 517056 Centred on 516856	Centred on 454361 Centred on 454268	Completed as part of DCO application.	TBC	To be agreed with LPA through site-specific WSI approval

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
					Onshore Cable Route and have been interpreted as possible archaeology.						
Onshore ECC	APS_078	Former footpath.	Low	Cropmarks of a footpath visible on aerial photography.	Completed. Geophysical survey did not corroborate with features identified on Aerial Photo / Lidar data.	**Yes.** The onshore ECC intersects the cropmarks identified on APs.	516994	454365	Completed as part of DCO application.	TBC	To be agreed with LPA through site-specific WSI approval
Onshore ECC	APS_077	Ridge and Furrow.	Low	An area of eroded Medieval / Post Medieval Ridge and Furrow is visible as microtopography via LiDAR data sources.	Completed. Geophysical survey did not corroborate with features identified on Aerial Photo / Lidar data; however other linear features of archaeological interest were visible.	**Yes.** The onshore ECC intersects the cropmarks identified on APs.	516782	454000	Completed as part of DCO application.	TBC	To be agreed with LPA through site-specific WSI approval
Onshore ECC	54C	Possible remains of an	**Medium***	No evidence of cropmarks or earthworks from	Completed. The geophysical survey identified	**Yes.** The onshore ECC intersects the	Centred on	Centred on 453991	Completed as part of	TBC	To be agreed with LPA through site-

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
		enclosed settlement.		AP/Lidar assessment.	a concentration of fragmentary linear anomalies (54C) that have been interpreted as possible archaeology. The anomalies may represent an enclosed settlement.	possible remains of an enclosed settlement.	516622		DCO application.		specific WSI approval
Onshore ECC	APS_076	Ridge and Furrow.	Low	An area of eroded Medieval / Post Medieval ridge and furrow is visible as a cropmark on aerial imagery sources. Also identified on the geophysical survey.	Partially covered by survey Area 72. Geophysical survey corroborates with the cropmarks identified on APs.	**Yes.** The onshore ECC intersects the larger area of ridge and furrow.	516121	453429	Complete	TBC	To be agreed with LPA through site-specific WSI approval
Onshore ECC	APS_075	Former field boundary.	Low	Field boundary visible as a cropmark on aerial imagery sources.	Completed. The geophysical survey identified a series of irregular discrete features which have been interpreted as	**Yes.** The onshore ECC intersects the cropmarks of the boundary visible on APs.	515480	453239	Complete	TBC	To be agreed with LPA through site-specific WSI approval

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
					fragmented remains of the former field boundary.						
Onshore ECC	74A	Rectilinear anomaly	Low	No evidence of cropmarks or earthworks from AP/Lidar assessment.	Completed. Geophysical survey identified a rectilinear anomaly (74A) which has been interpreted as possible archaeology.	**Yes.** The Onshore Export Cable Corridor intersects the geophysical anomaly and would result in its complete removal.	515388	453129	Complete	TBC	To be agreed with LPA through site-specific WSI approval
Onshore ECC	APS_074	Ridge and Furrow.	Low	Field boundary visible as a cropmark on aerial imagery sources.	Completed. Geophysical survey identified a series of linear anomalies consistent with the cropmarks of ridge and furrow.	**Yes.** The onshore ECC intersects the cropmarks visible on APs.	515107	452976	Complete	TBC	To be agreed with LPA through site-specific WSI approval
Onshore ECC / Trenchless crossing	APS_072	Ridge and Furrow.	Low	An area of eroded Medieval / Post Medieval ridge and furrow is visible on aerial imagery sources.	Completed. Geophysical survey of the area did not corroborate with APs. No features of archaeological	**Yes.** The onshore ECC and part of a trenchless crossing intersects the earthworks	514638	445793	Completed as part of DCO application.	Complete	To be agreed with LPA through site-specific WSI approval

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
					interest were identified. Subsequent trial trenching complete.	identified on APs.					
Onshore ECC / Trenchless crossing	APS_073	Ridge and Furrow.	Low	Cropmarks and residual microtopographic earthworks of Medieval / Post Medieval ridge and furrow.	Completed. Geophysical survey corroborates with the earthworks identified on APs, with additional features of strong archaeological interest. Subsequent trial trenching complete.	**Yes.** The location of a trenchless crossing within the onshore ECC intersects the earthworks identified on APs.	514568	446245	Completed as part of DCO application.	Complete	To be agreed with LPA through site-specific WSI approval
Onshore ECC / Trenchless crossing	185A, 185B, 185C, 185D	Rectilinear and circular anomalies amongst possible enclosures.	**Medium***	No evidence of cropmarks or earthworks from AP/Lidar assessment.	Completed. Geophysical survey identified a series of linear trends (185A) which have been interpreted as possible enclosures. Possible	**Yes.** A trenchless crossing zone intersects the Iron Age/ Romano-British trackway and associated enclosures.	Centred on 514574	Centred on 446219	Completed as part of DCO application.	Complete	To be agreed with LPA through site-specific WSI approval

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
					rectilinear and circular anomalies (185B) are discernible within the postulate enclosures. A series of additional linear trends (185D) to the west of the enclosures are interpreted as having a possible spatial association with them. Further linear trends (185C) were identified and correlate to the location of a known windmill structure. The trial trenching results confirmed the findings of the geophysics. Subsequent trial trenching complete.						

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
Onshore ECC	APS_071	Ridge and Furrow.	Low	An area of eroded Medieval / Post Medieval ridge and furrow and a former field boundary is visible as microtopography via LiDAR data sources.	Completed. Geophysical survey identified a series of linear trends interpreted as ridge and furrow remains.	**Yes.** The onshore ECC intersects the earthworks identified on APs.	Centred on 514760	Centred on 447938	Complete	TBC	To be agreed with LPA through site-specific WSI approval
Onshore ECC	MHU19463	Linear cropmark.	Low	Linear cropmark northeast of Catfoss Grange.	Completed. The geophysical survey did not identify a linear feature.	**Yes.** The onshore ECC intersects the cropmark recorded in the HER. Requires ground truthing (as part of the programme of archaeological trial trenching) post-consent.	514800	448600	Complete	TBC	To be agreed with LPA through site-specific WSI approval
Onshore ECC / Trenchless crossing	MHU13271	Former Old Course of Holderness Drain.	Low	A ditch marking the former Old Course of Holderness Drain.	Completed. Geophysical survey and trial trenching results did not	**Yes.** The location of a trenchless crossing within the	507290	442985	Completed as part of DCO application.	Complete	To be agreed with LPA through site-specific WSI approval

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
					corroborate with the HER data. Subsequent trial trenching complete.	onshore ECC intersects the former course of the drain.					
Onshore ECC / Trenchless crossing	APS_068	Ridge and Furrow, former field boundary.	Low	A large area of earthwork remains of eroded Medieval ridge and furrow and former field boundaries visible on Aerial Photographs (APs). Cropmarks of an Anti-Glider Ditch also visible.	Geophysical survey partially covered at Areas 168 and 176. The results do not corroborate with APs data, however other unclear features of possible archaeological interest were identified.	**Yes.** The location of a trenchless crossing within the onshore ECC intersects the earthworks identified on APs.	Centred on 514642	Centred on 446984	Complete	Partially complete	To be agreed with LPA through site-specific WSI approval
Onshore ECC / Trenchless crossing	164A	Truncated linear trend	**Low***	No evidence of cropmarks or earthworks from AP/Lidar assessment.	Geophysical survey identified a fragmentary linear trend (164A) which has been interpreted as possible archaeology.	**Yes.** The location of a trenchless crossing within the onshore ECC intersects the possible linear trend.	514693	447518	Complete	TBC	To be agreed with LPA through site-specific WSI approval

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
Onshore ECC / Trenchless crossing	166A	Positively enhanced circular trend	**Low***	No evidence of cropmarks or earthworks from AP/Lidar assessment.	Completed. The geophysical survey identified a circular trend (166A) which has been interpreted as possible archaeology based on its form and clear definition.	**Yes.** The Onshore Export Cable Corridor intersects the enhanced circular trend.	514702	447333	Complete	TBC	To be agreed with LPA through site-specific WSI approval
Onshore ECC / Trenchless crossing	176A	Fragmented linear trends.	Low	No evidence of cropmarks or earthworks from AP/Lidar assessment, however the anomalies lie in proximity to a medieval ditch earthwork recorded on NMP mapping to the south (HE UID_1460528).	Completed. The geophysical survey identified a fragmentary linear trend (176A) which has been interpreted as possible archaeology based on its form and clear definition. Subsequent trial trenching complete.	**Yes.** The location of a trenchless crossing within the onshore ECC intersects the archaeology identified on the geophysical survey. Requires ground truthing (as part of the programme of archaeological trial	Centred on 514648	Centred on 446956	Completed as part of DCO application.	Complete	To be agreed with LPA through site-specific WSI approval

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
						trenching) post-consent.					
Onshore ECC	105A	A series of curving anomalies	**Low***	No evidence of cropmarks or earthworks from AP/Lidar assessment.	Complete. The geophysical survey identified a series of curving anomalies (105A) interpreted as possible archaeology.	**Yes.** The Onshore Export Cable Corridor intersects the series of curving anomalies.	514129	451823	Complete	TBC	To be agreed with LPA through site-specific WSI approval
Onshore ECC / Off Route Access	APS_067	Ridge and Furrow.	Low	An area of eroded Medieval / Post Medieval ridge and furrow is visible as microtopography via LiDAR data sources.	Complete. The geophysical survey recorded a series of linear anomalies corroborating with LiDAR data sources.	**Yes.** The onshore ECC and an off-route access intersects the earthworks visible on AP and LiDAR data.	514185	451348	Complete	TBC	To be agreed with LPA through site-specific WSI approval
Onshore ECC	APS_106	Ridge and Furrow.	Low	An area of Medieval / Post Medieval ridge and furrow visible as cropmarks and earthworks on aerial imagery sources.	Complete. The geophysical survey recorded a series of linear anomalies corroborating with LiDAR data sources. Subsequent trial	**Yes.** The onshore ECC intersects the cropmarks visible on APs.	513936	450655	Complete	Complete	To be agreed with LPA through site-specific WSI approval

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
					trenching complete.						
Onshore ECC	APS_107 / 1343A	Ridge and Furrow and former field boundaries.	Low	An area of Medieval / Post Medieval ridge and furrow and former field boundary ditches aligned north to south / east to west, visible on aerial photography.	Complete. Geophysical survey corroborated with cropmarks of ridge and furrow and a former field boundary [1343A]. Subsequent trial trenching complete.	**Yes.** The onshore ECC intersects the cropmarks visible on APs.	513892 to 514231	450568 to 449523	Complete	Complete	To be agreed with LPA through site-specific WSI approval
Onshore ECC	APS_105 / 140cA	Military Airfield and trackway.	Low	The northern extent of a former military airfield is visible on aerial photography and a possible former trackway.	Completed. The geophysical survey identified two parallel linear anomalies which extend for c.50m. These have been interpreted as possible archaeology as they may be associated with a possible Roman road running between	**Yes.** The onshore ECC intersects the cropmarks visible on APs.	514016	449582	Completed as part of DCO application.	Complete	To be agreed with LPA through site-specific WSI approval

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
					Bridlington and Hull which is visible as a soil-mark (MHU1007) recorded 200m to the southwest. However, based on their alignment, it is more likely they are associated with the former airfield (APS_105). Subsequent trial trenching completed.						
Onshore ECC	APS_065	Ridge and Furrow.	Low	An area of eroded Medieval / Post Medieval ridge and furrow is visible as a cropmark on aerial imagery sources.	Completed. Geophysical survey data corroborated with the cropmarks visible on APs. Subsequent trial trenching complete.	**Yes.** The onshore ECC intersects the cropmarks visible on APs.	514173	445213	Completed as part of DCO application.	Complete	To be agreed with LPA through site-specific WSI approval

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
Onshore ECC	1235A	Square anomaly.	**Medium***	No evidence of cropmarks or earthworks from AP/Lidar assessment.	Completed. The geophysical survey identified a square anomaly (1235A) which has been interpreted as definite/probable archaeology. Strong ridge and furrow responses in the area suggest it predates this Medieval cultivation. Subsequent trial trenching complete.	**Yes.** The onshore ECC intersects the anomalies identified on the geophysical survey. Requires ground truthing (as part of the programme of archaeological trial trenching).	Centred on 514151	Centred on 445156	Completed as part of DCO application.	Complete	To be agreed with LPA through site-specific WSI approval
Onshore ECC	HE UID_1460420 / 221A, 221B	Partial enclosure.	**Medium***	Cropmarks of a network of trackways, field boundaries and a possible rectilinear enclosure of possible Iron Age or Roman date visible on aerial imagery sources	Completed. The geophysical survey identified linear anomalies forming a partial enclosure, interpreted as probable archaeology which corroborate	**Yes.** The onshore ECC intersects the anomalies identified on the geophysical survey. Requires ground truthing (as part of the	Centred on 513418	Centred on 444445	Completed as part of DCO application.	Complete	To be agreed with LPA through site-specific WSI approval

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
				(HE UID_1460420).	with features mapped on the NMP. Subsequent trial trenching complete.	programme of archaeological trial trenching).					
Onshore ECC	HE UID_1460420) / MHU7169 / 221E	Iron Age to Romano-British trackways and enclosures.	**Medium***	Cropmark and residual microtopography of an Iron Age / Roman trackway. Aerial photographs show double linear features with possible small enclosures at centre of complex.	Completed. The geophysical survey identified two short parallel linear trends which appear to be a continuation of the cropmarks and residual microtopography of an Iron Age / Roman trackway identified on NMP mapping. Subsequent trial trenching complete.	**Yes.** The onshore ECC intersects the anomalies identified on the geophysical survey. Requires ground truthing (as part of the programme of archaeological trial trenching).	513450	444450	Completed as part of DCO application.	Complete	To be agreed with LPA through site-specific WSI approval
Onshore ECC	HE UID_1460420 / 221G	Possible Iron Age / Roman ditch.	**Medium***	Cropmarks of an Iron Age / Roman field boundary.	Completed. The geophysical survey identified a linear spread interpreted as possible	**Yes.** The onshore ECC intersects the anomalies identified on the	513250	444290	Completed as part of DCO application.	Complete	To be agreed with LPA through site-specific WSI approval

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
					archaeology, situated slightly to the east of the position of a possible Iron Age / Roman ditch recorded on NMP mapping. Subsequent trial trenching complete.	geophysical survey. Requires ground truthing (as part of the programme of archaeological trial trenching).					
Onshore ECC	HE UID_1460420	Circular ditch / mound. Not observed in surveys.	**None***	Cropmark of a circular ditch visible on aerial photography sources.	Completed. The geophysical survey did not corroborate with the features identified via aerial imagery sources. Subsequent trial trenching complete.	**None**	Centred on 513599	Centred on 444647	Complete	Complete	To be agreed with LPA through site-specific WSI approval
Onshore ECC	APS_062	Former field boundary.	**None***	A former field boundary dating to the Post Medieval period is visible as an earthwork on aerial imagery sources.	Completed. The geophysical survey did not identify the former boundary visible on APs. Subsequent trial	**None**	513430	444425	Completed as part of DCO application.	Complete	To be agreed with LPA through site-specific WSI approval

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
					trenching complete.						
Onshore ECC	APS_061	Ridge and Furrow.	Low	An area of eroded Medieval / Post Medieval ridge and furrow identified on aerial imagery sources.	Completed. The results of the geophysical survey corroborate with the cropmarks visible on APs. Subsequent trial trenching complete.	**Yes.** The onshore ECC intersects the cropmarks identified on APs.	Centred on 512912	Centred on 444125	Completed as part of DCO application.	Complete	To be agreed with LPA through site-specific WSI approval
Onshore ECC / Trenchless crossing / Temporary Construction Compound	APS_058	Ridge and Furrow and tree enclosure ring.	Low	An area of eroded Medieval / Post Medieval ridge and furrow and a post-medieval tree enclosure ring is visible as a cropmark on aerial imagery sources.	Complete. Geophysical survey data corroborates with the cropmarks identified on APs.	**Yes.** The onshore ECC intersects the cropmarks identified on APs and anomalies in the geophysical survey data.	511863	443459	Complete	TBC	To be agreed with LPA through site-specific WSI approval
Onshore ECC / Off Route Access / Trenchless crossing	1201C	Possible archaeology.	Medium	No evidence of cropmarks or earthworks from AP/Lidar assessment.	Completed. The geophysical survey identified a series of irregular and fragmented	**Yes.** The location of a trenchless crossing within the onshore ECC	511702	443416	Completed as part of DCO application.	TBC	To be agreed with LPA through site-specific WSI approval

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
					anomalies (1201C) which have been interpreted as possible archaeology.	and an off route access intersect the anomalies identified in the geophysical survey data. Requires ground truthing (as part of the programme of archaeological trial trenching).					
Onshore ECC / Trenchless crossing / Temporary Construction Compound	MHU10203 / 1192A	Possible Iron Age settlement.	High	No evidence of cropmarks or earthworks from AP/Lidar assessment.	Completed. The geophysical survey identified a concentration of linear and curvilinear trends (1192A) which have been interpreted as a possible Iron Age settlement with associated enclosures and possible trackways. The	**Yes.** The location of a trenchless crossing within the onshore ECC and a Temporary Construction Compound intersect the anomalies identified in the geophysical survey data.	Centred on 511458	Centred on 443121	Completed as part of DCO application.	TBC	To be agreed with LPA through site-specific WSI approval

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
					HER lists a possible enclosure at this location recorded as a poorly defined cropmark (MHU10203).	Requires ground truthing (as part of the programme of archaeological trial trenching).					
Onshore ECC / Temporary Construction Compound	HE UID_1460330 / 1192E	Medieval tree enclosure.	Medium	Earthworks of a medieval tree enclosure is recorded on NMP mapping.	Completed. The geophysical survey results corroborate with the features visible on APS.	**Yes.** The location of the onshore ECC and a Temporary Construction Compound intersect the anomalies identified in the geophysical survey data**.** Requires ground truthing (as part of the programme of archaeological trial trenching).	511486	443129	Completed as part of DCO application.	TBC	To be agreed with LPA through site-specific WSI approval

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
Onshore ECC / Trenchless crossing	APS_057 / HE UID_80749	Natural feature of uncertain date.	Low	Earthwork of a natural feature of an uncertain date identified on NMP mapping.	Completed. Geophysical survey data did not corroborate with earthworks visible on APs.	**Yes.** The location of a trenchless crossing within the onshore ECC intersect the earthworks identified in the geophysical survey data**.**	511068	442974	Completed as part of DCO application.	TBC	To be agreed with LPA through site-specific WSI approval
Onshore ECC / Trenchless crossing	HE UID_1463627 / MHU3591	Site of a sizeable polygonal enclosure and field boundaries.	Low	NMP data identified north to south aligned Medieval or Post Medieval field boundaries and uncertain ditches visible as cropmarks.	Completed. Geophysical survey data did not corroborate with cropmarks visible on APs, however possible historic linear ditches on an east to west alignment were identified in the area.	**Yes.** The location of a trenchless crossing within the onshore ECC intersect the cropmarks identified in APs**.**	Centred on 510816	Centred on 442795	Completed as part of DCO application.	TBC	To be agreed with LPA through site-specific WSI approval
Onshore ECC / Trenchless crossing	APS_056 / 1255C	Former field boundary.	Low	Cropmarks of a ditch on a north-east/south-west alignment visible on aerial	Completed. Geophysical survey data corroborated with the	**Yes.** The location of a trenchless crossing within the onshore ECC	510323	442461	Completed as part of DCO application.	TBC	To be agreed with LPA through site-specific WSI approval

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
				photography sources.	cropmarks identified in APs, representing a former field division depicted on the 1st Ed OS map of 1888 (NLS, 2023).	intersect the cropmarks identified in APs**.**					
Onshore ECC	APS_055 / HE UID_1463587	Cropmarks of a Later Prehistoric / Roman trackway.	Medium	Cropmarks of a Prehistoric / Roman trackway visible on aerial photography sources.	Completed. Geophysical survey data did not corroborate with cropmarks visible on APs, however other features of archaeological interest were identified in the area.	**Yes.** The onshore ECC intersects the cropmarks identified in APs**.**	Centred on 509848	Centred on 442179	Completed as part of DCO application.	TBC	To be agreed with LPA through site-specific WSI approval
Onshore ECC	1255A	Possible continuation of an Iron Age / Roman ditch.	Low to Medium	Cropmarks of an Iron Age / Roman ditch visible on aerial photography sources.	Completed. The geophysical survey identified a well-defined linear trend (1255A) which appears to be a continuation of an Iron Age / Roman ditch visible as a	**Yes.** The onshore ECC intersects the anomalies identified in the geophysical survey and AP data**.** Requires ground	510241	442462	Completed as part of DCO application.	TBC	To be agreed with LPA through site-specific WSI approval

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
					cropmark (HE_UID 1334599).	truthing (as part of the programme of archaeological trial trenching).					
Onshore ECC	1257A, 1257B	Possible continuation of an Iron Age / Roman ditch.	Medium	No evidence of cropmarks or earthworks from AP/Lidar assessment. However, to the north-east of the anomaly are cropmarks of an Iron Age / Roman ditch.	Completed. Geophysical survey identified what appears to be the south-westward continuation of an Iron Age / Roman ditch visible as a cropmark (HE_UID 1334599).	**Yes.** The onshore ECC intersects the anomalies identified in the geophysical survey and AP data**.** Requires ground truthing (as part of the programme of archaeological trial trenching).	510181	442406	Completed as part of DCO application.	TBC	To be agreed with LPA through site-specific WSI approval
Onshore ECC	1252A, 1252B	Possible ditch.	Medium	No evidence of cropmarks or earthworks from AP/Lidar assessment.	Completed. The geophysical survey identified a short linear trend (1252A) which may	**Yes.** The onshore ECC intersects the anomalies identified in the geophysical	510088	442342	Completed as part of DCO application.	TBC	To be agreed with LPA through site-specific WSI approval

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
					represent a continuation of presumed ditch (1257A). Two parallel linear trends (1252B) may be comparable to the Prehistoric / Roman trackway (HE UID_1463587) recorded as a cropmark 280m to the southwest.	survey. Requires ground truthing (as part of the programme of archaeological trial trenching).					
Onshore ECC	1252C	Possible ditch.	Medium	No evidence of cropmarks or earthworks from AP/Lidar assessment.	Completed. The geophysical survey identified linear trends (1252C) interpreted as possible archaeology. Although this does not correspond with any recorded cropmark features it lies only 50m to the east of a Later	**Yes.** The onshore ECC intersects the anomalies identified in the geophysical survey. Requires ground truthing (as part of the programme of archaeologic	509945	442221	Completed as part of DCO application.	TBC	To be agreed with LPA through site-specific WSI approval

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
					Prehistoric / Roman Trackway albeit on a different alignment.	al trial trenching).					
Access Road	1214A, 1214B, 1219A	Linear trends of possible archaeological origin	Low	No evidence of cropmarks or earthworks from AP/Lidar assessment	Completed. The geophysical survey identified linear trends (1214A, 1214B, 1219A) which have been interpreted as possible archaeology.	**Yes.** An access road intersects the anomalies identified in the geophysical survey	Centred on 509970	Centred on 443093	Complete	TBC	To be agreed with LPA through site-specific WSI approval
Onshore ECC / Trenchless crossing	MHU19050	Ditches north of Meaux Lane.	Low	Earthworks of a former field boundary visible on aerial imagery sources.	Completed. The geophysical survey data did not corroborate with the features identified on APs.	**Yes.** The location of a trenchless crossing within the onshore ECC intersects the cropmarks identified on APs.	509590 to 508282	442043 to 442466	Completed as part of DCO application.	TBC	To be agreed with LPA through site-specific WSI approval

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
Onshore ECC / Trenchless crossing	APS_053	Area of Medieval / Post Medieval ridge and furrow.	Low	Earthworks of medieval ridge and furrow identified on aerial imagery sources.	Completed. Geophysical survey data corroborates with the features identified on APs. Additional linear trends of an uncertain origin were also identified in the area.	**Yes.** The location of a trenchless crossing within the onshore ECC intersect the anomalies identified in the geophysical survey**.** Requires ground truthing (as part of the programme of archaeological trial trenching).	Centred on 509441	Centred on 442012	Completed as part of DCO application.	TBC	To be agreed with LPA through site-specific WSI approval
Onshore ECC / Trenchless crossing	377a, 377b, 377c	Linear trends	Medium	No evidence of cropmarks or earthworks from AP/Lidar assessment.	Completed. The geophysical survey identified linear trends (377A, 377B, 377C) of possible archaeological origin.	**Yes**. The Onshore Export Cable Corridor intersects the anomalies identified in the geophysical survey.	509132	441972	Completed	TBC	To be agreed with LPA through site-specific WSI approval

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
Onshore ECC / Trenchless crossing	334A	Possible unenclosed settlement.	Medium	No evidence of cropmarks or earthworks from AP/Lidar assessment.	Completed. The geophysical survey identified a series of broad trends (334A), largely unconnected but forming a loose pattern that could potentially suggest an unenclosed settlement. It is possible that the anomalies have a natural origin.	**Yes.** The location of a trenchless crossing within the onshore ECC intersect the anomalies identified in the geophysical survey**.** Requires ground truthing (as part of the programme of archaeological trial trenching).	Centred on 508906	Centred on 442120	Completed as part of DCO application.	TBC	To be agreed with LPA through site-specific WSI approval
Onshore ECC / Trenchless crossing	315A	Possible ditch.	**Low***	No evidence of cropmarks or earthworks from AP/Lidar assessment.	Completed. The geophysical survey identified a linear trend [315A] running through the centre of the survey area. This has been noted as having a possible	**Yes.** The location of a trenchless crossing within the onshore ECC intersect the anomalies identified in the	508486	442386	Completed as part of DCO application.	Completed	To be agreed with LPA through site-specific WSI approval

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
					archaeological origin due to its nature and form, but it may have an agricultural origin. Subsequent trial trenching complete.	geophysical survey.					
Onshore ECC	296A	Possible circular ditch.	**Medium***	No evidence of cropmarks or earthworks from AP/Lidar assessment.	Completed. The geophysical survey identified a circular trend (296A) which was noted as possible archaeology due to its form but may have a natural origin. Subsequent trial trenching complete.	**Yes.** The onshore ECC intersects the anomalies identified in the geophysical survey.	Centred on 507953	Centred on 442709	Completed as part of DCO application.	Completed	To be agreed with LPA through site-specific WSI approval

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
Onshore ECC	APS_051	Ditch.	Low	Ditch visible as a cropmark on aerial imagery sources.	Completed. Partially surveyed in Area 291, however survey was not completed due to OHPs. Geophysical survey data did not corroborate with the cropmarks visible on APs, however linear features of possible archaeological interest were identified in the vicinity. Subsequent trial trenching complete.	**Yes.** The onshore ECC intersects the cropmarks identified on APs.	507779	442843	Completed as part of DCO application.	Completed	To be agreed with LPA through site-specific WSI approval
Onshore ECC	MHU18425	WWII decoy west of Routh.	Low	No evidence of cropmarks or earthworks from AP/Lidar assessment. The HER does not state the	Completed within both adjacent fields. Overhead lines prohibited the use of geophysical survey over the recorded	**Yes.** The onshore ECC intersects the decoy at the location recorded in the HER.	507800	442800	Completed	Completed	To be agreed with LPA through site-specific WSI approval

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
				condition of the decoy.	location of the asset within the HER. Subsequent trial trenching complete.						
Onshore ECC	APS_049	Ridge and Furrow.	Low	An area of ridge and furrow visible as earthworks on aerial photographic sources.	Completed. Geophysical survey did not corroborate with earthworks identified on APs. Subsequent trial trenching complete.	**Yes.** The onshore ECC intersects the cropmarks identified on APs.	506978	443006	Completed as part of DCO application.	Completed	To be agreed with LPA through site-specific WSI approval
Onshore ECC	300B	Possible ditch	Low	No evidence of cropmarks or earthworks from AP/Lidar assessment.	Completed. The geophysical survey identified several linear trends [300A] and have been categorised as possible archaeology. Subsequent trial trenching complete.	**Yes.** The onshore ECC intersects the anomalies identified in the geophysical survey. Requires ground truthing (as part of the programme of	506134	442699	Completed as part of DCO application.	Completed	To be agreed with LPA through site-specific WSI approval

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
						archaeological trial trenching).					
Onshore ECC / Trenchless crossing	MHU13102	South Bullock Pumping Station.	Low	No evidence of cropmarks or earthworks from AP/Lidar assessment. There is the possibility of below ground surviving remains.	n/a	**None**	505330	442640	n/a	n/a	n/a
Onshore ECC	APS_045	Former field boundary.	Low	Field boundary visible as an extant boundary on aerial imagery sources. No longer present.	Completed. Geophysical survey data did not corroborate with the earthworks visible on APs.	**Yes.** The onshore ECC intersects the earthworks visible on APs.	504854	442615	Completed as part of DCO application.	TBC	To be agreed with LPA through site-specific WSI approval

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
Onshore ECC	301A	Possible curvilinear ditches.	Medium	No evidence of cropmarks or earthworks from AP/Lidar assessment.	Completed. The geophysical survey identified two curvilinear anomalies (301A) that were interpreted as possible archaeology.	**Yes.** The onshore ECC intersects the anomalies identified in the geophysical survey. Requires ground truthing (as part of the programme of archaeological trial trenching) post-consent.	504878	442639	Completed as part of DCO application.	TBC	To be agreed with LPA through site-specific WSI approval
Off Route Access	432A	Linear anomaly, possible northerly extension of a medieval hollow way.	Medium	No evidence of cropmarks or earthworks from AP/Lidar assessment.	Completed. The geophysical survey identified a linear anomaly (432A) which has been interpreted as possible archaeology. It could be a northerly extension of a medieval hollow way recorded by	**Yes (slight).** The north-eastern half of the anomaly marginally intersects a Zone of Off Route Access. Requires ground truthing (as part of the programme	504384	441566	Completed as part of DCO application.	TBC	To be agreed with LPA through site-specific WSI approval

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
					aerial photography (HE_UID 1551517) 140m to the south.	of archaeological trial trenching) post-consent.					
Temporary Construction Compound	APS_044	Ridge and Furrow.	Low	An area of eroded Medieval / Post Medieval ridge and furrow visible on aerial imagery sources.	Completed. Geophysical survey did not corroborate with the earthworks visible on APs.	**Yes.** The location of a temporary construction compound intersects the earthworks visible on APs.	504573	441215	Completed as part of DCO application.	TBC	To be agreed with LPA through site-specific WSI approval
Temporary Construction Compound	432D	Former field boundary.	Low	No evidence of cropmarks or earthworks from AP/Lidar assessment.	Completed. The geophysical survey identified a linear feature on a north-west/south-east alignment which coincides with a former field boundary and associated small enclosure depicted on the 1st Ed OS map	**Yes.** The location of a temporary construction compound intersects the anomalies identified in the geophysical survey. Requires ground truthing (as part of the programme	504616	441254	Completed as part of DCO application.	TBC	To be agreed with LPA through site-specific WSI approval

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
					of 1888 (NLS, 2023).	of archaeological trial trenching) post-consent.					
Onshore ECC	HE_UID_1401624	WWII demolished structure.	Low	Cropmark evidence of the site of a demolished WWII structure associated with Leconfield Airfield to the south, visible on aerial imagery sources.	Completed. Geophysical survey data identified a historic spread in the area immediately surrounding this location.	**Yes.** The onshore ECC intersects the cropmarks identified in APs.	503002	441840	Completed as part of DCO application.	TBC	To be agreed with LPA through site-specific WSI approval
Onshore ECC	APS_033	Former field boundary.	Low	Rectilinear ditch visible as a cropmark on aerial imagery sources. Mapped by NMP as Post Medieval field boundary.	Completed. A number of unclear linear trends of the same alignment as the former boundary were identified at its approximate location.	**Yes.** The onshore ECC intersects the cropmarks identified in APs.	502881	441728	Completed as part of DCO application.	TBC	To be agreed with LPA through site-specific WSI approval

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
Onshore ECC / Trenchless crossing	APS_027	Ridge and Furrow.	Low	An area of eroded Medieval / Post Medieval ridge and furrow visible on aerial imagery sources.	Completed. Geophysical survey data did not corroborate with the earthworks identified on APs.	**Yes.** The location of a trenchless crossing within the onshore ECC intersects the cropmarks identified on APs.	502722	441678	Completed as part of DCO application.	TBC	To be agreed with LPA through site-specific WSI approval
Onshore ECC / Trenchless crossing	APS_016	Ridge and Furrow.	Low	An area of Medieval / Post Medieval ridge and furrow which is now eroded to microtopography visible on aerial imagery sources.	Completed. Geophysical survey data corroborates with the earthworks identified on APs.	**Yes.** The location of a trenchless crossing within the onshore ECC intersects the cropmarks identified on APs.	501817	441454	Completed as part of DCO application.	TBC	To be agreed with LPA through site-specific WSI approval
Onshore ECC / Trenchless crossing	APS_021	Former field boundary.	Low	Field boundary visible as cropmark on aerial imagery sources.	Completed. Geophysical survey data partially corroborated with the field boundary visible on APs.	**Yes.** The location of a trenchless crossing within the onshore ECC intersects the cropmarks identified on APs.	502118	441535	Completed as part of DCO application.	TBC	To be agreed with LPA through site-specific WSI approval

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
Onshore ECC	417A	Possible ditch.	Medium	No evidence of cropmarks or earthworks from AP/Lidar assessment.	Completed. The geophysical survey identified a fragmentary trend [417A] in the south-west of the survey area which may indicate a former field boundary but could have a natural origin.	**Yes.** The onshore ECC intersects the anomalies identified in the geophysical survey. Requires ground truthing (as part of the programme of archaeological trial trenching).	501689	441404	Completed as part of DCO application.	TBC	To be agreed with LPA through site-specific WSI approval
Onshore ECC	433A & 433B	Possible rectilinear ditch.	Medium	No evidence of cropmarks or earthworks from AP/Lidar assessment.	Completed. The geophysical survey identified a rectilinear trend [433A] along the southern limits of the area. The nature and form of the anomaly suggests a possible archaeological origin. However, its location at	**Yes.** The onshore ECC intersects the anomalies identified in the geophysical survey. Requires ground truthing (as part of the programme of archaeologic	501537 to 501291	441365 to 441371	Completed as part of DCO application.	TBC	To be agreed with LPA through site-specific WSI approval

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
					the edge of the survey area complicates interpretation and it may have a natural origin. A linear trend aligned east-west [433B] has been detected in the west of the survey area. This appears to be a continuation of anomalies detected in Field 443 immediately to the east.	al trial trenching).					
Onshore ECC	443A, 443C & 443E	Possible Prehistoric field system and former field boundary.	Medium	No evidence of cropmarks or earthworks from AP/Lidar assessment.	Completed. The geophysical survey identified a series of linear trends [443A] in the northwest of the survey area which appear to form part of a possible prehistoric field system. They are categorised	**Yes.** The onshore ECC intersects the anomalies identified in the geophysical survey. Requires ground truthing (as part of the programme of	501247 to 501107	441368 to 441325	Completed as part of DCO application.	TBC	To be agreed with LPA through site-specific WSI approval

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
					as having a probable archaeological origin due to their character and form. However, no known sites or cropmarks have been recorded within this area. Two strong parallel trends [443C] have been mapped in the northeast of the survey area. The data suggests a possible trackway, but they may be ploughing headlands associated with the ridge and furrow cultivation. A former field boundary [443E] was also identified corresponding to a former field	archaeological trial trenching).					

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
					division indicted on historic mapping (NLS, 1888).						
Temporary Construction Compound	443B	Possible enclosures or field system.	Medium	No evidence of cropmarks or earthworks from AP/Lidar assessment.	Completed. The geophysical survey identified several weak linear trends (443B) which appear to be a continuation of a possible series of enclosures or field systems detected in Field 446 to the west.	**Yes.** The location of a temporary construction compound intersects the anomalies identified in the geophysical survey. Requires ground truthing (as part of the programme of archaeological trial trenching).	500970	441060	Completed as part of DCO application.	TBC	To be agreed with LPA through site-specific WSI approval

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
Onshore ECC / Trenchless crossing / Temporary Construction Compound	474A, 474B & 474C	Possible ditches and rectilinear enclosure.	Medium	No evidence of cropmarks or earthworks from AP/Lidar assessment.	Completed. The geophysical survey identified a linear trend (474A) in the northwest of the survey area, probably archaeological in origin. Iron Age / Roman cropmarks have been recorded 250m to the southwest. More poorly defined trends have been detected in the north (474B) and south (474C) of the survey area. These have been noted as having a possible archaeological origin but could be due to natural variations.	**Yes.** The onshore ECC, a trenchless crossing and the location of a temporary construction compound intersects the anomalies identified in the geophysical survey. Requires ground truthing (as part of the programme of archaeological trial trenching).	501049 to 501027	440925 to 440663	Completed as part of DCO application.	TBC	To be agreed with LPA through site-specific WSI approval

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
Onshore ECC / Trenchless crossing / Temporary Construction Compound	APS_008	Ridge and Furrow and earthwork of a Medieval hollow way.	Low	An area of Medieval / Post Medieval ridge and furrow which is orientated approximately north-south is visible as eroded earthworks and cropmarks on aerial imagery sources.	Complete. Geophysical survey data did not corroborate with the earthworks identified on APs, however some ridge and furrow were detected in Area 517.	**Yes.** The onshore ECC, a trenchless crossing and the location of a temporary construction compound intersects the cropmarks identified on APs.	Centred on 500998	Centred on 440368	Completed	TBC	To be agreed with LPA through site-specific WSI approval
Onshore ECC / Trenchless crossing	MHU13031	Milestone on York Road.	Low	n/a	n/a	**None**	500850	439785	n/a	n/a	n/a
Onshore ECC	APS_005	Former field boundary.	Low	A former field boundary dating to the Post Medieval period was visible as an earthwork and was orientated approximately northwest-southeast. The feature has been	Completed. Geophysical survey data did not corroborate with the earthworks identified on APs.	**Yes.** The onshore ECC intersects the earthworks identified on APs.	500751	439539	Completed as part of DCO application.	TBC	To be agreed with LPA through site-specific WSI approval

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
				removed and is no longer present.							
Onshore ECC	APS_001	Ridge and Furrow.	Low	An area of Medieval / Post Medieval ridge and furrow which is now eroded visible on aerial imagery sources.	Completed. The geophysical survey captured a series of linear anomalies which corroborate with ridge and furrow visible on APs.	**Yes.** The onshore ECC intersects the earthworks identified on APs.	500691	439304	Completed	TBC	To be agreed with LPA through site-specific WSI approval
Onshore ECC	APS_002 / MHU596	Former field system.	Low	Earthworks of a bank and ditch, Killingwoldgraves. The bank is orientated approximately northwest-southeast which is visible as a cropmark identified through aerial imagery sources.	Completed. Geophysical survey data did not corroborate with the earthworks identified on APs	**Yes.** The onshore ECC intersects the earthworks identified on APs.	500700 to 500988	439240 to 438887	Completed	TBC	To be agreed with LPA through site-specific WSI approval

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
Onshore ECC	APS_006	Ditch.	**Low***	A ditch orientated approximately northwest-southeast which was visible as an earthwork has been identified through aerial imagery sources and is no longer extant.	Completed. Geophysical survey data did not corroborate with the earthworks identified on APs	**Yes.** The onshore ECC intersects the earthworks identified on APs.	500735	439154	Completed	TBC	To be agreed with LPA through site-specific WSI approval
Onshore ECC	APS_007	Ditch.	**Low***	A ditch orientated approximately northeast-southwest which is visible as an earthwork and later as a cropmark has been identified through aerial imagery sources.	Completed. Geophysical survey data did not corroborate with the earthworks identified on APs	**Yes.** The onshore ECC intersects the earthworks identified on APs.	500725	439142	Completed	TBC	To be agreed with LPA through site-specific WSI approval

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
Onshore ECC	APS_004	Pits.	**Low***	A group of pits of unknown date are visible as cropmarks on aerial imagery sources.	Completed. Geophysical survey data did not corroborate with the earthworks identified on APs	**Yes.** The onshore ECC intersects the cropmarks identified on APs.	500722	439111	Completed	TBC	To be agreed with LPA through site-specific WSI approval
Onshore ECC	HE UID_1568365 / 560A	Medieval bank.	**Medium***	Earthworks of a bank of possible medieval date visible on aerial imagery sources.	Completed. The geophysical survey identified a band of weakly enhanced response (560A) interpreted as probable archaeology, corroborating with an earthwork of a medieval bank visible on NMP mapping.	**Yes.** The onshore ECC intersects the anomalies identified in the geophysical survey. Requires ground truthing (as part of the programme of archaeological trial trenching).	501384	438718	Completed as part of DCO application.	TBC	To be agreed with LPA through site-specific WSI approval

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
Onshore ECC	560B	Possible opencast mining or World War I practice trenches.	Medium	No evidence of cropmarks or earthworks from AP/Lidar assessment.	Completed. The geophysical survey identified a series of disjointed anomalies (560B) which have been interpreted as possible opencast mining or World War I practice trenches.	**Yes.** The onshore ECC intersects the anomalies identified in the geophysical survey. Requires ground truthing (as part of the programme of archaeological trial trenching).	Centred on 501411	Centred on 438693	Completed as part of DCO application.	TBC	To be agreed with LPA through site-specific WSI approval
Onshore ECC	574A	Possible opencast mining or World War I practice trenches.	Medium	No evidence of cropmarks or earthworks from AP/Lidar assessment.	Completed. The geophysical survey identified a series of disjointed anomalies (574A) which have been interpreted as possible opencast mining or World War I practice trenches. A	**Yes.** The onshore ECC intersects the anomalies identified in the geophysical survey. Requires ground truthing (as part of the programme of archaeologic	Centred on 501655	Centred on 438397	No Completed as part of DCO application.	TBC	To be agreed with LPA through site-specific WSI approval

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
					natural origin is also possible.	al trial trenching).					
Onshore ECC / Trenchless crossing	1251A	Possible limekiln.	Medium	No evidence of cropmarks or earthworks from AP/Lidar assessment.	Completed. The geophysical survey identified a circular anomaly (1251A) which has been interpreted as possible archaeology. It is possible that this represents the base of a limekiln.	**Yes.** The onshore ECC intersects the anomalies identified in the geophysical survey. Requires ground truthing (as part of the programme of archaeological trial trenching).	501930	437997	Completed as part of DCO application.	TBC	To be agreed with LPA through site-specific WSI approval

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
Onshore ECC / Trenchless crossing	HE UID_1087954 / APS_018	Possible later Prehistoric / Roman ditch system.	Medium	A later Prehistoric / Roman multiple ditch system is visible as earthworks and cropmarks on aerial imagery sources.	Completed. Geophysical survey data did not corroborate with the earthworks identified on APs.	**Yes.** The location of a trenchless crossing within the onshore ECC intersects the earthworks identified on APs	501914	437946	Completed	TBC	To be agreed with LPA through site-specific WSI approval
Onshore ECC	APS_011	Former field boundary.	Low	Partial cropmark remains of a Post Medieval field boundary identified on aerial imagery sources.	Completed. Geophysical survey data corroborated with the cropmarks identified on APs. Subsequent trial trenching complete.	**No.** The cropmarks lie within the extent of the Substation Zone but is not expected to interact with the construction works based on the current ES design freeze information	501439	437585	Completed as part of DCO application.	Completed	n/a

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
Onshore ECC	APS_012 / 648B	Extractive pit.	None	Reinstated land following a Post Medieval extraction pit visible as an earthwork on aerial imagery sources.	Completed. Geophysical survey data identified a historic spread (648B) at this location. Subsequent trial trenching complete.	**Yes.** The location of the Substation Zone intersects the earthwork identified on APs.	501452	437452	Completed as part of DCO application.	Completed	n/a
Substation Temporary Construction Compound / Permanent Substation Access Road (including earthwork and construction)	APS_013	Enclosure, ditch, and pits.	None	Cropmarks of an enclosure, ditch, and pits of possible Prehistoric date visible on aerial imagery sources.	Completed. Geophysical survey data did not corroborate with the earthworks identified on APs. Subsequent trial trenching complete.	**Yes.** The location of the Substation Temporary Construction Compound and earthworks associated with the Permanent Substation Access Road intersects the earthwork identified on APs.	Centred on 501498	Centred on 437229	Completed as part of DCO application.	Completed	n/a

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
Substation Zone (proposed landscaping area)	APS_017 / MHU15288	Area occupied by elements of the gun battery associated with the scheduled WWII Heavy Anti-aircraft gunsite, 350m west of Butt Farm.	**None***	Ephemeral associated infrastructure associated with the Scheduled remains of WWII Heavy Anti-aircraft gunsite to the north.	Completed Geophysical survey and trial trenching did not identify and remains associated HER entry within this location.	**None**	Centred on 501824	Centred on 436913	Completed as part of DCO application.	Completed	n/a
Substation Zone / Trenchless crossing / Onward Connection to National Grid	APS_026	Ridge and Furrow.	Low	An area of eroded Medieval / Post Medieval ridge and furrow visible on aerial imagery sources.	Completed. Geophysical survey data corroborated with the cropmarks identified on APs. Subsequent trial trenching complete.	**Yes.** The location of the Substation Zone, Trenchless crossing and Onward Connection to National Grid intersects the earthworks identified on APs.	Centred on 502454	Centred on 436696	Completed as part of DCO application.	Completed.	To be agreed with LPA through site-specific WSI approval

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
Substation Zone	865A & 865B	Linear trends.	**Medium***	No evidence of cropmarks or earthworks from AP/Lidar assessment.	Completed. The geophysical survey identified a series of linear trends [818A] on a predominantly east to west alignment. Additional trends [865B] have also been detected in the south of the survey area. Their form and relationship to the more definitive trends suggests that these are possibly archaeological features.	**No.** The anomaly lies within the extent of the Substation Zone but is not expected to interact with the construction works based on the current ES design freeze information. Requires ground truthing (as part of the programme of archaeological trial trenching).	502169	436236	Completed as part of DCO application.	Completed as part of DCO application.	To be agreed with LPA through site-specific WSI approval
Substation Zone	818A	Circular anomaly.	**None***	No evidence of cropmarks or earthworks from AP/Lidar assessment.	Completed. The geophysical survey identified a very well-defined circular anomaly [818A] in the northwest	**Yes.** The anomaly lies within the extent of the Substation Zone.	502257	436598	Completed as part of DCO application.	Completed as part of DCO application.	n/a

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
					of the survey area, measuring approximately 30m in diameter. It is noted as possible, rather than probable, archaeology as the form of the response is not entirely consistent with a ring ditch type feature. The evaluation trenching of this anomaly did not identify any features.						
Onward Connection to National Grid / Trenchless crossing	APS_030 / HE_UID_1565982 / HE_UID_1565984 / MHU3530	Bronze Age round barrow, rectangular enclosures and field system.	High	Series of cropmark ditches which comprise a settlement site and likely field system including trackways, pits and enclosures visible in aerial photographs, satellite imagery and LiDAR.	Completed. Geophysical survey results corroborated with the settlement site and field system identified on aerial photographs.	**Yes.** The location of a Temporary Construction Compound intersects cropmarks of a Bronze Age round barrow. Other cropmarks of ditches are intersected by	502640 to 503055	436529 to 436387	Completed	TBC	To be agreed with LPA through site-specific WSI approval

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
				Previously recorded by NMP.		the Onward Connection to National Grid intersects the cropmarks identified on APs.					
Zone of Off Route Access	MHU13025	Site of Shepherd Hut.	Low	No evidence of cropmarks or earthworks from AP/Lidar assessment.	Completed. Geophysical survey data did not corroborate with the earthworks identified on APs.	**Yes.** The Zone of an Off Route access intersects the location of the Shepherd Hut recorded in the HER.	502940	436350	Completed.	TBC	To be agreed with LPA through site-specific WSI approval
Onward Connection to National Grid / Trenchless crossing	MHU13026	Well north-west of Shepherd Hut.	Low	No evidence of cropmarks or earthworks from AP/Lidar assessment.	Completed. Geophysical survey data did not corroborate with the earthworks identified on APs	**Yes.** The site of the well is intersected by the Onward Connection to National Grid and trenchless crossing area.	502910	436480	Completed.	TBC	To be agreed with LPA through site-specific WSI approval

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
Onward Connection to National Grid / Zone of Off Route Access	HE_UID_1566062	Iron Age / Roman field boundary.	Low	The NMP records cropmarks of a possible Iron Age / Roman field boundary.	Completed. Geophysical survey data did not corroborate with the cropmarks identified on APs.	**Yes.** The cropmarks identified on APs are intersected by the Onward Connection to National Grid and a Zone of Off Route Access.	503306	436330	Completed as part of DCO application.	TBC	To be agreed with LPA through site-specific WSI approval
Onward Connection to National Grid / Trenchless crossing	896A	Possible ditch.	Low	No evidence of cropmarks or earthworks from AP/Lidar assessment.	Completed. The geophysical survey identified a linear anomaly in the west of the survey area [896A]. It has no other features in the vicinity of a similar character; however, it could relate to an undocumented historical feature or a possible archaeological feature.	**Yes.** The Onward Connection to National Grid and location of a Trenchless crossing intersect the anomaly identified in the geophysical survey. Requires ground truthing (as part of the programme of archaeologic	503667	436092	Completed as part of DCO application.	TBC	To be agreed with LPA through site-specific WSI approval

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
						al trial trenching) post-consent.					
Onward Connection to National Grid / Trenchless crossing	APS_035	Former field system.	Low	An area of former field systems and ditches which are visible as cropmarks through aerial imagery sources.	Completed. Geophysical survey data did not corroborate with the earthworks identified on APs	**Yes.** The Onward Connection to National Grid and location of a Trenchless crossing intersect the anomaly identified in the geophysical survey.	503524	435889	Completed.	TBC	To be agreed with LPA through site-specific WSI approval
Onward Connection to National Grid	APS_040	Ridge and Furrow.	Low	An area of eroded Medieval / Post Medieval ridge and furrow which is orientated approximately north-south and is visible as earthworks and	Completed. Geophysical survey data did not corroborate with the earthworks identified on APs.	**Yes.** The Onward Connection to National Grid substation intersects the cropmarks identified on APs.	503684	435803	Completed.	TBC	To be agreed with LPA through site-specific WSI approval

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
				cropmarks on aerial imagery sources.							
All Elements	AoPA	Area of Potential A Holocene alluvium/tidal deposits, organic deposits, lacustrine deposits, and colluvium	Medium	n/a	n/a	**Yes.** The landfall, cable route, substation and onward connection to the National Grid substation all interact with a small element of this mapped deposit. Maximum impact has been reviewed and reduced from Major impact (Substantial Harm) as investigations to date have not demonstrated	n/a	n/a	Completed	To be completed across the whole route along with geoarchaeological test pits to define extents of deposit.	To be agreed with LPA through site-specific WSI approval

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
						widespread waterlogging, meaning that indirect effects are expected to be localised.					
All Elements	AoPB	Area of Potential B - Glaciofluvial deposits	Medium	n/a	n/a	**Yes.** The landfall, cable route, substation and onward connection to the National Grid substation all interact with a small element of this mapped deposit. Deposits do not derive significance from waterlogging and consequently effects are anticipated to be minimal.	n/a	n/a	Completed	To be completed across the whole route along with geoarchaeological test pits to define extents of deposit.	To be agreed with LPA through site-specific WSI approval

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
All Elements	AoPC	Area of Potential C – Head deposits	Medium	n/a	n/a	**Yes (slight).** The southern boundary of the Substation Zone interacts with a portion of this mapped deposit. Deposits do not derive significance from waterlogging and consequently effects are anticipated to be minimal.	n/a	n/a	Completed	To be completed across the whole route along with geoarchaeological test pits to define extents of deposit	To be agreed with LPA through site-specific WSI approval
All Elements	AoPD	Area of Potential D – Near surface glacial till	Low	n/a	n/a	**Yes.** The landfall, cable route, substation and onward connection to the National Grid substation all interact with a small element of this mapped deposit.	n/a	n/a	Completed	To be completed across the whole route along with geoarchaeological test pits to define extents of deposit	To be agreed with LPA through site-specific WSI approval

Project Element	Aerial Photo (AP)/Lidar ref / NMP UID / HHER ID / Geophys Ref	Name / Description	Heritage Importance	High-level results of Aerial Photographic and Lidar Assessment	High-level results of Priority Archaeological Geophysical Survey and Trial Trenching (where applicable)	Interaction	Easting	Northing	Post-Consent Evaluation/Mitigation Stages to be agreed with HAP		
									Geophysical Survey	Trial Trenching	Mitigation
						Deposits do not derive significance from waterlogging and consequently effects are anticipated to be minimal.					

Appendix 3 – Public Outreach / Community Engagement Strategy

217. A public outreach and community engagement strategy will be implemented and further developed post-consent through a stand-alone overarching document agreed in consultation with Historic England and HAP. The strategy will be driven by the research themes of the Projects and will be developed such that relevant aspects of the strategy are included and referenced in the site-specific WSIs as relevant.

Research Themes

218. As part of the public engagement strategy, common themes relevant to the archaeology observed on the Projects 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 Projects' archaeological research agenda (Section 6). The broad research themes identified from the assessment work undertaken to date include:

- Understand landscape division and use within the Onshore Development Area;
- Understand periodisation within the Onshore Development Area;
- Understand Connectivity between the Onshore Development Area and more widely; and
- Site and Period-Specific issues based on previously observed remains.

219. Consideration will also be given to the **Volume 8, Outline Offshore Written Scheme of Investigation (application ref 8.22)** with regard to potential linkages to the offshore historic environment. For example, this could include a review of Mesolithic material at landfall within the context of offshore deposits to further establish the significance of both marine and terrestrial archaeological material.

Potential Outreach Opportunities

220. The outreach program may encompass the following components, tailored to the Projects' needs:

- 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 Projects.

- Regular updates to the Dogger Bank South project-specific Archaeology Web Page.
- Conducting publicly accessible talks delivered by the archaeological fieldwork contractor(s) to local interest groups, including schools and Parish groups/councils, to discuss ongoing excavations.
- Extending invitations to specialist broadcast media productions, such as BBC Digging for Britain, 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.
- 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.
- Co-ordination of agreed community-based documentary research project(s) pertinent to the research agenda, for example Hull in WWII and the defence of Britain, medieval settlements in Holderness and/or the agricultural history of the Onshore Development Area.

Butt Farm Enhancement and Engagement

221. The Heavy Anti-aircraft (HAA) gunsite, 350m west of Butt Farm (NHLE 1019186) is located approximately 140m north of the Onshore Converter Station, outside the Onshore Development Area.

222. The Scheduled Monument is situated on private land with public access currently restricted to organised tours and open days, which are run by local interest groups and facilitated by the current landowners. The site was removed from Historic England's 'Heritage at Risk Register' in 2021 following a programme of repair and restoration that conserved the command building and eastern most gun emplacement (Historic England 2025). However, significant portions of the HAA gunsite are in need of further conservation work.

223. These elements of the proposed works are enhancements that the Projects may consider as a good developer and as encouraged by NPS EN-1 Section 5.9.13, rather than mitigation required to offset impacts. Some proposals may be outside the control of the Projects, but the applicants intend to explore their feasibility in consultation with Historic England, HAP and the relevant landowner(s) and occupiers as appropriate.

224. Following discussions with Historic England, specific opportunities for enhancement at the HAA gunsite have been identified. The options discussed are outlined below and aim to explore the ways in which value can be added to specific elements of the historical and archaeological interest of the site.

Physical Enhancements

225. This option would involve the Applicants funding further clearance, consolidation and/or restoration works of elements of the HAA gunsite which are currently in disrepair/buried. The work could range from regular upkeep and maintenance of the site (i.e. vegetation clearance) to further conservation of the three remaining 1941 emplacements or additional investigation and debris clearance around the sites of the two 1943-gun emplacements.

226. The physical enhancement works could be integrated into existing tours and annual heritage events / open days held at the site. Additionally, these efforts could involve local interest groups/volunteers and a heritage craft skills programme.

227. Key considerations and constraints for this option include:

- As the site is located on private land, agreements with the landowners and any tenant would be required.
- Agreement would need to be reached with ERYC (HAP) and Historic England on how to secure the work and the mechanism for funding.
- Physical works would require application for Scheduled Monument Consent (SMC) to Historic England.
- While the works could be integrated into current annual heritage events and open days held at the site, public access/experience of the asset are dependent on private access agreements, which are beyond the control of the Projects and Historic England.

Digital 3D Model

228. This option would seek to create a digital reconstruction of the HAA gunsite, including the 1943-gun emplacements, radar mat and associated accommodation on the domestic site. Once constructed the model would afford viewers further contextualisation of the relationship between the HAA gunsite, Butt Farm and the no longer extant associated miliary infrastructure withing the historical limits of the site.

229. The model could present opportunities to produce visualisations of the site's phasing, to understand the HAA gunsite's development over time, from the introduction of radar in 1940 to its post-WWII role as part of the Nucleus Force.

230. There are options to signposting the model on information boards from PRoW and/or Project-controlled land and opportunities for incorporation into augmented reality / virtual tours once the model is constructed. There are options to tie this into wider themes of the defence of Hull in WWII, and how the site fits into a wider network, along with specific questions in the Projects' Research Agenda (Section 6).

231. Key considerations and constraints for the development of this option include:

- Agreements would be required on where the platform is hosted and the lifecycle of funding and maintenance.
- Access would need to be agreed for the initial survey of the HAA gunsite.
- Apart from the initial survey the production of the 3D model could be undertaken without direct access to the Scheduled Monument
- Once completed and hosted on an online platform, the 3D model would significantly enhance public engagement and experience of the Scheduled Monument, above what is currently possible through private tours and heritage open days. This would include allowing those who would not be able to physically access the site to engage with it virtually.

Archaeological and Historical Research

232. This option would involve research ideas suggested by Historic England for community engagement concerning the wider context of the gun site such as around the women's quarters, missing buildings, moved buildings and the wider WWII defence context.

233. The Projects could offer coordination, funding and/or specialist input for a community led volunteer scheme. This initiative would provide opportunities for interest groups and volunteers to conduct archaeological and historical research on topics that matter to them, guided by key themes from the Projects' Research agenda and the findings of further archaeological surveys both onshore and offshore.

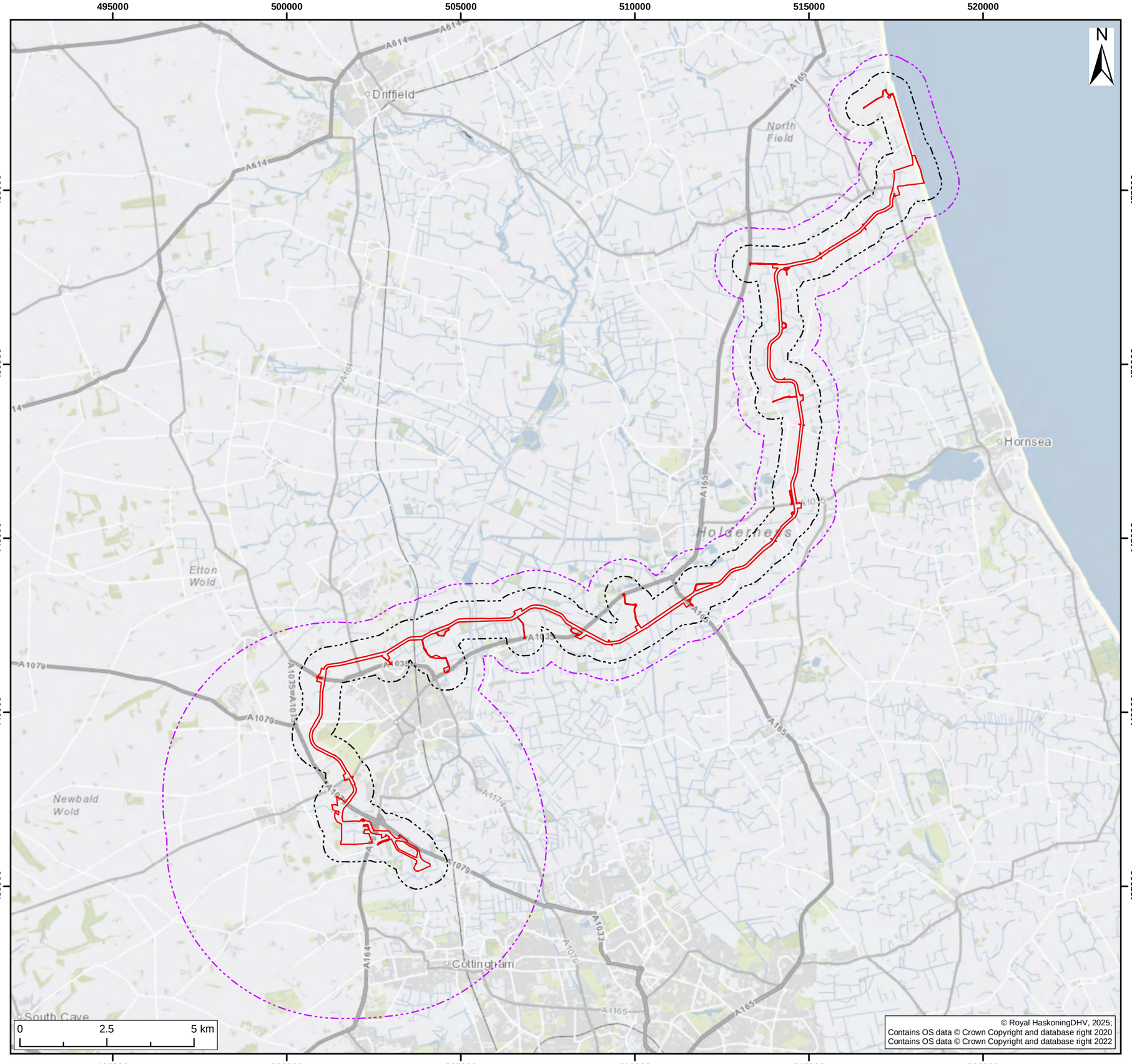
234. Key considerations and constraints for this option include:

- Documentary research would be independent of access to site as the work would involve online, archive, library and oral history research.
- The duration, mechanism and level of support provided by the Projects over the course of the community led archaeological and historical research programme would need to be defined and agreed.
- There would be opportunities to expand this option out from specifically the HAA gunsite to other key themes across both the Onshore and Offshore Development Areas included but not limited to:
    - Prehistoric deposit sequences;
    - Intertidal Archaeology such as Iron Age to Romano British finds/ Medieval & Post-Medieval lost villages / WWII Defences; and
    - WWII wrecks further offshore

Cross Project Collaboration

235. The Projects are happy to participate in attendance at cross project working groups constituted by Historic England for the purpose of coordinating outreach works.

Figures 1-5



Legend:

- Onshore Development Area
- Non-designated Heritage Asset Study Area
- Designated Heritage Asset Study Area

SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR
S3	P02	25/04/2025	Suitable for review & comment	SM	ND	MJ
S2	P01	01/02/2024	Suitable for Information	JH	SB	MJ

Title:

Onshore Archaeology and Cultural Heritage Study Areas

Figure: 1

Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0707

Co-ordinate system: British National Grid

Page Size: A3

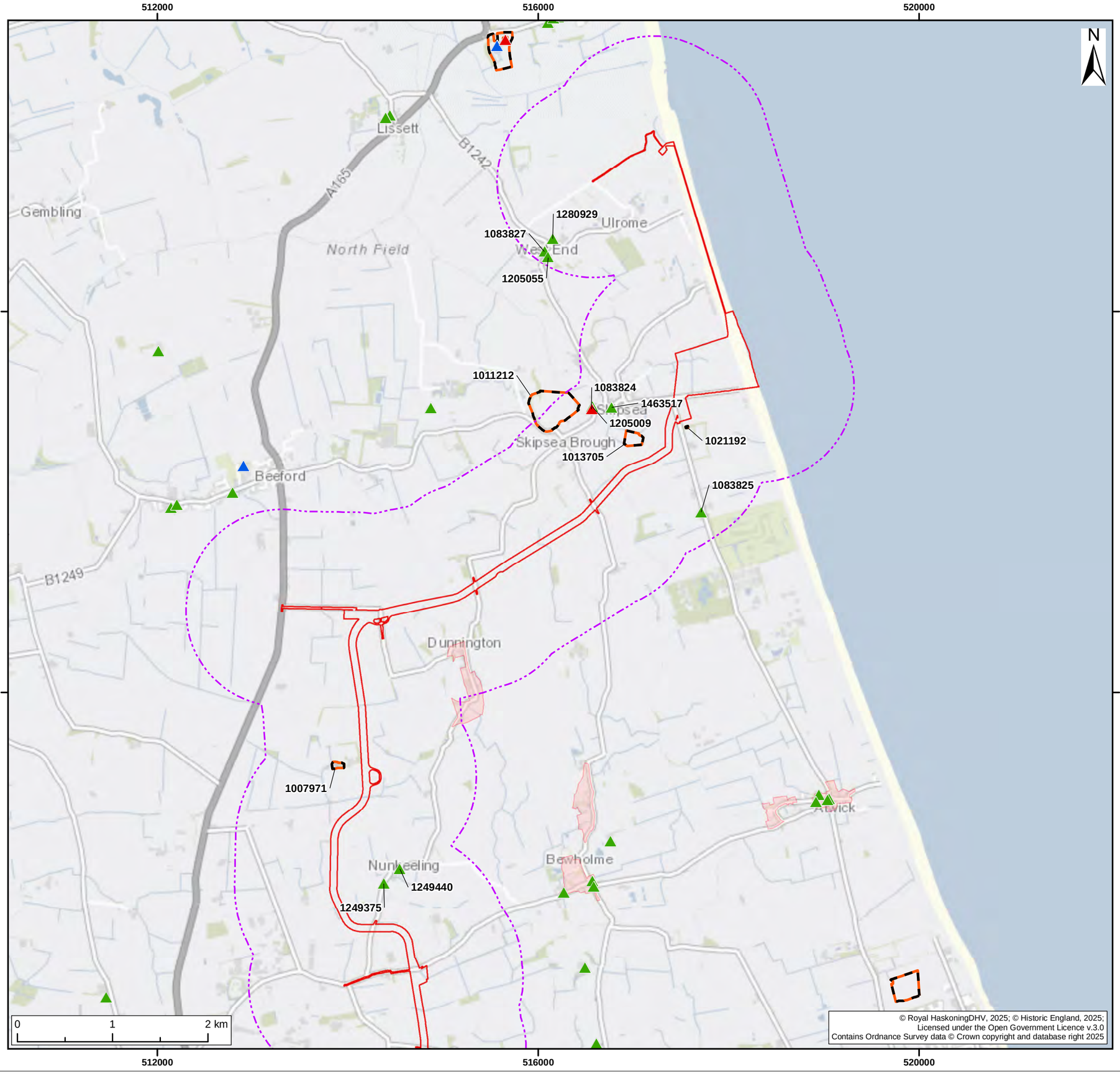
Scale: 1:110,000

Project: Dogger Bank South Offshore Wind Farms

Report: Environmental Statement

Royal HaskoningDHV
Enhancing Society Together

RWE



Legend:

- Onshore Development Area
- Designated Heritage Asset Study Area
- Scheduled Monuments
- Registered Parks and Gardens
- Conservation Areas

Listed Building Grade

- I
- II*
- II

S3	P02	25/04/2025	Suitable for review & comment	SM	ND	MJ
S2	P01	01/02/2024	Suitable for Information	JH	SB	MJ
SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR

Title:

Location of the Designated Heritage Assets within Study Area

Figure: 2a

Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0708

Co-ordinate system: British National Grid

Page Size: A3

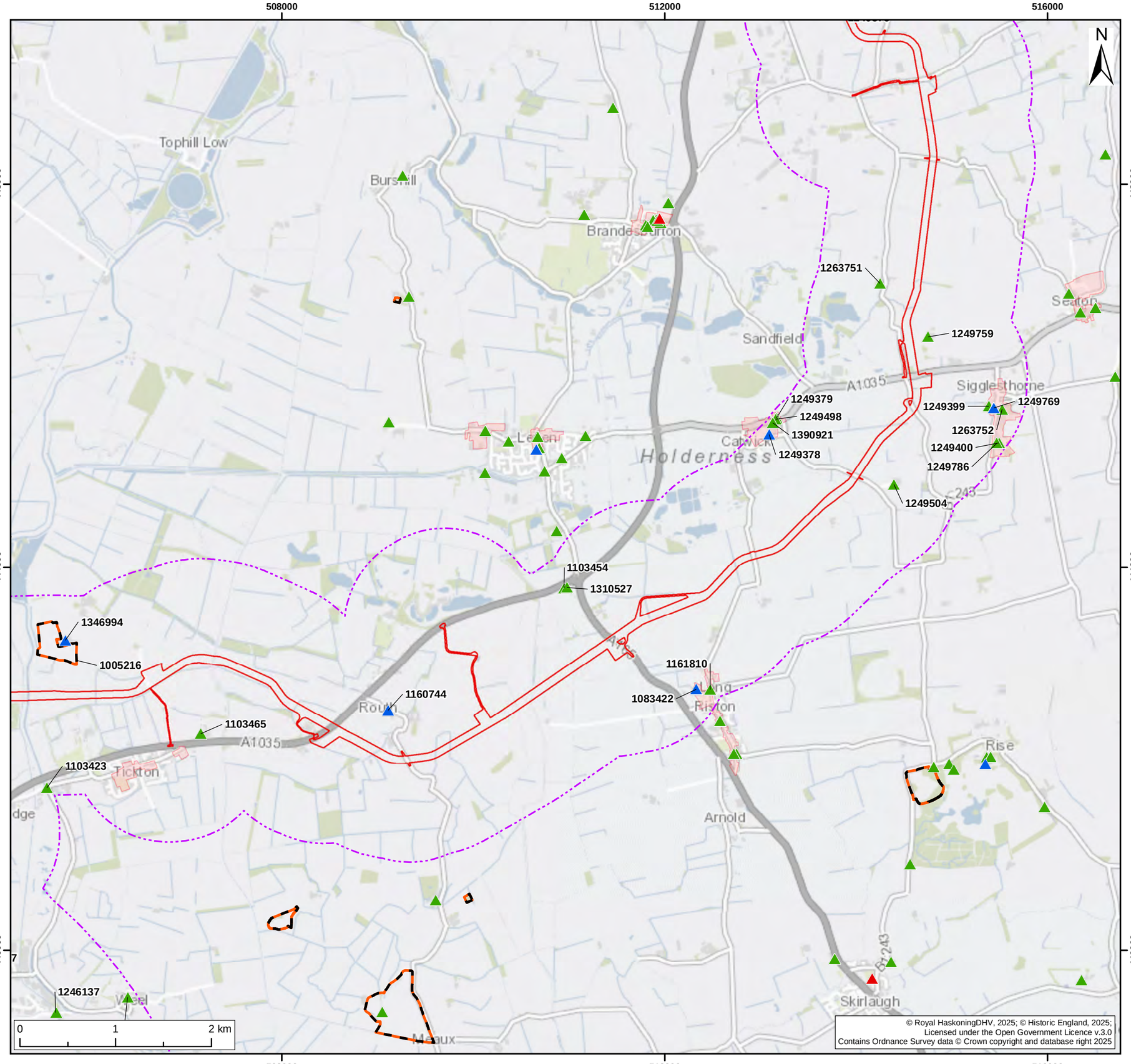
Scale: 1:40,000

Project: Dogger Bank South Offshore Wind Farms

Report: Environmental Statement

Royal HaskoningDHV
Enhancing Society Together

RWE



Legend:

- Onshore Development Area
- Designated Heritage Asset Study Area
- Scheduled Monuments
- Registered Parks and Gardens
- Conservation Areas

Listed Building Grade

- I
- II*
- II

S3	P02	25/04/2025	Suitable for review & comment	SM	ND	MJ
S2	P01	01/02/2024	Suitable for Information	JH	SB	MJ
SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR

Title:

Location of the Designated Heritage Assets within Study Area

Figure: 2b

Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0708

Co-ordinate system: British National Grid

Page Size: A3

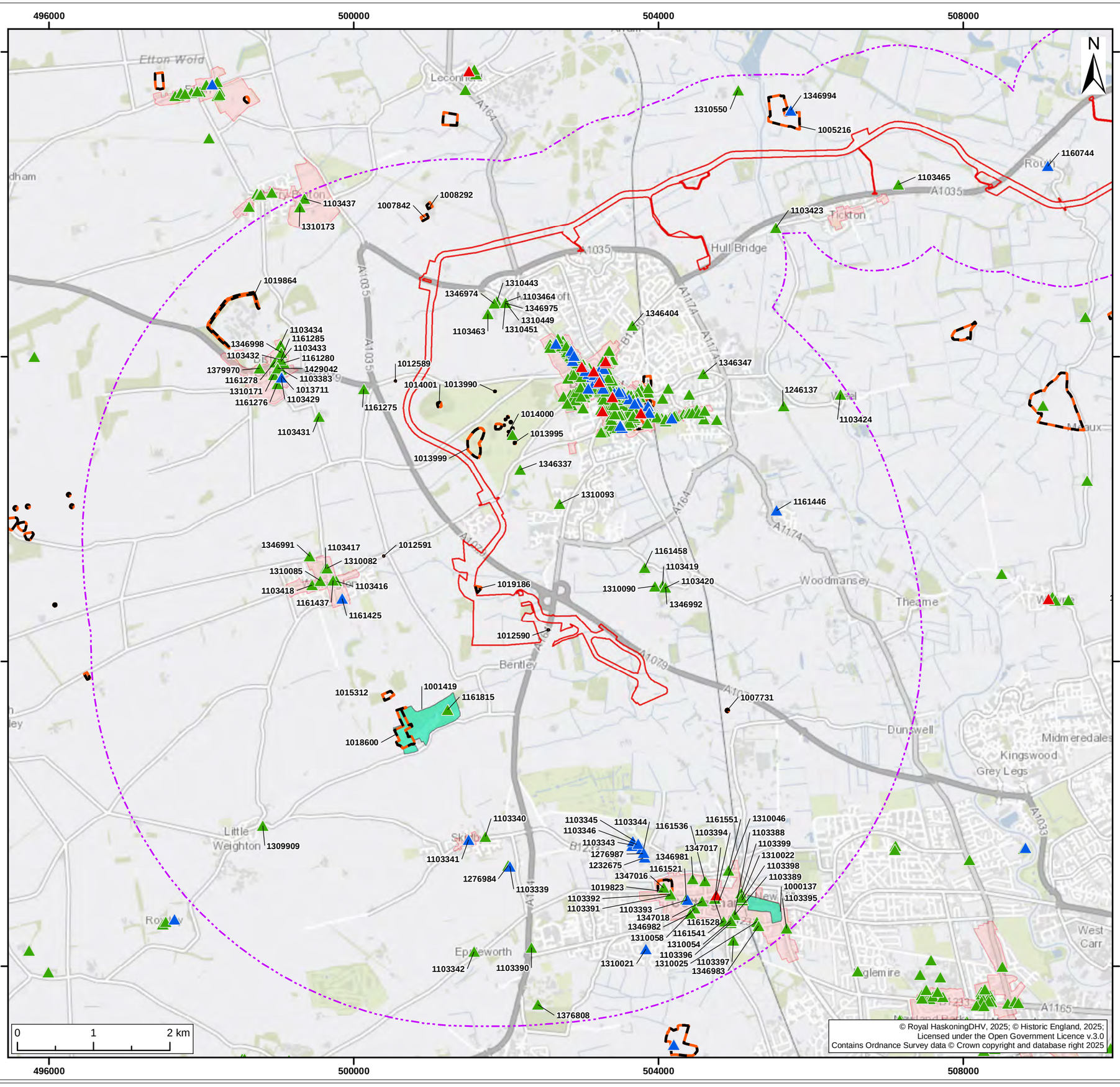
Scale: 1:40,000

Project: Dogger Bank South Offshore Wind Farms

Report: Environmental Statement

Royal HaskoningDHV
Enhancing Society Together

RWE



Legend:

- Onshore Development Area
- Designated Heritage Asset Study Area
- Scheduled Monuments
- Registered Parks and Gardens
- Conservation Areas

Listed Building Grade

- I
- II*
- II

S3	P02	25/04/2025	Suitable for review & comment	SM	ND	MJ
S2	P01	01/02/2024	Suitable for Information	JH	SB	MJ
SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR

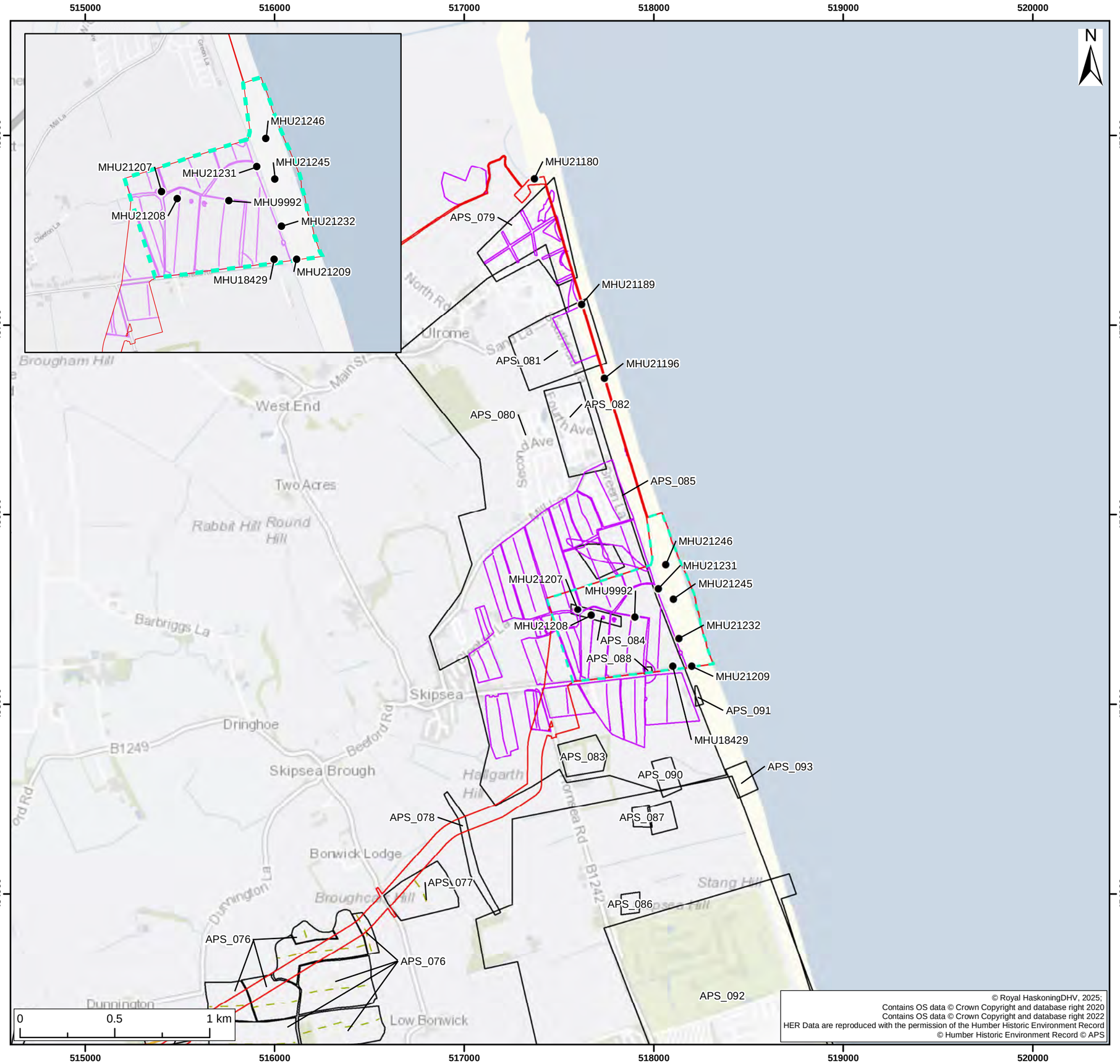
Title:

Location of the Designated Heritage Assets within Study Area

Figure: 2c	Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0708	
Co-ordinate system: British National Grid	Page Size: A3	Scale: 1:50,000
Project: Dogger Bank South Offshore Wind Farms	Report: Environmental Statement	

Royal HaskoningDHV
Enhancing Society Together

RWE



Legend:

- Onshore Development Area
- Landfall Location
- Substation Zone
- HER Monument Line
- HER Monument Point
- NMP Data
- APS Site

APS Detailed Mapping

- Airfield
- Ditch
- Enclosure
- Field Boundary
- Ring Ditch
- Sand Pit
- Structure
- Trackway
- Ridge and Furrow

SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR
S3	P02	25/04/2025	Suitable for review & comment	SM	ND	MJ
S2	P01	01/02/2024	Suitable for Information	JH	SB	MJ

Title:

Location of Known non-Designated Assets Located within the Onshore Development Boundary

Figure: 3a

Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0709

Co-ordinate system: British National Grid

Page Size: A3

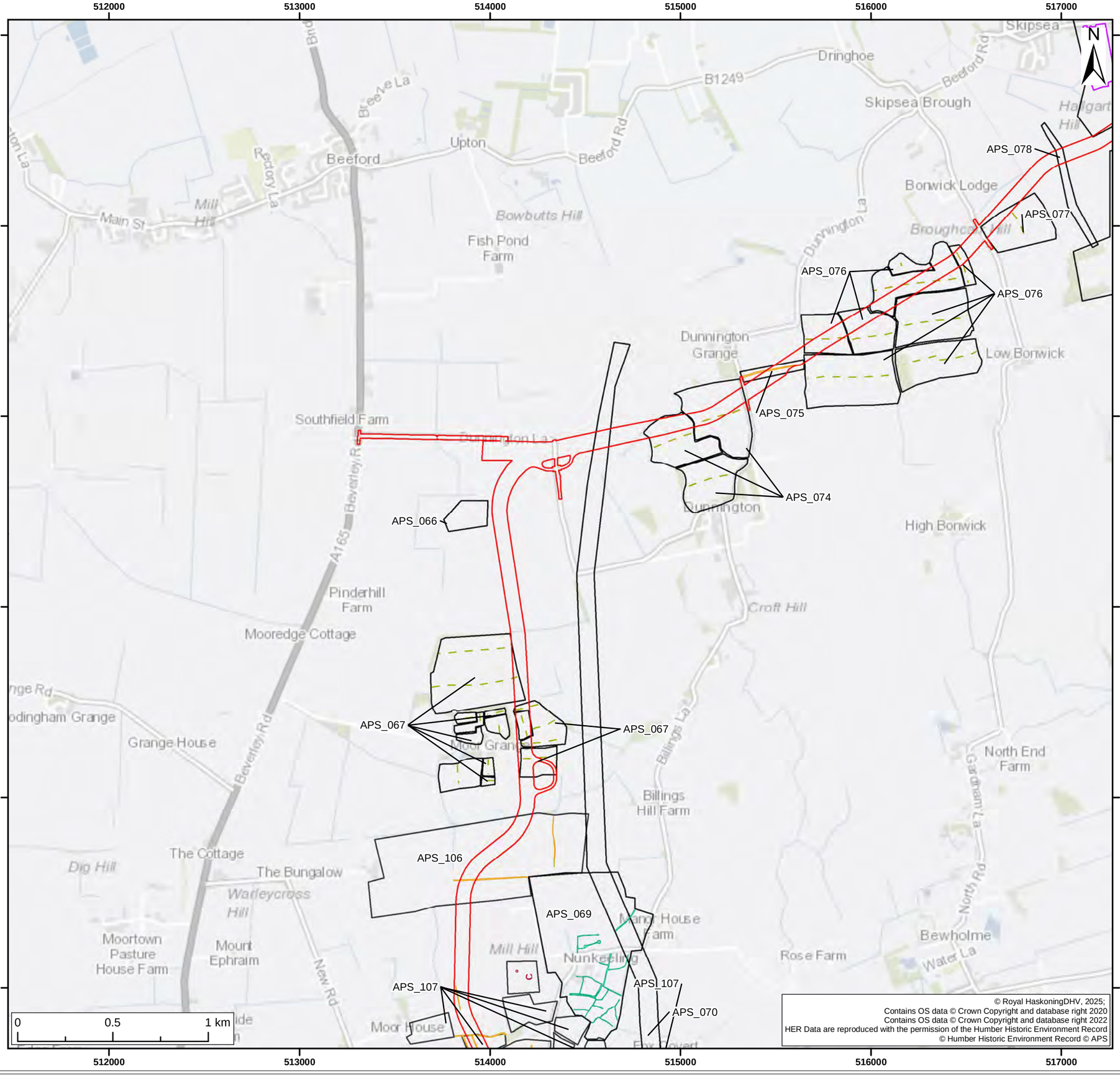
Scale: 1:20,000

Project: Dogger Bank South Offshore Wind Farms

Report: Environmental Statement

Royal HaskoningDHV
Enhancing Society Together

RWE



Legend:

- Onshore Development Area
- Landfall Location
- Substation Zone
- HER Monument Line
- HER Monument Point
- NMP Data
- APS Site

APS Detailed Mapping

- Airfield
- Ditch
- Enclosure
- Field Boundary
- Ring Ditch
- Sand Pit
- Structure
- Trackway
- Ridge and Furrow

SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR
S3	P02	25/04/2025	Suitable for review & comment	SM	ND	MJ
S2	P01	01/02/2024	Suitable for Information	JH	SB	MJ

Title:

Location of Known non-Designated Assets Located within the Onshore Development Boundary

Figure: 3b

Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0709

Co-ordinate system: British National Grid

Page Size: A3

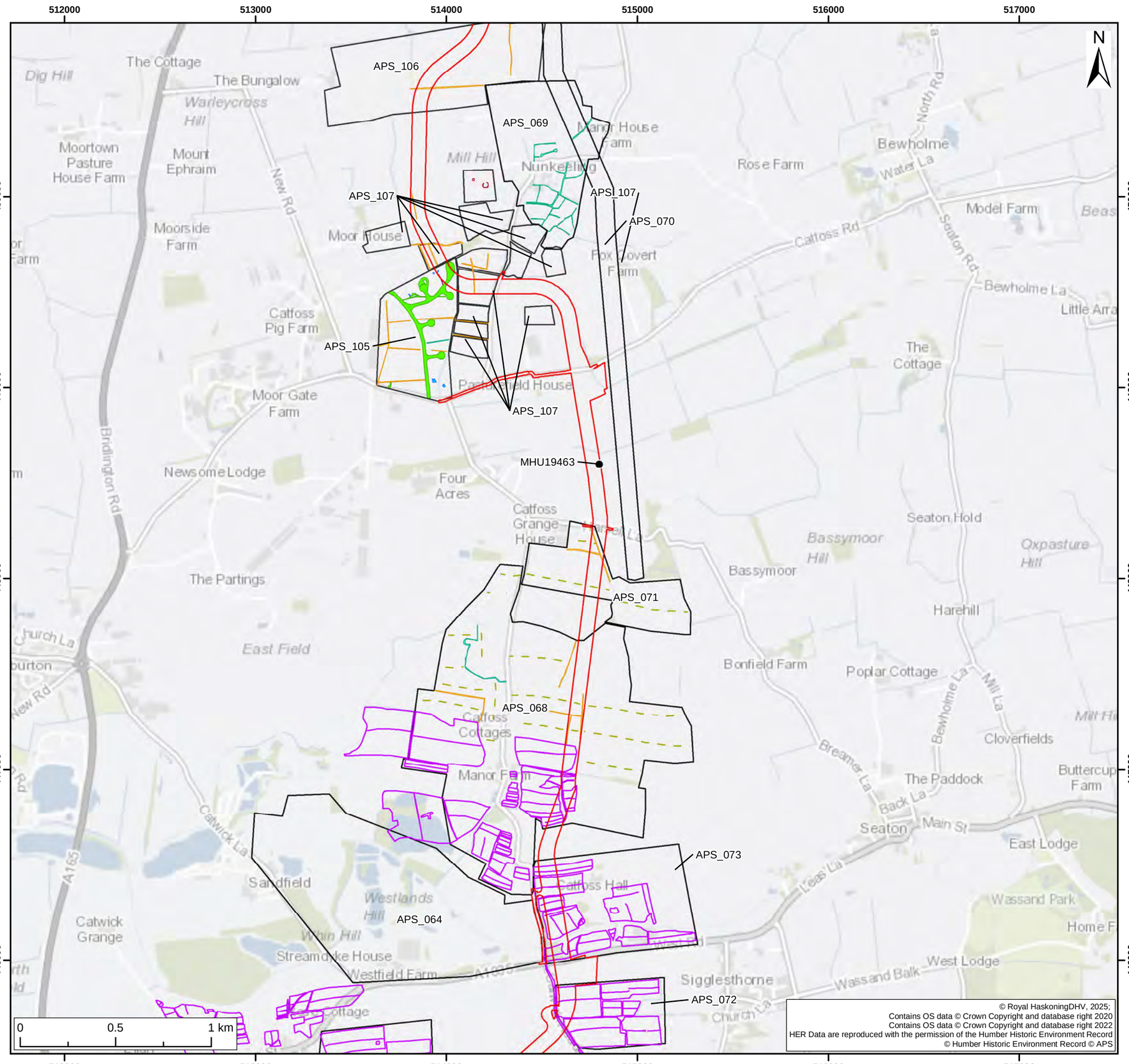
Scale: 1:20,000

Project: Dogger Bank South Offshore Wind Farms

Report: Environmental Statement

Royal HaskoningDHV
Enhancing Society Together

RWE



Legend:

- Onshore Development Area
- Landfall Location
- Substation Zone
- HER Monument Line
- HER Monument Point
- NMP Data
- APS Site

APS Detailed Mapping

- Airfield
- Ditch
- Enclosure
- Field Boundary
- Ring Ditch
- Sand Pit
- Structure
- Trackway
- Ridge and Furrow

S3	P02	25/04/2025	Suitable for review & comment	SM	ND	MJ
S2	P01	01/02/2024	Suitable for Information	JH	SB	MJ
SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR

Title:

Location of Known non-Designated Assets Located within the Onshore Development Boundary

Figure: 3c

Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0709

Co-ordinate system: British National Grid

Page Size: A3

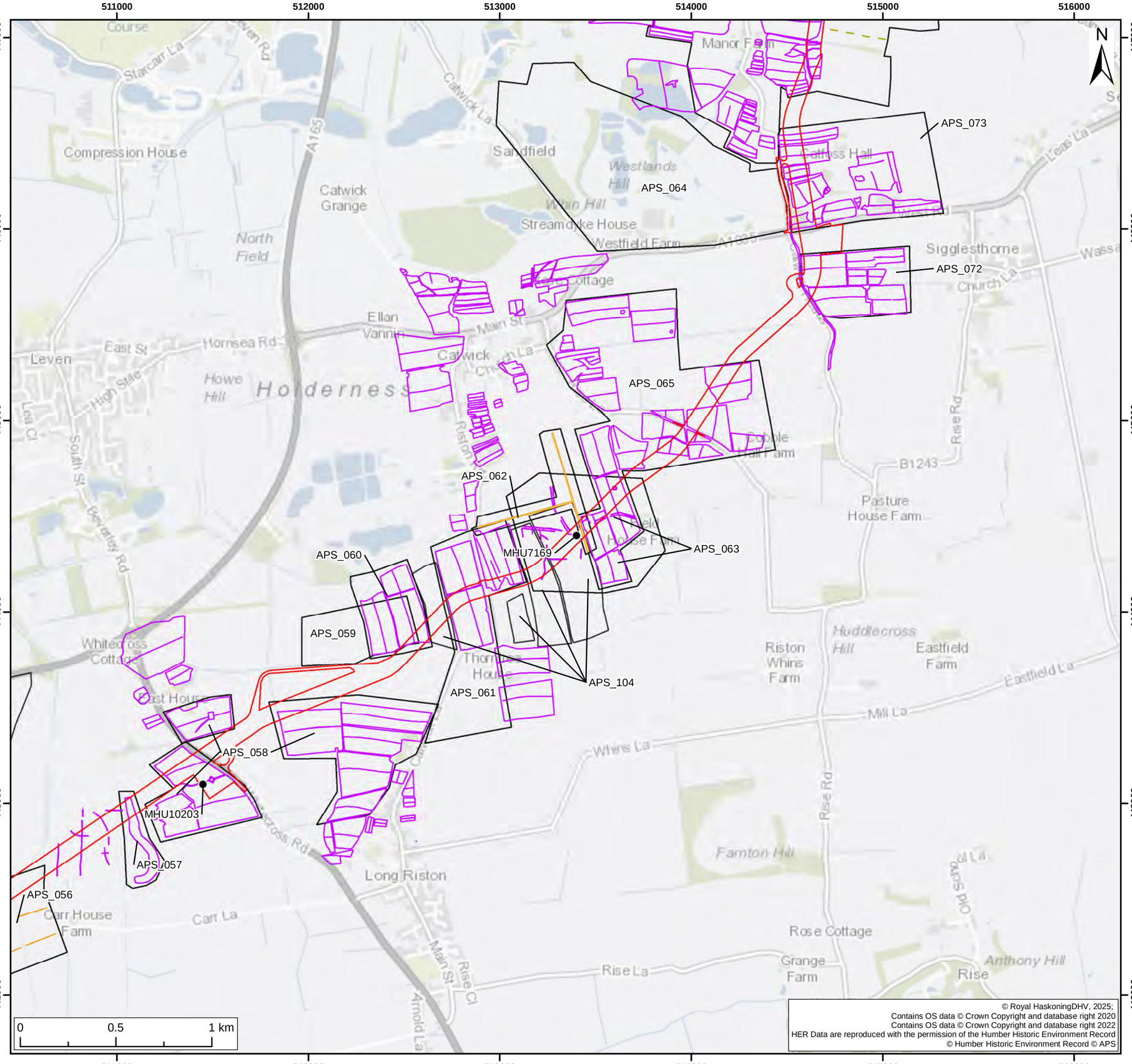
Scale: 1:20,000

Project: Dogger Bank South Offshore Wind Farms

Report: Environmental Statement

Royal HaskoningDHV
Enhancing Society Together

RWE



Legend:

- Onshore Development Area
- Landfall Location
- Substation Zone
- HER Monument Line
- HER Monument Point
- NMP Data
- APS Site

APS Detailed Mapping

- Airfield
- Ditch
- Enclosure
- Field Boundary
- Ring Ditch
- Sand Pit
- Structure
- Trackway
- Ridge and Furrow

SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR
S3	P02	25/04/2025	Suitable for review & comment	SM	ND	MJ
S2	P01	01/02/2024	Suitable for Information	JH	SB	MJ

Title:

Location of Known non-Designated Assets Located within the Onshore Development Boundary

Figure: 3d

Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0709

Co-ordinate system: British National Grid

Page Size: A3

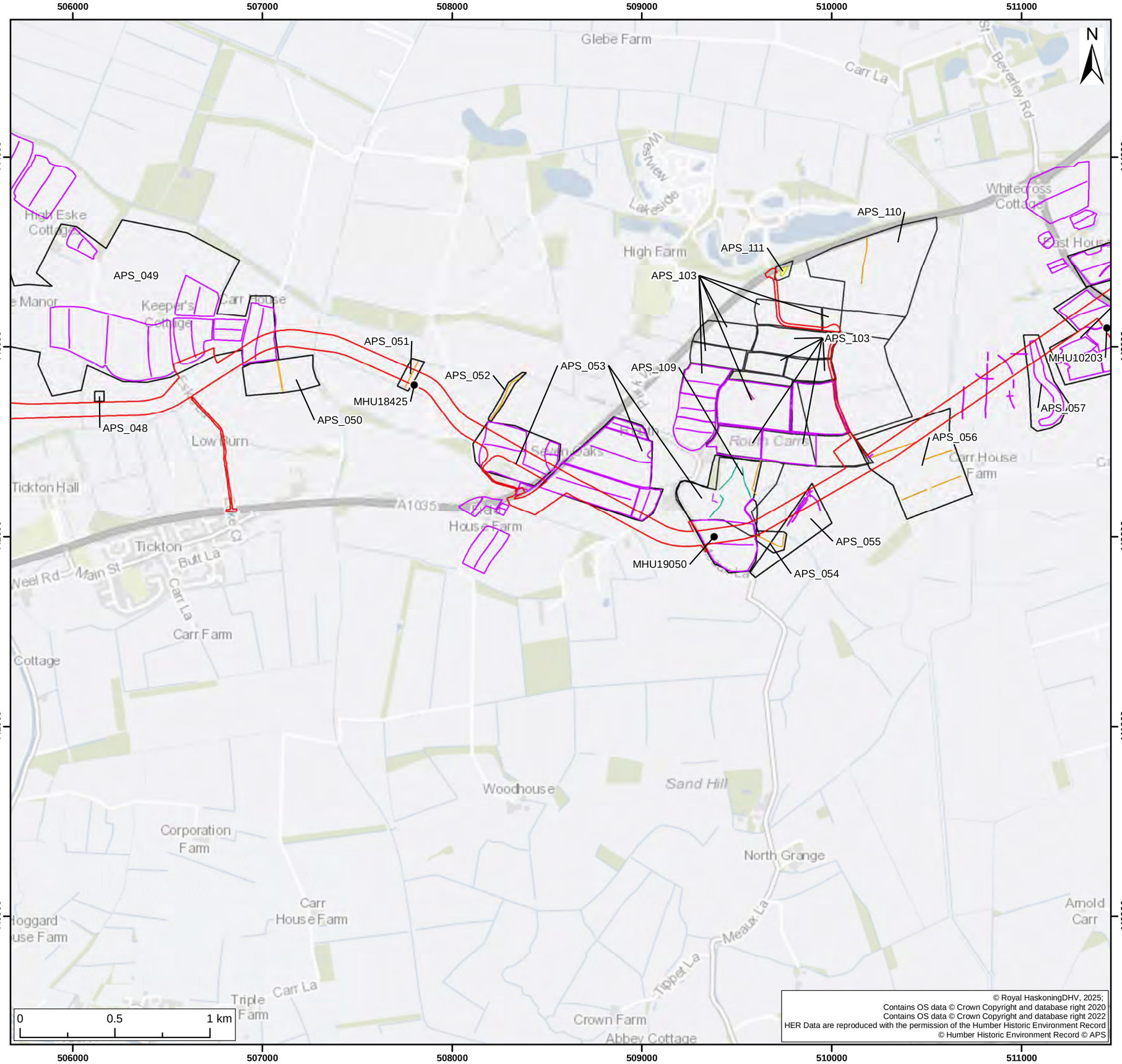
Scale: 1:20,000

Project: Dogger Bank South Offshore Wind Farms

Report: Environmental Statement

Royal HaskoningDHV
Enhancing Society Together

RWE



Legend:

- Onshore Development Area
- Landfall Location
- Substation Zone
- HER Monument Line
- HER Monument Point
- NMP Data
- APS Site

APS Detailed Mapping

- Airfield
- Ditch
- Enclosure
- Field Boundary
- Ring Ditch
- Sand Pit
- Structure
- Trackway
- Ridge and Furrow

SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR
S3	P02	25/04/2025	Suitable for review & comment	SM	ND	MJ
S2	P01	01/02/2024	Suitable for Information	JH	SB	MJ

Title:

Location of Known non-Designated Assets Located within the Onshore Development Boundary

Figure: 3e

Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0709

Co-ordinate system: British National Grid

Page Size: A3

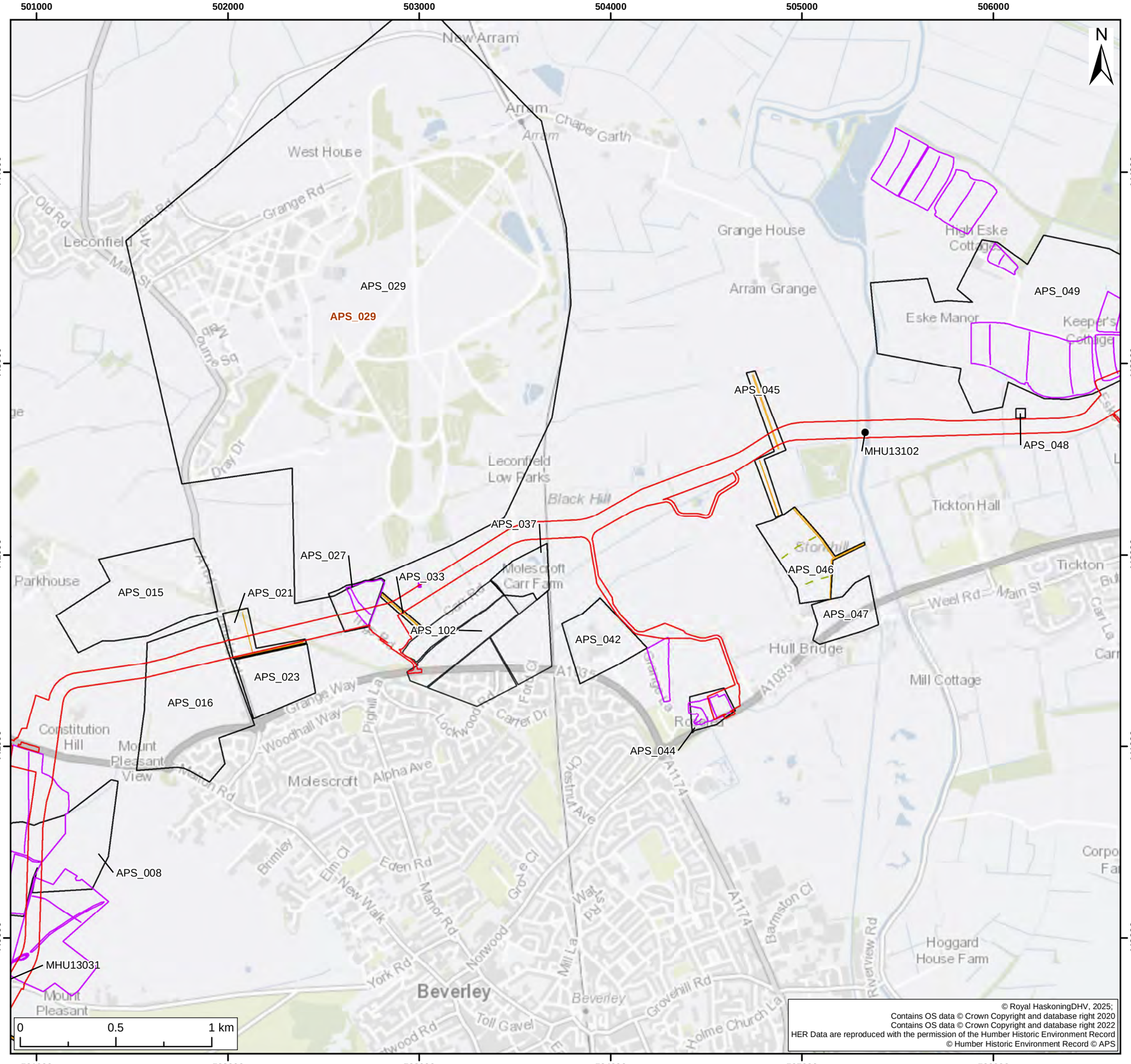
Scale: 1:20,000

Project: Dogger Bank South Offshore Wind Farms

Report: Environmental Statement

Royal HaskoningDHV
Enhancing Society Together

RWE



Legend:

- Onshore Development Area
- Landfall Location
- Substation Zone
- HER Monument Line
- HER Monument Point
- NMP Data
- APS Site

APS Detailed Mapping

- Airfield
- Ditch
- Enclosure
- Field Boundary
- Ring Ditch
- Sand Pit
- Structure
- Trackway
- Ridge and Furrow

SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR
S3	P02	25/04/2025	Suitable for review & comment	SM	ND	MJ
S2	P01	01/02/2024	Suitable for Information	JH	SB	MJ

Title:

Location of Known non-Designated Assets Located within the Onshore Development Boundary

Figure: 3f

Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0709

Co-ordinate system: British National Grid

Page Size: A3

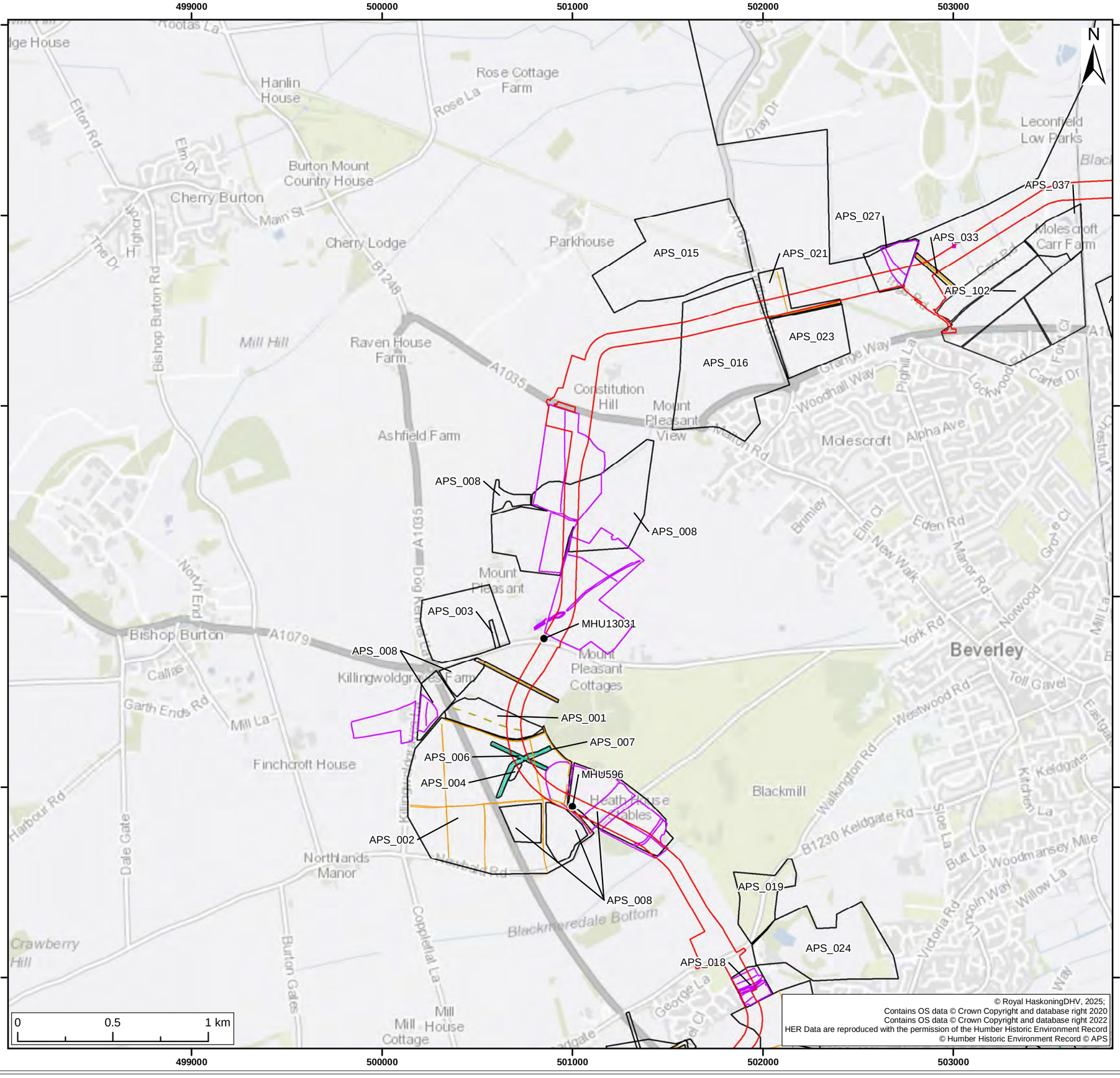
Scale: 1:20,000

Project: Dogger Bank South Offshore Wind Farms

Report: Environmental Statement

Royal HaskoningDHV
Enhancing Society Together

RWE



Legend:

- Onshore Development Area
- Landfall Location
- Substation Zone
- HER Monument Line
- HER Monument Point
- NMP Data
- APS Site

APS Detailed Mapping

- Airfield
- Ditch
- Enclosure
- Field Boundary
- Ring Ditch
- Sand Pit
- Structure
- Trackway
- Ridge and Furrow

S3	P02	25/04/2025	Suitable for review & comment	SM	ND	MJ
S2	P01	01/02/2024	Suitable for Information	JH	SB	MJ
SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR

Title:

Location of Known non-Designated Assets Located within the Onshore Development Boundary

Figure: 3g

Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0709

Co-ordinate system: British National Grid

Page Size: A3

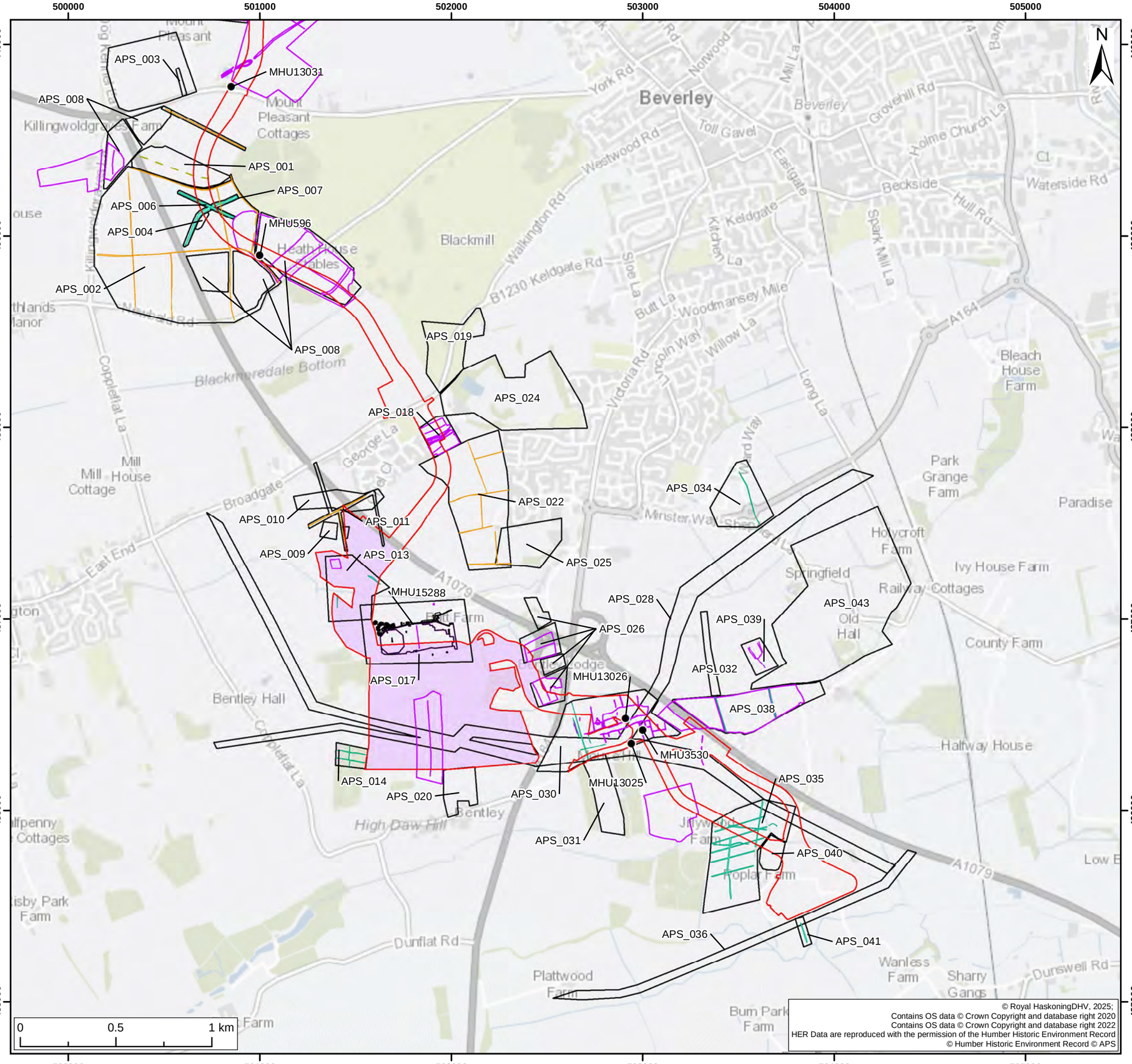
Scale: 1:20,000

Project: Dogger Bank South Offshore Wind Farms

Report: Environmental Statement

Royal HaskoningDHV
Enhancing Society Together

RWE



Legend:

- Onshore Development Area
- Landfall Location
- Substation Zone
- HER Monument Line
- HER Monument Point
- NMP Data
- APS Site

APS Detailed Mapping

- Airfield
- Ditch
- Enclosure
- Field Boundary
- Ring Ditch
- Sand Pit
- Structure
- Trackway
- Ridge and Furrow

S3	P02	25/04/2025	Suitable for review & comment	SM	ND	MJ
S2	P01	01/02/2024	Suitable for Information	JH	SB	MJ
SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR

Title:

Location of Known non-Designated Assets Located within the Onshore Development Boundary

Figure: 3h

Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0709

Co-ordinate system: British National Grid

Page Size: A3

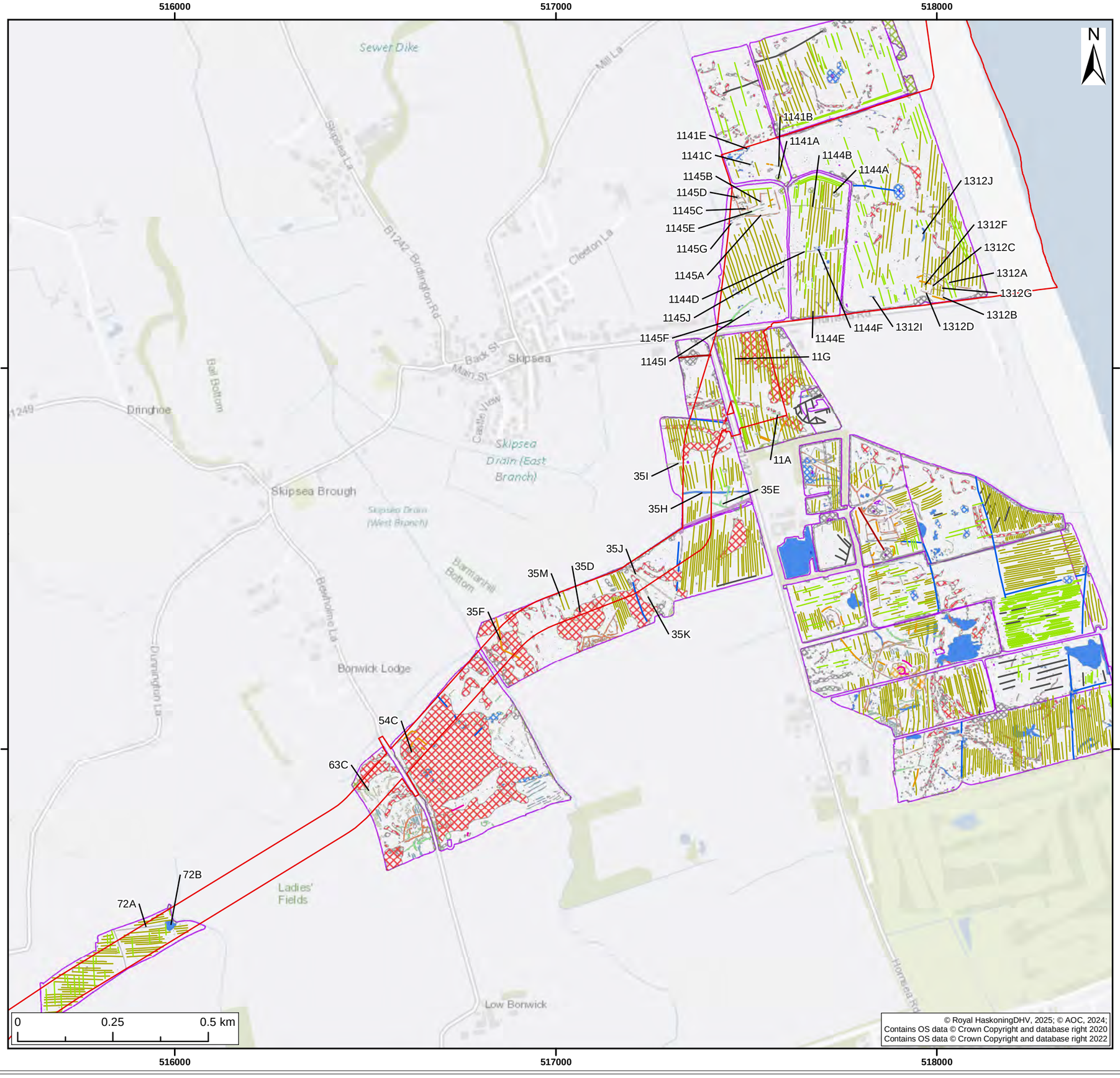
Scale: 1:20,000

Project: Dogger Bank South Offshore Wind Farms

Report: Environmental Statement

Royal HaskoningDHV
Enhancing Society Together

RWE



Legend:

- Onshore Development Area
- Survey Extents

Geophysical Survey Interpretation Line

- Trend (Drain)
- Trend (Historic)
- Trend (Plough)
- Trend (Poss Arch)
- Trend (Probable Archaeology)
- Trend (Ridge and Furrow)
- Trend (Service)

Geophysical Survey Interpretation Polygon

- Anomaly (Agricultural)
- Anomaly (Geology)
- Anomaly (Historic)
- Spread (Unclear Origin)
- Anomaly (Probable Archaeology)
- Anomaly (Ferrous / Iron Spike)
- Anomaly (Unclear)
- Spread (Agricultural)
- Spread (Ferrous/Iron Spike)
- Spread (Geology)
- Spread (Historic)
- Spread (Mag Disturbance)
- Spread (Possible Archaeology)
- Spread (Probable Archaeology)
- Anomaly (Possible Archaeology)

Note: Please see the full coverage Geophysical Assessment Report: AS -029 to AS-035 for detailed geophysical survey figures

S3	P02	25/04/2025	Suitable for review & comment	SM	ND	MJ
S2	P01	01/02/2024	Suitable for Information	JH	SB	MJ
SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR

Title:

Summary of Geophysical Survey Data

Figure: 4a

Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0710

Co-ordinate system: British National Grid

Page Size: A3

Scale: 1:10,000

Project: Dogger Bank South Offshore Wind Farms

Report: Environmental Statement

Royal HaskoningDHV
Enhancing Society Together

RWE

514000 515000

454000 453000 452000

N

Beeford
B1249
Skipsea Rd
Beeford Rd
Ashleigh Dr
Beverley Rd
Fish Pond Farm
Dunnington Grange
Dunnington La
72A
79B
81C
Southfield Farm
Dunnington La
Sewer
East Field
Dunnington
A165
Pinderhill Plantation
Pinderhill Farm
edge Cottage

0 0.25 0.5 km

Legend:

- Onshore Development Area
- Survey Extents

Geophysical Survey Interpretation Line

- Trend (Drain)
- Trend (Historic)
- Trend (Plough)
- Trend (Poss Arch)
- Trend (Probable Archaeology)
- Trend (Ridge and Furrow)
- Trend (Service)

Geophysical Survey Interpretation Polygon

- Anomaly (Agricultural)
- Anomaly (Geology)
- Anomaly (Historic)
- Spread (Unclear Origin)
- Anomaly (Probable Archaeology)
- Anomaly (Ferrous / Iron Spike)
- Anomaly (Unclear)
- Spread (Agricultural)
- Spread (Ferrous/Iron Spike)
- Spread (Geology)
- Spread (Historic)
- Spread (Mag Disturbance)
- Spread (Possible Archaeology)
- Spread (Probable Archaeology)
- Anomaly (Possible Archaeology)

Note: Please see the full coverage Geophysical Assessment Report: AS -029 to AS-035 for detailed geophysical survey figures

S3	P02	25/04/2025	Suitable for review & comment	SM	ND	MJ
S2	P01	01/02/2024	Suitable for Information	JH	SB	MJ
SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR

Title:

Summary of Geophysical Survey Data

Figure: 4b

Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0710

Co-ordinate system: British National Grid

Page Size: A3

Scale: 1:10,000

Project: Dogger Bank South Offshore Wind Farms

Report: Environmental Statement

Royal HaskoningDHV
Enhancing Society Together

RWE

514000
515000
452000
451000
450000
N
Pinderhill Farm
oredge Cottage
Moor Grange
Billings La
Moor Cottage Farm
ngalow
Rose Farm
New Rd
Moor House
Nunkeeling Drain
Cadoss Rd
1343A
138B
0
0.25
0.5 km

Legend:

- Onshore Development Area
- Survey Extents

Geophysical Survey Interpretation Line

- Trend (Drain)
- Trend (Historic)
- Trend (Plough)
- Trend (Poss Arch)
- Trend (Probable Archaeology)
- Trend (Ridge and Furrow)
- Trend (Service)

Geophysical Survey Interpretation Polygon

- Anomaly (Agricultural)
- Anomaly (Geology)
- Anomaly (Historic)
- Spread (Unclear Origin)
- Anomaly (Probable Archaeology)
- Anomaly (Ferrous / Iron Spike)
- Anomaly (Unclear)
- Spread (Agricultural)
- Spread (Ferrous/Iron Spike)
- Spread (Geology)
- Spread (Historic)
- Spread (Mag Disturbance)
- Spread (Possible Archaeology)
- Spread (Probable Archaeology)
- Anomaly (Possible Archaeology)

Note: Please see the full coverage Geophysical Assessment Report: AS -029 to AS-035 for detailed geophysical survey figures

SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR
S3	P02	25/04/2025	Suitable for review & comment	SM	ND	MJ
S2	P01	01/02/2024	Suitable for Information	JH	SB	MJ

Title:

Summary of Geophysical Survey Data

Figure: 4c

Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0710

Co-ordinate system: British National Grid

Page Size: A3

Scale: 1:10,000

Project: Dogger Bank South Offshore Wind Farms

Report: Environmental Statement

Royal HaskoningDHV
Enhancing Society Together

RWE

514000
515000
449000
448000
N
1343A
138B
140A
1241E
Catfoss Rd
Catfoss Pig Farm
Lord Mayor's Whins
Clubley's Mere Drain
Pasturefield House
Moor Gate Farm
Moor Plantation
Newsome Plantation
Four Acres
Remington Ave
Catfoss Grange House
Hasell La
Moor Main Drain
Catfoss Whin Covert
Bassymoor Plantation
Bassymoor
Bonfield Farm
Catfoss Cottages
0
0.25
0.5 km

Legend:

- Onshore Development Area
- Survey Extents

Geophysical Survey Interpretation Line

- Trend (Drain)
- Trend (Historic)
- Trend (Plough)
- Trend (Poss Arch)
- Trend (Probable Archaeology)
- Trend (Ridge and Furrow)
- Trend (Service)

Geophysical Survey Interpretation Polygon

- Anomaly (Agricultural)
- Anomaly (Geology)
- Anomaly (Historic)
- Spread (Unclear Origin)
- Anomaly (Probable Archaeology)
- Anomaly (Ferrous / Iron Spike)
- Anomaly (Unclear)
- Spread (Agricultural)
- Spread (Ferrous/Iron Spike)
- Spread (Geology)
- Spread (Historic)
- Spread (Mag Disturbance)
- Spread (Possible Archaeology)
- Spread (Probable Archaeology)
- Anomaly (Possible Archaeology)

Note: Please see the full coverage Geophysical Assessment Report: AS -029 to AS-035 for detailed geophysical survey figures

SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR
S3	P02	25/04/2025	Suitable for review & comment	SM	ND	MJ
S2	P01	01/02/2024	Suitable for Information	JH	SB	MJ

Title:

Summary of Geophysical Survey Data

Figure: 4d

Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0710

Co-ordinate system: British National Grid

Page Size: A3

Scale: 1:10,000

Project:

Dogger Bank South Offshore Wind Farms

Report:

Environmental Statement

Royal HaskoningDHV
Enhancing Society Together

RWE

513000 514000 515000

447000 446000 445000

N

Catfoss Cottages
Manor Farm
Stream Dyke
Westlands Pond
Sandfield
Catfoss Hall
The Parks
Streamdyke House
Westfield Farm
A1035
West Rd
Rose Cottage
Main St
Church La
Beck La
Rose La
Catwick
Catwick Heads
Sigglesthorne
Old La
Church La
Cobble Hall Farm
Catwick Heads

168C
176A
176C
185E
185C
185A
185D
185B
193A
200A
202A
1235C
1235A
1235D

0 0.25 0.5 km

Legend:

- Onshore Development Area
- Survey Extents

Geophysical Survey Interpretation Line

- Trend (Drain)
- Trend (Historic)
- Trend (Plough)
- Trend (Poss Arch)
- Trend (Probable Archaeology)
- Trend (Ridge and Furrow)
- Trend (Service)

Geophysical Survey Interpretation Polygon

- Anomaly (Agricultural)
- Anomaly (Geology)
- Anomaly (Historic)
- Spread (Unclear Origin)
- Anomaly (Probable Archaeology)
- Anomaly (Ferrous / Iron Spike)
- Anomaly (Unclear)
- Spread (Agricultural)
- Spread (Ferrous/Iron Spike)
- Spread (Geology)
- Spread (Historic)
- Spread (Mag Disturbance)
- Spread (Possible Archaeology)
- Spread (Probable Archaeology)
- Anomaly (Possible Archaeology)

Note: Please see the full coverage Geophysical Assessment Report: AS -029 to AS-035 for detailed geophysical survey figures

S3	P02	25/04/2025	Suitable for review & comment	SM	ND	MJ
S2	P01	01/02/2024	Suitable for Information	JH	SB	MJ
SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR

Title:

Summary of Geophysical Survey Data

Figure: 4e

Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0710

Co-ordinate system: British National Grid

Page Size: A3

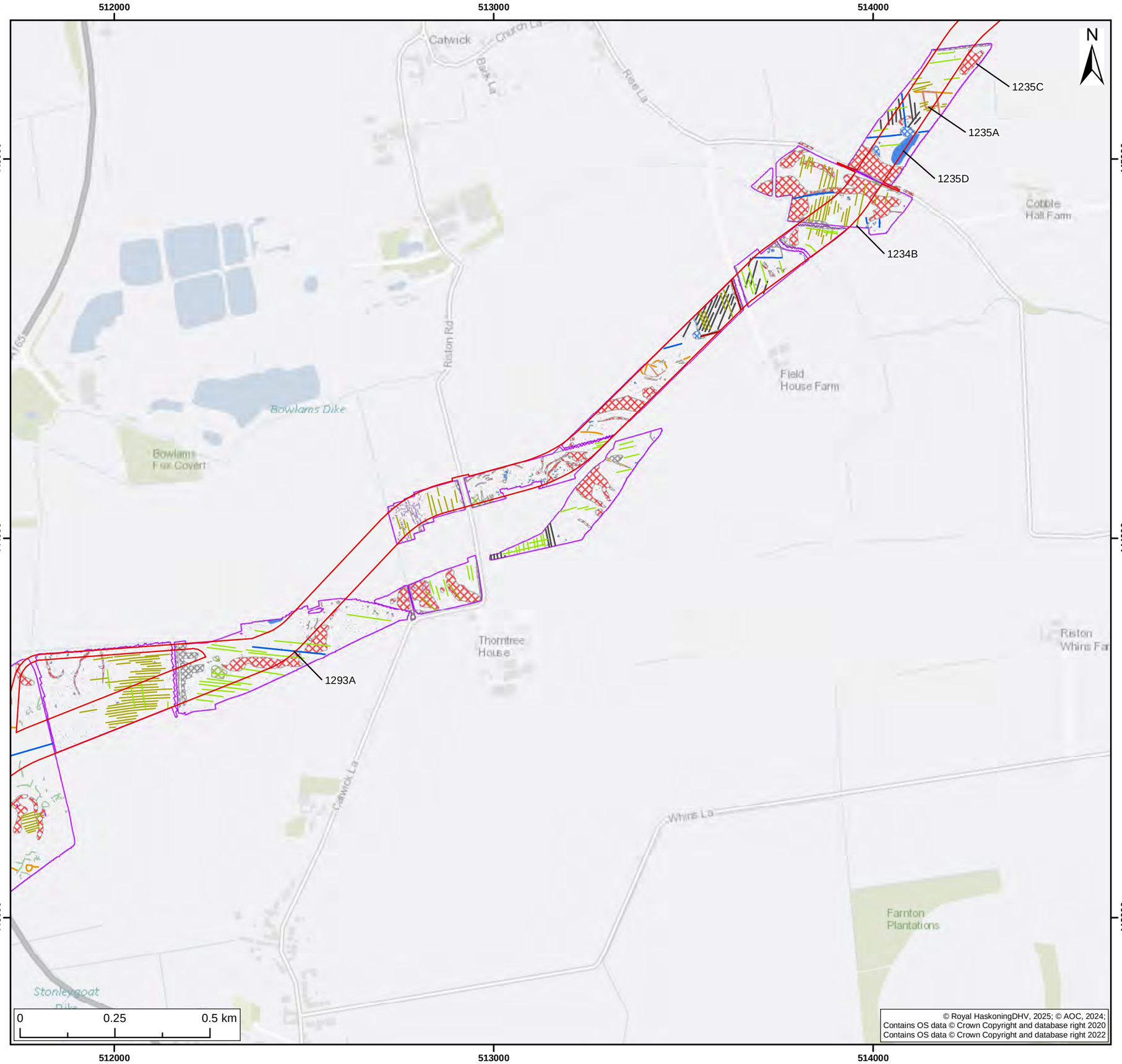
Scale: 1:10,000

Project: Dogger Bank South Offshore Wind Farms

Report: Environmental Statement

Royal HaskoningDHV
Enhancing Society Together

RWE



Legend:

- Onshore Development Area
- Survey Extents

Geophysical Survey Interpretation Line

- Trend (Drain)
- Trend (Historic)
- Trend (Plough)
- Trend (Poss Arch)
- Trend (Probable Archaeology)
- Trend (Ridge and Furrow)
- Trend (Service)

Geophysical Survey Interpretation Polygon

- Anomaly (Agricultural)
- Anomaly (Geology)
- Anomaly (Historic)
- Spread (Unclear Origin)
- Anomaly (Probable Archaeology)
- Anomaly (Ferrous / Iron Spike)
- Anomaly (Unclear)
- Spread (Agricultural)
- Spread (Ferrous/Iron Spike)
- Spread (Geology)
- Spread (Historic)
- Spread (Mag Disturbance)
- Spread (Possible Archaeology)
- Spread (Probable Archaeology)
- Anomaly (Possible Archaeology)

Note: Please see the full coverage Geophysical Assessment Report: AS -029 to AS-035 for detailed geophysical survey figures

S3	P02	25/04/2025	Suitable for review & comment	SM	ND	MJ
S2	P01	01/02/2024	Suitable for Information	JH	SB	MJ
SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR

Title:

Summary of Geophysical Survey Data

Figure: 4f

Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0710

Co-ordinate system: British National Grid

Page Size: A3

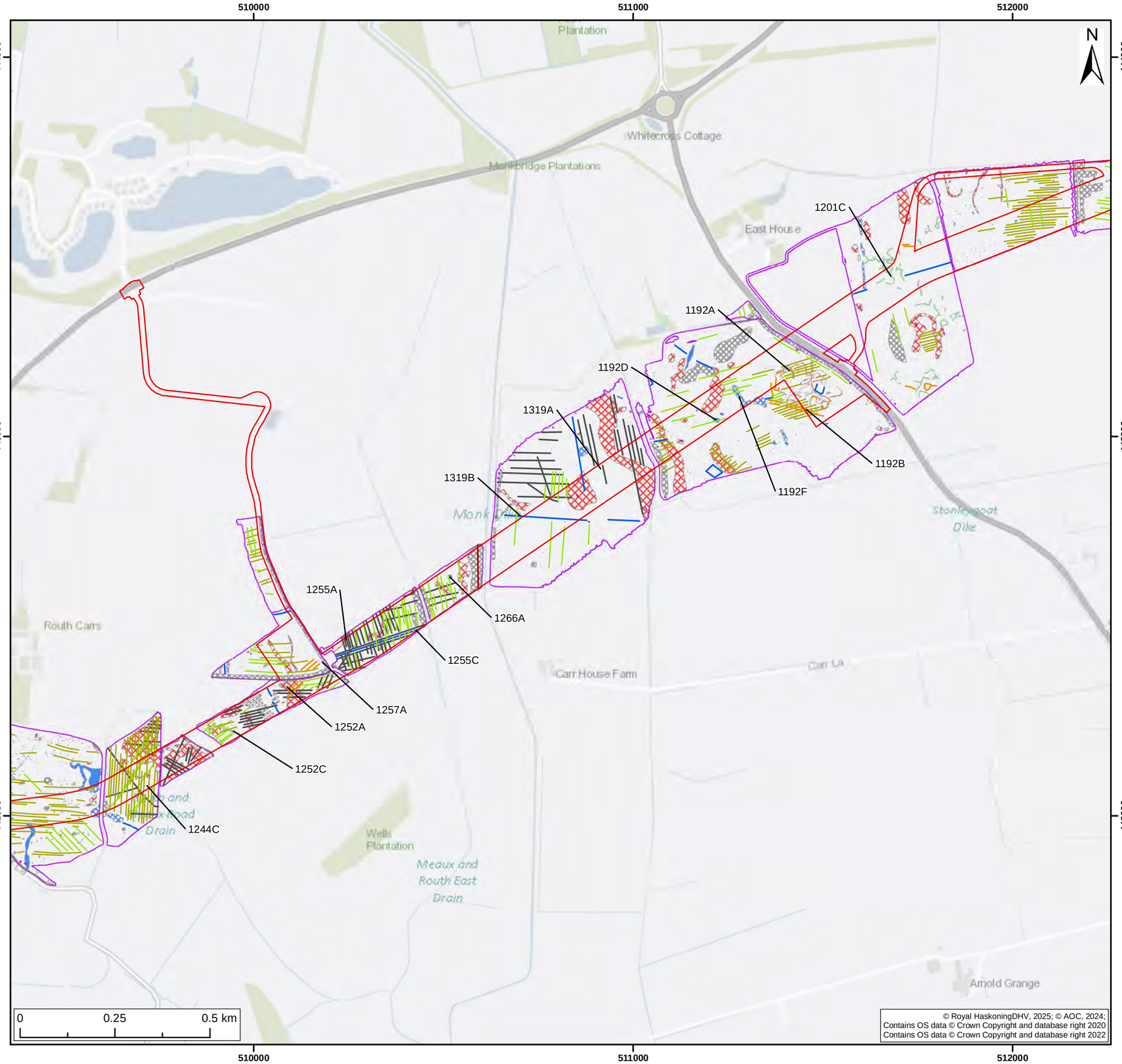
Scale: 1:10,000

Project: Dogger Bank South Offshore Wind Farms

Report: Environmental Statement

Royal HaskoningDHV
Enhancing Society Together

RWE



Legend:

- Onshore Development Area
- Survey Extents

Geophysical Survey Interpretation Line

- Trend (Drain)
- Trend (Historic)
- Trend (Plough)
- Trend (Poss Arch)
- Trend (Probable Archaeology)
- Trend (Ridge and Furrow)
- Trend (Service)

Geophysical Survey Interpretation Polygon

- Anomaly (Agricultural)
- Anomaly (Geology)
- Anomaly (Historic)
- Spread (Unclear Origin)
- Anomaly (Probable Archaeology)
- Anomaly (Ferrous / Iron Spike)
- Anomaly (Unclear)
- Spread (Agricultural)
- Spread (Ferrous/Iron Spike)
- Spread (Geology)
- Spread (Historic)
- Spread (Mag Disturbance)
- Spread (Possible Archaeology)
- Spread (Probable Archaeology)
- Anomaly (Possible Archaeology)

Note: Please see the full coverage Geophysical Assessment Report: AS -029 to AS-035 for detailed geophysical survey figures

SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR
S3	P02	25/04/2025	Suitable for review & comment	SM	ND	MJ
S2	P01	01/02/2024	Suitable for Information	JH	SB	MJ

Title:

Summary of Geophysical Survey Data

Figure: 4g

Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0710

Co-ordinate system: British National Grid

Page Size: A3

Scale: 1:10,000

Project:

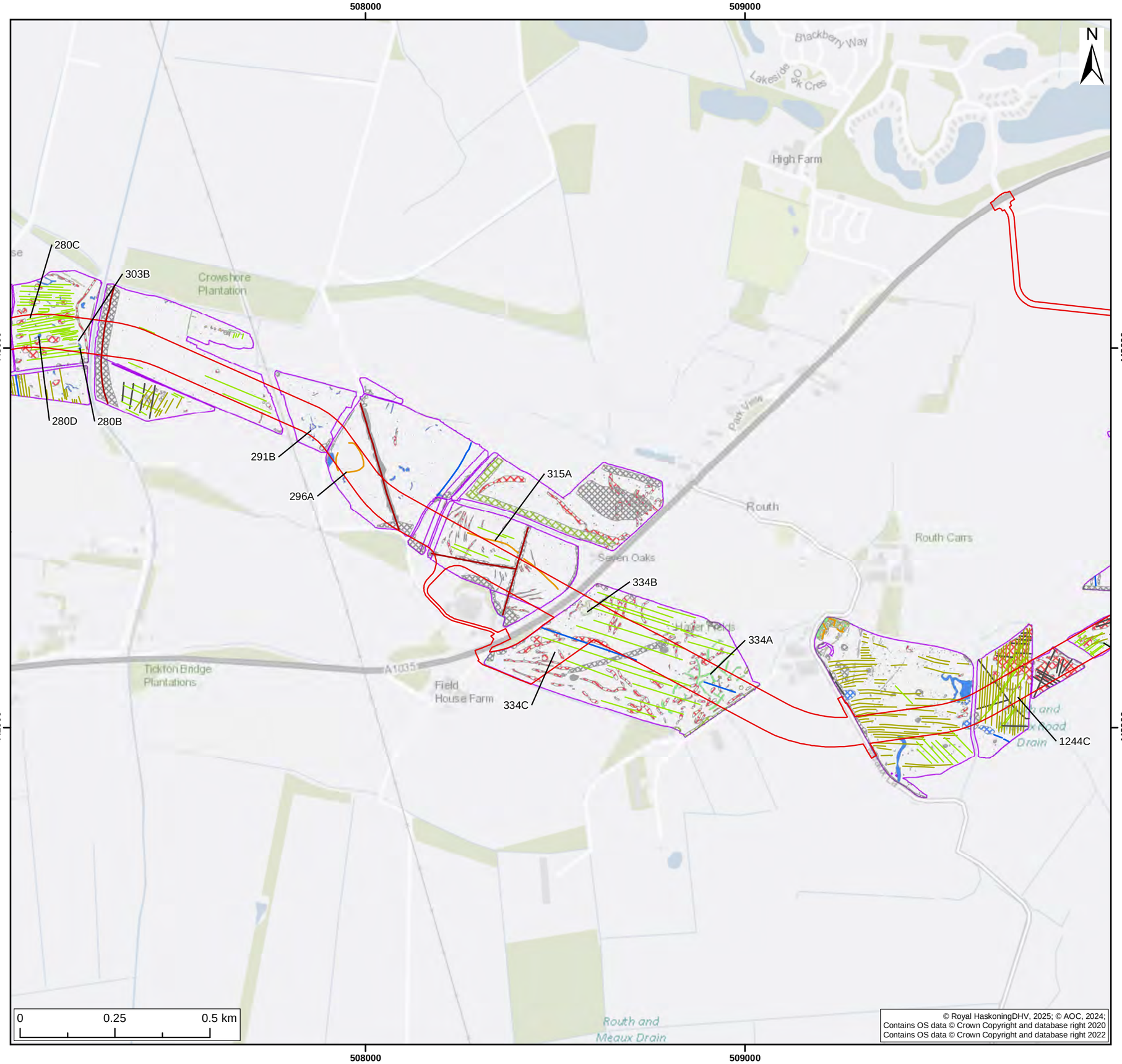
Dogger Bank South Offshore Wind Farms

Report:

Environmental Statement

Royal HaskoningDHV
Enhancing Society Together

RWE



Legend:

- Onshore Development Area
- Survey Extents

Geophysical Survey Interpretation Line

- Trend (Drain)
- Trend (Historic)
- Trend (Plough)
- Trend (Poss Arch)
- Trend (Probable Archaeology)
- Trend (Ridge and Furrow)
- Trend (Service)

Geophysical Survey Interpretation Polygon

- Anomaly (Agricultural)
- Anomaly (Geology)
- Anomaly (Historic)
- Spread (Unclear Origin)
- Anomaly (Probable Archaeology)
- Anomaly (Ferrous / Iron Spike)
- Anomaly (Unclear)
- Spread (Agricultural)
- Spread (Ferrous/Iron Spike)
- Spread (Geology)
- Spread (Historic)
- Spread (Mag Disturbance)
- Spread (Possible Archaeology)
- Spread (Probable Archaeology)
- Anomaly (Possible Archaeology)

Note: Please see the full coverage Geophysical Assessment Report: AS -029 to AS-035 for detailed geophysical survey figures

S3	P02	25/04/2025	Suitable for review & comment	SM	ND	MJ
S2	P01	01/02/2024	Suitable for Information	JH	SB	MJ
SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR

Title:

Summary of Geophysical Survey Data

Figure: 4h

Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0710

Co-ordinate system: British National Grid

Page Size: A3

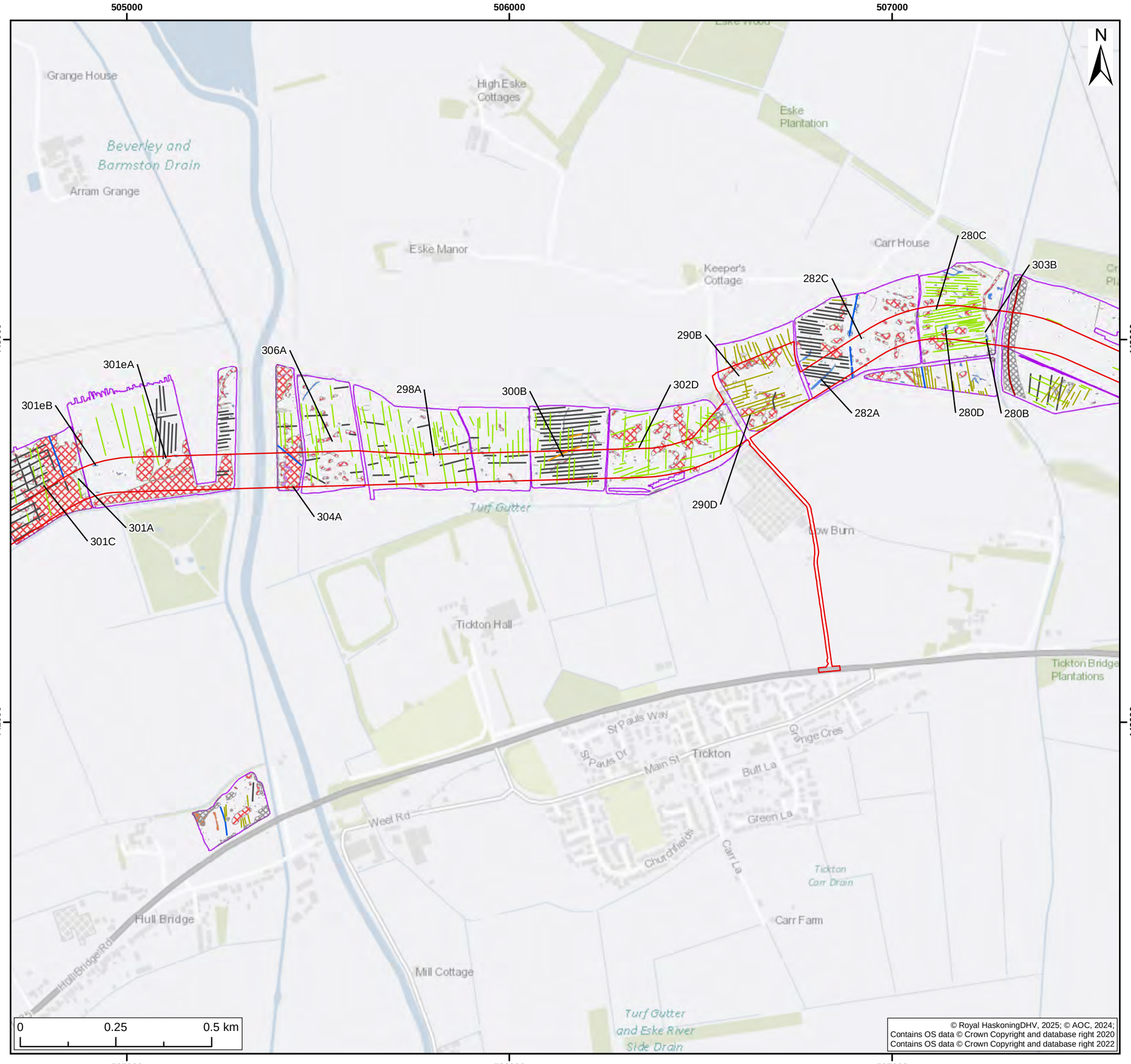
Scale: 1:10,000

Project: Dogger Bank South Offshore Wind Farms

Report: Environmental Statement

Royal HaskoningDHV
Enhancing Society Together

RWE



Legend:

- Onshore Development Area
- Survey Extents

Geophysical Survey Interpretation Line

- Trend (Drain)
- Trend (Historic)
- Trend (Plough)
- Trend (Poss Arch)
- Trend (Probable Archaeology)
- Trend (Ridge and Furrow)
- Trend (Service)

Geophysical Survey Interpretation Polygon

- Anomaly (Agricultural)
- Anomaly (Geology)
- Anomaly (Historic)
- Spread (Unclear Origin)
- Anomaly (Probable Archaeology)
- Anomaly (Ferrous / Iron Spike)
- Anomaly (Unclear)
- Spread (Agricultural)
- Spread (Ferrous/Iron Spike)
- Spread (Geology)
- Spread (Historic)
- Spread (Mag Disturbance)
- Spread (Possible Archaeology)
- Spread (Probable Archaeology)
- Anomaly (Possible Archaeology)

Note: Please see the full coverage Geophysical Assessment Report: AS -029 to AS-035 for detailed geophysical survey figures

S3	P02	25/04/2025	Suitable for review & comment	SM	ND	MJ
S2	P01	01/02/2024	Suitable for Information	JH	SB	MJ
SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR

Title:

Summary of Geophysical Survey Data

Figure: 4i

Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0710

Co-ordinate system: British National Grid

Page Size: A3

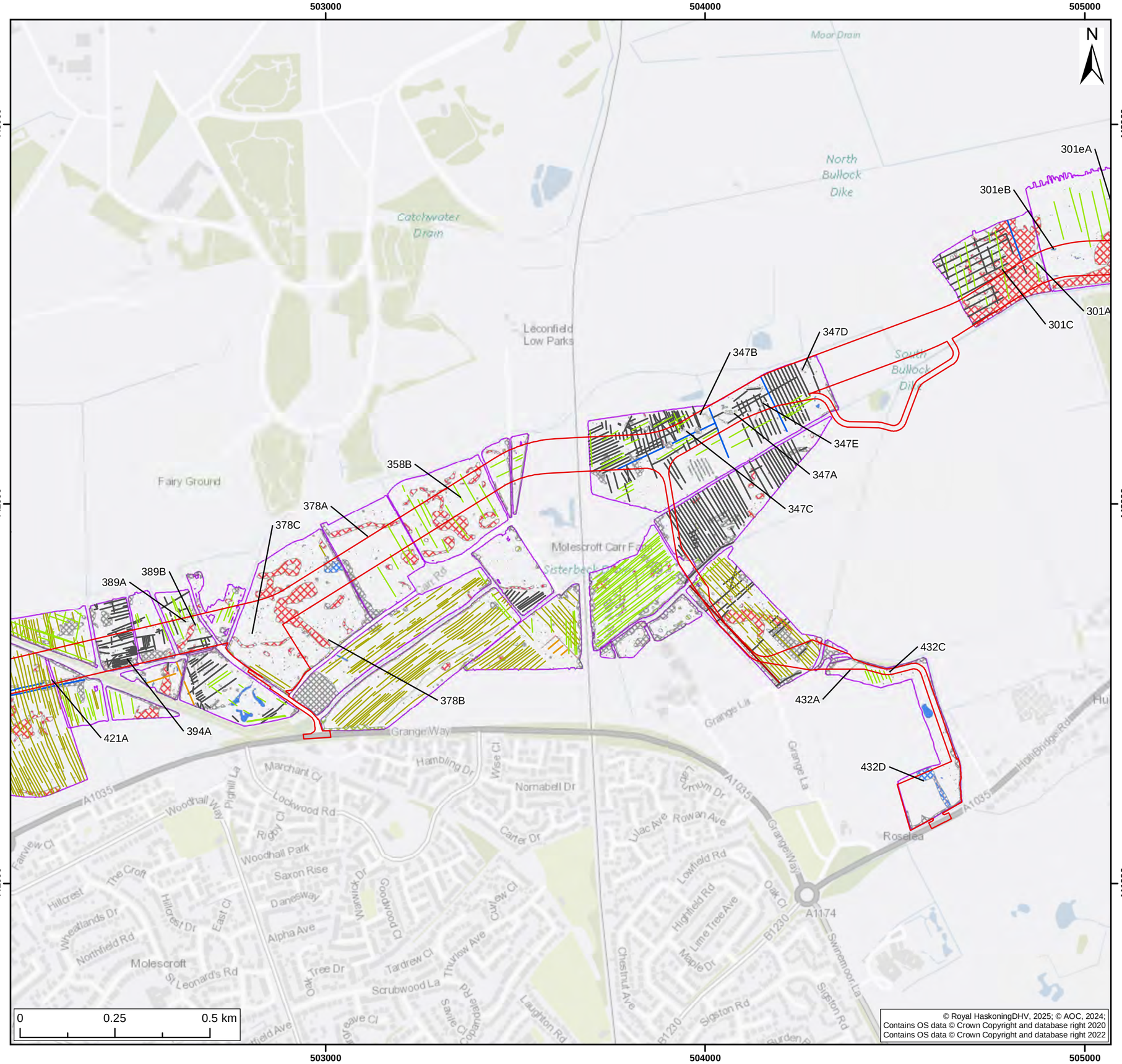
Scale: 1:10,000

Project: Dogger Bank South Offshore Wind Farms

Report: Environmental Statement

Royal HaskoningDHV
Enhancing Society Together

RWE



Legend:

- Onshore Development Area
- Survey Extents

Geophysical Survey Interpretation Line

- Trend (Drain)
- Trend (Historic)
- Trend (Plough)
- Trend (Poss Arch)
- Trend (Probable Archaeology)
- Trend (Ridge and Furrow)
- Trend (Service)

Geophysical Survey Interpretation Polygon

- Anomaly (Agricultural)
- Anomaly (Geology)
- Anomaly (Historic)
- Spread (Unclear Origin)
- Anomaly (Probable Archaeology)
- Anomaly (Ferrous / Iron Spike)
- Anomaly (Unclear)
- Spread (Agricultural)
- Spread (Ferrous/Iron Spike)
- Spread (Geology)
- Spread (Historic)
- Spread (Mag Disturbance)
- Spread (Possible Archaeology)
- Spread (Probable Archaeology)
- Anomaly (Possible Archaeology)

Note: Please see the full coverage Geophysical Assessment Report: AS -029 to AS-035 for detailed geophysical survey figures

S3	P02	25/04/2025	Suitable for review & comment	SM	ND	MJ
S2	P01	01/02/2024	Suitable for Information	JH	SB	MJ
SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR

Title:

Summary of Geophysical Survey Data

Figure: 4j

Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0710

Co-ordinate system: British National Grid

Page Size: A3

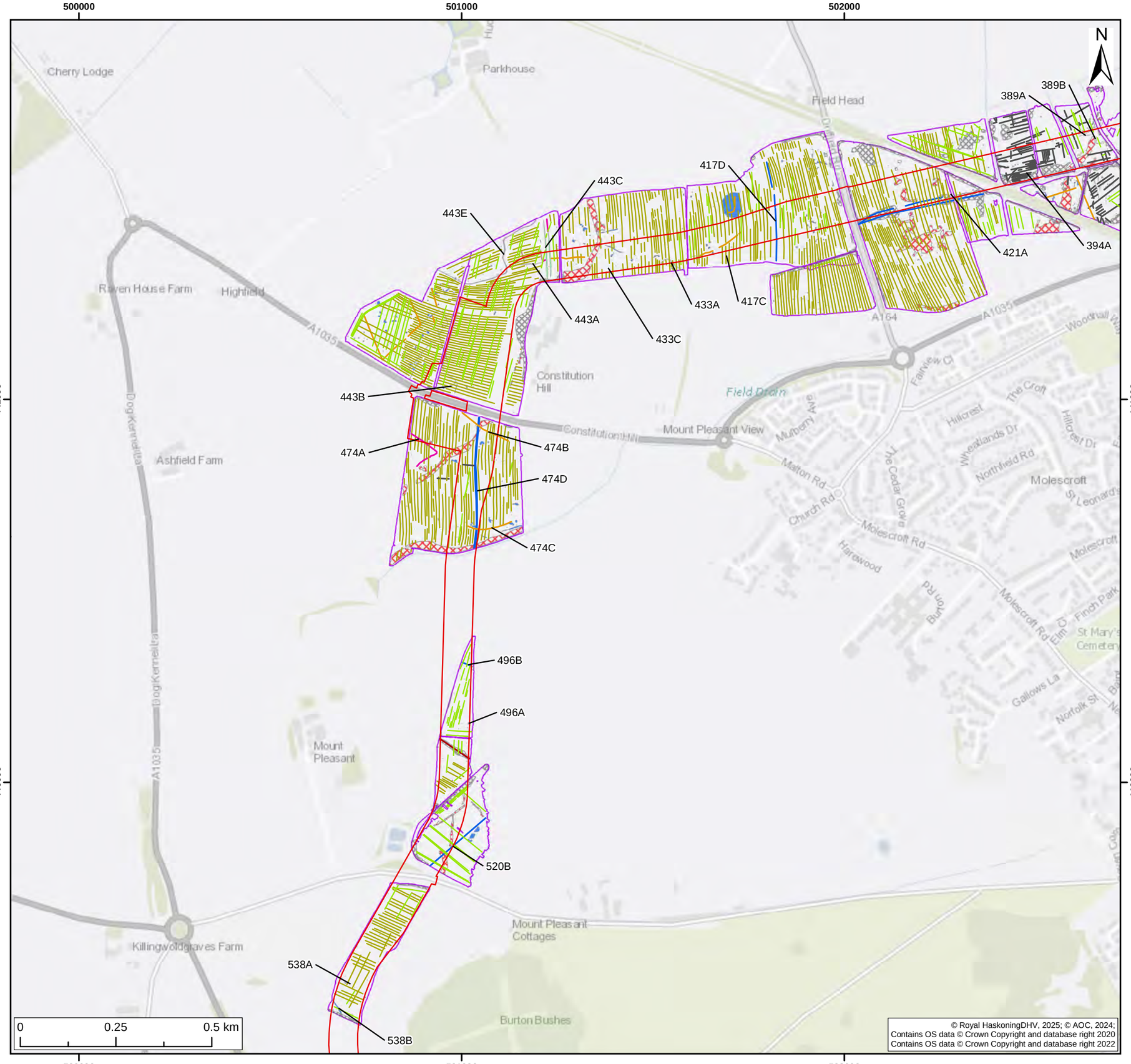
Scale: 1:10,000

Project: Dogger Bank South Offshore Wind Farms

Report: Environmental Statement

Royal HaskoningDHV
Enhancing Society Together

RWE



Legend:

- Onshore Development Area
- Survey Extents

Geophysical Survey Interpretation Line

- Trend (Drain)
- Trend (Historic)
- Trend (Plough)
- Trend (Poss Arch)
- Trend (Probable Archaeology)
- Trend (Ridge and Furrow)
- Trend (Service)

Geophysical Survey Interpretation Polygon

- Anomaly (Agricultural)
- Anomaly (Geology)
- Anomaly (Historic)
- Spread (Unclear Origin)
- Anomaly (Probable Archaeology)
- Anomaly (Ferrous / Iron Spike)
- Anomaly (Unclear)
- Spread (Agricultural)
- Spread (Ferrous/Iron Spike)
- Spread (Geology)
- Spread (Historic)
- Spread (Mag Disturbance)
- Spread (Possible Archaeology)
- Spread (Probable Archaeology)
- Anomaly (Possible Archaeology)

Note: Please see the full coverage Geophysical Assessment Report: AS -029 to AS-035 for detailed geophysical survey figures

S3	P02	25/04/2025	Suitable for review & comment	SM	ND	MJ
S2	P01	01/02/2024	Suitable for Information	JH	SB	MJ
SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR

Title:

Summary of Geophysical Survey Data

Figure: 4k

Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0710

Co-ordinate system: British National Grid

Page Size: A3

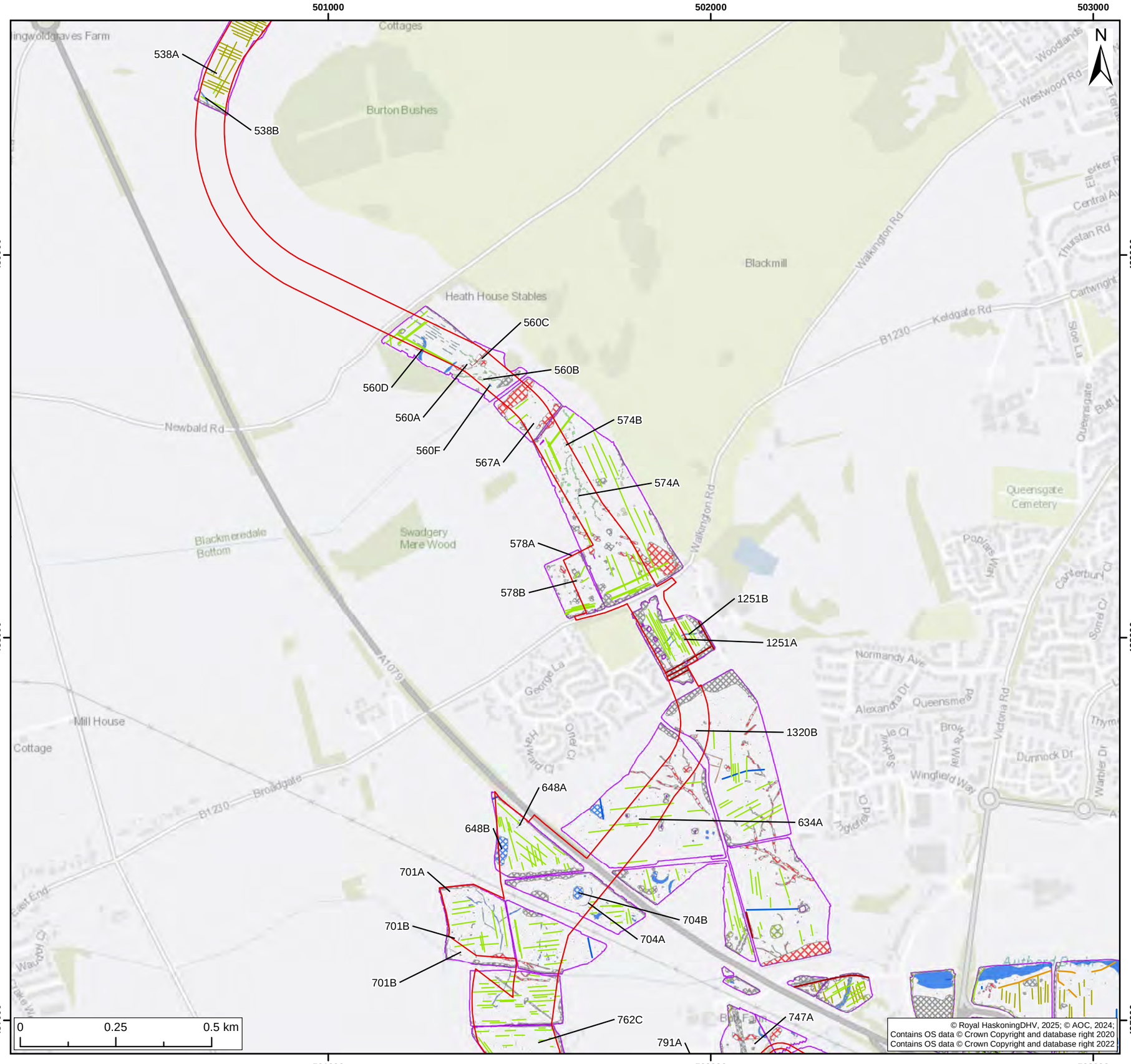
Scale: 1:10,000

Project: Dogger Bank South Offshore Wind Farms

Report: Environmental Statement

Royal HaskoningDHV
Enhancing Society Together

RWE



Legend:

- Onshore Development Area
- Survey Extents

Geophysical Survey Interpretation Line

- Trend (Drain)
- Trend (Historic)
- Trend (Plough)
- Trend (Poss Arch)
- Trend (Probable Archaeology)
- Trend (Ridge and Furrow)
- Trend (Service)

Geophysical Survey Interpretation Polygon

- Anomaly (Agricultural)
- Anomaly (Geology)
- Anomaly (Historic)
- Spread (Unclear Origin)
- Anomaly (Probable Archaeology)
- Anomaly (Ferrous / Iron Spike)
- Anomaly (Unclear)
- Spread (Agricultural)
- Spread (Ferrous/Iron Spike)
- Spread (Geology)
- Spread (Historic)
- Spread (Mag Disturbance)
- Spread (Possible Archaeology)
- Spread (Probable Archaeology)
- Anomaly (Possible Archaeology)

Note: Please see the full coverage Geophysical Assessment Report: AS -029 to AS-035 for detailed geophysical survey figures

S3	P02	25/04/2025	Suitable for review & comment	SM	ND	MJ
S2	P01	01/02/2024	Suitable for Information	JH	SB	MJ
SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR

Title:

Summary of Geophysical Survey Data

Figure: 4l

Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0710

Co-ordinate system: British National Grid

Page Size: A3

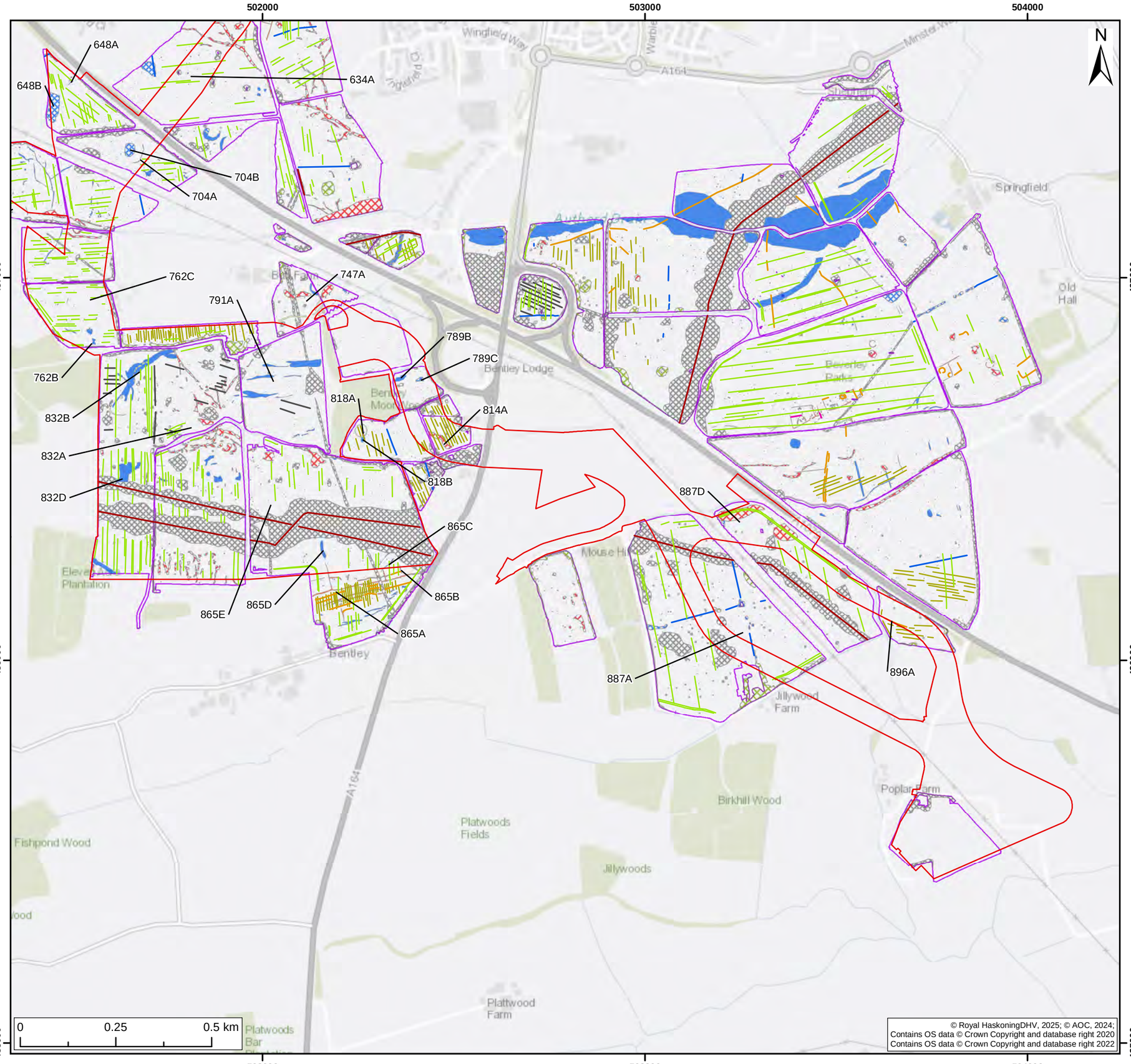
Scale: 1:10,000

Project: Dogger Bank South Offshore Wind Farms

Report: Environmental Statement

Royal HaskoningDHV
Enhancing Society Together

RWE



Legend:

- Onshore Development Area
- Survey Extents

Geophysical Survey Interpretation Line

- Trend (Drain)
- Trend (Historic)
- Trend (Plough)
- Trend (Poss Arch)
- Trend (Probable Archaeology)
- Trend (Ridge and Furrow)
- Trend (Service)

Geophysical Survey Interpretation Polygon

- Anomaly (Agricultural)
- Anomaly (Geology)
- Anomaly (Historic)
- Spread (Unclear Origin)
- Anomaly (Probable Archaeology)
- Anomaly (Ferrous / Iron Spike)
- Anomaly (Unclear)
- Spread (Agricultural)
- Spread (Ferrous/Iron Spike)
- Spread (Geology)
- Spread (Historic)
- Spread (Mag Disturbance)
- Spread (Possible Archaeology)
- Spread (Probable Archaeology)
- Anomaly (Possible Archaeology)

Note: Please see the full coverage Geophysical Assessment Report: AS -029 to AS-035 for detailed geophysical survey figures

S3	P02	25/04/2025	Suitable for review & comment	SM	ND	MJ
S2	P01	01/02/2024	Suitable for Information	JH	SB	MJ
SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR

Title:

Summary of Geophysical Survey Data

Figure: 4m

Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0710

Co-ordinate system: British National Grid

Page Size: A3

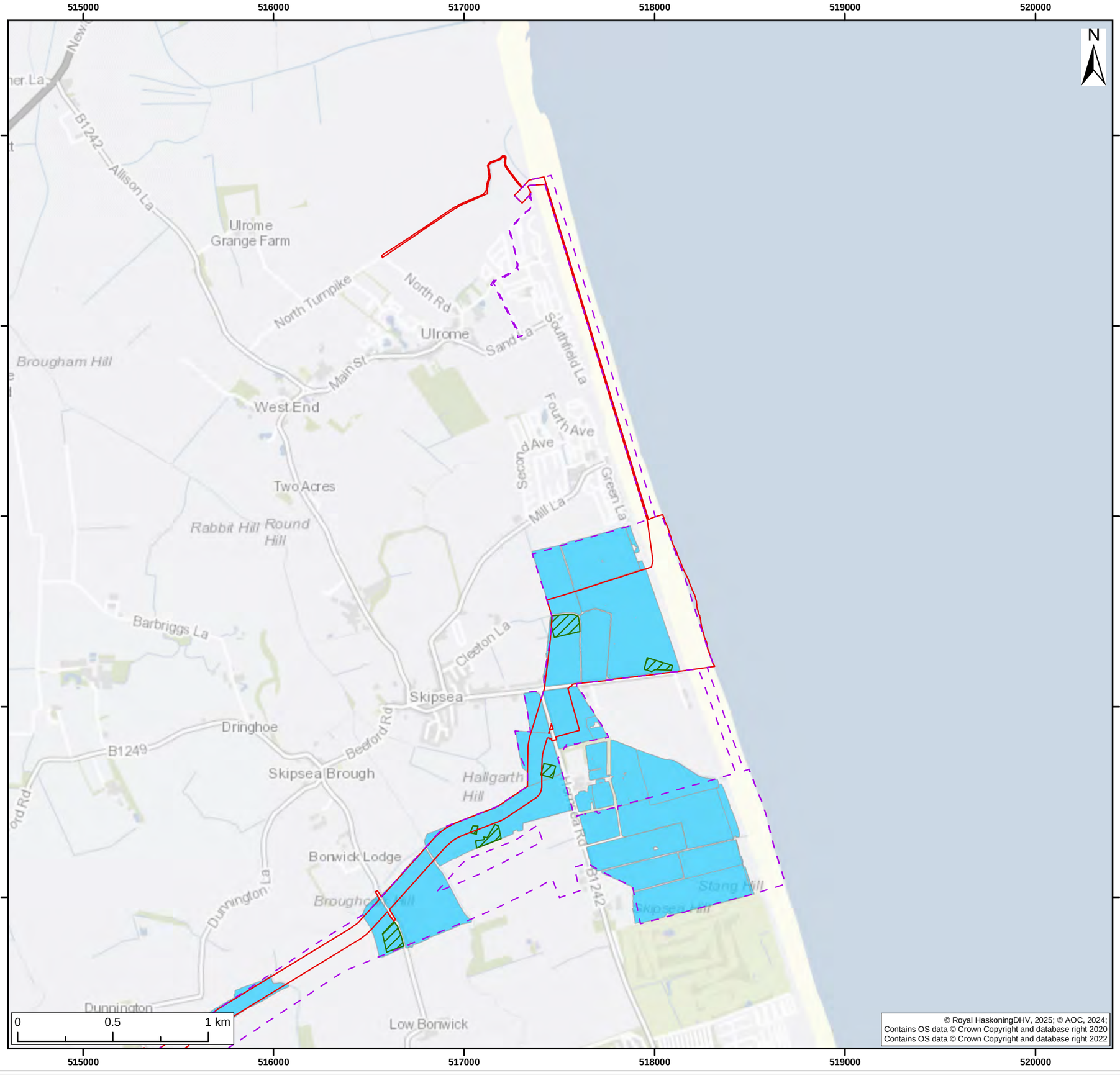
Scale: 1:10,000

Project: Dogger Bank South Offshore Wind Farms

Report: Environmental Statement

Royal HaskoningDHV
Enhancing Society Together

RWE



Legend:

- Onshore Development Area
- PEIR Onshore Development Area
- Geophysical survey coverage to date
- Areas identified to avoid from geophysical survey

S3	P02	25/04/2025	Suitable for review & comment	SM	ND	MJ
S2	P01	01/02/2024	Suitable for Information	JH	SB	MJ
SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR

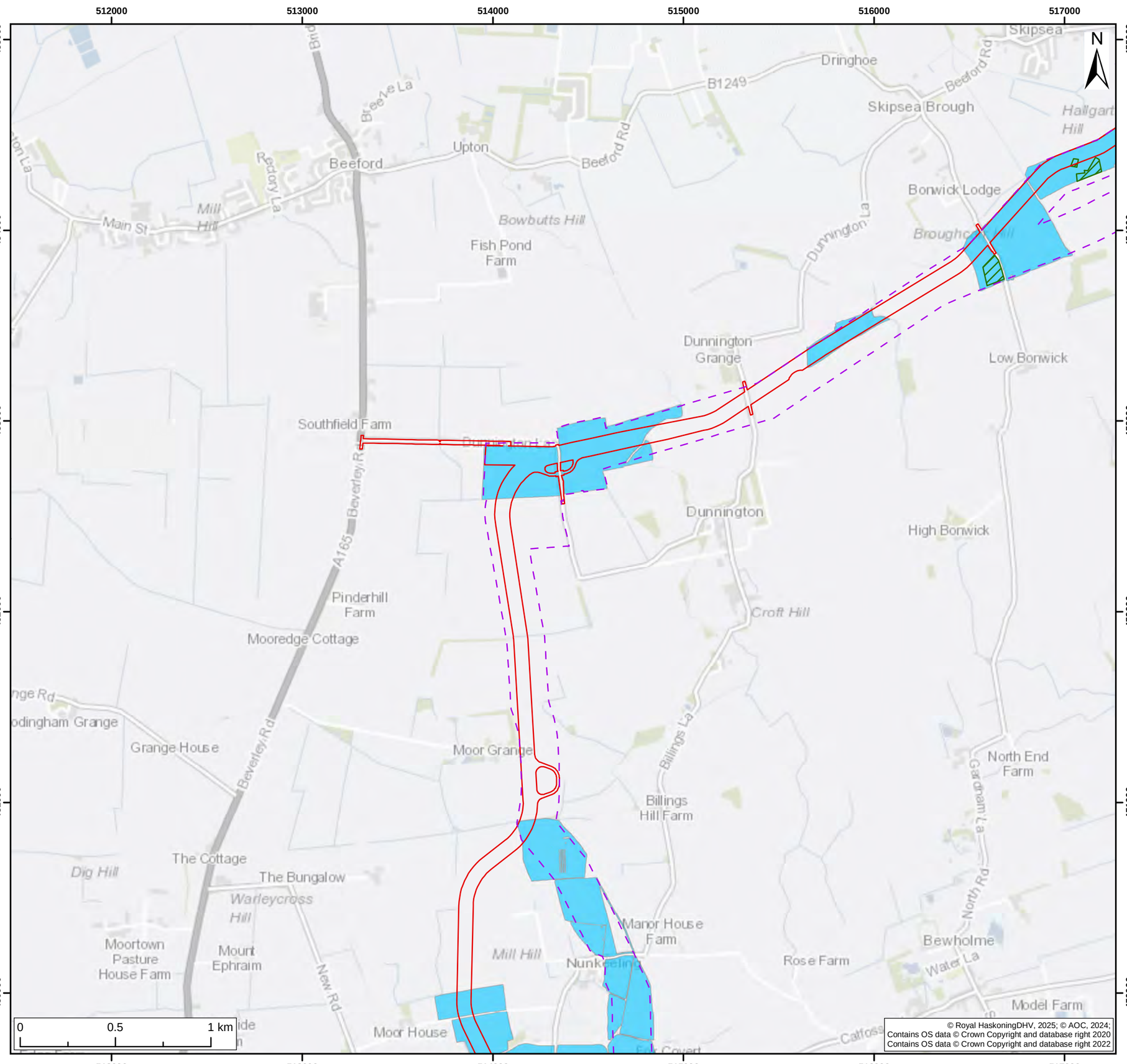
Title:

Geophysical data used to inform route refinement

Figure: 5a	Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0711	
Co-ordinate system: British National Grid	Page Size: A3	Scale: 1:20,000
Project: Dogger Bank South Offshore Wind Farms	Report: Environmental Statement	

Royal HaskoningDHV
Enhancing Society Together

RWE



Legend:

- Onshore Development Area
- PEIR Onshore Development Area
- Geophysical survey coverage to date
- Areas identified to avoid from geophysical survey

S3	P02	25/04/2025	Suitable for review & comment	SM	ND	MJ
S2	P01	01/02/2024	Suitable for Information	JH	SB	MJ
SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR

Title:

Geophysical data used to inform route refinement

Figure: 5b

Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0711

Co-ordinate system: British National Grid

Page Size: A3

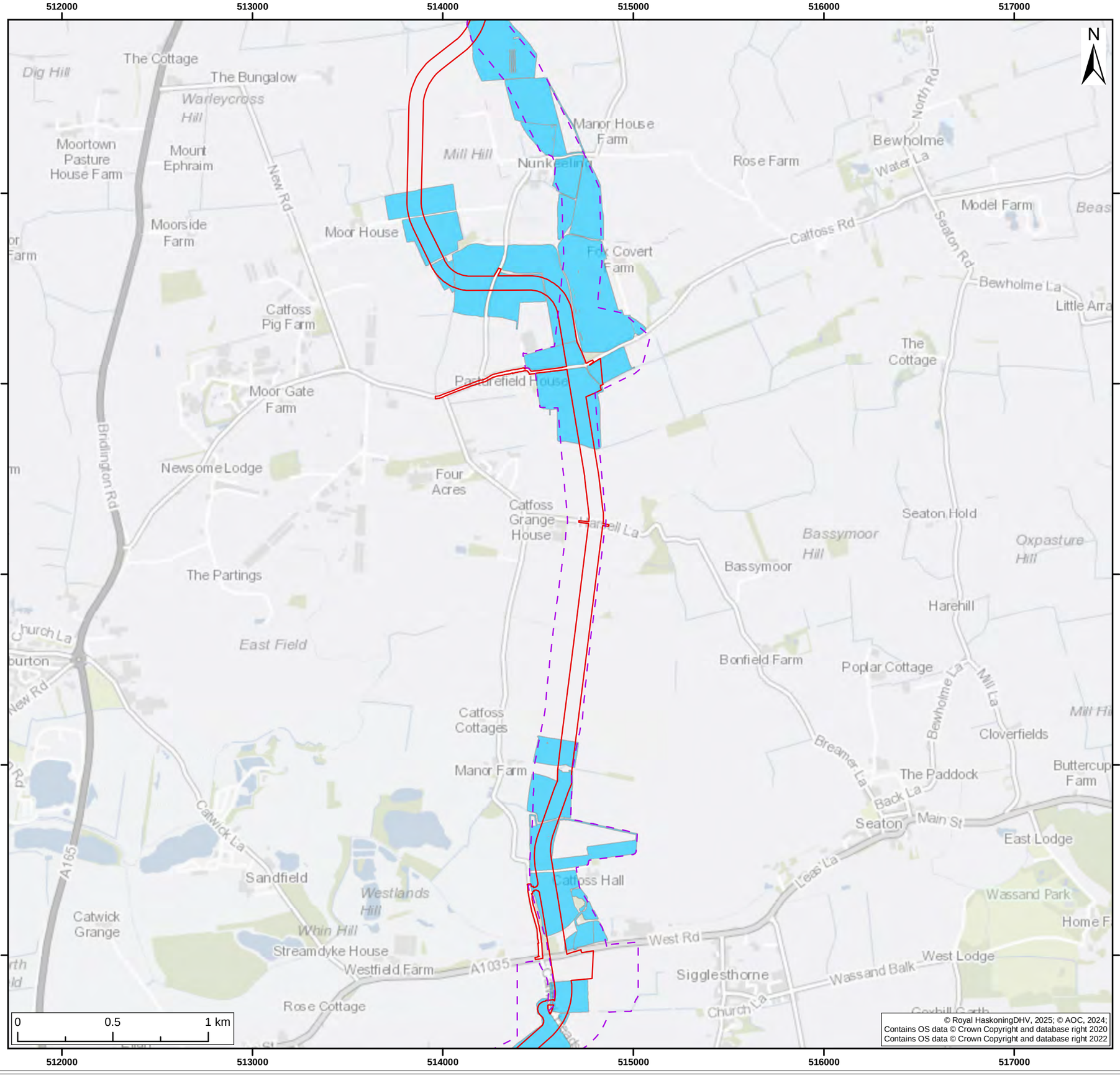
Scale: 1:20,000

Project: Dogger Bank South Offshore Wind Farms

Report: Environmental Statement

Royal HaskoningDHV
Enhancing Society Together

RWE



Legend:

- Onshore Development Area
- PEIR Onshore Development Area
- Geophysical survey coverage to date
- Areas identified to avoid from geophysical survey

S3	P02	25/04/2025	Suitable for review & comment	SM	ND	MJ
S2	P01	01/02/2024	Suitable for Information	JH	SB	MJ
SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR

Title:

Geophysical data used to inform route refinement

Figure: 5c

Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0711

Co-ordinate system: British National Grid

Page Size: A3

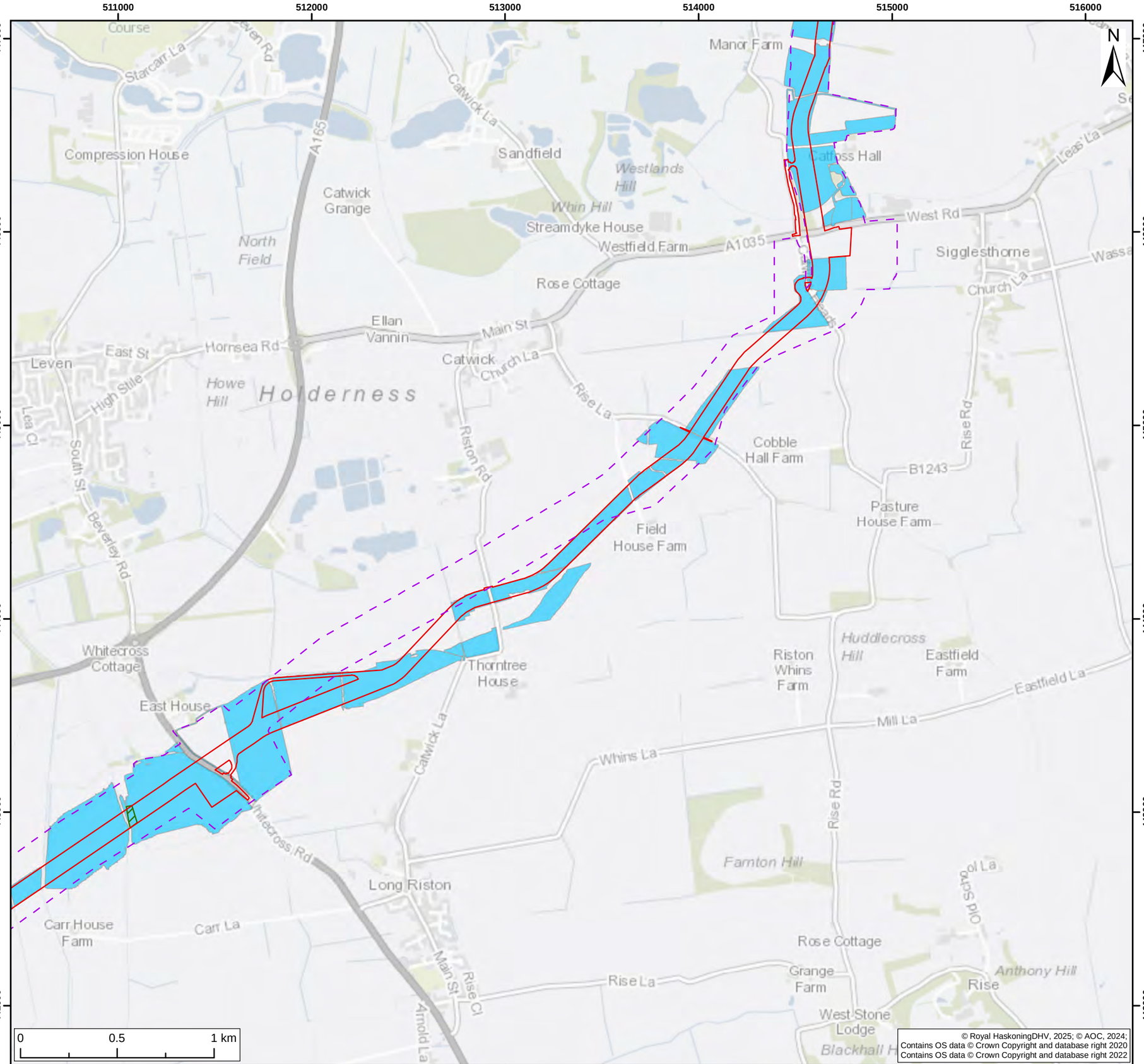
Scale: 1:20,000

Project: Dogger Bank South Offshore Wind Farms

Report: Environmental Statement

Royal HaskoningDHV
Enhancing Society Together

RWE



Legend:

- Onshore Development Area
- PEIR Onshore Development Area
- Geophysical survey coverage to date
- Areas identified to avoid from geophysical survey

SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR
S3	P02	25/04/2025	Suitable for review & comment	SM	ND	MJ
S2	P01	01/02/2024	Suitable for Information	JH	SB	MJ

Title:

Geophysical data used to inform route refinement

Figure: 5d

Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0711

Co-ordinate system: British National Grid

Page Size: A3

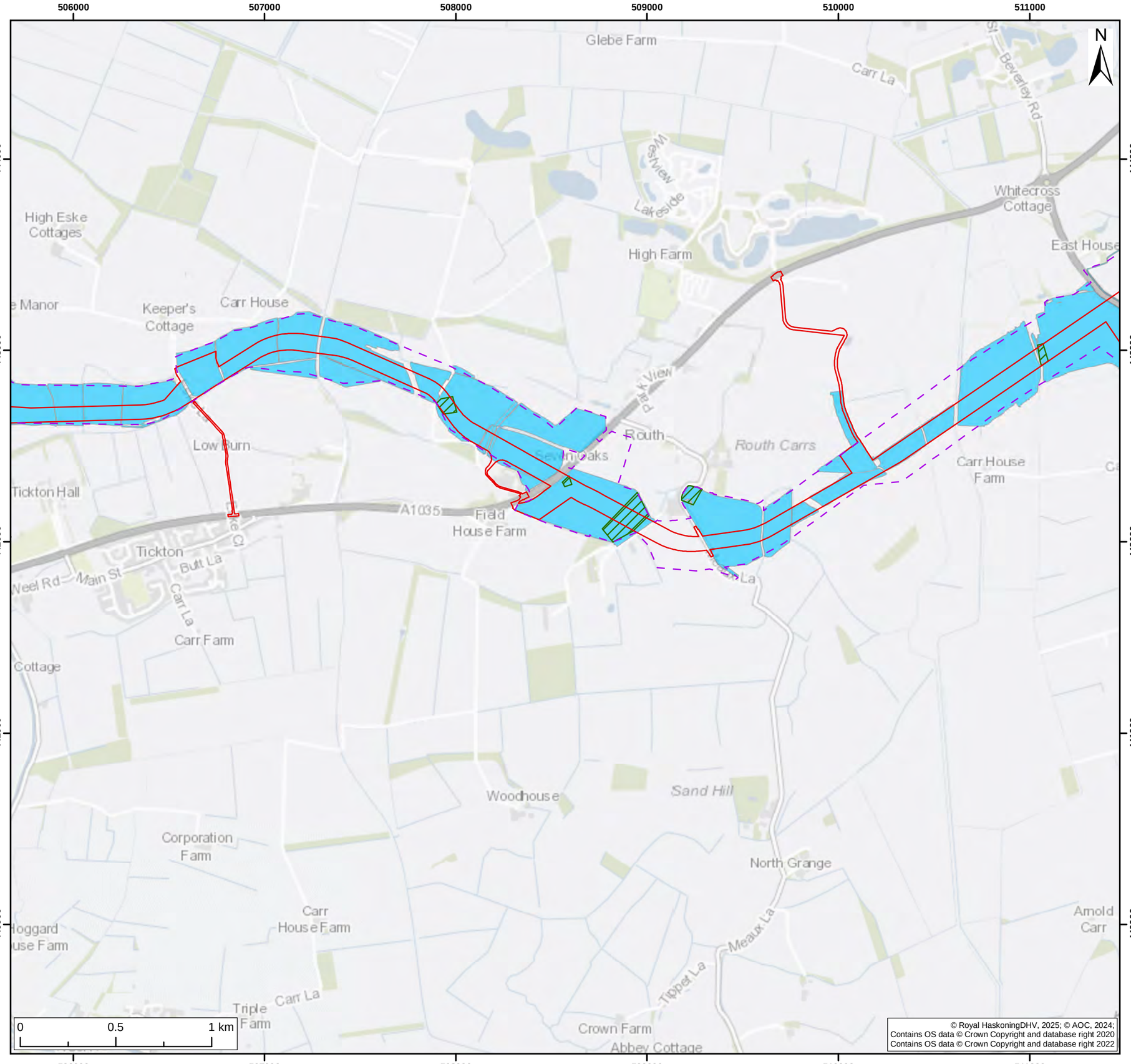
Scale: 1:20,000

Project: Dogger Bank South Offshore Wind Farms

Report: Environmental Statement

Royal HaskoningDHV
Enhancing Society Together

RWE



Legend:

- Onshore Development Area
- PEIR Onshore Development Area
- Geophysical survey coverage to date
- Areas identified to avoid from geophysical survey

SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR
S3	P02	25/04/2025	Suitable for review & comment	SM	ND	MJ
S2	P01	01/02/2024	Suitable for Information	JH	SB	MJ

Title:

Geophysical data used to inform route refinement

Figure: 5e

Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0711

Co-ordinate system: British National Grid

Page Size: A3

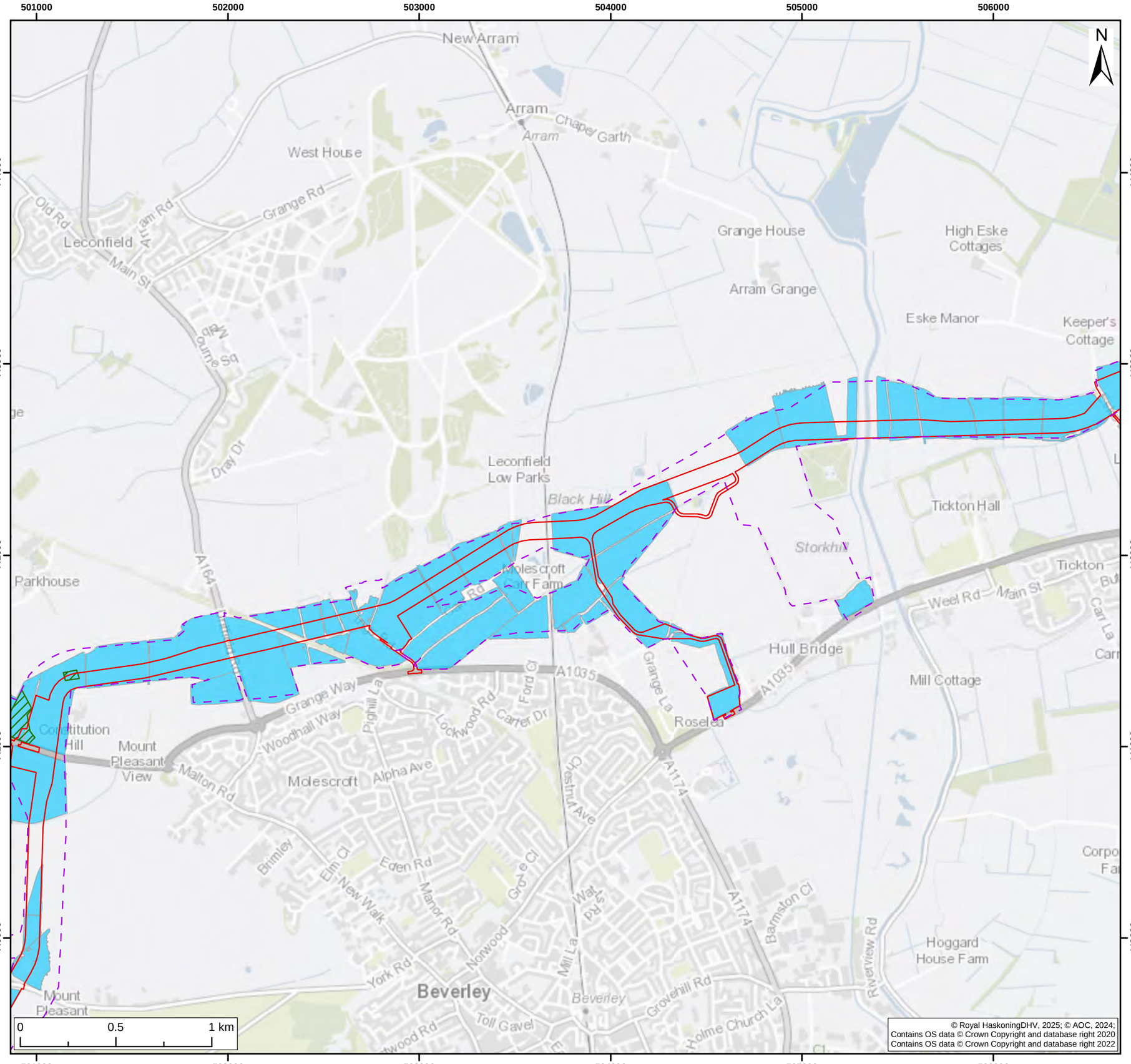
Scale: 1:20,000

Project: Dogger Bank South Offshore Wind Farms

Report: Environmental Statement

Royal HaskoningDHV
Enhancing Society Together

RWE



Legend:

- Onshore Development Area
- PEIR Onshore Development Area
- Geophysical survey coverage to date
- Areas identified to avoid from geophysical survey

SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR
S3	P02	25/04/2025	Suitable for review & comment	SM	ND	MJ
S2	P01	01/02/2024	Suitable for Information	JH	SB	MJ

Title:

Geophysical data used to inform route refinement

Figure: 5f

Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0711

Co-ordinate system: British National Grid

Page Size: A3

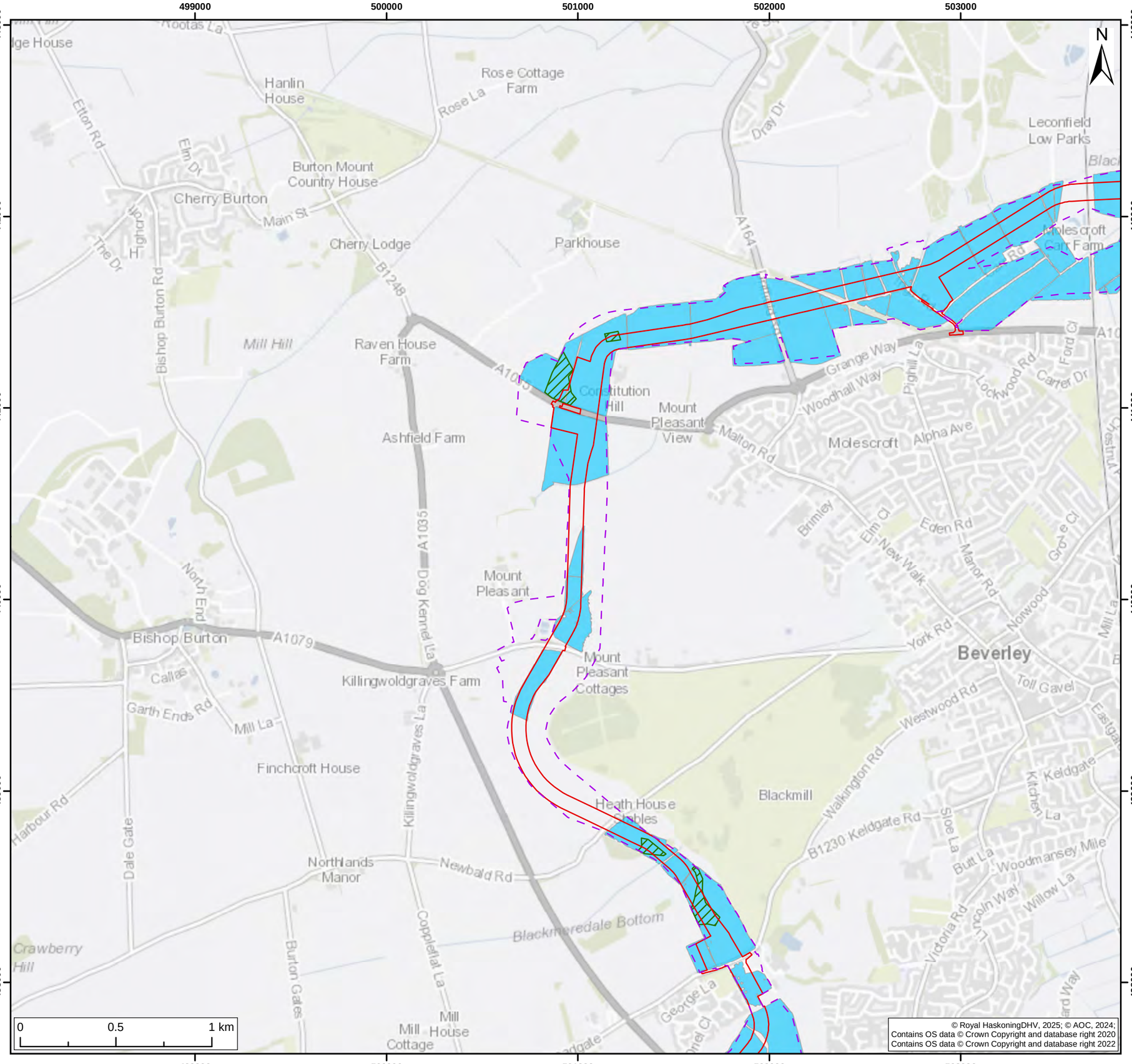
Scale: 1:20,000

Project: Dogger Bank South Offshore Wind Farms

Report: Environmental Statement

Royal HaskoningDHV
Enhancing Society Together

RWE



Legend:

- Onshore Development Area
- PEIR Onshore Development Area
- Geophysical survey coverage to date
- Areas identified to avoid from geophysical survey

S3	P02	25/04/2025	Suitable for review & comment	SM	ND	MJ
S2	P01	01/02/2024	Suitable for Information	JH	SB	MJ
SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR

Title:

Geophysical data used to inform route refinement

Figure: 5g

Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0711

Co-ordinate system: British National Grid

Page Size: A3

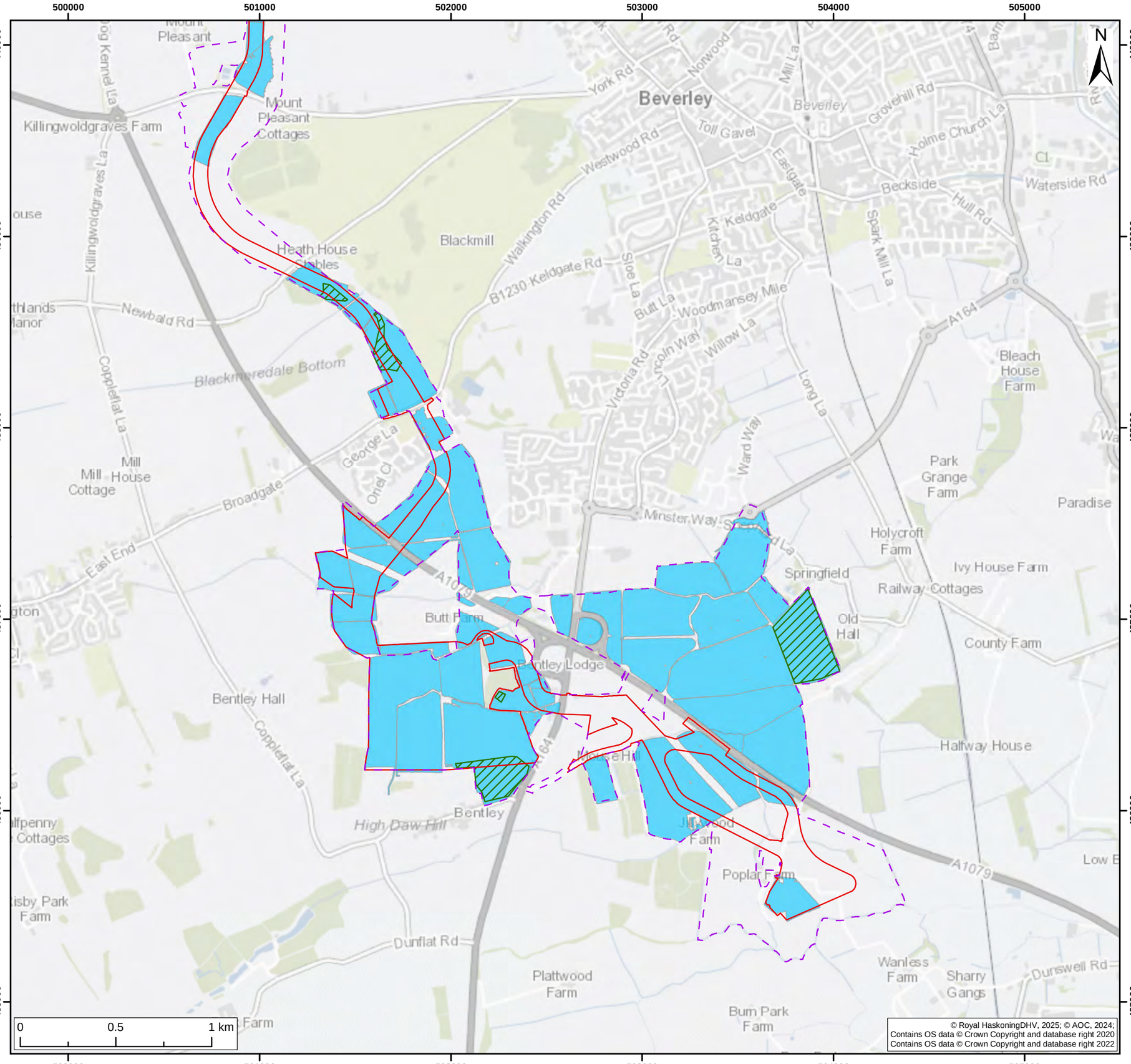
Scale: 1:20,000

Project: Dogger Bank South Offshore Wind Farms

Report: Environmental Statement

Royal HaskoningDHV
Enhancing Society Together

RWE



Legend:

- Onshore Development Area
- PEIR Onshore Development Area
- Geophysical survey coverage to date
- Areas identified to avoid from geophysical survey

SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR
S3	P02	25/04/2025	Suitable for review & comment	SM	ND	MJ
S2	P01	01/02/2024	Suitable for Information	JH	SB	MJ

Title:

Geophysical data used to inform route refinement

Figure: 5h

Drawing No: PC2340-RHD-ON-ZZ-DR-Z-0711

Co-ordinate system: British National Grid

Page Size: A3

Scale: 1:20,000

Project: Dogger Bank South Offshore Wind Farms

Report: Environmental Statement

Royal HaskoningDHV
Enhancing Society Together

RWE

RWE Renewables UK Dogger Bank South (West) Limited

RWE Renewables UK Dogger Bank South (East) Limited

Windmill Hill Business Park
Whitehill Way
Swindon
Wiltshire, SN5 6PB